Maverik Store

(Los Volcanes Rd. / Unser Blvd.)

Traffic Impact Study

March 08, 2019

F I N A L

Presented to:

City of Albuquerque
Transportation Development Section

NM Dept. of Transportation
District 3

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Traffic Impact Study

Executive Summary

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed Maverik Store, determine the impact of the development on the adjacent transportation system and recommend mitigation measures where necessary. This study is prepared to meet the requirements of the City of Albuquerque Transportation Dev. Section, Planning Dept. & the New Mexico Department of Transportation (NMDOT) associated with its review of the Maverik Store.

The proposed development is located at the southeast corner of Los Volcanes Rd. / Unser Blvd. The study area includes the intersections of Los Volcanes Rd. / Coors Blvd., Central Ave. / Unser Blvd., Bluewater Rd. / Unser Blvd., Los Volcanes Rd. / Unser Blvd., I-40 N. Ramp / Unser Blvd., I-40 S. Ramp / Unser Blvd., and Los Volcanes Rd. / Silver Creek Rd. as well as the two proposed driveways for the project – one on Los Volcanes Rd. and one on Silver Creek Rd.

The proposed development is to be developed as a Gasoline Station with Convenience Store containing a total of 20 fueling positions for vehicles (14 passenger car fueling positions plus 6 truck fueling positions).

Analysis in this Study complies with the requirements of the City of Albuquerque and the New Mexico Department of Transportation, District 3 Traffic Engineer at the time of the Scoping Meeting. Signalized intersection analyses utilize existing signal timing / phasing.

The development will be accessed via two proposed driveways for this parcel of land, one on Los Volcanes Rd. and one on Silver Creek Rd. Both driveways are proposed to be full access unsignalized driveways. There will also be a future connection via cross-access through the property to the south to a right-in, right-out driveway on Unser Blvd. approximately 980 feet south of Los Volcanes Rd. at such time as the property to the south is fully developed. It is unlikely that a significant volume of Maverik traffic will use the remote driveway in the future and certainly none will use it currently.

Analysis results by analysis year are included in the following tables:

Executive Summary Results Table

			2020 Conditions		2030 Conditions	
Intersection No. / Name	**Signalization**	**Case**	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**
1 - Los Volcanes Rd. / Coors Blvd.	Signalized	NO BUILD	A-7.5	A-9.1	A-7.6	B-10.1
		BUILD	A-8.1	A-9.6	A-8.2	B-10.1
2 - Central Ave. / Unser Blvd.	Signalized	NO BUILD	C-28.9	D-41.7	E-57.1	F-83.3
		BUILD	C-29.4	D-42.7	E-61.8	F-81.5
3 - Bluewater Rd. / Unser Blvd.	Signalized	NO BUILD	B-13.6	C-24.7	B-15.0	C-33
		BUILD	B-14.2	C-24.6	B-15.9	C-29.7
4 - Los Volcanes Rd. / Unser Blvd	**Signalized**	NO BUILD	D-47.8	C-21.7	F-82.0	C-24.0
		BUILD	E-67.0	B-19.3	F-108.1	C-20.9
		MIT BLD	**C-24.7**	**C-22.7**	**C-33.4**	**C-23.4**
5 - I-40 N. Ramp / Unser Blvd.	Signalized	NO BUILD	B-14.2	C-24.9	B-15.2	C-26.8
		BUILD	B-14.2	C-24.9	B-15.3	C-25.9
6 - I-40 S. Ramp / Unser Blvd.	Unsignalized	NO BUILD	D-33.2	F-999	E-43.5	F-999
		BUILD	E-38.3	F-999	E-47.0	F-999
7 - Los Volcanes Rd. / Silver Creek	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	C-19.0	C-17.1	C-21.2	C-19.0
8 - Los Volcanes Rd. / Driveway "A"	Unsignalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	E-37.3	D-26.7	E-47.7	D-31.4
9 - Driveway "B" / Silver Creek Rd.	Signalized	NO BUILD	N/A	N/A	N/A	N/A
		BUILD	A-9.2	A-9.1	A-9.2	A-9.2

Note: Mitigated BUILD Condition for Intersection #4 (Los Volcanes Rd. / Unser Blvd.) implements dual southbound left turn lanes on Unser Blvd. and dual eastbound receiving lanes on Los Volcanes Rd.
No mitigation measure is recommended for Intersections 1, 2, 3, 5, 6, and 7.

In summary, the proposed development does not have a significant adverse impact to the adjacent transportation system and the minimal impact to the transportation system can be mitigated by the recommended measures described in this report and summarized in the table above. The impact of the proposed Maverik Store is minor on all of the intersections analyzed in this report except for the signalized intersection of Los Volcanes Rd. / Unser Blvd. The recommendations of this study are:

Recommendations:

Design and construction of the proposed Maverik Store shall maintain adequate sight distances at proposed driveways and offsite modified intersections.

Los Volcanes Rd. / **Unser Blvd.** - Construct dual southbound left turn lanes on Unser Blvd. at Los Volcanes Rd. Dual southbound left turn lanes should be designed and constructed to a minimum length of 185 feet plus transition. Dual eastbound lanes on Los Volcanes will be required for at least 1,000 feet east of Unser Blvd. (1,320 feet preferred).

Proposed driveways associated with this project should be designed with one entering and one exiting lane minimum of sufficient width to accommodate the delivery vehicles' turning movements.

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(Los Volcanes Rd. / Unser Blvd.)
Traffic Impact Study

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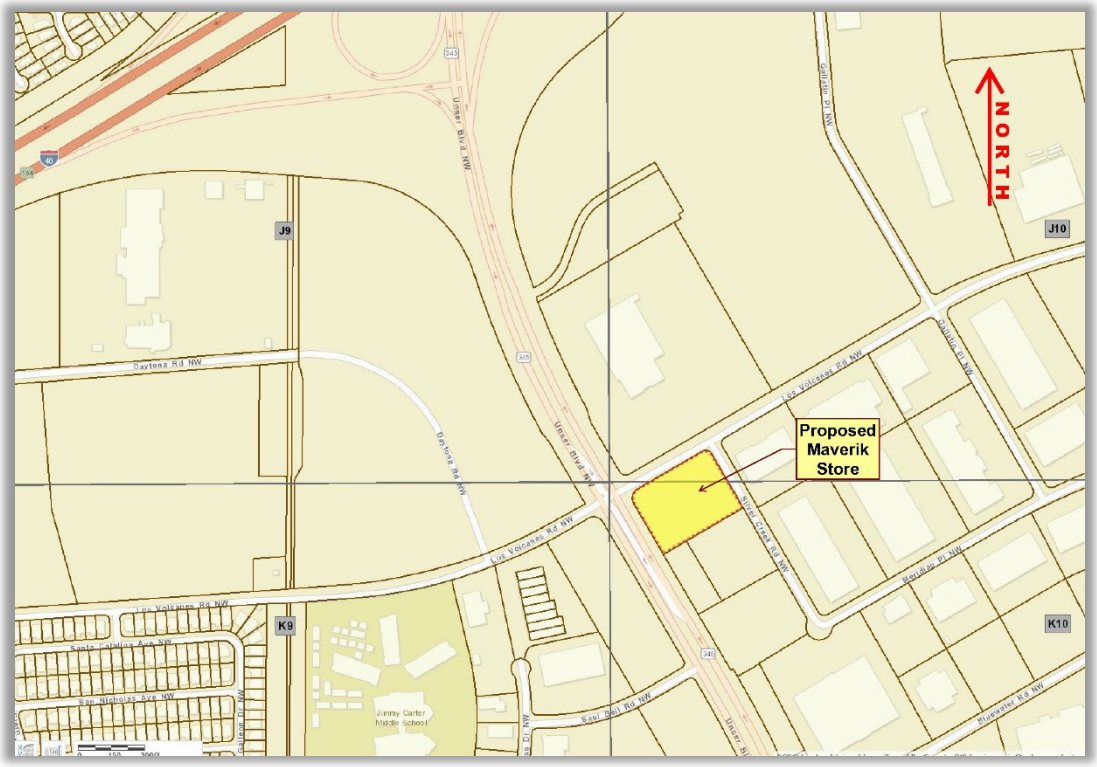
Traffic Impact Study

Introduction

The purpose of this study is to evaluate the transportation conditions before and after implementation of the proposed Maverik Store and determine the impact of the development on the adjacent transportation system. The recommendations of this study will provide measures to mitigate the impact of the development of the site plan on critical intersections and street segments. This study is prepared to meet requirements of the City of Albuquerque Transportation Development Section, Planning Department, City of Albuquerque and New Mexico Department of Transportation District 3 associated with their review of the Maverik Store as shown on the plan on Page A-3 in the Appendix of this report.

The proposed development is located at the southeast corner of Los Volcanes Rd. / Unser Blvd. in Albuquerque, New Mexico. If the property was to develop in a manner significantly different than the proposed plan considered in this report such that the number of generated trips is significantly greater, then an update to this study may be required.

Following is a vicinity map depicting the location of the proposed project:



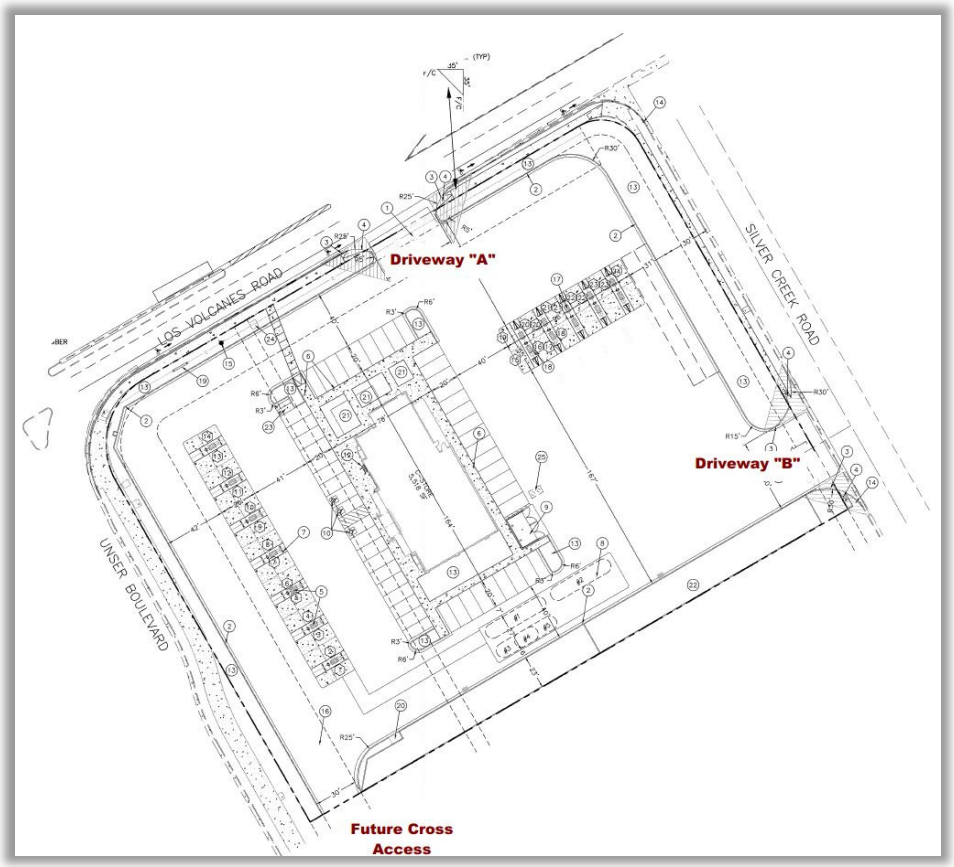
Description of Proposed Development

The proposed project is described as a gasoline station with convenience store at the southeast corner of Los Volcanes Rd. / Unser Blvd. The project lies in the city limits of Albuquerque, NM. The project is next to a Regional Principal Arterial Roadway (Unser Blvd.) which is maintained by the City of Albuquerque. The project is also close to the I-40 / Unser Interchange. Therefore, the project will need to comply with City of Albuquerque requirements regarding the overall development and the adjacent transportation system and with the requirements of the New Mexico Department of Transportation regarding transportation issues at I-40 / Unser Blvd.

This study will analyze an implementation year of 2020 and a horizon year of 2030.

The development will be accessed via two proposed driveways for this parcel of land and a future cross-access easement connection to future development to the south. One driveway is proposed as a full access unsignalized driveway on Los Volcanes Rd. and the other driveway is proposed as a full access unsignalized driveway on Silver Creek Rd.

Following is the proposed site development plan depicting driveway (access) locations (also, see Appendix Page A-3 for a more complete version of the proposed site development plan):



Study Area Conditions

A Traffic Impact Study Scoping Meeting was held with the City of Albuquerque Transportation Development Section, Planning Department with staff (Ernest Armijo) and with the New Mexico Department of Transportation staff (Nancy Perea and Margaret Haynes). During the exchange, it was determined that the study area would include the following list of intersections to be analyzed in the Traffic Impact Study:

1. Los Volcanes Rd. / Coors Blvd.
2. Central Ave. / Unser Blvd.
3. Bluewater Rd. / Unser Blvd.
4. Los Volcanes Rd. / Unser Blvd.
5. I-40 N. Ramp / Unser Blvd.
6. I-40 S. Ramp / Unser Blvd.
7. Los Volcanes Rd. / Silver Creek Rd.

In addition, two proposed driveways will be analyzed: a proposed full access unsignalized driveway on Los Volcanes Rd. and a proposed full access unsignalized driveway on Silver Creek Rd. (see Site Plan on Appendix Page A-3)

This scope of study was based on the assumption that the parcel in question would be developed as a gasoline / service station with a convenience store as shown on the proposed site plan.

There are two other known land development projects in the area which need to be incorporated into the background traffic model for this study: Coors Park & Sell (located at the northeast corner of Fortuna Rd. / Coors Blvd.) is a proposed retail commercial development. Adjustments for the West Mesa HS traffic have been included in the background traffic for the Coors Park & Sell development as well. The title of the Traffic Impact Study for the Coors Park & Sell development is “Fortuna / Coors Retail Commercial Development” dated October 19, 2017. The second known development project in the area which needs to be incorporated into the background traffic model for this study is the BEK Development, a proposed regional food distribution center for which the Traffic Impact Study was prepared just prior to this proposed Maverik Store. Thus, the Maverik Store incorporates the BEK Development traffic into its background traffic volumes.

There are no known Transportation Improvement Program projects in the area that need to be considered in the Traffic Impact Study. However, during the Scoping Meeting for the proposed Maverik Store, the City staff mentioned that there was a proposed widening project on Unser Blvd. from Los Volcanes Rd. south to Sarracino Pl. NW wherein Unser Blvd. would be widened to six lanes. Research for the Unser widening project revealed that funds were diverted to

another project and the Unser widening plans were shelved for the time being until funds were in place to construct the project.

This project area is served by public transit services; specifically Routes #54, 66, 92, 94, 96, 155, 198 and 766. These routes run along multiple roads in the vicinity of this project. See Appendix Page A-153a for City of Albuquerque Transit map.

Some roadways in the vicinity are designated on the Futures 2040 Metropolitan Transportation Plan (2040 Long Range Bikeway System) as either Proposed or Existing Bicycle Lanes.

There are pedestrian facilities in the project area – curb & gutter and sidewalks along the roads, as well as raised medians for pedestrians & bicyclists crossing against traffic.

Los Volcanes Rd. and Bluewater Rd. are classified as a Major Collector Roadways on the Mid-Region Council of Government's Futures 2040 Long Range Roadway System Map. They are generally two-lane urban-type roadways with curb, gutter and sidewalks. The posted speed limit along these roads is 25 MPH or 30 MPH.

Unser Blvd. and Coors Blvd. are classified as Regional Principal Arterial Roadways on the Mid-Region Council of Government's Futures 2040 Long Range Roadway System Map. Unser Blvd. is generally a four-lane roadway while Coors Blvd. is generally a six-lane roadway. Both have curb & gutter with sidewalks. The posted speed limit along this section of Unser Blvd. is 35 MPH and along Coors Blvd. is 45 MPH.

Central Ave. is classified as a Community Principal Arterial Roadway on the Mid-Region Council of Government's Futures 2040 Long Range Roadway System Map. Central Ave. is generally a six-lane roadway with raised medians and curb & gutter with sidewalks. The posted speed limit along this section of Central Ave. is 55 MPH.

Ladera Dr. is classified as a Minor Arterial Roadway on the Mid-Region Council of Government's Futures 2040 Long Range Roadway System Map. Ladera Dr. is generally a four-lane roadway with raised medians and curb & gutter with sidewalks. The posted speed limit along this section of Ladera Dr. is 40 MPH.

Analysis of Existing Conditions

The existing analysis of each of the signalized and unsignalized intersection in this Study are summarized in the following table. The results are based on existing signal timing provided by the City of Albuquerque Traffic Engineering Operations Section of the Municipal Development Department. Existing traffic volumes (turning movement counts) were collected at the intersections targeted for analysis in this study in 2017 and 2018 which are included on Appendix Pages A-172 thru A-177. Resulting calculated delay and associated levels-of-service

Highway Capacity Manual Signalized and Unsignalized Intersection Analysis reports are located on Pages A-72 through A-83 in the Appendix of this report.

Intersection: 1 - Los Volcanes Rd. / Coors Blvd. - Signalized

	Eastbound			Westbound			Northbound			Southbound			
Peak Hour	L	T	R	L	T	R	L	T	R	L	T	R	
AM	E - 57.9	A - 0.0	D - 50.5	A - 0.0	A - 0.0	A - 0.0	A - 2.2	A - 1.8	A - 0.0	A - 0.0	A - 4.0	A - 4.2	**A - 7.3**
PM	E - 59.0	A - 0.0	D - 53.7	A - 0.0	A - 0.0	A - 0.0	A - 3.6	A - 1.9	A - 0.0	A - 0.0	A - 5.5	A - 6.0	**A - 8.4**

Intersection: 2 - Central Ave. / Unser Blvd. - Signalized

	Eastbound			Westbound			Northbound			Southbound			
Peak Hour	L	T	R	L	T	R	L	T	R	L	T	R	
AM	E - 61.6	D - 54.4	D - 54.4	E - 64.4	D - 53.5	A - 0.0	A - 8.0	B - 19.0	B - 19.0	B - 13.9	A - 0.2	A - 0.0	**C - 28.0**
PM	E - 62.6	C - 27.6	C - 27.7	E - 65.0	C - 26.3	A - 0.0	C - 32.4	D - 48.7	D - 46.7	C - 30.2	D - 37.5	A - 0.0	**D - 39.3**

Intersection: 3 - Bluewater Rd. / Unser Blvd. - Signalized

	Eastbound			Westbound			Northbound			Southbound			
Peak Hour	L	T	R	L	T	R	L	T	R	L	T	R	
AM	D - 48.8	D - 45.1	D - 45.1	E - 56.2	E - 55.6	E - 63.8	A - 5.0	B - 12.2	A - 0.0	B - 11.7	A - 0.3	A - 0.0	**B - 13.3**
PM	D - 43.0	D - 40.7	D - 40.7	D - 53.6	D - 52.3	E - 60.5	B - 11.3	C - 22.0	A - 0.0	B - 10.2	B - 15.7	A - 0.0	**C - 24.1**

Intersection: 4 - Los Volcanes Rd. / Unser Blvd. - Signalized

	Eastbound			Westbound			Northbound			Southbound			
Peak Hour	L	T	R	L	T	R	L	T	R	L	T	R	
AM	D - 42.0	D - 45.2	D - 45.2	D - 38.1	D - 44.6	D - 37.0	B - 15.0	A - 7.4	A - 0.0	**F - 124**	B - 18.3	A - 9.6	**C - 26.3**
PM	E - 55.3	D - 49.4	D - 49.4	D - 41.0	D - 47.1	D - 45.3	B - 13.6	A - 0.4	A - 0.0	B - 10.2	B - 20.0	A - 8.3	**C - 21.4**

Intersection: 5 - I-40 N. Ramp / Unser Blvd. - Signalized

	Eastbound			Westbound			Northbound			Southbound			
Peak Hour	L	T	R	L	T	R	L	T	R	L	T	R	
AM	A - 0.0	A - 0.0	A - 0.0	E - 59.3	A - 0.0	A - 0.0	A - 5.6	A - 3.6	A - 0.0	A - 0.0	A - 8.7	A - 9.3	**B - 13.7**
PM	A - 0.0	A - 0.0	A - 0.0	D - 45.3	A - 0.0	A - 0.0	B - 11.3	B - 12.7	A - 0.0	A - 0.0	B - 17.2	B - 17.9	**C - 24.6**

Intersection: 6 - I-40 S. Ramp / Unser Blvd. - Unsignalized

	Eastbound			Westbound			Northbound			Southbound			
Peak Hour	L	T	R	L	T	R	L	T	R	L	T	R	
AM	E - 43.4	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	**A - 0.9**
PM	**F - 999**	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	A - 0.0	**F - 129**

Analysis of Implementation Year Conditions

Traffic Projections

Background traffic was taken from recent traffic counts (Appendix A-172 thru A-177) conducted for this project. The traffic counts were conducted to collect traffic flow rates.

Projected trips were calculated based on Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition utilizing equations for ITE Land Use 945 (Gasoline / Service Station w/Convenience Market. Trips for the development were determined based on land use defined on the Conceptual Site Development Plan on Page A-3 in the Appendix of this report. The following table summarized the trip generation rate for the project:

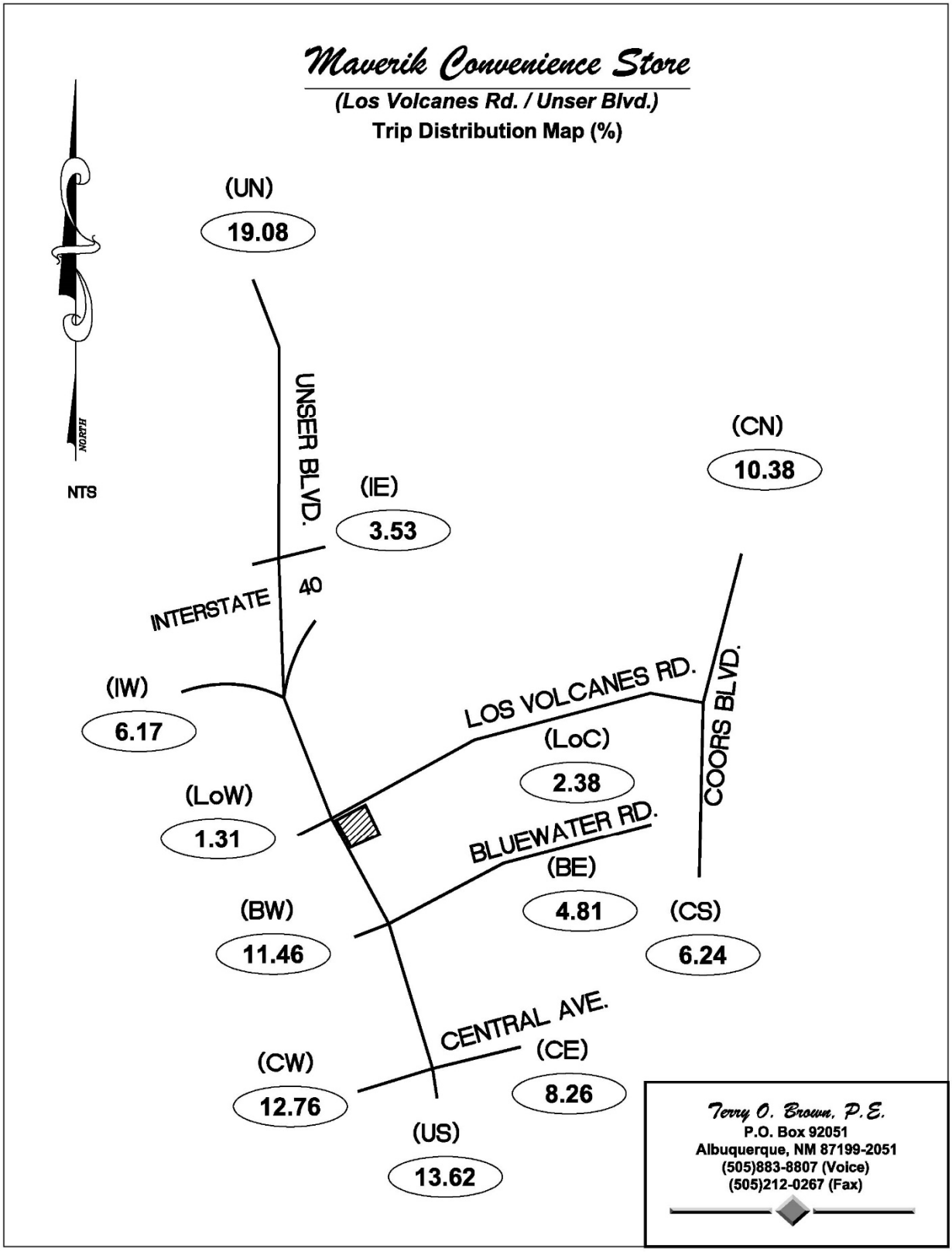
Maverik C-Store (Los Volcanes / Unser Blvd.)

Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Gasoline / Service Station w/ Convenience Market (945)	*20*	4,208	145	139	143	137
	Fueling Positions					

Pass-by trips were not applied to this project since there are no proposed driveways on Unser Blvd. See Appendix Page A-7 for more information regarding the trip generation.

The Gravity Model was used to determine trip distribution where primary trips for the commercial land use development were distributed proportionally to the 2020 projected population of citywide subareas. Population data for the years 2012 and 2040 were taken from the 2040 Socioeconomic Forecasts by Subareas for the Mid-Region of New Mexico supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2012 and 2040 was interpolated linearly to obtain 2020 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 data analysis subzones are shown in the Appendix on Pages A-8 thru A-15 and in the following graphic:


Maverik Convenience Store
(Los Volcanes Rd. / Unser Blvd.)
Trip Distribution Map (%)
NORTH
NTS
(UN)
19.08
UNSER BLVD.
(IE)
3.53
(CN)
10.38
INTERSTATE
40
(IW)
6.17
LOS VOLCANES RD.
COORS BLVD.
(LoC)
2.38
(LoW)
1.31
BLUEWATER RD.
(BE)
4.81
(BW)
11.46
(CS)
6.24
CENTRAL AVE.
(CW)
12.76
(CE)
8.26
(US)
13.62
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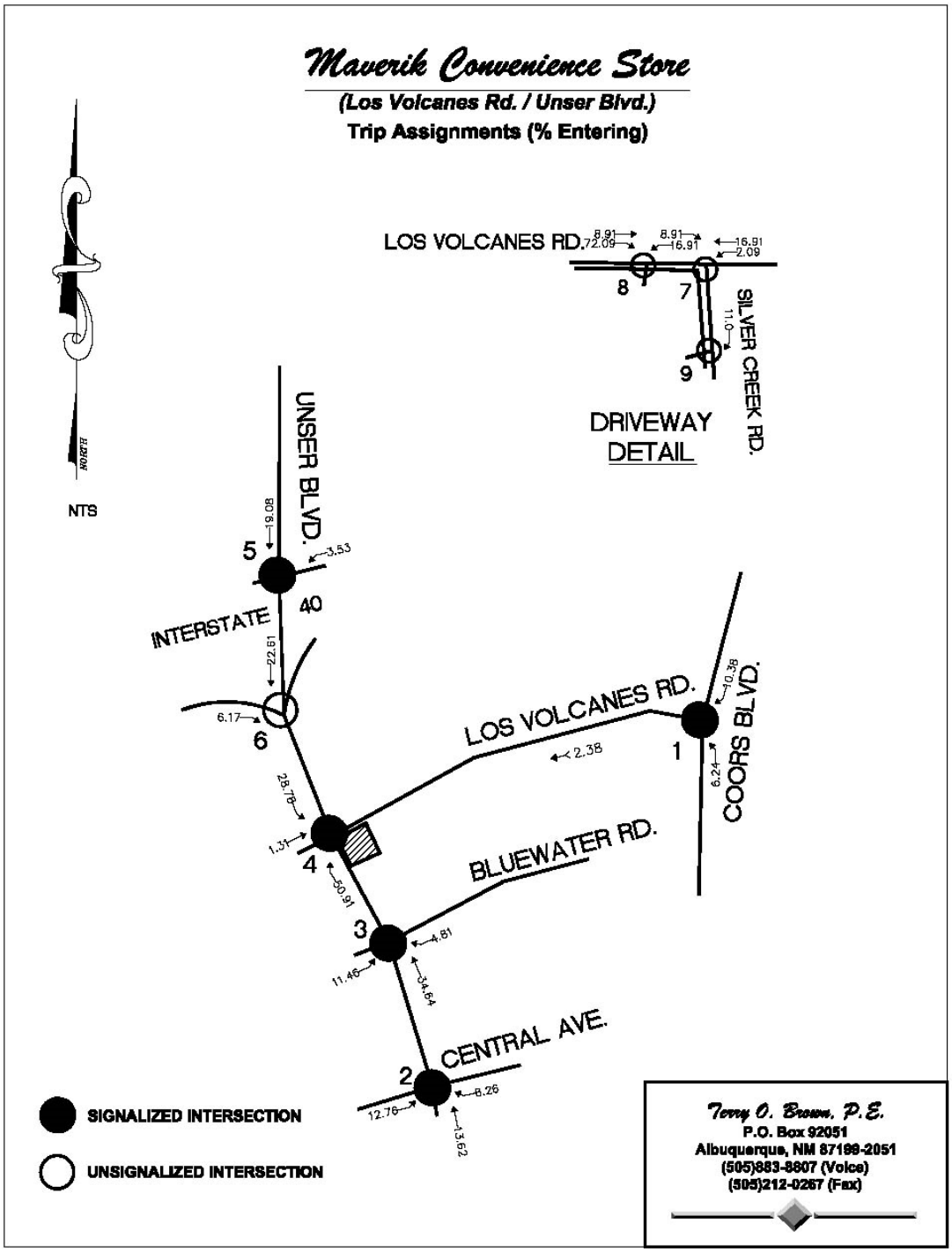
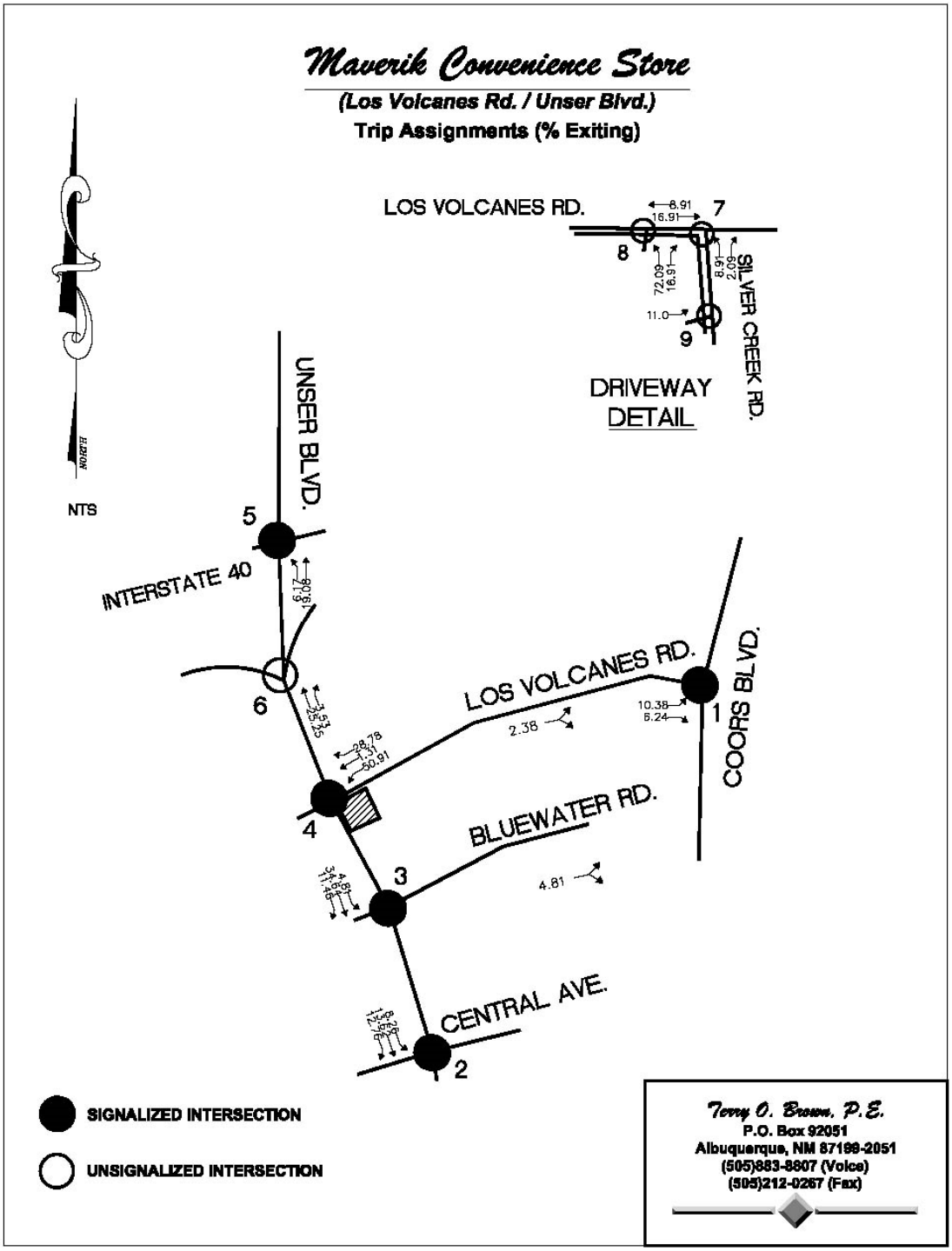
Trip assignments are first made on a percentage basis derived from data established in the trip distribution determination process and logical routing. Those percentages are then applied to the projected trips to determine individual traffic movements. Percentage trip assignments for commercial trips are shown below and in the Appendix on Pages A-14 thru A-15 and in the following displays:




Maverik Convenience Store
(Los Volcanes Rd. / Unser Blvd.)
Trip Assignments (% Exiting)
LOS VOLCANES RD.
SILVER CREEK RD.
DRIVEWAY
DETAIL
NTS
UNSER BLVD.
INTERSTATE 40
LOS VOLCANES RD.
COORS BLVD.
BLUEWATER RD.
CENTRAL AVE.
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION
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Background traffic growth rates were considered for each individual approach to an intersection that was targeted for analysis based on data from the 2007 through 2016 Traffic Flow maps prepared by the Mid-Region Council of Governments. Most of the Traffic Flow Data for those years taken from the MRCOG Traffic Flow Maps were Standard Data. The data from those years for each approach was plotted on a graph and a linear "regression trend line" calculated using the equation format *y=mx+b*. The growth rate was determined by calculating the average volume increase per year during the time period considered and dividing that volume into the most recent AWDT used in the analysis from which future volumes will be calculated. The rate of growth of that trend line was utilized as the annual growth rate for each approach if that calculated rate appeared feasible. However, in every roadway segment considered in this analysis, the rate indicated either an inconsistent or a negative growth trend; therefore, the growth rate was considered to be a generic 0.5%. Historical Growth Rate Graphs with linear regression trend lines are shown in the Appendix on Pages A-16 thru A-28. The growth rate utilized for each approach to an intersection is printed at the top of the Turning Movement sheets for each intersection (Appendix Pages A-30 thru A-71).

The trip generation, trip distribution and trip assignments were utilized along with the existing 2017 / 2018 background traffic volumes and the historical traffic growth rates to determine the Implementation & Horizon year NO BUILD and BUILD volumes, see Appendix Pages A-30 thru A-71.

Traffic Analysis

Signalized and unsignalized intersection analyses performed in this report utilize the Highway Capacity Manual, 6th Edition methods. Software utilized is Synchro recently released version 10.3.15.0. Initial analysis utilizes existing signal timing and existing geometry of the intersection. Also, queuing analysis utilizes Highway Capacity Manual, 6th Edition methods and equations, again using Synchro 10.3.15.0 software to generate the queuing reports. Calculated queue lengths are 95th percentile confidence level.

A capacity analysis for each intersection using existing traffic signal timing (see Appendix Pages A-84 thru A-117) was conducted for the Implementation Year (2020) NO BUILD and BUILD Conditions and the results are summarized as follows:

Implementation Year Analysis (2020)

#1 – Los Volcanes Rd. / Coors Blvd. - Pages A-84 thru A-115

The results of the 2020 analyses of the full access signalized intersection of Los Volcanes Rd. / Coors Blvd. are summarized in the following tables:

	EB (Los Volcanes Rd.)			NB (Coors Blvd.)			SB (Coors Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2		1	1	3			3>	0
AM Peak Hour									
2020 NO BUILD Conditions Volumes	142		46	67	1,080			718	130
V/C Ratio	0.68		0.29	0.13	0.27			0.23	0.24
Level-of-Service	E		D	A	A			A	A
Control Delay (Seconds)	57.7		50.1	2.3	1.9			4.2	4.4
Intersection LOS	**A - 7.5**								
2020 BUILD Conditions Volumes	156		55	76	1,080			718	145
V/C Ratio	0.69		0.34	0.15	0.27			0.24	0.24
Level-of-Service	E		D	A	A			A	A
Control Delay (Seconds)	57.9		50.2	2.5	2.0			4.4	4.6
Intersection LOS	**A - 8.1**								
PM Peak Hour									
2020 NO BUILD Conditions Volumes	188		99	65	1,169			1,692	161
V/C Ratio	0.62		0.47	0.24	0.28			0.48	0.48
Level-of-Service	E		D	A	A			A	A
Control Delay (Seconds)	58.8		53.3	4.4	2.1			6.1	6.7
Intersection LOS	**A - 9.1**								
2020 BUILD Conditions Volumes	202		108	74	1,169			1,692	176
V/C Ratio	0.63		0.49	0.27	0.28			0.49	0.49
Level-of-Service	E		D	A	A			A	A
Control Delay (Seconds)	58.4		53.1	5.0	2.3			6.4	7.1
Intersection LOS	**A - 9.6**								

The 2020 analysis of the intersection of Los Volcanes Rd. / Coors Blvd. demonstrates that the overall intersection delays will be acceptable for all conditions analyzed in this report. Also, it is demonstrated that the proposed Maverik Store will have minimal impact on the intersection. The average intersection delay will be increased by 0.6 seconds during the AM Peak Hour and by 0.5 seconds during the PM Peak Hour as a result of implementation of the proposed Maverik Convenience Store. Therefore, no recommendations are made for the intersection of Los Volcanes Rd. / Coors Blvd.

#2 – Central Ave. / Unser Blvd. - Pages A-84 thru A-115

The results of the 2020 analyses of the full access signalized intersection of Central Ave. / Unser Blvd. are summarized in the following tables:

	EB (Central Ave.)			WB (Central Ave.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	2>	0	1	2	1	1	2>	0	1	2	1
AM Peak Hour												
2020 NO BUILD Conditions Volumes	293	388	18	43	135	90	18	1,253	132	105	447	96
V/C Ratio	0.83	0.80	0.80	0.62	0.49		0.03	0.71	0.72	0.48	0.23	
Level-of-Service	E	D	D	E	D		A	C	C	B	A	
Control Delay (Seconds)	61.9	54.3	54.3	64.4	53.5	0.0	8.1	21.3	21.5	17.1	0.2	0.0
Intersection LOS	**C - 28.9**											
2020 BUILD Conditions Volumes	312	388	18	43	135	102	18	1,273	132	116	466	114
V/C Ratio	0.85	0.80	0.80	0.62	0.52		0.03	0.72	0.73	0.53	0.24	
Level-of-Service	E	D	D	E	D		A	C	C	B	A	
Control Delay (Seconds)	63.0	54.3	54.3	64.4	54.5	0.0	8.3	22.0	22.3	18.5	0.3	0.0
Intersection LOS	**C - 29.4**											
PM Peak Hour												
2020 NO BUILD Conditions Volumes	175	383	34	90	345	61	57	848	109	133	1,065	145
V/C Ratio	0.70	0.31	0.31	0.70	0.26		0.35	0.87	0.87	0.63	0.89	
Level-of-Service	E	C	C	E	C		C	D	D	C	D	
Control Delay (Seconds)	62.8	28.0	28.1	65.0	26.7	0.0	32.7	53.9	53.9	32.0	37.3	0.0
Intersection LOS	**D - 41.7**											
2020 BUILD Conditions Volumes	193	383	34	90	345	73	57	867	109	144	1,084	162
V/C Ratio	0.72	0.31	0.31	0.70	0.27		0.36	0.89	0.89	0.68	0.90	
Level-of-Service	E	C	C	E	C		C	E	E	C	D	
Control Delay (Seconds)	63.9	28.4	28.5	65.0	27.6	0.0	32.8	56.1	56.1	32.3	37.2	0.0
Intersection LOS	**D - 42.7**											

The westbound and southbound right turn movements at this intersection are not controlled by the traffic signal. The 2020 analysis of the intersection of Central Ave. / Unser Blvd. demonstrates that the overall intersection delays will be acceptable for all conditions analyzed in this report. Also, the impact of the proposed Maverik Store is that it increases the calculated average intersection delay by 0.5 seconds during the AM Peak Hour and by 1.0 seconds during the PM Peak Hour. The impact of the proposed Maverik Store on the intersection of Central Ave. / Unser Blvd. is minimal. Therefore, no recommendations are made for the intersection of Central Ave. / Unser Blvd.

#3 – Bluewater Rd. / Unser Blvd. - Pages A-84 thru A-115

The results of the 2020 analyses of the signalized intersection of Bluewater Rd. / Unser Blvd. are summarized in the following tables:

	EB (Bluewater Rd.)			WB (Bluewater Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1	1	1	2	1	1	2	1
AM Peak Hour												
2020 NO BUILD Conditions Volumes	98	43	40	29	19	48	21	1,412	80	108	641	53
V/C Ratio	0.47	0.00	0.33	0.25	0.22	0.64	0.04	0.66		0.45	0.30	
Level-of-Service	D	A	D	E	E	E	A	B		B	A	
Control Delay (Seconds)	49.3	0.0	45.4	56.2	55.6	63.8	5.0	12.3	0.0	12.2	0.3	0.0
Intersection LOS	**B - 13.6**											
2020 BUILD Conditions Volumes	115	43	40	29	19	55	21	1,462	80	115	689	69
V/C Ratio	0.54	0.00	0.32	0.24	0.20	0.67	0.04	0.69		0.51	0.33	
Level-of-Service	D	A	D	E	D	E	A	B		B	A	
Control Delay (Seconds)	50.1	0.0	44.8	55.5	54.8	63.8	5.2	13.1	0.0	14.2	0.3	0.0
Intersection LOS	**B - 14.2**											
PM Peak Hour												
2020 NO BUILD Conditions Volumes	100	54	42	88	93	158	36	941	91	64	1,321	107
V/C Ratio	0.38	0.00	0.25	0.41	0.39	0.78	0.14	0.46		0.18	0.64	
Level-of-Service	D	A	D	D	D	E	B	C		B	B	
Control Delay (Seconds)	42.7	0.0	40.4	53.5	52.2	60.5	12.2	22.5	0.0	10.7	16.6	0.0
Intersection LOS	**C - 24.7**											
2020 BUILD Conditions Volumes	116	54	42	88	93	165	36	991	91	71	1,368	123
V/C Ratio	0.42	0.00	0.24	0.40	0.38	0.79	0.15	0.49		0.22	0.67	
Level-of-Service	D	A	D	D	D	E	B	C		B	B	
Control Delay (Seconds)	42.3	0.0	39.4	52.8	51.5	60.2	13.5	23.8	0.0	11.8	17.8	0.0
Intersection LOS	**C - 25.6**											

The northbound and southbound right turn movements at this intersection are not controlled by the traffic signal. The 2020 analysis of the intersection of Bluewater Rd. / Unser Blvd. demonstrates that the level-of-service will be acceptable for the AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions analyzed in this report. The implementation of the proposed development increases the delay at the intersection by 0.6 seconds during the AM Peak Hour and by 0.9 seconds during the PM Peak Hour. The impact of the proposed Maverik Store is minimal to moderate and, therefore, no operational recommendations are made for the intersection of Bluewater Rd. / Unser Blvd.

#4 – Los Volcanes Rd. / Unser Blvd. - Pages A-84 thru A-115

The results of the 2020 analyses of the full access signalized intersection of Los Volcanes Rd. / Unser Blvd. are summarized in the following tables:

	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	1>	0	1	1	1	1	3	1	1	2	1
AM Peak Hour												
2020 NO BUILD Conditions Volumes	286	82	13	91	77	199	30	1,651	228	316	784	110
V/C Ratio	0.62	0.00	0.40	0.37	0.32	0.57	0.13	0.94		1.44	0.54	0.15
Level-of-Service	D	A	D	D	D	D	B	C		F	B	A
Control Delay (Seconds)	41.6	0.0	44.9	37.6	44.2	36.8	15.8	28.1	0.0	256.0	18.8	9.9
Intersection LOS	**D - 47.8**											
2020 BUILD Conditions Volumes	286	84	13	162	79	239	30	1,651	302	358	784	110
V/C Ratio	0.57	0.00	0.44	0.56	0.28	0.62	0.14	1.01		1.70	0.58	0.16
Level-of-Service	D	A	D	D	D	D	B	F		F	C	B
Control Delay (Seconds)	41.1	0.0	46.6	35.9	40.9	35.3	17.9	42.4	0.0	369.0	21.4	11.5
Intersection LOS	**E - 67.0**											
Mitigage Lane Geometry	2	1>	0	1	1	1	1	3	1	**2**	2	1
2020 BUILD Conditions [MITIGATED] Vol.	286	84	13	162	79	239	30	1,651	302	358	784	110
V/C Ratio	0.72	0.00	0.53	0.78	0.42	0.72	0.12	0.91		0.93	0.51	0.14
Level-of-Service	D	A	D	E	D	D	B	A		E	B	A
Control Delay (Seconds)	49.1	0.0	50.8	59.4	48.9	44.1	14.1	6.5	0.0	73.6	15.7	8.0
Intersection LOS	**C - 24.7**											
PM Peak Hour												
2020 NO BUILD Conditions Volumes	161	52	30	148	72	256	22	1,102	123	209	1,243	109
V/C Ratio	0.78	0.00	0.29	0.42	0.22	0.65	0.10	0.46		0.52	0.69	0.12
Level-of-Service	D	A	D	D	D	D	B	A		B	C	A
Control Delay (Seconds)	51.3	0.0	47.1	39.2	44.7	43.2	15.5	0.5	0.0	11.5	22.3	9.4
Intersection LOS	**C - 21.7**											
2020 BUILD Conditions Volumes	161	54	30	218	74	295	22	1,102	196	250	1,243	109
V/C Ratio	0.27	0.00	0.28	0.60	0.20	0.66	0.10	0.48		0.60	0.70	0.12
Level-of-Service	D	A	D	D	D	D	B	A		B	C	B
Control Delay (Seconds)	38.8	0.0	46.0	41.9	42.3	40.2	16.6	0.6	0.0	12.7	23.3	10.6
Intersection LOS	**B - 19.3**											
Mitigage Lane Geometry	2	1>	0	1	1	1	1	3	1	**2**	2	1
2020 BUILD Conditions [MITIGATED] Vol.	161	54	30	218	74	295	22	1,102	196	250	1,243	109
V/C Ratio	0.37	0.00	0.46	0.62	0.21	0.66	0.10	0.46		0.77	0.67	0.12
Level-of-Service	D	A	E	D	D	D	B	A		E	C	B
Control Delay (Seconds)	48.8	0.0	55.5	43.2	43.0	41.4	14.9	0.5	0.0	62.1	20.7	10.2
Intersection LOS	**C - 22.7**											

The northbound right turn movement at this intersection is not controlled by the traffic signal. The 2020 analysis of the intersection of Los Volcanes Rd. / Unser Blvd. demonstrates that there is a significant impact to the calculated delays for the intersection, especially during the AM Peak Hour period. Mitigation of the impact of this project consists of implementing dual

southbound left turn lanes on Unser Blvd. at Los Volcanes Rd. This will require that Los Volcanes Rd. be widened to accommodate the dual left turns with two eastbound lanes extending from Unser Blvd. almost to Gallatin Pl. Transition back to one lane eastbound should occur just west of the intersection of Gallatin Pl. Signal re-timing will also be necessary. The southbound left turn movement will be required to operate as a "Protected ONLY" left turn movement.

The existing southbound left turn lane on Unser Blvd. at Los Volcanes Rd. is approximately 150 feet long. Implementing dual left turn lanes will require that the outside left turn lane (which is current striped out) be re-striped for use. The outside left turn lane will be more than 1,000 feet long, which is sufficient to contain the calculated 95th Percentile queuing for the movement (more on that issue in the horizon year analysis section).

#5 – I-40 N. Ramp / Unser Blvd. - Pages A-84 thru A-115

The results of the 2020 analyses of the signalized intersection of I-40 N. Ramp / Unser Blvd. are summarized in the following tables:

	WB (I-40 N. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	<1	0	1	2	0	0	3>	0
AM Peak Hour									
2020 NO BUILD Conditions Volumes	351	1	0	18	701	0	0	1,686	67
V/C Ratio	0.83	0.00	0.00	0.08	0.27	0.00	0.00	0.51	0.51
Level-of-Service	E	A	A	A	A	A	A	A	A
Control Delay (Seconds)	59.0	0.0	0.0	5.9	3.8	0.0	0.0	9.1	9.8
Intersection LOS	**B - 14.1**								
2020 BUILD Conditions Volumes	362	1	0	27	728	0	0	1,714	67
V/C Ratio	0.83	0.00	0.00	0.12	0.28	0.00	0.00	0.52	0.52
Level-of-Service	E	A	A	A	A	A	A	A	B
Control Delay (Seconds)	58.7	0.0	0.0	6.4	4.0	0.0	0.0	9.4	10.1
Intersection LOS	**B - 14.3**								
PM Peak Hour									
2020 NO BUILD Conditions Volumes	939	1	0	31	928	0	0	1,046	71
V/C Ratio	0.87	0.00	0.00	0.09	0.43	0.00	0.00	0.41	0.41
Level-of-Service	D	A	A	B	B	A	A	B	B
Control Delay (Seconds)	45.1	0.0	0.0	11.7	13.2	0.0	0.0	17.8	18.4
Intersection LOS	**C - 24.9**								
2020 BUILD Conditions Volumes	944	1	0	39	954	0	0	1,073	71
V/C Ratio	0.87	0.00	0.00	0.12	0.45	0.00	0.00	0.42	0.42
Level-of-Service	D	A	A	B	B	A	A	B	B
Control Delay (Seconds)	45.0	0.0	0.0	12.0	13.5	0.0	0.0	18.1	18.7
Intersection LOS	**C - 24.9**								

The westbound right turn movement at this intersection is not controlled by the traffic signal. The 2020 analysis of the intersection of I-40 N. Ramp / Unser Blvd. demonstrates that the level-

of-service will be acceptable for both the AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions analyzed in this report. The implementation of the proposed development increases the delay at the intersection by 0.2 seconds during the AM Peak Hour and by 0.0 seconds during the PM Peak Hour. Therefore, no recommendations are made for the intersection of I-40 N. Ramp / Unser Blvd.

#6 –I-40 S. Ramp / Unser Blvd. – Pages A-84 thru A-115

The results of the analysis of the unsignalized intersection of I-40 S. Ramp / Unser Blvd. are summarized in the following table:

	EB (I-40 S. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	0	1	0	2	1	0	2	0
AM Peak Hour									
2020 NO BUILD Conditions Volumes	54	0	32	0	692	0	0	1,026	0
V/C Ratio	0.32								
Level-of-Service	D		A						
Control Delay (Seconds)	33.2		0.0						
Intersection LOS	**TWSC**								
2020 BUILD Conditions Volumes	54	0	41	0	727	0	0	1,059	0
V/C Ratio	1.26								
Level-of-Service	E		A						
Control Delay (Seconds)	38.3		0.0						
Intersection LOS	**TWSC**								
PM Peak Hour									
2020 NO BUILD Conditions Volumes	82	0	50	0	1,072	0	0	1,983	0
V/C Ratio	13.78								
Level-of-Service	F		A						
Control Delay (Seconds)	999		0.0						
Intersection LOS	**TWSC**								
2020 BUILD Conditions Volumes	82	0	59	0	1,107	0	0	2,015	0
V/C Ratio	109.33								
Level-of-Service	F		A						
Control Delay (Seconds)	999		0.0						
Intersection LOS	**TWSC**								

The northbound right turn movement and the southbound to eastbound left turn movement do not affect the operation of this unsignalized intersection. The 2020 analysis of the intersection of I-40 S. Ramp / Unser Blvd. demonstrates that the delays will be very long for all conditions analyzed in this report. In the previous Traffic Impact Study for the BEK Facility, mitigated analysis took into consideration the impact of upstream / downstream traffic signals (I-40 N. Ramp / Unser and Los Volcanes Rd. / Unser) and considers that there is sufficient room for one vehicle storage in the center of Unser Blvd. to affect a two-stage left turn. A Peak Hour Traffic Signal Warrant was performed in that Study and it showed that a traffic signal is not warranted

at this intersection. The proposed volumes at the I-40 S. Ramp / Unser Blvd. with respect to a traffic signal warrant analysis will not change for this project since the proposed Maverik Store will not generate a single eastbound left turn movement at the intersection. A traffic signal is still not warranted. There is no solution to the long delays for the eastbound left turn movement at this ramp short of major interchange redesign. Also, the proposed Maverik Store does not contribute any traffic to the problematic eastbound left turn movement. Therefore, no recommendations are made for the intersection of I-40 S. Ramp / Unser Blvd.

#7 – Los Volcanes Rd. / Silver Creek Rd. – Pages A-84 thru A-115

The results of the analysis of the full access unsignalized intersection of Los Volcanes Rd. / Silver Creek Rd. are summarized in the following table:

	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Silver Creek Rd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		1>		1	1			<1>	
AM Peak Hour									
2020 BUILD Conditions Volumes		605	53	22	382		22		8
V/C Ratio				0.04			0.14		
Level-of-Service				A	A		C		
Control Delay (Seconds)				9.9	0.0		19.0		
Intersection LOS	**TWSC**								
PM Peak Hour									
2020 BUILD Conditions Volumes		379	22	8	461		51		22
V/C Ratio				0.01			0.25		
Level-of-Service				A	A		C		
Control Delay (Seconds)				8.5	0.0		17.1		
Intersection LOS	**TWSC**								

The 2020 analysis of the intersection of Los Volcanes Rd. / Silver Creek Rd. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Los Volcanes Rd. / Silver Creek Rd.

#8 – Los Volcanes Rd. / Driveway "A". - Pages A-84 thru A-115

Driveway "A" is proposed as an unsignalized full access driveway on Los Volcanes Rd. The results of the 2020 analyses of the intersection of Los Volcanes Rd. / Driveway "A" are summarized in the following tables:

	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Driveway "A")		
	L	T	R	L	T	R	L	T	R
Proposed Lane Geometry		2>		1	1			<1>	
AM Peak Hour									
2020 BUILD Conditions Volumes		639	105	25	379		100		24
V/C Ratio				0.05			0.61		
Level-of-Service				B	A		E		
Control Delay (Seconds)				10.5	0.0		37.3		
Intersection LOS	**TWSC**								
PM Peak Hour									
2020 BUILD Conditions Volumes		397	103	24	488		99		23
V/C Ratio				0.04			0.50		
Level-of-Service				A	A		D		
Control Delay (Seconds)				9.1	0.0		26.7		
Intersection LOS	**TWSC**								

The 2020 analysis of the intersection of Los Volcanes Rd. / Driveway "A" demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Los Volcanes Rd. / Driveway "A".

It is recommended that Driveway "A" be designed and constructed with one entering lane and one exiting lane (minimum) and that adequate sight distances be provided for entering and exiting vehicles at the driveway. Also, Driveway "A" should be designed and constructed to facility delivery trucks as needed.

A conceptual plan for Driveway "A" on Los Volcanes Rd. can be located on Page A-3a in the Appendix of this report demonstrating the proposed location and geometric design of Los Volcanes Rd. near Driveway "A".

#9 – Driveway "B" / Silver Creek Rd. - Pages A-84 thru A-115

Driveway "B" is proposed as a full access unsignalized intersection on Silver Creek Rd. The results of the 2020 analyses of the intersection of Driveway "B" / Silver Creek Rd. are summarized in the following tables:

	EB (Driveway "B")			NB (Silver Creek Rd.)			SB (Silver Creek Rd.)		
	L	T	R	L	T	R	L	T	R
Proposed Lane Geometry		<1>			<1			1>	
AM Peak Hour									
2020 BUILD Conditions Volumes	15		1	1	15			59	16
V/C Ratio	0.02			0.00					
Level-of-Service	A			A	A				
Control Delay (Seconds)	9.2			7.4	0.0				
Intersection LOS	**TWSC**								
PM Peak Hour									
2020 BUILD Conditions Volumes	15		1	1	58			14	16
V/C Ratio	0.02			0.00					
Level-of-Service	A			A	A				
Control Delay (Seconds)	9.1			7.3	0.0				
Intersection LOS	**TWSC**								

The 2020 analysis of the intersection of Driveway "B" / Silver Creek Rd. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Driveway "B" / Silver Creek Rd.

It is recommended that Driveway "B" be designed and constructed with one entering lane and one exiting lane (minimum) and that adequate sight distances be provided for entering and exiting vehicles at the driveway. Also, Driveway "B" should be designed and constructed to facility delivery trucks as needed.

Analysis of Horizon Year (2030) Conditions

#1 – Los Volcanes Rd. / Coors Blvd. - Pages A-116 thru A-147

The results of the 2030 analyses of the full access signalized intersection of Los Volcanes Rd. / Coors Blvd. are summarized in the following tables:

	EB (Los Volcanes Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2		1	1	3			3>	0
AM Peak Hour									
2030 NO BUILD Conditions Volumes	149		49	76	1,132			753	136
V/C Ratio	0.69		0.30	0.15	0.29			0.25	0.25
Level-of-Service	E		D	A	A			A	A
Control Delay (Seconds)	57.3		49.9	2.5	2.0			4.3	4.6
Intersection LOS	**A - 7.6**								
95th Percentile Queue (veh)	4.5		6.0	0.5	2.3			3.7	3.9
2030 BUILD Conditions Volumes	163		58	85	1,132			753	151
V/C Ratio	0.70		0.35	0.17	0.29			0.25	0.26
Level-of-Service	E		D	A	A			A	A
Control Delay (Seconds)	57.7		50.0	2.7	2.1			4.5	4.8
Intersection LOS	**A - 8.2**								
95th Percentile Queue (veh)	4.9		7.2	0.6	2.4			3.9	4.1
PM Peak Hour									
2030 NO BUILD Conditions Volumes	196		112	71	1,223			1,771	168
V/C Ratio	0.64		0.56	0.29	0.30			0.51	0.52
Level-of-Service	E		E	A	A			A	A
Control Delay (Seconds)	58.8		55.1	6.1	2.7			7.2	7.9
Intersection LOS	**B - 10.1**								
95th Percentile Queue (veh)	5.9		12.2	0.7	3.4			10.9	11.7
2030 BUILD Conditions Volumes	210		121	80	1,223			1,771	183
V/C Ratio	0.60		0.52	0.31	0.30			0.52	0.52
Level-of-Service	E		D	A	A			A	A
Control Delay (Seconds)	57.1		52.6	6.2	2.6			7.1	7.9
Intersection LOS	**B - 10.1**								
95th Percentile Queue (veh)	6.3		13.2	0.9	3.3			10.9	11.9

Queuing Summary	EB (Los Volcanes Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
2030 NO BUILD Conditions (Max Queue)	5.9	0.0	12.2	0.7	3.4	0.0	0.0	10.9	11.7
2030 BUILD Conditions (Max Queue)	6.3	0.0	13.2	0.9	3.3	0.0	0.0	10.9	11.9
Percent Heavy Commercial Traffic	5%								
2030 NO BUILD Conditions (Max Queue) - Ft.	155	0	320	18	89	0	0	286	307
2030 BUILD Conditions (Max Queue) - Ft.	165	0	347	24	87	0	0	286	312
Length of Existing Lane	150		150	190	Cont			Cont	0

The 2030 analysis of the intersection of Los Volcanes Rd. / Coors Blvd. demonstrates that the overall intersection delays will be acceptable for all conditions analyzed in this report. Also, the impact of the proposed Maverik Store on the intersection of Los Volcanes Rd. / Coors Blvd. is that it increases the calculated average intersection delay by 0.6 seconds during the AM Peak Hour and 0.0 seconds during the PM Peak Hour. The impact is minimal. Therefore, no recommendations are made for the intersection of Los Volcanes Rd. / Coors Blvd.

The queuing analysis demonstrates that the eastbound approach to this intersection is deficit in queuing storage lanes. Queuing storage is limited by available right-of-way constraints as well as the presence of existing private driveways located approximately 275 feet west of the eastbound stop bar on Los Volcanes. The existing striping for the eastbound approach optimizes the right-of-way and space available for the left and right turn lanes. Therefore, no recommendation is made regarding extending existing lanes.

#2 – Central Ave. / Unser Blvd. - Pages A-116 thru A-147

The results of the 2030 analyses of the full access signalized intersection of Central Ave. / Unser Blvd. are summarized in the following tables:

	EB (Central Ave.)			WB (Central Ave.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	2>	0	1	2	1	1	2>	0	1	2	1
AM Peak Hour												
2030 NO BUILD Conditions Volumes	310	407	19	46	142	98	26	1,822	192	110	471	102
V/C Ratio	0.84	0.80	0.81	0.63	0.49		0.04	1.04	1.08	0.81	0.25	
Level-of-Service	E	D	D	E	D		A	F	F	D	A	
Control Delay (Seconds)	62.9	54.5	54.5	64.5	53.4	0.0	8.8	65.8	77.3	39.5	0.3	0.0
Intersection LOS	**E - 57.1**											
95th Percentile Queue (veh)	9.4	11.3	11.7	3.0	4.1	0.0	0.5	50.6	56.8	4.1	0.1	0.0
2030 BUILD Conditions Volumes	329	407	19	46	142	110	26	1,842	192	121	490	120
V/C Ratio	0.86	0.80	0.81	0.63	0.53		0.04	1.07	1.10	0.83	0.26	
Level-of-Service	E	D	D	E	D		A	F	F	D	A	
Control Delay (Seconds)	64.2	54.5	54.5	64.5	54.3	0.0	9.1	73.8	86.3	40.8	0.3	0.0
Intersection LOS	**E - 61.8**											
95th Percentile Queue (veh)	10.0	11.3	11.7	3.0	4.1	0.0	0.5	53.6	60.3	7.3	0.1	0.0
PM Peak Hour												
2030 NO BUILD Conditions Volumes	184	402	36	94	363	65	83	1,235	158	147	1,121	155
V/C Ratio	0.78	0.35	0.36	0.78	0.30		0.53	1.22	1.23	0.83	0.92	
Level-of-Service	E	C	C	E	C		D	F	F	D	D	
Control Delay (Seconds)	68.7	31.7	31.7	69.3	30.1	0.0	35.1	158.0	163.0	38.3	38.4	0.0
Intersection LOS	**F - 83.3**											
95th Percentile Queue (veh)	6.3	9.3	9.6	6.4	7.9	0.0	3.4	54.2	56.1	5.7	22.0	0.0
2030 BUILD Conditions Volumes	202	402	36	94	363	77	83	1,254	158	158	1,140	172
V/C Ratio	0.73	0.35	0.35	0.71	0.30		0.49	1.22	1.23	0.81	0.92	
Level-of-Service	E	C	C	E	C		C	F	F	D	D	
Control Delay (Seconds)	64.6	30.9	31.0	64.9	29.9	0.0	33.4	155.0	161.0	36.7	36.7	0.0
Intersection LOS	**F - 81.5**											
95th Percentile Queue (veh)	6.6	9.2	9.5	6.2	7.8	0.0	3.3	54.5	56.5	5.8	21.9	0.0

Queuing Summary	EB (Central Ave.)			WB (Central Ave.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
2030 NO BUILD Conditions (Max Queue)	9.4	11.3	11.7	6.4	7.9	0.0	3.4	54.2	56.8	5.7	22.0	0.0
2030 BUILD Conditions (Max Queue)	10.0	11.3	11.7	6.2	7.8	0.0	3.3	54.5	60.3	7.3	21.9	0.0
Percent Heavy Commercial Traffic	5%											
2030 NO BUILD Conditions (Max Queue) - Ft.	247	297	307	168	207	0	89	1,423	1,491	150	578	0
2030 BUILD Conditions (Max Queue) - Ft.	263	297	307	163	205	0	87	1,431	1,583	192	575	0
Length of Existing Lane	340	Cont	0	385	Cont	125	150	Cont	0	450	Cont	800

The westbound and southbound right turn movements at this intersection are not controlled by the traffic signal. The 2030 analysis of the intersection of Central Ave. / Unser Blvd. demonstrates that the overall intersection delays will be marginally acceptable for AM conditions analyzed in this report. The PM conditions show long delays for both the NO BUILD and BUILD

analyses. The impact of the Maverik Store increases the average intersection delay by 4.7 seconds during the AM Peak Hour and reduces delay by 1.8 seconds during the PM Peak Hour. The impact of the proposed Maverik Convenience Store is minimal. Therefore, no recommendations are made for the intersection of Central Ave. / Unser Blvd.

The queuing analysis demonstrates that the existing auxiliary left and right turn lanes are of sufficient length to contain the calculated 95th Percentile queues at the intersection. Therefore, no recommendation is made regarding queuing storage issues.

#3 – Bluewater Rd. / Unser Blvd. - Pages A-116 thru A-147

The results of the 2030 analyses of the signalized intersection of Bluewater Rd. / Unser Blvd. are summarized in the following tables:

	EB (Bluewater Rd.)			WB (Bluewater Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	1>	0	1	1	1	1	2	1	1	2	1
AM Peak Hour												
2030 NO BUILD Conditions Volumes	135	60	56	31	20	51	23	1,545	88	123	729	61
V/C Ratio	0.64	0.00	0.46	0.26	0.21	0.66	0.04	0.73		0.58	0.34	
Level-of-Service	D	A	D	E	E	E	A	B		B	A	
Control Delay (Seconds)	54.9	0.0	46.6	56.1	55.2	63.7	5.1	13.1	0.0	17.7	0.3	0.0
Intersection LOS	**B - 15.0**											
95th Percentile Queue (veh)	8.3	0.0	6.4	1.9	1.2	3.4	0.3	15.6	0.0	3.6	0.2	0.0
2030 BUILD Conditions Volumes	152	60	56	31	20	58	23	1,595	88	130	777	77
V/C Ratio	0.70	0.00	0.45	0.25	0.20	0.68	0.05	0.76		0.64	0.37	
Level-of-Service	E	A	D	E	D	E	A	B		C	A	
Control Delay (Seconds)	58.6	0.0	46.0	55.5	54.5	63.6	5.4	14.1	0.0	21.3	0.3	0.0
Intersection LOS	**B - 15.9**											
95th Percentile Queue (veh)	3.0	0.0	6.4	1.9	1.2	3.8	0.3	17.0	0.0	4.6	0.2	0.0
PM Peak Hour												
2030 NO BUILD Conditions Volumes	138	75	59	92	98	165	39	1,028	99	72	1,510	121
V/C Ratio	0.55	0.00	0.34	0.44	0.42	0.83	0.22	0.51		0.25	0.75	
Level-of-Service	D	A	D	D	D	E	C	C		B	C	
Control Delay (Seconds)	46.0	0.0	41.2	54.2	52.6	62.8	20.4	24.6	0.0	13.3	32.3	0.0
Intersection LOS	**C - 33.0**											
95th Percentile Queue (veh)	7.6	0.0	7.0	5.6	5.8	10.1	1.0	16.7	0.0	1.5	29.8	0.0
2030 BUILD Conditions Volumes	154	75	59	92	98	172	39	1,078	99	79	1,557	137
V/C Ratio	0.56	0.00	0.33	0.42	0.38	0.80	0.21	0.54		0.25	0.77	
Level-of-Service	D	A	D	D	D	E	C	B		B	C	
Control Delay (Seconds)	44.3	0.0	40.1	52.6	51.1	59.8	20.6	15.1	0.0	11.4	32.6	0.0
Intersection LOS	**C - 29.7**											
95th Percentile Queue (veh)	8.2	0.0	6.9	5.5	5.7	10.3	1.0	12.3	0.0	1.6	30.5	0.0

Queuing Summary	EB (Bluewater Rd.)			WB (Bluewater Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
2030 NO BUILD Conditions (Max Queue)	8.3	0.0	7.0	5.6	5.8	10.1	1.0	16.7	0.0	3.6	29.8	0.0
2030 BUILD Conditions (Max Queue)	8.2	0.0	6.9	5.5	5.7	10.3	1.0	17.0	0.0	4.6	30.5	0.0
Percent Heavy Commercial Traffic	8%											
2030 NO BUILD Conditions (Max Queue) - Ft.	218	0	184	147	152	265	26	438	0	95	782	0
2030 BUILD Conditions (Max Queue) - Ft.	215	0	181	144	150	270	26	446	0	121	801	0
Length of Existing Lane	90	Cont	0	125	Cont	125	115	Cont	250	150	Cont	150

The northbound and southbound right turn movements at this intersection are not controlled by the traffic signal. The 2030 analysis of the intersection of Bluewater Rd. / Unser Blvd. demonstrates that the level-of-service will be acceptable for the AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions analyzed in this report. The implementation of the

proposed development increases the delay at the intersection by 0.9 seconds during the AM Peak Hour and by 0.3 seconds during the PM Peak Hour. The impact of the proposed Maverik Store is minimal to moderate and, therefore, no operational recommendations are made for the intersection of Bluewater Rd. / Unser Blvd.

The queuing analysis for this intersection demonstrates that there are deficit storage lanes on the Bluewater eastbound and westbound approaches, but sufficient storage for the calculated 95th percentile queues on Unser Blvd. northbound and southbound. Due to right-of-way constraints and / or driveway issues, no recommendation is made with regard to queuing issues at this intersection.

#4 – Los Volcanes Rd. / Unser Blvd. - Pages A-116 thru A-147

The results of the 2030 analyses of the full access signalized intersection of Los Volcanes Rd. / Unser Blvd. are summarized in the table on the following page.

As expected, the signalized intersection of Los Volcanes Rd. / Unser Blvd. is the intersection that is most impacted by the proposed Maverik Convenience Store at the southeast corner of that intersection. The 2030 analysis of the signalized intersection is very congested and experiencing long delays, especially during the AM Peak Hour NO BUILD and BUILD conditions. The Maverik Convenience Store project is expected to increase the average overall intersection delay by 26 seconds during the AM Peak Hour period and reduce the average overall intersection delay by 3.1 seconds during the PM Peak Hour period.

The excessive delays at this intersection during the 2030 AM Peak Hour period can be mitigated by constructing and implementing dual southbound left turn lanes as recommended in the Implementation Year Analysis section of this report. Implementation of the dual southbound left turn lanes will require that Los Volcanes Rd. be widened to accommodate the dual left turns with two eastbound lanes extending from Unser Blvd. almost to Gallatin Pl. Transition back to one lane eastbound should occur just west of the intersection of Gallatin Pl. Signal re-timing will also be necessary. The southbound left turn movement will be required to operate as a "Protected ONLY" left turn movement.

The queuing analysis in the table at the bottom of the following page assumes that the mitigated geometry will be implemented for the BUILD Conditions. There are deficit queuing storage issues on Los Volcanes Rd., but not on northbound and southbound Unser Blvd. Queuing storage issues eastbound and westbound on Los Volcanes cannot be mitigated due to existing right-of-way issues and / or driveway issues.

Also, the southbound queuing on Unser Blvd. for the left turn movements requires 473 feet of storage (dual lanes) for a total of 946 feet of storage (473 x 2). In this case, the inside storage lane provides 150 feet of left turn storage and the outside left turn lane will provide more than 1,000 feet of storage for the southbound left turn movement. This report concludes that the 150 foot long inside left turn lane plus the 1,000+ foot long outside left turn lane will provide more than sufficient storage for the southbound left turn movement in 2030. Therefore, the only recommendation of this report is to open up the existing outside southbound left turn lane, thus providing dual southbound left turn lanes on Unser Blvd. at Los Volcanes Rd.

	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	2	1>	0	1	1	1	1	3	1	1	2	1
AM Peak Hour												
2030 NO BUILD Conditions Volumes	300	86	14	96	81	213	34	1,876	266	353	823	116
V/C Ratio	0.64	0.00	0.41	0.38	0.32	0.59	0.16	1.10		1.68	0.58	0.16
Level-of-Service	D	A	D	D	D	D	B	F		F	C	B
Control Delay (Seconds)	41.4	0.0	44.2	36.6	43.1	36.2	17.1	80.1	0.0	360.0	20.2	10.5
Intersection LOS	**F - 82.0**											
95th Percentile Queue (veh)	2.4	0.0	6.5	5.5	5.1	11.5	1.2	40.8	0.0	51.2	15.7	3.3
2030 BUILD Conditions Volumes	300	88	14	167	83	253	34	1,876	340	395	823	116
V/C Ratio	0.60	0.00	0.45	0.56	0.28	0.64	0.18	1.17		1.88	0.62	0.17
Level-of-Service	D	A	D	D	D	C	B	F		F	C	B
Control Delay (Seconds)	40.8	0.0	45.9	35.2	40.0	34.8	19.2	115.0	0.0	447.0	23.0	12.2
Intersection LOS	**F - 108.1**											
Mitigage Lane Geometry	2	1>	0	1	1	1	1	3	1	2	2	1
V/C Ratio	0.82	0.00	0.56	0.87	0.45	0.78	0.14	1.00		1.09	0.53	0.15
Level-of-Service	E	A	D	E	D	D	B	F		F	B	A
Control Delay (Seconds)	57.2	0.0	51.7	74.2	49.2	49.0	13.4	14.4	0.0	117.0	15.5	8.1
Intersection LOS	**C - 33.4**											
95th Percentile Queue (veh)	5.3	0.0	7.2	8.3	5.7	15.4	1.0	5.6	0.0	18.0	13.7	2.8
PM Peak Hour												
2030 NO BUILD Conditions Volumes	169	54	32	167	75	292	25	1,252	145	229	1,305	114
V/C Ratio	0.83	0.00	0.28	0.47	0.21	0.69	0.14	0.57		0.64	0.77	0.13
Level-of-Service	D	A	D	D	D	D	B	A		B	C	B
Control Delay (Seconds)	54.7	0.0	45.3	38.9	43.0	42.1	19.9	2.2	0.0	15.1	27.2	11.6
Intersection LOS	**C - 24.0**											
2030 BUILD Conditions Volumes	169	56	32	237	77	331	25	1,252	218	270	1,305	114
V/C Ratio	0.27	0.00	0.27	0.61	0.20	0.67	0.13	0.58		0.71	0.76	0.13
Level-of-Service	D	A	D	D	D	D	B	A		B	C	B
Control Delay (Seconds)	36.6	0.0	43.7	40.7	40.3	37.8	19.5	3.3	0.0	16.0	27.0	11.7
Intersection LOS	**C - 20.9**											
95th Percentile Queue (veh)	4.2	0.0	4.8	3.4	4.0	15.3	0.7	2.1	0.0	7.9	24.6	3.0
Mitigage Lane Geometry	2	1>	0	1	1	1	1	3	1	2	2	1
V/C Ratio	0.37	0.00	0.44	0.63	0.20	0.69	0.12	0.55		0.78	0.73	0.13
Level-of-Service	D	A	D	D	D	D	B	A		E	C	B
Control Delay (Seconds)	47.6	0.0	54.0	42.0	41.0	40.7	17.3	1.1	0.0	63.0	23.8	11.3
Intersection LOS	**C - 23.4**											
95th Percentile Queue (veh)	4.8	0.0	5.5	11.7	4.1	15.8	0.7	0.6	0.0	8.8	23.1	2.9

Queuing Summary	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R	L	T	R
2030 NO BUILD Conditions (Max Queue)	9.2	0.0	6.5	8.3	5.1	14.1	1.2	40.8	0.0	51.2	24.7	3.3
2030 BUILD Conditions (Max Queue)	5.3	0.0	7.2	11.7	5.7	15.8	1.0	5.6	0.0	18.0	23.1	2.9
Percent Heavy Commercial Traffic	10%											
2030 NO BUILD Conditions (Max Queue) - Ft.	242	0	171	218	134	370	32	1,071	0	1,344	648	87
2030 BUILD Conditions (Max Queue) - Ft.	139	0	189	307	150	415	26	147	0	473	606	76
Length of Existing Lane	100	Cont	0	140	Cont	140	580	Cont	140	999	Cont	150

#5 – I-40 N. Ramp / Unser Blvd. - Pages A-116 thru A-147

The results of the 2030 analyses of the signalized intersection of I-40 N. Ramp / Unser Blvd. are summarized in the following tables:

	WB (I-40 N. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	<1	0	1	2	0	0	3>	0
AM Peak Hour									
2030 NO BUILD Conditions Volumes	389	1	0	20	737	0	0	1,807	72
V/C Ratio	0.84	0.00	0.00	0.10	0.29	0.00	0.00	0.56	0.56
Level-of-Service	E	A	A	A	A	A	A	B	B
Control Delay (Seconds)	58.1	0.0	0.0	7.2	4.3	0.0	0.0	10.4	11.2
Intersection LOS	**B - 15.2**								
95th Percentile Queue (veh)	11.4	0.0	0.0	0.3	4.9	0.0	0.0	13.7	15.0
2030 BUILD Conditions Volumes	394	1	0	29	764	0	0	1,835	72
V/C Ratio	0.84	0.00	0.00	0.14	0.30	0.00	0.00	0.57	0.57
Level-of-Service	E	A	A	A	A	A	A	B	B
Control Delay (Seconds)	58.0	0.0	0.0	7.8	4.4	0.0	0.0	10.6	11.5
Intersection LOS	**B - 15.3**								
95th Percentile Queue (veh)	11.5	0.0	0.0	0.4	5.2	0.0	0.0	14.1	15.5
PM Peak Hour									
2030 NO BUILD Conditions Volumes	992	1	0	34	981	0	0	1,121	76
V/C Ratio	0.89	0.00	0.00	0.12	0.48	0.00	0.00	0.46	0.46
Level-of-Service	D	A	A	B	B	A	A	C	C
Control Delay (Seconds)	45.8	0.0	0.0	14.1	15.5	0.0	0.0	20.4	21.2
Intersection LOS	**C - 26.8**								
95th Percentile Queue (veh)	22.7	0.0	0.0	0.8	13.2	0.0	0.0	12.4	13.3
2030 BUILD Conditions Volumes	997	1	0	42	1,007	0	0	1,148	76
V/C Ratio	0.88	0.00	0.00	0.14	0.49	0.00	0.00	0.46	0.46
Level-of-Service	D	A	A	B	B	A	A	B	C
Control Delay (Seconds)	44.3	0.0	0.0	13.4	15.1	0.0	0.0	19.9	20.7
Intersection LOS	**C - 25.9**								
95th Percentile Queue (veh)	22.5	0.0	0.0	1.0	13.4	0.0	0.0	12.5	13.4

Queuing Summary	WB (I-40 N. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
2030 NO BUILD Conditions (Max Queue)	22.7	0.0	0.0	0.8	13.2	0.0	0.0	13.7	15.0
2030 BUILD Conditions (Max Queue)	22.5	0.0	0.0	1.0	13.4	0.0	0.0	14.1	15.5
Percent Heavy Commercial Traffic									
2030 NO BUILD Conditions (Max Queue) - Ft.	596	0	0	21	347	0	0	360	394
2030 BUILD Conditions (Max Queue) - Ft.	591	0	0	26	352	0	0	370	407
Length of Existing Lane	750	Cont	0	350	Cont	0	0	Cont	0

The westbound right turn movement and the southbound right turn movements are not controlled by the traffic signal at this intersection. The 2030 analysis of the intersection of I-40 N. Ramp / Unser Blvd. demonstrates that the level-of-service will be acceptable for both the AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions analyzed in this report. The

implementation of the proposed development increases the delay at the intersection by 0.1 seconds during the AM Peak Hour and by 0.1 seconds during the PM Peak Hour. Therefore, no recommendations are made for the intersection of I-40 N. Ramp / Unser Blvd.

The queuing analysis demonstrates that the 95th Percentile calculated queueing can be contained within the available storage provided at the intersection. The westbound left turn movement queuing will be store on the two approach lanes (an exclusive left turn lane and a thru / left turn lane) which extend back at least 750 feet east of the westbound stop bar at the end of the ramp. The westbound to northbound right turn movement occurs on a sweeping ramp with an add lane on Unser Blvd. northbound. Therefore, there is no queuing to consider.

#6 –I-40 S. Ramp / Unser Blvd. – Pages A-116 thru A-147

The results of the 2030 analysis of the unsignalized intersection of I-40 S. Ramp / Unser Blvd. are summarized in the following table:

	EB (I-40 S. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	0	1	0	2	1	0	2	0
AM Peak Hour									
2030 NO BUILD Conditions Volumes	56	0	38	0	728	0	0	1,095	0
V/C Ratio	0.40								
Level-of-Service	E		A						
Control Delay (Seconds)	43.5		0.0						
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)	1.8								
2030 BUILD Conditions Volumes	56	0	47	0	763	0	0	1,128	0
V/C Ratio	0.42								
Level-of-Service	E		A						
Control Delay (Seconds)	47.0		0.0						
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)	1.9								
PM Peak Hour									
2030 NO BUILD Conditions Volumes	86	0	54	0	1,133	0	0	2,091	0
V/C Ratio	25.29								
Level-of-Service	F		A						
Control Delay (Seconds)	999		0.0						
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)	14.7								
2030 BUILD Conditions Volumes	86	0	63	0	1,168	0	0	2,123	0
V/C Ratio	114.67								
Level-of-Service	F		A						
Control Delay (Seconds)	999		0.0						
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)	16.8								

Queuing Summary	EB (I-40 S. Ramp)			NB (Unser Blvd.)			SB (Unser Blvd.)		
	L	T	R	L	T	R	L	T	R
2030 NO BUILD Conditions (Max Queue)	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2030 BUILD Conditions (Max Queue)	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Heavy Commercial Traffic	10%								
2030 NO BUILD Conditions (Max Queue) - Ft.	386	0	0	0	0	0	0	0	0
2030 BUILD Conditions (Max Queue) - Ft.	441	0	0	0	0	0	0	0	0
Length of Existing Lane	125	N/A	250	0	Cont	750	N/A	Cont	999

The eastbound right turn movement on the I-40 off-ramp eastbound to southbound on Unser Blvd. is facilitated by a sweeping right turn ramp with an add-lane on Unser southbound. The 2030 analysis of the intersection of I-40 S. Ramp / Unser Blvd. demonstrates that the delays will be very long for all conditions analyzed in this report, especially during the 2030 PM Peak Hour

period. There are no solutions to this issue short of a new traffic signal at the intersection. But previous analysis in the previously submitted BEK Development Traffic Impact Study demonstrated that there are insufficient volumes of eastbound left turn traffic at the ramp to warrant a traffic signal based on the Peak Hour Warrant criteria. The proposed Maverik Store does not contribute any traffic to the problematic eastbound left turn movement. Therefore, no recommendations are made for the intersection of I-40 S. Ramp / Unser Blvd.

#7 – Los Volcanes Rd. / Silver Creek Rd. – Pages A-116 thru A-147

The results of the 2030 analyses of the unsignalized intersection of Los Volcanes Rd. / Silver Creek Rd. are summarized in the following tables:

	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Silver Creek Rd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		1>		1	1			<1>	
AM Peak Hour									
95th Percentile Queue (veh)									
2030 BUILD Conditions Volumes		682	55	23	404		23		8
V/C Ratio				0.04			0.16		
Level-of-Service				B	A		C		
Control Delay (Seconds)				10.4	0.0		21.2		
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)				0.1			0.5		
PM Peak Hour									
2030 BUILD Conditions Volumes		421	23	8	517		53		23
V/C Ratio				0.01			0.28		
Level-of-Service				A	A		C		
Control Delay (Seconds)				8.7	0.0		19.0		
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)				0.0			1.1		

The 2030 analysis of the intersection of Los Volcanes Rd. / Silver Creek Rd. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Los Volcanes Rd. / Silver Creek Rd.

#8 – Los Volcanes Rd. / Driveway "A" - Pages A-116 thru A-147

Driveway "A" is proposed as an unsignalized full access driveway on Los Volcanes Rd. The results of the 2030 analyses of the intersection of Los Volcanes Rd. / Driveway "A" are summarized in the following tables:

	EB (Los Volcanes Rd.)			WB (Los Volcanes Rd.)			NB (Driveway "A")		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry									
AM Peak Hour									
2030 BUILD Conditions Volumes		718	105	25	402		100		24
V/C Ratio				0.05			0.69		
Level-of-Service				B	A		E		
Control Delay (Seconds)				11.0	0.0		47.7		
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)				0.2			4.5		
PM Peak Hour									
2030 BUILD Conditions Volumes		441	103	24	546		99		23
V/C Ratio				0.04			0.55		
Level-of-Service				A	A		D		
Control Delay (Seconds)				9.3	0.0		31.4		
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)				0.1			3.1		

The 2030 analysis of the intersection of Los Volcanes Rd. / Driveway "A" demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Los Volcanes Rd. / Driveway "A".

It is recommended that Driveway "A" be designed and constructed with one entering lane and one exiting lane (minimum) and that adequate sight distances be provided for entering and exiting vehicles at the driveway. Also, Driveway "A" should be designed and constructed to facility delivery trucks as needed.

#9 – Driveway "B" / Silver Creek Rd. - Pages A-116 thru A-147

Driveway "B" is proposed as a full access unsignalized intersection on Silver Creek Rd. The results of the 2030 analyses of the intersection of Driveway "B" / Silver Creek Rd. are summarized in the following tables:

	EB (Driveway "B")			NB (Silver Creek Rd.)			SB (Silver Creek Rd.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry									
AM Peak Hour									
95th Percentile Queue (veh)									
2030 BUILD Conditions Volumes	15		1	1	16			62	16
V/C Ratio	0.02			0.00					
Level-of-Service	A			A	A				
Control Delay (Seconds)	9.2			7.4	0.0				
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)	0.1			0.0					
PM Peak Hour									
2030 BUILD Conditions Volumes	15		1	1	61			15	16
V/C Ratio	0.02			0.00					
Level-of-Service	A			A	A				
Control Delay (Seconds)	9.2			7.3	0.0				
Intersection LOS	**TWSC**								
95th Percentile Queue (veh)	0.1			0.0					

The 2030 analysis of the intersection of Driveway "B" / Silver Creek Rd. demonstrates that the delays will be acceptable for all conditions analyzed in this report. Therefore, no recommendations are made for the intersection of Driveway "B" / Silver Creek Rd.

It is recommended that Driveway "B" be designed and constructed with one entering lane and one exiting lane (minimum) and that adequate sight distances be provided for entering and exiting vehicles at the driveway. Also, Driveway "B" should be designed and constructed to facility delivery trucks as needed.

Impact Assessment

The proposed Maverik Store development will have minimal adverse impact on the adjacent transportation system except at the intersection of Los Volcanes Rd. / Unser Blvd. All the levels-of-service were determined to be acceptable for the overall intersections or, if the levels-of-service were deemed unacceptable, it was determined that the proposed Maverik Store had an insignificant impact on the intersection.

Access Design Specifications

Sight distances at proposed Driveways "A" and "B" are adequate. There are no vertical or horizontal curves along this portion of Los Volcanes Rd. nor Silver Creek Rd. and there are no structures that are blocking sight distance into and out of the driveway. Sufficient sight distances will be required to be maintained to meet the requirements of the City of Albuquerque.

All of the roadways in the vicinity of this project except Silver Creek Rd. are designated on the Futures 2040 Metropolitan Transportation Plan (2040 Long Range Bikeway System) as Existing or Proposed Bicycle Lanes (see Appendix Page A-5).

Two driveways are proposed for this project. Driveway "A" is a proposed full access unsignalized driveway on Los Volcanes Rd. and Driveway "B" is a proposed full access driveway on Silver Creek Rd. Both driveways should be designed with one entering lane minimum and one exiting lane minimum and should accommodate turning movements for the design vehicles.

Summary of Deficiencies, Anticipated Impacts, and Recommendations

The existing 2020 analysis determined some deficiencies in the adjacent transportation system, most of them associated with both the NO BUILD and the BUILD condition Additionally, it was demonstrated that the impact of the proposed Maverik Store was insignificant except at the intersection of Los Volcanes Rd. / Unser Blvd. Mitigation of that impact consists of constructing dual southbound left turn lanes on Unser Blvd. at Los Volcanes Rd. Implementation of dual southbound left turn lanes on Unser Blvd. at Los Volcanes Rd. will necessitate widening of Los Volcanes Rd. to provide two eastbound thru lanes from Unser Blvd. for at least 1,000 feet to the east (1,320 feet preferred). Once the dual southbound left turn lanes are implemented, then signal modifications will be required and signal timing will need to be re-programmed to allow for southbound left turn protected movements.

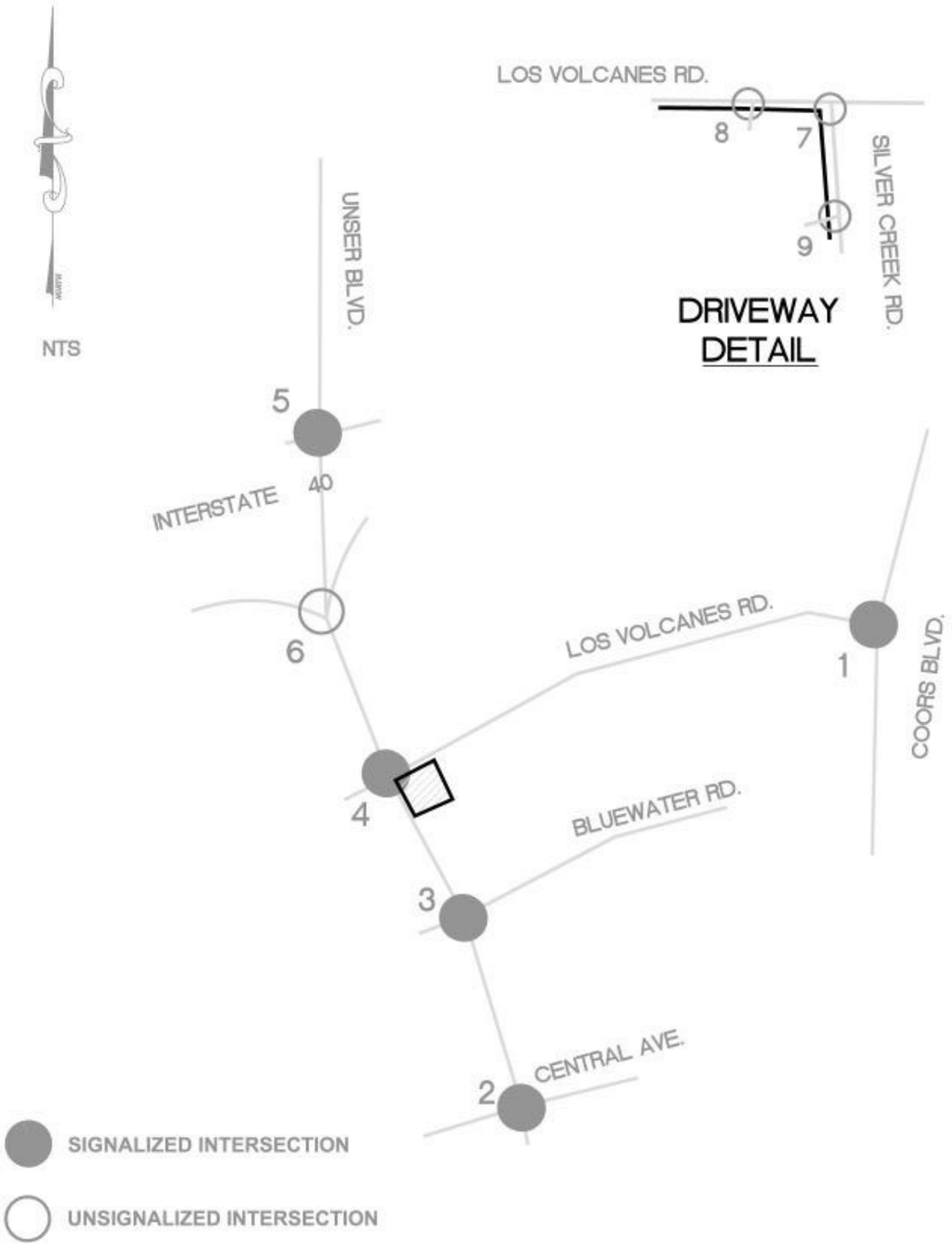
In summary, the impacts of the proposed Maverik Store can be mitigated provided that the following recommendations are implemented:

Recommendations:

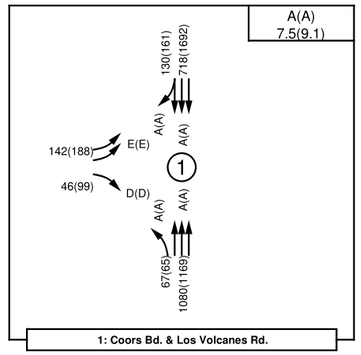
Recommendations:

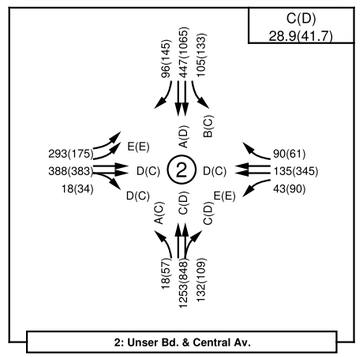
Recommendations of this study are listed at the end of the Executive Summary.

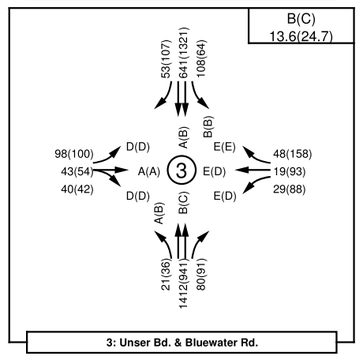
NOTE: The following pages summarize the Lanes / Volumes / LOS associated with each lane group of each intersection in this Study.

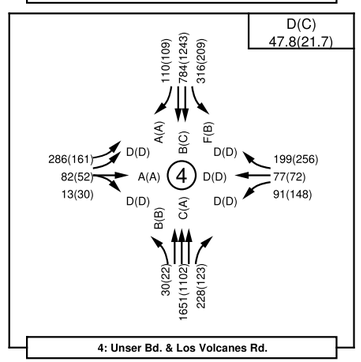


2020 NO BUILD Conditions









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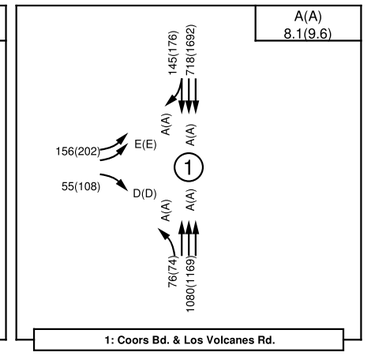
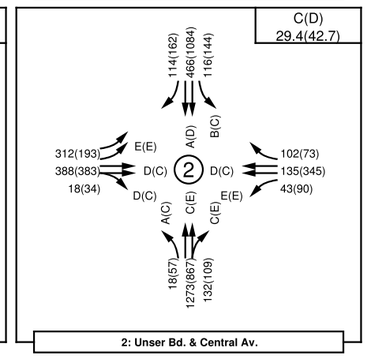
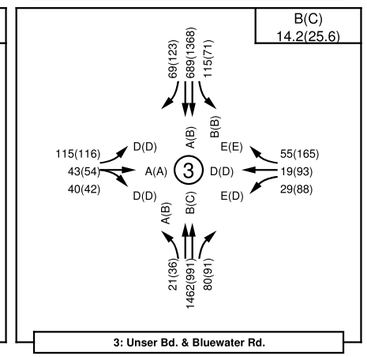
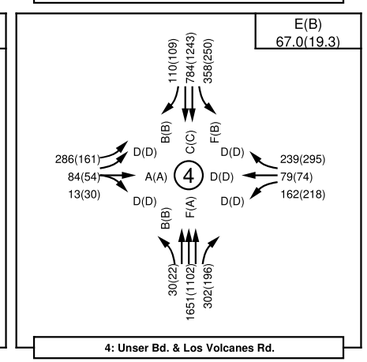






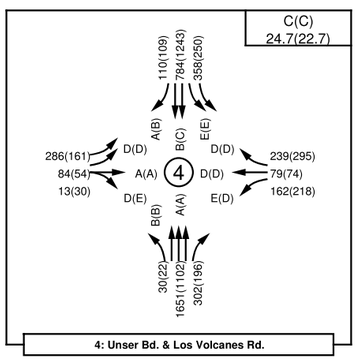


2020 BUILD Conditions [MITIGATED]

NO RECOMMENDATION

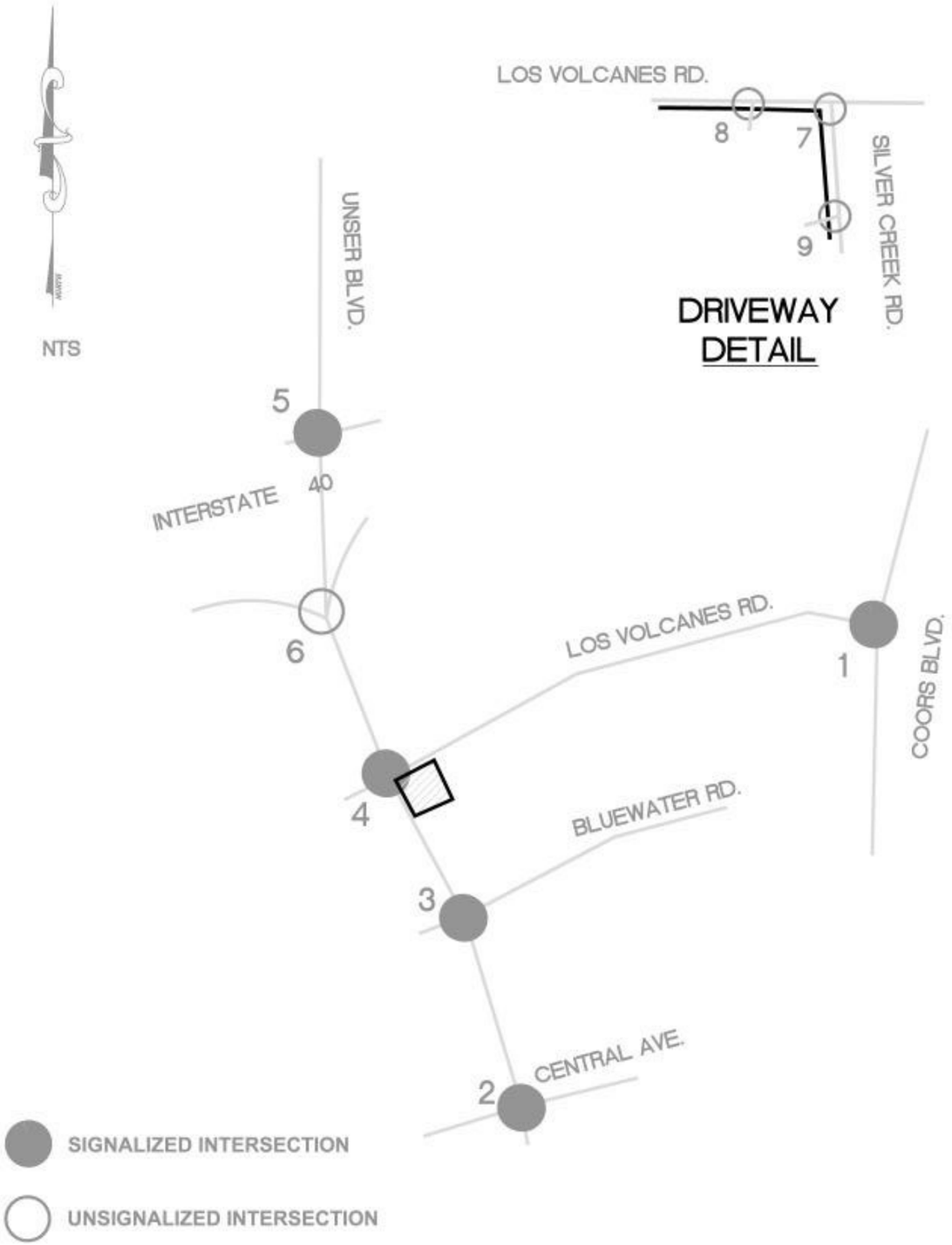
NO RECOMMENDATION

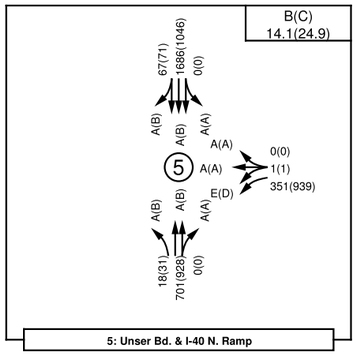
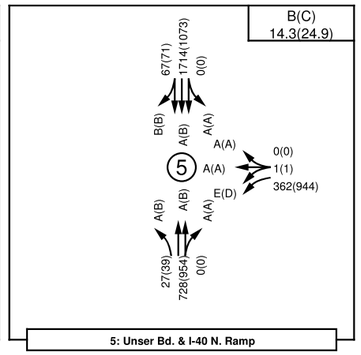
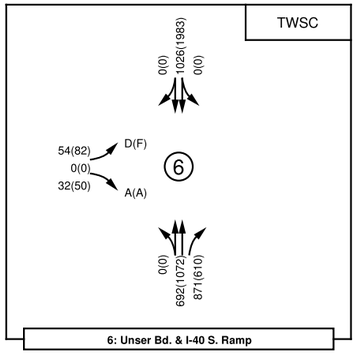
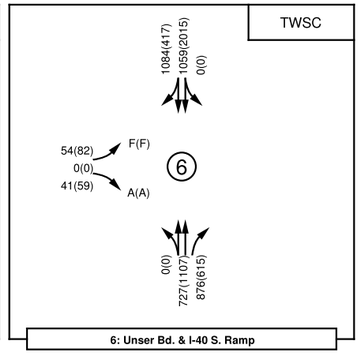
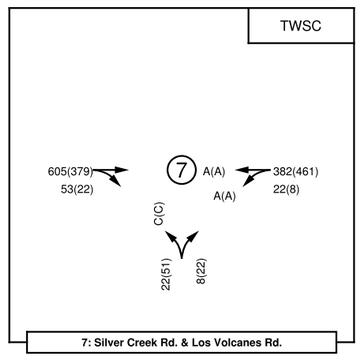
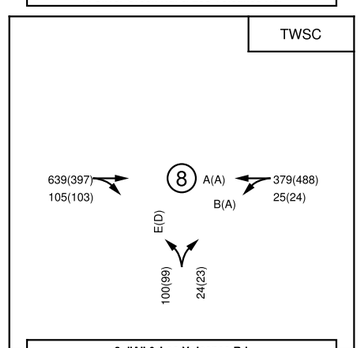
NO RECOMMENDATION



Maverik Convenience Store
Los Volcanes Rd. / Unser Blvd.
LOS / Volume Analysis Map

AM(PM)

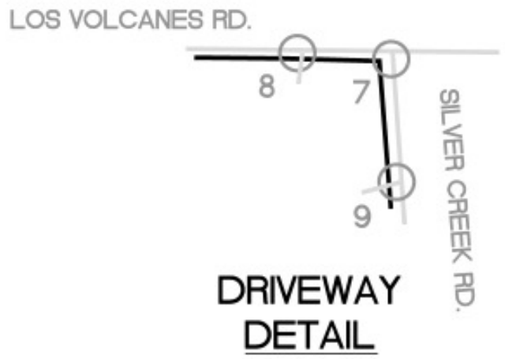


2020 NO BUILD Conditions	2020 BUILD Conditions	2020 BUILD Conditions [MITIGATED]
		**NO RECOMMENDATION**
		**NO RECOMMENDATION**
		**NO RECOMMENDATION**
DRIVEWAY DOES NOT EXIST FOR NO BUILD CONDITION		**NEW DRIVEWAY**

Maverik Convenience Store
Los Volcanes Rd. / Unser Blvd.
LOS / Volume Analysis Map

AM(PM)

NTS



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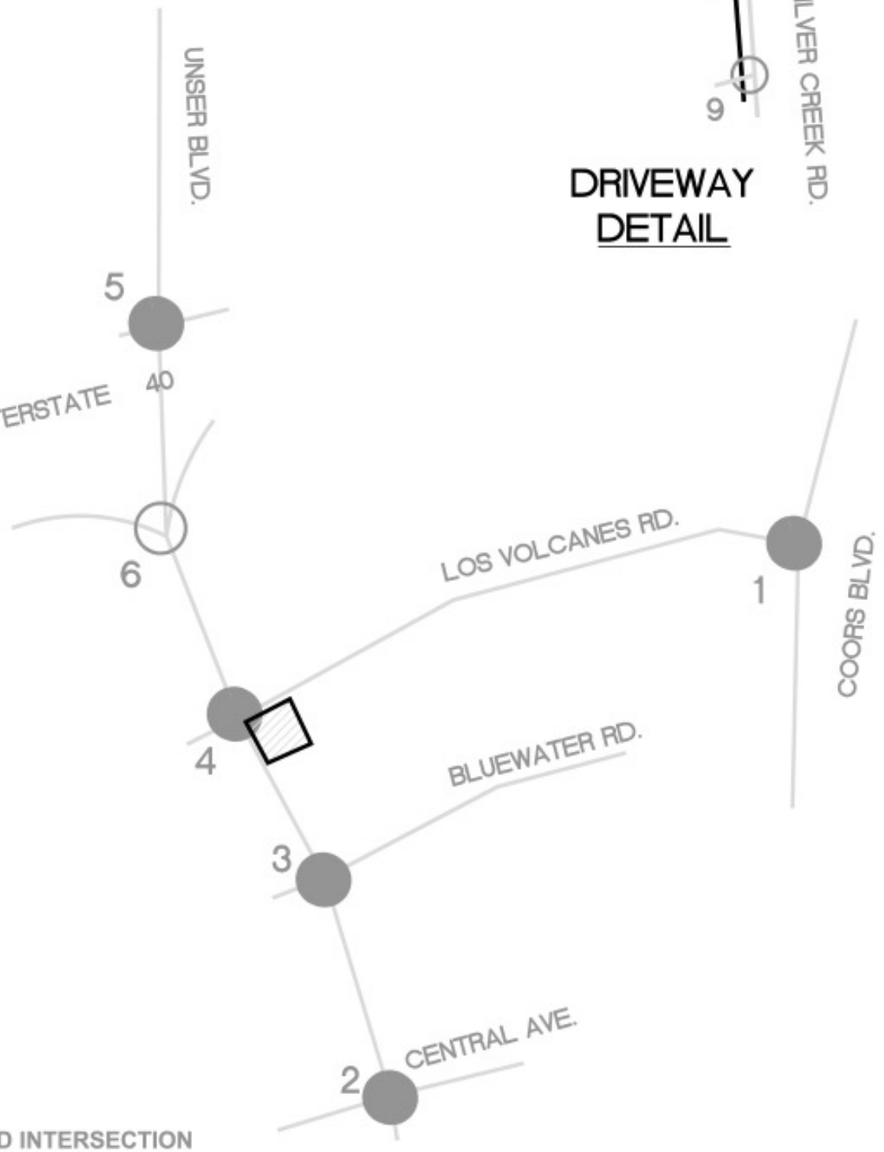
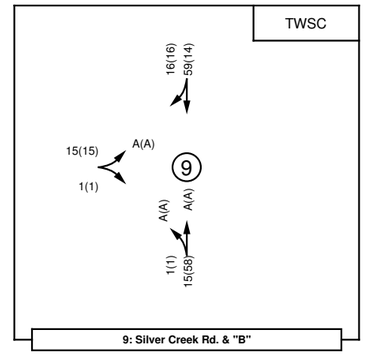


2020 NO BUILD Conditions

DRIVEWAY DOES NOT EXIST FOR NO BUILD CONDITION

2020 BUILD Conditions



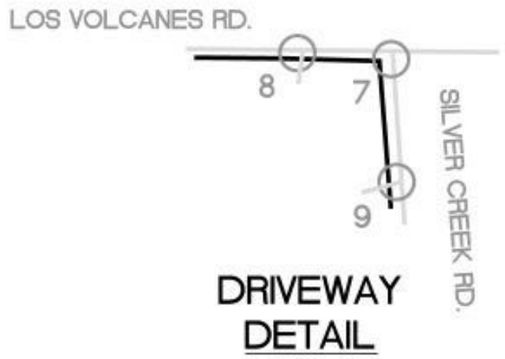
2020 BUILD Conditions [MITIGATED]

NEW DRIVEWAY

Maverik Convenience Store
Los Volcanes Rd. / Unser Blvd.
LOS / Volume Analysis Map

AM(PM)

NTS



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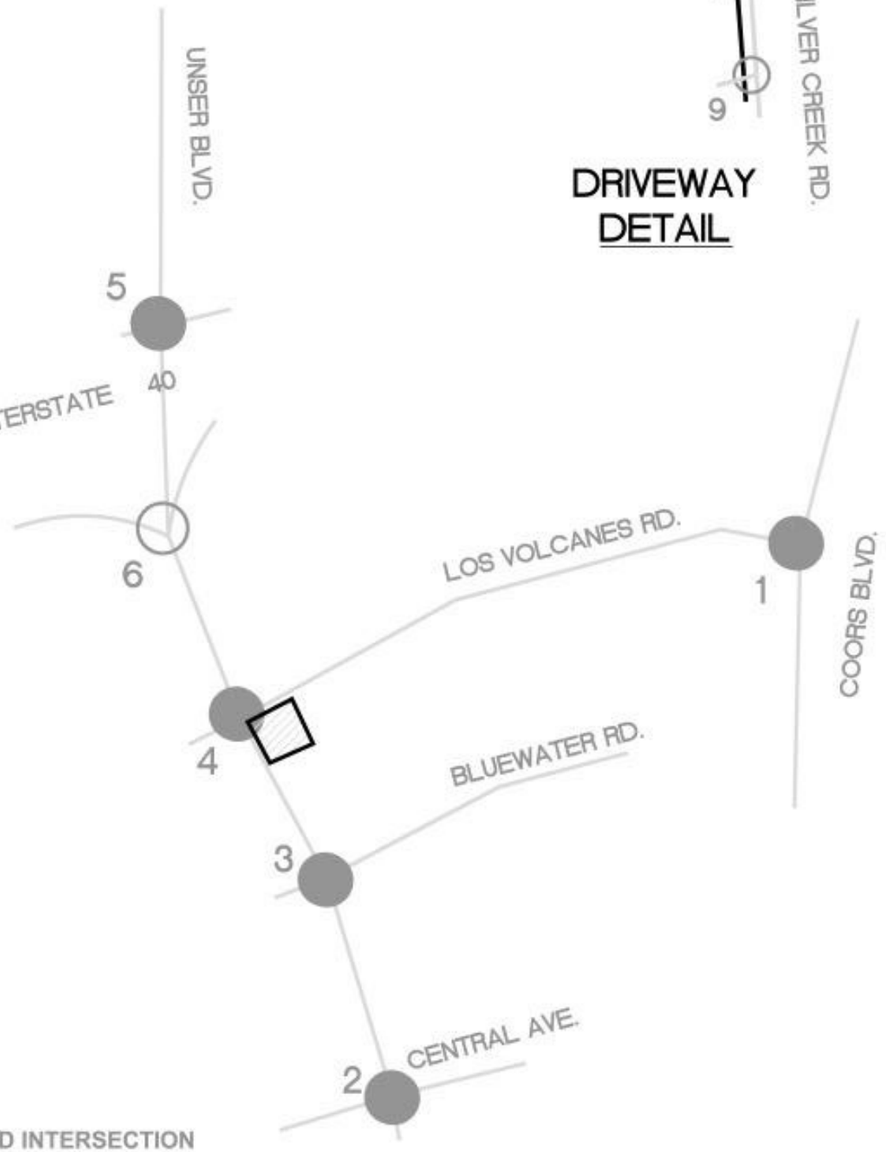

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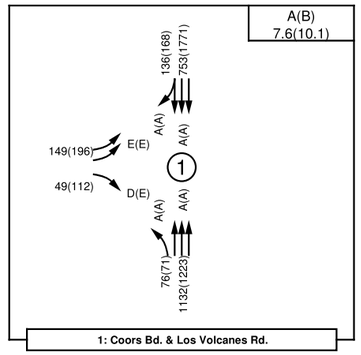
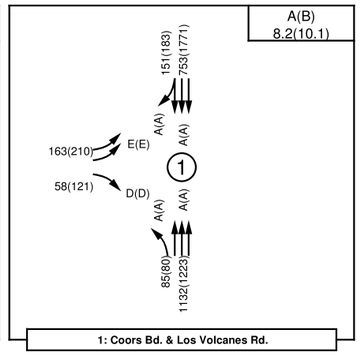
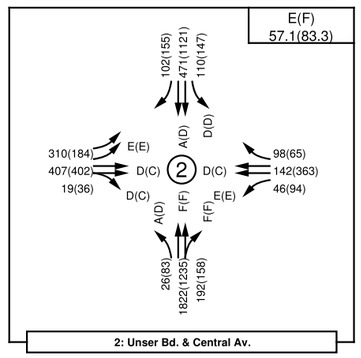
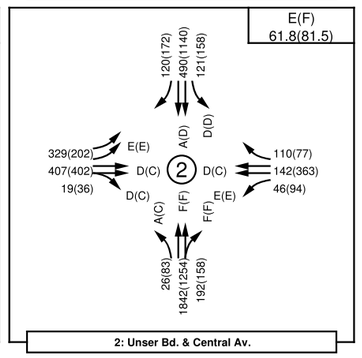
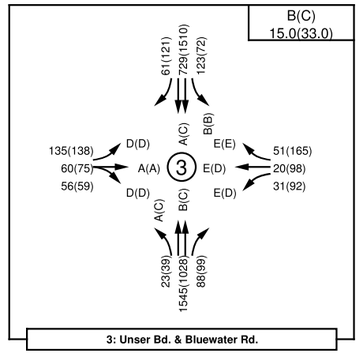
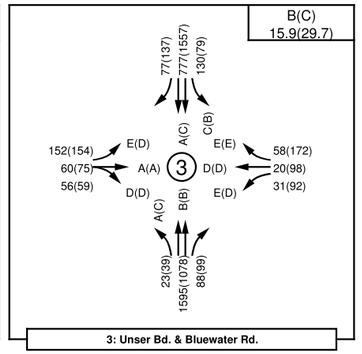
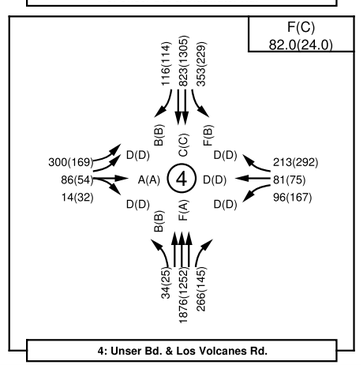
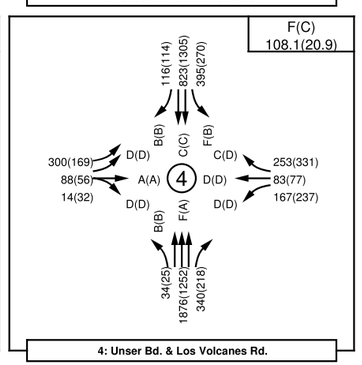
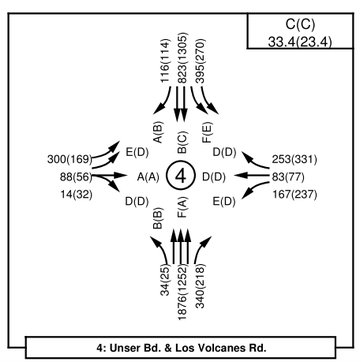
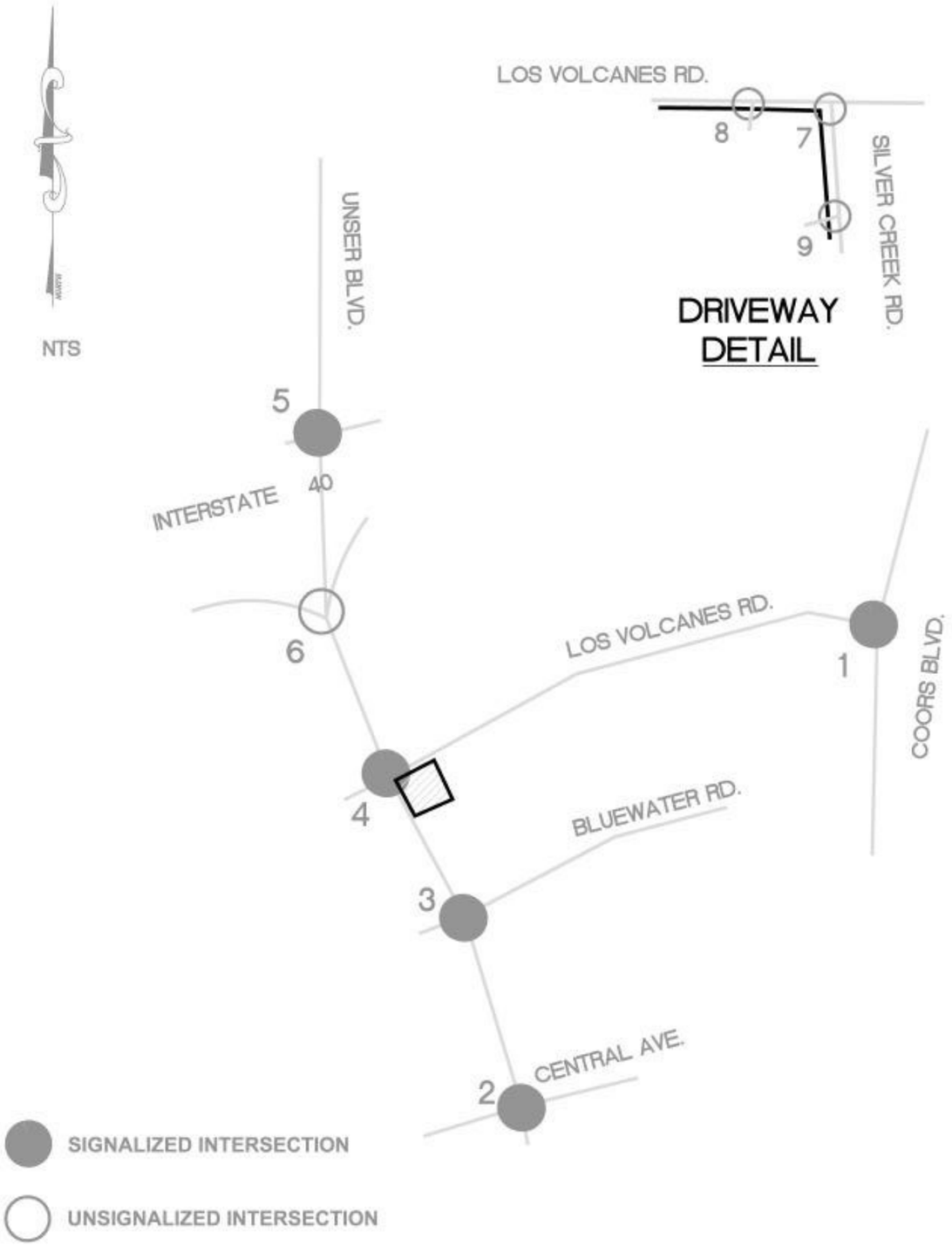
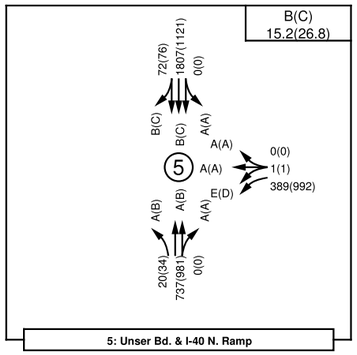
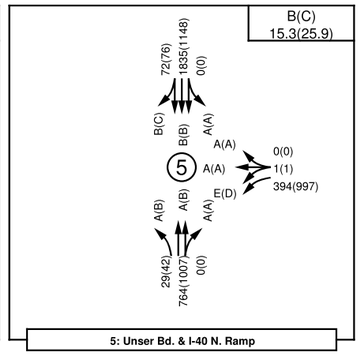
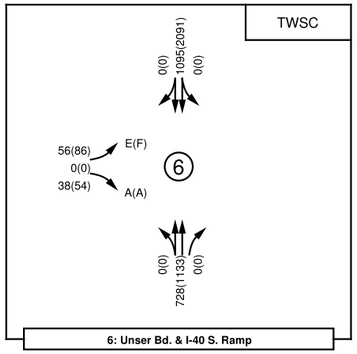
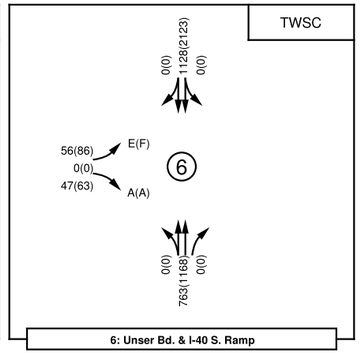
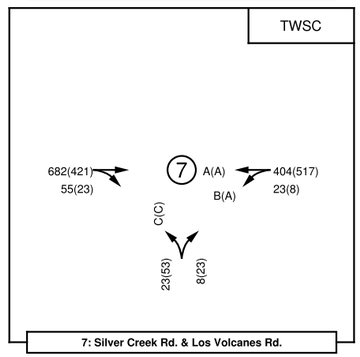
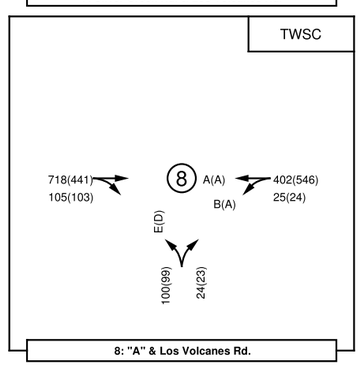
1: Coors Bd. & Los Volcanes Rd.			**NO RECOMMENDATION**
2: Unser Bd. & Central Av.			**NO RECOMMENDATION**
3: Unser Bd. & Bluewater Rd.			**NO RECOMMENDATION**
4: Unser Bd. & Los Volcanes Rd.				**NO RECOMMENDATION**

AM(PM)

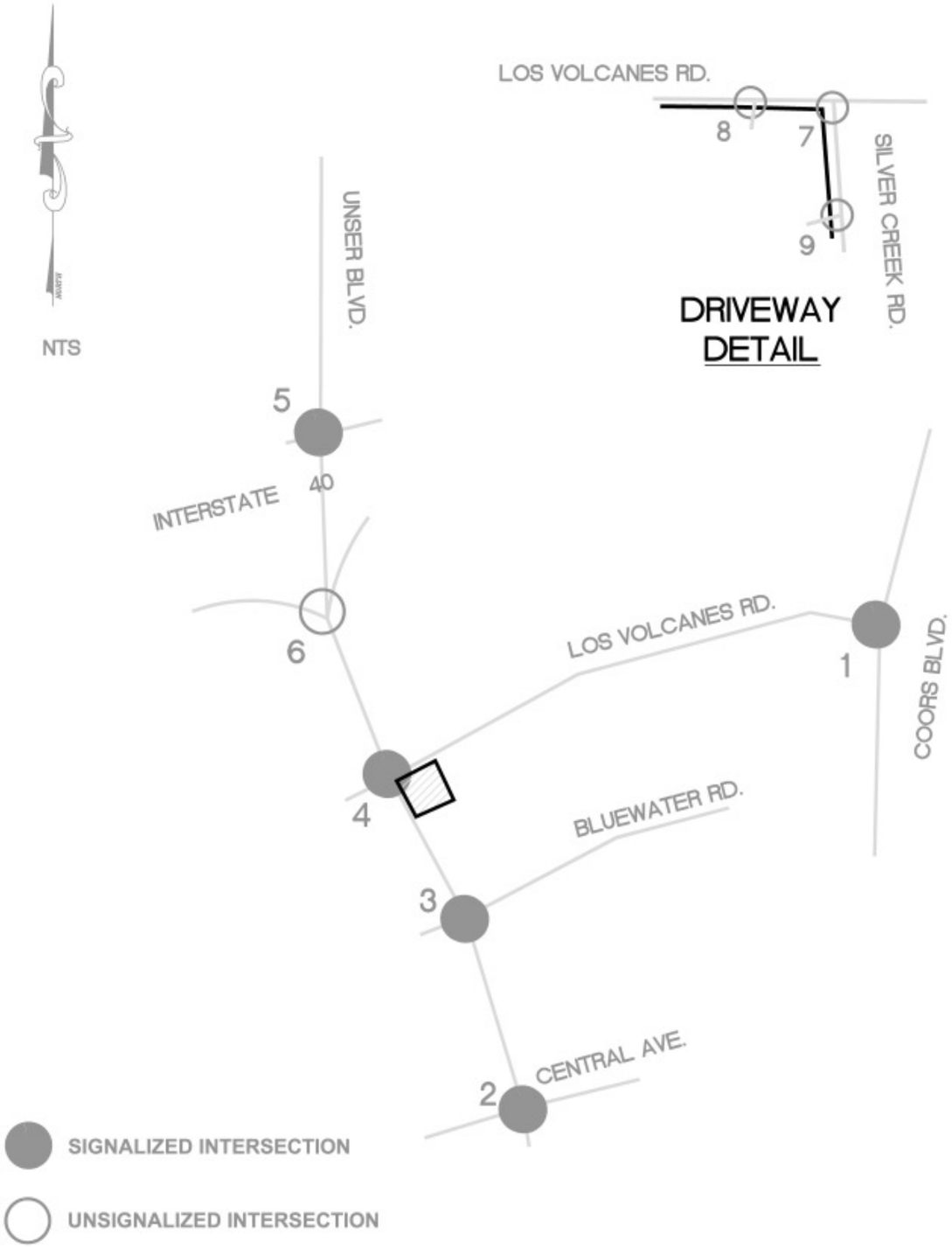
Maverik Convenience Store
Los Volcanes Rd. / Unser Blvd.
LOS / Volume Analysis Map



	2030 NO BUILD Conditions	2030 BUILD Conditions	2030 BUILD Conditions (MITIGATED)
			**NO RECOMMENDATION**
			**NO RECOMMENDATION**
			**NO RECOMMENDATION**
DRIVEWAY DOES NOT EXIST FOR NO BUILD CONDITION			**NEW DRIVEWAY**

Maverik Convenience Store
Los Volcanes Rd. / Unser Blvd.
LOS / Volume Analysis Map

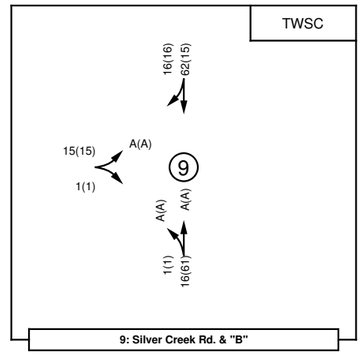
AM(PM)



2030 NO BUILD Conditions

DRIVEWAY DOES NOT EXIST FOR NO BUILD CONDITION

2030 BUILD Conditions



2030 BUILD Conditions (MITIGATED)

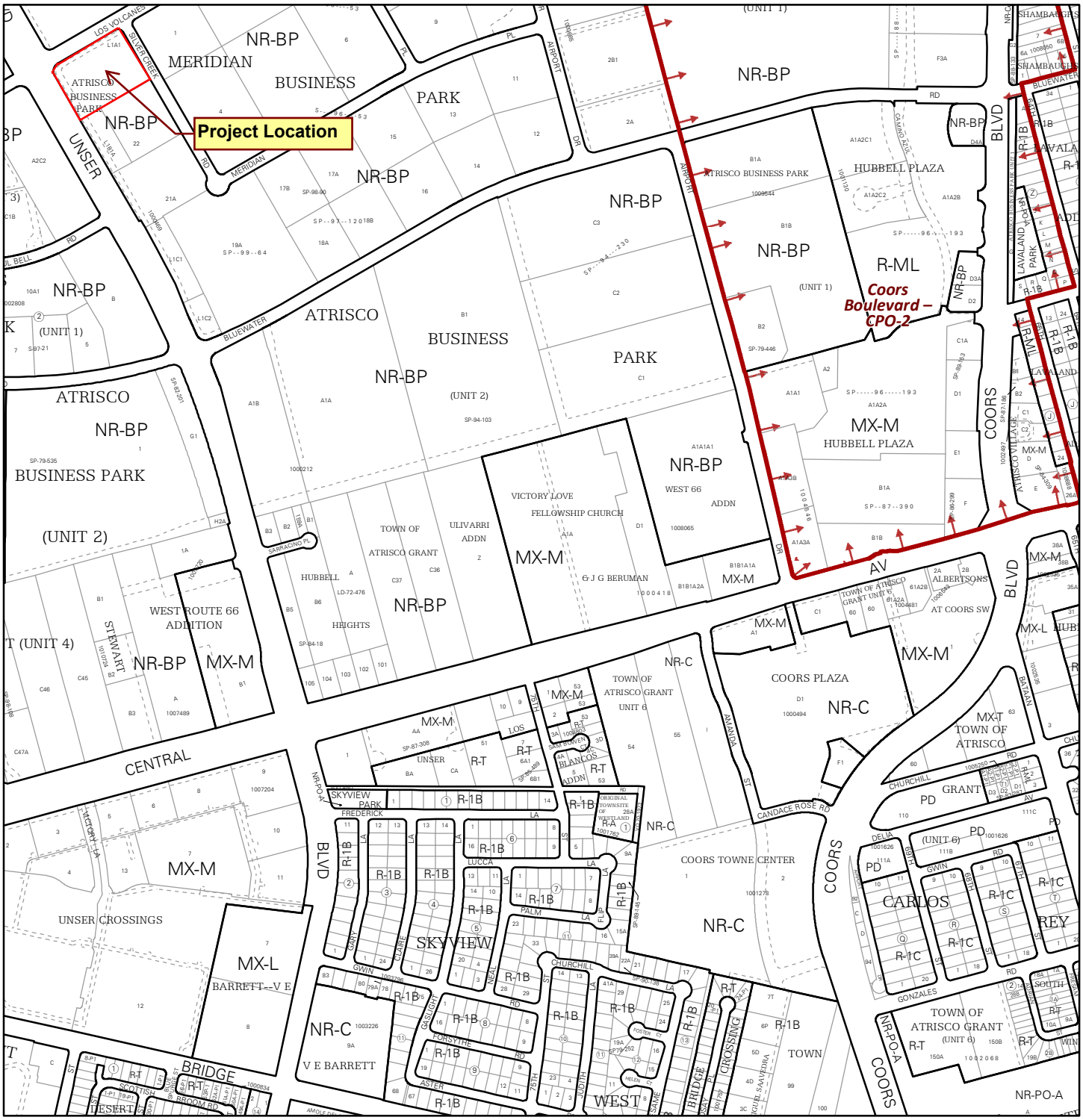
NEW DRIVEWAY

Maverik Convenience Store
Los Volcanes Rd. / Unser Blvd.
LOS / Volume Analysis Map

AM(PM)

Appendix

APPENDIX



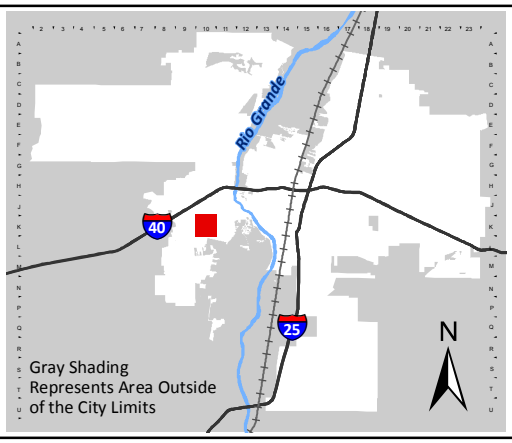
For more details about the Integrated Development Ordinance visit: http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance

IDO Zone Atlas
May 2018

Albuquerque Geographic Information System

IDO Zoning information as of May 17, 2018

The Zone Districts and Overlay Zones are established by the Integrated Development Ordinance (IDO).



Zone Atlas Page:

K-10-Z

- Easement
- Escarpment
- Petroglyph National Monument
- Areas Outside of City Limits
- Airport Protection Overlay (APO) Zone
- Character Protection Overlay (CPO) Zone
- Historic Protection Overlay (HPO) Zone
- View Protection Overlay (VPO) Zone

Feet: 0 250 500

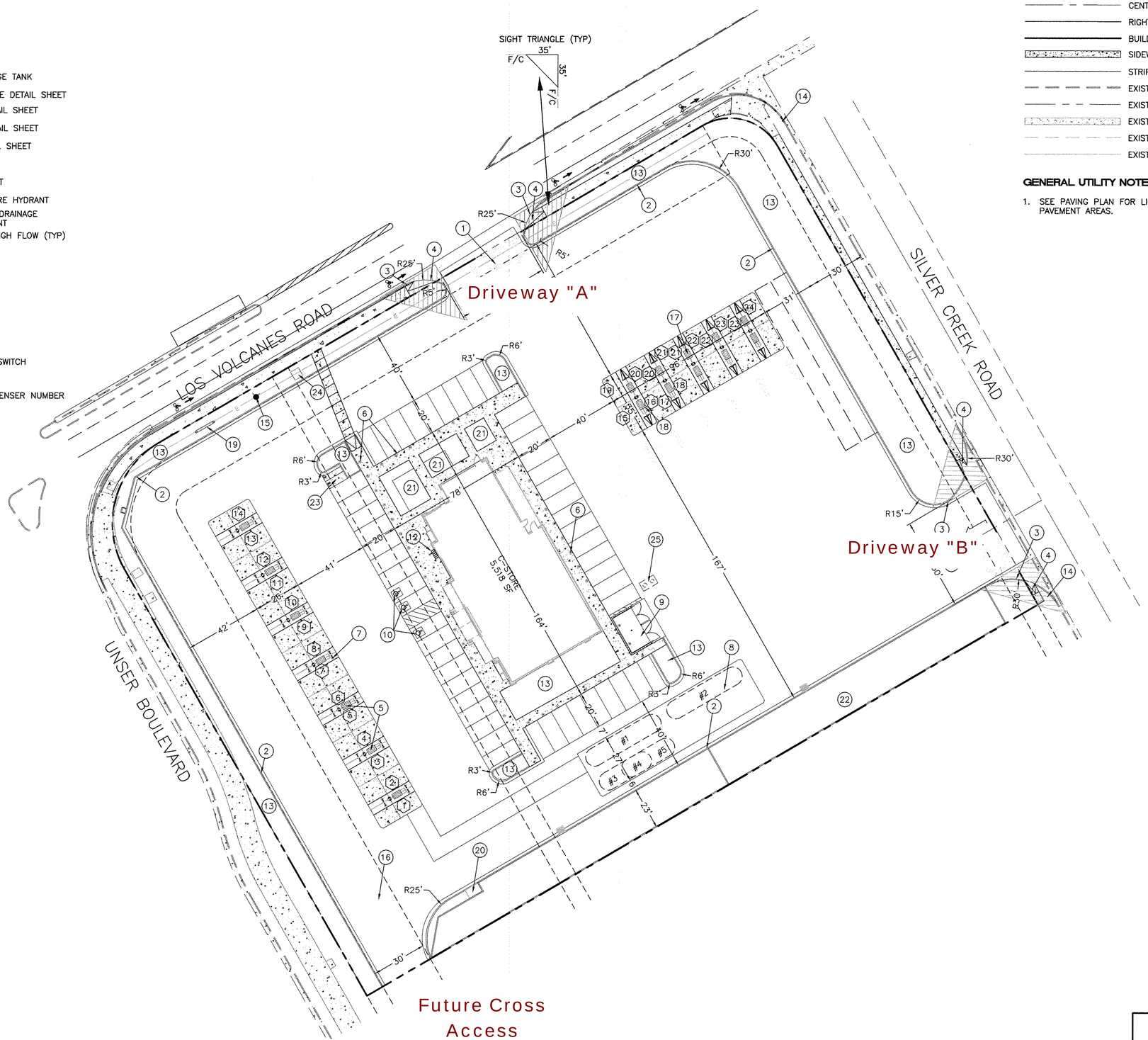
Maverik Convenience Store

(Los Volcanes Rd. / Unser Blvd.)
Aerial Map

KEYED NOTE:

1. DIRECTIONAL ARROW AND ENTER MARKINGS (TYPICAL)
2. 6" CURB & GUTTER
3. 8" CURB & GUTTER
4. ADA RAMP (TYP.)
5. FUEL PUMP (TYP.)
6. BOLLARD (TYP.)
7. HOOP BOLLARD (TYP.)
8. UNDERGROUND STORAGE TANK
9. TRASH ENCLOSURE SEE DETAIL SHEET
10. HC PARKING SEE DETAIL SHEET
11. MC PARKING SEE DETAIL SHEET
12. BIKE RACK SEE DETAIL SHEET
13. LANDSCAPE AREA
14. EXISTING FIRE HYDRANT
15. PROPOSED PRIVATE FIRE HYDRANT
16. 30' PRIVATE ACCESS, DRAINAGE AND PARKING EASEMENT
17. DIESEL FUEL PUMP, HIGH FLOW (TYP)
18. MPDS (TYP)
19. SIGN
20. AIR STATION
21. PATIO AREAS
22. DRAINAGE POND
23. MOTORCYCLE PARKING
24. EXISTING ELECTRICAL SWITCH
25. GREASE INTERCEPTOR

XX FUELING STATION/DISPENSER NUMBER

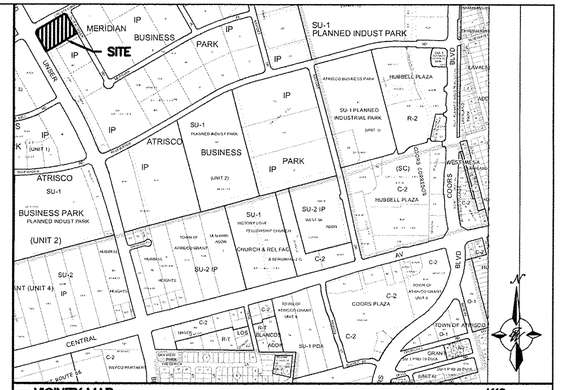


LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- CENTERLINE
- RIGHT-OF-WAY
- BUILDING
- SIDEWALK
- STRIPING
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- EXISTING SIDEWALK
- EXISTING LANE
- EXISTING STRIPING

GENERAL UTILITY NOTES:

1. SEE PAVING PLAN FOR LIGHT DUTY AND HEAVY DUTY PAVEMENT AREAS.



VICINITY MAP: K10

LEGAL DESCRIPTION:

TRACT L-1-A-1, ATRISCO BUSINESS PARK

NOTES:

ADDRESS: 551 SILVER CREEK RD NW
ALBUQUERQUE, NM 87121

UPC NO: 101005705548020114

SITE DATA

PROPOSED USAGE:	MAVERIK ADVENTURE FIRST STOP
LOT AREA:	133,273 SF (3.06 ACRES)
ZONING	NR-BP
BUILDING AREA:	5,518 SF
PARKING REQUIRED:	22 SPACES (4 SPACES/1000 SF)
PARKING PROVIDED:	71 SPACES
HC PARKING REQUIRED:	2 SPACES
HC PARKING PROVIDED:	3 SPACES 1 SPACE VAN ACCESSIBLE
MC PARKING REQUIRED:	1 SPACES (1 SPACE FOR 1 TO 25 REQUIRED PARKING)
MC PARKING PROVIDED:	2 SPACES
BICYCLE PARKING REQUIRED:	3 SPACES (3 SPACES OR 10% OF REQUIRED PARKING)
BICYCLE PARKING PROVIDED:	5 SPACES
LANDSCAPE AREA REQUIRED:	25,551 SF (20% OF NET AREA)
LANDSCAPE AREA PROVIDED:	25,745 SF

GRAPHIC SCALE
30 0 15 30
(IN FEET)
1 inch = 30 ft.

MAVERIK

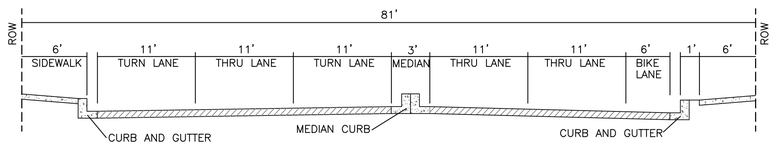
ENGINEER'S SEAL
VINCENT P. CARRICA NEW MEXICO 16212 LICENSED PROFESSIONAL ENGINEER 3-7-19
VINCENT P. CARRICA
P.E. #16212

MAVERIK STORE #NM-0115
UNSER AND LOS VOLCANES

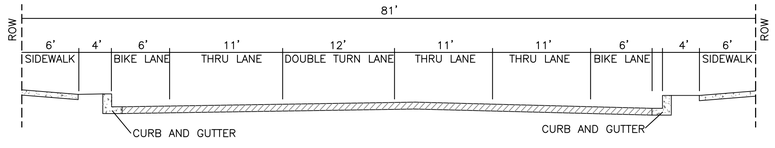
SITE PLAN FOR BUILDING PERMIT

TIERRA WEST, LLC
5571 MIDWAY PARK PL NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 858-3100
www.tierrawestllc.com

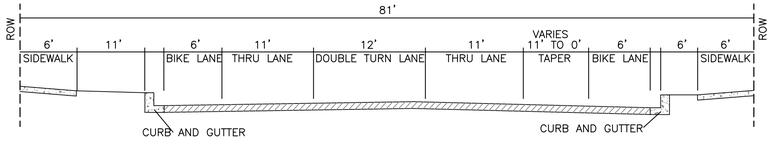
DRAWN BY: pm
DATE: 3-7-19
DRAWING: 2018042-SP
SHEET #: SP-1
A-3



SECTION A-A



SECTION B-B



SECTION C-C

GRAPHIC SCALE

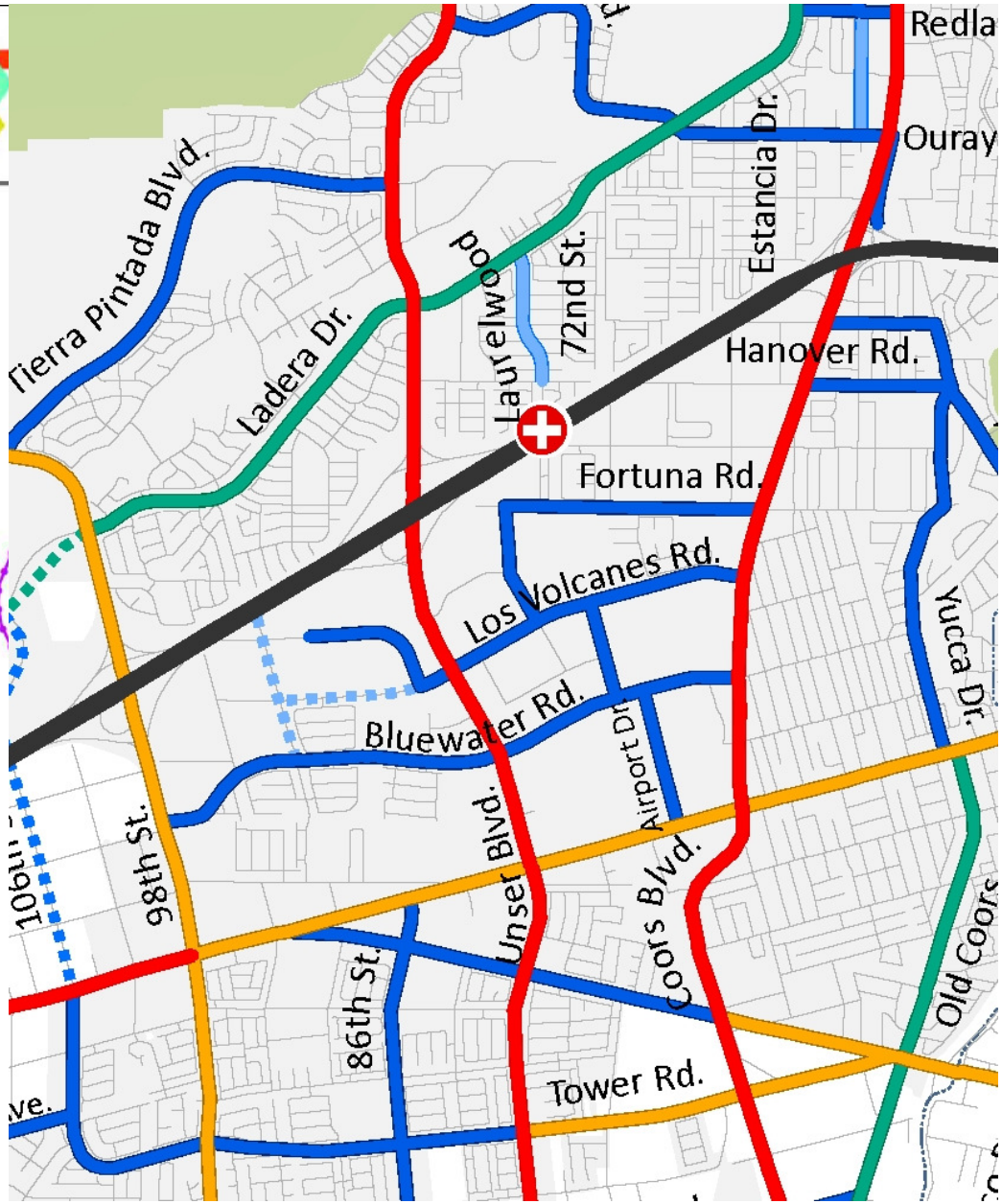
(IN FEET)
1 inch = 60 ft.

ENGINEER'S SEAL	LOS VOLCANES ALBUQUERQUE, NM	DRAWN BY pm
		DATE 2-27-19
	LOS VOLCANES EXPANSION EXHIBIT	DRAWING
	TIERRA WEST, LLC 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com	SHEET # 1
RONALD R. BOHANNAN P.E. #7868		A-3a

Futures 2040
Metropolitan Transportation Plan

2040 Long Range Roadway System

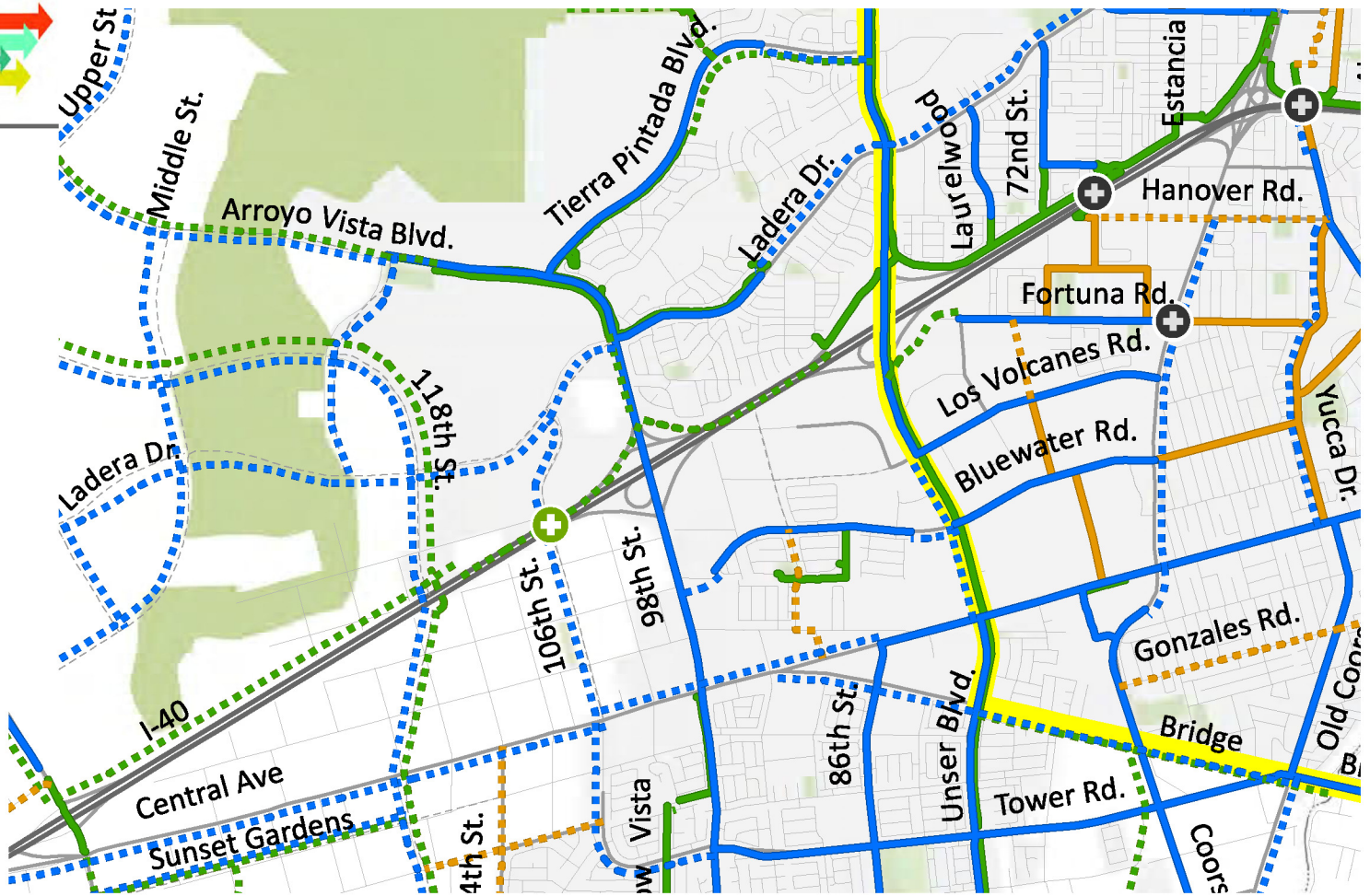
- Interchange/Crossing
- Interchange/Crossing, Post 2040
- Freeways
- Regional Principal Arterial
- Community Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Proposed Regional Principal Arterial
- Proposed Community Principal Arterial
- Proposed Minor Arterial
- Proposed Major Collector
- Proposed Minor Collector
- Proposed Regional Principal Arterial, Post 2040
- Proposed Community Principal Arterial, Post 2040
- Proposed Minor Arterial, Post 2040
- Proposed Major Collector, Post 2040
- Proposed Minor Collector, Post 2040
- Classification TBD, Post 2040



Futures 2040
Metropolitan Transportation Plan

2040 Long Range Bikeway System

- Proposed Overpass/Underpass
- Existing Overpass/Underpass
- Existing, Bicycle Boulevard
- Existing, Bicycle Lane
- Existing, Bicycle Route
- Existing, Paved Trail; Existing
- Proposed, Bicycle Boulevard
- Proposed, Bicycle Lane
- Proposed, Bicycle Route
- Proposed, Paved Trail
- 50 Mile Loop



2017 Traffic Flows
for the Greater Albuquerque Area

Map prepared by the Mid-Region Council of Governments (MRCOG) in cooperation with the New Mexico Department of Transportation, the local governments in the Albuquerque Metropolitan Planning Area, and the U.S. Department of Transportation, Federal Highway Administration. Map prepared September 2018.

An online version of this map with complete and historic traffic count information and additional maps can be found at: www.mrcog-nm.gov

Mid-Region Council of Governments
809 Copper Ave. NW
Albuquerque, NM 87102
505-247-1750

MRMPO
Mid-Region Metropolitan Planning Organization

Average Weekday Traffic

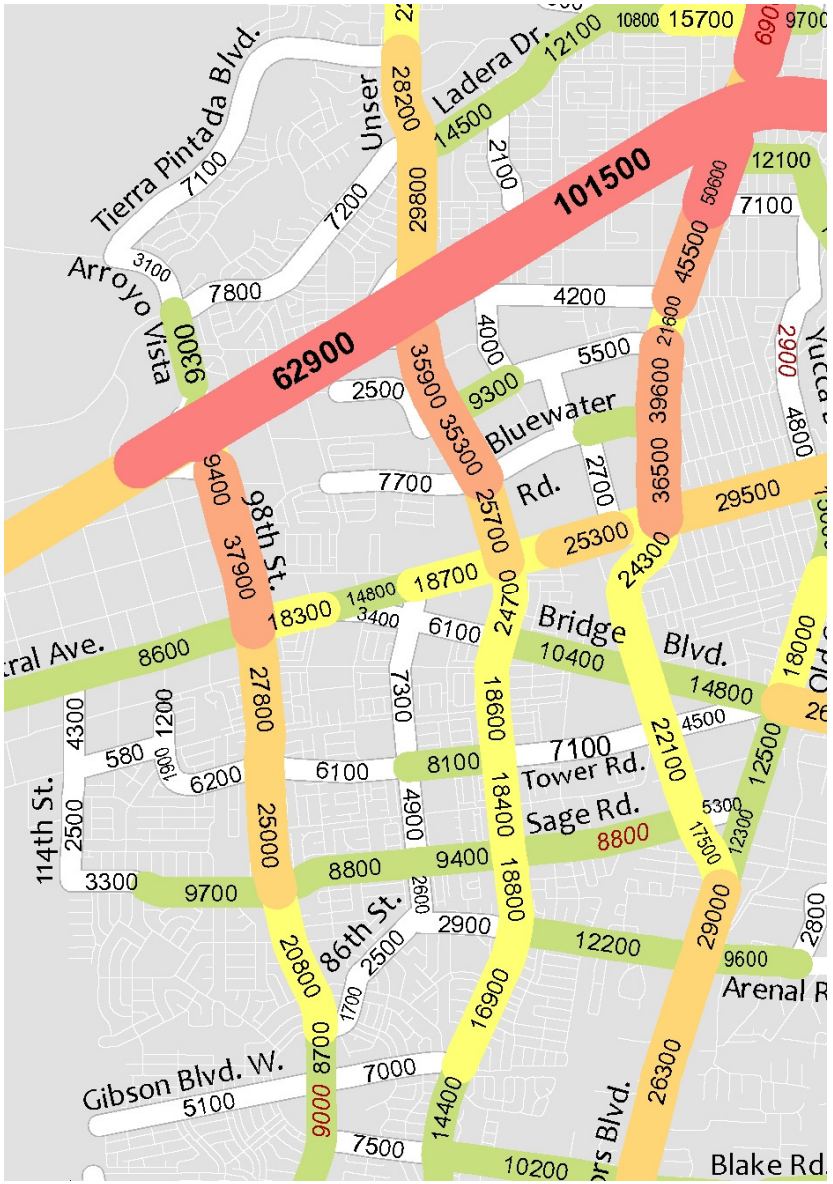
Standard Data
9500

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

Non-Standard Data
9500

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

Link volumes have been rounded to the nearest 10th, with some count volumes being the average of two shorter segments.



Maverik C-Store (Los Volcanes / Unser Blvd.)
Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Gasoline / Service Station w/ Convenience Market (945)	***20***	4,208	145	139	143	137
	Fueling Positions					

ITE Trip Generation Equations:

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

T = ***268.46*** **(X) +** ***-1161***
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

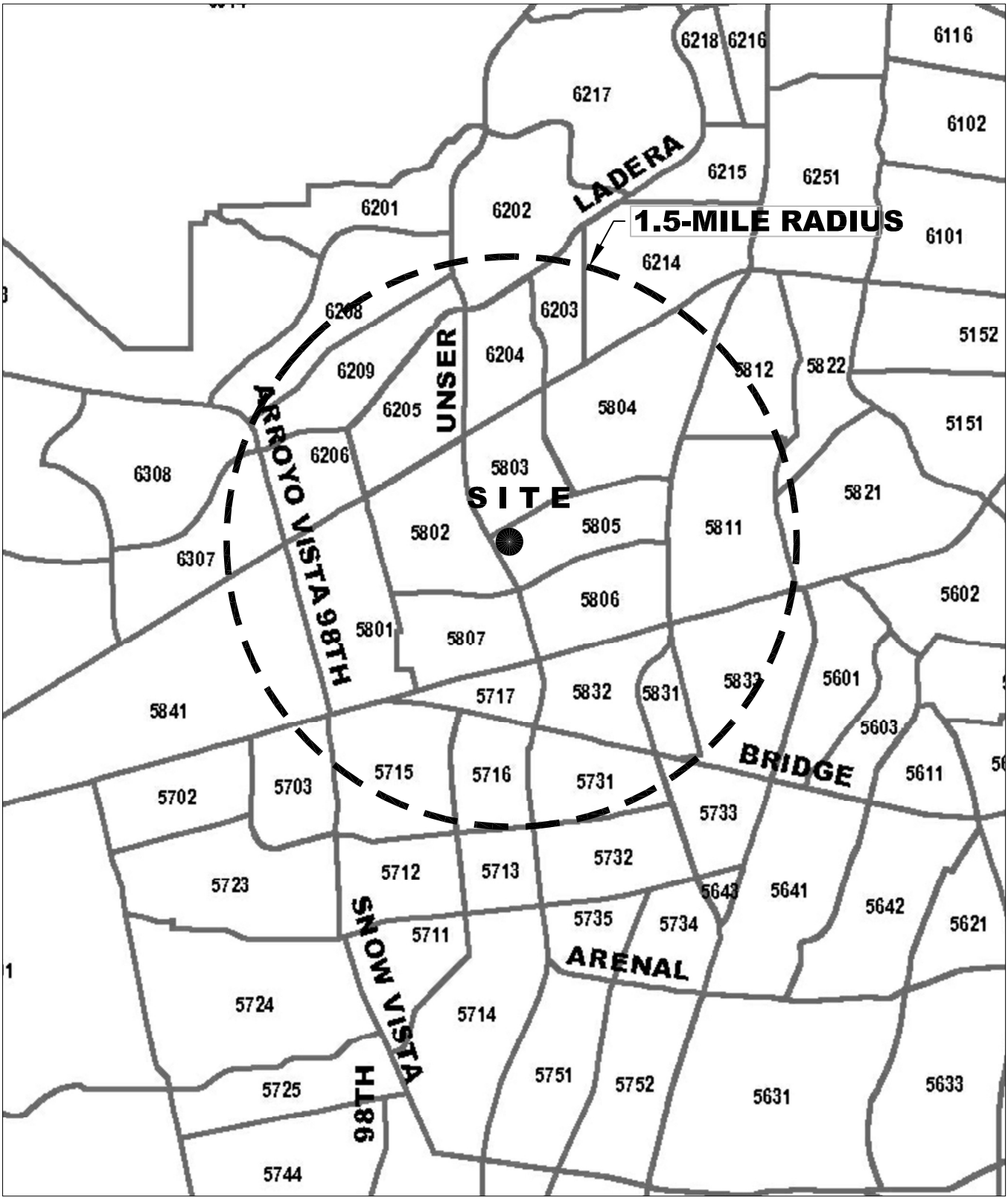
T = ***19*** **(X) +** ***-96.53***
51% Enter, ***49%*** Exit

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

T = ***13.99*** **(X) +** ***0***
51% Enter, ***49%*** Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 10th Edition



DATA ANALYSIS SUBZONE (DASZ) MAP

Maverik Convenience Store (Los Volcanes Rd. / Unser Bd.)

Trip Distribution Table

Maverik Convenience Store (Los Volcanes Rd. / Unser Bd.)

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

2012 and 2040 Data Taken from Mid-Region Council of Governments'
2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(UN) Unser Blvd. North			(IE) Interstate 40 East			(CN) Coors Blvd. North		
DASZ #	% Sub Area in Study	2012 Population	2040 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2012	**2040**	**2020**											
Boundary Specified on DASZ Map															
5703	10%	2470	2412	2,453	245	**0.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5715	80%	4039	4232	4,094	3,275	**8.94%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5716	100%	2780	2608	2,731	2,731	**7.45%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5717	100%	6	1529	441	441	**1.20%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5731	95%	1330	1632	1,416	1,345	**3.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5801	100%	1452	3303	1,981	1,981	**5.41%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5802	100%	592	758	639	639	**1.74%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5803	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5804	90%	2474	3828	2,861	2,575	**7.03%**	0%	0.00%	0	0%	0.00%	0	**70%**	4.92%	1,803
5805	100%	138	343	197	197	**0.54%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5806	100%	847	2144	1,218	1,218	**3.32%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5807	100%	1730	2227	1,872	1,872	**5.11%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5811	100%	4435	4231	4,377	4,377	**11.95%**	0%	0.00%	0	0%	0.00%	0	**25%**	2.99%	1,094
5812	40%	2301	2178	2,266	906	**2.47%**	0%	0.00%	0	0%	0.00%	0	**100%**	2.47%	906
5821	5%	2013	1926	1,988	99	**0.27%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5831	100%	668	671	669	669	**1.83%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5832	100%	1221	1808	1,389	1,389	**3.79%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5833	55%	3969	3511	3,838	2,111	**5.76%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5841	15%	161	269	192	29	**0.08%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6202	20%	1414	2166	1,629	326	**0.89%**	**100%**	0.89%	326	0%	0.00%	0	0%	0.00%	0
6203	95%	908	992	932	885	**2.42%**	**100%**	2.42%	885	0%	0.00%	0	0%	0.00%	0
6204	100%	1931	2366	2,055	2,055	**5.61%**	**100%**	5.61%	2,055	0%	0.00%	0	0%	0.00%	0
6205	100%	2223	2133	2,197	2,197	**6.00%**	**100%**	6.00%	2,197	0%	0.00%	0	0%	0.00%	0
6206	100%	1365	1735	1,471	1,471	**4.01%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6208	20%	1785	4155	2,462	492	**1.34%**	**50%**	0.67%	246	0%	0.00%	0	0%	0.00%	0
6209	100%	1571	2055	1,709	1,709	**4.66%**	**75%**	3.50%	1,282	0%	0.00%	0	0%	0.00%	0
6214	35%	3716	3630	3,691	1,292	**3.53%**	0%	0.00%	0	**100%**	3.53%	1,292	0%	0.00%	0
6307	30%	0	1356	387	116	**0.32%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				51,155	36,642	100.00%			**6,991**			**1,292**			**3,803**
									19.08%			3.53%			10.38%

Trip Distribution Table

Maverik Convenience Store (Los Volcanes Rd. / Unser Bd.)

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

2012 and 2040 Data Taken from Mid-Region Council of Governments'
2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(CS) Coors Blvd. South			(CE) Central Ave. East			(US) Unser Blvd. South		
DASZ #	% Sub Area in Study	2012 Population	2040 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2012	**2040**	**2020**											
Boundary Specified on DASZ Map															
5703	10%	2470	2412	2,453	245	**0.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5715	80%	4039	4232	4,094	3,275	**8.94%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5716	100%	2780	2608	2,731	2,731	**7.45%**	0%	0.00%	0	0%	0.00%	0	**100%**	7.45%	2,731
5717	100%	6	1529	441	441	**1.20%**	0%	0.00%	0	0%	0.00%	0	**50%**	0.60%	221
5731	95%	1330	1632	1,416	1,345	**3.67%**	0%	0.00%	0	0%	0.00%	0	**100%**	3.67%	1,345
5801	100%	1452	3303	1,981	1,981	**5.41%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5802	100%	592	758	639	639	**1.74%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5803	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5804	90%	2474	3828	2,861	2,575	**7.03%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5805	100%	138	343	197	197	**0.54%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5806	100%	847	2144	1,218	1,218	**3.32%**	0%	0.00%	0	**50%**	1.66%	609	0%	0.00%	0
5807	100%	1730	2227	1,872	1,872	**5.11%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5811	100%	4435	4231	4,377	4,377	**11.95%**	**50%**	5.97%	2,189	0%	0.00%	0	0%	0.00%	0
5812	40%	2301	2178	2,266	906	**2.47%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5821	5%	2013	1926	1,988	99	**0.27%**	**100%**	0.27%	99	0%	0.00%	0	0%	0.00%	0
5831	100%	668	671	669	669	**1.83%**	0%	0.00%	0	**100%**	1.83%	669	0%	0.00%	0
5832	100%	1221	1808	1,389	1,389	**3.79%**	0%	0.00%	0	**50%**	1.90%	695	**50%**	1.90%	695
5833	55%	3969	3511	3,838	2,111	**5.76%**	0%	0.00%	0	**50%**	2.88%	1,056	0%	0.00%	0
5841	15%	161	269	192	29	**0.08%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6202	20%	1414	2166	1,629	326	**0.89%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6203	95%	908	992	932	885	**2.42%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6204	100%	1931	2366	2,055	2,055	**5.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6205	100%	2223	2133	2,197	2,197	**6.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6206	100%	1365	1735	1,471	1,471	**4.01%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6208	20%	1785	4155	2,462	492	**1.34%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6209	100%	1571	2055	1,709	1,709	**4.66%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6214	35%	3716	3630	3,691	1,292	**3.53%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6307	30%	0	1356	387	116	**0.32%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				51,155	36,642	100.00%			**2,288**			**3,028**			**4,991**
									6.24%			8.26%			13.62%

Trip Distribution Table

Maverik Convenience Store (Los Volcanes Rd. / Unser Bd.)

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

2012 and 2040 Data Taken from Mid-Region Council of Governments'
2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(CW) Central Ave. West			(BW) Bluewater Rd. West			(LoW) Los Volcanes Rd. West		
DASZ #	% Sub Area in Study	2012 Population	2040 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2012	**2040**	**2020**											
Boundary Specified on DASZ Map															
5703	10%	2470	2412	2,453	245	**0.67%**	**100%**	0.67%	245	0%	0.00%	0	0%	0.00%	0
5715	80%	4039	4232	4,094	3,275	**8.94%**	**100%**	8.94%	3,275	0%	0.00%	0	0%	0.00%	0
5716	100%	2780	2608	2,731	2,731	**7.45%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5717	100%	6	1529	441	441	**1.20%**	**50%**	0.60%	221	0%	0.00%	0	0%	0.00%	0
5731	95%	1330	1632	1,416	1,345	**3.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5801	100%	1452	3303	1,981	1,981	**5.41%**	0%	0.00%	0	**100%**	5.41%	1,981	0%	0.00%	0
5802	100%	592	758	639	639	**1.74%**	0%	0.00%	0	**25%**	0.44%	160	**75%**	1.31%	479
5803	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5804	90%	2474	3828	2,861	2,575	**7.03%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5805	100%	138	343	197	197	**0.54%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5806	100%	847	2144	1,218	1,218	**3.32%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5807	100%	1730	2227	1,872	1,872	**5.11%**	**50%**	2.55%	936	**50%**	2.55%	936	0%	0.00%	0
5811	100%	4435	4231	4,377	4,377	**11.95%**	0%	0.00%	0	**25%**	2.99%	1,094	0%	0.00%	0
5812	40%	2301	2178	2,266	906	**2.47%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5821	5%	2013	1926	1,988	99	**0.27%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5831	100%	668	671	669	669	**1.83%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5832	100%	1221	1808	1,389	1,389	**3.79%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5833	55%	3969	3511	3,838	2,111	**5.76%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5841	15%	161	269	192	29	**0.08%**	0%	0.00%	0	**100%**	0.08%	29	0%	0.00%	0
6202	20%	1414	2166	1,629	326	**0.89%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6203	95%	908	992	932	885	**2.42%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6204	100%	1931	2366	2,055	2,055	**5.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6205	100%	2223	2133	2,197	2,197	**6.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6206	100%	1365	1735	1,471	1,471	**4.01%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6208	20%	1785	4155	2,462	492	**1.34%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6209	100%	1571	2055	1,709	1,709	**4.66%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6214	35%	3716	3630	3,691	1,292	**3.53%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6307	30%	0	1356	387	116	**0.32%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				51,155	36,642	100.00%			**4,677**			**4,200**			**479**
									12.76%			11.46%			1.31%

Trip Distribution Table

Maverik Convenience Store (Los Volcanes Rd. / Unser Bd.)

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

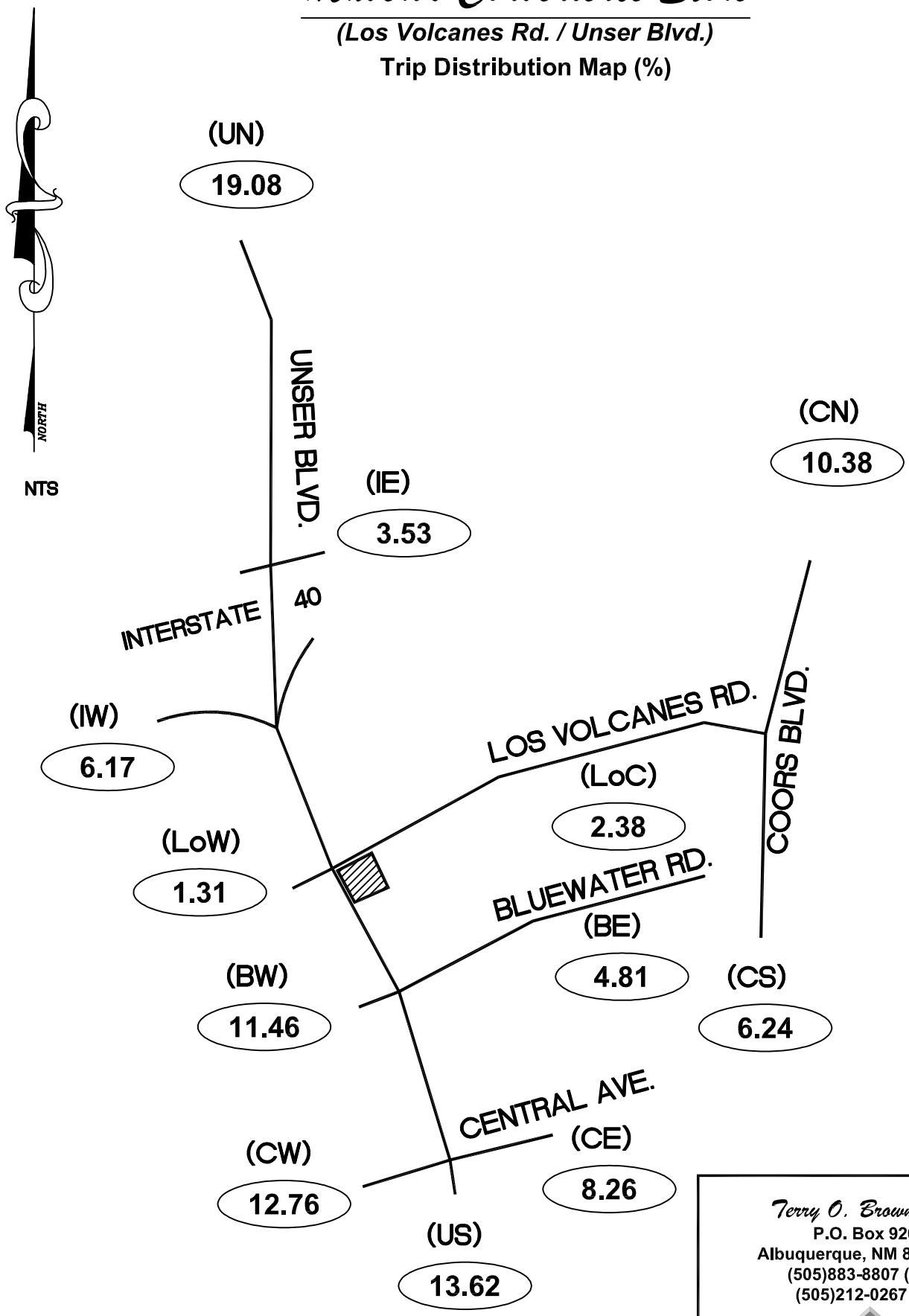
2012 and 2040 Data Taken from Mid-Region Council of Governments'
2040 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(IW) Interstate 40 West			(LoC) Los Volcanes Central			(BE) Bluewater Rd. East		
DASZ #	% Sub Area in Study	2012 Population	2040 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2012	**2040**	**2020**											
Boundary Specified on DASZ Map															
5703	10%	2470	2412	2,453	245	**0.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5715	80%	4039	4232	4,094	3,275	**8.94%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5716	100%	2780	2608	2,731	2,731	**7.45%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5717	100%	6	1529	441	441	**1.20%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5731	95%	1330	1632	1,416	1,345	**3.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5801	100%	1452	3303	1,981	1,981	**5.41%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5802	100%	592	758	639	639	**1.74%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5803	100%	0	0	0	0	**0.00%**	0%	0.00%	0	**100%**	0.00%	0	0%	0.00%	0
5804	90%	2474	3828	2,861	2,575	**7.03%**	0%	0.00%	0	**30%**	2.11%	773	0%	0.00%	0
5805	100%	138	343	197	197	**0.54%**	0%	0.00%	0	**50%**	0.27%	99	**50%**	0.27%	99
5806	100%	847	2144	1,218	1,218	**3.32%**	0%	0.00%	0	0%	0.00%	0	**50%**	1.66%	609
5807	100%	1730	2227	1,872	1,872	**5.11%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5811	100%	4435	4231	4,377	4,377	**11.95%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5812	40%	2301	2178	2,266	906	**2.47%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5821	5%	2013	1926	1,988	99	**0.27%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5831	100%	668	671	669	669	**1.83%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5832	100%	1221	1808	1,389	1,389	**3.79%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5833	55%	3969	3511	3,838	2,111	**5.76%**	0%	0.00%	0	0%	0.00%	0	**50%**	2.88%	1,056
5841	15%	161	269	192	29	**0.08%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6202	20%	1414	2166	1,629	326	**0.89%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6203	95%	908	992	932	885	**2.42%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6204	100%	1931	2366	2,055	2,055	**5.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6205	100%	2223	2133	2,197	2,197	**6.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6206	100%	1365	1735	1,471	1,471	**4.01%**	**100%**	4.01%	1,471	0%	0.00%	0	0%	0.00%	0
6208	20%	1785	4155	2,462	492	**1.34%**	**50%**	0.67%	246	0%	0.00%	0	0%	0.00%	0
6209	100%	1571	2055	1,709	1,709	**4.66%**	**25%**	1.17%	427	0%	0.00%	0	0%	0.00%	0
6214	35%	3716	3630	3,691	1,292	**3.53%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6307	30%	0	1356	387	116	**0.32%**	**100%**	0.32%	116	0%	0.00%	0	0%	0.00%	0
				51,155	36,642	100.00%			**2,260**			**871**			**1,763**
									6.17%			2.38%			4.81%

Maverik Convenience Store

(Los Volcanes Rd. / Unser Blvd.)

Trip Distribution Map (%)



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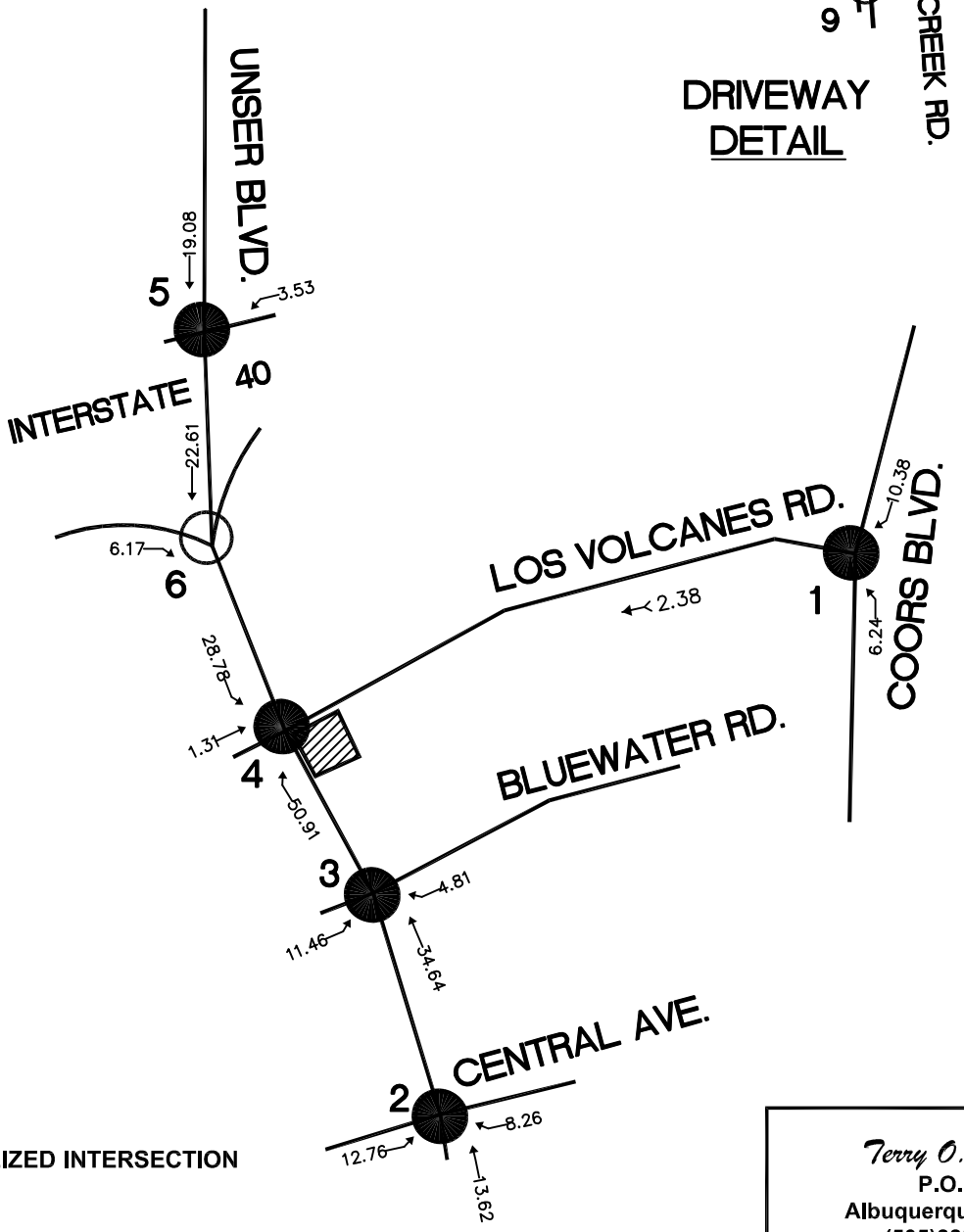
Maverik Convenience Store

(Los Volcanes Rd. / Unser Blvd.)

Trip Assignments (% Entering)

NTS



SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

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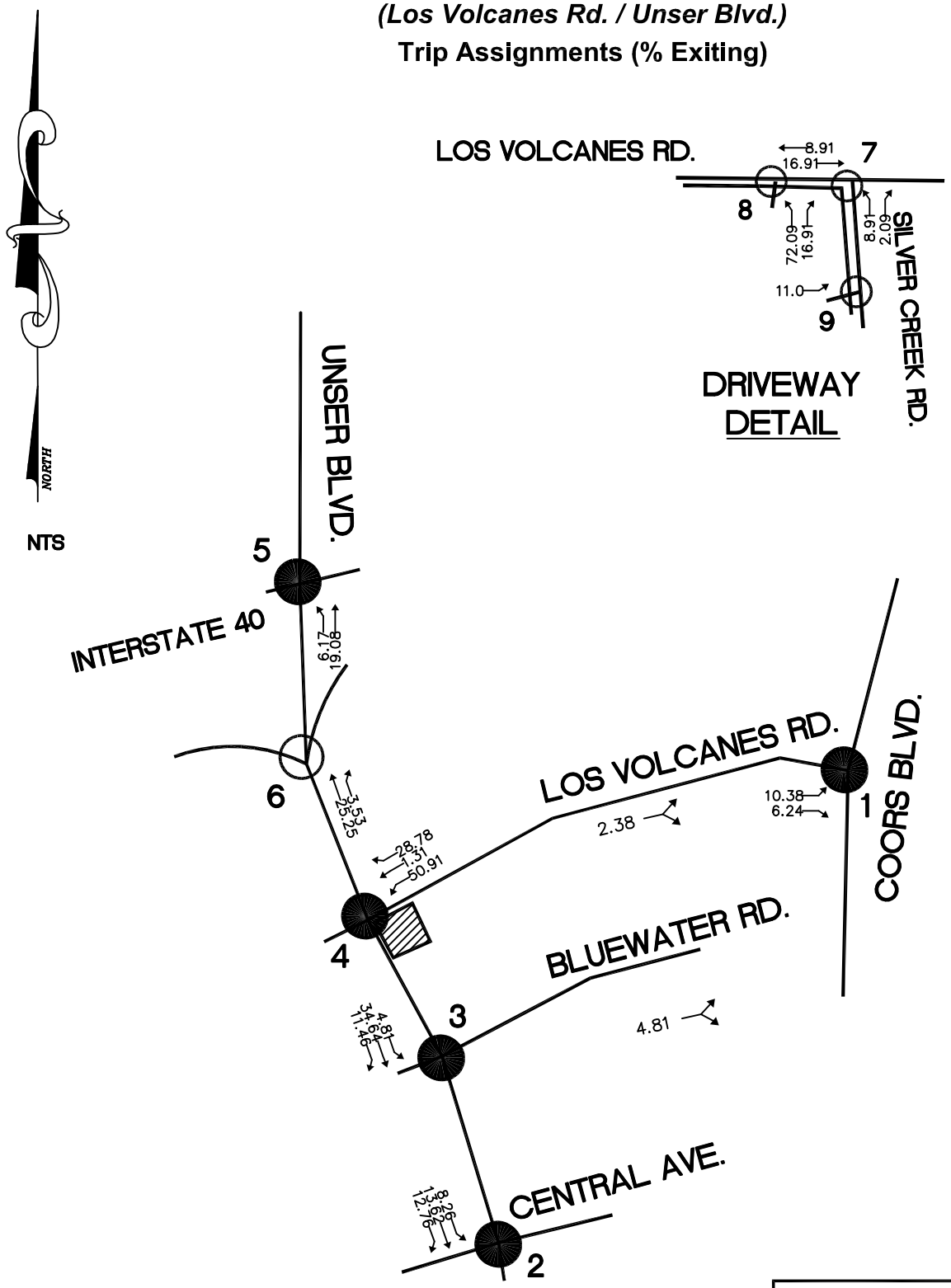
Maverik Convenience Store

(Los Volcanes Rd. / Unser Blvd.)

Trip Assignments (% Exiting)



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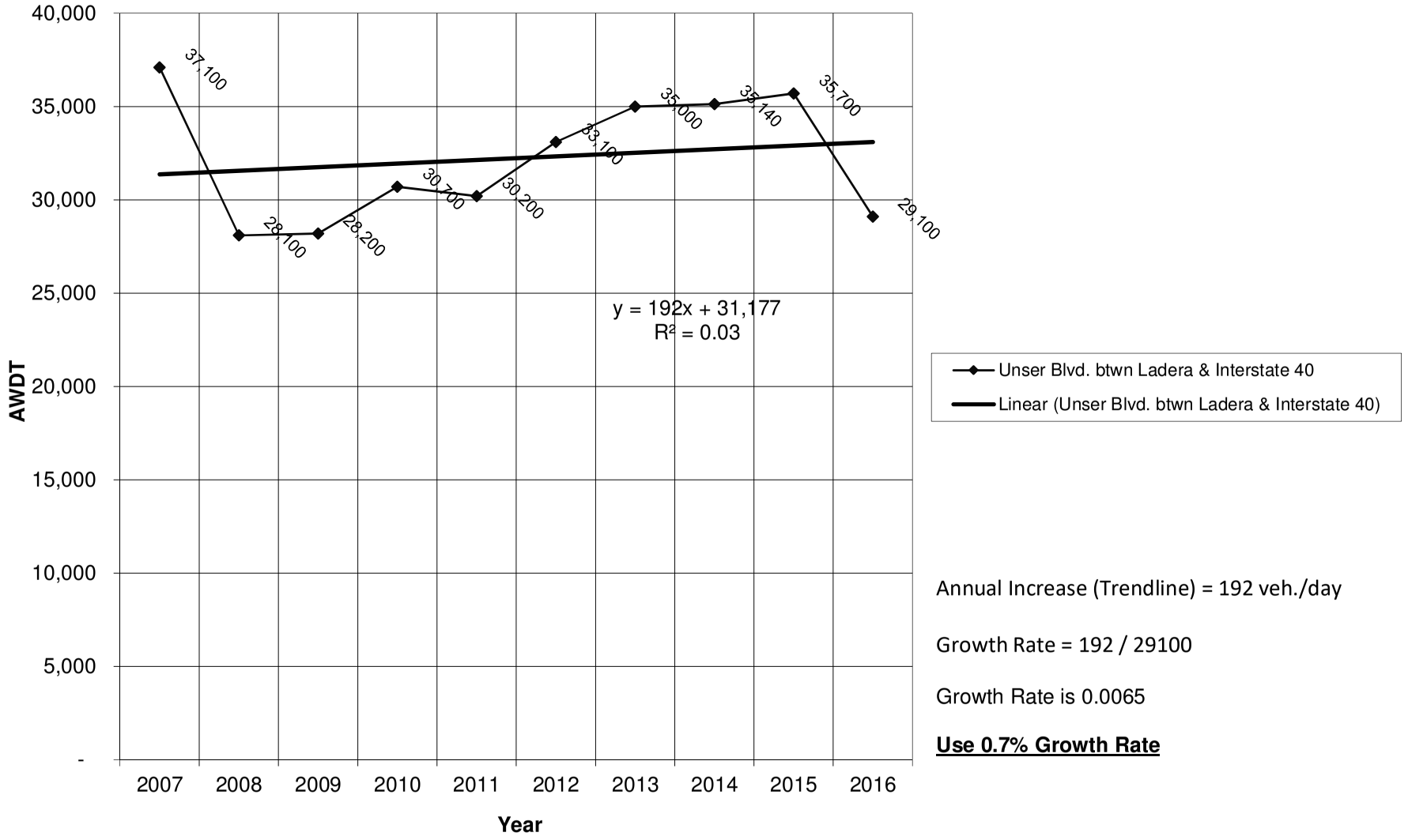
Maverik Convenience Store (Los Volcanes Rd. / Unser Bd.)

Historic Growth Rate Table

Traffic Flows from MRCOG Map

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Unser Blvd. btwn Ladera & Interstate 40	37,100	28,100	28,200	30,700	30,200	33,100	35,000	35,140	35,700	29,100
Coors Blvd. North of Fortuna Rd.	38,600	38,800	38,800	36,600	32,200	34,900	37,600	37,610	38,500	43,100
Coors Blvd. btwn Los Volcanes & Bluewater	49,200	41,500	41,400	34,200	33,800	35,600	36,200	31,290	32,100	37,600
Bluewater Rd. West of Coors Blvd.	8,400	5,600	5,600	5,500	10,500	10,300	10,100	10,140	7,800	8,100
Bluewater Rd. East of Unser Blvd.	5,900	5,900	4,800	4,700	4,700	5,500	5,400	5,410	4,600	4,800
Central Av. East of Unser Blvd.	24,600	24,700	19,800	16,700	18,000	15,000	17,600	15,720	23,200	23,700
Unser Blvd. South of Central Av.	9,400	9,400	7,200	15,300	15,100	18,100	23,600	23,640	24,200	23,400
Central Av. West of Unser Blvd.	23,300	22,600	22,600	21,800	21,500	18,200	17,700	17,740	18,200	17,700
Unser Blvd. btwn Bluewater & Central	20,200	31,800	31,800	21,300	21,000	29,900	25,800	26,310	26,400	29,200
Bluewater Rd. West of Unser Blvd.	3,200	3,200	3,200	4,700	4,600	4,500	4,400	4,410	4,500	7,300
Unser Blvd. btwn Bluewater & Los Volcanes	31,400	28,200	23,300	22,900	22,600	29,900	26,600	30,150	30,800	32,000
Unser btwn Los Volcanes & Interstate 40	40,000	25,400	27,200	31,600	31,200	29,900	30,100	30,150	33,500	34,100

Historic Growth Chart Unser Bd. btwn Ladera & Interstate 40 (2007-2016)



Annual Increase (Trendline) = 192 veh./day

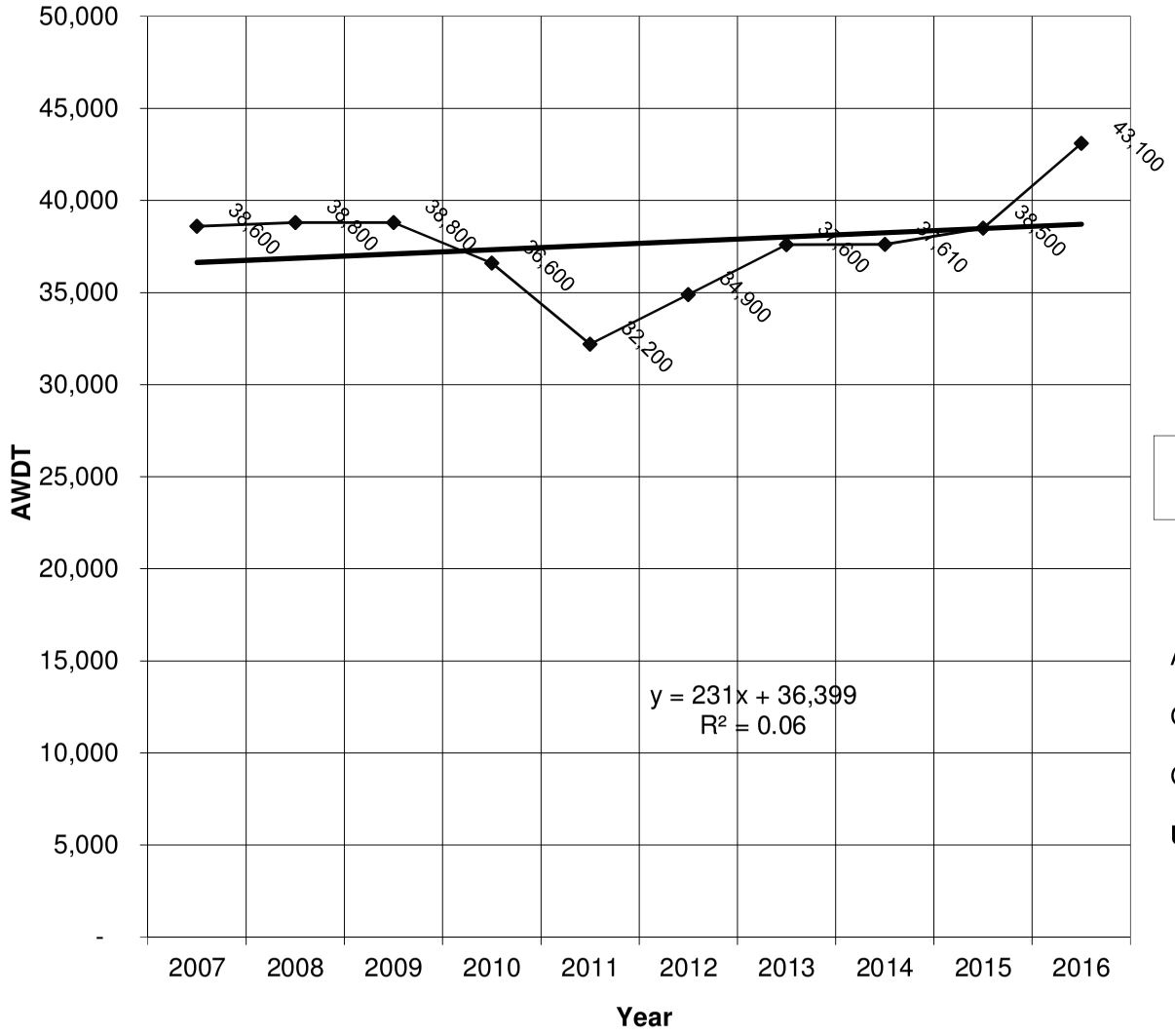
Growth Rate = 192 / 29100

Growth Rate is 0.0065

Use 0.7% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Chart Coors Bd. North of Fortuna Rd. (2007-2016)



Annual Increase (Trendline) = 231 veh./day

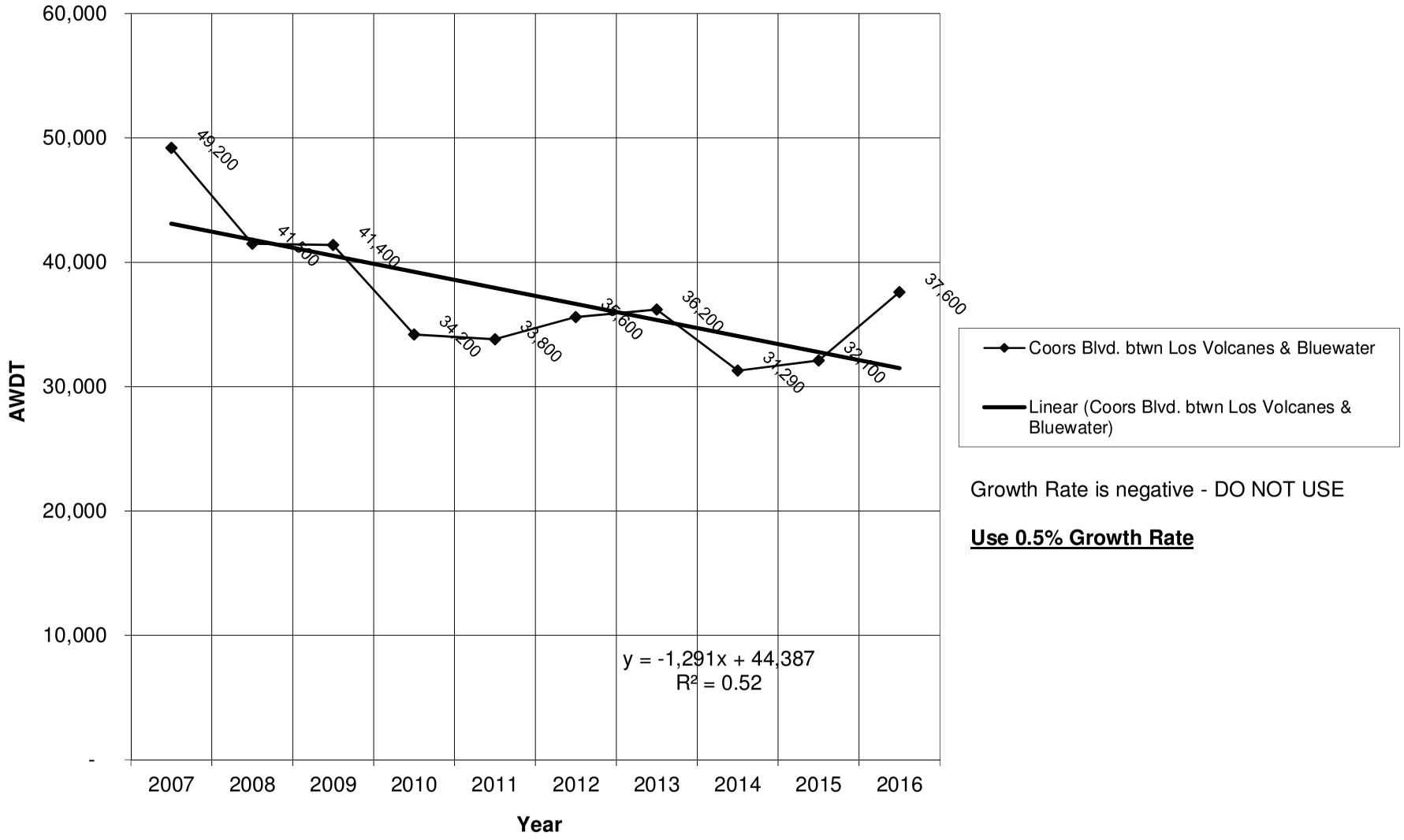
Growth Rate = 231 / 43100

Growth Rate = 0.0053

Use 0.5% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Chart Coors Bd. btwn Los Volcanes & Bluewater (2007-2016)

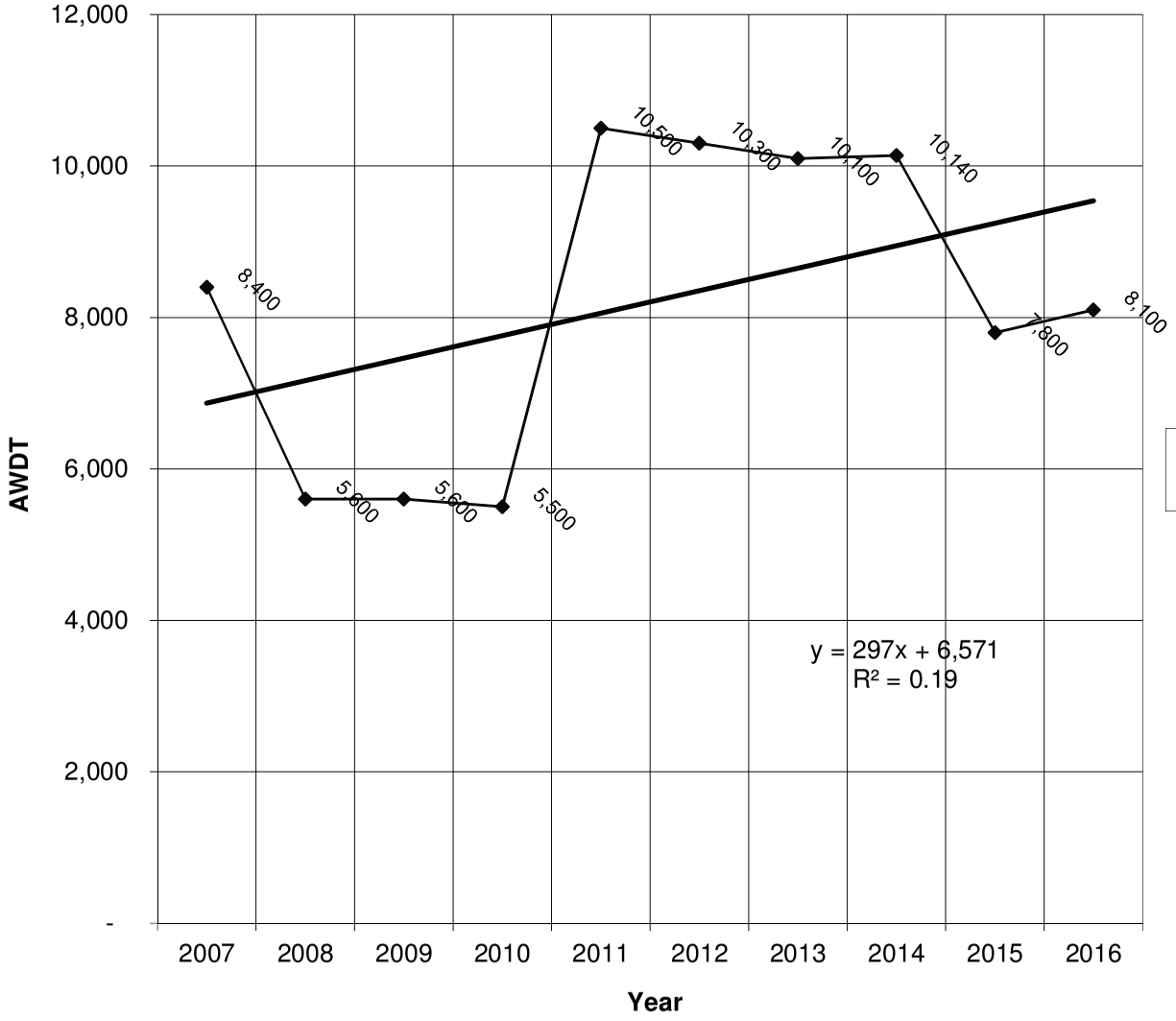


Growth Rate is negative - DO NOT USE

Use 0.5% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Chart Bluewater Rd. West of Coors Bd. (2007-2016)



Annual Increase (Trendline) = 297 veh./day

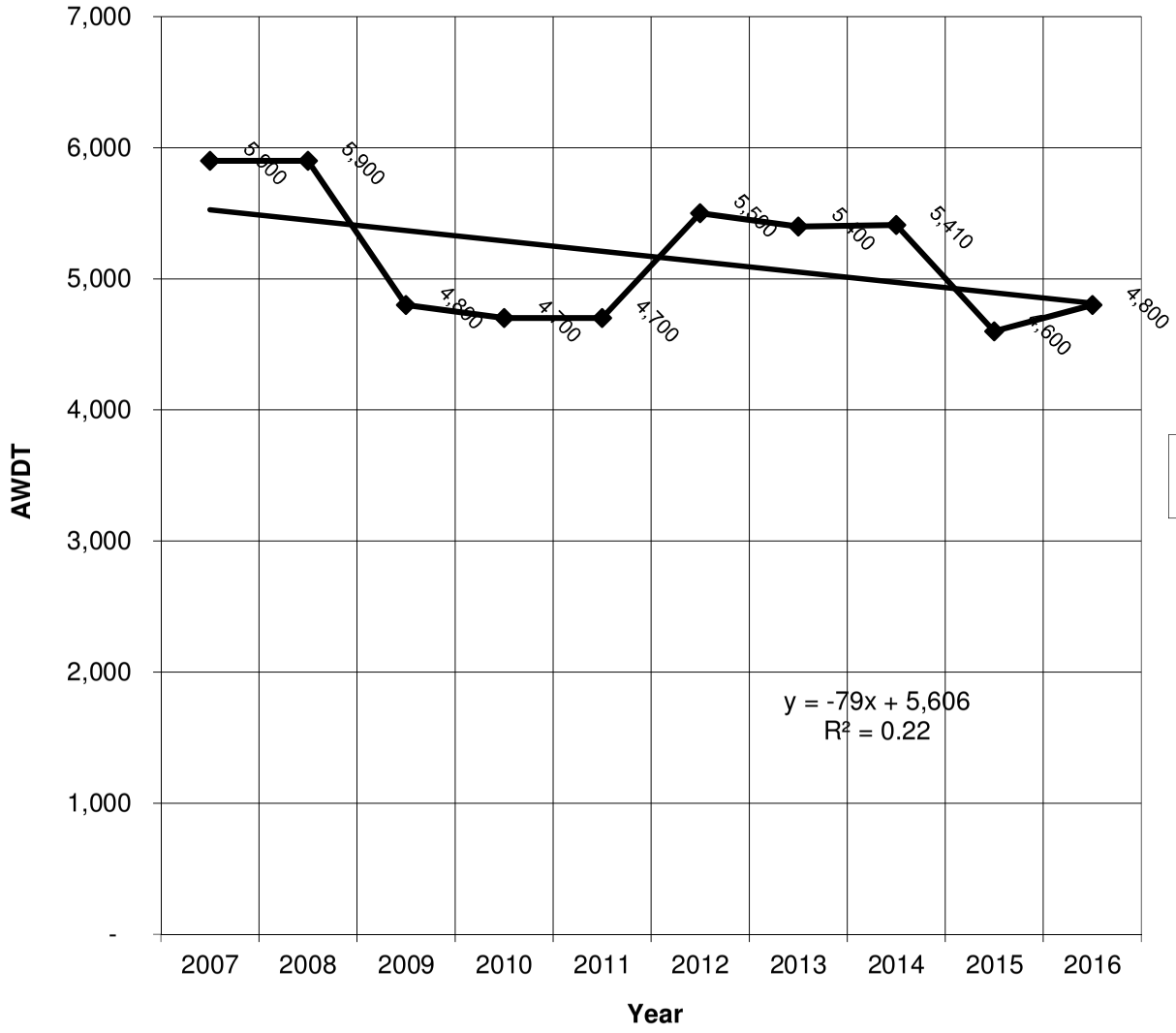
Growth Rate = 297 / 8100

Growth Rate = 0.0366

Use 3.7% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Chart Bluewater Rd. East of Unser Bd. (2007-2016)

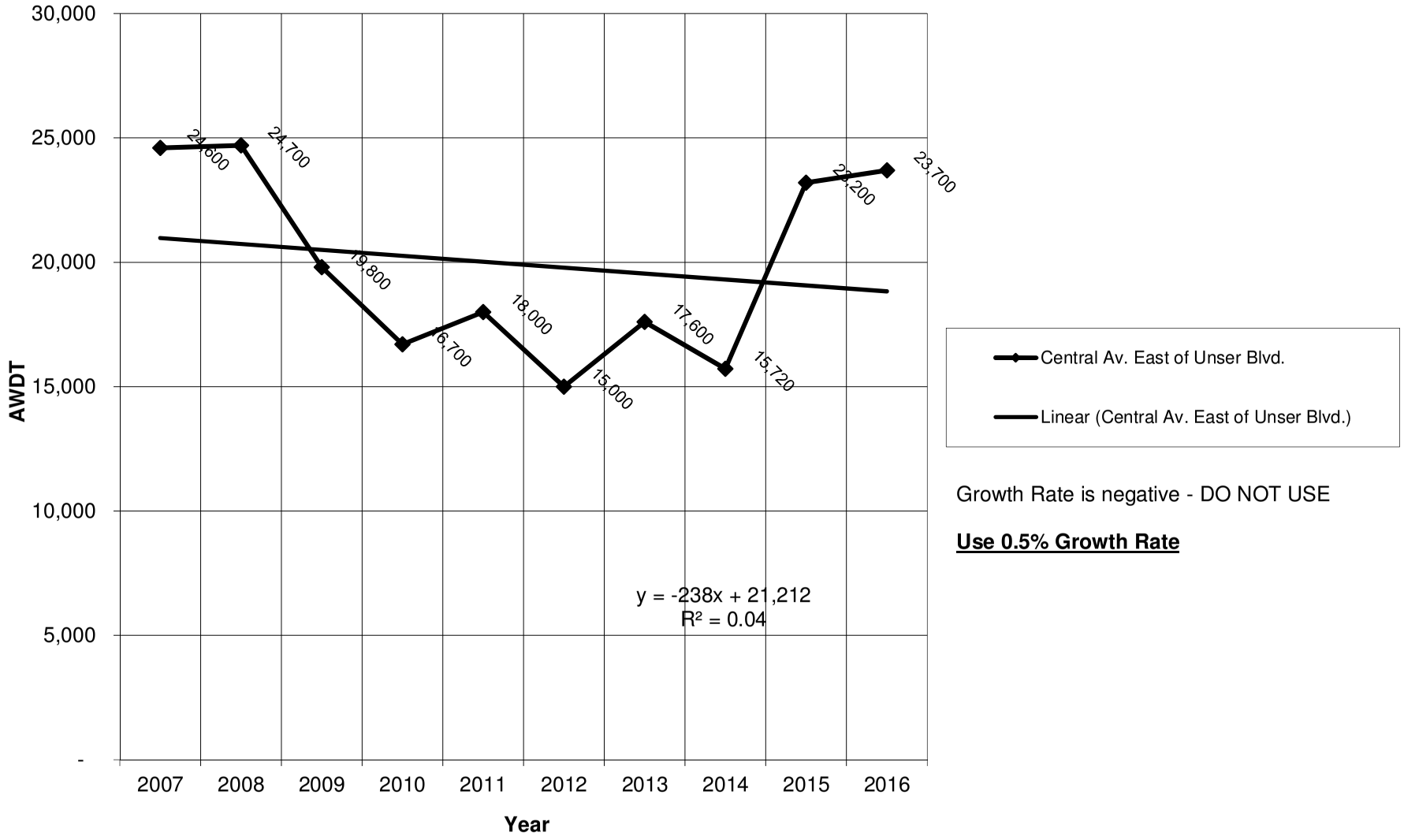


Growth Rate is negative - DO NOT USE

Use 0.5% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Chart Central Av. East of Unser Bd. (2007-2016)

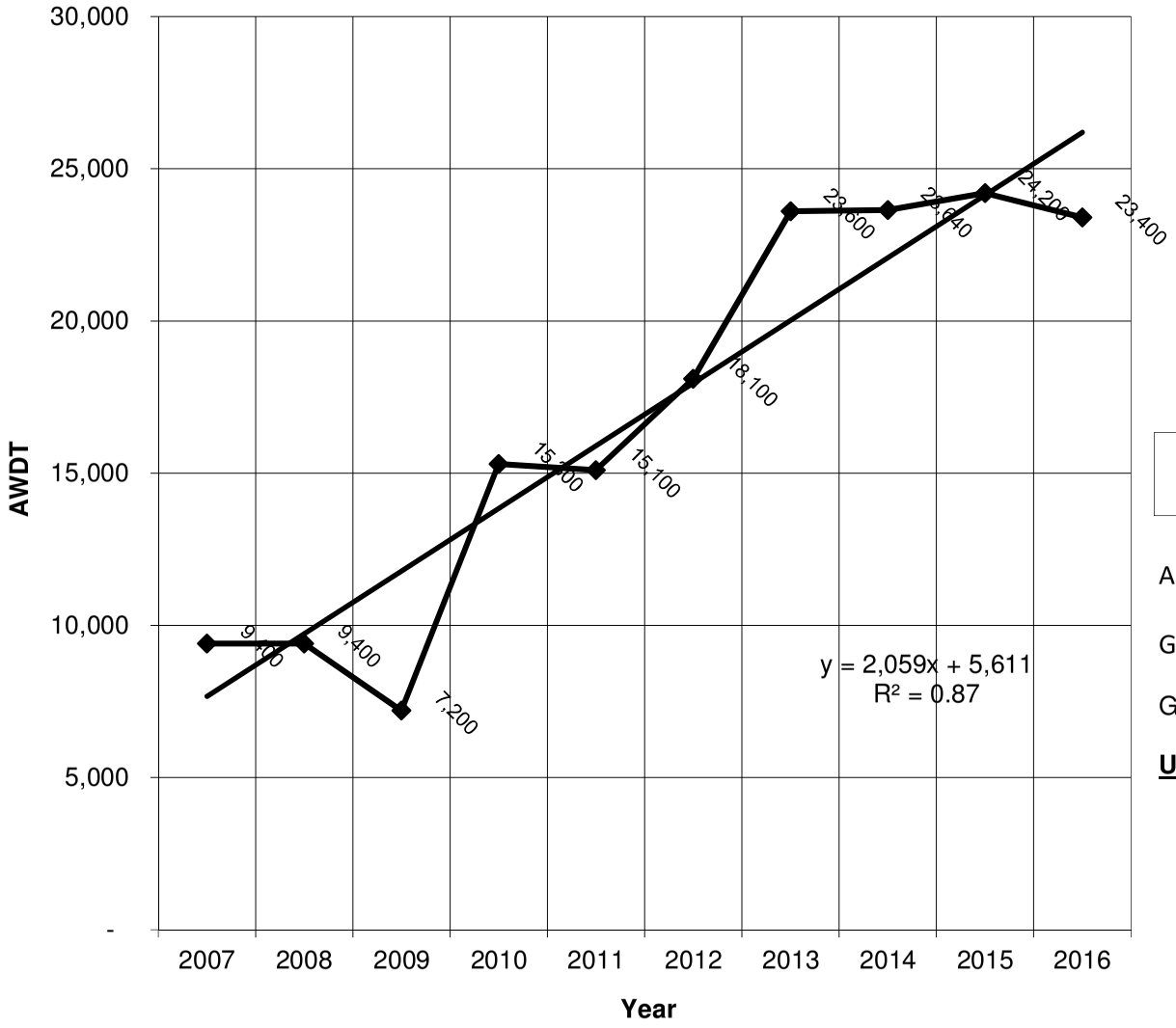


Growth Rate is negative - DO NOT USE

Use 0.5% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Chart Unser Bd. South of Central Av. (2007-2016)



Annual Increase (Trendline) = 2059 veh./day

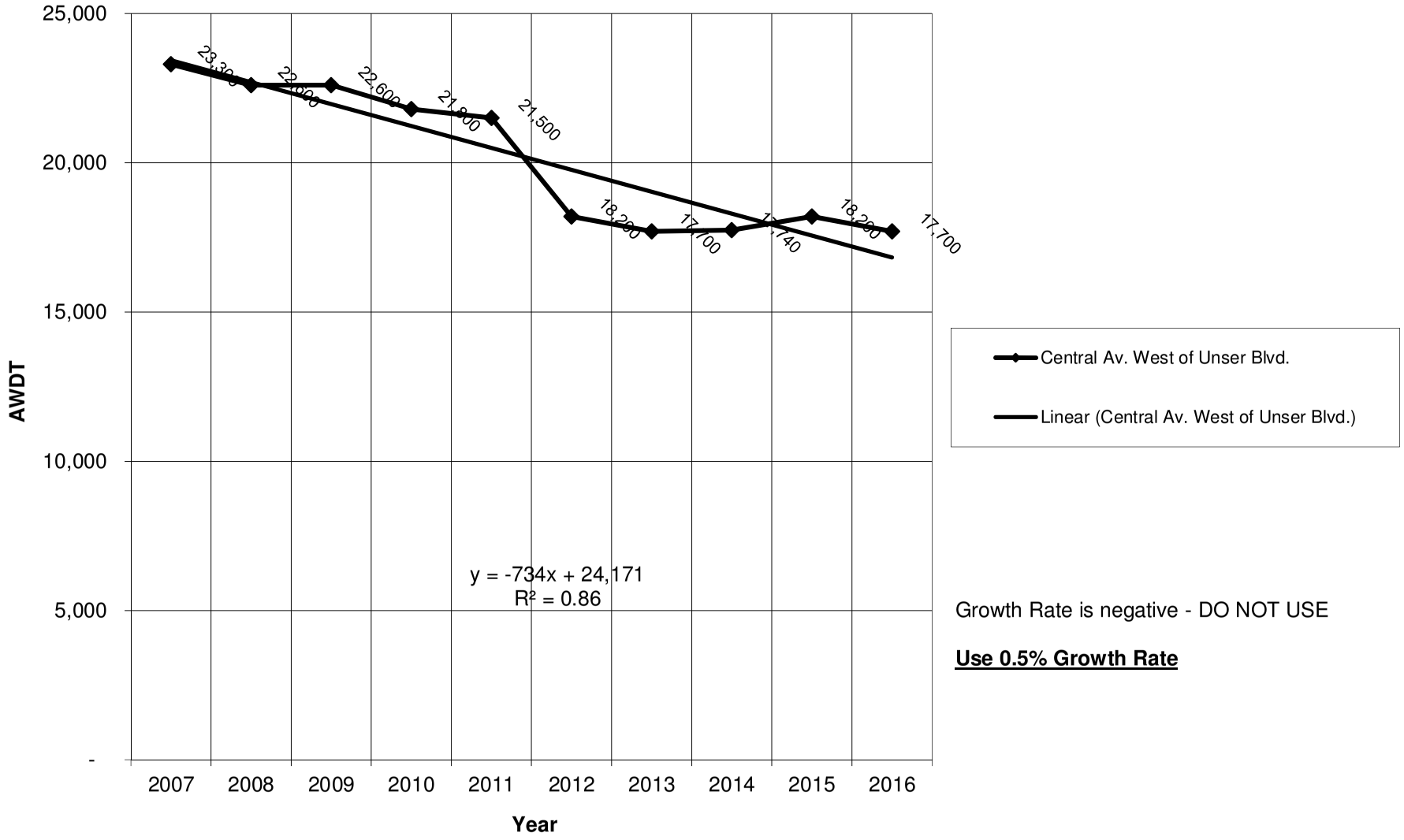
Growth Rate = 2059 / 23400

Growth Rate is 0.0879

Use 8.8% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Chart Central Av. West of Unser Bd. (2007-2016)

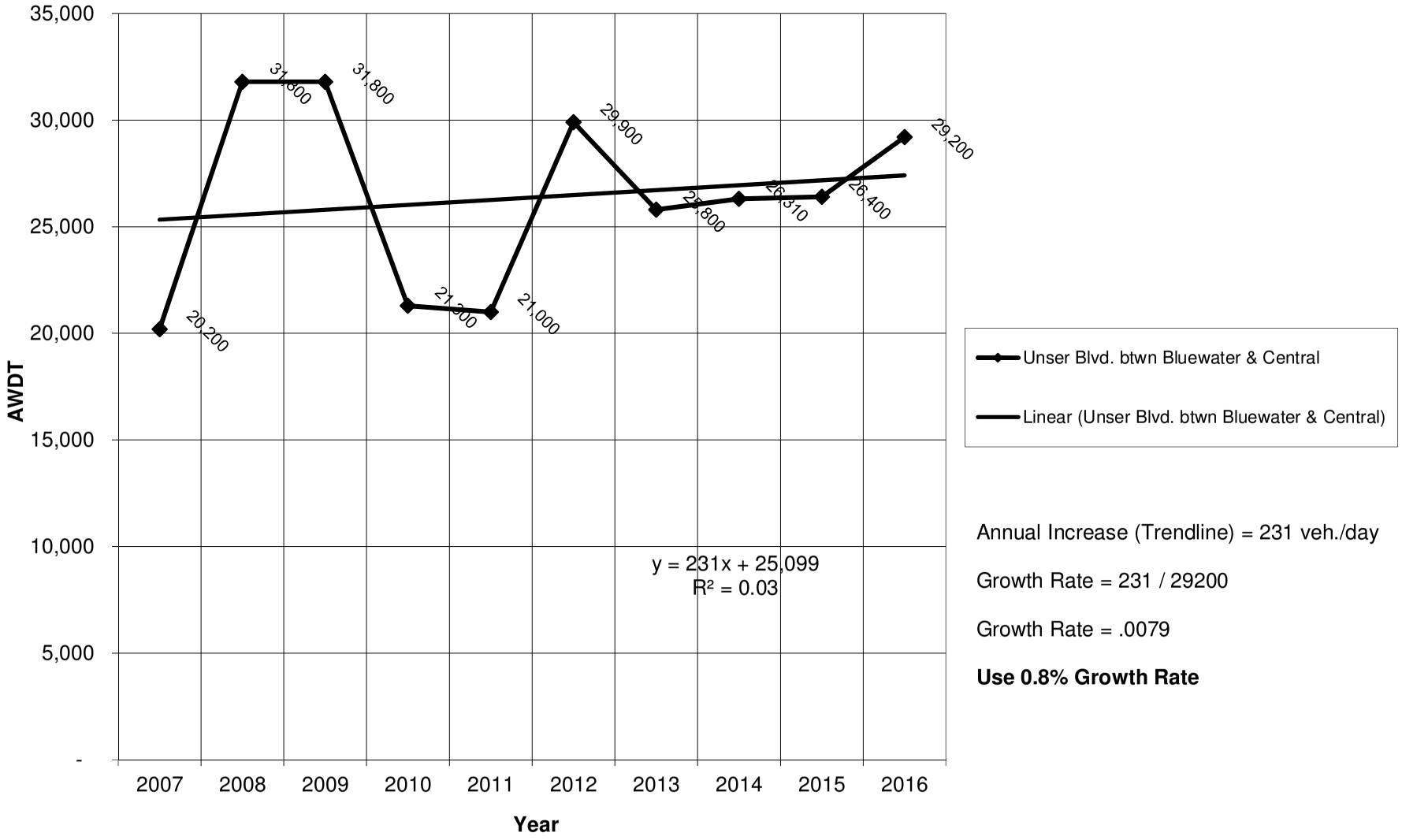


Growth Rate is negative - DO NOT USE

Use 0.5% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Chart Unser Bd. btwn Bluewater & Central (2007-2016)



Annual Increase (Trendline) = 231 veh./day

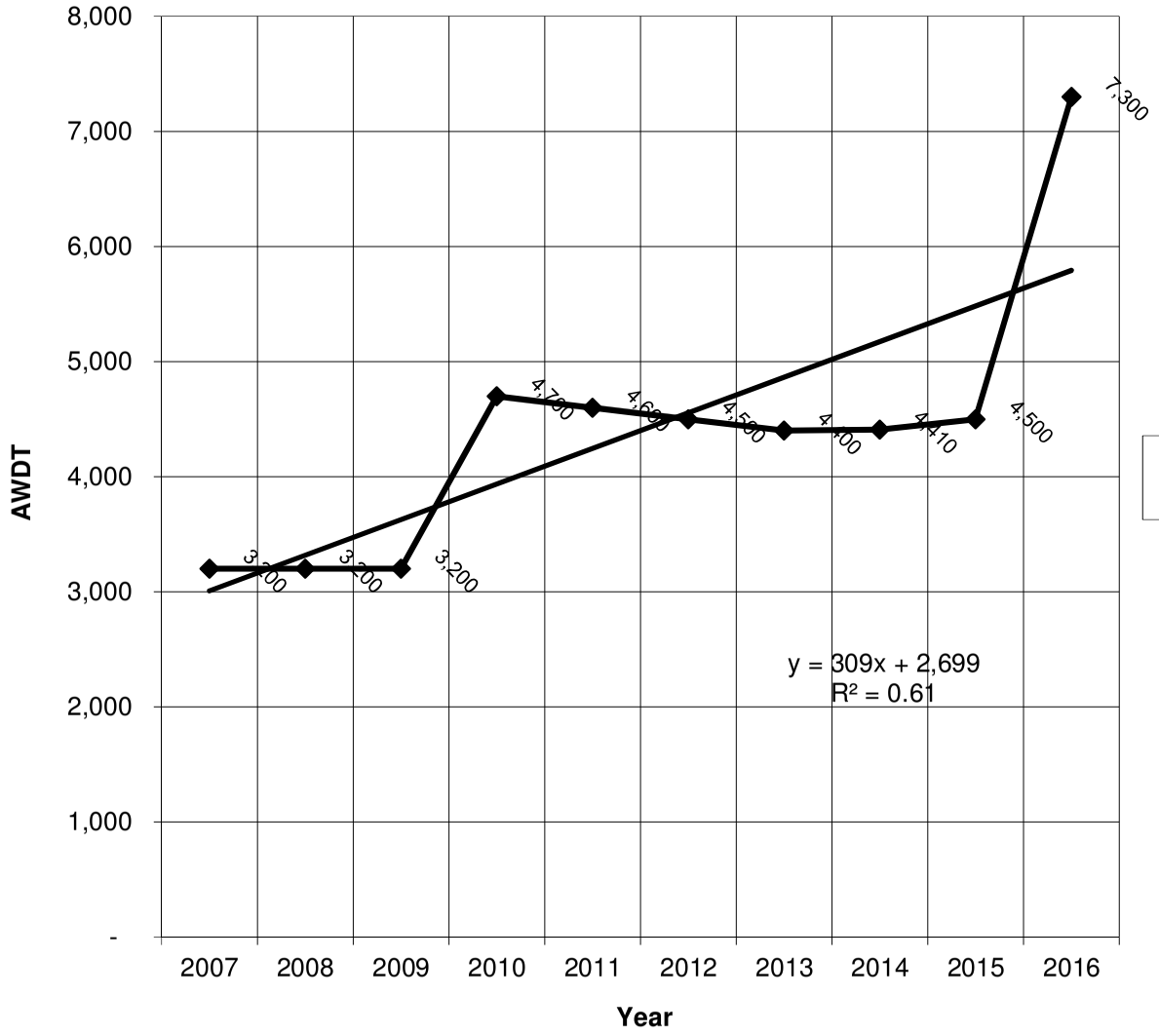
Growth Rate = 231 / 29200

Growth Rate = .0079

Use 0.8% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Chart Bluewater Rd. West of Unser Bd. (2007-2016)



Annual Increase (Trendline) = 309 veh./day

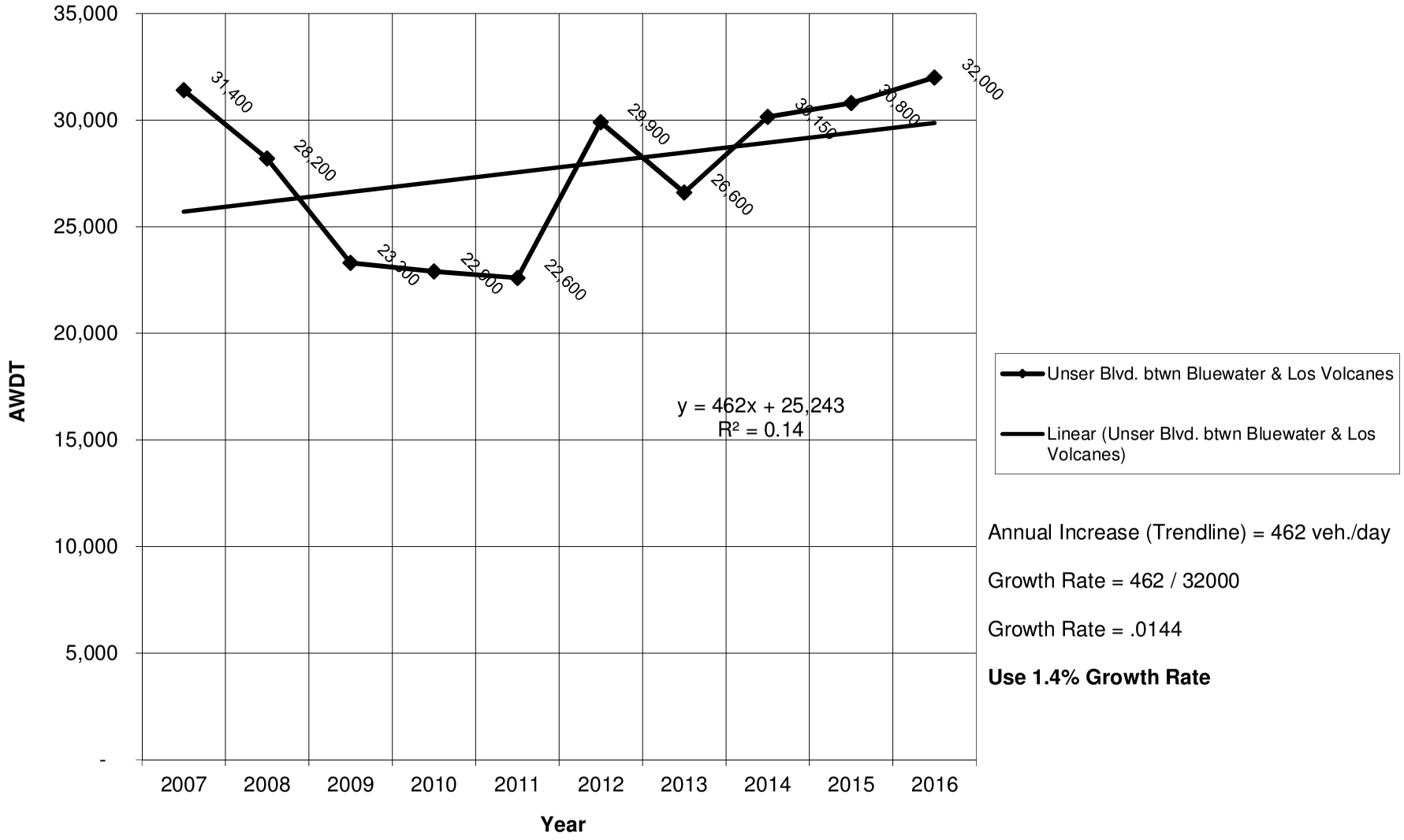
Growth Rate = 309 / 7300

Growth Rate = .0423

Use 4.2% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Unser Bd. btwn Bluewater & Los Volcanes (2007-2016)



Annual Increase (Trendline) = 462 veh./day

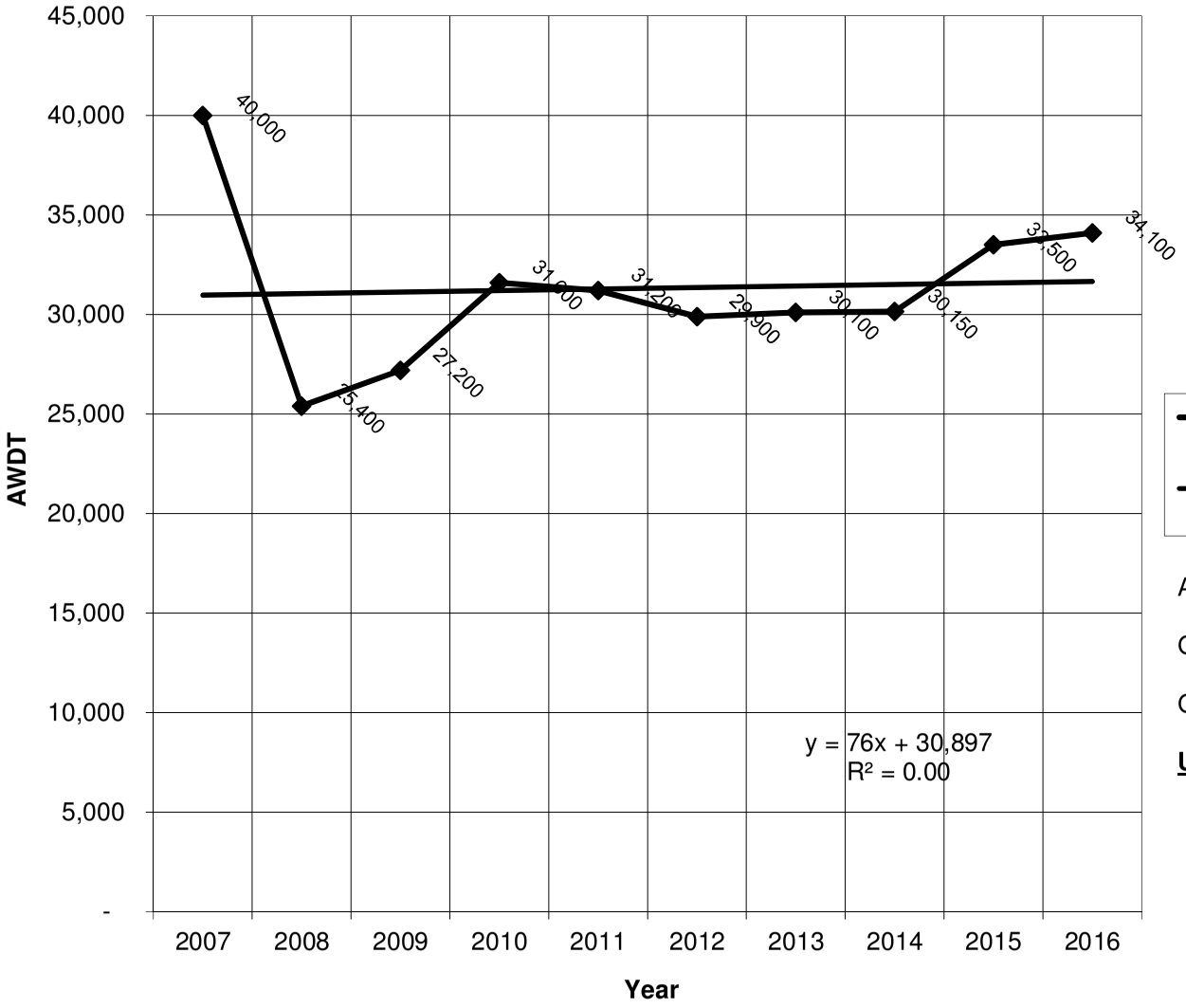
Growth Rate = 462 / 32000

Growth Rate = .0144

Use 1.4% Growth Rate

MaverikUnser_Growth.xlsx

Historic Growth Chart Unser btwn Los Volcanes & Interstate 40 (2007-2016)



Annual Increase (Trendline) = 76 veh./day

Growth Rate = 76 / 34100

Growth Rate = .0022 - TOO LOW

Use 0.5% Growth Rate

MaverikUnser_Growth.xlsx

Maverik Convenience Store

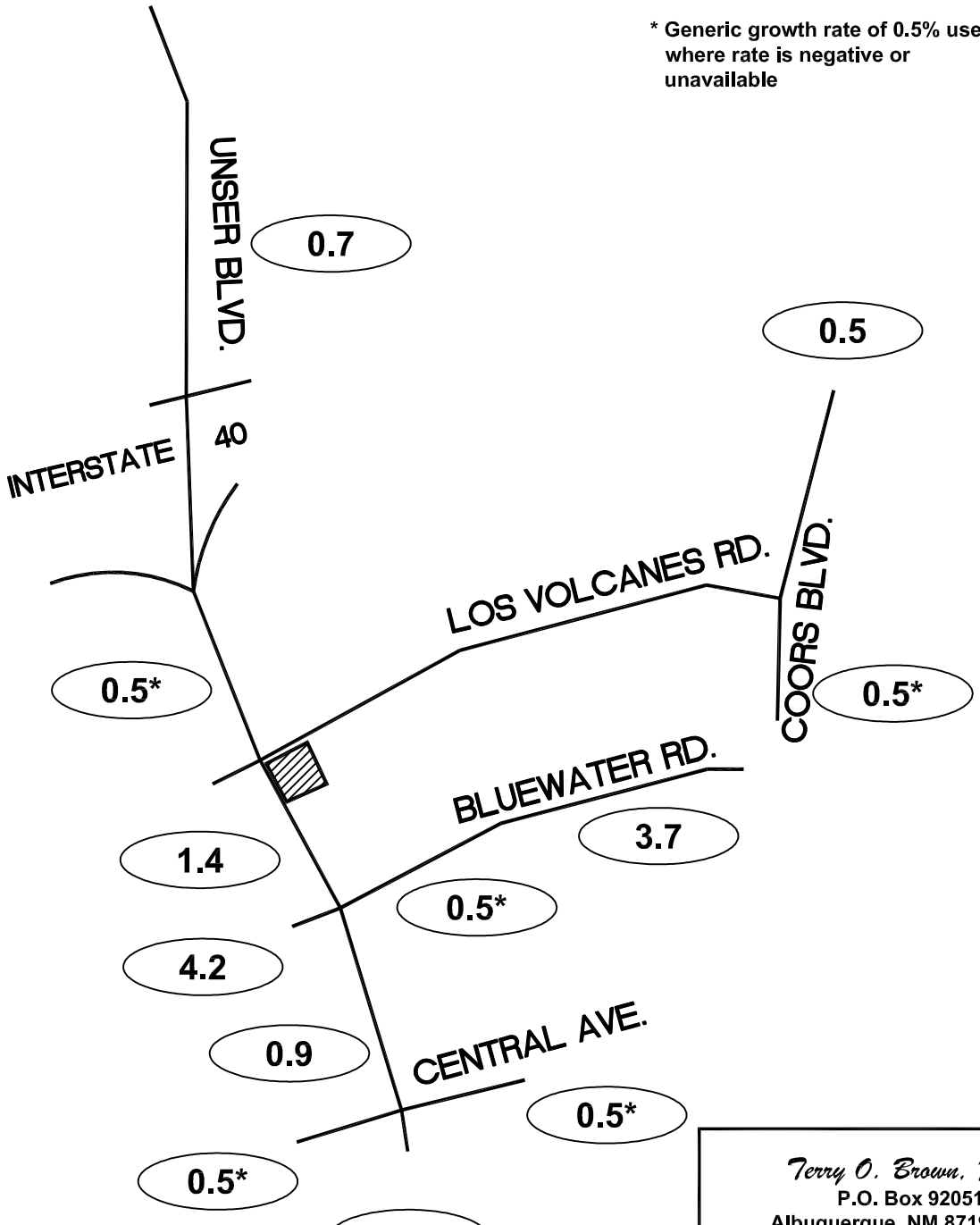
(Los Volcanes Rd. / Unser Blvd.)

Growth Rate Map (%)

NORTH

NTS

* Generic growth rate of 0.5% used where rate is negative or unavailable



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Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2020) - 100% Development

INTERSECTION: **Summary**

Los Volcanes Rd. / Coors Blvd.

(1)	0.92			0.92			0.92			0.92		PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
12.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	132	0	44	0	0	0	59	1,044	0	0	695	123
2020 (NO BUILD - A.M.)	*142*	*0*	*46*	*0*	*0*	*0*	*67*	*1,080*	*0*	*0*	*718*	*130*
2020 (BUILD - A.M.)	***156***	***0***	***55***	***0***	***0***	***0***	***76***	***1,080***	***0***	***0***	***718***	***145***

	0.97			0.97			0.97			0.97		PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	161	0	89	0	0	0	60	1,086	0	0	1,598	132
2020 (NO BUILD - P.M.)	*188*	*0*	*99*	*0*	*0*	*0*	*65*	*1,169*	*0*	*0*	*1,692*	*161*
2020 (BUILD - P.M.)	***202***	***0***	***108***	***0***	***0***	***0***	***74***	***1,169***	***0***	***0***	***1,692***	***176***

Central Av. / Unser Blvd.

(2)	0.92			0.92			0.92			0.92		PHF
	Eastbound (Central Av.)			Westbound (Central Av.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
12.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	288	384	18	43	134	83	16	1,135	120	103	443	95
2020 (NO BUILD - A.M.)	*293*	*388*	*18*	*43*	*135*	*90*	*18*	*1,253*	*132*	*105*	*447*	*96*
2020 (BUILD - A.M.)	***312***	***388***	***18***	***43***	***135***	***102***	***18***	***1,273***	***132***	***116***	***466***	***114***

	0.95			0.95			0.95			0.95		PHF
	Eastbound (Central Av.)			Westbound (Central Av.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	172	379	34	89	342	57	52	770	99	126	1,051	141
2020 (NO BUILD - P.M.)	*175*	*383*	*34*	*90*	*345*	*61*	*57*	*848*	*109*	*133*	*1,065*	*145*
2020 (BUILD - P.M.)	***193***	***383***	***34***	***90***	***345***	***73***	***57***	***867***	***109***	***144***	***1,084***	***162***

Bluewater Rd. / Unser Blvd.

(3)	0.90			0.90			0.90			0.90		PHF
	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
12.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	90	40	37	29	19	48	21	1,375	79	105	622	52
2020 (NO BUILD - A.M.)	*98*	*43*	*40*	*29*	*19*	*48*	*21*	*1,412*	*80*	*108*	*641*	*53*
2020 (BUILD - A.M.)	***115***	***43***	***40***	***29***	***19***	***55***	***21***	***1,462***	***80***	***115***	***689***	***69***

	0.94			0.94			0.94			0.94		PHF
	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	92	50	39	87	92	156	35	918	89	61	1,271	104
2020 (NO BUILD - P.M.)	*100*	*54*	*42*	*88*	*93*	*158*	*36*	*941*	*91*	*64*	*1,321*	*107*
2020 (BUILD - P.M.)	***116***	***54***	***42***	***88***	***93***	***165***	***36***	***991***	***91***	***71***	***1,368***	***123***

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2020) - 100% Development

INTERSECTION: **Summary**

Los Volcanes Rd. / Unser Blvd.

(4)	0.75			0.75			0.75			0.75			PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)			
11.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	283	81	13	88	76	193	29	1,606	209	285	776	109	
2020 (NO BUILD - A.M.)	*286*	*82*	*13*	*91*	*77*	*199*	*30*	*1,651*	*228*	*316*	*784*	*110*	
2020 (BUILD - A.M.)	***286***	***84***	***13***	***162***	***79***	***239***	***30***	***1,651***	***302***	***358***	***784***	***110***	
	0.91			0.91			0.91			0.91			PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	159	51	30	132	71	221	21	1,072	114	192	1,231	108	
2020 (NO BUILD - P.M.)	*161*	*52*	*30*	*148*	*72*	*256*	*22*	*1,102*	*123*	*209*	*1,243*	*109*	
2020 (BUILD - P.M.)	***161***	***54***	***30***	***218***	***74***	***295***	***22***	***1,102***	***196***	***250***	***1,243***	***109***	

I-40 N. Ramp / Unser Blvd.

(5)	0.92			0.92			0.92			0.92			PHF
	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)			
11.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	0	336	1	0	18	693	0	0	1,656	66	
2020 (NO BUILD - A.M.)	*0*	*0*	*0*	*357*	*1*	*0*	*18*	*701*	*0*	*0*	*1,686*	*67*	
2020 (BUILD - A.M.)	***0***	***0***	***0***	***362***	***1***	***0***	***27***	***728***	***0***	***0***	***1,714***	***67***	
	0.97			0.97			0.97			0.97			PHF
	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	0	920	1	0	28	910	0	0	1,028	70	
2020 (NO BUILD - P.M.)	*0*	*0*	*0*	*939*	*1*	*0*	*31*	*928*	*0*	*0*	*1,046*	*71*	
2020 (BUILD - P.M.)	***0***	***0***	***0***	***944***	***1***	***0***	***39***	***954***	***0***	***0***	***1,073***	***71***	

I-40 S. Ramp / Unser Blvd.

(6)	0.91			0.91			0.91			0.91			PHF
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)			
11.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	53	0	29	0	0	0	0	684	860	0	991	1,073	
2020 (NO BUILD - A.M.)	*54*	*0*	*32*	*0*	*0*	*0*	*0*	*692*	*871*	*0*	*1,026*	*1,084*	
2020 (BUILD - A.M.)	***54***	***0***	***41***	***0***	***0***	***0***	***0***	***727***	***876***	***0***	***1,059***	***1,084***	
	0.75			0.75			0.75			0.75			PHF
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	81	0	49	0	0	0	0	1,050	582	0	1,950	413	
2020 (NO BUILD - P.M.)	*82*	*0*	*50*	*0*	*0*	*0*	*0*	*1,072*	*610*	*0*	*1,983*	*417*	
2020 (BUILD - P.M.)	***82***	***0***	***59***	***0***	***0***	***0***	***0***	***1,107***	***615***	***0***	***2,015***	***417***	

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2020) - 100% Development

INTERSECTION: **Summary**

Los Volcanes Rd. / Silver Creek Rd.

(7) 11.0% Truck	0.75			0.75			0.75			0.75			PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Silver Creek Rd.)			Southbound (Silver Creek Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	40	19	0	0	10	0	5	0	0	0	
2020 (NO BUILD - A.M.)	*0*	*581*	*40*	*19*	*357*	*0*	*10*	*0*	*5*	*0*	*0*	*0*	
2020 (BUILD - A.M.)	***0***	***605***	***53***	***22***	***382***	***0***	***22***	***0***	***8***	***0***	***0***	***0***	

	0.75			0.75			0.75			0.75			PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Silver Creek Rd.)			Southbound (Silver Creek Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	9	5	0	0	39	0	19	0	0	0	
2020 (NO BUILD - P.M.)	*0*	*356*	*9*	*5*	*437*	*0*	*39*	*0*	*19*	*0*	*0*	*0*	
2020 (BUILD - P.M.)	***0***	***379***	***22***	***8***	***461***	***0***	***51***	***0***	***22***	***0***	***0***	***0***	

Los Volcanes Rd. / Driveway "A"

(8) 11.0% Truck	0.75			0.75			0.75			0.75			PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	0	0	0	0	0	0	0	0	0	0	
2020 (NO BUILD - A.M.)	*0*	*626*	*0*	*0*	*367*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2020 (BUILD - A.M.)	***0***	***639***	***105***	***25***	***379***	***0***	***100***	***0***	***24***	***0***	***0***	***0***	

	0.75			0.75			0.75			0.75			PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	0	0	0	0	0	0	0	0	0	0	
2020 (NO BUILD - P.M.)	*0*	*384*	*0*	*0*	*476*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2020 (BUILD - P.M.)	***0***	***397***	***103***	***24***	***488***	***0***	***99***	***0***	***23***	***0***	***0***	***0***	

Driveway "B" / Silver Creek Rd.

(9) 11.0% Truck	0.75			0.75			0.75			0.75			PHF
	Eastbound (Driveway "B")			Westbound (Driveway "B")			Northbound (Silver Creek Rd.)			Southbound (Silver Creek Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	0	0	0	0	0	0	0	0	0	0	
2020 (NO BUILD - A.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*15*	*0*	*0*	*59*	*0*	
2020 (BUILD - A.M.)	***15***	***0***	***0***	***0***	***0***	***0***	***0***	***15***	***0***	***0***	***59***	***16***	

	0.75			0.75			0.75			0.75			PHF
	Eastbound (Driveway "B")			Westbound (Driveway "B")			Northbound (Silver Creek Rd.)			Southbound (Silver Creek Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	0	0	0	0	0	0	0	0	0	0	
2020 (NO BUILD - P.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*58*	*0*	*0*	*14*	*0*	
2020 (BUILD - P.M.)	***15***	***0***	***0***	***0***	***0***	***0***	***0***	***58***	***0***	***0***	***14***	***16***	

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Coors Blvd.

INTERSECTION: E-W Street: **Los Volcanes Rd.** (1)

N-S Street: **Coors Blvd.**

Year of Existing Counts 2017

Implementation Year **2020**

Growth Rates 0.50% 0.50% 0.50% 0.50%

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	131	0	44	0	0	0	59	1,039	0	0	692	122
Background Traffic Growth	2	0	1	0	0	0	1	16	0	0	10	2
Subtotal	133	0	45	0	0	0	60	1,055	0	0	702	124
B.E.K. Development Trips	0	0	1	0	0	0	7	0	0	0	0	0
Coors Park & Sell	9	0	0	0	0	0	0	25	0	0	16	6
Subtotal (NO BUILD - A.M.)	***142***	***0***	***46***	***0***	***0***	***0***	***67***	***1,080***	***0***	***0***	***718***	***130***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.38%***
Percent Commercial Trips Generated(Exiting)	***10.38%***	*0.00%*	***6.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	14	0	9	0	0	0	9	0	0	0	0	15
Total AM Peak Hour BUILD Volumes	**156**	**0**	**55**	**0**	**0**	**0**	**76**	**1,080**	**0**	**0**	**718**	**145**

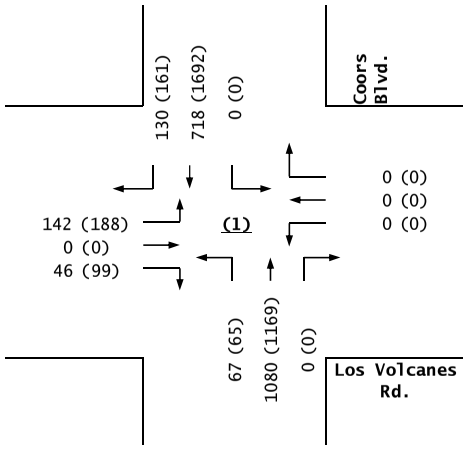
0.50% 0.50% 0.50% 0.50%

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	160	0	89	0	0	0	60	1,081	0	0	1,590	131
Background Traffic Growth	2	0	1	0	0	0	1	16	0	0	24	2
Subtotal	162	0	90	0	0	0	61	1,097	0	0	1,614	133
B.E.K. Development Trips	0	0	9	0	0	0	4	0	0	0	0	0
Coors Park & Sell	26	0	0	0	0	0	0	72	0	0	78	28
Subtotal (NO BUILD - P.M.)	***188***	***0***	***99***	***0***	***0***	***0***	***65***	***1,169***	***0***	***0***	***1,692***	***161***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.38%***
Percent Commercial Trips Generated(Exiting)	***10.38%***	*0.00%*	***6.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	14	0	9	0	0	0	9	0	0	0	0	15
Total PM Peak Hour BUILD Volumes	**202**	**0**	**108**	**0**	**0**	**0**	**74**	**1,169**	**0**	**0**	**1,692**	**176**

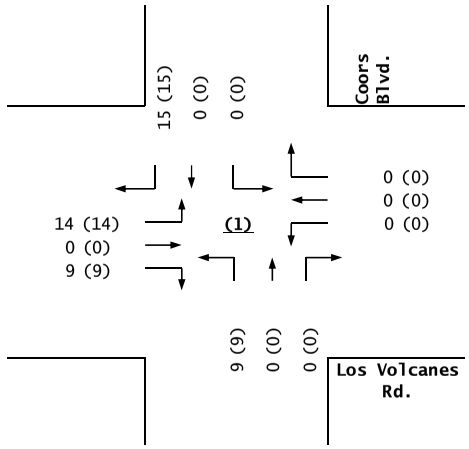
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
2018 AM Peak Hr. Volumes	132	0	44	0	0	0	59	1,044	0	0	695	123
2018 PM Peak Hr. Volumes	161	0	89	0	0	0	60	1,086	0	0	1,598	132

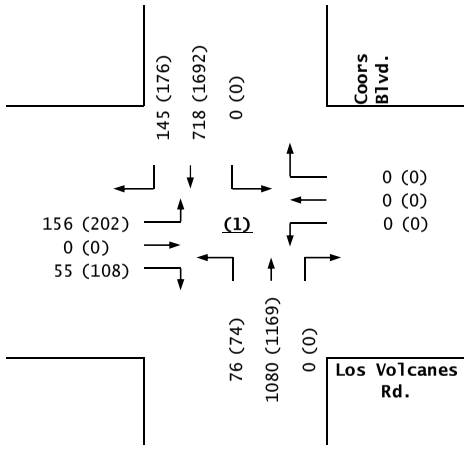
2020
NO BUILD



Trips



2020
BUILD



Los Volcanes Rd. / Coors Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Central Av. / Unser Blvd.

INTERSECTION: E-W Street: **Central Av.** (2)

N-S Street: **Unser Blvd.**

Year of Existing Counts 2018

Implementation Year **2020**

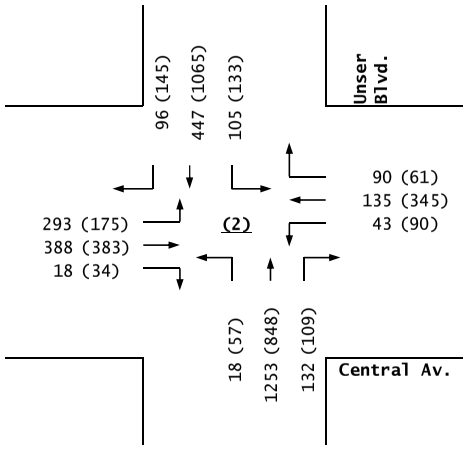
Growth Rates	**0.50%**			**0.50%**			**5.00%**			**0.50%**		
	Eastbound (Central Av.)			**Westbound (Central Av.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	288	384	18	43	134	83	16	1,135	120	103	443	95
Background Traffic Growth	3	4	0	0	1	1	2	114	12	1	4	1
Subtotal	291	388	18	43	135	84	18	1,249	132	104	447	96
B.E.K. Development Trips	2	0	0	0	0	6	0	4	0	1	0	0
Subtotal (NO BUILD - A.M.)	***293***	***388***	***18***	***43***	***135***	***90***	***18***	***1,253***	***132***	***105***	***447***	***96***
Percent Commercial Trips Generated(Entering)	***12.76%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***8.26%***	*0.00%*	***13.62%***	*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%*	*0.00%*	***8.26%***	***13.62%***	***12.76%***
Total Trips Generated	19	0	0	0	0	12	0	20	0	11	19	18
Total AM Peak Hour BUILD Volumes	**312**	**388**	**18**	**43**	**135**	**102**	**18**	**1,273**	**132**	**116**	**466**	**114**

	0.50%			**0.50%**			**5.00%**			**0.50%**		
	Eastbound (Central Av.)			**Westbound (Central Av.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	172	379	34	89	342	57	52	770	99	126	1,051	141
Background Traffic Growth	2	4	0	1	3	1	5	77	10	1	11	1
Subtotal	174	383	34	90	345	58	57	847	109	127	1,062	142
B.E.K. Development Trips	1	0	0	0	0	3	0	1	0	6	3	3
Subtotal (NO BUILD - P.M.)	***175***	***383***	***34***	***90***	***345***	***61***	***57***	***848***	***109***	***133***	***1,065***	***145***
Percent Commercial Trips Generated(Entering)	***12.76%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***8.26%***	*0.00%*	***13.62%***	*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%*	*0.00%*	***8.26%***	***13.62%***	***12.76%***
Total Trips Generated	18	0	0	0	0	12	0	19	0	11	19	17
Total PM Peak Hour BUILD Volumes	**193**	**383**	**34**	**90**	**345**	**73**	**57**	**867**	**109**	**144**	**1,084**	**162**

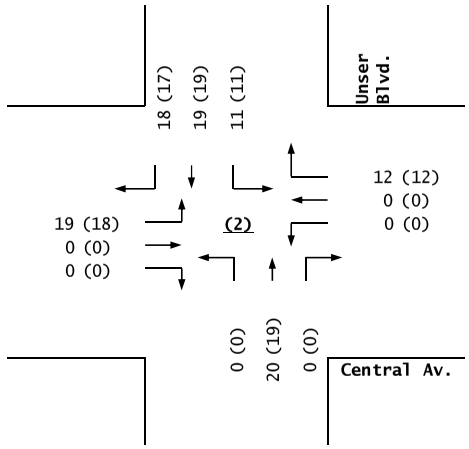
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Central Av.)			**Westbound (Central Av.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
2018 AM Peak Hr. Volumes	288	384	18	43	134	83	16	1,135	120	103	443	95
2018 PM Peak Hr. Volumes	172	379	34	89	342	57	52	770	99	126	1,051	141

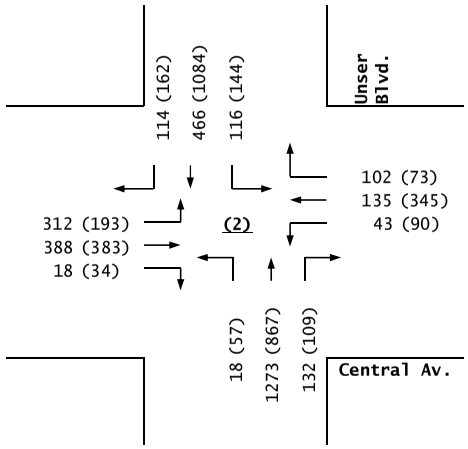
2020
NO BUILD



Trips



2020
BUILD



Central Av. / Unser Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Bluewater Rd. / Unser Blvd.

INTERSECTION: E-W Street: **Bluewater Rd.** (3)

N-S Street: **Unser Blvd.**

Year of Existing Counts 2018

Implementation Year **2020**

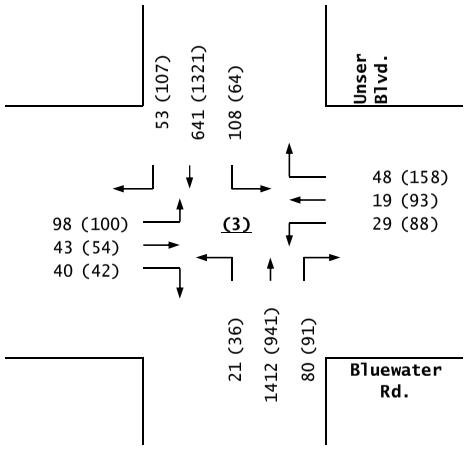
Growth Rates	**4.20%**			**0.50%**			**0.90%**			**1.40%**		
	Eastbound (Bluewater Rd.)			**Westbound (Bluewater Rd.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	90	40	37	29	19	48	21	1,375	79	105	622	52
Background Traffic Growth	8	3	3	0	0	0	0	25	1	3	17	1
Subtotal	98	43	40	29	19	48	21	1,400	80	108	639	53
B.E.K. Development Trips	0	0	0	0	0	0	0	12	0	0	2	0
Subtotal (NO BUILD - A.M.)	***98***	***43***	***40***	***29***	***19***	***48***	***21***	***1,412***	***80***	***108***	***641***	***53***
Percent Commercial Trips Generated(Entering)	***11.46%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.81%***	*0.00%*	***34.64%***	*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%*	*0.00%*	***4.81%***	***34.64%***	***11.46%***
Total Trips Generated	17	0	0	0	0	7	0	50	0	7	48	16
Total AM Peak Hour BUILD Volumes	**115**	**43**	**40**	**29**	**19**	**55**	**21**	**1,462**	**80**	**115**	**689**	**69**

	4.20%			**0.50%**			**0.90%**			**1.40%**		
	Eastbound (Bluewater Rd.)			**Westbound (Bluewater Rd.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	92	50	39	87	92	156	35	918	89	61	1,271	104
Background Traffic Growth	8	4	3	1	1	2	1	17	2	2	36	3
Subtotal	100	54	42	88	93	158	36	935	91	63	1,307	107
B.E.K. Development Trips	0	0	0	0	0	0	0	6	0	1	14	0
Subtotal (NO BUILD - P.M.)	***100***	***54***	***42***	***88***	***93***	***158***	***36***	***941***	***91***	***64***	***1,321***	***107***
Percent Commercial Trips Generated(Entering)	***11.46%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.81%***	*0.00%*	***34.64%***	*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%*	*0.00%*	***4.81%***	***34.64%***	***11.46%***
Total Trips Generated	16	0	0	0	0	7	0	50	0	7	47	16
Total PM Peak Hour BUILD Volumes	**116**	**54**	**42**	**88**	**93**	**165**	**36**	**991**	**91**	**71**	**1,368**	**123**

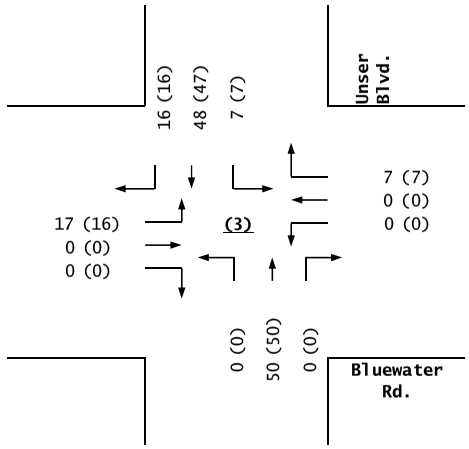
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Bluewater Rd.)			**Westbound (Bluewater Rd.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
2018 AM Peak Hr. Volumes	90	40	37	29	19	48	21	1,375	79	105	622	52
2018 PM Peak Hr. Volumes	92	50	39	87	92	156	35	918	89	61	1,271	104

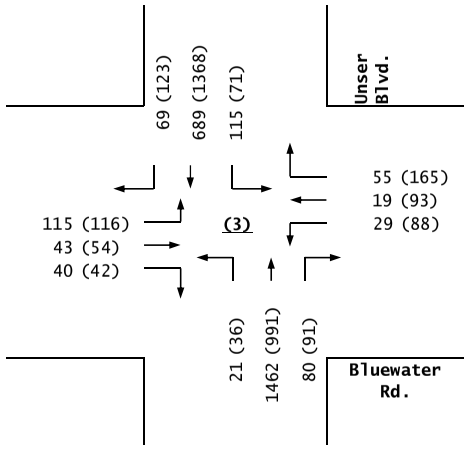
2020
NO BUILD



Trips



2020
BUILD



Bluewater Rd. / Unser Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Unser Blvd.

INTERSECTION: E-W Street: **Los Volcanes Rd.** (4)

N-S Street: **Unser Blvd.**

Year of Existing Counts 2018

Implementation Year **2020**

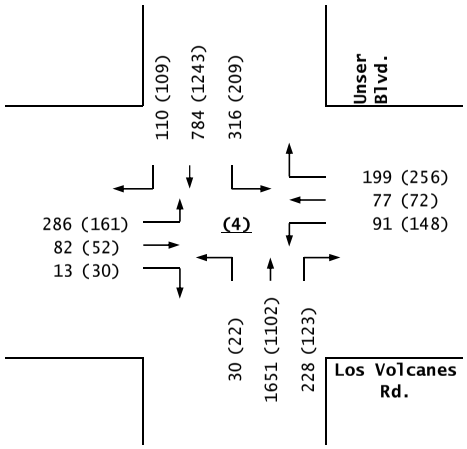
Growth Rates	**0.50%**			**0.50%**			**1.40%**			**0.50%**		
	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	283	81	13	88	76	193	29	1,606	209	285	776	109
Background Traffic Growth	3	1	0	1	1	2	1	45	6	3	8	1
Subtotal	286	82	13	89	77	195	30	1,651	215	288	784	110
B.E.K. Development Trips	0	0	0	2	0	4	0	0	13	28	0	0
Subtotal (NO BUILD - A.M.)	***286***	***82***	***13***	***91***	***77***	***199***	***30***	***1,651***	***228***	***316***	***784***	***110***
Percent Commercial Trips Generated(Entering)	*0.00%*	***1.31%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***50.91%***	***28.78%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***50.91%***	***1.31%***	***28.78%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	2	0	71	2	40	0	0	74	42	0	0
Total AM Peak Hour BUILD Volumes	**286**	**84**	**13**	**162**	**79**	**239**	**30**	**1,651**	**302**	**358**	**784**	**110**

	0.50%			**0.50%**			**1.40%**			**0.50%**		
	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	159	51	30	132	71	221	21	1,072	114	192	1,231	108
Background Traffic Growth	2	1	0	1	1	2	1	30	3	2	12	1
Subtotal	161	52	30	133	72	223	22	1,102	117	194	1,243	109
B.E.K. Development Trips	0	0	0	15	0	33	0	0	6	15	0	0
Subtotal (NO BUILD - P.M.)	***161***	***52***	***30***	***148***	***72***	***256***	***22***	***1,102***	***123***	***209***	***1,243***	***109***
Percent Commercial Trips Generated(Entering)	*0.00%*	***1.31%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***50.91%***	***28.78%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***50.91%***	***1.31%***	***28.78%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	2	0	70	2	39	0	0	73	41	0	0
Total PM Peak Hour BUILD Volumes	**161**	**54**	**30**	**218**	**74**	**295**	**22**	**1,102**	**196**	**250**	**1,243**	**109**

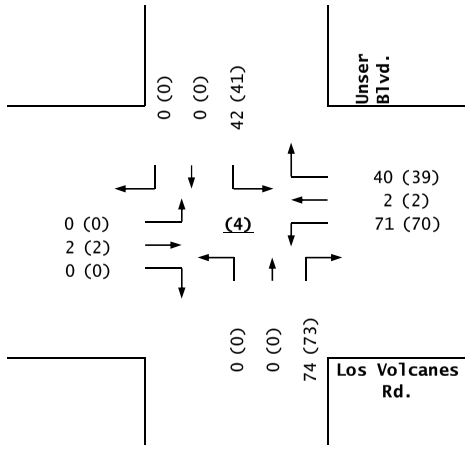
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
2018 AM Peak Hr. Volumes	283	81	13	88	76	193	29	1,606	209	285	776	109
2018 PM Peak Hr. Volumes	159	51	30	132	71	221	21	1,072	114	192	1,231	108

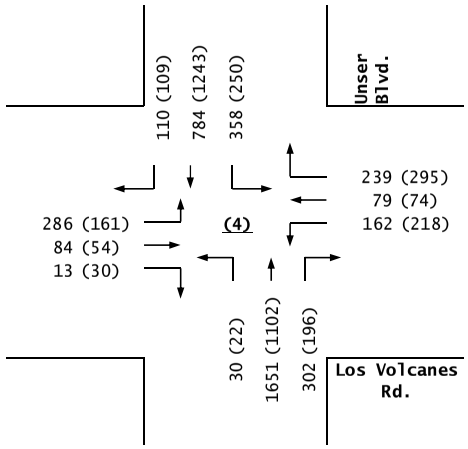
2020
NO BUILD



Trips



2020
BUILD



Los Volcanes Rd. / Unser Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

I-40 N. Ramp / Unser Blvd.

INTERSECTION: E-W Street: **I-40 N. Ramp** (5)

N-S Street: **Unser Blvd.**

Year of Existing Counts 2018

Implementation Year **2020**

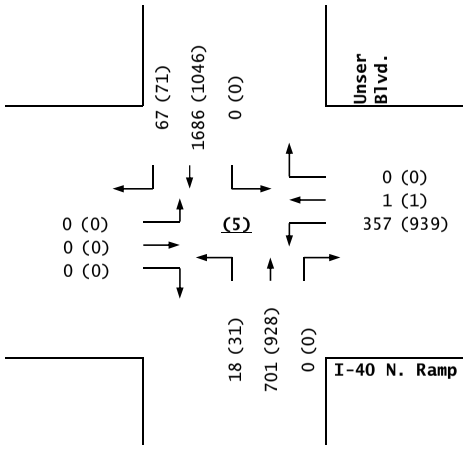
Growth Rates	**0.50%**			**0.50%**			**0.50%**			**0.70%**		
	Eastbound (I-40 N. Ramp)			**Westbound (I-40 N. Ramp)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	336	1	0	18	693	0	0	1,656	66
Background Traffic Growth	0	0	0	3	0	0	0	7	0	0	23	1
Subtotal	0	0	0	339	1	0	18	700	0	0	1,679	67
B.E.K. Development Trips	0	0	0	18	0	0	0	1	0	0	7	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***0***	***357***	***1***	***0***	***18***	***701***	***0***	***0***	***1,686***	***67***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***3.53%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***19.08%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.17%***	***19.08%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	5	0	0	9	27	0	0	28	0
Total AM Peak Hour BUILD Volumes	**0**	**0**	**0**	**362**	**1**	**0**	**27**	**728**	**0**	**0**	**1,714**	**67**

	0.50%			**0.50%**			**0.50%**			**0.70%**		
	Eastbound (I-40 N. Ramp)			**Westbound (I-40 N. Ramp)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	920	1	0	28	910	0	0	1,028	70
Background Traffic Growth	0	0	0	9	0	0	0	9	0	0	14	1
Subtotal	0	0	0	929	1	0	28	919	0	0	1,042	71
B.E.K. Development Trips	0	0	0	10	0	0	3	9	0	0	4	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***0***	***939***	***1***	***0***	***31***	***928***	***0***	***0***	***1,046***	***71***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***3.53%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***19.08%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.17%***	***19.08%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	5	0	0	8	26	0	0	27	0
Total PM Peak Hour BUILD Volumes	**0**	**0**	**0**	**944**	**1**	**0**	**39**	**954**	**0**	**0**	**1,073**	**71**

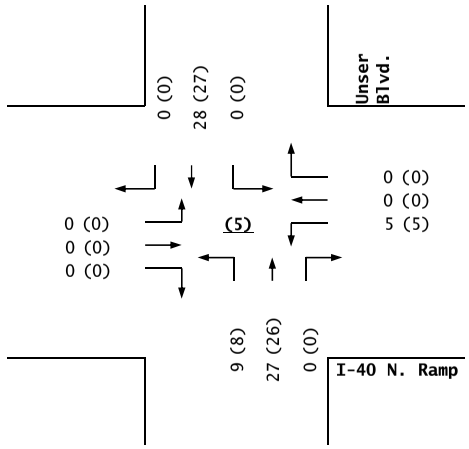
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (I-40 N. Ramp)			**Westbound (I-40 N. Ramp)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
2018 AM Peak Hr. Volumes	0	0	0	336	1	0	18	693	0	0	1,656	66
2018 PM Peak Hr. Volumes	0	0	0	920	1	0	28	910	0	0	1,028	70

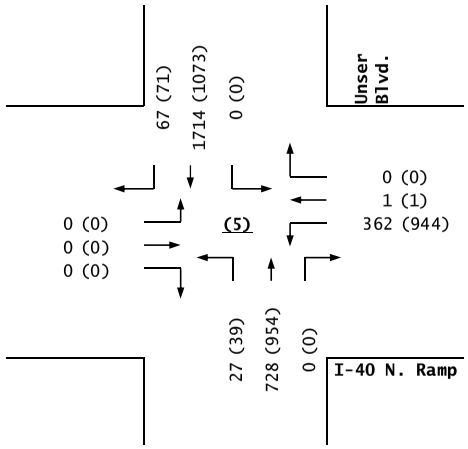
2020
NO BUILD



Trips



2020
BUILD



I-40 N. Ramp / Unser Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

I-40 S. Ramp / Unser Blvd.

INTERSECTION: E-W Street: **I-40 S. Ramp** (6)

N-S Street: **Unser Blvd.**

Year of Existing Counts 2018

Implementation Year **2020**

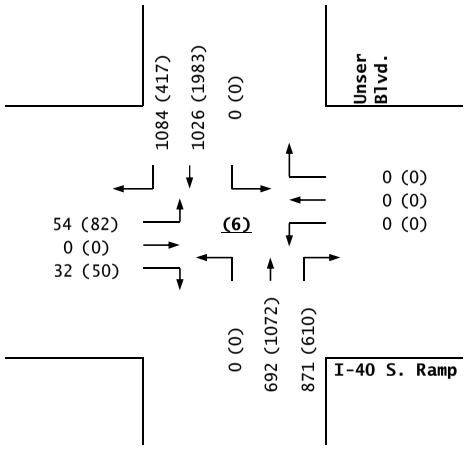
Growth Rates	**0.50%**			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (I-40 S. Ramp)			**Westbound (I-40 S. Ramp)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	53	0	29	0	0	0	0	684	860	0	991	1,073
Background Traffic Growth	1	0	0	0	0	0	0	7	9	0	10	11
Subtotal	54	0	29	0	0	0	0	691	869	0	1,001	1,084
B.E.K. Development Trips	0	0	3	0	0	0	0	1	2	0	25	0
Subtotal (NO BUILD - A.M.)	***54***	***0***	***32***	***0***	***0***	***0***	***0***	***692***	***871***	***0***	***1,026***	***1,084***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***6.17%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***22.61%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.25%***	***3.53%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	9	0	0	0	0	35	5	0	33	0
Total AM Peak Hour BUILD Volumes	**54**	**0**	**41**	**0**	**0**	**0**	**0**	**727**	**876**	**0**	**1,059**	**1,084**

	0.50%			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (I-40 S. Ramp)			**Westbound (I-40 S. Ramp)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	81	0	49	0	0	0	0	1,050	582	0	1,950	413
Background Traffic Growth	1	0	0	0	0	0	0	11	6	0	20	4
Subtotal	82	0	49	0	0	0	0	1,061	588	0	1,970	417
B.E.K. Development Trips	0	0	1	0	0	0	0	11	22	0	13	0
Subtotal (NO BUILD - P.M.)	***82***	***0***	***50***	***0***	***0***	***0***	***0***	***1,072***	***610***	***0***	***1,983***	***417***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***6.17%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***22.61%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.25%***	***3.53%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	9	0	0	0	0	35	5	0	32	0
Total PM Peak Hour BUILD Volumes	**82**	**0**	**59**	**0**	**0**	**0**	**0**	**1,107**	**615**	**0**	**2,015**	**417**

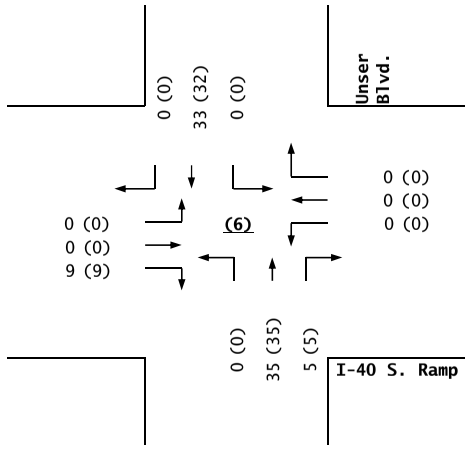
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (I-40 S. Ramp)			**Westbound (I-40 S. Ramp)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
2018 AM Peak Hr. Volumes	53	0	29	0	0	0	0	684	860	0	991	1,073
2018 PM Peak Hr. Volumes	81	0	49	0	0	0	0	1,050	582	0	1,950	413

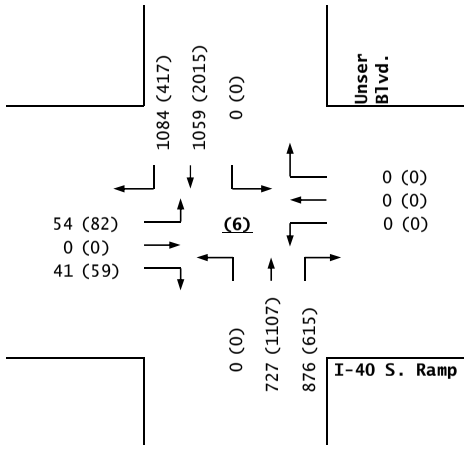
2020
NO BUILD



Trips



2020
BUILD



I-40 S. Ramp / Unser Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Silver Creek Rd.

INTERSECTION: E-W Street: **Los Volcanes Rd.** (7)

N-S Street: **Silver Creek Rd.**

Year of Existing Counts 2018

Implementation Year **2020**

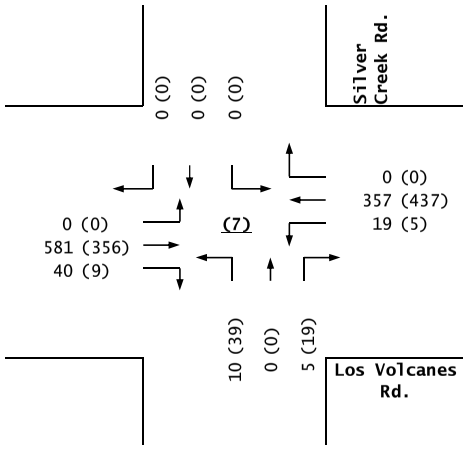
Growth Rates	**0.50%**			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	40	19	0	0	10	0	5	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	40	19	0	0	10	0	5	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***581***	***40***	***19***	***357***	***0***	***10***	***0***	***5***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***8.91%***	***2.09%***	***16.91%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***16.91%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***8.91%***	*0.00%*	***2.09%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	24	13	3	25	0	12	0	3	0	0	0
Total AM Peak Hour BUILD Volumes	**0**	**605**	**53**	**22**	**382**	**0**	**22**	**0**	**8**	**0**	**0**	**0**

	0.50%			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	9	5	0	0	39	0	19	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	9	5	0	0	39	0	19	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***356***	***9***	***5***	***437***	***0***	***39***	***0***	***19***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***8.91%***	***2.09%***	***16.91%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***16.91%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***8.91%***	*0.00%*	***2.09%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	23	13	3	24	0	12	0	3	0	0	0
Total PM Peak Hour BUILD Volumes	**0**	**379**	**22**	**8**	**461**	**0**	**51**	**0**	**22**	**0**	**0**	**0**

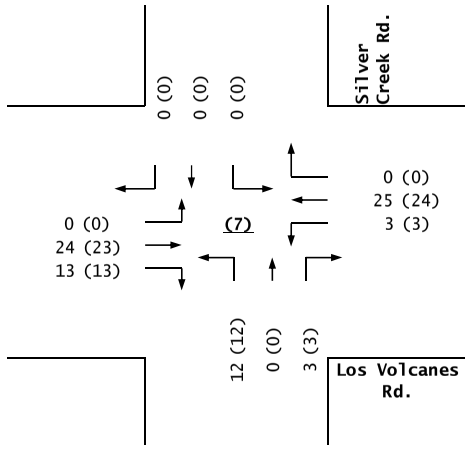
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
2018 AM Peak Hr. Volumes	0	0	40	19	0	0	10	0	5	0	0	0
2018 PM Peak Hr. Volumes	0	0	9	5	0	0	39	0	19	0	0	0

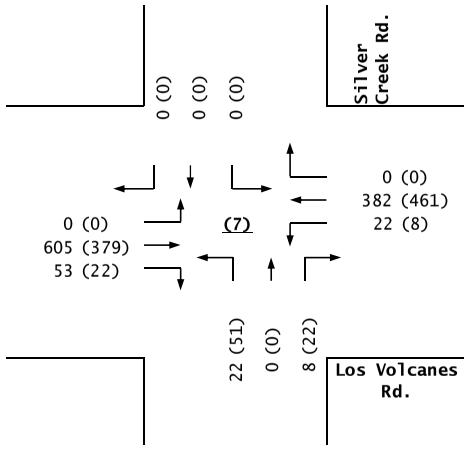
2020
NO BUILD



Trips



2020
BUILD



Los Volcanes Rd. / Silver Creek Rd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Driveway "A"

INTERSECTION: E-W Street: **Los Volcanes Rd.** (8)

N-S Street: **Driveway "A"**

Year of Existing Counts 2018

Implementation Year **2020**

Growth Rates

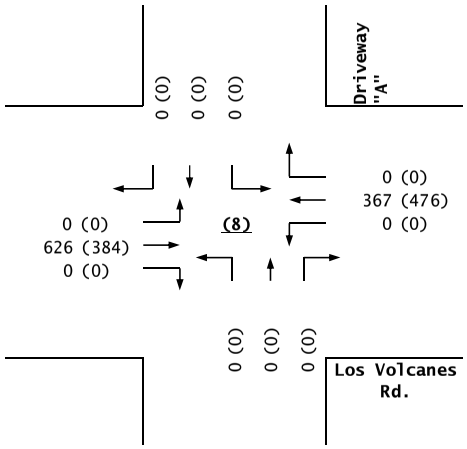
	0.50%			0.50%			0.50%			0.50%		
	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Driveway "A")**			**Southbound (Driveway "A")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***626***	***0***	***0***	***367***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***8.91%***	***72.09%***	***16.91%***	*0.00%*	*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%*	***8.91%***	*0.00%*	***72.09%***	*0.00%*	***16.98%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	13	105	25	12	0	100	0	24	0	0	0
Total AM Peak Hour BUILD Volumes	**0**	**639**	**105**	**25**	**379**	**0**	**100**	**0**	**24**	**0**	**0**	**0**

	0.50%			0.50%			0.50%			0.50%		
	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Driveway "A")**			**Southbound (Driveway "A")**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***384***	***0***	***0***	***476***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***8.91%***	***72.09%***	***16.91%***	*0.00%*	*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%*	***8.91%***	*0.00%*	***72.09%***	*0.00%*	***16.98%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	13	103	24	12	0	99	0	23	0	0	0
Total PM Peak Hour BUILD Volumes	**0**	**397**	**103**	**24**	**488**	**0**	**99**	**0**	**23**	**0**	**0**	**0**

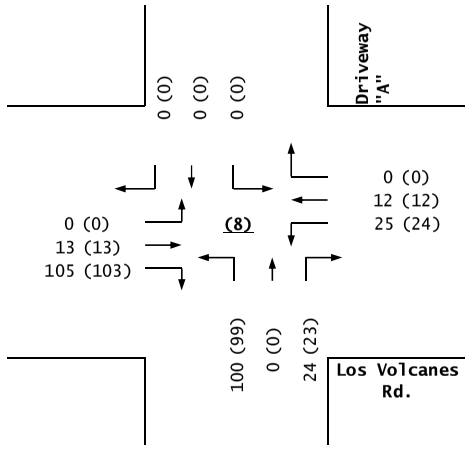
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Driveway "A")**			**Southbound (Driveway "A")**		
2018 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2018 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0

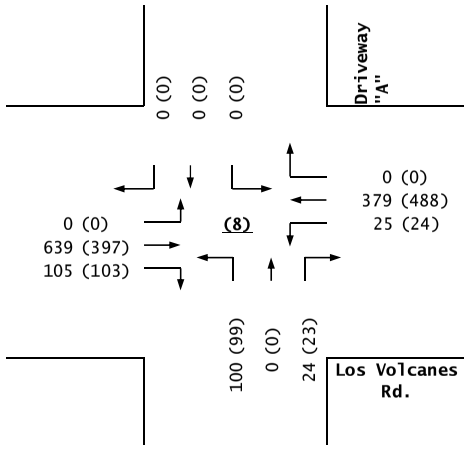
2020
NO BUILD



Trips



2020
BUILD



Los Volcanes Rd. / Driveway "A"

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Driveway "B" / Silver Creek Rd.

INTERSECTION: E-W Street: **Driveway "B"** (9)

N-S Street: **Silver Creek Rd.**

Year of Existing Counts 2018

Implementation Year **2020**

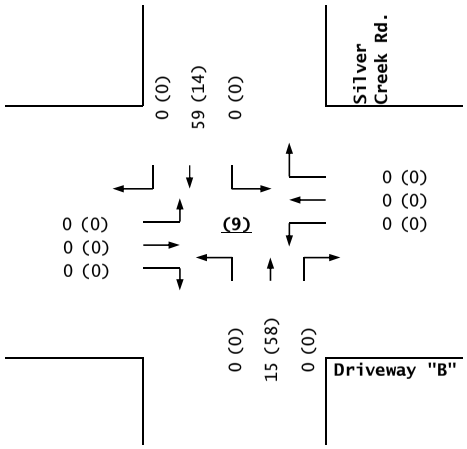
Growth Rates	0.50%			0.50%			0.50%			0.50%		
	Eastbound (Driveway "B")			**Westbound (Driveway "B")**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***15***	***0***	***0***	***59***	***0***
Percent Maverik Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.00%***
Percent Maverik Trips Generated(Exiting)	***11.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	15	0	0	0	0	0	0	0	0	0	0	16
Total AM Peak Hour BUILD Volumes	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**59**	**16**

	0.50%			0.50%			0.50%			0.50%		
	Eastbound (Driveway "B")			**Westbound (Driveway "B")**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***58***	***0***	***0***	***14***	***0***
Percent Maverik Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.00%***
Percent Maverik Trips Generated(Exiting)	***11.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	15	0	0	0	0	0	0	0	0	0	0	16
Total PM Peak Hour BUILD Volumes	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**58**	**0**	**0**	**14**	**16**

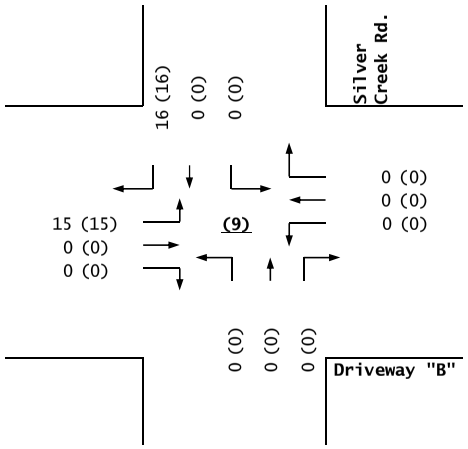
	Entering	Exiting		
Number of Truck Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Driveway "B")			**Westbound (Driveway "B")**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
2018 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2018 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0

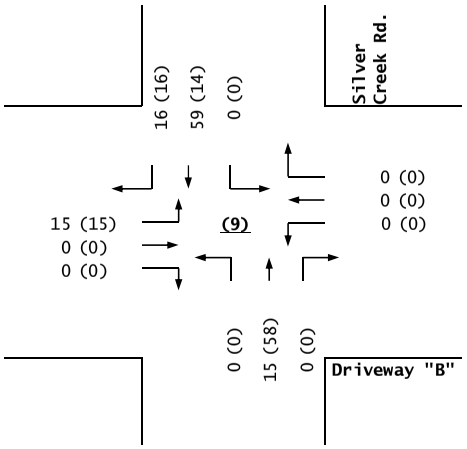
2020
NO BUILD



Trips



2020
BUILD



Driveway "B" / Silver Creek Rd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2030) - 100% Development

INTERSECTION: **Summary**

Los Volcanes Rd. / Coors Blvd. *0.92* *0.92* *0.92* *0.92* *PHF*

(1)

12.0% Truck	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	132	0	44	0	0	0	59	1,044	0	0	695	123
2030 (NO BUILD - A.M.)	*149*	*0*	*48*	*0*	*0*	*0*	*70*	*1,132*	*0*	*0*	*753*	*136*
2030 (BUILD - A.M.)	***163***	***0***	***57***	***0***	***0***	***0***	***79***	***1,132***	***0***	***0***	***753***	***151***

0.97 *0.97* *0.97* *0.97* *PHF*

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	161	0	89	0	0	0	60	1,086	0	0	1,598	132
2030 (NO BUILD - P.M.)	*196*	*0*	*104*	*0*	*0*	*0*	*68*	*1,223*	*0*	*0*	*1,771*	*168*
2030 (BUILD - P.M.)	***210***	***0***	***113***	***0***	***0***	***0***	***77***	***1,223***	***0***	***0***	***1,771***	***183***

Central Av. / Unser Blvd. *0.92* *0.92* *0.92* *0.92* *PHF*

(2)

12.0% Truck	Eastbound (Central Av.)			Westbound (Central Av.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	288	384	18	43	134	83	16	1,135	120	103	443	95
2030 (NO BUILD - A.M.)	*307*	*407*	*19*	*46*	*142*	*94*	*26*	*1,820*	*192*	*110*	*470*	*101*
2030 (BUILD - A.M.)	***326***	***407***	***19***	***46***	***142***	***106***	***26***	***1,840***	***192***	***121***	***489***	***119***

0.95 *0.95* *0.95* *0.95* *PHF*

	Eastbound (Central Av.)			Westbound (Central Av.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	172	379	34	89	342	57	52	770	99	126	1,051	141
2030 (NO BUILD - P.M.)	*183*	*402*	*36*	*94*	*363*	*63*	*83*	*1,233*	*158*	*140*	*1,117*	*152*
2030 (BUILD - P.M.)	***201***	***402***	***36***	***94***	***363***	***75***	***83***	***1,252***	***158***	***151***	***1,136***	***169***

Bluewater Rd. / Unser Blvd. *0.90* *0.90* *0.90* *0.90* *PHF*

(3)

12.0% Truck	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	90	40	37	29	19	48	21	1,375	79	105	622	52
2030 (NO BUILD - A.M.)	*135*	*60*	*56*	*31*	*20*	*51*	*23*	*1,536*	*88*	*123*	*728*	*61*
2030 (BUILD - A.M.)	***152***	***60***	***56***	***31***	***20***	***58***	***23***	***1,586***	***88***	***130***	***776***	***77***

0.94 *0.94* *0.94* *0.94* *PHF*

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	92	50	39	87	92	156	35	918	89	61	1,271	104
2030 (NO BUILD - P.M.)	*138*	*75*	*59*	*92*	*98*	*165*	*39*	*1,023*	*99*	*72*	*1,499*	*121*
2030 (BUILD - P.M.)	***154***	***75***	***59***	***92***	***98***	***172***	***39***	***1,073***	***99***	***79***	***1,546***	***137***

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2030) - 100% Development

INTERSECTION: **Summary**

Los Volcanes Rd. / Unser Blvd.

(4) 11.0% Truck	0.75 PHF											
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	283	81	13	88	76	193	29	1,606	209	285	776	109
2030 (NO BUILD - A.M.)	*300*	*86*	*14*	*95*	*81*	*209*	*34*	*1,876*	*257*	*330*	*823*	*116*
2030 (BUILD - A.M.)	***300***	***88***	***14***	***166***	***83***	***249***	***34***	***1,876***	***331***	***372***	***823***	***116***

	0.91 PHF											
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	159	51	30	132	71	221	21	1,072	114	192	1,231	108
2030 (NO BUILD - P.M.)	*169*	*54*	*32*	*155*	*75*	*267*	*25*	*1,252*	*139*	*219*	*1,305*	*114*
2030 (BUILD - P.M.)	***169***	***56***	***32***	***225***	***77***	***306***	***25***	***1,252***	***212***	***260***	***1,305***	***114***

I-40 N. Ramp / Unser Blvd.

(5) 11.0% Truck	0.92 PHF											
	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	0	0	0	336	1	0	18	693	0	0	1,656	66
2030 (NO BUILD - A.M.)	*0*	*0*	*0*	*374*	*1*	*0*	*19*	*736*	*0*	*0*	*1,802*	*72*
2030 (BUILD - A.M.)	***0***	***0***	***0***	***379***	***1***	***0***	***28***	***763***	***0***	***0***	***1,830***	***72***

	0.97 PHF											
	Eastbound (I-40 N. Ramp)			Westbound (I-40 N. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	0	0	0	920	1	0	28	910	0	0	1,028	70
2030 (NO BUILD - P.M.)	*0*	*0*	*0*	*985*	*1*	*0*	*33*	*974*	*0*	*0*	*1,118*	*76*
2030 (BUILD - P.M.)	***0***	***0***	***0***	***990***	***1***	***0***	***41***	***1,000***	***0***	***0***	***1,145***	***76***

I-40 S. Ramp / Unser Blvd.

(6) 11.0% Truck	0.91 PHF											
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	53	0	29	0	0	0	0	684	860	0	991	1,073
2030 (NO BUILD - A.M.)	*56*	*0*	*34*	*0*	*0*	*0*	*0*	*726*	*914*	*0*	*1,075*	*1,137*
2030 (BUILD - A.M.)	***56***	***0***	***43***	***0***	***0***	***0***	***0***	***761***	***919***	***0***	***1,108***	***1,137***

	0.75 PHF											
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2018)	81	0	49	0	0	0	0	1,050	582	0	1,950	413
2030 (NO BUILD - P.M.)	*86*	*0*	*53*	*0*	*0*	*0*	*0*	*1,124*	*639*	*0*	*2,080*	*438*
2030 (BUILD - P.M.)	***86***	***0***	***62***	***0***	***0***	***0***	***0***	***1,159***	***644***	***0***	***2,112***	***438***

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2030) - 100% Development

INTERSECTION: **Summary**

Los Volcanes Rd. / Silver Creek Rd.

(7) 11.0% Truck	0.75			0.75			0.75			0.75			PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Silver Creek Rd.)			Southbound (Silver Creek Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	40	19	0	0	10	0	5	0	0	0	
2030 (NO BUILD - A.M.)	*0*	*626*	*42*	*20*	*374*	*0*	*11*	*0*	*5*	*0*	*0*	*0*	
2030 (BUILD - A.M.)	***0***	***650***	***55***	***23***	***399***	***0***	***23***	***0***	***8***	***0***	***0***	***0***	

	0.75			0.75			0.75			0.75			PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Silver Creek Rd.)			Southbound (Silver Creek Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	9	5	0	0	39	0	19	0	0	0	
2030 (NO BUILD - P.M.)	*0*	*382*	*10*	*5*	*456*	*0*	*41*	*0*	*20*	*0*	*0*	*0*	
2030 (BUILD - P.M.)	***0***	***405***	***23***	***8***	***480***	***0***	***53***	***0***	***23***	***0***	***0***	***0***	

Los Volcanes Rd. / Driveway "A"

(8) 11.0% Truck	0.75			0.75			0.75			0.75			PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	0	0	0	0	0	0	0	0	0	0	
2030 (NO BUILD - A.M.)	*0*	*673*	*0*	*0*	*385*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2030 (BUILD - A.M.)	***0***	***686***	***105***	***25***	***397***	***0***	***100***	***0***	***24***	***0***	***0***	***0***	

	0.75			0.75			0.75			0.75			PHF
	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	0	0	0	0	0	0	0	0	0	0	
2030 (NO BUILD - P.M.)	*0*	*412*	*0*	*0*	*497*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2030 (BUILD - P.M.)	***0***	***425***	***103***	***24***	***509***	***0***	***99***	***0***	***23***	***0***	***0***	***0***	

Driveway "B" / Silver Creek Rd.

(9) 11.0% Truck	0.75			0.75			0.75			0.75			PHF
	Eastbound (Driveway "B")			Westbound (Driveway "B")			Northbound (Silver Creek Rd.)			Southbound (Silver Creek Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	0	0	0	0	0	0	0	0	0	0	
2030 (NO BUILD - A.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*16*	*0*	*0*	*62*	*0*	
2030 (BUILD - A.M.)	***15***	***0***	***0***	***0***	***0***	***0***	***0***	***16***	***0***	***0***	***62***	***16***	

	0.75			0.75			0.75			0.75			PHF
	Eastbound (Driveway "B")			Westbound (Driveway "B")			Northbound (Silver Creek Rd.)			Southbound (Silver Creek Rd.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2018)	0	0	0	0	0	0	0	0	0	0	0	0	
2030 (NO BUILD - P.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*61*	*0*	*0*	*15*	*0*	
2030 (BUILD - P.M.)	***15***	***0***	***0***	***0***	***0***	***0***	***0***	***61***	***0***	***0***	***15***	***16***	

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Coors Blvd.

INTERSECTION: E-W Street: **Los Volcanes Rd.** (1)

N-S Street: **Coors Blvd.**

Year of Existing Counts 2017

Horizon Year **2030**

Growth Rates 0.50% 0.50% 0.50% 0.50%

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	131	0	44	0	0	0	59	1,039	0	0	692	122
Background Traffic Growth	9	0	3	0	0	0	4	68	0	0	45	8
Subtotal	140	0	47	0	0	0	63	1,107	0	0	737	130
B.E.K. Development Trips	0	0	1	0	0	0	7	0	0	0	0	0
Coors Park & Sell	9	0	0	0	0	0	0	25	0	0	16	6
Subtotal (NO BUILD - A.M.)	***149***	***0***	***48***	***0***	***0***	***0***	***70***	***1,132***	***0***	***0***	***753***	***136***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.38%***
Percent Commercial Trips Generated(Exiting)	***10.38%***	*0.00%*	***6.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	14	0	9	0	0	0	9	0	0	0	0	15
Total AM Peak Hour BUILD Volumes	**163**	**0**	**57**	**0**	**0**	**0**	**79**	**1,132**	**0**	**0**	**753**	**151**

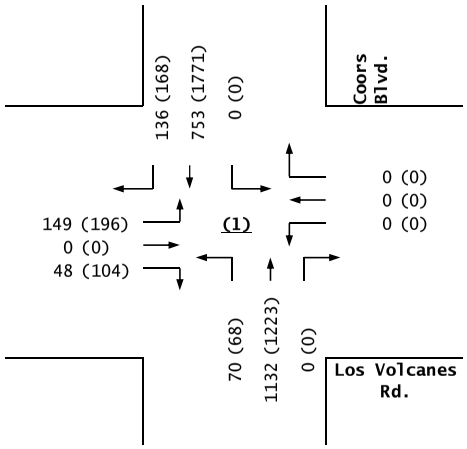
0.50% 0.50% 0.50% 0.50%

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	160	0	89	0	0	0	60	1,081	0	0	1,590	131
Background Traffic Growth	10	0	6	0	0	0	4	70	0	0	103	9
Subtotal	170	0	95	0	0	0	64	1,151	0	0	1,693	140
B.E.K. Development Trips	0	0	9	0	0	0	4	0	0	0	0	0
Coors Park & Sell	26	0	0	0	0	0	0	72	0	0	78	28
Subtotal (NO BUILD - P.M.)	***196***	***0***	***104***	***0***	***0***	***0***	***68***	***1,223***	***0***	***0***	***1,771***	***168***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.38%***
Percent Commercial Trips Generated(Exiting)	***10.38%***	*0.00%*	***6.24%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	14	0	9	0	0	0	9	0	0	0	0	15
Total PM Peak Hour BUILD Volumes	**210**	**0**	**113**	**0**	**0**	**0**	**77**	**1,223**	**0**	**0**	**1,771**	**183**

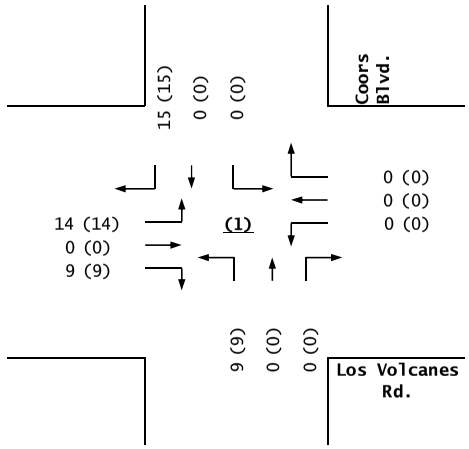
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Coors Blvd.)			Southbound (Coors Blvd.)		
2018 AM Peak Hr. Volumes	132	0	44	0	0	0	59	1,044	0	0	695	123
2018 PM Peak Hr. Volumes	161	0	89	0	0	0	60	1,086	0	0	1,598	132

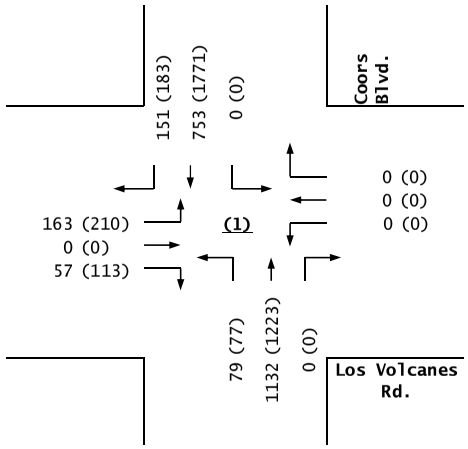
2030
NO BUILD



Trips



2030
BUILD



Los Volcanes Rd. / Coors Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Central Av. / Unser Blvd.

INTERSECTION: E-W Street: **Central Av.** (2)

N-S Street: **Unser Blvd.**

Year of Existing Counts 2018

Horizon Year **2030**

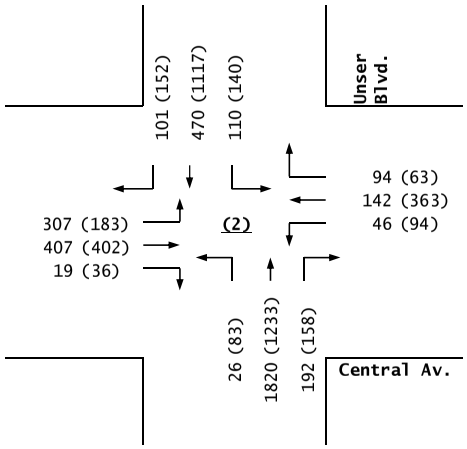
Growth Rates	**0.50%**			**0.50%**			**5.00%**			**0.50%**		
	Eastbound (Central Av.)			**Westbound (Central Av.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	288	384	18	43	134	83	16	1,135	120	103	443	95
Background Traffic Growth	17	23	1	3	8	5	10	681	72	6	27	6
Subtotal	305	407	19	46	142	88	26	1,816	192	109	470	101
B.E.K. Development Trips	2	0	0	0	0	6	0	4	0	1	0	0
Subtotal (NO BUILD - A.M.)	***307***	***407***	***19***	***46***	***142***	***94***	***26***	***1,820***	***192***	***110***	***470***	***101***
Percent Commercial Trips Generated(Entering)	***12.76%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***8.26%***	*0.00%*	***13.62%***	*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%*	*0.00%*	***8.26%***	***13.62%***	***12.76%***
Total Trips Generated	19	0	0	0	0	12	0	20	0	11	19	18
Total AM Peak Hour BUILD Volumes	**326**	**407**	**19**	**46**	**142**	**106**	**26**	**1,840**	**192**	**121**	**489**	**119**

	0.50%			**0.50%**			**5.00%**			**0.50%**		
	Eastbound (Central Av.)			**Westbound (Central Av.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	172	379	34	89	342	57	52	770	99	126	1,051	141
Background Traffic Growth	10	23	2	5	21	3	31	462	59	8	63	8
Subtotal	182	402	36	94	363	60	83	1,232	158	134	1,114	149
B.E.K. Development Trips	1	0	0	0	0	3	0	1	0	6	3	3
Subtotal (NO BUILD - P.M.)	***183***	***402***	***36***	***94***	***363***	***63***	***83***	***1,233***	***158***	***140***	***1,117***	***152***
Percent Commercial Trips Generated(Entering)	***12.76%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***8.26%***	*0.00%*	***13.62%***	*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%*	*0.00%*	***8.26%***	***13.62%***	***12.76%***
Total Trips Generated	18	0	0	0	0	12	0	19	0	11	19	17
Total PM Peak Hour BUILD Volumes	**201**	**402**	**36**	**94**	**363**	**75**	**83**	**1,252**	**158**	**151**	**1,136**	**169**

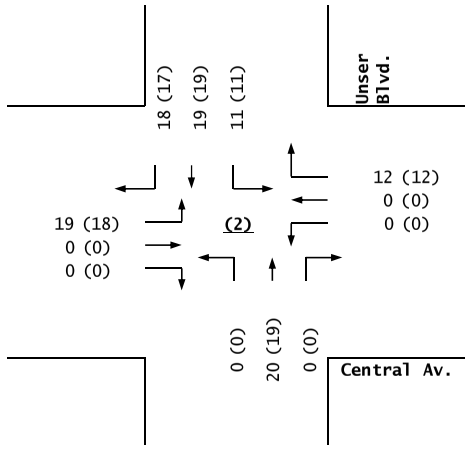
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Central Av.)			**Westbound (Central Av.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
2018 AM Peak Hr. Volumes	288	384	18	43	134	83	16	1,135	120	103	443	95
2018 PM Peak Hr. Volumes	172	379	34	89	342	57	52	770	99	126	1,051	141

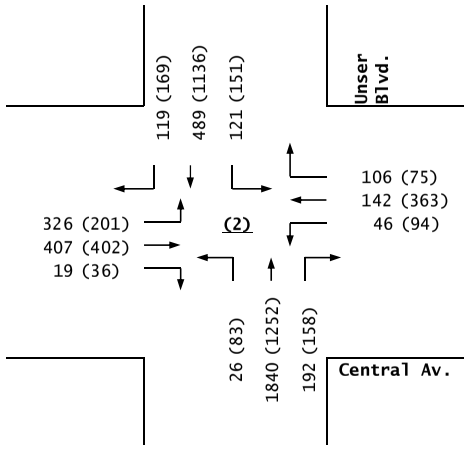
2030
NO BUILD



Trips



2030
BUILD



Central Av. / Unser Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Bluewater Rd. / Unser Blvd.

INTERSECTION: E-W Street: **Bluewater Rd.** (3)

N-S Street: **Unser Blvd.**

Year of Existing Counts 2018

Horizon Year **2030**

Growth Rates **4.20%** **0.50%** **0.90%** **1.40%**

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	90	40	37	29	19	48	21	1,375	79	105	622	52
Background Traffic Growth	45	20	19	2	1	3	2	149	9	18	104	9
Subtotal	135	60	56	31	20	51	23	1,524	88	123	726	61
B.E.K. Development Trips	0	0	0	0	0	0	0	12	0	0	2	0
Subtotal (NO BUILD - A.M.)	***135***	***60***	***56***	***31***	***20***	***51***	***23***	***1,536***	***88***	***123***	***728***	***61***
Percent Commercial Trips Generated(Entering)	***11.46%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.81%***	*0.00%*	***34.64%***	*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%*	*0.00%*	***4.81%***	***34.64%***	***11.46%***
Total Trips Generated	17	0	0	0	0	7	0	50	0	7	48	16
Total AM Peak Hour BUILD Volumes	**152**	**60**	**56**	**31**	**20**	**58**	**23**	**1,586**	**88**	**130**	**776**	**77**

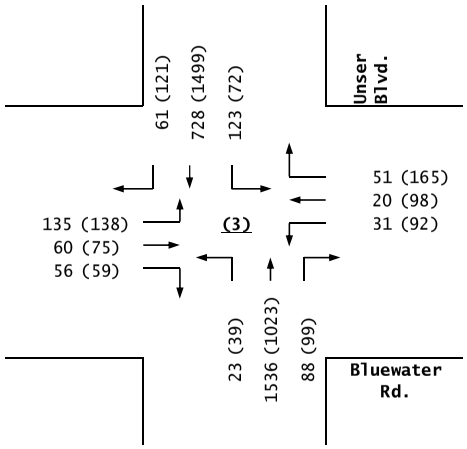
4.20% **0.50%** **0.90%** **1.40%**

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	92	50	39	87	92	156	35	918	89	61	1,271	104
Background Traffic Growth	46	25	20	5	6	9	4	99	10	10	214	17
Subtotal	138	75	59	92	98	165	39	1,017	99	71	1,485	121
B.E.K. Development Trips	0	0	0	0	0	0	0	6	0	1	14	0
Subtotal (NO BUILD - P.M.)	***138***	***75***	***59***	***92***	***98***	***165***	***39***	***1,023***	***99***	***72***	***1,499***	***121***
Percent Commercial Trips Generated(Entering)	***11.46%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.81%***	*0.00%*	***34.64%***	*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%*	*0.00%*	***4.81%***	***34.64%***	***11.46%***
Total Trips Generated	16	0	0	0	0	7	0	50	0	7	47	16
Total PM Peak Hour BUILD Volumes	**154**	**75**	**59**	**92**	**98**	**172**	**39**	**1,073**	**99**	**79**	**1,546**	**137**

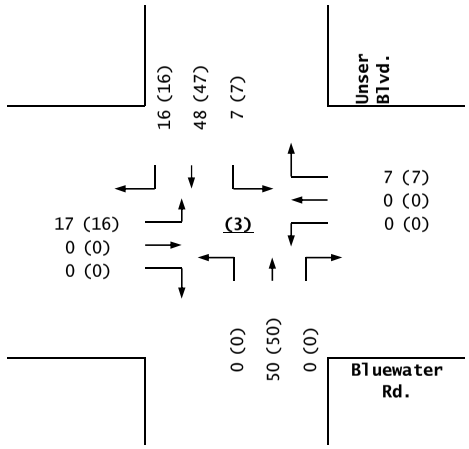
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Bluewater Rd.)			Westbound (Bluewater Rd.)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
2018 AM Peak Hr. Volumes	90	40	37	29	19	48	21	1,375	79	105	622	52
2018 PM Peak Hr. Volumes	92	50	39	87	92	156	35	918	89	61	1,271	104

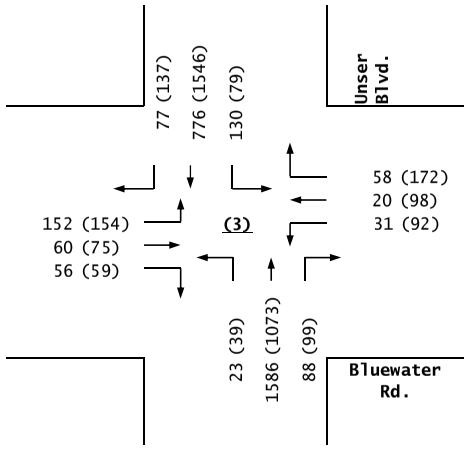
2030
NO BUILD



Trips



2030
BUILD



Bluewater Rd. / Unser Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Unser Blvd.

INTERSECTION: E-W Street: **Los Volcanes Rd.** (4)

N-S Street: **Unser Blvd.**

Year of Existing Counts 2018

Horizon Year **2030**

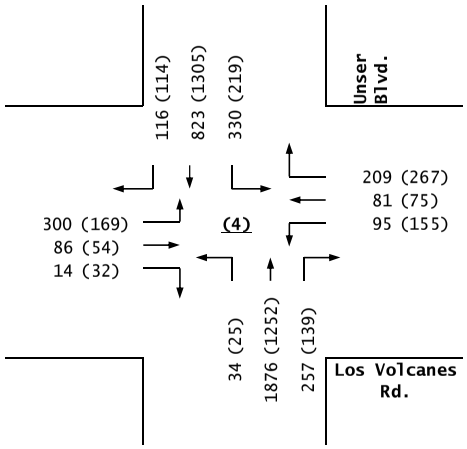
Growth Rates	**0.50%**			**0.50%**			**1.40%**			**0.50%**		
	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	283	81	13	88	76	193	29	1,606	209	285	776	109
Background Traffic Growth	17	5	1	5	5	12	5	270	35	17	47	7
Subtotal	300	86	14	93	81	205	34	1,876	244	302	823	116
B.E.K. Development Trips	0	0	0	2	0	4	0	0	13	28	0	0
Subtotal (NO BUILD - A.M.)	***300***	***86***	***14***	***95***	***81***	***209***	***34***	***1,876***	***257***	***330***	***823***	***116***
Percent Commercial Trips Generated(Entering)	*0.00%*	***1.31%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***50.91%***	***28.78%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***50.91%***	***1.31%***	***28.78%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	2	0	71	2	40	0	0	74	42	0	0
Total AM Peak Hour BUILD Volumes	**300**	**88**	**14**	**166**	**83**	**249**	**34**	**1,876**	**331**	**372**	**823**	**116**

	0.50%			**0.50%**			**1.40%**			**0.50%**		
	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	159	51	30	132	71	221	21	1,072	114	192	1,231	108
Background Traffic Growth	10	3	2	8	4	13	4	180	19	12	74	6
Subtotal	169	54	32	140	75	234	25	1,252	133	204	1,305	114
B.E.K. Development Trips	0	0	0	15	0	33	0	0	6	15	0	0
Subtotal (NO BUILD - P.M.)	***169***	***54***	***32***	***155***	***75***	***267***	***25***	***1,252***	***139***	***219***	***1,305***	***114***
Percent Commercial Trips Generated(Entering)	*0.00%*	***1.31%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***50.91%***	***28.78%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***50.91%***	***1.31%***	***28.78%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	2	0	70	2	39	0	0	73	41	0	0
Total PM Peak Hour BUILD Volumes	**169**	**56**	**32**	**225**	**77**	**306**	**25**	**1,252**	**212**	**260**	**1,305**	**114**

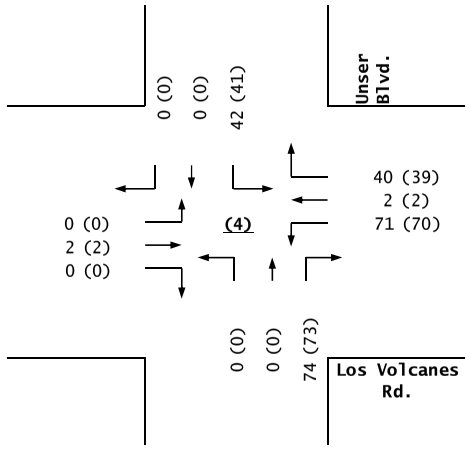
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
2018 AM Peak Hr. Volumes	283	81	13	88	76	193	29	1,606	209	285	776	109
2018 PM Peak Hr. Volumes	159	51	30	132	71	221	21	1,072	114	192	1,231	108

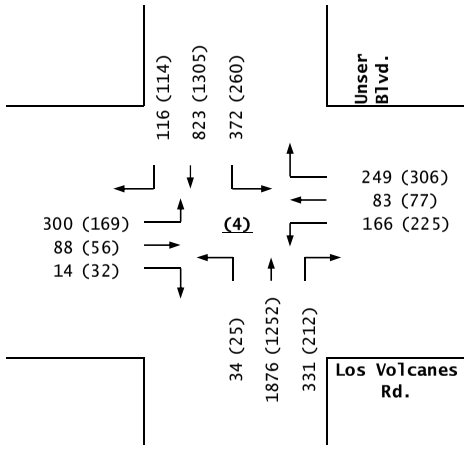
2030
NO BUILD



Trips



2030
BUILD



Los Volcanes Rd. / Unser Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

I-40 N. Ramp / Unser Blvd.

INTERSECTION: E-W Street: **I-40 N. Ramp** (5)

N-S Street: **Unser Blvd.**

Year of Existing Counts 2018

Horizon Year **2030**

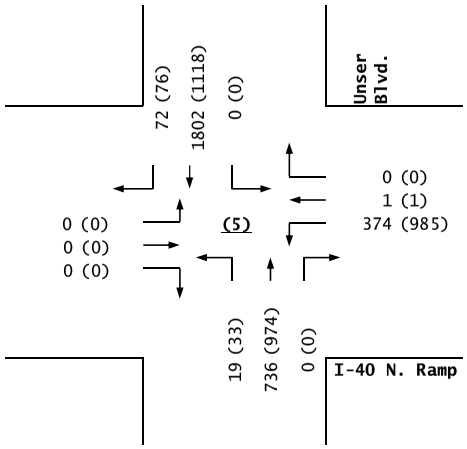
Growth Rates	**0.50%**			**0.50%**			**0.50%**			**0.70%**		
	Eastbound (I-40 N. Ramp)			**Westbound (I-40 N. Ramp)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	336	1	0	18	693	0	0	1,656	66
Background Traffic Growth	0	0	0	20	0	0	1	42	0	0	139	6
Subtotal	0	0	0	356	1	0	19	735	0	0	1,795	72
B.E.K. Development Trips	0	0	0	18	0	0	0	1	0	0	7	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***0***	***374***	***1***	***0***	***19***	***736***	***0***	***0***	***1,802***	***72***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***3.53%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***19.08%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.17%***	***19.08%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	5	0	0	9	27	0	0	28	0
Total AM Peak Hour BUILD Volumes	**0**	**0**	**0**	**379**	**1**	**0**	**28**	**763**	**0**	**0**	**1,830**	**72**

	0.50%			**0.50%**			**0.50%**			**0.70%**		
	Eastbound (I-40 N. Ramp)			**Westbound (I-40 N. Ramp)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	920	1	0	28	910	0	0	1,028	70
Background Traffic Growth	0	0	0	55	0	0	2	55	0	0	86	6
Subtotal	0	0	0	975	1	0	30	965	0	0	1,114	76
B.E.K. Development Trips	0	0	0	10	0	0	3	9	0	0	4	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***0***	***985***	***1***	***0***	***33***	***974***	***0***	***0***	***1,118***	***76***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	***3.53%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***19.08%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***6.17%***	***19.08%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	5	0	0	8	26	0	0	27	0
Total PM Peak Hour BUILD Volumes	**0**	**0**	**0**	**990**	**1**	**0**	**41**	**1,000**	**0**	**0**	**1,145**	**76**

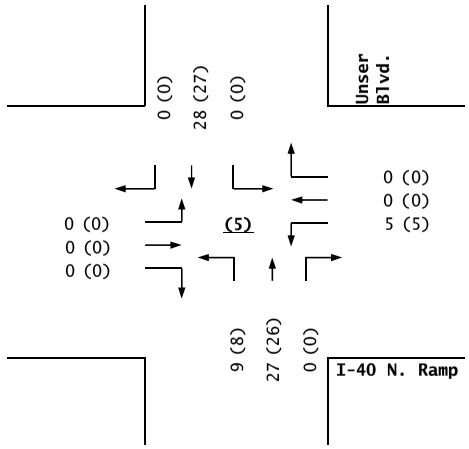
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (I-40 N. Ramp)			**Westbound (I-40 N. Ramp)**			**Northbound (Unser Blvd.)**			**Southbound (Unser Blvd.)**		
2018 AM Peak Hr. Volumes	0	0	0	336	1	0	18	693	0	0	1,656	66
2018 PM Peak Hr. Volumes	0	0	0	920	1	0	28	910	0	0	1,028	70

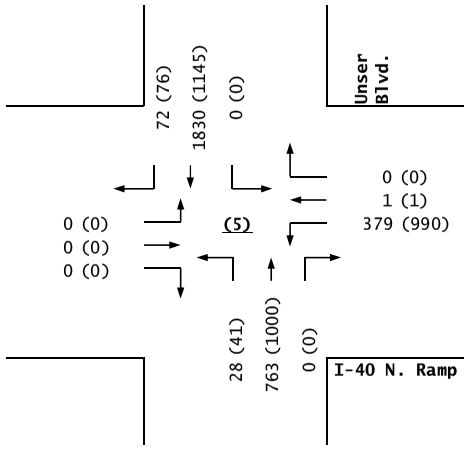
2030
NO BUILD



Trips



2030
BUILD



I-40 N. Ramp / Unser Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

I-40 S. Ramp / Unser Blvd.

INTERSECTION: E-W Street: **I-40 S. Ramp** (6)

N-S Street: **Unser Blvd.**

Year of Existing Counts 2018

Horizon Year **2030**

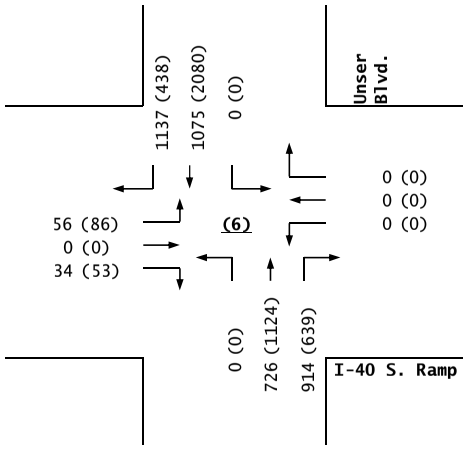
	Growth Rates	0.50%			0.50%			0.50%			0.50%		
		Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		53	0	29	0	0	0	0	684	860	0	991	1,073
Background Traffic Growth		3	0	2	0	0	0	0	41	52	0	59	64
Subtotal		56	0	31	0	0	0	0	725	912	0	1,050	1,137
B.E.K. Development Trips		0	0	3	0	0	0	0	1	2	0	25	0
Subtotal (NO BUILD - A.M.)		***56***	***0***	***34***	***0***	***0***	***0***	***0***	***726***	***914***	***0***	***1,075***	***1,137***
Percent Commercial Trips Generated(Entering)		*0.00%*	*0.00%*	***6.17%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***22.61%***	*0.00%*
Percent Commercial Trips Generated(Exiting)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.25%***	***3.53%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated		0	0	9	0	0	0	0	35	5	0	33	0
Total AM Peak Hour BUILD Volumes		**56**	**0**	**43**	**0**	**0**	**0**	**0**	**761**	**919**	**0**	**1,108**	**1,137**

	0.50%			0.50%			0.50%			0.50%		
	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	81	0	49	0	0	0	0	1,050	582	0	1,950	413
Background Traffic Growth	5	0	3	0	0	0	0	63	35	0	117	25
Subtotal	86	0	52	0	0	0	0	1,113	617	0	2,067	438
B.E.K. Development Trips	0	0	1	0	0	0	0	11	22	0	13	0
Subtotal (NO BUILD - P.M.)	***86***	***0***	***53***	***0***	***0***	***0***	***0***	***1,124***	***639***	***0***	***2,080***	***438***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***6.17%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***22.61%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.25%***	***3.53%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	9	0	0	0	0	35	5	0	32	0
Total PM Peak Hour BUILD Volumes	**86**	**0**	**62**	**0**	**0**	**0**	**0**	**1,159**	**644**	**0**	**2,112**	**438**

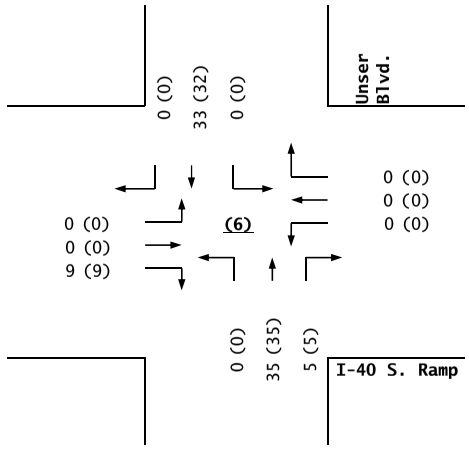
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (I-40 S. Ramp)			Westbound (I-40 S. Ramp)			Northbound (Unser Blvd.)			Southbound (Unser Blvd.)		
2018 AM Peak Hr. Volumes	53	0	29	0	0	0	0	684	860	0	991	1,073
2018 PM Peak Hr. Volumes	81	0	49	0	0	0	0	1,050	582	0	1,950	413

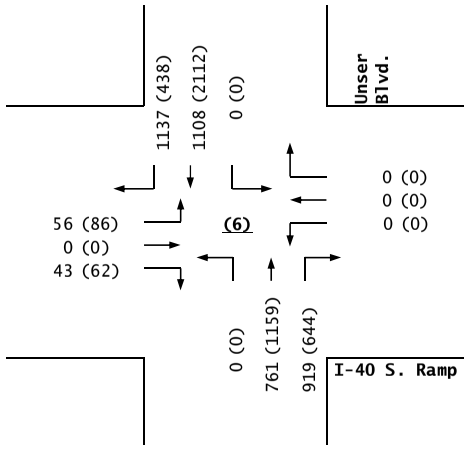
2030
NO BUILD



Trips



2030
BUILD



I-40 S. Ramp / Unser Blvd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Silver Creek Rd.

INTERSECTION: E-W Street: **Los Volcanes Rd.** (7)

N-S Street: **Silver Creek Rd.**

Year of Existing Counts 2018

Horizon Year **2030**

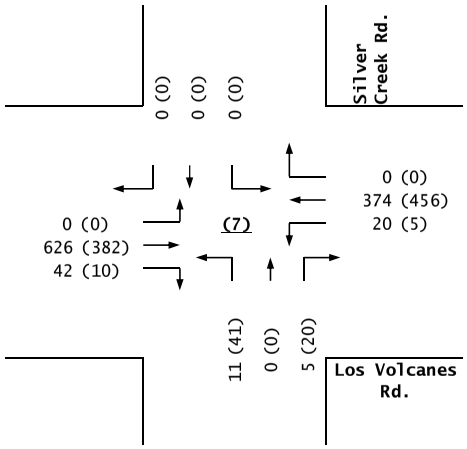
Growth Rates	**0.50%**			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	40	19	0	0	10	0	5	0	0	0
Background Traffic Growth	0	0	2	1	0	0	1	0	0	0	0	0
Subtotal	0	0	42	20	0	0	11	0	5	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***626***	***42***	***20***	***374***	***0***	***11***	***0***	***5***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***8.91%***	***2.09%***	***16.91%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***16.91%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***8.91%***	*0.00%*	***2.09%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	24	13	3	25	0	12	0	3	0	0	0
Total AM Peak Hour BUILD Volumes	**0**	**650**	**55**	**23**	**399**	**0**	**23**	**0**	**8**	**0**	**0**	**0**

	0.50%			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	9	5	0	0	39	0	19	0	0	0
Background Traffic Growth	0	0	1	0	0	0	2	0	1	0	0	0
Subtotal	0	0	10	5	0	0	41	0	20	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***382***	***10***	***5***	***456***	***0***	***41***	***0***	***20***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	***8.91%***	***2.09%***	***16.91%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***16.91%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***8.91%***	*0.00%*	***2.09%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	23	13	3	24	0	12	0	3	0	0	0
Total PM Peak Hour BUILD Volumes	**0**	**405**	**23**	**8**	**480**	**0**	**53**	**0**	**23**	**0**	**0**	**0**

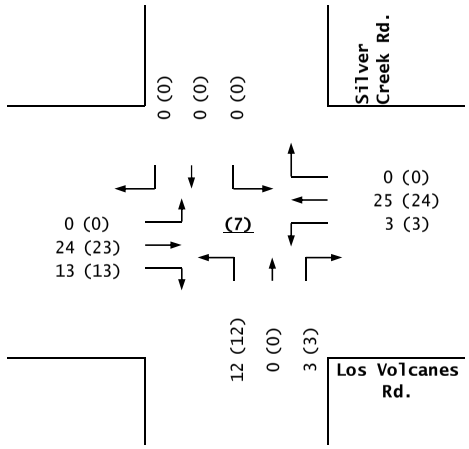
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Los Volcanes Rd.)			**Westbound (Los Volcanes Rd.)**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
2018 AM Peak Hr. Volumes	0	0	40	19	0	0	10	0	5	0	0	0
2018 PM Peak Hr. Volumes	0	0	9	5	0	0	39	0	19	0	0	0

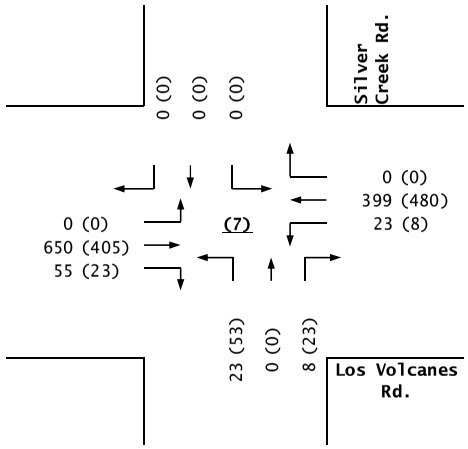
2030
NO BUILD



Trips



2030
BUILD



Los Volcanes Rd. / Silver Creek Rd.

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Los Volcanes Rd. / Driveway "A"

INTERSECTION: E-W Street: **Los Volcanes Rd.** (8)

N-S Street: **Driveway "A"**

Year of Existing Counts 2018

Horizon Year **2030**

Growth Rates **0.50%** **0.50%** **0.50%** **0.50%**

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***673***	***0***	***0***	***385***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***8.91%***	***72.09%***	***16.91%***	*0.00%*	*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%*	***8.91%***	*0.00%*	***72.09%***	*0.00%*	***16.98%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	13	105	25	12	0	100	0	24	0	0	0
Total AM Peak Hour BUILD Volumes	**0**	**686**	**105**	**25**	**397**	**0**	**100**	**0**	**24**	**0**	**0**	**0**

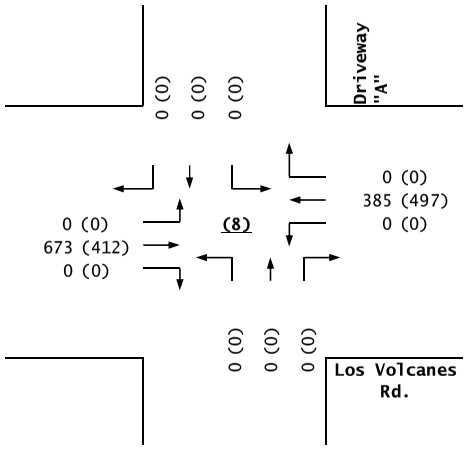
0.50% **0.50%** **0.50%** **0.50%**

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***412***	***0***	***0***	***497***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***8.91%***	***72.09%***	***16.91%***	*0.00%*	*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%*	***8.91%***	*0.00%*	***72.09%***	*0.00%*	***16.98%***	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	13	103	24	12	0	99	0	23	0	0	0
Total PM Peak Hour BUILD Volumes	**0**	**425**	**103**	**24**	**509**	**0**	**99**	**0**	**23**	**0**	**0**	**0**

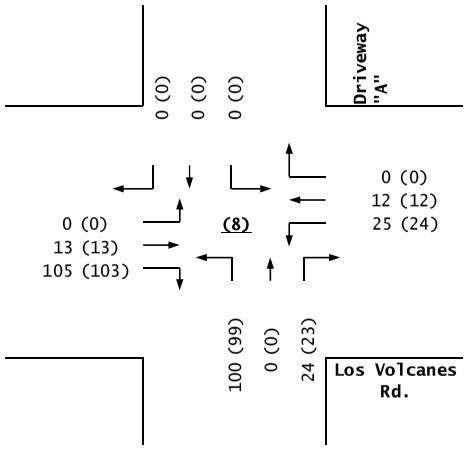
	Entering	Exiting		
Number of Commercial Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Los Volcanes Rd.)			Westbound (Los Volcanes Rd.)			Northbound (Driveway "A")			Southbound (Driveway "A")		
2018 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2018 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0

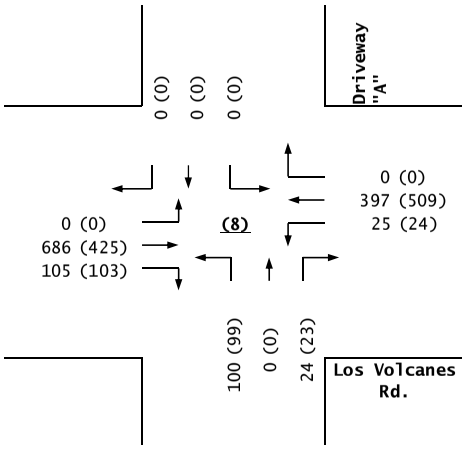
2030
NO BUILD



Trips



2030
BUILD



Los Volcanes Rd. / Driveway "A"

Maverik Store (Los Volcanes Rd. / Unser Blvd.)

Projected Turning Movements Worksheet

Driveway "B" / Silver Creek Rd.

INTERSECTION: E-W Street: **Driveway "B"** (9)

N-S Street: **Silver Creek Rd.**

Year of Existing Counts 2018

Horizon Year **2030**

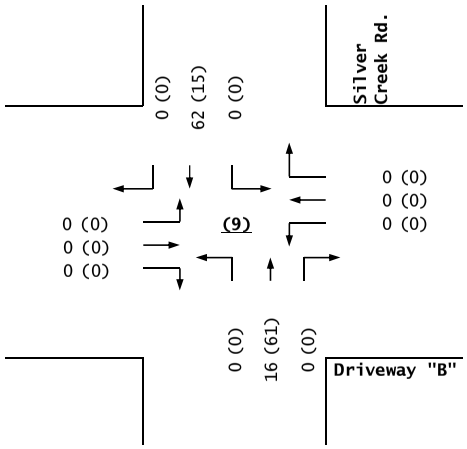
Growth Rates	**0.50%**			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (Driveway "B")			**Westbound (Driveway "B")**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***16***	***0***	***0***	***62***	***0***
Percent Maverik Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.00%***
Percent Maverik Trips Generated(Exiting)	***11.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	15	0	0	0	0	0	0	0	0	0	0	16
Total AM Peak Hour BUILD Volumes	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**0**	**62**	**16**

	0.50%			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (Driveway "B")			**Westbound (Driveway "B")**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***61***	***0***	***0***	***15***	***0***
Percent Maverik Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.00%***
Percent Maverik Trips Generated(Exiting)	***11.00%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	15	0	0	0	0	0	0	0	0	0	0	16
Total PM Peak Hour BUILD Volumes	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**61**	**0**	**0**	**15**	**16**

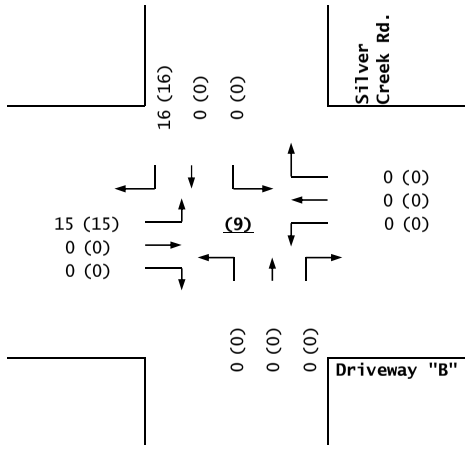
	Entering	Exiting		
Number of Truck Trips Generated	**145**	**139**	A.M.	100% Development
	143	**137**	P.M.	

	Eastbound (Driveway "B")			**Westbound (Driveway "B")**			**Northbound (Silver Creek Rd.)**			**Southbound (Silver Creek Rd.)**		
2018 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2018 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0

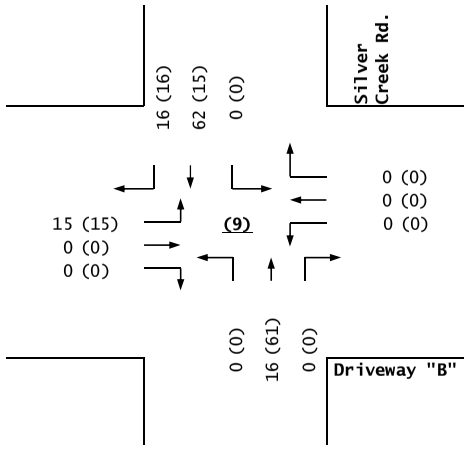
2030
NO BUILD



Trips



2030
BUILD



Driveway "B" / Silver Creek Rd.

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	132	44	59	1044	695
Future Volume (vph)	132	44	59	1044	695
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	2		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	10.0	21.0	21.0
Total Split (s)	42.0	20.0	20.0	78.0	58.0
Total Split (%)	35.0%	16.7%	16.7%	65.0%	48.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	10.4	21.7	99.6	99.6	88.3
Actuated g/C Ratio	0.09	0.18	0.83	0.83	0.74
v/c Ratio	0.48	0.15	0.13	0.27	0.24
Control Delay	68.4	14.4	2.6	2.5	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	68.4	14.4	2.6	2.5	5.2
LOS	E	B	A	A	A
Approach Delay	54.8			2.5	5.2
Approach LOS	D			A	A

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 37.8 (32%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 55		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.48		
Intersection Signal Delay: 8.0	Intersection LOS: A	
Intersection Capacity Utilization 37.0%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 1: Coors Bd. & Los Volcanes Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	132	44	59	1044	695	123
Future Volume (veh/h)	132	44	59	1044	695	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	143	48	64	1135	755	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	215	164	581	4326	3339	587
Arrive On Green	0.06	0.06	0.04	0.85	0.77	0.77
Sat Flow, veh/h	3428	1572	1767	5233	4500	762
Grp Volume(v), veh/h	143	48	64	1135	587	302
Grp Sat Flow(s),veh/h/ln	1714	1572	1767	1689	1689	1718
Q Serve(g_s), s	4.9	3.4	0.8	5.1	5.8	5.9
Cycle Q Clear(g_c), s	4.9	3.4	0.8	5.1	5.8	5.9
Prop In Lane	1.00	1.00	1.00			0.44
Lane Grp Cap(c), veh/h	215	164	581	4326	2602	1324
V/C Ratio(X)	0.66	0.29	0.11	0.26	0.23	0.23
Avail Cap(c_a), veh/h	1057	550	729	4326	2602	1324
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	49.6	2.1	1.7	3.8	3.8
Incr Delay (d2), s/veh	3.0	0.8	0.1	0.1	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	3.1	0.2	1.0	1.8	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.9	50.5	2.2	1.8	4.0	4.2
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	191			1199	889	
Approach Delay, s/veh	56.1			1.8	4.1	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		107.5		12.5	10.0	97.5
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		73.0		37.0	15.0	53.0
Max Q Clear Time (g_c+I1), s		7.1		6.9	2.8	7.9
Green Ext Time (p_c), s		11.3		0.6	0.1	7.3

Intersection Summary		
HCM 6th Ctrl Delay	7.3	
HCM 6th LOS	A	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	288	384	43	134	83	16	1135	103	443	95
Future Volume (vph)	288	384	43	134	83	16	1135	103	443	95
Turn Type	Prot	NA	Prot	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8	2		6		6
Detector Phase	7	4	3	8	8	5	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	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	22.0	35.0	14.0	27.0	27.0	14.0	52.0	19.0	57.0	57.0
Total Split (%)	18.3%	29.2%	11.7%	22.5%	22.5%	11.7%	43.3%	15.8%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	15.3	20.5	7.9	13.1	13.1	68.2	62.2	74.6	65.6	65.6
Actuated g/C Ratio	0.13	0.17	0.07	0.11	0.11	0.57	0.52	0.62	0.55	0.55
v/c Ratio	0.72	0.73	0.41	0.38	0.29	0.03	0.76	0.50	0.25	0.11
Control Delay	60.1	53.8	64.2	51.7	2.6	10.2	27.8	33.8	21.4	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.1	53.8	64.2	51.7	2.6	10.2	27.8	33.8	21.4	6.1
LOS	E	D	E	D	A	B	C	C	C	A
Approach Delay		56.4		38.2			27.6		21.2	
Approach LOS		E		D			C		C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 80		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.76		
Intersection Signal Delay: 34.1	Intersection LOS: C	
Intersection Capacity Utilization 72.9%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 2: Unser Bd. & Central Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	384	18	43	134	83	16	1135	120	103	443	95
Future Volume (veh/h)	288	384	18	43	134	83	16	1135	120	103	443	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	313	417	20	47	146	0	17	1234	130	112	482	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	376	522	25	76	302		672	1915	201	271	2102	
Arrive On Green	0.11	0.15	0.15	0.04	0.09	0.00	0.04	0.59	0.59	0.09	1.00	0.00
Sat Flow, veh/h	3428	3425	164	1767	3526	1572	1767	3219	338	1767	3526	1572
Grp Volume(v), veh/h	313	214	223	47	146	0	17	674	690	112	482	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1826	1767	1763	1572	1767	1763	1795	1767	1763	1572
Q Serve(g_s), s	10.7	14.1	14.1	3.1	4.7	0.0	0.4	30.1	30.4	3.0	0.0	0.0
Cycle Q Clear(g_c), s	10.7	14.1	14.1	3.1	4.7	0.0	0.4	30.1	30.4	3.0	0.0	0.0
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	376	269	278	76	302		672	1048	1067	271	2102	
V/C Ratio(X)	0.83	0.80	0.80	0.62	0.48		0.03	0.64	0.65	0.41	0.23	
Avail Cap(c_a), veh/h	486	441	457	133	646		731	1048	1067	401	2102	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.96	0.96	0.00
Uniform Delay (d), s/veh	52.3	49.1	49.1	56.5	52.3	0.0	8.0	16.0	16.0	13.1	0.0	0.0
Incr Delay (d2), s/veh	9.3	5.3	5.3	7.9	1.2	0.0	0.0	3.0	3.0	1.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	6.6	6.8	1.6	2.2	0.0	0.2	12.5	12.8	1.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	54.4	54.4	64.4	53.5	0.0	8.0	19.0	19.0	14.0	0.2	0.0
LnGrp LOS	E	D	D	E	D		A	B	B	B	A	
Approach Vol, veh/h		750			193	A		1381			594	A
Approach Delay, s/veh		57.4			56.2			18.9			2.8	
Approach LOS		E			E			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	76.4	10.2	23.3	10.0	76.5	18.2	15.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	14.0	47.0	9.0	30.0	9.0	52.0	17.0	22.0
Max Q Clear Time (g_c+I1), s	5.0	32.4	5.1	16.1	2.4	2.0	12.7	6.7
Green Ext Time (p_c), s	0.2	8.2	0.0	2.2	0.0	3.7	0.4	0.7

Intersection Summary		
HCM 6th Ctrl Delay		28.0
HCM 6th LOS		C

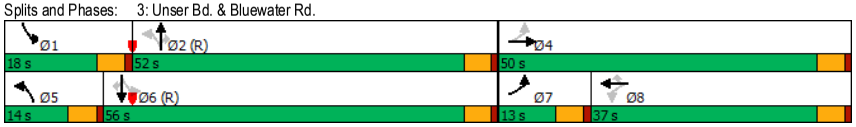
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	90	40	29	19	48	21	1375	79	105	622	52
Future Volume (vph)	90	40	29	19	48	21	1375	79	105	622	52
Turn Type	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	8	8	8	5	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	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	13.0	50.0	37.0	37.0	37.0	14.0	52.0	52.0	18.0	56.0	56.0
Total Split (%)	10.8%	41.7%	30.8%	30.8%	30.8%	11.7%	43.3%	43.3%	15.0%	46.7%	46.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	21.4	21.4	8.5	8.5	8.5	80.1	74.1	74.1	86.6	77.6	77.6
Actuated g/C Ratio	0.18	0.18	0.07	0.07	0.07	0.67	0.62	0.62	0.72	0.65	0.65
v/c Ratio	0.47	0.25	0.35	0.16	0.25	0.04	0.71	0.09	0.48	0.30	0.06
Control Delay	50.0	24.9	62.6	53.7	2.8	6.3	31.9	6.2	24.7	11.2	2.8
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	50.0	24.9	62.6	53.7	2.8	6.3	31.9	6.2	24.7	11.2	2.8
LOS	D	C	E	D	A	A	C	A	C	B	A
Approach Delay		38.5		30.9			30.2			12.5	
Approach LOS		D		C			C			B	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 99.6 (83%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 25.3		Intersection LOS: C	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Unser Bd. & Bluewater Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	40	37	29	19	48	21	1375	79	105	622	52
Future Volume (veh/h)	90	40	37	29	19	48	21	1375	79	105	622	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	100	44	41	32	21	53	23	1528	0	117	691	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	233	142	132	128	97	83	636	2371		276	2371	
Arrive On Green	0.07	0.16	0.16	0.05	0.05	0.05	0.04	0.67	0.00	0.08	1.00	0.00
Sat Flow, veh/h	1767	884	824	1302	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	100	0	85	32	21	53	23	1528	0	117	691	0
Grp Sat Flow(s),veh/h/ln	1767	0	1707	1302	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.2	0.0	5.3	2.9	1.3	4.0	0.5	30.1	0.0	2.5	0.0	0.0
Cycle Q Clear(g_c), s	6.2	0.0	5.3	2.9	1.3	4.0	0.5	30.1	0.0	2.5	0.0	0.0
Prop In Lane	1.00		0.48	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	0	275	128	97	83	636	2371		276	2371	
V/C Ratio(X)	0.43	0.00	0.31	0.25	0.22	0.64	0.04	0.64		0.42	0.29	
Avail Cap(c_a), veh/h	233	0	640	407	495	419	695	2371		394	2371	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.61	0.61	0.00	0.85	0.85	0.00
Uniform Delay (d), s/veh	47.5	0.0	44.5	55.2	54.5	55.7	5.0	11.4	0.0	10.4	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.6	1.0	1.1	8.1	0.0	0.8	0.0	0.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	2.3	1.0	0.6	1.8	0.2	11.1	0.0	1.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	0.0	45.1	56.2	55.6	63.8	5.0	12.2	0.0	11.3	0.3	0.0
LnGrp LOS	D	A	D	E	E	E	A	B		B	A	
Approach Vol, veh/h		185			106			1551	A		808	A
Approach Delay, s/veh		47.1			59.9			12.1			1.9	
Approach LOS		D			E			B			A	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	85.7		24.3	10.0	85.7	13.0	11.3				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	13.0	47.0		45.0	9.0	51.0	8.0	32.0				
Max Q Clear Time (g_c+I1), s	4.5	32.1		7.3	2.5	2.0	8.2	6.0				
Green Ext Time (p_c), s	0.2	9.7		0.5	0.0	5.7	0.0	0.3				

Intersection Summary			
HCM 6th Ctrl Delay		13.3	
HCM 6th LOS		B	

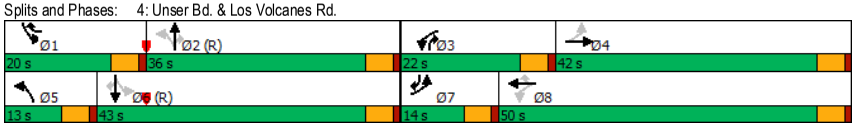
Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	283	81	88	76	193	29	1606	209	285	776	109
Future Volume (vph)	283	81	88	76	193	29	1606	209	285	776	109
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	42.0	22.0	50.0	20.0	13.0	36.0	22.0	20.0	43.0	14.0
Total Split (%)	11.7%	35.0%	18.3%	41.7%	16.7%	10.8%	30.0%	18.3%	16.7%	35.8%	11.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	22.4	13.4	28.1	16.4	59.8	42.7	36.2	53.2	79.6	68.1	82.1
Actuated g/C Ratio	0.19	0.11	0.23	0.14	0.50	0.36	0.30	0.44	0.66	0.57	0.68
v/c Ratio	0.71	0.60	0.42	0.40	0.32	0.16	1.41	0.36	0.61	0.52	0.13
Control Delay	47.0	59.5	41.2	53.1	14.4	13.9	217.1	3.5	29.1	18.4	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	59.5	41.2	53.1	14.4	13.9	217.1	3.5	29.1	18.4	3.1
LOS	D	E	D	D	B	B	F	A	C	B	A
Approach Delay		50.1		29.2			189.7			19.6	
Approach LOS		D		C			F			B	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.41		
Intersection Signal Delay: 107.3	Intersection LOS: F	
Intersection Capacity Utilization 74.1%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	81	13	88	76	193	29	1606	209	285	776	109
Future Volume (veh/h)	283	81	13	88	76	193	29	1606	209	285	776	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	377	108	17	117	101	257	39	2141	0	380	1035	145
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	612	266	42	324	310	459	304	2362		333	1937	982
Arrive On Green	0.08	0.17	0.17	0.07	0.17	0.17	0.08	0.93	0.00	0.13	0.55	0.55
Sat Flow, veh/h	3428	1565	246	1767	1856	1572	1767	5066	1572	1767	3526	1572
Grp Volume(v), veh/h	377	0	125	117	101	257	39	2141	0	380	1035	145
Grp Sat Flow(s),veh/h/ln	1714	0	1811	1767	1856	1572	1767	1689	1572	1767	1763	1572
Q Serve(g_s), s	9.0	0.0	7.4	6.5	5.8	16.6	1.3	22.1	0.0	15.0	22.5	4.6
Cycle Q Clear(g_c), s	9.0	0.0	7.4	6.5	5.8	16.6	1.3	22.1	0.0	15.0	22.5	4.6
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	612	0	308	324	310	459	304	2362		333	1937	982
V/C Ratio(X)	0.62	0.00	0.41	0.36	0.33	0.56	0.13	0.91		1.14	0.53	0.15
Avail Cap(c_a), veh/h	612	0	558	447	696	786	349	2362		333	1937	982
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.68	0.68	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	44.4	37.4	44.0	35.9	14.9	2.9	0.0	31.4	17.2	9.3
Incr Delay (d2), s/veh	1.9	0.0	0.9	0.7	0.6	1.1	0.1	4.5	0.0	92.9	1.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	3.4	2.9	2.7	6.5	0.5	2.4	0.0	18.5	9.2	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.0	0.0	45.2	38.1	44.6	37.0	15.0	7.4	0.0	124.4	18.3	9.6
LnGrp LOS	D	A	D	D	D	D	B	A		F	B	A
Approach Vol, veh/h		502			475			2180	A		1560	
Approach Delay, s/veh		42.8			38.9			7.6			43.3	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	60.9	13.6	25.4	10.0	70.9	14.0	25.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	31.0	17.0	37.0	8.0	38.0	9.0	45.0
Max Q Clear Time (g_c+I1), s	17.0	24.1	8.5	9.4	3.3	24.5	11.0	18.6
Green Ext Time (p_c), s	0.0	6.1	0.2	0.7	0.0	6.6	0.0	1.5

Intersection Summary		
HCM 6th Ctrl Delay		26.3
HCM 6th LOS		C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	336	1	18	693	1656
Future Volume (vph)	336	1	18	693	1656
Turn Type	Perm	NA	pm+pt	NA	NA
Protected Phases		8	5	2	6
Permitted Phases	8		2		
Detector Phase	8	8	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0
Total Split (s)	38.0	38.0	15.0	92.0	77.0
Total Split (%)	29.2%	29.2%	11.5%	70.8%	59.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	19.8	19.8	100.2	100.2	89.3
Actuated g/C Ratio	0.15	0.15	0.77	0.77	0.69
v/c Ratio	0.72	0.72	0.11	0.28	0.54
Control Delay	67.6	68.0	5.7	5.1	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	67.6	68.0	5.7	5.1	11.5
LOS	E	E	A	A	B
Approach Delay		67.8		5.1	11.5
Approach LOS		E		A	B

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 13 (10%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.72		
Intersection Signal Delay: 16.7	Intersection LOS: B	
Intersection Capacity Utilization 51.1%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 5: Unser Bd. & I-40 N. Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	336	1	0	18	693	0	0	1656	66
Future Volume (veh/h)	0	0	0	336	1	0	18	693	0	0	1656	66
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	0	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				366	0	0	20	753	0	0	1800	72
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	0	3	3	0	0	3	3
Cap, veh/h				444	233	0	260	2811	0	0	3600	144
Arrive On Green				0.13	0.00	0.00	0.04	0.80	0.00	0.00	0.72	0.72
Sat Flow, veh/h				3534	1856	0	1767	3618	0	0	5164	200
Grp Volume(v), veh/h				366	0	0	20	753	0	0	1216	656
Grp Sat Flow(s),veh/h/ln				1767	1856	0	1767	1763	0	0	1689	1820
Q Serve(g_s), s				13.1	0.0	0.0	0.3	7.2	0.0	0.0	20.4	20.5
Cycle Q Clear(g_c), s				13.1	0.0	0.0	0.3	7.2	0.0	0.0	20.4	20.5
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.11
Lane Grp Cap(c), veh/h				444	233	0	260	2811	0	0	2433	1311
V/C Ratio(X)				0.82	0.00	0.00	0.08	0.27	0.00	0.00	0.50	0.50
Avail Cap(c_a), veh/h				897	471	0	328	2811	0	0	2433	1311
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.4	0.0	0.0	5.5	3.4	0.0	0.0	7.9	7.9
Incr Delay (d2), s/veh				3.9	0.0	0.0	0.1	0.2	0.0	0.0	0.7	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.1	0.0	0.0	0.1	2.2	0.0	0.0	7.1	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				59.3	0.0	0.0	5.6	3.6	0.0	0.0	8.7	9.3
LnGrp LOS				E	A	A	A	A	A	A	A	A
Approach Vol, veh/h					366			773			1872	
Approach Delay, s/veh					59.3			3.7			8.9	
Approach LOS					E			A			A	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		108.7			10.0	98.7		21.3				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		87.0			10.0	72.0		33.0				
Max Q Clear Time (g_c+I1), s		9.2			2.3	22.5		15.1				
Green Ext Time (p_c), s		6.4			0.0	22.8		1.2				

Intersection Summary		
HCM 6th Ctrl Delay	13.7	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	29	0	0	0	0	684	860	0	991	0
Future Vol, veh/h	53	0	29	0	0	0	0	684	860	0	991	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	280	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	62	0	34	0	0	0	0	805	1012	0	1166	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1569	-	-	-	0	0	-	-	0
Stage 1	1166	-	-	-	-	-	-	-	-
Stage 2	403	-	-	-	-	-	-	-	-
Critical Hdwy	6.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	-	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	*154	0	0	0	-	-	0	-	0
Stage 1	*257	0	0	0	-	-	0	-	0
Stage 2	*767	0	0	0	-	-	0	-	0
Platoon blocked, %	1				-	-		-	
Mov Cap-1 Maneuver	*154	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	*154	0	-	-	-	-	-	-	-
Stage 1	*257	0	-	-	-	-	-	-	-
Stage 2	*767	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	43.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	-	154	-	-
HCM Lane V/C Ratio	-	-	0.405	-	-
HCM Control Delay (s)	-	-	43.4	0	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	1.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	161	89	60	1086	1598
Future Volume (vph)	161	89	60	1086	1598
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	2		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	10.0	21.0	21.0
Total Split (s)	42.0	26.0	26.0	88.0	62.0
Total Split (%)	32.3%	20.0%	20.0%	67.7%	47.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	12.7	24.0	109.3	109.3	98.0
Actuated g/C Ratio	0.10	0.18	0.84	0.84	0.75
v/c Ratio	0.50	0.31	0.26	0.26	0.47
Control Delay	64.7	51.1	4.6	2.4	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	64.7	51.1	4.6	2.4	6.8
LOS	E	D	A	A	A
Approach Delay	59.9			2.5	6.8
Approach LOS	E			A	A

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 45.5 (35%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.50		
Intersection Signal Delay: 9.5	Intersection LOS: A	
Intersection Capacity Utilization 52.6%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 1: Coors Bd. & Los Volcanes Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	161	89	60	1086	1598	132
Future Volume (veh/h)	161	89	60	1086	1598	132
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	166	92	62	1120	1647	136
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	287	204	311	4329	3709	306
Arrive On Green	0.08	0.08	0.05	0.85	0.78	0.77
Sat Flow, veh/h	3428	1572	1767	5233	4936	393
Grp Volume(v), veh/h	166	92	62	1120	1166	617
Grp Sat Flow(s),veh/h/ln	1714	1572	1767	1689	1689	1785
Q Serve(g_s), s	6.1	7.0	0.8	5.4	15.2	15.4
Cycle Q Clear(g_c), s	6.1	7.0	0.8	5.4	15.2	15.4
Prop In Lane	1.00	1.00	1.00			0.22
Lane Grp Cap(c), veh/h	287	204	311	4329	2626	1388
V/C Ratio(X)	0.58	0.45	0.20	0.26	0.44	0.44
Avail Cap(c_a), veh/h	1002	532	529	4329	2626	1388
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	52.3	3.3	1.8	4.9	5.0
Incr Delay (d2), s/veh	1.7	1.4	0.3	0.1	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	6.3	0.2	1.2	4.8	5.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	59.0	53.7	3.6	1.9	5.5	6.0
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	258			1182	1783	
Approach Delay, s/veh	57.1			2.0	5.6	
Approach LOS	E			A	A	

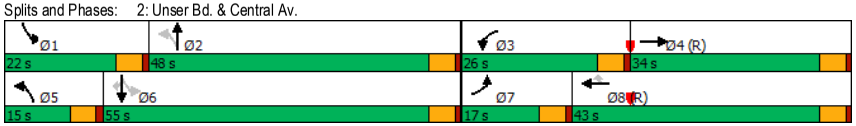
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		115.1		14.9	10.0	105.1
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		83.0		37.0	21.0	57.0
Max Q Clear Time (g_c+I1), s		7.4		9.0	2.8	17.4
Green Ext Time (p_c), s		11.1		0.9	0.1	19.2

Intersection Summary		
HCM 6th Ctrl Delay	8.4	
HCM 6th LOS	A	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	172	379	89	342	57	52	770	126	1051	141
Future Volume (vph)	172	379	89	342	57	52	770	126	1051	141
Turn Type	Prot	NA	Prot	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8	2		6		6
Detector Phase	7	4	3	8	8	5	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	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	17.0	34.0	26.0	43.0	43.0	15.0	48.0	22.0	55.0	55.0
Total Split (%)	13.1%	26.2%	20.0%	33.1%	33.1%	11.5%	36.9%	16.9%	42.3%	42.3%
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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	C-Min	Min	C-Min	C-Min	Min	Min	Min	Min	Min
Act Effct Green (s)	12.5	41.6	13.3	42.4	42.4	55.9	47.2	62.1	50.4	50.4
Actuated g/C Ratio	0.10	0.32	0.10	0.33	0.33	0.43	0.36	0.48	0.39	0.39
v/c Ratio	0.55	0.39	0.53	0.32	0.10	0.31	0.73	0.53	0.81	0.21
Control Delay	62.7	37.1	65.2	35.4	0.3	21.3	38.9	23.6	26.7	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.7	37.1	65.2	35.4	0.3	21.3	38.9	23.6	26.7	1.9
LOS	E	D	E	D	A	C	D	C	C	A
Approach Delay		44.6		36.8			37.9		23.8	
Approach LOS		D		D			D		C	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 127.4 (98%), Referenced to phase 4:EBT and 8:WBT, Start of Green		
Natural Cycle: 65		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.81		
Intersection Signal Delay: 33.3	Intersection LOS: C	
Intersection Capacity Utilization 63.0%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 2: Unser Bd. & Central Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	379	34	89	342	57	52	770	99	126	1051	141
Future Volume (veh/h)	172	379	34	89	342	57	52	770	99	126	1051	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	181	399	36	94	360	0	55	811	104	133	1106	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	260	1315	118	135	1418		171	1025	131	239	1244	
Arrive On Green	0.08	0.40	0.39	0.08	0.40	0.00	0.05	0.33	0.32	0.10	0.47	0.00
Sat Flow, veh/h	3428	3272	294	1767	3526	1572	1767	3143	403	1767	3526	1572
Grp Volume(v), veh/h	181	214	221	94	360	0	55	455	460	133	1106	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1803	1767	1763	1572	1767	1763	1783	1767	1763	1572
Q Serve(g_s), s	6.7	10.8	10.9	6.7	8.8	0.0	2.6	30.5	30.5	6.2	37.1	0.0
Cycle Q Clear(g_c), s	6.7	10.8	10.9	6.7	8.8	0.0	2.6	30.5	30.5	6.2	37.1	0.0
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	260	708	724	135	1418		171	575	582	239	1244	
V/C Ratio(X)	0.70	0.30	0.30	0.70	0.25		0.32	0.79	0.79	0.56	0.89	
Avail Cap(c_a), veh/h	343	708	724	299	1418		239	597	603	356	1383	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.74	0.74	0.00
Uniform Delay (d), s/veh	58.6	26.5	26.6	58.6	25.9	0.0	31.3	39.8	39.9	28.7	32.2	0.0
Incr Delay (d2), s/veh	4.0	1.1	1.1	6.4	0.4	0.0	1.1	6.9	6.9	1.5	5.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	4.8	4.9	3.3	3.8	0.0	1.2	14.2	14.4	2.7	15.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.6	27.6	27.7	65.0	26.3	0.0	32.4	46.7	46.7	30.2	37.5	0.0
LnGrp LOS	E	C	C	E	C		C	D	D	C	D	
Approach Vol, veh/h		616			454	A		970			1239	A
Approach Delay, s/veh		37.9			34.3			45.9			36.7	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	46.4	13.9	56.2	10.0	49.9	13.9	56.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	43.0	21.0	29.0	10.0	50.0	12.0	38.0
Max Q Clear Time (g_c+I1), s	8.2	32.5	8.7	12.9	4.6	39.1	8.7	10.8
Green Ext Time (p_c), s	0.2	4.3	0.2	2.3	0.0	5.7	0.2	2.5

Intersection Summary		
HCM 6th Ctrl Delay	39.3	
HCM 6th LOS	D	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	92	50	87	92	156	35	918	89	61	1271	104
Future Volume (vph)	92	50	87	92	156	35	918	89	61	1271	104
Turn Type	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	8	8	8	5	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	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	14.0	52.0	38.0	38.0	38.0	14.0	64.0	64.0	14.0	64.0	64.0
Total Split (%)	10.8%	40.0%	29.2%	29.2%	29.2%	10.8%	49.2%	49.2%	10.8%	49.2%	49.2%
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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	31.0	31.0	15.9	15.9	15.9	86.4	79.0	79.0	87.7	79.6	79.6
Actuated g/C Ratio	0.24	0.24	0.12	0.12	0.12	0.66	0.61	0.61	0.67	0.61	0.61
v/c Ratio	0.35	0.22	0.59	0.43	0.49	0.15	0.46	0.10	0.18	0.63	0.11
Control Delay	42.0	25.2	68.1	57.4	12.1	3.1	10.8	2.9	6.8	11.7	1.2
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	42.0	25.2	68.1	57.4	12.1	3.1	10.8	2.9	6.8	11.7	1.2
LOS	D	C	E	E	B	A	B	A	A	B	A
Approach Delay		33.7		39.1			9.9			10.7	
Approach LOS		C		D			A			B	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 127.4 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 15.0		Intersection LOS: B	
Intersection Capacity Utilization 61.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Unser Bd. & Bluewater Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	50	39	87	92	156	35	918	89	61	1271	104
Future Volume (veh/h)	92	50	39	87	92	156	35	918	89	61	1271	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	98	53	41	93	98	166	37	977	0	65	1352	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	273	228	176	230	251	212	295	2209		382	2209	
Arrive On Green	0.07	0.23	0.23	0.14	0.14	0.14	0.03	0.42	0.00	0.05	0.63	0.00
Sat Flow, veh/h	1767	970	750	1292	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	98	0	94	93	98	166	37	977	0	65	1352	0
Grp Sat Flow(s),veh/h/ln	1767	0	1720	1292	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.0	0.0	5.8	8.7	6.3	13.3	0.9	25.7	0.0	1.6	30.2	0.0
Cycle Q Clear(g_c), s	6.0	0.0	5.8	8.7	6.3	13.3	0.9	25.7	0.0	1.6	30.2	0.0
Prop In Lane	1.00		0.44	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	273	0	404	230	251	212	295	2209		382	2209	
V/C Ratio(X)	0.36	0.00	0.23	0.40	0.39	0.78	0.13	0.44		0.17	0.61	
Avail Cap(c_a), veh/h	287	0	635	393	485	411	349	2209		436	2209	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.69	0.69	0.00	0.77	0.77	0.00
Uniform Delay (d), s/veh	42.2	0.0	40.4	52.4	51.3	54.4	11.2	21.5	0.0	10.1	14.7	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.3	1.1	1.0	6.2	0.1	0.4	0.0	0.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	2.5	2.9	3.0	5.6	0.4	11.6	0.0	0.6	11.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.0	0.0	40.7	53.6	52.3	60.5	11.3	22.0	0.0	10.2	15.7	0.0
LnGrp LOS	D	A	D	D	D	E	B	C		B	B	
Approach Vol, veh/h		192			357			1014	A		1417	A
Approach Delay, s/veh		41.9			56.5			21.6			15.4	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	85.5		34.5	10.0	85.5	13.0	21.6				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	9.0	59.0		47.0	9.0	59.0	9.0	33.0				
Max Q Clear Time (g_c+I1), s	3.6	27.7		7.8	2.9	32.2	8.0	15.3				
Green Ext Time (p_c), s	0.0	8.4		0.5	0.0	12.2	0.0	1.3				

Intersection Summary			
HCM 6th Ctrl Delay		24.1	
HCM 6th LOS		C	

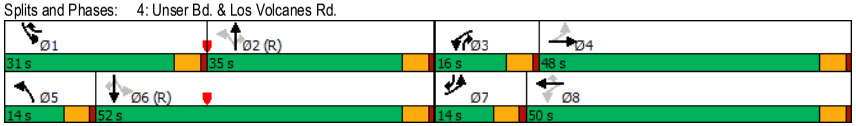
Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	159	51	132	71	221	21	1072	114	192	1231	108
Future Volume (vph)	159	51	132	71	221	21	1072	114	192	1231	108
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	48.0	16.0	50.0	31.0	14.0	35.0	16.0	31.0	52.0	14.0
Total Split (%)	10.8%	36.9%	12.3%	38.5%	23.8%	10.8%	26.9%	12.3%	23.8%	40.0%	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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	21.4	11.4	24.8	13.1	33.3	81.7	74.7	90.5	94.6	83.9	97.9
Actuated g/C Ratio	0.16	0.09	0.19	0.10	0.26	0.63	0.57	0.70	0.73	0.65	0.75
v/c Ratio	1.09	0.51	0.58	0.42	0.55	0.09	0.41	0.11	0.51	0.60	0.10
Control Delay	113.2	49.9	51.3	58.7	35.1	11.5	18.7	2.8	9.8	13.8	2.6
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	113.2	49.9	51.3	58.7	35.1	11.5	18.7	2.8	9.8	13.8	2.6
LOS	F	D	D	E	D	B	B	A	A	B	A
Approach Delay		104.0		44.1			17.1			12.5	
Approach LOS		F		D			B			B	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 5.2 (4%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 75		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.09		
Intersection Signal Delay: 31.3	Intersection LOS: C	
Intersection Capacity Utilization 68.5%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	51	30	132	71	221	21	1072	114	192	1231	108
Future Volume (veh/h)	159	51	30	132	71	221	21	1072	114	192	1231	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	524	56	33	145	78	243	23	1178	0	211	1353	119
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	648	172	101	360	316	387	252	2806		450	2057	1038
Arrive On Green	0.08	0.16	0.16	0.09	0.17	0.17	0.09	1.00	0.00	0.08	0.58	0.58
Sat Flow, veh/h	3428	1094	645	1767	1856	1572	1767	5066	1572	1767	3526	1572
Grp Volume(v), veh/h	524	0	89	145	78	243	23	1178	0	211	1353	119
Grp Sat Flow(s),veh/h/ln	1714	0	1739	1767	1856	1572	1767	1689	1572	1767	1763	1572
Q Serve(g_s), s	10.0	0.0	5.9	8.7	4.7	17.9	0.7	0.0	0.0	6.3	33.7	3.6
Cycle Q Clear(g_c), s	10.0	0.0	5.9	8.7	4.7	17.9	0.7	0.0	0.0	6.3	33.7	3.6
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	648	0	273	360	316	387	252	2806		450	2057	1038
V/C Ratio(X)	0.81	0.00	0.33	0.40	0.25	0.63	0.09	0.42		0.47	0.66	0.11
Avail Cap(c_a), veh/h	648	0	589	363	657	675	307	2806		684	2057	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.98	0.98	0.98	0.89	0.89	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	0.0	48.7	40.3	46.7	43.7	13.5	0.0	0.0	9.4	18.3	8.1
Incr Delay (d2), s/veh	7.6	0.0	0.7	0.7	0.4	1.6	0.1	0.4	0.0	0.8	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	2.6	3.9	2.2	7.2	0.3	0.1	0.0	2.5	13.8	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	0.0	49.4	41.0	47.1	45.3	13.6	0.4	0.0	10.2	20.0	8.3
LnGrp LOS	E	A	D	D	D	D	B	A		B	B	A
Approach Vol, veh/h		613			466			1201	A		1683	
Approach Delay, s/veh		54.4			44.3			0.7			17.9	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	76.0	15.8	24.4	10.0	79.8	14.0	26.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	26.0	30.0	11.0	43.0	9.0	47.0	9.0	45.0
Max Q Clear Time (g_c+I1), s	8.3	2.0	10.7	7.9	2.7	35.7	12.0	19.9
Green Ext Time (p_c), s	0.5	10.0	0.0	0.5	0.0	7.3	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

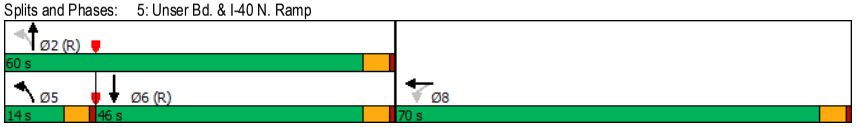
Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	920	1	28	910	1028
Future Volume (vph)	920	1	28	910	1028
Turn Type	Perm	NA	pm+pt	NA	NA
Protected Phases		8	5	2	6
Permitted Phases	8		2		
Detector Phase	8	8	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0
Total Split (s)	70.0	70.0	14.0	60.0	46.0
Total Split (%)	53.8%	53.8%	10.8%	46.2%	35.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	48.5	48.5	73.5	73.5	62.0
Actuated g/C Ratio	0.37	0.37	0.57	0.57	0.48
v/c Ratio	0.76	0.76	0.11	0.47	0.48
Control Delay	43.4	43.4	17.3	17.8	25.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	43.4	43.4	17.3	17.8	25.3
LOS	D	D	B	B	C
Approach Delay		43.4		17.8	25.3
Approach LOS		D		B	C

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 2.6 (2%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 55		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.76		
Intersection Signal Delay: 28.6	Intersection LOS: C	
Intersection Capacity Utilization 57.3%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 5: Unser Bd. & I-40 N. Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	920	1	0	28	910	0	0	1028	70
Future Volume (veh/h)	0	0	0	920	1	0	28	910	0	0	1028	70
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	0	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				949	0	0	29	938	0	0	1060	72
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				3	3	0	3	3	0	0	3	3
Cap, veh/h				1090	572	0	348	2222	0	0	2680	182
Arrive On Green				0.31	0.00	0.00	0.05	0.63	0.00	0.00	0.55	0.55
Sat Flow, veh/h				3534	1856	0	1767	3618	0	0	5012	329
Grp Volume(v), veh/h				949	0	0	29	938	0	0	739	393
Grp Sat Flow(s),veh/h/ln				1767	1856	0	1767	1763	0	0	1689	1796
Q Serve(g_s), s				33.0	0.0	0.0	0.8	17.4	0.0	0.0	16.3	16.3
Cycle Q Clear(g_c), s				33.0	0.0	0.0	0.8	17.4	0.0	0.0	16.3	16.3
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.18
Lane Grp Cap(c), veh/h				1090	572	0	348	2222	0	0	1868	994
V/C Ratio(X)				0.87	0.00	0.00	0.08	0.42	0.00	0.00	0.40	0.40
Avail Cap(c_a), veh/h				1794	942	0	402	2222	0	0	1868	994
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.5	0.0	0.0	11.2	12.1	0.0	0.0	16.6	16.7
Incr Delay (d2), s/veh				2.8	0.0	0.0	0.1	0.6	0.0	0.0	0.6	1.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.8	0.0	0.0	0.3	6.9	0.0	0.0	6.4	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.3	0.0	0.0	11.3	12.7	0.0	0.0	17.2	17.9
LnGrp LOS				D	A	A	B	B	A	A	B	B
Approach Vol, veh/h					949			967			1132	
Approach Delay, s/veh					45.3			12.7			17.4	
Approach LOS					D			B			B	

Timer - Assigned Phs	2			5	6		8					
Phs Duration (G+Y+Rc), s	85.9			10.0	75.9		44.1					
Change Period (Y+Rc), s	5.0			5.0	5.0		5.0					
Max Green Setting (Gmax), s	55.0			9.0	41.0		65.0					
Max Q Clear Time (g_c+I1), s	19.4			2.8	18.3		35.0					
Green Ext Time (p_c), s	8.2			0.0	8.3		4.1					

Intersection Summary		
HCM 6th Ctrl Delay	24.6	
HCM 6th LOS	C	

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	128.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	81	0	49	0	0	0	0	1050	582	0	1950	0
Future Vol, veh/h	81	0	49	0	0	0	0	1050	582	0	1950	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	280	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	95	0	58	0	0	0	0	1235	685	0	2294	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	2912	-	-	-	0	0	-	-	0
Stage 1	2294	-	-	-	-	-	-	-	-
Stage 2	618	-	-	-	-	-	-	-	-
Critical Hdwy	6.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	-	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 8	0	0	0	-	-	0	-	0
Stage 1	*~ 61	0	0	0	-	-	0	-	0
Stage 2	*605	0	0	0	-	-	0	-	0
Platoon blocked, %	1				-	-		-	
Mov Cap-1 Maneuver	*~ 8	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	*~ 8	0	-	-	-	-	-	-	-
Stage 1	*~ 61	0	-	-	-	-	-	-	-
Stage 2	*605	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	5815.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	-	8	-	-
HCM Lane V/C Ratio	-	-	11.912	-	-
HCM Control Delay (s)	-	-	$ 5815.3	0	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q(veh)	-	-	13.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	142	46	67	1080	718
Future Volume (vph)	142	46	67	1080	718
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	2		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	10.0	21.0	21.0
Total Split (s)	42.0	20.0	20.0	78.0	58.0
Total Split (%)	35.0%	16.7%	16.7%	65.0%	48.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	10.8	22.3	99.2	99.2	87.7
Actuated g/C Ratio	0.09	0.19	0.83	0.83	0.73
v/c Ratio	0.50	0.15	0.15	0.28	0.26
Control Delay	67.6	14.2	2.8	2.6	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	67.6	14.2	2.8	2.6	5.5
LOS	E	B	A	A	A
Approach Delay	54.5			2.7	5.5
Approach LOS	D			A	A

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 37.8 (32%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 55		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.50		
Intersection Signal Delay: 8.2	Intersection LOS: A	
Intersection Capacity Utilization 37.6%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 1: Coors Bd. & Los Volcanes Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	142	46	67	1080	718	130
Future Volume (veh/h)	142	46	67	1080	718	130
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	154	50	73	1174	780	141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	227	170	564	4308	3313	594
Arrive On Green	0.07	0.07	0.04	0.85	0.77	0.77
Sat Flow, veh/h	3428	1572	1767	5233	4486	774
Grp Volume(v), veh/h	154	50	73	1174	609	312
Grp Sat Flow(s),veh/h/ln	1714	1572	1767	1689	1689	1716
Q Serve(g_s), s	5.3	3.5	0.9	5.4	6.1	6.2
Cycle Q Clear(g_c), s	5.3	3.5	0.9	5.4	6.1	6.2
Prop In Lane	1.00	1.00	1.00			0.45
Lane Grp Cap(c), veh/h	227	170	564	4308	2590	1316
V/C Ratio(X)	0.68	0.29	0.13	0.27	0.23	0.24
Avail Cap(c_a), veh/h	1057	550	711	4308	2590	1316
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	49.3	2.2	1.7	4.0	4.0
Incr Delay (d2), s/veh	2.9	0.8	0.1	0.2	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	5.7	0.4	2.0	3.4	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.7	50.1	2.3	1.9	4.2	4.4
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	204			1247	921	
Approach Delay, s/veh	55.8			1.9	4.3	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		107.0		13.0	10.0	97.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		73.0		37.0	15.0	53.0
Max Q Clear Time (g_c+I1), s		7.4		7.3	2.9	8.2
Green Ext Time (p_c), s		11.9		0.7	0.1	7.6

Intersection Summary		
HCM 6th Ctrl Delay	7.5	
HCM 6th LOS	A	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	293	388	43	135	90	18	1253	105	447	96
Future Volume (vph)	293	388	43	135	90	18	1253	105	447	96
Turn Type	Prot	NA	Prot	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8	2		6		6
Detector Phase	7	4	3	8	8	5	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	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	22.0	35.0	14.0	27.0	27.0	14.0	52.0	19.0	57.0	57.0
Total Split (%)	18.3%	29.2%	11.7%	22.5%	22.5%	11.7%	43.3%	15.8%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	15.4	20.7	7.9	13.2	13.2	68.0	61.9	74.4	65.3	65.3
Actuated g/C Ratio	0.13	0.17	0.07	0.11	0.11	0.57	0.52	0.62	0.54	0.54
v/c Ratio	0.73	0.73	0.41	0.38	0.32	0.04	0.84	0.57	0.25	0.11
Control Delay	60.4	53.8	64.2	51.6	3.8	10.3	31.7	43.3	21.4	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.4	53.8	64.2	51.6	3.8	10.3	31.7	43.3	21.4	5.9
LOS	E	D	E	D	A	B	C	D	C	A
Approach Delay		56.5		37.6			31.4		22.6	
Approach LOS		E		D			C		C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.84		
Intersection Signal Delay: 35.9	Intersection LOS: D	
Intersection Capacity Utilization 76.8%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 2: Unser Bd. & Central Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	293	388	18	43	135	90	18	1253	132	105	447	96
Future Volume (veh/h)	293	388	18	43	135	90	18	1253	132	105	447	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	318	422	20	47	147	0	20	1362	143	114	486	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	381	528	25	76	302		669	1909	199	238	2097	
Arrive On Green	0.11	0.15	0.15	0.04	0.09	0.00	0.04	0.59	0.59	0.09	1.00	0.00
Sat Flow, veh/h	3428	3427	162	1767	3526	1572	1767	3221	336	1767	3526	1572
Grp Volume(v), veh/h	318	217	225	47	147	0	20	742	763	114	486	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1826	1767	1763	1572	1767	1763	1795	1767	1763	1572
Q Serve(g_s), s	10.9	14.2	14.3	3.1	4.8	0.0	0.5	35.5	36.1	3.1	0.0	0.0
Cycle Q Clear(g_c), s	10.9	14.2	14.3	3.1	4.8	0.0	0.5	35.5	36.1	3.1	0.0	0.0
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	381	271	281	76	302		669	1045	1064	238	2097	
V/C Ratio(X)	0.83	0.80	0.80	0.62	0.49		0.03	0.71	0.72	0.48	0.23	
Avail Cap(c_a), veh/h	486	441	457	133	646		727	1045	1064	367	2097	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.96	0.96	0.00
Uniform Delay (d), s/veh	52.2	49.0	49.0	56.5	52.3	0.0	8.1	17.2	17.3	15.7	0.0	0.0
Incr Delay (d2), s/veh	9.6	5.3	5.3	7.9	1.2	0.0	0.0	4.1	4.2	1.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.9	10.9	11.2	2.8	3.9	0.0	0.3	21.2	21.8	2.2	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.9	54.3	54.3	64.4	53.5	0.0	8.1	21.3	21.5	17.1	0.2	0.0
LnGrp LOS	E	D	D	E	D		A	C	C	B	A	
Approach Vol, veh/h		760			194	A		1525			600	A
Approach Delay, s/veh		57.5			56.2			21.2			3.5	
Approach LOS		E			E			C			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	76.1	10.2	23.5	10.0	76.4	18.3	15.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	14.0	47.0	9.0	30.0	9.0	52.0	17.0	22.0
Max Q Clear Time (g_c+I1), s	5.1	38.1	5.1	16.3	2.5	2.0	12.9	6.8
Green Ext Time (p_c), s	0.2	6.2	0.0	2.2	0.0	3.7	0.4	0.7

Intersection Summary		
HCM 6th Ctrl Delay	28.9	
HCM 6th LOS	C	

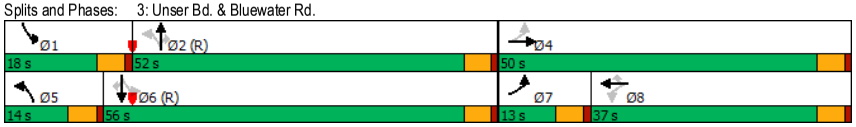
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	98	43	29	19	48	21	1412	80	108	641	53
Future Volume (vph)	98	43	29	19	48	21	1412	80	108	641	53
Turn Type	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	8	8	8	5	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	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	13.0	50.0	37.0	37.0	37.0	14.0	52.0	52.0	18.0	56.0	56.0
Total Split (%)	10.8%	41.7%	30.8%	30.8%	30.8%	11.7%	43.3%	43.3%	15.0%	46.7%	46.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	21.5	21.5	8.6	8.6	8.6	79.7	73.8	73.8	86.6	77.5	77.5
Actuated g/C Ratio	0.18	0.18	0.07	0.07	0.07	0.66	0.62	0.62	0.72	0.65	0.65
v/c Ratio	0.51	0.27	0.35	0.16	0.25	0.05	0.73	0.09	0.50	0.31	0.06
Control Delay	51.3	25.0	62.6	53.6	2.8	6.0	32.6	5.8	27.2	11.7	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	25.0	62.6	53.6	2.8	6.0	32.6	5.8	27.2	11.7	3.0
LOS	D	C	E	D	A	A	C	A	C	B	A
Approach Delay		39.2		30.9			30.8			13.2	
Approach LOS		D		C			C			B	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 99.6 (83%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 26.0		Intersection LOS: C	
Intersection Capacity Utilization 69.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Unser Bd. & Bluewater Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	43	40	29	19	48	21	1412	80	108	641	53
Future Volume (veh/h)	98	43	40	29	19	48	21	1412	80	108	641	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	109	48	44	32	21	53	23	1569	0	120	712	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	233	143	131	128	97	83	626	2371		267	2371	
Arrive On Green	0.07	0.16	0.16	0.05	0.05	0.05	0.04	0.67	0.00	0.08	1.00	0.00
Sat Flow, veh/h	1767	891	817	1294	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	109	0	92	32	21	53	23	1569	0	120	712	0
Grp Sat Flow(s),veh/h/ln	1767	0	1708	1294	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.8	0.0	5.7	2.9	1.3	4.0	0.5	31.5	0.0	2.6	0.0	0.0
Cycle Q Clear(g_c), s	6.8	0.0	5.7	2.9	1.3	4.0	0.5	31.5	0.0	2.6	0.0	0.0
Prop In Lane	1.00		0.48	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	0	275	128	97	83	626	2371		267	2371	
V/C Ratio(X)	0.47	0.00	0.33	0.25	0.22	0.64	0.04	0.66		0.45	0.30	
Avail Cap(c_a), veh/h	233	0	641	405	495	419	685	2371		385	2371	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.51	0.51	0.00	0.84	0.84	0.00
Uniform Delay (d), s/veh	47.8	0.0	44.7	55.2	54.5	55.7	5.0	11.6	0.0	11.2	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.7	1.0	1.1	8.1	0.0	0.8	0.0	1.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.6	0.0	4.5	1.8	1.2	3.2	0.3	15.6	0.0	2.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.3	0.0	45.4	56.2	55.6	63.8	5.0	12.3	0.0	12.2	0.3	0.0
LnGrp LOS	D	A	D	E	E	E	A	B		B	A	
Approach Vol, veh/h		201			106			1592	A		832	A
Approach Delay, s/veh		47.5			59.9			12.2			2.0	
Approach LOS		D			E			B			A	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	85.7		24.3	10.0	85.7	13.0	11.3				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	13.0	47.0		45.0	9.0	51.0	8.0	32.0				
Max Q Clear Time (g_c+I1), s	4.6	33.5		7.7	2.5	2.0	8.8	6.0				
Green Ext Time (p_c), s	0.2	9.2		0.5	0.0	5.9	0.0	0.3				

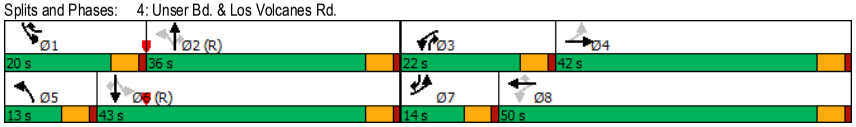
Intersection Summary		
HCM 6th Ctrl Delay	13.6	
HCM 6th LOS	B	

Notes
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	286	82	91	77	199	30	1651	228	316	784	110
Future Volume (vph)	286	82	91	77	199	30	1651	228	316	784	110
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	42.0	22.0	50.0	20.0	13.0	36.0	22.0	20.0	43.0	14.0
Total Split (%)	11.7%	35.0%	18.3%	41.7%	16.7%	10.8%	30.0%	18.3%	16.7%	35.8%	11.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	22.4	13.4	28.5	16.7	63.3	39.2	32.7	50.0	79.3	67.7	81.7
Actuated g/C Ratio	0.19	0.11	0.24	0.14	0.53	0.33	0.27	0.42	0.66	0.56	0.68
v/c Ratio	0.72	0.61	0.43	0.40	0.31	0.17	1.61	0.41	0.63	0.53	0.13
Control Delay	47.2	59.6	41.1	52.8	13.0	14.9	303.7	4.3	28.7	18.7	3.2
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	47.2	59.6	41.1	52.8	13.0	14.9	303.7	4.3	28.7	18.7	3.2
LOS	D	E	D	D	B	B	F	A	C	B	A
Approach Delay		50.3		28.3			263.4			19.9	
Approach LOS		D		C			F			B	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.61		
Intersection Signal Delay: 143.9	Intersection LOS: F	
Intersection Capacity Utilization 76.7%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	286	82	13	91	77	199	30	1651	228	316	784	110
Future Volume (veh/h)	286	82	13	91	77	199	30	1651	228	316	784	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	381	109	17	121	103	265	40	2201	0	421	1045	147
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	617	271	42	330	319	467	298	2339		292	1921	975
Arrive On Green	0.08	0.17	0.17	0.07	0.17	0.17	0.06	0.61	0.00	0.13	0.54	0.54
Sat Flow, veh/h	3428	1567	244	1767	1856	1572	1767	5066	1572	1767	3526	1572
Grp Volume(v), veh/h	381	0	126	121	103	265	40	2201	0	421	1045	147
Grp Sat Flow(s),veh/h/ln	1714	0	1812	1767	1856	1572	1767	1689	1572	1767	1763	1572
Q Serve(g_s), s	9.0	0.0	7.4	6.7	5.8	17.1	1.4	47.7	0.0	15.0	23.0	4.7
Cycle Q Clear(g_c), s	9.0	0.0	7.4	6.7	5.8	17.1	1.4	47.7	0.0	15.0	23.0	4.7
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	617	0	314	330	319	467	298	2339		292	1921	975
V/C Ratio(X)	0.62	0.00	0.40	0.37	0.32	0.57	0.13	0.94		1.44	0.54	0.15
Avail Cap(c_a), veh/h	617	0	559	450	696	786	342	2339		292	1921	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.99	0.99	0.99	0.65	0.65	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	0.0	44.1	36.9	43.6	35.7	15.7	21.7	0.0	38.9	17.7	9.6
Incr Delay (d2), s/veh	1.9	0.0	0.8	0.7	0.6	1.1	0.1	6.4	0.0	216.8	1.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	6.1	5.3	4.9	10.9	1.0	22.6	0.0	40.0	14.5	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.6	0.0	44.9	37.6	44.2	36.8	15.8	28.1	0.0	255.8	18.8	9.9
LnGrp LOS	D	A	D	D	D	D	B	C		F	B	A
Approach Vol, veh/h		507			489			2241	A		1613	
Approach Delay, s/veh		42.4			38.5			27.9			79.8	
Approach LOS		D			D			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	60.4	13.8	25.8	10.0	70.4	14.0	25.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	31.0	17.0	37.0	8.0	38.0	9.0	45.0
Max Q Clear Time (g_c+I1), s	17.0	49.7	8.7	9.4	3.4	25.0	11.0	19.1
Green Ext Time (p_c), s	0.0	0.0	0.2	0.7	0.0	6.5	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	47.8
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	351	1	18	701	1686
Future Volume (vph)	351	1	18	701	1686
Turn Type	Perm	NA	pm+pt	NA	NA
Protected Phases		8	5	2	6
Permitted Phases	8		2		
Detector Phase	8	8	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0
Total Split (s)	38.0	38.0	15.0	92.0	77.0
Total Split (%)	29.2%	29.2%	11.5%	70.8%	59.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	20.4	20.4	99.6	99.6	88.7
Actuated g/C Ratio	0.16	0.16	0.77	0.77	0.68
v/c Ratio	0.73	0.73	0.11	0.28	0.56
Control Delay	67.8	67.9	6.0	5.3	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	67.8	67.9	6.0	5.3	12.0
LOS	E	E	A	A	B
Approach Delay		67.8		5.3	12.0
Approach LOS		E		A	B

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 13 (10%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.73		
Intersection Signal Delay: 17.3	Intersection LOS: B	
Intersection Capacity Utilization 63.9%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 5: Unser Bd. & I-40 N. Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	351	1	0	18	701	0	0	1686	67
Future Volume (veh/h)	0	0	0	351	1	0	18	701	0	0	1686	67
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	0	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				383	0	0	20	762	0	0	1833	73
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	0	3	3	0	0	3	3
Cap, veh/h				462	243	0	252	2793	0	0	3576	142
Arrive On Green				0.13	0.00	0.00	0.04	0.79	0.00	0.00	0.72	0.72
Sat Flow, veh/h				3534	1856	0	1767	3618	0	0	5165	199
Grp Volume(v), veh/h				383	0	0	20	762	0	0	1238	668
Grp Sat Flow(s),veh/h/ln				1767	1856	0	1767	1763	0	0	1689	1820
Q Serve(g_s), s				13.7	0.0	0.0	0.3	7.4	0.0	0.0	21.4	21.5
Cycle Q Clear(g_c), s				13.7	0.0	0.0	0.3	7.4	0.0	0.0	21.4	21.5
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.11
Lane Grp Cap(c), veh/h				462	243	0	252	2793	0	0	2416	1302
V/C Ratio(X)				0.83	0.00	0.00	0.08	0.27	0.00	0.00	0.51	0.51
Avail Cap(c_a), veh/h				897	471	0	320	2793	0	0	2416	1302
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.1	0.0	0.0	5.8	3.6	0.0	0.0	8.3	8.3
Incr Delay (d2), s/veh				3.9	0.0	0.0	0.1	0.2	0.0	0.0	0.8	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				10.5	0.0	0.0	0.2	4.2	0.0	0.0	11.9	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				59.0	0.0	0.0	5.9	3.8	0.0	0.0	9.1	9.8
LnGrp LOS				E	A	A	A	A	A	A	A	A
Approach Vol, veh/h					383			782			1906	
Approach Delay, s/veh					59.0			3.9			9.3	
Approach LOS					E			A			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		108.0			10.0	98.0		22.0				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		87.0			10.0	72.0		33.0				
Max Q Clear Time (g_c+I1), s		9.4			2.3	23.5		15.7				
Green Ext Time (p_c), s		6.5			0.0	23.2		1.3				

Intersection Summary		
HCM 6th Ctrl Delay	14.1	
HCM 6th LOS	B	

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	0	32	0	0	0	0	692	871	0	1026	0
Future Vol, veh/h	54	0	32	0	0	0	0	692	871	0	1026	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	280	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	59	0	35	0	0	0	0	760	957	0	1127	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1507	-	-	-	0	0	-	-	0
Stage 1	1127	-	-	-	-	-	-	-	-
Stage 2	380	-	-	-	-	-	-	-	-
Critical Hdwy	6.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	-	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	*186	0	0	0	-	-	0	-	0
Stage 1	*269	0	0	0	-	-	0	-	0
Stage 2	*742	0	0	0	-	-	0	-	0
Platoon blocked, %	1				-	-		-	
Mov Cap-1 Maneuver	*186	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	*186	0	-	-	-	-	-	-	-
Stage 1	*269	0	-	-	-	-	-	-	-
Stage 2	*742	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	33.2	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	-	186	-	-
HCM Lane V/C Ratio	-	-	0.319	-	-
HCM Control Delay (s)	-	-	33.2	0	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	1.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	156	55	76	1080	718
Future Volume (vph)	156	55	76	1080	718
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	2		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	10.0	21.0	21.0
Total Split (s)	42.0	20.0	20.0	78.0	58.0
Total Split (%)	35.0%	16.7%	16.7%	65.0%	48.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	11.4	23.0	98.6	98.6	87.0
Actuated g/C Ratio	0.10	0.19	0.82	0.82	0.72
v/c Ratio	0.53	0.17	0.18	0.28	0.26
Control Delay	68.5	14.9	3.1	2.8	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	68.5	14.9	3.1	2.8	5.7
LOS	E	B	A	A	A
Approach Delay	54.5			2.8	5.7
Approach LOS	D			A	A

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 37.8 (32%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 55		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.53		
Intersection Signal Delay: 8.8	Intersection LOS: A	
Intersection Capacity Utilization 38.3%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 1: Coors Bd. & Los Volcanes Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	156	55	76	1080	718	145
Future Volume (veh/h)	156	55	76	1080	718	145
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	170	60	83	1174	780	158
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	245	178	553	4281	3222	647
Arrive On Green	0.07	0.07	0.04	0.85	0.76	0.76
Sat Flow, veh/h	3428	1572	1767	5233	4397	850
Grp Volume(v), veh/h	170	60	83	1174	621	317
Grp Sat Flow(s),veh/h/ln	1714	1572	1767	1689	1689	1703
Q Serve(g_s), s	5.8	4.2	1.1	5.6	6.4	6.5
Cycle Q Clear(g_c), s	5.8	4.2	1.1	5.6	6.4	6.5
Prop In Lane	1.00	1.00	1.00			0.50
Lane Grp Cap(c), veh/h	245	178	553	4281	2573	1297
V/C Ratio(X)	0.69	0.34	0.15	0.27	0.24	0.24
Avail Cap(c_a), veh/h	1057	550	700	4281	2573	1297
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	49.1	2.4	1.9	4.2	4.2
Incr Delay (d2), s/veh	3.5	1.1	0.1	0.2	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	3.8	0.3	1.2	2.0	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.9	50.2	2.5	2.0	4.4	4.6
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	230			1257	938	
Approach Delay, s/veh	55.9			2.1	4.5	
Approach LOS	E			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		106.4		13.6	10.0	96.4
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		73.0		37.0	15.0	53.0
Max Q Clear Time (g_c+I1), s		7.6		7.8	3.1	8.5
Green Ext Time (p_c), s		11.9		0.8	0.1	7.8

Intersection Summary		
HCM 6th Ctrl Delay	8.1	
HCM 6th LOS	A	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	312	388	43	135	102	18	1273	116	466	114
Future Volume (vph)	312	388	43	135	102	18	1273	116	466	114
Turn Type	Prot	NA	Prot	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8	2		6		6
Detector Phase	7	4	3	8	8	5	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	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	22.0	35.0	14.0	27.0	27.0	14.0	52.0	19.0	57.0	57.0
Total Split (%)	18.3%	29.2%	11.7%	22.5%	22.5%	11.7%	43.3%	15.8%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	15.8	20.7	7.9	12.8	12.8	67.4	61.3	74.8	65.3	65.3
Actuated g/C Ratio	0.13	0.17	0.07	0.11	0.11	0.56	0.51	0.62	0.54	0.54
v/c Ratio	0.76	0.73	0.41	0.39	0.36	0.04	0.86	0.61	0.27	0.13
Control Delay	61.7	53.8	64.2	52.1	5.7	10.4	33.3	47.5	20.1	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.7	53.8	64.2	52.1	5.7	10.4	33.3	47.5	20.1	6.2
LOS	E	D	E	D	A	B	C	D	C	A
Approach Delay		57.2		37.1			33.0		22.3	
Approach LOS		E		D			C		C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 36.6		Intersection LOS: D	
Intersection Capacity Utilization 78.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Unser Bd. & Central Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	312	388	18	43	135	102	18	1273	132	116	466	114
Future Volume (veh/h)	312	388	18	43	135	102	18	1273	132	116	466	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	339	422	20	47	147	0	20	1384	143	126	507	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	401	528	25	76	282		655	1902	195	237	2097	
Arrive On Green	0.12	0.15	0.15	0.04	0.08	0.00	0.04	0.59	0.59	0.09	1.00	0.00
Sat Flow, veh/h	3428	3427	162	1767	3526	1572	1767	3227	332	1767	3526	1572
Grp Volume(v), veh/h	339	217	225	47	147	0	20	752	775	126	507	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1826	1767	1763	1572	1767	1763	1796	1767	1763	1572
Q Serve(g_s), s	11.6	14.2	14.3	3.1	4.8	0.0	0.5	36.7	37.4	3.4	0.0	0.0
Cycle Q Clear(g_c), s	11.6	14.2	14.3	3.1	4.8	0.0	0.5	36.7	37.4	3.4	0.0	0.0
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	401	271	281	76	282		655	1039	1059	237	2097	
V/C Ratio(X)	0.85	0.80	0.80	0.62	0.52		0.03	0.72	0.73	0.53	0.24	
Avail Cap(c_a), veh/h	486	441	457	133	646		714	1039	1059	360	2097	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.95	0.95	0.00
Uniform Delay (d), s/veh	51.9	49.0	49.0	56.5	53.0	0.0	8.3	17.6	17.8	16.7	0.0	0.0
Incr Delay (d2), s/veh	11.1	5.3	5.3	7.9	1.5	0.0	0.0	4.4	4.5	1.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	6.7	6.9	1.6	2.2	0.0	0.2	15.4	16.0	1.5	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.0	54.3	54.3	64.4	54.5	0.0	8.3	22.0	22.3	18.5	0.3	0.0
LnGrp LOS	E	D	D	E	D		A	C	C	B	A	
Approach Vol, veh/h		781			194	A		1547			633	A
Approach Delay, s/veh		58.1			56.9			22.0			3.9	
Approach LOS		E			E			C			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	75.7	10.2	23.5	10.0	76.4	19.0	14.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	14.0	47.0	9.0	30.0	9.0	52.0	17.0	22.0
Max Q Clear Time (g_c+I1), s	5.4	39.4	5.1	16.3	2.5	2.0	13.6	6.8
Green Ext Time (p_c), s	0.2	5.6	0.0	2.2	0.0	3.9	0.4	0.7

Intersection Summary		
HCM 6th Ctrl Delay	29.4	
HCM 6th LOS	C	

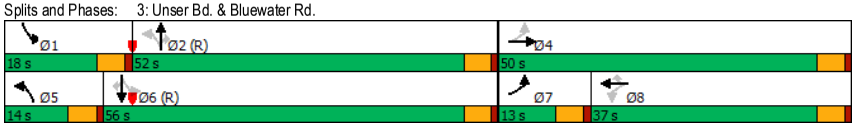
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	115	43	29	19	55	21	1462	80	115	689	69
Future Volume (vph)	115	43	29	19	55	21	1462	80	115	689	69
Turn Type	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	8	8	8	5	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	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	13.0	50.0	37.0	37.0	37.0	14.0	52.0	52.0	18.0	56.0	56.0
Total Split (%)	10.8%	41.7%	30.8%	30.8%	30.8%	11.7%	43.3%	43.3%	15.0%	46.7%	46.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	21.6	21.6	8.6	8.6	8.6	79.3	73.3	73.3	86.8	77.5	77.5
Actuated g/C Ratio	0.18	0.18	0.07	0.07	0.07	0.66	0.61	0.61	0.72	0.65	0.65
v/c Ratio	0.60	0.27	0.35	0.16	0.29	0.05	0.76	0.09	0.55	0.34	0.07
Control Delay	55.4	25.0	62.6	53.6	4.5	5.8	33.3	5.6	28.2	12.0	3.7
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	55.4	25.0	62.6	53.6	4.5	5.8	33.3	5.6	28.2	12.0	3.7
LOS	E	C	E	D	A	A	C	A	C	B	A
Approach Delay		42.7		29.8			31.5			13.4	
Approach LOS		D		C			C			B	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 99.6 (83%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 26.5		Intersection LOS: C	
Intersection Capacity Utilization 72.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Unser Bd. & Bluewater Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	43	40	29	19	55	21	1462	80	115	689	69
Future Volume (veh/h)	115	43	40	29	19	55	21	1462	80	115	689	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	128	48	44	32	21	61	23	1624	0	128	766	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	239	148	136	135	107	91	598	2352		252	2353	
Arrive On Green	0.07	0.17	0.17	0.06	0.06	0.06	0.04	0.67	0.00	0.08	1.00	0.00
Sat Flow, veh/h	1767	891	817	1294	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	128	0	92	32	21	61	23	1624	0	128	766	0
Grp Sat Flow(s),veh/h/ln	1767	0	1708	1294	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	8.0	0.0	5.7	2.9	1.3	4.6	0.5	34.1	0.0	2.8	0.0	0.0
Cycle Q Clear(g_c), s	8.0	0.0	5.7	2.9	1.3	4.6	0.5	34.1	0.0	2.8	0.0	0.0
Prop In Lane	1.00		0.48	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	0	284	135	107	91	598	2352		252	2353	
V/C Ratio(X)	0.54	0.00	0.32	0.24	0.20	0.67	0.04	0.69		0.51	0.33	
Avail Cap(c_a), veh/h	239	0	641	405	495	419	657	2352		369	2353	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.47	0.47	0.00	0.80	0.80	0.00
Uniform Delay (d), s/veh	47.8	0.0	44.1	54.6	53.9	55.4	5.2	12.3	0.0	12.9	0.0	0.0
Incr Delay (d2), s/veh	2.3	0.0	0.7	0.9	0.9	8.3	0.0	0.8	0.0	1.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	2.5	1.0	0.6	2.0	0.2	12.6	0.0	1.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	0.0	44.8	55.5	54.8	63.8	5.2	13.1	0.0	14.2	0.3	0.0
LnGrp LOS	D	A	D	E	D	E	A	B		B	A	
Approach Vol, veh/h		220			114			1647	A		894	A
Approach Delay, s/veh		47.9			59.8			13.0			2.3	
Approach LOS		D			E			B			A	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	85.1		24.9	10.0	85.1	13.0	11.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	13.0	47.0		45.0	9.0	51.0	8.0	32.0				
Max Q Clear Time (g_c+I1), s	4.8	36.1		7.7	2.5	2.0	10.0	6.6				
Green Ext Time (p_c), s	0.2	8.0		0.5	0.0	6.5	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay	14.2	
HCM 6th LOS	B	

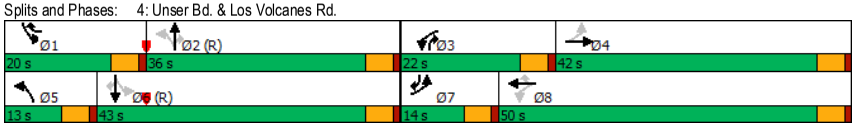
Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	286	84	162	79	239	30	1651	302	358	784	110
Future Volume (vph)	286	84	162	79	239	30	1651	302	358	784	110
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	42.0	22.0	50.0	20.0	13.0	36.0	22.0	20.0	43.0	14.0
Total Split (%)	11.7%	35.0%	18.3%	41.7%	16.7%	10.8%	30.0%	18.3%	16.7%	35.8%	11.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	22.5	13.5	33.9	20.3	65.0	37.6	31.0	51.8	75.7	64.1	78.1
Actuated g/C Ratio	0.19	0.11	0.28	0.17	0.54	0.31	0.26	0.43	0.63	0.53	0.65
v/c Ratio	0.72	0.62	0.64	0.34	0.36	0.18	1.69	0.50	0.74	0.56	0.14
Control Delay	44.7	60.0	45.9	48.4	13.7	16.1	342.3	5.2	35.3	21.1	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.7	60.0	45.9	48.4	13.7	16.1	342.3	5.2	35.3	21.1	3.5
LOS	D	E	D	D	B	B	F	A	D	C	A
Approach Delay		48.6		30.2			286.0			23.6	
Approach LOS		D		C			F			C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 110		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.69		
Intersection Signal Delay: 153.7	Intersection LOS: F	
Intersection Capacity Utilization 79.9%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	286	84	13	162	79	239	30	1651	302	358	784	110
Future Volume (veh/h)	286	84	13	162	79	239	30	1651	302	358	784	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	381	112	17	216	105	319	40	2201	0	477	1045	147
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	663	252	38	386	375	514	278	2185		281	1814	927
Arrive On Green	0.08	0.16	0.16	0.12	0.20	0.20	0.06	0.57	0.00	0.13	0.51	0.51
Sat Flow, veh/h	3428	1574	239	1767	1856	1572	1767	5066	1572	1767	3526	1572
Grp Volume(v), veh/h	381	0	129	216	105	319	40	2201	0	477	1045	147
Grp Sat Flow(s),veh/h/ln	1714	0	1813	1767	1856	1572	1767	1689	1572	1767	1763	1572
Q Serve(g_s), s	9.0	0.0	7.7	11.8	5.7	20.6	1.5	51.8	0.0	15.0	24.5	5.1
Cycle Q Clear(g_c), s	9.0	0.0	7.7	11.8	5.7	20.6	1.5	51.8	0.0	15.0	24.5	5.1
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	663	0	291	386	375	514	278	2185		281	1814	927
V/C Ratio(X)	0.57	0.00	0.44	0.56	0.28	0.62	0.14	1.01		1.70	0.58	0.16
Avail Cap(c_a), veh/h	663	0	559	431	696	786	322	2185		281	1814	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.61	0.61	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	0.0	45.5	34.6	40.5	34.1	17.8	25.6	0.0	40.0	20.1	11.1
Incr Delay (d2), s/veh	1.2	0.0	1.1	1.3	0.4	1.2	0.1	16.8	0.0	329.0	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	3.6	5.2	2.7	8.0	0.6	21.1	0.0	34.1	10.2	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	0.0	46.6	35.9	40.9	35.3	17.9	42.4	0.0	369.0	21.4	11.5
LnGrp LOS	D	A	D	D	D	D	B	F		F	C	B
Approach Vol, veh/h		510			640			2241	A		1669	
Approach Delay, s/veh		42.5			36.4			42.0			119.9	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	56.8	19.0	24.3	10.0	66.8	14.0	29.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	31.0	17.0	37.0	8.0	38.0	9.0	45.0
Max Q Clear Time (g_c+I1), s	17.0	53.8	13.8	9.7	3.5	26.5	11.0	22.6
Green Ext Time (p_c), s	0.0	0.0	0.2	0.7	0.0	6.0	0.0	1.7

Intersection Summary		
HCM 6th Ctrl Delay		67.0
HCM 6th LOS		E

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	286	84	162	79	239	30	1651	302	358	784	110
Future Volume (vph)	286	84	162	79	239	30	1651	302	358	784	110
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2			6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	21.0	14.0	21.0	23.0	10.0	62.0	14.0	23.0	75.0	14.0
Total Split (%)	11.7%	17.5%	11.7%	17.5%	19.2%	8.3%	51.7%	11.7%	19.2%	62.5%	11.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	22.0	13.0	22.0	13.0	37.4	64.2	58.6	72.6	19.5	72.4	86.4
Actuated g/C Ratio	0.18	0.11	0.18	0.11	0.31	0.54	0.49	0.60	0.16	0.60	0.72
v/c Ratio	0.78	0.65	0.94	0.53	0.60	0.12	0.90	0.39	0.87	0.49	0.13
Control Delay	53.9	64.0	92.1	64.6	31.2	5.9	24.8	2.0	66.0	14.8	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.9	64.0	92.1	64.6	31.2	5.9	24.8	2.0	66.0	14.8	1.1
LOS	D	E	F	E	C	A	C	A	E	B	A
Approach Delay		56.4		57.2			21.0			28.2	
Approach LOS		E		E			C			C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.94		
Intersection Signal Delay: 30.8	Intersection LOS: C	
Intersection Capacity Utilization 70.3%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	286	84	13	162	79	239	30	1651	302	358	784	110
Future Volume (veh/h)	286	84	13	162	79	239	30	1651	302	358	784	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	381	112	17	216	105	319	40	2201	0	477	1045	147
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	528	210	32	276	247	446	324	2406		514	2057	1035
Arrive On Green	0.08	0.13	0.13	0.08	0.13	0.13	0.08	0.95	0.00	0.15	0.58	0.58
Sat Flow, veh/h	3428	1574	239	1767	1856	1572	1767	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	381	0	129	216	105	319	40	2201	0	477	1045	147
Grp Sat Flow(s),veh/h/ln	1714	0	1813	1767	1856	1572	1767	1689	1572	1714	1763	1572
Q Serve(g_s), s	9.0	0.0	8.0	9.0	6.2	16.0	1.3	19.9	0.0	16.5	21.1	4.2
Cycle Q Clear(g_c), s	9.0	0.0	8.0	9.0	6.2	16.0	1.3	19.9	0.0	16.5	21.1	4.2
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	528	0	242	276	247	446	324	2406		514	2057	1035
V/C Ratio(X)	0.72	0.00	0.53	0.78	0.42	0.72	0.12	0.91		0.93	0.51	0.14
Avail Cap(c_a), veh/h	528	0	242	276	247	446	324	2406		514	2057	1035
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.61	0.61	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	0.0	48.5	45.9	47.8	38.7	14.0	2.1	0.0	50.4	14.8	7.7
Incr Delay (d2), s/veh	4.8	0.0	2.3	13.5	1.2	5.4	0.1	4.4	0.0	23.2	0.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	3.8	3.1	3.0	9.1	0.5	2.0	0.0	8.7	8.4	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	0.0	50.8	59.4	48.9	44.1	14.1	6.5	0.0	73.6	15.7	8.0
LnGrp LOS	D	A	D	E	D	D	B	A		E	B	A
Approach Vol, veh/h		510			640			2241	A		1669	
Approach Delay, s/veh		49.5			50.0			6.6			31.6	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	62.0	14.0	21.0	10.0	75.0	14.0	21.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	18.0	57.0	9.0	16.0	5.0	70.0	9.0	16.0
Max Q Clear Time (g_c+I1), s	18.5	21.9	11.0	10.0	3.3	23.1	11.0	18.0
Green Ext Time (p_c), s	0.0	24.7	0.0	0.3	0.0	10.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	362	1	27	728	1714
Future Volume (vph)	362	1	27	728	1714
Turn Type	Perm	NA	pm+pt	NA	NA
Protected Phases		8	5	2	6
Permitted Phases	8		2		
Detector Phase	8	8	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0
Total Split (s)	38.0	38.0	15.0	92.0	77.0
Total Split (%)	29.2%	29.2%	11.5%	70.8%	59.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	21.0	21.0	99.0	99.0	87.9
Actuated g/C Ratio	0.16	0.16	0.76	0.76	0.68
v/c Ratio	0.73	0.73	0.16	0.30	0.57
Control Delay	66.7	67.1	6.9	5.6	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	66.7	67.1	6.9	5.6	12.6
LOS	E	E	A	A	B
Approach Delay		66.9		5.7	12.6
Approach LOS		E		A	B

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 13 (10%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.73		
Intersection Signal Delay: 17.6	Intersection LOS: B	
Intersection Capacity Utilization 53.0%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 5: Unser Bd. & I-40 N. Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	362	1	0	27	728	0	0	1714	67
Future Volume (veh/h)	0	0	0	362	1	0	27	728	0	0	1714	67
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	0	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				394	0	0	29	791	0	0	1863	73
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	0	3	3	0	0	3	3
Cap, veh/h				474	249	0	246	2782	0	0	3562	139
Arrive On Green				0.13	0.00	0.00	0.04	0.79	0.00	0.00	0.71	0.71
Sat Flow, veh/h				3534	1856	0	1767	3618	0	0	5169	196
Grp Volume(v), veh/h				394	0	0	29	791	0	0	1257	679
Grp Sat Flow(s),veh/h/ln				1767	1856	0	1767	1763	0	0	1689	1820
Q Serve(g_s), s				14.1	0.0	0.0	0.5	7.9	0.0	0.0	22.2	22.3
Cycle Q Clear(g_c), s				14.1	0.0	0.0	0.5	7.9	0.0	0.0	22.2	22.3
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.11
Lane Grp Cap(c), veh/h				474	249	0	246	2782	0	0	2405	1296
V/C Ratio(X)				0.83	0.00	0.00	0.12	0.28	0.00	0.00	0.52	0.52
Avail Cap(c_a), veh/h				897	471	0	314	2782	0	0	2405	1296
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				54.9	0.0	0.0	6.2	3.7	0.0	0.0	8.6	8.6
Incr Delay (d2), s/veh				3.9	0.0	0.0	0.2	0.3	0.0	0.0	0.8	1.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.5	0.0	0.0	0.2	2.5	0.0	0.0	7.8	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				58.7	0.0	0.0	6.4	4.0	0.0	0.0	9.4	10.1
LnGrp LOS				E	A	A	A	A	A	A	A	B
Approach Vol, veh/h					394			820			1936	
Approach Delay, s/veh					58.7			4.1			9.6	
Approach LOS					E			A			A	

Timer - Assigned Phs	2			5	6		8					
Phs Duration (G+Y+Rc), s	107.6			10.0	97.6		22.4					
Change Period (Y+Rc), s	5.0			5.0	5.0		5.0					
Max Green Setting (Gmax), s	87.0			10.0	72.0		33.0					
Max Q Clear Time (g_c+I1), s	9.9			2.5	24.3		16.1					
Green Ext Time (p_c), s	6.9			0.0	23.7		1.3					

Intersection Summary		
HCM 6th Ctrl Delay	14.3	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	0	41	0	0	0	0	727	0	0	1059	0
Future Vol, veh/h	54	0	41	0	0	0	0	727	0	0	1059	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	280	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	59	0	45	0	0	0	0	799	0	0	1164	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1564	-	-	-	0	0	-	-	0
Stage 1	1164	-	-	-	-	-	-	-	-
Stage 2	400	-	-	-	-	-	-	-	-
Critical Hdwy	6.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	-	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	*166	0	0	0	-	-	0	-	0
Stage 1	*257	0	0	0	-	-	0	-	0
Stage 2	*742	0	0	0	-	-	0	-	0
Platoon blocked, %	1				-	-		-	
Mov Cap-1 Maneuver	*166	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	*166	0	-	-	-	-	-	-	-
Stage 1	*257	0	-	-	-	-	-	-	-
Stage 2	*742	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	38.3	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	-	166	-	-
HCM Lane V/C Ratio	-	-	0.357	-	-
HCM Control Delay (s)	-	-	38.3	0	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	1.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	605	53	22	382	22	8
Future Vol, veh/h	605	53	22	382	22	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	807	71	29	509	29	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	878	0	1410	843
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	567	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	765	-	152	362
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	566	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	765	-	144	362
Mov Cap-2 Maneuver	-	-	-	-	279	-
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	536	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	297	-	-	765	-
HCM Lane V/C Ratio	0.135	-	-	0.038	-
HCM Control Delay (s)	19	-	-	9.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	639	105	25	379	100	24
Future Vol, veh/h	639	105	25	379	100	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	852	140	33	505	133	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	992	0	1493	922
Stage 1	-	-	-	-	922	-
Stage 2	-	-	-	-	571	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	693	-	135	326
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	563	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	693	-	~ 126	326
Mov Cap-2 Maneuver	-	-	-	-	259	-
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	526	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	37.3
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	270	-	-	693	-
HCM Lane V/C Ratio	0.612	-	-	0.048	-
HCM Control Delay (s)	37.3	-	-	10.5	0
HCM Lane LOS	E	-	-	B	A
HCM 95th %tile Q(veh)	3.7	-	-	0.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1	1	15	59	16
Future Vol, veh/h	15	1	1	15	59	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	1	1	20	79	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	112	90	100	0	-	0
Stage 1	90	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	882	965	1486	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	998	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	881	965	1486	-	-	-
Mov Cap-2 Maneuver	881	-	-	-	-	-
Stage 1	930	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1486	-	886	-	-
HCM Lane V/C Ratio	0.001	-	0.024	-	-
HCM Control Delay (s)	7.4	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	188	99	65	1169	1692
Future Volume (vph)	188	99	65	1169	1692
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	2		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	10.0	21.0	21.0
Total Split (s)	42.0	26.0	26.0	88.0	62.0
Total Split (%)	32.3%	20.0%	20.0%	67.7%	47.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	13.8	25.2	108.2	108.2	96.8
Actuated g/C Ratio	0.11	0.19	0.83	0.83	0.74
v/c Ratio	0.54	0.33	0.31	0.29	0.52
Control Delay	65.6	52.1	5.8	2.7	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	65.6	52.1	5.8	2.7	7.7
LOS	E	D	A	A	A
Approach Delay	60.9			2.9	7.7
Approach LOS	E			A	A

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 45.5 (35%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.54		
Intersection Signal Delay: 10.5	Intersection LOS: B	
Intersection Capacity Utilization 55.8%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 1: Coors Bd. & Los Volcanes Rd.

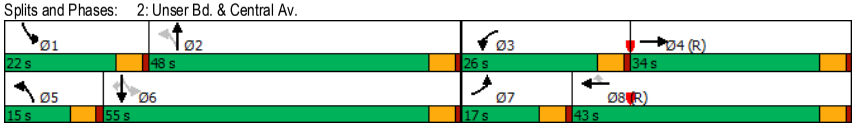
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	188	99	65	1169	1692	161
Future Volume (veh/h)	188	99	65	1169	1692	161
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	194	102	67	1205	1744	166
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	311	215	285	4294	3627	344
Arrive On Green	0.09	0.09	0.05	0.85	0.77	0.76
Sat Flow, veh/h	3428	1572	1767	5233	4873	447
Grp Volume(v), veh/h	194	102	67	1205	1250	660
Grp Sat Flow(s),veh/h/ln	1714	1572	1767	1689	1689	1775
Q Serve(g_s), s	7.1	7.8	0.9	6.2	17.5	17.7
Cycle Q Clear(g_c), s	7.1	7.8	0.9	6.2	17.5	17.7
Prop In Lane	1.00	1.00	1.00			0.25
Lane Grp Cap(c), veh/h	311	215	285	4294	2603	1368
V/C Ratio(X)	0.62	0.47	0.24	0.28	0.48	0.48
Avail Cap(c_a), veh/h	1002	532	502	4294	2603	1368
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	51.8	4.0	2.0	5.4	5.5
Incr Delay (d2), s/veh	1.9	1.5	0.4	0.2	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.7	11.1	0.5	2.6	9.5	10.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.8	53.3	4.4	2.1	6.1	6.7
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	296			1272	1910	
Approach Delay, s/veh	56.9			2.3	6.3	
Approach LOS	E			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		114.2		15.8	10.0	104.2
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		83.0		37.0	21.0	57.0
Max Q Clear Time (g_c+I1), s		8.2		9.8	2.9	19.7
Green Ext Time (p_c), s		12.5		1.0	0.1	20.6

Intersection Summary		
HCM 6th Ctrl Delay	9.1	
HCM 6th LOS	A	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	175	383	90	345	61	57	848	133	1065	145
Future Volume (vph)	175	383	90	345	61	57	848	133	1065	145
Turn Type	Prot	NA	Prot	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8	2		6		6
Detector Phase	7	4	3	8	8	5	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	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	17.0	34.0	26.0	43.0	43.0	15.0	48.0	22.0	55.0	55.0
Total Split (%)	13.1%	26.2%	20.0%	33.1%	33.1%	11.5%	36.9%	16.9%	42.3%	42.3%
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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	C-Min	Min	C-Min	C-Min	Min	Min	Min	Min	Min
Act Effct Green (s)	12.6	41.1	13.4	41.9	41.9	55.6	46.8	62.8	50.7	50.7
Actuated g/C Ratio	0.10	0.32	0.10	0.32	0.32	0.43	0.36	0.48	0.39	0.39
v/c Ratio	0.56	0.40	0.53	0.32	0.11	0.34	0.81	0.60	0.82	0.22
Control Delay	62.8	37.6	65.2	35.9	0.4	22.2	42.9	37.4	27.3	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.8	37.6	65.2	35.9	0.4	22.2	42.9	37.4	27.3	1.8
LOS	E	D	E	D	A	C	D	D	C	A
Approach Delay		45.0		36.8			41.7		25.6	
Approach LOS		D		D			D		C	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 127.4 (98%), Referenced to phase 4:EBT and 8:WBT, Start of Green		
Natural Cycle: 65		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.82		
Intersection Signal Delay: 35.3	Intersection LOS: D	
Intersection Capacity Utilization 64.3%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 2: Unser Bd. & Central Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	383	34	90	345	61	57	848	109	133	1065	145
Future Volume (veh/h)	175	383	34	90	345	61	57	848	109	133	1065	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	184	403	36	95	363	0	60	893	115	140	1121	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	263	1303	116	136	1403		170	1028	132	221	1255	
Arrive On Green	0.08	0.40	0.39	0.08	0.40	0.00	0.05	0.33	0.32	0.10	0.47	0.00
Sat Flow, veh/h	3428	3275	291	1767	3526	1572	1767	3141	404	1767	3526	1572
Grp Volume(v), veh/h	184	216	223	95	363	0	60	501	507	140	1121	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1803	1767	1763	1572	1767	1763	1783	1767	1763	1572
Q Serve(g_s), s	6.8	10.9	11.1	6.8	9.0	0.0	2.9	34.7	34.8	6.5	37.7	0.0
Cycle Q Clear(g_c), s	6.8	10.9	11.1	6.8	9.0	0.0	2.9	34.7	34.8	6.5	37.7	0.0
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	263	702	718	136	1403		170	577	583	221	1255	
V/C Ratio(X)	0.70	0.31	0.31	0.70	0.26		0.35	0.87	0.87	0.63	0.89	
Avail Cap(c_a), veh/h	343	702	718	299	1403		238	597	603	333	1383	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.71	0.71	0.00
Uniform Delay (d), s/veh	58.5	26.8	26.9	58.6	26.3	0.0	31.5	41.1	41.2	29.9	32.0	0.0
Incr Delay (d2), s/veh	4.2	1.1	1.1	6.4	0.4	0.0	1.2	12.8	12.6	2.1	5.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.6	8.5	8.7	5.9	7.0	0.0	2.3	23.8	24.0	5.1	21.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.8	28.0	28.1	65.0	26.7	0.0	32.7	53.9	53.9	32.0	37.3	0.0
LnGrp LOS	E	C	C	E	C		C	D	D	C	D	
Approach Vol, veh/h		623			458	A		1068			1261	A
Approach Delay, s/veh		38.3			34.6			52.7			36.7	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	46.5	14.0	55.7	10.0	50.3	14.0	55.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	43.0	21.0	29.0	10.0	50.0	12.0	38.0
Max Q Clear Time (g_c+I1), s	8.5	36.8	8.8	13.1	4.9	39.7	8.8	11.0
Green Ext Time (p_c), s	0.2	3.3	0.2	2.3	0.0	5.6	0.2	2.5

Intersection Summary		
HCM 6th Ctrl Delay		41.7
HCM 6th LOS		D

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	100	54	88	93	158	36	941	91	64	1321	107
Future Volume (vph)	100	54	88	93	158	36	941	91	64	1321	107
Turn Type	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	8	8	8	5	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	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	14.0	52.0	38.0	38.0	38.0	14.0	64.0	64.0	14.0	64.0	64.0
Total Split (%)	10.8%	40.0%	29.2%	29.2%	29.2%	10.8%	49.2%	49.2%	10.8%	49.2%	49.2%
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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	31.2	31.2	16.1	16.1	16.1	86.1	78.7	78.7	87.5	79.4	79.4
Actuated g/C Ratio	0.24	0.24	0.12	0.12	0.12	0.66	0.61	0.61	0.67	0.61	0.61
v/c Ratio	0.38	0.23	0.59	0.43	0.49	0.16	0.47	0.10	0.19	0.66	0.11
Control Delay	42.6	25.8	68.2	57.2	11.9	2.9	10.7	2.6	6.8	11.9	1.4
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	42.6	25.8	68.2	57.2	11.9	2.9	10.7	2.6	6.8	11.9	1.4
LOS	D	C	E	E	B	A	B	A	A	B	A
Approach Delay		34.4		39.0			9.8			10.9	
Approach LOS		C		D			A			B	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 127.4 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 15.1		Intersection LOS: B	
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Unser Bd. & Bluewater Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	54	42	88	93	158	36	941	91	64	1321	107
Future Volume (veh/h)	100	54	42	88	93	158	36	941	91	64	1321	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	106	57	45	94	99	168	38	1001	0	68	1405	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	281	230	182	230	253	214	278	2192		370	2192	
Arrive On Green	0.07	0.24	0.23	0.14	0.14	0.14	0.03	0.42	0.00	0.05	0.62	0.00
Sat Flow, veh/h	1767	961	758	1282	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	106	0	102	94	99	168	38	1001	0	68	1405	0
Grp Sat Flow(s),veh/h/ln	1767	0	1719	1282	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	6.4	0.0	6.3	8.9	6.3	13.4	1.0	26.6	0.0	1.7	32.6	0.0
Cycle Q Clear(g_c), s	6.4	0.0	6.3	8.9	6.3	13.4	1.0	26.6	0.0	1.7	32.6	0.0
Prop In Lane	1.00		0.44	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	0	412	230	253	214	278	2192		370	2192	
V/C Ratio(X)	0.38	0.00	0.25	0.41	0.39	0.78	0.14	0.46		0.18	0.64	
Avail Cap(c_a), veh/h	288	0	635	391	485	411	332	2192		424	2192	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.60	0.60	0.00	0.76	0.76	0.00
Uniform Delay (d), s/veh	41.9	0.0	40.1	52.3	51.2	54.3	12.1	22.1	0.0	10.6	15.5	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.3	1.2	1.0	6.2	0.1	0.4	0.0	0.2	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.2	0.0	4.9	5.3	5.5	9.6	0.7	16.3	0.0	1.2	18.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	0.0	40.4	53.5	52.2	60.5	12.2	22.5	0.0	10.7	16.6	0.0
LnGrp LOS	D	A	D	D	D	E	B	C		B	B	
Approach Vol, veh/h		208			361			1039	A		1473	A
Approach Delay, s/veh		41.6			56.4			22.1			16.3	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	84.8		35.2	10.0	84.8	13.4	21.7
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	9.0	59.0		47.0	9.0	59.0	9.0	33.0
Max Q Clear Time (g_c+I1), s	3.7	28.6		8.3	3.0	34.6	8.4	15.4
Green Ext Time (p_c), s	0.0	8.6		0.6	0.0	12.2	0.0	1.3

Intersection Summary		
HCM 6th Ctrl Delay	24.7	
HCM 6th LOS	C	

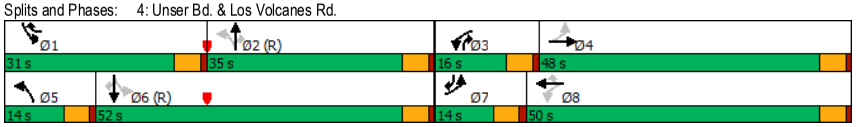
Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	161	52	148	72	256	22	1102	123	209	1243	109
Future Volume (vph)	161	52	148	72	256	22	1102	123	209	1243	109
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	48.0	16.0	50.0	31.0	14.0	35.0	16.0	31.0	52.0	14.0
Total Split (%)	10.8%	36.9%	12.3%	38.5%	23.8%	10.8%	26.9%	12.3%	23.8%	40.0%	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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	21.4	11.4	25.1	13.3	34.9	80.1	73.1	88.9	94.7	83.7	97.7
Actuated g/C Ratio	0.16	0.09	0.19	0.10	0.27	0.62	0.56	0.68	0.73	0.64	0.75
v/c Ratio	1.10	0.52	0.65	0.42	0.61	0.09	0.43	0.12	0.55	0.61	0.10
Control Delay	117.6	51.0	54.4	58.1	35.8	12.2	20.9	3.2	12.1	13.4	2.4
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	117.6	51.0	54.4	58.1	35.8	12.2	20.9	3.2	12.1	13.4	2.4
LOS	F	D	D	E	D	B	C	A	B	B	A
Approach Delay		107.9		45.0			19.0			12.5	
Approach LOS		F		D			B			B	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 5.2 (4%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 75		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.10		
Intersection Signal Delay: 32.6	Intersection LOS: C	
Intersection Capacity Utilization 69.0%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	52	30	148	72	256	22	1102	123	209	1243	109
Future Volume (veh/h)	161	52	30	148	72	256	22	1102	123	209	1243	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	531	57	33	163	79	281	24	1211	0	230	1366	120
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	680	194	112	388	355	433	237	2658		444	1983	1005
Arrive On Green	0.08	0.18	0.18	0.09	0.19	0.19	0.09	1.00	0.00	0.08	0.56	0.56
Sat Flow, veh/h	3428	1102	638	1767	1856	1572	1767	5066	1572	1767	3526	1572
Grp Volume(v), veh/h	531	0	90	163	79	281	24	1211	0	230	1366	120
Grp Sat Flow(s),veh/h/ln	1714	0	1741	1767	1856	1572	1767	1689	1572	1767	1763	1572
Q Serve(g_s), s	10.0	0.0	5.8	9.7	4.7	20.5	0.7	0.0	0.0	7.3	36.0	3.9
Cycle Q Clear(g_c), s	10.0	0.0	5.8	9.7	4.7	20.5	0.7	0.0	0.0	7.3	36.0	3.9
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	680	0	306	388	355	433	237	2658		444	1983	1005
V/C Ratio(X)	0.78	0.00	0.29	0.42	0.22	0.65	0.10	0.46		0.52	0.69	0.12
Avail Cap(c_a), veh/h	680	0	589	388	657	688	292	2658		663	1983	1005
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.96	0.96	0.96	0.88	0.88	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	0.0	46.5	38.5	44.4	41.6	15.3	0.0	0.0	10.6	20.3	9.2
Incr Delay (d2), s/veh	5.8	0.0	0.5	0.7	0.3	1.6	0.2	0.5	0.0	0.9	2.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.3	0.0	4.7	7.6	4.0	12.7	0.5	0.2	0.0	5.3	21.3	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	0.0	47.1	39.2	44.7	43.2	15.5	0.5	0.0	11.5	22.3	9.4
LnGrp LOS	D	A	D	D	D	D	B	A		B	C	A
Approach Vol, veh/h		621			523			1235	A		1716	
Approach Delay, s/veh		50.7			42.1			0.8			20.0	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	72.2	16.0	26.9	10.0	77.1	14.0	28.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	26.0	30.0	11.0	43.0	9.0	47.0	9.0	45.0
Max Q Clear Time (g_c+I1), s	9.3	2.0	11.7	7.8	2.7	38.0	12.0	22.5
Green Ext Time (p_c), s	0.6	10.4	0.0	0.5	0.0	6.2	0.0	1.4

Intersection Summary		
HCM 6th Ctrl Delay		21.7
HCM 6th LOS		C

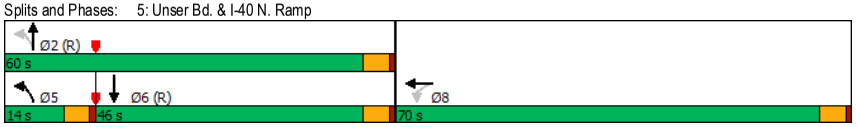
Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	939	1	31	928	1046
Future Volume (vph)	939	1	31	928	1046
Turn Type	Perm	NA	pm+pt	NA	NA
Protected Phases		8	5	2	6
Permitted Phases	8		2		
Detector Phase	8	8	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0
Total Split (s)	70.0	70.0	14.0	60.0	46.0
Total Split (%)	53.8%	53.8%	10.8%	46.2%	35.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	49.4	49.4	72.6	72.6	60.9
Actuated g/C Ratio	0.38	0.38	0.56	0.56	0.47
v/c Ratio	0.77	0.77	0.13	0.49	0.49
Control Delay	42.9	42.9	17.6	18.4	26.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.9	42.9	17.6	18.4	26.3
LOS	D	D	B	B	C
Approach Delay		42.9		18.4	26.3
Approach LOS		D		B	C

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 2.6 (2%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 55		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.77		
Intersection Signal Delay: 28.9	Intersection LOS: C	
Intersection Capacity Utilization 66.0%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 5: Unser Bd. & I-40 N. Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	939	1	0	31	928	0	0	1046	71
Future Volume (veh/h)	0	0	0	939	1	0	31	928	0	0	1046	71
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	0	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				969	0	0	32	957	0	0	1078	73
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				3	3	0	3	3	0	0	3	3
Cap, veh/h				1111	583	0	339	2201	0	0	2652	179
Arrive On Green				0.31	0.00	0.00	0.05	0.62	0.00	0.00	0.55	0.54
Sat Flow, veh/h				3534	1856	0	1767	3618	0	0	5013	328
Grp Volume(v), veh/h				969	0	0	32	957	0	0	751	400
Grp Sat Flow(s),veh/h/ln				1767	1856	0	1767	1763	0	0	1689	1797
Q Serve(g_s), s				33.7	0.0	0.0	0.9	18.2	0.0	0.0	16.8	16.9
Cycle Q Clear(g_c), s				33.7	0.0	0.0	0.9	18.2	0.0	0.0	16.8	16.9
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.18
Lane Grp Cap(c), veh/h				1111	583	0	339	2201	0	0	1848	983
V/C Ratio(X)				0.87	0.00	0.00	0.09	0.43	0.00	0.00	0.41	0.41
Avail Cap(c_a), veh/h				1794	942	0	394	2201	0	0	1848	983
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.1	0.0	0.0	11.6	12.6	0.0	0.0	17.1	17.2
Incr Delay (d2), s/veh				2.9	0.0	0.0	0.1	0.6	0.0	0.0	0.7	1.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				21.4	0.0	0.0	0.7	11.6	0.0	0.0	10.9	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.1	0.0	0.0	11.7	13.2	0.0	0.0	17.8	18.4
LnGrp LOS				D	A	A	B	B	A	A	B	B
Approach Vol, veh/h					969			989			1151	
Approach Delay, s/veh					45.1			13.2			18.0	
Approach LOS					D			B			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		85.2			10.0	75.2		44.8				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		55.0			9.0	41.0		65.0				
Max Q Clear Time (g_c+I1), s		20.2			2.9	18.9		35.7				
Green Ext Time (p_c), s		8.3			0.0	8.4		4.2				

Intersection Summary		
HCM 6th Ctrl Delay	24.9	
HCM 6th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	148.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	82	0	50	0	0	0	0	1072	610	0	1983	0
Future Vol, veh/h	82	0	50	0	0	0	0	1072	610	0	1983	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	280	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	96	0	59	0	0	0	0	1261	718	0	2333	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	2964	-	-	-	0	0	-	-	0
Stage 1	2333	-	-	-	-	-	-	-	-
Stage 2	631	-	-	-	-	-	-	-	-
Critical Hdwy	6.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	-	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 7	0	0	0	-	-	0	-	0
Stage 1	*~ 58	0	0	0	-	-	0	-	0
Stage 2	*605	0	0	0	-	-	0	-	0
Platoon blocked, %	1				-	-		-	
Mov Cap-1 Maneuver	*~ 7	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	*~ 7	0	-	-	-	-	-	-	-
Stage 1	*~ 58	0	-	-	-	-	-	-	-
Stage 2	*605	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	6780.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	-	7	-	-
HCM Lane V/C Ratio	-	-	13.782	-	-
HCM Control Delay (s)	-	-	$ 6780.4	0	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q(veh)	-	-	13.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	202	108	74	1169	1692
Future Volume (vph)	202	108	74	1169	1692
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	2		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	10.0	21.0	21.0
Total Split (s)	42.0	26.0	26.0	88.0	62.0
Total Split (%)	32.3%	20.0%	20.0%	67.7%	47.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	14.3	26.0	107.7	107.7	96.0
Actuated g/C Ratio	0.11	0.20	0.83	0.83	0.74
v/c Ratio	0.56	0.35	0.35	0.29	0.52
Control Delay	63.2	50.6	6.7	2.8	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	63.2	50.6	6.7	2.8	8.1
LOS	E	D	A	A	A
Approach Delay	58.8			3.1	8.1
Approach LOS	E			A	A

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 45.5 (35%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.56		
Intersection Signal Delay: 10.9	Intersection LOS: B	
Intersection Capacity Utilization 56.5%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 1: Coors Bd. & Los Volcanes Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	202	108	74	1169	1692	176
Future Volume (veh/h)	202	108	74	1169	1692	176
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	208	111	76	1205	1744	181
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	331	224	280	4265	3567	369
Arrive On Green	0.10	0.10	0.05	0.84	0.76	0.76
Sat Flow, veh/h	3428	1572	1767	5233	4830	482
Grp Volume(v), veh/h	208	111	76	1205	1261	664
Grp Sat Flow(s),veh/h/ln	1714	1572	1767	1689	1689	1769
Q Serve(g_s), s	7.6	8.5	1.0	6.4	18.2	18.5
Cycle Q Clear(g_c), s	7.6	8.5	1.0	6.4	18.2	18.5
Prop In Lane	1.00	1.00	1.00			0.27
Lane Grp Cap(c), veh/h	331	224	280	4265	2583	1353
V/C Ratio(X)	0.63	0.49	0.27	0.28	0.49	0.49
Avail Cap(c_a), veh/h	1002	532	498	4265	2583	1353
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	51.4	4.5	2.1	5.7	5.8
Incr Delay (d2), s/veh	2.0	1.7	0.5	0.2	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	7.5	0.4	1.5	5.9	6.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.4	53.1	5.0	2.3	6.4	7.1
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	319			1281	1925	
Approach Delay, s/veh	56.6			2.5	6.6	
Approach LOS	E			A	A	

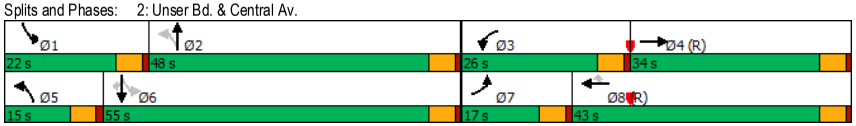
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		113.4		16.6	10.0	103.4
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		83.0		37.0	21.0	57.0
Max Q Clear Time (g_c+I1), s		8.4		10.5	3.0	20.5
Green Ext Time (p_c), s		12.5		1.1	0.1	20.6

Intersection Summary		
HCM 6th Ctrl Delay	9.6	
HCM 6th LOS	A	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	193	383	90	345	73	57	867	144	1084	162
Future Volume (vph)	193	383	90	345	73	57	867	144	1084	162
Turn Type	Prot	NA	Prot	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8	2		6		6
Detector Phase	7	4	3	8	8	5	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	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	17.0	34.0	26.0	43.0	43.0	15.0	48.0	22.0	55.0	55.0
Total Split (%)	13.1%	26.2%	20.0%	33.1%	33.1%	11.5%	36.9%	16.9%	42.3%	42.3%
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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	C-Min	Min	C-Min	C-Min	Min	Min	Min	Min	Min
Act Effct Green (s)	12.6	40.2	13.4	40.9	40.9	55.8	47.0	64.0	51.7	51.7
Actuated g/C Ratio	0.10	0.31	0.10	0.31	0.31	0.43	0.36	0.49	0.40	0.40
v/c Ratio	0.62	0.41	0.53	0.33	0.13	0.34	0.82	0.63	0.82	0.24
Control Delay	64.9	38.3	65.2	36.5	0.5	22.0	43.5	42.3	25.6	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	38.3	65.2	36.5	0.5	22.0	43.5	42.3	25.6	1.8
LOS	E	D	E	D	A	C	D	D	C	A
Approach Delay		46.7		36.4			42.3		24.6	
Approach LOS		D		D			D		C	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 127.4 (98%), Referenced to phase 4:EBT and 8:WBT, Start of Green		
Natural Cycle: 65		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.82		
Intersection Signal Delay: 35.2	Intersection LOS: D	
Intersection Capacity Utilization 65.4%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 2: Unser Bd. & Central Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	383	34	90	345	73	57	867	109	144	1084	162
Future Volume (veh/h)	193	383	34	90	345	73	57	867	109	144	1084	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	203	403	36	95	363	0	60	913	115	152	1141	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	281	1289	115	136	1369		168	1030	130	224	1270	
Arrive On Green	0.08	0.39	0.39	0.08	0.39	0.00	0.05	0.33	0.32	0.11	0.48	0.00
Sat Flow, veh/h	3428	3275	291	1767	3526	1572	1767	3150	397	1767	3526	1572
Grp Volume(v), veh/h	203	216	223	95	363	0	60	511	517	152	1141	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1803	1767	1763	1572	1767	1763	1784	1767	1763	1572
Q Serve(g_s), s	7.5	11.0	11.1	6.8	9.1	0.0	2.9	35.7	35.7	7.1	38.5	0.0
Cycle Q Clear(g_c), s	7.5	11.0	11.1	6.8	9.1	0.0	2.9	35.7	35.7	7.1	38.5	0.0
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	281	694	710	136	1369		168	577	584	224	1270	
V/C Ratio(X)	0.72	0.31	0.31	0.70	0.27		0.36	0.89	0.89	0.68	0.90	
Avail Cap(c_a), veh/h	343	694	710	299	1369		236	597	604	329	1383	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.68	0.68	0.00
Uniform Delay (d), s/veh	58.2	27.2	27.3	58.6	27.1	0.0	31.5	41.4	41.6	29.9	31.7	0.0
Incr Delay (d2), s/veh	5.7	1.2	1.2	6.4	0.5	0.0	1.3	14.6	14.5	2.4	5.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	4.9	5.1	3.3	4.0	0.0	1.3	17.7	18.0	3.0	16.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.9	28.4	28.5	65.0	27.6	0.0	32.8	56.1	56.1	32.3	37.2	0.0
LnGrp LOS	E	C	C	E	C		C	E	E	C	D	
Approach Vol, veh/h		642			458	A		1088			1293	A
Approach Delay, s/veh		39.7			35.3			54.8			36.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	46.5	14.0	55.2	10.0	50.8	14.7	54.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	43.0	21.0	29.0	10.0	50.0	12.0	38.0
Max Q Clear Time (g_c+I1), s	9.1	37.7	8.8	13.1	4.9	40.5	9.5	11.1
Green Ext Time (p_c), s	0.2	2.9	0.2	2.3	0.0	5.4	0.2	2.5

Intersection Summary		
HCM 6th Ctrl Delay	42.7	
HCM 6th LOS	D	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	116	54	88	93	165	36	991	91	71	1368	123
Future Volume (vph)	116	54	88	93	165	36	991	91	71	1368	123
Turn Type	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	8	8	8	5	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	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	14.0	52.0	38.0	38.0	38.0	14.0	64.0	64.0	14.0	64.0	64.0
Total Split (%)	10.8%	40.0%	29.2%	29.2%	29.2%	10.8%	49.2%	49.2%	10.8%	49.2%	49.2%
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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	31.1	31.1	16.1	16.1	16.1	86.0	78.6	78.6	87.8	79.5	79.5
Actuated g/C Ratio	0.24	0.24	0.12	0.12	0.12	0.66	0.60	0.60	0.68	0.61	0.61
v/c Ratio	0.44	0.23	0.59	0.43	0.51	0.17	0.50	0.10	0.22	0.68	0.13
Control Delay	44.5	26.0	68.2	57.2	12.0	3.4	11.7	2.6	6.6	12.3	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	26.0	68.2	57.2	12.0	3.4	11.7	2.6	6.6	12.3	1.9
LOS	D	C	E	E	B	A	B	A	A	B	A
Approach Delay		36.1		38.4			10.7			11.3	
Approach LOS		D		D			B			B	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 127.4 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 15.6		Intersection LOS: B	
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Unser Bd. & Bluewater Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	54	42	88	93	165	36	991	91	71	1368	123
Future Volume (veh/h)	116	54	42	88	93	165	36	991	91	71	1368	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	123	57	45	94	99	176	38	1054	0	76	1455	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	293	239	189	237	262	222	260	2159		345	2159	
Arrive On Green	0.08	0.25	0.24	0.14	0.14	0.14	0.03	0.41	0.00	0.05	0.61	0.00
Sat Flow, veh/h	1767	961	758	1282	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	123	0	102	94	99	176	38	1054	0	76	1455	0
Grp Sat Flow(s),veh/h/ln	1767	0	1719	1282	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	7.5	0.0	6.2	8.8	6.3	14.1	1.0	28.7	0.0	2.0	35.4	0.0
Cycle Q Clear(g_c), s	7.5	0.0	6.2	8.8	6.3	14.1	1.0	28.7	0.0	2.0	35.4	0.0
Prop In Lane	1.00		0.44	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	0	428	237	262	222	260	2159		345	2159	
V/C Ratio(X)	0.42	0.00	0.24	0.40	0.38	0.79	0.15	0.49		0.22	0.67	
Avail Cap(c_a), veh/h	293	0	635	391	485	411	315	2159		400	2159	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.58	0.58	0.00	0.70	0.70	0.00
Uniform Delay (d), s/veh	41.3	0.0	39.2	51.7	50.6	54.0	13.3	23.3	0.0	11.6	16.6	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.3	1.1	0.9	6.2	0.1	0.5	0.0	0.2	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	2.7	2.9	3.0	6.0	0.4	12.9	0.0	0.8	14.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	0.0	39.4	52.8	51.5	60.2	13.5	23.8	0.0	11.8	17.8	0.0
LnGrp LOS	D	A	D	D	D	E	B	C		B	B	
Approach Vol, veh/h		225			369			1092	A		1531	A
Approach Delay, s/veh		41.0			56.0			23.4			17.5	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	83.6		36.4	10.0	83.6	14.0	22.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	9.0	59.0		47.0	9.0	59.0	9.0	33.0				
Max Q Clear Time (g_c+I1), s	4.0	30.7		8.2	3.0	37.4	9.5	16.1				
Green Ext Time (p_c), s	0.1	9.0		0.6	0.0	11.8	0.0	1.3				

Intersection Summary			
HCM 6th Ctrl Delay		25.6	
HCM 6th LOS		C	

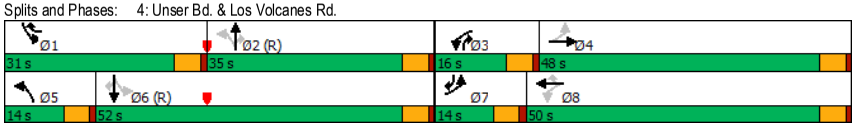
Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	161	54	218	74	295	22	1102	196	250	1243	109
Future Volume (vph)	161	54	218	74	295	22	1102	196	250	1243	109
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	48.0	16.0	50.0	31.0	14.0	35.0	16.0	31.0	52.0	14.0
Total Split (%)	10.8%	36.9%	12.3%	38.5%	23.8%	10.8%	26.9%	12.3%	23.8%	40.0%	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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	21.5	11.6	25.7	13.7	38.6	76.5	69.5	85.5	94.4	83.4	97.2
Actuated g/C Ratio	0.17	0.09	0.20	0.11	0.30	0.59	0.53	0.66	0.73	0.64	0.75
v/c Ratio	0.37	0.52	0.95	0.42	0.58	0.09	0.45	0.20	0.61	0.61	0.10
Control Delay	44.2	51.9	91.4	58.4	26.1	12.9	23.9	3.5	16.2	14.1	2.3
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	44.2	51.9	91.4	58.4	26.1	12.9	23.9	3.5	16.2	14.1	2.3
LOS	D	D	F	E	C	B	C	A	B	B	A
Approach Delay		46.8		54.4			20.7			13.6	
Approach LOS		D		D			C			B	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 5.2 (4%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 75		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.95		
Intersection Signal Delay: 24.6	Intersection LOS: C	
Intersection Capacity Utilization 67.3%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	54	30	218	74	295	22	1102	196	250	1243	109
Future Volume (veh/h)	161	54	30	218	74	295	22	1102	196	250	1243	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	177	59	33	240	81	324	24	1211	0	275	1366	120
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	667	207	116	400	396	492	232	2531		460	1950	971
Arrive On Green	0.06	0.19	0.19	0.09	0.21	0.21	0.09	1.00	0.00	0.10	0.55	0.55
Sat Flow, veh/h	3428	1118	625	1767	1856	1572	1767	5066	1572	1767	3526	1572
Grp Volume(v), veh/h	177	0	92	240	81	324	24	1211	0	275	1366	120
Grp Sat Flow(s),veh/h/ln	1714	0	1743	1767	1856	1572	1767	1689	1572	1767	1763	1572
Q Serve(g_s), s	5.3	0.0	5.9	12.0	4.7	23.2	0.8	0.0	0.0	9.2	36.8	4.1
Cycle Q Clear(g_c), s	5.3	0.0	5.9	12.0	4.7	23.2	0.8	0.0	0.0	9.2	36.8	4.1
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	667	0	323	400	396	492	232	2531		460	1950	971
V/C Ratio(X)	0.27	0.00	0.28	0.60	0.20	0.66	0.10	0.48		0.60	0.70	0.12
Avail Cap(c_a), veh/h	709	0	590	400	657	713	286	2531		651	1950	971
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.86	0.86	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	0.0	45.5	39.4	42.1	38.7	16.4	0.0	0.0	11.5	21.2	10.3
Incr Delay (d2), s/veh	0.2	0.0	0.5	2.5	0.3	1.5	0.2	0.6	0.0	1.3	2.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	2.6	1.3	2.2	9.1	0.3	0.1	0.0	3.7	15.4	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	0.0	46.0	41.9	42.3	40.2	16.6	0.6	0.0	12.7	23.3	10.6
LnGrp LOS	D	A	D	D	D	D	B	A		B	C	B
Approach Vol, veh/h		269			645			1235	A		1761	
Approach Delay, s/veh		41.2			41.1			0.9			20.8	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	69.0	16.0	28.1	10.0	75.9	12.4	31.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	26.0	30.0	11.0	43.0	9.0	47.0	9.0	45.0
Max Q Clear Time (g_c+I1), s	11.2	2.0	14.0	7.9	2.8	38.8	7.3	25.2
Green Ext Time (p_c), s	0.7	10.4	0.0	0.5	0.0	5.8	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Timings
4: Unser Bd. & Los Volcanes Rd.

Terry O. Brown, P.E.
03/06/2019

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	161	54	218	74	295	22	1102	196	250	1243	109
Future Volume (vph)	161	54	218	74	295	22	1102	196	250	1243	109
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2			6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	10.0	21.0	24.0	35.0	22.0	10.0	63.0	24.0	22.0	75.0	10.0
Total Split (%)	7.7%	16.2%	18.5%	26.9%	16.9%	7.7%	48.5%	18.5%	16.9%	57.7%	7.7%
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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	21.9	11.9	35.5	21.6	41.6	73.2	66.4	90.0	16.1	75.6	89.6
Actuated g/C Ratio	0.17	0.09	0.27	0.17	0.32	0.56	0.51	0.69	0.12	0.58	0.69
v/c Ratio	0.36	0.52	0.67	0.26	0.60	0.11	0.47	0.19	0.65	0.67	0.11
Control Delay	38.9	55.0	48.5	47.8	36.9	8.3	13.4	0.5	62.3	23.0	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.9	55.0	48.5	47.8	36.9	8.3	13.4	0.5	62.3	23.0	5.1
LOS	D	E	D	D	D	A	B	A	E	C	A
Approach Delay		44.4		42.6			11.4			27.9	
Approach LOS		D		D			B			C	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 5.2 (4%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 75		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.67		
Intersection Signal Delay: 25.5	Intersection LOS: C	
Intersection Capacity Utilization 67.3%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.

HCM 6th Signalized Intersection Summary
4: Unser Bd. & Los Volcanes Rd.

Terry O. Brown, P.E.
03/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	54	30	218	74	295	22	1102	196	250	1243	109
Future Volume (veh/h)	161	54	30	218	74	295	22	1102	196	250	1243	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	177	59	33	240	81	324	24	1211	0	275	1366	120
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	485	128	71	385	385	490	246	2630		358	2035	980
Arrive On Green	0.05	0.11	0.11	0.14	0.21	0.21	0.09	1.00	0.00	0.10	0.58	0.58
Sat Flow, veh/h	3428	1118	625	1767	1856	1572	1767	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	177	0	92	240	81	324	24	1211	0	275	1366	120
Grp Sat Flow(s),veh/h/ln	1714	0	1743	1767	1856	1572	1767	1689	1572	1714	1763	1572
Q Serve(g_s), s	5.9	0.0	6.4	14.9	4.7	23.2	0.8	0.0	0.0	10.2	34.8	4.0
Cycle Q Clear(g_c), s	5.9	0.0	6.4	14.9	4.7	23.2	0.8	0.0	0.0	10.2	34.8	4.0
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	485	0	199	385	385	490	246	2630		358	2035	980
V/C Ratio(X)	0.37	0.00	0.46	0.62	0.21	0.66	0.10	0.46		0.77	0.67	0.12
Avail Cap(c_a), veh/h	485	0	228	411	442	539	246	2630		475	2035	980
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.86	0.86	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	0.0	53.8	40.5	42.7	38.8	14.7	0.0	0.0	56.7	19.0	10.0
Incr Delay (d2), s/veh	0.5	0.0	1.7	2.6	0.3	2.6	0.1	0.5	0.0	5.4	1.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	2.9	6.8	2.2	9.3	0.3	0.1	0.0	4.7	14.3	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	0.0	55.5	43.2	43.0	41.4	14.9	0.5	0.0	62.1	20.7	10.2
LnGrp LOS	D	A	E	D	D	D	B	A		E	C	B
Approach Vol, veh/h		269			645			1235	A		1761	
Approach Delay, s/veh		51.1			42.3			0.8			26.5	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	71.5	22.1	18.9	10.0	79.1	10.0	30.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	58.0	19.0	16.0	5.0	70.0	5.0	30.0
Max Q Clear Time (g_c+I1), s	12.2	2.0	16.9	8.4	2.8	36.8	7.9	25.2
Green Ext Time (p_c), s	0.4	12.3	0.1	0.2	0.0	14.2	0.0	0.7

Intersection Summary		
HCM 6th Ctrl Delay		22.7
HCM 6th LOS		C

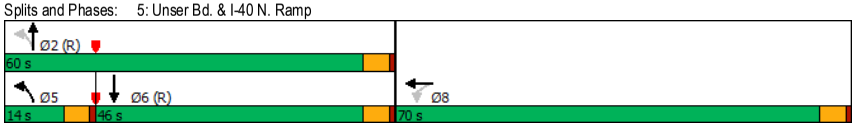
Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	944	1	39	954	1073
Future Volume (vph)	944	1	39	954	1073
Turn Type	Perm	NA	pm+pt	NA	NA
Protected Phases		8	5	2	6
Permitted Phases	8		2		
Detector Phase	8	8	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0
Total Split (s)	70.0	70.0	14.0	60.0	46.0
Total Split (%)	53.8%	53.8%	10.8%	46.2%	35.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	49.5	49.5	72.5	72.5	60.5
Actuated g/C Ratio	0.38	0.38	0.56	0.56	0.47
v/c Ratio	0.77	0.77	0.16	0.50	0.51
Control Delay	42.8	42.9	20.3	22.8	26.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.8	42.9	20.3	22.8	26.9
LOS	D	D	C	C	C
Approach Delay		42.9		22.7	26.9
Approach LOS		D		C	C

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 2.6 (2%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 30.4	Intersection LOS: C
Intersection Capacity Utilization 62.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: Unser Bd. & I-40 N. Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	944	1	0	39	954	0	0	1073	71
Future Volume (veh/h)	0	0	0	944	1	0	39	954	0	0	1073	71
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	0	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				974	0	0	40	984	0	0	1106	73
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				3	3	0	3	3	0	0	3	3
Cap, veh/h				1116	586	0	331	2196	0	0	2650	175
Arrive On Green				0.32	0.00	0.00	0.05	0.62	0.00	0.00	0.55	0.54
Sat Flow, veh/h				3534	1856	0	1767	3618	0	0	5022	320
Grp Volume(v), veh/h				974	0	0	40	984	0	0	769	410
Grp Sat Flow(s),veh/h/ln				1767	1856	0	1767	1763	0	0	1689	1798
Q Serve(g_s), s				33.8	0.0	0.0	1.2	19.0	0.0	0.0	17.4	17.5
Cycle Q Clear(g_c), s				33.8	0.0	0.0	1.2	19.0	0.0	0.0	17.4	17.5
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.18
Lane Grp Cap(c), veh/h				1116	586	0	331	2196	0	0	1843	981
V/C Ratio(X)				0.87	0.00	0.00	0.12	0.45	0.00	0.00	0.42	0.42
Avail Cap(c_a), veh/h				1794	942	0	385	2196	0	0	1843	981
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.0	0.0	0.0	11.8	12.8	0.0	0.0	17.4	17.4
Incr Delay (d2), s/veh				3.0	0.0	0.0	0.2	0.7	0.0	0.0	0.7	1.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.1	0.0	0.0	0.5	7.5	0.0	0.0	6.9	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.0	0.0	0.0	12.0	13.5	0.0	0.0	18.1	18.7
LnGrp LOS				D	A	A	B	B	A	A	B	B
Approach Vol, veh/h					974			1024			1179	
Approach Delay, s/veh					45.0			13.4			18.3	
Approach LOS					D			B			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		85.0			10.0	75.0		45.0				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		55.0			9.0	41.0		65.0				
Max Q Clear Time (g_c+I1), s		21.0			3.2	19.5		35.8				
Green Ext Time (p_c), s		8.6			0.0	8.5		4.2				

Intersection Summary		
HCM 6th Ctrl Delay	24.9	
HCM 6th LOS	C	

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1079.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	82	0	59	0	0	0	0	1107	615	0	2015	417
Future Vol, veh/h	82	0	59	0	0	0	0	1107	615	0	2015	417
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	280	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	109	0	79	0	0	0	0	1476	820	0	2687	556

Major/Minor	Minor2				Major1			Major2		
Conflicting Flow All	3703	-	-		-	0	0	-	-	0
Stage 1	2965	-	-		-	-	-	-	-	-
Stage 2	738	-	-		-	-	-	-	-	-
Critical Hdwy	6.86	-	-		-	-	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-		-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-		-	-	-	-	-	-
Follow-up Hdwy	3.53	-	-		-	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 1	0	0		0	-	-	0	-	-
Stage 1	*~ 25	0	0		0	-	-	0	-	-
Stage 2	*583	0	0		0	-	-	0	-	-
Platoon blocked, %	1					-	-		-	-
Mov Cap-1 Maneuver	*~ 1	0	-		-	-	-	-	-	-
Mov Cap-2 Maneuver	*~ 1	0	-		-	-	-	-	-	-
Stage 1	*~ 25	0	-		-	-	-	-	-	-
Stage 2	*583	0	-		-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay	$ 55751.6	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	-	-	1	-	-	-
HCM Lane V/C Ratio	-	-	109.333	-	-	-
HCM Control Delay (s)	-	-	$ 55751.6	0	-	-
HCM Lane LOS	-	-	F	A	-	-
HCM 95th %tile Q(veh)	-	-	16.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	379	22	8	461	51	22
Future Vol, veh/h	379	22	8	461	51	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	505	29	11	615	68	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	534	0	1157	520
Stage 1	-	-	-	-	520	-
Stage 2	-	-	-	-	637	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1029	-	216	554
Stage 1	-	-	-	-	595	-
Stage 2	-	-	-	-	525	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1029	-	213	554
Mov Cap-2 Maneuver	-	-	-	-	349	-
Stage 1	-	-	-	-	595	-
Stage 2	-	-	-	-	517	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	393	-	-	1029	-
HCM Lane V/C Ratio	0.248	-	-	0.01	-
HCM Control Delay (s)	17.1	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1	-	-	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	397	103	24	488	99	23
Future Vol, veh/h	397	103	24	488	99	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	529	137	32	651	132	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	666	0	1313	598
Stage 1	-	-	-	-	598	-
Stage 2	-	-	-	-	715	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	919	-	174	500
Stage 1	-	-	-	-	547	-
Stage 2	-	-	-	-	483	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	919	-	164	500
Mov Cap-2 Maneuver	-	-	-	-	301	-
Stage 1	-	-	-	-	547	-
Stage 2	-	-	-	-	456	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	26.7
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	325	-	-	919	-
HCM Lane V/C Ratio	0.501	-	-	0.035	-
HCM Control Delay (s)	26.7	-	-	9.1	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	2.7	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1	1	58	14	16
Future Vol, veh/h	15	1	1	58	14	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	1	1	77	19	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	109	30	40	0	-	0
Stage 1	30	-	-	-	-	-
Stage 2	79	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	886	1042	1563	-	-	-
Stage 1	990	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	885	1042	1563	-	-	-
Mov Cap-2 Maneuver	885	-	-	-	-	-
Stage 1	989	-	-	-	-	-
Stage 2	942	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1563	-	893	-	-
HCM Lane V/C Ratio	0.001	-	0.024	-	-
HCM Control Delay (s)	7.3	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	149	49	76	1132	753
Future Volume (vph)	149	49	76	1132	753
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	2		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	10.0	21.0	21.0
Total Split (s)	42.0	20.0	20.0	78.0	58.0
Total Split (%)	35.0%	16.7%	16.7%	65.0%	48.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	11.1	22.7	98.9	98.9	87.3
Actuated g/C Ratio	0.09	0.19	0.82	0.82	0.73
v/c Ratio	0.52	0.16	0.18	0.30	0.27
Control Delay	67.7	14.7	3.1	2.8	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	67.7	14.7	3.1	2.8	5.7
LOS	E	B	A	A	A
Approach Delay	54.6			2.8	5.7
Approach LOS	D			A	A

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 37.8 (32%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 55		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.52		
Intersection Signal Delay: 8.4	Intersection LOS: A	
Intersection Capacity Utilization 38.5%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 1: Coors Bd. & Los Volcanes Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	149	49	76	1132	753	136
Future Volume (veh/h)	149	49	76	1132	753	136
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	162	53	83	1230	818	148
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	236	174	543	4295	3300	593
Arrive On Green	0.07	0.07	0.04	0.85	0.76	0.76
Sat Flow, veh/h	3428	1572	1767	5233	4484	776
Grp Volume(v), veh/h	162	53	83	1230	639	327
Grp Sat Flow(s),veh/h/ln	1714	1572	1767	1689	1689	1716
Q Serve(g_s), s	5.5	3.7	1.0	5.9	6.6	6.7
Cycle Q Clear(g_c), s	5.5	3.7	1.0	5.9	6.6	6.7
Prop In Lane	1.00	1.00	1.00			0.45
Lane Grp Cap(c), veh/h	236	174	543	4295	2582	1312
V/C Ratio(X)	0.69	0.30	0.15	0.29	0.25	0.25
Avail Cap(c_a), veh/h	1057	550	690	4295	2582	1312
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	49.1	2.3	1.8	4.1	4.1
Incr Delay (d2), s/veh	2.7	0.7	0.1	0.2	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.5	6.0	0.5	2.3	3.7	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.3	49.9	2.5	2.0	4.3	4.6
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	215			1313	966	
Approach Delay, s/veh	55.5			2.0	4.4	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		106.7		13.3	10.0	96.7
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		73.0		37.0	15.0	53.0
Max Q Clear Time (g_c+I1), s		7.9		7.5	3.0	8.7
Green Ext Time (p_c), s		12.8		0.7	0.1	8.1

Intersection Summary		
HCM 6th Ctrl Delay	7.6	
HCM 6th LOS	A	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	310	407	46	142	98	26	1822	110	471	102
Future Volume (vph)	310	407	46	142	98	26	1822	110	471	102
Turn Type	Prot	NA	Prot	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8	2		6		6
Detector Phase	7	4	3	8	8	5	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	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	22.0	35.0	14.0	27.0	27.0	14.0	52.0	19.0	57.0	57.0
Total Split (%)	18.3%	29.2%	11.7%	22.5%	22.5%	11.7%	43.3%	15.8%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	15.8	21.4	8.0	13.6	13.6	67.1	60.8	73.7	64.3	64.3
Actuated g/C Ratio	0.13	0.18	0.07	0.11	0.11	0.56	0.51	0.61	0.54	0.54
v/c Ratio	0.76	0.74	0.43	0.39	0.34	0.05	1.25	0.59	0.27	0.12
Control Delay	61.6	53.5	65.1	51.2	4.9	10.7	144.2	45.0	21.2	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.6	53.5	65.1	51.2	4.9	10.7	144.2	45.0	21.2	5.7
LOS	E	D	E	D	A	B	F	D	C	A
Approach Delay		56.9		37.5			142.5		22.7	
Approach LOS		E		D			F		C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 130		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.25		
Intersection Signal Delay: 95.8	Intersection LOS: F	
Intersection Capacity Utilization 95.3%	ICU Level of Service F	
Analysis Period (min) 15		

Splits and Phases: 2: Unser Bd. & Central Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	407	19	46	142	98	26	1822	192	110	471	102
Future Volume (veh/h)	310	407	19	46	142	98	26	1822	192	110	471	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	337	442	21	50	154	0	28	1980	209	120	512	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	399	549	26	79	311		644	1867	194	148	2069	
Arrive On Green	0.12	0.16	0.16	0.04	0.09	0.00	0.04	0.58	0.58	0.10	1.00	0.00
Sat Flow, veh/h	3428	3427	162	1767	3526	1572	1767	3224	334	1767	3526	1572
Grp Volume(v), veh/h	337	227	236	50	154	0	28	1066	1123	120	512	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1826	1767	1763	1572	1767	1763	1795	1767	1763	1572
Q Serve(g_s), s	11.6	14.9	15.0	3.3	5.0	0.0	0.7	69.5	69.5	3.8	0.0	0.0
Cycle Q Clear(g_c), s	11.6	14.9	15.0	3.3	5.0	0.0	0.7	69.5	69.5	3.8	0.0	0.0
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	399	282	292	79	311		644	1021	1040	148	2069	
V/C Ratio(X)	0.84	0.80	0.81	0.63	0.49		0.04	1.04	1.08	0.81	0.25	
Avail Cap(c_a), veh/h	486	441	457	133	646		703	1021	1040	266	2069	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.94	0.94	0.00
Uniform Delay (d), s/veh	51.9	48.6	48.6	56.4	52.1	0.0	8.8	25.3	25.3	29.9	0.0	0.0
Incr Delay (d2), s/veh	11.0	5.9	5.9	8.1	1.2	0.0	0.0	40.6	52.1	9.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.4	11.3	11.7	3.0	4.1	0.0	0.5	50.6	56.8	4.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.9	54.5	54.5	64.5	53.4	0.0	8.8	65.8	77.3	39.5	0.3	0.0
LnGrp LOS	E	D	D	E	D		A	F	F	D	A	
Approach Vol, veh/h		800			204	A		2217			632	A
Approach Delay, s/veh		58.0			56.1			70.9			7.7	
Approach LOS		E			E			E			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	74.5	10.4	24.2	10.0	75.4	19.0	15.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	14.0	47.0	9.0	30.0	9.0	52.0	17.0	22.0
Max Q Clear Time (g_c+I1), s	5.8	71.5	5.3	17.0	2.7	2.0	13.6	7.0
Green Ext Time (p_c), s	0.2	0.0	0.0	2.2	0.0	4.0	0.4	0.7

Intersection Summary		
HCM 6th Ctrl Delay	57.1	
HCM 6th LOS	E	

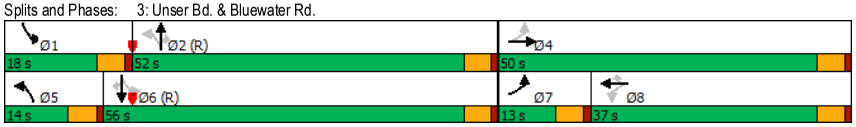
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	135	60	31	20	51	23	1545	88	123	729	61
Future Volume (vph)	135	60	31	20	51	23	1545	88	123	729	61
Turn Type	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	8	8	8	5	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	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	13.0	50.0	37.0	37.0	37.0	14.0	52.0	52.0	18.0	56.0	56.0
Total Split (%)	10.8%	41.7%	30.8%	30.8%	30.8%	11.7%	43.3%	43.3%	15.0%	46.7%	46.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	21.8	21.8	8.8	8.8	8.8	78.5	72.5	72.5	86.8	77.2	77.2
Actuated g/C Ratio	0.18	0.18	0.07	0.07	0.07	0.65	0.60	0.60	0.72	0.64	0.64
v/c Ratio	0.69	0.37	0.37	0.16	0.26	0.06	0.81	0.10	0.63	0.36	0.06
Control Delay	60.9	30.6	63.4	53.4	3.1	6.0	35.1	6.7	37.0	13.3	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.9	30.6	63.4	53.4	3.1	6.0	35.1	6.7	37.0	13.3	4.0
LOS	E	C	E	D	A	A	D	A	D	B	A
Approach Delay		46.9		31.1			33.1			15.9	
Approach LOS		D		C			C			B	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 99.6 (83%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.81		
Intersection Signal Delay: 28.9	Intersection LOS: C	
Intersection Capacity Utilization 76.2%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 3: Unser Bd. & Bluewater Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	60	56	31	20	51	23	1545	88	123	729	61
Future Volume (veh/h)	135	60	56	31	20	51	23	1545	88	123	729	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	150	67	62	34	22	57	26	1717	0	137	810	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	235	145	134	129	102	87	580	2355		236	2361	
Arrive On Green	0.07	0.16	0.16	0.06	0.06	0.06	0.04	0.67	0.00	0.09	1.00	0.00
Sat Flow, veh/h	1767	887	821	1251	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	150	0	129	34	22	57	26	1717	0	137	810	0
Grp Sat Flow(s),veh/h/ln	1767	0	1708	1251	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	8.0	0.0	8.2	3.2	1.4	4.3	0.5	37.8	0.0	3.0	0.0	0.0
Cycle Q Clear(g_c), s	8.0	0.0	8.2	3.2	1.4	4.3	0.5	37.8	0.0	3.0	0.0	0.0
Prop In Lane	1.00		0.48	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	235	0	279	129	102	87	580	2355		236	2361	
V/C Ratio(X)	0.64	0.00	0.46	0.26	0.21	0.66	0.04	0.73		0.58	0.34	
Avail Cap(c_a), veh/h	235	0	640	394	495	419	639	2355		351	2361	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.00	0.82	0.82	0.00
Uniform Delay (d), s/veh	49.3	0.0	45.4	55.1	54.2	55.6	5.1	12.9	0.0	15.8	0.0	0.0
Incr Delay (d2), s/veh	5.6	0.0	1.2	1.1	1.0	8.1	0.0	0.2	0.0	1.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	0.0	6.4	1.9	1.2	3.4	0.3	15.6	0.0	3.6	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	0.0	46.6	56.1	55.2	63.7	5.1	13.1	0.0	17.7	0.3	0.0
LnGrp LOS	D	A	D	E	E	E	A	B		B	A	
Approach Vol, veh/h		279			113			1743	A		947	A
Approach Delay, s/veh		51.1			59.8			13.0			2.8	
Approach LOS		D			E			B			A	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.2	85.1		24.6	10.0	85.4	13.0	11.6				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	13.0	47.0		45.0	9.0	51.0	8.0	32.0				
Max Q Clear Time (g_c+I1), s	5.0	39.8		10.2	2.5	2.0	10.0	6.3				
Green Ext Time (p_c), s	0.2	5.8		0.8	0.0	7.0	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		15.0
HCM 6th LOS		B

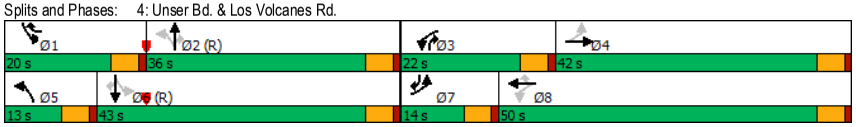
Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	300	86	96	81	213	34	1876	266	353	823	116
Future Volume (vph)	300	86	96	81	213	34	1876	266	353	823	116
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	42.0	22.0	50.0	20.0	13.0	36.0	22.0	20.0	43.0	14.0
Total Split (%)	11.7%	35.0%	18.3%	41.7%	16.7%	10.8%	30.0%	18.3%	16.7%	35.8%	11.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	22.9	13.9	29.5	17.5	65.0	37.7	31.0	48.7	78.5	66.8	80.8
Actuated g/C Ratio	0.19	0.12	0.25	0.15	0.54	0.31	0.26	0.41	0.65	0.56	0.67
v/c Ratio	0.74	0.63	0.45	0.40	0.32	0.20	1.92	0.48	0.69	0.56	0.14
Control Delay	47.9	60.1	40.8	51.9	12.8	16.7	443.5	7.0	31.4	20.0	3.6
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	47.9	60.1	40.8	51.9	12.8	16.7	443.5	7.0	31.4	20.0	3.6
LOS	D	E	D	D	B	B	F	A	C	B	A
Approach Delay		51.0		27.8			383.5			21.6	
Approach LOS		D		C			F			C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 130		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.92		
Intersection Signal Delay: 209.8	Intersection LOS: F	
Intersection Capacity Utilization 83.5%	ICU Level of Service E	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	86	14	96	81	213	34	1876	266	353	823	116
Future Volume (veh/h)	300	86	14	96	81	213	34	1876	266	353	823	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	400	115	19	128	108	284	45	2501	0	471	1097	155
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	629	282	47	339	339	484	276	2283		281	1883	958
Arrive On Green	0.08	0.18	0.18	0.08	0.18	0.18	0.04	0.45	0.00	0.13	0.53	0.53
Sat Flow, veh/h	3428	1553	257	1767	1856	1572	1767	5066	1572	1767	3526	1572
Grp Volume(v), veh/h	400	0	134	128	108	284	45	2501	0	471	1097	155
Grp Sat Flow(s),veh/h/ln	1714	0	1809	1767	1856	1572	1767	1689	1572	1767	1763	1572
Q Serve(g_s), s	9.0	0.0	7.9	7.0	6.1	18.3	1.6	54.1	0.0	15.0	25.3	5.1
Cycle Q Clear(g_c), s	9.0	0.0	7.9	7.0	6.1	18.3	1.6	54.1	0.0	15.0	25.3	5.1
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	629	0	328	339	339	484	276	2283		281	1883	958
V/C Ratio(X)	0.64	0.00	0.41	0.38	0.32	0.59	0.16	1.10		1.68	0.58	0.16
Avail Cap(c_a), veh/h	629	0	558	455	696	786	320	2283		281	1883	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.99	0.99	0.99	0.52	0.52	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	0.0	43.4	35.9	42.6	35.1	16.9	33.0	0.0	40.5	18.9	10.2
Incr Delay (d2), s/veh	2.1	0.0	0.8	0.7	0.5	1.1	0.1	47.2	0.0	319.7	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	0.0	6.5	5.5	5.1	11.5	1.2	40.8	0.0	51.2	15.7	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.4	0.0	44.2	36.6	43.1	36.2	17.1	80.1	0.0	360.1	20.2	10.5
LnGrp LOS	D	A	D	D	D	D	B	F		F	C	B
Approach Vol, veh/h		534			520			2546	A		1723	
Approach Delay, s/veh		42.1			37.8			79.0			112.3	
Approach LOS		D			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	59.1	14.1	26.8	10.0	69.1	14.0	26.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	31.0	17.0	37.0	8.0	38.0	9.0	45.0
Max Q Clear Time (g_c+I1), s	17.0	56.1	9.0	9.9	3.6	27.3	11.0	20.3
Green Ext Time (p_c), s	0.0	0.0	0.2	0.7	0.0	6.0	0.0	1.6

Intersection Summary		
HCM 6th Ctrl Delay		82.0
HCM 6th LOS		F

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	389	1	20	737	1807
Future Volume (vph)	389	1	20	737	1807
Turn Type	Perm	NA	pm+pt	NA	NA
Protected Phases		8	5	2	6
Permitted Phases	8		2		
Detector Phase	8	8	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0
Total Split (s)	38.0	38.0	15.0	92.0	77.0
Total Split (%)	29.2%	29.2%	11.5%	70.8%	59.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	22.2	22.2	97.8	97.8	86.8
Actuated g/C Ratio	0.17	0.17	0.75	0.75	0.67
v/c Ratio	0.74	0.75	0.14	0.30	0.61
Control Delay	66.5	66.8	7.1	6.0	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	66.5	66.8	7.1	6.0	13.8
LOS	E	E	A	A	B
Approach Delay		66.6		6.1	13.8
Approach LOS		E		A	B

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 13 (10%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.75		
Intersection Signal Delay: 18.7	Intersection LOS: B	
Intersection Capacity Utilization 55.7%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 5: Unser Bd. & I-40 N. Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	389	1	0	20	737	0	0	1807	72
Future Volume (veh/h)	0	0	0	389	1	0	20	737	0	0	1807	72
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	0	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				424	0	0	22	801	0	0	1964	78
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	0	3	3	0	0	3	3
Cap, veh/h				505	265	0	228	2751	0	0	3516	139
Arrive On Green				0.14	0.00	0.00	0.04	0.78	0.00	0.00	0.70	0.70
Sat Flow, veh/h				3534	1856	0	1767	3618	0	0	5166	198
Grp Volume(v), veh/h				424	0	0	22	801	0	0	1326	716
Grp Sat Flow(s),veh/h/ln				1767	1856	0	1767	1763	0	0	1689	1820
Q Serve(g_s), s				15.2	0.0	0.0	0.4	8.4	0.0	0.0	24.9	25.0
Cycle Q Clear(g_c), s				15.2	0.0	0.0	0.4	8.4	0.0	0.0	24.9	25.0
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.11
Lane Grp Cap(c), veh/h				505	265	0	228	2751	0	0	2375	1280
V/C Ratio(X)				0.84	0.00	0.00	0.10	0.29	0.00	0.00	0.56	0.56
Avail Cap(c_a), veh/h				897	471	0	296	2751	0	0	2375	1280
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				54.3	0.0	0.0	7.0	4.1	0.0	0.0	9.4	9.4
Incr Delay (d2), s/veh				3.8	0.0	0.0	0.2	0.3	0.0	0.0	1.0	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				11.4	0.0	0.0	0.3	4.9	0.0	0.0	13.7	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				58.1	0.0	0.0	7.2	4.3	0.0	0.0	10.4	11.2
LnGrp LOS				E	A	A	A	A	A	A	B	B
Approach Vol, veh/h					424			823			2042	
Approach Delay, s/veh					58.1			4.4			10.7	
Approach LOS					E			A			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		106.4			10.0	96.4		23.6				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		87.0			10.0	72.0		33.0				
Max Q Clear Time (g_c+I1), s		10.4			2.4	27.0		17.2				
Green Ext Time (p_c), s		7.0			0.0	25.0		1.4				

Intersection Summary		
HCM 6th Ctrl Delay	15.2	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	0	38	0	0	0	0	728	0	0	1095	0
Future Vol, veh/h	56	0	38	0	0	0	0	728	0	0	1095	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	280	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	62	0	42	0	0	0	0	800	0	0	1203	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1603	-	-	-	0	0	-	-	0
Stage 1	1203	-	-	-	-	-	-	-	-
Stage 2	400	-	-	-	-	-	-	-	-
Critical Hdwy	6.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	-	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	*153	0	0	0	-	-	0	-	0
Stage 1	*245	0	0	0	-	-	0	-	0
Stage 2	*742	0	0	0	-	-	0	-	0
Platoon blocked, %	1				-	-		-	
Mov Cap-1 Maneuver	*153	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	*153	0	-	-	-	-	-	-	-
Stage 1	*245	0	-	-	-	-	-	-	-
Stage 2	*742	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	43.5	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	-	153	-	-
HCM Lane V/C Ratio	-	-	0.402	-	-
HCM Control Delay (s)	-	-	43.5	0	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	1.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	163	58	85	1132	753
Future Volume (vph)	163	58	85	1132	753
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	2		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	10.0	21.0	21.0
Total Split (s)	42.0	20.0	20.0	78.0	58.0
Total Split (%)	35.0%	16.7%	16.7%	65.0%	48.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	11.6	23.3	98.4	98.4	86.7
Actuated g/C Ratio	0.10	0.19	0.82	0.82	0.72
v/c Ratio	0.54	0.18	0.20	0.30	0.28
Control Delay	68.1	14.9	3.3	2.9	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	68.1	14.9	3.3	2.9	5.9
LOS	E	B	A	A	A
Approach Delay	54.2			2.9	5.9
Approach LOS	D			A	A

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 37.8 (32%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 55		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.54		
Intersection Signal Delay: 8.9	Intersection LOS: A	
Intersection Capacity Utilization 39.8%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 1: Coors Bd. & Los Volcanes Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	163	58	85	1132	753	151
Future Volume (veh/h)	163	58	85	1132	753	151
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	177	63	92	1230	818	164
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	253	182	532	4269	3218	641
Arrive On Green	0.07	0.07	0.04	0.84	0.76	0.76
Sat Flow, veh/h	3428	1572	1767	5233	4404	844
Grp Volume(v), veh/h	177	63	92	1230	651	331
Grp Sat Flow(s),veh/h/ln	1714	1572	1767	1689	1689	1704
Q Serve(g_s), s	6.1	4.4	1.2	6.0	6.9	7.0
Cycle Q Clear(g_c), s	6.1	4.4	1.2	6.0	6.9	7.0
Prop In Lane	1.00	1.00	1.00			0.50
Lane Grp Cap(c), veh/h	253	182	532	4269	2565	1294
V/C Ratio(X)	0.70	0.35	0.17	0.29	0.25	0.26
Avail Cap(c_a), veh/h	1057	550	680	4269	2565	1294
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	48.9	2.5	2.0	4.3	4.3
Incr Delay (d2), s/veh	3.5	1.1	0.2	0.2	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	7.2	0.6	2.4	3.9	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.7	50.0	2.7	2.1	4.5	4.8
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	240			1322	982	
Approach Delay, s/veh	55.7			2.2	4.6	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		106.1		13.9	10.0	96.1
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		73.0		37.0	15.0	53.0
Max Q Clear Time (g_c+I1), s		8.0		8.1	3.2	9.0
Green Ext Time (p_c), s		12.8		0.8	0.1	8.3

Intersection Summary		
HCM 6th Ctrl Delay	8.2	
HCM 6th LOS	A	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	329	407	46	142	110	26	1842	121	490	120
Future Volume (vph)	329	407	46	142	110	26	1842	121	490	120
Turn Type	Prot	NA	Prot	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8	2		6		6
Detector Phase	7	4	3	8	8	5	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	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	22.0	35.0	14.0	27.0	27.0	14.0	52.0	19.0	57.0	57.0
Total Split (%)	18.3%	29.2%	11.7%	22.5%	22.5%	11.7%	43.3%	15.8%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	16.1	21.4	8.0	13.3	13.3	66.5	60.2	74.0	64.3	64.3
Actuated g/C Ratio	0.13	0.18	0.07	0.11	0.11	0.55	0.50	0.62	0.54	0.54
v/c Ratio	0.79	0.74	0.43	0.40	0.39	0.06	1.27	0.62	0.28	0.14
Control Delay	63.4	53.6	65.1	51.6	6.7	10.7	155.1	48.8	19.7	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.4	53.6	65.1	51.6	6.7	10.7	155.1	48.8	19.7	5.8
LOS	E	D	E	D	A	B	F	D	B	A
Approach Delay		57.9		37.0			153.3		22.2	
Approach LOS		E		D			F		C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 150		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.27		
Intersection Signal Delay: 100.6	Intersection LOS: F	
Intersection Capacity Utilization 96.4%	ICU Level of Service F	
Analysis Period (min) 15		

Splits and Phases: 2: Unser Bd. & Central Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	329	407	19	46	142	110	26	1842	192	121	490	120
Future Volume (veh/h)	329	407	19	46	142	110	26	1842	192	121	490	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	358	442	21	50	154	0	28	2002	209	132	533	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	419	549	26	79	291		628	1848	189	159	2069	
Arrive On Green	0.12	0.16	0.16	0.04	0.08	0.00	0.04	0.57	0.57	0.11	1.00	0.00
Sat Flow, veh/h	3428	3427	162	1767	3526	1572	1767	3228	331	1767	3526	1572
Grp Volume(v), veh/h	358	227	236	50	154	0	28	1077	1134	132	533	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1826	1767	1763	1572	1767	1763	1796	1767	1763	1572
Q Serve(g_s), s	12.3	14.9	15.0	3.3	5.0	0.0	0.7	68.7	68.7	4.6	0.0	0.0
Cycle Q Clear(g_c), s	12.3	14.9	15.0	3.3	5.0	0.0	0.7	68.7	68.7	4.6	0.0	0.0
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	419	282	292	79	291		628	1009	1028	159	2069	
V/C Ratio(X)	0.86	0.80	0.81	0.63	0.53		0.04	1.07	1.10	0.83	0.26	
Avail Cap(c_a), veh/h	486	441	457	133	646		687	1009	1028	266	2069	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	51.6	48.6	48.6	56.4	52.8	0.0	9.1	25.7	25.7	31.0	0.0	0.0
Incr Delay (d2), s/veh	12.5	5.9	5.9	8.1	1.5	0.0	0.0	48.2	60.6	9.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.0	11.3	11.7	3.0	4.1	0.0	0.5	53.6	60.3	7.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.2	54.5	54.5	64.5	54.3	0.0	9.1	73.8	86.3	40.8	0.3	0.0
LnGrp LOS	E	D	D	E	D		A	F	F	D	A	
Approach Vol, veh/h		821			204	A		2239			665	A
Approach Delay, s/veh		58.7			56.8			79.3			8.3	
Approach LOS		E			E			E			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	73.7	10.4	24.2	10.0	75.4	19.7	14.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	14.0	47.0	9.0	30.0	9.0	52.0	17.0	22.0
Max Q Clear Time (g_c+I1), s	6.6	70.7	5.3	17.0	2.7	2.0	14.3	7.0
Green Ext Time (p_c), s	0.2	0.0	0.0	2.2	0.0	4.1	0.4	0.7

Intersection Summary		
HCM 6th Ctrl Delay		61.8
HCM 6th LOS		E

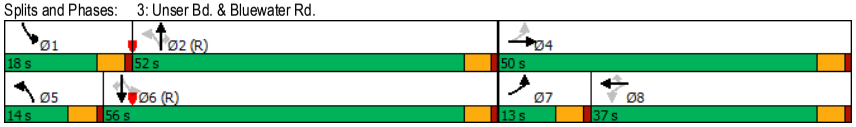
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	152	60	31	20	58	23	1595	88	130	777	77
Future Volume (vph)	152	60	31	20	58	23	1595	88	130	777	77
Turn Type	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	8	8	8	5	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	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	13.0	50.0	37.0	37.0	37.0	14.0	52.0	52.0	18.0	56.0	56.0
Total Split (%)	10.8%	41.7%	30.8%	30.8%	30.8%	11.7%	43.3%	43.3%	15.0%	46.7%	46.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	21.8	21.8	8.8	8.8	8.8	78.0	72.0	72.0	87.0	77.2	77.2
Actuated g/C Ratio	0.18	0.18	0.07	0.07	0.07	0.65	0.60	0.60	0.72	0.64	0.64
v/c Ratio	0.78	0.37	0.37	0.16	0.30	0.06	0.84	0.10	0.65	0.38	0.08
Control Delay	68.9	30.6	63.4	53.4	5.1	5.9	35.7	6.7	35.4	13.6	4.8
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	68.9	30.6	63.4	53.4	5.1	5.9	35.7	6.7	35.4	13.6	4.8
LOS	E	C	E	D	A	A	D	A	D	B	A
Approach Delay		52.3		30.5			33.8			15.8	
Approach LOS		D		C			C			B	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 99.6 (83%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.84		
Intersection Signal Delay: 29.5	Intersection LOS: C	
Intersection Capacity Utilization 78.9%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 3: Unser Bd. & Bluewater Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	60	56	31	20	58	23	1595	88	130	777	77
Future Volume (veh/h)	152	60	56	31	20	58	23	1595	88	130	777	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	169	67	62	34	22	64	26	1772	0	144	863	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	241	149	138	135	111	94	554	2332		226	2345	
Arrive On Green	0.07	0.17	0.17	0.06	0.06	0.06	0.04	0.66	0.00	0.09	1.00	0.00
Sat Flow, veh/h	1767	887	821	1251	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	169	0	129	34	22	64	26	1772	0	144	863	0
Grp Sat Flow(s),veh/h/ln	1767	0	1708	1251	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	8.0	0.0	8.2	3.2	1.4	4.8	0.5	41.1	0.0	3.3	0.0	0.0
Cycle Q Clear(g_c), s	8.0	0.0	8.2	3.2	1.4	4.8	0.5	41.1	0.0	3.3	0.0	0.0
Prop In Lane	1.00		0.48	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	0	287	135	111	94	554	2332		226	2345	
V/C Ratio(X)	0.70	0.00	0.45	0.25	0.20	0.68	0.05	0.76		0.64	0.37	
Avail Cap(c_a), veh/h	241	0	640	394	495	419	613	2332		337	2345	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.00	0.76	0.76	0.00
Uniform Delay (d), s/veh	49.8	0.0	44.9	54.5	53.7	55.3	5.4	13.8	0.0	19.0	0.0	0.0
Incr Delay (d2), s/veh	8.8	0.0	1.1	1.0	0.9	8.4	0.0	0.2	0.0	2.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.0	0.0	6.4	1.9	1.2	3.8	0.3	17.0	0.0	4.6	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.6	0.0	46.0	55.5	54.5	63.6	5.4	14.1	0.0	21.3	0.3	0.0
LnGrp LOS	E	A	D	E	D	E	A	B		C	A	
Approach Vol, veh/h		298			120			1798	A		1007	A
Approach Delay, s/veh		53.1			59.7			13.9			3.3	
Approach LOS		D			E			B			A	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	84.4		25.2	10.0	84.8	13.0	12.2				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	13.0	47.0		45.0	9.0	51.0	8.0	32.0				
Max Q Clear Time (g_c+I1), s	5.3	43.1		10.2	2.5	2.0	10.0	6.8				
Green Ext Time (p_c), s	0.2	3.4		0.8	0.0	7.6	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		15.9
HCM 6th LOS		B

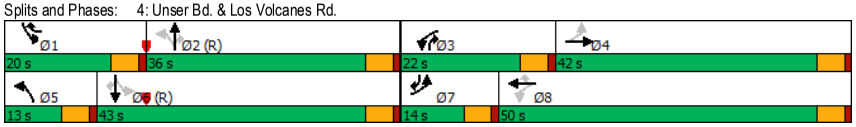
Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	300	88	167	83	253	34	1876	340	395	823	116
Future Volume (vph)	300	88	167	83	253	34	1876	340	395	823	116
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	42.0	22.0	50.0	20.0	13.0	36.0	22.0	20.0	43.0	14.0
Total Split (%)	11.7%	35.0%	18.3%	41.7%	16.7%	10.8%	30.0%	18.3%	16.7%	35.8%	11.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	23.0	14.0	34.6	20.9	65.0	37.8	31.0	51.9	75.1	63.3	77.3
Actuated g/C Ratio	0.19	0.12	0.29	0.17	0.54	0.32	0.26	0.43	0.63	0.53	0.64
v/c Ratio	0.74	0.63	0.66	0.35	0.38	0.20	1.92	0.56	0.83	0.59	0.15
Control Delay	45.7	60.1	46.2	47.9	14.1	17.3	443.7	7.5	42.3	22.3	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.7	60.1	46.2	47.9	14.1	17.3	443.7	7.5	42.3	22.3	3.9
LOS	D	E	D	D	B	B	F	A	D	C	A
Approach Delay		49.3		30.4			371.4			26.6	
Approach LOS		D		C			F			C	

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 150		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.92		
Intersection Signal Delay: 201.8	Intersection LOS: F	
Intersection Capacity Utilization 86.5%	ICU Level of Service E	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	88	14	167	83	253	34	1876	340	395	823	116
Future Volume (veh/h)	300	88	14	167	83	253	34	1876	340	395	823	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	400	117	19	223	111	337	45	2501	0	527	1097	155
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	671	263	43	395	394	530	257	2133		281	1778	911
Arrive On Green	0.08	0.17	0.17	0.12	0.21	0.21	0.04	0.42	0.00	0.13	0.50	0.50
Sat Flow, veh/h	3428	1557	253	1767	1856	1572	1767	5066	1572	1767	3526	1572
Grp Volume(v), veh/h	400	0	136	223	111	337	45	2501	0	527	1097	155
Grp Sat Flow(s),veh/h/ln	1714	0	1810	1767	1856	1572	1767	1689	1572	1767	1763	1572
Q Serve(g_s), s	9.0	0.0	8.1	12.1	6.0	21.7	1.7	50.5	0.0	15.0	26.9	5.5
Cycle Q Clear(g_c), s	9.0	0.0	8.1	12.1	6.0	21.7	1.7	50.5	0.0	15.0	26.9	5.5
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	671	0	305	395	394	530	257	2133		281	1778	911
V/C Ratio(X)	0.60	0.00	0.45	0.56	0.28	0.64	0.18	1.17		1.88	0.62	0.17
Avail Cap(c_a), veh/h	671	0	558	436	696	786	301	2133		281	1778	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.47	0.47	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	0.0	44.8	33.8	39.6	33.5	19.1	34.7	0.0	39.7	21.4	11.8
Incr Delay (d2), s/veh	1.4	0.0	1.0	1.4	0.4	1.3	0.2	80.3	0.0	407.5	1.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.1	0.0	6.7	9.1	5.0	13.2	1.3	48.1	0.0	61.9	16.7	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.8	0.0	45.9	35.2	40.0	34.8	19.2	115.0	0.0	447.2	23.0	12.2
LnGrp LOS	D	A	D	D	D	C	B	F		F	C	B
Approach Vol, veh/h		536			671			2546	A		1779	
Approach Delay, s/veh		42.1			35.8			113.3			147.7	
Approach LOS		D			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	55.5	19.2	25.2	10.0	65.5	14.0	30.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	31.0	17.0	37.0	8.0	38.0	9.0	45.0
Max Q Clear Time (g_c+I1), s	17.0	52.5	14.1	10.1	3.7	28.9	11.0	23.7
Green Ext Time (p_c), s	0.0	0.0	0.2	0.7	0.0	5.3	0.0	1.8

Intersection Summary		
HCM 6th Ctrl Delay	108.1	
HCM 6th LOS	F	

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	300	88	167	83	253	34	1876	340	395	823	116
Future Volume (vph)	300	88	167	83	253	34	1876	340	395	823	116
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2			6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	13.0	21.0	13.0	21.0	22.0	10.0	64.0	13.0	22.0	76.0	13.0
Total Split (%)	10.8%	17.5%	10.8%	17.5%	18.3%	8.3%	53.3%	10.8%	18.3%	63.3%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	21.2	13.2	21.2	13.2	38.0	64.6	59.0	72.0	19.8	73.2	86.2
Actuated g/C Ratio	0.18	0.11	0.18	0.11	0.32	0.54	0.49	0.60	0.16	0.61	0.72
v/c Ratio	0.88	0.67	1.04	0.55	0.62	0.15	1.01	0.44	0.94	0.51	0.13
Control Delay	64.6	64.4	119.6	64.6	32.5	5.9	41.3	2.9	76.4	14.7	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.6	64.4	119.6	64.6	32.5	5.9	41.3	2.9	76.4	14.7	1.1
LOS	E	E	F	E	C	A	D	A	E	B	A
Approach Delay		64.6		66.8			35.0			31.8	
Approach LOS		E		E			D			C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 117.6 (98%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 40.3		Intersection LOS: D	
Intersection Capacity Utilization 75.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	88	14	167	83	253	34	1876	340	395	823	116
Future Volume (veh/h)	300	88	14	167	83	253	34	1876	340	395	823	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	400	117	19	223	111	337	45	2501	0	527	1097	155
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	490	208	34	256	247	432	313	2491		486	2086	1035
Arrive On Green	0.07	0.13	0.13	0.07	0.13	0.13	0.08	0.98	0.00	0.14	0.59	0.59
Sat Flow, veh/h	3428	1557	253	1767	1856	1572	1767	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	400	0	136	223	111	337	45	2501	0	527	1097	155
Grp Sat Flow(s),veh/h/ln	1714	0	1810	1767	1856	1572	1767	1689	1572	1714	1763	1572
Q Serve(g_s), s	8.0	0.0	8.4	8.0	6.6	16.0	1.4	59.0	0.0	17.0	22.1	4.5
Cycle Q Clear(g_c), s	8.0	0.0	8.4	8.0	6.6	16.0	1.4	59.0	0.0	17.0	22.1	4.5
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	490	0	241	256	247	432	313	2491		486	2086	1035
V/C Ratio(X)	0.82	0.00	0.56	0.87	0.45	0.78	0.14	1.00		1.09	0.53	0.15
Avail Cap(c_a), veh/h	490	0	241	256	247	432	313	2491		486	2086	1035
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.47	0.47	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.9	0.0	48.7	48.1	47.9	40.1	13.3	1.0	0.0	51.5	14.5	7.8
Incr Delay (d2), s/veh	10.3	0.0	3.0	26.1	1.3	8.8	0.1	13.4	0.0	65.8	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.3	0.0	7.2	8.3	5.7	15.4	1.0	5.6	0.0	18.0	13.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.2	0.0	51.7	74.2	49.2	49.0	13.4	14.4	0.0	117.3	15.5	8.1
LnGrp LOS	E	A	D	E	D	D	B	F		F	B	A
Approach Vol, veh/h		536			671			2546	A		1779	
Approach Delay, s/veh		55.8			57.4			14.3			45.0	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	64.0	13.0	21.0	10.0	76.0	13.0	21.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	59.0	8.0	16.0	5.0	71.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	19.0	61.0	10.0	10.4	3.4	24.1	10.0	18.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	11.6	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		33.4
HCM 6th LOS		C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	394	1	29	764	1835
Future Volume (vph)	394	1	29	764	1835
Turn Type	Perm	NA	pm+pt	NA	NA
Protected Phases		8	5	2	6
Permitted Phases	8		2		
Detector Phase	8	8	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0
Total Split (s)	38.0	38.0	15.0	92.0	77.0
Total Split (%)	29.2%	29.2%	11.5%	70.8%	59.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	22.3	22.3	97.7	97.7	86.5
Actuated g/C Ratio	0.17	0.17	0.75	0.75	0.67
v/c Ratio	0.75	0.75	0.21	0.32	0.62
Control Delay	66.7	66.8	8.2	6.2	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	66.7	66.8	8.2	6.2	14.2
LOS	E	E	A	A	B
Approach Delay		66.8		6.2	14.2
Approach LOS		E		A	B

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 13 (10%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.75		
Intersection Signal Delay: 18.9	Intersection LOS: B	
Intersection Capacity Utilization 64.7%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 5: Unser Bd. & I-40 N. Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	394	1	0	29	764	0	0	1835	72
Future Volume (veh/h)	0	0	0	394	1	0	29	764	0	0	1835	72
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	0	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				429	0	0	32	830	0	0	1995	78
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	0	3	3	0	0	3	3
Cap, veh/h				510	268	0	223	2746	0	0	3511	137
Arrive On Green				0.14	0.00	0.00	0.04	0.78	0.00	0.00	0.70	0.70
Sat Flow, veh/h				3534	1856	0	1767	3618	0	0	5169	195
Grp Volume(v), veh/h				429	0	0	32	830	0	0	1345	728
Grp Sat Flow(s),veh/h/ln				1767	1856	0	1767	1763	0	0	1689	1820
Q Serve(g_s), s				15.4	0.0	0.0	0.6	8.9	0.0	0.0	25.7	25.8
Cycle Q Clear(g_c), s				15.4	0.0	0.0	0.6	8.9	0.0	0.0	25.7	25.8
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.11
Lane Grp Cap(c), veh/h				510	268	0	223	2746	0	0	2370	1278
V/C Ratio(X)				0.84	0.00	0.00	0.14	0.30	0.00	0.00	0.57	0.57
Avail Cap(c_a), veh/h				897	471	0	291	2746	0	0	2370	1278
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				54.2	0.0	0.0	7.5	4.2	0.0	0.0	9.6	9.6
Incr Delay (d2), s/veh				3.8	0.0	0.0	0.3	0.3	0.0	0.0	1.0	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				11.5	0.0	0.0	0.4	5.2	0.0	0.0	14.1	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				58.0	0.0	0.0	7.8	4.4	0.0	0.0	10.6	11.5
LnGrp LOS				E	A	A	A	A	A	A	B	B
Approach Vol, veh/h					429			862			2073	
Approach Delay, s/veh					58.0			4.6			10.9	
Approach LOS					E			A			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		106.2			10.0	96.2		23.8				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		87.0			10.0	72.0		33.0				
Max Q Clear Time (g_c+I1), s		10.9			2.6	27.8		17.4				
Green Ext Time (p_c), s		7.3			0.0	25.3		1.4				

Intersection Summary		
HCM 6th Ctrl Delay	15.3	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	0	47	0	0	0	0	763	0	0	1128	0
Future Vol, veh/h	56	0	47	0	0	0	0	763	0	0	1128	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	280	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	62	0	52	0	0	0	0	838	0	0	1240	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1659	-	-	-	0	0	-	-	0
Stage 1	1240	-	-	-	-	-	-	-	-
Stage 2	419	-	-	-	-	-	-	-	-
Critical Hdwy	6.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	-	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	*145	0	0	0	-	-	0	-	0
Stage 1	*234	0	0	0	-	-	0	-	0
Stage 2	*718	0	0	0	-	-	0	-	0
Platoon blocked, %	1				-	-		-	
Mov Cap-1 Maneuver	*145	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	*145	0	-	-	-	-	-	-	-
Stage 1	*234	0	-	-	-	-	-	-	-
Stage 2	*718	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	47	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	-	145	-	-
HCM Lane V/C Ratio	-	-	0.424	-	-
HCM Control Delay (s)	-	-	47	0	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	1.9	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	682	55	23	404	23	8
Future Vol, veh/h	682	55	23	404	23	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	909	73	31	539	31	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	982	0	1547	946
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	601	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	699	-	125	316
Stage 1	-	-	-	-	376	-
Stage 2	-	-	-	-	546	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	699	-	117	316
Mov Cap-2 Maneuver	-	-	-	-	250	-
Stage 1	-	-	-	-	376	-
Stage 2	-	-	-	-	512	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	21.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	264	-	-	699	-
HCM Lane V/C Ratio	0.157	-	-	0.044	-
HCM Control Delay (s)	21.2	-	-	10.4	0
HCM Lane LOS	C	-	-	B	A
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	718	105	25	402	100	24
Future Vol, veh/h	718	105	25	402	100	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	957	140	33	536	133	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1097	0	1629	1027
Stage 1	-	-	-	-	1027	-
Stage 2	-	-	-	-	602	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	633	-	~ 111	283
Stage 1	-	-	-	-	344	-
Stage 2	-	-	-	-	545	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	633	-	~ 103	283
Mov Cap-2 Maneuver	-	-	-	-	232	-
Stage 1	-	-	-	-	344	-
Stage 2	-	-	-	-	505	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	47.7
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	240	-	-	633	-
HCM Lane V/C Ratio	0.689	-	-	0.053	-
HCM Control Delay (s)	47.7	-	-	11	0
HCM Lane LOS	E	-	-	B	A
HCM 95th %tile Q(veh)	4.5	-	-	0.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1	1	16	62	16
Future Vol, veh/h	15	1	1	16	62	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	1	1	21	83	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	117	94	104	0	-	0
Stage 1	94	-	-	-	-	-
Stage 2	23	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	877	960	1481	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	876	960	1481	-	-	-
Mov Cap-2 Maneuver	876	-	-	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	997	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1481	-	881	-	-
HCM Lane V/C Ratio	0.001	-	0.024	-	-
HCM Control Delay (s)	7.4	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	196	112	71	1223	1771
Future Volume (vph)	196	112	71	1223	1771
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	2		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	10.0	21.0	21.0
Total Split (s)	42.0	26.0	26.0	88.0	62.0
Total Split (%)	32.3%	20.0%	20.0%	67.7%	47.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	13.1	24.8	106.9	106.9	95.2
Actuated g/C Ratio	0.10	0.19	0.82	0.82	0.73
v/c Ratio	0.59	0.38	0.38	0.30	0.55
Control Delay	62.9	52.5	8.1	3.1	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	62.9	52.5	8.1	3.1	8.7
LOS	E	D	A	A	A
Approach Delay	59.1			3.4	8.7
Approach LOS	E			A	A

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 45.5 (35%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.59		
Intersection Signal Delay: 11.1	Intersection LOS: B	
Intersection Capacity Utilization 60.2%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 1: Coors Bd. & Los Volcanes Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	196	112	71	1223	1771	168
Future Volume (veh/h)	196	112	71	1223	1771	168
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	202	115	73	1261	1826	173
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	316	206	251	4209	3550	335
Arrive On Green	0.09	0.09	0.04	0.83	0.75	0.75
Sat Flow, veh/h	3428	1572	1767	5233	4875	444
Grp Volume(v), veh/h	202	115	73	1261	1307	692
Grp Sat Flow(s),veh/h/ln	1714	1572	1767	1689	1689	1776
Q Serve(g_s), s	7.4	8.9	1.1	7.3	20.2	20.4
Cycle Q Clear(g_c), s	7.4	8.9	1.1	7.3	20.2	20.4
Prop In Lane	1.00	1.00	1.00			0.25
Lane Grp Cap(c), veh/h	316	206	251	4209	2546	1339
V/C Ratio(X)	0.64	0.56	0.29	0.30	0.51	0.52
Avail Cap(c_a), veh/h	976	508	468	4209	2546	1339
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	53.0	5.4	2.5	6.4	6.4
Incr Delay (d2), s/veh	1.9	2.1	0.6	0.2	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.9	12.2	0.7	3.4	10.9	11.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.8	55.1	6.1	2.7	7.2	7.9
LnGrp LOS	E	E	A	A	A	A
Approach Vol, veh/h	317			1334	1999	
Approach Delay, s/veh	57.4			2.8	7.4	
Approach LOS	E			A	A	

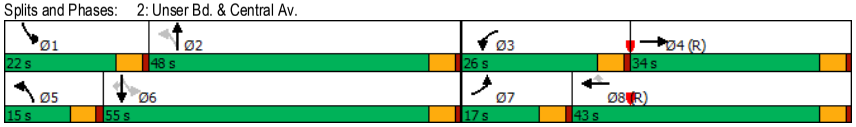
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		113.0		17.0	10.0	103.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		83.0		37.0	21.0	57.0
Max Q Clear Time (g_c+I1), s		9.3		10.9	3.1	22.4
Green Ext Time (p_c), s		13.4		1.1	0.1	21.0

Intersection Summary		
HCM 6th Ctrl Delay	10.1	
HCM 6th LOS	B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	184	402	94	363	65	83	1235	147	1121	155
Future Volume (vph)	184	402	94	363	65	83	1235	147	1121	155
Turn Type	Prot	NA	Prot	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8	2		6		6
Detector Phase	7	4	3	8	8	5	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	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	17.0	34.0	26.0	43.0	43.0	15.0	48.0	22.0	55.0	55.0
Total Split (%)	13.1%	26.2%	20.0%	33.1%	33.1%	11.5%	36.9%	16.9%	42.3%	42.3%
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	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	C-Min	Min	C-Min	C-Min	Min	Min	Min	Min	Min
Act Effct Green (s)	11.3	29.7	12.7	31.1	31.1	64.0	55.3	70.9	59.0	59.0
Actuated g/C Ratio	0.09	0.23	0.10	0.24	0.24	0.49	0.43	0.55	0.45	0.45
v/c Ratio	0.66	0.58	0.58	0.46	0.14	0.42	1.00	0.70	0.74	0.21
Control Delay	68.5	47.1	69.1	43.6	0.6	21.8	59.7	51.3	18.4	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.5	47.1	69.1	43.6	0.6	21.8	59.7	51.3	18.4	1.4
LOS	E	D	E	D	A	C	E	D	B	A
Approach Delay		53.4		42.9			57.6		19.9	
Approach LOS		D		D			E		B	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 127.4 (98%), Referenced to phase 4:EBT and 8:WBT, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.00		
Intersection Signal Delay: 41.8	Intersection LOS: D	
Intersection Capacity Utilization 81.4%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 2: Unser Bd. & Central Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	402	36	94	363	65	83	1235	158	147	1121	155
Future Volume (veh/h)	184	402	36	94	363	65	83	1235	158	147	1121	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	194	423	38	99	382	0	87	1300	166	155	1180	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	248	1192	107	127	1282		163	1059	134	186	1279	
Arrive On Green	0.07	0.36	0.36	0.07	0.36	0.00	0.05	0.34	0.34	0.10	0.48	0.00
Sat Flow, veh/h	3428	3273	293	1767	3526	1572	1767	3147	400	1767	3526	1572
Grp Volume(v), veh/h	194	227	234	99	382	0	87	725	741	155	1180	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1803	1767	1763	1572	1767	1763	1784	1767	1763	1572
Q Serve(g_s), s	7.2	12.2	12.3	7.2	10.1	0.0	4.1	43.8	43.8	7.4	40.6	0.0
Cycle Q Clear(g_c), s	7.2	12.2	12.3	7.2	10.1	0.0	4.1	43.8	43.8	7.4	40.6	0.0
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	248	642	656	127	1282		163	593	600	186	1279	
V/C Ratio(X)	0.78	0.35	0.36	0.78	0.30		0.53	1.22	1.23	0.83	0.92	
Avail Cap(c_a), veh/h	316	642	656	285	1282		215	593	600	286	1356	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.57	0.57	0.00
Uniform Delay (d), s/veh	59.3	30.2	30.2	59.3	29.5	0.0	32.4	43.1	43.1	31.2	31.9	0.0
Incr Delay (d2), s/veh	9.4	1.5	1.5	10.0	0.6	0.0	2.7	114.5	119.4	7.1	6.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	9.3	9.6	6.4	7.9	0.0	3.4	54.2	56.1	5.7	22.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.7	31.7	31.7	69.3	30.1	0.0	35.1	157.7	162.6	38.3	38.4	0.0
LnGrp LOS	E	C	C	E	C		D	F	F	D	D	
Approach Vol, veh/h		655			481	A		1553			1335	A
Approach Delay, s/veh		42.7			38.2			153.1			38.4	
Approach LOS		D			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	48.8	14.3	52.3	11.2	52.1	14.4	52.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	43.0	21.0	29.0	10.0	50.0	12.0	38.0
Max Q Clear Time (g_c+I1), s	9.4	45.8	9.2	14.3	6.1	42.6	9.2	12.1
Green Ext Time (p_c), s	0.2	0.0	0.2	2.4	0.1	4.6	0.2	2.6

Intersection Summary		
HCM 6th Ctrl Delay	83.3	
HCM 6th LOS	F	

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	138	75	92	98	165	39	1028	99	72	1510	121
Future Volume (vph)	138	75	92	98	165	39	1028	99	72	1510	121
Turn Type	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	8	8	8	5	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	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	14.0	52.0	38.0	38.0	38.0	14.0	64.0	64.0	14.0	64.0	64.0
Total Split (%)	10.8%	40.0%	29.2%	29.2%	29.2%	10.8%	49.2%	49.2%	10.8%	49.2%	49.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	30.1	30.1	16.1	16.1	16.1	84.0	77.5	77.5	85.9	78.4	78.4
Actuated g/C Ratio	0.23	0.23	0.12	0.12	0.12	0.65	0.60	0.60	0.66	0.60	0.60
v/c Ratio	0.57	0.34	0.65	0.46	0.51	0.24	0.52	0.11	0.25	0.76	0.13
Control Delay	50.0	32.4	72.4	57.9	12.0	7.9	13.1	2.5	7.2	13.9	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.0	32.4	72.4	57.9	12.0	7.9	13.1	2.5	7.2	13.9	1.9
LOS	D	C	E	E	B	A	B	A	A	B	A
Approach Delay		41.3		40.3			12.0			12.8	
Approach LOS		D		D			B			B	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 127.4 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.76		
Intersection Signal Delay: 17.5	Intersection LOS: B	
Intersection Capacity Utilization 75.4%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 3: Unser Bd. & Bluewater Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	75	59	92	98	165	39	1028	99	72	1510	121
Future Volume (veh/h)	138	75	59	92	98	165	39	1028	99	72	1510	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	147	80	63	98	104	176	41	1094	0	77	1606	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	269	233	184	222	250	212	190	2128		313	2128	
Arrive On Green	0.07	0.24	0.24	0.13	0.13	0.13	0.03	0.40	0.00	0.03	0.40	0.00
Sat Flow, veh/h	1767	962	757	1235	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	147	0	143	98	104	176	41	1094	0	77	1606	0
Grp Sat Flow(s),veh/h/ln	1767	0	1719	1235	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	9.0	0.0	8.9	9.7	6.7	14.2	1.1	30.3	0.0	2.1	50.8	0.0
Cycle Q Clear(g_c), s	9.0	0.0	8.9	9.7	6.7	14.2	1.1	30.3	0.0	2.1	50.8	0.0
Prop In Lane	1.00		0.44	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	0	417	222	250	212	190	2128		313	2128	
V/C Ratio(X)	0.55	0.00	0.34	0.44	0.42	0.83	0.22	0.51		0.25	0.75	
Avail Cap(c_a), veh/h	269	0	622	369	471	399	244	2128		367	2128	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.26	0.26	0.00	0.70	0.70	0.00
Uniform Delay (d), s/veh	43.7	0.0	40.7	52.8	51.5	54.8	20.2	24.4	0.0	13.1	30.5	0.0
Incr Delay (d2), s/veh	2.3	0.0	0.5	1.4	1.1	8.1	0.1	0.2	0.0	0.3	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.6	0.0	7.0	5.6	5.8	10.1	1.0	16.7	0.0	1.5	29.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	0.0	41.2	54.2	52.6	62.8	20.4	24.6	0.0	13.3	32.3	0.0
LnGrp LOS	D	A	D	D	D	E	C	C		B	C	
Approach Vol, veh/h		290			378			1135	A		1683	A
Approach Delay, s/veh		43.6			57.8			24.5			31.4	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	83.5		36.5	10.0	83.5	14.0	22.5				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	9.0	59.0		47.0	9.0	59.0	9.0	33.0				
Max Q Clear Time (g_c+I1), s	4.1	32.3		10.9	3.1	52.8	11.0	16.2				
Green Ext Time (p_c), s	0.1	9.2		0.9	0.0	4.9	0.0	1.4				

Intersection Summary		
HCM 6th Ctrl Delay	33.0	
HCM 6th LOS	C	

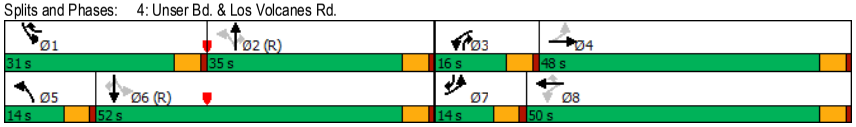
Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	169	54	167	75	292	25	1252	145	229	1305	114
Future Volume (vph)	169	54	167	75	292	25	1252	145	229	1305	114
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	48.0	16.0	50.0	31.0	14.0	35.0	16.0	31.0	52.0	14.0
Total Split (%)	10.8%	36.9%	12.3%	38.5%	23.8%	10.8%	26.9%	12.3%	23.8%	40.0%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	19.6	10.6	23.6	12.6	36.0	76.1	70.0	86.0	93.4	82.2	96.2
Actuated g/C Ratio	0.15	0.08	0.18	0.10	0.28	0.59	0.54	0.66	0.72	0.63	0.74
v/c Ratio	1.26	0.57	0.78	0.46	0.67	0.12	0.51	0.15	0.66	0.65	0.11
Control Delay	177.0	54.6	65.4	60.1	38.6	13.9	27.4	5.3	23.2	14.6	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	177.0	54.6	65.4	60.1	38.6	13.9	27.4	5.3	23.2	14.6	2.0
LOS	F	D	E	E	D	B	C	A	C	B	A
Approach Delay		159.3		50.0			24.9			14.9	
Approach LOS		F		D			C			B	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 5.2 (4%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 80		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.26		
Intersection Signal Delay: 43.2	Intersection LOS: D	
Intersection Capacity Utilization 73.9%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	54	32	167	75	292	25	1252	145	229	1305	114
Future Volume (veh/h)	169	54	32	167	75	292	25	1252	145	229	1305	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	557	59	35	184	82	321	27	1376	0	252	1434	125
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	671	210	124	393	385	467	192	2433		392	1872	944
Arrive On Green	0.07	0.19	0.19	0.08	0.21	0.21	0.08	0.96	0.00	0.09	0.53	0.53
Sat Flow, veh/h	3428	1091	647	1767	1856	1572	1767	5066	1572	1767	3526	1572
Grp Volume(v), veh/h	557	0	94	184	82	321	27	1376	0	252	1434	125
Grp Sat Flow(s),veh/h/ln	1714	0	1739	1767	1856	1572	1767	1689	1572	1767	1763	1572
Q Serve(g_s), s	9.0	0.0	6.0	10.9	4.8	23.5	0.9	3.1	0.0	9.0	41.8	4.5
Cycle Q Clear(g_c), s	9.0	0.0	6.0	10.9	4.8	23.5	0.9	3.1	0.0	9.0	41.8	4.5
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	671	0	334	393	385	467	192	2433		392	1872	944
V/C Ratio(X)	0.83	0.00	0.28	0.47	0.21	0.69	0.14	0.57		0.64	0.77	0.13
Avail Cap(c_a), veh/h	671	0	575	393	642	685	246	2433		587	1872	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.93	0.93	0.93	0.84	0.84	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	0.0	44.9	38.1	42.7	40.4	19.6	1.4	0.0	13.3	24.1	11.3
Incr Delay (d2), s/veh	8.7	0.0	0.5	0.8	0.3	1.7	0.3	0.8	0.0	1.8	3.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.2	0.0	4.8	8.3	4.0	14.1	0.7	1.3	0.0	6.7	24.7	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.7	0.0	45.3	38.9	43.0	42.1	19.9	2.2	0.0	15.1	27.2	11.6
LnGrp LOS	D	A	D	D	D	D	B	A		B	C	B
Approach Vol, veh/h		651			587			1403	A		1811	
Approach Delay, s/veh		53.3			41.2			2.5			24.4	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	67.4	16.0	30.0	10.0	74.0	14.0	32.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	26.0	30.0	11.0	43.0	9.0	47.0	9.0	45.0
Max Q Clear Time (g_c+I1), s	11.0	5.1	12.9	8.0	2.9	43.8	11.0	25.5
Green Ext Time (p_c), s	0.6	11.5	0.0	0.5	0.0	2.6	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	24.0
HCM 6th LOS	C

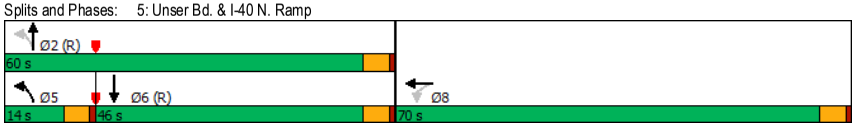
Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	992	1	34	981	1121
Future Volume (vph)	992	1	34	981	1121
Turn Type	Perm	NA	pm+pt	NA	NA
Protected Phases		8	5	2	6
Permitted Phases	8		2		
Detector Phase	8	8	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0
Total Split (s)	70.0	70.0	14.0	60.0	46.0
Total Split (%)	53.8%	53.8%	10.8%	46.2%	35.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	50.7	50.7	69.3	69.3	57.4
Actuated g/C Ratio	0.39	0.39	0.53	0.53	0.44
v/c Ratio	0.79	0.79	0.17	0.54	0.56
Control Delay	43.3	43.4	20.4	23.0	29.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	43.3	43.4	20.4	23.0	29.7
LOS	D	D	C	C	C
Approach Delay		43.3		22.9	29.7
Approach LOS		D		C	C

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 2.6 (2%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.79		
Intersection Signal Delay: 31.8	Intersection LOS: C	
Intersection Capacity Utilization 69.2%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 5: Unser Bd. & I-40 N. Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	992	1	0	34	981	0	0	1121	76
Future Volume (veh/h)	0	0	0	992	1	0	34	981	0	0	1121	76
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	0	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				1024	0	0	35	1011	0	0	1156	78
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				3	3	0	3	3	0	0	3	3
Cap, veh/h				1148	603	0	290	2109	0	0	2526	170
Arrive On Green				0.32	0.00	0.00	0.04	0.60	0.00	0.00	0.52	0.52
Sat Flow, veh/h				3534	1856	0	1767	3618	0	0	5014	327
Grp Volume(v), veh/h				1024	0	0	35	1011	0	0	805	429
Grp Sat Flow(s),veh/h/ln				1767	1856	0	1767	1763	0	0	1689	1797
Q Serve(g_s), s				35.8	0.0	0.0	1.1	21.0	0.0	0.0	19.5	19.5
Cycle Q Clear(g_c), s				35.8	0.0	0.0	1.1	21.0	0.0	0.0	19.5	19.5
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.18
Lane Grp Cap(c), veh/h				1148	603	0	290	2109	0	0	1760	936
V/C Ratio(X)				0.89	0.00	0.00	0.12	0.48	0.00	0.00	0.46	0.46
Avail Cap(c_a), veh/h				1767	928	0	344	2109	0	0	1760	936
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				41.7	0.0	0.0	13.9	14.7	0.0	0.0	19.6	19.6
Incr Delay (d2), s/veh				4.1	0.0	0.0	0.2	0.8	0.0	0.0	0.9	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				22.7	0.0	0.0	0.8	13.2	0.0	0.0	12.4	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.8	0.0	0.0	14.1	15.5	0.0	0.0	20.4	21.2
LnGrp LOS				D	A	A	B	B	A	A	C	C
Approach Vol, veh/h					1024			1046			1234	
Approach Delay, s/veh					45.8			15.5			20.7	
Approach LOS					D			B			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		82.8			10.0	72.8		47.2				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		55.0			9.0	41.0		65.0				
Max Q Clear Time (g_c+I1), s		23.0			3.1	21.5		37.8				
Green Ext Time (p_c), s		8.8			0.0	8.5		4.4				

Intersection Summary		
HCM 6th Ctrl Delay	26.8	
HCM 6th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	330.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	86	0	54	0	0	0	0	1133	0	0	2091	0
Future Vol, veh/h	86	0	54	0	0	0	0	1133	0	0	2091	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	280	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	101	0	64	0	0	0	0	1333	0	0	2460	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	3127	-	-	-	0	0	-	-	0
Stage 1	2460	-	-	-	-	-	-	-	-
Stage 2	667	-	-	-	-	-	-	-	-
Critical Hdwy	6.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	-	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 4	0	0	0	-	-	0	-	0
Stage 1	*~ 49	0	0	0	-	-	0	-	0
Stage 2	*583	0	0	0	-	-	0	-	0
Platoon blocked, %	1				-	-		-	
Mov Cap-1 Maneuver	*~ 4	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	*~ 4	0	-	-	-	-	-	-	-
Stage 1	*~ 49	0	-	-	-	-	-	-	-
Stage 2	*583	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay$ s	12705.5	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	-	4	-	-
HCM Lane V/C Ratio	-	-	25.294	-	-
HCM Control Delay (s)	-	-	$ 12705.5	0	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q(veh)	-	-	14.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	210	121	80	1223	1771
Future Volume (vph)	210	121	80	1223	1771
Turn Type	Prot	pm+ov	pm+pt	NA	NA
Protected Phases	4	5	5	2	6
Permitted Phases		4	2		
Detector Phase	4	5	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	10.0	21.0	21.0
Total Split (s)	42.0	26.0	26.0	88.0	62.0
Total Split (%)	32.3%	20.0%	20.0%	67.7%	47.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	14.6	26.6	107.4	107.4	95.4
Actuated g/C Ratio	0.11	0.20	0.83	0.83	0.73
v/c Ratio	0.57	0.39	0.40	0.30	0.55
Control Delay	60.0	50.3	9.6	3.0	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	60.0	50.3	9.6	3.0	8.7
LOS	E	D	A	A	A
Approach Delay	56.5			3.4	8.7
Approach LOS	E			A	A

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 45.5 (35%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.57		
Intersection Signal Delay: 11.2	Intersection LOS: B	
Intersection Capacity Utilization 58.7%	ICU Level of Service B	
Analysis Period (min) 15		

Splits and Phases: 1: Coors Bd. & Los Volcanes Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	210	121	80	1223	1771	183
Future Volume (veh/h)	210	121	80	1223	1771	183
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	216	125	82	1261	1826	189
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	361	238	263	4220	3528	363
Arrive On Green	0.11	0.11	0.05	0.83	0.76	0.75
Sat Flow, veh/h	3428	1572	1767	5233	4833	481
Grp Volume(v), veh/h	216	125	82	1261	1319	696
Grp Sat Flow(s),veh/h/ln	1714	1572	1767	1689	1689	1769
Q Serve(g_s), s	7.8	9.5	1.2	7.2	20.3	20.7
Cycle Q Clear(g_c), s	7.8	9.5	1.2	7.2	20.3	20.7
Prop In Lane	1.00	1.00	1.00			0.27
Lane Grp Cap(c), veh/h	361	238	263	4220	2554	1338
V/C Ratio(X)	0.60	0.52	0.31	0.30	0.52	0.52
Avail Cap(c_a), veh/h	1002	532	480	4220	2554	1338
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	50.8	5.5	2.4	6.3	6.4
Incr Delay (d2), s/veh	1.6	1.8	0.7	0.2	0.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	13.2	0.9	3.3	10.9	11.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.1	52.6	6.2	2.6	7.1	7.9
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	341			1343	2015	
Approach Delay, s/veh	55.5			2.8	7.4	
Approach LOS	E			A	A	

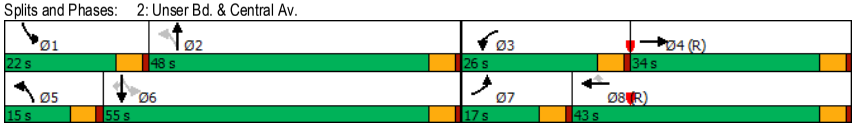
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		112.3		17.7	10.0	102.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		83.0		37.0	21.0	57.0
Max Q Clear Time (g_c+I1), s		9.2		11.5	3.2	22.7
Green Ext Time (p_c), s		13.4		1.2	0.2	21.1

Intersection Summary		
HCM 6th Ctrl Delay	10.1	
HCM 6th LOS	B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	202	402	94	363	77	83	1254	158	1140	172
Future Volume (vph)	202	402	94	363	77	83	1254	158	1140	172
Turn Type	Prot	NA	Prot	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8	2		6		6
Detector Phase	7	4	3	8	8	5	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	21.0	10.0	21.0	10.0	21.0	21.0
Total Split (s)	17.0	34.0	26.0	43.0	43.0	15.0	48.0	22.0	55.0	55.0
Total Split (%)	13.1%	26.2%	20.0%	33.1%	33.1%	11.5%	36.9%	16.9%	42.3%	42.3%
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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	C-Min	Min	C-Min	C-Min	Min	Min	Min	Min	Min
Act Effct Green (s)	12.5	30.7	13.7	31.9	31.9	65.5	55.9	72.8	60.0	60.0
Actuated g/C Ratio	0.10	0.24	0.11	0.25	0.25	0.50	0.43	0.56	0.46	0.46
v/c Ratio	0.65	0.56	0.54	0.44	0.16	0.40	1.00	0.69	0.74	0.23
Control Delay	66.5	45.9	65.3	42.8	0.7	20.5	60.1	49.7	17.9	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.5	45.9	65.3	42.8	0.7	20.5	60.1	49.7	17.9	1.6
LOS	E	D	E	D	A	C	E	D	B	A
Approach Delay		52.4		40.7			57.9		19.4	
Approach LOS		D		D			E		B	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 127.4 (98%), Referenced to phase 4:EBT and 8:WBT, Start of Green		
Natural Cycle: 80		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.00		
Intersection Signal Delay: 41.2	Intersection LOS: D	
Intersection Capacity Utilization 79.3%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 2: Unser Bd. & Central Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	402	36	94	363	77	83	1254	158	158	1140	172
Future Volume (veh/h)	202	402	36	94	363	77	83	1254	158	158	1140	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	213	423	38	99	382	0	87	1320	166	166	1200	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	291	1215	109	140	1289		179	1079	135	205	1311	
Arrive On Green	0.08	0.37	0.36	0.08	0.37	0.00	0.05	0.34	0.33	0.11	0.49	0.00
Sat Flow, veh/h	3428	3273	293	1767	3526	1572	1767	3153	394	1767	3526	1572
Grp Volume(v), veh/h	213	227	234	99	382	0	87	734	752	166	1200	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1803	1767	1763	1572	1767	1763	1785	1767	1763	1572
Q Serve(g_s), s	7.9	12.1	12.2	7.1	10.0	0.0	4.1	44.5	44.5	7.7	40.9	0.0
Cycle Q Clear(g_c), s	7.9	12.1	12.2	7.1	10.0	0.0	4.1	44.5	44.5	7.7	40.9	0.0
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	291	655	669	140	1289		179	603	611	205	1311	
V/C Ratio(X)	0.73	0.35	0.35	0.71	0.30		0.49	1.22	1.23	0.81	0.92	
Avail Cap(c_a), veh/h	343	655	669	299	1289		232	603	611	300	1383	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.56	0.56	0.00
Uniform Delay (d), s/veh	58.0	29.5	29.6	58.4	29.3	0.0	31.3	42.8	42.9	30.7	31.0	0.0
Incr Delay (d2), s/veh	6.5	1.5	1.4	6.5	0.6	0.0	2.0	112.4	117.6	5.9	5.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.6	9.2	9.5	6.2	7.8	0.0	3.3	54.5	56.5	5.8	21.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.6	30.9	31.0	64.9	29.9	0.0	33.4	155.2	160.5	36.7	36.7	0.0
LnGrp LOS	E	C	C	E	C		C	F	F	D	D	
Approach Vol, veh/h		674			481	A		1573			1366	A
Approach Delay, s/veh		41.6			37.1			151.0			36.7	
Approach LOS		D			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	48.5	14.3	52.3	11.1	52.3	15.0	51.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	43.0	21.0	29.0	10.0	50.0	12.0	38.0
Max Q Clear Time (g_c+I1), s	9.7	46.5	9.1	14.2	6.1	42.9	9.9	12.0
Green Ext Time (p_c), s	0.2	0.0	0.2	2.4	0.1	4.5	0.1	2.6

Intersection Summary		
HCM 6th Ctrl Delay		81.5
HCM 6th LOS		F

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	154	75	92	98	172	39	1078	99	79	1557	137
Future Volume (vph)	154	75	92	98	172	39	1078	99	79	1557	137
Turn Type	pm+pt	NA	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8		5	2		1	6	
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	8	8	8	5	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	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	14.0	52.0	38.0	38.0	38.0	14.0	64.0	64.0	14.0	64.0	64.0
Total Split (%)	10.8%	40.0%	29.2%	29.2%	29.2%	10.8%	49.2%	49.2%	10.8%	49.2%	49.2%
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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	31.1	31.1	17.1	17.1	17.1	85.8	78.3	78.3	88.0	79.4	79.4
Actuated g/C Ratio	0.24	0.24	0.13	0.13	0.13	0.66	0.60	0.60	0.68	0.61	0.61
v/c Ratio	0.60	0.33	0.61	0.43	0.50	0.23	0.54	0.11	0.27	0.77	0.15
Control Delay	50.4	31.3	68.1	56.0	11.3	8.4	13.1	2.3	7.3	15.3	2.7
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	50.4	31.3	68.1	56.0	11.3	8.4	13.1	2.3	7.3	15.3	2.7
LOS	D	C	E	E	B	A	B	A	A	B	A
Approach Delay		41.5		37.9			12.1			14.0	
Approach LOS		D		D			B			B	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 127.4 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.77		
Intersection Signal Delay: 17.9	Intersection LOS: B	
Intersection Capacity Utilization 74.2%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 3: Unser Bd. & Bluewater Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	75	59	92	98	172	39	1078	99	79	1557	137
Future Volume (veh/h)	154	75	59	92	98	172	39	1078	99	79	1557	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	164	80	63	98	104	183	41	1147	0	84	1656	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	295	244	192	236	271	230	197	2142		340	2142	
Arrive On Green	0.08	0.25	0.25	0.15	0.15	0.15	0.05	0.61	0.00	0.03	0.41	0.00
Sat Flow, veh/h	1767	962	757	1235	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	164	0	143	98	104	183	41	1147	0	84	1656	0
Grp Sat Flow(s),veh/h/ln	1767	0	1719	1235	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	10.0	0.0	8.8	9.6	6.6	14.6	1.1	24.6	0.0	2.2	52.8	0.0
Cycle Q Clear(g_c), s	10.0	0.0	8.8	9.6	6.6	14.6	1.1	24.6	0.0	2.2	52.8	0.0
Prop In Lane	1.00		0.44	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	0	436	236	271	230	197	2142		340	2142	
V/C Ratio(X)	0.56	0.00	0.33	0.42	0.38	0.80	0.21	0.54		0.25	0.77	
Avail Cap(c_a), veh/h	295	0	635	379	485	411	251	2142		395	2142	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.27	0.27	0.00	0.65	0.65	0.00
Uniform Delay (d), s/veh	42.0	0.0	39.7	51.5	50.2	53.6	20.4	14.8	0.0	11.2	30.8	0.0
Incr Delay (d2), s/veh	2.3	0.0	0.4	1.2	0.9	6.2	0.1	0.3	0.0	0.2	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.2	0.0	6.9	5.5	5.7	10.3	1.0	12.3	0.0	1.6	30.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	0.0	40.1	52.6	51.1	59.8	20.6	15.1	0.0	11.4	32.6	0.0
LnGrp LOS	D	A	D	D	D	E	C	B		B	C	
Approach Vol, veh/h		307			385			1188	A		1740	A
Approach Delay, s/veh		42.3			55.6			15.3			31.6	
Approach LOS		D			E			B			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	83.0		37.0	10.0	83.0	14.0	23.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	9.0	59.0		47.0	9.0	59.0	9.0	33.0
Max Q Clear Time (g_c+I1), s	4.2	26.6		10.8	3.1	54.8	12.0	16.6
Green Ext Time (p_c), s	0.1	10.5		0.9	0.0	3.5	0.0	1.4

Intersection Summary		
HCM 6th Ctrl Delay	29.7	
HCM 6th LOS	C	

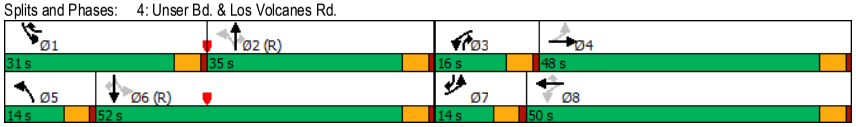
Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	169	56	237	77	331	25	1252	218	270	1305	114
Future Volume (vph)	169	56	237	77	331	25	1252	218	270	1305	114
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2	6		6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	14.0	48.0	16.0	50.0	31.0	14.0	35.0	16.0	31.0	52.0	14.0
Total Split (%)	10.8%	36.9%	12.3%	38.5%	23.8%	10.8%	26.9%	12.3%	23.8%	40.0%	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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	21.8	11.9	26.0	14.0	40.6	74.6	67.5	83.5	94.1	83.0	96.9
Actuated g/C Ratio	0.17	0.09	0.20	0.11	0.31	0.57	0.52	0.64	0.72	0.64	0.75
v/c Ratio	0.38	0.54	1.03	0.43	0.64	0.11	0.53	0.22	0.70	0.64	0.11
Control Delay	44.1	52.2	111.0	58.3	28.9	13.4	28.8	5.5	26.1	14.3	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	52.2	111.0	58.3	28.9	13.4	28.8	5.5	26.1	14.3	1.9
LOS	D	D	F	E	C	B	C	A	C	B	A
Approach Delay		46.9		62.5			25.1			15.4	
Approach LOS		D		E			C			B	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 5.2 (4%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 80		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.03		
Intersection Signal Delay: 28.4	Intersection LOS: C	
Intersection Capacity Utilization 70.0%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	56	32	237	77	331	25	1252	218	270	1305	114
Future Volume (veh/h)	169	56	32	237	77	331	25	1252	218	270	1305	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	186	62	35	260	85	364	27	1376	0	297	1434	125
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	691	230	130	424	433	541	206	2367		419	1875	939
Arrive On Green	0.07	0.21	0.21	0.09	0.23	0.23	0.09	0.93	0.00	0.11	0.53	0.53
Sat Flow, veh/h	3428	1114	629	1767	1856	1572	1767	5066	1572	1767	3526	1572
Grp Volume(v), veh/h	186	0	97	260	85	364	27	1376	0	297	1434	125
Grp Sat Flow(s),veh/h/ln	1714	0	1742	1767	1856	1572	1767	1689	1572	1767	1763	1572
Q Serve(g_s), s	5.4	0.0	6.1	12.0	4.8	25.7	0.9	5.1	0.0	10.7	41.7	4.5
Cycle Q Clear(g_c), s	5.4	0.0	6.1	12.0	4.8	25.7	0.9	5.1	0.0	10.7	41.7	4.5
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	691	0	360	424	433	541	206	2367		419	1875	939
V/C Ratio(X)	0.27	0.00	0.27	0.61	0.20	0.67	0.13	0.58		0.71	0.76	0.13
Avail Cap(c_a), veh/h	730	0	590	424	657	731	261	2367		590	1875	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.82	0.82	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	0.0	43.3	38.1	40.0	36.4	19.3	2.4	0.0	13.7	24.0	11.4
Incr Delay (d2), s/veh	0.2	0.0	0.4	2.6	0.2	1.5	0.2	0.9	0.0	2.3	3.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	0.0	4.8	3.4	4.0	15.3	0.7	2.1	0.0	7.9	24.6	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	0.0	43.7	40.7	40.3	37.8	19.5	3.3	0.0	16.0	27.0	11.7
LnGrp LOS	D	A	D	D	D	D	B	A		B	C	B
Approach Vol, veh/h		283			709			1403	A		1856	
Approach Delay, s/veh		39.1			39.2			3.6			24.2	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	64.7	16.0	30.8	10.0	73.2	12.5	34.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	26.0	30.0	11.0	43.0	9.0	47.0	9.0	45.0
Max Q Clear Time (g_c+I1), s	12.7	7.1	14.0	8.1	2.9	43.7	7.4	27.7
Green Ext Time (p_c), s	0.7	11.0	0.0	0.5	0.0	2.6	0.1	1.7

Intersection Summary		
HCM 6th Ctrl Delay		20.9
HCM 6th LOS		C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	169	56	237	77	331	25	1252	218	270	1305	114
Future Volume (vph)	169	56	237	77	331	25	1252	218	270	1305	114
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8	1	5	2	3	1	6	7
Permitted Phases	4		8		8	2		2			6
Detector Phase	7	4	3	8	1	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	10.0	21.0	24.0	35.0	22.0	10.0	63.0	24.0	22.0	75.0	10.0
Total Split (%)	7.7%	16.2%	18.5%	26.9%	16.9%	7.7%	48.5%	18.5%	16.9%	57.7%	7.7%
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)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	21.4	12.3	36.2	23.1	43.9	71.8	65.0	88.9	16.8	75.0	88.1
Actuated g/C Ratio	0.16	0.09	0.28	0.18	0.34	0.55	0.50	0.68	0.13	0.58	0.68
v/c Ratio	0.39	0.54	0.72	0.26	0.64	0.14	0.55	0.21	0.68	0.71	0.11
Control Delay	39.4	55.8	51.4	46.8	38.0	8.6	14.3	0.6	62.2	24.5	5.4
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	39.4	55.8	51.4	46.8	38.0	8.6	14.3	0.6	62.2	24.5	5.4
LOS	D	E	D	D	D	A	B	A	E	C	A
Approach Delay		45.0		44.0			12.2			29.3	
Approach LOS		D		D			B			C	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 5.2 (4%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 26.3		Intersection LOS: C	
Intersection Capacity Utilization 70.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Unser Bd. & Los Volcanes Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	56	32	237	77	331	25	1252	218	270	1305	114
Future Volume (veh/h)	169	56	32	237	77	331	25	1252	218	270	1305	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	186	62	35	260	85	364	27	1376	0	297	1434	125
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	496	140	79	410	419	529	221	2504		379	1969	951
Arrive On Green	0.05	0.13	0.13	0.15	0.23	0.23	0.09	0.99	0.00	0.11	0.56	0.56
Sat Flow, veh/h	3428	1114	629	1767	1856	1572	1767	5066	1572	3428	3526	1572
Grp Volume(v), veh/h	186	0	97	260	85	364	27	1376	0	297	1434	125
Grp Sat Flow(s),veh/h/ln	1714	0	1742	1767	1856	1572	1767	1689	1572	1714	1763	1572
Q Serve(g_s), s	6.0	0.0	6.7	16.0	4.8	26.0	0.9	0.9	0.0	11.0	39.3	4.4
Cycle Q Clear(g_c), s	6.0	0.0	6.7	16.0	4.8	26.0	0.9	0.9	0.0	11.0	39.3	4.4
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	496	0	219	410	419	529	221	2504		379	1969	951
V/C Ratio(X)	0.37	0.00	0.44	0.63	0.20	0.69	0.12	0.55		0.78	0.73	0.13
Avail Cap(c_a), veh/h	496	0	228	423	442	549	221	2504		475	1969	951
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.82	0.82	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	0.0	52.6	39.0	40.8	37.2	17.1	0.4	0.0	56.3	21.3	11.0
Incr Delay (d2), s/veh	0.5	0.0	1.4	3.0	0.2	3.5	0.2	0.7	0.0	6.7	2.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.8	0.0	5.5	11.7	4.1	15.8	0.7	0.6	0.0	8.8	23.1	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.6	0.0	54.0	42.0	41.0	40.7	17.3	1.1	0.0	63.0	23.8	11.3
LnGrp LOS	D	A	D	D	D	D	B	A		E	C	B
Approach Vol, veh/h		283			709			1403	A		1856	
Approach Delay, s/veh		49.8			41.2			1.4			29.2	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	68.2	23.1	20.3	10.0	76.6	10.0	33.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	58.0	19.0	16.0	5.0	70.0	5.0	30.0
Max Q Clear Time (g_c+I1), s	13.0	2.9	18.0	8.7	2.9	41.3	8.0	28.0
Green Ext Time (p_c), s	0.4	15.0	0.1	0.2	0.0	14.2	0.0	0.4

Intersection Summary		
HCM 6th Ctrl Delay		23.4
HCM 6th LOS		C

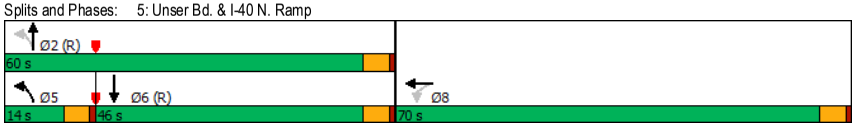
Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Configurations					
Traffic Volume (vph)	997	1	42	1007	1148
Future Volume (vph)	997	1	42	1007	1148
Turn Type	Perm	NA	pm+pt	NA	NA
Protected Phases		8	5	2	6
Permitted Phases	8		2		
Detector Phase	8	8	5	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0
Total Split (s)	70.0	70.0	14.0	60.0	46.0
Total Split (%)	53.8%	53.8%	10.8%	46.2%	35.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag
Lead-Lag Optimize?					
Recall Mode	Min	Min	Min	C-Min	C-Min
Act Effct Green (s)	51.8	51.8	70.2	70.2	58.0
Actuated g/C Ratio	0.40	0.40	0.54	0.54	0.45
v/c Ratio	0.77	0.77	0.20	0.55	0.57
Control Delay	41.6	41.6	23.1	27.8	29.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.6	41.6	23.1	27.8	29.5
LOS	D	D	C	C	C
Approach Delay		41.6		27.6	29.5
Approach LOS		D		C	C

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 2.6 (2%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.77		
Intersection Signal Delay: 32.6	Intersection LOS: C	
Intersection Capacity Utilization 70.1%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 5: Unser Bd. & I-40 N. Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	997	1	0	42	1007	0	0	1148	76
Future Volume (veh/h)	0	0	0	997	1	0	42	1007	0	0	1148	76
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1856	1856	0	1856	1856	0	0	1856	1856
Adj Flow Rate, veh/h				1029	0	0	43	1038	0	0	1184	78
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				3	3	0	3	3	0	0	3	3
Cap, veh/h				1173	616	0	302	2138	0	0	2571	169
Arrive On Green				0.33	0.00	0.00	0.05	0.61	0.00	0.00	0.53	0.52
Sat Flow, veh/h				3534	1856	0	1767	3618	0	0	5022	320
Grp Volume(v), veh/h				1029	0	0	43	1038	0	0	823	439
Grp Sat Flow(s),veh/h/ln				1767	1856	0	1767	1763	0	0	1689	1798
Q Serve(g_s), s				35.7	0.0	0.0	1.3	21.3	0.0	0.0	19.7	19.8
Cycle Q Clear(g_c), s				35.7	0.0	0.0	1.3	21.3	0.0	0.0	19.7	19.8
Prop In Lane				1.00		0.00	1.00		0.00	0.00		0.18
Lane Grp Cap(c), veh/h				1173	616	0	302	2138	0	0	1789	952
V/C Ratio(X)				0.88	0.00	0.00	0.14	0.49	0.00	0.00	0.46	0.46
Avail Cap(c_a), veh/h				1794	942	0	356	2138	0	0	1789	952
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				40.9	0.0	0.0	13.2	14.3	0.0	0.0	19.0	19.1
Incr Delay (d2), s/veh				3.4	0.0	0.0	0.2	0.8	0.0	0.0	0.9	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				22.5	0.0	0.0	1.0	13.4	0.0	0.0	12.5	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				44.3	0.0	0.0	13.4	15.1	0.0	0.0	19.9	20.7
LnGrp LOS				D	A	A	B	B	A	A	B	C
Approach Vol, veh/h					1029			1081			1262	
Approach Delay, s/veh					44.3			15.0			20.2	
Approach LOS					D			B			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		82.9			10.0	72.9		47.1				
Change Period (Y+Rc), s		5.0			5.0	5.0		5.0				
Max Green Setting (Gmax), s		55.0			9.0	41.0		65.0				
Max Q Clear Time (g_c+I1), s		23.3			3.3	21.8		37.7				
Green Ext Time (p_c), s		9.1			0.0	8.7		4.5				

Intersection Summary		
HCM 6th Ctrl Delay	25.9	
HCM 6th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1481.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	86	0	63	0	0	0	0	1168	0	0	2123	0
Future Vol, veh/h	86	0	63	0	0	0	0	1168	0	0	2123	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	280	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	115	0	84	0	0	0	0	1557	0	0	2831	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	3610	-	-	-	0	0	-	-	0
Stage 1	2831	-	-	-	-	-	-	-	-
Stage 2	779	-	-	-	-	-	-	-	-
Critical Hdwy	6.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	-	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	*~ 1	0	0	0	-	-	0	-	0
Stage 1	*~ 30	0	0	0	-	-	0	-	0
Stage 2	*560	0	0	0	-	-	0	-	0
Platoon blocked, %	1				-	-		-	
Mov Cap-1 Maneuver	*~ 1	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	*~ 1	0	-	-	-	-	-	-	-
Stage 1	*~ 30	0	-	-	-	-	-	-	-
Stage 2	*560	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	58160	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	-	1	-	-
HCM Lane V/C Ratio	-	-	114.667	-	-
HCM Control Delay (s)	-	-	$ 58160	0	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q(veh)	-	-	16.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	421	23	8	517	53	23
Future Vol, veh/h	421	23	8	517	53	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	561	31	11	689	71	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	592	0	1288	577
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	711	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	979	-	180	514
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	485	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	979	-	177	514
Mov Cap-2 Maneuver	-	-	-	-	315	-
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	476	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	357	-	-	979	-
HCM Lane V/C Ratio	0.284	-	-	0.011	-
HCM Control Delay (s)	19	-	-	8.7	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	441	103	24	546	99	23
Future Vol, veh/h	441	103	24	546	99	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	588	137	32	728	132	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	725	0	1449	657
Stage 1	-	-	-	-	657	-
Stage 2	-	-	-	-	792	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	873	-	144	463
Stage 1	-	-	-	-	514	-
Stage 2	-	-	-	-	444	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	873	-	135	463
Mov Cap-2 Maneuver	-	-	-	-	271	-
Stage 1	-	-	-	-	514	-
Stage 2	-	-	-	-	416	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	31.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	294	-	-	873	-
HCM Lane V/C Ratio	0.553	-	-	0.037	-
HCM Control Delay (s)	31.4	-	-	9.3	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	3.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1	1	61	15	16
Future Vol, veh/h	15	1	1	61	15	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	1	1	81	20	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	114	31	41	0	-	0
Stage 1	31	-	-	-	-	-
Stage 2	83	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	880	1040	1562	-	-	-
Stage 1	989	-	-	-	-	-
Stage 2	938	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	879	1040	1562	-	-	-
Mov Cap-2 Maneuver	879	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	938	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1562	-	888	-	-
HCM Lane V/C Ratio	0.001	-	0.024	-	-
HCM Control Delay (s)	7.3	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Traffic Count Data Sheet

Year Counts Taken: **2017**
E-W Street: **Los Volcanes Rd.**
N-S Street: **Coors Blvd.**
Signalized

Speed Limit (Los Volcanes Rd.)= **25** MPH
Speed Limit (Coors Blvd.)= **45** MPH
6/8/17

Begin Time	End Time	Eastbound (Los Volcanes Rd.)				Westbound (Los Volcanes Rd.)				Northbound (Coors Blvd.)				Southbound (Coors Blvd.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	~~25~~	~~0~~	~~14~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~4~~	~~217~~	~~0~~	~~0~~	~~0~~	~~167~~	~~27~~	~~0~~
7:15 AM	7:30 AM	**36**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**7**	**269**	**0**	**0**	**0**	**143**	**21**	**0**
7:30 AM	7:45 AM	**31**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**16**	**274**	**0**	**0**	**0**	**184**	**32**	**0**
7:45 AM	8:00 AM	**36**	**0**	**13**	**0**	**0**	**0**	**0**	**1**	**18**	**268**	**0**	**1**	**0**	**195**	**40**	**1**
8:00 AM	8:15 AM	**28**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**18**	**228**	**0**	**0**	**0**	**170**	**29**	**0**
8:15 AM	8:30 AM	~~35~~	~~0~~	~~18~~	~~1~~	~~0~~	~~0~~	~~0~~	~~0~~	~~8~~	~~226~~	~~0~~	~~0~~	~~0~~	~~158~~	~~18~~	~~0~~
8:30 AM	8:45 AM	~~29~~	~~0~~	~~14~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~4~~	~~248~~	~~0~~	~~0~~	~~0~~	~~190~~	~~23~~	~~0~~
8:45 AM	9:00 AM	~~24~~	~~0~~	~~18~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~20~~	~~257~~	~~0~~	~~0~~	~~0~~	~~189~~	~~26~~	~~0~~
AM Peak Hour Volumes		**131**	**0**	**44**	**0**	**0**	**0**	**0**	**1**	**59**	**1039**	**0**	**1**	**0**	**692**	**122**	**1**
% of Total Traffic		6.3%	0.0%	2.1%		0.0%	0.0%	0.0%		2.8%	49.7%	0.0%		0.0%	33.1%	5.8%	
% Directional			8.4%				0.0%	**Intersection**			52.6%				39.0%		
AM Peak Hour Factor			*0.89*				*#DIV/0!*	**0.92**			*0.95*				*0.87*		

Begin Time	End Time	Eastbound (Los Volcanes Rd.)				Westbound (Los Volcanes Rd.)				Northbound (Coors Blvd.)				Southbound (Coors Blvd.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	~~36~~	~~0~~	~~32~~	~~1~~	~~0~~	~~0~~	~~0~~	~~0~~	~~16~~	~~217~~	~~0~~	~~2~~	~~0~~	~~390~~	~~32~~	~~1~~
4:15 PM	4:30 PM	**25**	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**12**	**262**	**0**	**0**	**0**	**409**	**33**	**0**
4:30 PM	4:45 PM	**53**	**0**	**25**	**0**	**0**	**0**	**0**	**0**	**21**	**261**	**0**	**0**	**0**	**406**	**35**	**0**
4:45 PM	5:00 PM	**33**	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**15**	**277**	**0**	**1**	**0**	**388**	**31**	**1**
5:00 PM	5:15 PM	**49**	**0**	**26**	**0**	**0**	**0**	**0**	**0**	**12**	**281**	**0**	**0**	**0**	**387**	**32**	**0**
5:15 PM	5:30 PM	~~33~~	~~0~~	~~15~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~21~~	~~267~~	~~0~~	~~0~~	~~0~~	~~376~~	~~34~~	~~0~~
5:30 PM	5:45 PM	~~28~~	~~0~~	~~23~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~15~~	~~243~~	~~0~~	~~0~~	~~0~~	~~347~~	~~32~~	~~0~~
5:45 PM	6:00 PM	~~30~~	~~0~~	~~21~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~12~~	~~220~~	~~0~~	~~2~~	~~0~~	~~385~~	~~29~~	~~0~~
PM Peak Hour Volumes		**160**	**0**	**89**	**0**	**0**	**0**	**0**	**0**	**60**	**1081**	**0**	**1**	**0**	**1590**	**131**	**1**
% of Total Traffic		5.1%	0.0%	2.9%		0.0%	0.0%	0.0%		1.9%	34.7%	0.0%		0.0%	51.1%	4.2%	
% Directional			8.0%				0.0%	**Intersection**			36.7%				55.3%		
PM Peak Hour Factor			*0.80*				*#DIV/0!*	**0.97**			*0.97*				*0.97*		

Traffic Count Data Sheet

Year Counts Taken: **2018**
E-W Street: **Central Av.**
N-S Street: **Unser Bd.**
Signalized
Speed Limit (Central Av.)= **55** MPH
Speed Limit (Unser Bd.)= **35** MPH
7/12/18

Begin Time	End Time	Eastbound (Central Av.)				Westbound (Central Av.)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	~~64~~	~~93~~	~~3~~	~~4~~	~~5~~	~~26~~	~~14~~	~~1~~	~~4~~	~~253~~	~~20~~	~~0~~	~~14~~	~~69~~	~~26~~	~~1~~
7:15 AM	7:30 AM	71	104	2	0	4	29	19	1	6	327	31	0	26	92	25	0
7:30 AM	7:45 AM	93	91	7	0	15	27	22	0	2	300	27	0	22	110	16	0
7:45 AM	8:00 AM	48	95	6	0	11	41	16	0	5	303	40	0	39	137	37	0
8:00 AM	8:15 AM	76	94	3	2	13	37	26	1	3	205	22	0	16	104	17	0
8:15 AM	8:30 AM	~~46~~	~~66~~	~~3~~	~~0~~	~~9~~	~~41~~	~~13~~	~~0~~	~~2~~	~~226~~	~~17~~	~~0~~	~~27~~	~~108~~	~~23~~	~~0~~
8:30 AM	8:45 AM	~~56~~	~~76~~	~~3~~	~~0~~	~~12~~	~~44~~	~~21~~	~~2~~	~~11~~	~~192~~	~~16~~	~~0~~	~~25~~	~~93~~	~~18~~	~~0~~
8:45 AM	9:00 AM	~~52~~	~~78~~	~~5~~	~~0~~	~~8~~	~~42~~	~~9~~	~~0~~	~~4~~	~~185~~	~~48~~	~~5~~	~~28~~	~~103~~	~~22~~	~~0~~
AM Peak Hour Volumes		288	384	18	2	43	134	83	2	16	1135	120	0	103	443	95	0
% of Total Traffic		10.1%	13.4%	0.6%		1.5%	4.7%	2.9%		0.6%	39.6%	4.2%		3.6%	15.5%	3.3%	
% Directional			24.1%				9.1%	Intersection			44.4%				22.4%		
AM Peak Hour Factor			*0.90*				*0.86*	0.92			*0.87*				*0.75*		

Begin Time	End Time	Eastbound (Central Av.)				Westbound (Central Av.)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	~~44~~	~~71~~	~~6~~	~~0~~	~~19~~	~~78~~	~~13~~	~~0~~	~~10~~	~~141~~	~~20~~	~~0~~	~~47~~	~~259~~	~~37~~	~~0~~
4:15 PM	4:30 PM	~~43~~	~~79~~	~~6~~	~~1~~	~~36~~	~~79~~	~~18~~	~~0~~	~~3~~	~~142~~	~~25~~	~~0~~	~~25~~	~~271~~	~~29~~	~~1~~
4:30 PM	4:45 PM	48	89	5	0	27	88	11	0	9	202	22	0	26	269	27	0
4:45 PM	5:00 PM	38	96	14	2	18	91	13	0	14	220	29	0	35	265	36	0
5:00 PM	5:15 PM	45	94	4	0	23	82	14	0	15	173	21	0	30	263	38	1
5:15 PM	5:30 PM	41	100	11	1	21	81	19	2	14	175	27	0	35	254	40	0
5:30 PM	5:45 PM	~~57~~	~~90~~	~~11~~	~~1~~	~~24~~	~~85~~	~~14~~	~~0~~	~~12~~	~~201~~	~~24~~	~~0~~	~~24~~	~~244~~	~~36~~	~~0~~
5:45 PM	6:00 PM	~~36~~	~~103~~	~~7~~	~~0~~	~~24~~	~~81~~	~~12~~	~~0~~	~~12~~	~~161~~	~~23~~	~~0~~	~~33~~	~~272~~	~~36~~	~~0~~
PM Peak Hour Volumes		172	379	34	3	89	342	57	2	52	770	99	0	126	1051	141	1
% of Total Traffic		5.2%	11.4%	1.0%		2.7%	10.3%	1.7%		1.6%	23.2%	3.0%		3.8%	31.7%	4.3%	
% Directional			17.6%				14.7%	Intersection			27.8%				39.7%		
PM Peak Hour Factor			*0.96*				*0.97*	0.95			*0.88*				*0.98*		

Traffic Count Data Sheet

Year Counts Taken: **2018**
E-W Street: **Bluewater Rd.**
N-S Street: **Unser Bd.**
Signalized
Speed Limit (Bluewater Rd.)= **25** MPH
Speed Limit (Unser Bd.)= **35** MPH
7/12/18

Begin Time	End Time	Eastbound (Bluewater Rd.)				Westbound (Bluewater Rd.)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	~~15~~	~~7~~	~~6~~	~~0~~	~~4~~	~~2~~	~~7~~	~~0~~	~~10~~	~~291~~	~~27~~	~~0~~	~~19~~	~~87~~	~~19~~	~~0~~
7:15 AM	7:30 AM	18	10	12	0	3	0	12	0	7	388	18	0	31	135	12	0
7:30 AM	7:45 AM	28	13	10	0	6	6	7	0	3	381	32	1	25	174	13	0
7:45 AM	8:00 AM	26	10	7	0	13	5	18	0	6	320	23	0	29	173	8	0
8:00 AM	8:15 AM	18	7	8	0	7	8	11	1	5	286	6	0	20	140	19	0
8:15 AM	8:30 AM	~~14~~	~~4~~	~~2~~	~~0~~	~~6~~	~~5~~	~~13~~	~~0~~	~~4~~	~~275~~	~~8~~	~~0~~	~~24~~	~~156~~	~~10~~	~~0~~
8:30 AM	8:45 AM	~~16~~	~~6~~	~~9~~	~~0~~	~~3~~	~~7~~	~~4~~	~~1~~	~~5~~	~~257~~	~~10~~	~~0~~	~~23~~	~~135~~	~~6~~	~~0~~
8:45 AM	9:00 AM	~~23~~	~~12~~	~~5~~	~~0~~	~~6~~	~~3~~	~~9~~	~~0~~	~~2~~	~~236~~	~~14~~	~~0~~	~~22~~	~~138~~	~~11~~	~~0~~
AM Peak Hour Volumes		**90**	**40**	**37**	**0**	**29**	**19**	**48**	**1**	**21**	**1375**	**79**	**1**	**105**	**622**	**52**	**0**
% of Total Traffic		3.6%	1.6%	1.5%		1.2%	0.8%	1.9%		0.8%	54.6%	3.1%		4.2%	24.7%	2.1%	
% Directional			6.6%				3.8%	**Intersection**			58.6%				30.9%		
AM Peak Hour Factor			*0.82*				*0.67*	**0.90**			*0.89*				*0.92*		

Begin Time	End Time	Eastbound (Bluewater Rd.)				Westbound (Bluewater Rd.)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	~~23~~	~~9~~	~~8~~	~~0~~	~~25~~	~~26~~	~~40~~	~~0~~	~~7~~	~~180~~	~~10~~	~~0~~	~~19~~	~~318~~	~~14~~	~~0~~
4:15 PM	4:30 PM	~~15~~	~~6~~	~~8~~	~~0~~	~~15~~	~~16~~	~~39~~	~~0~~	~~10~~	~~191~~	~~13~~	~~0~~	~~12~~	~~331~~	~~34~~	~~0~~
4:30 PM	4:45 PM	~~14~~	~~4~~	~~9~~	~~0~~	~~12~~	~~27~~	~~46~~	~~0~~	~~7~~	~~215~~	~~15~~	~~0~~	~~23~~	~~288~~	~~32~~	~~0~~
4:45 PM	5:00 PM	26	9	16	0	22	15	36	0	7	211	55	1	12	303	27	0
5:00 PM	5:15 PM	26	19	8	0	22	31	52	0	12	238	8	0	11	349	23	0
5:15 PM	5:30 PM	16	11	8	0	23	24	35	0	7	224	13	0	16	301	38	1
5:30 PM	5:45 PM	24	11	7	0	20	22	33	0	9	245	13	0	22	318	16	0
5:45 PM	6:00 PM	~~16~~	~~6~~	~~9~~	~~0~~	~~25~~	~~26~~	~~43~~	~~0~~	~~5~~	~~208~~	~~10~~	~~0~~	~~23~~	~~335~~	~~28~~	~~0~~
PM Peak Hour Volumes		**92**	**50**	**39**	**0**	**87**	**92**	**156**	**0**	**35**	**918**	**89**	**1**	**61**	**1271**	**104**	**1**
% of Total Traffic		3.1%	1.7%	1.3%		2.9%	3.1%	5.2%		1.2%	30.7%	3.0%		2.0%	42.5%	3.5%	
% Directional			6.0%				11.2%	**Intersection**			34.8%				48.0%		
PM Peak Hour Factor			*0.85*				*0.80*	**0.94**			*0.95*				*0.94*		

Traffic Count Data Sheet

Year Counts Taken: **2018**
E-W Street: **Los Volcanes Rd.**
N-S Street: **Unser Bd.**
Signalized

Speed Limit (Los Volcanes Rd.)= **25** MPH
Speed Limit (Unser Bd.)= **35** MPH
7/12/18

Begin Time	End Time	Eastbound (Los Volcanes Rd.)				Westbound (Los Volcanes Rd.)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	111	27	3	1	15	47	61	0	19	659	52	0	103	275	45	0
7:15 AM	7:30 AM	74	32	3	0	28	14	48	0	4	324	90	0	72	169	18	0
7:30 AM	7:45 AM	42	11	1	0	32	9	40	0	5	334	40	0	65	173	24	0
7:45 AM	8:00 AM	56	11	6	0	13	6	44	0	1	289	27	0	45	159	22	0
8:00 AM	8:15 AM	~~78~~	~~12~~	~~10~~	~~0~~	~~10~~	~~2~~	~~30~~	~~1~~	~~6~~	~~267~~	~~21~~	~~0~~	~~44~~	~~164~~	~~28~~	~~0~~
8:15 AM	8:30 AM	~~63~~	~~13~~	~~10~~	~~0~~	~~8~~	~~2~~	~~35~~	~~0~~	~~4~~	~~258~~	~~23~~	~~0~~	~~32~~	~~143~~	~~18~~	~~0~~
8:30 AM	8:45 AM	~~39~~	~~8~~	~~8~~	~~0~~	~~5~~	~~7~~	~~25~~	~~0~~	~~7~~	~~237~~	~~23~~	~~0~~	~~43~~	~~160~~	~~14~~	~~0~~
8:45 AM	9:00 AM	~~17~~	~~3~~	~~2~~	~~0~~	~~8~~	~~6~~	~~18~~	~~0~~	~~7~~	~~93~~	~~13~~	~~0~~	~~26~~	~~66~~	~~6~~	~~0~~
AM Peak Hour Volumes		283	81	13	1	88	76	193	0	29	1606	209	0	285	776	109	0
% of Total Traffic		7.6%	2.2%	0.3%		2.3%	2.0%	5.1%		0.8%	42.8%	5.6%		7.6%	20.7%	2.9%	
% Directional			10.1%				9.5%	Intersection			49.2%				31.2%		
AM Peak Hour Factor			*0.67*				*0.73*	0.66			*0.63*				*0.69*		

Begin Time	End Time	Eastbound (Los Volcanes Rd.)				Westbound (Los Volcanes Rd.)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	~~23~~	~~10~~	~~7~~	~~0~~	~~30~~	~~11~~	~~53~~	~~0~~	~~3~~	~~221~~	~~21~~	~~0~~	~~33~~	~~305~~	~~27~~	~~0~~
4:15 PM	4:30 PM	~~19~~	~~6~~	~~6~~	~~0~~	~~21~~	~~10~~	~~44~~	~~0~~	~~4~~	~~218~~	~~17~~	~~0~~	~~47~~	~~349~~	~~22~~	~~0~~
4:30 PM	4:45 PM	~~48~~	~~5~~	~~7~~	~~0~~	~~34~~	~~10~~	~~64~~	~~0~~	~~5~~	~~234~~	~~31~~	~~0~~	~~43~~	~~286~~	~~20~~	~~0~~
4:45 PM	5:00 PM	40	14	4	0	23	6	45	0	4	275	25	0	61	313	24	0
5:00 PM	5:15 PM	48	14	16	0	59	33	74	0	7	277	44	0	55	288	22	0
5:15 PM	5:30 PM	39	12	6	0	26	14	55	0	5	256	16	0	40	321	36	0
5:30 PM	5:45 PM	32	11	4	0	24	18	47	0	5	264	29	0	36	309	26	0
5:45 PM	6:00 PM	~~28~~	~~10~~	~~4~~	~~0~~	~~20~~	~~6~~	~~36~~	~~0~~	~~4~~	~~234~~	~~25~~	~~0~~	~~43~~	~~368~~	~~39~~	~~0~~
PM Peak Hour Volumes		159	51	30	0	132	71	221	0	21	1072	114	0	192	1231	108	0
% of Total Traffic		4.7%	1.5%	0.9%		3.9%	2.1%	6.5%		0.6%	31.5%	3.4%		5.6%	36.2%	3.2%	
% Directional			7.1%				12.5%	Intersection			35.5%				45.0%		
PM Peak Hour Factor			*0.77*				*0.64*	0.91			*0.92*				*0.96*		

Traffic Count Data Sheet

Year Counts Taken: **2018**
E-W Street: **I-40 N. Ramp**
N-S Street: **Unser Bd.**
Signalized
Speed Limit (I-40 N. Ramp)= **30** MPH
Speed Limit (Unser Bd.)= **35** MPH
7/12/18

Begin	End	Eastbound (I-40 N. Ramp)				Westbound (I-40 N. Ramp)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
Time	Time	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	~~0~~	~~0~~	~~0~~	~~0~~	~~87~~	~~0~~	~~0~~	~~0~~	~~4~~	~~400~~	~~0~~	~~1~~	~~0~~	~~100~~	~~14~~	~~0~~
7:15 AM	7:30 AM	0	0	0	0	81	1	0	0	4	150	0	0	0	441	13	0
7:30 AM	7:45 AM	0	0	0	0	85	0	0	0	3	173	0	0	0	465	23	0
7:45 AM	8:00 AM	0	0	0	0	99	0	0	1	5	191	0	0	0	383	16	0
8:00 AM	8:15 AM	0	0	0	0	71	0	0	0	6	179	0	0	0	367	14	0
8:15 AM	8:30 AM	~~0~~	~~0~~	~~0~~	~~0~~	~~79~~	~~0~~	~~0~~	~~0~~	~~11~~	~~141~~	~~0~~	~~0~~	~~0~~	~~308~~	~~20~~	~~0~~
8:30 AM	8:45 AM	~~0~~	~~0~~	~~0~~	~~0~~	~~62~~	~~0~~	~~0~~	~~0~~	~~4~~	~~134~~	~~0~~	~~0~~	~~0~~	~~328~~	~~18~~	~~0~~
8:45 AM	9:00 AM	~~0~~	~~0~~	~~0~~	~~0~~	~~76~~	~~0~~	~~0~~	~~0~~	~~5~~	~~121~~	~~0~~	~~0~~	~~0~~	~~281~~	~~34~~	~~2~~
AM Peak Hour Volumes		0	0	0	0	336	1	0	1	18	693	0	0	0	1656	66	0
% of Total Traffic		0.0%	0.0%	0.0%		12.1%	0.0%	0.0%		0.6%	25.0%	0.0%		0.0%	59.8%	2.4%	
% Directional			0.0%				12.2%	Intersection			25.7%				62.1%		
AM Peak Hour Factor			*#DIV/0!*				*0.85*	0.92			*0.91*				*0.88*		

Begin	End	Eastbound (I-40 N. Ramp)				Westbound (I-40 N. Ramp)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
Time	Time	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	~~0~~	~~0~~	~~0~~	~~0~~	~~233~~	~~0~~	~~1~~	~~0~~	~~6~~	~~188~~	~~0~~	~~0~~	~~0~~	~~219~~	~~16~~	~~0~~
4:15 PM	4:30 PM	~~0~~	~~0~~	~~0~~	~~0~~	~~266~~	~~0~~	~~0~~	~~0~~	~~11~~	~~175~~	~~0~~	~~0~~	~~0~~	~~221~~	~~26~~	~~0~~
4:30 PM	4:45 PM	~~0~~	~~0~~	~~0~~	~~0~~	~~254~~	~~0~~	~~1~~	~~0~~	~~12~~	~~209~~	~~0~~	~~0~~	~~0~~	~~208~~	~~19~~	~~0~~
4:45 PM	5:00 PM	~~0~~	~~0~~	~~0~~	~~0~~	~~222~~	~~0~~	~~0~~	~~0~~	~~6~~	~~209~~	~~0~~	~~0~~	~~0~~	~~248~~	~~15~~	~~0~~
5:00 PM	5:15 PM	0	0	0	0	205	1	0	0	8	270	0	0	0	264	15	0
5:15 PM	5:30 PM	0	0	0	0	237	0	0	0	2	235	0	0	0	238	27	0
5:30 PM	5:45 PM	0	0	0	0	228	0	1	0	8	238	0	0	0	237	16	0
5:45 PM	6:00 PM	0	0	0	0	250	0	0	0	10	167	0	0	0	289	12	0
PM Peak Hour Volumes		0	0	0	0	920	1	1	0	28	910	0	0	0	1028	70	0
% of Total Traffic		0.0%	0.0%	0.0%		31.1%	0.0%	0.0%		0.9%	30.8%	0.0%		0.0%	34.8%	2.4%	
% Directional			0.0%				31.2%	Intersection			31.7%				37.1%		
PM Peak Hour Factor			*#DIV/0!*				*0.92*	0.97			*0.84*				*0.91*		

Traffic Count Data Sheet

Year Counts Taken: **2018**
E-W Street: **I-40 S.Ramp**
N-S Street: **Unser Bd.**
Unsignalized
Speed Limit (I-40 S.Ramp)= **30** MPH
Speed Limit (Unser Bd.)= **35** MPH
7/12/18

Begin Time	End Time	Eastbound (I-40 S.Ramp)				Westbound (I-40 S.Ramp)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	~~2~~	~~1~~	~~13~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~161~~	~~226~~	~~0~~	~~0~~	~~130~~	~~313~~	~~0~~
7:15 AM	7:30 AM	9	0	10	0	0	0	0	0	0	145	230	0	0	247	322	0
7:30 AM	7:45 AM	12	0	5	0	0	0	0	0	0	197	241	0	0	277	287	0
7:45 AM	8:00 AM	16	0	5	0	0	0	0	0	0	186	151	0	0	251	230	0
8:00 AM	8:15 AM	16	0	9	0	0	0	0	0	0	156	238	0	0	216	234	0
8:15 AM	8:30 AM	~~13~~	~~0~~	~~6~~	~~1~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~127~~	~~209~~	~~0~~	~~0~~	~~214~~	~~206~~	~~0~~
8:30 AM	8:45 AM	~~12~~	~~0~~	~~9~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~112~~	~~186~~	~~2~~	~~0~~	~~206~~	~~204~~	~~0~~
8:45 AM	9:00 AM	~~15~~	~~0~~	~~14~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~106~~	~~136~~	~~0~~	~~0~~	~~176~~	~~161~~	~~0~~
AM Peak Hour Volumes		**53**	**0**	**29**	**0**	**0**	**0**	**0**	**0**	**0**	**684**	**860**	**0**	**0**	**991**	**1073**	**0**
% of Total Traffic		1.4%	0.0%	0.8%		0.0%	0.0%	0.0%		0.0%	18.5%	23.3%		0.0%	26.9%	29.1%	
% Directional			2.2%				0.0%	**Intersection**			41.8%				55.9%		
AM Peak Hour Factor			*0.82*				*#DIV/0!*	**0.91**			*0.88*				*0.91*		

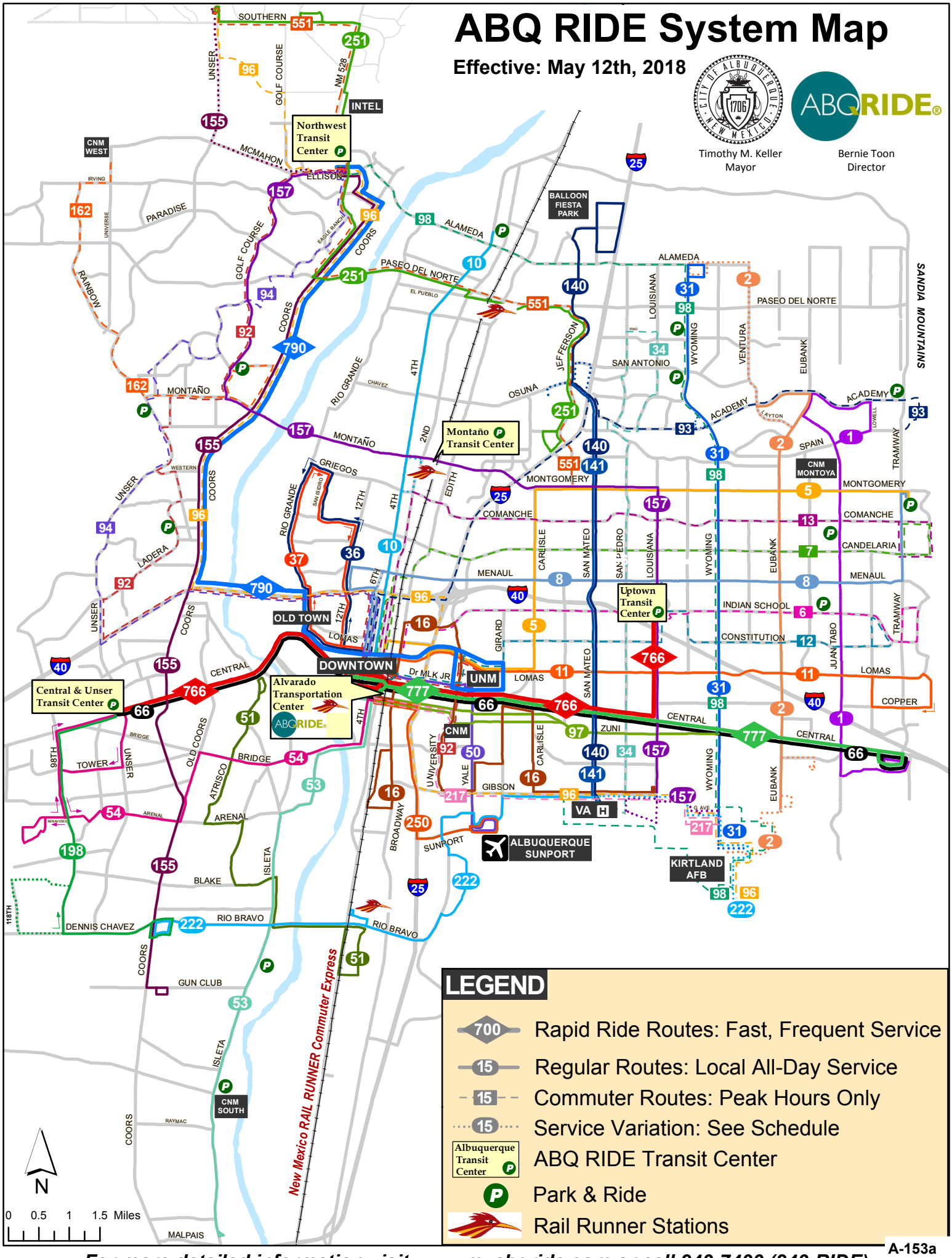
Begin Time	End Time	Eastbound (I-40 S.Ramp)				Westbound (I-40 S.Ramp)				Northbound (Unser Bd.)				Southbound (Unser Bd.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	~~15~~	~~0~~	~~10~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~192~~	~~106~~	~~0~~	~~0~~	~~413~~	~~77~~	~~0~~
4:15 PM	4:30 PM	~~18~~	~~0~~	~~10~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~197~~	~~84~~	~~0~~	~~0~~	~~376~~	~~78~~	~~0~~
4:30 PM	4:45 PM	17	0	9	0	0	0	0	0	0	228	112	8	0	396	81	0
4:45 PM	5:00 PM	13	0	12	0	0	0	0	0	0	213	132	0	0	383	80	0
5:00 PM	5:15 PM	16	0	15	0	0	0	0	0	0	231	98	0	0	386	91	0
5:15 PM	5:30 PM	35	0	13	0	0	0	0	0	0	378	240	0	0	785	161	0
5:30 PM	5:45 PM	~~13~~	~~0~~	~~6~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~179~~	~~95~~	~~0~~	~~0~~	~~429~~	~~85~~	~~0~~
5:45 PM	6:00 PM	~~13~~	~~0~~	~~10~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~147~~	~~120~~	~~5~~	~~0~~	~~342~~	~~79~~	~~0~~
PM Peak Hour Volumes		**81**	**0**	**49**	**0**	**0**	**0**	**0**	**0**	**0**	**1050**	**582**	**8**	**0**	**1950**	**413**	**0**
% of Total Traffic		2.0%	0.0%	1.2%		0.0%	0.0%	0.0%		0.0%	25.5%	14.1%		0.0%	47.3%	10.0%	
% Directional			3.2%				0.0%	**Intersection**			39.6%				57.3%		
PM Peak Hour Factor			*0.68*				*#DIV/0!*	**0.64**			*0.66*				*0.62*		

ABQ RIDE System Map

Effective: May 12th, 2018

Timothy M. Keller
Mayor

Bernie Toon
Director



LEGEND

- 700 — Rapid Ride Routes: Fast, Frequent Service
- 15 — Regular Routes: Local All-Day Service
- 15 — Commuter Routes: Peak Hours Only
- 15 — Service Variation: See Schedule
- Albuquerque Transit Center — ABQ RIDE Transit Center
- P — Park & Ride
- Rail Runner Stations

A-153a

For more detailed information visit www.myabqride.com or call 243-7433 (243-RIDE)

SCOPE OF TRAFFIC IMPACT STUDY (TIS)

TO: Terry Brown

MEETING DATE: July 26, 2018

ATTENDEES: Consultant Team; COA Transportation Development Review; NMDOT

PROJECT: C-Store Los Volcanes and Unser Blvd., Zone Atlas # K-10

REQUESTED CITY ACTION: ___ Zone Change ___ Site Development Plan

___ Subdivision _X_ Building Permit ___ Sector Plan ___ Sector Plan Amendment

___ Curb Cut Permit ___ Conditional Use ___ Annexation ___ Site Plan Amendment

ASSOCIATED APPLICATION: New 20 pump gas convenience market at SE corner of Los Volcanes Rd. and Unser Blvd. 3.06 acre site.

SCOPE OF REPORT:
The Traffic Impact Study should follow the standard report format, which is outlined in the DPM. The following supplemental information is provided for the preparation of this specific study.

1. Trip Generation - Use Trip Generation Manual, 10th Edition.
   Local data may be used for certain land use types as determined by staff.
   Consultant to provide.

2. Appropriate study area:
   Signalized Intersections;
   a. I-25 and Unser ramps (both sides)
   b. Unser and Los Volcanes
   c. Unser and Bluewater
   d. Coors and Los Volcanes

   Unsignalized Intersections;
   a. None

   Driveway Intersections: all site drives.

3. Intersection turning movement counts
   Study Time – 7-9 a.m. peak hour, 4-6 p.m. peak hour
   Consultant to provide for all intersections listed above.

4. Type of intersection progression and factors to be used.

Type III arrival type (see “2016 Highway Capacity Manual” or equivalent as approved by staff). Unless otherwise justified, peak hour factors and % heavy commercial should be taken directly from the MRCOG turning movement data provided or as calculated from current count data by consultant.

5. Boundaries of area to be used for trip distribution.
   1.5 mile radius – commercial;

6. Basis for trip distribution.

Residential – Use inverse relationship based upon distance and employment. Use employment data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Office/Industrial - Use inverse relationship based upon distance and population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Commercial - Use relationship based upon population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Residential - $Ts = (Tt) (Se / D) / (Se / D)$
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Se = Subarea Employment
D = Distance from Development to Subarea

Office/Industrial - $Ts = (Tt) (Sp / D) / (Sp / D)$
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Sp = Subarea Population
D = Distance from Development to Subarea

Commercial -
$Ts = (Tt) (Sp) / (Sp)$
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Sp = Subarea Population

7. Traffic Assignment. Logical routing on the major street system.

8. Method of intersection capacity analysis - planning or operational (see "2016 Highway Capacity Manual" or equivalent [i.e. HCS, Synchro, Teapac, etc.] as approved by staff). Must use latest version of design software and/or current edition of design manual.
   Implementation Year:

9. Traffic conditions for analysis:
   a. Existing analysis __ yes _X_ no - year ();
   b. Phase implementation year(s) without proposed development – 2020
   c. Phase implementation year(s) with proposed development – 2020
   d. Project completion year without proposed development – 2030
   e. Project completion year with proposed development – 2030
   f. Other –

10. Background traffic growth.
    Method: use 10-year historical growth based on standard data from the MRCOG Traffic Flow Maps. Minimum growth rate to be used is 1/2%.

11. Items to be included in the study:
    a. Intersection analysis.
    b. Signal progression - An analysis is required if the driveway analysis indicates a traffic signal is possibly warranted. Analysis Method:
    c. Arterial LOS analysis;
    d. Recommended street, intersection and signal improvements.
    e. Site design features such as turning lanes, median cuts, queuing requirements and site circulation, including driveway signalization and visibility.
    f. Transportation system impacts.
    g. Other mitigating measures.
    h. Accident analyses __ yes _X_ no; Location(s):
    i. Weaving analyses __ yes _X_ no; Location(s):

12. Other:

SUBMITTAL REQUIREMENTS:

1. Number of copies of report required
   a. 1 paper copy
   b. 1 digital copy
2. Submittal Fee – $1300 for up to 3 reviews

The Traffic Impact Study for this development proposal, project name, shall be performed in accordance with the above criteria. If there are any questions regarding the above items, please contact me at 924-3633.

_____ **8/23/18**

Ernest Armijo, P.E. Date
Senior Engineer for
Transportation Development Section

via: email

C: TIS Task Force Attendees, file