CITY OF ALBUQUERQUE

March 28, 2017

Terry Brown, P.E.
P.O Box 92051
Albuquerque, NM 87199

Re: **Cibola Loop Development**
Ellison Drive / Cibola Loop
Traffic Impact Study
Engineer's Stamp dated 02-02-17 (A13-D011)

Dear Mr. Brown,

The subject Traffic Impact Study received on February 2, 2017 has been reviewed and approved by the Transportation Development Section. All comments have been adequately addressed.

The final Traffic Impact Study shall be valid for a period of three years. Should significant modifications to the approved development proposal occur, the approved study shall be revised to incorporate the changes.

If you have any questions, please feel free to contact me at (505) 924-3991.

Sincerely,

Racquel M. Michel, P.E.
Traffic Engineer, Planning Dept.
Development Review Services

via: email
C: Applicant, File

PO Box 1293
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Terry O. Brown P.E.

Cibola Loop Development

(Ellison Dr. / Cibola Loop)

Traffic Impact Study

February 2, 2017

F I N A L

Presented to:

City of Albuquerque
Transportation Development Section

Prepared for:

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Cibola Loop Community Center
(Ellison Dr. / Cibola Loop)
TRAFFIC IMPACT STUDY

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Cibola Loop Community Center
(Ellison Dr. / Cibola Loop)
TRAFFIC IMPACT STUDY

STUDY PURPOSE

This study is being conducted in conjunction with a request for approval of a multi-use development plan such as the one shown in the Appendix (Page A-3) of this report. The purpose of this study is to identify the impact of the proposed development on the adjacent transportation system, and to make recommendations to mitigate any significant adverse impact on the adjacent transportation system resulting from the implementation of the proposed plan. This report is being prepared to meet the requirements of the City of Albuquerque Transportation Development Division in association with the development of the Cibola Loop Community Center located on Cibola Loop north of Ellison Dr.

STUDY PROCEDURES

The basic procedure to be followed is to evaluate the NO BUILD and BUILD traffic conditions for the implementation year (2020) for the signalized intersections of Ellison Dr. / N. Seven Bar Loop, Ellison Dr. / W. Cibola Loop, Ellison Dr. / E. Cibola Loop, Ellison Dr. / Coors Bypass and for the unsignalized intersections of Mill Rd. / W. Cibola Loop, and two proposed driveways on Cibola Loop and one on Ellison Dr. The procedure followed in this study is outlined as follows:

1) Calculate the generated trips for the proposed development consisting of a 25,000 SF Library, a 60,000 SF Multi-Generational Center, a 27,000 SF Pool, a 153 unit Apartment Complex, 56,410 SF of Shopping Center and 3,000 SF Fast Food Restaurant w/o Drive-Thru Window (See more detailed trip generation rate table in Appendix – Pages A-7 thru A-13).

2) Calculate growth rate for the area utilizing Traffic Flow Maps from the Mid-Region Council of Governments to define area traffic growth rate. (See Appendix Pages A-14 thru A-20)

2) Calculate trip distribution for the newly generated trips by this development. The trips will be distributed based on year 2020 population within a two-mile radius of the proposed new multi-use development, Appendix Pages A-22 thru A-27.

3) Determine Trip Assignments for the newly generated trips based on the results of the Trip Distribution Analysis and logical routing to and from the site (See Appendix Pages A-28 thru A-29 of this report).

4) Apply a 35% pass-by trip reduction to only the retail commercial trips, Appendix Page A-30.

5) Conduct new AM and PM Peak Hour traffic counts for the intersections of Ellison Dr. / N. Seven Bar Loop, Ellison Dr. / W. Cibola Loop, Ellison Dr. / E. Cibola Loop, Ellison Dr. / Coors Bypass and Mill Rd. / W. Cibola Loop, Appendix Pages A-77 thru A-78.

6) Determine 2020 NO BUILD Volumes by growing the existing turning movement counts to the year 2020 utilizing the calculated annual historic growth rate for the area. There are no previously approved projects in the area to include in this study, Appendix Pages A-31 thru A-46.

7) Add in data from Trip Assignments Maps and Tables to the 2020 NO BUILD Volumes to obtain 2020 BUILD Volumes for this project, A-31 thru A-46.

8) Provide signalized and / or unsignalized intersection analyses for the following intersections:

INTERSECTION	TYPE CONTROL	NO BUILD	BUILD
1) Ellison Dr. / N. Seven Bar Loop	Traffic Signal	2020	2020
2) Ellison Dr. / W. Cibola Loop	Traffic Signal	2020	2020
3) Ellison Dr. / E. Cibola Loop	Traffic Signal	2020	2020
4) Ellison Dr. / Coors Bypass	Traffic Signal	2020	2020
5) Mill Rd. / W. Cibola Loop	Unsignalized	2020	2020
6) Ellison Dr. / Driveway "A"	Unsignalized	N/A	2020
7) Driveway "B" / E. Cibola Loop	Unsignalized	N/A	2020

GENERAL AREA CHARACTERISTICS

The proposed development is located on Cibola Loop north of Ellison Dr. as shown on the Vicinity Map on Page A-2 of the Appendix of this report. The property is bounded on the south by Ellison Dr. and Cibola High School and on the other sides by residential and apartment complexes. The total area of land addressed in this Traffic Impact Study is approximately 30 acres.

This project is located in a mostly residential development area. Cibola High School is across the street on the south side of Ellison Dr. Also, there are other public facilities on the east side of this development.

AREA STREET NETWORK

The following information is taken from the Futures 2040 Long Range Roadway System from the Mid-Region Metropolitan Planning Organization and from Google Earth aerial photos.

Ellison Dr. and Coors Bypass are classified as Regional Principal Arterial Streets. Ellison Dr. is a four-lane roadway and Coors Bypass is a six-lane roadway. Both roadways have raised center medians and curb and gutter. Both roadways have sporadic portions of sidewalk, asphalt trail and no sidewalk. Ellison Dr. has a posted speed limit of 40 MPH and Coors Bypass has a posted speed limit of 45 MPH.

N. Seven Bar Loop is classified as a Major Collector Street. It is a two lane paved street with a bike lane, curb and gutter and sidewalk. N. Seven Bar Loop has a posted speed limit of 25 MPH.

Cibola Loop and Mill Rd. are not classified on the Futures 2040 Long Range Roadway System Map. They are considered local streets for the purpose of this report. The posted speed limit along Cibola Loop and Mill Rd. is 25 MPH.

EXISTING TRAFFIC VOLUMES

2014 Average Weekday Traffic Volumes (AWDT) for major streets in the site plan area are shown on Page A-6 in the Appendix.

Existing AM and PM peak hour turning movement counts for the intersections of Ellison Dr. / N. Seven Bar Loop, Ellison Dr. / W. Cibola Loop, Ellison Dr. / E. Cibola Loop, Ellison Dr. / Coors Bypass and Mill Rd. / W. Cibola Loop were obtained by the consultant for this study.

The counts and volume data are included in the Appendix (Pages A-77 thru A- 78).

EXISTING (2016) LEVELS OF SERVICE

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

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

The Highway Capacity Manual defines Level of Service (LOS) for unsignalized intersections in terms of average controlled delay per vehicle also. However, the thresholds for the various levels of service for unsignalized intersections varies from that of signalized intersections. The following table summarizes the thresholds for various levels of service at unsignalized intersections:

LOS A	0 to10.0"
LOS B	10 to 15"
LOS C	15 to 25"
LOS D	25 to 35"
LOS E	35 to 50"
LOS F	> 50"

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

Existing levels-of-service were not determined for this study.

EXISTING TRANSIT SERVICE

This area is serviced by the City of Albuquerque Transit System with Routes 92, 94, 96, 155,157 and 790, as well as the Northwest Transit Center (NWTC) at Ellison Rd / Coors By-pass, which includes a Park and Ride.

Route 92 (Taylor Ranch Express) is a weekday only route that runs from the NWTC west on Ellison Dr., south on Golf Course Rd., west to Unser Blvd, then east to downtown and University Blvd. on Interstate 40 twice per day at 6:15 and 6:45 AM southbound and 4:30 and 5:00 PM northbound. It connects with the free-of-charge D-Ride bus loop downtown.

Route 94 (Unser Express) is a weekday only route that runs from the NWTC west on Ellison Dr., south along Coors Bypass, west to Unser Blvd, then east to downtown and University Blvd. on Interstate 40 twice per day at 6:00 and 7:00 AM southbound and 4:45 and 5:15 PM northbound. It connects with the free-of-charge D-Ride bus loop downtown.

Route 96 (Crosstown Commuter) is a weekday only route that runs from north on Unser Blvd. to the NWTC east on Ellison Dr., south on Coors Blvd., then east and south to Gibson Blvd. on Interstates 40 and 25 from 5:15 to 6:45 AM southbound and 3:45 to 5:15 PM northbound every 15 min.

Route 155 (Coors Blvd. Line) runs from the NWTC east on Ellison Dr. and south on Coors Blvd. to Gun Club Rd. round trip beginning at 5:40 AM every 30 minutes. Additionally, during rush hour this route runs round trip west and north on McMahon and Unser Blvd. to Southern Blvd. It also runs on the weekends.

Route 157 (Montano / Uptown / Kirkland) runs from the NWTC west on Ellison Dr., south on Golf Course Rd., east on Montano (Montgomery), and south on Louisiana Blvd. to Gibson round trip beginning at 5:30 AM every 45 minutes. (See Bus Routes on Pages A-79 thru A-86 of the Appendix.)

Following are portions of the ABQRide Route Map and ABQ Bike Route Map, respectively.

PROPOSED DEVELOPMENT

The proposed project consists of a 25,000 SF Library, a 60,000 SF Multi-Generational Center, a 27,000 SF Pool, a 153 unit Apartment Complex, 56,410 SF of Shopping Center and 3,000 SF Fast Food Restaurant w/o Drive-Thru Window. (See Conceptual Site Plan on Page A-3 of the Appendix.)

TRIP GENERATION

Projected trips were calculated from data in the Institute of Transportation Engineers Trip Generation report (9th Edition, 2012). Trips for the development were determined based on land uses defined on the Conceptual Site Development Plan on Page A-3 in the Appendix of this report.

Cibola Loop (Westside Multigenerational Center) Plan

Trip Generation Data (ITE Trip Generation Manual - 9th Edition)

COMMENT	USE (ITE CODE) DESCRIPTION		24 HR VOL GROSS	A. M. PEAK HR. ENTER	A. M. PEAK HR. EXIT	P. M. PEAK HR. ENTER	P. M. PEAK HR. EXIT
	Summary Sheet	Units					
Tract No.	Library (590)	25.00	1,438	19	8	83	90
Multi-Gen Cntr.	Health/Fitness Club (492)	60.00	1,976	42	42	116	88
Pool	Health/Fitness Club (492)	27.00	889	19	19	55	41
Tract No.	Apartment (220)	153.00	1,051	16	63	66	36
Tract No.	Shopping Center (820)	56.41	4,681	68	42	196	212
Tract No.	Fast Food Restaurant w/o Drive-Thru Window (933)	3.00	2,148	79	53	40	38
	Subtotal		**12,183**	**243**	**227**	**556**	**505**
	Retail Commercial Trips Subject to Pass-by Trips		6,829	147	95	236	250
	Pass-by Trips	**35%**	*(2,390)*	*(51)*	*(33)*	*(83)*	*(88)*
	Net New Retail Commercial Trips		4,439	96	62	153	162
	New Office Trips		5,354	96	132	320	255
	Total Trips Adjusted for Pass-by		**9,793**	**192**	**194**	**473**	**417**

NOTE: Red numbers are subject to pass-by trip rate.

The resulting numbers of trips generated for the proposed development are summarized in the following table:

An adjustment was made to the trip generation rates for Pass-by Trips of 35%. See Appendix Pages A-7 thru A-13 for the trip generation worksheets.

TRIP DISTRIBUTION

Primary and Diverted Linked Trips:

Trips were distributed as follows:

Commercial Land Uses

Primary and diverted linked trips for the commercial land use development were distributed proportionally to the 2020 projected population of Data Analysis Subzones within a two-mile radius of the proposed development. Population data for the years 2015 and 2035 were

taken from the 2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico, supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2015 and 2035 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 is shown in the Appendix on Pages A-22 thru A-26. The Trip Distribution Map is on Appendix Page A-27.

TRIP ASSIGNMENT

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 are shown on Appendix Pages A-28 thru A-29. Passby trips are shown on Appendix Page A-30.

BACKGROUND TRAFFIC GROWTH

Background traffic growth rates were considered for each individual approach to an intersection that was targeted for analysis based on data from the 2005 thru 2014 Traffic Flow maps prepared by the Mid-Region Council of Governments (MRCOG). Almost all 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 growth rate for each approach if that calculated rate appeared feasible. However, there were some instances where the rate indicated a negative growth trend. In those cases, an appropriate growth rate from an adjacent segment of the same roadway was considered. Due to the potential for growth in the area, it was believed that a zero percent growth rate was inappropriate for this study. Additionally, if the R^2 value of the trend line was low, other means of establishing a probable growth rate from the data accumulated was considered. Historical Growth Rate Graphs with linear regression trendlines are shown in the Appendix on Pages A-14 thru A-20. A Historic Growth Map can be found on Appendix Pages A-21.

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-33 thru A-45).

PROJECTED PEAK HOUR TURNING MOVEMENTS FOR 2020 BUILDOUT

The calculated growth rates for the intersections studied in this report were applied to the most recent peak hour traffic counts to establish the 2020 background traffic volumes. To these volumes, the generated trips based on implementation of the proposed Cibola Loop Community Center Plan were added to obtain BUILD volumes for the intersection analyses. See Appendix Pages A-31 thru A-46 for further information regarding turning movement counts.

INTERSECTION CAPACITY ANALYSIS

Intersection capacity analyses were performed in accordance with the procedures for signalized and unsignalized intersections in the Highway Capacity Manual, Transportation Research Board, 2010, using Trafficware's Synchro version 9 Highway Capacity Software for signalized and unsignalized intersections. For signalized intersections, the operational method of analysis was used for 2020 conditions (BUILD).

Capacity analyses were performed for the following traffic conditions.

2020 without development of the subject property (2020 NO BUILD)
2020 with total development as per the Proposed Site Plan (2020 BUILD).

The results of the existing, 2020 NO BUILD and 2020 BUILD capacity analyses are summarized in the following sections - *Results of Intersection Capacity Analyses*.

RESULTS OF INTERSECTION CAPACITY ANALYSES

IMPLEMENTATION YEAR (2020)

Intersection #1: Ellison Dr. / N. Seven Bar Loop – Appendix Pages A- 47 thru A- 72

The results of the 2020 implementation year analysis of the signalized intersection of Ellison Dr. / N. Seven Bar Loop are summarized in the following tables:

Intersection: 1 - ELLISON DR. / N. 7 BAR LOOP

2020 AM Peak Hour BUILD **2020 PM Peak Hour BUILD**

		(EXIST. GEOM.) NO BUILD		(EXIST. GEOM.) BUILD			(EXIST. GEOM.) NO BUILD		(EXIST. GEOM.) BUILD	
		Lanes	LOS-Delay	Lanes	LOS-Delay		Lanes	LOS-Delay	Lanes	LOS-Delay
EB	L	1	A - 4.7	1	A - 3.7	L	1	A - 2.5	1	A - 3.2
	T	2	A - 4.0	2	A - 4.8	T	2	A - 2.6	2	A - 3.6
WB	T	2	B - 17.9	2	A - 0.3	T	2	A - 0.4	2	A - 0.3
	R	1	B - 13.9	1	A - 0.2	R	1	A - 0.1	1	A - 0.1
SB	L	1	D - 49.5	1	D - 48.9	L	1	E - 66.6	1	E - 71.7
	R	1	D - 37.6	1	D - 36.0	R	1	E - 61.5	1	E - 58.1
Intersection:		***B - 13.4***		***A - 8.2***			***A - 5.5***		***A - 6.5***	

Note: ">" designates a shared right or left turn lane.

The analysis indicates that the signalized intersection of Ellison Dr. / N. Seven Bar Loop operates at acceptable levels-of-service and delays for the 2020 AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions for the overall intersection. The southbound left and right turn movements will experience marginally excessive delays during the PM Peak Hour NO BUILD and BUILD conditions. The traffic generated by the proposed development does not increase the delay at the intersection during the AM Peak Hour and increases the delay during the PM Peak Hour by only 1 second. Therefore, no recommendations are made for the intersection of Ellison Dr. / N. Seven Bar Loop.

The queuing analysis for this intersection are summarized in the following table:

Queueing Analysis Summary Sheet

Project: Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Intersection: **Ellison Dr. / N.Seven Bar Dr.**

2020

Approach	Left Turns			Thru Movements				Right Turns		
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*1*	*50*	*125*	*2*	*611*	*Cont*		*0*	*0*	*0*
AM NO BUILD Queue	1	52	100	2	919	500		0	0	0
AM BUILD Queue	**1**	**52**	**100**	**2**	**1,005**	**550**		**0**	**0**	**0**
Existing Lane Length	*1*	*81*	*125*	*2*	*853*	*Cont*		*0*	*0*	*0*
PM NO BUILD Queue	1	84	150	2	944	**700**		0	0	0
PM BUILD Queue	**1**	**84**	**150**	**2**	**1,155**	**825**		**0**	**0**	**0**
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*0*	*0*	*0*	*2*	*344*	*Cont*		*1*	*24*	*230*
AM NO BUILD Queue	0	0	0	2	486	300		1	58	100
AM BUILD Queue	**0**	**0**	**0**	**2**	**572**	**350**		**1**	**80**	**125**
Existing Lane Length	*0*	*0*	*0*	*2*	*1,159*	*Cont*		*1*	*133*	*230*
PM NO BUILD Queue	0	0	0	2	1,252	**900**		1	154	**250**
PM BUILD Queue	**0**	**0**	**0**	**2**	**1,438**	**>1,000**	*	**1**	**201**	**325**
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*0*	*0*	*0*	*0*	*0*	*Cont*		*0*	*0*	*0*
AM NO BUILD Queue	0	0	0	0	0	0		0	0	0
AM BUILD Queue	**0**	**0**	**0**	**0**	**0**	**0**		**0**	**0**	**0**
Existing Lane Length	*0*	*0*	*0*	*0*	*0*	*Cont*		*0*	*0*	*0*
PM NO BUILD Queue	0	0	0	0	0	0		0	0	0
PM BUILD Queue	**0**	**0**	**0**	**0**	**0**	**0**		**0**	**0**	**0**
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*1*	*66*	*95*	*0*	*0*	*Cont*		*1*	*78*	*400*
AM NO BUILD Queue	1	139	175	0	0	0		1	80	125
AM BUILD Queue	**1**	**161**	**200**	**0**	**0**	**0**		**1**	**80**	**125**
Existing Lane Length	*1*	*65*	*95*	*0*	*96*	*Cont*		*1*	*0*	*400*
PM NO BUILD Queue	1	81	**150**	0	98	**#DIV/0!**	##	1	0	0
PM BUILD Queue	**1**	**134**	**225**	**0**	**98**	**#DIV/0!**	##	**1**	**0**	**0**

	AM	PM
Cycle Length:	100	140

NOTE: Queue lengths are in feet.

Calculated Right Turn Queue Lengths can be reduced by 50%
to account for right-turns-on-red and right turn overlaps.

The queuing analysis recommends lengthening the southbound left turn lane from 95 feet to 225 feet plus transition. The southbound left turn lane cannot be lengthened without adversely affecting the intersection of Condesa Ct. / Seven Bar Loop. Therefore, no recommendations are made for the queue lengths at the intersection of Ellison Dr. / Seven Bar Loop.

Intersection #2: Ellison Dr. / W. Cibola Loop – Appendix Pages A- 47 thru A- 72

The results of the 2020 implementation year analysis of the signalized intersection of Ellison Dr. / W. Cibola Loop are summarized in the following tables:

ıtersection: 2 - ELLISON DR. / W. CIBOLA LOOP

		2020 AM Peak Hour BUILD				2020 PM Peak Hour BUILD			
		(EXIST. GEOM.)				(EXIST. GEOM.)			
		NO BUILD		BUILD		NO BUILD		BUILD	
		Lanes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay
EB	L	1	B - 14.8	1	B - 15.9	1	B - 16.0	1	C - 28.9
	T	2	D - 43.2	2	D - 37.9	2	D - 44.1	2	C - 23.8
	R	1	C - 25.1	1	C - 20.2	1	C - 25.5	1	B - 13.8
WB	L	1	C - 32.2	1	D - 37.9	1	B - 19.1	1	B - 18.7
	T	2	B - 17.8	2	C - 30.4	2	A - 0.7	2	B - 11.7
	R	1	B - 11.9	1	B - 18.7	1	A - 0.0	1	A - 1.1
NB	L	1	C - 27.5	1	C - 28.2	1	C - 34.4	1	D - 37.2
	T	1	C - 32.0	1	C - 32.2	1	D - 38.1	1	D - 39.7
	R	>	C - 32.0	>	C - 32.2	>	D - 38.1	>	D - 39.7
SB	L	1	C - 26.7	1	C - 26.9	1	C - 33.9	1	D - 35.4
	T	1	C - 32.7	1	D - 37.3	1	D - 39.7	1	D - 50.6
	R	>	C - 32.7	>	D - 37.3	>	D - 39.7	>	D - 50.6
Intersection:		***C - 32.8***		***C - 33.4***		***B - 19.2***		***C - 20.3***	

Note: ">" designates a shared right or left turn lane.

The analysis indicates that the signalized intersection of Ellison Dr. / W. Cibola Loop operates at acceptable levels-of-service and delays for the 2020 AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions. The traffic generated by the proposed development increases the delay at the intersection during the AM Peak Hour by 0.6 seconds and during the PM Peak Hour by 1.1 seconds. Therefore, no recommendations are made for the intersection of Ellison Dr. / W. Cibola Loop.

The queuing analysis for this intersection are summarized in the following table:

Queueing Analysis Summary Sheet

Project: Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Intersection: **Ellison Dr. / W.Cibola Loop**

2020

Approach	Left Turns			Thru Movements				Right Turns		
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*1*	*19*	*110*	*2*	*0*	*Cont*		*1*	*0*	*160*
AM NO BUILD Queue	1	19	50	2	681	400		1	0	0
AM BUILD Queue	**1**	**73**	**125**	**2**	**735**	**425**		**1**	**0**	**0**
Existing Lane Length	*1*	*75*	*110*	*2*	*0*	*Cont*		*1*	*0*	*160*
PM NO BUILD Queue	1	77	**150**	2	873	**650**		1	0	0
PM BUILD Queue	**1**	**209**	**325**	**2**	**1,005**	**725**		**1**	**0**	**0**
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*1*	*59*	*250*	*2*	*0*	*Cont*		*1*	*6*	*145*
AM NO BUILD Queue	1	60	100	2	375	250		1	6	25
AM BUILD Queue	**1**	**60**	**100**	**2**	**429**	**275**		**1**	**6**	**25**
Existing Lane Length	*1*	*3*	*250*	*2*	*0*	*Cont*		*1*	*48*	*145*
PM NO BUILD Queue	1	3	25	2	1,318	>1,000	*	1	49	100
PM BUILD Queue	**1**	**3**	**25**	**2**	**1,434**	**>1,000**	*	**1**	**49**	**100**
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*1*	*0*	*100*	*1*	*0*	*Cont*		*0*	*0*	*0*
AM NO BUILD Queue	1	0	0	1	0	0		0	0	0
AM BUILD Queue	**1**	**0**	**0**	**1**	**1**	**0**		**0**	**0**	**0**
Existing Lane Length	*1*	*0*	*100*	*1*	*0*	*Cont*		*0*	*0*	*0*
PM NO BUILD Queue	1	0	0	1	0	0		0	0	0
PM BUILD Queue	**1**	**0**	**0**	**1**	**2**	**0**		**0**	**0**	**0**
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*1*	*52*	*75*	*1*	*0*	*Cont*		*0*	*55*	*0*
AM NO BUILD Queue	1	53	100	1	0	0		0	56	100
AM BUILD Queue	**1**	**135**	**175**	**1**	**1**	**0**		**0**	**110**	**150**
Existing Lane Length	*1*	*26*	*75*	*1*	*0*	*Cont*		*0*	*69*	*0*
PM NO BUILD Queue	1	27	**75**	1	0	0		0	70	**150**
PM BUILD Queue	**1**	**210**	**325**	**1**	**1**	**0**		**0**	**186**	**300**

	AM	PM
Cycle Length:	100	140

NOTE: Queue lengths are in feet.

Calculated Right Turn Queue Lengths can be reduced by 50% to account for right-turns-on-red and right turn overlaps.

The queuing analysis recommends lengthening the eastbound left turn lane from 110 feet to 325 feet plus transition and lengthening the southbound left turn lane from 75 feet to 325

feet plus transition. According to aerial photographs, it appears that the eastbound left turn lane cannot be lengthened without eliminating the pedestrian refuge located in the median in the school crossing zone. There is an existing eastbound left turn lane that is currently striped out that may be restriped as a second left turn lane to provide additional queuing in the future, however, there is not enough eastbound left turn lane volume for optimal operation of a dual left turn lane. At this point, it would create more delays. According to aerial photographs, it appears that the southbound left turn lane may be lengthened and should be left as striped only with no median curb as to not interfere with the intersection of W. Cibola Loop / Mill Rd.

Intersection #3: Ellison Dr. / E. Cibola Loop – Appendix Pages A- 47 thru A- 72

The results of the 2020 implementation year analysis of the signalized intersection of Ellison Dr. / E. Cibola Loop are summarized in the following tables:

Intersection: 3 - ELLISON DR. / E. CIBOLA LOOP

2020 AM Peak Hour BUILD

		(EXIST. GEOM.) NO BUILD		(EXIST. GEOM.) BUILD		(MIT. GEOM.) BUILD	
		Lanes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay
EB	L	1	B - 18.1	1	B - 18.8	1	B - 18.5
	T	2	B - 18.7	2	C - 27.3	2	C - 27.3
	R	>	B - 18.8	>	C - 27.6	>	C - 27.5
WB	L	1	C - 24.9	1	C - 25.7	1	C - 25.7
	T	2	C - 33.9	2	D - 35.2	3	C - 33.5
	R	1	C - 29.1	1	C - 30.2	>	C - 33.7
NB	L	1	C - 26.4	1	C - 26.1	1	C - 26.1
	T	1	B - 17.3	1	B - 16.7	1	B - 16.7
	R	>	B - 17.3	>	B - 16.7	>	B - 16.7
SB	L	1	C - 21.6	1	C - 23.0	1	C - 23.0
	T	1	C - 20.2	1	B - 19.7	1	B - 19.7
	R	>	C - 20.2	>	B - 19.7	>	B - 19.7
Intersection:			***C - 23.2***		***C - 27.3***		***C - 27.1***

2020 PM Peak Hour BUILD

		(EXIST. GEOM.) NO BUILD		(EXIST. GEOM.) BUILD		(MIT. GEOM.) BUILD	
		Lanes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay
EB	L	1	C - 24.9	1	B - 13.1	1	C - 32.2
	T	2	A - 0.6	2	A - 1.7	2	A - 2.3
	R	>	A - 0.6	>	A - 1.7	>	A - 2.3
WB	L	1	A - 7.2	1	B - 13.0	1	B - 13.5
	T	2	A - 9.3	2	**F** - 109	3	A - 2.9
	R	1	A - 3.6	1	A - 0.0	>	B - 13.7
NB	L	1	E - 75.7	1	D - 52.3	1	D - 49.8
	T	1	D - 49.6	1	C - 34.3	1	C - 33.4
	R	>	D - 49.6	>	C - 34.3	>	C - 33.4
SB	L	1	**F** - 85.5	1	E - 79.0	1	E - 71.4
	T	1	D - 50.3	1	D - 37.7	1	D - 36.7
	R	>	D - 50.3	>	D - 37.7	>	D - 36.7
Intersection:			***B - 14.3***		***E - 63.3***		***B - 13.9***

Note: ">" designates a shared right or left turn lane.

Mitigation includes restriping the westbound right turn lane as a shared thru/right turn lane and constructing a third westbound thru lane to Driveway "A" (approx. 800 feet) where it will become an exclusive right turn lane.

The analysis indicates that the signalized intersection of Ellison Dr. / E. Cibola Loop operates at acceptable levels-of-service for the 2020 AM Peak Hour NO BUILD and BUILD conditions and will experience marginally excessive delays for the PM Peak Hour BUILD conditions. The intersection may be mitigated by restriping the existing westbound right turn lane to become a shared thru/right turn lane and constructing a third westbound thru lane to the proposed Driveway “A” (approximately 800 feet), where the new lane will turn into an exclusive right turn lane for Driveway “A”. This recommendation is based on the availability of sufficient right-of-way or the possibility of acquiring the needed right-of-way to construct the improvements.

The queuing analysis for this intersection are summarized in the following table:

Queueing Analysis Summary Sheet

Project: Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Intersection: **Ellison Dr. / E.Cibola Loop**

2020

Approach	Left Turns			Thru Movements				Right Turns		
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*1*	*19*	*175*	*2*	*0*	*Cont*		*0*	*34*	*0*
AM NO BUILD Queue	1	19	50	2	728	425		0	35	75
AM BUILD Queue	**1**	**19**	**50**	**2**	**796**	**450**		**0**	**36**	**75**
Existing Lane Length	*1*	*23*	*175*	*2*	*0*	*Cont*		*0*	*51*	*0*
PM NO BUILD Queue	1	23	75	2	885	**650**		0	52	125
PM BUILD Queue	**1**	**23**	**75**	**2**	**1,031**	**750**		**0**	**53**	**125**
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*1*	*15*	*250*	*2*	*0*	*Cont*		*1*	*45*	*320*
AM NO BUILD Queue	1	15	50	2	367	250		1	46	75
AM BUILD Queue	**1**	**15**	**50**	**2**	**434**	**275**		**1**	**46**	**75**
Existing Lane Length	*1*	*45*	*250*	*2*	*0*	*Cont*		*1*	*195*	*320*
PM NO BUILD Queue	1	46	100	2	1,611	>1,000	*	1	199	325
PM BUILD Queue	**1**	**46**	**100**	**2**	**1,777**	**>1,000**	*	**1**	**199**	**325**
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*1*	*22*	*40*	*1*	*0*	*Cont*		*0*	*16*	*0*
AM NO BUILD Queue	1	22	50	1	0	0		0	16	50
AM BUILD Queue	**1**	**22**	**50**	**1**	**1**	**0**		**0**	**16**	**50**
Existing Lane Length	*1*	*76*	*40*	*1*	*4*	*Cont*		*0*	*40*	*0*
PM NO BUILD Queue	1	78	150	1	4	25		0	41	100
PM BUILD Queue	**1**	**78**	**150**	**1**	**6**	**25**		**0**	**41**	**100**
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*1*	*153*	*105*	*1*	*3*	*Cont*		*0*	*11*	*0*
AM NO BUILD Queue	1	156	200	1	3	0		0	11	25
AM BUILD Queue	**1**	**156**	**200**	**1**	**4**	**25**		**0**	**11**	**25**
Existing Lane Length	*1*	*147*	*105*	*1*	*4*	*Cont*		*0*	*37*	*0*
PM NO BUILD Queue	1	150	250	1	4	25		0	38	100
PM BUILD Queue	**1**	**150**	**250**	**1**	**5**	**25**		**0**	**38**	**100**

	AM	PM
Cycle Length:	100	140

NOTE: Queue lengths are in feet.

Calculated Right Turn Queue Lengths can be reduced by 50% to account for right-turns-on-red and right turn overlaps.

The queuing analysis recommends lengthening the northbound left turn lane from 40 feet to 150 feet plus transition and lengthening the southbound left turn lane from 105 feet to 250 feet plus transition for both the NO BUILD and BUILD conditions.

Intersection #4: Ellison Dr. / Coors Bypass – Appendix Pages A- 47 thru A- 72

The results of the 2020 implementation year analysis of the signalized intersection of Ellison Dr. / Coors Bypass are summarized in the following tables:

Intersection: 4 - ELLISON DR. / COORS BYPASS

		2020 AM Peak Hour BUILD				2020 PM Peak Hour BUILD			
		(EXIST. GEOM.)				(EXIST. GEOM.)			
		NO BUILD		BUILD		NO BUILD		BUILD	
		Lanes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay
EB	L	2	D - 48.2	2	D - 48.5	2	**F** - 102	2	**F** - 136
	T	2	D - 46.2	2	B - 16.7	2	**F** - 117	2	**F** - 102
	R	1	A - 0.0	1	A - 0.0	1	A - 0.0	1	A - 0.0
WB	L	2	D - 51.9	2	D - 51.9	2	**F** - 245	2	**F** - 289
	T	2	C - 34.9	2	C - 34.9	2	**F** - 221	2	**F** - 249
	R	1	A - 0.0	1	A - 0.0	1	A - 0.0	1	A - 0.0
NB	L	2	E - 56.4	2	E - 56.5	2	**F** - 280	2	**F** - 300
	T	3	B - 16.3	3	B - 16.5	3	**F** - 220	3	**F** - 220
	R	1	A - 0.0	1	A - 0.0	1	A - 0.0	1	A - 0.0
SB	L	2	D - 47.8	2	D - 47.8	2	**F** - 278	2	**F** - 278
	T	3	C - 24.6	3	C - 25.9	3	E - 56.3	3	E - 64.7
	R	1	A - 0.0	1	A - 0.0	1	A - 0.0	1	A - 0.0
Intersection:		***C - 30.2***		***C - 31.2***		**F - *190***		**F - *200***	

Note: ">" designates a shared right or left turn lane.

The analysis indicates that the signalized intersection of Ellison Dr. / Coors Bypass operates at acceptable levels-of-service for the 2020 AM Peak Hour NO BUILD and BUILD conditions and will experience excessive delays for the PM Peak Hour NO BUILD and BUILD conditions. Traffic generated by the proposed development will only increase the delays at the intersection by 1 second during the AM Peak Hour and by 10 seconds during the PM Peak Hour. The delays are a NO BUILD condition and will not be caused by the proposed development. The intersection is already built-out and no physical improvements could be made. Therefore, no recommendations are made for the intersection of Ellison Dr. / Coors Bypass.

The queuing analysis for this intersection are summarized in the following table:

Queueing Analysis Summary Sheet

Project: Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Intersection: **Ellison Dr. / Coors Bypass**

2020

Approach	Left Turns			Thru Movements				Right Turns		
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*2*	*84*	*200*	*2*	*470*	*Cont*		*1*	*328*	*345*
AM NO BUILD Queue	2	86	75	2	479	300		1	335	375
AM BUILD Queue	**2**	**101**	**100**	**2**	**499**	**300**		**1**	**368**	**400**
Existing Lane Length	*2*	*141*	*200*	*2*	*579*	*Cont*		*1*	*334*	*345*
PM NO BUILD Queue	2	144	**150**	2	591	**475**		1	341	**500**
PM BUILD Queue	**2**	**177**	**175**	**2**	**634**	**500**		**1**	**412**	**575**
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*2*	*85*	*210*	*2*	*168*	*Cont*		*1*	*16*	*250*
AM NO BUILD Queue	2	96	100	2	190	150		1	18	50
AM BUILD Queue	**2**	**96**	**100**	**2**	**210**	**150**		**1**	**18**	**50**
Existing Lane Length	*2*	*331*	*210*	*2*	*893*	*Cont*		*1*	*106*	*250*
PM NO BUILD Queue	2	375	325	2	1,011	**750**		1	120	200
PM BUILD Queue	**2**	**375**	**325**	**2**	**1,060**	**775**		**1**	**120**	**200**
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*2*	*191*	*210*	*3*	*969*	*Cont*		*1*	*53*	*320*
AM NO BUILD Queue	2	195	150	3	988	400		1	54	100
AM BUILD Queue	**2**	**228**	**175**	**3**	**988**	**400**		**1**	**54**	**100**
Existing Lane Length	*2*	*720*	*210*	*3*	*2,603*	*Cont*		*1*	*194*	*320*
PM NO BUILD Queue	2	734	**550**	3	2,655	>1,000	*	1	198	325
PM BUILD Queue	**2**	**814**	**625**	**3**	**2,655**	**>1,000**	*	**1**	**198**	**325**
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length		# Lanes	Vol.	Length
Existing Lane Length	*2*	*67*	*230*	*3*	*1,417*	*Cont*		*1*	*42*	*350*
AM NO BUILD Queue	2	68	75	3	1,445	550		1	43	75
AM BUILD Queue	**2**	**68**	**75**	**3**	**1,445**	**550**		**1**	**58**	**100**
Existing Lane Length	*2*	*123*	*230*	*3*	*1,164*	*Cont*		*1*	*109*	*350*
PM NO BUILD Queue	2	125	150	3	1,187	625		1	111	**200**
PM BUILD Queue	**2**	**125**	**150**	**3**	**1,187**	**625**		**1**	**148**	**250**

	AM	PM
Cycle Length:	100	140

NOTE: Queue lengths are in feet.

Calculated Right Turn Queue Lengths can be reduced by 50% to account for right-turns-on-red and right turn overlaps.

The queuing analysis recommends lengthening the westbound left turn lane from 210 feet to 325 feet plus transition for both the NO BUILD and BUILD conditions. This dual left is physically constrained by the close proximity to the Ellison Dr. / Cottonwood Dr. intersection and the width of the existing median. It appears from aerial photography that the lanes may be lengthened to the recommended length or as close to the recommended length as possible. However, this development does not contribute traffic volumes to the westbound

left turn movement. The queuing analysis also recommends lengthening the northbound left turn lane from 210 feet to 550 feet plus transition for the NO BUILD condition and to 625 feet plus transition for the BUILD condition. 9.6 percent of the northbound left turns are generated by the proposed Cibola Loop Development and a cost sharing between the City of Albuquerque and the developer should be used for this improvement.

Intersection #5: Mill Rd. / W. Cibola Loop – Appendix Pages A- 47 thru A- 72

One driveway for this project will be the fourth leg of this intersection. The results of the 2020 implementation year analysis of the signalized intersection of Mill Rd. / W. Cibola Loop are summarized in the following tables:

Intersection: 5 - MILL RD. / W. CIBOLA LOOP

2020 AM Peak Hour BUILD

		(EXIST. GEOM.) NO BUILD			BUILD		
		Lanes	LOS-Delay		Lanes	LOS-Delay	
EB	L	1	A - 9.3	>	A - 9.4	L	
	T		A - 0.0	1	A - 9.4	T	
	R	>	A - 9.3	>	A - 9.4	R	
WB	L		A - 0.0	>	B - 11.2	L	
	T		A - 0.0	1	B - 11.2	T	
	R		A - 0.0	>	B - 11.2	R	
NB	L	>	A - 7.6	>	A - 7.6	L	
	T	1	A - 0.0	1	A - 7.6	T	
	R		A - 0.0	>	A - 0.0	R	
SB	L		A - 0.0	>	A - 0.0	L	
	T	1	A - 0.0	1	A - 7.4	T	
	R	>	A - 0.0	>	A - 7.4	R	
Intersection:			***u - 1.6***		***u - 3.7***		

2020 PM Peak Hour BUILD

		(EXIST. GEOM.) NO BUILD			BUILD		
		Lanes	LOS-Delay		Lanes	LOS-Delay	
EB	L	1	A - 9.0	>	B - 10.1	L	
	T		A - 0.0	1	B - 10.1	T	
	R	>	A - 9.0	>	B - 10.1	R	
WB	L		A - 0.0	>	B - 13.4	L	
	T		A - 0.0	1	B - 13.4	T	
	R		A - 0.0	>	B - 13.4	R	
NB	L	>	A - 7.5	>	A - 7.5	L	
	T	1	A - 0.0	1	A - 7.5	T	
	R		A - 0.0	>	A - 0.0	R	
SB	L		A - 0.0	>	A - 0.0	L	
	T	1	A - 0.0	1	A - 7.8	T	
	R	>	A - 0.0	>	A - 7.8	R	
Intersection:			***u - 1.0***		***u - 4.8***		

Note: ">" designates a shared right or left turn lane.

The analysis indicates that the unsignalized intersection of Mill Rd. / W. Cibola Loop operates at acceptable levels-of-service and delays for the 2020 AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions. Therefore, no recommendations are made for the intersection of Mill Rd. / W. Cibola Loop besides constructing the fourth leg.

Intersection #6: Ellison Dr. / Driveway "A" – Appendix Pages A- 47 thru A- 72

This is a proposed right-in, left-in, right-out, only unsignalized driveway. The results of the 2020 implementation year analysis of the signalized intersection of Ellison Dr. / Driveway "A" are summarized in the following tables:

Intersection: 6 - ELLISON DR. / DRIVEWAY "A"

2020 AM Peak Hour BUILD **2020 PM Peak Hour BUILD**

		(EXIST. GEOM.) NO BUILD Lanes	LOS-Delay	BUILD Lanes	LOS-Delay		(EXIST. GEOM.) NO BUILD Lanes	LOS-Delay	BUILD Lanes	LOS-Delay
EB	L	1	A - 0.0	1	A - 8.5	L	1	A - 0.0	1	B - 11.5
	T	2	A - 0.0	2	A - 0.0	T	2	A - 0.0	2	A - 0.0
WB	T	2	A - 0.0	2	A - 0.0	T	2	A - 0.0	2	A - 0.0
	R	1	A - 0.0	1	A - 0.0	R	1	A - 0.0	1	A - 0.0
SB	R	1	A - 0.0	1	A - 10.0	R	1	A - 0.0	1	C - 15.7
Intersection:		***u - 0.0***		***u - 0.6***			***u - 0.0***		***u - 1.4***	

Note: ">" designates a shared right or left turn lane.

The analysis indicates that the unsignalized intersection of Ellison Dr. / Driveway "A" operates at acceptable levels-of-service and delays for the 2020 AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions. Therefore, no recommendations are made for the intersection of Ellison Dr. / Driveway "A".

A Determination of Warrants for Deceleration Lanes was conducted for Driveway "A" and recommends constructing a westbound right turn deceleration lane of 325 feet with a 10.5:1 taper ratio and an eastbound left turn deceleration lane of 500 feet with a 10.5:1 taper ratio. From aerial photographs, it appears that the eastbound left turn lane cannot be constructed to the desired length by probably more close to 200 feet. In this case, the subject westbound right turn deceleration lane should be a continuation of the third westbound thru lane on Ellison Dr. through the intersection of Cibola Loop (East) if there is sufficient right-of-way available to construct that third westbound thru lane.

Intersection #7: Driveway "B" / E. Cibola Loop – Appendix Pages A- 47 thru A- 72

This is a proposed unsignalized full access driveway. The results of the 2020 implementation year analysis of the signalized intersection of Driveway "B" / E. Cibola Loop are summarized in the following tables:

Intersection: 7 - DRIVEWAY "B" / E. CIBOLA LOOP

2020 AM Peak Hour BUILD **2020 PM Peak Hour BUILD**

		(EXIST. GEOM.) NO BUILD Lanes	LOS-Delay	BUILD Lanes	LOS-Delay		(EXIST. GEOM.) NO BUILD Lanes	LOS-Delay	BUILD Lanes	LOS-Delay
EB	L	1	A - 0.0	1	B - 12.3	L	1	A - 0.0	1	B - 14.5
	R	>	A - 0.0	>	B - 12.3	R	>	A - 0.0	>	B - 14.5
NB	L	>	A - 0.0	>	A - 8.3	L	>	A - 0.0	>	A - 8.2
	T	1	A - 0.0	1	A - 8.3	T	1	A - 0.0	1	A - 0.0
SB	T	1	A - 0.0	1	A - 0.0	T	1	A - 0.0	1	A - 0.0
	R	>	A - 0.0	>	A - 0.0	R	>	A - 0.0	>	A - 0.0
Intersection:		***u - 0.0***		***u - 2.1***			***u - 0.0***		***u - 4.4***	

Note: ">" designates a shared right or left turn lane.

The analysis indicates that the unsignalized intersection of Driveway "B" / E. Cibola Loop operates at acceptable levels-of-service and delays for the 2020 AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions. Therefore, no recommendations are made for the intersection of Driveway "B" / E. Cibola Loop.

CONCLUSIONS

This analysis was conducted using the following methodology: Trip Generation was established using the Institute of Transportation Engineers' (ITE's) Trip Generation Manual (9th Edition). Generated Trips were distributed proportionately based on the population data within a two-mile radius of the project; Growth rate of background traffic volumes was established from Traffic Flow Map data from 2005 through 2014; and the intersection analyses were performed in accordance with the 2000 Highway Capacity Manual. The Traffic Impact Study showed a moderate increase in traffic congestion for the adjacent transportation network based on 100% buildout of the proposed project.

In summary, the proposed development plan for mixed use development presents minimal adverse impact to the adjacent transportation system provided that the following recommendations are followed:

RECOMMENDATIONS

- All design and construction for this project shall insure that adequate site distances at the proposed access points and any offsite intersection for which improvements are constructed.
- Driveways shall be constructed using a minimum of 25-foot radius curb returns or larger is required to accommodate delivery trucks.
- The proposed development should be accessed via three driveways – Mill Rd. / Cibola Loop (full access, unsignalized, one entering lane, one exiting lane), Driveway "A" via Ellison Dr. (right-in, right-out, left-in only unsignalized, one lane entering, one lane exiting) and Driveway "B" via Cibola Loop (full access, unsignalized, one lane entering, one lane exiting).
- **Ellison Dr. / E. Cibola Loop** – If sufficient right-of-way on Ellison Dr. is available or can be acquired, restripe the existing westbound right turn lane to become a shared thru/right turn lane and construct a third westbound thru lane to the proposed Driveway "A" (approximately 800 feet), where the new lane will turn into an exclusive right turn lane for Driveway "A".
- **Ellison Dr. / W. Cibola Loop** - Extend the southbound left turn lane from 75 feet to 325 feet plus transition.
- **Ellison Dr. / Coors Bypass** - Extend the northbound left turn lane from 210 feet to 625 feet plus transition using a cost sharing of 9.6% to the developer.
- **Ellison Dr. / Driveway "A"** - construct a westbound right turn deceleration lane of 325 feet with a 10.5:1 taper ratio and an eastbound left turn deceleration lane of 200 feet (or as long as possible) with a 10.5:1 taper ratio. If it is possible to construct the third westbound thru lane on Ellison Dr. at E. Cibola Loop, then the westbound right turn deceleration lane should be a continuation of that third westbound (outside) thru lane which terminates at the proposed Driveway "A".

Appendix

Appendix

Cibola Loop Community Center

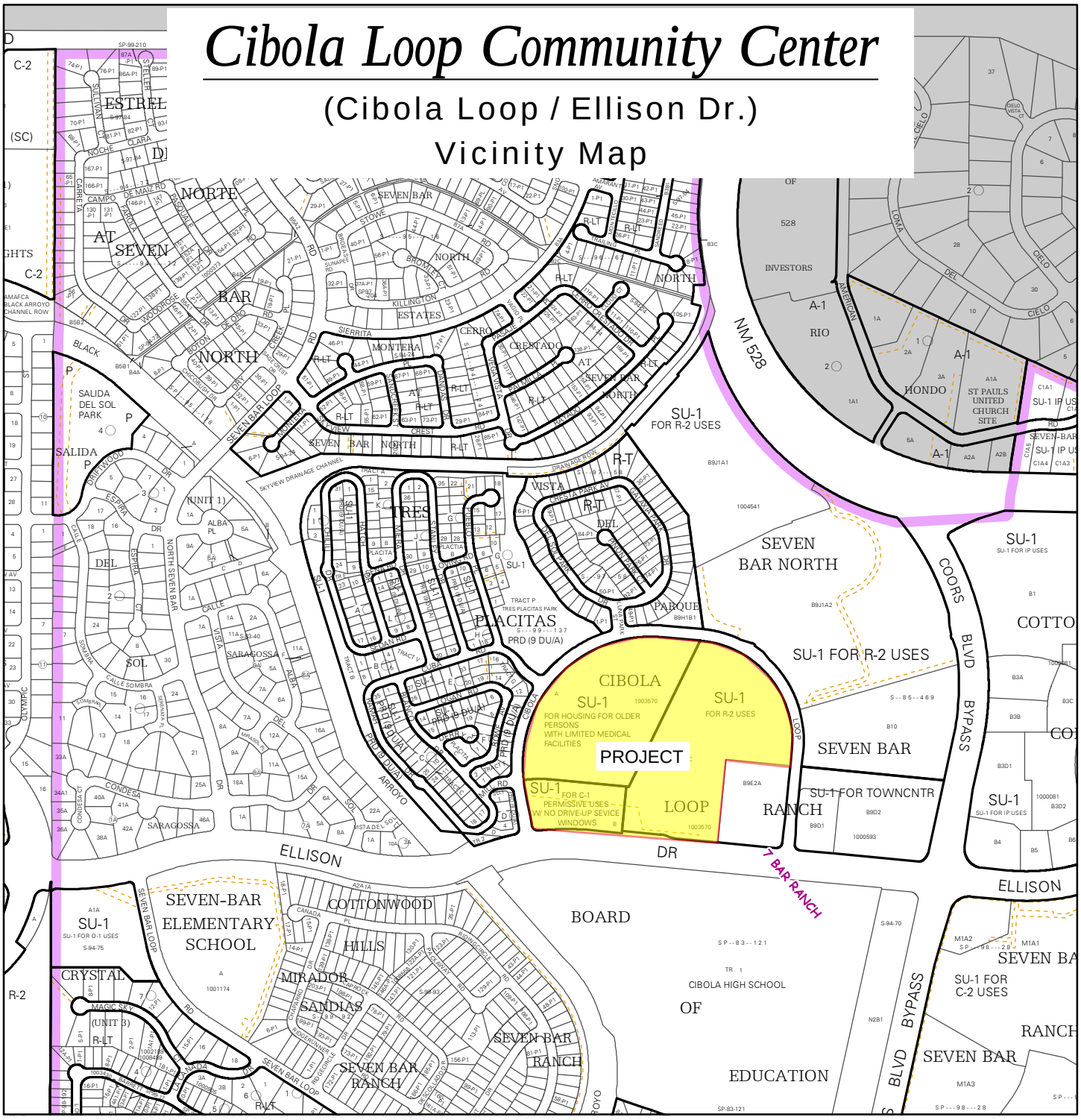
(Cibola Loop / Ellison Dr.)

Aerial Map

Cibola Loop Community Center

(Cibola Loop / Ellison Dr.)

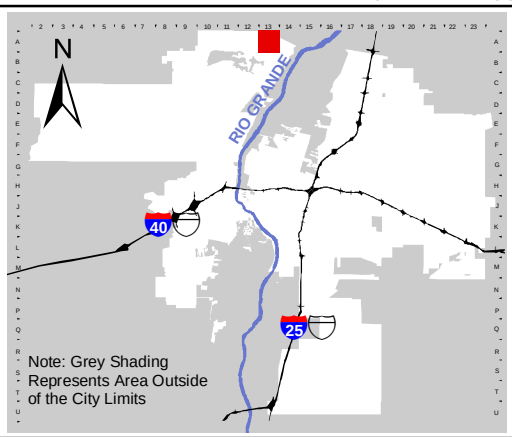
Vicinity Map



For more current information and details visit: http://www.cabq.gov/gis

Albuquerque Geographic Information System

Map amended through: 9/2/2014



Zone Atlas Page:

A-13-Z

Selected Symbols

- SECTOR PLANS
- Design Overlay Zones
- City Historic Zones
- H-1 Buffer Zone
- Petroglyph Mon.
- Escarpment
- 2 Mile Airport Zone
- Airport Noise Contours
- Wall Overlay Zone

0 750 1,500 Feet

WESTSIDE MULTIGENERATIONAL CENTER

CIBOLA LOOP PROPOSED SITE DEVELOPMENT PLAN

SCALE: 1" =60'-0"

0 20' 40' 60' 80' 100' 150' 200' NORTH

KELLS + CRAIG ARCHITECTS

CONSENSUS PLANNING

Futures 2040 Metropolitan Transportation Plan

MRMPO
Mid-Region Metropolitan Planning Organization

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

The Long Range Roadway System (LRRS) provides future recommended roadways and their regional role. This network includes roadways that are not expected to be constructed in the timeframe of the 2040 MTP, however they are included to in order to identify future needed connections.

The LRRS builds upon functional classification, by considering the character of the roadway, its role in the regional network, the types of trips taken, and the needs to all users.

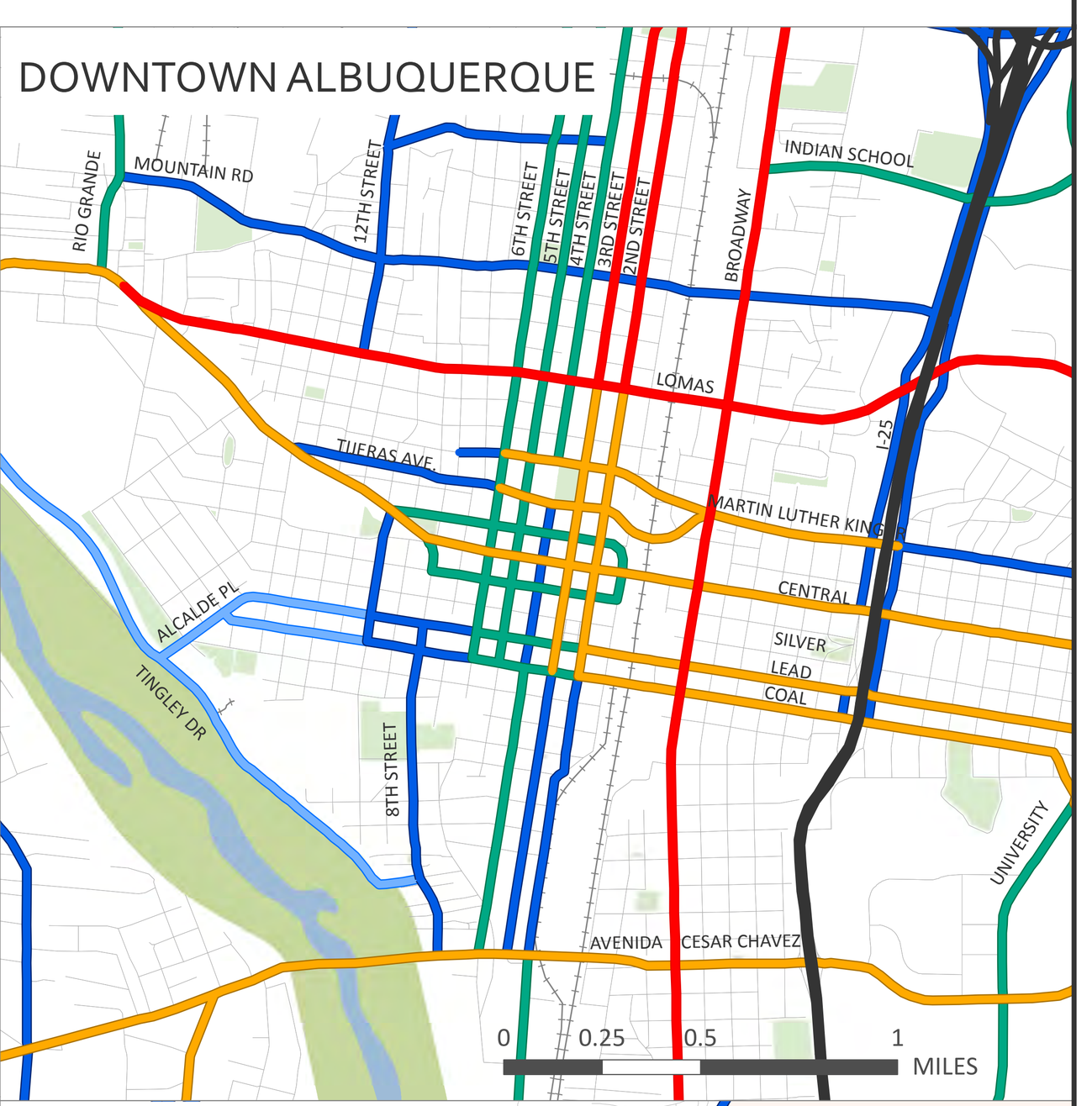
REGIONAL PRINCIPAL ARTERIAL
Trips on regional principal arterials are primarily for traveling longer distances across the region. Regional principal arterials prioritize passenger vehicles and freight. These roadways should have high levels of access management.

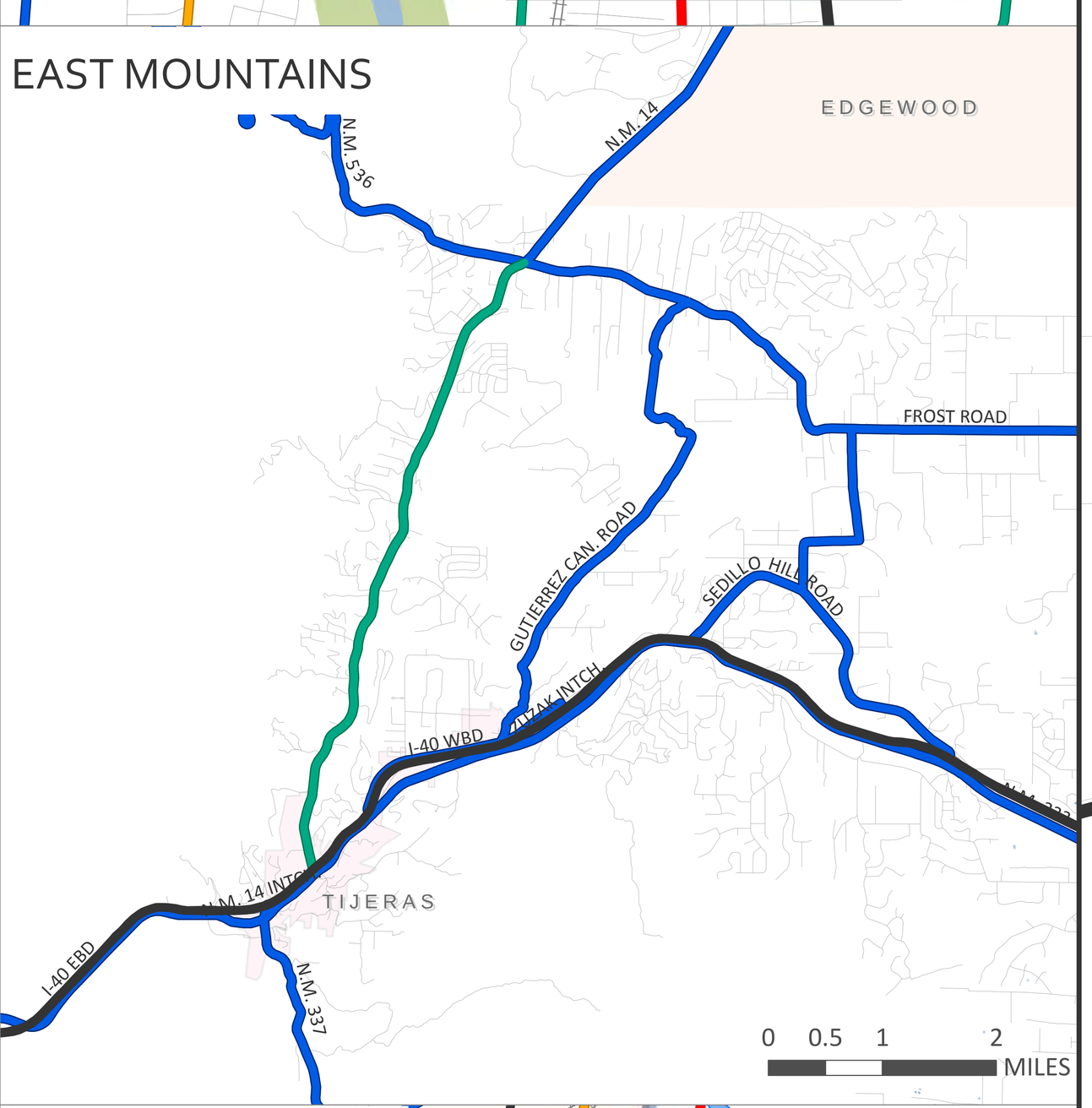
COMMUNITY PRINCIPAL ARTERIAL
Community principal arterial include many destinations with direct access from the arterial. Travel on community principal arterials tends to be over relatively short distances. Community principal arterials do not prioritize one mode over another; instead, they strive to achieve a balance for different user needs.

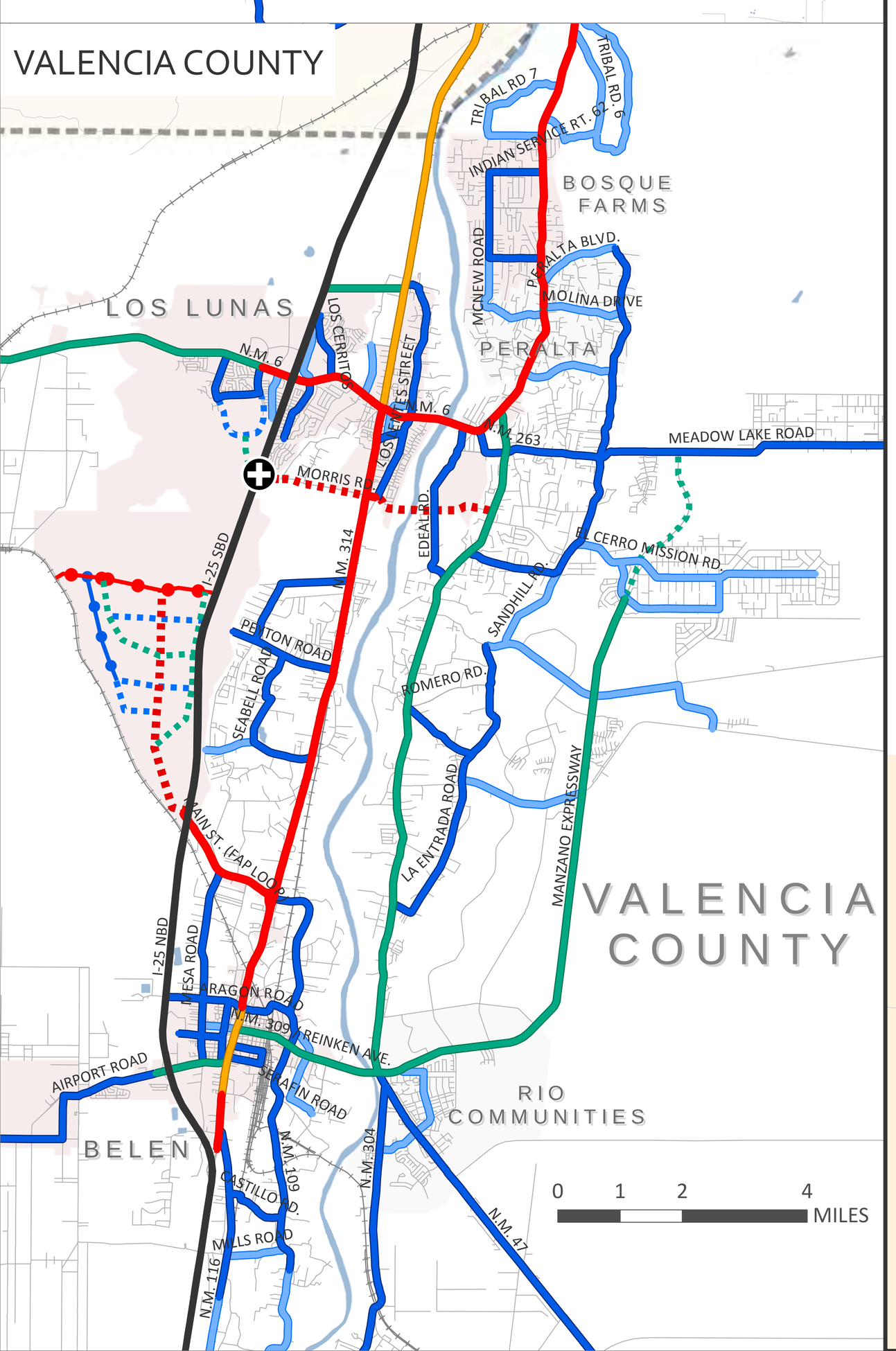
MINOR ARTERIAL
Minor arterials provide the connectivity of principal arterials, but they prioritize slower moving traffic, including bicyclists and pedestrians, to allow these modes additional options to reach destinations without needing to be on a principal arterial.

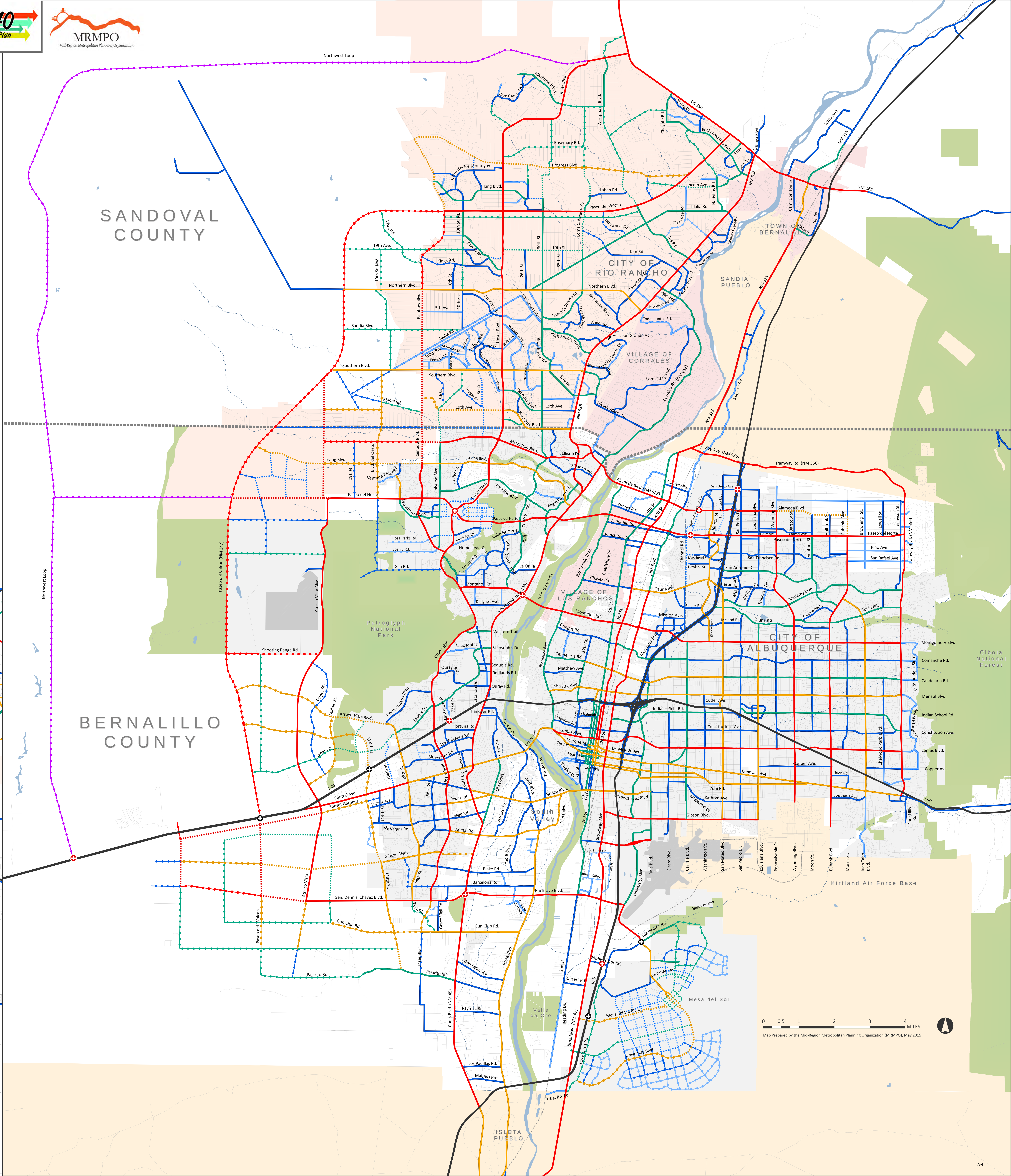
MAJOR COLLECTOR
Major collectors provide additional connectivity between destinations on arterials and neighborhoods. They prioritize bicyclists and pedestrians. Bicyclists should be able to use collectors for long segments of their trips while motorists primarily use them for short segments of their trips.

MINOR COLLECTOR
Minor collectors provide additional connectivity between destinations on arterials and neighborhoods.

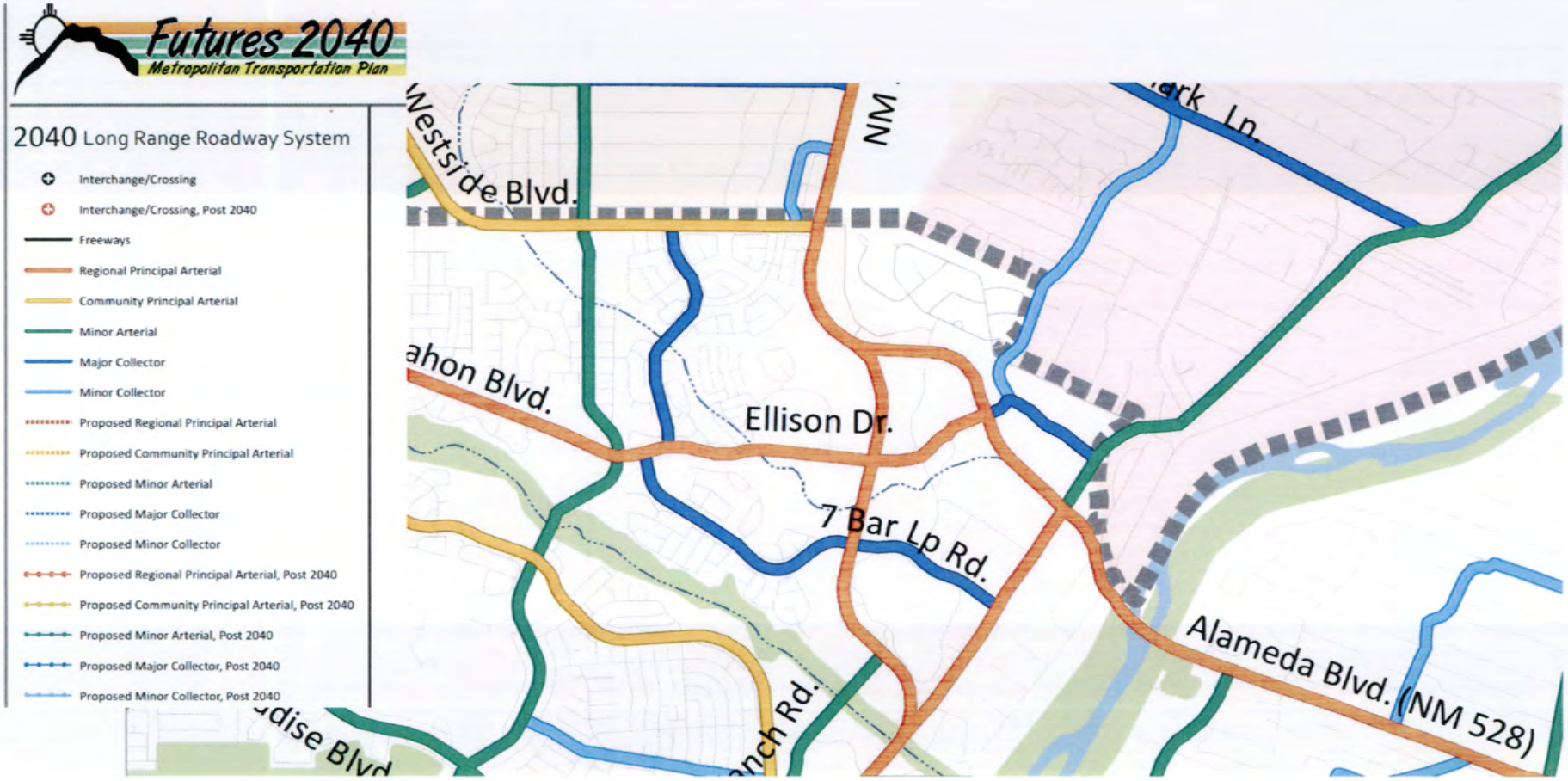








A-4



Excerpt from Futures 2040 Long Range Roadway System Map

2015 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 July 2015.

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.

Santa Ana Pueblo

Sandia Pueblo

Isleta Pueblo

Uptown Inset

Downtown Inset

Average Weekday Traffic

- 0 - 2999
- 3000 - 7999
- 8000 - 14999
- 15000 - 24999
- 25000 - 34999
- 35000 - 49999
- >50000 + Highways

0 0.75 1.5 3 MILES

A-6

Cibola Loop (Westside Multigenerational Center) Plan

Trip Generation Data (ITE Trip Generation Manual - 9th Edition)

COMMENT	USE (ITE CODE) / DESCRIPTION		24 HR VOL GROSS	A. M. PEAK HR. ENTER	A. M. PEAK HR. EXIT	P. M. PEAK HR. ENTER	P. M. PEAK HR. EXIT
	Summary Sheet	Units					
Tract No.	Library (590)	25.00	1,438	19	8	83	90
Multi-Gen Cntr.	Health/Fitness Club (492)	60.00	1,976	42	42	116	88
Pool	Health/Fitness Club (492)	27.00	889	19	19	55	41
Tract No.	Apartment (220)	153.00	1,051	16	63	66	36
Tract No.	Shopping Center (820)	56.41	4,681	68	42	196	212
Tract No.	Fast Food Restaurant w/o Drive-Thru Window (933)	3.00	2,148	79	53	40	38
	Subtotal		**12,183**	**243**	**227**	**556**	**505**

NOTE: Red numbers are subject to pass-by trip rate.

	Retail Commercial Trips Subject to Pass-by Trips		6,829	147	95	236	250
	Pass-by Trips	**35%**	*(2,390)*	*(51)*	*(33)*	*(83)*	*(88)*
	Net New Retail Commercial Trips		4,439	96	62	153	162
	New Office Trips		5,354	96	132	320	255
	Total Trips Adjusted for Pass-by		**9,793**	**192**	**194**	**473**	**417**

Cibola Loop (Westside Multigenerational Center) Plan
Trip Generation Data (ITE Trip Generation Manual - 9th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Library (590)	*25.00*	1,438	19	8	83	90
	1,000 S.F.					

ITE Trip Generation Equations:

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

Ln(T) = ***0.69*** **Ln(X) +** ***5.05***
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 = ***1.32*** **(X) +** ***-5.84***
71% Enter, ***29%*** Exit

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

Ln(T) = ***0.91*** **Ln(X) +** ***2.22***
48% Enter, ***52%*** Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 9th Edition

Cibola Loop (Westside Multigenerational Center) Plan
Trip Generation Data (ITE Trip Generation Manual - 9th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Health/Fitness Club (492)	*60.00*	1,976	42	42	116	88
	1,000 S.F.					

ITE Trip Generation Equations:

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

T = ***32.93*** **(X) +** ***0***

50% Enter, ***50%*** Exit

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

T = ***1.41*** **(X) +** ***0***

50% Enter, ***50%*** Exit

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

Ln(T) = ***0.95*** **Ln(X) +** ***1.43***

57% Enter, ***43%*** Exit

Comments:

Multi-Gen Cntr.

Based on ITE Trip Generation Manual - 9th Edition

Cibola Loop (Westside Multigenerational Center) Plan
Trip Generation Data (ITE Trip Generation Manual - 9th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Health/Fitness Club (492)	*27.00*	889	19	19	55	41
	1,000 S.F.					

ITE Trip Generation Equations:

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

T = ***32.93*** **(X) +** ***0***

50% Enter, ***50%*** Exit

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

T = ***1.41*** **(X) +** ***0***

50% Enter, ***50%*** Exit

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

Ln(T) = ***0.95*** **Ln(X) +** ***1.43***

57% Enter, ***43%*** Exit

Comments:

Pool

Based on ITE Trip Generation Manual - 9th Edition

Cibola Loop (Westside Multigenerational Center) Plan
Trip Generation Data (ITE Trip Generation Manual - 9th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Apartment (220)	*153.00*	1,051	16	63	66	36
	Dwelling Units					

ITE Trip Generation Equations:

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

T = ***6.06*** **(X) +** ***123.56***
50% Enter, ***50%*** Exit

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

T = ***0.49*** **(X) +** ***3.73***
20% Enter, ***80%*** 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 = ***0.55*** **(X) +** ***17.65***
65% Enter, ***35%*** Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 9th Edition

Cibola Loop (Westside Multigenerational Center) Plan
Trip Generation Data (ITE Trip Generation Manual - 9th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Shopping Center (820)	***56.41***	4,681	68	42	196	212
	1,000 S.F.					

ITE Trip Generation Equations:

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

Ln(T) = ***0.65*** **Ln(X) +** ***5.83***
50% Enter, ***50%*** Exit

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

Ln(T) = ***0.61*** **Ln(X) +** ***2.24***
62% Enter, ***38%*** Exit

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

Ln(T) = ***0.67*** **Ln(X) +** ***3.31***
48% Enter, ***52%*** Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 9th Edition

Cibola Loop (Westside Multigenerational Center) Plan
Trip Generation Data (ITE Trip Generation Manual - 9th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Fast Food Restaurant w/o Drive-Thru Window (933)	***3.00***	2,148	79	53	40	38
	1,000 S.F.					

ITE Trip Generation Equations:

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

T = ***716*** **(X) +** ***0***
50% Enter, ***50%*** Exit

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

T = ***43.87*** **(X) +** ***0***
60% Enter, ***40%*** 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 = ***26.15*** **(X) +** ***0***
51% Enter, ***49%*** Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 9th Edition

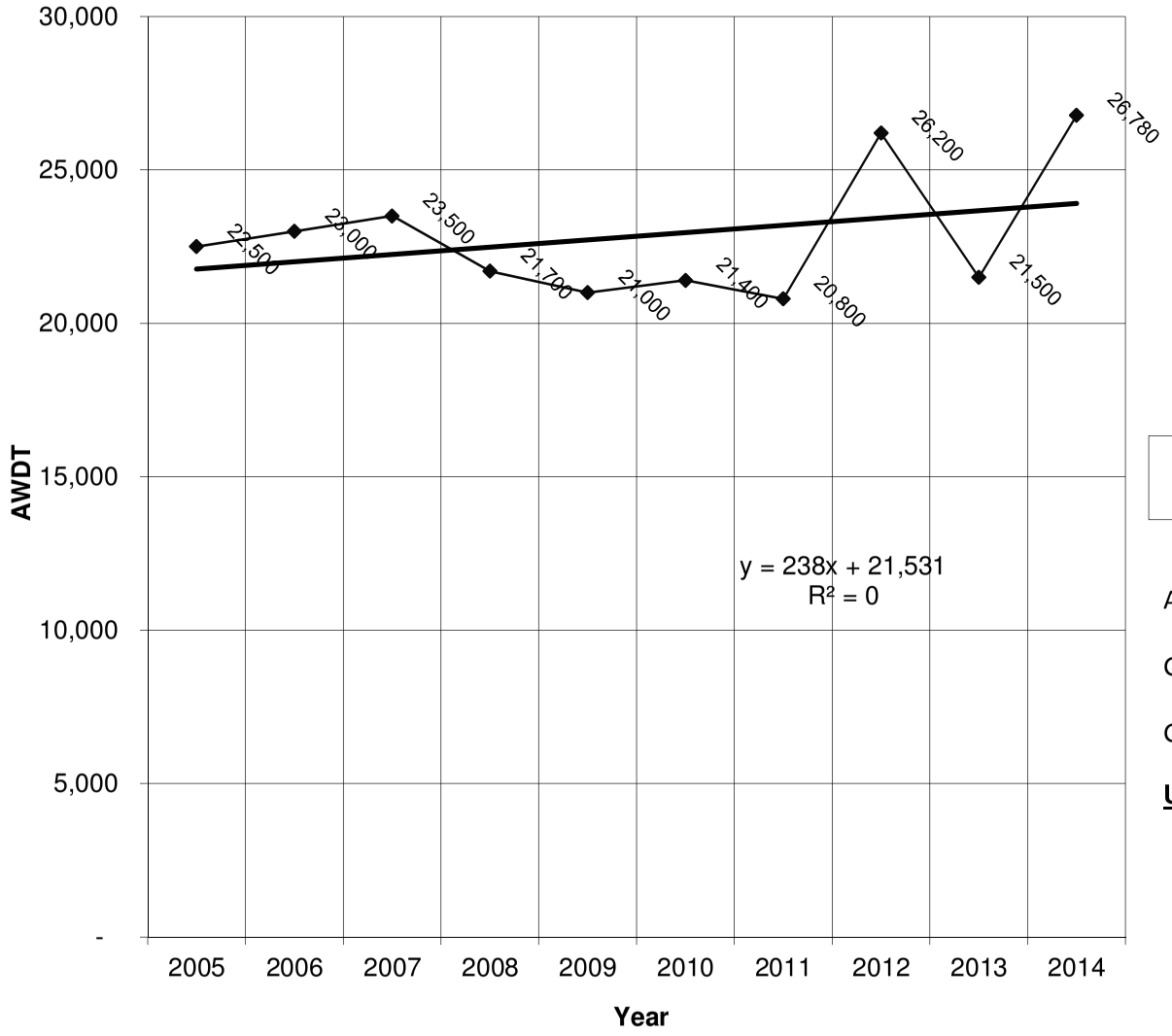
Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Historic Growth Rate Table

Traffic Flows from MRCOG Map

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Ellison Dr. West of N. Seven Bar Dr.	22,500	23,000	23,500	21,700	21,000	21,400	20,800	26,200	21,500	26,780
N. Seven Bar Dr. North of Ellison Dr.	1,600	1,700	1,700	1,600	1,600	1,600	1,500	1,400	1,400	1,400
Ellison Dr. btwn N. 7 Bar & Coors Bypass	26,200	29,000	29,700	30,000	27,300	27,200	26,800	24,500	24,300	23,040
Coors Bypass North of Ellison Dr.	40,000	40,900	43,400	43,800	43,900	43,900	47,000	36,900	39,300	44,010
Ellison Dr. East of Coors Bypass	21,600	22,100	22,700	21,300	21,400	21,400	30,500	30,200	30,000	21,040
Coors Bypass South of Ellison Dr.	49,200	50,300	51,600	44,400	44,600	47,800	47,000	47,000	48,400	55,590

Historic Growth Chart Ellison Dr. West of N. Seven Bar Dr. (2005-2014)



Annual Increase (Trendline) = 238 veh./day

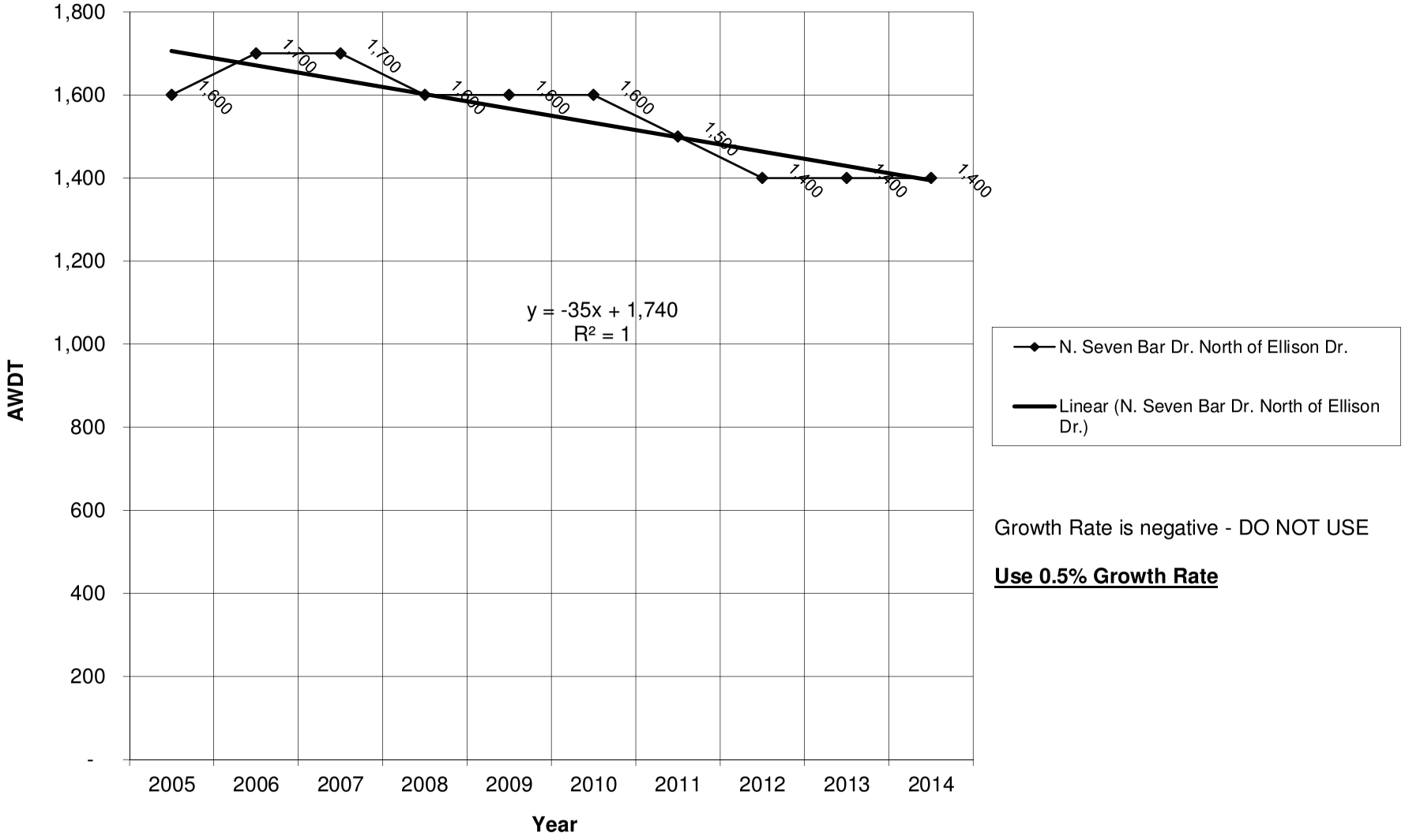
Growth Rate = 238 / 26780

Growth Rate = .0089

Use 0.9% Growth Rate

CibolaLoop_Growth.xlsx

Historic Growth Chart N. Seven Bar Dr. North of Ellison Dr. (2005-2014)

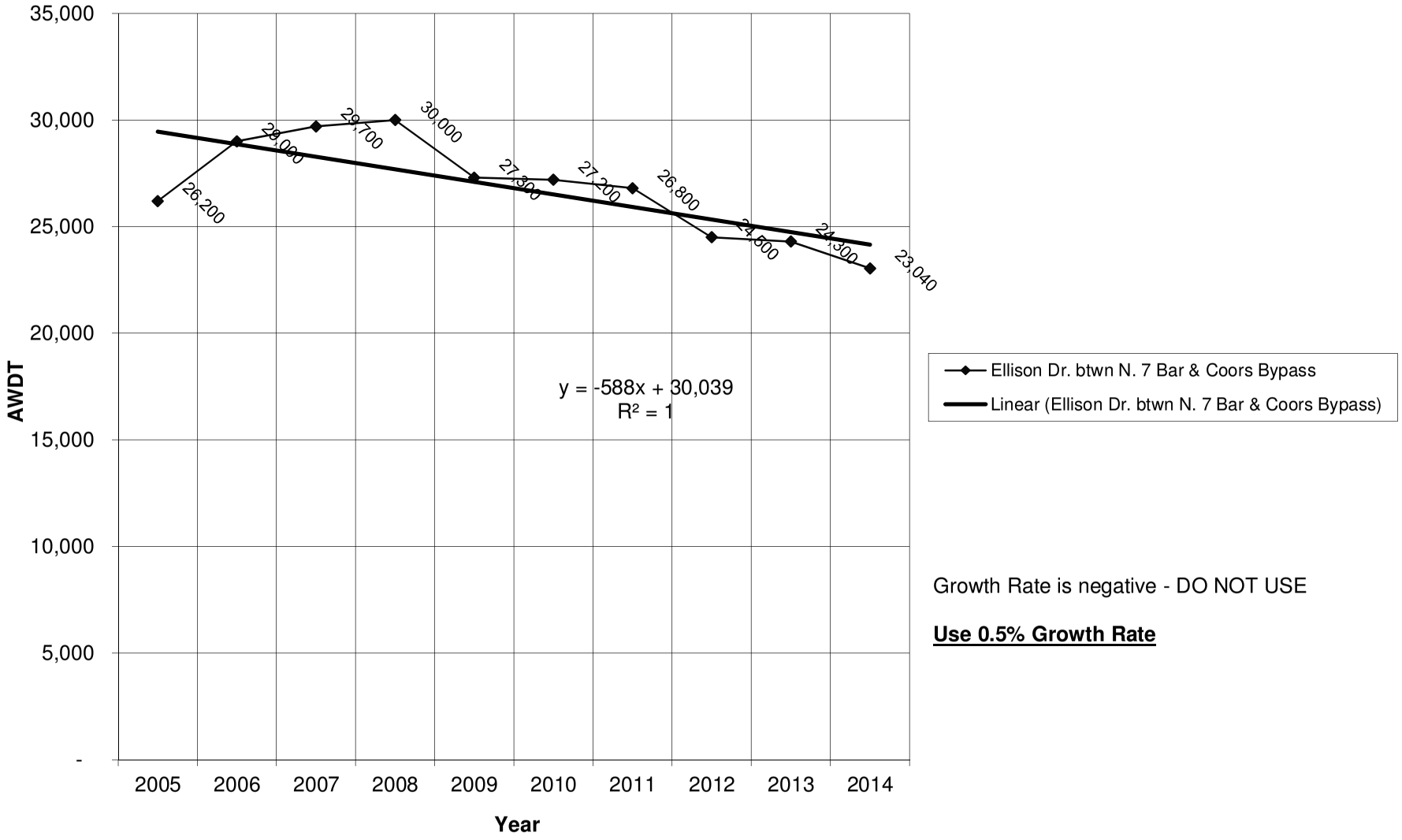


Growth Rate is negative - DO NOT USE

Use 0.5% Growth Rate

CibolaLoop_Growth.xlsx

Historic Growth Chart Ellison Dr. btwn N. 7 Bar & Coors Bypass (2005-2014)

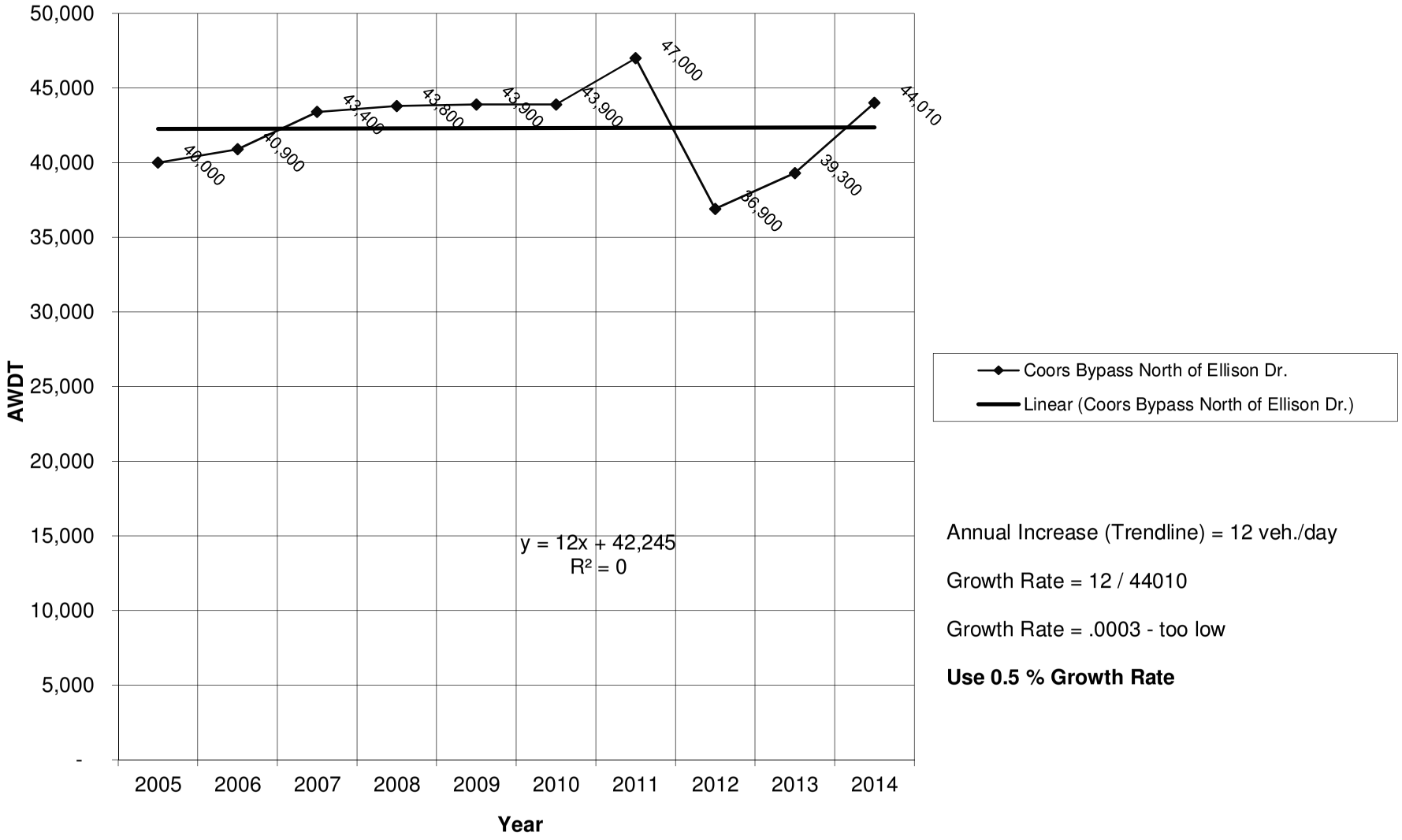


Growth Rate is negative - DO NOT USE

Use 0.5% Growth Rate

CibolaLoop_Growth.xlsx

Historic Growth Chart Coors Bypass North of Ellison Dr. (2005-2014)



Annual Increase (Trendline) = 12 veh./day

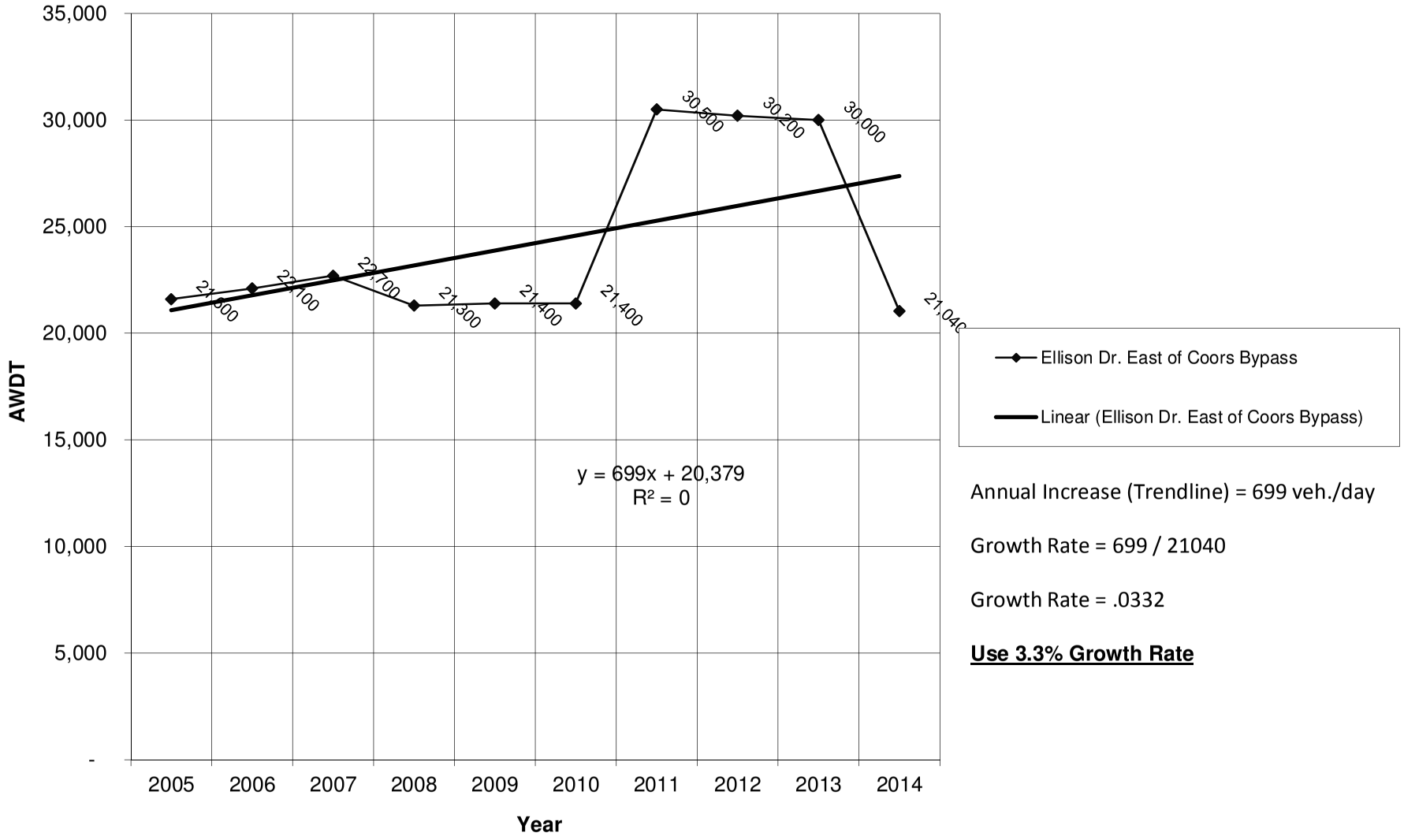
Growth Rate = 12 / 44010

Growth Rate = .0003 - too low

Use 0.5 % Growth Rate

CibolaLoop_Growth.xlsx

Historic Growth Chart Ellison Dr. East of Coors Bypass (2005-2014)



Annual Increase (Trendline) = 699 veh./day

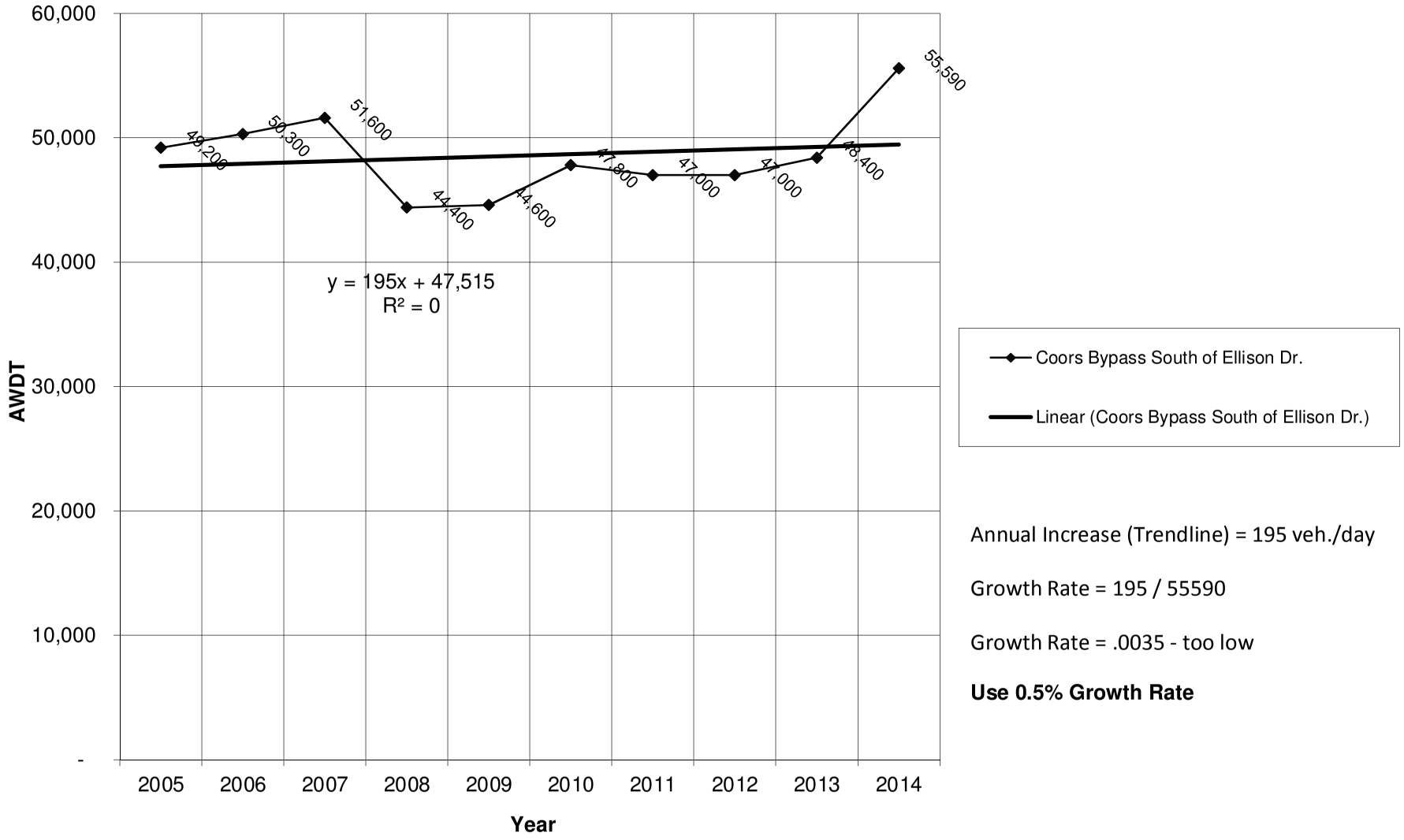
Growth Rate = 699 / 21040

Growth Rate = .0332

Use 3.3% Growth Rate

CibolaLoop_Growth.xlsx

Historic Growth Chart Coors Bypass South of Ellison Dr. (2005-2014)



Annual Increase (Trendline) = 195 veh./day

Growth Rate = 195 / 55590

Growth Rate = .0035 - too low

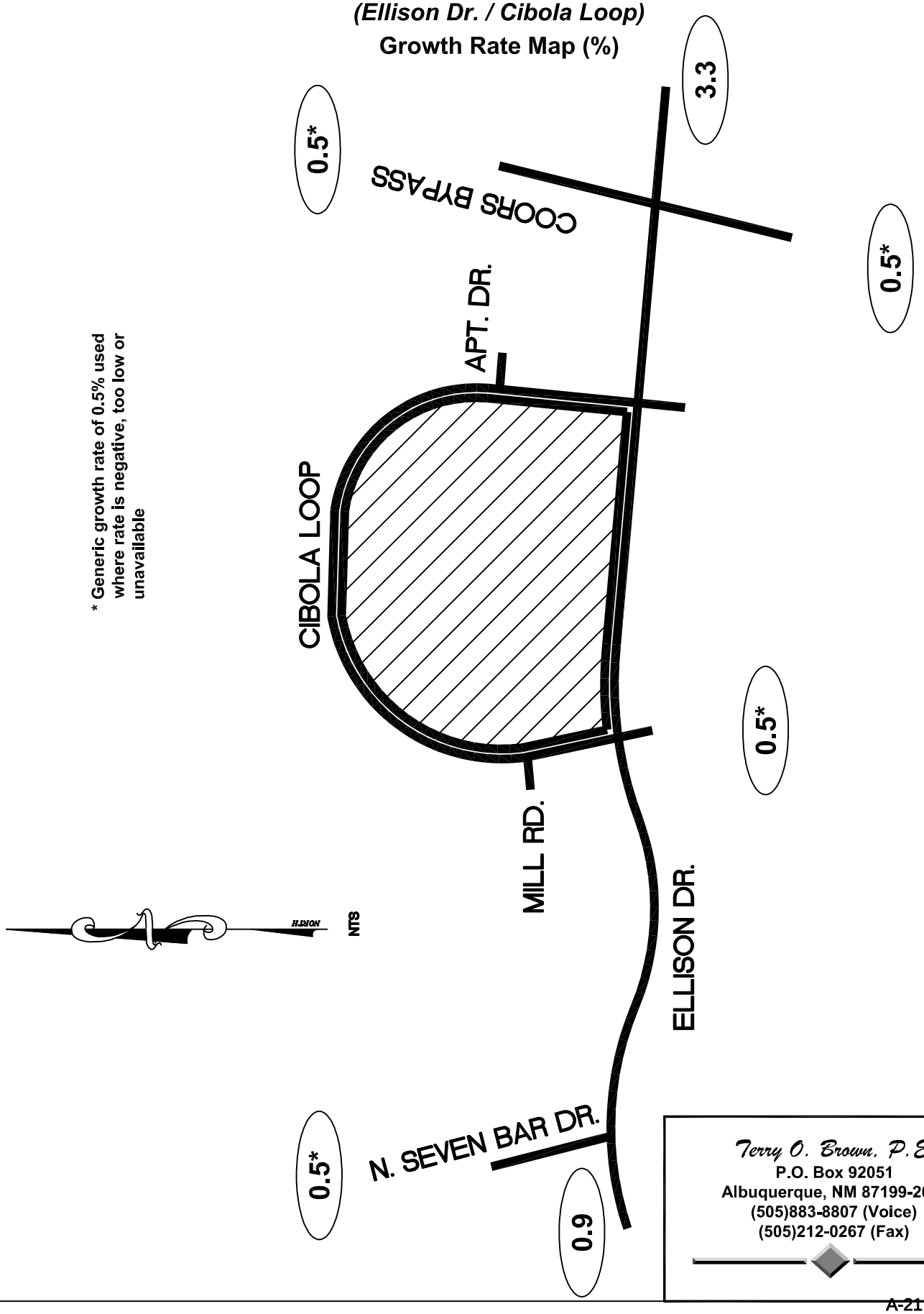
Use 0.5% Growth Rate

CibolaLoop_Growth.xlsx

Cibola Loop Community Center

(Ellison Dr. / Cibola Loop)

Growth Rate Map (%)



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

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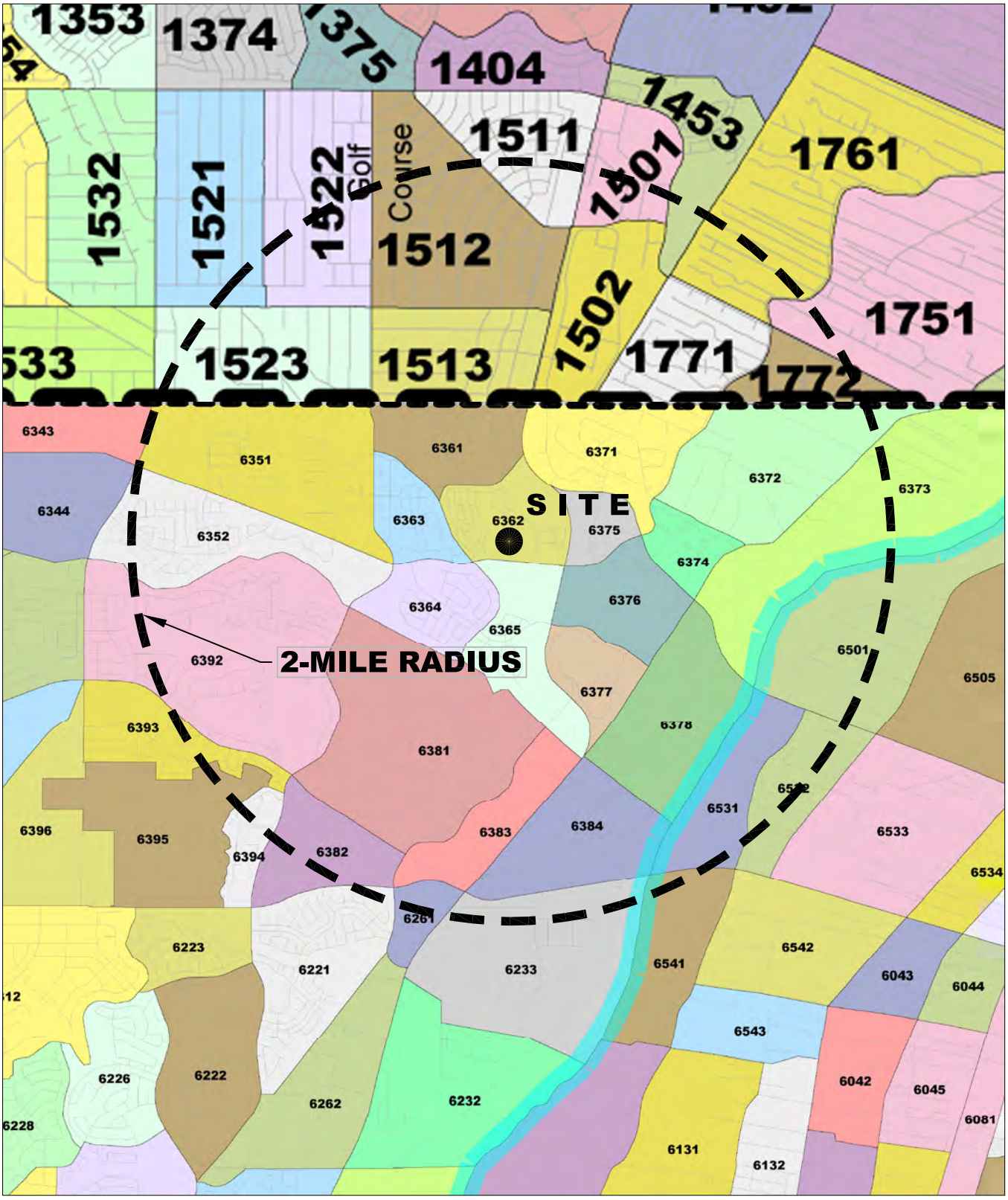
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)



DATA ANALYSIS SUBZONE (DASZ) MAP

Cibola Loop Community Center (N. of Ellison Dr.)

Trip Distribution Table

Cibola Loop Community Center (N. of Ellison Dr.)

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

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

							(EW) Ellison Dr. West			(7N) N. Seven Bar Dr.			(MW) Mill Rd. West		
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	**2025**	**2020**											
Boundary Specified on DASZ Map															
1453	10%	2231	2541	2,386	239	**0.63%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1501	30%	860	854	857	257	**0.68%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1502	100%	10	1169	590	590	**1.55%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1511	40%	920	901	911	364	**0.96%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1512	80%	2008	1944	1,976	1,581	**4.16%**	25%	1.04%	395	25%	1.04%	395	0%	0.00%	0
1513	100%	1071	1073	1,072	1,072	**2.82%**	25%	0.70%	268	25%	0.70%	268	0%	0.00%	0
1521	5%	2121	2094	2,108	105	**0.28%**	50%	0.14%	53	50%	0.14%	53	0%	0.00%	0
1522	45%	1474	1531	1,503	676	**1.78%**	50%	0.89%	338	50%	0.89%	338	0%	0.00%	0
1523	85%	2614	2639	2,627	2,233	**5.87%**	50%	2.93%	1,117	50%	2.93%	1,117	0%	0.00%	0
1751	5%	1282	1444	1,363	68	**0.18%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1761	15%	1271	1358	1,315	197	**0.52%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1771	100%	604	597	601	601	**1.58%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1772	95%	151	187	169	161	**0.42%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6233	10%	968	1069	1,019	102	**0.27%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6261	45%	521	515	518	233	**0.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6351	100%	3458	3372	3,415	3,415	**8.98%**	100%	8.98%	3,415	0%	0.00%	0	0%	0.00%	0
6352	90%	2515	2501	2,508	2,257	**5.93%**	100%	5.93%	2,257	0%	0.00%	0	0%	0.00%	0
6361	100%	1493	1448	1,471	1,471	**3.87%**	0%	0.00%	0	100%	3.87%	1,471	0%	0.00%	0
6362	100%	3164	3184	3,174	3,174	**8.34%**	0%	0.00%	0	0%	0.00%	0	15%	1.25%	476
6363	100%	821	795	808	808	**2.12%**	20%	0.42%	162	80%	1.70%	646	0%	0.00%	0
6364	100%	1465	1419	1,442	1,442	**3.79%**	100%	3.79%	1,442	0%	0.00%	0	0%	0.00%	0
6365	100%	1309	1269	1,289	1,289	**3.39%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6371	100%	415	407	411	411	**1.08%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6372	95%	362	425	394	374	**0.98%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6373	45%	332	411	372	167	**0.44%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6374	100%	1082	1045	1,064	1,064	**2.80%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6375	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6376	100%	781	753	767	767	**2.02%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6377	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6378	100%	258	248	253	253	**0.66%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6381	100%	7037	6856	6,947	6,947	**18.26%**	50%	9.13%	3,474	0%	0.00%	0	0%	0.00%	0
6382	60%	964	930	947	568	**1.49%**	90%	1.34%	511	0%	0.00%	0	0%	0.00%	0
6383	100%	699	673	686	686	**1.80%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6384	100%	260	248	254	254	**0.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6392	80%	3930	3830	3,880	3,104	**8.16%**	100%	8.16%	3,104	0%	0.00%	0	0%	0.00%	0
6393	20%	1477	1427	1,452	290	**0.76%**	100%	0.76%	290	0%	0.00%	0	0%	0.00%	0
6394	30%	465	450	458	137	**0.36%**	100%	0.36%	137	0%	0.00%	0	0%	0.00%	0
6395	5%	15	15	15	1	**0.00%**	100%	0.00%	1	0%	0.00%	0	0%	0.00%	0
6501	45%	825	802	814	366	**0.96%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6531	95%	122	122	122	116	**0.30%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6532	50%	406	396	401	201	**0.53%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6541	5%	166	159	163	8	**0.02%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				52,522	38,049	100.00%			**16,963**			**4,288**			**476**
									44.58%			11.27%			1.25%

Trip Distribution Table

Cibola Loop Community Center (N. of Ellison Dr.)

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

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

							(CC) Cibola Loop Central			(AE) Apartment Dr. East			(CN) Coors Bypass North		
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	**2025**	**2020**											
Boundary Specified on DASZ Map															
1453	10%	2231	2541	2,386	239	**0.63%**	0%	0.00%	0	0%	0.00%	0	**100%**	0.63%	239
1501	30%	860	854	857	257	**0.68%**	0%	0.00%	0	0%	0.00%	0	**100%**	0.68%	257
1502	100%	10	1169	590	590	**1.55%**	0%	0.00%	0	0%	0.00%	0	**100%**	1.55%	590
1511	40%	920	901	911	364	**0.96%**	0%	0.00%	0	0%	0.00%	0	**100%**	0.96%	364
1512	80%	2008	1944	1,976	1,581	**4.16%**	0%	0.00%	0	0%	0.00%	0	**50%**	2.08%	791
1513	100%	1071	1073	1,072	1,072	**2.82%**	0%	0.00%	0	0%	0.00%	0	**50%**	1.41%	536
1521	5%	2121	2094	2,108	105	**0.28%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1522	45%	1474	1531	1,503	676	**1.78%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1523	85%	2614	2639	2,627	2,233	**5.87%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1751	5%	1282	1444	1,363	68	**0.18%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1761	15%	1271	1358	1,315	197	**0.52%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1771	100%	604	597	601	601	**1.58%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1772	95%	151	187	169	161	**0.42%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6233	10%	968	1069	1,019	102	**0.27%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6261	45%	521	515	518	233	**0.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6351	100%	3458	3372	3,415	3,415	**8.98%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6352	90%	2515	2501	2,508	2,257	**5.93%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6361	100%	1493	1448	1,471	1,471	**3.87%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6362	100%	3164	3184	3,174	3,174	**8.34%**	**75%**	6.26%	2,381	**10%**	0.83%	317	0%	0.00%	0
6363	100%	821	795	808	808	**2.12%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6364	100%	1465	1419	1,442	1,442	**3.79%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6365	100%	1309	1269	1,289	1,289	**3.39%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6371	100%	415	407	411	411	**1.08%**	0%	0.00%	0	0%	0.00%	0	**50%**	0.54%	206
6372	95%	362	425	394	374	**0.98%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6373	45%	332	411	372	167	**0.44%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6374	100%	1082	1045	1,064	1,064	**2.80%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6375	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	**50%**	0.00%	0
6376	100%	781	753	767	767	**2.02%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6377	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6378	100%	258	248	253	253	**0.66%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6381	100%	7037	6856	6,947	6,947	**18.26%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6382	60%	964	930	947	568	**1.49%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6383	100%	699	673	686	686	**1.80%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6384	100%	260	248	254	254	**0.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6392	80%	3930	3830	3,880	3,104	**8.16%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6393	20%	1477	1427	1,452	290	**0.76%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6394	30%	465	450	458	137	**0.36%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6395	5%	15	15	15	1	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6501	45%	825	802	814	366	**0.96%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6531	95%	122	122	122	116	**0.30%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6532	50%	406	396	401	201	**0.53%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6541	5%	166	159	163	8	**0.02%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				52,522	38,049	100.00%			**2,381**			**317**			**2,982**
									6.26%			0.83%			7.84%

Trip Distribution Table

Cibola Loop Community Center (N. of Ellison Dr.)

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

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

							(EE) Ellison Dr. East			(CS) Coors Bypass South		
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	**2025**	**2020**								
Boundary Specified on DASZ Map												
1453	10%	2231	2541	2,386	239	**0.63%**	0%	0.00%	0	0%	0.00%	0
1501	30%	860	854	857	257	**0.68%**	0%	0.00%	0	0%	0.00%	0
1502	100%	10	1169	590	590	**1.55%**	0%	0.00%	0	0%	0.00%	0
1511	40%	920	901	911	364	**0.96%**	0%	0.00%	0	0%	0.00%	0
1512	80%	2008	1944	1,976	1,581	**4.16%**	0%	0.00%	0	0%	0.00%	0
1513	100%	1071	1073	1,072	1,072	**2.82%**	0%	0.00%	0	0%	0.00%	0
1521	5%	2121	2094	2,108	105	**0.28%**	0%	0.00%	0	0%	0.00%	0
1522	45%	1474	1531	1,503	676	**1.78%**	0%	0.00%	0	0%	0.00%	0
1523	85%	2614	2639	2,627	2,233	**5.87%**	0%	0.00%	0	0%	0.00%	0
1751	5%	1282	1444	1,363	68	**0.18%**	**100%**	0.18%	68	0%	0.00%	0
1761	15%	1271	1358	1,315	197	**0.52%**	**100%**	0.52%	197	0%	0.00%	0
1771	100%	604	597	601	601	**1.58%**	**100%**	1.58%	601	0%	0.00%	0
1772	95%	151	187	169	161	**0.42%**	**100%**	0.42%	161	0%	0.00%	0
6233	10%	968	1069	1,019	102	**0.27%**	0%	0.00%	0	**100%**	0.27%	102
6261	45%	521	515	518	233	**0.61%**	0%	0.00%	0	**100%**	0.61%	233
6351	100%	3458	3372	3,415	3,415	**8.98%**	0%	0.00%	0	0%	0.00%	0
6352	90%	2515	2501	2,508	2,257	**5.93%**	0%	0.00%	0	0%	0.00%	0
6361	100%	1493	1448	1,471	1,471	**3.87%**	0%	0.00%	0	0%	0.00%	0
6362	100%	3164	3184	3,174	3,174	**8.34%**	0%	0.00%	0	0%	0.00%	0
6363	100%	821	795	808	808	**2.12%**	0%	0.00%	0	0%	0.00%	0
6364	100%	1465	1419	1,442	1,442	**3.79%**	0%	0.00%	0	0%	0.00%	0
6365	100%	1309	1269	1,289	1,289	**3.39%**	0%	0.00%	0	**80%**	2.71%	1,031
6371	100%	415	407	411	411	**1.08%**	**50%**	0.54%	206	0%	0.00%	0
6372	95%	362	425	394	374	**0.98%**	**100%**	0.98%	374	0%	0.00%	0
6373	45%	332	411	372	167	**0.44%**	**100%**	0.44%	167	0%	0.00%	0
6374	100%	1082	1045	1,064	1,064	**2.80%**	**100%**	2.80%	1,064	0%	0.00%	0
6375	100%	0	0	0	0	**0.00%**	**50%**	0.00%	0	0%	0.00%	0
6376	100%	781	753	767	767	**2.02%**	**50%**	1.01%	384	**50%**	1.01%	384
6377	100%	0	0	0	0	**0.00%**	0%	0.00%	0	**100%**	0.00%	0
6378	100%	258	248	253	253	**0.66%**	**75%**	0.50%	190	**25%**	0.17%	63
6381	100%	7037	6856	6,947	6,947	**18.26%**	0%	0.00%	0	**50%**	9.13%	3,474
6382	60%	964	930	947	568	**1.49%**	0%	0.00%	0	**10%**	0.15%	57
6383	100%	699	673	686	686	**1.80%**	0%	0.00%	0	**100%**	1.80%	686
6384	100%	260	248	254	254	**0.67%**	0%	0.00%	0	**100%**	0.67%	254
6392	80%	3930	3830	3,880	3,104	**8.16%**	0%	0.00%	0	0%	0.00%	0
6393	20%	1477	1427	1,452	290	**0.76%**	0%	0.00%	0	0%	0.00%	0
6394	30%	465	450	458	137	**0.36%**	0%	0.00%	0	0%	0.00%	0
6395	5%	15	15	15	1	**0.00%**	0%	0.00%	0	0%	0.00%	0
6501	45%	825	802	814	366	**0.96%**	**100%**	0.96%	366	0%	0.00%	0
6531	95%	122	122	122	116	**0.30%**	**50%**	0.15%	58	**50%**	0.15%	58
6532	50%	406	396	401	201	**0.53%**	**50%**	0.26%	101	**50%**	0.26%	101
6541	5%	166	159	163	8	**0.02%**	0%	0.00%	0	**100%**	0.02%	8
				52,522	38,049	100.00%			**3,935**			**6,450**
									10.34%			16.95%

Trip Distribution Table

Cibola Loop Community Center (N. of Ellison Dr.)

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

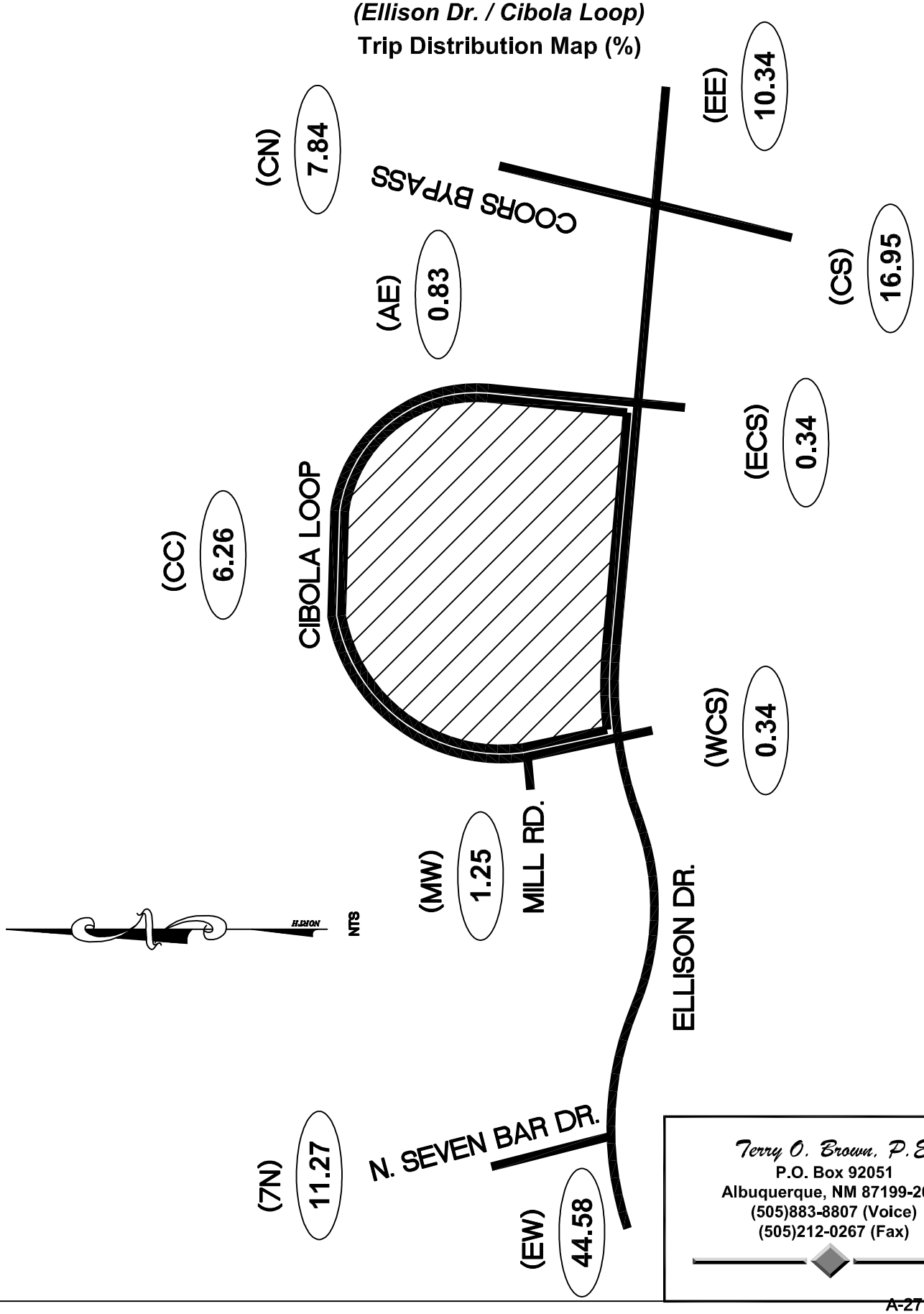
2015 and 2025 Data Taken from Mid-Region Council of Governments'
2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

							(WCS) W.Cibola Loop South			(ECS) E.Cibola Loop South		
DASZ #	% Sub Area in Study	2015 Population	2025 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2015	**2025**	**2020**								
Boundary Specified on DASZ Map												
1453	10%	2231	2541	2,386	239	**0.63%**	0%	0.00%	0	0%	0.00%	0
1501	30%	860	854	857	257	**0.68%**	0%	0.00%	0	0%	0.00%	0
1502	100%	10	1169	590	590	**1.55%**	0%	0.00%	0	0%	0.00%	0
1511	40%	920	901	911	364	**0.96%**	0%	0.00%	0	0%	0.00%	0
1512	80%	2008	1944	1,976	1,581	**4.16%**	0%	0.00%	0	0%	0.00%	0
1513	100%	1071	1073	1,072	1,072	**2.82%**	0%	0.00%	0	0%	0.00%	0
1521	5%	2121	2094	2,108	105	**0.28%**	0%	0.00%	0	0%	0.00%	0
1522	45%	1474	1531	1,503	676	**1.78%**	0%	0.00%	0	0%	0.00%	0
1523	85%	2614	2639	2,627	2,233	**5.87%**	0%	0.00%	0	0%	0.00%	0
1751	5%	1282	1444	1,363	68	**0.18%**	0%	0.00%	0	0%	0.00%	0
1761	15%	1271	1358	1,315	197	**0.52%**	0%	0.00%	0	0%	0.00%	0
1771	100%	604	597	601	601	**1.58%**	0%	0.00%	0	0%	0.00%	0
1772	95%	151	187	169	161	**0.42%**	0%	0.00%	0	0%	0.00%	0
6233	10%	968	1069	1,019	102	**0.27%**	0%	0.00%	0	0%	0.00%	0
6261	45%	521	515	518	233	**0.61%**	0%	0.00%	0	0%	0.00%	0
6351	100%	3458	3372	3,415	3,415	**8.98%**	0%	0.00%	0	0%	0.00%	0
6352	90%	2515	2501	2,508	2,257	**5.93%**	0%	0.00%	0	0%	0.00%	0
6361	100%	1493	1448	1,471	1,471	**3.87%**	0%	0.00%	0	0%	0.00%	0
6362	100%	3164	3184	3,174	3,174	**8.34%**	0%	0.00%	0	0%	0.00%	0
6363	100%	821	795	808	808	**2.12%**	0%	0.00%	0	0%	0.00%	0
6364	100%	1465	1419	1,442	1,442	**3.79%**	0%	0.00%	0	0%	0.00%	0
6365	100%	1309	1269	1,289	1,289	**3.39%**	**10%**	0.34%	129	**10%**	0.34%	129
6371	100%	415	407	411	411	**1.08%**	0%	0.00%	0	0%	0.00%	0
6372	95%	362	425	394	374	**0.98%**	0%	0.00%	0	0%	0.00%	0
6373	45%	332	411	372	167	**0.44%**	0%	0.00%	0	0%	0.00%	0
6374	100%	1082	1045	1,064	1,064	**2.80%**	0%	0.00%	0	0%	0.00%	0
6375	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0
6376	100%	781	753	767	767	**2.02%**	0%	0.00%	0	0%	0.00%	0
6377	100%	0	0	0	0	**0.00%**	0%	0.00%	0	0%	0.00%	0
6378	100%	258	248	253	253	**0.66%**	0%	0.00%	0	0%	0.00%	0
6381	100%	7037	6856	6,947	6,947	**18.26%**	0%	0.00%	0	0%	0.00%	0
6382	60%	964	930	947	568	**1.49%**	0%	0.00%	0	0%	0.00%	0
6383	100%	699	673	686	686	**1.80%**	0%	0.00%	0	0%	0.00%	0
6384	100%	260	248	254	254	**0.67%**	0%	0.00%	0	0%	0.00%	0
6392	80%	3930	3830	3,880	3,104	**8.16%**	0%	0.00%	0	0%	0.00%	0
6393	20%	1477	1427	1,452	290	**0.76%**	0%	0.00%	0	0%	0.00%	0
6394	30%	465	450	458	137	**0.36%**	0%	0.00%	0	0%	0.00%	0
6395	5%	15	15	15	1	**0.00%**	0%	0.00%	0	0%	0.00%	0
6501	45%	825	802	814	366	**0.96%**	0%	0.00%	0	0%	0.00%	0
6531	95%	122	122	122	116	**0.30%**	0%	0.00%	0	0%	0.00%	0
6532	50%	406	396	401	201	**0.53%**	0%	0.00%	0	0%	0.00%	0
6541	5%	166	159	163	8	**0.02%**	0%	0.00%	0	0%	0.00%	0
				52,522	38,049	100.00%			**129**			**129**
									0.34%			0.34%

Cibola Loop Community Center

(Ellison Dr. / Cibola Loop)

Trip Distribution Map (%)



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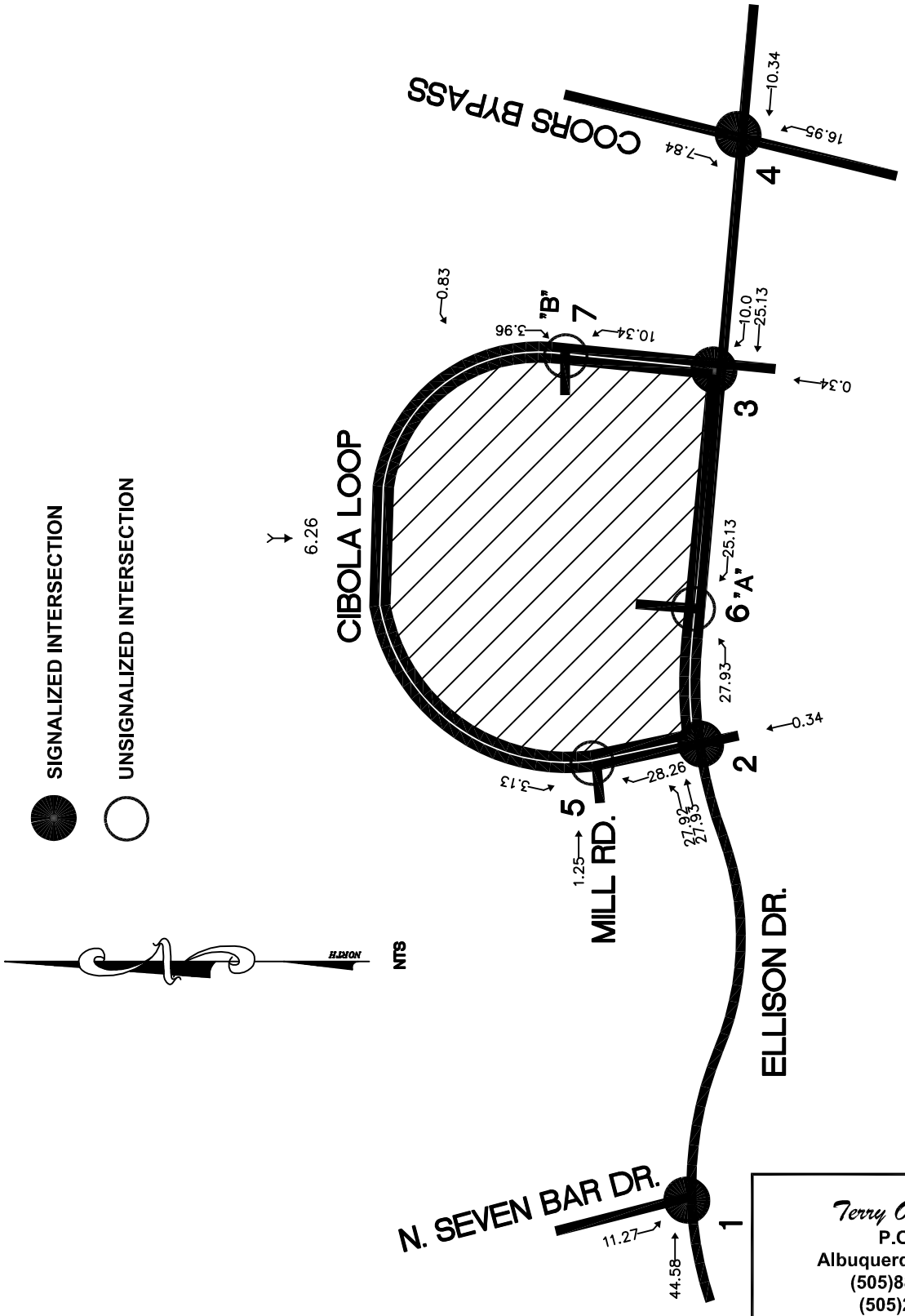
Cibola Loop Community Center

(Ellison Dr. / Cibola Loop)

Trip Assignments (% Entering)



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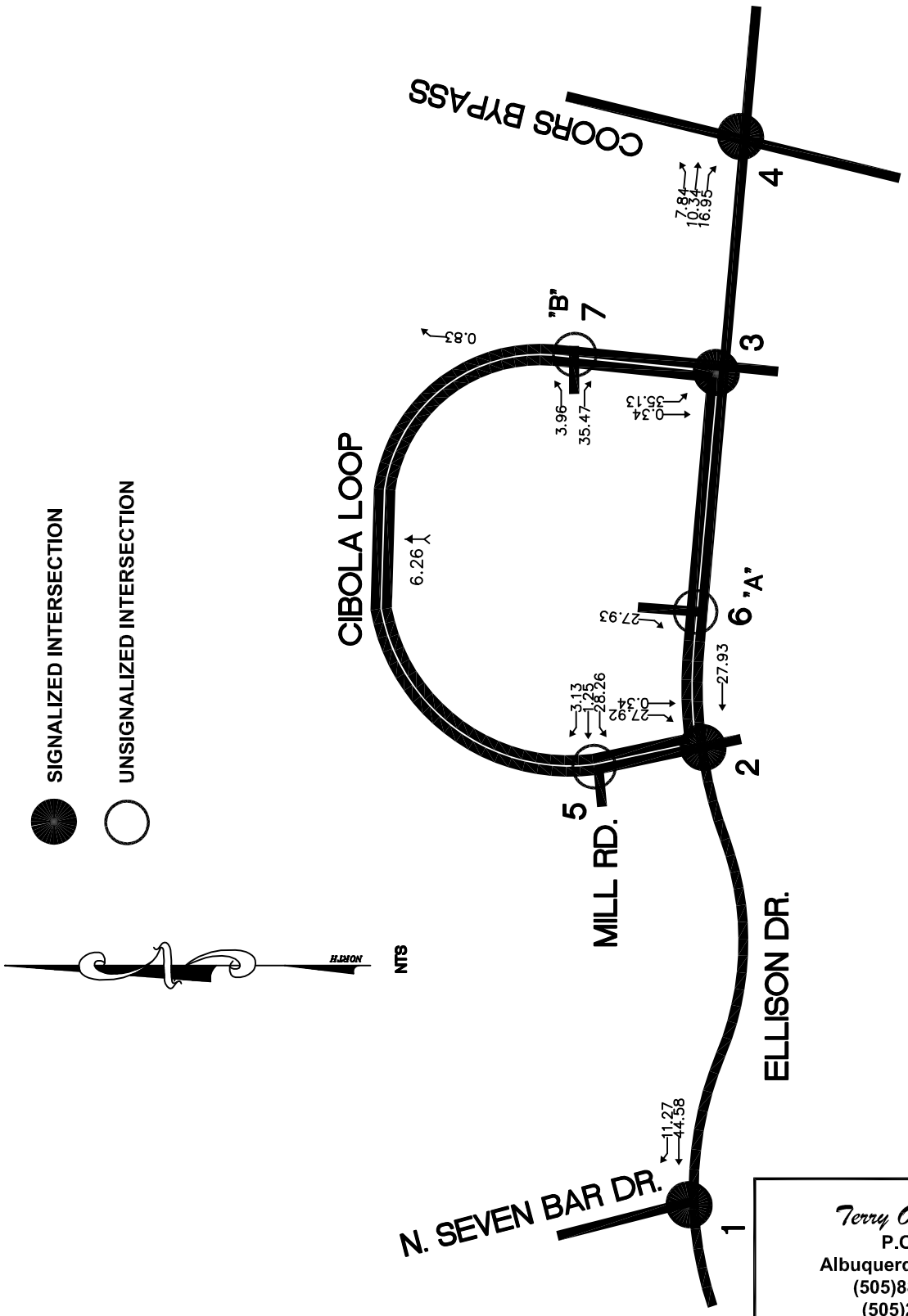
Cibola Loop Community Center

(Ellison Dr. / Cibola Loop)

Trip Assignments (% Exiting)



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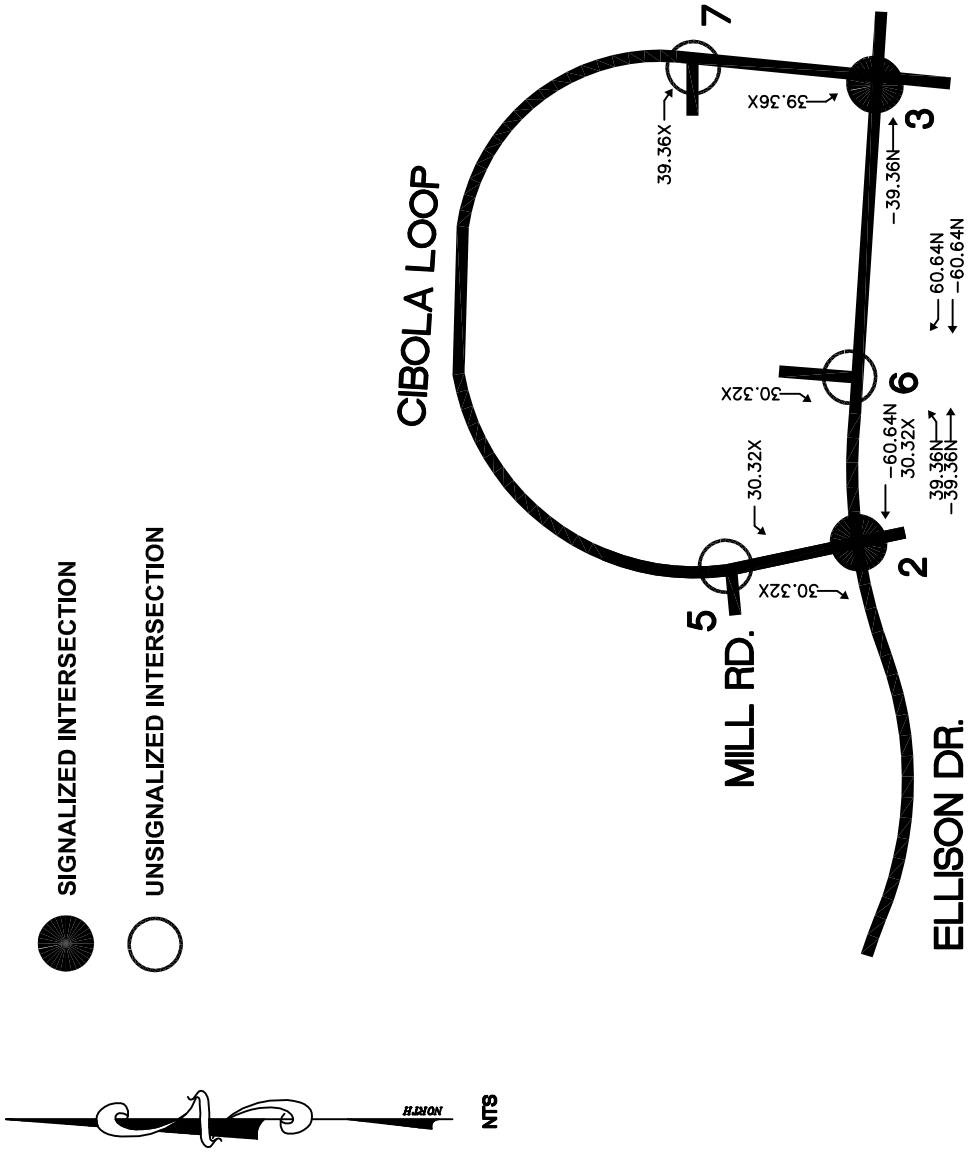
Cibola Loop Community Center

(Ellison Dr. / Cibola Loop)

Passby Trip Assignments (eNtering, eXiting)



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Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2020) - 100% Development

INTERSECTION: **Summary**

Ellison Dr. / N.Seven Bar Dr.

(1)

3.0% Truck	0.83			0.83			0.83			0.83			PHF
	Eastbound (Ellison Dr.)			Westbound (Ellison Dr.)			Northbound (N.Seven Bar Dr.)			Southbound (N.Seven Bar Dr.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	50	611	0	0	344	24	0	0	0	66	0	78	
2020 (NO BUILD - A.M.)	*52*	*919*	*0*	*0*	*486*	*58*	*0*	*0*	*0*	*139*	*0*	*80*	
2020 (BUILD - A.M.)	***52***	***1,005***	***0***	***0***	***572***	***80***	***0***	***0***	***0***	***161***	***0***	***80***	
	0.94			0.94			0.94			0.94			PHF
	Eastbound (Ellison Dr.)			Westbound (Ellison Dr.)			Northbound (N.Seven Bar Dr.)			Southbound (N.Seven Bar Dr.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	81	853	0	0	1,159	133	0	0	0	65	96	0	
2020 (NO BUILD - P.M.)	*84*	*944*	*0*	*0*	*1,252*	*154*	*0*	*0*	*0*	*81*	*98*	*0*	
2020 (BUILD - P.M.)	***84***	***1,155***	***0***	***0***	***1,438***	***201***	***0***	***0***	***0***	***134***	***98***	***0***	

Ellison Dr. / W.Cibola Loop

(2)

3.0% Truck	0.83			0.83			0.83			0.83			PHF
	Eastbound (Ellison Dr.)			Westbound (Ellison Dr.)			Northbound (W.Cibola Loop)			Southbound (W.Cibola Loop)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	19	0	0	59	0	6	0	0	0	52	0	55	
2020 (NO BUILD - A.M.)	*19*	*1,040*	*179*	*173*	*544*	*6*	*84*	*13*	*53*	*53*	*28*	*56*	
2020 (BUILD - A.M.)	***73***	***1,094***	***179***	***173***	***577***	***6***	***84***	***14***	***53***	***53***	***29***	***120***	
	0.94			0.94			0.94			0.94			PHF
	Eastbound (Ellison Dr.)			Westbound (Ellison Dr.)			Northbound (W.Cibola Loop)			Southbound (W.Cibola Loop)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	75	0	0	3	0	48	0	0	0	26	0	69	
2020 (NO BUILD - P.M.)	*77*	*948*	*37*	*27*	*1,406*	*49*	*44*	*7*	*28*	*27*	*6*	*70*	
2020 (BUILD - P.M.)	***209***	***1,080***	***37***	***27***	***1,499***	***49***	***44***	***9***	***28***	***27***	***7***	***213***	

Ellison Dr. / E.Cibola Loop

(3)

3.0% Truck	0.95			0.95			0.95			0.95			PHF
	Eastbound (Ellison Dr.)			Westbound (Ellison Dr.)			Northbound (E.Cibola Loop)			Southbound (E.Cibola Loop)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	19	0	34	15	0	45	22	0	16	153	3	11	
2020 (NO BUILD - A.M.)	*19*	*781*	*214*	*128*	*480*	*46*	*106*	*12*	*69*	*156*	*257*	*11*	
2020 (BUILD - A.M.)	***19***	***761***	***214***	***128***	***528***	***65***	***106***	***13***	***69***	***224***	***258***	***24***	
	0.75			0.75			0.75			0.75			PHF
	Eastbound (Ellison Dr.)			Westbound (Ellison Dr.)			Northbound (E.Cibola Loop)			Southbound (E.Cibola Loop)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	23	0	51	45	0	195	76	4	40	147	4	37	
2020 (NO BUILD - P.M.)	*23*	*913*	*89*	*70*	*1,635*	*199*	*122*	*10*	*69*	*150*	*57*	*38*	
2020 (BUILD - P.M.)	***23***	***880***	***89***	***70***	***1,754***	***246***	***122***	***12***	***69***	***296***	***58***	***73***	

Ellison Dr. / Coors Bypass

(4)

3.0% Truck	0.95			0.95			0.95			0.95			PHF
	Eastbound (Ellison Dr.)			Westbound (Ellison Dr.)			Northbound (Coors Bypass)			Southbound (Coors Bypass)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	84	470	328	85	168	16	191	969	53	67	1,417	42	
2020 (NO BUILD - A.M.)	*110*	*510*	*386*	*96*	*256*	*18*	*304*	*988*	*54*	*68*	*1,445*	*93*	
2020 (BUILD - A.M.)	***125***	***530***	***419***	***96***	***276***	***18***	***337***	***988***	***54***	***68***	***1,445***	***108***	
	0.75			0.75			0.75			0.75			PHF
	Eastbound (Ellison Dr.)			Westbound (Ellison Dr.)			Northbound (Coors Bypass)			Southbound (Coors Bypass)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	141	579	334	331	893	106	720	2,603	194	123	1,164	109	
2020 (NO BUILD - P.M.)	*156*	*607*	*368*	*375*	*1,025*	*120*	*757*	*2,655*	*198*	*125*	*1,187*	*122*	
2020 (BUILD - P.M.)	***189***	***650***	***439***	***375***	***1,074***	***120***	***837***	***2,655***	***198***	***125***	***1,187***	***159***	

Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2020) - 100% Development

INTERSECTION: **Summary**

Mill Rd. / W.Cibola Loop (5) 3.0% Truck

	0.83			0.83			0.83			0.83			PHF
	Eastbound (Mill Rd.)			Westbound (Mill Rd.)			Northbound (W.Cibola Loop)			Southbound (W.Cibola Loop)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	0	0	17	0	0	0	3	0	0	0	0	0	
2020 (NO BUILD - A.M.)	*0*	*0*	*25*	*0*	*0*	*0*	*7*	*18*	*0*	*0*	*137*	*0*	
2020 (BUILD - A.M.)	***0***	***2***	***25***	***68***	***2***	***6***	***7***	***18***	***54***	***6***	***137***	***0***	

	0.94			0.94			0.94			0.94			PHF
	Eastbound (Mill Rd.)			Westbound (Mill Rd.)			Northbound (W.Cibola Loop)			Southbound (W.Cibola Loop)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	0	0	10	0	0	0	15	0	0	0	0	0	
2020 (NO BUILD - P.M.)	*0*	*0*	*12*	*0*	*0*	*0*	*17*	*109*	*0*	*0*	*103*	*0*	
2020 (BUILD - P.M.)	***0***	***6***	***12***	***153***	***5***	***13***	***17***	***109***	***134***	***15***	***103***	***0***	

Ellison Dr. / Driveway "A" (6) 3.0% Truck

	0.83			0.83			0.83			0.83			PHF
	Eastbound (Ellison Dr.)			Westbound (Ellison Dr.)			Northbound (Driveway "A")			Southbound (Driveway "A")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	0	0	0	0	0	0	0	0	0	0	0	0	
2020 (NO BUILD - A.M.)	*0*	*1,180*	*0*	*0*	*722*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2020 (BUILD - A.M.)	***74***	***1,173***	***0***	***0***	***691***	***79***	***0***	***0***	***0***	***0***	***0***	***64***	

	0.94			0.94			0.94			0.94			PHF
	Eastbound (Ellison Dr.)			Westbound (Ellison Dr.)			Northbound (Driveway "A")			Southbound (Driveway "A")			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	0	0	0	0	0	0	0	0	0	0	0	0	
2020 (NO BUILD - P.M.)	*0*	*1,062*	*0*	*0*	*1,481*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
2020 (BUILD - P.M.)	***165***	***1,064***	***0***	***0***	***1,431***	***169***	***0***	***0***	***0***	***0***	***0***	***143***	

Driveway "B" / E. Cibola Lp. (7) 3.0% Truck

	0.95			0.95			0.95			0.95			PHF
	Eastbound (Driveway "B")			Westbound (Driveway "B")			Northbound (E. Cibola Lp.)			Southbound (E. Cibola Lp.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	0	0	0	0	0	0	0	0	0	0	0	0	
2020 (NO BUILD - A.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*77*	*0*	*0*	*424*	*0*	
2020 (BUILD - A.M.)	***8***	***0***	***82***	***0***	***0***	***0***	***20***	***77***	***0***	***0***	***424***	***8***	

	0.75			0.75			0.75			0.75			PHF
	Eastbound (Driveway "B")			Westbound (Driveway "B")			Northbound (E. Cibola Lp.)			Southbound (E. Cibola Lp.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2016)	0	0	0	0	0	0	0	0	0	0	0	0	
2020 (NO BUILD - P.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*232*	*0*	*0*	*245*	*0*	
2020 (BUILD - P.M.)	***17***	***0***	***183***	***0***	***0***	***0***	***49***	***232***	***0***	***0***	***245***	***19***	

Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Projected Turning Movements Worksheet

Ellison Dr. / N.Seven Bar Dr.

INTERSECTION: E-W Street: **Ellison Dr.** (1)

N-S Street: **N.Seven Bar Dr.**

Year of Existing Counts 2016

Implementation Year **2020**

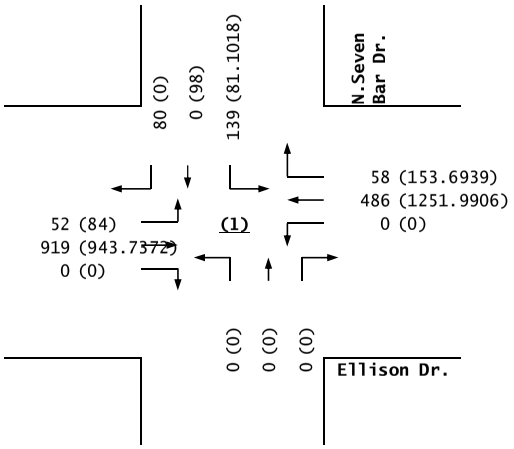
Growth Rates	**0.90%**			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (N.Seven Bar Dr.)**			**Southbound (N.Seven Bar Dr.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	50	611	0	0	344	24	0	0	0	66	0	78
Background Traffic Growth	2	22	0	0	7	0	0	0	0	1	0	2
Subtotal	52	633	0	0	351	24	0	0	0	67	0	80
Cibola HS trips	0	286	0	0	135	34	0	0	0	72	0	0
Subtotal (NO BUILD - A.M.)	***52***	***919***	***0***	***0***	***486***	***58***	***0***	***0***	***0***	***139***	***0***	***80***
Percent Commercial Trips Generated(Entering)	*0.00%*	***44.58%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.27%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***44.58%***	***11.27%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	86	0	0	86	22	0	0	0	22	0	0
Total AM Peak Hour BUILD Volumes	**52**	**1,005**	**0**	**0**	**572**	**80**	**0**	**0**	**0**	**161**	**0**	**80**

	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (N.Seven Bar Dr.)**			**Southbound (N.Seven Bar Dr.)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	81	853	0	0	1,159	133	0	0	0	65	96	0
Background Traffic Growth	3	31	0	0	23	3	0	0	0	1	2	0
Subtotal	84	884	0	0	1,182	136	0	0	0	66	98	0
Cibola HS trips	0	60	0	0	70	18	0	0	0	15	0	0
Subtotal (NO BUILD - P.M.)	***84***	***944***	***0***	***0***	***1,252***	***154***	***0***	***0***	***0***	***81***	***98***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***44.58%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***11.27%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***44.58%***	***11.27%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	211	0	0	186	47	0	0	0	53	0	0
Total PM Peak Hour BUILD Volumes	**84**	**1,155**	**0**	**0**	**1,438**	**201**	**0**	**0**	**0**	**134**	**98**	**0**

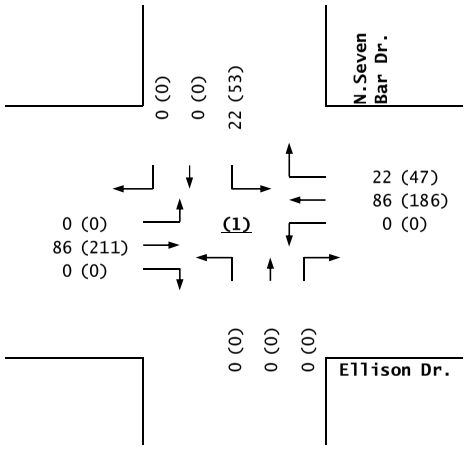
	Entering	Exiting		
Number of Commercial Trips Generated	**192**	**194**	A.M.	100% Commercial Development
	473	**417**	P.M.	

	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (N.Seven Bar Dr.)**			**Southbound (N.Seven Bar Dr.)**		
2016 AM Peak Hr. Volumes	50	611	0	0	344	24	0	0	0	66	0	78
2016 PM Peak Hr. Volumes	81	853	0	0	1,159	133	0	0	0	65	96	0

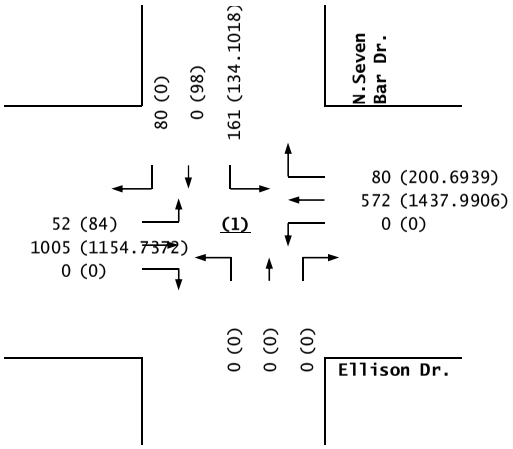
2020
NO BUILD



Trips



2020
BUILD



Ellison Dr. / N.Seven Bar Dr.

Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Projected Turning Movements Worksheet

Ellison Dr. / W.Cibola Loop

INTERSECTION: E-W Street: **Ellison Dr.** (2)

N-S Street: **W.Cibola Loop**

Year of Existing Counts 2016

Implementation Year **2020**

Growth Rates	0.50%			0.50%			0.50%			0.50%		
	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (W.Cibola Loop)**			**Southbound (W.Cibola Loop)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	19	0	0	59	0	6	0	0	0	52	0	55
Background Traffic Growth	0	0	0	1	0	0	0	0	0	1	0	1
Subtotal	19	0	0	60	0	6	0	0	0	53	0	56
Cibola HS trips	0	179	179	113	84	0	84	13	53	0	28	0
Subtotal (NO BUILD - A.M.)	***19***	***1,040***	***179***	***173***	***544***	***6***	***84***	***13***	***53***	***53***	***28***	***56***
Percent Commercial Trips Generated(Entering)	***27.92%***	***27.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.34%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.34%***	***27.92%***
Total Trips Generated	54	54	0	0	54	0	0	1	0	0	1	54
Subtotal AM Pk Hr. BUILD Volumes	**73**	**1,094**	**179**	**173**	**598**	**6**	**84**	**14**	**53**	**53**	**29**	**110**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-21*	*0*	*0*	*0*	*0*	*0*	*0*	*10*
Total AM Peak Hour BUILD Volumes	**73**	**1,094**	**179**	**173**	**577**	**6**	**84**	**14**	**53**	**53**	**29**	**120**

	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (W.Cibola Loop)**			**Southbound (W.Cibola Loop)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	75	0	0	3	0	48	0	0	0	26	0	69
Background Traffic Growth	2	0	0	0	0	1	0	0	0	1	0	1
Subtotal	77	0	0	3	0	49	0	0	0	27	0	70
Cibola HS trips	0	37	37	24	44	0	44	7	28	0	6	0
Subtotal (NO BUILD - P.M.)	***77***	***948***	***37***	***27***	***1,406***	***49***	***44***	***7***	***28***	***27***	***6***	***70***
Percent Commercial Trips Generated(Entering)	***27.92%***	***27.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.34%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.34%***	***27.92%***
Total Trips Generated	132	132	0	0	116	0	0	2	0	0	1	116
Subtotal PM Pk Hr. BUILD Volumes	**209**	**1,080**	**37**	**27**	**1,522**	**49**	**44**	**9**	**28**	**27**	**7**	**186**
Pass-by Trip Adjustments	*0*	*0*	*0*	*0*	*-23*	*0*	*0*	*0*	*0*	*0*	*0*	*27*
Total PM Peak Hour BUILD Volumes	**209**	**1,080**	**37**	**27**	**1,499**	**49**	**44**	**9**	**28**	**27**	**7**	**213**

	Entering	Exiting		
Number of Commercial Trips Generated	**192**	**194**	A.M.	100% Commercial Development
	473	**417**	P.M.	

	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (W.Cibola Loop)**			**Southbound (W.Cibola Loop)**		
2016 AM Peak Hr. Volumes	19	0	0	59	0	6	0	0	0	52	0	55
2016 PM Peak Hr. Volumes	75	0	0	3	0	48	0	0	0	26	0	69

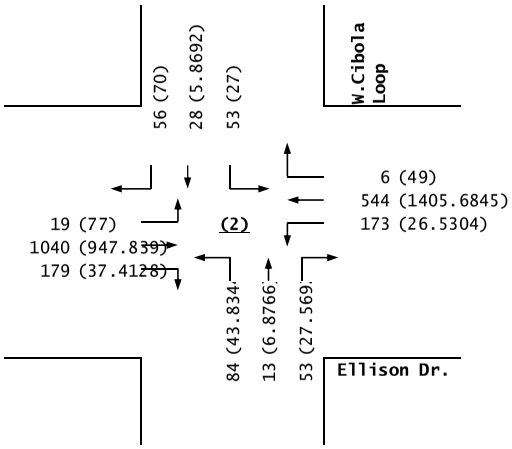
Pass-by Trip Calculations:

AM Pass-by Trips	***Eastbound (Ellison Dr.)***			***Westbound (Ellison Dr.)***			***Northbound (W.Cibola Loop)***			***Southbound (W.Cibola Loop)***		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-60.64%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*-31*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***30.32%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***30.32%***
Volume Exiting	*0*	*0*	*0*	*0*	*10*	*0*	*0*	*0*	*0*	*0*	*0*	*10*
Net AM Passby Trips	***0***	***0***	***0***	***0***	***-21***	***0***	***0***	***0***	***0***	***0***	***0***	***10***

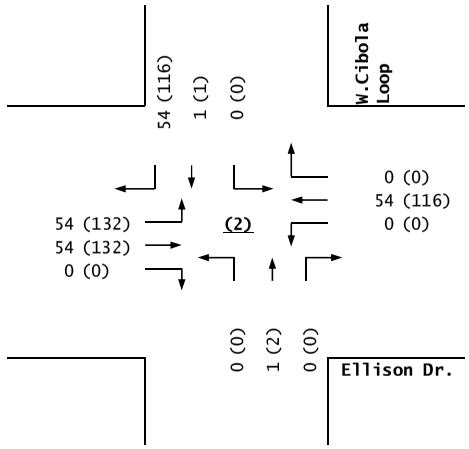
PM Pass-by Trips	***Eastbound (Ellison Dr.)***			***Westbound (Ellison Dr.)***			***Northbound (W.Cibola Loop)***			***Southbound (W.Cibola Loop)***		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***-60.64%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Growth Rate to Apply to *Volume Entering*	*0*	*0*	*0*	*0*	*-50*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***30.32%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***30.32%***
Volume Exiting	*0*	*0*	*0*	*0*	*27*	*0*	*0*	*0*	*0*	*0*	*0*	*27*
Net PM Passby Trips	***0***	***0***	***0***	***0***	***-23***	***0***	***0***	***0***	***0***	***0***	***0***	***27***

	Entering	*Exiting*	
Pass-by Trips	***51***	***33***	*AM*
	83	***88***	*PM*

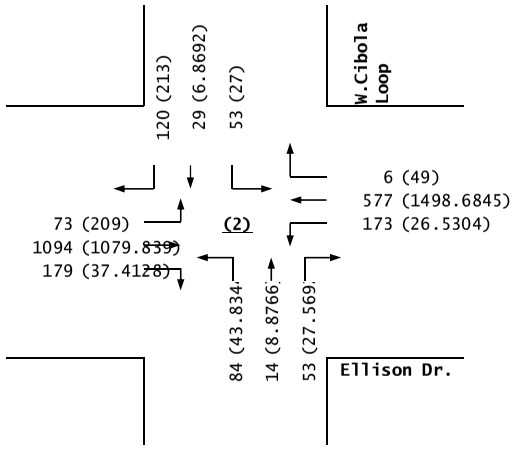
2020
NO BUILD



Trips



2020
BUILD



Ellison Dr. / W.Cibola Loop

Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Projected Turning Movements Worksheet

Ellison Dr. / E.Cibola Loop

INTERSECTION: E-W Street: **Ellison Dr.** (3)

N-S Street: **E.Cibola Loop**

Year of Existing Counts 2016

Implementation Year **2020**

Growth Rates	0.50%			0.50%			0.50%			0.50%		
	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (E.Cibola Loop)**			**Southbound (E.Cibola Loop)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	19	0	34	15	0	45	22	0	16	153	3	11
Background Traffic Growth	0	0	1	0	0	1	0	0	0	3	0	0
Subtotal	19	0	35	15	0	46	22	0	16	156	3	11
Cibola HS trips	0	53	179	113	113	0	84	12	53	0	254	0
Subtotal (NO BUILD - A.M.)	***19***	***781***	***214***	***128***	***480***	***46***	***106***	***12***	***69***	***156***	***257***	***11***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.13%***	***10.00%***	*0.00%*	***0.34%***	*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%*	***35.13%***	***0.34%***	*0.00%*
Total Trips Generated	0	0	0	0	48	19	0	1	0	68	1	0
Subtotal AM Pk Hr. BUILD Volumes	**19**	**781**	**214**	**128**	**528**	**65**	**106**	**13**	**69**	**224**	**258**	**11**
Pass-by Trip Adjustments	*0*	*-20*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*13*
Total AM Peak Hour BUILD Volumes	**19**	**761**	**214**	**128**	**528**	**65**	**106**	**13**	**69**	**224**	**258**	**24**

	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (E.Cibola Loop)**			**Southbound (E.Cibola Loop)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	23	0	51	45	0	195	76	4	40	147	4	37
Background Traffic Growth	0	0	1	1	0	4	2	0	1	3	0	1
Subtotal	23	0	52	46	0	199	78	4	41	150	4	38
Cibola HS trips	0	28	37	24	24	0	44	6	28	0	53	0
Subtotal (NO BUILD - P.M.)	***23***	***913***	***89***	***70***	***1,635***	***199***	***122***	***10***	***69***	***150***	***57***	***38***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.13%***	***10.00%***	*0.00%*	***0.34%***	*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%*	***35.13%***	***0.34%***	*0.00%*
Total Trips Generated	0	0	0	0	119	47	0	2	0	146	1	0
Subtotal PM Pk Hr. BUILD Volumes	**23**	**913**	**89**	**70**	**1,754**	**246**	**122**	**12**	**69**	**296**	**58**	**38**
Pass-by Trip Adjustments	*0*	*-33*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*35*
Total PM Peak Hour BUILD Volumes	**23**	**880**	**89**	**70**	**1,754**	**246**	**122**	**12**	**69**	**296**	**58**	**73**

	Entering	Exiting		
Number of Commercial Trips Generated	**192**	**194**	A.M.	100% Commercial Development
	473	**417**	P.M.	

	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (E.Cibola Loop)**			**Southbound (E.Cibola Loop)**		
2016 AM Peak Hr. Volumes	19	0	34	15	0	45	22	0	16	153	3	11
2016 PM Peak Hr. Volumes	23	0	51	45	0	195	76	4	40	147	4	37

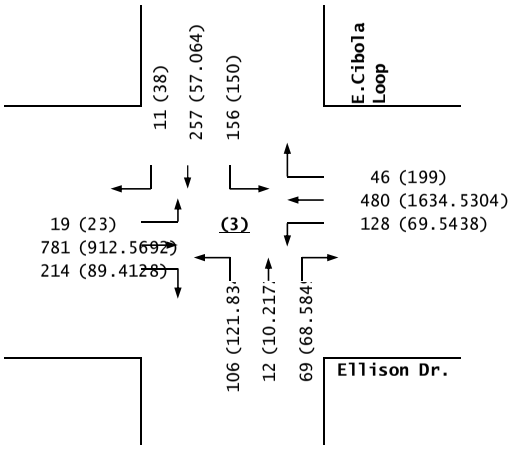
Pass-by Trip Calculations:

AM Pass-by Trips	***Eastbound (Ellison Dr.)***			***Westbound (Ellison Dr.)***			***Northbound (E.Cibola Loop)***			***Southbound (E.Cibola Loop)***		
Percent Entering	*0.00%*	***-39.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*-20*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***39.36%***
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*13*
Net AM Passby Trips	***0***	***-20***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***13***

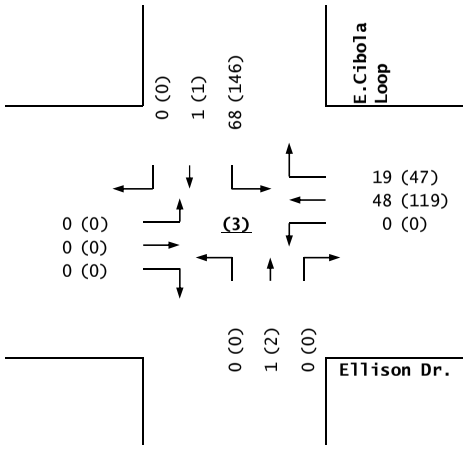
PM Pass-by Trips	***Eastbound (Ellison Dr.)***			***Westbound (Ellison Dr.)***			***Northbound (E.Cibola Loop)***			***Southbound (E.Cibola Loop)***		
Percent Entering	*0.00%*	***-39.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Growth Rate to Apply to *Volume Entering*	*0*	*-33*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***39.36%***
Volume Exiting	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*35*
Net PM Passby Trips	***0***	***-33***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***35***

	Entering	*Exiting*	
Pass-by Trips	***51***	***33***	*AM*
	83	***88***	*PM*

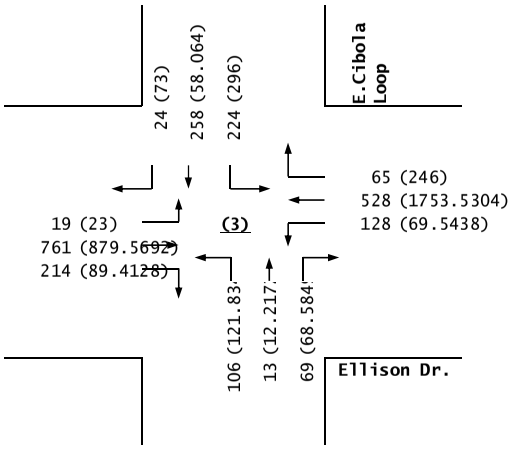
2020
NO BUILD



Trips



2020
BUILD



Ellison Dr. / E.Cibola Loop

Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Projected Turning Movements Worksheet

Ellison Dr. / Coors Bypass

INTERSECTION: E-W Street: **Ellison Dr.** (4)

N-S Street: **Coors Bypass**

Year of Existing Counts 2016

Implementation Year **2020**

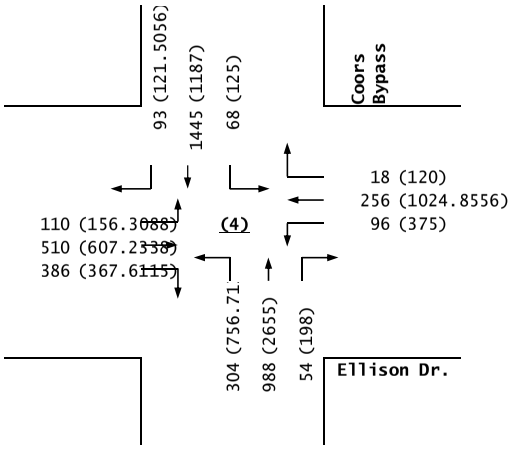
Growth Rates	**0.50%**			**3.30%**			**0.50%**			**0.50%**		
	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (Coors Bypass)**			**Southbound (Coors Bypass)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	84	470	328	85	168	16	191	969	53	67	1,417	42
Background Traffic Growth	2	9	7	11	22	2	4	19	1	1	28	1
Subtotal	86	479	335	96	190	18	195	988	54	68	1,445	43
Cibola HS trips	24	31	51	0	66	0	109	0	0	0	0	50
Subtotal (NO BUILD - A.M.)	***110***	***510***	***386***	***96***	***256***	***18***	***304***	***988***	***54***	***68***	***1,445***	***93***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.34%***	*0.00%*	***16.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.84%***
Percent Commercial Trips Generated(Exiting)	***7.84%***	***10.34%***	***16.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	15	20	33	0	20	0	33	0	0	0	0	15
Total AM Peak Hour BUILD Volumes	**125**	**530**	**419**	**96**	**276**	**18**	**337**	**988**	**54**	**68**	**1,445**	**108**

	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (Coors Bypass)**			**Southbound (Coors Bypass)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	141	579	334	331	893	106	720	2,603	194	123	1,164	109
Background Traffic Growth	3	12	7	44	118	14	14	52	4	2	23	2
Subtotal	144	591	341	375	1,011	120	734	2,655	198	125	1,187	111
Cibola HS trips	12	16	27	0	14	0	23	0	0	0	0	11
Subtotal (NO BUILD - P.M.)	***156***	***607***	***368***	***375***	***1,025***	***120***	***757***	***2,655***	***198***	***125***	***1,187***	***122***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.34%***	*0.00%*	***16.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***7.84%***
Percent Commercial Trips Generated(Exiting)	***7.84%***	***10.34%***	***16.95%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	33	43	71	0	49	0	80	0	0	0	0	37
Total PM Peak Hour BUILD Volumes	**189**	**650**	**439**	**375**	**1,074**	**120**	**837**	**2,655**	**198**	**125**	**1,187**	**159**

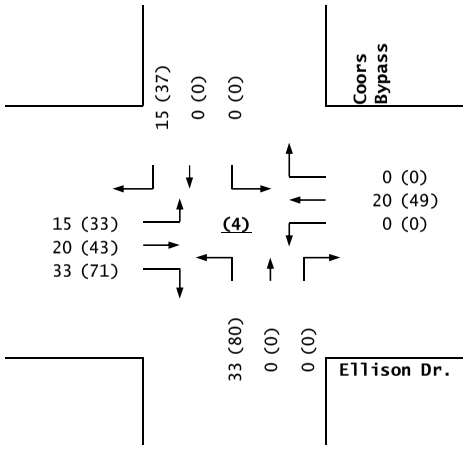
	Entering	Exiting		
Number of Commercial Trips Generated	**192**	**194**	A.M.	100% Commercial Development
	473	**417**	P.M.	

	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (Coors Bypass)**			**Southbound (Coors Bypass)**		
2016 AM Peak Hr. Volumes	84	470	328	85	168	16	191	969	53	67	1,417	42
2016 PM Peak Hr. Volumes	141	579	334	331	893	106	720	2,603	194	123	1,164	109

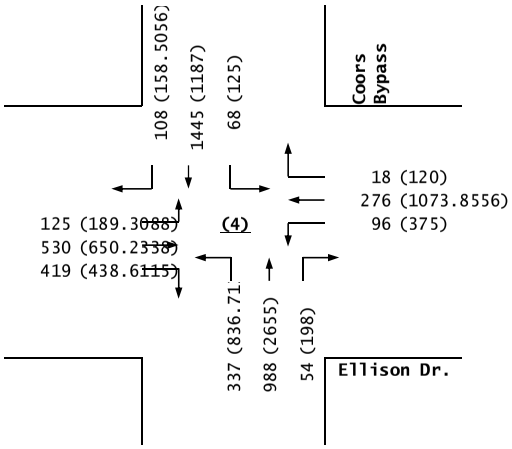
2020
NO BUILD



Trips



2020
BUILD



Ellison Dr. / Coors Bypass

Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Projected Turning Movements Worksheet

Mill Rd. / W.Cibola Loop

INTERSECTION: E-W Street: **Mill Rd.** (5)

N-S Street: **W.Cibola Loop**

Year of Existing Counts 2016

Implementation Year **2020**

Growth Rates	0.50%			0.50%			0.50%			0.50%		
	Eastbound (Mill Rd.)			**Westbound (Mill Rd.)**			**Northbound (W.Cibola Loop)**			**Southbound (W.Cibola Loop)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	17	0	0	0	3	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	17	0	0	0	3	0	0	0	0	0
Cibola HS trips	0	0	8	0	0	0	4	9	0	0	20	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***25***	***0***	***0***	***0***	***7***	***18***	***0***	***0***	***137***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***1.25%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***28.26%***	***3.13%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***28.26%***	***1.25%***	***3.13%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	2	0	55	2	6	0	0	54	6	0	0
Subtotal AM Pk Hr. BUILD Volumes	**0**	**2**	**25**	**55**	**2**	**6**	**7**	**18**	**54**	**6**	**137**	**0**
Pass-by Trip Adjustments	*0*	*0*	*0*	*13*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes	**0**	**2**	**25**	**68**	**2**	**6**	**7**	**18**	**54**	**6**	**137**	**0**

	Eastbound (Mill Rd.)			**Westbound (Mill Rd.)**			**Northbound (W.Cibola Loop)**			**Southbound (W.Cibola Loop)**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	10	0	0	0	15	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	10	0	0	0	15	0	0	0	0	0
Cibola HS trips	0	0	2	0	0	0	2	5	0	0	4	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***12***	***0***	***0***	***0***	***17***	***109***	***0***	***0***	***103***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	***1.25%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***28.26%***	***3.13%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***28.26%***	***1.25%***	***3.13%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	6	0	118	5	13	0	0	134	15	0	0
Subtotal PM Pk Hr. BUILD Volumes	**0**	**6**	**12**	**118**	**5**	**13**	**17**	**109**	**134**	**15**	**103**	**0**
Pass-by Trip Adjustments	*0*	*0*	*0*	*35*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**0**	**6**	**12**	**153**	**5**	**13**	**17**	**109**	**134**	**15**	**103**	**0**

	Entering	Exiting		
Number of Commercial Trips Generated	**192**	**194**	A.M.	100% Commercial Development
	473	**417**	P.M.	

	Eastbound (Mill Rd.)			**Westbound (Mill Rd.)**			**Northbound (W.Cibola Loop)**			**Southbound (W.Cibola Loop)**		
2016 AM Peak Hr. Volumes	0	0	17	0	0	0	3	0	0	0	0	0
2016 PM Peak Hr. Volumes	0	0	10	0	0	0	15	0	0	0	0	0

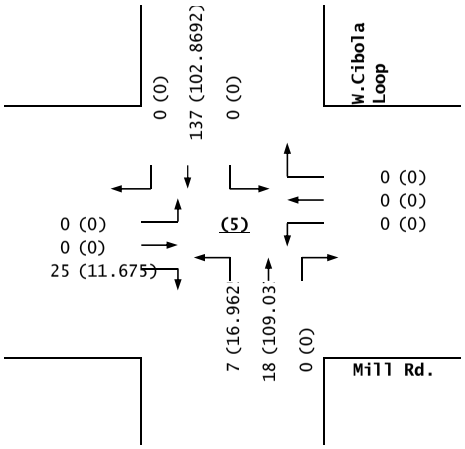
Pass-by Trip Calculations:

AM Pass-by Trips	***Eastbound (Mill Rd.)***			***Westbound (Mill Rd.)***			***Northbound (W.Cibola Loop)***			***Southbound (W.Cibola Loop)***		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	***39.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*13*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***0***	***13***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

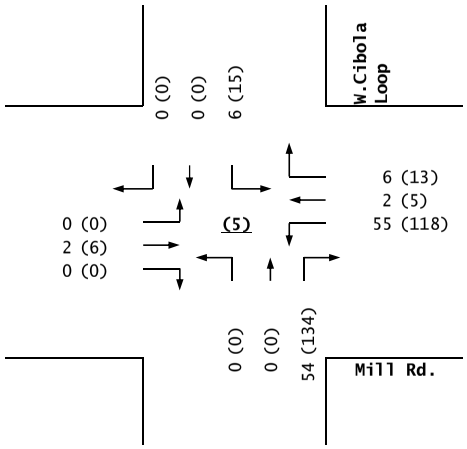
PM Pass-by Trips	***Eastbound (Mill Rd.)***			***Westbound (Mill Rd.)***			***Northbound (W.Cibola Loop)***			***Southbound (W.Cibola Loop)***		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Growth Rate to Apply to *Volume Entering*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	*0.00%*	***39.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*0*	*35*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***0***	***35***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***51***	***33***	*AM*
	83	***88***	*PM*

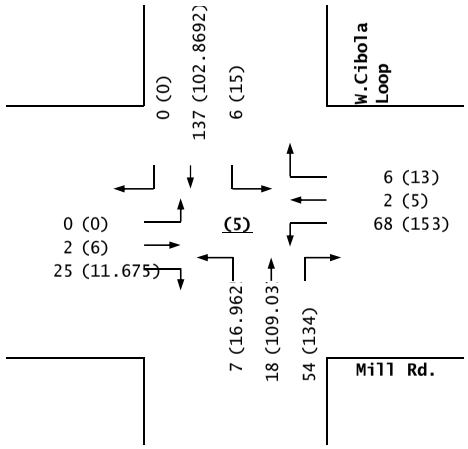
2020
NO BUILD



Trips



2020
BUILD



Mill Rd. / W.Cibola Loop

Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Projected Turning Movements Worksheet

Ellison Dr. / Driveway "A"

INTERSECTION: E-W Street: **Ellison Dr.** (6)

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

Year of Existing Counts 2016

Implementation Year **2020**

Growth Rates	**0.50%**			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**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 (NO BUILD - A.M.)	***0***	***1,180***	***0***	***0***	***722***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	***27.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.13%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.93%***
Total Trips Generated	54	0	0	0	0	48	0	0	0	0	0	54
Subtotal AM Pk Hr. BUILD Volumes	**54**	**1,180**	**0**	**0**	**722**	**48**	**0**	**0**	**0**	**0**	**0**	**54**
Pass-by Trip Adjustments	*20*	*-7*	*0*	*0*	*-31*	*31*	*0*	*0*	*0*	*0*	*0*	*10*
Total AM Peak Hour BUILD Volumes	**74**	**1,173**	**0**	**0**	**691**	**79**	**0**	**0**	**0**	**0**	**0**	**64**

	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**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 (NO BUILD - P.M.)	***0***	***1,062***	***0***	***0***	***1,481***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	***27.93%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***25.13%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***27.93%***
Total Trips Generated	132	0	0	0	0	119	0	0	0	0	0	116
Subtotal PM Pk Hr. BUILD Volumes	**132**	**1,062**	**0**	**0**	**1,481**	**119**	**0**	**0**	**0**	**0**	**0**	**116**
Pass-by Trip Adjustments	*33*	*2*	*0*	*0*	*-50*	*50*	*0*	*0*	*0*	*0*	*0*	*27*
Total PM Peak Hour BUILD Volumes	**165**	**1,064**	**0**	**0**	**1,431**	**169**	**0**	**0**	**0**	**0**	**0**	**143**

	Entering	Exiting		
Number of Commercial Trips Generated	**192**	**194**	A.M.	100% Commercial Development
	473	**417**	P.M.	

	Eastbound (Ellison Dr.)			**Westbound (Ellison Dr.)**			**Northbound (Driveway "A")**			**Southbound (Driveway "A")**		
2016 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2016 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0

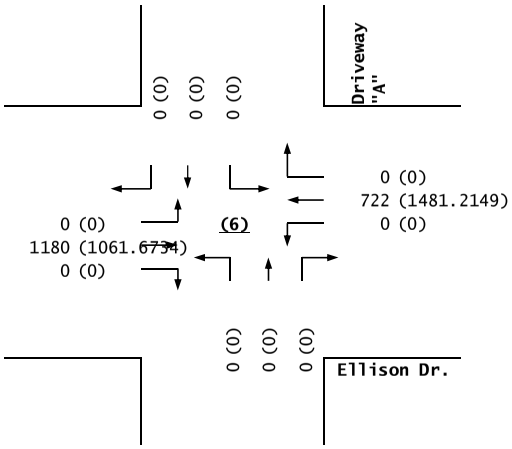
Pass-by Trip Calculations:

AM Pass-by Trips	***Eastbound (Ellison Dr.)***			***Westbound (Ellison Dr.)***			***Northbound (Driveway "A")***			***Southbound (Driveway "A")***		
Percent Entering	***39.36%***	***-39.36%***	*0.00%*	*0.00%*	***-60.64%***	***60.64%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*20*	*-20*	*0*	*0*	*-31*	*31*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	***39.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***30.34%***
Volume Exiting	*0*	*13*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*10*
Net AM Passby Trips	***20***	***-7***	***0***	***0***	***-31***	***31***	***0***	***0***	***0***	***0***	***0***	***10***

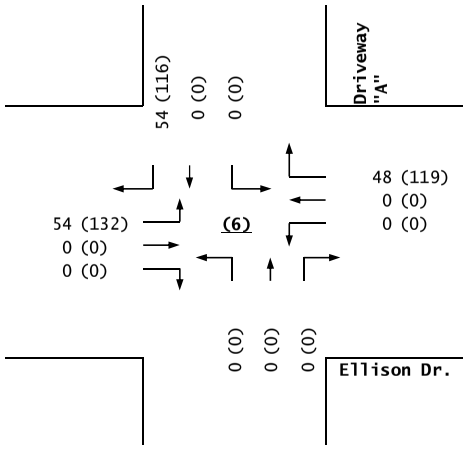
PM Pass-by Trips	***Eastbound (Ellison Dr.)***			***Westbound (Ellison Dr.)***			***Northbound (Driveway "A")***			***Southbound (Driveway "A")***		
Percent Entering	***39.36%***	***-39.36%***	*0.00%*	*0.00%*	***-60.64%***	***60.64%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Growth Rate to Apply to *Volume Entering*	*33*	*-33*	*0*	*0*	*-50*	*50*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	***39.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***30.34%***
Volume Exiting	*0*	*35*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*27*
Net PM Passby Trips	***33***	***2***	***0***	***0***	***-50***	***50***	***0***	***0***	***0***	***0***	***0***	***27***

	Entering	*Exiting*	
Pass-by Trips	***51***	***33***	*AM*
	83	***88***	*PM*

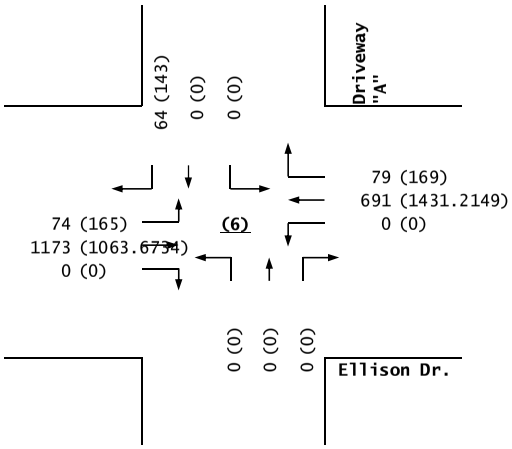
2020
NO BUILD



Trips



2020
BUILD



Ellison Dr. / Driveway "A"

Cibola Loop Community Center (Ellison Dr. / Cibola Loop)

Projected Turning Movements Worksheet

Driveway "B" / E. Cibola Lp.

INTERSECTION: E-W Street: **Driveway "B"** (7)

N-S Street: **E. Cibola Lp.**

Year of Existing Counts 2016

Implementation Year **2020**

Growth Rates	**0.50%**			**0.50%**			**0.50%**			**0.50%**		
	Eastbound (Driveway "B")			**Westbound (Driveway "B")**			**Northbound (E. Cibola Lp.)**			**Southbound (E. Cibola Lp.)**		
	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***	***77***	***0***	***0***	***424***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.34%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.96%***
Percent Commercial Trips Generated(Exiting)	***3.96%***	*0.00%*	***35.47%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	8	0	69	0	0	0	20	0	0	0	0	8
Subtotal AM Pk Hr. BUILD Volumes	**8**	**0**	**69**	**0**	**0**	**0**	**20**	**77**	**0**	**0**	**424**	**8**
Pass-by Trip Adjustments	*0*	*0*	*13*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total AM Peak Hour BUILD Volumes	**8**	**0**	**82**	**0**	**0**	**0**	**20**	**77**	**0**	**0**	**424**	**8**

	Eastbound (Driveway "B")			**Westbound (Driveway "B")**			**Northbound (E. Cibola Lp.)**			**Southbound (E. Cibola Lp.)**		
	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***	***232***	***0***	***0***	***245***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***10.34%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***3.96%***
Percent Commercial Trips Generated(Exiting)	***3.96%***	*0.00%*	***35.47%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	17	0	148	0	0	0	49	0	0	0	0	19
Subtotal PM Pk Hr. BUILD Volumes	**17**	**0**	**148**	**0**	**0**	**0**	**49**	**232**	**0**	**0**	**245**	**19**
Pass-by Trip Adjustments	*0*	*0*	*35*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total PM Peak Hour BUILD Volumes	**17**	**0**	**183**	**0**	**0**	**0**	**49**	**232**	**0**	**0**	**245**	**19**

	Entering	Exiting		
Number of Commercial Trips Generated	**192**	**194**	A.M.	100% Commercial Development
	473	**417**	P.M.	

	Eastbound (Driveway "B")			**Westbound (Driveway "B")**			**Northbound (E. Cibola Lp.)**			**Southbound (E. Cibola Lp.)**		
2016 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2016 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0

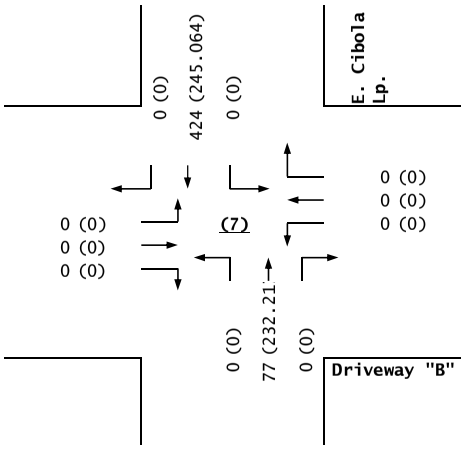
Pass-by Trip Calculations:

AM Pass-by Trips	***Eastbound (Driveway "B")***			***Westbound (Driveway "B")***			***Northbound (E. Cibola Lp.)***			***Southbound (E. Cibola Lp.)***		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Entering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	***39.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*13*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net AM Passby Trips	***0***	***0***	***13***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

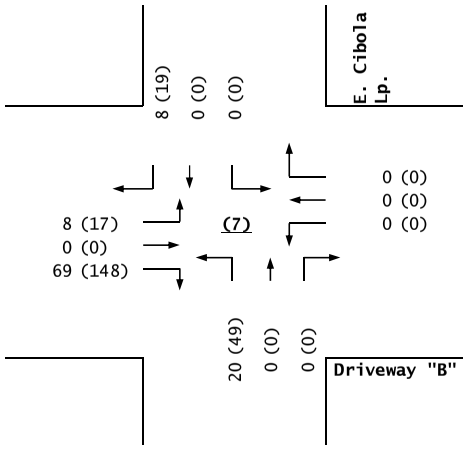
PM Pass-by Trips	***Eastbound (Driveway "B")***			***Westbound (Driveway "B")***			***Northbound (E. Cibola Lp.)***			***Southbound (E. Cibola Lp.)***		
Percent Entering	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Growth Rate to Apply to *Volume Entering*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Percent Exiting	*0.00%*	*0.00%*	***39.36%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Volume Exiting	*0*	*0*	*35*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Net PM Passby Trips	***0***	***0***	***35***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

	Entering	*Exiting*	
Pass-by Trips	***51***	***33***	*AM*
	83	***88***	*PM*

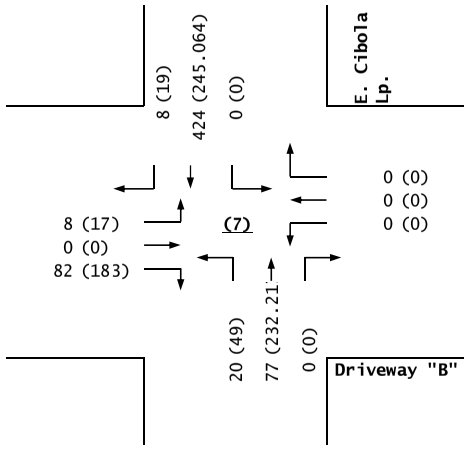
2020
NO BUILD



Trips



2020
BUILD

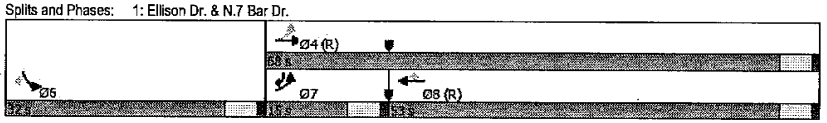


Driveway "B" / E. Cibola Lp.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	52	919	486	58	139	80
Future Volume (vph)	52	919	486	58	139	80
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases	4			8		6
Detector Phase	7	4	8	8	6	7
Switch Phase						
Minimum Initial (s)	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
Total Split (s)	15.0	68.0	53.0	53.0	32.0	15.0
Total Split (%)	15.0%	68.0%	53.0%	53.0%	32.0%	15.0%
Yellow Time (s)	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Recall Mode	Min	C-Min	C-Min	C-Min	Min	Min
Act Effct Green (s)	75.2	75.2	63.7	63.7	14.8	26.3
Actuated g/C Ratio	0.75	0.75	0.64	0.64	0.15	0.26
v/c Ratio	0.10	0.42	0.26	0.07	0.64	0.20
Control Delay	4.3	5.5	7.2	2.9	51.0	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.3	5.5	7.2	2.9	51.0	6.2
LOS	A	A	A	A	D	A
Approach Delay		5.4	6.7		34.7	
Approach LOS		A	A		C	

Intersection Summary			
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 85 (85%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 9.5		Intersection LOS: A	
Intersection Capacity Utilization 41.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Ellison Dr. & N.7 Bar Dr.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	52	919	486	58	139	80
Future Volume (veh/h)	52	919	486	58	139	80
Number	7	4	8	18	1	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	63	1107	586	70	167	96
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	576	2735	2385	1067	210	266
Arrive On Green	0.05	0.78	0.22	0.22	0.12	0.12
Sat Flow, veh/h	1757	3597	3597	1568	1757	1568
Grp Volume(v), veh/h	63	1107	586	70	167	96
Grp Sat Flow(s),veh/h/ln	1757	1752	1752	1568	1757	1568
Q Serve(g_s), s	0.9	10.1	13.7	3.5	9.2	5.4
Cycle Q Clear(g_c), s	0.9	10.1	13.7	3.5	9.2	5.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	576	2735	2385	1067	210	266
V/C Ratio(X)	0.11	0.40	0.25	0.07	0.80	0.36
Avail Cap(c_a), veh/h	664	2735	2385	1067	474	502
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	4.6	3.5	17.7	13.8	42.8	36.7
Incr Delay (d2), s/veh	0.1	0.4	0.2	0.1	6.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.9	6.7	1.6	4.9	4.9
LnGrp Delay(d),s/veh	4.7	4.0	17.9	13.9	49.5	37.6
LnGrp LOS	A	A	B	B	D	D
Approach Vol, veh/h		1170	656		263	
Approach Delay, s/veh		4.0	17.5		45.2	
Approach LOS		A	B		D	

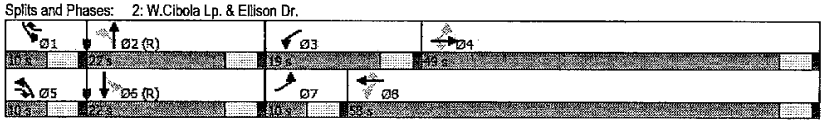
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				83.0		17.0	10.0	73.0
Change Period (Y+Rc), s				5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s				63.0		27.0	10.0	48.0
Max Q Clear Time (g_c+I1), s				12.1		11.2	2.9	15.7
Green Ext Time (p_c), s				17.9		0.7	0.1	15.2

Intersection Summary		
HCM 2010 Ctrl Delay	13.4	
HCM 2010 LOS	B	

Lane Configurations												
Traffic Volume (vph)	19	1040	179	173	544	6	84	13	53	53	28	56
Future Volume (vph)	19	1040	179	173	544	6	84	13	53	53	28	56
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+pt		NA	
Protected Phases	7	4	5	3	8	1	5	2	1		6	
Permitted Phases	4		4	8		8	2		6			
Detector Phase	7	4	5	3	8	1	5	2	1		6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0		21.0	
Total Split (s)	10.0	49.0	10.0	19.0	58.0	10.0	10.0	22.0	10.0		22.0	
Total Split (%)	10.0%	49.0%	10.0%	19.0%	58.0%	10.0%	10.0%	22.0%	10.0%		22.0%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead		Lag	
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	Min		C-Min	
Act Effct Green (s)	48.3	42.3	55.2	60.1	49.5	61.5	25.4	17.5	23.8		16.7	
Actuated g/C Ratio	0.48	0.42	0.55	0.60	0.50	0.62	0.25	0.18	0.24		0.17	
v/c Ratio	0.05	0.84	0.23	0.69	0.38	0.01	0.29	0.24	0.19		0.30	
Control Delay	6.7	26.5	1.8	38.8	17.3	0.0	32.5	16.4	31.2		19.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	6.7	26.5	1.8	38.8	17.3	0.0	32.5	16.4	31.2		19.7	
LOS	A	C	A	D	B	A	C	B	C		B	
Approach Delay		22.6			22.3			25.4			24.2	
Approach LOS		C			C			C			C	

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 99 (99%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 22.8 Intersection LOS: C
Intersection Capacity Utilization 62.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2: W.Cibola Lp. & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	1040	179	173	544	6	84	13	53	53	28	56
Future Volume (veh/h)	19	1040	179	173	544	6	84	13	53	53	28	56
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	23	1253	216	208	655	7	101	16	64	64	34	67
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	420	1498	749	253	1627	806	397	76	305	415	131	258
Arrive On Green	0.02	0.14	0.14	0.09	0.46	0.46	0.05	0.24	0.24	0.05	0.24	0.24
Sat Flow, veh/h	1757	3505	1568	1757	3505	1568	1757	323	1293	1757	556	1095
Grp Volume(v), veh/h	23	1253	216	208	655	7	101	0	80	64	0	101
Grp Sat Flow(s),veh/h/ln	1757	1752	1568	1757	1752	1568	1757	0	1616	1757	0	1651
Q Serve(g_s), s	0.7	34.8	11.3	6.4	12.3	0.2	4.4	0.0	4.0	2.7	0.0	5.0
Cycle Q Clear(g_c), s	0.7	34.8	11.3	6.4	12.3	0.2	4.4	0.0	4.0	2.7	0.0	5.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.80	1.00		0.66
Lane Grp Cap(c), veh/h	420	1498	749	253	1627	806	397	0	381	415	0	389
V/C Ratio(X)	0.05	0.84	0.29	0.82	0.40	0.01	0.25	0.00	0.21	0.15	0.00	0.26
Avail Cap(c_a), veh/h	420	1542	768	346	1858	909	397	0	381	415	0	389
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	0.95	0.95	0.95	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	39.5	24.9	21.9	17.6	11.6	27.2	0.0	30.7	26.6	0.0	31.1
Incr Delay (d2), s/veh	0.0	3.7	0.2	10.4	0.2	0.0	0.3	0.0	1.3	0.2	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	17.7	5.0	3.8	5.9	0.1	2.1	0.0	1.9	1.3	0.0	2.4
LnGrp Delay(d),s/veh	14.8	43.2	25.1	32.2	17.8	11.9	27.5	0.0	32.0	26.7	0.0	32.7
LnGrp LOS	B	D	C	C	B	B	C		C	C		C
Approach Vol, veh/h		1492			870			181			165	
Approach Delay, s/veh		40.2			21.2			29.5			30.4	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	28.6	13.7	47.7	10.0	28.6	10.0	51.4
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	5.0	17.0	14.0	44.0	5.0	17.0	5.0	53.0
Max Q Clear Time (g_c+I1), s	4.7	6.0	8.4	36.8	6.4	7.0	2.7	14.3
Green Ext Time (p_c), s	0.0	0.7	0.3	5.9	0.0	0.7	0.0	20.5

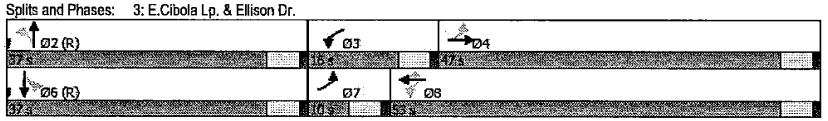
Intersection Summary
HCM 2010 Ctrl Delay 32.8
HCM 2010 LOS C

Lane Configurations									
Traffic Volume (vph)	19	781	128	480	46	106	12	156	257
Future Volume (vph)	19	781	128	480	46	106	12	156	257
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4	3	8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	7	4	3	8	8	2	2	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
Minimum Split (s)	10.0	21.0	10.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	10.0	47.0	16.0	53.0	53.0	37.0	37.0	37.0	37.0
Total Split (%)	10.0%	47.0%	16.0%	53.0%	53.0%	37.0%	37.0%	37.0%	37.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	43.8	37.8	50.5	41.2	41.2	37.8	37.8	37.8	37.8
Actuated g/C Ratio	0.44	0.38	0.50	0.41	0.41	0.38	0.38	0.38	0.38
v/c Ratio	0.05	0.80	0.56	0.35	0.07	0.33	0.13	0.34	0.41
Control Delay	4.9	13.0	21.3	17.3	6.5	28.5	8.4	27.0	26.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.9	13.0	21.3	17.3	6.5	28.5	8.4	27.0	26.9
LOS	A	B	C	B	A	C	A	C	C
Approach Delay		12.8		17.4			19.8		26.9
Approach LOS		B		B			B		C

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 8 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 17.3 Intersection LOS: B
Intersection Capacity Utilization 72.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 3: E.Cibola Lp. & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	781	214	128	480	46	106	12	69	156	257	11
Future Volume (veh/h)	19	781	214	128	480	46	106	12	69	156	257	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	20	822	225	135	505	48	112	13	73	164	271	12
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	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	356	942	258	253	1281	573	430	105	592	593	762	34
Arrive On Green	0.10	0.69	0.69	0.02	0.12	0.12	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1757	2721	745	1757	3505	1568	1081	243	1362	1293	1753	78
Grp Volume(v), veh/h	20	529	518	135	505	48	112	0	88	164	0	283
Grp Sat Flow(s),veh/h/ln	1757	1752	1713	1757	1752	1568	1081	0	1604	1293	0	1831
Q Serve(g_s), s	0.7	23.5	23.5	4.8	13.3	2.7	7.7	0.0	3.2	8.7	0.0	10.3
Cycle Q Clear(g_c), s	0.7	23.5	23.5	4.8	13.3	2.7	18.1	0.0	3.2	11.9	0.0	10.3
Prop In Lane	1.00		0.43	1.00		1.00	1.00		0.85	1.00		0.04
Lane Grp Cap(c), veh/h	356	606	593	253	1281	573	430	0	697	593	0	796
V/C Ratio(X)	0.06	0.87	0.87	0.53	0.39	0.08	0.26	0.00	0.12	0.28	0.00	0.36
Avail Cap(c_a), veh/h	356	736	720	324	1682	753	430	0	697	593	0	796
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.48	0.48	0.85	0.85	0.85	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	13.7	13.7	23.4	33.7	29.1	25.0	0.0	16.9	20.4	0.0	18.9
Incr Delay (d2), s/veh	0.0	5.0	5.1	1.5	0.2	0.1	1.5	0.0	0.4	1.2	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	11.7	11.5	2.4	6.5	1.2	2.5	0.0	1.5	3.3	0.0	5.5
LnGrp Delay(d),s/veh	18.1	18.7	18.8	24.9	33.9	29.1	26.4	0.0	17.3	21.6	0.0	20.2
LnGrp LOS	B	B	B	C	C	C	C		B	C		C
Approach Vol, veh/h		1067			688			198			447	
Approach Delay, s/veh		18.8			31.8			22.4			20.7	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		48.5	11.9	39.6		48.5	10.0	41.5
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		32.0	11.0	42.0		32.0	5.0	48.0
Max Q Clear Time (g_c+I1), s		20.1	6.8	25.5		13.9	2.7	15.3
Green Ext Time (p_c), s		2.7	0.1	9.1		3.3	0.0	12.8

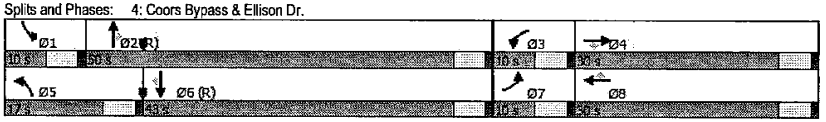
Intersection Summary

HCM 2010 Ctrl Delay 23.2
HCM 2010 LOS C

Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	110	510	386	96	256	18	304	988	54	68	1445	93
Future Volume (vph)	110	510	386	96	256	18	304	988	54	68	1445	93
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	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	5.0
Minimum Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	10.0	30.0	30.0	10.0	30.0	30.0	17.0	50.0	50.0	10.0	43.0	43.0
Total Split (%)	10.0%	30.0%	30.0%	10.0%	30.0%	30.0%	17.0%	50.0%	50.0%	10.0%	43.0%	43.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	5.4	22.1	22.1	5.7	22.4	22.4	12.2	46.6	46.6	5.6	40.0	40.0
Actuated g/C Ratio	0.05	0.22	0.22	0.06	0.22	0.22	0.12	0.47	0.47	0.06	0.40	0.40
v/c Ratio	0.32	0.69	0.83	0.53	0.34	0.04	0.77	0.44	0.07	0.38	0.76	0.13
Control Delay	42.1	32.4	31.5	56.6	33.3	0.2	56.0	19.1	0.2	51.6	29.3	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.1	32.4	31.5	56.6	33.3	0.2	56.0	19.1	0.2	51.6	29.3	0.4
LOS	D	C	C	E	C	A	E	B	A	D	C	A
Approach Delay		32.6			37.8			26.6			28.6	
Approach LOS		C			D			C			C	

Intersection Summary			
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 49 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 29.6		Intersection LOS: C	
Intersection Capacity Utilization 71.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Coors Bypass & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	510	386	96	256	18	304	988	54	68	1445	93
Future Volume (veh/h)	110	510	386	96	256	18	304	988	54	68	1445	93
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	58	537	0	101	269	0	320	1040	0	72	1521	0
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
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	170	705	316	170	705	316	385	2512	782	170	2195	683
Arrive On Green	0.02	0.07	0.00	0.05	0.20	0.00	0.11	0.80	0.00	0.05	0.44	0.00
Sat Flow, veh/h	3408	3505	1568	3408	3505	1568	3408	5036	1568	3408	5036	1568
Grp Volume(v), veh/h	58	537	0	101	269	0	320	1040	0	72	1521	0
Grp Sat Flow(s),veh/h/ln	1704	1752	1568	1704	1752	1568	1704	1679	1568	1704	1679	1568
Q Serve(g_s), s	1.7	15.1	0.0	2.9	6.6	0.0	9.2	13.0	0.0	2.1	24.4	0.0
Cycle Q Clear(g_c), s	1.7	15.1	0.0	2.9	6.6	0.0	9.2	13.0	0.0	2.1	24.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	705	316	170	705	316	385	2512	782	170	2195	683
V/C Ratio(X)	0.34	0.76	0.00	0.59	0.38	0.00	0.83	0.41	0.00	0.42	0.69	0.00
Avail Cap(c_a), veh/h	170	876	392	170	876	392	409	2512	782	170	2195	683
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.5	44.3	0.0	46.6	34.6	0.0	43.4	15.8	0.0	46.1	22.8	0.0
Incr Delay (d2), s/veh	0.7	1.9	0.0	5.4	0.3	0.0	13.0	0.5	0.0	1.7	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(50%),veh/ln	0.8	7.5	0.0	1.5	3.2	0.0	5.0	6.2	0.0	1.0	11.6	0.0
LnGrp Delay(d),s/veh	48.2	46.2	0.0	51.9	34.9	0.0	56.4	16.3	0.0	47.8	24.6	0.0
LnGrp LOS	D	D		D	C		E	B		D	C	
Approach Vol, veh/h		595			370			1360			1593	
Approach Delay, s/veh		46.4			39.5			25.8			25.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	54.9	10.0	25.1	16.3	48.6	10.0	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	5.0	45.0	5.0	25.0	12.0	38.0	5.0	25.0
Max Q Clear Time (g_c+I1), s	4.1	15.0	4.9	17.1	11.2	26.4	3.7	8.6
Green Ext Time (p_c), s	0.0	21.7	0.0	3.1	0.1	9.9	0.0	4.6

Intersection Summary		
HCM 2010 Ctrl Delay	30.2	
HCM 2010 LOS	C	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	25	7	18	137	1
Future Volume (vph)	1	25	7	18	137	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.869				0.999	
Flt Protected	0.998			0.987		
Satd. Flow (prot)	1600	0	0	1821	1843	0
Flt Permitted	0.998			0.987		
Satd. Flow (perm)	1600	0	0	1821	1843	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	315			388	398	
Travel Time (s)	7.2			10.6	10.9	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	1	30	8	22	165	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	31	0	0	30	166	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.3%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection								
Int Delay, s/veh	1.6							
Movement	EBL	EBR	NBL	NBT			SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	1	25	7	18			137	1
Future Vol, veh/h	1	25	7	18			137	1
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	83	83	83	83			83	83
Heavy Vehicles, %	3	3	3	3			3	3
Mvmt Flow	1	30	8	22			165	1

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	205	166	166	0		-	0
Stage 1	166	-	-	-		-	-
Stage 2	39	-	-	-		-	-
Critical Hdwy	7.13	6.23	4.13	-		-	-
Critical Hdwy Stg 1	6.13	-	-	-		-	-
Critical Hdwy Stg 2	6.13	-	-	-		-	-
Follow-up Hdwy	3.527	3.327	2.227	-		-	-
Pot Cap-1 Maneuver	758	876	1406	-		-	-
Stage 1	834	-	-	-		-	-
Stage 2	981	-	-	-		-	-
Platoon blocked, %	1			-		-	-
Mov Cap-1 Maneuver	755	876	1406	-		-	-
Mov Cap-2 Maneuver	755	-	-	-		-	-
Stage 1	829	-	-	-		-	-
Stage 2	975	-	-	-		-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	2.1	0
HCM LOS	A		

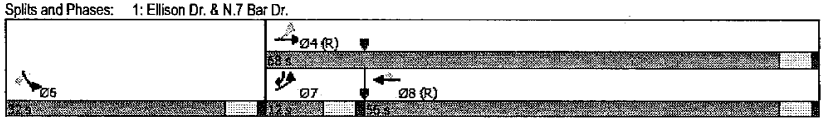
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1406	-	871	-	-
HCM Lane V/C Ratio	0.006	-	0.036	-	-
HCM Control Delay (s)	7.6	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Configurations						
Traffic Volume (vph)	52	1005	572	80	161	80
Future Volume (vph)	52	1005	572	80	161	80
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases	4			8		6
Detector Phase	7	4	8	8	6	7
Switch Phase						
Minimum Initial (s)	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
Total Split (s)	12.0	68.0	56.0	56.0	32.0	12.0
Total Split (%)	12.0%	68.0%	56.0%	56.0%	32.0%	12.0%
Yellow Time (s)	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Recall Mode	Min	C-Min	C-Min	C-Min	Min	Min
Act Effct Green (s)	73.7	73.7	62.1	62.1	16.3	27.9
Actuated g/C Ratio	0.74	0.74	0.62	0.62	0.16	0.28
v/c Ratio	0.12	0.47	0.32	0.10	0.68	0.19
Control Delay	5.0	6.5	7.4	1.8	50.8	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.0	6.5	7.4	1.8	50.8	5.9
LOS	A	A	A	A	D	A
Approach Delay		6.4	6.7		36.0	
Approach LOS		A	A		D	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 47 (47%), Referenced to phase 4:EBTL and 8:WBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 10.2 — Intersection LOS: B
Intersection Capacity Utilization 45.0% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1: Ellison Dr. & N.7 Bar Dr.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	52	1005	572	80	161	80
Future Volume (veh/h)	52	1005	572	80	161	80
Number	7	4	8	18	1	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	63	1211	689	96	194	96
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	612	2681	2331	1043	237	290
Arrive On Green	0.05	0.77	1.00	1.00	0.13	0.13
Sat Flow, veh/h	1757	3597	3597	1568	1757	1568
Grp Volume(v), veh/h	63	1211	689	96	194	96
Grp Sat Flow(s),veh/h/ln	1757	1752	1752	1568	1757	1568
Q Serve(g_s), s	1.0	12.4	0.0	0.0	10.7	5.3
Cycle Q Clear(g_c), s	1.0	12.4	0.0	0.0	10.7	5.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	612	2681	2331	1043	237	290
V/C Ratio(X)	0.10	0.45	0.30	0.09	0.82	0.33
Avail Cap(c_a), veh/h	647	2681	2331	1043	474	502
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.92	1.00	1.00
Uniform Delay (d), s/veh	3.7	4.2	0.0	0.0	42.1	35.4
Incr Delay (d2), s/veh	0.1	0.6	0.3	0.2	6.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	6.1	0.1	0.0	5.7	4.9
LnGrp Delay(d),s/veh	3.7	4.8	0.3	0.2	48.9	36.0
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h		1274	785		290	
Approach Delay, s/veh		4.7	0.3		44.6	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				81.5		18.5	10.0	71.5
Change Period (Y+Rc), s				5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s				63.0		27.0	7.0	51.0
Max Q Clear Time (g_c+I1), s				14.4		12.7	3.0	2.0
Green Ext Time (p_c), s				21.5		0.8	0.0	21.5

Intersection Summary

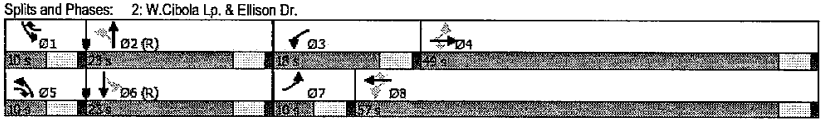
HCM 2010 Ctrl Delay	8.2	
HCM 2010 LOS	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	73	1094	179	173	577	6	84	14	53	29
Future Volume (vph)	73	1094	179	173	577	6	84	14	53	29
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	5	3	8	1	5	2	1	6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	7	4	5	3	8	1	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0	21.0
Total Split (s)	10.0	49.0	10.0	18.0	57.0	10.0	10.0	23.0	10.0	23.0
Total Split (%)	10.0%	49.0%	10.0%	18.0%	57.0%	10.0%	10.0%	23.0%	10.0%	23.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	Min	C-Min
Act Effct Green (s)	51.4	44.1	56.0	61.2	49.5	60.7	24.0	17.1	22.4	16.3
Actuated g/C Ratio	0.51	0.44	0.56	0.61	0.50	0.61	0.24	0.17	0.22	0.16
v/c Ratio	0.21	0.85	0.23	0.71	0.40	0.01	0.38	0.25	0.20	0.47
Control Delay	7.0	28.3	1.5	37.6	20.8	0.0	35.7	16.1	31.7	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.0	28.3	1.5	37.6	20.8	0.0	35.7	16.1	31.7	15.3
LOS	A	C	A	D	C	A	D	B	C	B
Approach Delay		23.6			24.5			27.0		19.6
Approach LOS		C			C			C		B

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 91 (91%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 23.8 Intersection LOS: C
Intersection Capacity Utilization 70.1% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2: W.Cibola Lp. & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	1094	179	173	577	6	84	14	53	53	29	120
Future Volume (veh/h)	73	1094	179	173	577	6	84	14	53	53	29	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	88	1318	216	208	695	7	101	17	64	64	35	145
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	370	1511	754	246	1633	809	324	79	299	411	73	304
Arrive On Green	0.03	0.29	0.29	0.03	0.15	0.15	0.05	0.23	0.23	0.05	0.23	0.23
Sat Flow, veh/h	1757	3505	1568	1757	3505	1568	1757	340	1279	1757	314	1301
Grp Volume(v), veh/h	88	1318	216	208	695	7	101	0	81	64	0	180
Grp Sat Flow(s),veh/h/ln	1757	1752	1568	1757	1752	1568	1757	0	1619	1757	0	1615
Q Serve(g_s), s	2.7	35.8	9.8	6.3	18.0	0.3	4.4	0.0	4.0	2.7	0.0	9.6
Cycle Q Clear(g_c), s	2.7	35.8	9.8	6.3	18.0	0.3	4.4	0.0	4.0	2.7	0.0	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.79	1.00		0.81
Lane Grp Cap(c), veh/h	370	1511	754	246	1633	809	324	0	379	411	0	378
V/C Ratio(X)	0.24	0.87	0.29	0.85	0.43	0.01	0.31	0.00	0.21	0.16	0.00	0.48
Avail Cap(c_a), veh/h	370	1542	768	325	1823	894	324	0	379	411	0	378
HCM Platoon Ratio	0.67	0.67	0.67	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.6	32.9	20.0	23.4	30.2	18.7	27.7	0.0	30.9	26.7	0.0	33.0
Incr Delay (d2), s/veh	0.3	5.0	0.2	14.5	0.2	0.0	0.5	0.0	1.3	0.2	0.0	4.3
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	1.3	18.4	4.3	4.0	8.8	0.2	2.2	0.0	1.9	1.3	0.0	4.7
LnGrp Delay(d),s/veh	15.9	37.9	20.2	37.9	30.4	18.7	28.2	0.0	32.2	26.9	0.0	37.3
LnGrp LOS	B	D	C	D	C	B	C		C	C		D
Approach Vol, veh/h		1622			910			182			244	
Approach Delay, s/veh		34.4			32.0			30.0			34.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	28.4	13.5	48.1	10.0	28.4	10.0	51.6
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	5.0	18.0	13.0	44.0	5.0	18.0	5.0	52.0
Max Q Clear Time (g_c+I1), s	4.7	6.0	8.3	37.8	6.4	11.6	4.7	20.0
Green Ext Time (p_c), s	0.0	1.2	0.2	5.4	0.0	0.8	0.0	19.7

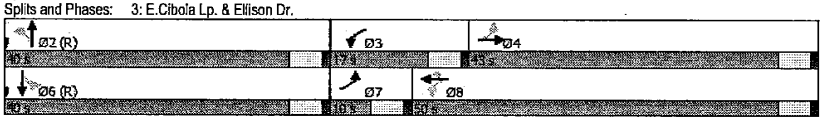
Intersection Summary

HCM 2010 Ctrl Delay	33.4	
HCM 2010 LOS	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	761	128	528	65	106	13	224	258			
Future Volume (vph)	19	761	128	528	65	106	13	224	258			
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA			
Protected Phases	7	4	3	8			2		6			
Permitted Phases	4		8		8	2		6				
Detector Phase	7	4	3	8	8	2	2	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			
Minimum Split (s)	10.0	21.0	10.0	21.0	21.0	21.0	21.0	21.0	21.0			
Total Split (s)	10.0	43.0	17.0	50.0	50.0	40.0	40.0	40.0	40.0			
Total Split (%)	10.0%	43.0%	17.0%	50.0%	50.0%	40.0%	40.0%	40.0%	40.0%			
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0			
Lead/Lag	Lead	Lag	Lead	Lag	Lag							
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	C-Min	C-Min	C-Min	C-Min			
Act Effct Green (s)	41.2	35.5	48.8	39.5	39.5	39.8	39.8	39.8	39.8			
Actuated g/C Ratio	0.41	0.36	0.49	0.40	0.40	0.40	0.40	0.40	0.40			
v/c Ratio	0.03	0.84	0.56	0.40	0.10	0.32	0.13	0.46	0.41			
Control Delay	5.3	16.1	20.9	15.9	7.2	26.0	7.6	27.4	24.8			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	5.3	16.1	20.9	15.9	7.2	26.0	7.6	27.4	24.8			
LOS	A	B	C	B	A	C	A	C	C			
Approach Delay		16.0		16.0			18.0		26.0			
Approach LOS		B		B			B		C			

Intersection Summary			
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 18.3		Intersection LOS: B	
Intersection Capacity Utilization 72.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: E.Cibola Lp. & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	761	214	128	528	65	106	13	69	224	258	24
Future Volume (veh/h)	19	761	214	128	528	65	106	13	69	224	258	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	10	801	225	135	556	68	112	14	73	236	272	25
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	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	324	906	254	247	1246	558	431	115	599	605	740	68
Arrive On Green	0.10	0.67	0.67	0.02	0.12	0.12	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1757	2704	759	1757	3505	1568	1067	259	1348	1292	1665	153
Grp Volume(v), veh/h	10	519	507	135	556	68	112	0	87	236	0	297
Grp Sat Flow(s),veh/h/ln	1757	1752	1711	1757	1752	1568	1067	0	1607	1292	0	1818
Q Serve(g_s), s	0.3	24.0	24.0	4.9	14.8	3.9	7.8	0.0	3.2	13.1	0.0	10.9
Cycle Q Clear(g_c), s	0.3	24.0	24.0	4.9	14.8	3.9	18.6	0.0	3.2	16.3	0.0	10.9
Prop In Lane	1.00		0.44	1.00		1.00	1.00		0.84	1.00		0.08
Lane Grp Cap(c), veh/h	324	587	573	247	1246	558	431	0	714	605	0	808
V/C Ratio(X)	0.03	0.88	0.88	0.55	0.45	0.12	0.26	0.00	0.12	0.39	0.00	0.37
Avail Cap(c_a), veh/h	324	666	650	334	1577	706	431	0	714	605	0	808
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.83	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.8	14.9	14.9	24.2	35.0	30.2	24.6	0.0	16.3	21.1	0.0	18.4
Incr Delay (d2), s/veh	0.0	12.4	12.7	1.5	0.2	0.1	1.5	0.0	0.3	1.9	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	13.3	13.0	2.5	7.2	1.7	2.5	0.0	1.5	5.0	0.0	5.7
LnGrp Delay(d),s/veh	18.8	27.3	27.6	25.7	35.2	30.2	26.1	0.0	16.7	23.0	0.0	19.7
LnGrp LOS	B	C	C	C	D	C	C		B	C		B
Approach Vol, veh/h		1036			759			199			533	
Approach Delay, s/veh		27.4			33.1			22.0			21.2	
Approach LOS		C			C			C			C	

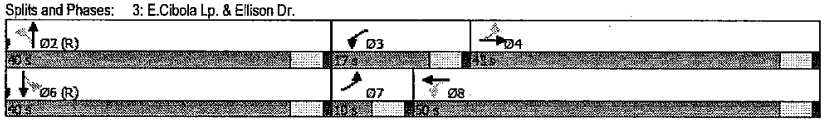
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		49.4	12.1	38.5		49.4	10.0	40.6
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		35.0	12.0	38.0		35.0	5.0	45.0
Max Q Clear Time (g_c+I1), s		20.6	6.9	26.0		18.3	2.3	16.8
Green Ext Time (p_c), s		3.3	0.1	7.5		3.5	0.0	12.4

Intersection Summary		
HCM 2010 Ctrl Delay	27.3	
HCM 2010 LOS	C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	761	128	528	106	13	224	258				
Future Volume (vph)	19	761	128	528	106	13	224	258				
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA				
Protected Phases	7	4	3	8		2		6				
Permitted Phases	4		8		2		6					
Detector Phase	7	4	3	8	2	2	6	6				
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Minimum Split (s)	10.0	21.0	10.0	21.0	21.0	21.0	21.0	21.0				
Total Split (s)	10.0	43.0	17.0	50.0	40.0	40.0	40.0	40.0				
Total Split (%)	10.0%	43.0%	17.0%	50.0%	40.0%	40.0%	40.0%	40.0%				
Yellow Time (s)	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				
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Lead/Lag	Lead	Lag	Lead	Lag								
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	C-Min	C-Min	C-Min	C-Min				
Act Effct Green (s)	41.2	35.5	48.8	39.5	39.8	39.8	39.8	39.8				
Actuated g/C Ratio	0.41	0.36	0.49	0.40	0.40	0.40	0.40	0.40				
v/c Ratio	0.03	0.84	0.56	0.32	0.32	0.13	0.46	0.41				
Control Delay	5.3	16.1	20.1	15.9	26.0	7.6	27.4	24.8				
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Delay	5.3	16.1	20.1	15.9	26.0	7.6	27.4	24.8				
LOS	A	B	C	B	C	A	C	C				
Approach Delay		16.0		16.7		18.0		26.0				
Approach LOS		B		B		B		C				

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 96 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 18.5	Intersection LOS: B
Intersection Capacity Utilization 72.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: E.Cibola Lp. & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	761	214	128	528	65	106	13	69	224	258	24
Future Volume (veh/h)	19	761	214	128	528	65	106	13	69	224	258	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	10	801	225	135	556	68	112	14	73	236	272	25
Adj No. of Lanes	1	2	0	1	3	0	1	1	0	1	1	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	351	906	254	248	1620	196	430	115	599	605	740	68
Arrive On Green	0.10	0.67	0.67	0.02	0.12	0.12	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1757	2704	759	1757	4555	550	1067	259	1348	1292	1665	153
Grp Volume(v), veh/h	10	519	507	135	408	216	112	0	87	236	0	297
Grp Sat Flow(s),veh/h/ln	1757	1752	1711	1757	1679	1748	1067	0	1607	1292	0	1818
Q Serve(g_s), s	0.3	24.0	24.0	4.9	11.2	11.4	7.8	0.0	3.2	13.1	0.0	10.9
Cycle Q Clear(g_c), s	0.3	24.0	24.0	4.9	11.2	11.4	18.6	0.0	3.2	16.3	0.0	10.9
Prop In Lane	1.00		0.44	1.00		0.31	1.00		0.84	1.00		0.08
Lane Grp Cap(c), veh/h	351	587	573	248	1194	622	430	0	714	605	0	808
V/C Ratio(X)	0.03	0.88	0.88	0.55	0.34	0.35	0.26	0.00	0.12	0.39	0.00	0.37
Avail Cap(c_a), veh/h	351	666	650	335	1511	786	430	0	714	605	0	808
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.83	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	14.9	14.9	24.2	33.4	33.6	24.6	0.0	16.3	21.1	0.0	18.5
Incr Delay (d2), s/veh	0.0	12.4	12.6	1.5	0.1	0.3	1.5	0.0	0.3	1.9	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	13.3	13.0	2.5	5.2	5.6	2.5	0.0	1.5	5.0	0.0	5.7
LnGrp Delay(d),s/veh	18.5	27.3	27.5	25.7	33.5	33.7	26.1	0.0	16.7	23.0	0.0	19.7
LnGrp LOS	B	C	C	C	C	C	C		B	C		B
Approach Vol, veh/h		1036			759			199			533	
Approach Delay, s/veh		27.3			32.2			22.0			21.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		49.4	12.1	38.5		49.4	10.0	40.6
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		35.0	12.0	38.0		35.0	5.0	45.0
Max Q Clear Time (g_c+I1), s		20.6	6.9	26.0		18.3	2.3	13.4
Green Ext Time (p_c), s		3.3	0.1	7.5		3.5	0.0	13.1

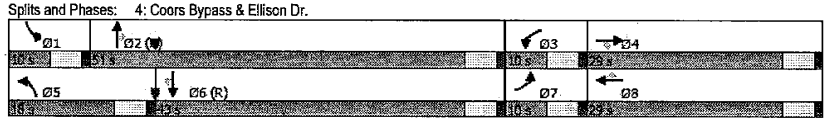
Intersection Summary		
HCM 2010 Ctrl Delay	27.1	
HCM 2010 LOS	C	

Lane Configurations												
Traffic Volume (vph)	125	530	419	96	276	18	337	988	54	68	1445	108
Future Volume (vph)	125	530	419	96	276	18	337	988	54	68	1445	108
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	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	5.0
Minimum Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	10.0	29.0	29.0	10.0	29.0	29.0	18.0	51.0	51.0	10.0	43.0	43.0
Total Split (%)	10.0%	29.0%	29.0%	10.0%	29.0%	29.0%	18.0%	51.0%	51.0%	10.0%	43.0%	43.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	5.2	22.3	22.3	5.4	22.4	22.4	13.0	46.9	46.9	5.4	39.3	39.3
Actuated g/C Ratio	0.05	0.22	0.22	0.05	0.22	0.22	0.13	0.47	0.47	0.05	0.39	0.39
v/c Ratio	0.37	0.72	0.90	0.55	0.37	0.04	0.80	0.44	0.07	0.39	0.77	0.16
Control Delay	43.0	34.8	39.7	58.6	33.9	0.2	57.0	18.7	0.2	52.3	29.9	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.0	34.8	39.7	58.6	33.9	0.2	57.0	18.7	0.2	52.3	29.9	0.8
LOS	D	C	D	E	C	A	E	B	A	D	C	A
Approach Delay		37.4			38.4			27.3			28.9	
Approach LOS		D			D			C			C	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 47 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 31.2 Intersection LOS: C
Intersection Capacity Utilization 73.0% ICU Level of Service D
Analysis Period (min) 15

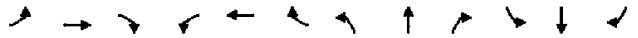
Splits and Phases: 4: Coors Bypass & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	530	419	96	276	18	337	988	54	68	1445	108
Future Volume (veh/h)	125	530	419	96	276	18	337	988	54	68	1445	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	66	558	0	101	291	0	355	1040	0	72	1521	0
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
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	170	715	320	170	715	320	420	2497	778	170	2129	663
Arrive On Green	0.02	0.07	0.00	0.05	0.20	0.00	0.12	0.50	0.00	0.05	0.42	0.00
Sat Flow, veh/h	3408	3505	1568	3408	3505	1568	3408	5036	1568	3408	5036	1568
Grp Volume(v), veh/h	66	558	0	101	291	0	355	1040	0	72	1521	0
Grp Sat Flow(s),veh/h/ln	1704	1752	1568	1704	1752	1568	1704	1679	1568	1704	1679	1568
Q Serve(g_s), s	1.9	15.7	0.0	2.9	7.2	0.0	10.2	13.1	0.0	2.1	25.0	0.0
Cycle Q Clear(g_c), s	1.9	15.7	0.0	2.9	7.2	0.0	10.2	13.1	0.0	2.1	25.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	715	320	170	715	320	420	2497	778	170	2129	663
V/C Ratio(X)	0.39	0.78	0.00	0.59	0.41	0.00	0.85	0.42	0.00	0.42	0.71	0.00
Avail Cap(c_a), veh/h	170	841	376	170	841	376	443	2497	778	170	2129	663
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.7	44.4	0.0	46.5	34.5	0.0	42.9	16.0	0.0	46.1	23.9	0.0
Incr Delay (d2), s/veh	0.8	2.3	0.0	5.4	0.4	0.0	13.6	0.5	0.0	1.7	2.1	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(50%),veh/ln	0.9	7.9	0.0	1.5	3.5	0.0	5.6	6.2	0.0	1.0	12.0	0.0
LnGrp Delay(d),s/veh	48.5	46.7	0.0	51.9	34.9	0.0	56.5	16.5	0.0	47.8	25.9	0.0
LnGrp LOS	D	D		D	C		E	B		D	C	
Approach Vol, veh/h		624			392			1395			1593	
Approach Delay, s/veh		46.9			39.3			26.7			26.9	
Approach LOS		D			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	54.6	10.0	25.4	17.3	47.3	10.0	25.4				
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	5.0	46.0	5.0	24.0	13.0	38.0	5.0	24.0				
Max Q Clear Time (g_c+I1), s	4.1	15.1	4.9	17.7	12.2	27.0	3.9	9.2				
Green Ext Time (p_c), s	0.0	22.2	0.0	2.7	0.1	9.5	0.0	4.7				

Intersection Summary

HCM 2010 Ctrl Delay 31.2
HCM 2010 LOS C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	1	2	25	68	2	6	7	16	54	6	137	1
Future Volume (vph)	1	2	25	68	2	6	7	16	54	6	137	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.877			0.990			0.905			0.999	
Flt Protected		0.998			0.957			0.996			0.998	
Satd. Flow (prot)	0	1615	0	0	1748	0	0	1663	0	0	1839	0
Flt Permitted		0.998			0.957			0.996			0.998	
Satd. Flow (perm)	0	1615	0	0	1748	0	0	1663	0	0	1839	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		315			265			388			398	
Travel Time (s)		7.2			6.0			10.6			10.9	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	1	2	30	82	2	7	8	19	65	7	165	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	0	0	91	0	0	92	0	0	173	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 26.2%	ICU Level of Service A
Analysis Period (min) 15	

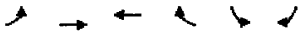
Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	2	25	68	2	6	7	16	54	6	137	1
Future Vol, veh/h	1	2	25	68	2	6	7	16	54	6	137	1
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	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	1	2	30	82	2	7	8	19	65	7	165	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	253	281	166	265	250	52	166	0	0	84	0	0
Stage 1	180	180	-	69	69	-	-	-	-	-	-	-
Stage 2	73	101	-	196	181	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	698	628	876	688	651	1013	1406	-	-	1506	-	-
Stage 1	819	749	-	939	835	-	-	-	-	-	-	-
Stage 2	934	810	-	803	748	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	685	619	876	655	644	1013	1406	-	-	1506	-	-
Mov Cap-2 Maneuver	685	619	-	655	644	-	-	-	-	-	-	-
Stage 1	814	745	-	933	830	-	-	-	-	-	-	-
Stage 2	919	805	-	769	744	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	11.2	0.7	0.3
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1406	-	-	843	673	1506	-	-
HCM Lane V/C Ratio	0.006	-	-	0.04	0.136	0.005	-	-
HCM Control Delay (s)	7.6	0	-	9.4	11.2	7.4	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	74	1173	691	79	0	64
Future Volume (vph)	74	1173	691	79	0	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500			0	0	325
Storage Lanes	1			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected	0.950					
Satd. Flow (prot)	1752	3505	3505	1568	0	1596
Flt Permitted	0.950					
Satd. Flow (perm)	1752	3505	3505	1568	0	1596
Link Speed (mph)		40	40		30	
Link Distance (ft)		450	816		232	
Travel Time (s)		7.7	13.9		5.3	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	89	1413	833	95	0	77
Shared Lane Traffic (%)						
Lane Group Flow (vph)	89	1413	833	95	0	77
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	74	1173	691	79	0	64
Future Vol, veh/h	74	1173	691	79	0	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	500	-	-	0	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	89	1413	833	95	0	77

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	833	0	-	0	-	416
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.16	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.23	-	-	-	-	3.33
Pot Cap-1 Maneuver	1126	-	-	-	0	*798
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	1	-	-	-		1
Mov Cap-1 Maneuver	1126	-	-	-	-	*798
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1126	-	-	-	798
HCM Lane V/C Ratio	0.079	-	-	-	0.097
HCM Control Delay (s)	8.5	-	-	-	10
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.3

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

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	8	82	20	77	424	8
Future Volume (vph)	8	82	20	77	424	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.876				0.998	
Flt Protected	0.996			0.990		
Satd. Flow (prot)	1609	0	0	1826	1841	0
Flt Permitted	0.996			0.990		
Satd. Flow (perm)	1609	0	0	1826	1841	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	197			442	149	
Travel Time (s)	4.5			12.1	4.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	86	21	81	446	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	94	0	0	102	454	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	82	20	77	424	8
Future Vol, veh/h	8	82	20	77	424	8
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	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	8	86	21	81	446	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	574	451	455	0	-	0
Stage 1	451	-	-	-	-	-
Stage 2	123	-	-	-	-	-
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	484	606	1100	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	474	606	1100	-	-	-
Mov Cap-2 Maneuver	474	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	898	-	-	-	-	-

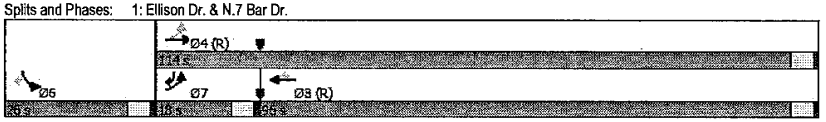
HCM Control Delay, s	12.3	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1100	-	591	-	-
HCM Lane V/C Ratio	0.019	-	0.16	-	-
HCM Control Delay (s)	8.3	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

Lane Configurations						
Traffic Volume (vph)	84	944	1252	154	81	98
Future Volume (vph)	84	944	1252	154	81	98
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases	4			8		6
Detector Phase	7	4	8	8	6	7
Switch Phase						
Minimum Initial (s)	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
Total Split (s)	18.0	114.0	96.0	96.0	26.0	18.0
Total Split (%)	12.9%	81.4%	68.6%	68.6%	18.6%	12.9%
Yellow Time (s)	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Recall Mode	Min	C-Min	C-Min	C-Min	Min	Min
Act Effct Green (s)	117.8	117.8	105.1	106.1	12.2	23.9
Actuated g/C Ratio	0.84	0.84	0.76	0.76	0.09	0.17
v/c Ratio	0.27	0.34	0.50	0.13	0.57	0.32
Control Delay	4.2	3.0	1.5	0.2	74.9	20.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	3.0	1.5	0.2	74.9	20.6
LOS	A	A	A	A	E	C
Approach Delay		3.1	1.4		45.2	
Approach LOS		A	A		D	

Intersection Summary			
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 103 (74%), Referenced to phase 4:EBTL and 8:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 5.0		Intersection LOS: A	
Intersection Capacity Utilization 56.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Ellison Dr. & N.7 Bar Dr.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	84	944	1252	154	81	98
Future Volume (veh/h)	84	944	1252	154	81	98
Number	7	4	8	18	1	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	89	1004	1332	164	86	104
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	383	2975	2724	1219	140	181
Arrive On Green	0.04	0.85	1.00	1.00	0.08	0.08
Sat Flow, veh/h	1757	3597	3597	1568	1757	1568
Grp Volume(v), veh/h	89	1004	1332	164	86	104
Grp Sat Flow(s),veh/h/ln	1757	1752	1752	1568	1757	1568
Q Serve(g_s), s	1.3	8.5	0.0	0.0	6.6	8.8
Cycle Q Clear(g_c), s	1.3	8.5	0.0	0.0	6.6	8.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	383	2975	2724	1219	140	181
V/C Ratio(X)	0.23	0.34	0.49	0.13	0.61	0.57
Avail Cap(c_a), veh/h	484	2975	2724	1219	264	291
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.56	0.56	1.00	1.00
Uniform Delay (d), s/veh	2.2	2.2	0.0	0.0	62.3	58.6
Incr Delay (d2), s/veh	0.3	0.3	0.4	0.1	4.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	4.2	0.1	0.0	3.4	7.7
LnGrp Delay(d),s/veh	2.5	2.6	0.4	0.1	66.6	61.5
LnGrp LOS	A	A	A	A	E	E
Approach Vol, veh/h		1093	1496		190	
Approach Delay, s/veh		2.6	0.3		63.8	
Approach LOS		A	A		E	

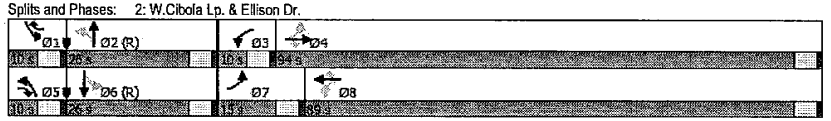
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				123.8		16.2	10.0	113.8
Change Period (Y+Rc), s				5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s				109.0		21.0	13.0	91.0
Max Q Clear Time (g_c+I1), s				10.5		10.8	3.3	2.0
Green Ext Time (p_c), s				40.8		0.4	0.1	39.4

Intersection Summary		
HCM 2010 Ctrl Delay	5.5	
HCM 2010 LOS	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	77	948	37	27	1406	49	44	7	27	6
Future Volume (vph)	77	948	37	27	1406	49	44	7	27	6
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	5	3	8	1	5	2	1	6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	7	4	5	3	8	1	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0	21.0
Total Split (s)	15.0	94.0	10.0	10.0	89.0	10.0	10.0	26.0	10.0	26.0
Total Split (%)	10.7%	67.1%	7.1%	7.1%	63.6%	7.1%	7.1%	18.6%	7.1%	18.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	Min	C-Min
Act Effct Green (s)	89.0	79.4	92.8	82.7	76.2	88.5	35.2	26.8	33.1	25.7
Actuated g/C Ratio	0.64	0.57	0.66	0.59	0.54	0.63	0.25	0.19	0.24	0.18
v/c Ratio	0.43	0.51	0.04	0.10	0.78	0.05	0.14	0.11	0.09	0.23
Control Delay	21.0	17.0	0.5	6.7	20.4	0.1	43.0	23.5	42.7	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.0	17.0	0.5	6.7	20.4	0.1	43.0	23.5	42.7	16.0
LOS	C	B	A	A	C	A	D	C	D	B
Approach Delay		16.7			19.5			34.4		23.1
Approach LOS		B			B			C		C

Intersection Summary			
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 6 (4%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 19.0		Intersection LOS: B	
Intersection Capacity Utilization 64.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: W.Cibola Lp. & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	948	37	27	1406	49	44	7	28	27	6	70
Future Volume (veh/h)	77	948	37	27	1406	49	44	7	28	27	6	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	82	1009	39	29	1496	52	47	7	30	29	6	74
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	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	284	1791	857	245	1787	856	421	84	360	463	33	403
Arrive On Green	0.01	0.17	0.17	0.07	1.00	1.00	0.04	0.27	0.27	0.04	0.27	0.27
Sat Flow, veh/h	1757	3505	1568	1757	3505	1568	1757	305	1308	1757	119	1467
Grp Volume(v), veh/h	82	1009	39	29	1496	52	47	0	37	29	0	80
Grp Sat Flow(s),veh/h/ln	1757	1752	1568	1757	1752	1568	1757	0	1614	1757	0	1586
Q Serve(g_s), s	3.1	37.0	2.7	1.0	0.0	0.0	2.7	0.0	2.4	1.6	0.0	5.4
Cycle Q Clear(g_c), s	3.1	37.0	2.7	1.0	0.0	0.0	2.7	0.0	2.4	1.6	0.0	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.81	1.00		0.93
Lane Grp Cap(c), veh/h	284	1791	857	245	1787	856	421	0	443	463	0	436
V/C Ratio(X)	0.29	0.56	0.05	0.12	0.84	0.06	0.11	0.00	0.08	0.06	0.00	0.18
Avail Cap(c_a), veh/h	345	2228	1053	245	2103	997	421	0	443	463	0	436
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.25	0.25	0.25	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	43.9	25.5	19.1	0.0	0.0	34.3	0.0	37.7	33.9	0.0	38.8
Incr Delay (d2), s/veh	0.5	0.3	0.0	0.1	0.7	0.0	0.1	0.0	0.4	0.1	0.0	0.9
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	1.5	18.1	1.2	0.5	0.2	0.0	1.3	0.0	1.1	0.8	0.0	2.5
LnGrp Delay(d),s/veh	16.0	44.1	25.5	19.1	0.7	0.0	34.4	0.0	38.1	33.9	0.0	39.7
LnGrp LOS	B	D	C	B	A	A	C		D	C		D
Approach Vol, veh/h		1130			1577			84			109	
Approach Delay, s/veh		41.4			1.0			36.0			38.2	
Approach LOS		D			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	43.5	10.0	76.5	10.0	43.5	10.1	76.4
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	5.0	21.0	5.0	89.0	5.0	21.0	10.0	84.0
Max Q Clear Time (g_c+I1), s	3.6	4.4	3.0	39.0	4.7	7.4	5.1	2.0
Green Ext Time (p_c), s	0.0	0.5	0.0	32.5	0.0	0.5	0.1	42.7

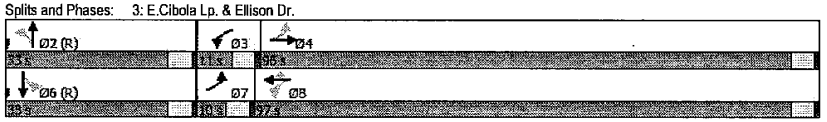
Intersection Summary		
HCM 2010 Ctrl Delay	19.2	
HCM 2010 LOS	B	

Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	23	913	70	1635	199	122	10	150	57			
Future Volume (vph)	23	913	70	1635	199	122	10	150	57			
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA			
Protected Phases	7	4	3	8			2		6			
Permitted Phases	4		8		8	2		6				
Detector Phase	7	4	3	8	8	2	2	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			
Minimum Split (s)	10.0	21.0	10.0	21.0	21.0	21.0	21.0	21.0	21.0			
Total Split (s)	10.0	96.0	11.0	97.0	97.0	33.0	33.0	33.0	33.0			
Total Split (%)	7.1%	68.6%	7.9%	69.3%	69.3%	23.6%	23.6%	23.6%	23.6%			
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0			
Lead/Lag	Lead	Lag	Lead	Lag	Lag							
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	C-Min	C-Min	C-Min	C-Min			
Act Effct Green (s)	96.5	91.3	98.5	92.2	92.2	27.5	27.5	27.5	27.5			
Actuated g/C Ratio	0.69	0.65	0.70	0.66	0.66	0.20	0.20	0.20	0.20			
v/c Ratio	0.13	0.59	0.37	0.94	0.24	0.77	0.27	0.86	0.35			
Control Delay	7.8	9.9	10.3	32.3	6.4	76.5	13.5	86.8	43.0			
Queue Delay	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0			
Total Delay	7.8	9.9	10.3	37.2	6.4	76.5	13.5	86.8	43.0			
LOS	A	A	B	D	A	E	B	F	D			
Approach Delay		9.9		33.0			51.8		69.8			
Approach LOS		A		C			D		E			

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 113 (81%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 29.9 Intersection LOS: C
Intersection Capacity Utilization 76.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 3: E.Cibola Lp. & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	913	89	70	1635	199	122	10	69	150	57	38
Future Volume (veh/h)	23	913	89	70	1635	199	122	10	69	150	57	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	15	1217	119	93	2180	265	163	13	92	200	76	51
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
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	136	2098	205	377	2279	1019	231	41	290	244	213	143
Arrive On Green	0.07	1.00	1.00	0.05	0.86	0.86	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1757	3227	315	1757	3505	1568	1246	198	1400	1271	1031	692
Grp Volume(v), veh/h	15	880	676	93	2180	265	163	0	105	200	0	127
Grp Sat Flow(s),veh/h/ln	1757	1752	1789	1757	1752	1568	1246	0	1598	1271	0	1723
Q Serve(g_s), s	0.4	0.0	0.0	2.5	68.2	4.1	18.0	0.0	7.8	21.2	0.0	8.8
Cycle Q Clear(g_c), s	0.4	0.0	0.0	2.5	68.2	4.1	26.9	0.0	7.8	29.0	0.0	8.8
Prop In Lane	1.00		0.18	1.00		1.00	1.00		0.88	1.00		0.40
Lane Grp Cap(c), veh/h	136	1139	1163	377	2279	1019	231	0	331	244	0	357
V/C Ratio(X)	0.11	0.58	0.58	0.25	0.96	0.26	0.71	0.00	0.32	0.82	0.00	0.36
Avail Cap(c_a), veh/h	136	1139	1163	389	2303	1030	231	0	331	244	0	357
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	0.09	0.09	0.09	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.6	0.0	0.0	7.2	7.9	3.6	59.0	0.0	47.1	59.8	0.0	47.5
Incr Delay (d2), s/veh	0.3	0.6	0.6	0.0	1.3	0.0	16.7	0.0	2.5	25.7	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.2	1.2	31.5	1.7	7.3	0.0	3.7	9.5	0.0	4.5
LnGrp Delay(d),s/veh	24.9	0.6	0.6	7.2	9.3	3.6	75.7	0.0	49.6	85.5	0.0	50.3
LnGrp LOS	C	A	A	A	A	A	E		D	F		D
Approach Vol, veh/h		1351			2538			268			327	
Approach Delay, s/veh		0.9			8.6			65.5			71.8	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	10.0	96.0		34.0	10.0	96.0
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		28.0	6.0	91.0		28.0	5.0	92.0
Max Q Clear Time (g_c+I1), s		28.9	4.5	2.0		31.0	2.4	70.2
Green Ext Time (p_c), s		0.0	0.0	75.4		0.0	0.0	20.8

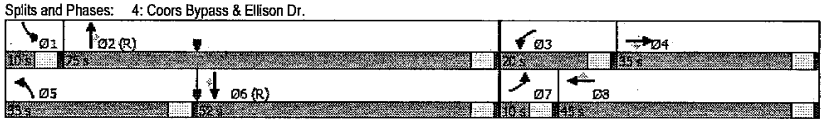
Intersection Summary

HCM 2010 Ctrl Delay 14.3
HCM 2010 LOS B

Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	156	607	368	375	1025	120	757	2655	198	125	1187	122
Future Volume (vph)	156	607	368	375	1025	120	757	2655	198	125	1187	122
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	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	5.0
Minimum Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	10.0	35.0	35.0	20.0	45.0	45.0	33.0	75.0	75.0	10.0	52.0	52.0
Total Split (%)	7.1%	25.0%	25.0%	14.3%	32.1%	32.1%	23.6%	53.6%	53.6%	7.1%	37.1%	37.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	5.0	30.0	30.0	15.0	40.0	40.0	28.0	70.0	70.0	5.0	47.0	47.0
Actuated g/C Ratio	0.04	0.21	0.21	0.11	0.29	0.29	0.20	0.50	0.50	0.04	0.34	0.34
v/c Ratio	0.86	1.08	0.84	1.37	1.37	0.30	1.48	1.41	0.31	1.38	0.94	0.26
Control Delay	113.9	93.7	22.8	229.6	209.6	10.9	264.2	215.1	9.9	261.3	56.4	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	113.9	93.7	22.8	229.6	209.6	10.9	264.2	215.1	9.9	261.3	56.4	5.0
LOS	F	F	C	F	F	B	F	F	A	F	E	A
Approach Delay		70.4			198.8			214.1			69.9	
Approach LOS		E			F			F			E	

Intersection Summary			
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 132 (94%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.48			
Intersection Signal Delay: 164.1		Intersection LOS: F	
Intersection Capacity Utilization 104.6%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Coors Bypass & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	607	368	375	1025	120	757	2655	198	125	1187	122
Future Volume (veh/h)	156	607	368	375	1025	120	757	2655	198	125	1187	122
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	104	809	0	500	1367	0	1009	3540	0	167	1583	0
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
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	122	751	336	365	1001	448	682	2518	784	122	1691	526
Arrive On Green	0.01	0.07	0.00	0.11	0.29	0.00	0.20	0.50	0.00	0.04	0.34	0.00
Sat Flow, veh/h	3408	3505	1568	3408	3505	1568	3408	5036	1568	3408	5036	1568
Grp Volume(v), veh/h	104	809	0	500	1367	0	1009	3540	0	167	1583	0
Grp Sat Flow(s),veh/h/ln	1704	1752	1568	1704	1752	1568	1704	1679	1568	1704	1679	1568
Q Serve(g_s), s	4.3	30.0	0.0	15.0	40.0	0.0	28.0	70.0	0.0	5.0	42.6	0.0
Cycle Q Clear(g_c), s	4.3	30.0	0.0	15.0	40.0	0.0	28.0	70.0	0.0	5.0	42.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	122	751	336	365	1001	448	682	2518	784	122	1691	526
V/C Ratio(X)	0.85	1.08	0.00	1.37	1.37	0.00	1.48	1.41	0.00	1.37	0.94	0.00
Avail Cap(c_a), veh/h	122	751	336	365	1001	448	682	2518	784	122	1691	526
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	68.8	65.1	0.0	62.5	50.0	0.0	56.0	35.0	0.0	67.5	45.1	0.0
Incr Delay (d2), s/veh	33.0	51.4	0.0	182.8	170.8	0.0	224.0	185.1	0.0	210.7	11.2	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	2.6	19.9	0.0	16.3	43.1	0.0	34.4	75.3	0.0	5.9	21.5	0.0
LnGrp Delay(d),s/veh	101.8	116.5	0.0	245.3	220.8	0.0	280.0	220.1	0.0	278.2	56.3	0.0
LnGrp LOS	F	F		F	F		F	F		F	E	
Approach Vol, veh/h		913			1867			4549			1750	
Approach Delay, s/veh		114.8			227.3			233.4			77.5	
Approach LOS		F			F			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	75.0	20.0	35.0	33.0	52.0	10.0	45.0				
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	5.0	70.0	15.0	30.0	28.0	47.0	5.0	40.0				
Max Q Clear Time (g_c+I1), s	7.0	72.0	17.0	32.0	30.0	44.6	6.3	42.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0				

Intersection Summary		
HCM 2010 Ctrl Delay	190.2	
HCM 2010 LOS	F	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	12	17	109	103	1
Future Volume (vph)	1	12	17	109	103	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.875				0.999	
Flt Protected	0.996			0.993		
Satd. Flow (prot)	1608	0	0	1832	1843	0
Flt Permitted	0.996			0.993		
Satd. Flow (perm)	1608	0	0	1832	1843	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	315			388	398	
Travel Time (s)	7.2			10.6	10.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1	13	18	116	110	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	0	134	111	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 23.3%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	12	17	109	103	1
Future Vol, veh/h	1	12	17	109	103	1
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	94	94	94	94	94	94
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	13	18	116	110	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	262	110	111	0	-	0
Stage 1	110	-	-	-	-	-
Stage 2	152	-	-	-	-	-
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	763	941	1473	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	753	941	1473	-	-	-
Mov Cap-2 Maneuver	753	-	-	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	890	-	-	-	-	-

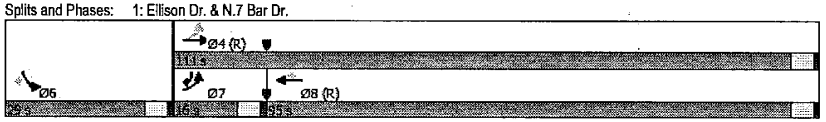
Approach	EB	NB	SB
HCM Control Delay, s	9	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1473	-	923	-	-
HCM Lane V/C Ratio	0.012	-	0.015	-	-
HCM Control Delay (s)	7.5	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	84	1155	1438	201	134	98
Future Volume (vph)	84	1155	1438	201	134	98
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	7	4	8		6	7
Permitted Phases	4			8		6
Detector Phase	7	4	8	8	6	7
Switch Phase						
Minimum Initial (s)	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
Total Split (s)	16.0	111.0	95.0	95.0	29.0	16.0
Total Split (%)	11.4%	79.3%	67.9%	67.9%	20.7%	11.4%
Yellow Time (s)	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Recall Mode	Min	C-Min	C-Min	C-Min	Min	Min
Act Effct Green (s)	113.3	113.3	101.3	101.3	16.7	28.7
Actuated g/C Ratio	0.81	0.81	0.72	0.72	0.12	0.20
v/c Ratio	0.35	0.43	0.60	0.18	0.69	0.29
Control Delay	6.9	4.8	2.8	0.2	75.2	27.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.9	4.8	2.8	0.2	75.2	27.6
LOS	A	A	A	A	E	C
Approach Delay		4.9	2.5		55.2	
Approach LOS		A	A		E	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 133 (95%), Referenced to phase 4:EBTL and 8:WBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 7.4	Intersection LOS: A
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Ellison Dr. & N.7 Bar Dr.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	84	1155	1438	201	134	98
Future Volume (veh/h)	84	1155	1438	201	134	98
Number	7	4	8	18	1	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	89	1229	1530	214	143	104
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	321	2911	2660	1190	172	210
Arrive On Green	0.04	0.83	1.00	1.00	0.10	0.10
Sat Flow, veh/h	1757	3597	3597	1568	1757	1568
Grp Volume(v), veh/h	89	1229	1530	214	143	104
Grp Sat Flow(s),veh/h/ln	1757	1752	1752	1568	1757	1568
Q Serve(g_s), s	1.4	12.8	0.0	0.0	11.2	8.6
Cycle Q Clear(g_c), s	1.4	12.8	0.0	0.0	11.2	8.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	321	2911	2660	1190	172	210
V/C Ratio(X)	0.28	0.42	0.58	0.18	0.83	0.50
Avail Cap(c_a), veh/h	396	2911	2660	1190	301	325
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.38	0.38	1.00	1.00
Uniform Delay (d), s/veh	2.7	3.1	0.0	0.0	62.0	56.2
Incr Delay (d2), s/veh	0.5	0.5	0.3	0.1	9.7	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	6.3	0.1	0.0	5.9	7.6
LnGrp Delay(d),s/veh	3.2	3.6	0.3	0.1	71.7	58.1
LnGrp LOS	A	A	A	A	E	E
Approach Vol, veh/h		1318	1744		247	
Approach Delay, s/veh		3.5	0.3		66.0	
Approach LOS		A	A		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				121.3		18.7	10.0	111.3
Change Period (Y+Rc), s				5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s				106.0		24.0	11.0	90.0
Max Q Clear Time (g_c+I1), s				14.8		13.2	3.4	2.0
Green Ext Time (p_c), s				55.5		0.6	0.1	54.4

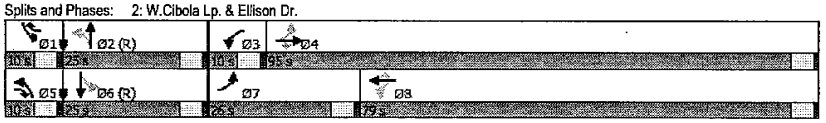
Intersection Summary	
HCM 2010 Ctrl Delay	6.5
HCM 2010 LOS	A

Lane Configurations											
Traffic Volume (vph)	209	1080	37	27	1499	49	44	9	27	7	
Future Volume (vph)	209	1080	37	27	1499	49	44	9	27	7	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+pt	NA	
Protected Phases	7	4	5	3	8	1	5	2	1	6	
Permitted Phases	4		4	8		8	2		6		
Detector Phase	7	4	5	3	8	1	5	2	1	6	
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0	21.0	
Total Split (s)	26.0	95.0	10.0	10.0	79.0	10.0	10.0	25.0	10.0	25.0	
Total Split (%)	18.6%	67.9%	7.1%	7.1%	56.4%	7.1%	7.1%	17.9%	7.1%	17.9%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	Min	C-Min	
Act Effct Green (s)	97.5	86.4	98.6	78.2	72.1	83.6	28.1	21.0	26.8	20.3	
Actuated g/C Ratio	0.70	0.62	0.70	0.56	0.52	0.60	0.20	0.15	0.19	0.14	
v/c Ratio	0.72	0.53	0.03	0.10	0.88	0.05	0.32	0.15	0.11	0.56	
Control Delay	52.3	13.7	0.5	5.0	19.4	0.4	52.7	26.0	47.1	14.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	52.3	13.7	0.5	5.0	19.4	0.4	52.7	26.0	47.1	14.5	
LOS	D	B	A	A	B	A	D	C	D	B	
Approach Delay		19.4			18.5			40.4		18.1	
Approach LOS		B			B			D		B	

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 45 (32%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 19.4 Intersection LOS: B
Intersection Capacity Utilization 87.4% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 2: W.Cibola Lp. & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	1080	37	27	1499	49	44	9	28	27	7	213
Future Volume (veh/h)	209	1080	37	27	1499	49	44	9	28	27	7	213
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	222	1149	39	29	1595	52	47	10	30	29	7	227
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	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	1841	880	251	1690	812	263	106	318	440	12	398
Arrive On Green	0.08	0.53	0.53	0.07	0.96	0.96	0.04	0.26	0.26	0.04	0.26	0.26
Sat Flow, veh/h	1757	3505	1568	1757	3505	1568	1757	407	1222	1757	47	1528
Grp Volume(v), veh/h	222	1149	39	29	1595	52	47	0	40	29	0	234
Grp Sat Flow(s),veh/h/ln	1757	1752	1568	1757	1752	1568	1757	0	1629	1757	0	1575
Q Serve(g_s), s	8.6	32.4	1.6	1.1	25.1	0.2	2.7	0.0	2.6	1.7	0.0	18.1
Cycle Q Clear(g_c), s	8.6	32.4	1.6	1.1	25.1	0.2	2.7	0.0	2.6	1.7	0.0	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.75	1.00		0.97
Lane Grp Cap(c), veh/h	281	1841	880	251	1690	812	263	0	424	440	0	410
V/C Ratio(X)	0.79	0.62	0.04	0.12	0.94	0.06	0.18	0.00	0.09	0.07	0.00	0.57
Avail Cap(c_a), veh/h	406	2253	1064	251	1853	885	263	0	424	440	0	410
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.0	23.5	13.8	18.5	1.7	1.1	36.9	0.0	39.3	35.3	0.0	45.0
Incr Delay (d2), s/veh	5.9	0.3	0.0	0.2	10.0	0.0	0.3	0.0	0.4	0.1	0.0	5.7
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	4.7	15.7	0.7	0.5	9.9	0.1	1.3	0.0	1.2	0.8	0.0	8.5
LnGrp Delay(d),s/veh	28.9	23.8	13.8	18.7	11.7	1.1	37.2	0.0	39.7	35.4	0.0	50.6
LnGrp LOS	C	C	B	B	B	A	D		D	D		D
Approach Vol, veh/h		1410			1676			87			263	
Approach Delay, s/veh		24.3			11.5			38.3			49.0	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	41.4	10.0	78.6	10.0	41.4	16.0	72.5
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	5.0	20.0	5.0	90.0	5.0	20.0	21.0	74.0
Max Q Clear Time (g_c+I1), s	3.7	4.6	3.1	34.4	4.7	20.1	10.6	27.1
Green Ext Time (p_c), s	0.0	1.6	0.0	39.1	0.0	0.0	0.4	34.7

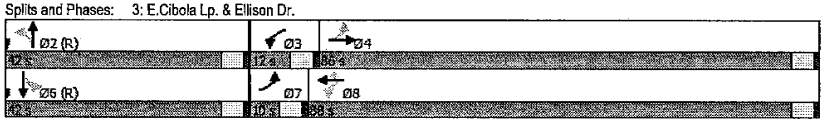
Intersection Summary

HCM 2010 Ctrl Delay 20.3
HCM 2010 LOS C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	23	880	70	1754	246	122	12	296	58
Future Volume (vph)	23	880	70	1754	246	122	12	296	58
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4	3	8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	7	4	3	8	8	2	2	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
Minimum Split (s)	10.0	21.0	10.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	10.0	86.0	12.0	88.0	88.0	42.0	42.0	42.0	42.0
Total Split (%)	7.1%	61.4%	8.6%	62.9%	62.9%	30.0%	30.0%	30.0%	30.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	86.1	81.1	89.9	83.0	83.0	37.0	37.0	37.0	37.0
Actuated g/C Ratio	0.62	0.58	0.64	0.59	0.59	0.26	0.26	0.26	0.26
v/c Ratio	0.13	0.64	0.41	1.13	0.32	0.62	0.14	1.14	0.36
Control Delay	11.9	18.5	4.7	67.1	0.1	56.9	14.9	137.3	33.4
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	11.9	18.5	4.7	67.3	0.1	56.9	14.9	137.3	33.4
LOS	B	B	A	E	A	E	B	F	C
Approach Delay		18.5		57.2			44.6		105.5
Approach LOS		B		E			D		F

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.14	
Intersection Signal Delay: 51.8	Intersection LOS: D
Intersection Capacity Utilization 89.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: E.Cibola Lp. & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	880	89	70	1754	246	122	12	39	296	58	73
Future Volume (veh/h)	23	880	89	70	1754	246	122	12	39	296	58	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	15	1173	119	93	2339	328	163	16	52	395	77	97
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
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	166	1719	174	344	1883	842	334	122	398	428	238	299
Arrive On Green	0.07	1.00	1.00	0.08	1.00	1.00	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1757	3214	325	1757	3505	1568	1194	382	1243	1315	743	936
Grp Volume(v), veh/h	15	639	653	93	2339	328	163	0	68	395	0	174
Grp Sat Flow(s),veh/h/ln	1757	1752	1787	1757	1752	1568	1194	0	1625	1315	0	1679
Q Serve(g_s), s	0.5	0.0	0.0	3.4	0.0	0.0	16.9	0.0	4.2	40.0	0.0	11.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	3.4	0.0	0.0	28.6	0.0	4.2	44.8	0.0	11.0
Prop In Lane	1.00		0.18	1.00		1.00	1.00		0.76	1.00		0.56
Lane Grp Cap(c), veh/h	166	937	956	344	1883	842	334	0	520	428	0	537
V/C Ratio(X)	0.09	0.68	0.68	0.27	1.24	0.39	0.49	0.00	0.13	0.92	0.00	0.32
Avail Cap(c_a), veh/h	166	1014	1034	364	2078	930	334	0	520	428	0	537
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.8	0.0	0.0	13.0	0.0	0.0	47.2	0.0	33.8	50.9	0.0	36.1
Incr Delay (d2), s/veh	0.2	1.7	1.7	0.0	109.4	0.0	5.0	0.0	0.5	28.1	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.5	1.6	28.6	0.0	6.0	0.0	1.9	18.6	0.0	5.4
LnGrp Delay(d),s/veh	13.1	1.7	1.7	13.0	109.4	0.0	52.3	0.0	34.3	79.0	0.0	37.7
LnGrp LOS	B	A	A	B	F	A	D		C	E		D
Approach Vol, veh/h		1307			2760			231			569	
Approach Delay, s/veh		1.8			93.1			47.0			66.4	
Approach LOS		A			F			D			E	

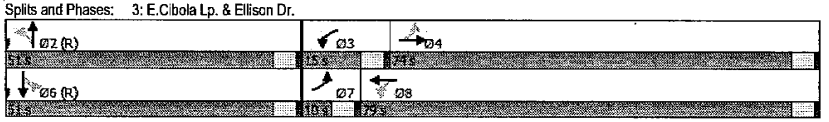
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		50.3	10.4	79.3		50.3	10.0	79.7
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		37.0	7.0	81.0		37.0	5.0	83.0
Max Q Clear Time (g_c+I1), s		30.6	5.4	2.0		46.8	2.5	2.0
Green Ext Time (p_c), s		2.1	0.0	70.6		0.0	0.0	72.2

Intersection Summary		
HCM 2010 Ctrl Delay	63.3	
HCM 2010 LOS	E	

Lane Configurations								
Traffic Volume (vph)	23	880	70	1754	122	12	296	58
Future Volume (vph)	23	880	70	1754	122	12	296	58
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	10.0	74.0	15.0	79.0	51.0	51.0	51.0	51.0
Total Split (%)	7.1%	52.9%	10.7%	56.4%	36.4%	36.4%	36.4%	36.4%
Yellow Time (s)	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
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	77.5	72.3	84.0	75.6	44.3	44.3	44.3	44.3
Actuated g/C Ratio	0.55	0.52	0.60	0.54	0.32	0.32	0.32	0.32
v/c Ratio	0.13	0.72	0.45	0.99	0.49	0.12	0.95	0.31
Control Delay	15.7	23.8	14.0	10.9	44.1	12.4	79.9	26.9
Queue Delay	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0
Total Delay	15.7	23.8	14.0	26.0	44.1	12.4	79.9	26.9
LOS	B	C	B	C	D	B	E	C
Approach Delay		23.7		25.6		34.8		63.7
Approach LOS		C		C		C		E

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 138 (99%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 30.0	Intersection LOS: C
Intersection Capacity Utilization 80.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: E.Cibola Lp. & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	880	89	70	1754	246	122	12	39	296	58	73
Future Volume (veh/h)	23	880	89	70	1754	246	122	12	39	296	58	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	15	1173	119	93	2339	328	163	16	52	395	77	97
Adj No. of Lanes	1	2	0	1	3	0	1	1	0	1	1	0
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	114	1687	171	342	2370	322	351	126	408	445	244	308
Arrive On Green	0.07	1.00	1.00	0.08	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1757	3214	325	1757	4484	610	1194	382	1243	1315	743	936
Grp Volume(v), veh/h	15	639	653	93	1733	934	163	0	68	395	0	174
Grp Sat Flow(s),veh/h/ln	1757	1752	1787	1757	1679	1737	1194	0	1625	1315	0	1679
Q Serve(g_s), s	0.5	0.0	0.0	3.5	0.0	74.0	16.6	0.0	4.1	41.9	0.0	10.9
Cycle Q Clear(g_c), s	0.5	0.0	0.0	3.5	0.0	74.0	27.4	0.0	4.1	46.0	0.0	10.9
Prop In Lane	1.00		0.18	1.00		0.35	1.00		0.76	1.00		0.56
Lane Grp Cap(c), veh/h	114	920	938	342	1775	918	351	0	534	445	0	552
V/C Ratio(X)	0.13	0.69	0.70	0.27	0.98	1.02	0.46	0.00	0.13	0.89	0.00	0.32
Avail Cap(c_a), veh/h	114	920	938	398	1775	918	351	0	534	445	0	552
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	0.0	13.5	0.0	0.0	45.5	0.0	32.9	49.1	0.0	35.2
Incr Delay (d2), s/veh	0.5	2.3	2.3	0.0	2.9	13.7	4.4	0.0	0.5	22.2	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.6	0.6	1.6	0.7	3.5	5.9	0.0	1.9	18.0	0.0	5.3
LnGrp Delay(d),s/veh	32.2	2.3	2.3	13.5	2.9	13.7	49.8	0.0	33.4	71.4	0.0	36.7
LnGrp LOS	C	A	A	B	A	F	D		C	E		D
Approach Vol, veh/h		1307			2760			231			569	
Approach Delay, s/veh		2.6			6.9			45.0			60.8	
Approach LOS		A			A			D			E	

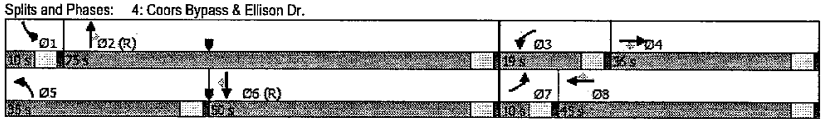
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		51.0	10.5	78.5		51.0	10.0	79.0
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		46.0	10.0	69.0		46.0	5.0	74.0
Max Q Clear Time (g_c+I1), s		29.4	5.5	2.0		48.0	2.5	76.0
Green Ext Time (p_c), s		3.4	0.1	60.5		0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B

Lane Configurations												
Traffic Volume (vph)	189	650	439	375	1074	120	837	2655	198	125	1187	159
Future Volume (vph)	189	650	439	375	1074	120	837	2655	198	125	1187	159
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	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	5.0
Minimum Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0
Total Split (s)	10.0	36.0	36.0	19.0	45.0	45.0	35.0	75.0	75.0	10.0	50.0	50.0
Total Split (%)	7.1%	25.7%	25.7%	13.6%	32.1%	32.1%	25.0%	53.6%	53.6%	7.1%	35.7%	35.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min	C-Min
Act Effct Green (s)	5.0	31.0	31.0	14.0	40.0	40.0	30.0	70.0	70.0	5.0	45.0	45.0
Actuated g/C Ratio	0.04	0.22	0.22	0.10	0.29	0.29	0.21	0.50	0.50	0.04	0.32	0.32
v/c Ratio	1.04	1.12	0.95	1.47	1.43	0.30	1.53	1.41	0.31	1.38	0.98	0.34
Control Delay	138.6	116.0	47.0	269.4	236.6	10.9	283.7	215.1	9.9	261.3	64.7	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Total Delay	138.6	116.0	47.0	269.4	236.7	10.9	284.6	215.1	9.9	261.3	64.7	10.0
LOS	F	F	D	F	F	B	F	F	A	F	E	B
Approach Delay		92.2			227.2			219.9			75.5	
Approach LOS		F			F			F			E	

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 122 (87%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.53	
Intersection Signal Delay: 175.4	Intersection LOS: F
Intersection Capacity Utilization 106.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 4: Coors Bypass & Ellison Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	650	439	375	1074	120	837	2655	198	125	1187	159
Future Volume (veh/h)	189	650	439	375	1074	120	837	2655	198	125	1187	159
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	126	867	0	500	1432	0	1116	3540	0	167	1583	0
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	3	1
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	122	776	347	341	1001	448	730	2518	784	122	1619	504
Arrive On Green	0.07	0.44	0.00	0.10	0.29	0.00	0.21	0.50	0.00	0.04	0.32	0.00
Sat Flow, veh/h	3408	3505	1568	3408	3505	1568	3408	5036	1568	3408	5036	1568
Grp Volume(v), veh/h	126	867	0	500	1432	0	1116	3540	0	167	1583	0
Grp Sat Flow(s),veh/h/ln	1704	1752	1568	1704	1752	1568	1704	1679	1568	1704	1679	1568
Q Serve(g_s), s	5.0	31.0	0.0	14.0	40.0	0.0	30.0	70.0	0.0	5.0	43.6	0.0
Cycle Q Clear(g_c), s	5.0	31.0	0.0	14.0	40.0	0.0	30.0	70.0	0.0	5.0	43.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	122	776	347	341	1001	448	730	2518	784	122	1619	504
V/C Ratio(X)	1.04	1.12	0.00	1.47	1.43	0.00	1.53	1.41	0.00	1.37	0.98	0.00
Avail Cap(c_a), veh/h	122	776	347	341	1001	448	730	2518	784	122	1619	504
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.0	39.0	0.0	63.0	50.0	0.0	55.0	35.0	0.0	67.5	47.0	0.0
Incr Delay (d2), s/veh	70.8	63.2	0.0	225.6	199.3	0.0	244.6	185.1	0.0	210.7	17.7	0.0
Initial Q Delay(d3),s/veh	0.5	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	21.7	0.0	17.3	47.1	0.0	38.9	75.3	0.0	5.9	22.9	0.0
LnGrp Delay(d),s/veh	136.3	102.2	0.0	288.6	249.3	0.0	299.6	220.1	0.0	278.2	64.7	0.0
LnGrp LOS	F	F		F	F		F	F		F	E	
Approach Vol, veh/h		993			1932			4656			1750	
Approach Delay, s/veh		106.5			259.5			239.1			85.1	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	75.0	19.0	36.0	35.0	50.0	10.0	45.0
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	5.0	70.0	14.0	31.0	30.0	45.0	5.0	40.0
Max Q Clear Time (g_c+I1), s	7.0	72.0	16.0	33.0	32.0	45.6	7.0	42.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay	200.3	
HCM 2010 LOS	F	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	1	6	12	153	5	13	17	109	134	15	103	1
Future Volume (vph)	1	6	12	153	5	13	17	109	134	15	103	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.912			0.990			0.930			0.999	
Flt Protected		0.998			0.957			0.997			0.994	
Satd. Flow (prot)	0	1679	0	0	1748	0	0	1710	0	0	1832	0
Flt Permitted		0.998			0.957			0.997			0.994	
Satd. Flow (perm)	0	1679	0	0	1748	0	0	1710	0	0	1832	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		315			265			388			398	
Travel Time (s)		7.2			6.0			10.6			10.9	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1	6	13	163	5	14	18	116	143	16	110	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	0	0	182	0	0	277	0	0	127	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

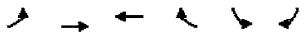
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	6	12	153	5	13	17	109	134	15	103	1
Future Vol, veh/h	1	6	12	153	5	13	17	109	134	15	103	1
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	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	1	6	13	163	5	14	18	116	143	16	110	1

Major/Minor	Minor2			Minor1			Major			Major2		
Conflicting Flow All	375	437	110	375	366	187	111	0	0	259	0	0
Stage 1	142	142	-	223	223	-	-	-	-	-	-	-
Stage 2	233	295	-	152	143	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	614	528	941	614	582	900	1473	-	-	1308	-	-
Stage 1	859	777	-	814	734	-	-	-	-	-	-	-
Stage 2	804	680	-	848	777	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	588	513	941	587	566	900	1473	-	-	1308	-	-
Mov Cap-2 Maneuver	588	513	-	587	566	-	-	-	-	-	-	-
Stage 1	846	767	-	802	723	-	-	-	-	-	-	-
Stage 2	774	670	-	819	767	-	-	-	-	-	-	-

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HCM Control Delay, s	10.1		13.5	0.6	1
HCM LOS	B		B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1473	-	-	727	602	1308	-	-
HCM Lane V/C Ratio	0.012	-	-	0.028	0.302	0.012	-	-
HCM Control Delay (s)	7.5	0	-	10.1	13.5	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1.3	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	165	1064	1431	169	0	143
Future Volume (vph)	165	1064	1431	169	0	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500			0	0	325
Storage Lanes	1			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected	0.950					
Satd. Flow (prot)	1752	3505	3505	1568	0	1596
Flt Permitted	0.950					
Satd. Flow (perm)	1752	3505	3505	1568	0	1596
Link Speed (mph)		40	40		30	
Link Distance (ft)		450	816		232	
Travel Time (s)		7.7	13.9		5.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	176	1132	1522	180	0	152
Shared Lane Traffic (%)						
Lane Group Flow (vph)	176	1132	1522	180	0	152
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 55.4%	ICU Level of Service B
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	165	1064	1431	169	0	143
Future Vol, veh/h	165	1064	1431	169	0	143
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None		None	-	None
Storage Length	500	-	-	0	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	176	1132	1522	180	0	152

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1522	0	-	0	-	761
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.16	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.23	-	-	-	-	3.33
Pot Cap-1 Maneuver	*727	-	-	-	0	*486
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	1	-	-	-		1
Mov Cap-1 Maneuver	*727	-	-	-	-	*486
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

[illegible]	[illegible]	[illegible]	[illegible]
HCM Control Delay, s	1.5	11	[illegible]
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	*727	-	-	-	486
HCM Lane V/C Ratio	0.241	-	-	-	0.313
HCM Control Delay (s)	11.5	-	-	-	15.7
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.9	-	-	-	1.3

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

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	17	183	49	232	245	19
Future Volume (vph)	17	183	49	232	245	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.877				0.990	
Flt Protected	0.996			0.991		
Satd. Flow (prot)	1611	0	0	1828	1826	0
Flt Permitted	0.996			0.991		
Satd. Flow (perm)	1611	0	0	1828	1826	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	197			442	149	
Travel Time (s)	4.5			12.1	4.1	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Adj. Flow (vph)	23	244	65	309	327	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	267	0	0	374	352	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	183	49	232	245	19
Future Vol, veh/h	17	183	49	232	245	19
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	23	244	65	309	327	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	779	339	352	0	-	0
Stage 1	339	-	-	-	-	-
Stage 2	440	-	-	-	-	-
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	369	701	1201	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	676	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	345	701	1201	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	632	-	-	-	-	-

[illegible]	[illegible]	[illegible]	[illegible]
HCM Control Delay, s	14.1	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1201	-	644	-	-
HCM Lane V/C Ratio	0.054	-	0.414	-	-
HCM Control Delay (s)	8.2	0	14.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	2	-	-

Data Entry Sheet

Determination of Warrants for Deceleration Lanes

NM DOT State Access Management Manual Criteria

Driveway "A" / Ellison Dr.

Project Information:

Project Name:	**Cibola Loop Community Center**
Project Location:	**Ellison Dr. / Cibola Loop**
Implemenation Year:	**2020**
Project Environment:	**Urban** **Multi-Lane**

Street Information:

Major Street Name:	**Ellison Dr.**
Minor Street Name:	**Driveway "A"**

Intersection Information:

	Orientation	Prevailing Speed	No. Lanes Each Direction
Driveway "A"	**Southbound**	**25**	**N/A**
Ellison Dr.	**East-West**	**40**	**2**

Determine Case:

Case

1 Urban Two-Lane Highway - Use Table 17.B.1
2 Urban Multi-Lane Highway - Use Table 17.B-2
3 Rural Two Lane Highway - Use Table 17.B-3 and 17.B-5
4 Rural Multi-Lane Highway - Use Table 17.B-4 and 17.B-6

Ellison Dr. is Case	**2**
Speed Category	**35 to 40**

WB Right Turn Volumes		**WB Thru Volumes**
2020 AM Pk. Hr. NO BUILD	0	441
2020 AM Pk. Hr. BUILD	67	441
2020 PM Pk. Hr. NO BUILD	0	1370
2020 PM Pk. Hr. BUILD	166	1370

EB Leftt Turn Volumes		**EB Thru Volumes**
2020 AM Pk. Hr. NO BUILD	0	737
2020 AM Pk. Hr. BUILD	54	806
2020 PM Pk. Hr. NO BUILD	0	943
2020 PM Pk. Hr. BUILD	132	1091

Worksheet Developed by Terry O. Brown, P.E.

Determination of Warrants for Auxiliary Lanes

Project Name: **Cibola Loop Community Center**
Name of Highway: **Ellison Dr.**
Name of Cross Street: **Driveway "A"**

Determination of Warrants for: **Southbound Driveway**

Implementation Year Volumes - **2020** **Posted Speed Limit:** **40**

Right Turn Deceleration Lane - Implementation Year Volumes

Condition	Year	Projected Right Turn Volume	Warrant Volume in thru Lane	Projected Volume in thru Lane	✓ If Met	Lane Length (Deceleration)*	Adjustment Factor for Grade**	Lane Length (Storage)***	Total Lane Length	Taper Ratio
AM Peak Hour NO BUILD	**2020**	-	-	221		N/A		-	**N/A**	**N/A**
AM Peak Hour BUILD	**2020**	67	1	221	✓	325	1.00	-	**325**	**10.5:1**
PM Peak Hour NO BUILD	**2020**	-	-	685		N/A		-	**N/A**	**N/A**
PM Peak Hour BUILD	**2020**	166	1	685	✓	325	1.00	-	**325**	**10.5:1**

Based on Table 17.B-2 (Criteria for Deceleration Lanes on Urban Multi-Lane Highways)

Left Turn Deceleration Lane - Implementation Year Volumes

Condition	Year	Projected Left Turn Volume	Warrant Volume in thru Lane	Projected Volume in thru Lane	✓ If Met	Lane Length (Deceleration)*	Adjustment Factor for Grade**	Lane Length (Storage)***	Total Lane Length	Taper Ratio
AM Peak Hour NO BUILD	**2020**	-	-	369		N/A		N/A	**N/A**	**N/A**
AM Peak Hour BUILD	**2020**	54	1	403	✓	325	1.00	75	**400**	**10.5:1**
PM Peak Hour NO BUILD	**2020**	-	-	472		N/A		N/A	**N/A**	**N/A**
PM Peak Hour BUILD	**2020**	132	1	546	✓	325	1.00	175	**500**	**10.5:1**

Based on Table 17.B-2 (Criteria for Deceleration Lanes on Urban Multi-Lane Highways)

* Lane Length Requirements based on Table 18.K-1 (Deceleration and Acceleraion Lengths)

** Enter Grade Adjustment Factor from Table 18.K-2 or other criteria.

*** Lane Storage Length is Based on a calculated 3-minute queue based on average arrival rate per minute.
= Volume/Hr. divided by 60 times three (rounded) times 25 feet per vehicle.
Lane Storage Length for right turn decel lanes is zero unless there is a stop condition.

Notes and Comments:

1. This warrant sheet is for the southbound Driveway "A" at 100% Development of the Project

Worksheet Developed by Terry O. Brown, P.E.

Table 17.B-2
Criteria For Deceleration Lanes On
URBAN MULTI-LANE HIGHWAYS

Turning Volume[1] (vph)	LEFT-TURN DECELERATION LANE Minimum Volume in Adjacent Through Lane (vphpl)[2]			RIGHT-TURN DECELERATION LANE Minimum Volume in Adjacent Through Lane (vphpl)[2]		
	≤30 mph	35 to 40 mph	45 to 55 mph	≤30 mph	35 to 40 mph	45 to 55 mph
<5	**Not Required**	**Not Required**	**Not Required**	**Not Required**	**Not Required**	**Not Required**
5	**Not Required**	**490**	**420**	**1,200**	**730**	**450**
10	**420**	**370**	**300**	**820**	**490**	**320**
15	**360**	**290**	**220**	**600**	**350**	**240**
20	**310**	**230**	**160**	**460**	**260**	**180**
25	**270**	**190**	**130**	**360**	**230**	**150**
30	**240**	**160**	**110**	**290**	**200**	**130**
35	**210**	**130**	**100**	**260**	**180**	**120**
40	**180**	**120**	**Required**	**240**	**170**	**110**
45	**160**	**110**	**Required**	**220**	**160**	**Required**
50	**140**	**Required**	**Required**	**200**	**Required**	**Required**
55	**120**	**Required**	**Required**	**190**	**Required**	**Required**
≥56	**Required**	**Required**	**Required**	**Required**	**Required**	**Required**
	Left-turn Deceleratаion Lanes are Required on Urban Multi-lane Highways for the following Left-turn Volumes: • ≤30 mph : 56 vph or more • 35 to 40 mph : 46 vph or more • 45 to 55 mph : 36 vph or more			***Right-turn Deceleratаion Lanes are Required on Urban Multi-lane Highways for the following Right-turn Volumes:*** • ≤30 mph : 56 vph or more • 35 to 40 mph : 46 vph or more • 45 to 55 mph : 41 vph or more		

Notes:

1. *Use linear interpolation for turning volumes between 5 and 55 vph.*
2. *The volume in the adjacent through lane includes through vehicles and turning vehicles.*

Table 18.K-1
Deceleration and Acceleration Lengths (feet)

Speed Change Lane Condition	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
Deceleration Distance										
Stop Condition	150	200	250	325	400	475	550	650	725	850
Slow to 15 MPH	130	175	230	300	370	450	525	620	700	820
Deceleration Taper										
Length for 12-foot Lane	50	75	100	125	150	175	200	225	250	250
Straight Line Ratios (L:W)	4:1	6:1	8:1	10.5:1	12.5:1	14.5:1	16.5:1	18.5:1	21:1	21:1
Acceleration Lane Length	N/A	190	270	380	550	760	960	1,170	1,380	1,590
Acceleration Taper										
Length of 12-foot Lane	N/A	100	120	150	170	180	230	270	300	300
Straight Line Ratios (L:W)	N/A	8:1	10:1	12.5:1	14:1	15:1	19:1	22.5:1	25:1	25:1

Traffic Count Data Sheet

Year Counts Taken: **2016** E-W Street: **EllisonDr.** Speed Limit (EllisonDr.)= **35** MPH

N-S Street: **7 Bar Loop E.** Speed Limit (7 Bar Loop E.)= **35** MPH

UNSIGNALIZED 8/4/16

Begin Time	End Time	Eastbound (EllisonDr.)				Westbound (EllisonDr.)				Northbound (7 Bar Loop E.)				Southbound (7 Bar Loop E.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	~~10~~	~~126~~	~~0~~	~~0~~	~~0~~	~~57~~	~~3~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~18~~	~~0~~	~~22~~	~~0~~
7:15 AM	7:30 AM	**5**	**156**	**0**	**0**	**0**	**80**	**5**	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**26**	**0**
7:30 AM	7:45 AM	**23**	**182**	**0**	**1**	**0**	**101**	**3**	**2**	**0**	**0**	**0**	**0**	**19**	**0**	**25**	**0**
7:45 AM	8:00 AM	**10**	**135**	**0**	**1**	**0**	**81**	**8**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**18**	**0**
8:00 AM	8:15 AM	**12**	**138**	**0**	**0**	**0**	**82**	**8**	**1**	**0**	**0**	**0**	**0**	**16**	**0**	**9**	**0**
8:15 AM	8:30 AM	~~3~~	~~128~~	~~0~~	~~1~~	~~0~~	~~70~~	~~5~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~8~~	~~0~~	~~15~~	~~0~~
8:30 AM	8:45 AM	~~16~~	~~136~~	~~0~~	~~0~~	~~0~~	~~87~~	~~7~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~7~~	~~0~~	~~12~~	~~0~~
8:45 AM	9:00 AM	~~10~~	~~161~~	~~0~~	~~0~~	~~0~~	~~105~~	~~4~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~10~~	~~0~~	~~16~~	~~0~~
AM Peak Hour Volumes		**50**	**611**	**0**	**2**	**0**	**344**	**24**	**3**	**0**	**0**	**0**	**0**	**66**	**0**	**78**	**0**
% of Total Traffic		4.2%	51.9%	0.0%		0.0%	29.2%	2.0%		0.0%	0.0%	0.0%		5.6%	0.0%	0.0%	
% Directional			56.1%				31.2%		**Intersection**		0.0%				5.6%		
AM Peak Hour Factor			*0.81*				*0.88*		**0.83**						*0.82*		

Begin Time	End Time	Eastbound (EllisonDr.)				Westbound (EllisonDr.)				Northbound (7 Bar Loop E.)				Southbound (7 Bar Loop E.)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	~~12~~	~~177~~	~~0~~	~~0~~	~~0~~	~~228~~	~~27~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~9~~	~~0~~	~~19~~	~~0~~
4:15 PM	4:30 PM	**19**	**206**	**0**	**0**	**0**	**272**	**26**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**18**	**0**
4:30 PM	4:45 PM	**16**	**230**	**0**	**0**	**0**	**278**	**39**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**21**	**0**
4:45 PM	5:00 PM	**22**	**207**	**0**	**0**	**0**	**299**	**28**	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**28**	**0**
5:00 PM	5:15 PM	**24**	**210**	**0**	**0**	**0**	**310**	**40**	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**29**	**0**
5:15 PM	5:30 PM	~~28~~	~~202~~	~~0~~	~~0~~	~~0~~	~~244~~	~~27~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~11~~	~~0~~	~~30~~	~~0~~
5:30 PM	5:45 PM	~~30~~	~~193~~	~~0~~	~~1~~	~~0~~	~~266~~	~~35~~	~~1~~	~~0~~	~~0~~	~~0~~	~~0~~	~~19~~	~~0~~	~~19~~	~~0~~
5:45 PM	6:00 PM	~~11~~	~~182~~	~~0~~	~~0~~	~~0~~	~~232~~	~~20~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~9~~	~~0~~	~~27~~	~~0~~
PM Peak Hour Volumes		**81**	**853**	**0**	**0**	**0**	**1159**	**133**	**0**	**0**	**0**	**0**	**0**	**65**	**0**	**96**	**0**
% of Total Traffic		3.4%	35.7%	0.0%		0.0%	48.6%	5.6%		0.0%	0.0%	0.0%		2.7%	0.0%	4.0%	
% Directional			39.1%				54.1%		**Intersection**		0.0%				6.7%		
PM Peak Hour Factor			*0.95*				*0.92*		**0.94**						*0.77*		

Traffic Count Data Sheet

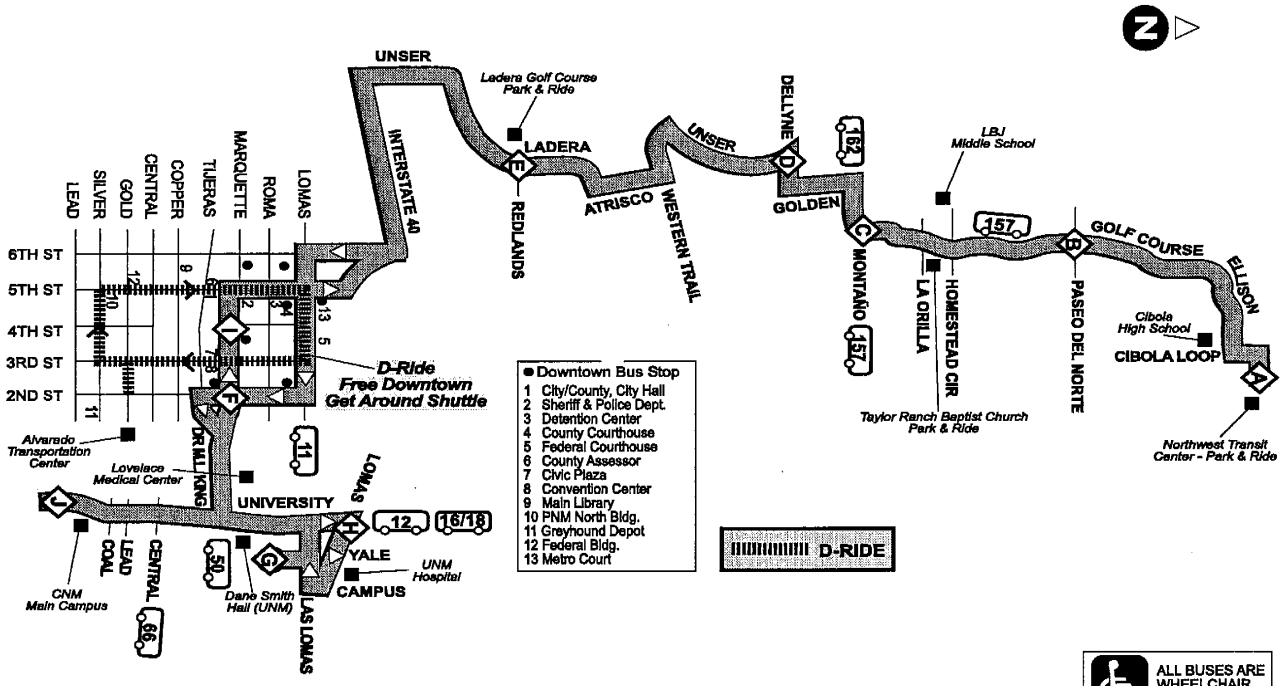
Year Counts Taken: **2016**
E-W Street: **Ellison Dr.**
N-S Street: **Coors Bypass**
SIGNALIZED
Speed Limit (Ellison Dr.)= **40** MPH
Speed Limit (Coors Bypass)= **45** MPH
8/4/16

Begin	End	Eastbound (Ellison Dr.)				Westbound (Ellison Dr.)				Northbound (Coors Bypass)				Southbound (Coors Bypass)			
Time	Time	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
7:00 AM	7:15 AM	~~12~~	~~109~~	~~87~~	~~1~~	~~10~~	~~32~~	~~2~~	~~2~~	~~36~~	~~183~~	~~10~~	~~0~~	~~16~~	~~374~~	~~9~~	~~1~~
7:15 AM	7:30 AM	**18**	**118**	**88**	**0**	**18**	**32**	**5**	**2**	**39**	**231**	**5**	**0**	**13**	**382**	**10**	**3**
7:30 AM	7:45 AM	**28**	**117**	**89**	**0**	**22**	**39**	**5**	**1**	**51**	**215**	**13**	**0**	**22**	**393**	**13**	**1**
7:45 AM	8:00 AM	**19**	**148**	**74**	**1**	**29**	**63**	**3**	**2**	**50**	**273**	**16**	**0**	**18**	**322**	**8**	**1**
8:00 AM	8:15 AM	**19**	**87**	**77**	**1**	**16**	**34**	**3**	**0**	**51**	**250**	**19**	**0**	**14**	**320**	**11**	**0**
8:15 AM	8:30 AM	~~20~~	~~99~~	~~72~~	~~1~~	~~29~~	~~40~~	~~5~~	~~1~~	~~41~~	~~249~~	~~15~~	~~0~~	~~13~~	~~330~~	~~4~~	~~1~~
8:30 AM	8:45 AM	~~22~~	~~98~~	~~55~~	~~2~~	~~19~~	~~40~~	~~14~~	~~5~~	~~35~~	~~205~~	~~13~~	~~0~~	~~17~~	~~326~~	~~8~~	~~0~~
8:45 AM	9:00 AM	~~34~~	~~89~~	~~78~~	~~1~~	~~31~~	~~50~~	~~7~~	~~0~~	~~51~~	~~220~~	~~26~~	~~0~~	~~17~~	~~298~~	~~11~~	~~0~~
AM Peak Hour Volumes		**84**	**470**	**328**	**2**	**85**	**168**	**16**	**5**	**191**	**969**	**53**	**0**	**67**	**1417**	**42**	**5**
% of Total Traffic		2.2%	12.0%	8.4%		2.2%	4.3%	0.4%		4.9%	24.8%	1.4%		1.7%	36.3%	0.1%	
% Directional			22.6%				6.9%		**Intersection**		31.1%				38.2%		
AM Peak Hour Factor			***0.91***				***0.71***		**0.95**		***0.89***				***0.89***		

Begin	End	Eastbound (Ellison Dr.)				Westbound (Ellison Dr.)				Northbound (Coors Bypass)				Southbound (Coors Bypass)			
Time	Time	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
4:00 PM	4:15 PM	~~19~~	~~113~~	~~84~~	~~1~~	~~59~~	~~162~~	~~25~~	~~2~~	~~130~~	~~457~~	~~44~~	~~0~~	~~46~~	~~305~~	~~22~~	~~0~~
4:15 PM	4:30 PM	~~32~~	~~97~~	~~78~~	~~0~~	~~77~~	~~165~~	~~15~~	~~1~~	~~141~~	~~503~~	~~35~~	~~1~~	~~33~~	~~279~~	~~13~~	~~0~~
4:30 PM	4:45 PM	~~25~~	~~124~~	~~85~~	~~3~~	~~88~~	~~170~~	~~6~~	~~2~~	~~141~~	~~501~~	~~47~~	~~5~~	~~34~~	~~328~~	~~16~~	~~3~~
4:45 PM	5:00 PM	**38**	**138**	**69**	**1**	**76**	**177**	**9**	**0**	**136**	**540**	**42**	**0**	**36**	**316**	**27**	**1**
5:00 PM	5:15 PM	**39**	**137**	**91**	**2**	**64**	**182**	**16**	**2**	**157**	**522**	**35**	**1**	**27**	**277**	**13**	**2**
5:15 PM	5:30 PM	**32**	**160**	**101**	**1**	**63**	**179**	**20**	**0**	**146**	**530**	**39**	**1**	**33**	**307**	**12**	**0**
5:30 PM	5:45 PM	**32**	**144**	**73**	**1**	**128**	**355**	**61**	**6**	**281**	**1011**	**78**	**1**	**27**	**264**	**57**	**2**
5:45 PM	6:00 PM	~~21~~	~~128~~	~~92~~	~~0~~	~~10~~	~~5~~	~~0~~	~~0~~	~~21~~	~~79~~	~~3~~	~~0~~	~~28~~	~~285~~	~~14~~	~~0~~
PM Peak Hour Volumes		**141**	**579**	**334**	**5**	**331**	**893**	**106**	**8**	**720**	**2603**	**194**	**3**	**123**	**1164**	**109**	**5**
% of Total Traffic		1.9%	7.9%	4.6%		4.5%	12.2%	1.4%		9.8%	35.6%	2.7%		1.7%	15.9%	1.5%	
% Directional			14.4%				18.2%		**Intersection**		48.1%				19.1%		
PM Peak Hour Factor			***0.90***				***0.81***		**0.73**		***0.64***				***0.92***		

Route / Ruta 92
Taylor Ranch Express

Effective: 8/10/2013



Route 92 - Weekday Southbound

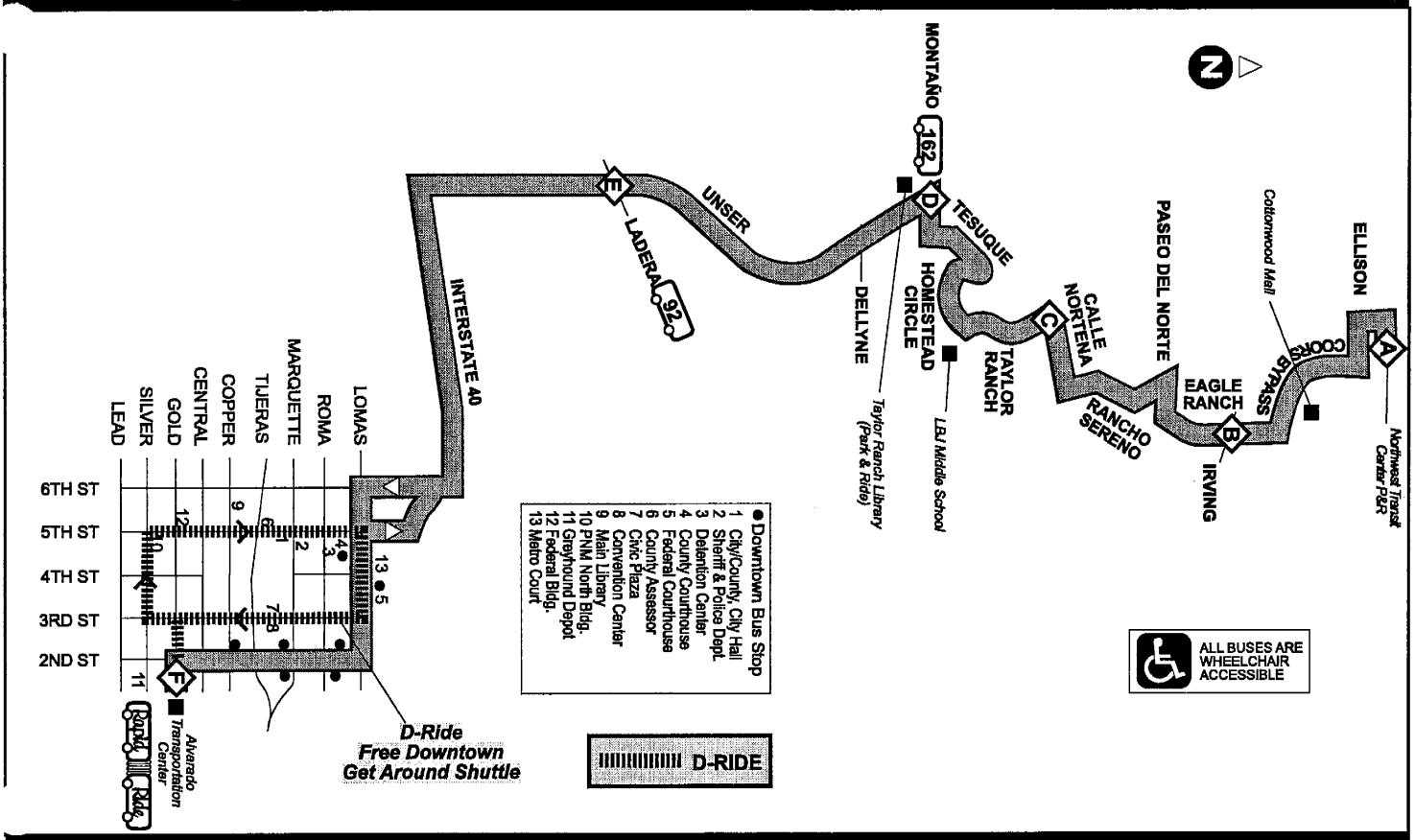
NORTHWEST TRANSIT CENTER P&R (A)	GOLF COURSE & PASEO DEL NORTE (B)	MONTAÑO & TAYLOR RANCH (C)	DELLYNE & UNSER (D)	LADERA & REDLANDS (E)	2ND & MARQUETTE (F)	UNIVERSITY & LOMAS (H)	DANE SMITH HALL (UNM) (G)	UNIVERSITY & BASEHART (CNM) (J)
6:17a	6:26a	6:31a	6:36a	6:42a	7:01a	7:08a	7:11a	7:20a
6:41a	6:51a	6:56a	7:01a	7:08a	7:28a	7:35a	7:39a	7:48a

Route 92 - Weekday Northbound

UNIVERSITY & BASEHART (CNM) (J)	UNIVERSITY & LOMAS (H)	DANE SMITH HALL (UNM) (G)	4TH & MARQUETTE (I)	LADERA & REDLANDS (E)	DELLYNE & UNSER (D)	MONTAÑO & TAYLOR RANCH (C)	GOLF COURSE & PASEO DEL NORTE (B)	NORTHWEST TRANSIT CENTER P&R (A)
4:27p	4:33p	4:37p	4:46p	5:05p	5:11p	5:16p	5:20p	5:30p
4:56p	5:02p	5:06p	5:16p	5:36p	5:42p	5:47p	5:51p	6:01p

Route 94 / Ruta 94
Unser Express

Effective: 8/10/2013



Route 94 - Weekday Southbound

NORTHWEST TRANSIT CENTER P&R (A)	EAGLE RANCH & IRVING (B)	CALLE NORTENA & TAYLOR RANCH (C)	UNSER & MONTAÑO (D)	UNSER & LADERA (E)	ALVARADO TRANSPORTATION CENTER (F)
5:58a	6:02a	6:10a	6:20a	6:27a	6:43a
6:52a	6:56a	7:05a	7:15a	7:26a	7:46a

Route 94 - Weekday Northbound

ALVARADO TRANSPORTATION CENTER (F)	UNSER & LADERA (E)	UNSER & MONTAÑO (D)	CALLE NORTENA & TAYLOR RANCH (C)	EAGLE RANCH & IRVING (B)	NORTHWEST TRANSIT CENTER P&R (A)
4:41p	5:01p	5:09p	5:18p	5:27p	5:34p
5:11p	5:32p	5:40p	5:49p	5:57p	6:04p

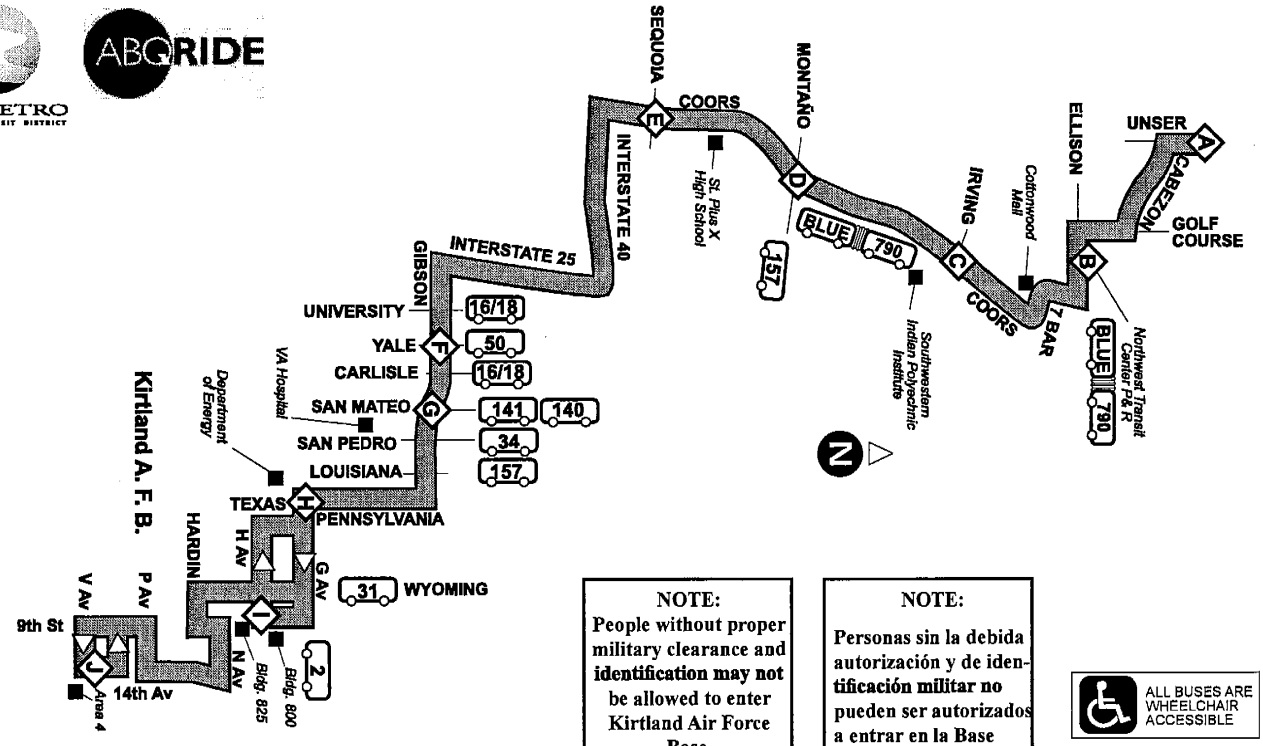
Route / Ruta 96
Crosstown Commuter

Effective: 5/17/2014

Route partially funded by

RIO METRO REGIONAL TRANSIT DISTRICT

ABQRIDE



NOTE:
People without proper military clearance and **identification may not** be allowed to enter Kirtland Air Force Base.

NOTE:
Personas sin la debida autorización y de identificación militar no pueden ser autorizados a entrar en la Base Aérea Kirtland.

ALL BUSES ARE WHEELCHAIR ACCESSIBLE

Route 96 - Weekday Southbound

SOUTHERN & UNSER (A)	NORTHWEST TRANSIT CENTER P&R (B)	COORS & IRVING (C)	COORS & MONTAÑO (D)	COORS & SEQUOIA (E)	GIBSON & YALE (F)	GIBSON & SAN MATEO (G)	G STREET D.O.E. BLDG. (H)	BUILDING 800 (I)	AREA 4 (J)
5:16a	5:26a	5:37a	5:43a	5:48a	6:00a	6:04a	6:11a	6:15a	6:27a
5:30a	5:40a	5:51a	5:57a	6:02a	6:14a	6:18a	6:25a	6:29a	6:41a
5:55a	6:07a	6:17a	6:22a	6:27a	6:41a	6:46a	6:53a	6:57a	7:09a
6:25a	6:37a	6:47a	6:52a	6:57a	7:11a	7:16a	7:23a	7:27a	7:39a
6:46a	6:59a	7:11a	7:18a	7:24a	7:44a	7:49a	7:58a	8:01a	8:12a

Route 96 - Weekday Northbound

AREA 4 (J)	BUILDING 800 (I)	G STREET D.O.E. BLDG. (H)	GIBSON & SAN MATEO (G)	GIBSON & YALE (F)	COORS & SEQUOIA (E)	COORS & MONTAÑO (D)	COORS & IRVING (C)	NORTHWEST TRANSIT CENTER P&R (B)	SOUTHERN & UNSER (A)
3:51p	3:58p	4:02p	4:09p	4:16p	4:33p	4:39p	4:45p	4:56p	5:12p
4:02p	4:09p	4:13p	4:20p	4:27p	4:44p	4:50p	4:56p	5:07p	5:23p
4:19p	4:28p	4:32p	4:39p	4:46p	5:03p	5:09p	5:16p	5:27p	5:43p
4:35p	4:44p	4:48p	4:55p	5:02p	5:19p	5:25p	5:32p	5:43p	5:59p
5:15p	5:24p	5:28p	5:35p	5:42p	5:59p	6:05p	6:12p	6:23p	6:39p

IMPORTANT:

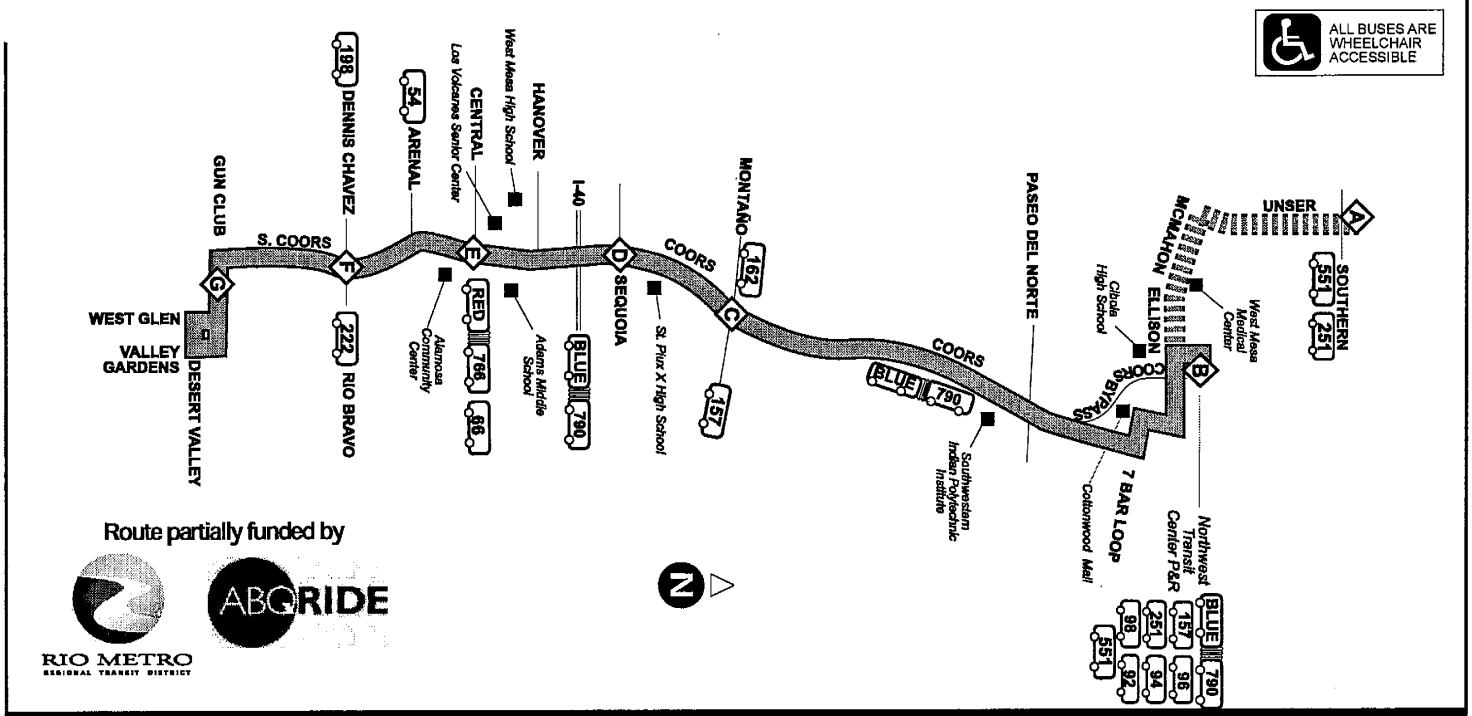
Due to varying military restrictions, access to Kirtland Air Force Base may be changed at any time. If you are traveling to KAFB please call 243-RIDE (243-7433) for current information.

IMPORTANTE:

Debido a diferentes restricciones militares, el acceso a La Base Aerea Kirtland puede cambiar en cualquier momento. Si usted viaja hacia KAFB en autobùs, por favor llame al 243-RIDE (243-7433) para obtener información actualizada.

Route / Ruta 155
Coors Blvd.

Effective: 5/17/2014



Route 155 - Weekday - Southbound

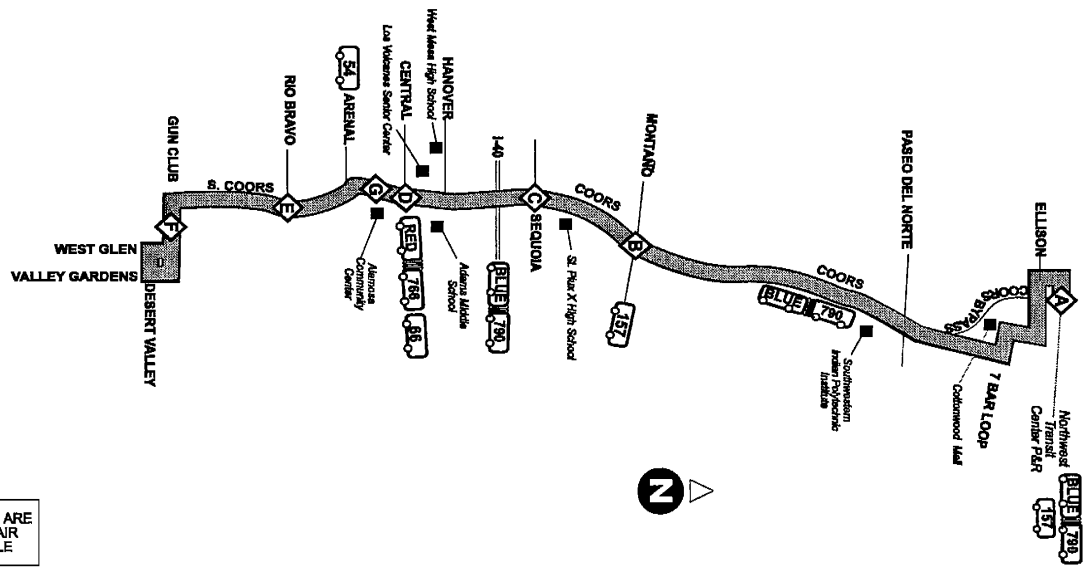
SOUTHERN & UNSER (A)	NORTHWEST TRANSIT CENTER P & R (B)	COORS & MONTAÑO (C)	COORS & SEQUOIA (D)	COORS & CENTRAL (E)	COORS & RIO BRAVO (F)	COORS & GUN CLUB (G)
5:36a	5:50a	6:09a	6:14a	6:23a	6:33a	6:40a
6:10a	6:24a	6:43a	6:50a	7:01a	7:11a	7:18a
6:41a	6:55a	7:14a	7:21a	7:32a	7:42a	7:49a
7:15a	7:29a	7:48a	7:53a	8:04a	8:14a	8:21a
7:49a	8:03a	8:22a	8:27a	8:38a	8:48a	8:55a
.....	8:36a	8:53a	8:58a	9:08a	9:18a	9:25a
.....	9:06a	9:23a	9:28a	9:38a	9:48a	9:55a
.....	9:36a	9:53a	9:58a	10:08a	10:18a	10:25a
.....	10:04a	10:22a	10:27a	10:38a	10:48a	10:55a
.....	10:34a	10:52a	10:57a	11:08a	11:18a	11:25a
.....	11:04a	11:22a	11:27a	11:38a	11:48a	11:55a
.....	11:34a	11:52a	11:57a	12:08p	12:18p	12:25p
.....	12:05p	12:23p	12:28p	12:39p	12:50p	12:57p
.....	12:35p	12:53p	12:58p	1:09p	1:20p	1:27p
.....	1:05p	1:23p	1:28p	1:39p	1:50p	1:57p
.....	1:34p	1:52p	1:57p	2:09p	2:21p	2:28p
.....	2:05p	2:23p	2:28p	2:40p	2:52p	2:59p
.....	2:35p	2:53p	2:58p	3:10p	3:22p	3:29p
.....	3:03p	3:22p	3:28p	3:40p	3:52p	3:59p
.....	3:34p	3:53p	3:59p	4:11p	4:23p	4:30p
.....	4:03p	4:22p	4:28p	4:40p	4:52p	4:59p
.....	4:36p	4:55p	5:01p	5:12p	5:23p	5:30p
4:51p	5:05p	5:24p	5:30p	5:42p	5:53p	6:00p
5:21p	5:35p	5:54p	6:00p	6:11p	6:22p	6:29p
5:52p	6:06p	6:25p	6:31p	6:42p	6:53p	7:00p
.....	6:39p	6:56p	7:01p	7:10p	7:19p	7:26p
.....	7:18p	7:35p	7:40p	7:49p	7:58p	8:05p
.....	8:02p	8:19p	8:24p	8:33p	8:42p	8:49p
.....	8:40p	8:57p	9:02p	9:11p	9:20p	9:27p
.....	9:38p	9:55p	10:00p	10:09p	10:18p	10:25p

Route 155 - Weekday - Northbound

COORS & GUN CLUB (G)	COORS & RIO BRAVO (F)	COORS & CENTRAL (E)	COORS & SEQUOIA (D)	COORS & MONTAÑO (C)	NORTHWEST TRANSIT CENTER P & R (B)	SOUTHERN & UNSER (A)
6:35a	6:39a	6:52a	7:01a	7:07a	7:21a	7:36a
7:05a	7:09a	7:22a	7:31a	7:37a	7:51a	.....
7:36a	7:40a	7:53a	8:02a	8:08a	8:22a	.....
8:09a	8:13a	8:26a	8:35a	8:41a	8:55a	.....
8:39a	8:43a	8:56a	9:05a	9:11a	9:25a	.....
9:09a	9:13a	9:26a	9:35a	9:41a	9:55a	.....
9:38a	9:42a	9:55a	10:05a	10:11a	10:25a	.....
10:07a	10:11a	10:24a	10:34a	10:40a	10:54a	.....
10:37a	10:41a	10:54a	11:04a	11:10a	11:24a	.....
11:07a	11:11a	11:24a	11:34a	11:40a	11:54a	.....
11:37a	11:41a	11:54a	12:04p	12:10p	12:24p	.....
12:07p	12:11p	12:24p	12:34p	12:40p	12:54p	.....
12:38p	12:42p	12:55p	1:05p	1:11p	1:25p	.....
1:08p	1:12p	1:25p	1:35p	1:41p	1:55p	.....
1:38p	1:42p	1:55p	2:05p	2:11p	2:25p	.....
2:08p	2:12p	2:26p	2:36p	2:42p	2:56p	.....
2:38p	2:42p	2:56p	3:06p	3:12p	3:26p	.....
3:09p	3:13p	3:27p	3:38p	3:45p	4:00p	.....
3:40p	3:44p	3:58p	4:08p	4:15p	4:30p	4:46p
4:10p	4:14p	4:28p	4:38p	4:45p	5:00p	5:16p
4:41p	4:45p	4:58p	5:09p	5:16p	5:31p	5:47p
5:12p	5:16p	5:29p	5:40p	5:47p	6:02p	6:18p
5:42p	5:46p	5:59p	6:10p	6:17p	6:32p	.....
6:12p	6:16p	6:29p	6:40p	6:47p	7:02p	.....
6:44p	6:48p	6:59p	7:09p	7:15p	7:29p	.....
7:11p	7:15p	7:26p	7:36p	7:42p	7:56p	.....
7:49p	7:53p	8:04p	8:13p	8:19p	8:33p	.....
8:34p	8:38p	8:49p	8:58p	9:04p	9:18p	.....
9:40p	9:44p	9:55p	10:04p	10:10p	10:24p	.....

Route / Ruta 155
Coors Blvd.

Effective: 8/10/2013



Route 155 - Saturday Southbound

NORTHWEST TRANSIT CENTER P & R (A)	COORS & MONTAÑO (B)	COORS & SEQUOIA (C)	COORS & CENTRAL (D)	COORS & RIO BRAVO (E)	COORS & GUN CLUB (F)
6:57a	7:12a	7:17a	7:25a	7:34a	7:41a
7:42a	7:57a	8:02a	8:10a	8:19a	8:26a
8:27a	8:42a	8:47a	8:55a	9:04a	9:11a
9:11a	9:26a	9:31a	9:40a	9:49a	9:56a
9:56a	10:11a	10:16a	10:25a	10:35a	10:42a
10:42a	10:57a	11:03a	11:10a	11:21a	11:28a
11:27a	11:42a	11:48a	11:55a	12:06p	12:13p
12:11p	12:26p	12:32p	12:40p	12:50p	12:57p
12:56p	1:12p	1:17p	1:25p	1:35p	1:42p
1:41p	1:57p	2:02p	2:10p	2:20p	2:27p
2:24p	2:40p	2:45p	2:56p	3:06p	3:13p
3:09p	3:25p	3:30p	3:41p	3:51p	3:58p
3:54p	4:10p	4:15p	4:26p	4:36p	4:43p
4:39p	4:55p	5:00p	5:11p	5:21p	5:28p
5:24p	5:40p	5:45p	5:56p	6:05p	6:12p
6:13p	6:28p	6:32p	6:40p	6:48p	6:55p
6:58p	7:13p	7:17p	7:25p	7:33p	7:40p
7:43p	7:58p	8:02p	8:10p	8:18p	8:25p
8:28p	8:43p	8:47p	8:55p	9:03p	9:19p
9:28p	9:43p	9:47p	9:55p	10:03p	10:10p

Route 155 - Saturday Northbound

COORS & GUN CLUB (F)	COORS & RIO BRAVO (E)	COORS & CENTRAL (D)	COORS & SEQUOIA (C)	COORS & MONTAÑO (B)	NORTHWEST TRANSIT CENTER P & R (A)
7:47a	7:51a	8:00a	8:10a	8:16a	8:31a
8:42a	8:46a	8:55a	9:05a	9:11a	9:26a
9:27a	9:31a	9:40a	9:50a	9:56a	10:11a
10:12a	10:16a	10:25a	10:34a	10:40a	10:55a
10:56a	11:00a	11:10a	11:18a	11:24a	11:39a
11:40a	11:45a	11:55a	12:03p	12:09p	12:24p
12:27p	12:32p	12:40p	12:50p	12:57p	1:13p
1:12p	1:17p	1:25p	1:35p	1:42p	1:58p
1:57p	2:02p	2:10p	2:20p	2:27p	2:43p
2:42p	2:47p	2:55p	3:05p	3:12p	3:28p
3:27p	3:32p	3:40p	3:50p	3:57p	4:13p
4:10p	4:15p	4:25p	4:36p	4:41p	4:57p
4:55p	5:00p	5:10p	5:21p	5:26p	5:42p
5:40p	5:45p	5:55p	6:06p	6:11p	6:27p
6:27p	8:31p	6:40p	6:48p	6:53p	7:08p
7:12p	7:16p	7:25p	7:33p	7:38p	7:53p
7:57p	8:01p	8:10p	8:18p	8:23p	8:38p

Route 155 - Sunday Southbound

NORTHWEST TRANSIT CENTER P & R (A)	COORS & MONTAÑO (B)	COORS & SEQUOIA (C)	COORS & CENTRAL (D)	ALAMOSA COMMUNITY CTR. (G)
10:09a	10:24a	10:30a	10:39a	10:41a
10:54a	11:09a	11:15a	11:24a	11:26a
11:39a	11:54a	12:00p	12:09p	12:11p
12:24p	12:39p	12:45p	12:54p	12:56p
1:09p	1:24p	1:30p	1:39p	1:41p
1:54p	2:09p	2:15p	2:24p	2:26p
2:39p	2:54p	3:00p	3:09p	3:11p
3:24p	3:39p	3:45p	3:54p	3:56p
4:09p	4:24p	4:30p	4:39p	4:41p

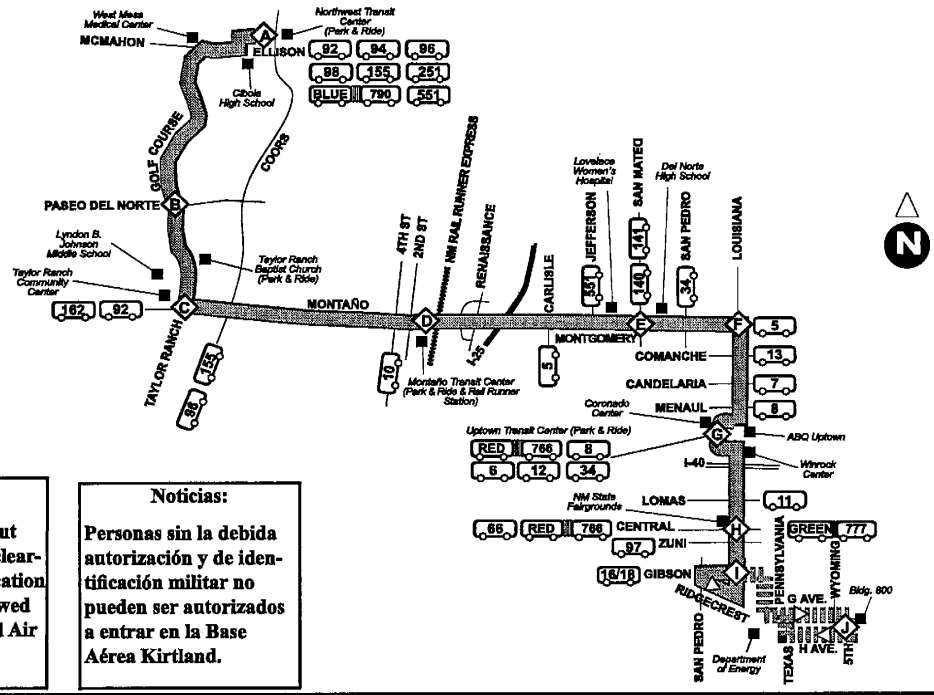
Route 155 - Sunday Northbound

ALAMOSA COMMUNITY CTR. (G)	COORS & CENTRAL (D)	COORS & SEQUOIA (C)	COORS & MONTAÑO (B)	NORTHWEST TRANSIT CENTER P & R (A)
10:00a	10:02a	10:11a	10:18a	10:33a
10:45a	10:47a	10:56a	11:03a	11:18a
11:30a	11:32a	11:41a	11:48a	12:03p
12:15p	12:17p	12:26p	12:33p	12:48p
1:00p	1:02p	1:11p	1:18p	1:33p
1:45p	1:47p	1:56p	2:03p	2:18p
2:30p	2:32p	2:41p	2:48p	3:03p
3:15p	3:17p	3:26p	3:33p	3:48p
4:00p	4:02p	4:11p	4:18p	4:33p

NO SERVICE TO GUN CLUB OR RIO BRAVO ON SUNDAYS
NO HAY SERVICIO A GUN CLUB O RIO BRAVO LOS DOMINGOS

Route / Ruta 157 — Effective: 1/11/2014
Louisiana / Uptown / Montaño / NWTC

ALL BUSES ARE WHEELCHAIR ACCESSIBLE



NOTE:
People without proper military clearance and identification may not be allowed to enter Kirtland Air Force Base.

Noticias:
Personas sin la debida autorización y de identificación militar no pueden ser autorizados a entrar en la Base Aérea Kirtland.

Route 157 - Weekday South / Eastbound

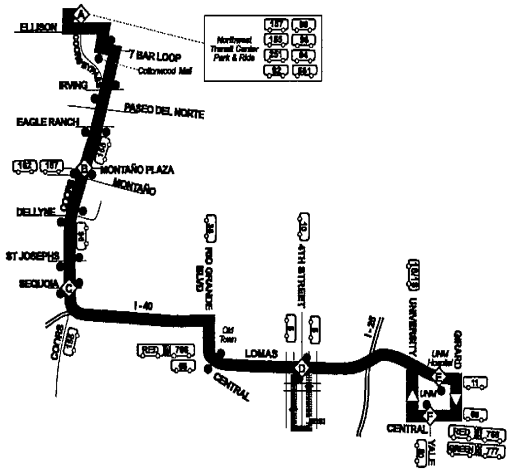
NORTHWEST TRANSIT CENTER P&R (A)	GOLF COURSE & PASEO DEL NORTE (B)	MONTAÑO & TAYLOR RANCH (C)	MONTAÑO TRANSIT CENTER (D)	MONTGOMERY & SAN MATEO (E)	MONTGOMERY & LOUISIANA (F)	UPTOWN TRANSIT CENTER P&R (G)	LOUISIANA & CENTRAL (H)	LOUISIANA & GIBSON (I)	BLDG. 800 (J)
5:24a	5:33a	5:38a	5:47a	5:55a	5:59a	6:06a	6:14a	6:18a	6:27a
5:57a	6:07a	6:12a	6:22a	6:31a	6:35a	6:42a	6:51a	6:55a	7:04a
6:14a	6:25a	6:30a	6:40a	6:49a	6:53a	7:01a	7:10a	7:14a	7:23a
6:29a	6:40a	6:45a	6:55a	7:04a	7:08a	7:16a	7:25a	7:29a	7:38a
6:51a	7:02a	7:07a	7:17a	7:26a	7:30a	7:38a	7:47a	7:51a	8:00a
7:05a	7:16a	7:21a	7:37a	7:47a	7:51a	8:00a	8:09a	8:13a	8:21a
7:25a	7:36a	7:41a	7:57a	8:07a	8:11a	8:20a	8:29a	8:33a	8:41a
7:51a	8:01a	8:06a	8:19a	8:28a	8:32a	8:40a	8:49a	8:53a	.....
8:15a	8:25a	8:30a	8:40a	8:49a	8:53a	9:01a	9:10a	9:14a	.....
8:34a	8:44a	8:49a	8:59a	9:08a	9:12a	9:20a	9:29a	9:33a	.....
8:55a	9:05a	9:10a	9:19a	9:28a	9:32a	9:40a	9:49a	9:53a	.....
9:13a	9:23a	9:28a	9:37a	9:46a	9:50a	9:58a	10:07a	10:11a	.....
9:32a	9:42a	9:47a	9:56a	10:05a	10:09a	10:17a	10:26a	10:30a	.....
9:52a	10:02a	10:07a	10:17a	10:27a	10:31a	10:40a	10:49a	10:53a	.....
10:12a	10:22a	10:27a	10:37a	10:47a	10:51a	11:00a	11:09a	11:13a	.....
10:32a	10:42a	10:47a	10:57a	11:07a	11:11a	11:20a	11:29a	11:33a	.....
10:52a	11:02a	11:07a	11:17a	11:27a	11:31a	11:40a	11:49a	11:53a	.....
11:12a	11:22a	11:27a	11:37a	11:47a	11:51a	12:00p	12:09p	12:13p	.....
11:31a	11:41a	11:46a	11:56a	12:06p	12:10p	12:19p	12:28p	12:32p	.....
11:48a	11:58a	12:03p	12:13p	12:23p	12:27p	12:36p	12:45p	12:49p	12:57p
12:10p	12:20p	12:25p	12:35p	12:45p	12:50p	1:00p	1:09p	1:13p	.....
12:30p	12:40p	12:45p	12:55p	1:05p	1:10p	1:20p	1:29p	1:33p	.....
12:49p	1:00p	1:05p	1:15p	1:25p	1:30p	1:40p	1:50p	1:55p	.....
1:09p	1:20p	1:25p	1:35p	1:45p	1:50p	2:00p	2:10p	2:15p	.....
1:27p	1:37p	1:42p	1:51p	2:01p	2:06p	2:16p	2:26p	2:31p	2:39p
1:47p	1:57p	2:02p	2:11p	2:21p	2:26p	2:36p	2:46p	2:51p	2:59p
2:08p	2:16p	2:23p	2:32p	2:42p	2:47p	2:57p	3:07p	3:12p	3:20p
2:29p	2:39p	2:44p	2:53p	3:03p	3:08p	3:18p	3:28p	3:33p	3:41p
2:49p	2:59p	3:04p	3:13p	3:23p	3:28p	3:38p	3:48p	3:53p	4:01p
3:09p	3:19p	3:24p	3:33p	3:43p	3:48p	3:58p	4:08p	4:13p	4:21p
3:29p	3:40p	3:45p	3:54p	4:05p	4:10p	4:20p	4:30p	4:35p	4:43p
3:50p	4:01p	4:06p	4:15p	4:26p	4:31p	4:41p	4:51p	4:56p	5:04p
4:13p	4:24p	4:29p	4:38p	4:49p	4:54p	5:04p	5:14p	5:19p	5:27p
4:33p	4:44p	4:49p	4:58p	5:09p	5:14p	5:24p	5:34p	5:39p	5:47p
4:59p	5:10p	5:15p	5:24p	5:34p	5:38p	5:47p	5:57p	6:02p	.....
5:21p	5:32p	5:37p	5:46p	5:56p	6:00p	6:09p	6:19p	6:24p	.....
5:44p	5:55p	6:00p	6:09p	6:19p	6:23p	6:32p	6:42p	6:47p	.....
6:05p	6:16p	6:21p	6:30p	6:40p	6:44p	6:53p	7:03p	7:08p	.....
6:37p	6:47p	6:52p	7:01p	7:09p	7:13p	7:21p	7:30p	7:35p	.....
7:20p	7:30p	7:35p	7:44p	7:52p	7:56p	8:04p	8:13p	8:18p	.....
8:02p	8:12p	8:17p	8:26p	8:34p	8:38p	8:46p	8:55p	9:00p	.....
8:55p	9:05p	9:10p	9:19p	9:27p	9:31p	9:39p	9:48p	9:53p	.....
.....	.....	.....	.....	.....	9:47p	9:55p	10:04p	10:09p	.....

Route 157 - Weekday West / Northbound

BLDG. 800 (J)	LOUISIANA & GIBSON (I)	LOUISIANA & CENTRAL (H)	UPTOWN TRANSIT CENTER P&R (G)	MONTGOMERY & LOUISIANA (F)	MONTGOMERY & SAN MATEO (E)	MONTAÑO TRANSIT CENTER (D)	MONTAÑO & TAYLOR RANCH (C)	GOLF COURSE & PASEO DEL NORTE (B)	NORTHWEST TRANSIT CENTER P&R (A)
.....	5:43a	5:48a	5:56a	6:05a	6:09a	6:19a	6:31a	6:35a	6:45a
.....	6:17a	6:22a	6:30a	6:39a	6:43a	6:53a	7:05a	7:09a	7:19a
6:31a	6:37a	6:42a	6:50a	7:00a	7:05a	7:16a	7:28a	7:32a	7:42a
6:52a	6:58a	7:03a	7:11a	7:21a	7:26a	7:37a	7:49a	7:53a	8:03a
7:10a	7:16a	7:22a	7:30a	7:40a	7:45a	7:56a	8:08a	8:12a	8:22a
7:30a	7:36a	7:42a	7:50a	8:00a	8:05a	8:16a	8:28a	8:32a	8:42a
7:48a	7:54a	8:00a	8:08a	8:18a	8:22a	8:32a	6:43a	8:47a	8:57a
8:10a	8:16a	8:22a	8:30a	8:40a	8:44a	8:54a	9:05a	9:09a	9:19a
8:30a	8:36a	8:42a	8:50a	9:00a	9:04a	9:14a	9:25a	9:29a	9:39a
8:50a	8:58a	9:02a	9:10a	9:20a	9:24a	9:34a	9:45a	9:49a	9:59a
.....	9:16a	9:22a	9:30a	9:40a	9:44a	9:54a	10:06a	10:10a	10:20a
.....	9:36a	9:42a	9:50a	10:00a	10:04a	10:14a	10:26a	10:30a	10:40a
.....	9:56a	10:02a	10:10a	10:20a	10:24a	10:34a	10:46a	10:50a	11:00a
.....	10:16a	10:22a	10:30a	10:40a	10:44a	10:54a	11:06a	11:10a	11:20a
.....	10:36a	10:42a	10:50a	11:01a	11:05a	11:16a	11:28a	11:32a	11:42a
.....	10:56a	11:02a	11:10a	11:21a	11:25a	11:36a	11:48a	11:52a	12:02p
.....	11:16a	11:22a	11:30a	11:41a	11:45a	11:56a	12:08p	12:12p	12:22p
.....	11:36a	11:42a	11:50a	12:01p	12:05p	12:17p	12:29p	12:33p	12:43p
.....	11:56a	12:02p	12:10p	12:21p	12:25p	12:37p	12:49p	12:53p	1:03p
.....	12:14p	12:20p	12:28p	12:39p	12:43p	12:55p	1:07p	1:11p	1:21p
.....	12:34p	12:40p	12:48p	12:59p	1:03p	1:15p	1:27p	1:31p	1:41p
.....	12:55p	1:01p	1:09p	1:20p	1:24p	1:36p	1:48p	1:52p	2:02p
1:09p	1:15p	1:21p	1:29p	1:40p	1:44p	1:56p	2:08p	2:12p	2:22p
.....	1:35p	1:41p	1:49p	2:00p	2:04p	2:16p	2:28p	2:32p	2:42p
.....	1:55p	2:01p	2:09p	2:20p	2:24p	2:36p	2:48p	2:52p	3:02p
.....	2:12p	2:18p	2:26p	2:38p	2:43p	2:55p	3:08p	3:12p	3:22p
.....	2:33p	2:39p	2:47p	2:59p	3:04p	3:16p	3:29p	3:33p	3:43p
2:47p	2:53p	2:59p	3:08p	3:20p	3:25p	3:37p	3:51p	3:55p	4:05p
3:07p	3:13p	3:19p	3:28p	3:40p	3:45p	3:57p	4:11p	4:15p	4:25p
3:28p	3:35p	3:41p	3:50p	4:01p	4:06p	4:19p	4:35p	4:39p	4:49p
3:49p	3:56p	4:02p	4:11p	4:22p	4:27p	4:40p	4:56p	5:00p	5:10p
4:08p	4:15p	4:21p	4:30p	4:41p	4:46p	4:59p	5:15p	5:19p	5:29p
4:33p	4:40p	4:46p	4:55p	5:06p	5:11p	5:24p	5:41p	5:45p	5:55p
4:55p	5:02p	5:08p	5:17p	5:28p	5:33p	5:46p	6:03p	6:07p	6:17p
5:13p	5:20p	5:26p	5:35p	5:46p	5:51p	6:04p	6:21p	6:25p	6:35p
5:36p	5:42p	5:48p	5:57p	6:08p	6:13p	6:24p	6:39p	6:44p	6:54p
5:56p	6:02p	6:08p	6:17p	6:28p	6:33p	6:44p	6:59p	7:04p	7:14p
.....	6:25p	6:30p	6:38p	6:47p	6:51p	7:01p	7:13p	7:17p	7:27p
.....	6:47p	6:52p	7:00p	7:09p	7:13p	7:23p	7:35p	7:39p	7:49p
.....	7:22p	7:27p	7:35p	7:44p	7:48p	7:58p	8:09p	8:13p	8:22p
.....	7:49p	7:54p	8:02p	8:11p	8:15p	8:25p	8:36p	8:40p	8:49p
.....	8:34p	8:39p	8:47p	8:56p	9:00p	9:10p	9:21p	9:25p	9:34p
.....	9:21p	9:26p	9:34p	9:43p	9:47p	9:57p	10:08p	10:12p	10:21p

Route/Ruta 790
Rapid Ride Blue Line

Effective: 8/9/2014



Route partially funded by:

RIO METRO

ALL BUSES ARE WHEELCHAIR ACCESSIBLE

Route 790 - Weekday

SOUTH & EASTBOUND

NORTHWEST TRANSIT CENTER P&R (A)	COORS & MONTAÑO (B)	COORS & SEQUOIA (C)	LOMAS & 4TH STREET (D)	LOMAS @ UNM HOSPITAL (E)	CENTRAL & YALE (F)	
5:19a	5:31a	5:37a	5:48a	5:55a	6:00a	
5:54a	6:06a	6:12a	6:23a	6:30a	6:35a	
6:19a	6:31a	6:37a	6:48a	6:55a	7:00a	
6:36a	6:49a	6:55a	7:07a	7:15a	7:20a	
6:47a	7:00a	7:07a	7:21a	7:29a	7:35a	
6:54a	7:07a	7:14a	7:28a	7:36a	7:42a	
*7:01a	7:14a	7:22a	7:36a	7:44a	7:50a	M,T,W,Th,F
7:08a	7:21a	7:29a	7:43a	7:51a	7:57a	
7:18a	7:31a	7:41a	7:57a	8:05a	8:11a	
7:33a	7:46a	7:56a	8:12a	8:20a	8:26a	
*7:44a	7:57a	8:05a	8:20a	8:28a	8:33a	M,W,F
7:51a	8:04a	8:12a	8:27a	8:35a	8:40a	
7:58a	8:11a	8:18a	8:33a	8:41a	8:46a	
8:13a	8:26a	8:33a	8:48a	8:56a	9:01a	
*8:23a	8:36a	8:43a	8:58a	9:06a	9:11a	T,Th
8:31a	8:44a	8:51a	9:03a	9:11a	9:16a	
8:51a	9:04a	9:11a	9:23a	9:31a	9:36a	
9:01a	9:14a	9:21a	9:33a	9:41a	9:46a	
9:21a	9:34a	9:41a	9:53a	10:01a	10:06a	
9:43a	9:56a	10:03a	10:15a	10:23a	10:28a	
9:59a	10:12a	10:19a	10:31a	10:39a	10:44a	
10:07a	10:20a	10:27a	10:39a	10:47a	10:52a	
10:34a	10:47a	10:53a	11:05a	11:13a	11:18a	
11:04a	11:17a	11:23a	11:35a	11:43a	11:48a	
11:23a	11:36a	11:43a	11:55a	12:03p	12:08p	
11:43a	11:56a	12:03p	12:15p	12:23p	12:28p	
12:03p	12:16p	12:23p	12:35p	12:43p	12:48p	
12:23p	12:36p	12:43p	12:55p	1:03p	1:08p	
12:41p	12:54p	1:01p	1:15p	1:23p	1:28p	
1:01p	1:14p	1:21p	1:35p	1:43p	1:48p	
1:21p	1:34p	1:41p	1:55p	2:03p	2:08p	
1:43p	1:56p	2:03p	2:15p	2:23p	2:28p	
2:02p	2:15p	2:22p	2:34p	2:42p	2:47p	
2:20p	2:33p	2:40p	2:52p	3:00p	3:05p	
.....	.....	.....	.....	3:08p	3:13p	
*.....	.....	.....	.....	3:17p	3:22p	M,T,W,Th,F
2:46p	2:59p	3:06p	3:18p	3:26p	3:31p	
3:07p	3:20p	3:27p	3:39p	3:47p	3:52p	
3:22p	3:35p	3:42p	3:54p	4:02p	4:07p	
3:42p	3:55p	4:02p	4:14p	4:22p	4:27p	
.....	.....	.....	.....	4:39p	4:44p	
4:05p	4:19p	4:26p	4:39p	4:47p	4:52p	
4:17p	4:31p	4:38p	4:51p	4:59p	5:04p	
4:32p	4:46p	4:53p	5:07p	5:15p	5:20p	
4:53p	5:07p	5:14p	5:28p	5:36p	5:41p	
5:15p	5:29p	5:36p	5:50p	5:58p	6:03p	
5:46p	5:59p	6:06p	6:18p	6:25p	6:30p	
6:22p	6:35p	6:42p	6:54p	7:00p	7:05p	
6:57p	7:10p	7:17p	7:29p	7:35p	7:40p	
7:20p	7:33p	7:40p	7:52p	7:58p	8:03p	
7:53p	8:06p	8:12p	8:24p	8:30p	8:35p	
8:28p	8:41p	8:47p	8:59p	9:05p	9:10p	

WEST & NORTHBOUND

CENTRAL & YALE (F)	LOMAS & 4TH STREET (D)	COORS & SEQUOIA (C)	COORS & MONTAÑO (B)	NORTHWEST TRANSIT CENTER P&R (A)	
6:02a	6:08a	6:18a	6:25a	6:39a	
6:37a	6:43a	6:53a	7:00a	7:14a	
7:02a	7:08a	7:19a	7:26a	7:40a	
7:37a	7:44a	7:55a	8:01a	8:15a	
7:59a	8:06a	8:17a	8:23a	8:37a	
8:13a	8:20a	8:31a	8:37a	8:51a	
8:28a	8:35a	8:46a	8:52a	9:06a	
8:42a	8:49a	9:00a	9:06a	9:20a	
8:48a	8:55a	9:06a	9:12a	9:26a	
9:18a	9:25a	9:36a	9:42a	9:56a	
9:48a	9:55a	10:06a	10:12a	10:26a	
10:08a	10:15a	10:26a	10:32a	10:46a	
10:30a	10:37a	10:48a	10:54a	11:08a	
10:46a	10:53a	11:04a	11:10a	11:24a	
10:54a	11:01a	11:12a	11:18a	11:32a	
11:20a	11:27a	11:38a	11:44a	11:58a	
11:50a	11:57a	12:08p	12:14p	12:28p	
12:10p	12:17p	12:29p	12:35p	12:50p	
12:30p	12:37p	12:49p	12:55p	1:10p	
12:50p	12:57p	1:09p	1:15p	1:30p	
1:10p	1:17p	1:29p	1:35p	1:50p	
1:30p	1:37p	1:49p	1:55p	2:10p	
1:50p	1:57p	2:09p	2:15p	2:30p	
2:10p	2:17p	2:29p	2:35p	2:51p	
2:30p	2:37p	2:49p	2:55p	3:11p	
2:49p	2:56p	3:10p	3:17p	3:33p	
3:07p	3:14p	3:29p	3:36p	3:53p	
3:13p	3:20p	3:35p	3:42p	3:59p	
*3:23p	3:30p	3:45p	3:52p	4:09p	M,T,W,Th,F
3:33p	3:40p	3:55p	4:02p	4:19p	
3:54p	4:01p	4:15p	4:22p	4:39p	
4:09p	4:16p	4:30p	4:37p	4:54p	
4:29p	4:36p	4:50p	4:57p	5:14p	
4:44p	4:51p	5:05p	5:12p	5:29p	
4:54p	5:01p	5:17p	5:24p	5:42p	
5:06p	5:13p	5:29p	5:36p	5:54p	
5:22p	5:29p	5:45p	5:52p	6:10p	
5:43p	5:50p	6:03p	6:10p	6:26p	
6:05p	6:11p	6:24p	6:30p	6:46p	
6:31p	6:37p	6:48p	6:54p	7:08p	
7:08p	7:12p	7:23p	7:29p	7:43p	
7:41p	7:47p	7:58p	8:04p	8:18p	
8:04p	8:10p	8:20p	8:26p	8:39p	
8:36p	8:42p	8:52p	8:58p	9:11p	
9:11p	9:17p	9:27p	9:33p	9:46p	

* Designated trips that operate only when U.N.M. is in session.

M,T,W,Th,F = All weekday service

M,W,F = Only Monday, Wednesday & Friday Service

T,Th = Only Tuesday & Thursday Service

* Designado viajes que operan sólo cuando U.N.M. se encuentra en período de sesiones.

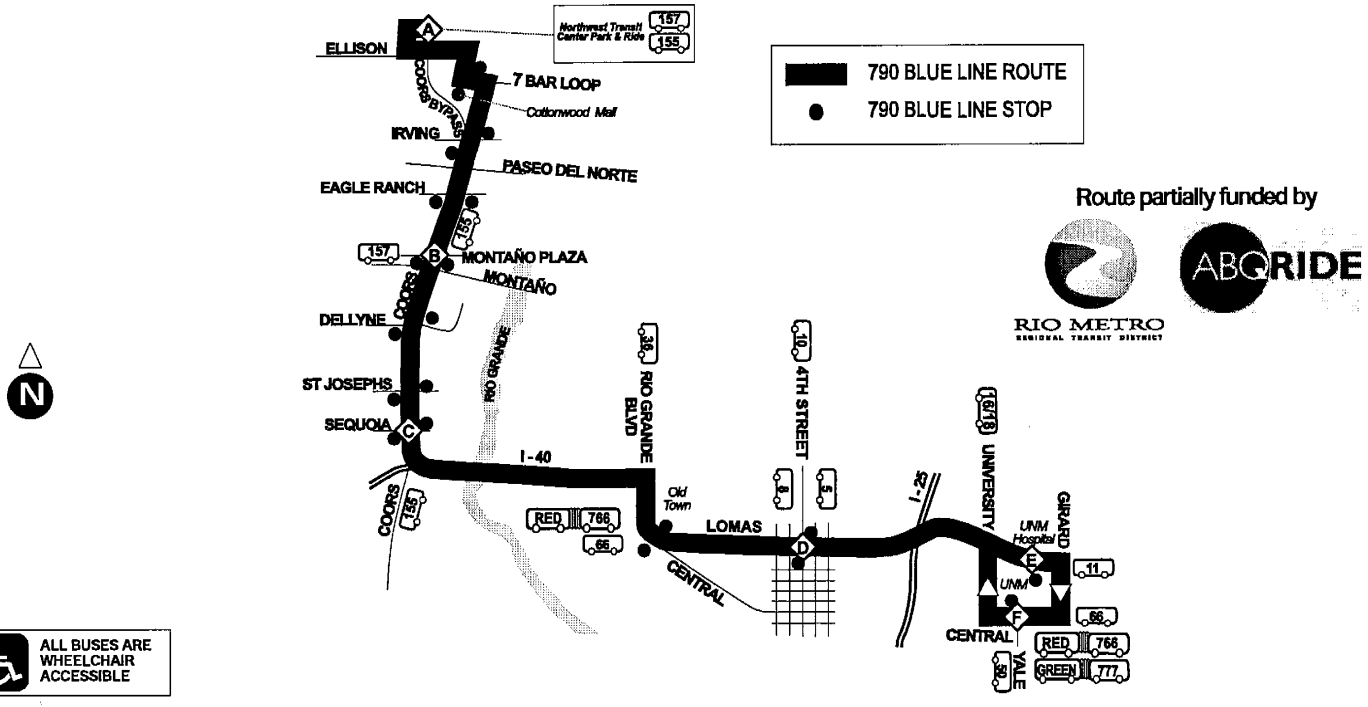
M,T,W,Th,F = Servicio los lunes, martes, miércoles, jueves y viernes.

M,W,F = Servicio sólo los lunes, miércoles y viernes.

T,Th = Servicio sólo los martes y jueves.

Route/Ruta 790
Rapid Ride Blue Line

Effective: 5/17/2014



Route 790 - Saturday

SOUTH & EASTBOUND

NORTHWEST TRANSIT CENTER P&R (A)	COORS & MONTAÑO (B)	COORS & SEQUOIA (C)	LOMAS & 4TH STREET (D)	LOMAS @ UNM HOSPITAL (E)	CENTRAL & YALE (F)
6:53a	7:08a	7:13a	7:23a	7:29a	7:34a
7:39a	7:54a	7:59a	8:09a	8:15a	8:20a
8:25a	8:40a	8:45a	8:55a	9:01a	9:06a
9:11a	9:26a	9:31a	9:41a	9:47a	9:52a
9:57a	10:12a	10:17a	10:27a	10:33a	10:38a
10:43a	10:58a	11:03a	11:13a	11:19a	11:24a
11:29a	11:44a	11:49a	11:59a	12:05p	12:10p
12:15p	12:30p	12:35p	12:45p	12:51p	12:56p
1:01p	1:16p	1:21p	1:31p	1:37p	1:42p
1:47p	2:02p	2:07p	2:17p	2:23p	2:28p
2:33p	2:48p	2:53p	3:03p	3:09p	3:14p
3:19p	3:34p	3:39p	3:49p	3:55p	4:00p
4:05p	4:20p	4:25p	4:35p	4:41p	4:46p
4:51p	5:06p	5:11p	5:21p	5:27p	5:32p
5:37p	5:52p	5:57p	6:07p	6:13p	6:18p
6:23p	6:38p	6:43p	6:53p	6:59p	7:04p
7:09p	7:24p	7:29p	7:39p	7:45p	7:50p

WEST & NORTHBOUND

CENTRAL & YALE (F)	LOMAS & 4TH STREET (D)	COORS & SEQUOIA (C)	COORS & MONTAÑO (B)	NORTHWEST TRANSIT CENTER P&R (A)
7:36a	7:42a	7:55a	8:00a	8:15a
8:22a	8:28a	8:41a	8:46a	9:01a
9:08a	9:14a	9:27a	9:32a	9:47a
9:54a	10:00a	10:13a	10:18a	10:33a
10:40a	10:46a	10:59a	11:04a	11:19a
11:26a	11:32a	11:45a	11:50a	12:05p
12:12p	12:18p	12:31p	12:36p	12:51p
12:58p	1:04p	1:17p	1:22p	1:37p
1:44p	1:50p	2:03p	2:08p	2:23p
2:30p	2:36p	2:49p	2:54p	3:09p
3:16p	3:22p	3:35p	3:40p	3:55p
4:02p	4:08p	4:21p	4:26p	4:41p
4:48p	4:54p	5:07p	5:12p	5:27p
5:34p	5:40p	5:53p	5:58p	6:13p
6:20p	6:26p	6:39p	6:44p	6:59p
7:06p	7:12p	7:25p	7:30p	7:45p
7:52p	7:58p	8:11p	8:16p	8:31p