Fraternal Order of Police

(Bear Canyon Arroyo / Jefferson St.)

Traffic Impact Study

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Presented to:

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City of Albuquerque
&
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Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St.)
TRAFFIC IMPACT STUDY

STUDY PURPOSE

The study is being conducted in conjunction with a request for approval of a land use / development plan permitting the implementation of land uses consisting of proposed commercial and office uses such as the one shown in the Appendix (Page A-2) 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 new development. This study is based on the assumption that the land uses implemented in the development of the Fraternal Order of Police project will be similar to those defined in the table on Page A-xx in the Appendix of this report. Should the developer propose a combination of land uses that would significantly increase the overall traffic generation for the Fraternal Order of Police site, an update to this study would be required by the City of Albuquerque Transportation Development Section reflecting the proposed new conditions. This study is being prepared to meet the requirements of the City of Albuquerque Transportation Development Section and the New Mexico Department of Transportation District 3 Office.

STUDY PROCEDURES

A telephone scoping meeting was held on July 19, 2006 with City of Albuquerque Transportation Development staff (Tony Loyd) to discuss scope and methodology to be utilized within the report. Tony Loyd summarized the meeting and defined the requirements and procedures for the study in letter dated July xx, 2006 (See end of Appendix). Specific items included format, intersections to be studied, intersection analysis procedures, existing traffic counts, trip distribution methodology, and implementation year definition.

The basic procedure followed for this traffic impact study is outlined as follows:

- Calculate the generated trips for this proposed commercial / office development as defined on Page A-2 of the Appendix of this report and more specifically defined in the Trip Generation Table on Page A-6 of the Appendix of this report. The trips generated for the implementation year analyses (2009) will assume that 100% of the development has occurred.
- Calculate trip distribution for the newly generated trips by this development. The new commercial trips will be distributed based on year 2009 population within a two (2) mile radius boundary of the proposed site as shown on Page A-9 in the Appendix of this report. The new office trips will be distributed based on a city-wide distribution.
- Determine Trip Assignments for the newly generated trips based on the results of the Trip Distribution Analysis and logical routing to and from the new site.
- Obtain AM Peak Hour and PM Peak Hour Turning Movement Volumes Traffic Counts from the Mid-Region Council of Governments (MRCOG) for the intersections of Singer Blvd / Jefferson St, Jefferson St / I-25 W. ramp, Jefferson St / I-25 E. ramp, San Mateo Blvd / I-25 W. ramp, San Mateo Blvd / I-25 E. ramp, and Osuna Blvd / Jefferson St. Additionally, traffic counts were performed for the intersections of President Dr / Jefferson St., Jefferson Plaza / Jefferson St and BMW Drive / I-25 Frontage Rd.

- Determine Historic Growth Rates for background traffic volumes based on an analysis of the growth trend of recent AWDT Volumes obtained from 2001 thru 2005 MRCOG Traffic Flow Maps.
- Determine the 2009 NO BUILD Volumes for each intersection to be analyzed by growing the background traffic growth from the year of the counts to 2009.
- Add data from Trip Assignments Maps and Tables to the 2009 NO BUILD Volumes to obtain the 2009 BUILD Volumes for this project.
- Provide signalized and unsignalized intersection analyses for the following intersections:

INTERSECTION	TYPE CONTROL	NO BUILD ANALYSIS	BUILD ANALYSIS
Singer Blvd / Jefferson St	Traffic Signal	2009	2009
Jefferson St / I-25 W. ramp	Traffic Signal	2009	2009
Jefferson St / I-25 E. ramp	Traffic Signal	2009	2009
San Mateo Blvd / I-25 E. ramp	Traffic Signal	2009	2009
Osuna Blvd / I-25 W. ramp	Traffic Signal	2009	2009
Osuna Blvd / Jefferson St	Traffic Signal	2009	2009
Presidential Dr / Jefferson St	Stop Sign	2009	2009
Jefferson Plaza / Jefferson St	Stop Sign	2009	2009
BMW Drive / I-25 Frontage Rd	Stop Sign	2009	2009
Driveway 'A' / Jefferson St	Stop Sign	N/A	2009
Driveway 'B' / Jefferson St	Stop Sign	2009	2009
Driveway 'C' / Jefferson St	Stop Sign	N/A	2009

GENERAL AREA CHARACTERISTICS

This project is located at the northeast corner of the intersection of Bear Canyon Arroyo / Jefferson Street. The surrounding area is primarily zoned for commercial and industrial type of development. The Vicinity Map on Page A-1 of the Appendix shows the zoning of the surrounding properties in the area surrounding this site. The site is bound on the west by Jefferson St., on the south by the Bear Canyon Arroyo, and on the north by commercial property (See Vicinity Map on Pages A-1 and A-3 of the Appendix). There are no other major planned and approved developments in the general vicinity of the site. There is one moderate size project near McLeod / Jefferson St. which was studied earlier this year. The Traffic Impact Study for that project (Jefferson Pointe) indicated an insignificant volume of traffic distributed north of the project.

AREA STREET NETWORK

Access to this site will be primarily via Jefferson Street. Secondary access is from the BMW Drive on the I-25 frontage road.

Interstate 25 is a freeway providing north-south access through the City of Albuquerque. It has three lanes in each direction in the vicinity of the site.

Jefferson Street is classified as a Minor Arterial roadway on the Long Range Roadway System Map for the Albuquerque Metropolitan Planning Area. It is a four lane paved urban roadway with curbs and gutters on both sides. There are raised medians to the west and north of Interstate 25 on Jefferson Street to Osuna Rd. Jefferson Street south and east of I-25 is a four lane undivided urban street with curbs and gutters on both sides of the road.

The speed limit on Jefferson St is 35 M.P.H. The intersection of Singer Blvd / Jefferson St. was recently reconstructed to improve the capacity of the intersection.

Osuna Blvd is classified as a principal arterial on the Long Range Roadway System Map for the Albuquerque Metropolitan Planning Area. It is a four lane divided urban roadway in this vicinity. It is identified as San Mateo Blvd to the east of Interstate 25. The speed limit on Osuna / San Mateo Blvd is 45 M.P.H.

Singer Blvd, Jefferson Plaza and Presidential Dr are not classified on the Long Range Roadway System Map for the Albuquerque Metropolitan Planning Area.

EXISTING TRAFFIC VOLUMES

2005 Average Weekday Traffic Volumes (AWDT) for major streets in the site plan area are shown on Page A-4 in the Appendix.

Recent AM and PM Peak Hour turning movement counts were provided by the City of Albuquerque for the intersection of Singer Blvd / Jefferson St, Jefferson St / I-25 W. ramp, Jefferson St / I-25 E. ramp, San Mateo Blvd / I-25 W. ramp, San Mateo Blvd / I-25 E. ramp, and Osuna Blvd / Jefferson St.

Additionally, AM and PM Peak Hour turning movement counts for 1998 were obtained by field traffic counts taken recently for the following intersections:

Presidential Dr / Jefferson St.
Jefferson Plaza / Jefferson St.
BMW Drive / I-25 Frontage Rd.

The counts are included at the end of the Appendix.

PROPOSED DEVELOPMENT

The proposed conceptual site development plan associated with this property defines different ITE Land Uses as summarized in the following table:

Land Use Summary Table

Land Use Description	Size Proposed
Corporate Headquarters Building (714)	20,000 SF
General Office Building (710)	60,000 SF
Drive-In Bank (912)	4 drive up windows
High Turnover (Sit-Down) Office (932)	10,000 SF

See the conceptual site development plan on Page A-2 in the Appendix of this report to acquire more detailed information about the proposed development. This site plan is conceptual at this point in time and is subject to some changes as progress takes place in the design process. The plan should, however, provide a reliable basis upon which to analyze the impact of the development on the adjacent transportation system and provide guidelines for mitigating the impact and establishing access criteria.

There are four (4) proposed access points (driveways) for the new site (See Site Map on Page A-2). The primary access into the development is via the proposed three unsignalized driveways on Jefferson St. The other secondary access driveway is the BMW driveway onto the I-25 Frontage Rd. The middle driveway onto Jefferson St is existing and is a full access driveway. The other two driveways on Jefferson St. will be right-in / right-out only driveways. The driveway on the I-25 Frontage Rd. is a right-turn-in, right-turn-out driveway since the Frontage Rd. is one-way southbound.

TRIP GENERATION

Projected trips were calculated from data in the Institute of Transportation Engineers Trip Generation report (7th Edition, 2003). Trips for the development were determined based on land uses defined in the Land Use Summary Table above.

The resulting number of trips generated for the proposed development (100%) are summarized in the following table:

FOP Site (Jefferson St. North of Singer Blvd.)

Trip Generation Data

USE (ITE CODE)		24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
DESCRIPTION		*GROSS*	*ENTER*	*EXIT*	*ENTER*	*EXIT*
Summary Sheet	Units					
Corporate Headquarters Building (714)	20.00	170	31	2	4	33
General Office Building (710)	60.00	900	110	15	25	121
Drive-In Bank (912)	4.00	1,563	45	33	102	102
High Turnover (Sit-Down) Restaurant (932)	10.00	1,272	60	55	67	43
Subtotal		**3,905**	**246**	**105**	**198**	**299**

The Implementation Year Analysis for this study assumed a development of 100% of the project to be implemented. See Appendix Pages A-6 through A-10 for more detailed information regarding trip generation rates (including Trip Generation Summary Tables and Worksheets).

No adjustments were made to the trip generation rates for Pass-by Trips for these land uses.

TRIP DISTRIBUTION

Primary and Diverted Linked Trips:

Commercial Land Use

Primary and diverted linked trips for the commercial land use development were distributed proportionally to the 2009 projected population of Data Analysis Subzones within a two-mile radius of the proposed development. Population data for the years 2000 and 2025 were taken from the 2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico, S-03-01, 2003, Appendix B and Appendix C, supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2000 and 2025

was interpolated linearly to obtain 2009 population data to utilize for this analysis. Population Subzones were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of subareas and data analysis subzones is shown on Appendix Pages A-9 thru A-18.

Office Land Uses

Primary and diverted linked trips for the Office land use development were distributed proportionally to the 2009 projected population of Subareas citywide. Population data for the years 2005 and 2010 were taken from the 2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico, S-03-01, 2003, Appendix D, supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2005 and 2010 was interpolated linearly to obtain 2009 population data to utilize for this analysis. Population Subzones were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of subareas and data analysis subzones is shown on Appendix Pages A-9 thru A-18.

TRIP ASSIGNMENTS

Trip assignments for primary and diverted linked trips 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. Commercial percentage trip distribution and trip assignments maps are shown on Pages A-18 through A-20 in the Appendix of this report. Office percentage trip distribution and trip assignments maps are shown on Pages A-25 through A-27 in the Appendix of this report.

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 2001, 2002, 2003, 2004 and 2005 Traffic Flow maps prepared by the Mid-Region Council of Governments. Most of the Traffic Flow Data for those years taken from the MRCOG Traffic Flow Maps were Standard Data. The data from those years for each approach was plotted on a graph and a linear "regression trend line" calculated using the equation format $y=mx+b$. The growth rate was determined by calculating the average volume increase per year during the time period considered and dividing that volume into the most recent AWDT used in the analysis from which future volumes will be calculated. The rate of growth of that trend line was utilized as the annual growth rate for each approach if that calculated rate appeared feasible. However, there were some instances where the rate indicated a negative growth trend or appeared to be unreasonably high or low. In those cases, an appropriate growth rate from an adjacent segment of the same roadway was used, a shorter time span was used to determine the growth rate, or the growth rate was considered to be zero or a generic 3% if appropriate. Due to the potential for growth in the area, it was believed that a zero percent growth rate was inappropriate for this study. Therefore, a growth rate of 1.00% was used if the linear regression analysis showed the growth rate to be negative. 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-29 through A-38. An Historic Growth Rate Map can be found on Page A-39 of the Appendix. Additionally, 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-43 through A-67).

PROJECTED PEAK HOUR TURNING MOVEMENTS FOR 2009 BUILDOUT

The calculated growth rates were applied to the most recent peak hour traffic counts (furnished by the City of Albuquerque and conducted for this study) to derive the 2009 AM and PM Peak Hour NO BUILD Volumes. To these volumes, the generated trips based on implementation of the proposed Fraternal Order of Police Conceptual Site Development Plan (100% development) were added to obtain BUILD volumes for the intersection analyses. See Appendix Pages A-43 through A-67 for further information regarding the turning movement counts. Turning Movement Volumes Maps for the 2009 NO BUILD Conditions, Trips Generated, and 2009 BUILD Conditions are shown on Pages A-68 thru A-71 in the Appendix of this report.

INTERSECTION CAPACITY ANALYSIS

Intersection capacity analyses were performed in accordance with the procedures for signalized and unsignalized intersections in the Highway Capacity Manual, Special Report 209, Transportation Research Board, 2000, using Synchro Version 6 Highway Capacity Software for signalized and unsignalized intersections. For signalized intersections, the operational method of analysis was used for 2010 conditions (NO BUILD and BUILD).

Generally speaking, the operational analyses utilized data obtained from the traffic count data furnished by the Mid-Region Council of Governments. The percent heavy commercial traffic was obtained from the Turning Movements for Total Intersection sheet from the traffic counts. Peak Hour Factors (PHF) were taken from the AM or PM Peak Hour Traffic Count Data Sheet. If the volume of traffic for the 2009 NO BUILD and / or 2009 BUILD analysis increased significantly above that of the existing traffic count, then it was considered appropriate to increase the Peak Hour Factors for those movements by up to 0.02. The arrival type was assumed to be a Type 3 Arrival unless on a major street with an adjacent upstream traffic signal that would platoon the heavier direction flow of traffic. In that case, the appropriate arrival type would be a Type 4 Arrival.

Capacity analyses were performed for the following traffic conditions.

2009 without development of the subject property (NO BUILD)
2009 with development as per the Conceptual Site Development Plan (BUILD)

The results of the 2009 NO BUILD and 2009 BUILD capacity analyses are summarized in the following sections - *Results and Discussion of Intersection Capacity Analyses*.

RESULTS OF SIGNALIZED INTERSECTION CAPACITY ANALYSES

IMPLEMENTATION YEAR (2009)

#1 - Singer Blvd. / Jefferson St. - Pages A-72 thru A-76

The results of the implementation year analysis of the signalized intersection of Singer Blvd / Jefferson St are summarized in the following tables:

Existing Geometry (Singer Blvd / Jefferson St.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Singer Blvd	2	0	0	1	0
WB Singer Blvd	2	0	1	1	0
NB Jefferson St.	1	0	2	0	1
SB Jefferson St.	1	0	1	1	0

Singer Blvd / Jefferson St.	2009 No Build		2009 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	B-19.8	E-58.3	B-19.0	E-67.3
Existing Geometry – Add SB Right Turn Lane				D-54.5

The intersection of Singer Blvd / Jefferson St. is projected to operate at satisfactory levels-of-service for the projected 2009 AM Peak Hour BUILD Condition. The projected 2009 PM Peak Hour NO BUILD and BUILD Conditions are at or near capacity. The projected level-of-service for both conditions is LOS "E".

The critical lane movements at the intersection for the 2009 PM Peak Hour BUILD Condition are the northbound left turn movement, the southbound thru movement, the eastbound thru movement, and the westbound left turn movement. Implementing dual northbound left turn lanes does not provide enough benefit to rectify the situation due to the fact that the projected northbound left turn volume is 218 vehicles per hour for the 2009 PM Peak Hour Conditions. It appears from aerial photographs that there may be sufficient room to construct a new southbound right turn lane on Jefferson St. This improvement would provide enough benefit to raise the level-of-service at the intersection to "D" for the 2009 PM Peak Hour BUILD Condition. The projected volume for the eastbound thru movement is too small, and providing an additional eastbound thru lane would not provide significant benefit. There are already existing dual westbound left turn lanes on Singer Blvd. Therefore, an additional westbound left turn lane cannot be considered. Therefore, the recommendation of this report is to construct a new southbound right turn lane on Jefferson St. at Singer Blvd. to mitigate the impact of this development on the intersection.

It should be noted that this project contributes only about 5.8% of the total traffic to the intersection and only about 4.0% of the total southbound right turn volume during the projected 2009 PM Peak Hour period.

The following table summarizes the results of the queuing analysis for this intersection of Singer Blvd / Jefferson St.:

Queueing Analysis Summary Sheet

Project: Fraternal Order of Police
Intersection: Singer Ave / Jefferson St

2009

Eastbound Approach	Left Turns # Lanes	Left Turns Vol.	Left Turns Length (Ft.)	Thru Movements # Lanes	Thru Movements Vol.	Thru Movements Length (Ft.)	Right Turns # Lanes	Right Turns Vol.	Right Turns Length (Ft.)
Existing Lane Length	*2*	*145*	*175*	*1*	*28*	*Cont*	*0*	*201*	*0*
AM NO BUILD Queue	2	151	125	1	29	75	0	209	275
AM BUILD Queue	**2**	**158**	**150**	**1**	**29**	**75**	**0**	**209**	**275**
Existing Lane Length	*2*	*212*	*175*	*1*	*63*	*Cont*	*0*	*428*	*0*
PM NO BUILD Queue	2	220	200	1	66	125	0	445	525
PM BUILD Queue	**2**	**222**	**200**	**1**	**66**	**125**	**0**	**445**	**525**

Westbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*2*	*56*	*165*	*2*	*19*	*Cont*	*0*	*21*	*0*
AM NO BUILD Queue	2	58	75	2	20	25	0	22	50
AM BUILD Queue	**2**	**58**	**75**	**2**	**20**	**25**	**0**	**22**	**50**
Existing Lane Length	*2*	*193*	*165*	*2*	*35*	*Cont*	*0*	*53*	*0*
PM NO BUILD Queue	2	201	175	2	36	50	0	55	100
PM BUILD Queue	**2**	**201**	**175**	**2**	**36**	**50**	**0**	**55**	**100**

Northbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*1*	*411*	*130*	*2*	*671*	*Cont*	*1*	*283*	*325*
AM NO BUILD Queue	1	427	475	2	698	450	1	294	350
AM BUILD Queue	**1**	**427**	**475**	**2**	**827**	**500**	**1**	**294**	**350**
Existing Lane Length	*1*	*210*	*130*	*2*	*386*	*Cont*	*1*	*156*	*325*
PM NO BUILD Queue	1	218	300	2	401	**300**	1	162	225
PM BUILD Queue	**1**	**218**	**300**	**2**	**498**	**350**	**1**	**162**	**225**

Southbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*1*	*34*	*150*	*2*	*387*	*Cont*	*0*	*134*	*0*
AM NO BUILD Queue	1	42	75	2	481	325	0	167	225
AM BUILD Queue	**1**	**42**	**75**	**2**	**502**	**325**	**0**	**169**	**225**
Existing Lane Length	*1*	*28*	*150*	*2*	*593*	*Cont*	*0*	*134*	*0*
PM NO BUILD Queue	1	35	75	2	738	**500**	0	167	250
PM BUILD Queue	**1**	**35**	**75**	**2**	**800**	**525**	**0**	**174**	**250**

	AM	PM
Cycle Length:	110	120

#2 - Jefferson St I-25 W. ramp - Pages A-77 thru A-81

The results of the implementation year analysis of the signalized intersection of Jefferson St / I-25 W. ramp are summarized in the following tables:

Existing Geometry (/ Jefferson St.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
SB I-25 W. ramp	1	0	2	0	1
WB Jefferson St.	1	0	2	0	0
EB Jefferson St.	0	0	1	1	0

Jefferson St / I-25 W. ramp	2009 No Build		2009 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	C-27.7	C-25.4	C-32.2	C-24.6

This analysis is based on AM and PM Peak Hour turning movement volumes obtained from the Mid-Region Council of Governments. The results of the signalized intersection analysis indicate that the operation of the intersection is satisfactory. However, an observation of conditions in the field indicate that the intersection volumes are well above capacity of the intersection. The discrepancy between the analysis and the actual conditions is due to the fact that the traffic backup and queues are of such magnitude that the traffic demand is not accurately reflected by the traffic volumes reported in the MRCOG traffic count data. The operation of the intersection is probably level-of-service "F" in reality. Mitigation of the less-than desirable levels-of-service consists of reconstruction of the Jefferson St. / I-25 Interchange. It is a regional problem and should not be the responsibility of a private developer.

The following table summarizes the results of the queuing analysis for this intersection of Jefferson St / I-25 W. ramp:

Queueing Analysis Summary Sheet

Project: Fraternal Order of Police
Intersection: Jefferson St / I-25 W. ramp

2009

Eastbound Approach	Left Turns # Lanes	Left Turns Vol.	Left Turns Length (Ft.)	Thru Movements # Lanes	Thru Movements Vol.	Thru Movements Length (Ft.)	Right Turns # Lanes	Right Turns Vol.	Right Turns Length (Ft.)
Existing Lane Length	*0*	*0*	*0*	*2*	*412*	*Cont*	*0*	*234*	*0*
AM NO BUILD Queue	0	0	0	2	432	300	0	243	300
AM BUILD Queue	**0**	**0**	**0**	**2**	**446**	**300**	**0**	**250**	**300**
Existing Lane Length	*0*	*0*	*0*	*2*	*737*	*Cont*	*0*	*518*	*0*
PM NO BUILD Queue	0	0	0	2	774	525	0	539	**625**
PM BUILD Queue	**0**	**0**	**0**	**2**	**805**	**525**	**0**	**570**	**650**

Westbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*1*	*241*	*150*	*2*	*1,680*	*Cont*	*0*	*0*	*0*
AM NO BUILD Queue	1	252	325	2	1,748	>1,000	0	0	0
AM BUILD Queue	**1**	**252**	**325**	**2**	**1,877**	**>1,000**	**0**	**0**	**0**
Existing Lane Length	*1*	*272*	*150*	*2*	*946*	*Cont*	*0*	*0*	*0*
PM NO BUILD Queue	1	286	375	2	987	**625**	0	0	0
PM BUILD Queue	**1**	**286**	**375**	**2**	**1,084**	**675**	**0**	**0**	**0**

Northbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
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 Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*1*	*251*	*600*	*2*	*402*	*Cont*	*1*	*169*	*350*
AM NO BUILD Queue	1	314	375	2	497	325	1	209	275
AM BUILD Queue	**1**	**335**	**400**	**2**	**507**	**350**	**1**	**209**	**275**
Existing Lane Length	*1*	*288*	*600*	*2*	*583*	*Cont*	*1*	*114*	*350*
PM NO BUILD Queue	1	364	**450**	2	721	**475**	1	141	225
PM BUILD Queue	**1**	**409**	**500**	**2**	**769**	**525**	**1**	**141**	**225**

	AM	PM
Cycle Length:	110	120

The westbound left turn lane cannot be lengthened since it's current length is restricted by the design of the grade separation structure at the interchange.

#3 - Jefferson S / I-25 E. ramp - Pages A-82 thru A-86

The results of the implementation year analysis of the signalized intersection of Jefferson St / I-25 E. ramp are summarized in the following tables:

Existing Geometry (Jefferson St / I-25 E. ramp)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
NB I-25 E. ramp	1	1	1	0	1
WB Jefferson St.	0	0	1	1	0
EB Jefferson St.	1	0	2	0	0

Jefferson St / I-25 E. ramp	2009 No Build		2009 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	C-23.3	C-25.9	C-24.5	C-30.5

The conditions at the intersection of Jefferson St. / I-25 East Ramp are similar to those discussed previously for the West Ramp. The calculated reported levels-of-service are optimistically good. The actual levels-of-service being experienced in the field are LOS "F" for both the NO BUILD Conditions and the BUILD Conditions.

This intersection is part of a regional interchange and should be part of a public infrastructure project to reconstruct the interchange.

The following table summarizes the results of the queuing analysis for this intersection of Jefferson St / I-25 E. ramp:

Queueing Analysis Summary Sheet

Project: Fraternal Order of Police
Intersection: Jefferson St / I-25 E. ramp

2009

Eastbound Approach	Left Turns # Lanes	Left Turns Vol.	Left Turns Length (Ft.)	Thru Movements # Lanes	Thru Movements Vol.	Thru Movements Length (Ft.)	Right Turns # Lanes	Right Turns Vol.	Right Turns Length (Ft.)
Existing Lane Length	*1*	*52*	*125*	*2*	*440*	*Cont*	*0*	*0*	*0*
AM NO BUILD Queue	1	54	100	2	465	325	0	0	0
AM BUILD Queue	**1**	**54**	**100**	**2**	**500**	**325**	**0**	**0**	**0**
Existing Lane Length	*1*	*316*	*125*	*2*	*673*	*Cont*	*0*	*0*	*0*
PM NO BUILD Queue	1	329	425	2	714	**475**	0	0	0
PM BUILD Queue	**1**	**329**	**425**	**2**	**790**	**525**	**0**	**0**	**0**

Westbound Approach	Left Turns # Lanes	Left Turns Vol.	Left Turns Length (Ft.)	Thru Movements # Lanes	Thru Movements Vol.	Thru Movements Length (Ft.)	Right Turns # Lanes	Right Turns Vol.	Right Turns Length (Ft.)
Existing Lane Length	*0*	*0*	*0*	*2*	*473*	*Cont*	*0*	*119*	*0*
AM NO BUILD Queue	0	0	0	2	486	325	0	125	175
AM BUILD Queue	**0**	**0**	**0**	**2**	**545**	**350**	**0**	**125**	**175**
Existing Lane Length	*0*	*0*	*0*	*2*	*446*	*Cont*	*0*	*257*	*0*
PM NO BUILD Queue	0	0	0	2	463	**350**	0	271	350
PM BUILD Queue	**0**	**0**	**0**	**2**	**530**	**375**	**0**	**271**	**350**

Northbound Approach	Left Turns # Lanes	Left Turns Vol.	Left Turns Length (Ft.)	Thru Movements # Lanes	Thru Movements Vol.	Thru Movements Length (Ft.)	Right Turns # Lanes	Right Turns Vol.	Right Turns Length (Ft.)
Existing Lane Length	*1*	*647*	*850*	*2*	*291*	*Cont*	*1*	*134*	*325*
AM NO BUILD Queue	1	831	850	2	374	275	1	172	225
AM BUILD Queue	**1**	**900**	**900**	**2**	**374**	**275**	**1**	**172**	**225**
Existing Lane Length	*1*	*439*	*850*	*2*	*474*	*Cont*	*1*	*186*	*325*
PM NO BUILD Queue	1	564	**650**	2	609	425	1	239	325
PM BUILD Queue	**1**	**594**	**675**	**2**	**609**	**425**	**1**	**239**	**325**

Southbound Approach	Left Turns # Lanes	Left Turns Vol.	Left Turns Length (Ft.)	Thru Movements # Lanes	Thru Movements Vol.	Thru Movements Length (Ft.)	Right Turns # Lanes	Right Turns Vol.	Right Turns Length (Ft.)
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**

	AM	PM
Cycle Length:	110	120

The eastbound left turn lane cannot be lengthened since it's current length is restricted by the design of the grade separation structure at the interchange. The northbound left turn queuing (850 feet) extends south from the stop bar to the gore point of the ramp.

#4 - San Mateo Blvd / I-25 E. ramp - Pages A-88 thru A-91

The results of the implementation year analysis of the signalized intersection of San Mateo Blvd / I-25 E. ramp are summarized in the following tables:

Existing Geometry (San Mateo Blvd / I-25 E. ramp)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB San Mateo Blvd	2	0	3	0	0
WB San Mateo Blvd	0	0	1	1	1
NB I-25 E. ramp	2	0	1	0	1

San Mateo Blvd / I-25 E. ramp	2009 No Build		2009 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	F-98.4	F-93.7	F-103	F-102

The projected 2009 AM and PM Peak Hour NO BUILD Conditions operation of the intersection is at LOS "F" with an approximate delay of 94 to 98 seconds. Implementation of the proposed FOP Development will provide only minor increases in the overall delay at the intersection. The magnitude of the delay increase is approximately 5 seconds during the AM Peak Hour and approximately 8 seconds during the PM Peak Hour. Therefore, this study finds that the level of impact of this development on the intersection of San Mateo Blvd. / I-25 East Ramp to be insignificant and no recommendation is made.

Additionally, the proposed FOP Development traffic will comprise less than 2% of the AM Peak Hour Volumes and the PM Peak Hour Volumes at the intersection projected for the 2009 BUILD Conditions.

The following table summarizes the results of the queuing analysis for this intersection of San Mateo Blvd / I-25 E. ramp:

Queueing Analysis Summary Sheet

Project: Fraternal Order of Police
Intersection: San Mateo Blvd / I-25 E. ramp

2009

Eastbound Approach	Left Turns # Lanes	Left Turns Vol.	Left Turns Length (Ft.)	Thru Movements # Lanes	Thru Movements Vol.	Thru Movements Length (Ft.)	Right Turns # Lanes	Right Turns Vol.	Right Turns Length (Ft.)
Existing Lane Length	*2*	*173*	*110*	*3*	*1,291*	*Cont*	*0*	*0*	*0*
AM NO BUILD Queue	2	189	150	3	1,410	575	0	0	0
AM BUILD Queue	**2**	**202**	**175**	**3**	**1,429**	**600**	**0**	**0**	**0**
Existing Lane Length	*2*	*298*	*110*	*3*	*1,736*	*Cont*	*0*	*0*	*0*
PM NO BUILD Queue	2	325	**250**	3	1,896	825	0	0	0
PM BUILD Queue	**2**	**366**	**275**	**3**	**1,940**	**825**	**0**	**0**	**0**

Westbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*0*	*0*	*0*	*2*	*2,423*	*Cont*	*1*	*517*	*400*
AM NO BUILD Queue	0	0	0	2	2,520	>1,000	1	538	575
AM BUILD Queue	**0**	**0**	**0**	**2**	**2,555**	**>1,000**	**1**	**538**	**575**
Existing Lane Length	*0*	*0*	*0*	*2*	*1,770*	*Cont*	*1*	*875*	*400*
PM NO BUILD Queue	0	0	0	2	1,841	>1,000	1	910	>1,000
PM BUILD Queue	**0**	**0**	**0**	**2**	**1,877**	**>1,000**	**1**	**910**	**>1,000**

Northbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*2*	*382*	*240*	*1*	*276*	*Cont*	*1*	*224*	*40*
AM NO BUILD Queue	2	472	325	1	341	400	1	277	325
AM BUILD Queue	**2**	**472**	**325**	**1**	**341**	**400**	**1**	**277**	**325**
Existing Lane Length	*2*	*242*	*240*	*1*	*597*	*Cont*	*1*	*347*	*40*
PM NO BUILD Queue	2	299	250	1	738	825	1	429	525
PM BUILD Queue	**2**	**299**	**250**	**1**	**738**	**825**	**1**	**429**	**525**

Southbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
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**

	AM	PM
Cycle Length:	110	120

The eastbound left turn lanes provide a total of 520 lineal feet of turn lane. Effectively, there are 260 feet of dual eastbound left turn lanes. The existing westbound right turn lane length (400 feet) extends back to the next intersection. It then continues beyond that, but this report

only measures to the next intersection. It should be noted that the proposed FOP project does not contribute any traffic to the northbound approach. Therefore, no recommendation is made.

#5 - San Mateo Blvd / I-25 W. ramp - Pages A-92 thru A-95a

The results of the implementation year analysis of the signalized intersection of San Mateo Blvd / I-25 W. ramp are summarized in the following tables:

Existing Geometry (San Mateo Blvd / I-25 W. ramp)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB San Mateo Blvd	0	0	2	0	1
WB San Mateo Blvd	2	0	3	0	0
SB I-25 W. ramp	1	0	2	0	1

San Mateo Blvd / I-25 W. ramp	2009 No Build		2009 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	C-34.4	D-39.3	D-37.7	D-42.8

This report indicates that the intersection of San Mateo Blvd. (Osuna) / I-25 W. Ramp will operate all acceptable levels-of-service for all conditions analyzed.

The following table summarizes the results of the queuing analysis for this intersection of San Mateo Blvd / I-25 W. ramp:

Queueing Analysis Summary Sheet

Project: Fraternal Order of Police
Intersection: Osuna Rd / I-25 W. ramp

2009

Eastbound Approach	Left Turns # Lanes	Left Turns Vol.	Left Turns Length (Ft.)	Thru Movements # Lanes	Thru Movements Vol.	Thru Movements Length (Ft.)	Right Turns # Lanes	Right Turns Vol.	Right Turns Length (Ft.)
Existing Lane Length	*0*	*0*	*0*	*2*	*1,325*	*Cont*	*1*	*403*	*350*
AM NO BUILD Queue	0	0	0	2	1,447	825	1	440	500
AM BUILD Queue	**0**	**0**	**0**	**2**	**1,479**	**825**	**1**	**440**	**500**
Existing Lane Length	*0*	*0*	*0*	*2*	*1,697*	*Cont*	*1*	*471*	*350*
PM NO BUILD Queue	0	0	0	2	1,853	>1,000	1	514	600
PM BUILD Queue	**0**	**0**	**0**	**2**	**1,938**	**>1,000**	**1**	**514**	**600**

Westbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*2*	*695*	*350**	*3*	*1,246*	*Cont*	*0*	*0*	*0*
AM NO BUILD Queue	2	759	475	3	1,361	575	0	0	0
AM BUILD Queue	**2**	**780**	**475**	**3**	**1,375**	**575**	**0**	**0**	**0**
Existing Lane Length	*2*	*484*	*350**	*3*	*1,184*	*Cont*	*0*	*0*	*0*
PM NO BUILD Queue	2	529	**375**	3	1,293	**575**	0	0	0
PM BUILD Queue	**2**	**551**	**400**	**3**	**1,307**	**600**	**0**	**0**	**0**

Northbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
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 Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*1*	*191*	*150*	*2*	*302*	*Cont*	*1*	*194*	*150*
AM NO BUILD Queue	1	236	300	2	373	275	1	240	300
AM BUILD Queue	**1**	**236**	**300**	**2**	**393**	**275**	**1**	**254**	**325**
Existing Lane Length	*1*	*155*	*150*	*2*	*182*	*Cont*	*1*	*145*	*150*
PM NO BUILD Queue	1	192	275	2	225	200	1	179	**250**
PM BUILD Queue	**1**	**192**	**275**	**2**	**240**	**200**	**1**	**189**	**275**

	AM	PM
Cycle Length:	110	120

The westbound left turn lanes provide a total of 700 lineal feet of turn lane. Effectively, there are 350 feet of dual eastbound left turn lanes. It cannot be lengthened. There are minor queuing problems on the north leg of the intersection. The southbound right turn lane should

be extended by approximately 175 feet. The southbound left turn lane should be lengthened by a distance of approximately 150 feet. This project does not contribute traffic to the southbound left turn movement. Therefore, this report recommends that the southbound right turn lane be lengthened by approximately 175 feet.

#6 - Osuna Rd. / Jefferson St. - Pages A-96 thru A-99

The results of the implementation year analysis of the signalized intersection of Osuna Rd / Jefferson St. are summarized in the following tables:

Existing Geometry (Osuna Rd. / Jefferson St.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Osuna Rd.	2	0	2	1	0
WB Osuna Rd.	2	0	2	0	1
NB Jefferson St.	1	0	2	0	1
SB Jefferson St.	1	0	1	1	0

Osuna Rd. / Jefferson St.	2009 No Build		2009 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	C-33.3	F-80.8	C-34.7	F-91.2
Exist. Geom. – Add EB Thru, WB Thru, SB RT Lanes				D-51.4

The intersection of Osuna Rd. / Jefferson St. is projected to operate at satisfactory levels-of-service for the projected 2009 AM Peak Hour BUILD Condition. The projected 2009 PM Peak Hour NO BUILD and BUILD Conditions are at or near capacity. The projected level-of-service for both conditions is LOS "F".

A previous Traffic Impact Study for the proposed Vista del Norte Commercial Development recommended that a fourth eastbound thru lane and a third westbound thru lane be constructed on Osuna Rd., and a southbound right turn lane be constructed on Jefferson St. There are probably serious right-of-way problems associated with construction of these improvements. If constructed, the projected 2009 PM Peak Hour BUILD level-of-service would be "D" with a 51.4 second average control delay.

The proposed FOP Development traffic will constitute 3.0% or less of the total projected 2009 AM and PM Peak Hour BUILD Volumes at the intersection of Osuna Rd. / Jefferson St.

The following table summarizes the results of the queuing analysis for this intersection of Osuna Blvd / Jefferson St.:

Queueing Analysis Summary Sheet

Project: Fraternal Order of Police
Intersection: Osuna Rd / Jefferson St

2009

Eastbound Approach	Left Turns # Lanes	Left Turns Vol.	Left Turns Length (Ft.)	Thru Movements # Lanes	Thru Movements Vol.	Thru Movements Length (Ft.)	Right Turns # Lanes	Right Turns Vol.	Right Turns Length (Ft.)
Existing Lane Length	*2*	*236*	*200*	*3*	*1,081*	*Cont*	*0*	*154*	*0*
AM NO BUILD Queue	2	282	225	3	1,292	550	0	184	250
AM BUILD Queue	**2**	**282**	**225**	**3**	**1,292**	**550**	**0**	**195**	**250**
Existing Lane Length	*2*	*248*	*200*	*3*	*1,487*	*Cont*	*0*	*81*	*0*
PM NO BUILD Queue	2	296	250	3	1,777	775	0	97	**150**
PM BUILD Queue	**2**	**296**	**250**	**3**	**1,777**	**775**	**0**	**111**	**175**

Westbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*2*	*182*	*175*	*2*	*921*	*Cont*	*1*	*262*	*0*
AM NO BUILD Queue	2	203	175	2	1,027	600	1	292	350
AM BUILD Queue	**2**	**231**	**175**	**2**	**1,027**	**600**	**1**	**292**	**350**
Existing Lane Length	*2*	*88*	*175*	*2*	*1,016*	*Cont*	*1*	*201*	*0*
PM NO BUILD Queue	2	98	**100**	2	1,133	725	1	224	300
PM BUILD Queue	**2**	**122**	**125**	**2**	**1,133**	**725**	**1**	**224**	**300**

Northbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*1*	*122*	*175*	*2*	*227*	*Cont*	*1*	*42*	*175*
AM NO BUILD Queue	1	157	225	2	293	225	1	54	100
AM BUILD Queue	**1**	**164**	**225**	**2**	**306**	**225**	**1**	**86**	**150**
Existing Lane Length	*1*	*291*	*175*	*2*	*557*	*Cont*	*1*	*264*	*175*
PM NO BUILD Queue	1	375	475	2	719	**475**	1	341	**425**
PM BUILD Queue	**1**	**390**	**475**	**2**	**754**	**500**	**1**	**426**	**525**

Southbound Approach	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)	# Lanes	Vol.	Length (Ft.)
Existing Lane Length	*1*	*197*	*200*	*2*	*374*	*Cont*	*0*	*160*	*0*
AM NO BUILD Queue	1	207	275	2	393	275	0	168	225
AM BUILD Queue	**1**	**207**	**275**	**2**	**423**	**300**	**0**	**168**	**225**
Existing Lane Length	*1*	*335*	*200*	*2*	*342*	*Cont*	*0*	*303*	*0*
PM NO BUILD Queue	1	352	450	2	359	**275**	0	318	400
PM BUILD Queue	**1**	**352**	**450**	**2**	**382**	**300**	**0**	**318**	**400**

	AM	PM
Cycle Length:	110	120

The northbound left turn lane should be extended to a length of 300 feet to the existing median break south of Osuna Rd. if possible. Due to the existence of impact fees, this improvement is not recommended in this study.

RESULTS OF UNSIGNALIZED INTERSECTION CAPACITY ANALYSES

IMPLEMENTATION YEAR (2009)

#7 - Presidential Dr / Jefferson St – Pages A-100 thru A-104

The results of the analysis of the unsignalized intersection of Presidential Dr / Jefferson St are summarized in the following table:

	2009 NO BUILD		2009 BUILD	
	AM	PM	AM	PM
Presidential Dr / Jefferson St.				
Minor Street (Presidential Dr)				
WB Left	C-20.2	C-21.9	C-21.9	D-26.2
WB Right	C-20.2	C-21.9	C-21.9	D-26.2
Major Street (Jefferson St)				
SB Left	A-9.2	B-11.3	A-9.5	B-12.4

#8 - Jefferson Plaza / Jefferson St. – Pages A-105 thru A-109

The results of the analysis of the unsignalized intersection of Jefferson Plaza / Jefferson St. are summarized in the following table:

	2009 NO BUILD		2009 BUILD	
	AM	PM	AM	PM
Jefferson Plaza / Jefferson St.				
Minor Street (Jefferson Plaza)				
EB Left	D-22.5	E-37.4	D-28.0	E-46.1
EB Right	D-22.5	E-37.4	D-28.0	E-46.1
WB Left	C-24.5	C-18.7	D-26.5	C-21.3
WB Right	C-24.5	C-18.7	D-26.5	C-21.3
Major Street (Jefferson St)				
NB Left	B-13.0	B-10.5	B-13.8	B-10.9
SB Left	A-9.7	A-10.0	A-9.9	B-10.7

#9 – BMW Driveway / I-25 Frontage Rd – Pages A-110 thru A-114

The results of the analysis of the unsignalized intersection of BMW Driveway / I-25 Frontage Rd are summarized in the following table:

	2009 NO BUILD		2009 BUILD	
	AM	PM	AM	PM
BMW Driveway / I-25 Frontage Rd				
Minor Street (BMW Driveway)				
EB Left	B-10.4	B-11.8	B-10.6	B-13.8
EB Right	B-10.4	B-11.8	B-10.6	B-13.8
Major Street (I-25 Frontage Rd)				
SB Right	N/A	N/A	N/A	N/A

This intersection occurs on an New Mexico Department of Transportation Interstate frontage road and therefore was analyzed for auxiliary deceleration lane warrants. (See Appendix pages A-126 through A-127) According to NMDOT State Access Management Manual Criteria, this intersection warrants a right turn deceleration lane with a length of 400 feet and a taper ratio of 12.5:1. The length of the deceleration lane length can be reduced to 370 feet plus transition if the return radius into the driveway is 35 feet or greater.

#10 – Driveway 'A' / Jefferson St. – Pages A-115 thru A-117

The results of the analysis of the unsignalized intersection of Driveway 'A' / Jefferson St. are summarized in the following table:

	2009 BUILD	
	AM	PM
Driveway 'A' / Jefferson St		
Minor Street (Driveway 'A')		
WB Right	B-12.0	B-13.0
Major Street (Jefferson St)		
NB Right	N/A	N/A

Driveway "A" is proposed to be a right-turn-in, right-turn-out only unsignalized driveway.

#11 – Driveway 'B' / Jefferson St. – Pages A-118 thru A-122

The results of the analysis of the unsignalized intersection of Driveway 'B' / Jefferson St. are summarized in the following table:

	2009 NO BUILD		2009 BUILD	
	AM	PM	AM	PM
Driveway 'B' / Jefferson St				
Minor Street (Driveway 'B')				
EB Left	C-16.3	C-20.0	C-22.6	D-34.1
EB Thru	N/A	N/A	C-22.6	D-34.1
EB Right	C-16.3	C-20.0	C-22.6	D-34.1
Minor Street (Driveway 'B')				
WB Left	N/A	N/A	C-23.3	F-75.7
WB Thru	N/A	N/A	C-23.3	F-75.7
WB Right	N/A	N/A	C-23.3	F-75.7
Major Street (Jefferson St)				
NB Left	B-10.3	B-10.9	B-10.3	B-10.9
SB Left	N/A	N/A	A-2.9	A-2.6

Currently, the east leg of the driveway exists as a dirt road. The volumes on the east leg currently are almost non-existent. Driveway "B" is proposed to be a full access unsignalized driveway which aligns with an existing driveway on the west side of Jefferson St.

Since the projected delays for the new FOP driveway are at LOS "F", this study recommends that the new driveway be constructed with at least two westbound approach lanes (one for westbound left turns and one for westbound thru / right turns) and one eastbound lane. Also,

a northbound right turn deceleration lane is warranted on Jefferson St. at Driveway "B". The length of the deceleration lane should be 150 feet plus transition.

#12 – Driveway 'C' / Jefferson St. – Pages A-123 thru A-125

The results of the analysis of the unsignalized intersection of Driveway 'C' / Jefferson St. are summarized in the following table:

	2009 BUILD	
	AM	PM
Driveway 'C' / Jefferson St		
Minor Street (Driveway 'C')		
WB Left	N/A	N/A
WB Right	B-12.4	B-12.4
Major Street (Jefferson St)		
NB Right	N/A	N/A

Driveway "C" is proposed to be a right-turn-in, right-turn-out only unsignalized driveway.

Driveways "A", "B", and "C" will be required to meet the minimum standards established by the City of Albuquerque Development Process Manual (D.P.M.).

It should be noted that Levels of Service (LOS) for unsignalized intersections cannot be compared directly with Levels of Service for signalized intersections. LOS for unsignalized intersections is based on reserve capacity, which is converted to generalized levels of delay; LOS for signalized intersections is based on actual delay in seconds..

LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

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

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

CONCLUSIONS

This analysis was conducted using the following methodology: Trip Generation was established using the Institute of Transportation Engineers' (ITE's) Trip Generation Manual (7th Edition). Generated Trips were distributed proportionately based on the Population Data Analysis Subzones or Population Subareas as was appropriate; Growth rate of background traffic was calculated from the 2001 thru 2005 AWDT's from MRCOG Traffic Flow Maps and used to project 2009 peak hour volumes at key intersections; 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 site plan consisting of commercial / office type of development will present no significant adverse impact to the adjacent transportation system provided that the following recommendations are followed:

RECOMMENDATIONS

FROM IMPLEMENTATION YEAR (2009) ANALYSIS

- All design and construction of the project shall provide for adequate sight distances and driveways at existing and proposed intersections and driveways constructed and/or altered by this project.
- **Singer Blvd. / Jefferson St.** – Construct a new southbound right turn lane on Jefferson St. at Singer Blvd. (The proposed FOP Development contributes about 5.8% of the total 2009 PM Peak Hour BUILD Condition traffic volume at this intersection and about 4.0% of the southbound right turn volume forecast for the 2009 PM Peak Hour BUILD Condition).
- **Osuna Rd. / I-25 West Ramp** – the southbound right turn lane on the exit ramp should be lengthened by a distance of 175 feet. (The proposed FOP Development contributes approximately 5.5% of the projected 2009 AM and PM Peak Hour BUILD Condition Volumes for the southbound right turn movement at this intersection).
- **Osuna Rd. / Jefferson St.** – see discussion on Page 17. No recommendation is made due to the presence of impact fees.
- **Driveways:**
  - Driveway "A" / Jefferson St. located near the north end of the project on Jefferson St. Driveway "A" is proposed to be a right-turn-in, right-turn-out only unsignalized driveway.
  - Driveway "B" / Jefferson St. located near the center of the frontage of the project along Jefferson St. is proposed to be a full access unsignalized intersection which aligns with the existing driveway on the west side of Jefferson St. Driveway "B" should be constructed with two westbound exiting lanes (one for left turns and one for thru / right turns) and one entering lane. Construct a northbound right turn deceleration lane on Jefferson St. at Driveway "B". The northbound right turn deceleration lane should be constructed to a length of 150 feet plus transition. Construct a southbound left turn lane on Jefferson St. at Driveway "B". The southbound left turn lane should be constructed to a length of 150 feet plus transition.
  - Driveway "C" / Jefferson St. located near the south end of the project on Jefferson St. Driveway "C" is proposed to be a right-turn-in, right-turn-out only unsignalized driveway.

- BMW Driveway / I-25 West Frontage Rd. is proposed to be a right-turn-in, right-turn-out only unsignalized driveway which serves and an existing access to the existing BMW dealership as well as a proposed access to the FOP Development. A southbound right turn deceleration lane is warranted on the I-25 West Frontage Rd. at the BMW driveway. The right turn deceleration lane should be constructed to a length of 370 feet plus a 12.5:1 taper transition provided that the return radii into the driveway is 35 feet or greater.
- Driveways "A", "B", and "C" should be construct to meet the minimum requirements of the City of Albuquerque's Development Process Manual. The BMW driveway should be constructed to comply with the requirements of the New Mexico Department of Transportation's State Access Management Manual.

Appendix

APPENDIX

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2009) - 100% Development

INTERSECTION: **Summary**

Singer Ave / Jefferson St

(1)

3.5% Truck

	0.80			*0.75*			*0.89*			*0.83*			*PHF*
	Eastbound (Singer Ave)			Westbound (Singer Ave)			Northbound (Jefferson St)			Southbound (Jefferson St)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	146	28	203	57	19	21	415	678	286	36	411	142	
2009 (NO BUILD - A.M.)	*151*	*29*	*209*	*58*	*20*	*22*	*427*	*698*	*294*	*42*	*481*	*167*	
2009 (BUILD - A.M.)	***158***	***29***	***209***	***58***	***20***	***22***	***427***	***827***	***294***	***42***	***502***	***169***	
% Contribution by Movement	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.6%	0.0%	0.0%	4.2%	1.2%	
% Contribution by Approach		*1.8%*			*0.0%*			*8.3%*			*3.2%*		
% Contribution - Intersection						*5.8%*							

	0.70			*0.75*			*0.91*			*0.86*			*PHF*
	Eastbound (Singer Ave)			Westbound (Singer Ave)			Northbound (Jefferson St)			Southbound (Jefferson St)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	214	64	432	195	35	54	212	390	158	30	629	142	
2009 (NO BUILD - P.M.)	*220*	*66*	*445*	*201*	*36*	*55*	*218*	*401*	*162*	*35*	*738*	*167*	
2009 (BUILD - P.M.)	***222***	***66***	***445***	***201***	***36***	***55***	***218***	***498***	***162***	***35***	***800***	***174***	
% Contribution by Movement	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.5%	0.0%	0.0%	7.8%	4.0%	
% Contribution by Approach		*0.3%*			*0.0%*			*11.0%*			*6.8%*		
% Contribution - Intersection						*5.8%*							

Jefferson St / I-25 W. ramp

(2)

5.6% Truck

	0.86			*0.85*			*0.85*			*0.73*			*PHF*
	Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	0	416	236	243	1,697	0	0	0	0	266	426	179	
2009 (NO BUILD - A.M.)	*0*	*432*	*243*	*252*	*1,748*	*0*	*0*	*0*	*0*	*314*	*497*	*209*	
2009 (BUILD - A.M.)	***0***	***446***	***250***	***252***	***1,877***	***0***	***0***	***0***	***0***	***335***	***507***	***209***	
% Contribution by Movement	N/A	3.1%	2.8%	0.0%	6.9%	N/A	N/A	N/A	N/A	6.3%	2.0%	0.0%	
% Contribution by Approach		*3.0%*			*6.1%*			*N/A*			*2.9%*		
% Contribution - Intersection						*4.7%*							

	0.94			*0.96*			*0.85*			*0.97*			*PHF*
	Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	0	744	523	275	955	0	0	0	0	305	617	121	
2009 (NO BUILD - P.M.)	*0*	*774*	*539*	*286*	*987*	*0*	*0*	*0*	*0*	*364*	*721*	*141*	
2009 (BUILD - P.M.)	***0***	***805***	***570***	***286***	***1,084***	***0***	***0***	***0***	***0***	***409***	***769***	***141***	
% Contribution by Movement	N/A	3.9%	5.4%	0.0%	8.9%	N/A	N/A	N/A	N/A	11.0%	6.2%	0.0%	
% Contribution by Approach		*4.5%*			*7.1%*			*N/A*			*7.1%*		
% Contribution - Intersection						*6.2%*							

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2009) - 100% Development

INTERSECTION: **Summary**

Jefferson St / I-25 E. ramp

(3)

3.7% Truck

	0.83			0.75			0.87			0.85		PHF
	Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	53	444	0	0	476	120	693	312	144	0	0	0
2009 (NO BUILD - A.M.)	*54*	*465*	*0*	*0*	*486*	*125*	*831*	*374*	*172*	*0*	*0*	*0*
2009 (BUILD - A.M.)	***54***	***500***	***0***	***0***	***545***	***125***	***900***	***374***	***172***	***0***	***0***	***0***
% Contribution by Movement	0.0%	7.0%	N/A	N/A	10.8%	0.0%	7.7%	0.0%	0.0%	N/A	N/A	N/A
% Contribution by Approach		***6.3%***			***8.8%***			***4.8%***			***N/A***	
% Contribution - Intersection						***6.1%***						

	0.84			0.95			0.95			0.85		PHF
	Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	319	680	0	0	449	259	470	508	199	0	0	0
2009 (NO BUILD - P.M.)	*329*	*714*	*0*	*0*	*463*	*271*	*564*	*609*	*239*	*0*	*0*	*0*
2009 (BUILD - P.M.)	***329***	***790***	***0***	***0***	***530***	***271***	***594***	***609***	***239***	***0***	***0***	***0***
% Contribution by Movement	0.0%	9.6%	N/A	N/A	12.6%	0.0%	5.1%	0.0%	0.0%	N/A	N/A	N/A
% Contribution by Approach		***6.8%***			***8.4%***			***2.1%***			***N/A***	
% Contribution - Intersection						***5.1%***						

San Mateo Blvd / I-25 E. ramp

(4)

4.4% Truck

	0.79			0.86			0.84			0.85		PHF
	Eastbound (San Mateo Blvd)			Westbound (San Mateo Blvd)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	177	1,321	0	0	2,447	522	405	292	237	0	0	0
2009 (NO BUILD - A.M.)	*189*	*1,410*	*0*	*0*	*2,520*	*538*	*472*	*341*	*277*	*0*	*0*	*0*
2009 (BUILD - A.M.)	***202***	***1,429***	***0***	***0***	***2,555***	***538***	***472***	***341***	***277***	***0***	***0***	***0***
% Contribution by Movement	6.4%	1.3%	N/A	N/A	1.4%	0.0%	0.0%	0.0%	0.0%	N/A	N/A	N/A
% Contribution by Approach		***2.0%***			***1.1%***			***0.0%***			***N/A***	
% Contribution - Intersection						***1.2%***						

	0.96			0.94			0.97			0.85		PHF
	Eastbound (San Mateo Blvd)			Westbound (San Mateo Blvd)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	305	1,776	0	0	1,788	884	256	632	367	0	0	0
2009 (NO BUILD - P.M.)	*325*	*1,896*	*0*	*0*	*1,841*	*910*	*299*	*738*	*429*	*0*	*0*	*0*
2009 (BUILD - P.M.)	***366***	***1,940***	***0***	***0***	***1,877***	***910***	***299***	***738***	***429***	***0***	***0***	***0***
% Contribution by Movement	11.2%	2.3%	N/A	N/A	1.9%	0.0%	0.0%	0.0%	0.0%	N/A	N/A	N/A
% Contribution by Approach		***3.7%***			***1.3%***			***0.0%***			***N/A***	
% Contribution - Intersection						***1.8%***						

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2009) - 100% Development

INTERSECTION: **Summary**

Osuna Rd / I-25 W. ramp

(5)

4.1% Truck

		0.83			*0.90*			*0.85*			*0.83*		*PHF*
	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	0	1,355	412	711	1,275	0	0	0	0	202	320	205	
2009 (NO BUILD - A.M.)	*0*	*1,447*	*440*	*759*	*1,361*	*0*	*0*	*0*	*0*	*236*	*373*	*240*	
2009 (BUILD - A.M.)	***0***	***1,479***	***440***	***780***	***1,375***	***0***	***0***	***0***	***0***	***236***	***393***	***254***	
% Contribution by Movement	N/A	2.2%	0.0%	2.7%	1.0%	N/A	N/A	N/A	N/A	0.0%	5.1%	5.5%	
% Contribution by Approach		***1.7%***			***1.6%***			***N/A***			***3.9%***		
% Contribution - Intersection						***2.0%***							

		0.84			*0.89*			*0.85*			*0.86*		*PHF*
	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	0	1,736	482	495	1,211	0	0	0	0	164	193	154	
2009 (NO BUILD - P.M.)	*0*	*1,853*	*514*	*529*	*1,293*	*0*	*0*	*0*	*0*	*192*	*225*	*179*	
2009 (BUILD - P.M.)	***0***	***1,938***	***514***	***551***	***1,307***	***0***	***0***	***0***	***0***	***192***	***240***	***189***	
% Contribution by Movement	N/A	4.4%	0.0%	4.0%	1.1%	N/A	N/A	N/A	N/A	0.0%	6.3%	5.3%	
% Contribution by Approach		***3.5%***			***1.9%***			***N/A***			***4.0%***		
% Contribution - Intersection						***3.0%***							

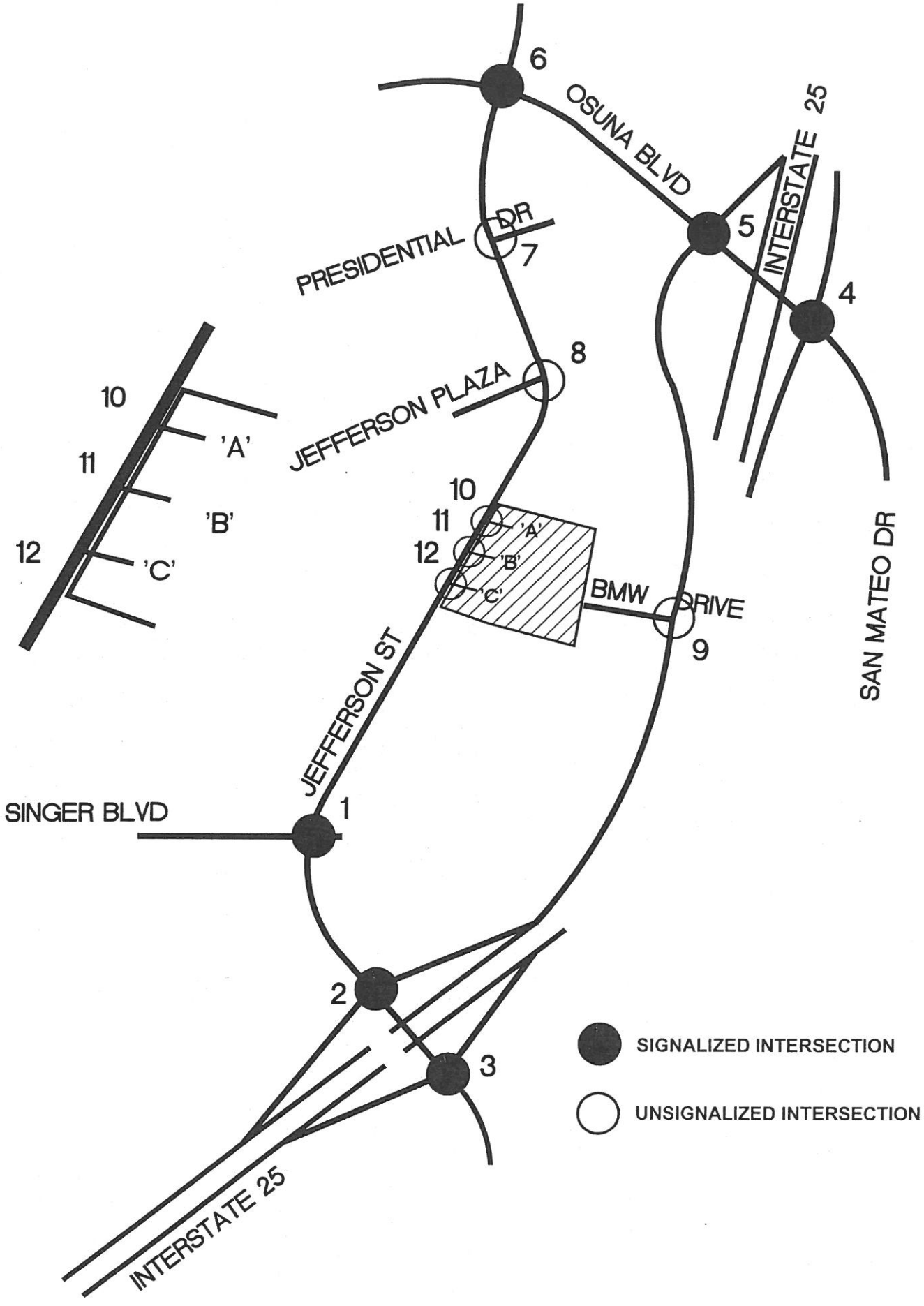
Osuna Rd / Jefferson St

(6)

6.1% Truck

		0.88			*0.87*			*0.91*			*0.87*		*PHF*
	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (Jefferson St)			Southbound (Jefferson St)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	254	1,165	166	190	963	274	136	253	47	201	381	163	
2009 (NO BUILD - A.M.)	*306*	*1,382*	*187*	*203*	*1,121*	*292*	*160*	*293*	*54*	*207*	*393*	*193*	
2009 (BUILD - A.M.)	***306***	***1,382***	***198***	***231***	***1,121***	***292***	***167***	***306***	***86***	***207***	***423***	***193***	
% Contribution by Movement	0.0%	0.0%	5.6%	12.1%	0.0%	0.0%	4.2%	4.2%	37.2%	0.0%	7.1%	0.0%	
% Contribution by Approach		***0.6%***			***1.7%***			***9.3%***			***3.6%***		
% Contribution - Intersection						***2.5%***							

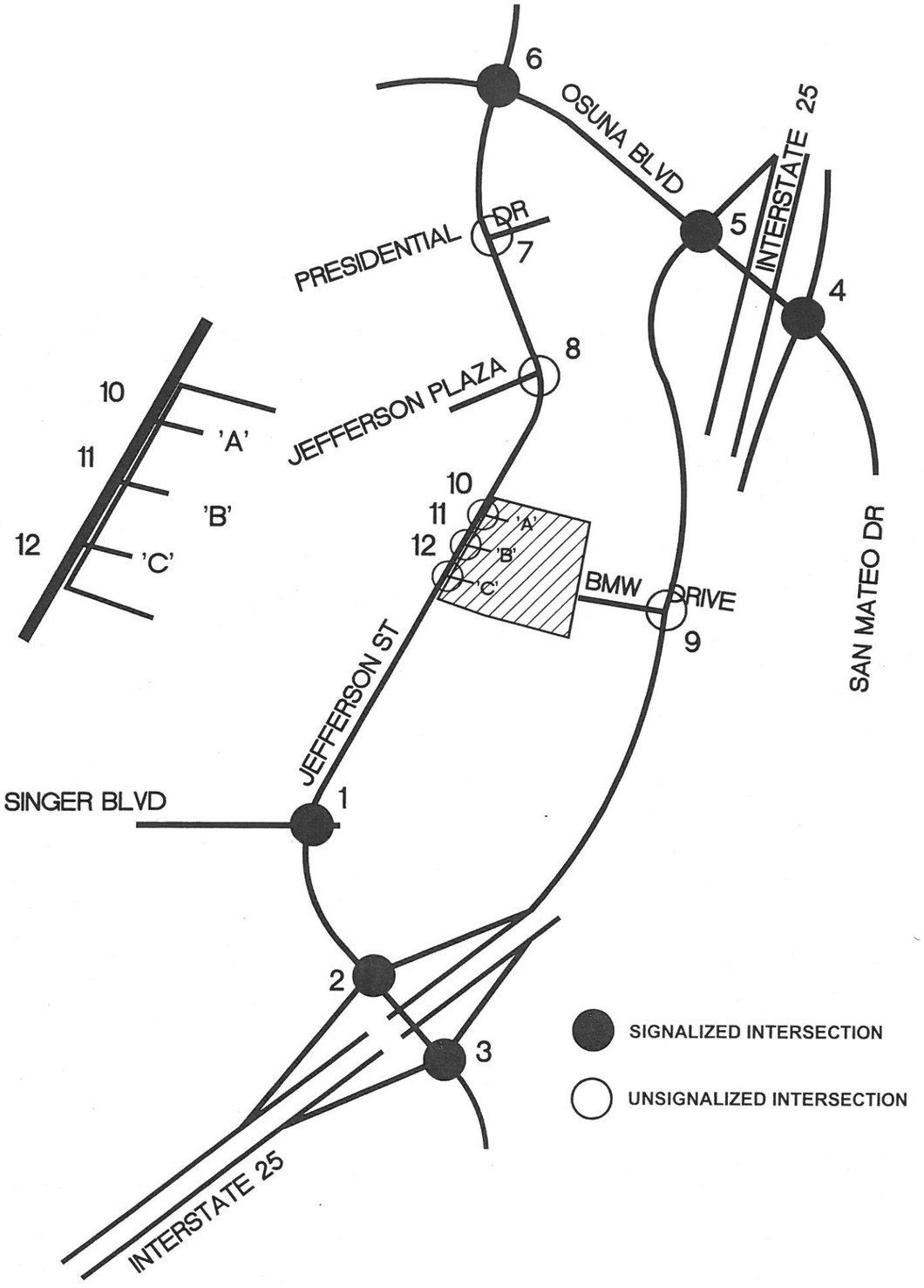
		0.94			*0.91*			*0.90*			*0.79*		*PHF*
	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (Jefferson St)			Southbound (Jefferson St)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	267	1,603	87	92	1,063	210	325	622	295	342	349	309	
2009 (NO BUILD - P.M.)	*323*	*1,878*	*100*	*98*	*1,232*	*224*	*378*	*719*	*341*	*352*	*359*	*345*	
2009 (BUILD - P.M.)	***323***	***1,878***	***114***	***122***	***1,232***	***224***	***393***	***754***	***426***	***352***	***382***	***345***	
% Contribution by Movement	0.0%	0.0%	12.3%	19.7%	0.0%	0.0%	3.8%	4.6%	20.0%	0.0%	6.0%	0.0%	
% Contribution by Approach		***0.6%***			***1.5%***			***8.6%***			***2.1%***		
% Contribution - Intersection						***3.0%***							


6
OSUNA BLVD
25
INTERSTATE
5
4
PRESIDENTIAL DR
7
8
JEFFERSON PLAZA
10
'A'
11
'B'
12
'C'
10
11
12
'A'
'B'
'C'
BMW DRIVE
9
SAN MATEO DR
JEFFERSON ST
SINGER BLVD
1
2
3
INTERSTATE 25
SIGNALIZED INTERSECTION
UNSIGNALIZED INTERSECTION
NORTH
NTS

70P Development

Jefferson St. North of Bear Canyon Arroyo

LOS / Volume Analysis Map



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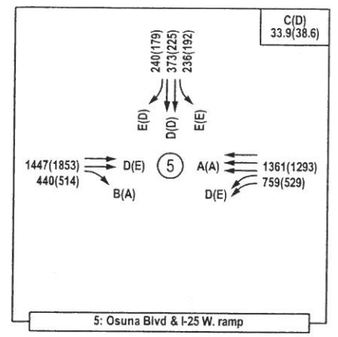
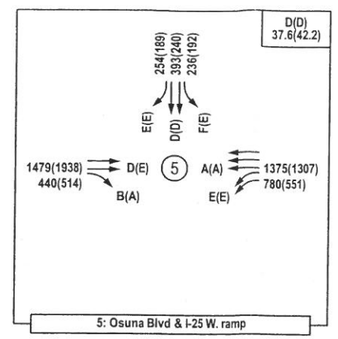
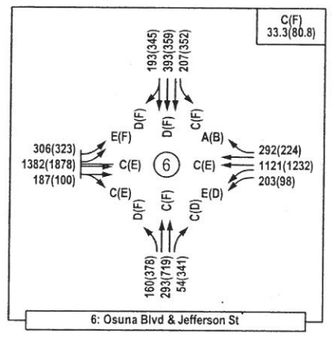
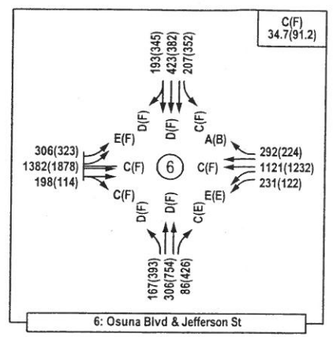
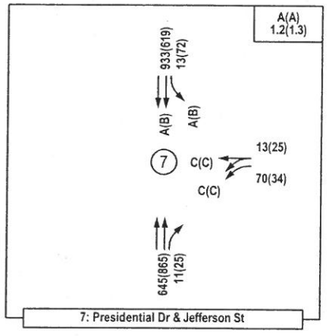
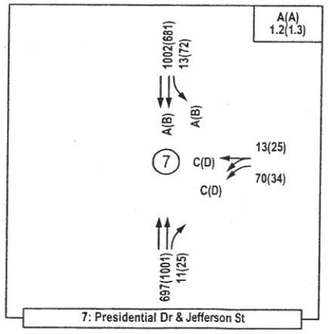
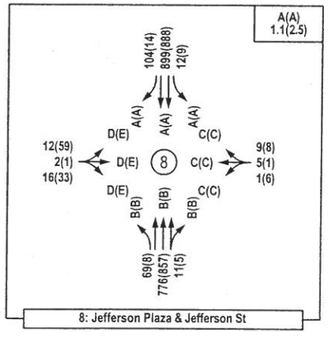
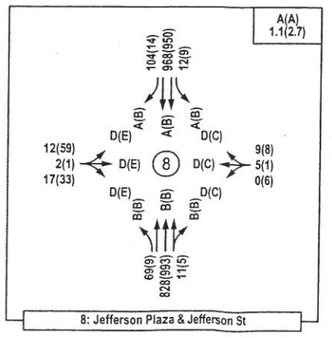
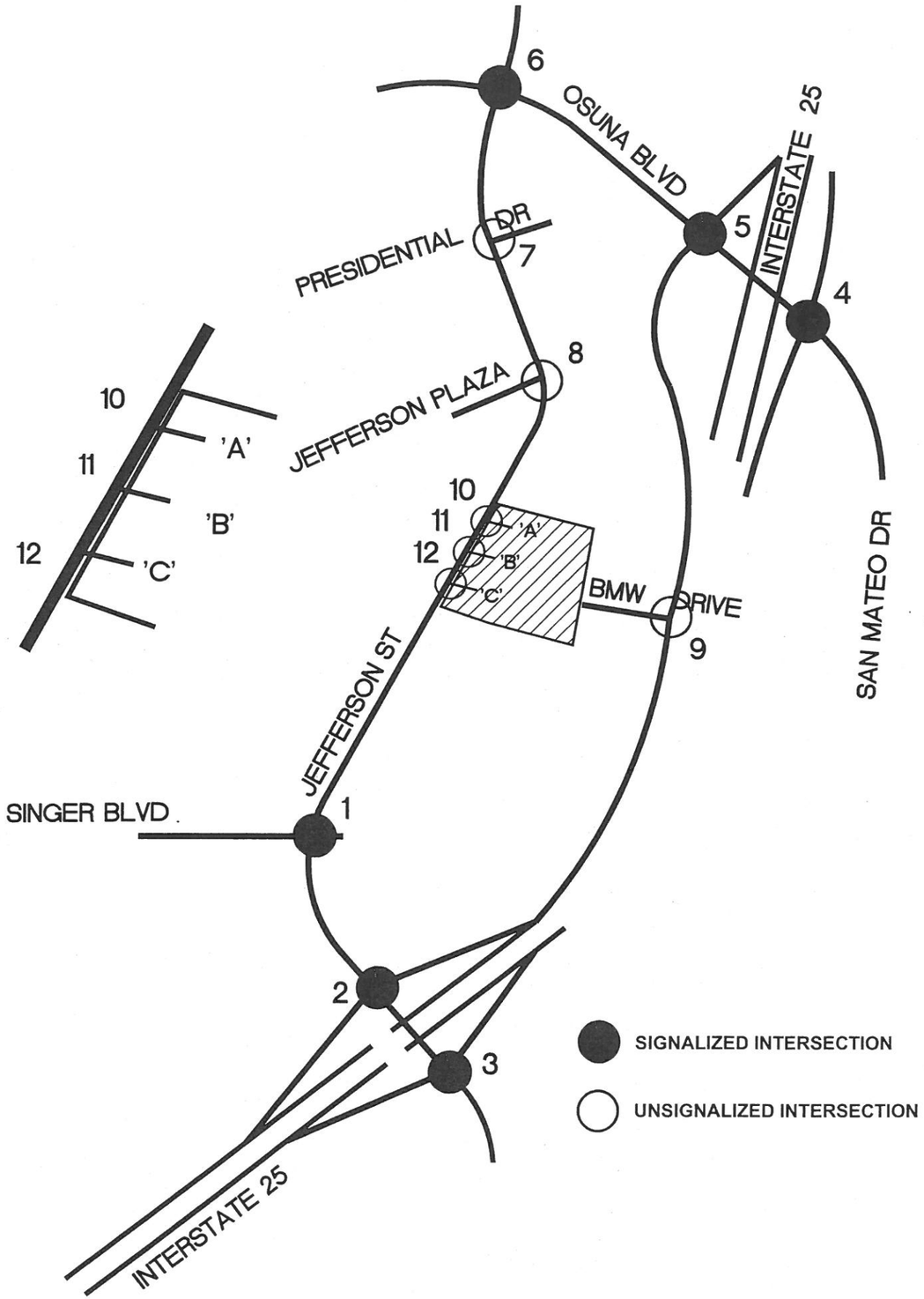
		NO RECOMMENDATION
		NO RECOMMENDATION
		NO RECOMMENDATION
		NO RECOMMENDATION



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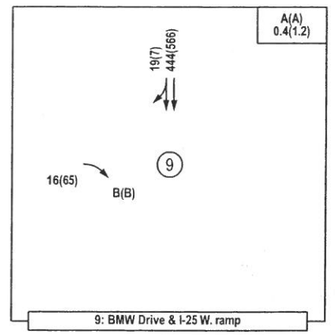
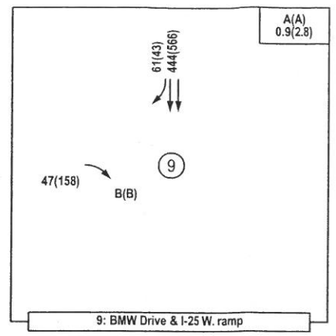
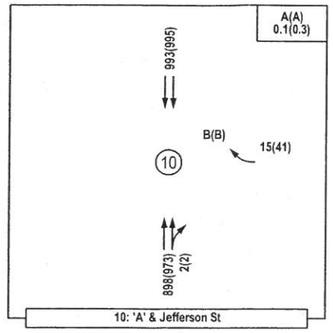
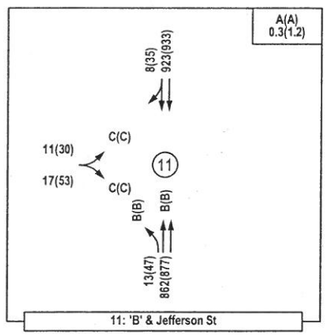
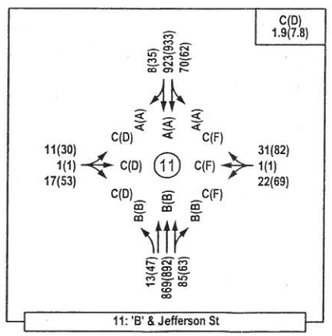
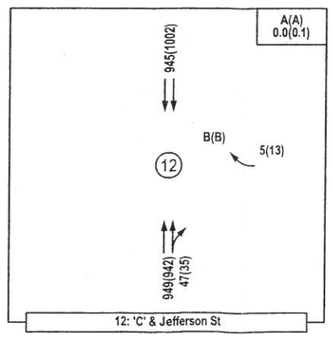
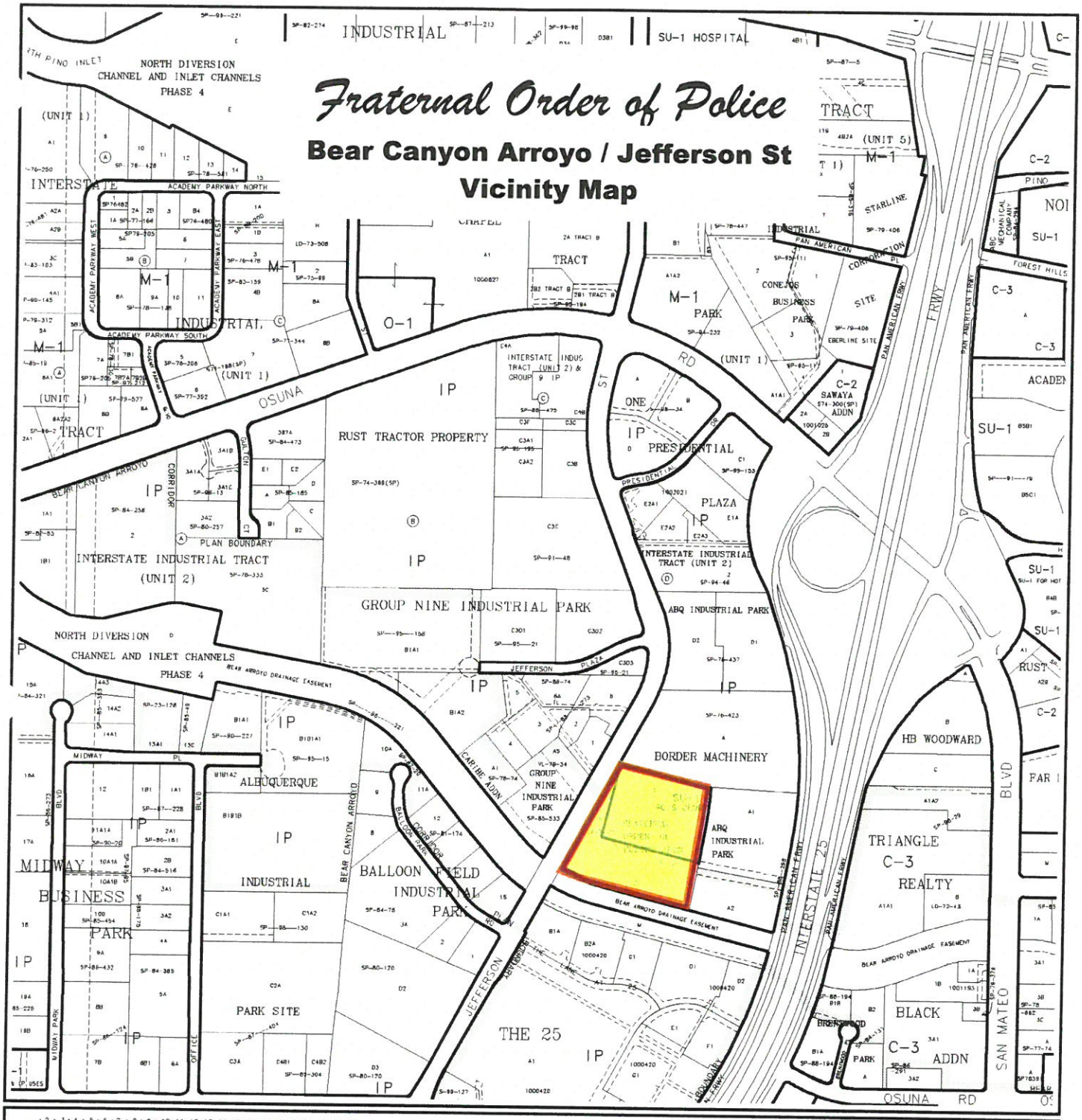
9: BMW Drive & I-25 W. ramp			NO RECOMMENDATION
10: 'A' & Jefferson St			
11: 'B' & Jefferson St			
12: 'C' & Jefferson St			

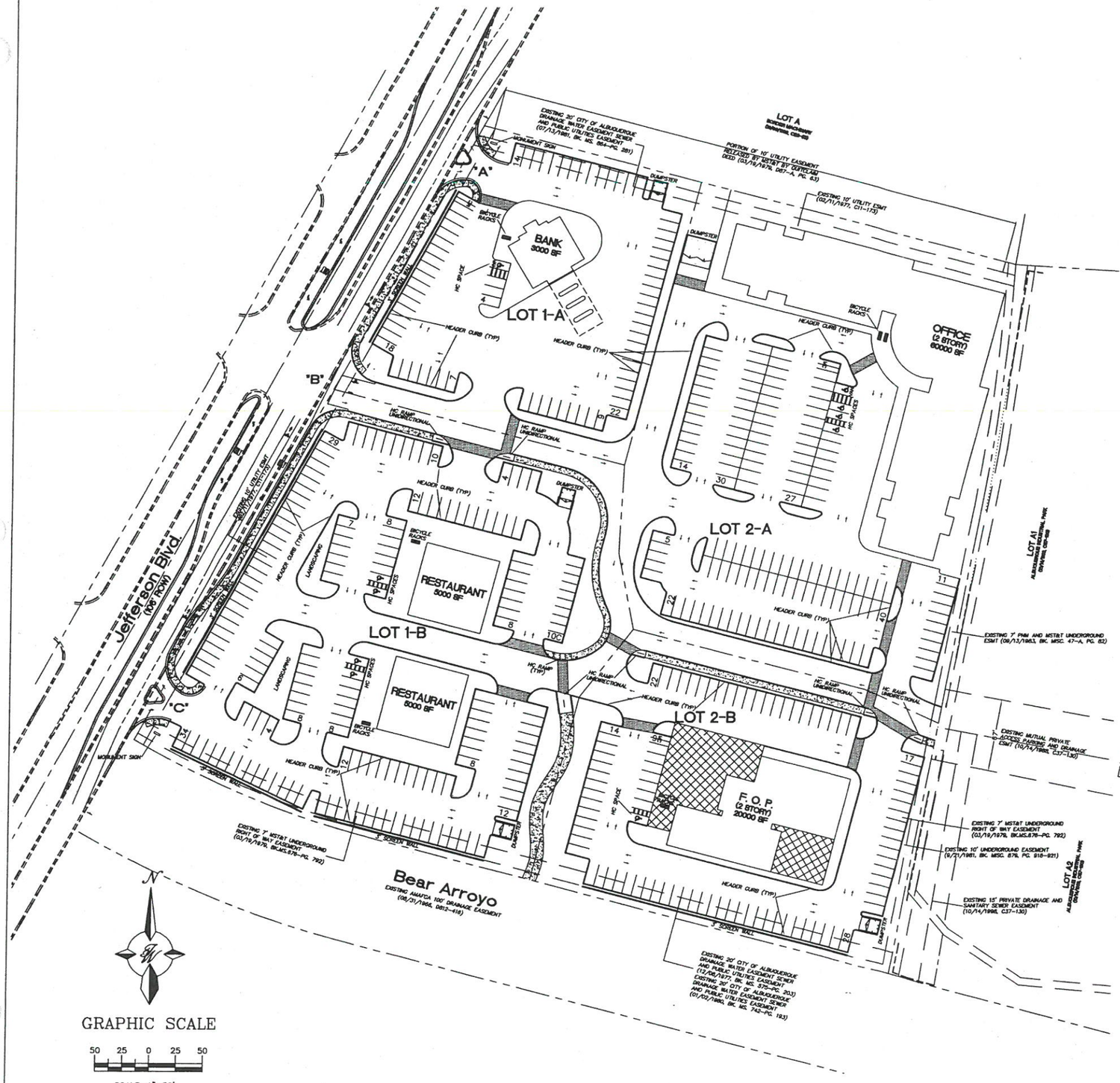
TOP Development

Jefferson St. North of Bear Canyon Arroyo

LOS / Volume Analysis Map


Fraternal Order of Police
Bear Canyon Arroyo / Jefferson St
Vicinity Map
INDUSTRIAL
SU-1 HOSPITAL
NORTH DIVERSION CHANNEL AND INLET CHANNELS PHASE 4
INTERSTATE
ACADEMY PARKWAY NORTH
ACADEMY PARKWAY WEST
ACADEMY PARKWAY EAST
ACADEMY PARKWAY SOUTH
M-1
O-1
OSUNA
RUST TRACTOR PROPERTY
IP
PRESIDENTIAL PLAZA
INTERSTATE INDUSTRIAL TRACT (UNIT 2)
GROUP NINE INDUSTRIAL PARK
ABQ INDUSTRIAL PARK
BORDER MACHINERY
HB WOODWARD
TRIANGLE C-3 REALTY
BLACK C-3 ADDN
BEAR CANYON ARROYO
BEAR ARROYO DRAINAGE EASEMENT
JEFFERSON
CARIBE
MIDWAY
ALBUQUERQUE
MIDWAY BUSINESS PARK
BALLOON FIELD INDUSTRIAL PARK
PARK SITE
THE 25
INTERSTATE 25
SAN MATEO BLVD
OSUNA RD
C-2
C-3
SU-1
PLAN BOUNDARY
NOTE: GREY SHADING REPRESENTS AREA OUTSIDE OF THE CITY LIMITS
GRAPHIC SCALE IN FEET
250 0 750 1000
Zone Atlas Page
E-17-Z
Map Amended through September 01, 2004
Albuquerque Geographic Information System
PLANNING DEPARTMENT
© Copyright 2004

D:\ATOBE\PROJECTS\FOP_Site_Jefferson\Site_Plan_[illegible]0612516-SPB.dwg



SITE DATA:

PROPOSED USAGE	COMMERCIAL
LOT AREAS	
LOT 1-A	66614 SF (1.53 AC)
LOT 1-B	136470 SF (3.13 AC)
LOT 2-A	135597 SF (3.11 AC)
LOT 2-B	82583 SF (1.90 AC)
TOTAL SITE	421264 SF (9.67 AC)
ZONING	SU-1 FOR IP
MAXIMUN FAR	0.25
MAXIMUN BUILDING HEIGHT	45'
MINIMUN BUILDING SETBACK	20'
LANDSCAPING REQUIREMENTS	
REQUIRED	15% OF PAVED SURFACE AND BUILDINGS

GENERAL NOTES:

1. COMMON STORM DRAINAGE, PEDESTRIAN, AND VEHICULAR ACCESS ACROSS NEW TRACTS IS GRANTED BY THIS SITE PLAN AND WILL BE GRANTED ON THE REPLAT.

2. PEDESTRIAN ACCESS WILL BE PROVIDED ACROSS ALL LOTS INTERNALLY IN THE APPROVED SITE PLAN.

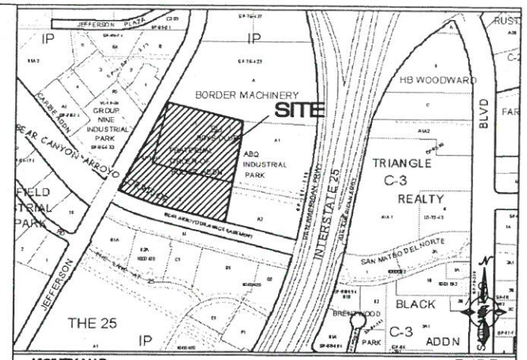
3. LIGHT POLES SHALL BE A MAXIMUM OF 25' FEET WITH FULL CUT OFF LIGHT FIXTURES. LIGHT FIXTURES SHALL BE A MAXIMUM OF 25' WITH FULL CUT OFF SHIELDS ON FIXTURES SO THAT NO FUGITIVE LIGHT SHALL ESCAPE BEYOND THE PROPERTY LINE. THE LIGHT FIXTURES SHALL BE FULLY SHIELDED WITH HORIZONTAL LAMPS.

4. THERE SHALL BE NO BACKLIT, PLASTIC, OR VINYL AWNINGS OR ILLUMINATED PLASTIC BANDING ON SIGNAGE.

5. NO FREESTANDING CELL TOWERS OR ANTENNA SHALL BE PERMITTED. ANY WIRELESS COMMUNICATIONS FACILITIES SHALL BE INTEGRATED INTO THE BUILDING ARCHITECTURE.

6. BUS STOPS ADJACENT TO THE PROPERTY,
   -ROUTE 151
   BUS STOPS AT SINGER AVE AND JEFFERSON BLVD AND OSUNA AVE AND JEFFERSON BLVD

7. TRAFFIC STOP SIGNS TO BE PLACED AT ALL INTERSECTIONS.



VICINITY MAP: E-17-Z

LEGAL DESCRIPTION:

FRATERNAL ORDER OF POLICE ADDITION, TRACTS 1 AND 2

LEGEND

- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- BOUNDARY LINE
- EXISTING BOUNDARY LINE
- EASEMENT
- CENTERLINE
- RIGHT-OF-WAY
- LOT LINES
- SETBACK LINE
- STRIPING
- PROPOSED BUILDING
- EXISTING SIDEWALK
- PROPOSED SIDEWALK
- PROPOSED CROSSWALK (PATTERN CONCRETE)
- PROPOSED BIKERACK
- PROPOSED FIRE HYDRANT
- PROPOSED SCREEN WALL
- PROPOSED PARKING LOT LIGHTING

PROJECT NUMBER: 1004801

APPLICATION NUMBER: _____

This plan is consistent with the specific Site Development Plan approved by the Environmental Planning Commission (EPC), dated _____ and the Findings and Conditions in the Official Notification of Decision are satisfied.

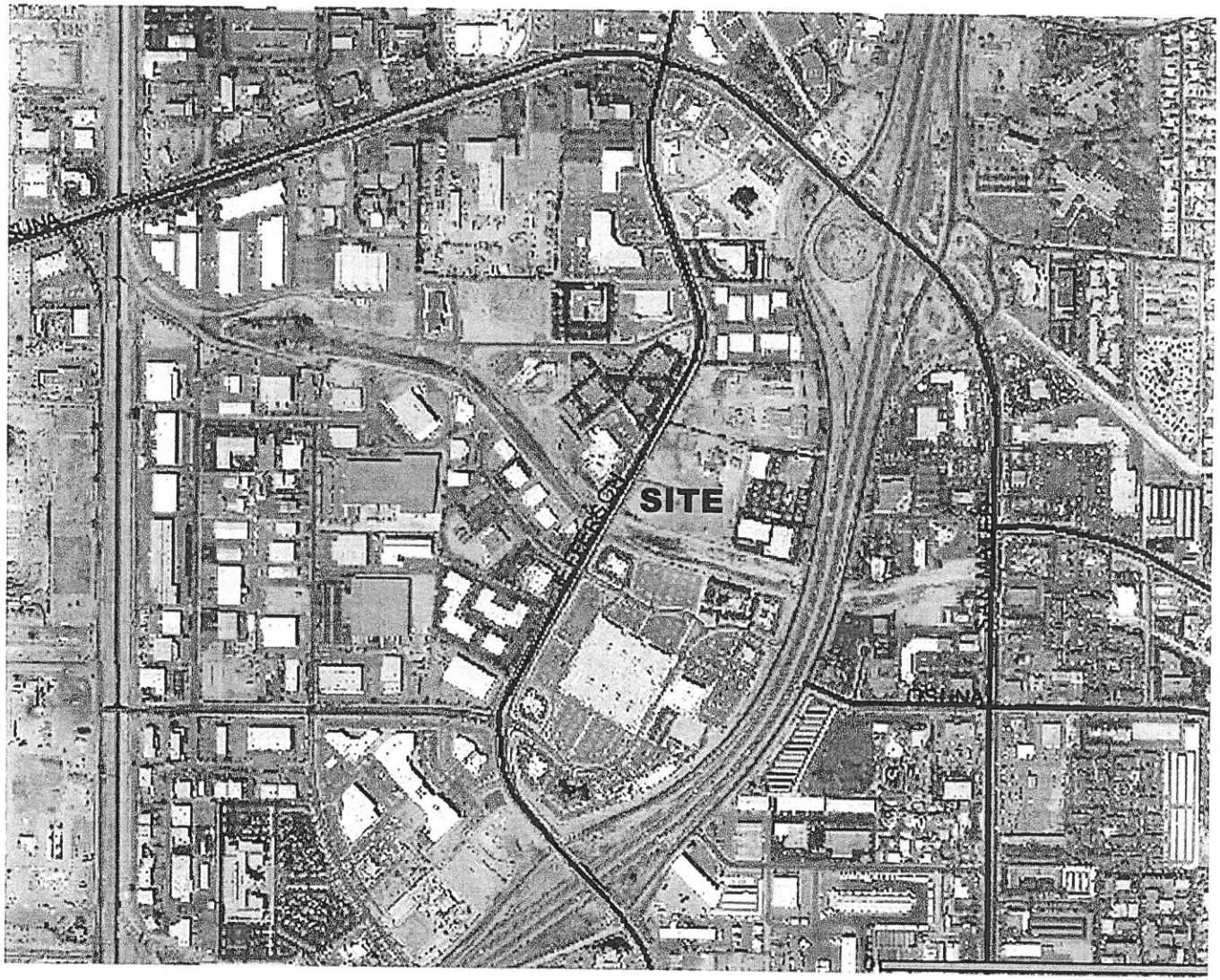
Is an Infrastructure List required? ( ) Yes ( ) No If Yes, then a set of approved DRC plans with a work order is required for any construction within Public Right-of-Way or for construction of public improvements.

DRB SITE DEVELOPMENT PLAN SIGNOFF APPROVAL:

Traffic Engineer, Transportation Division	Date
Water Utility Development	Date
Parks & Recreation Department	Date
City Engineer	Date
* Environmental Health Department (conditional)	Date
Solid Waste Management	Date
DRB Chairperson, Planning Department	Date

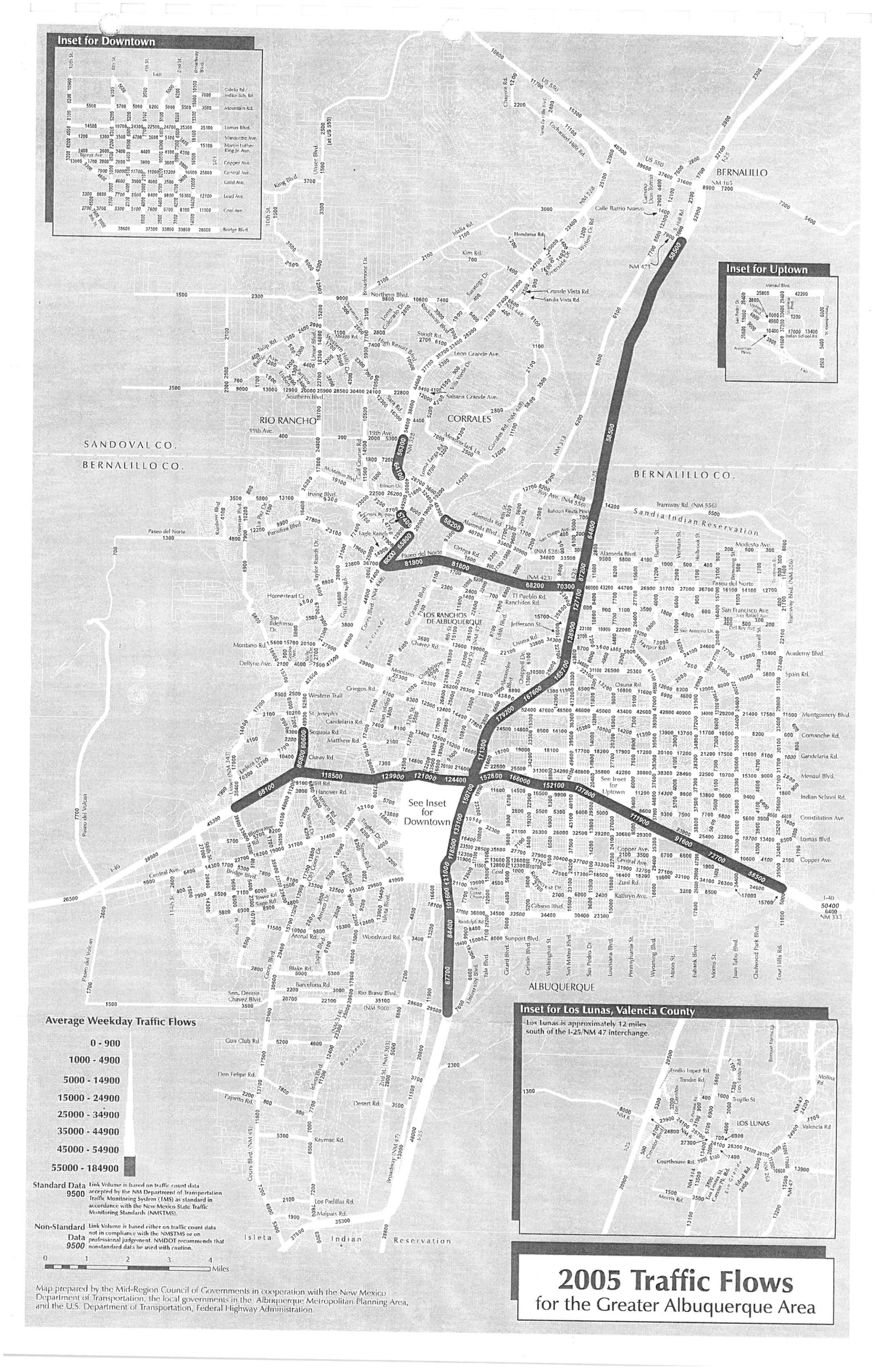
* Environmental Health, if necessary

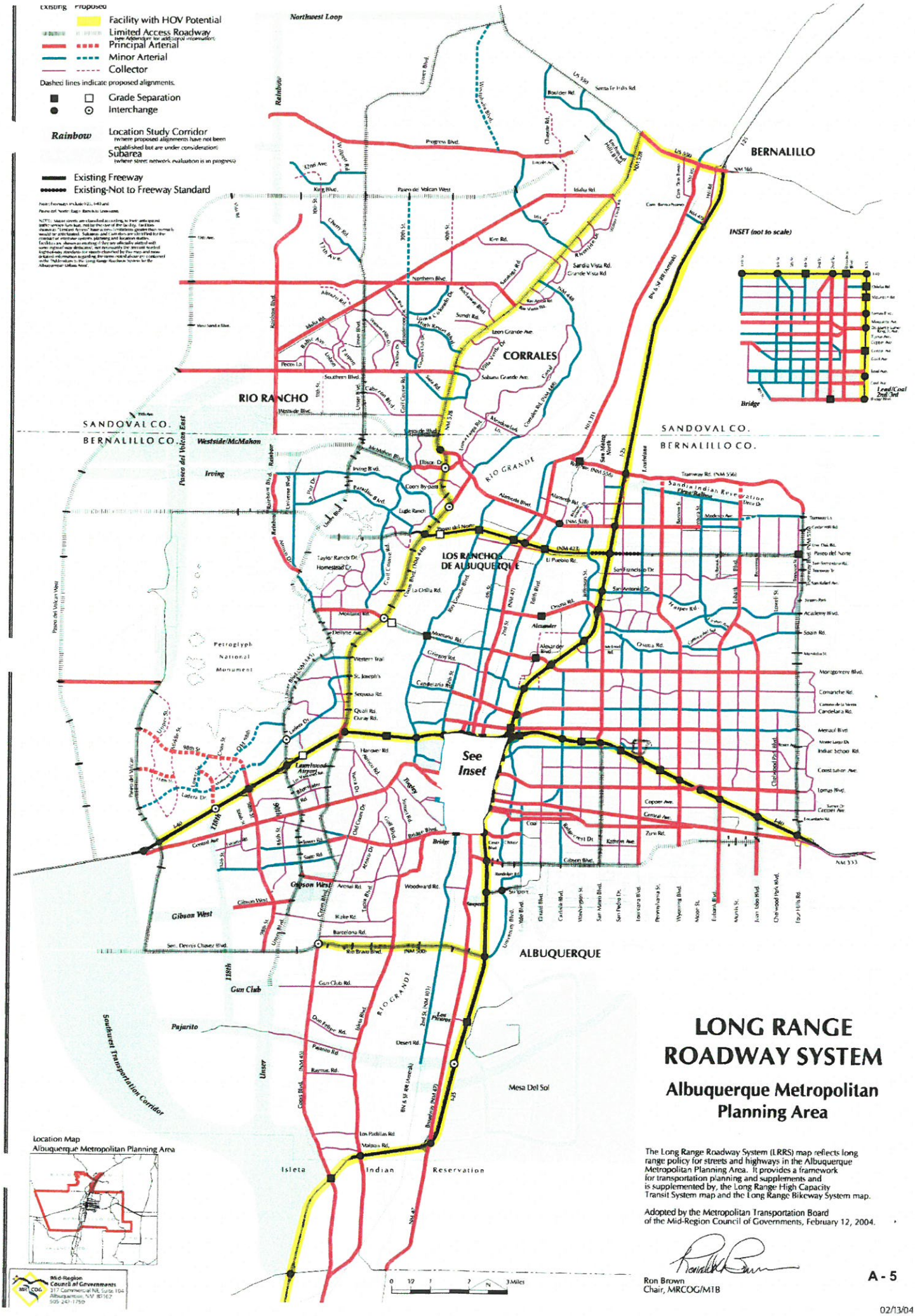
ENGINEER'S SEAL	FRATERNAL ORDER OF POLICE	DRAWN BY DY
	SITE PLAN FOR BUILDING PERMIT	DATE 10-2-06
		2516-SPB.dwg
	TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO (505)858-3100	SHEET # 3 of 5
RONALD R. BOHANNAN P.E. #7868		A-2



Fraternal Order of Police

(Bear Canyon Arroyo / Jefferson St)
Aerial Photo


Inset for Downtown
Inset for Uptown
Inset for Los Lunas, Valencia County
Los Lunas is approximately 12 miles south of the I-25/NM 47 interchange.
See Inset for Downtown
See Inset for Uptown
SANDOVAL CO.
BERNALILLO CO.
RIO RANCHO
CORRALES
BERNALILLO
ALBUQUERQUE
LOS RANCHOS DE ALBUQUERQUE
Sandia Indian Reservation
Isleta Indian Reservation
LOS LUNAS
Average Weekday Traffic Flows
0 - 900
1000 - 4900
5000 - 14900
15000 - 24900
25000 - 34900
35000 - 44900
45000 - 54900
55000 - 184900
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.
0 1 2 3 4 Miles
Map prepared by the Mid-Region Council of Governments in cooperation with the New Mexico Department of Transportation, the local governments in the Albuquerque Metropolitan Planning Area, and the U.S. Department of Transportation, Federal Highway Administration.
2005 Traffic Flows
for the Greater Albuquerque Area



LONG RANGE ROADWAY SYSTEM

Albuquerque Metropolitan Planning Area

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

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

Ron Brown
Chair, MRCOG/MTB

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

02/13/04

Jefferson St
167 (167)
481 (738)
42 (35)
22 (55)
20 (36)
58 (201)
151 (220)
29 (66)
209 (445)
(1)
427 (218)
698 (401)
294 (162)
Singer Ave

I-25 W. ramp
209 (141)
497 (721)
314 (364)
0 (0)
1748 (987)
252 (286)
0 (0)
432 (774)
243 (539)
(2)
0 (0)
0 (0)
0 (0)
Jefferson St

54 (3
465 (7
0 (0

I-25 W. ramp
240 (179)
373 (225)
236 (192)
0 (0)
1361 (1293)
759 (529)
0 (0)
1447 (1853)
440 (514)
(5)
0 (0)
0 (0)
0 (0)
Osuna Rd

Jefferson St
168 (318)
393 (359)
207 (352)
292 (224)
1027 (1133)
203 (98)
282 (296)
1292 (1777)
184 (97)
(6)
157 (375)
293 (719)
54 (341)
Osuna Rd

0 (0
0 (0
0 (0

I-25 W. ramp
19 (7)
444 (566)
0 (0)
0 (0)
0 (0)
0 (0)
0 (0)
0 (0)
16 (65)
(9)
0 (0)
0 (0)
0 (0)
BMW Drive

Jefferson St
0 (0)
923 (933)
0 (0)
0 (0)
0 (0)
0 (0)
0 (0)
0 (0)
0 (0)
(10)
0 (0)
862 (877)
0 (0)
Driveway "A"

11 (30
0 (0)
17 (53

Fraternal Order of Police

Bear Canyon Arroyo / Jefferson St

Trips Generated Volumes - AM(PM)

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

Fraternal Order of Police

Bear Canyon Arroyo / Jefferson St

2007 BUILD Volumes - AM(PM)

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

FOP Site (Jefferson St. North of Singer Blvd.)
Trip Generation Data

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					
FOP Building	Corporate Headquarters Building (714)	20.00	170	31	2	4	33
	General Office Building (710)	60.00	900	110	15	25	121
	Drive-In Bank (912)	4.00	1,563	45	33	102	102
	High Turnover (Sit-Down) Restaurant (932)	10.00	1,272	60	55	67	43
	Subtotal		**3,905**	**246**	**105**	**198**	**299**

FOP Site (Jefferson St. North of Singer Blvd.)
Trip Generation Data

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Corporate Headquarters Building (714)	*20.00*	170	31	2	4	33
	1,000 S.F.					

ITE Trip Generation Equations:

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

Ln(T) = ***0.97*** **Ln(X) +** ***2.23***
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) = ***0.95*** **Ln(X) +** ***0.66***
93% Enter, ***7%*** 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) = ***0.87*** **Ln(X) +** ***1.01***
10% Enter, ***90%*** Exit

Comments:
FOP Building

Based on ITE Trip Generation Manual - 7th Edition

FOP Site (Jefferson St. North of Singer Blvd.)
Trip Generation Data

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
General Office Building (710)	*60.00*	900	110	15	25	121
	1,000 S.F.					

ITE Trip Generation Equations:

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

Ln(T) = ***0.77*** **Ln(X) +** ***3.65***
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) = ***0.8*** **Ln(X) +** ***1.55***
88% Enter, ***12%*** Exit

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

T = ***1.12*** **(X) +** ***78.81***
17% Enter, ***83%*** Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 7th Edition

FOP Site (Jefferson St. North of Singer Blvd.)
Trip Generation Data

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A.M. PEAK HOUR		P.M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Drive-In Bank (912)	*4.00*	1,563	45	33	102	102
	Drive-In Windows					

ITE Trip Generation Equations:

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

Ln(T) = ***1.326*** **Ln(X) +** ***5.516***
50% Enter, ***50%*** Exit

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

T = ***19.38*** **(X) +** ***0***
58% Enter, ***42%*** Exit

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

T = ***51.08*** **(X) +** ***0***
50% Enter, ***50%*** Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 7th Edition

FOP Site (Jefferson St. North of Singer Blvd.)
Trip Generation Data

USE (ITE CODE)	Units	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
High Turnover (Sit-Down) Restaurant (932)	*10.00* **1,000 S.F.**	1,272	60	55	67	43

ITE Trip Generation Equations:

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

T = *127.15* (X) + *0*

50% Enter, *50%* Exit

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

T = *11.52* (X) + *0*

52% Enter, *48%* Exit

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

T = *10.92* (X) + *0*

61% Enter, *39%* Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 7th Edition

DATA ANALYSIS SUBZONE (DASZ) MAP

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Trip Distribution Table

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

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

2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(IN) Interstate 25 North			(SS) San Mateo Blvd South			(JS) Jefferson St South		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	**Population in Study**	**Population / Distance**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	**2025**	2009												
Boundary Specified on DASZ Map																
6046	10%	661	619	646	65	**65**	**0.16%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6051	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6052	100%	0	9	3	3	**3**	**0.01%**	50%	0.00%	2	0%	0.00%	0	0%	0.00%	0
6053	100%	0	14	5	5	**5**	**0.01%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6054	100%	2	2	2	2	**2**	**0.00%**	50%	0.00%	1	0%	0.00%	0	0%	0.00%	0
6055	100%	0	7	3	3	**3**	**0.01%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6056	100%	0	23	8	8	**8**	**0.02%**	50%	0.01%	4	0%	0.00%	0	0%	0.00%	0
6057	100%	6	6	6	6	**6**	**0.01%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6058	100%	52	57	54	54	**54**	**0.13%**	50%	0.07%	27	0%	0.00%	0	0%	0.00%	0
6061	50%	411	610	483	242	**242**	**0.60%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6062	95%	1359	1526	1,419	1,348	**1,348**	**3.33%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6063	100%	0	2	1	1	**1**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6064	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6075	25%	99	97	98	25	**25**	**0.06%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6076	60%	3	3	3	2	**2**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6081	70%	280	467	347	243	**243**	**0.60%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6082	85%	57	58	57	48	**48**	**0.12%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6083	100%	322	2404	1,072	1,072	**1,072**	**2.65%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6084	100%	565	2145	1,134	1,134	**1,134**	**2.80%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6091	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6092	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6093	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6094	100%	0	2	1	1	**1**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6095	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6522	5%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6526	35%	1330	1263	1,306	457	**457**	**1.13%**	50%	0.56%	229	0%	0.00%	0	0%	0.00%	0
6527	30%	0	2	1	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7012	80%	464	530	488	390	**390**	**0.96%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7013	100%	1097	1137	1,111	1,111	**1,111**	**2.75%**	0%	0.00%	0	0%	0.00%	0	50%	1.37%	556
7014	15%	1970	1872	1,935	290	**290**	**0.72%**	0%	0.00%	0	0%	0.00%	0	50%	0.36%	145
7021	50%	1308	1466	1,365	683	**683**	**1.69%**	0%	0.00%	0	0%	0.00%	0	50%	0.84%	342
7022	100%	1724	1681	1,709	1,709	**1,709**	**4.22%**	0%	0.00%	0	0%	0.00%	0	50%	2.11%	855

Trip Distribution Table

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

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

2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(IN) Interstate 25 North			(SS) San Mateo Blvd South			(JS) Jefferson St South		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	**Population In Study**	**Population / Distance**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	**2025**	2009												
7031	55%	1996	1919	1,968	1,082	**1,082**	**2.67%**	0%	0.00%	0	0%	0.00%	0	100%	2.67%	1,082
7032	100%	1574	1667	1,607	1,607	**1,607**	**3.97%**	0%	0.00%	0	0%	0.00%	0	100%	3.97%	1,607
7051	100%	2944	2761	2,878	2,878	**2,878**	**7.11%**	0%	0.00%	0	0%	0.00%	0	50%	3.56%	1,439
7052	100%	6	6	6	6	**6**	**0.01%**	0%	0.00%	0	50%	0.01%	3	25%	0.00%	2
7053	100%	7	56	25	25	**25**	**0.06%**	0%	0.00%	0	50%	0.03%	13	50%	0.03%	13
7101	100%	2152	2020	2,104	2,104	**2,104**	**5.20%**	0%	0.00%	0	100%	5.20%	2,104	0%	0.00%	0
7102	100%	494	463	483	483	**483**	**1.19%**	0%	0.00%	0	100%	1.19%	483	0%	0.00%	0
7103	70%	1190	1122	1,166	816	**816**	**2.02%**	0%	0.00%	0	70%	1.41%	571	30%	0.60%	245
7105	90%	1933	1820	1,892	1,703	**1,703**	**4.21%**	0%	0.00%	0	0%	0.00%	0	100%	4.21%	1,703
7106	100%	1901	1786	1,860	1,860	**1,860**	**4.60%**	0%	0.00%	0	0%	0.00%	0	100%	4.60%	1,860
7107	100%	2270	2166	2,233	2,233	**2,233**	**5.52%**	0%	0.00%	0	0%	0.00%	0	100%	5.52%	2,233
7111	100%	1176	1184	1,179	1,179	**1,179**	**2.91%**	50%	1.46%	590	0%	0.00%	0	0%	0.00%	0
7112	100%	5	10	7	7	**7**	**0.02%**	50%	0.01%	4	0%	0.00%	0	0%	0.00%	0
7113	95%	893	1145	984	935	**935**	**2.31%**	50%	1.16%	468	0%	0.00%	0	0%	0.00%	0
7114	25%	1486	1408	1,458	365	**365**	**0.90%**	50%	0.45%	183	0%	0.00%	0	0%	0.00%	0
7115	90%	1541	1450	1,508	1,357	**1,357**	**3.35%**	50%	1.68%	679	0%	0.00%	0	0%	0.00%	0
7116	100%	1275	1372	1,310	1,310	**1,310**	**3.24%**	50%	1.62%	655	0%	0.00%	0	0%	0.00%	0
7126	20%	0	1209	435	87	**87**	**0.22%**	50%	0.11%	44	0%	0.00%	0	0%	0.00%	0
7151	100%	1029	964	1,006	1,006	**1,006**	**2.49%**	0%	0.00%	0	100%	2.49%	1,006	0%	0.00%	0
7152	100%	1418	1324	1,384	1,384	**1,384**	**3.42%**	0%	0.00%	0	100%	3.42%	1,384	0%	0.00%	0
7153	100%	1420	1336	1,390	1,390	**1,390**	**3.44%**	50%	1.72%	695	0%	0.00%	0	0%	0.00%	0
7154	100%	1262	1156	1,224	1,224	**1,224**	**3.02%**	0%	0.00%	0	100%	3.02%	1,224	0%	0.00%	0
7155	95%	902	836	878	834	**834**	**2.06%**	0%	0.00%	0	100%	2.06%	834	0%	0.00%	0
7156	100%	1525	1415	1,485	1,485	**1,485**	**3.67%**	50%	1.83%	743	0%	0.00%	0	0%	0.00%	0
7157	100%	736	1232	915	915	**915**	**2.26%**	35%	0.79%	320	30%	0.68%	275	0%	0.00%	0
7201	15%	1826	2475	2,060	309	**309**	**0.76%**	50%	0.38%	155	0%	0.00%	0	0%	0.00%	0
7611	45%	1891	1757	1,843	829	**829**	**2.05%**	0%	0.00%	0	0%	0.00%	0	100%	2.05%	829
7612	100%	940	919	932	932	**932**	**2.30%**	0%	0.00%	0	0%	0.00%	0	100%	2.30%	932
7621	10%	1321	1242	1,293	129	**129**	**0.32%**	0%	0.00%	0	0%	0.00%	0	100%	0.32%	129
7622	95%	1032	973	1,011	960	**960**	**2.37%**	0%	0.00%	0	0%	0.00%	0	100%	2.37%	960
7632	15%	876	826	858	129	**129**	**0.32%**	0%	0.00%	0	0%	0.00%	0	100%	0.32%	129
				52,639	40,465	40,465	100.00%			**4,794**			**7,896**			**15,058**
										11.85%			19.51%			37.21%

Trip Distribution Table

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

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

2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(IS) Interstate 25 South			(SW) Singer Blvd West		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	Population in Study	Population / Distance	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	2025	2009									
Boundary Specified on DASZ Map													
6046	10%	661	619	646	65	**65**	**0.16%**	0%	0.00%	0	0%	0.00%	0
6051	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6052	100%	0	9	3	3	**3**	**0.01%**	0%	0.00%	0	0%	0.00%	0
6053	100%	0	14	5	5	**5**	**0.01%**	0%	0.00%	0	0%	0.00%	0
6054	100%	2	2	2	2	**2**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6055	100%	0	7	3	3	**3**	**0.01%**	0%	0.00%	0	0%	0.00%	0
6056	100%	0	23	8	8	**8**	**0.02%**	0%	0.00%	0	0%	0.00%	0
6057	100%	6	6	6	6	**6**	**0.01%**	0%	0.00%	0	0%	0.00%	0
6058	100%	52	57	54	54	**54**	**0.13%**	0%	0.00%	0	0%	0.00%	0
6061	50%	411	610	483	242	**242**	**0.60%**	50%	0.30%	121	0%	0.00%	0
6062	95%	1359	1526	1,419	1,348	**1,348**	**3.33%**	40%	1.33%	539	20%	0.67%	270
6063	100%	0	2	1	1	**1**	**0.00%**	0%	0.00%	0	100%	0.00%	1
6064	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	100%	0.00%	0
6075	25%	99	97	98	25	**25**	**0.06%**	100%	0.06%	25	0%	0.00%	0
6076	60%	3	3	3	2	**2**	**0.00%**	100%	0.00%	2	0%	0.00%	0
6081	70%	280	467	347	243	**243**	**0.60%**	0%	0.00%	0	0%	0.00%	0
6082	85%	57	58	57	48	**48**	**0.12%**	0%	0.00%	0	0%	0.00%	0
6083	100%	322	2404	1,072	1,072	**1,072**	**2.65%**	0%	0.00%	0	0%	0.00%	0
6084	100%	565	2145	1,134	1,134	**1,134**	**2.80%**	0%	0.00%	0	0%	0.00%	0
6091	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6092	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6093	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6094	100%	0	2	1	1	**1**	**0.00%**	0%	0.00%	0	100%	0.00%	1
6095	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	100%	0.00%	0
6522	5%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6526	35%	1330	1263	1,306	457	**457**	**1.13%**	0%	0.00%	0	0%	0.00%	0
6527	30%	0	2	1	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0
7012	80%	464	530	488	390	**390**	**0.96%**	100%	0.96%	390	0%	0.00%	0
7013	100%	1097	1137	1,111	1,111	**1,111**	**2.75%**	50%	1.37%	556	0%	0.00%	0
7014	15%	1970	1872	1,935	290	**290**	**0.72%**	50%	0.36%	145	0%	0.00%	0
7021	50%	1308	1466	1,365	683	**683**	**1.69%**	50%	0.84%	342	0%	0.00%	0
7022	100%	1724	1681	1,709	1,709	**1,709**	**4.22%**	50%	2.11%	855	0%	0.00%	0

Trip Distribution Table

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

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

2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(IS) Interstate 25 South			(SW) Singer Blvd West		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	Population in Study	Population / Distance	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	2025	2009									
7031	55%	1996	1919	1,968	1,082	**1,082**	**2.67%**	0%	0.00%	0	0%	0.00%	0
7032	100%	1574	1667	1,607	1,607	**1,607**	**3.97%**	0%	0.00%	0	0%	0.00%	0
7051	100%	2944	2761	2,878	2,878	**2,878**	**7.11%**	50%	3.56%	1,439	0%	0.00%	0
7052	100%	6	6	6	6	**6**	**0.01%**	25%	0.00%	2	0%	0.00%	0
7053	100%	7	56	25	25	**25**	**0.06%**	0%	0.00%	0	0%	0.00%	0
7101	100%	2152	2020	2,104	2,104	**2,104**	**5.20%**	0%	0.00%	0	0%	0.00%	0
7102	100%	494	463	483	483	**483**	**1.19%**	0%	0.00%	0	0%	0.00%	0
7103	70%	1190	1122	1,166	816	**816**	**2.02%**	0%	0.00%	0	0%	0.00%	0
7105	90%	1933	1820	1,892	1,703	**1,703**	**4.21%**	0%	0.00%	0	0%	0.00%	0
7106	100%	1901	1786	1,860	1,860	**1,860**	**4.60%**	0%	0.00%	0	0%	0.00%	0
7107	100%	2270	2166	2,233	2,233	**2,233**	**5.52%**	0%	0.00%	0	0%	0.00%	0
7111	100%	1176	1184	1,179	1,179	**1,179**	**2.91%**	0%	0.00%	0	0%	0.00%	0
7112	100%	5	10	7	7	**7**	**0.02%**	0%	0.00%	0	0%	0.00%	0
7113	95%	893	1145	984	935	**935**	**2.31%**	0%	0.00%	0	0%	0.00%	0
7114	25%	1486	1408	1,458	365	**365**	**0.90%**	0%	0.00%	0	0%	0.00%	0
7115	90%	1541	1450	1,508	1,357	**1,357**	**3.35%**	0%	0.00%	0	0%	0.00%	0
7116	100%	1275	1372	1,310	1,310	**1,310**	**3.24%**	0%	0.00%	0	0%	0.00%	0
7126	20%	0	1209	435	87	**87**	**0.22%**	0%	0.00%	0	0%	0.00%	0
7151	100%	1029	964	1,006	1,006	**1,006**	**2.49%**	0%	0.00%	0	0%	0.00%	0
7152	100%	1418	1324	1,384	1,384	**1,384**	**3.42%**	0%	0.00%	0	0%	0.00%	0
7153	100%	1420	1336	1,390	1,390	**1,390**	**3.44%**	0%	0.00%	0	0%	0.00%	0
7154	100%	1262	1156	1,224	1,224	**1,224**	**3.02%**	0%	0.00%	0	0%	0.00%	0
7155	95%	902	836	878	834	**834**	**2.06%**	0%	0.00%	0	0%	0.00%	0
7156	100%	1525	1415	1,485	1,485	**1,485**	**3.67%**	0%	0.00%	0	0%	0.00%	0
7157	100%	736	1232	915	915	**915**	**2.26%**	0%	0.00%	0	0%	0.00%	0
7201	15%	1826	2475	2,060	309	**309**	**0.76%**	0%	0.00%	0	0%	0.00%	0
7611	45%	1891	1757	1,843	829	**829**	**2.05%**	0%	0.00%	0	0%	0.00%	0
7612	100%	940	919	932	932	**932**	**2.30%**	0%	0.00%	0	0%	0.00%	0
7621	10%	1321	1242	1,293	129	**129**	**0.32%**	0%	0.00%	0	0%	0.00%	0
7622	95%	1032	973	1,011	960	**960**	**2.37%**	0%	0.00%	0	0%	0.00%	0
7632	15%	876	826	858	129	**129**	**0.32%**	0%	0.00%	0	0%	0.00%	0
				52,639	40,465	40,465	100.00%			**4,414** 10.91%			**272** 0.67%

Trip Distribution Table

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

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

2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(OW) Osuna Rd West			(JN) Jefferson St North		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	Population in Study	Population / Distance	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	2025	2009									
Boundary Specified on DASZ Map													
6046	10%	661	619	646	65	**65**	**0.16%**	100%	0.16%	65	0%	0.00%	0
6051	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	100%	0.00%	0
6052	100%	0	9	3	3	**3**	**0.01%**	0%	0.00%	0	50%	0.00%	2
6053	100%	0	14	5	5	**5**	**0.01%**	0%	0.00%	0	100%	0.01%	5
6054	100%	2	2	2	2	**2**	**0.00%**	0%	0.00%	0	50%	0.00%	1
6055	100%	0	7	3	3	**3**	**0.01%**	0%	0.00%	0	100%	0.01%	3
6056	100%	0	23	8	8	**8**	**0.02%**	0%	0.00%	0	50%	0.01%	4
6057	100%	6	6	6	6	**6**	**0.01%**	80%	0.01%	5	20%	0.00%	1
6058	100%	52	57	54	54	**54**	**0.13%**	0%	0.00%	0	50%	0.07%	27
6061	50%	411	610	483	242	**242**	**0.60%**	50%	0.30%	121	0%	0.00%	0
6062	95%	1359	1526	1,419	1,348	**1,348**	**3.33%**	40%	1.33%	539	0%	0.00%	0
6063	100%	0	2	1	1	**1**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6064	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6075	25%	99	97	98	25	**25**	**0.06%**	0%	0.00%	0	0%	0.00%	0
6076	60%	3	3	3	2	**2**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6081	70%	280	467	347	243	**243**	**0.60%**	80%	0.48%	194	20%	0.12%	49
6082	85%	57	58	57	48	**48**	**0.12%**	80%	0.09%	38	20%	0.02%	10
6083	100%	322	2404	1,072	1,072	**1,072**	**2.65%**	100%	2.65%	1,072	0%	0.00%	0
6084	100%	565	2145	1,134	1,134	**1,134**	**2.80%**	100%	2.80%	1,134	0%	0.00%	0
6091	100%	0	0	0	0	**0**	**0.00%**	50%	0.00%	0	0%	0.00%	0
6092	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6093	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6094	100%	0	2	1	1	**1**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6095	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6522	5%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	100%	0.00%	0
6526	35%	1330	1263	1,306	457	**457**	**1.13%**	0%	0.00%	0	50%	0.56%	229
6527	30%	0	2	1	0	**0**	**0.00%**	0%	0.00%	0	100%	0.00%	0
7012	80%	464	530	488	390	**390**	**0.96%**	0%	0.00%	0	0%	0.00%	0
7013	100%	1097	1137	1,111	1,111	**1,111**	**2.75%**	0%	0.00%	0	0%	0.00%	0
7014	15%	1970	1872	1,935	290	**290**	**0.72%**	0%	0.00%	0	0%	0.00%	0
7021	50%	1308	1466	1,365	683	**683**	**1.69%**	0%	0.00%	0	0%	0.00%	0
7022	100%	1724	1681	1,709	1,709	**1,709**	**4.22%**	0%	0.00%	0	0%	0.00%	0

Trip Distribution Table

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

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

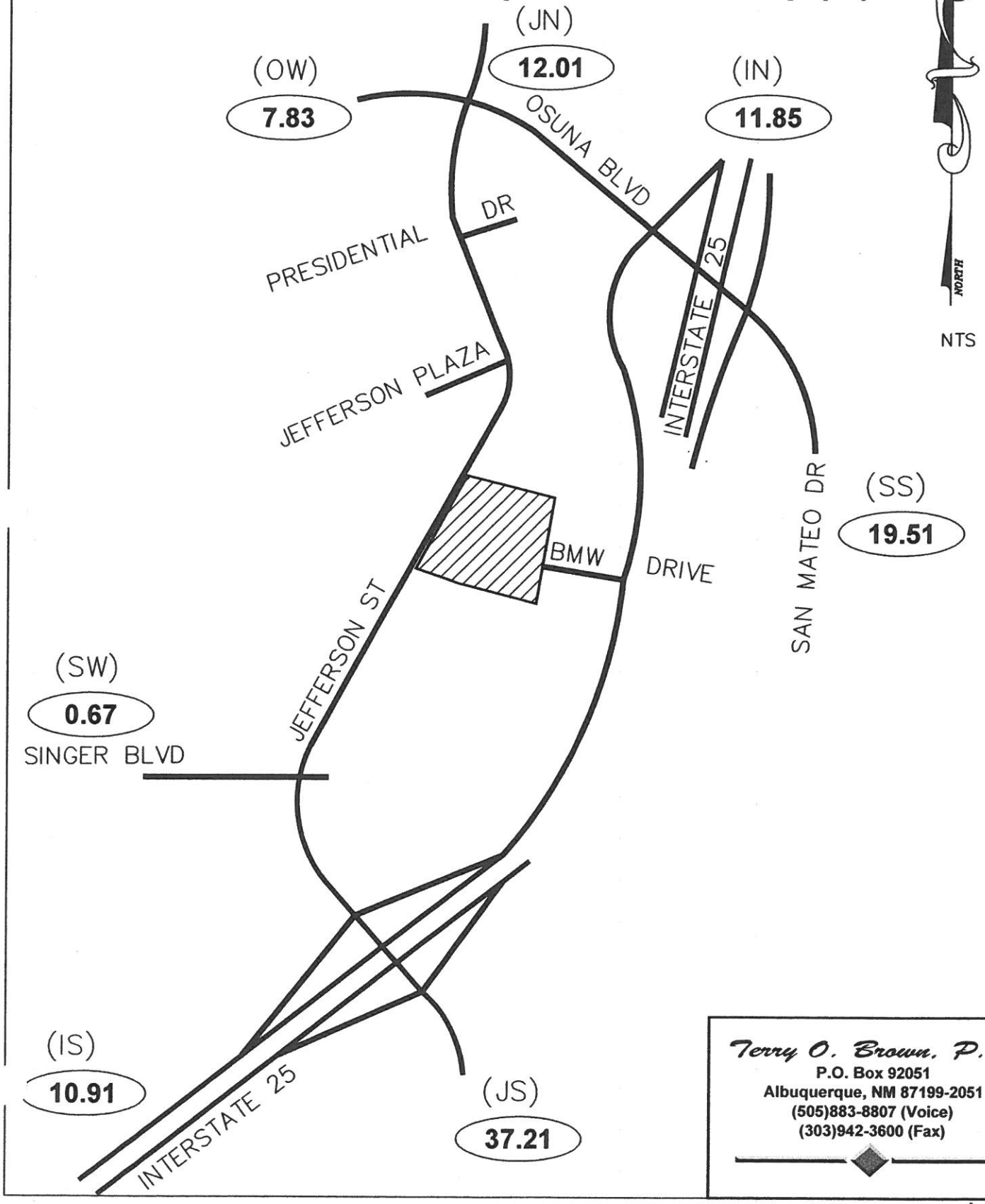
2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(OW) Osuna Rd West			(JN) Jefferson St North		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	**Population in Study**	**Population / Distance**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	**2025**	2009									
7031	55%	1996	1919	1,968	1,082	**1,082**	**2.67%**	0%	0.00%	0	0%	0.00%	0
7032	100%	1574	1667	1,607	1,607	**1,607**	**3.97%**	0%	0.00%	0	0%	0.00%	0
7051	100%	2944	2761	2,878	2,878	**2,878**	**7.11%**	0%	0.00%	0	0%	0.00%	0
7052	100%	6	6	6	6	**6**	**0.01%**	0%	0.00%	0	0%	0.00%	0
7053	100%	7	56	25	25	**25**	**0.06%**	0%	0.00%	0	0%	0.00%	0
7101	100%	2152	2020	2,104	2,104	**2,104**	**5.20%**	0%	0.00%	0	0%	0.00%	0
7102	100%	494	463	483	483	**483**	**1.19%**	0%	0.00%	0	0%	0.00%	0
7103	70%	1190	1122	1,166	816	**816**	**2.02%**	0%	0.00%	0	0%	0.00%	0
7105	90%	1933	1820	1,892	1,703	**1,703**	**4.21%**	0%	0.00%	0	0%	0.00%	0
7106	100%	1901	1786	1,860	1,860	**1,860**	**4.60%**	0%	0.00%	0	0%	0.00%	0
7107	100%	2270	2166	2,233	2,233	**2,233**	**5.52%**	0%	0.00%	0	0%	0.00%	0
7111	100%	1176	1184	1,179	1,179	**1,179**	**2.91%**	0%	0.00%	0	0%	0.00%	0
7112	100%	5	10	7	7	**7**	**0.02%**	0%	0.00%	0	50%	1.46%	590
7113	95%	893	1145	984	935	**935**	**2.31%**	0%	0.00%	0	50%	0.01%	4
7114	25%	1486	1408	1,458	365	**365**	**0.90%**	0%	0.00%	0	50%	1.16%	468
7115	90%	1541	1450	1,508	1,357	**1,357**	**3.35%**	0%	0.00%	0	50%	0.45%	183
7116	100%	1275	1372	1,310	1,310	**1,310**	**3.24%**	0%	0.00%	0	50%	1.68%	679
7126	20%	0	1209	435	87	**87**	**0.22%**	0%	0.00%	0	50%	1.62%	655
7151	100%	1029	964	1,006	1,006	**1,006**	**2.49%**	0%	0.00%	0	50%	0.11%	44
7152	100%	1418	1324	1,384	1,384	**1,384**	**3.42%**	0%	0.00%	0	0%	0.00%	0
7153	100%	1420	1336	1,390	1,390	**1,390**	**3.44%**	0%	0.00%	0	0%	0.00%	0
7154	100%	1262	1156	1,224	1,224	**1,224**	**3.02%**	0%	0.00%	0	50%	1.72%	695
7155	95%	902	836	878	834	**834**	**2.06%**	0%	0.00%	0	0%	0.00%	0
7156	100%	1525	1415	1,485	1,485	**1,485**	**3.67%**	0%	0.00%	0	0%	0.00%	0
7157	100%	736	1232	915	915	**915**	**2.26%**	0%	0.00%	0	50%	1.83%	743
7201	15%	1826	2475	2,060	309	**309**	**0.76%**	0%	0.00%	0	35%	0.79%	320
7611	45%	1891	1757	1,843	829	**829**	**2.05%**	0%	0.00%	0	50%	0.38%	155
7612	100%	940	919	932	932	**932**	**2.30%**	0%	0.00%	0	0%	0.00%	0
7621	10%	1321	1242	1,293	129	**129**	**0.32%**	0%	0.00%	0	0%	0.00%	0
7622	95%	1032	973	1,011	960	**960**	**2.37%**	0%	0.00%	0	0%	0.00%	0
7632	15%	876	826	858	129	**129**	**0.32%**	0%	0.00%	0	0%	0.00%	0
				52,639	40,465	40,465	100.00%			**3,169**			**4,862**
										7.83%			12.01%

Fraternal Order of Police

Bear Canyon Arroyo / Jefferson St

Commercial Trip Distribution Map (%)



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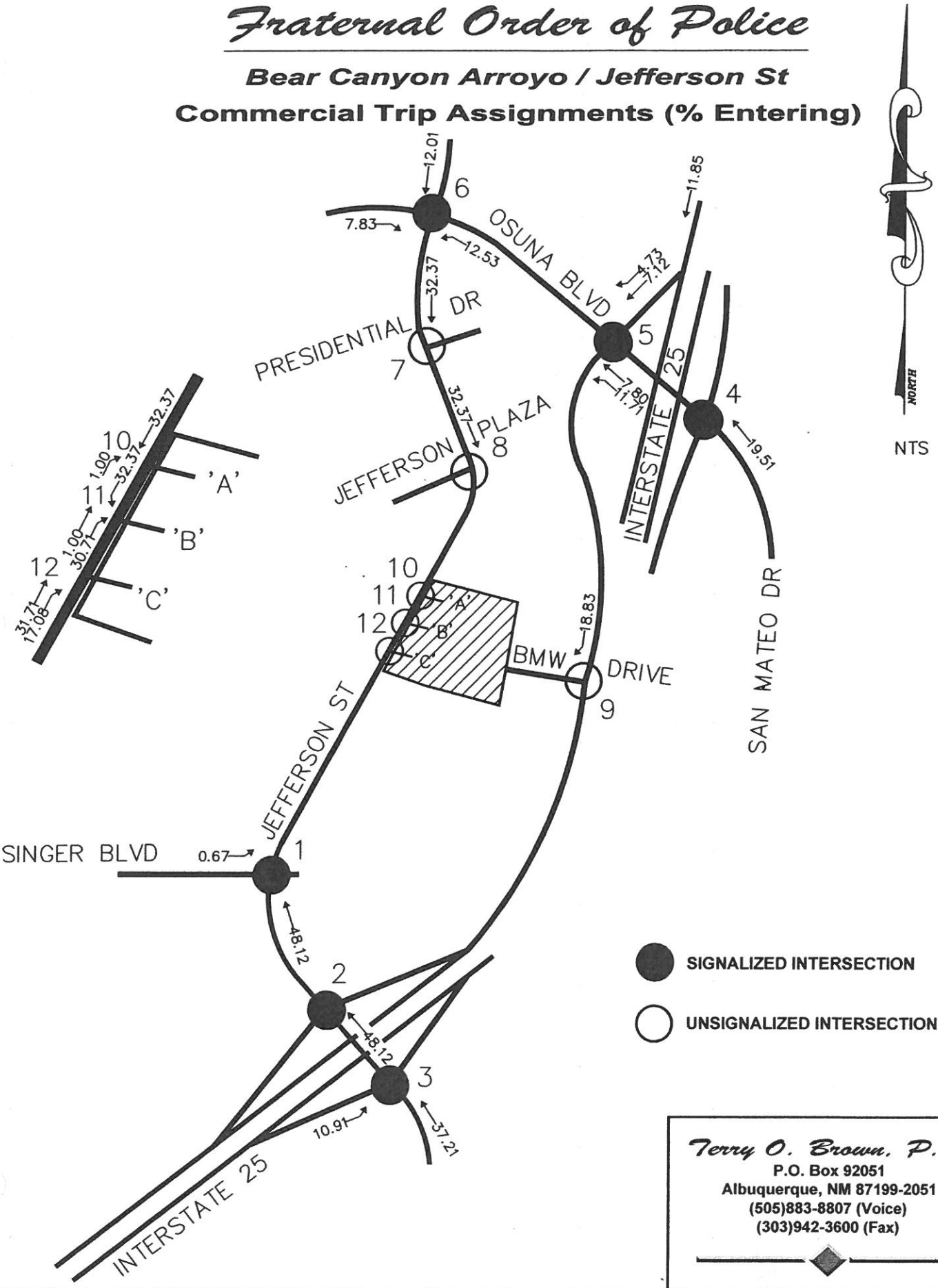
Fraternal Order of Police

Bear Canyon Arroyo / Jefferson St

Commercial Trip Assignments (% Entering)



NTS

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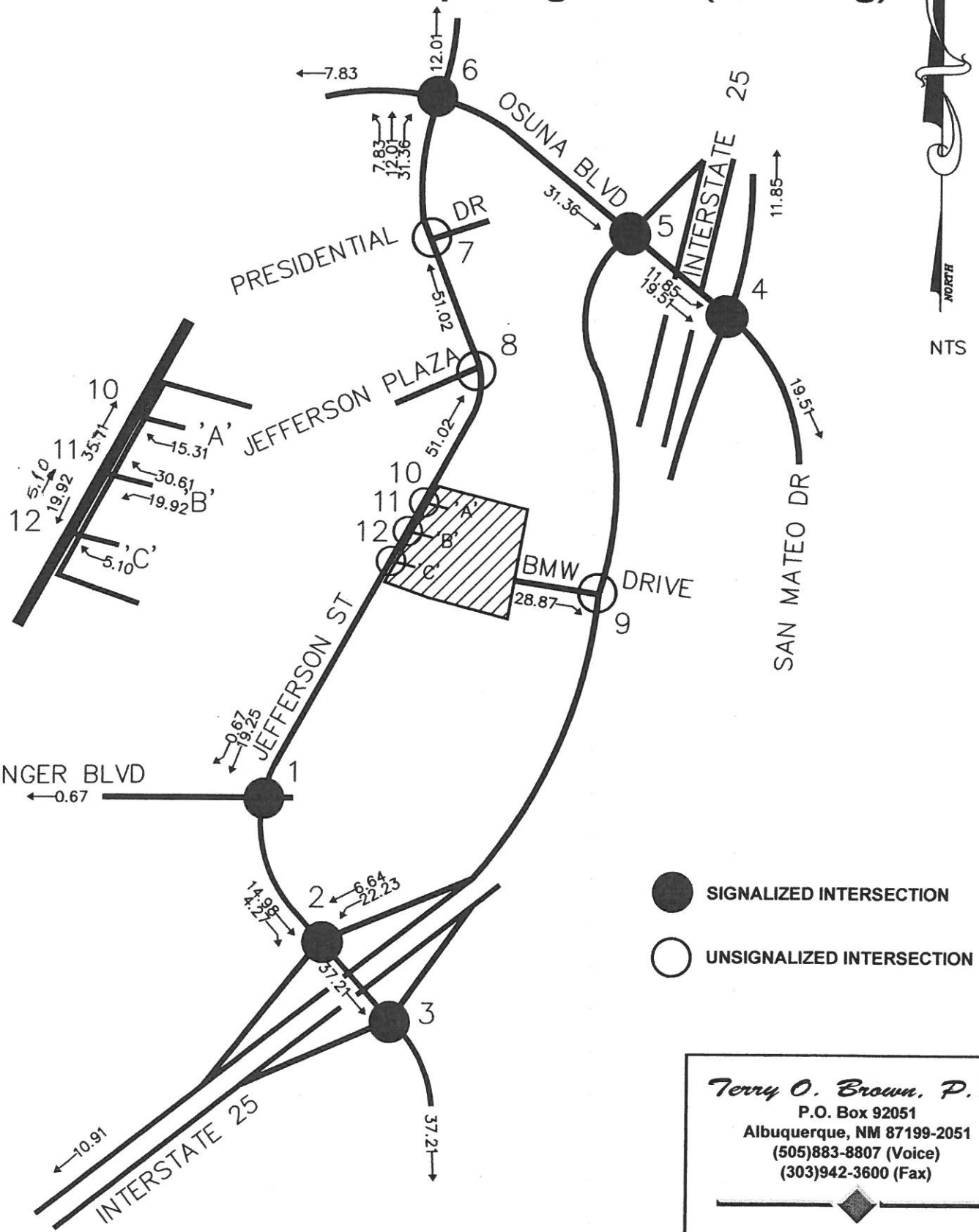
Fraternal Order of Police

Bear Canyon Arroyo / Jefferson St

Commercial Trip Assignments (% Exiting)



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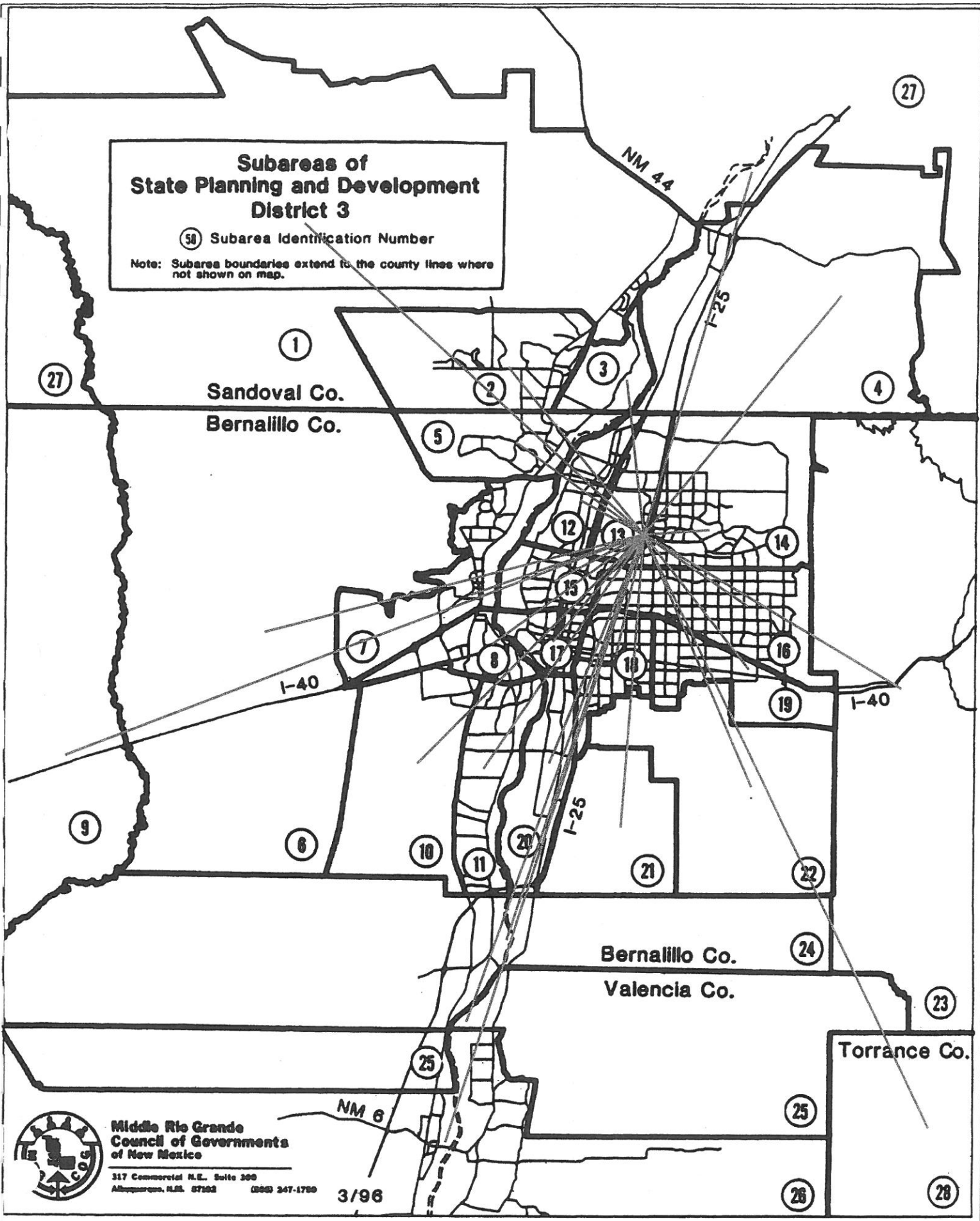


Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)
Trip Distribution - Subarea Map

Figure 4

Trip Distribution Table

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Sub Area Population Data:
For determination of Trip Distribution for Proposed **Office Development**

2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

											(IN) Interstate 25 North			(SS) San Mateo Blvd South			(JS) Jefferson St South		
Sub Area I.D.#	**% Sub Area in Study**	**2005 Population**	**2010 Population**	**2015 Population**	**2025 Population**	**Interpolated Population for the Year**	Population in Study	Dist. (Mi.)	**Population / Distance**	**% Population / Distance**	% Utilizing	% Population / Dist. Utilizing	Population	% Utilizing	% Population / Dist. Utilizing	Population	% Utilizing	% Population / Dist. Utilizing	Population
		2005	**2010**	**2015**	**2025**	2009													
1	100%	26,972	39,738	53,201	77,230	37,185	2,009	22.91	**88**	**0.08%**	100%	0.08%	88	0%	0.00%	0	0%	0.00%	0
2	100%	39,348	40,610	42,227	47,940	40,358	37,185	10.79	**3,447**	**3.13%**	100%	3.13%	3,447	0%	0.00%	0	0%	0.00%	0
3	100%	7,865	8,728	9,336	9,591	8,555	8,555	7.77	**1,101**	**1.00%**	100%	1.00%	1,101	0%	0.00%	0	0%	0.00%	0
4	100%	13,387	14,936	15,923	18,527	14,626	14,626	15.41	**949**	**0.86%**	100%	0.86%	949	0%	0.00%	0	0%	0.00%	0
5	100%	35,968	44,203	48,059	54,241	42,556	42,556	7.91	**5,383**	**4.88%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6	100%	2,784	3,950	4,265	18,676	3,717	3,717	19.43	**191**	**0.17%**	30%	0.05%	57	0%	0.00%	0	0%	0.00%	0
7	100%	48,565	59,615	64,196	75,089	57,405	57,405	9.11	**6,300**	**5.71%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
8	100%	27,546	28,553	29,299	33,406	28,352	28,352	9.38	**3,023**	**2.74%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
9	100%	1,678	1,888	2,055	2,438	1,846	1,846	30.82	**60**	**0.05%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
10	100%	39,532	4,822	59,940	70,184	11,764	11,764	16.01	**735**	**0.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
11	100%	32,051	33,202	37,130	38,279	32,972	32,972	14.14	**2,332**	**2.11%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
12	100%	16,144	16,146	16,635	17,804	16,146	16,146	3.62	**4,463**	**4.05%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
13*	100%	8,715	10,146	10,348	11,137	9,860	9,860	1.34	**7,358**	**6.67%**	18%	1.20%	1,324	0%	0.00%	0	0%	0.00%	0
14	100%	93,104	94,279	96,147	99,871	94,044	94,044	3.28	**28,646**	**25.97%**	30%	7.79%	8,594	40%	10.39%	11,458	30%	7.79%	8,594
15	100%	24,691	25,262	25,949	25,919	25,148	25,148	5.03	**5,005**	**4.54%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
16	100%	108,882	108,353	107,806	106,703	108,459	108,459	6.30	**17,221**	**15.61%**	0%	0.00%	0	0%	0.00%	0	40%	6.25%	6,888
17	100%	20,920	21,196	22,042	22,645	21,141	21,141	6.97	**3,034**	**2.75%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
18	100%	42,078	41,670	41,542	42,625	41,752	41,752	6.16	**6,773**	**6.14%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
19	100%	59,027	58,888	60,441	60,385	58,916	58,916	8.51	**6,924**	**6.28%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
20	100%	9,482	9,699	9,756	9,893	9,656	9,656	12.33	**783**	**0.71%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
21	100%	6	6	2,463	9,511	6	6	14.67	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
22	100%	4,231	3,629	3,701	3,704	3,749	3,749	13.67	**274**	**0.25%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
23	100%	18,140	20,390	21,613	24,186	19,940	19,940	15.01	**1,329**	**1.20%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
24	100%	2,393	2,554	2,697	3,054	2,522	2,522	21.31	**118**	**0.11%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
25	100%	1,009	1,062	1,127	1,252	1,051	1,051	25.80	**41**	**0.04%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
26	100%	75,506	85,654	96,202	117,341	83,624	83,624	31.76	**2,633**	**2.39%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
27	100%	20,955	22,276	23,694	26,710	22,012	22,012	18.76	**1,173**	**1.06%**	100%	1.06%	1,173	0%	0.00%	0	0%	0.00%	0
28	100%	19,524	21,690	23,476	26,318	21,257	21,257	32.76	**649**	**0.59%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
29	100%	11,360	13,771	16,206	20,579	13,289	13,289	50.25	**264**	**0.24%**	100%	0.24%	264	0%	0.00%	0	0%	0.00%	0
		811,863	836,916	947,476	1,075,238	831,905	793,557		**110,297**	**100.00%**		15.41%	**16,998**		10.39%	**11,458**		14.04%	**15,482**
													15.41%			10.39%			14.04%

* - Subarea in which the site it located.

Trip Distribution Table

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Sub Area Population Data:
For determination of Trip Distribution for Proposed **Office Development**

2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

										(IS) Interstate 25 South			(SW) Singer Blvd West			(OW) Osuna Rd West		
Sub Area I.D.#	**% Sub Area in Study**	**2005 Population**	**2010 Population**	**2015 Population**	**2025 Population**	**Interpolated Population for the Year**	Population in Study	Dist. (Mi.)	**Population / Distance**	% Utilizing	% Population / Dist. Utilizing	Population	% Utilizing	% Population / Dist. Utilizing	Population	% Utilizing	% Population / Dist. Utilizing	Population
		2005	**2010**	**2015**	**2025**	2009												
1	100%	26,972	39,738	53,201	77,230	37,185	2,009	22.91	**88**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
2	100%	39,348	40,610	42,227	47,940	40,358	37,185	10.79	**3,447**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
3	100%	7,865	8,728	9,336	9,591	8,555	8,555	7.77	**1,101**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
4	100%	13,387	14,936	15,923	18,527	14,626	14,626	15.41	**949**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5	100%	35,968	44,203	48,059	54,241	42,556	42,556	7.91	**5,383**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6	100%	2,784	3,950	4,265	18,676	3,717	3,717	19.43	**191**	40%	0.07%	77	0%	0.00%	0	0%	0.00%	0
7	100%	48,565	59,615	64,196	75,089	57,405	57,405	9.11	**6,300**	50%	2.86%	3,150	0%	0.00%	0	0%	0.00%	0
8	100%	27,546	28,553	29,299	33,406	28,352	28,352	9.38	**3,023**	100%	2.74%	3,023	0%	0.00%	0	0%	0.00%	0
9	100%	1,678	1,888	2,055	2,438	1,846	1,846	30.82	**60**	100%	0.05%	60	0%	0.00%	0	0%	0.00%	0
10	100%	39,532	4,822	59,940	70,184	11,764	11,764	16.01	**735**	100%	0.67%	735	0%	0.00%	0	0%	0.00%	0
11	100%	32,051	33,202	37,130	38,279	32,972	32,972	14.14	**2,332**	100%	2.11%	2,332	0%	0.00%	0	0%	0.00%	0
12	100%	16,144	16,146	16,635	17,804	16,146	16,146	3.62	**4,463**	0%	0.00%	0	30%	1.21%	1,339	30%	1.21%	1,339
13*	100%	8,715	10,146	10,348	11,137	9,860	9,860	1.34	**7,358**	2%	0.13%	147	15%	1.00%	1,104	18%	1.20%	1,324
14	100%	93,104	94,279	96,147	99,871	94,044	94,044	3.28	**28,646**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
15	100%	24,691	25,262	25,949	25,919	25,148	25,148	5.03	**5,005**	60%	2.72%	3,003	40%	1.81%	2,002	0%	0.00%	0
16	100%	108,882	108,353	107,806	106,703	108,459	108,459	6.30	**17,221**	60%	9.37%	10,333	0%	0.00%	0	0%	0.00%	0
17	100%	20,920	21,196	22,042	22,645	21,141	21,141	6.97	**3,034**	100%	2.75%	3,034	0%	0.00%	0	0%	0.00%	0
18	100%	42,078	41,670	41,542	42,625	41,752	41,752	6.16	**6,773**	100%	6.14%	6,773	0%	0.00%	0	0%	0.00%	0
19	100%	59,027	58,888	60,441	60,385	58,916	58,916	8.51	**6,924**	100%	6.28%	6,924	0%	0.00%	0	0%	0.00%	0
20	100%	9,482	9,699	9,756	9,893	9,656	9,656	12.33	**783**	100%	0.71%	783	0%	0.00%	0	0%	0.00%	0
21	100%	6	6	2,463	9,511	6	6	14.67	**0**	100%	0.00%	0	0%	0.00%	0	0%	0.00%	0
22	100%	4,231	3,629	3,701	3,704	3,749	3,749	13.67	**274**	100%	0.25%	274	0%	0.00%	0	0%	0.00%	0
23	100%	18,140	20,390	21,613	24,186	19,940	19,940	15.01	**1,329**	100%	1.20%	1,329	0%	0.00%	0	0%	0.00%	0
24	100%	2,393	2,554	2,697	3,054	2,522	2,522	21.31	**118**	100%	0.11%	118	0%	0.00%	0	0%	0.00%	0
25	100%	1,009	1,062	1,127	1,252	1,051	1,051	25.80	**41**	100%	0.04%	41	0%	0.00%	0	0%	0.00%	0
26	100%	75,506	85,654	96,202	117,341	83,624	83,624	31.76	**2,633**	100%	2.39%	2,633	0%	0.00%	0	0%	0.00%	0
27	100%	20,955	22,276	23,694	26,710	22,012	22,012	18.76	**1,173**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
28	100%	19,524	21,690	23,476	26,318	21,257	21,257	32.76	**649**	100%	0.59%	649	0%	0.00%	0	0%	0.00%	0
29	100%	11,360	13,771	16,206	20,579	13,289	13,289	50.25	**264**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
		811,863	836,916	947,476	1,075,238	831,905	793,557		**110,297**		41.18%	**45,418**		4.03%	**4,444**		2.41%	**2,663**
												41.18%			4.03%			2.41%

* - Subarea in which the site it located.

Trip Distribution Table

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Sub Area Population Data:
For determination of Trip Distribution for Proposed **Office Development**

2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

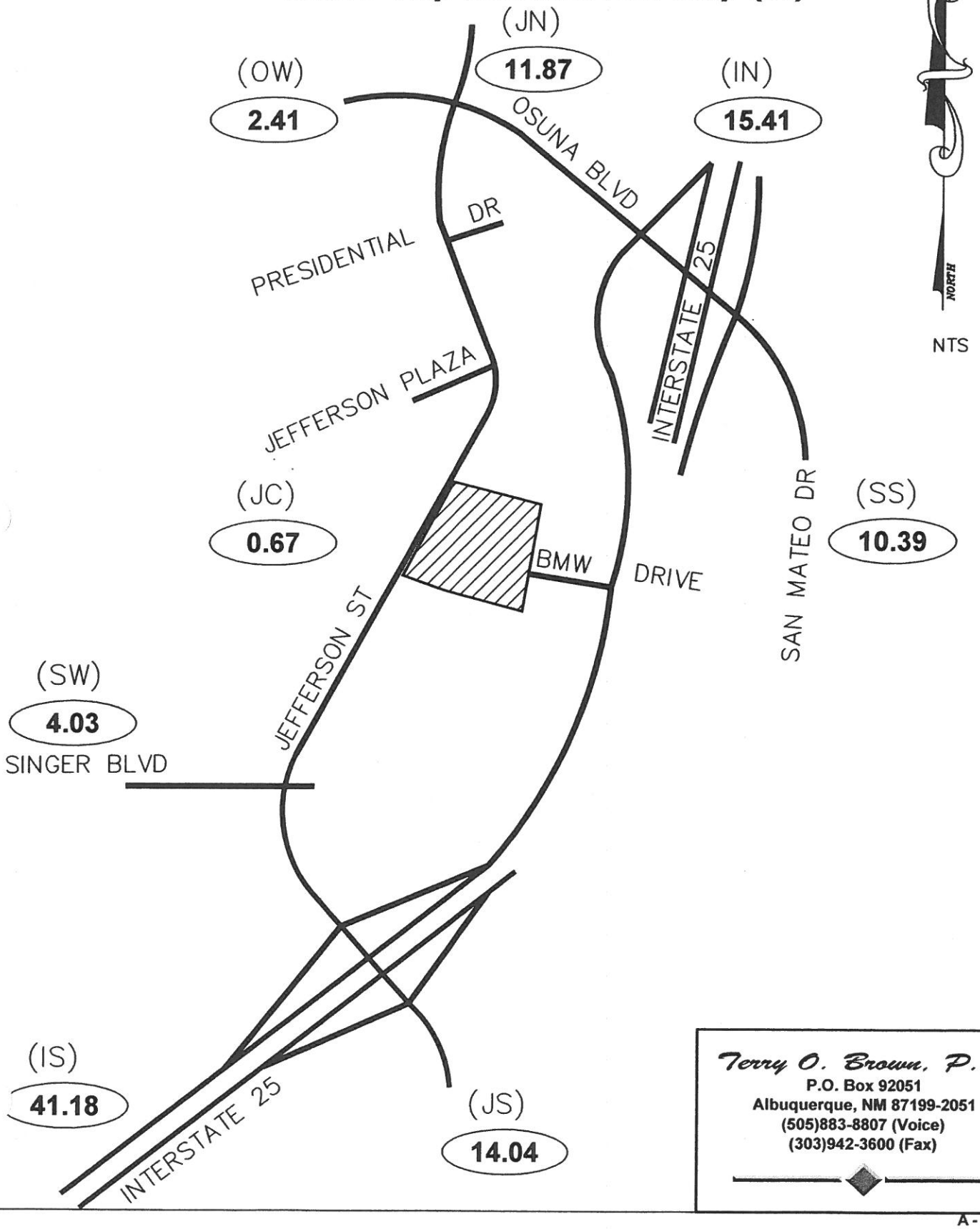
										(JN) Jefferson St North			(JC) Jefferson St Central		
Sub Area I.D.#	**% Sub Area in Study**	**2005 Population**	**2010 Population**	**2015 Population**	**2025 Population**	**Interpolated Population for the Year**	Population in Study	Dist. (Mi.)	**Population / Distance**	% Utilizing	% Population / Dist. Utilizing	Population	% Utilizing	% Population / Dist. Utilizing	Population
		2005	**2010**	**2015**	**2025**	2009									
1	100%	26,972	39,738	53,201	77,230	37,185	2,009	22.91	**88**	0%	0.00%	0	0%	0.00%	0
2	100%	39,348	40,610	42,227	47,940	40,358	37,185	10.79	**3,447**	0%	0.00%	0	0%	0.00%	0
3	100%	7,865	8,728	9,336	9,591	8,555	8,555	7.77	**1,101**	0%	0.00%	0	0%	0.00%	0
4	100%	13,387	14,936	15,923	18,527	14,626	14,626	15.41	**949**	0%	0.00%	0	0%	0.00%	0
5	100%	35,968	44,203	48,059	54,241	42,556	42,556	7.91	**5,383**	100%	4.88%	5,383	0%	0.00%	0
6	100%	2,784	3,950	4,265	18,676	3,717	3,717	19.43	**191**	30%	0.05%	57	0%	0.00%	0
7	100%	48,565	59,615	64,196	75,089	57,405	57,405	9.11	**6,300**	50%	2.86%	3,150	0%	0.00%	0
8	100%	27,546	28,553	29,299	33,406	28,352	28,352	9.38	**3,023**	0%	0.00%	0	0%	0.00%	0
9	100%	1,678	1,888	2,055	2,438	1,846	1,846	30.82	**60**	0%	0.00%	0	0%	0.00%	0
10	100%	39,532	4,822	59,940	70,184	11,764	11,764	16.01	**735**	0%	0.00%	0	0%	0.00%	0
11	100%	32,051	33,202	37,130	38,279	32,972	32,972	14.14	**2,332**	0%	0.00%	0	0%	0.00%	0
12	100%	16,144	16,146	16,635	17,804	16,146	16,146	3.62	**4,463**	40%	1.62%	1,785	0%	0.00%	0
13*	100%	8,715	10,146	10,348	11,137	9,860	9,860	1.34	**7,358**	37%	2.47%	2,722	10%	0.67%	736
14	100%	93,104	94,279	96,147	99,871	94,044	94,044	3.28	**28,646**	0%	0.00%	0	0%	0.00%	0
15	100%	24,691	25,262	25,949	25,919	25,148	25,148	5.03	**5,005**	0%	0.00%	0	0%	0.00%	0
16	100%	108,882	108,353	107,806	106,703	108,459	108,459	6.30	**17,221**	0%	0.00%	0	0%	0.00%	0
17	100%	20,920	21,196	22,042	22,645	21,141	21,141	6.97	**3,034**	0%	0.00%	0	0%	0.00%	0
18	100%	42,078	41,670	41,542	42,625	41,752	41,752	6.16	**6,773**	0%	0.00%	0	0%	0.00%	0
19	100%	59,027	58,888	60,441	60,385	58,916	58,916	8.51	**6,924**	0%	0.00%	0	0%	0.00%	0
20	100%	9,482	9,699	9,756	9,893	9,656	9,656	12.33	**783**	0%	0.00%	0	0%	0.00%	0
21	100%	6	6	2,463	9,511	6	6	14.67	**0**	0%	0.00%	0	0%	0.00%	0
22	100%	4,231	3,629	3,701	3,704	3,749	3,749	13.67	**274**	0%	0.00%	0	0%	0.00%	0
23	100%	18,140	20,390	21,613	24,186	19,940	19,940	15.01	**1,329**	0%	0.00%	0	0%	0.00%	0
24	100%	2,393	2,554	2,697	3,054	2,522	2,522	21.31	**118**	0%	0.00%	0	0%	0.00%	0
25	100%	1,009	1,062	1,127	1,252	1,051	1,051	25.80	**41**	0%	0.00%	0	0%	0.00%	0
26	100%	75,506	85,654	96,202	117,341	83,624	83,624	31.76	**2,633**	0%	0.00%	0	0%	0.00%	0
27	100%	20,955	22,276	23,694	26,710	22,012	22,012	18.76	**1,173**	0%	0.00%	0	0%	0.00%	0
28	100%	19,524	21,690	23,476	26,318	21,257	21,257	32.76	**649**	0%	0.00%	0	0%	0.00%	0
29	100%	11,360	13,771	16,206	20,579	13,289	13,289	50.25	**264**	0%	0.00%	0	0%	0.00%	0
		811,863	836,916	947,476	1,075,238	831,905	793,557		**110,297**		11.87%	**13,098**		0.67%	**736**
												11.87%			0.67%

* - Subarea in which the site it located.

Fraternal Order of Police

Bear Canyon Arroyo / Jefferson St

Office Trip Distribution Map (%)



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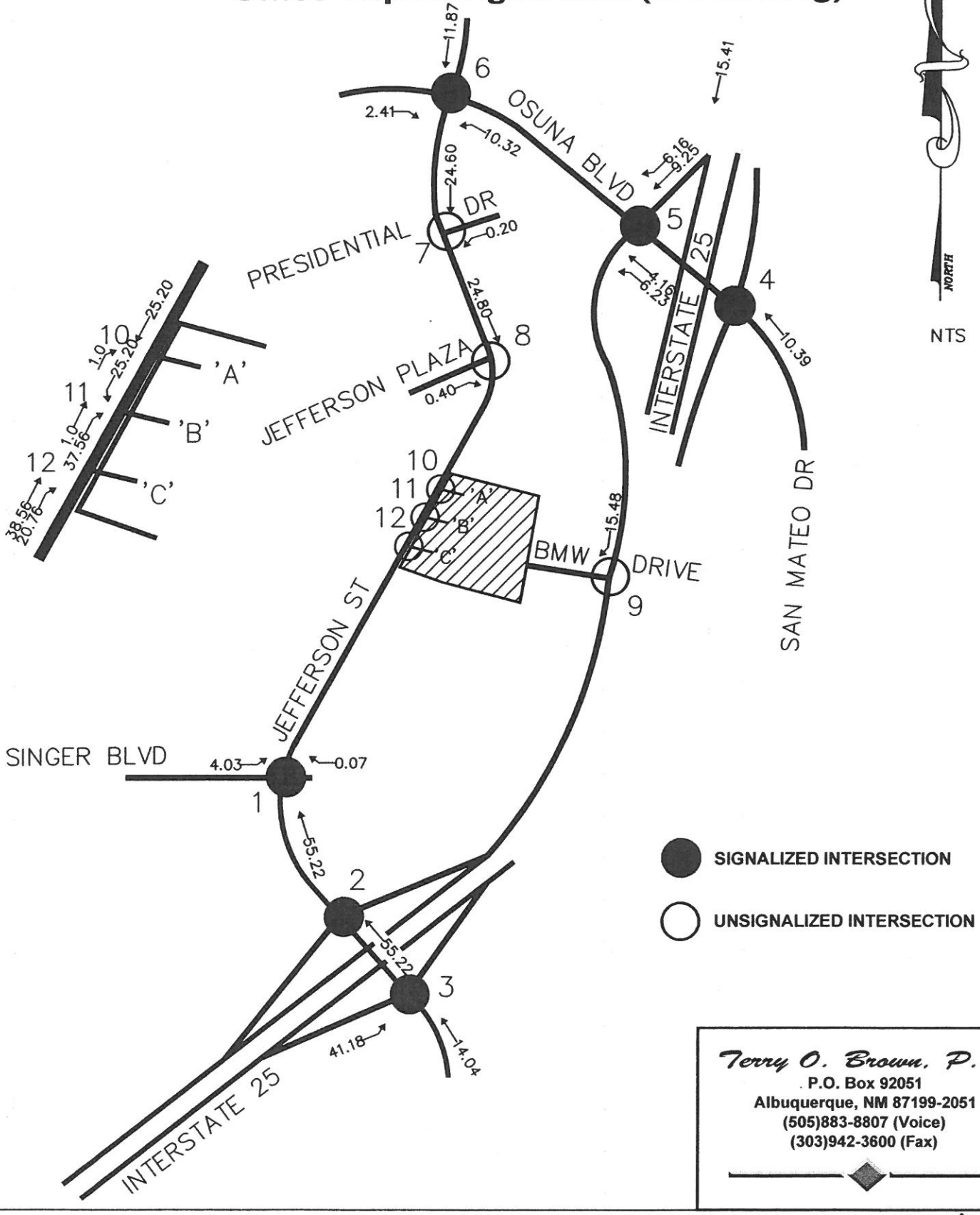
Fraternal Order of Police

Bear Canyon Arroyo / Jefferson St

Office Trip Assignments (% Entering)



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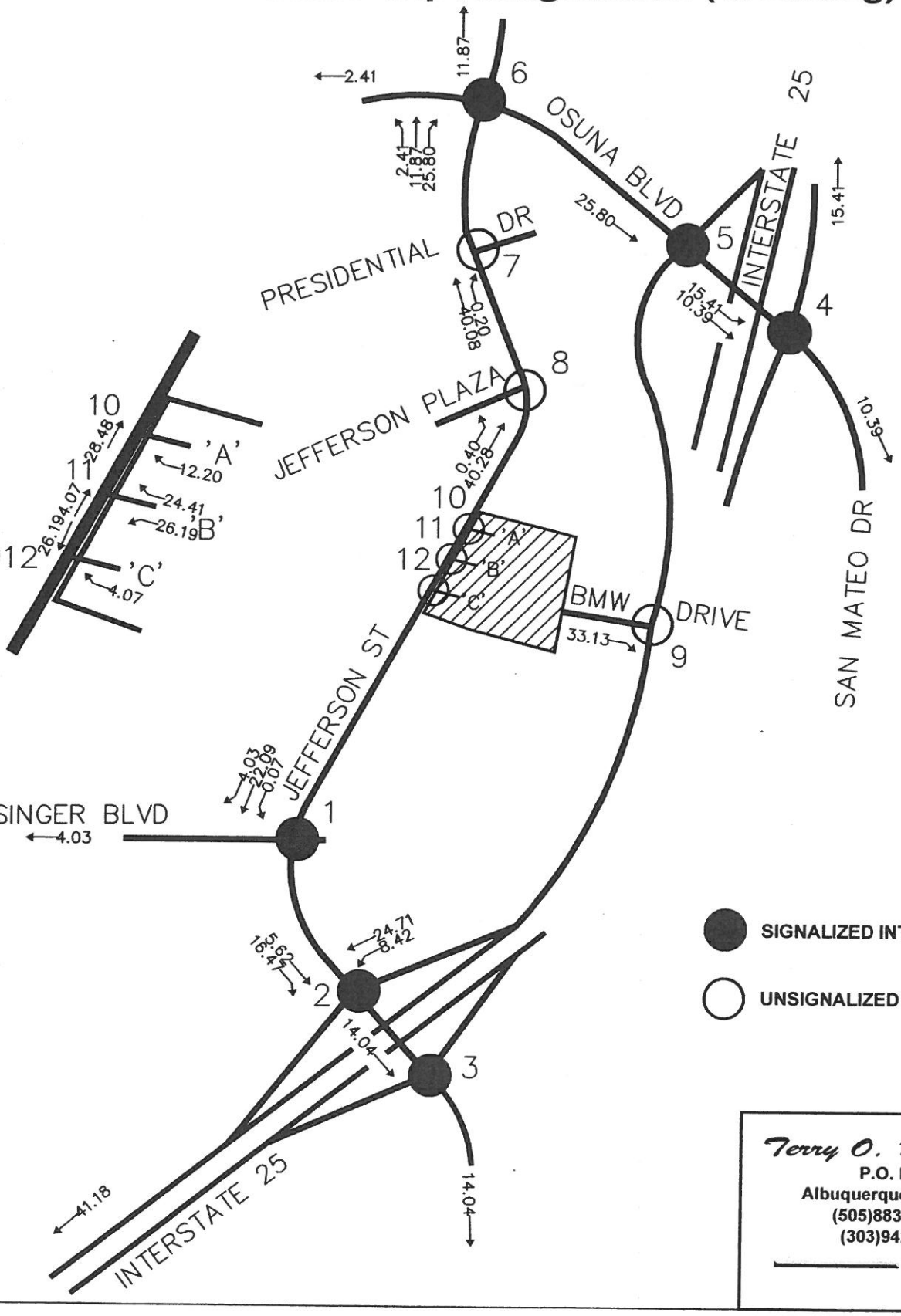
Fraternal Order of Police

Bear Canyon Arroyo / Jefferson St

Office Trip Assignments (% Exiting)



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Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

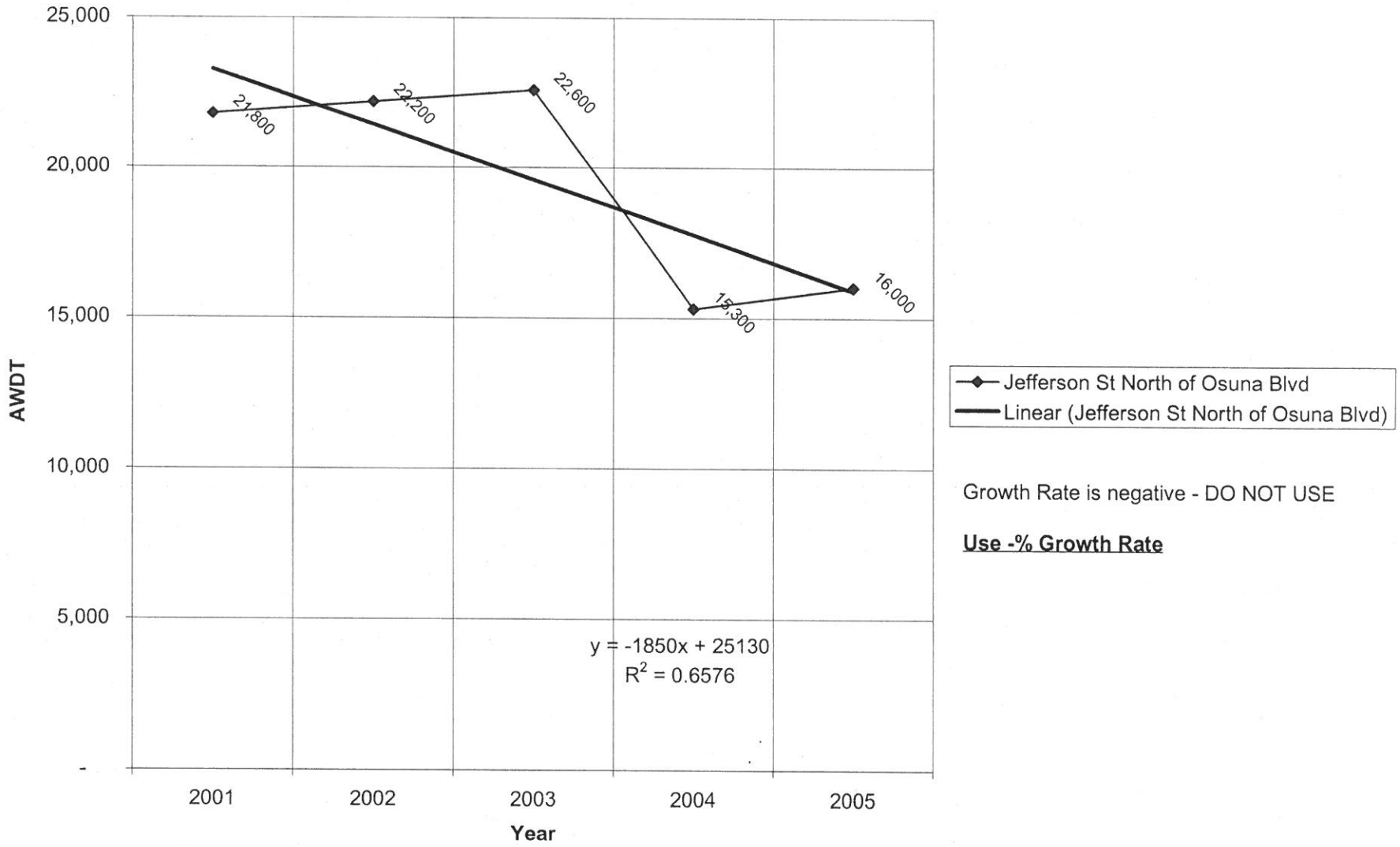
Historic Growth Rate Table

Traffic Flows from MRCOG Map

	2001	2002	2003	2004	2005
Jefferson St North of Osuna Blvd	21,800	22,200	22,600	15,300	16,000
Osuna Blvd btwn Jefferson & I-25	31,100	31,900	32,300	33,400	34,300
I-25 North of Osuna Blvd	102,800	130,500	134,600	140,000	138,900
San Mateo Blvd East of I-25	54,000	54,900	43,700	43,400	43,800
I-25 btwn Osuna Blvd & Jefferson St	117,400	140,500	151,200	155,700	155,700
Jefferson St East of I-25	13,800	14,000	14,200	14,100	14,200
I-25 South of Jefferson St	119,800	140,100	160,100	163,800	167,600
Singer Blvd West of Jefferson St	-	-	10,700	10,600	10,500
Jefferson St btwn Singer & Jeff. Plaza	19,200	19,600	19,900	24,800	25,600
Jefferson St btwn Jeff. Plaza & Osuna	16,100	15,000	15,200	15,700	22,700
Osuna Blvd West of Jefferson St	28,700	29,300	29,700	32,300	33,800

FOP_Growth.xls

Historic Growth Chart Jefferson St North of Osuna Blvd (2001-2005)

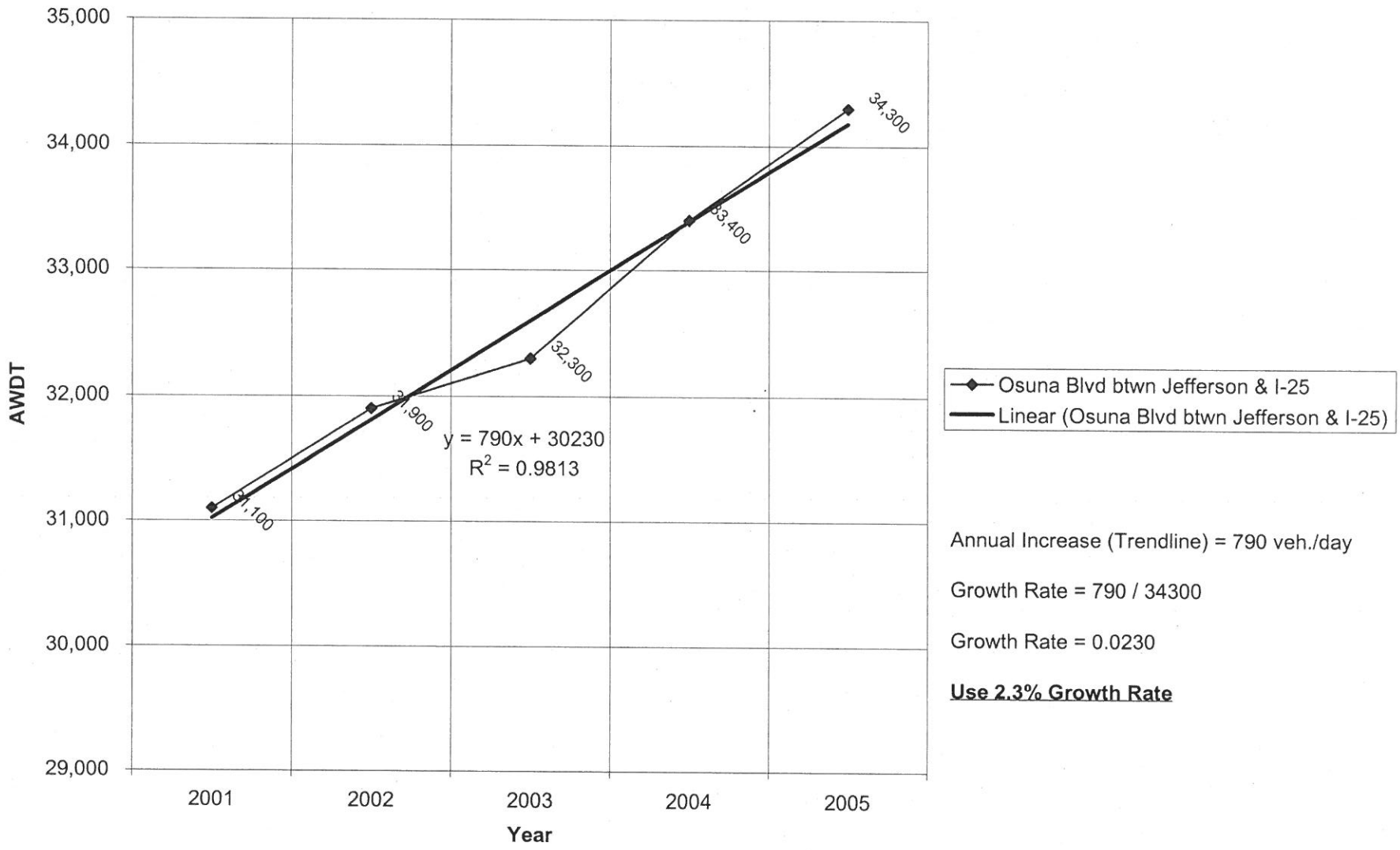


Growth Rate is negative - DO NOT USE

Use -% Growth Rate

FOP_Growth.xls

Historic Growth Chart Osuna Blvd btwn Jefferson & I-25 (2001-2005)



Annual Increase (Trendline) = 790 veh./day

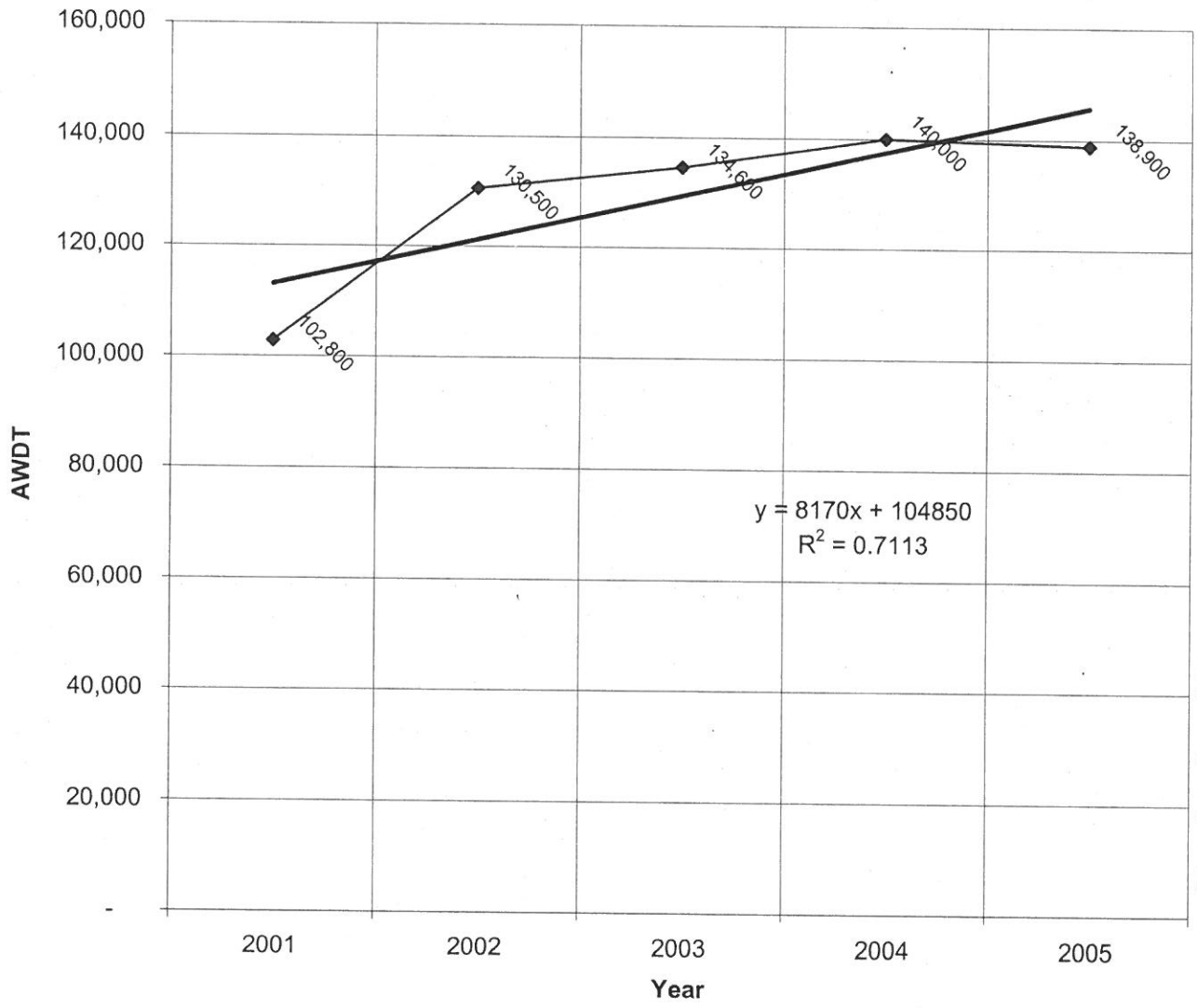
Growth Rate = 790 / 34300

Growth Rate = 0.0230

Use 2.3% Growth Rate

FOP_Growth.xls

Historic Growth Chart I-25 North of Osuna Blvd (2001-2005)



Annual Increase (Trendline) = 8170 veh./day

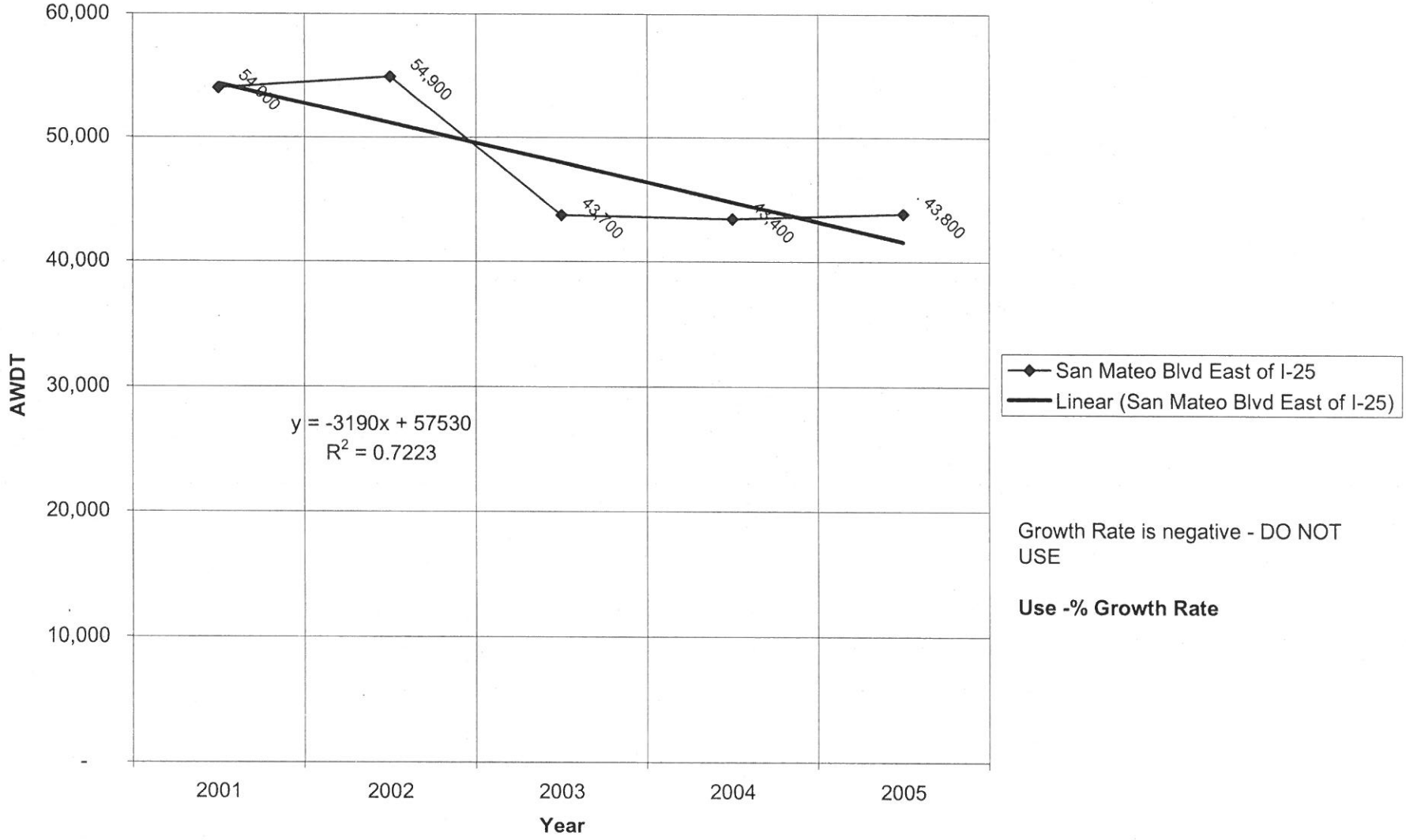
Growth Rate = 8170 / 138900

Growth Rate = 0.0588

Use 5.9% Growth Rate

FOP_Growth.xls

Historic Growth Chart San Mateo Blvd East of I-25 (2001-2005)

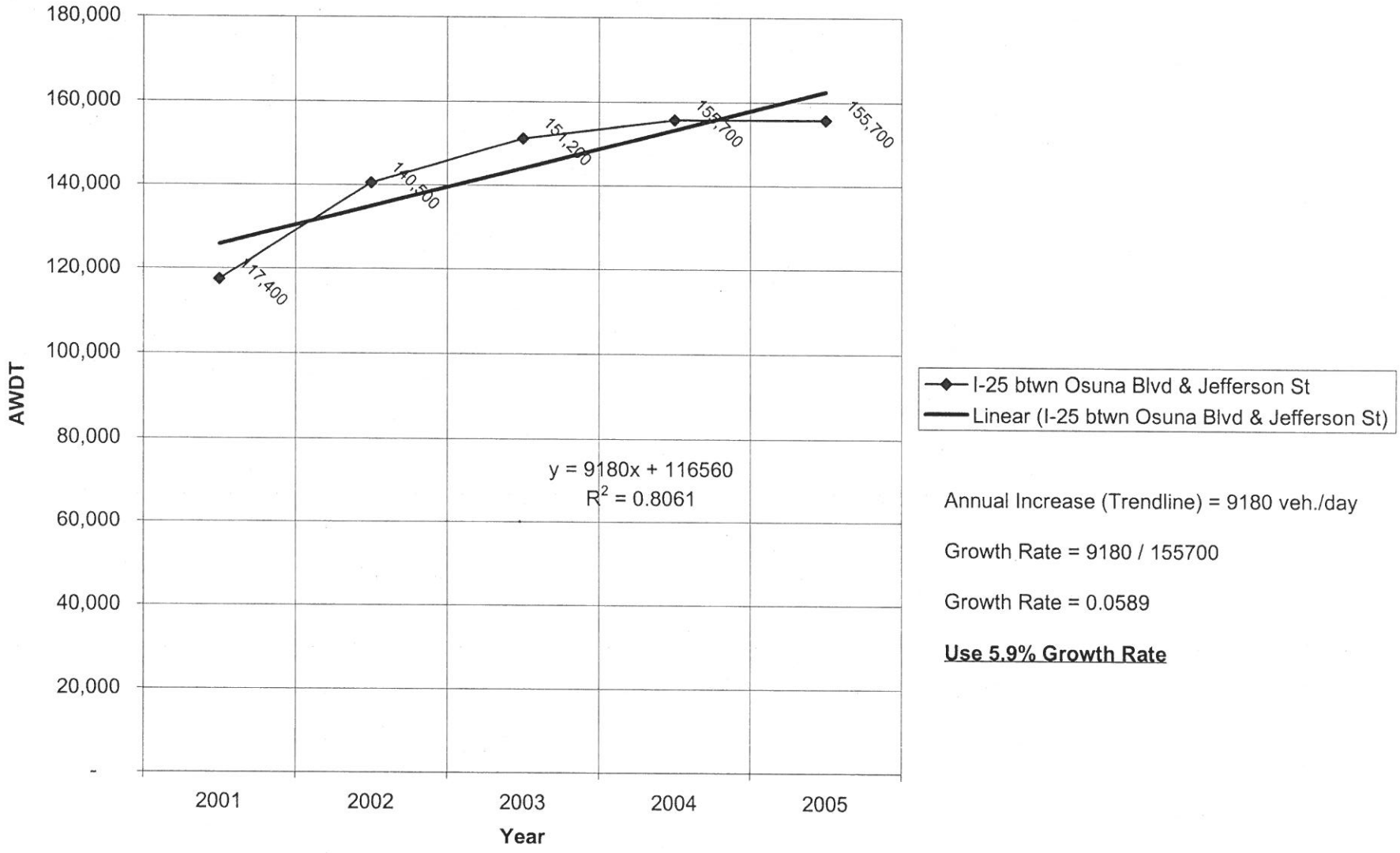


Growth Rate is negative - DO NOT USE

Use -% Growth Rate

FOP_Growth.xls

Historic Growth Chart I-25 btwn Osuna Blvd & Jefferson St (2001-2005)



Annual Increase (Trendline) = 9180 veh./day

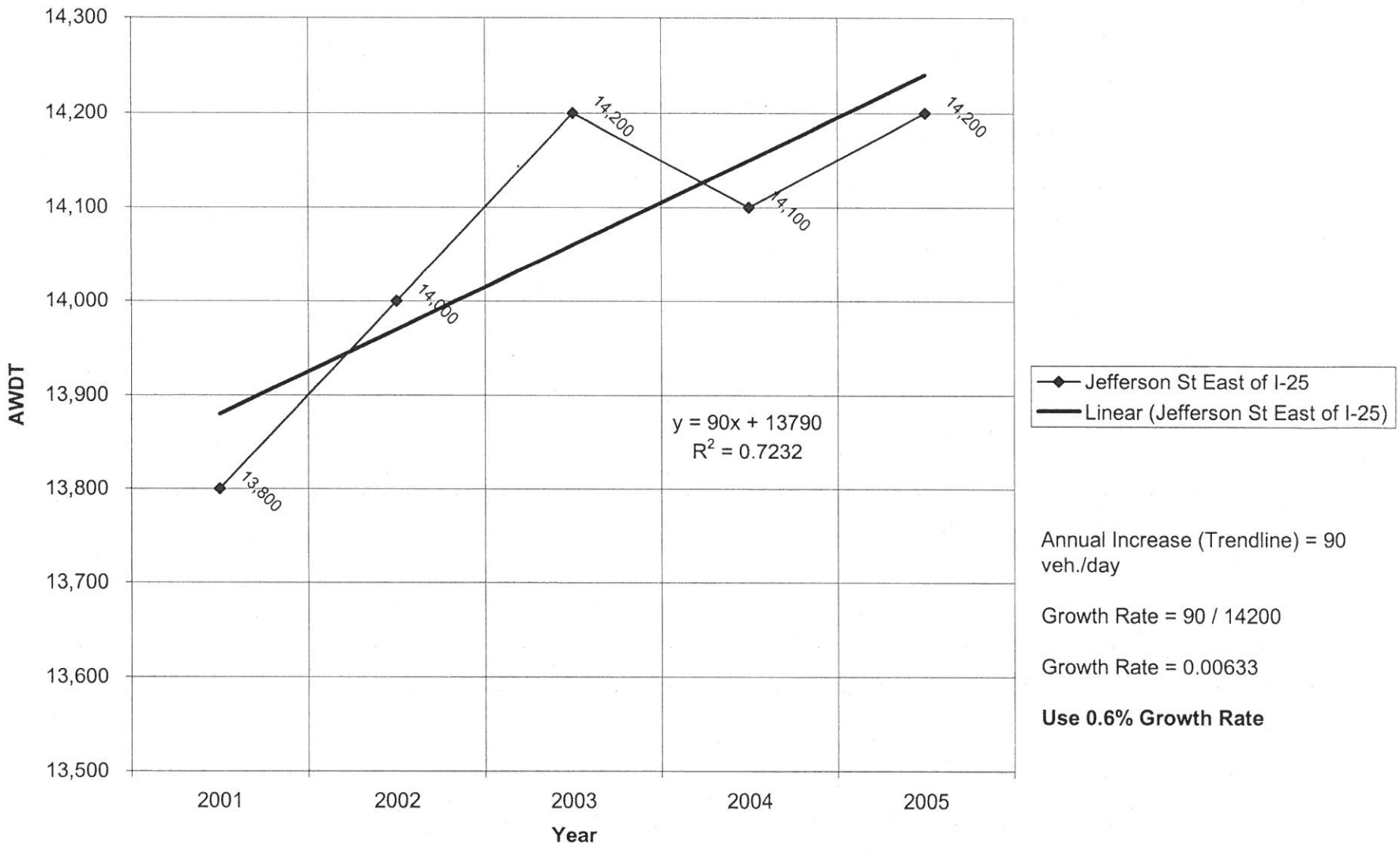
Growth Rate = 9180 / 155700

Growth Rate = 0.0589

Use 5.9% Growth Rate

FOP_Growth.xls

Historic Growth Chart Jefferson St East of I-25 (2001-2005)



Annual Increase (Trendline) = 90 veh./day

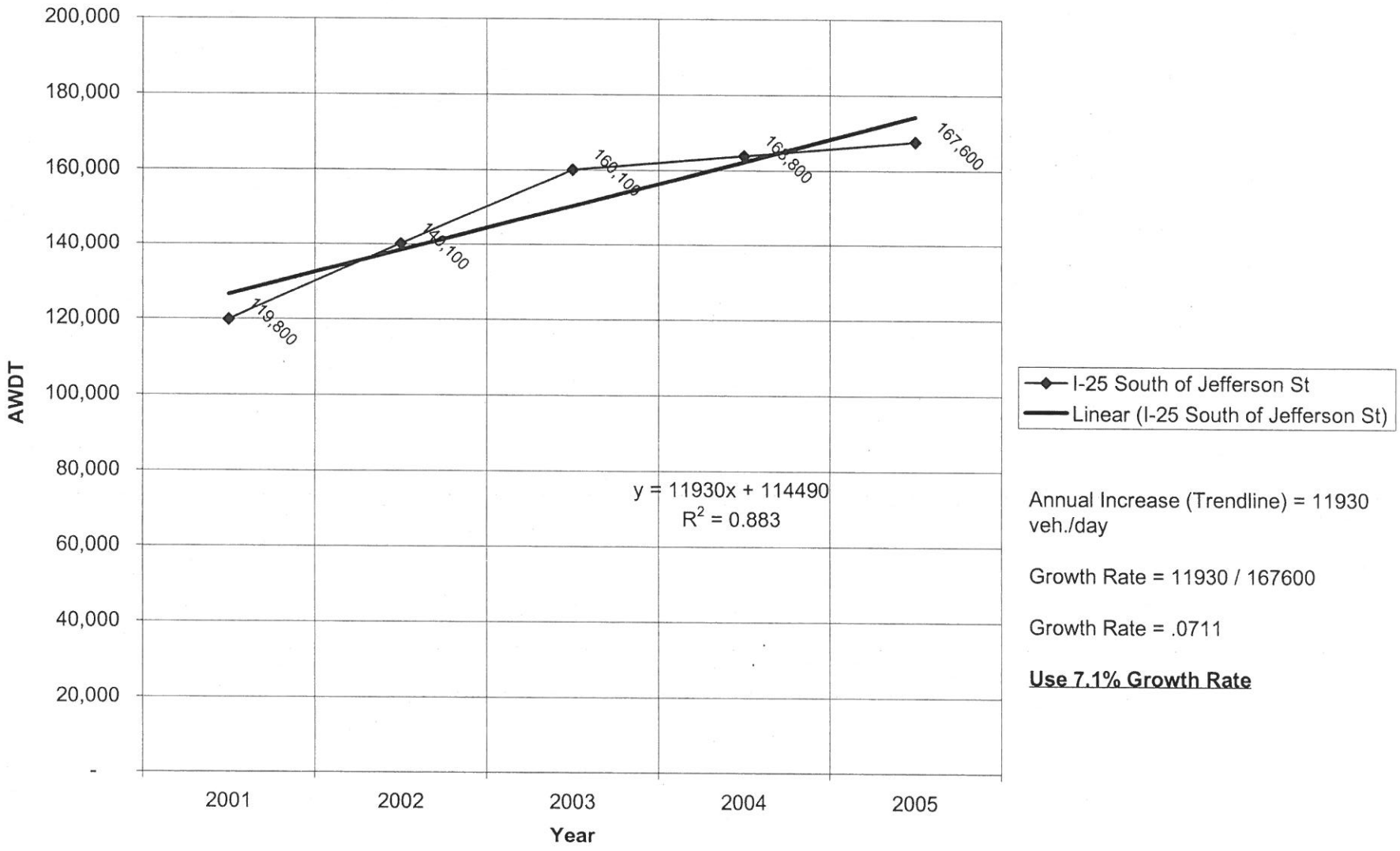
Growth Rate = 90 / 14200

Growth Rate = 0.00633

Use 0.6% Growth Rate

FOP_Growth.xls

Historic Growth Chart I-25 South of Jefferson St (2001-2005)



Annual Increase (Trendline) = 11930 veh./day

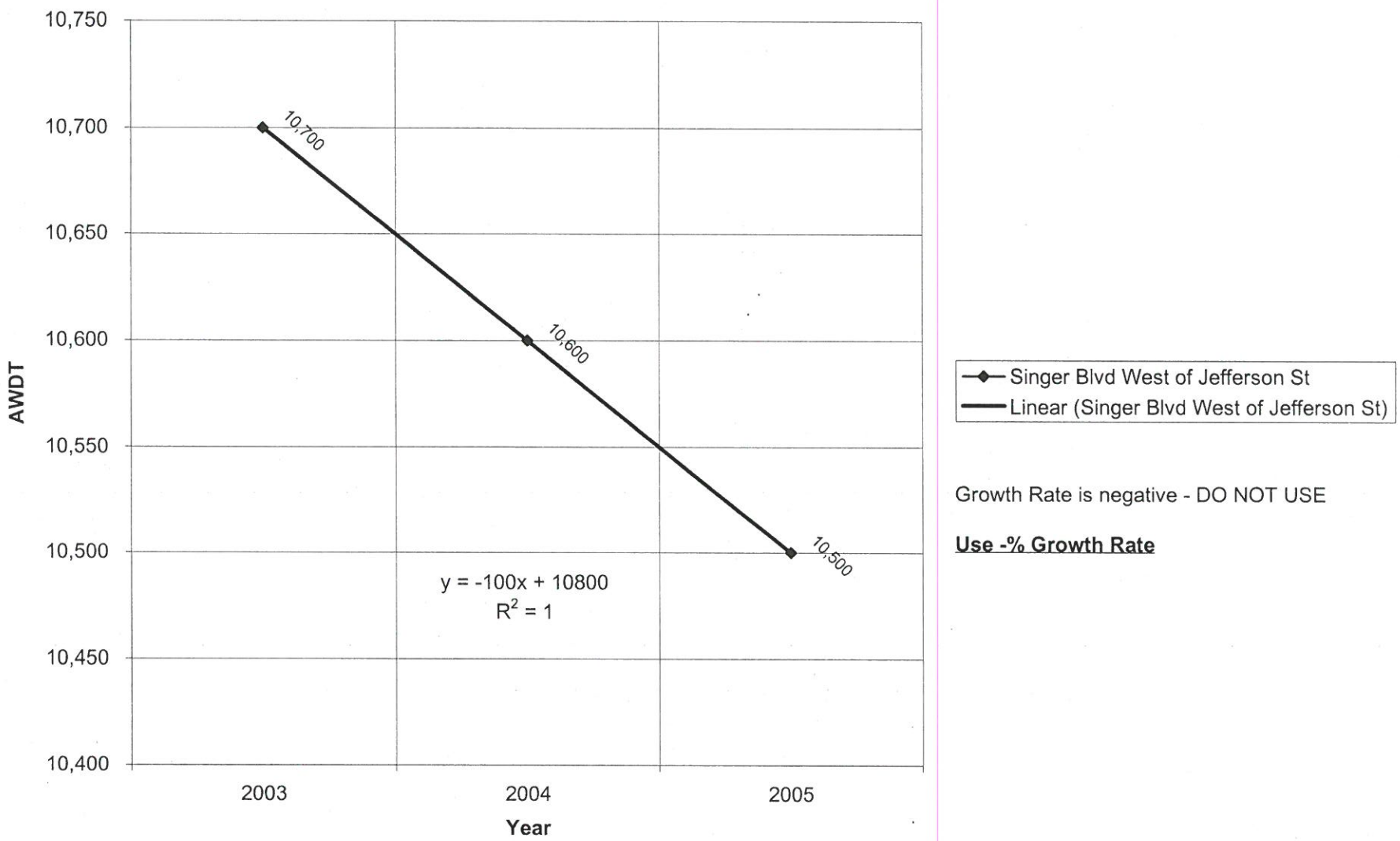
Growth Rate = 11930 / 167600

Growth Rate = .0711

Use 7.1% Growth Rate

FOP_Growth.xls

Historic Growth Chart Singer Blvd West of Jefferson St (2003-2005)

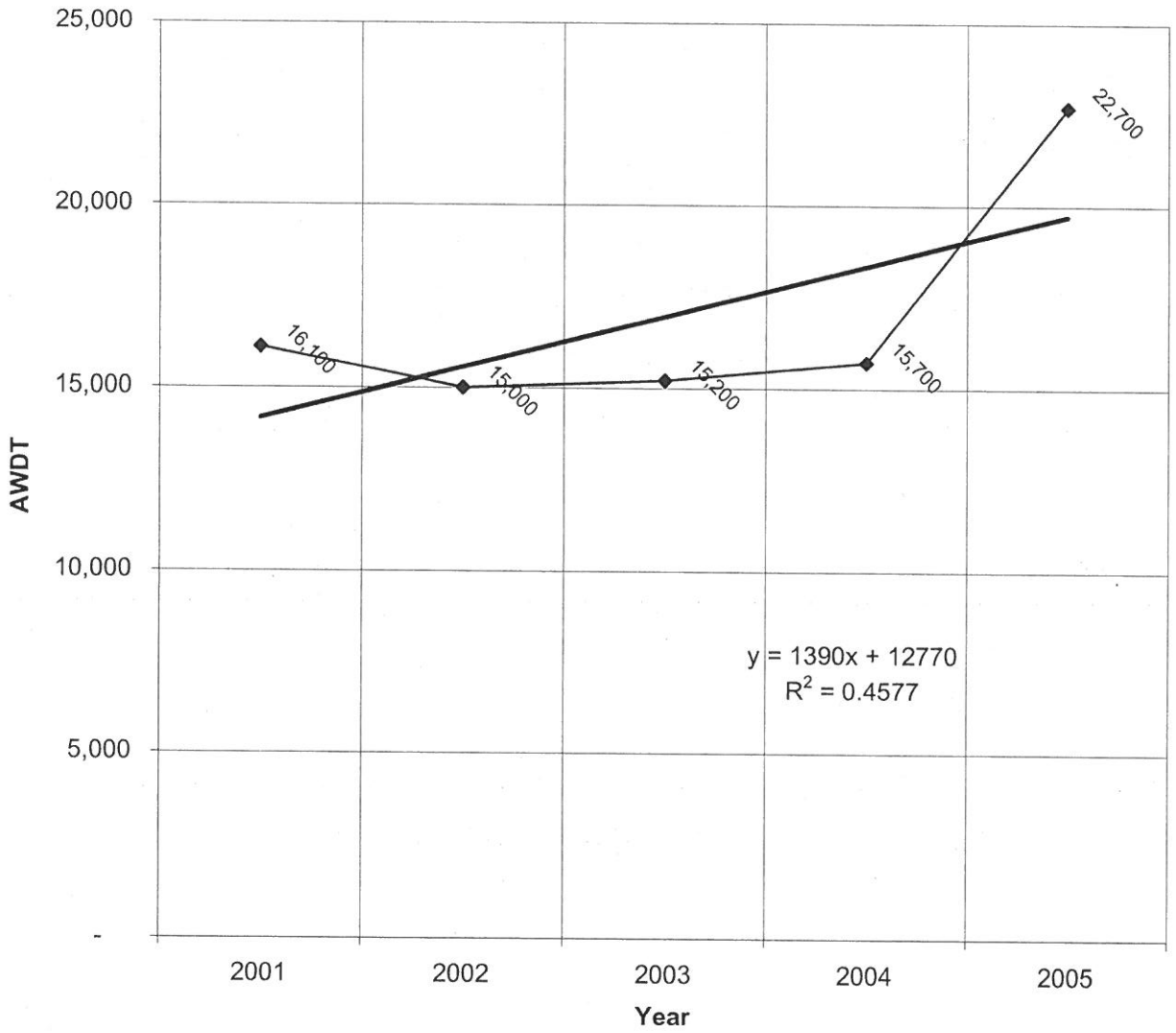


Growth Rate is negative - DO NOT USE

Use -% Growth Rate

FOP_Growth.xls

Historic Growth Chart Jefferson St btwn Singer & Jeff. Plaza (2001-2005)



Annual Increase (Trendline) = 1390 veh./day

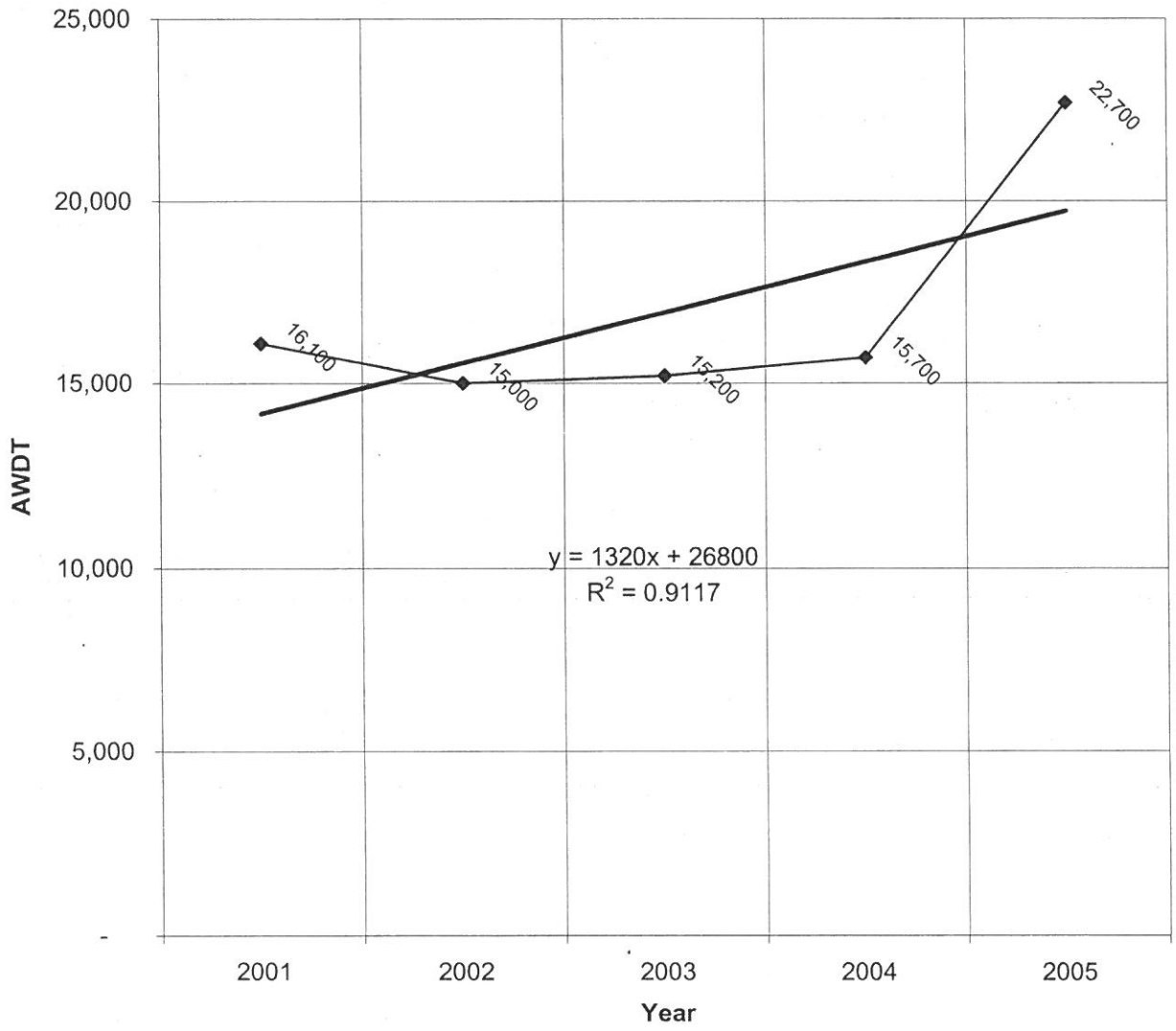
Growth Rate = 1390 / 22700

Growth Rate = 0.0612

Use 6.1% Growth Rate

FOP_Growth.xls

Historic Growth Chart Jefferson St btwn Jeff. Plaza & Osuna (2001-2005)



Annual Increase (Trendline) = 1320 veh./day

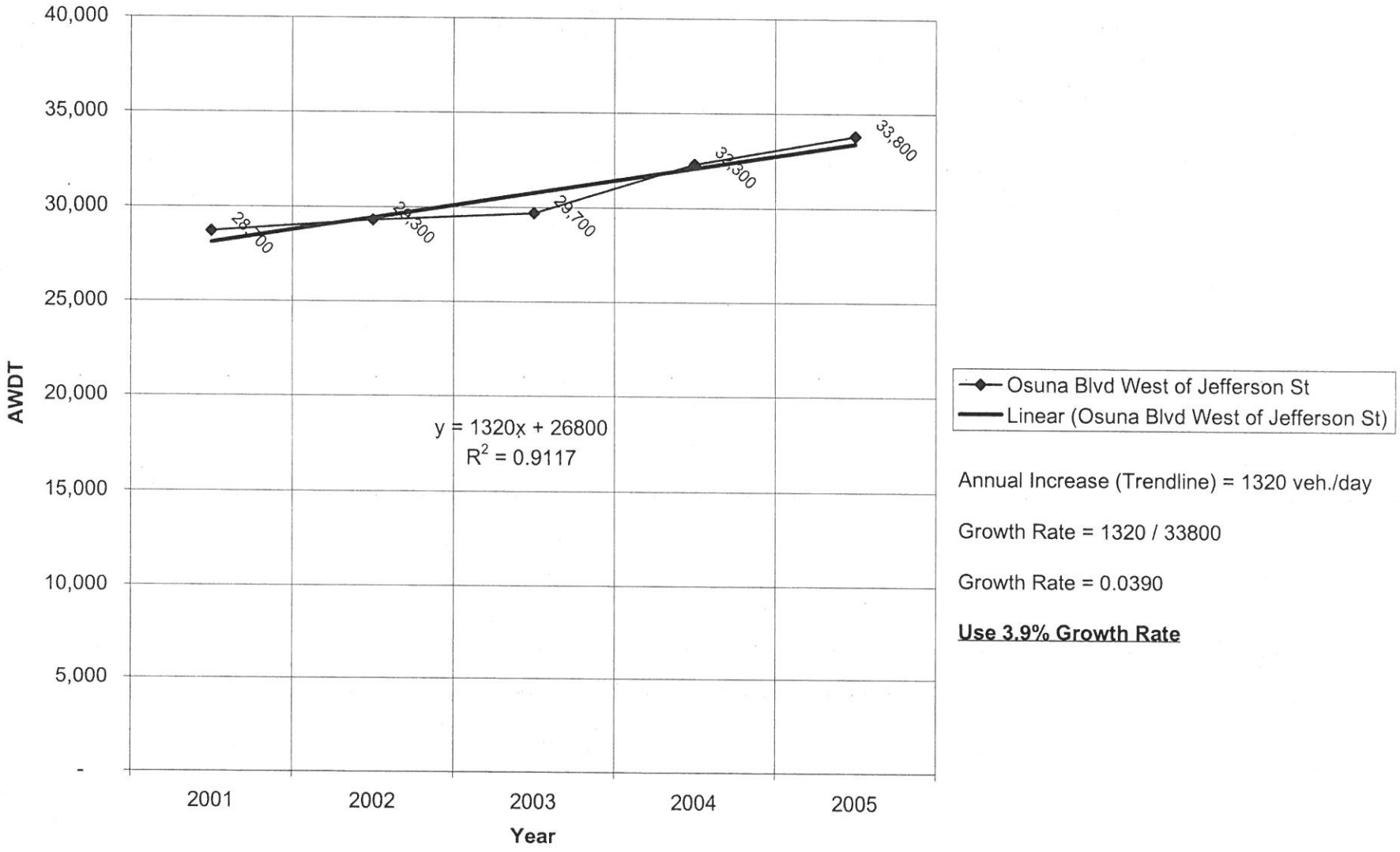
Growth Rate = 1320 / 22700

Growth Rate = 0.0581

Use 5.8% Growth Rate

FOP_Growth.xls

Historic Growth Chart Osuna Blvd West of Jefferson St (2001-2005)



Annual Increase (Trendline) = 1320 veh./day

Growth Rate = 1320 / 33800

Growth Rate = 0.0390

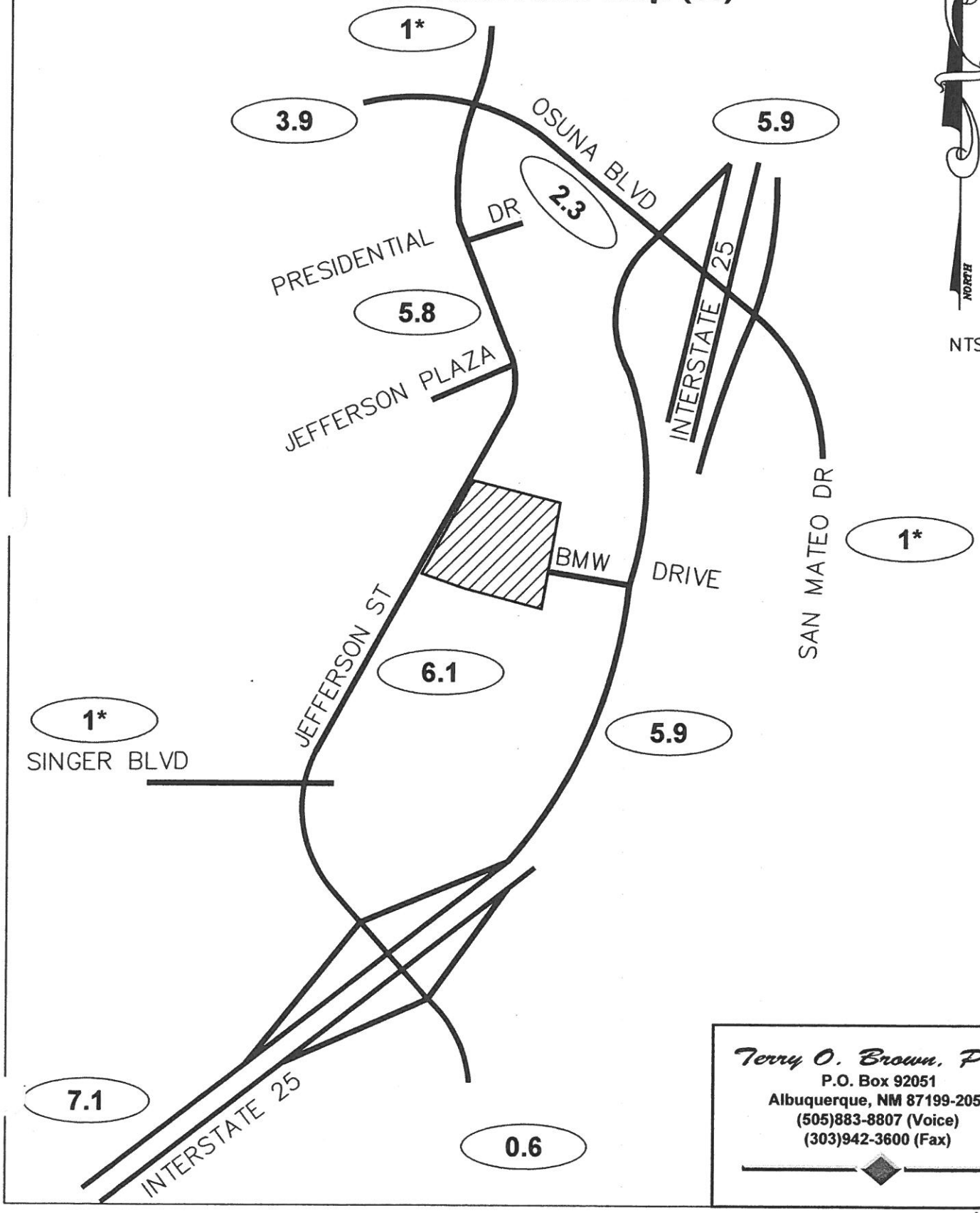
Use 3.9% Growth Rate

FOP_Growth.xls

Fraternal Order of Police

Bear Canyon Arroyo / Jefferson St

Growth Rate Map (%)



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Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2009) - 100% Development

INTERSECTION: **Summary**

Singer Ave / Jefferson St

(1)

3.5% Truck

		0.80			0.75			0.89			0.83		PHF
		Eastbound (Singer Ave)			Westbound (Singer Ave)			Northbound (Jefferson St)			Southbound (Jefferson St)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)		146	28	203	57	19	21	415	678	286	36	411	142
2009 (NO BUILD - A.M.)		*151*	*29*	*209*	*58*	*20*	*22*	*427*	*698*	*294*	*42*	*481*	*167*
2009 (BUILD - A.M.)		***158***	***29***	***209***	***58***	***20***	***22***	***427***	***827***	***294***	***42***	***502***	***169***
		0.70			0.75			0.91			0.86		PHF
		Eastbound (Singer Ave)			Westbound (Singer Ave)			Northbound (Jefferson St)			Southbound (Jefferson St)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)		214	64	432	195	35	54	212	390	158	30	629	142
2009 (NO BUILD - P.M.)		*220*	*66*	*445*	*201*	*36*	*55*	*218*	*401*	*162*	*35*	*738*	*167*
2009 (BUILD - P.M.)		***222***	***66***	***445***	***201***	***36***	***55***	***218***	***498***	***162***	***35***	***800***	***174***

Jefferson St / I-25 W. ramp

(2)

5.6% Truck

		0.86			0.85			0.85			0.73		PHF
		Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)		0	416	236	243	1,697	0	0	0	0	266	426	179
2009 (NO BUILD - A.M.)		*0*	*432*	*243*	*252*	*1,748*	*0*	*0*	*0*	*0*	*314*	*497*	*209*
2009 (BUILD - A.M.)		***0***	***446***	***250***	***252***	***1,877***	***0***	***0***	***0***	***0***	***335***	***507***	***209***
		0.94			0.96			0.85			0.97		PHF
		Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)		0	744	523	275	955	0	0	0	0	305	617	121
2009 (NO BUILD - P.M.)		*0*	*774*	*539*	*286*	*987*	*0*	*0*	*0*	*0*	*364*	*721*	*141*
2009 (BUILD - P.M.)		***0***	***805***	***570***	***286***	***1,084***	***0***	***0***	***0***	***0***	***409***	***769***	***141***

Jefferson St / I-25 E. ramp

(3)

3.7% Truck

		0.83			0.75			0.87			0.85		PHF
		Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)		53	444	0	0	476	120	693	312	144	0	0	0
2009 (NO BUILD - A.M.)		*54*	*465*	*0*	*0*	*486*	*125*	*831*	*374*	*172*	*0*	*0*	*0*
2009 (BUILD - A.M.)		***54***	***500***	***0***	***0***	***545***	***125***	***900***	***374***	***172***	***0***	***0***	***0***
		0.84			0.95			0.95			0.85		PHF
		Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)		319	680	0	0	449	259	470	508	199	0	0	0
2009 (NO BUILD - P.M.)		*329*	*714*	*0*	*0*	*463*	*271*	*564*	*609*	*239*	*0*	*0*	*0*
2009 (BUILD - P.M.)		***329***	***790***	***0***	***0***	***530***	***271***	***594***	***609***	***239***	***0***	***0***	***0***

San Mateo Blvd / I-25 E. ramp

(4)

4.4% Truck

		0.79			0.86			0.84			0.85		PHF
		Eastbound (San Mateo Blvd)			Westbound (San Mateo Blvd)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)		177	1,321	0	0	2,447	522	405	292	237	0	0	0
2009 (NO BUILD - A.M.)		*189*	*1,410*	*0*	*0*	*2,520*	*538*	*472*	*341*	*277*	*0*	*0*	*0*
2009 (BUILD - A.M.)		***202***	***1,429***	***0***	***0***	***2,555***	***538***	***472***	***341***	***277***	***0***	***0***	***0***
		0.96			0.94			0.97			0.85		PHF
		Eastbound (San Mateo Blvd)			Westbound (San Mateo Blvd)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)		305	1,776	0	0	1,788	884	256	632	367	0	0	0
2009 (NO BUILD - P.M.)		*325*	*1,896*	*0*	*0*	*1,841*	*910*	*299*	*738*	*429*	*0*	*0*	*0*
2009 (BUILD - P.M.)		***366***	***1,940***	***0***	***0***	***1,877***	***910***	***299***	***738***	***429***	***0***	***0***	***0***

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2009) - 100% Development

INTERSECTION: **Summary**

Osuna Rd / I-25 W. ramp

(5)

4.1% Truck

		0.83			0.90			0.85			0.83	PHF
	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	0	1,355	412	711	1,275	0	0	0	0	202	320	205
2009 (NO BUILD - A.M.)	*0*	*1,447*	*440*	*759*	*1,361*	*0*	*0*	*0*	*0*	*236*	*373*	*240*
2009 (BUILD - A.M.)	***0***	***1,479***	***440***	***780***	***1,375***	***0***	***0***	***0***	***0***	***236***	***393***	***254***

		0.84			0.89			0.85			0.86	PHF
	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	0	1,736	482	495	1,211	0	0	0	0	164	193	154
2009 (NO BUILD - P.M.)	*0*	*1,853*	*514*	*529*	*1,293*	*0*	*0*	*0*	*0*	*192*	*225*	*179*
2009 (BUILD - P.M.)	***0***	***1,938***	***514***	***551***	***1,307***	***0***	***0***	***0***	***0***	***192***	***240***	***189***

Osuna Rd / Jefferson St

(6)

6.1% Truck

		0.88			0.87			0.91			0.87	PHF
	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	254	1,165	166	190	963	274	136	253	47	201	381	163
2009 (NO BUILD - A.M.)	*306*	*1,382*	*187*	*203*	*1,121*	*292*	*160*	*293*	*54*	*207*	*393*	*193*
2009 (BUILD - A.M.)	***306***	***1,382***	***198***	***231***	***1,121***	***292***	***167***	***306***	***86***	***207***	***423***	***193***

		0.94			0.91			0.90			0.79	PHF
	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	267	1,603	87	92	1,063	210	325	622	295	342	349	309
2009 (NO BUILD - P.M.)	*323*	*1,878*	*100*	*98*	*1,232*	*224*	*378*	*719*	*341*	*352*	*359*	*345*
2009 (BUILD - P.M.)	***323***	***1,878***	***114***	***122***	***1,232***	***224***	***393***	***754***	***426***	***352***	***382***	***345***

Presidential Dr / Jefferson St

(7)

3.0% Truck

		0.85			0.85			0.90			0.94	PHF
	Eastbound (Presidential Dr)			Westbound (Presidential Dr)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	0	0	0	60	0	11	0	549	9	11	795	0
2009 (NO BUILD - A.M.)	*0*	*0*	*0*	*70*	*0*	*13*	*0*	*645*	*11*	*13*	*933*	*0*
2009 (BUILD - A.M.)	***0***	***0***	***0***	***70***	***0***	***13***	***0***	***697***	***11***	***13***	***1,002***	***0***

		0.85			0.85			0.85			0.89	PHF
	Eastbound (Presidential Dr)			Westbound (Presidential Dr)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	0	0	0	29	0	21	0	737	21	61	527	0
2009 (NO BUILD - P.M.)	*0*	*0*	*0*	*34*	*0*	*25*	*0*	*865*	*25*	*72*	*619*	*0*
2009 (BUILD - P.M.)	***0***	***0***	***0***	***34***	***0***	***25***	***0***	***1,001***	***25***	***72***	***681***	***0***

Jefferson Plaza / Jefferson St

(8)

3.0% Truck

		0.81			0.75			0.94			0.77	PHF
	Eastbound (Jefferson Plaza)			Westbound (Jefferson Plaza)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	10	2	14	0	4	8	59	661	9	10	766	89
2009 (NO BUILD - A.M.)	*12*	*2*	*16*	*0*	*5*	*9*	*69*	*776*	*11*	*12*	*899*	*104*
2009 (BUILD - A.M.)	***12***	***2***	***17***	***0***	***5***	***9***	***69***	***828***	***11***	***12***	***968***	***104***

		0.75			0.75			0.94			0.87	PHF
	Eastbound (Jefferson Plaza)			Westbound (Jefferson Plaza)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	50	0	28	5	0	7	7	730	4	8	756	12
2009 (NO BUILD - P.M.)	*59*	*0*	*33*	*6*	*0*	*8*	*8*	*857*	*5*	*9*	*888*	*14*
2009 (BUILD - P.M.)	***59***	***0***	***33***	***6***	***0***	***8***	***9***	***993***	***5***	***9***	***950***	***14***

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2009) - 100% Development

INTERSECTION: **Summary**

BMW Drive / I-25 W. ramp

(9)

3.0% Truck

	0.75			0.85			0.85			0.77		PHF
	Eastbound (BMW Drive)			Westbound (BMW Drive)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	0	0	14	0	0	0	0	0	0	0	377	16
2009 (NO BUILD - A.M.)	*0*	*0*	*16*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*444*	*19*
2009 (BUILD - A.M.)	***0***	***0***	***47***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***444***	***61***

	0.75			0.85			0.85			0.75		PHF
	Eastbound (BMW Drive)			Westbound (BMW Drive)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	0	0	55	0	0	0	0	0	0	0	481	6
2009 (NO BUILD - P.M.)	*0*	*0*	*65*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*566*	*7*
2009 (BUILD - P.M.)	***0***	***0***	***158***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***566***	***43***

Driveway "A" / Jefferson St

(10)

3.0% Truck

	0.85			0.85			0.94			0.94		PHF
	Eastbound (Driveway "A")			Westbound (Driveway "A")			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	0	0	0	0	0	0	0	729	0	0	780	0
2009 (NO BUILD - A.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*862*	*0*	*0*	*923*	*0*
2009 (BUILD - A.M.)	***0***	***0***	***0***	***0***	***0***	***15***	***0***	***898***	***2***	***0***	***993***	***0***

	0.85			0.85			0.94			0.94		PHF
	Eastbound (Driveway "A")			Westbound (Driveway "A")			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)	0	0	0	0	0	0	0	741	0	0	789	0
2009 (NO BUILD - P.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*877*	*0*	*0*	*933*	*0*
2009 (BUILD - P.M.)	***0***	***0***	***0***	***0***	***0***	***41***	***0***	***973***	***2***	***0***	***995***	***0***

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2009) - 100% Development

INTERSECTION: **Summary**

Driveway 'B' / Jefferson St

(11)

3.0% Truck

	0.85			0.85			0.94			0.94			PHF
	Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Jefferson St)			Southbound (Jefferson St)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	9	0	14	0	0	0	11	729	0	0	780	7	
2009 (NO BUILD - A.M.)	*11*	*0*	*17*	*0*	*0*	*0*	*13*	*862*	*0*	*0*	*923*	*8*	
2009 (BUILD - A.M.)	***11***	***0***	***17***	***22***	***0***	***31***	***13***	***869***	***85***	***70***	***923***	***8***	

	0.85			0.85			0.94			0.94			PHF
	Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Jefferson St)			Southbound (Jefferson St)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	25	0	45	0	0	0	40	741	0	0	789	30	
2009 (NO BUILD - P.M.)	*30*	*0*	*53*	*0*	*0*	*0*	*47*	*877*	*0*	*0*	*933*	*35*	
2009 (BUILD - P.M.)	***30***	***0***	***53***	***69***	***0***	***82***	***47***	***892***	***63***	***62***	***933***	***35***	

Driveway 'C' / Jefferson St

(12)

3.0% Truck

	0.85			0.85			0.94			0.94			PHF
	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Jefferson St)			Southbound (Jefferson St)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	0	0	0	0	0	0	0	729	0	0	780	0	
2009 (NO BUILD - A.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*862*	*0*	*0*	*923*	*0*	
2009 (BUILD - A.M.)	***0***	***0***	***0***	***0***	***0***	***5***	***0***	***949***	***47***	***0***	***945***	***0***	

	0.85			0.85			0.94			0.94			PHF
	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Jefferson St)			Southbound (Jefferson St)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	0	0	0	0	0	0	0	741	0	0	789	0	
2009 (NO BUILD - P.M.)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*877*	*0*	*0*	*933*	*0*	
2009 (BUILD - P.M.)	***0***	***0***	***0***	***0***	***0***	***13***	***0***	***942***	***35***	***0***	***1,002***	***0***	

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

Singer Ave / Jefferson St

INTERSECTION: E-W Street: **Singer Ave** (1)

N-S Street: **Jefferson St**

Year of Existing Counts 2005

Implementation Year **2009**

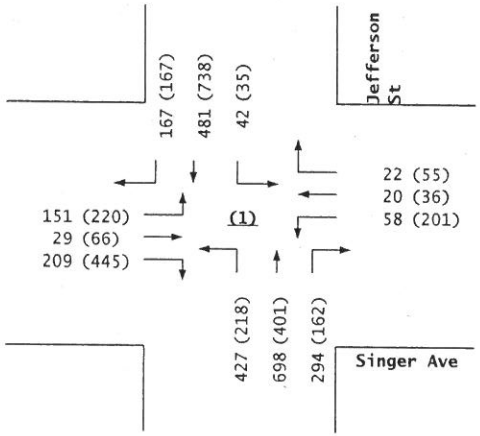
Growth Rates	1.00%			1.00%			1.00%			6.10%		
	Eastbound (Singer Ave)			Westbound (Singer Ave)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	145	28	201	56	19	21	411	671	283	34	387	134
Background Traffic Growth	6	1	8	2	1	1	16	27	11	8	94	33
Subtotal (NO BUILD - A.M.)	***151***	***29***	***209***	***58***	***20***	***22***	***427***	***698***	***294***	***42***	***481***	***167***
Percent Commercial Trips Generated(Entering)	***0.67%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***48.12%***	*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%*	***19.25%***	***0.67%***
Percent Office Trips Generated(Entering)	***4.03%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.07%***	*0.00%*	***55.22%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.07%***	***22.09%***	***4.03%***
Total Trips Generated	7	0	0	0	0	0	0	129	0	0	21	2
Total AM Peak Hour BUILD Volumes	**158**	**29**	**209**	**58**	**20**	**22**	**427**	**827**	**294**	**42**	**502**	**169**

	Eastbound (Singer Ave)			Westbound (Singer Ave)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	212	63	428	193	35	53	210	386	156	28	593	134
Background Traffic Growth	8	3	17	8	1	2	8	15	6	7	145	33
Subtotal (NO BUILD - P.M.)	***220***	***66***	***445***	***201***	***36***	***55***	***218***	***401***	***162***	***35***	***738***	***167***
Percent Commercial Trips Generated(Entering)	***0.67%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***48.12%***	*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%*	***19.25%***	***0.67%***
Percent Office Trips Generated(Entering)	***4.03%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.07%***	*0.00%*	***55.22%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.07%***	***22.09%***	***4.03%***
Total Trips Generated	2	0	0	0	0	0	0	97	0	0	62	7
Total PM Peak Hour BUILD Volumes	**222**	**66**	**445**	**201**	**36**	**55**	**218**	**498**	**162**	**35**	**800**	**174**

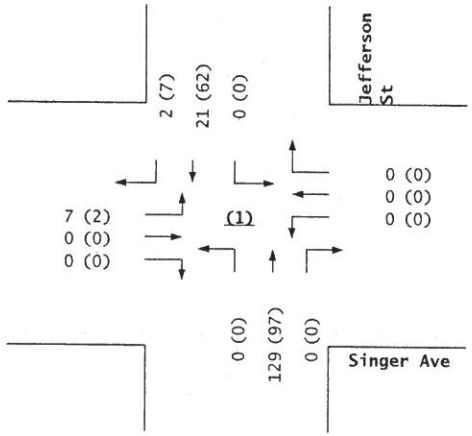
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (Singer Ave)			Westbound (Singer Ave)			Northbound (Jefferson St)			Southbound (Jefferson St)		
2006 AM Peak Hr. Volumes	146	28	203	57	19	21	415	678	286	36	411	142
2006 PM Peak Hr. Volumes	214	64	432	195	35	54	212	390	158	30	629	142

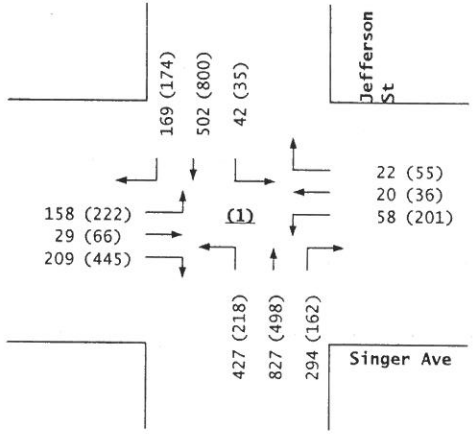
2009
NO BUILD



Trips



2009
BUILD



Singer Ave / Jefferson St

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

Jefferson St / I-25 W. ramp

INTERSECTION: E-W Street: **Jefferson St** (2)

N-S Street: **I-25 W. ramp**

Year of Existing Counts 2005

Implementation Year **2009**

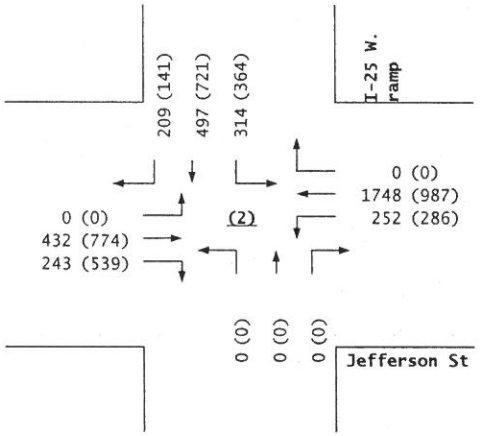
Growth Rates	Eastbound (Jefferson St) 1.00%			Westbound (Jefferson St) 1.00%			Northbound (I-25 W. ramp) 7.10%			Southbound (I-25 W. ramp) 5.90%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	412	234	241	1,680	0	0	0	0	251	402	169
Background Traffic Growth	0	16	9	10	67	0	0	0	0	59	95	40
Subtotal	0	428	243	251	1,747	0	0	0	0	310	497	209
Jefferson Pointe	0	4	0	1	1	0	0	0	0	4	0	0
Subtotal (NO BUILD - A.M.)	***0***	***432***	***243***	***252***	***1,748***	***0***	***0***	***0***	***0***	***314***	***497***	***209***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*48.12%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*14.98%*	*4.27%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*22.23%*	*6.64%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*55.22%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*5.62%*	*16.47%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*8.42%*	*24.71%*	*0.00%*
Total Trips Generated	0	14	7	0	129	0	0	0	0	21	10	0
Total AM Peak Hour BUILD Volumes	**0**	**446**	**250**	**252**	**1,877**	**0**	**0**	**0**	**0**	**335**	**507**	**209**

	Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	737	518	272	946	0	0	0	0	288	583	114
Background Traffic Growth	0	29	21	11	38	0	0	0	0	68	138	27
Subtotal	0	766	539	283	984	0	0	0	0	356	721	141
Jefferson Pointe	0	8	0	3	3	0	0	0	0	8	0	0
Subtotal (NO BUILD - P.M.)	***0***	***774***	***539***	***286***	***987***	***0***	***0***	***0***	***0***	***364***	***721***	***141***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*48.12%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*14.98%*	*4.27%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*22.23%*	*6.64%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*55.22%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*5.62%*	*16.47%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*8.42%*	*24.71%*	*0.00%*
Total Trips Generated	0	31	31	0	97	0	0	0	0	45	48	0
Total PM Peak Hour BUILD Volumes	**0**	**805**	**570**	**286**	**1,084**	**0**	**0**	**0**	**0**	**409**	**769**	**141**

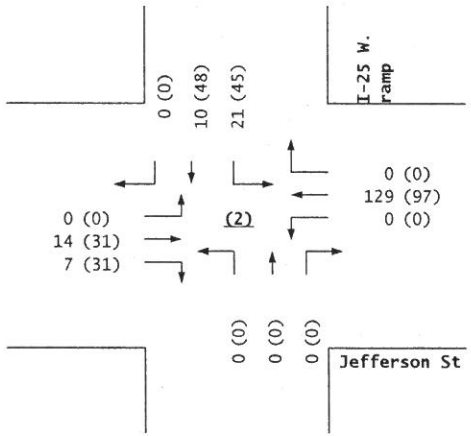
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
2006 AM Peak Hr. Volumes	0	416	236	243	1,697	0	0	0	0	266	426	179
2006 PM Peak Hr. Volumes	0	744	523	275	955	0	0	0	0	305	617	121

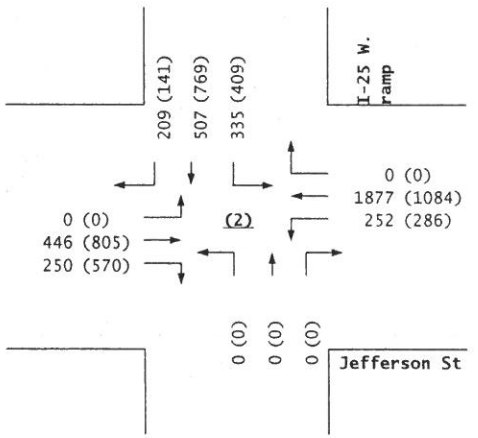
2009
NO BUILD



Trips



2009
BUILD



Jefferson St / I-25 W. ramp

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

Jefferson St / I-25 E. ramp

INTERSECTION: E-W Street: **Jefferson St** (3)

N-S Street: **I-25 E. ramp**

Year of Existing Counts 2005

Implementation Year **2009**

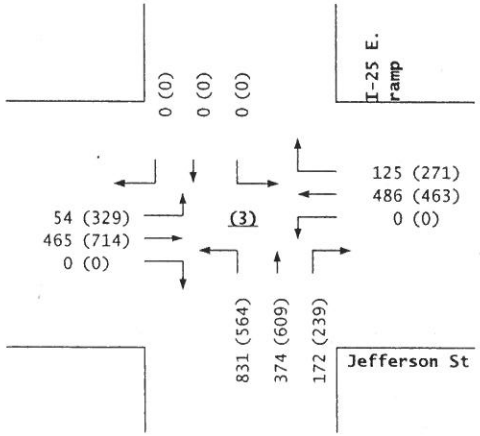
	Growth Rates	1.00%			0.60%			7.10%			5.90%		
		Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		52	440	0	0	473	119	647	291	134	0	0	0
Background Traffic Growth		2	18	0	0	11	3	184	83	38	0	0	0
Subtotal		54	458	0	0	484	122	831	374	172	0	0	0
Jefferson Pointe		0	7	0	0	2	3	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)		***54***	***465***	***0***	***0***	***486***	***125***	***831***	***374***	***172***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	***37.21%***	*0.00%*	***10.91%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)		*0.00%*	***37.21%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.04%***	*0.00%*	***41.18%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)		*0.00%*	***14.04%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated		0	35	0	0	59	0	69	0	0	0	0	0
Total AM Peak Hour BUILD Volumes		**54**	**500**	**0**	**0**	**545**	**125**	**900**	**374**	**172**	**0**	**0**	**0**

	Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	316	673	0	0	446	257	439	474	186	0	0	0
Background Traffic Growth	13	27	0	0	11	6	125	135	53	0	0	0
Subtotal	329	700	0	0	457	263	564	609	239	0	0	0
Jefferson Pointe	0	14	0	0	6	8	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***329***	***714***	***0***	***0***	***463***	***271***	***564***	***609***	***239***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***37.21%***	*0.00%*	***10.91%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***37.21%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***14.04%***	*0.00%*	***41.18%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	***14.04%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	76	0	0	67	0	30	0	0	0	0	0
Total PM Peak Hour BUILD Volumes	**329**	**790**	**0**	**0**	**530**	**271**	**594**	**609**	**239**	**0**	**0**	**0**

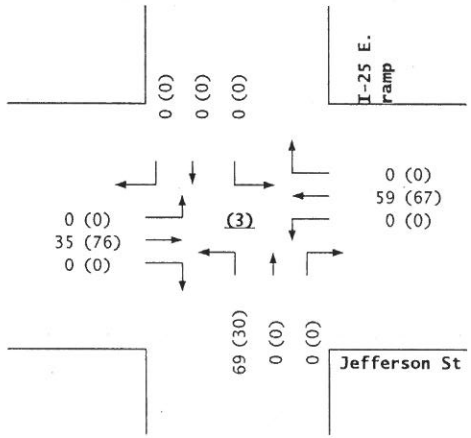
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (Jefferson St)			Westbound (Jefferson St)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
2006 AM Peak Hr. Volumes	53	444	0	0	476	120	693	312	144	0	0	0
2006 PM Peak Hr. Volumes	319	680	0	0	449	259	470	508	199	0	0	0

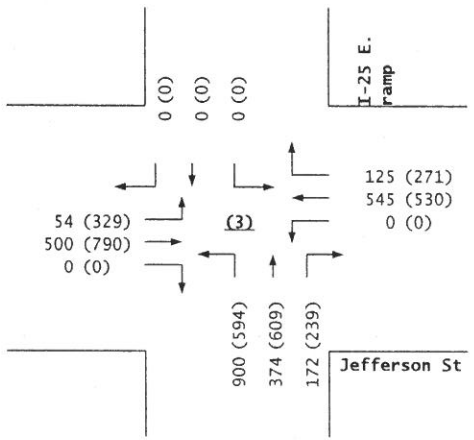
2009
NO BUILD



Trips



2009
BUILD



Jefferson St / I-25 E. ramp

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

San Mateo Blvd / I-25 E. ramp

INTERSECTION: E-W Street: **San Mateo Blvd** (4)

N-S Street: **I-25 E. ramp**

Year of Existing Counts 2005

Implementation Year **2009**

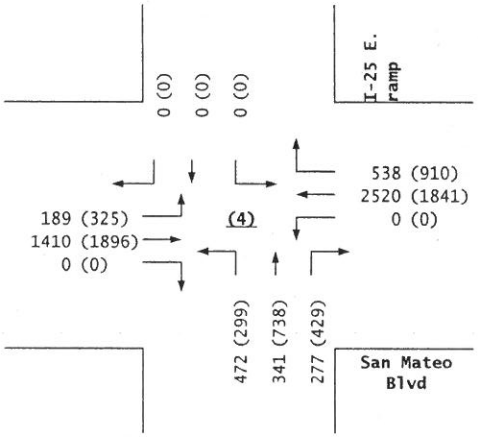
Growth Rates	2.30%			1.00%			5.90%			5.90%		
	Eastbound (San Mateo Blvd)			Westbound (San Mateo Blvd)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	173	1,291	0	0	2,423	517	382	276	224	0	0	0
Background Traffic Growth	16	119	0	0	97	21	90	65	53	0	0	0
Subtotal (NO BUILD - A.M.)	***189***	***1,410***	***0***	***0***	***2,520***	***538***	***472***	***341***	***277***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*19.51%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*11.85%*	*19.51%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*10.39%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*15.41%*	*10.39%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	13	19	0	0	35	0	0	0	0	0	0	0
Total AM Peak Hour BUILD Volumes	**202**	**1,429**	**0**	**0**	**2,555**	**538**	**472**	**341**	**277**	**0**	**0**	**0**

	Eastbound (San Mateo Blvd)			Westbound (San Mateo Blvd)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	298	1,736	0	0	1,770	875	242	597	347	0	0	0
Background Traffic Growth	27	160	0	0	71	35	57	141	82	0	0	0
Subtotal (NO BUILD - P.M.)	***325***	***1,896***	***0***	***0***	***1,841***	***910***	***299***	***738***	***429***	***0***	***0***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*19.51%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*11.85%*	*19.51%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*10.39%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*15.41%*	*10.39%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	41	44	0	0	36	0	0	0	0	0	0	0
Total PM Peak Hour BUILD Volumes	**366**	**1,940**	**0**	**0**	**1,877**	**910**	**299**	**738**	**429**	**0**	**0**	**0**

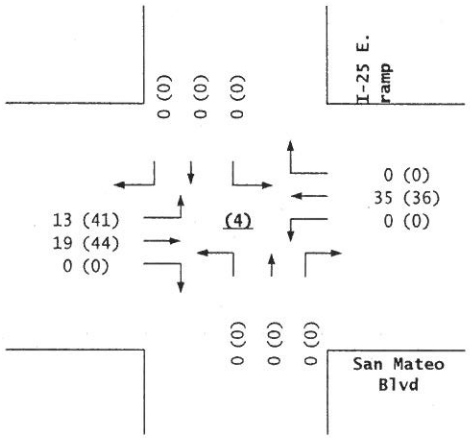
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (San Mateo Blvd)			Westbound (San Mateo Blvd)			Northbound (I-25 E. ramp)			Southbound (I-25 E. ramp)		
2006 AM Peak Hr. Volumes	177	1321	0	0	2,447	522	405	292	237	0	0	0
2006 PM Peak Hr. Volumes	305	1,776	0	0	1,788	884	256	632	367	0	0	0

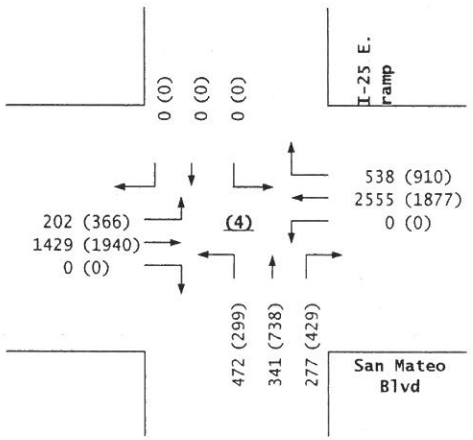
2009
NO BUILD



Trips



2009
BUILD



San Mateo Blvd / I-25 E. ramp

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

Osuna Rd / I-25 W. ramp

INTERSECTION: E-W Street: **Osuna Rd** (5)

N-S Street: **I-25 W. ramp**

Year of Existing Counts 2005

Implementation Year **2009**

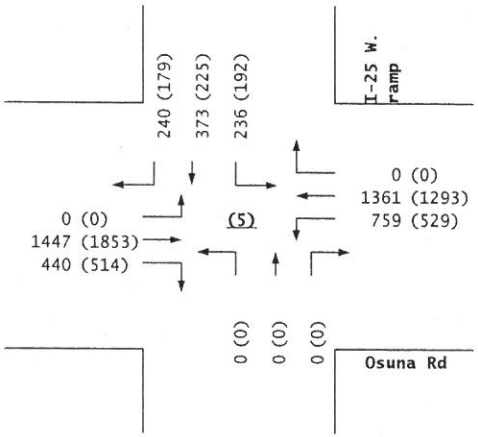
Growth Rates	2.30%			2.30%			5.90%			5.90%		
	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	1,325	403	695	1,246	0	0	0	0	191	302	194
Background Traffic Growth	0	122	37	64	115	0	0	0	0	45	71	46
Subtotal (NO BUILD - A.M.)	***0***	***1,447***	***440***	***759***	***1,361***	***0***	***0***	***0***	***0***	***236***	***373***	***240***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*11.71%*	*7.80%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*7.12%*	*4.73%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*31.36%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*6.23%*	*4.16%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*9.25%*	*6.16%*
Percent Office Trips Generated(Exiting)	*0.00%*	*25.80%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	32	0	21	14	0	0	0	0	0	20	14
Total AM Peak Hour BUILD Volumes	**0**	**1,479**	**440**	**780**	**1,375**	**0**	**0**	**0**	**0**	**236**	**393**	**254**

	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	1,697	471	484	1,184	0	0	0	0	155	182	145
Background Traffic Growth	0	156	43	45	109	0	0	0	0	37	43	34
Subtotal (NO BUILD - P.M.)	***0***	***1,853***	***514***	***529***	***1,293***	***0***	***0***	***0***	***0***	***192***	***225***	***179***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*11.71%*	*7.80%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*7.12%*	*4.73%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*31.36%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*6.23%*	*4.16%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*9.25%*	*6.16%*
Percent Office Trips Generated(Exiting)	*0.00%*	*25.80%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	85	0	22	14	0	0	0	0	0	15	10
Total PM Peak Hour BUILD Volumes	**0**	**1,938**	**514**	**551**	**1,307**	**0**	**0**	**0**	**0**	**192**	**240**	**189**

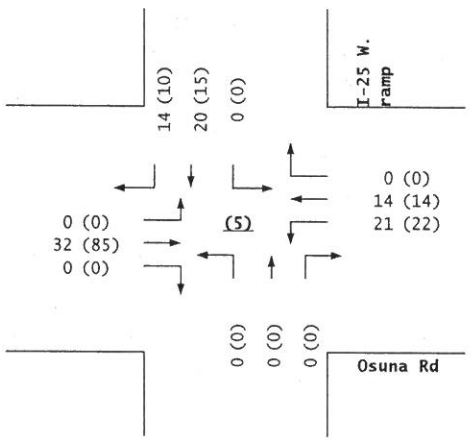
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
2006 AM Peak Hr. Volumes	0	1355	412	711	1,275	0	0	0	0	202	320	205
2006 PM Peak Hr. Volumes	0	1,736	482	495	1,211	0	0	0	0	164	193	154

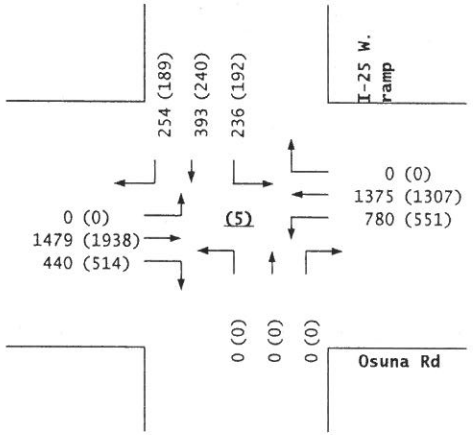
2009
NO BUILD



Trips



2009
BUILD



Osuna Rd / I-25 W. ramp

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

Osuna Rd / Jefferson St

INTERSECTION: E-W Street: **Osuna Rd** (6)

N-S Street: **Jefferson St**

Year of Existing Counts 2004

Implementation Year **2009**

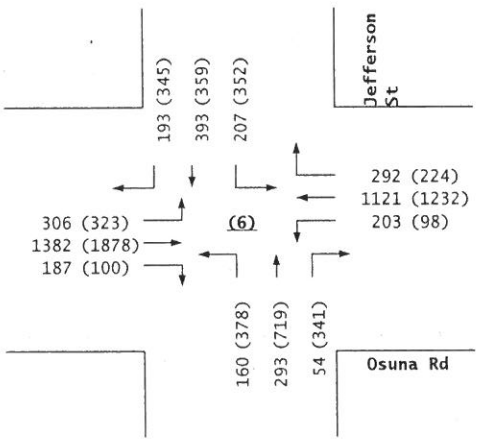
Growth Rates	3.90%			2.30%			5.80%			1.00%		
	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	236	1,081	154	182	921	262	122	227	42	197	374	160
Background Traffic Growth	46	211	30	21	106	30	35	66	12	10	19	8
Subtotal	282	1,292	184	203	1,027	292	157	293	54	207	393	168
Vista del Norte Commercial Trips	24	90	3	0	94	0	3	0	0	0	0	25
Subtotal (NO BUILD - A.M.)	***306***	***1,382***	***187***	***203***	***1,121***	***292***	***160***	***293***	***54***	***207***	***393***	***193***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*7.83%*	*12.53%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.01%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*7.83%*	*12.01%*	*31.36%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*2.41%*	*10.32%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*11.87%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2.41%*	*11.87%*	*25.80%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	11	28	0	0	7	13	32	0	30	0
Total AM Peak Hour BUILD Volumes	**306**	**1,382**	**198**	**231**	**1,121**	**292**	**167**	**306**	**86**	**207**	**423**	**193**

	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	248	1,487	81	88	1,016	201	291	557	264	335	342	303
Background Traffic Growth	48	290	16	10	117	23	84	162	77	17	17	15
Subtotal	296	1,777	97	98	1,133	224	375	719	341	352	359	318
Vista del Norte Commercial Trips	27	101	3	0	99	0	3	0	0	0	0	27
Subtotal (NO BUILD - P.M.)	***323***	***1,878***	***100***	***98***	***1,232***	***224***	***378***	***719***	***341***	***352***	***359***	***345***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*7.83%*	*12.53%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.01%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*7.83%*	*12.01%*	*31.36%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*2.41%*	*10.32%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*11.87%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2.41%*	*11.87%*	*25.80%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	14	24	0	0	15	35	85	0	23	0
Total PM Peak Hour BUILD Volumes	**323**	**1,878**	**114**	**122**	**1,232**	**224**	**393**	**754**	**426**	**352**	**382**	**345**

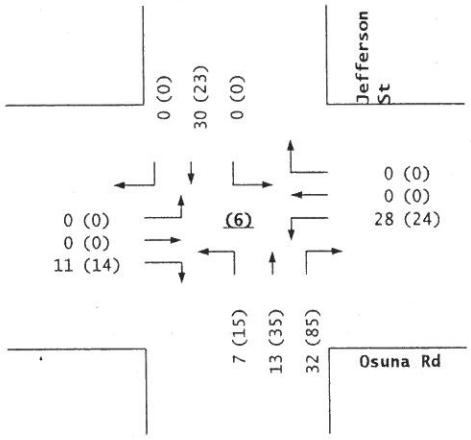
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (Osuna Rd)			Westbound (Osuna Rd)			Northbound (Jefferson St)			Southbound (Jefferson St)		
2006 AM Peak Hr. Volumes	254	1165	166	190	963	274	136	253	47	201	381	163
2006 PM Peak Hr. Volumes	267	1,603	87	92	1,063	210	325	622	295	342	349	309

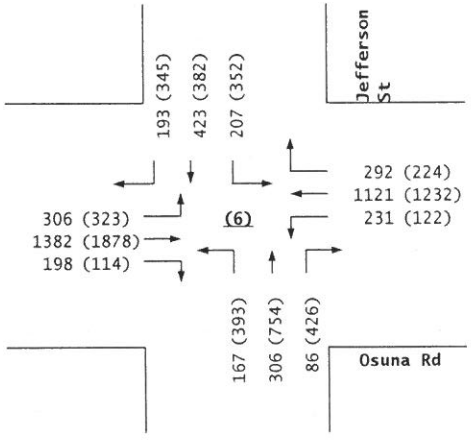
2009
NO BUILD



Trips



2009
BUILD



Osuna Rd / Jefferson St

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

Presidential Dr / Jefferson St

INTERSECTION: E-W Street: **Presidential Dr** (7)

N-S Street: **Jefferson St**

Year of Existing Counts 2006

Implementation Year **2009**

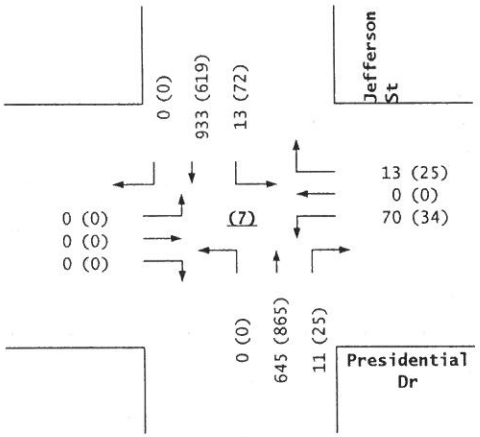
Growth Rates	5.80%			5.80%			5.80%			5.80%		
	Eastbound (Presidential Dr)			Westbound (Presidential Dr)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	60	0	11	0	549	9	11	795	0
Background Traffic Growth	0	0	0	10	0	2	0	96	2	2	138	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***0***	***70***	***0***	***13***	***0***	***645***	***11***	***13***	***933***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*32.37%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*51.02%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.20%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*24.60%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*40.08%*	*0.20%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	0	0	0	0	52	0	0	69	0
Total AM Peak Hour BUILD Volumes	**0**	**0**	**0**	**70**	**0**	**13**	**0**	**697**	**11**	**13**	**1,002**	**0**

	Eastbound (Presidential Dr)			Westbound (Presidential Dr)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	29	0	21	0	737	21	61	527	0
Background Traffic Growth	0	0	0	5	0	4	0	128	4	11	92	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***0***	***34***	***0***	***25***	***0***	***865***	***25***	***72***	***619***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*32.37%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*51.02%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.20%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*24.60%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*40.08%*	*0.20%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	0	0	0	0	136	0	0	62	0
Total PM Peak Hour BUILD Volumes	**0**	**0**	**0**	**34**	**0**	**25**	**0**	**1,001**	**25**	**72**	**681**	**0**

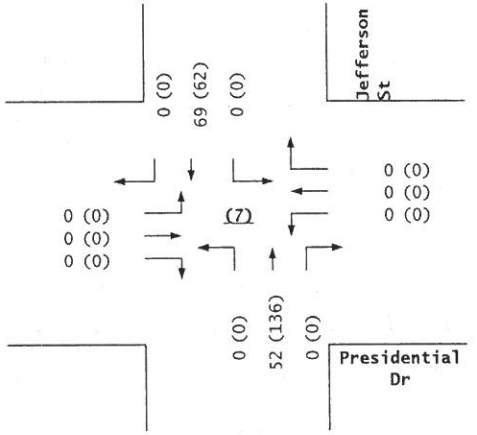
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (Presidential Dr)			Westbound (Presidential Dr)			Northbound (Jefferson St)			Southbound (Jefferson St)		
2006 AM Peak Hr. Volumes	0	0	0	60	0	11	0	549	9	11	795	0
2006 PM Peak Hr. Volumes	0	0	0	29	0	21	0	737	21	61	527	0

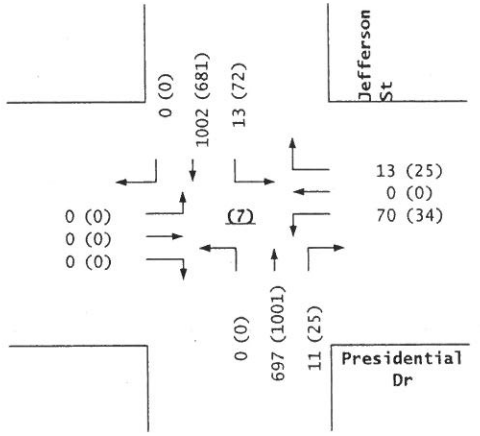
2009
NO BUILD



Trips



2009
BUILD



Presidential Dr / Jefferson St

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

Jefferson Plaza / Jefferson St

INTERSECTION: E-W Street: **Jefferson Plaza** (8)

N-S Street: **Jefferson St**

Year of Existing Counts 2006

Implementation Year **2009**

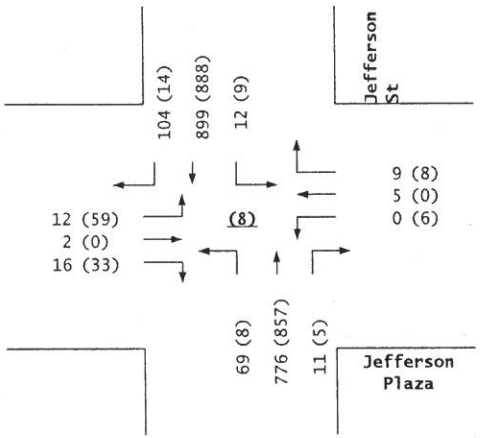
Growth Rates	5.80%			5.80%			5.80%			5.80%		
	Eastbound (Jefferson Plaza)			Westbound (Jefferson Plaza)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	10	2	14	0	4	8	59	661	9	10	766	89
Background Traffic Growth	2	0	2	0	1	1	10	115	2	2	133	15
Subtotal (NO BUILD - A.M.)	***12***	***2***	***16***	***0***	***5***	***9***	***69***	***776***	***11***	***12***	***899***	***104***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***32.37%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***51.02%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***0.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***24.80%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.40%***	***40.28%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	1	0	0	0	0	52	0	0	69	0
Total AM Peak Hour BUILD Volumes	**12**	**2**	**17**	**0**	**5**	**9**	**69**	**828**	**11**	**12**	**968**	**104**

	Eastbound (Jefferson Plaza)			Westbound (Jefferson Plaza)			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	50	0	28	5	0	7	7	730	4	8	756	12
Background Traffic Growth	9	0	5	1	0	1	1	127	1	1	132	2
Subtotal (NO BUILD - P.M.)	***59***	***0***	***33***	***6***	***0***	***8***	***8***	***857***	***5***	***9***	***888***	***14***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***32.37%***	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***51.02%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	***0.40%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***24.80%***	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.40%***	***40.28%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	0	0	0	1	136	0	0	62	0
Total PM Peak Hour BUILD Volumes	**59**	**0**	**33**	**6**	**0**	**8**	**9**	**993**	**5**	**9**	**950**	**14**

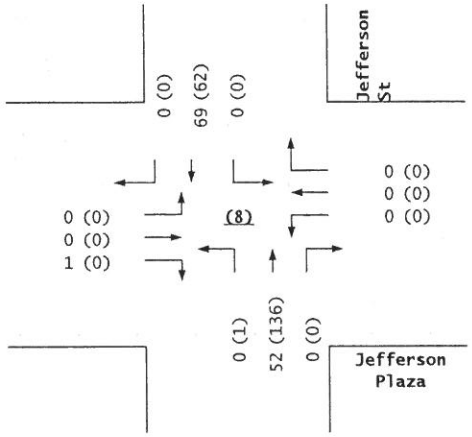
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (Jefferson Plaza)			Westbound (Jefferson Plaza)			Northbound (Jefferson St)			Southbound (Jefferson St)		
2006 AM Peak Hr. Volumes	10	2	14	0	4	8	59	661	9	10	766	89
2006 PM Peak Hr. Volumes	50	0	28	5	0	7	7	730	4	8	756	12

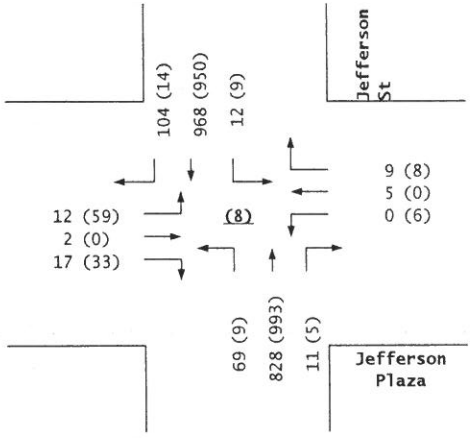
2009
NO BUILD



Trips



2009
BUILD



Jefferson Plaza / Jefferson St

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

BMW Drive / I-25 W. ramp

INTERSECTION: E-W Street: **BMW Drive** (9)

N-S Street: **I-25 W. ramp**

Year of Existing Counts 2006

Implementation Year **2009**

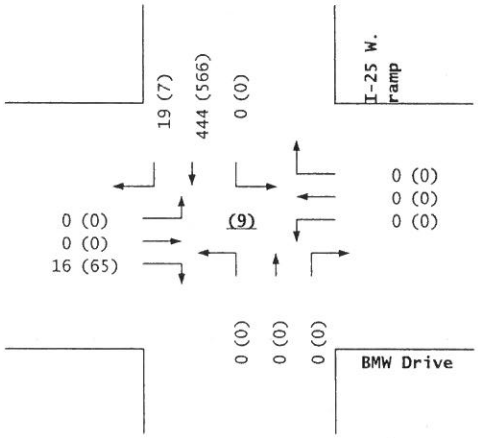
Growth Rates	5.90%			5.90%			5.90%			5.90%		
	Eastbound (BMW Drive)			Westbound (BMW Drive)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	14	0	0	0	0	0	0	0	377	16
Background Traffic Growth	0	0	2	0	0	0	0	0	0	0	67	3
Subtotal (NO BUILD - A.M.)	***0***	***0***	***16***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***444***	***19***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***18.83%***
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	***28.87%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***15.48%***
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	***33.13%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	31	0	0	0	0	0	0	0	0	42
Total AM Peak Hour BUILD Volumes	**0**	**0**	**47**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**444**	**61**

	Eastbound (BMW Drive)			Westbound (BMW Drive)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	55	0	0	0	0	0	0	0	481	6
Background Traffic Growth	0	0	10	0	0	0	0	0	0	0	85	1
Subtotal (NO BUILD - P.M.)	***0***	***0***	***65***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***566***	***7***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***18.83%***
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	***28.87%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***15.48%***
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	***33.13%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	93	0	0	0	0	0	0	0	0	36
Total PM Peak Hour BUILD Volumes	**0**	**0**	**158**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**566**	**43**

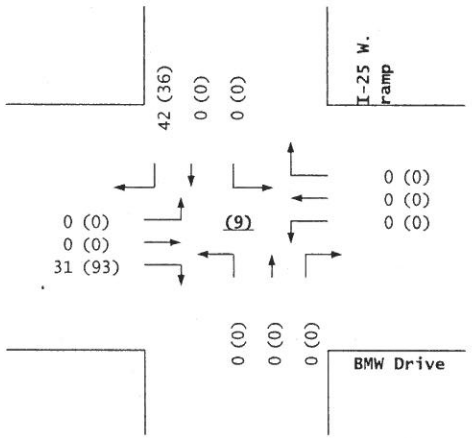
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (BMW Drive)			Westbound (BMW Drive)			Northbound (I-25 W. ramp)			Southbound (I-25 W. ramp)		
2006 AM Peak Hr. Volumes	0	0	14	0	0	0	0	0	0	0	377	16
2006 PM Peak Hr. Volumes	0	0	55	0	0	0	0	0	0	0	481	6

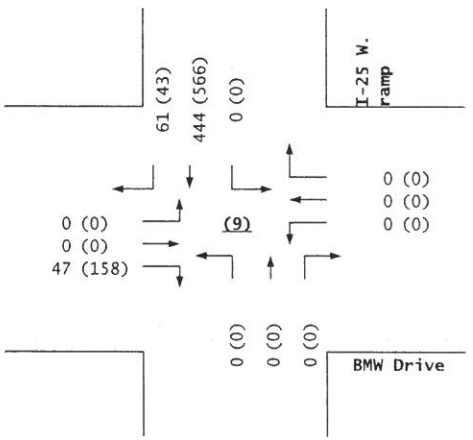
2009
NO BUILD



Trips



2009
BUILD



BMW Drive / I-25 W. ramp

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

Driveway "A" / Jefferson St

INTERSECTION: E-W Street: **Driveway "A"** (10)

N-S Street: **Jefferson St**

Year of Existing Counts 2006

Implementation Year **2009**

Growth Rates 6.10% 6.10% 6.10% 6.10%

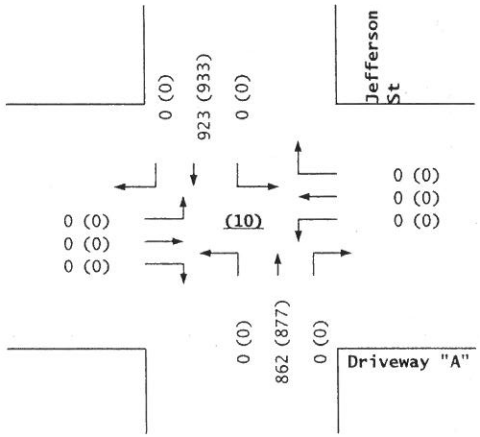
	Eastbound (Driveway "A")			Westbound (Driveway "A")			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	729	0	0	780	0
Background Traffic Growth	0	0	0	0	0	0	0	133	0	0	143	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***862***	***0***	***0***	***923***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*1.00%*	*0.00%*	*32.37%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*15.31%*	*0.00%*	*35.71%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*1.00%*	*0.00%*	*25.20%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.20%*	*0.00%*	*28.48%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	0	0	15	0	36	2	0	70	0
Total AM Peak Hour BUILD Volumes	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**898**	**2**	**0**	**993**	**0**

	Eastbound (Driveway "A")			Westbound (Driveway "A")			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	741	0	0	789	0
Background Traffic Growth	0	0	0	0	0	0	0	136	0	0	144	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***877***	***0***	***0***	***933***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*1.00%*	*0.00%*	*32.37%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*15.31%*	*0.00%*	*35.71%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*1.00%*	*0.00%*	*25.20%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.20%*	*0.00%*	*28.48%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	0	0	41	0	96	2	0	62	0
Total PM Peak Hour BUILD Volumes	**0**	**0**	**0**	**0**	**0**	**41**	**0**	**973**	**2**	**0**	**995**	**0**

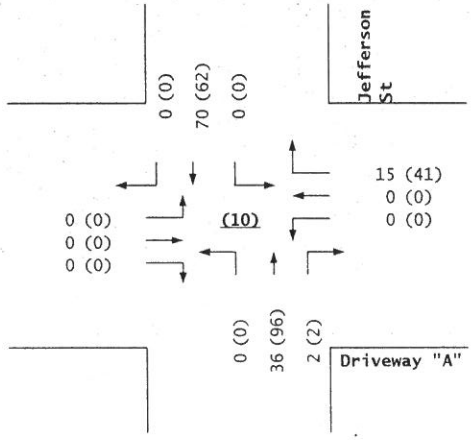
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (Driveway "A")			Westbound (Driveway "A")			Northbound (Jefferson St)			Southbound (Jefferson St)		
2006 AM Peak Hr. Volumes	0	0	0	0	0	0	0	729	0	0	780	0
2006 PM Peak Hr. Volumes	0	0	0	0	0	0	0	741	0	0	789	0

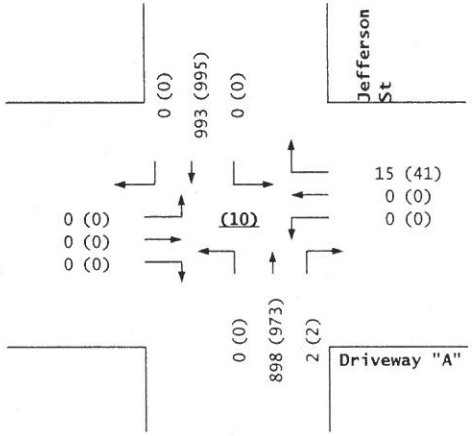
2009
NO BUILD



Trips



2009
BUILD



Driveway "A" / Jefferson St

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

Driveway 'B' / Jefferson St

INTERSECTION: E-W Street: **Driveway 'B'** (11)

N-S Street: **Jefferson St**

Year of Existing Counts 2006

Implementation Year **2009**

Growth Rates 6.10% 6.10% 6.10% 6.10%

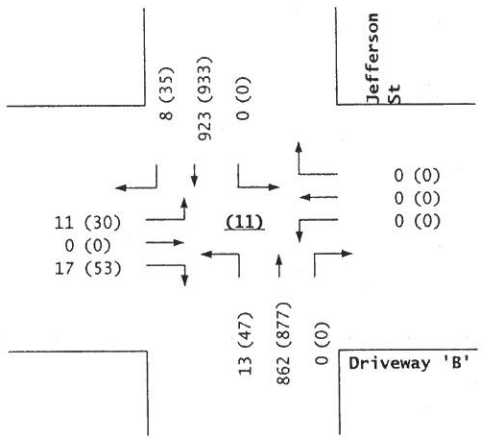
	Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	9	0	14	0	0	0	11	729	0	0	780	7
Background Traffic Growth	2	0	3	0	0	0	2	133	0	0	143	1
Subtotal	11	0	17	0	0	0	13	862	0	0	923	8
Jefferson Pointe	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***11***	***0***	***17***	***0***	***0***	***0***	***13***	***862***	***0***	***0***	***923***	***8***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.00%***	***30.71%***	***32.37%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***19.92%***	*0.00%*	***30.61%***	*0.00%*	***5.10%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.00%***	***37.56%***	***25.20%***	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***26.19%***	*0.00%*	***24.41%***	*0.00%*	***4.07%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	22	0	31	0	7	85	70	0	0
Total AM Peak Hour BUILD Volumes	**11**	**0**	**17**	**22**	**0**	**31**	**13**	**869**	**85**	**70**	**923**	**8**

	Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	25	0	45	0	0	0	40	741	0	0	789	30
Background Traffic Growth	5	0	8	0	0	0	7	136	0	0	144	5
Subtotal	30	0	53	0	0	0	47	877	0	0	933	35
Jefferson Pointe	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***30***	***0***	***53***	***0***	***0***	***0***	***47***	***877***	***0***	***0***	***933***	***35***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.00%***	***30.71%***	***32.37%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***19.92%***	*0.00%*	***30.61%***	*0.00%*	***5.10%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***1.00%***	***37.56%***	***25.20%***	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***26.19%***	*0.00%*	***24.41%***	*0.00%*	***4.07%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	69	0	82	0	15	63	62	0	0
Total PM Peak Hour BUILD Volumes	**30**	**0**	**53**	**69**	**0**	**82**	**47**	**892**	**63**	**62**	**933**	**35**

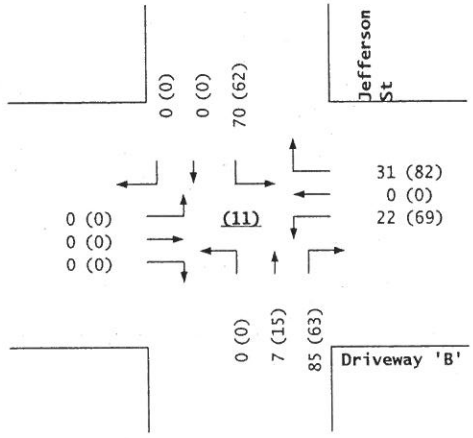
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Jefferson St)			Southbound (Jefferson St)		
2006 AM Peak Hr. Volumes	9	0	14	0	0	0	11	729	0	0	780	7
2006 PM Peak Hr. Volumes	25	0	45	0	0	0	40	741	0	0	789	30

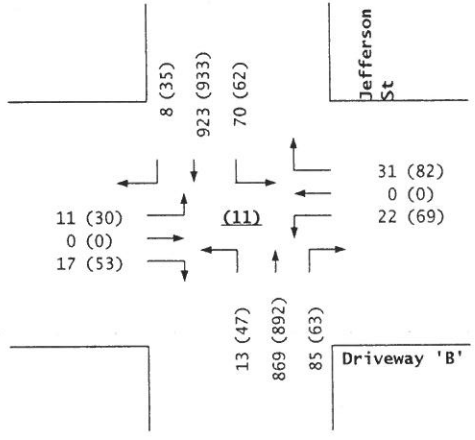
2009
NO BUILD



Trips



2009
BUILD



Driveway 'B' / Jefferson St

Fraternal Order of Police (Bear Canyon Arroyo / Jefferson St)

Projected Turning Movements Worksheet

Driveway 'C' / Jefferson St

INTERSECTION: E-W Street: **Driveway 'C'** (12)

N-S Street: **Jefferson St**

Year of Existing Counts 2006

Implementation Year **2009**

Growth Rates 6.10% 6.10% 6.10% 6.10%

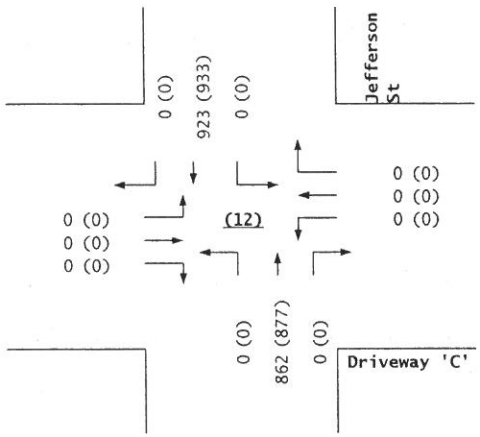
	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	729	0	0	780	0
Background Traffic Growth	0	0	0	0	0	0	0	133	0	0	143	0
Subtotal	0	0	0	0	0	0	0	862	0	0	923	0
Jefferson Pointe	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***862***	***0***	***0***	***923***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***31.71%***	***17.08%***	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.10%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***19.92%***	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***38.56%***	***20.76%***	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.07%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***26.19%***	*0.00%*
Total Trips Generated	0	0	0	0	0	5	0	87	47	0	22	0
Total AM Peak Hour BUILD Volumes	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**949**	**47**	**0**	**945**	**0**

	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Jefferson St)			Southbound (Jefferson St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	741	0	0	789	0
Background Traffic Growth	0	0	0	0	0	0	0	136	0	0	144	0
Subtotal	0	0	0	0	0	0	0	877	0	0	933	0
Jefferson Pointe	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***877***	***0***	***0***	***933***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***31.71%***	***17.08%***	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***5.10%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***19.92%***	*0.00%*
Percent Office Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***38.56%***	***20.76%***	*0.00%*	*0.00%*	*0.00%*
Percent Office Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***4.07%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***26.19%***	*0.00%*
Total Trips Generated	0	0	0	0	0	13	0	65	35	0	69	0
Total PM Peak Hour BUILD Volumes	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**942**	**35**	**0**	**1,002**	**0**

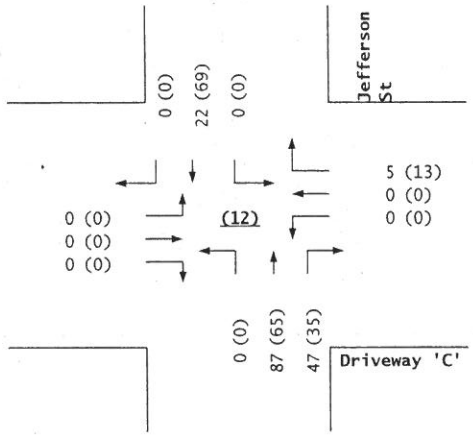
	Entering	Exiting		
Number of Commercial Trips Generated	**105**	**88**	A.M.	100% Commercial Development
	169	**145**	P.M.	
Number of Office Trips Generated	**141**	**17**	A.M.	100% Office Development
	29	**154**	P.M.	

	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Jefferson St)			Southbound (Jefferson St)		
2006 AM Peak Hr. Volumes	0	0	0	0	0	0	0	729	0	0	780	0
2006 PM Peak Hr. Volumes	0	0	0	0	0	0	0	741	0	0	789	0

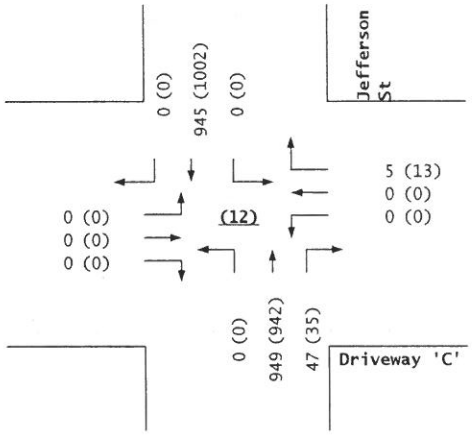
2009
NO BUILD



Trips

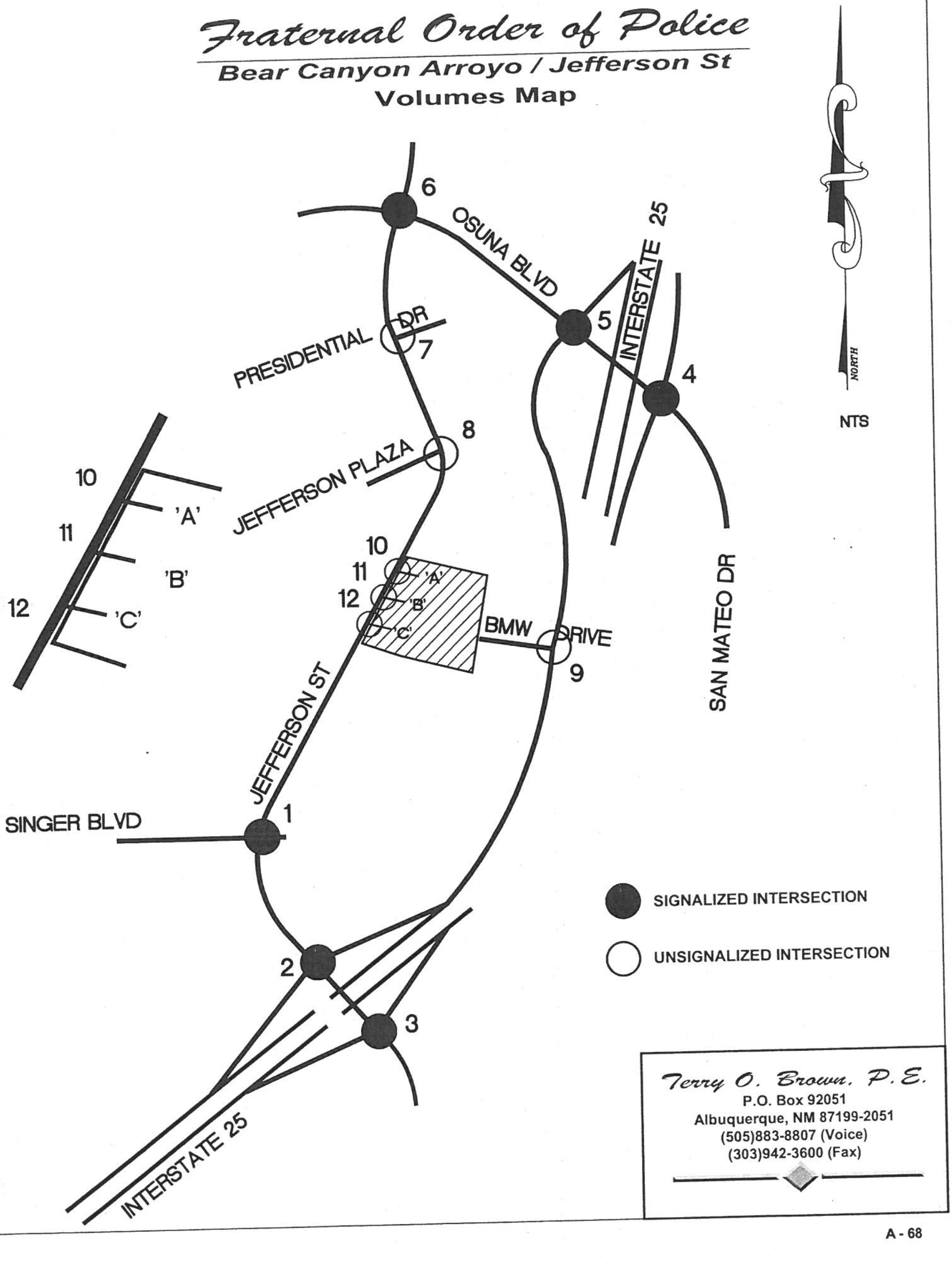


2009
BUILD



Driveway 'C' / Jefferson St

Fraternal Order of Police
Bear Canyon Arroyo / Jefferson St
Volumes Map



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Analysis of Intersection #1

Singer Blvd / Jefferson St

Timings
1: Singer Blvd & Jefferson St

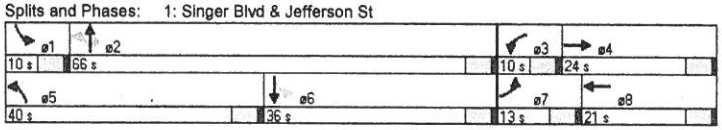
Terry O. Brown, P.E.
9/25/2006

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	151	29	58	20	427	698	294	42	481
Turn Type	Prot		Prot		pm+pt		Perm	pm+pt	
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases					2		2	6	
Detector Phases	7	4	3	8	5	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	21.0	10.0	21.0
Total Split (s)	13.0	24.0	10.0	21.0	40.0	66.0	66.0	10.0	36.0
Total Split (%)	11.8%	21.8%	9.1%	19.1%	36.4%	60.0%	60.0%	9.1%	32.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min
Act Effct Green (s)	10.7	13.4	7.8	10.5	79.9	69.0	69.0	56.2	48.4
Actuated g/C Ratio	0.10	0.12	0.07	0.10	0.73	0.63	0.63	0.51	0.44
v/c Ratio	0.58	0.70	0.32	0.17	0.86	0.36	0.30	0.12	0.52
Control Delay	55.3	17.7	52.9	26.1	39.6	6.2	0.5	10.7	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.3	17.7	52.9	26.1	39.6	6.2	0.5	10.7	19.4
LOS	E	B	D	C	D	A	A	B	B
Approach Delay		32.3		41.6		15.1			18.9
Approach LOS		C		D		B			B

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 98 (89%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 20.0 Intersection LOS: C
Intersection Capacity Utilization 74.2% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: Singer Blvd & Jefferson St



HCM Signalized Intersection Capacity Analysis
1: Singer Blvd & Jefferson St

Terry O. Brown, P.E.
9/25/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.97	1.00		0.97	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.87		1.00	0.92		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3367	1586		3367	3202		1736	3471	1553	1736	3337	
Flt Permitted	0.95	1.00		0.95	1.00		0.23	1.00	1.00	0.35	1.00	
Satd. Flow (perm)	3367	1586		3367	3202		419	3471	1553	648	3337	
Volume (vph)	151	29	209	58	20	22	427	698	294	42	481	167
Peak-hour factor, PHF	0.80	0.80	0.80	0.75	0.75	0.75	0.89	0.89	0.89	0.83	0.83	0.83
Adj. Flow (vph)	189	36	261	77	27	29	480	784	330	51	580	201
RTOR Reduction (vph)	0	229	0	0	26	0	0	0	123	0	25	0
Lane Group Flow (vph)	189	68	0	77	30	0	480	784	207	51	756	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Prot			pm+pt		Perm	pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	8.7	11.4		5.8	8.5		77.8	67.0	67.0	52.1	46.3	
Effective Green, g (s)	10.7	13.4		7.8	10.5		79.8	69.0	69.0	56.1	48.3	
Actuated g/C Ratio	0.10	0.12		0.07	0.10		0.73	0.63	0.63	0.51	0.44	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	328	193		239	306		645	2177	974	408	1465	
v/s Ratio Prot	c0.06	c0.04		0.02	0.01		c0.19	0.23		0.01	0.23	
v/s Ratio Perm							c0.35		0.13	0.05		
v/c Ratio	0.58	0.35		0.32	0.10		0.74	0.36	0.21	0.12	0.52	
Uniform Delay, d1	47.5	44.3		48.6	45.4		13.5	9.9	8.8	13.6	22.4	
Progression Factor	1.00	1.00		1.00	1.00		1.48	0.57	0.22	1.09	0.78	
Incremental Delay, d2	2.4	1.1		0.8	0.1		1.9	0.2	0.2	0.1	1.2	
Delay (s)	49.9	45.4		49.4	45.6		21.9	5.9	2.1	15.0	18.6	
Level of Service	D	D		D	D		C	A	A	B	B	
Approach Delay (s)		47.2			47.8			9.9			18.4	
Approach LOS		D			D			A			B	

Intersection Summary

HCM Average Control Delay	19.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0	
Intersection Capacity Utilization	74.2%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Timings
1: Singer Blvd & Jefferson St

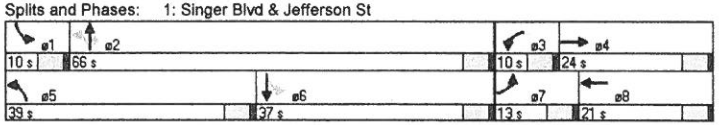
Terry O. Brown, P.E.
9/25/2006

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	158	29	58	20	427	827	294	42	502
Turn Type	Prot		Prot		pm+pt		Perm	pm+pt	
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases					2		2	6	
Detector Phases	7	4	3	8	5	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	21.0	10.0	21.0
Total Split (s)	13.0	24.0	10.0	21.0	39.0	66.0	66.0	10.0	37.0
Total Split (%)	11.8%	21.8%	9.1%	19.1%	35.5%	60.0%	60.0%	9.1%	33.6%
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
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min
Act Effct Green (s)	10.8	13.5	7.8	10.5	79.8	69.0	69.0	56.7	48.9
Actuated g/C Ratio	0.10	0.12	0.07	0.10	0.73	0.63	0.63	0.52	0.44
v/c Ratio	0.60	0.70	0.32	0.17	0.87	0.43	0.30	0.14	0.54
Control Delay	55.9	17.6	52.8	26.1	38.2	5.6	0.3	10.8	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.9	17.6	52.8	26.1	38.2	5.6	0.3	10.8	19.5
LOS	E	B	D	C	D	A	A	B	B
Approach Delay		32.9		41.6		13.6			19.0
Approach LOS		C		D		B			B

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 101 (92%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 19.1 — Intersection LOS: B
Intersection Capacity Utilization 74.9% — ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: Singer Blvd & Jefferson St



HCM Signalized Intersection Capacity Analysis
1: Singer Blvd & Jefferson St

Terry O. Brown, P.E.
9/25/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.97	1.00		0.97	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.87		1.00	0.92		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3367	1586		3367	3202		1736	3471	1553	1736	3340	
Flt Permitted	0.95	1.00		0.95	1.00		0.22	1.00	1.00	0.31	1.00	
Satd. Flow (perm)	3367	1586		3367	3202		401	3471	1553	562	3340	
Volume (vph)	158	29	209	58	20	22	427	827	294	42	502	169
Peak-hour factor, PHF	0.80	0.80	0.80	0.75	0.75	0.75	0.89	0.89	0.89	0.83	0.83	0.83
Adj. Flow (vph)	198	36	261	77	27	29	480	929	330	51	605	204
RTOR Reduction (vph)	0	229	0	0	26	0	0	0	123	0	24	0
Lane Group Flow (vph)	198	68	0	77	30	0	480	929	207	51	785	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Prot			pm+pt		Perm	pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	8.8	11.5		5.8	8.5		77.7	66.9	66.9	52.6	46.8	
Effective Green, g (s)	10.8	13.5		7.8	10.5		79.7	68.9	68.9	56.6	48.8	
Actuated g/C Ratio	0.10	0.12		0.07	0.10		0.72	0.63	0.63	0.51	0.44	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	331	195		239	306		629	2174	973	372	1482	
v/s Ratio Prot	c0.06	c0.04		0.02	0.01		c0.19	0.27		0.01	0.23	
v/s Ratio Perm							c0.36		0.13	0.06		
v/c Ratio	0.60	0.35		0.32	0.10		0.76	0.43	0.21	0.14	0.53	
Uniform Delay, d1	47.5	44.2		48.6	45.4		14.9	10.5	8.9	13.4	22.3	
Progression Factor	1.00	1.00		1.00	1.00		1.35	0.49	0.08	1.10	0.78	
Incremental Delay, d2	2.9	1.1		0.8	0.1		1.9	0.2	0.2	0.1	1.2	
Delay (s)	50.4	45.3		49.4	45.6		22.0	5.3	0.9	14.8	18.6	
Level of Service	D	D		D	D		C	A	A	B	B	
Approach Delay (s)		47.4			47.8			9.1			18.4	
Approach LOS		D			D			A			B	

Intersection Summary

HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

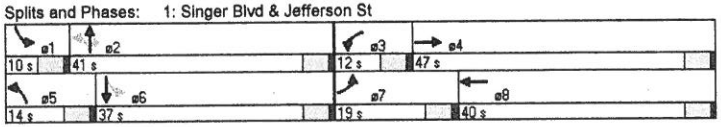
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	220	66	201	36	218	401	162	35	738
Turn Type	Prot		Prot		pm+pt		Perm	pm+pt	
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases					2		2	6	
Detector Phases	7	4	3	8	5	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	21.0	10.0	21.0
Total Split (s)	19.0	47.0	12.0	40.0	14.0	41.0	41.0	10.0	37.0
Total Split (%)	17.3%	42.7%	10.9%	36.4%	12.7%	37.3%	37.3%	9.1%	33.6%
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
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min
Act Effct Green (s)	15.4	44.0	9.0	37.6	48.0	38.0	38.0	41.0	34.0
Actuated g/C Ratio	0.14	0.40	0.08	0.34	0.44	0.35	0.35	0.37	0.31
v/c Ratio	0.67	1.01	0.97	0.11	1.00	0.37	0.27	0.11	0.99
Control Delay	52.4	63.7	99.3	11.5	104.4	24.8	6.9	13.7	52.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.4	63.7	99.3	11.5	104.4	24.8	6.9	13.7	52.2
LOS	D	E	F	B	F	C	A	B	D
Approach Delay		60.3		72.0		43.4			50.8
Approach LOS		E		E		D			D

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 85 (77%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.01
Intersection Signal Delay: 54.3 — Intersection LOS: D
Intersection Capacity Utilization 87.8% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1: Singer Blvd & Jefferson St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.97	1.00		0.97	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.87		1.00	0.91		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3367	1588		3367	3157		1736	3471	1553	1736	3375	
Flt Permitted	0.95	1.00		0.95	1.00		0.11	1.00	1.00	0.44	1.00	
Satd. Flow (perm)	3367	1588		3367	3157		198	3471	1553	809	3375	
Volume (vph)	220	66	445	201	36	55	218	401	162	35	738	167
Peak-hour factor, PHF	0.70	0.70	0.70	0.75	0.75	0.75	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	314	94	636	268	48	73	240	441	178	41	858	194
RTOR Reduction (vph)	0	86	0	0	48	0	0	0	117	0	18	0
Lane Group Flow (vph)	314	644	0	268	73	0	240	441	61	41	1034	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Prot			pm+pt		Perm	pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	13.4	42.0		7.0	35.6		45.0	36.0	36.0	37.0	32.0	
Effective Green, g (s)	15.4	44.0		9.0	37.6		48.0	38.0	38.0	41.0	34.0	
Actuated g/C Ratio	0.14	0.40		0.08	0.34		0.44	0.35	0.35	0.37	0.31	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	471	635		275	1079		240	1199	536	361	1043	
v/s Ratio Prot	0.09	c0.41		c0.08	0.02		c0.10	0.13		0.01	0.31	
v/s Ratio Perm							c0.34		0.04	0.04		
v/c Ratio	0.67	1.01		0.97	0.07		1.00	0.37	0.11	0.11	0.99	
Uniform Delay, d1	44.9	33.0		50.4	24.4		30.4	27.0	24.5	22.2	37.9	
Progression Factor	1.00	1.00		1.00	1.00		1.98	0.88	1.54	0.71	0.71	
Incremental Delay, d2	3.6	39.1		46.9	0.0		55.5	0.8	0.4	0.1	24.6	
Delay (s)	48.4	72.1		97.2	24.4		115.8	24.6	38.3	16.0	51.6	
Level of Service	D	E		F	C		F	C	D	B	D	
Approach Delay (s)		65.0			74.6			52.9			50.3	
Approach LOS		E			E			D			D	

Intersection Summary

HCM Average Control Delay	58.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

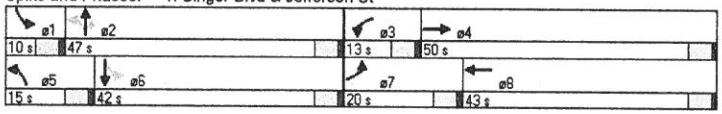
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	222	66	201	36	218	498	162	35	800
Turn Type	Prot		Prot		pm+pt		Perm	pm+pt	
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases					2		2	6	
Detector Phases	7	4	3	8	5	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	21.0	10.0	21.0
Total Split (s)	20.0	50.0	13.0	43.0	15.0	47.0	47.0	10.0	42.0
Total Split (%)	16.7%	41.7%	10.8%	35.8%	12.5%	39.2%	39.2%	8.3%	35.0%
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
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?									
Recall Mode	Min	Min	Min	Min	Min	C-Min	C-Min	Min	C-Min
Act Effct Green (s)	16.3	47.0	10.0	40.7	54.0	44.0	44.0	46.0	39.0
Actuated g/C Ratio	0.14	0.39	0.08	0.34	0.45	0.37	0.37	0.38	0.32
v/c Ratio	0.69	1.04	0.95	0.11	1.02	0.43	0.26	0.13	1.02
Control Delay	57.9	75.9	98.1	12.4	110.3	27.8	7.8	16.4	68.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.9	75.9	98.1	12.4	110.3	27.8	7.8	16.4	68.3
LOS	E	E	F	B	F	C	A	B	E
Approach Delay		70.4		71.4		44.6			66.5
Approach LOS		E		E		D			E

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 3 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 62.3 Intersection LOS: E
Intersection Capacity Utilization 89.7% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1: Singer Blvd & Jefferson St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.97	1.00		0.97	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.87		1.00	0.91		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3367	1588		3367	3157		1736	3471	1553	1736	3378	
Flt Permitted	0.95	1.00		0.95	1.00		0.10	1.00	1.00	0.37	1.00	
Satd. Flow (perm)	3367	1588		3367	3157		174	3471	1553	682	3378	
Volume (vph)	222	66	445	201	36	55	218	498	162	35	800	174
Peak-hour factor, PHF	0.70	0.70	0.70	0.75	0.75	0.75	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	317	94	636	268	48	73	240	547	178	41	930	202
RTOR Reduction (vph)	0	78	0	0	48	0	0	0	113	0	16	0
Lane Group Flow (vph)	317	652	0	268	73	0	240	547	65	41	1116	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Prot			pm+pt		Perm	pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	14.3	45.0		8.0	38.7		52.0	42.0	42.0	42.0	37.0	
Effective Green, g (s)	16.3	47.0		10.0	40.7		54.0	44.0	44.0	46.0	39.0	
Actuated g/C Ratio	0.14	0.39		0.08	0.34		0.45	0.37	0.37	0.38	0.32	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	457	622		281	1071		235	1273	569	323	1098	
v/s Ratio Prot	c0.09	c0.41		c0.08	0.02		c0.10	0.16		0.01	0.33	
v/s Ratio Perm							c0.36		0.04	0.04		
v/c Ratio	0.69	1.05		0.95	0.07		1.02	0.43	0.11	0.13	1.02	
Uniform Delay, d1	49.5	36.5		54.8	26.8		35.1	28.6	25.1	23.6	40.5	
Progression Factor	1.00	1.00		1.00	1.00		1.78	0.93	1.83	0.82	0.95	
Incremental Delay, d2	4.5	49.4		40.9	0.0		60.9	0.9	0.4	0.2	30.4	
Delay (s)	54.0	85.9		95.7	26.8		123.3	27.6	46.4	19.4	69.0	
Level of Service	D	F		F	C		F	C	D	B	E	
Approach Delay (s)		76.3			74.3			54.9			67.3	
Approach LOS		E			E			D			E	

Intersection Summary

HCM Average Control Delay	67.3	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.00			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	6.0	
Intersection Capacity Utilization	89.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

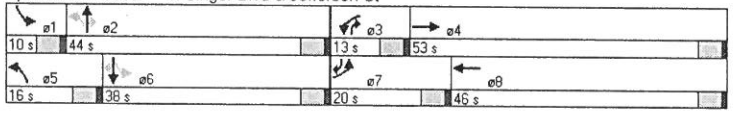
Timings
1: Singer Blvd & Jefferson St

Terry O. Brown, P.E.
10/1/2006

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Volume (vph)	222	66	201	36	218	498	162	35	800	174
Turn Type	Prot		Prot		pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	7	4	3	8	5	2	3	1	6	7
Permitted Phases					2		2	6		6
Detector Phases	7	4	3	8	5	2	3	1	6	7
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	20.0	53.0	13.0	46.0	16.0	44.0	13.0	10.0	38.0	20.0
Total Split (%)	16.7%	44.2%	10.8%	38.3%	13.3%	36.7%	10.8%	8.3%	31.7%	16.7%
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
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min	Min
Act Effct Green (s)	16.3	49.5	10.4	43.6	51.1	41.0	54.4	41.7	34.6	53.9
Actuated g/C Ratio	0.14	0.41	0.09	0.36	0.43	0.34	0.45	0.35	0.29	0.45
v/c Ratio	0.69	0.98	0.92	0.10	0.94	0.46	0.22	0.14	0.93	0.25
Control Delay	57.9	56.7	89.9	11.5	90.2	31.1	5.6	17.9	54.0	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.9	56.7	89.9	11.5	90.2	31.1	5.6	17.9	54.0	5.5
LOS	E	E	F	B	F	C	A	B	D	A
Approach Delay		57.1		65.5		41.1			44.4	
Approach LOS		E		E		D			D	

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 3 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 49.5 Intersection LOS: D
Intersection Capacity Utilization 84.2% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1: Singer Blvd & Jefferson St



HCM Signalized Intersection Capacity Analysis
1: Singer Blvd & Jefferson St

Terry O. Brown, P.E.
10/1/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	1.00		0.97	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.87		1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3367	1588		3367	3157		1736	3471	1553	1736	3471	1553
Flt Permitted	0.95	1.00		0.95	1.00		0.11	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	3367	1588		3367	3157		194	3471	1553	685	3471	1553
Volume (vph)	222	66	445	201	36	55	218	498	162	35	800	174
Peak-hour factor, PHF	0.70	0.70	0.70	0.75	0.75	0.75	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	317	94	636	268	48	73	240	547	178	41	930	202
RTOR Reduction (vph)	0	89	0	0	46	0	0	0	102	0	0	116
Lane Group Flow (vph)	317	641	0	268	75	0	240	547	76	41	930	86
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot			Prot			pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Actuated Green, G (s)	14.3	47.5		8.4	41.6		49.1	39.0	47.4	37.7	32.6	46.9
Effective Green, g (s)	16.3	49.5		10.4	43.6		51.1	41.0	51.4	41.7	34.6	50.9
Actuated g/C Ratio	0.14	0.41		0.09	0.36		0.43	0.34	0.43	0.35	0.29	0.42
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	457	655		292	1147		256	1186	704	300	1001	698
v/s Ratio Prot	c0.09	c0.40		c0.08	0.02		c0.11	0.16	0.01	0.01	0.27	0.02
v/s Ratio Perm							c0.29		0.04	0.04		0.04
v/c Ratio	0.69	0.98		0.92	0.06		0.94	0.46	0.11	0.14	0.93	0.12
Uniform Delay, d1	49.5	34.7		54.4	24.9		32.9	30.9	20.6	26.3	41.5	21.0
Progression Factor	1.00	1.00		1.00	1.00		1.76	0.96	1.76	0.81	0.94	1.83
Incremental Delay, d2	4.5	29.6		31.7	0.0		36.5	1.2	0.1	0.2	14.7	0.1
Delay (s)	54.0	64.3		86.1	24.9		94.6	30.8	36.3	21.6	53.6	38.5
Level of Service	D	E		F	C		F	C	D	C	D	D
Approach Delay (s)		61.2			67.1			47.7			49.9	
Approach LOS		E			E			D			D	

Intersection Summary				
HCM Average Control Delay	54.5	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.93			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	6.0	
Intersection Capacity Utilization	84.2%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

A-76a

Analysis of Intersection #2

Jefferson St / I-25 West ramp

Timings
2: Jefferson St & I-25 W. ramp

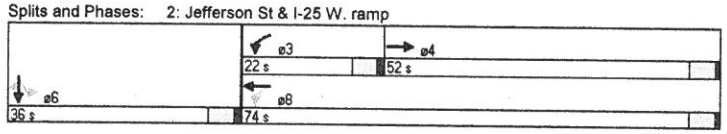
Terry O. Brown, P.E.
9/25/2006

Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Configurations						
Volume (vph)	432	252	1748	314	497	209
Turn Type		pm+pt		Perm		Perm
Protected Phases	4	3	8		6	
Permitted Phases		8		6		6
Detector Phases	4	3	8	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	52.0	22.0	74.0	36.0	36.0	36.0
Total Split (%)	47.3%	20.0%	67.3%	32.7%	32.7%	32.7%
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
Lead/Lag	Lag	Lead				
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	51.4	69.6	69.6	34.4	34.4	34.4
Actuated g/C Ratio	0.47	0.63	0.63	0.31	0.31	0.31
v/c Ratio	0.50	0.67	0.95	0.81	0.64	0.59
Control Delay	19.2	17.0	26.3	46.7	34.6	35.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.2	17.0	26.4	46.7	34.6	35.0
LOS	B	B	C	D	C	C
Approach Delay	19.2		25.2		38.4	
Approach LOS	B		C		D	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 16 (15%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 28.2 — Intersection LOS: C
Intersection Capacity Utilization 70.1% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2: Jefferson St & I-25 W. ramp



HCM Signalized Intersection Capacity Analysis
2: Jefferson St & I-25 W. ramp

Terry O. Brown, P.E.
9/25/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frt		0.95		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3221		1703	3406					1703	3406	1524
Flt Permitted		1.00		0.24	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3221		432	3406					1703	3406	1524
Volume (vph)	0	432	243	252	1748	0	0	0	0	314	497	209
Peak-hour factor, PHF	0.86	0.86	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.73	0.73	0.73
Adj. Flow (vph)	0	502	283	296	2056	0	0	0	0	430	681	286
RTOR Reduction (vph)	0	68	0	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	717	0	296	2056	0	0	0	0	430	681	276
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type				pm+pt						Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases				8						6		6
Actuated Green, G (s)		49.4		67.6	67.6					32.4	32.4	32.4
Effective Green, g (s)		51.4		69.6	69.6					34.4	34.4	34.4
Actuated g/C Ratio		0.47		0.63	0.63					0.31	0.31	0.31
Clearance Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1505		449	2155					533	1065	477
v/s Ratio Prot		0.22		0.09	c0.60						0.20	
v/s Ratio Perm				0.33						c0.25		0.18
v/c Ratio		0.48		0.66	0.95					0.81	0.64	0.58
Uniform Delay, d1		20.1		11.6	18.7					34.7	32.5	31.7
Progression Factor		1.08		1.07	0.81					0.96	0.96	0.96
Incremental Delay, d2		0.2		3.2	9.9					11.8	2.8	4.8
Delay (s)		21.9		15.6	25.0					45.2	33.9	35.1
Level of Service		C		B	C					D	C	D
Approach Delay (s)		21.9			23.8			0.0			37.6	
Approach LOS		C			C			A			D	

Intersection Summary

HCM Average Control Delay	27.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

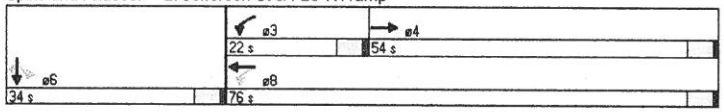
c Critical Lane Group

Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Configurations						
Volume (vph)	446	252	1877	335	507	209
Turn Type		pm+pt		Perm		Perm
Protected Phases	4	3	8		6	
Permitted Phases		8		6		6
Detector Phases	4	3	8	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	54.0	22.0	76.0	34.0	34.0	34.0
Total Split (%)	49.1%	20.0%	69.1%	30.9%	30.9%	30.9%
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
Lead/Lag	Lag	Lead				
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	55.1	73.0	73.0	31.0	31.0	31.0
Actuated g/C Ratio	0.50	0.66	0.66	0.28	0.28	0.28
v/c Ratio	0.48	0.66	0.98	0.96	0.72	0.65
Control Delay	20.1	15.5	28.9	69.3	39.3	40.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.1	15.5	28.9	69.3	39.3	40.0
LOS	C	B	C	E	D	D
Approach Delay	20.1		27.3		49.0	
Approach LOS	C		C		D	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 16 (15%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 32.6 Intersection LOS: C
Intersection Capacity Utilization 74.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 2: Jefferson St & I-25 W. ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frt		0.95		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3222		1703	3406					1703	3406	1524
Flt Permitted		1.00		0.24	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3222		438	3406					1703	3406	1524
Volume (vph)	0	446	250	252	1877	0	0	0	0	335	507	209
Peak-hour factor, PHF	0.86	0.86	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.73	0.73	0.73
Adj. Flow (vph)	0	519	291	296	2208	0	0	0	0	459	695	286
RTOR Reduction (vph)	0	66	0	0	0	0	0	0	0	0	0	8
Lane Group Flow (vph)	0	744	0	296	2208	0	0	0	0	459	695	278
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type				pm+pt						Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases				8						6		6
Actuated Green, G (s)		53.1		71.0	71.0					29.0	29.0	29.0
Effective Green, g (s)		55.1		73.0	73.0					31.0	31.0	31.0
Actuated g/C Ratio		0.50		0.66	0.66					0.28	0.28	0.28
Clearance Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1614		462	2260					480	960	429
v/s Ratio Prot		0.23		0.09	c0.65						0.20	
v/s Ratio Perm				0.34						c0.27		0.18
v/c Ratio		0.46		0.64	0.98					0.96	0.72	0.65
Uniform Delay, d1		17.8		10.1	17.7					38.8	35.6	34.7
Progression Factor		1.26		1.09	0.83					0.97	0.96	0.96
Incremental Delay, d2		0.2		2.7	12.8					30.6	4.5	7.1
Delay (s)		22.7		13.7	27.5					68.1	38.9	40.4
Level of Service		C		B	C					E	D	D
Approach Delay (s)		22.7			25.9			0.0			48.5	
Approach LOS		C			C			A			D	

Intersection Summary

HCM Average Control Delay	32.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		

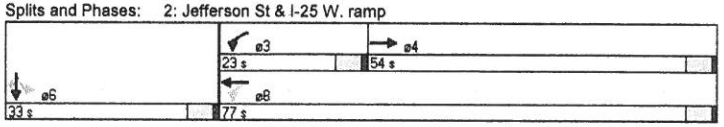
c Critical Lane Group

Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Configurations						
Volume (vph)	774	286	987	364	721	141
Turn Type		pm+pt		Perm		Perm
Protected Phases	4	3	8		6	
Permitted Phases		8		6		6
Detector Phases	4	3	8	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	54.0	23.0	77.0	33.0	33.0	33.0
Total Split (%)	49.1%	20.9%	70.0%	30.0%	30.0%	30.0%
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
Lead/Lag	Lag	Lead				
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	49.7	71.3	71.3	32.7	32.7	32.7
Actuated g/C Ratio	0.45	0.65	0.65	0.30	0.30	0.30
v/c Ratio	0.94	0.84	0.47	0.74	0.73	0.26
Control Delay	21.7	48.5	6.3	45.2	40.0	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.7	48.5	6.3	45.2	40.0	8.1
LOS	C	D	A	D	D	A
Approach Delay	21.7		15.8		37.9	
Approach LOS	C		B		D	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 41 (37%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 24.8 Intersection LOS: C
Intersection Capacity Utilization 84.7% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 2: Jefferson St & I-25 W. ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frt		0.94		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3196		1703	3406					1703	3406	1524
Flt Permitted		1.00		0.08	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3196		136	3406					1703	3406	1524
Volume (vph)	0	774	539	286	987	0	0	0	0	364	721	141
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.85	0.85	0.85	0.97	0.97	0.97
Adj. Flow (vph)	0	823	573	298	1028	0	0	0	0	375	743	145
RTOR Reduction (vph)	0	49	0	0	0	0	0	0	0	0	0	102
Lane Group Flow (vph)	0	1347	0	298	1028	0	0	0	0	375	743	43
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type				pm+pt						Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases				8						6		6
Actuated Green, G (s)		47.7		69.4	69.4					30.6	30.6	30.6
Effective Green, g (s)		49.7		71.4	71.4					32.6	32.6	32.6
Actuated g/C Ratio		0.45		0.65	0.65					0.30	0.30	0.30
Clearance Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1444		355	2211					505	1009	452
v/s Ratio Prot		c0.42		c0.14	0.30						0.22	
v/s Ratio Perm				0.40						c0.22		0.03
v/c Ratio		0.93		0.84	0.46					0.74	0.74	0.10
Uniform Delay, d1		28.6		32.6	9.7					34.9	34.8	28.0
Progression Factor		0.65		1.06	0.59					0.99	0.99	1.34
Incremental Delay, d2		3.2		13.3	0.1					8.6	4.3	0.4
Delay (s)		21.8		47.8	5.9					43.4	39.0	37.9
Level of Service		C		D	A					D	D	D
Approach Delay (s)		21.8			15.3			0.0			40.2	
Approach LOS		C			B			A			D	

Intersection Summary

HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		

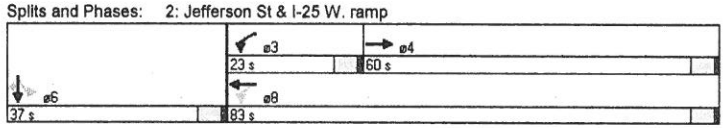
c Critical Lane Group

Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Configurations						
Volume (vph)	805	286	1084	409	769	141
Turn Type		pm+pt		Perm		Perm
Protected Phases	4	3	8		6	
Permitted Phases		8		6		6
Detector Phases	4	3	8	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	60.0	23.0	83.0	37.0	37.0	37.0
Total Split (%)	50.0%	19.2%	69.2%	30.8%	30.8%	30.8%
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
Lead/Lag	Lag	Lead				
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	55.0	77.2	77.2	36.8	36.8	36.8
Actuated g/C Ratio	0.46	0.64	0.64	0.31	0.31	0.31
v/c Ratio	0.97	0.90	0.51	0.81	0.76	0.27
Control Delay	23.5	61.5	4.5	43.6	35.1	5.5
Queue Delay	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	23.5	61.5	4.7	43.6	35.1	5.5
LOS	C	E	A	D	D	A
Approach Delay	23.5		16.6		34.6	
Approach LOS	C		B		C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 75 (63%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 24.7 — Intersection LOS: C
Intersection Capacity Utilization 89.0% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 2: Jefferson St & I-25 W. ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frt		0.94		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3194		1703	3406					1703	3406	1524
Flt Permitted		1.00		0.07	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3194		124	3406					1703	3406	1524
Volume (vph)	0	805	570	286	1084	0	0	0	0	409	769	141
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.85	0.85	0.85	0.97	0.97	0.97
Adj. Flow (vph)	0	856	606	298	1129	0	0	0	0	422	793	145
RTOR Reduction (vph)	0	39	0	0	0	0	0	0	0	0	0	80
Lane Group Flow (vph)	0	1423	0	298	1129	0	0	0	0	422	793	65
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type				pm+pt						Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases				8						6		6
Actuated Green, G (s)		53.0		75.2	75.2					34.8	34.8	34.8
Effective Green, g (s)		55.0		77.2	77.2					36.8	36.8	36.8
Actuated g/C Ratio		0.46		0.64	0.64					0.31	0.31	0.31
Clearance Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1464		332	2191					522	1045	467
v/s Ratio Prot		c0.45		c0.14	0.33						0.23	
v/s Ratio Perm				0.43						c0.25		0.04
v/c Ratio		0.97		0.90	0.52					0.81	0.76	0.14
Uniform Delay, d1		31.7		38.0	11.4					38.4	37.6	30.1
Progression Factor		0.66		1.08	0.34					0.78	0.78	0.47
Incremental Delay, d2		3.0		21.0	0.2					11.7	4.7	0.6
Delay (s)		23.8		62.2	4.1					41.7	34.1	14.9
Level of Service		C		E	A					D	C	B
Approach Delay (s)		23.8			16.2			0.0			34.4	
Approach LOS		C			B			A			C	

Intersection Summary

HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Analysis of Intersection #3

Jefferson St / I-25 East ramp

Timings
3: Jefferson St & I-25 E.ramp

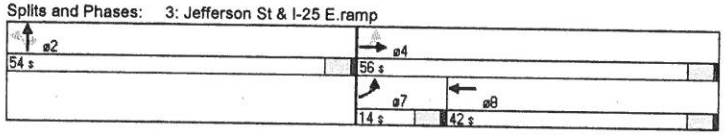
Terry O. Brown, P.E.
9/25/2006

Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Configurations						
Volume (vph)	54	465	486	831	374	172
Turn Type	pm+pt			Perm		Perm
Protected Phases	7	4	8		2	
Permitted Phases	4			2		2
Detector Phases	7	4	8	2	2	2
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	21.0
Total Split (s)	14.0	56.0	42.0	54.0	54.0	54.0
Total Split (%)	12.7%	50.9%	38.2%	49.1%	49.1%	49.1%
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
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	45.4	45.4	32.5	58.6	58.6	58.6
Actuated g/C Ratio	0.41	0.41	0.30	0.53	0.53	0.53
v/c Ratio	0.26	0.39	0.80	0.57	0.53	0.22
Control Delay	14.3	14.9	40.5	22.1	19.2	2.9
Queue Delay	0.0	0.0	0.0	0.6	0.1	0.0
Total Delay	14.3	14.9	40.5	22.8	19.3	2.9
LOS	B	B	D	C	B	A
Approach Delay		14.8	40.5		18.3	
Approach LOS		B	D		B	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 78 (71%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 23.6 — Intersection LOS: C
Intersection Capacity Utilization 70.1% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 3: Jefferson St & I-25 E.ramp



HCM Signalized Intersection Capacity Analysis
3: Jefferson St & I-25 E.ramp

Terry O. Brown, P.E.
9/25/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Util. Factor	1.00	0.95			0.95		0.91	0.91	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	1736	3471			3364		1579	3240	1553			
Flt Permitted	0.11	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	206	3471			3364		1579	3240	1553			
Volume (vph)	54	465	0	0	486	125	831	374	172	0	0	0
Peak-hour factor, PHF	0.83	0.83	0.83	0.75	0.75	0.75	0.87	0.87	0.87	0.85	0.85	0.85
Adj. Flow (vph)	65	560	0	0	648	167	955	430	198	0	0	0
RTOR Reduction (vph)	0	0	0	0	23	0	0	0	93	0	0	0
Lane Group Flow (vph)	65	560	0	0	792	0	478	907	105	0	0	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt						Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4						2		2			
Actuated Green, G (s)	43.4	43.4			30.5		56.6	56.6	56.6			
Effective Green, g (s)	45.4	45.4			32.5		58.6	58.6	58.6			
Actuated g/C Ratio	0.41	0.41			0.30		0.53	0.53	0.53			
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	223	1433			994		841	1726	827			
v/s Ratio Prot	0.03	c0.16			c0.24							
v/s Ratio Perm	0.09						c0.30	0.28	0.07			
v/c Ratio	0.29	0.39			0.80		0.57	0.53	0.13			
Uniform Delay, d1	22.7	22.6			35.7		17.2	16.7	12.9			
Progression Factor	0.70	0.65			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.6	0.1			4.5		2.8	1.1	0.3			
Delay (s)	16.4	14.8			40.2		20.0	17.8	13.2			
Level of Service	B	B			D		C	B	B			
Approach Delay (s)		15.0			40.2			17.9			0.0	
Approach LOS		B			D			B			A	

Intersection Summary

HCM Average Control Delay	23.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

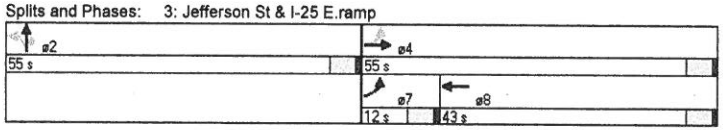
c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Configurations						
Volume (vph)	54	500	545	900	374	172
Turn Type	pm+pt			Perm		Perm
Protected Phases	7	4	8		2	
Permitted Phases	4			2		2
Detector Phases	7	4	8	2	2	2
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	21.0
Total Split (s)	12.0	55.0	43.0	55.0	55.0	55.0
Total Split (%)	10.9%	50.0%	39.1%	50.0%	50.0%	50.0%
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
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	47.3	47.3	35.2	56.7	56.7	56.7
Actuated g/C Ratio	0.43	0.43	0.32	0.52	0.52	0.52
v/c Ratio	0.28	0.40	0.81	0.64	0.57	0.22
Control Delay	14.9	16.2	39.6	24.9	20.8	2.9
Queue Delay	0.0	0.0	0.0	0.6	0.1	0.0
Total Delay	14.9	16.2	39.6	25.4	20.9	2.9
LOS	B	B	D	C	C	A
Approach Delay		16.1	39.6		20.1	
Approach LOS		B	D		C	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 74 (67%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 24.7 — Intersection LOS: C
Intersection Capacity Utilization 74.8% — ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 3: Jefferson St & I-25 E.ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Util. Factor	1.00	0.95			0.95		0.91	0.91	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	1736	3471			3374		1579	3237	1553			
Flt Permitted	0.10	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	191	3471			3374		1579	3237	1553			
Volume (vph)	54	500	0	0	545	125	900	374	172	0	0	0
Peak-hour factor, PHF	0.83	0.83	0.83	0.75	0.75	0.75	0.87	0.87	0.87	0.85	0.85	0.85
Adj. Flow (vph)	65	602	0	0	727	167	1034	430	198	0	0	0
RTOR Reduction (vph)	0	0	0	0	19	0	0	0	96	0	0	0
Lane Group Flow (vph)	65	602	0	0	875	0	517	947	102	0	0	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt						Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4						2		2			
Actuated Green, G (s)	45.3	45.3			33.2		54.7	54.7	54.7			
Effective Green, g (s)	47.3	47.3			35.2		56.7	56.7	56.7			
Actuated g/C Ratio	0.43	0.43			0.32		0.52	0.52	0.52			
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	210	1493			1080		814	1669	801			
v/s Ratio Prot	0.03	c0.17			c0.26							
v/s Ratio Perm	0.11						c0.33	0.29	0.07			
v/c Ratio	0.31	0.40			0.81		0.64	0.57	0.13			
Uniform Delay, d1	22.1	21.6			34.3		19.2	18.3	13.8			
Progression Factor	0.74	0.74			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.6	0.1			4.7		3.8	1.4	0.3			
Delay (s)	17.0	16.1			39.0		23.0	19.7	14.1			
Level of Service	B	B			D		C	B	B			
Approach Delay (s)		16.2			39.0			20.0			0.0	
Approach LOS		B			D			C			A	

Intersection Summary

HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		

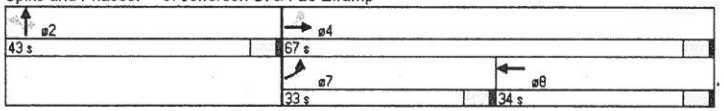
c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Configurations						
Volume (vph)	329	714	463	564	609	239
Turn Type	pm+pt			Perm		Perm
Protected Phases	7	4	8		2	
Permitted Phases	4			2		2
Detector Phases	7	4	8	2	2	2
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	21.0
Total Split (s)	33.0	67.0	34.0	43.0	43.0	43.0
Total Split (%)	30.0%	60.9%	30.9%	39.1%	39.1%	39.1%
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
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	59.2	59.2	28.4	44.8	44.8	44.8
Actuated g/C Ratio	0.54	0.54	0.26	0.41	0.41	0.41
v/c Ratio	0.78	0.46	0.83	0.62	0.63	0.35
Control Delay	27.4	6.1	41.5	32.8	29.8	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.4	6.1	41.5	32.8	29.8	10.8
LOS	C	A	D	C	C	B
Approach Delay		12.8	41.5		27.4	
Approach LOS		B	D		C	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 85 (77%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 25.3 — Intersection LOS: C
Intersection Capacity Utilization 84.7% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 3: Jefferson St & I-25 E.ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Util. Factor	1.00	0.95			0.95		0.91	0.91	1.00			
Frt	1.00	1.00			0.94		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.99	1.00			
Satd. Flow (prot)	1736	3471			3279		1579	3287	1553			
Flt Permitted	0.13	1.00			1.00		0.95	0.99	1.00			
Satd. Flow (perm)	233	3471			3279		1579	3287	1553			
Volume (vph)	329	714	0	0	463	271	564	609	239	0	0	0
Peak-hour factor, PHF	0.84	0.84	0.84	0.95	0.95	0.95	0.95	0.95	0.95	0.85	0.85	0.85
Adj. Flow (vph)	392	850	0	0	487	285	594	641	252	0	0	0
RTOR Reduction (vph)	0	0	0	0	79	0	0	0	95	0	0	0
Lane Group Flow (vph)	392	850	0	0	693	0	398	837	157	0	0	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt						Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4						2		2			
Actuated Green, G (s)	57.2	57.2			26.4		42.8	42.8	42.8			
Effective Green, g (s)	59.2	59.2			28.4		44.8	44.8	44.8			
Actuated g/C Ratio	0.54	0.54			0.26		0.41	0.41	0.41			
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	505	1868			847		643	1339	632			
v/s Ratio Prot	c0.20	0.24			0.21							
v/s Ratio Perm	c0.22						0.25	0.25	0.10			
v/c Ratio	0.78	0.46			0.82		0.62	0.63	0.25			
Uniform Delay, d1	26.8	15.5			38.4		25.8	25.9	21.5			
Progression Factor	0.82	0.37			1.00		1.00	1.00	1.00			
Incremental Delay, d2	3.8	0.1			6.2		4.4	2.2	0.9			
Delay (s)	25.8	5.9			44.5		30.3	28.1	22.4			
Level of Service	C	A			D		C	C	C			
Approach Delay (s)		12.2			44.5			27.7			0.0	
Approach LOS		B			D			C			A	

Intersection Summary

HCM Average Control Delay	25.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Timings
3: Jefferson St & I-25 E.ramp

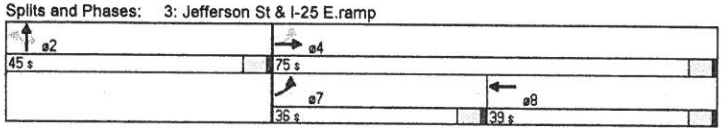
Terry O. Brown, P.E.
9/25/2006

Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Configurations						
Volume (vph)	329	790	530	594	609	239
Turn Type	pm+pt			Perm		Perm
Protected Phases	7	4	8		2	
Permitted Phases	4			2		2
Detector Phases	7	4	8	2	2	2
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	21.0
Total Split (s)	36.0	75.0	39.0	45.0	45.0	45.0
Total Split (%)	30.0%	62.5%	32.5%	37.5%	37.5%	37.5%
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
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?						
Recall Mode	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	66.6	66.6	33.8	47.4	47.4	47.4
Actuated g/C Ratio	0.56	0.56	0.28	0.40	0.40	0.40
v/c Ratio	0.80	0.49	0.86	0.65	0.66	0.36
Control Delay	31.6	12.3	46.6	37.4	34.0	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	12.3	46.6	37.4	34.0	13.9
LOS	C	B	D	D	C	B
Approach Delay		18.0	46.6		31.6	
Approach LOS		B	D		C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 16 (13%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 30.1 Intersection LOS: C
Intersection Capacity Utilization 89.0% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 3: Jefferson St & I-25 E.ramp



HCM Signalized Intersection Capacity Analysis
3: Jefferson St & I-25 E.ramp

Terry O. Brown, P.E.
9/25/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Util. Factor	1.00	0.95			0.95		0.91	0.91	1.00			
Frt	1.00	1.00			0.95		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.99	1.00			
Satd. Flow (prot)	1736	3471			3295		1579	3283	1553			
Flt Permitted	0.11	1.00			1.00		0.95	0.99	1.00			
Satd. Flow (perm)	199	3471			3295		1579	3283	1553			
Volume (vph)	329	790	0	0	530	271	594	609	239	0	0	0
Peak-hour factor, PHF	0.84	0.84	0.84	0.95	0.95	0.95	0.95	0.95	0.95	0.85	0.85	0.85
Adj. Flow (vph)	392	940	0	0	558	285	625	641	252	0	0	0
RTOR Reduction (vph)	0	0	0	0	55	0	0	0	84	0	0	0
Lane Group Flow (vph)	392	940	0	0	788	0	408	858	168	0	0	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	pm+pt						Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4						2		2			
Actuated Green, G (s)	64.6	64.6			31.8		45.4	45.4	45.4			
Effective Green, g (s)	66.6	66.6			33.8		47.4	47.4	47.4			
Actuated g/C Ratio	0.55	0.55			0.28		0.39	0.39	0.39			
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	492	1926			928		624	1297	613			
v/s Ratio Prot	c0.20	0.27			0.24							
v/s Ratio Perm	c0.24						0.26	0.26	0.11			
v/c Ratio	0.80	0.49			0.85		0.65	0.66	0.27			
Uniform Delay, d1	31.2	16.3			40.7		29.6	29.7	24.6			
Progression Factor	0.85	0.74			1.00		1.00	1.00	1.00			
Incremental Delay, d2	4.1	0.1			7.3		5.3	2.7	1.1			
Delay (s)	30.7	12.2			48.0		34.9	32.4	25.7			
Level of Service	C	B			D		C	C	C			
Approach Delay (s)		17.7			48.0			32.0			0.0	
Approach LOS		B			D			C			A	

Intersection Summary

HCM Average Control Delay	30.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Analysis of Intersection #4

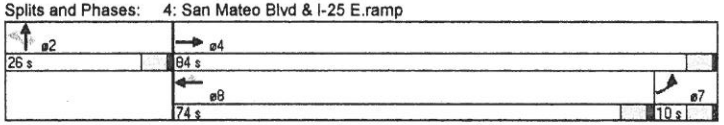
San Mateo Blvd / I-25 East ramp

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Volume (vph)	189	1410	2520	538	472	341	277
Turn Type	Prot			Perm	Perm		Perm
Protected Phases	7	4	8			2	
Permitted Phases				8	2		2
Detector Phases	7	4	8	8	2	2	2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	10.0	84.0	74.0	74.0	26.0	26.0	26.0
Total Split (%)	9.1%	76.4%	67.3%	67.3%	23.6%	23.6%	23.6%
Yellow Time (s)	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
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?							
Recall Mode	Min	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	7.0	81.0	71.0	71.0	23.0	23.0	23.0
Actuated g/C Ratio	0.06	0.74	0.65	0.65	0.21	0.21	0.21
v/c Ratio	1.12	0.49	1.37	0.67	0.80	1.06	0.92
Control Delay	107.0	1.1	189.7	15.0	47.6	103.1	66.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.0	1.1	189.7	15.0	47.6	103.1	66.1
LOS	F	A	F	B	D	F	E
Approach Delay		13.6	158.9			69.7	
Approach LOS		B	F			E	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 47 (43%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.37
Intersection Signal Delay: 99.3 Intersection LOS: F
Intersection Capacity Utilization 108.7% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 4: San Mateo Blvd & I-25 E.ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Util. Factor	0.97	0.91			0.91	0.91	0.97	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	3367	4988			3325	1413	3367	1827	1553			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	3367	4988			3325	1413	3367	1827	1553			
Volume (vph)	189	1410	0	0	2520	538	472	341	277	0	0	0
Peak-hour factor, PHF	0.79	0.79	0.79	0.86	0.86	0.86	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	239	1785	0	0	2930	626	562	406	330	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	24	0	0	33	0	0	0
Lane Group Flow (vph)	239	1785	0	0	2930	602	562	406	297	0	0	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot					Perm	Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			
Actuated Green, G (s)	5.0	79.0			69.0	69.0	21.0	21.0	21.0			
Effective Green, g (s)	7.0	81.0			71.0	71.0	23.0	23.0	23.0			
Actuated g/C Ratio	0.06	0.74			0.65	0.65	0.21	0.21	0.21			
Clearance Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	214	3673			2146	912	704	382	325			
v/s Ratio Prot	c0.07	0.36			c0.88			c0.22				
v/s Ratio Perm						0.43	0.17		0.19			
v/c Ratio	1.12	0.49			1.37	0.66	0.80	1.06	0.91			
Uniform Delay, d1	51.5	6.0			19.5	12.0	41.3	43.5	42.5			
Progression Factor	1.02	0.18			1.00	1.00	0.92	0.93	0.91			
Incremental Delay, d2	59.0	0.0			167.5	1.7	9.0	63.0	31.4			
Delay (s)	111.4	1.1			187.0	13.8	47.1	103.6	70.3			
Level of Service	F	A			F	B	D	F	E			
Approach Delay (s)		14.1			156.5			70.7			0.0	
Approach LOS		B			F			E			A	

Intersection Summary

HCM Average Control Delay	98.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	108.7%	ICU Level of Service	G
Analysis Period (min)	15		

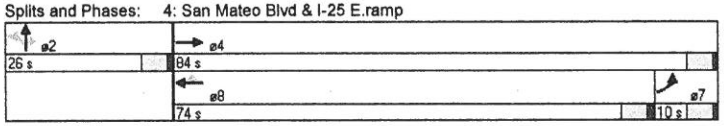
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Volume (vph)	202	1429	2555	538	472	341	277
Turn Type	Prot			Perm	Perm		Perm
Protected Phases	7	4	8			2	
Permitted Phases				8	2		2
Detector Phases	7	4	8	8	2	2	2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	10.0	84.0	74.0	74.0	26.0	26.0	26.0
Total Split (%)	9.1%	76.4%	67.3%	67.3%	23.6%	23.6%	23.6%
Yellow Time (s)	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
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?							
Recall Mode	Min	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	7.0	81.0	71.0	71.0	23.0	23.0	23.0
Actuated g/C Ratio	0.06	0.74	0.65	0.65	0.21	0.21	0.21
v/c Ratio	1.20	0.49	1.38	0.67	0.80	1.06	0.93
Control Delay	137.5	1.1	198.2	15.0	46.9	102.5	66.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	137.5	1.1	198.2	15.0	46.9	102.5	66.7
LOS	F	A	F	B	D	F	E
Approach Delay		18.0	166.3			69.3	
Approach LOS		B	F			E	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 46 (42%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.38
Intersection Signal Delay: 104.2 — Intersection LOS: F
Intersection Capacity Utilization 110.0% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 4: San Mateo Blvd & I-25 E.ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Util. Factor	0.97	0.91			0.91	0.91	0.97	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	3367	4988			3325	1413	3367	1827	1553			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	3367	4988			3325	1413	3367	1827	1553			
Volume (vph)	202	1429	0	0	2555	538	472	341	277	0	0	0
Peak-hour factor, PHF	0.79	0.79	0.79	0.86	0.86	0.86	0.84	0.84	0.84	0.85	0.85	0.85
Adj. Flow (vph)	256	1809	0	0	2971	626	562	406	330	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	24	0	0	32	0	0	0
Lane Group Flow (vph)	256	1809	0	0	2971	602	562	406	298	0	0	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot					Perm	Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			
Actuated Green, G (s)	5.0	79.0			69.0	69.0	21.0	21.0	21.0			
Effective Green, g (s)	7.0	81.0			71.0	71.0	23.0	23.0	23.0			
Actuated g/C Ratio	0.06	0.74			0.65	0.65	0.21	0.21	0.21			
Clearance Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	214	3673			2146	912	704	382	325			
v/s Ratio Prot	c0.08	0.36			c0.89			c0.22				
v/s Ratio Perm						0.43	0.17		0.19			
v/c Ratio	1.20	0.49			1.38	0.66	0.80	1.06	0.92			
Uniform Delay, d1	51.5	6.0			19.5	12.0	41.3	43.5	42.6			
Progression Factor	1.01	0.17			1.00	1.00	0.91	0.92	0.90			
Incremental Delay, d2	92.7	0.0			176.0	1.8	8.9	62.9	32.1			
Delay (s)	144.6	1.0			195.5	13.9	46.4	102.7	70.3			
Level of Service	F	A			F	B	D	F	E			
Approach Delay (s)		18.8			163.9			70.1			0.0	
Approach LOS		B			F			E			A	

Intersection Summary

HCM Average Control Delay	103.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	110.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Timings
4: San Mateo Blvd & I-25 E.ramp

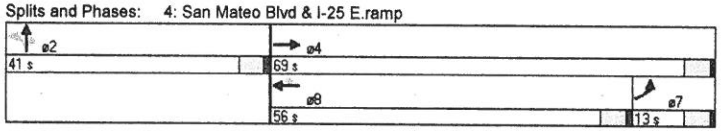
Terry O. Brown, P.E.
9/25/2006

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Volume (vph)	325	1896	1841	910	299	738	429
Turn Type	Prot			Perm	Perm		Perm
Protected Phases	7	4	8			2	
Permitted Phases				8	2		2
Detector Phases	7	4	8	8	2	2	2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	13.0	69.0	56.0	56.0	41.0	41.0	41.0
Total Split (%)	11.8%	62.7%	50.9%	50.9%	37.3%	37.3%	37.3%
Yellow Time (s)	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
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?							
Recall Mode	Min	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	10.0	66.0	53.0	53.0	38.0	38.0	38.0
Actuated g/C Ratio	0.09	0.60	0.48	0.48	0.35	0.35	0.35
v/c Ratio	1.11	0.66	1.27	1.27	0.26	1.21	0.81
Control Delay	90.7	3.8	155.6	158.1	23.3	135.4	38.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.7	3.8	155.6	158.1	23.3	135.4	38.7
LOS	F	A	F	F	C	F	D
Approach Delay		16.6	156.4			84.3	
Approach LOS		B	F			F	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 38 (35%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.27
Intersection Signal Delay: 92.3 Intersection LOS: F
Intersection Capacity Utilization 118.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 4: San Mateo Blvd & I-25 E.ramp



HCM Signalized Intersection Capacity Analysis
4: San Mateo Blvd & I-25 E.ramp

Terry O. Brown, P.E.
9/25/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Util. Factor	0.97	0.91			0.91	0.91	0.97	1.00	1.00			
Frt	1.00	1.00			0.99	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	3367	4988			3307	1413	3367	1827	1553			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	3367	4988			3307	1413	3367	1827	1553			
Volume (vph)	325	1896	0	0	1841	910	299	738	429	0	0	0
Peak-hour factor, PHF	0.96	0.96	0.96	0.94	0.94	0.94	0.97	0.97	0.97	0.85	0.85	0.85
Adj. Flow (vph)	339	1975	0	0	1959	968	308	761	442	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	25	0	0	8	0	0	0
Lane Group Flow (vph)	339	1975	0	0	2030	870	308	761	434	0	0	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot					Perm	Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			
Actuated Green, G (s)	8.0	64.0			51.0	51.0	36.0	36.0	36.0			
Effective Green, g (s)	10.0	66.0			53.0	53.0	38.0	38.0	38.0			
Actuated g/C Ratio	0.09	0.60			0.48	0.48	0.35	0.35	0.35			
Clearance Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	306	2993			1593	681	1163	631	536			
v/s Ratio Prot	c0.10	0.40			0.61			c0.42				
v/s Ratio Perm						c0.62	0.09		0.28			
v/c Ratio	1.11	0.66			1.27	1.28	0.26	1.21	0.81			
Uniform Delay, d1	50.0	14.6			28.5	28.5	25.9	36.0	32.7			
Progression Factor	0.75	0.25			1.00	1.00	0.87	0.91	0.87			
Incremental Delay, d2	53.5	0.0			128.5	136.1	0.4	104.3	10.0			
Delay (s)	91.2	3.7			157.0	164.6	23.1	136.9	38.4			
Level of Service	F	A			F	F	C	F	D			
Approach Delay (s)		16.5			159.3			84.9			0.0	
Approach LOS		B			F			F			A	

Intersection Summary

HCM Average Control Delay	93.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	118.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

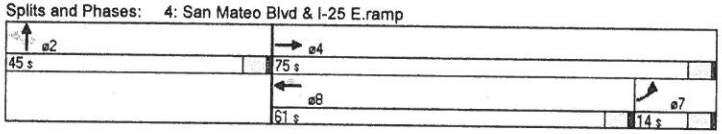
Timings
4: San Mateo Blvd & I-25 E.ramp

Terry O. Brown, P.E.
9/25/2006

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Volume (vph)	366	1940	1877	910	299	738	429
Turn Type	Prot			Perm	Perm		Perm
Protected Phases	7	4	8			2	
Permitted Phases				8	2		2
Detector Phases	7	4	8	8	2	2	2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	14.0	75.0	61.0	61.0	45.0	45.0	45.0
Total Split (%)	11.7%	62.5%	50.8%	50.8%	37.5%	37.5%	37.5%
Yellow Time (s)	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
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?							
Recall Mode	Min	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	11.0	72.0	58.0	58.0	42.0	42.0	42.0
Actuated g/C Ratio	0.09	0.60	0.48	0.48	0.35	0.35	0.35
v/c Ratio	1.23	0.68	1.29	1.28	0.26	1.19	0.80
Control Delay	146.8	6.4	163.0	164.4	30.8	135.1	47.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	146.8	6.4	163.0	164.4	30.8	135.1	47.1
LOS	F	A	F	F	C	F	D
Approach Delay		28.6	163.4			88.1	
Approach LOS		C	F			F	

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 24 (20%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.29
Intersection Signal Delay: 99.8 Intersection LOS: F
Intersection Capacity Utilization 120.8% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 4: San Mateo Blvd & I-25 E.ramp



HCM Signalized Intersection Capacity Analysis
4: San Mateo Blvd & I-25 E.ramp

Terry O. Brown, P.E.
9/25/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Util. Factor	0.97	0.91			0.91	0.91	0.97	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	3367	4988			3310	1413	3367	1827	1553			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	3367	4988			3310	1413	3367	1827	1553			
Volume (vph)	366	1940	0	0	1877	910	299	738	429	0	0	0
Peak-hour factor, PHF	0.96	0.96	0.96	0.94	0.94	0.94	0.97	0.97	0.97	0.85	0.85	0.85
Adj. Flow (vph)	381	2021	0	0	1997	968	308	761	442	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	25	0	0	7	0	0	0
Lane Group Flow (vph)	381	2021	0	0	2057	881	308	761	435	0	0	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot					Perm	Perm		Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			
Actuated Green, G (s)	9.0	70.0			56.0	56.0	40.0	40.0	40.0			
Effective Green, g (s)	11.0	72.0			58.0	58.0	42.0	42.0	42.0			
Actuated g/C Ratio	0.09	0.60			0.48	0.48	0.35	0.35	0.35			
Clearance Time (s)	5.0	5.0			5.0	5.0	5.0	5.0	5.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	309	2993			1600	683	1178	639	544			
v/s Ratio Prot	c0.11	0.41			0.62			c0.42				
v/s Ratio Perm						c0.62	0.09		0.28			
v/c Ratio	1.23	0.68			1.29	1.29	0.26	1.19	0.80			
Uniform Delay, d1	54.5	16.1			31.0	31.0	27.9	39.0	35.2			
Progression Factor	0.83	0.38			1.00	1.00	1.08	1.07	1.08			
Incremental Delay, d2	107.6	0.1			133.5	141.1	0.4	97.6	9.0			
Delay (s)	152.8	6.2			164.5	172.1	30.6	139.4	47.1			
Level of Service	F	A			F	F	C	F	D			
Approach Delay (s)		29.5			166.8			90.2			0.0	
Approach LOS		C			F			F			A	

Intersection Summary			
HCM Average Control Delay	102.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	120.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Analysis of Intersection #5

Osuna Blvd / I-25 West ramp

Timings
5: Osuna Blvd & I-25 W. ramp

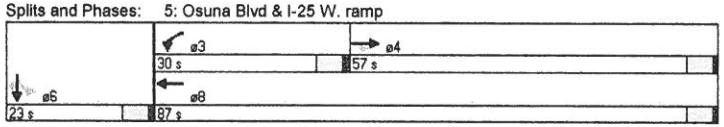
Terry O. Brown, P.E.
9/25/2006

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations	↑↑	↱	↰↰	↑↑↑	↰	↑↑	↱
Volume (vph)	1447	440	759	1361	236	373	240
Turn Type		Perm	Prot		Perm		Perm
Protected Phases	4		3	8		6	
Permitted Phases		4			6		6
Detector Phases	4	4	3	8	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	57.0	57.0	30.0	87.0	23.0	23.0	23.0
Total Split (%)	51.8%	51.8%	27.3%	79.1%	20.9%	20.9%	20.9%
Yellow Time (s)	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
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	54.0	54.0	27.0	84.0	20.0	20.0	20.0
Actuated g/C Ratio	0.49	0.49	0.25	0.76	0.18	0.18	0.18
v/c Ratio	1.02	0.68	1.02	0.40	0.90	0.71	0.84
Control Delay	45.6	15.4	46.8	6.7	75.8	49.4	53.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.6	15.4	46.8	6.7	75.8	49.4	53.2
LOS	D	B	D	A	E	D	D
Approach Delay	38.6			21.1		57.8	
Approach LOS	D			C		E	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 109 (99%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.02
Intersection Signal Delay: 34.8 Intersection LOS: C
Intersection Capacity Utilization 108.7% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 5: Osuna Blvd & I-25 W. ramp



HCM Signalized Intersection Capacity Analysis
5: Osuna Blvd & I-25 W. ramp

Terry O. Brown, P.E.
9/25/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰↰	↑↑↑					↰	↑↑	↱
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Util. Factor		0.95	1.00	0.97	0.91					1.00	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3471	1553	3367	4988					1736	3471	1553
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3471	1553	3367	4988					1736	3471	1553
Volume (vph)	0	1447	440	759	1361	0	0	0	0	236	373	240
Peak-hour factor, PHF	0.83	0.83	0.83	0.90	0.90	0.90	0.85	0.85	0.85	0.83	0.83	0.83
Adj. Flow (vph)	0	1743	530	843	1512	0	0	0	0	284	449	289
RTOR Reduction (vph)	0	0	11	0	0	0	0	0	0	0	0	64
Lane Group Flow (vph)	0	1743	519	843	1512	0	0	0	0	284	449	225
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		52.0	52.0	25.0	82.0					18.0	18.0	18.0
Effective Green, g (s)		54.0	54.0	27.0	84.0					20.0	20.0	20.0
Actuated g/C Ratio		0.49	0.49	0.25	0.76					0.18	0.18	0.18
Clearance Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1704	762	826	3809					316	631	282
v/s Ratio Prot		c0.50		c0.25	0.30						0.13	
v/s Ratio Perm			0.33							c0.16		0.15
v/c Ratio		1.02	0.68	1.02	0.40					0.90	0.71	0.80
Uniform Delay, d1		28.0	21.4	41.5	4.4					44.0	42.3	43.1
Progression Factor		0.65	0.53	0.74	1.51					1.00	1.00	1.00
Incremental Delay, d2		25.8	2.1	15.2	0.0					30.3	6.7	20.6
Delay (s)		44.0	13.5	46.0	6.7					74.4	49.0	63.7
Level of Service		D	B	D	A					E	D	E
Approach Delay (s)		36.9			20.8			0.0			60.2	
Approach LOS		D			C			A			E	

Intersection Summary

HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	108.7%	ICU Level of Service	G
Analysis Period (min)	15		

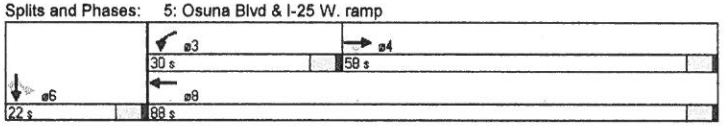
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations	↑↑	↱	↰↰	↑↑↑	↰	↑↑	↱
Volume (vph)	1479	440	780	1375	236	393	254
Turn Type		Perm	Prot		Perm		Perm
Protected Phases	4		3	8		6	
Permitted Phases		4			6		6
Detector Phases	4	4	3	8	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	58.0	58.0	30.0	88.0	22.0	22.0	22.0
Total Split (%)	52.7%	52.7%	27.3%	80.0%	20.0%	20.0%	20.0%
Yellow Time (s)	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
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	55.0	55.0	27.0	85.0	19.0	19.0	19.0
Actuated g/C Ratio	0.50	0.50	0.25	0.77	0.17	0.17	0.17
v/c Ratio	1.03	0.68	1.05	0.40	0.95	0.79	0.92
Control Delay	45.7	14.5	57.6	6.3	86.0	54.2	66.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.7	14.5	57.6	6.3	86.0	54.2	66.7
LOS	D	B	E	A	F	D	E
Approach Delay	38.6			24.9		66.3	
Approach LOS	D			C		E	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 109 (99%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 38.0 — Intersection LOS: D
Intersection Capacity Utilization 110.0% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Osuna Blvd & I-25 W. ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰↰	↑↑↑					↰	↑↑	↱
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Util. Factor		0.95	1.00	0.97	0.91					1.00	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3471	1553	3367	4988					1736	3471	1553
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3471	1553	3367	4988					1736	3471	1553
Volume (vph)	0	1479	440	780	1375	0	0	0	0	236	393	254
Peak-hour factor, PHF	0.83	0.83	0.83	0.90	0.90	0.90	0.85	0.85	0.85	0.83	0.83	0.83
Adj. Flow (vph)	0	1782	530	867	1528	0	0	0	0	284	473	306
RTOR Reduction (vph)	0	0	8	0	0	0	0	0	0	0	0	65
Lane Group Flow (vph)	0	1782	522	867	1528	0	0	0	0	284	473	241
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		53.0	53.0	25.0	83.0					17.0	17.0	17.0
Effective Green, g (s)		55.0	55.0	27.0	85.0					19.0	19.0	19.0
Actuated g/C Ratio		0.50	0.50	0.25	0.77					0.17	0.17	0.17
Clearance Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1736	777	826	3854					300	600	268
v/s Ratio Prot		c0.51		c0.26	0.31						0.14	
v/s Ratio Perm			0.34							c0.16		0.16
v/c Ratio		1.03	0.67	1.05	0.40					0.95	0.79	0.90
Uniform Delay, d1		27.5	20.7	41.5	4.1					45.0	43.6	44.6
Progression Factor		0.63	0.51	0.74	1.52					1.00	1.00	1.00
Incremental Delay, d2		26.6	1.9	25.9	0.0					40.0	10.1	34.5
Delay (s)		44.0	12.5	56.7	6.2					85.0	53.7	79.0
Level of Service		D	B	E	A					F	D	E
Approach Delay (s)		36.8			24.5			0.0			69.3	
Approach LOS		D			C			A			E	

Intersection Summary

HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	110.0%	ICU Level of Service	H
Analysis Period (min)	15		

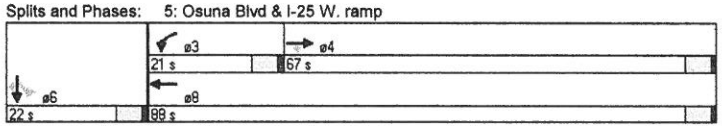
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Volume (vph)	1853	514	529	1293	192	225	179
Turn Type		Perm	Prot		Perm		Perm
Protected Phases	4		3	8		6	
Permitted Phases		4			6		6
Detector Phases	4	4	3	8	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	67.0	67.0	21.0	88.0	22.0	22.0	22.0
Total Split (%)	60.9%	60.9%	19.1%	80.0%	20.0%	20.0%	20.0%
Yellow Time (s)	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
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	64.0	64.0	18.9	85.9	18.1	18.1	18.1
Actuated g/C Ratio	0.58	0.58	0.17	0.78	0.16	0.16	0.16
v/c Ratio	1.09	0.65	1.03	0.37	0.78	0.46	0.63
Control Delay	62.8	7.2	59.9	7.4	63.2	44.1	32.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.8	7.2	59.9	7.4	63.2	44.1	32.8
LOS	E	A	E	A	E	D	C
Approach Delay	50.7			22.6		46.8	
Approach LOS	D			C		D	

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 15 (14%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 39.9 — Intersection LOS: D
Intersection Capacity Utilization 118.7% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Osuna Blvd & I-25 W. ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Util. Factor		0.95	1.00	0.97	0.91					1.00	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3471	1553	3367	4988					1736	3471	1553
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3471	1553	3367	4988					1736	3471	1553
Volume (vph)	0	1853	514	529	1293	0	0	0	0	192	225	179
Peak-hour factor, PHF	0.84	0.84	0.84	0.89	0.89	0.89	0.85	0.85	0.85	0.86	0.86	0.86
Adj. Flow (vph)	0	2206	612	594	1453	0	0	0	0	223	262	208
RTOR Reduction (vph)	0	0	33	0	0	0	0	0	0	0	0	75
Lane Group Flow (vph)	0	2206	579	594	1453	0	0	0	0	223	262	133
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		62.0	62.0	16.9	83.9					16.1	16.1	16.1
Effective Green, g (s)		64.0	64.0	18.9	85.9					18.1	18.1	18.1
Actuated g/C Ratio		0.58	0.58	0.17	0.78					0.16	0.16	0.16
Clearance Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		2019	904	579	3895					286	571	256
v/s Ratio Prot		c0.64		c0.18	0.29						0.08	
v/s Ratio Perm			0.37							c0.13		0.09
v/c Ratio		1.09	0.64	1.03	0.37					0.78	0.46	0.52
Uniform Delay, d1		23.0	15.3	45.6	3.7					44.0	41.5	42.0
Progression Factor		0.71	0.46	0.86	1.91					1.00	1.00	1.00
Incremental Delay, d2		44.2	0.4	18.6	0.0					18.7	2.6	7.3
Delay (s)		60.5	7.4	57.9	7.1					62.8	44.2	49.3
Level of Service		E	A	E	A					E	D	D
Approach Delay (s)		49.0			21.9			0.0			51.7	
Approach LOS		D			C			A			D	

Intersection Summary

HCM Average Control Delay	39.3	HCM Level of Service	D
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	118.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Timings
5: Osuna Blvd & I-25 W. ramp

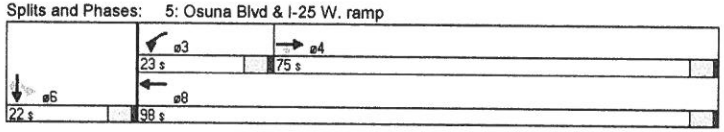
Terry O. Brown, P.E.
9/25/2006

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations	↑↑	↱	↰↰	↑↑↑	↰	↑↑	↱
Volume (vph)	1938	514	551	1307	192	240	189
Turn Type		Perm	Prot		Perm		Perm
Protected Phases	4		3	8		6	
Permitted Phases		4			6		6
Detector Phases	4	4	3	8	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	75.0	75.0	23.0	98.0	22.0	22.0	22.0
Total Split (%)	62.5%	62.5%	19.2%	81.7%	18.3%	18.3%	18.3%
Yellow Time (s)	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
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	Min	Min	Min	Min	C-Min	C-Min	C-Min
Act Effct Green (s)	72.0	72.0	20.6	95.6	18.4	18.4	18.4
Actuated g/C Ratio	0.60	0.60	0.17	0.80	0.15	0.15	0.15
v/c Ratio	1.11	0.64	1.07	0.37	0.84	0.52	0.69
Control Delay	64.0	7.1	75.9	8.3	75.3	50.5	39.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.0	7.1	75.9	8.3	75.3	50.5	39.6
LOS	E	A	E	A	E	D	D
Approach Delay	52.1			28.3		54.8	
Approach LOS	D			C		D	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.11
Intersection Signal Delay: 43.8 Intersection LOS: D
Intersection Capacity Utilization 120.8% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Osuna Blvd & I-25 W. ramp



HCM Signalized Intersection Capacity Analysis
5: Osuna Blvd & I-25 W. ramp

Terry O. Brown, P.E.
9/25/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰↰	↑↑↑					↰	↑↑	↱
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Util. Factor		0.95	1.00	0.97	0.91					1.00	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3471	1553	3367	4988					1736	3471	1553
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3471	1553	3367	4988					1736	3471	1553
Volume (vph)	0	1938	514	551	1307	0	0	0	0	192	240	189
Peak-hour factor, PHF	0.84	0.84	0.84	0.89	0.89	0.89	0.85	0.85	0.85	0.86	0.86	0.86
Adj. Flow (vph)	0	2307	612	619	1469	0	0	0	0	223	279	220
RTOR Reduction (vph)	0	0	22	0	0	0	0	0	0	0	0	79
Lane Group Flow (vph)	0	2307	590	619	1469	0	0	0	0	223	279	141
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		70.0	70.0	18.6	93.6					16.4	16.4	16.4
Effective Green, g (s)		72.0	72.0	20.6	95.6					18.4	18.4	18.4
Actuated g/C Ratio		0.60	0.60	0.17	0.80					0.15	0.15	0.15
Clearance Time (s)		5.0	5.0	5.0	5.0					5.0	5.0	5.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		2083	932	578	3974					266	532	238
v/s Ratio Prot		c0.66		c0.18	0.29						0.08	
v/s Ratio Perm			0.38							c0.13		0.09
v/c Ratio		1.11	0.63	1.07	0.37					0.84	0.52	0.59
Uniform Delay, d1		24.0	15.5	49.7	3.5					49.4	46.8	47.3
Progression Factor		0.41	0.44	0.80	2.28					1.00	1.00	1.00
Incremental Delay, d2		50.4	0.3	35.7	0.0					25.9	3.7	10.4
Delay (s)		60.2	7.1	75.5	8.0					75.2	50.4	57.8
Level of Service		E	A	E	A					E	D	E
Approach Delay (s)		49.1			28.1			0.0			60.3	
Approach LOS		D			C			A			E	

Intersection Summary

HCM Average Control Delay	42.8	HCM Level of Service	D
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	120.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

A-95a

Analysis of Intersection #6

Osuna Blvd / Jefferson St

Phasings
6: Osuna Blvd & Jefferson St

Terry O. Brown, P.E.
9/30/2006

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases	7	4	3	8	8 1	5	2	2 3	1	6
Permitted Phases						2			6	
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		10.0	21.0		10.0	21.0
Total Split (s)	17.0	53.0	13.0	49.0	66.0	14.0	27.0	40.0	17.0	30.0
Total Split (%)	15.5%	48.2%	11.8%	44.5%	60.0%	12.7%	24.5%	36.4%	15.5%	27.3%
Maximum Green (s)	12.0	48.0	8.0	44.0		9.0	22.0		12.0	25.0
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
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?										
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Recall Mode	Min	Min	Min	Min		Min	C-Min		Min	C-Min
Walk Time (s)		5.0		5.0			5.0			5.0
Flash Dont Walk (s)		11.0		11.0			11.0			11.0
Pedestrian Calls (#/hr)		0		0			0			0
90th %ile Green (s)	12.0	48.0	8.0	44.0		9.0	22.0		12.0	25.0
90th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
70th %ile Green (s)	12.0	48.0	8.0	44.0		9.0	22.0		12.0	25.0
70th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
50th %ile Green (s)	12.0	48.0	8.0	44.0		9.0	22.0		12.0	25.0
50th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
30th %ile Green (s)	14.0	48.0	10.0	44.0		9.0	20.0		12.0	23.0
30th %ile Term Code	Max	Hold	Max	Max		Max	Coord		Max	Coord
10th %ile Green (s)	12.9	44.8	9.8	41.7		9.2	24.6		10.8	26.2
10th %ile Term Code	Gap	Hold	Gap	Gap		Gap	Coord		Gap	Coord

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 96 (87%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Control Type: Actuated-Coordinated

HCM Signalized Intersection Capacity Analysis
6: Osuna Blvd & Jefferson St

Terry O. Brown, P.E.
9/30/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3303	4806		3303	3406	1524	1703	3406	1524	1703	3237	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.17	1.00	1.00	0.38	1.00	
Satd. Flow (perm)	3303	4806		3303	3406	1524	299	3406	1524	673	3237	
Volume (vph)	306	1382	187	203	1121	292	160	293	54	207	393	193
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.87	0.87	0.87
Adj. Flow (vph)	348	1570	212	233	1289	336	176	322	59	238	452	222
RTOR Reduction (vph)	0	16	0	0	0	53	0	0	35	0	54	0
Lane Group Flow (vph)	348	1766	0	233	1289	283	176	322	24	238	620	0
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot			Prot		pt+ov	pm+pt		pt+ov	pm+pt		
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	
Permitted Phases							2			6		
Actuated Green, G (s)	12.6	47.4		8.8	43.6	60.4	31.0	22.0	35.8	36.6	24.8	
Effective Green, g (s)	14.6	49.4		10.8	45.6	62.4	35.0	24.0	37.8	40.6	26.8	
Actuated g/C Ratio	0.13	0.45		0.10	0.41	0.57	0.32	0.22	0.34	0.37	0.24	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	438	2158		324	1412	865	236	743	524	378	789	
v/s Ratio Prot	c0.11	0.37		0.07	c0.38	0.19	c0.07	0.09	0.02	c0.08	c0.19	
v/s Ratio Perm							0.16			0.15		
v/c Ratio	0.79	0.82		0.72	0.91	0.33	0.75	0.43	0.04	0.63	0.79	
Uniform Delay, d1	46.2	26.4		48.1	30.3	12.6	29.8	37.1	24.1	25.9	38.9	
Progression Factor	1.00	1.00		1.13	0.69	0.60	0.79	0.76	1.41	1.00	1.00	
Incremental Delay, d2	9.6	2.5		6.8	8.5	0.2	11.5	1.7	0.0	3.3	7.7	
Delay (s)	55.8	28.9		61.4	29.3	7.8	35.1	29.9	34.0	29.2	46.6	
Level of Service	E	C		E	C	A	D	C	C	C	D	
Approach Delay (s)		33.3			29.4			31.9			42.1	
Approach LOS		C			C			C			D	

Intersection Summary

HCM Average Control Delay	33.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Phasings
6: Osuna Blvd & Jefferson St

Terry O. Brown, P.E.
9/30/2006

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases	7	4	3	8	81	5	2	23	1	6
Permitted Phases						2			6	
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		10.0	21.0		10.0	21.0
Total Split (s)	17.0	52.0	14.0	49.0	71.0	15.0	22.0	36.0	22.0	29.0
Total Split (%)	15.5%	47.3%	12.7%	44.5%	64.5%	13.6%	20.0%	32.7%	20.0%	26.4%
Maximum Green (s)	12.0	47.0	9.0	44.0		10.0	17.0		17.0	24.0
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
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?										
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Recall Mode	Min	Min	Min	Min		Min	C-Min		Min	C-Min
Walk Time (s)		5.0		5.0			5.0			5.0
Flash Dont Walk (s)		11.0		11.0			11.0			11.0
Pedestrian Calls (#/hr)		0		0			0			0
90th %ile Green (s)	12.0	47.0	9.0	44.0		10.0	17.0		17.0	24.0
90th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
70th %ile Green (s)	12.0	47.0	9.0	44.0		10.0	17.0		17.0	24.0
70th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
50th %ile Green (s)	12.0	47.0	9.0	44.0		10.0	17.3		16.7	24.0
50th %ile Term Code	Max	Max	Max	Max		Max	Coord		Gap	Coord
30th %ile Green (s)	12.0	47.0	9.0	44.0		10.0	19.8		14.2	24.0
30th %ile Term Code	Max	Hold	Max	Max		Max	Coord		Gap	Coord
10th %ile Green (s)	12.9	44.0	10.7	41.8		9.2	24.5		10.8	26.1
10th %ile Term Code	Gap	Hold	Gap	Gap		Gap	Coord		Gap	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 97 (88%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Control Type: Actuated-Coordinated

HCM Signalized Intersection Capacity Analysis
6: Osuna Blvd & Jefferson St

Terry O. Brown, P.E.
9/30/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3303	4801		3303	3406	1524	1703	3406	1524	1703	3245	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.19	1.00	1.00	0.33	1.00	
Satd. Flow (perm)	3303	4801		3303	3406	1524	340	3406	1524	589	3245	
Volume (vph)	306	1382	198	231	1121	292	167	306	86	207	423	193
Peak-hour factor, PHF	0.88	0.88	0.88	0.87	0.87	0.87	0.91	0.91	0.91	0.87	0.87	0.87
Adj. Flow (vph)	348	1570	225	266	1289	336	184	336	95	238	486	222
RTOR Reduction (vph)	0	17	0	0	0	25	0	0	47	0	48	0
Lane Group Flow (vph)	348	1778	0	266	1289	311	184	336	48	238	660	0
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot			Prot		pt+ov	pm+pt		pt+ov	pm+pt		
Protected Phases	7	4		3	8	81	5	2	23	1	6	
Permitted Phases							2			6		
Actuated Green, G (s)	12.2	46.5		9.3	43.6	63.7	28.9	19.1	33.4	39.2	24.4	
Effective Green, g (s)	14.2	48.5		11.3	45.6	65.7	32.9	21.1	35.4	41.2	26.4	
Actuated g/C Ratio	0.13	0.44		0.10	0.41	0.60	0.30	0.19	0.32	0.37	0.24	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	426	2117		339	1412	910	248	653	490	394	779	
v/s Ratio Prot	c0.11	c0.37		0.08	c0.38	0.20	c0.08	0.10	0.03	c0.09	c0.20	
v/s Ratio Perm							0.14			0.13		
v/c Ratio	0.82	0.84		0.78	0.91	0.34	0.74	0.51	0.10	0.60	0.85	
Uniform Delay, d1	46.6	27.3		48.2	30.3	11.2	31.3	39.9	26.1	25.6	39.9	
Progression Factor	1.00	1.00		1.13	0.61	0.66	0.82	0.83	1.14	1.00	1.00	
Incremental Delay, d2	11.5	3.1		10.2	8.4	0.2	10.7	2.7	0.1	2.6	11.1	
Delay (s)	58.1	30.4		64.8	27.1	7.6	36.3	36.0	29.8	28.2	50.9	
Level of Service	E	C		E	C	A	D	D	C	C	D	
Approach Delay (s)		34.9			28.9			35.1			45.2	
Approach LOS		C			C			D			D	

Intersection Summary

HCM Average Control Delay	34.7	HCM Level of Service		C	
HCM Volume to Capacity ratio	0.85				
Actuated Cycle Length (s)	110.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	80.2%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group

Phasings
6: Osuna Blvd & Jefferson St

Terry O. Brown, P.E.
9/30/2006

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases	7	4	3	8	8 1	5	2	2 3	1	6
Permitted Phases						2			6	
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		10.0	21.0		10.0	21.0
Total Split (s)	14.0	47.0	10.0	43.0	68.0	24.0	28.0	38.0	25.0	29.0
Total Split (%)	12.7%	42.7%	9.1%	39.1%	61.8%	21.8%	25.5%	34.5%	22.7%	26.4%
Maximum Green (s)	9.0	42.0	5.0	38.0		19.0	23.0		20.0	24.0
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
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?										
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Recall Mode	Min	Min	Min	Min		Min	C-Min		Min	C-Min
Walk Time (s)		5.0		5.0			5.0			5.0
Flash Dont Walk (s)		11.0		11.0			11.0			11.0
Pedestrian Calls (#/hr)		0		0			0			0
90th %ile Green (s)	9.0	42.0	5.0	38.0		19.0	23.0		20.0	24.0
90th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
70th %ile Green (s)	9.0	42.0	5.0	38.0		19.0	23.0		20.0	24.0
70th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
50th %ile Green (s)	9.0	42.0	5.0	38.0		19.0	23.0		20.0	24.0
50th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
30th %ile Green (s)	9.0	42.0	5.0	38.0		19.0	23.0		20.0	24.0
30th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
10th %ile Green (s)	9.0	42.0	5.0	38.0		19.0	23.0		20.0	24.0
10th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 109 (99%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Control Type: Actuated-Coordinated

HCM Signalized Intersection Capacity Analysis
6: Osuna Blvd & Jefferson St

Terry O. Brown, P.E.
9/30/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3303	4856		3303	3406	1524	1703	3406	1524	1703	3155	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.16	1.00	1.00	0.15	1.00	
Satd. Flow (perm)	3303	4856		3303	3406	1524	287	3406	1524	276	3155	
Volume (vph)	323	1878	100	98	1232	224	378	719	341	352	359	345
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.90	0.90	0.90	0.79	0.79	0.79
Adj. Flow (vph)	344	1998	106	108	1354	246	420	799	379	446	454	437
RTOR Reduction (vph)	0	5	0	0	0	4	0	0	21	0	92	0
Lane Group Flow (vph)	344	2099	0	108	1354	242	420	799	358	446	799	0
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot			Prot		pt+ov	pm+pt		pt+ov	pm+pt		
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	
Permitted Phases							2			6		
Actuated Green, G (s)	9.0	42.0		5.0	38.0	63.0	42.0	23.0	33.0	44.0	24.0	
Effective Green, g (s)	11.0	44.0		7.0	40.0	65.0	46.0	25.0	35.0	48.0	26.0	
Actuated g/C Ratio	0.10	0.40		0.06	0.36	0.59	0.42	0.23	0.32	0.44	0.24	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	330	1942		210	1239	901	390	774	485	406	746	
v/s Ratio Prot	c0.10	c0.43		0.03	0.40	0.16	0.21	0.23	0.23	c0.22	0.25	
v/s Ratio Perm							0.24			c0.26		
v/c Ratio	1.04	1.08		0.51	1.09	0.27	1.08	1.03	0.74	1.10	1.07	
Uniform Delay, d1	49.5	33.0		49.9	35.0	10.9	46.7	42.5	33.4	32.1	42.0	
Progression Factor	1.00	1.00		0.96	0.66	1.16	0.74	0.95	1.06	1.00	1.00	
Incremental Delay, d2	61.0	46.1		2.0	54.1	0.2	67.4	40.7	5.7	74.0	53.5	
Delay (s)	110.5	79.1		49.8	77.2	12.9	102.2	81.2	41.0	106.1	95.5	
Level of Service	F	E		D	E	B	F	F	D	F	F	
Approach Delay (s)		83.5			66.2			77.2			99.0	
Approach LOS		F			E			E			F	

Intersection Summary

HCM Average Control Delay	80.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	98.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Phasings
6: Osuna Blvd & Jefferson St

Terry O. Brown, P.E.
9/30/2006

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases	7	4	3	8	8 1	5	2	2 3	1	6
Permitted Phases						2			6	
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		10.0	21.0		10.0	21.0
Total Split (s)	15.0	51.0	10.0	46.0	74.0	27.0	31.0	41.0	28.0	32.0
Total Split (%)	12.5%	42.5%	8.3%	38.3%	61.7%	22.5%	25.8%	34.2%	23.3%	26.7%
Maximum Green (s)	10.0	46.0	5.0	41.0		22.0	26.0		23.0	27.0
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
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag		Lead	Lag
Lead-Lag Optimize?										
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Recall Mode	Min	Min	Min	Min		Min	C-Min		Min	C-Min
Walk Time (s)		5.0		5.0			5.0			5.0
Flash Dont Walk (s)		11.0		11.0			11.0			11.0
Pedestrian Calls (#/hr)		0		0			0			0
90th %ile Green (s)	10.0	46.0	5.0	41.0		22.0	26.0		23.0	27.0
90th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
70th %ile Green (s)	10.0	46.0	5.0	41.0		22.0	26.0		23.0	27.0
70th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
50th %ile Green (s)	10.0	46.0	5.0	41.0		22.0	26.0		23.0	27.0
50th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
30th %ile Green (s)	10.0	46.0	5.0	41.0		22.0	26.0		23.0	27.0
30th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord
10th %ile Green (s)	10.0	46.0	5.0	41.0		22.0	26.0		23.0	27.0
10th %ile Term Code	Max	Max	Max	Max		Max	Coord		Max	Coord

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Control Type: Actuated-Coordinated

HCM Signalized Intersection Capacity Analysis
6: Osuna Blvd & Jefferson St

Terry O. Brown, P.E.
9/30/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3303	4851		3303	3406	1524	1703	3406	1524	1703	3163	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.14	1.00	1.00	0.14	1.00	
Satd. Flow (perm)	3303	4851		3303	3406	1524	256	3406	1524	247	3163	
Volume (vph)	323	1878	114	122	1232	224	393	754	426	352	382	345
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.90	0.90	0.90	0.79	0.79	0.79
Adj. Flow (vph)	344	1998	121	134	1354	246	437	838	473	446	484	437
RTOR Reduction (vph)	0	5	0	0	0	3	0	0	23	0	86	0
Lane Group Flow (vph)	344	2114	0	134	1354	243	437	838	450	446	835	0
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot			Prot		pt+ov	pm+pt		pt+ov	pm+pt		
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	
Permitted Phases							2			6		
Actuated Green, G (s)	10.0	46.0		5.0	41.0	69.0	48.0	26.0	36.0	50.0	27.0	
Effective Green, g (s)	12.0	48.0		7.0	43.0	71.0	52.0	28.0	38.0	54.0	29.0	
Actuated g/C Ratio	0.10	0.40		0.06	0.36	0.59	0.43	0.23	0.32	0.45	0.24	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	330	1940		193	1220	902	400	795	483	414	764	
v/s Ratio Prot	c0.10	c0.44		0.04	0.40	0.16	0.22	0.25	c0.30	c0.22	c0.26	
v/s Ratio Perm							0.25			0.26		
v/c Ratio	1.04	1.09		0.69	1.11	0.27	1.09	1.05	0.93	1.08	1.09	
Uniform Delay, d1	54.0	36.0		55.4	38.5	11.9	50.2	46.0	39.7	36.1	45.5	
Progression Factor	1.00	1.00		1.07	1.09	1.28	0.96	0.81	0.84	1.00	1.00	
Incremental Delay, d2	61.0	49.5		9.7	60.7	0.2	72.0	47.0	24.7	66.5	60.6	
Delay (s)	115.0	85.5		69.2	102.6	15.4	120.3	84.2	58.0	102.6	106.1	
Level of Service	F	F		E	F	B	F	F	E	F	F	
Approach Delay (s)		89.6			87.7			86.1			105.0	
Approach LOS		F			F			F			F	

Intersection Summary

HCM Average Control Delay	91.2	HCM Level of Service	F	
HCM Volume to Capacity ratio	1.07			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	6.0	
Intersection Capacity Utilization	100.0%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

Timings
6: Osuna Blvd & Jefferson St

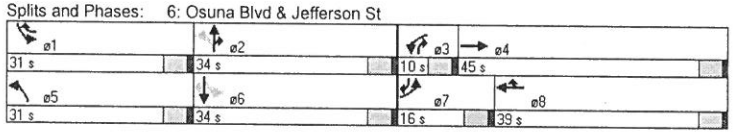
Terry O. Brown, P.E.
10/1/2006

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	323	1878	122	1232	224	393	754	426	352	382	345
Turn Type	Prot		Prot		pt+ov	pm+pt		pt+ov	pm+pt		pm+ov
Protected Phases	7	4	3	8	8 1	5	2	2 3	1	6	7
Permitted Phases						2			6		6
Detector Phases	7	4	3	8	8 1	5	2	2 3	1	6	7
Minimum Initial (s)	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	10.0	21.0	10.0	21.0		10.0	21.0		10.0	21.0	10.0
Total Split (s)	16.0	45.0	10.0	39.0	70.0	31.0	34.0	44.0	31.0	34.0	16.0
Total Split (%)	13.3%	37.5%	8.3%	32.5%	58.3%	25.8%	28.3%	36.7%	25.8%	28.3%	13.3%
Yellow Time (s)	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min		Min	C-Min		Min	C-Min	Min
Act Effct Green (s)	13.0	42.0	7.0	36.0	67.0	56.2	31.0	41.0	60.2	33.8	49.8
Actuated g/C Ratio	0.11	0.35	0.06	0.30	0.56	0.47	0.26	0.34	0.50	0.28	0.42
v/c Ratio	0.96	0.99	0.69	0.92	0.29	0.88	0.95	0.85	0.97	0.50	0.65
Control Delay	92.2	55.4	71.9	52.2	18.2	38.3	57.7	44.9	69.3	39.0	28.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	92.2	55.4	71.9	52.2	18.2	38.3	57.7	44.9	69.3	39.0	28.8
LOS	F	E	E	D	B	D	E	D	E	D	C
Approach Delay		60.5		48.9			49.4			45.6	
Approach LOS		E		D			D			D	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.99
Intersection Signal Delay: 52.3 Intersection LOS: D
Intersection Capacity Utilization 87.0% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 6: Osuna Blvd & Jefferson St



HCM Signalized Intersection Capacity Analysis
6: Osuna Blvd & Jefferson St

Terry O. Brown, P.E.
10/1/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	0.97	0.86		0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3303	6113		3303	4893	1524	1703	3406	1524	1703	3406	1524
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.35	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	3303	6113		3303	4893	1524	622	3406	1524	212	3406	1524
Volume (vph)	323	1878	114	122	1232	224	393	754	426	352	382	345
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.90	0.90	0.90	0.79	0.79	0.79
Adj. Flow (vph)	344	1998	121	134	1354	246	437	838	473	446	484	437
RTOR Reduction (vph)	0	7	0	0	0	6	0	0	34	0	0	47
Lane Group Flow (vph)	344	2112	0	134	1354	240	437	838	439	446	484	390
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot			Prot		pt+ov	pm+pt		pt+ov	pm+pt		pm+ov
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	7
Permitted Phases							2			6		6
Actuated Green, G (s)	11.0	40.0		5.0	34.0	65.0	52.2	29.0	39.0	57.8	31.8	42.8
Effective Green, g (s)	13.0	42.0		7.0	36.0	67.0	56.2	31.0	41.0	61.8	33.8	46.8
Actuated g/C Ratio	0.11	0.35		0.06	0.30	0.56	0.47	0.26	0.34	0.51	0.28	0.39
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	358	2140		193	1468	851	518	880	521	457	959	632
v/s Ratio Prot	c0.10	c0.35		0.04	0.28	0.16	0.18	0.25	c0.29	c0.23	0.14	0.07
v/s Ratio Perm							0.22			c0.27		0.19
v/c Ratio	0.96	0.99		0.69	0.92	0.28	0.84	0.95	0.84	0.98	0.50	0.62
Uniform Delay, d1	53.2	38.7		55.4	40.6	13.9	23.4	43.8	36.5	35.7	36.1	29.4
Progression Factor	1.00	1.00		0.97	1.02	1.30	0.87	0.83	0.89	1.00	1.00	1.00
Incremental Delay, d2	37.2	16.3		9.7	9.3	0.2	11.8	20.6	11.6	35.5	1.9	1.8
Delay (s)	90.4	55.0		63.6	50.8	18.3	32.2	56.9	44.0	71.2	38.0	31.2
Level of Service	F	E		E	D	B	C	E	D	E	D	C
Approach Delay (s)		60.0			47.1			47.3			46.6	
Approach LOS		E			D			D			D	

Intersection Summary

HCM Average Control Delay	51.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Analysis of Intersection #7

Presidential Dr / Jefferson St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	70	13	645	11	13	933
Peak Hour Factor	0.85	0.85	0.90	0.90	0.94	0.94
Hourly flow rate (vph)	82	15	717	12	14	993
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh)	1					
Upstream signal (ft)						689
pX, platoon unblocked	0.89					
vC, conflicting volume	1241	358			729	
vC1, stage 1 conf vol	717					
vC2, stage 2 conf vol	524					
vCu, unblocked vol	1149	358			729	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)	5.9					
tF (s)	3.5	3.3			2.2	
p0 queue free %	73	98			98	
cM capacity (veh/h)	306	635			864	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	98	358	358	12	14	496	496
Volume Left	82	0	0	0	14	0	0
Volume Right	15	0	0	12	0	0	0
cSH	333	1700	1700	1700	864	1700	1700
Volume to Capacity	0.29	0.21	0.21	0.01	0.02	0.29	0.29
Queue Length 95th (ft)	30	0	0	0	1	0	0
Control Delay (s)	20.2	0.0	0.0	0.0	9.2	0.0	0.0
Lane LOS	C				A		
Approach Delay (s)	20.2	0.0			0.1		
Approach LOS	C						

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	37.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	70	13	697	11	13	1002
Peak Hour Factor	0.85	0.85	0.90	0.90	0.94	0.94
Hourly flow rate (vph)	82	15	774	12	14	1066
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh)	1					
Upstream signal (ft)						689
pX, platoon unblocked	0.87					
vC, conflicting volume	1335	387			787	
vC1, stage 1 conf vol	774					
vC2, stage 2 conf vol	561					
vCu, unblocked vol	1237	387			787	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)	5.9					
tF (s)	3.5	3.3			2.2	
p0 queue free %	71	97			98	
cM capacity (veh/h)	283	608			822	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	98	387	387	12	14	533	533
Volume Left	82	0	0	0	14	0	0
Volume Right	15	0	0	12	0	0	0
cSH	309	1700	1700	1700	822	1700	1700
Volume to Capacity	0.32	0.23	0.23	0.01	0.02	0.31	0.31
Queue Length 95th (ft)	33	0	0	0	1	0	0
Control Delay (s)	21.9	0.0	0.0	0.0	9.5	0.0	0.0
Lane LOS	C				A		
Approach Delay (s)	21.9	0.0			0.1		
Approach LOS	C						

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	39.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	34	25	865	25	72	619
Peak Hour Factor	0.85	0.85	0.85	0.85	0.89	0.89
Hourly flow rate (vph)	40	29	1018	29	81	696
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh)	1					
Upstream signal (ft)						689
pX, platoon unblocked						
vC, conflicting volume	1527	509			1047	
vC1, stage 1 conf vol	1018					
vC2, stage 2 conf vol	510					
vCu, unblocked vol	1527	509			1047	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)	5.9					
tF (s)	3.5	3.3			2.2	
p0 queue free %	81	94			88	
cM capacity (veh/h)	213	507			654	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	69	509	509	29	81	348	348
Volume Left	40	0	0	0	81	0	0
Volume Right	29	0	0	29	0	0	0
cSH	282	1700	1700	1700	654	1700	1700
Volume to Capacity	0.25	0.30	0.30	0.02	0.12	0.20	0.20
Queue Length 95th (ft)	24	0	0	0	11	0	0
Control Delay (s)	21.9	0.0	0.0	0.0	11.3	0.0	0.0
Lane LOS	C				B		
Approach Delay (s)	21.9	0.0			1.2		
Approach LOS	C						

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	34	25	1001	25	72	681
Peak Hour Factor	0.85	0.85	0.85	0.85	0.89	0.89
Hourly flow rate (vph)	40	29	1178	29	81	765
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh)	1					
Upstream signal (ft)						689
pX, platoon unblocked						
vC, conflicting volume	1722	589			1207	
vC1, stage 1 conf vol	1178					
vC2, stage 2 conf vol	544					
vCu, unblocked vol	1722	589			1207	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)	5.9					
tF (s)	3.5	3.3			2.2	
p0 queue free %	77	93			86	
cM capacity (veh/h)	177	449			568	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	69	589	589	29	81	383	383
Volume Left	40	0	0	0	81	0	0
Volume Right	29	0	0	29	0	0	0
cSH	238	1700	1700	1700	568	1700	1700
Volume to Capacity	0.29	0.35	0.35	0.02	0.14	0.23	0.23
Queue Length 95th (ft)	29	0	0	0	12	0	0
Control Delay (s)	26.2	0.0	0.0	0.0	12.4	0.0	0.0
Lane LOS	D				B		
Approach Delay (s)	26.2	0.0			1.2		
Approach LOS	D						

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

Analysis of Intersection #8

Jefferson Plaza / Jefferson St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑↑↱		↰	↑↑	↱
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	12	2	16	1	5	9	69	776	11	12	899	104
Peak Hour Factor	0.81	0.81	0.81	0.75	0.75	0.75	0.94	0.94	0.94	0.77	0.77	0.77
Hourly flow rate (vph)	15	2	20	1	7	12	73	826	12	16	1168	135
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1774	2183	584	1614	2312	419	1303			837		
vC1, stage 1 conf vol	1199	1199		978	978							
vC2, stage 2 conf vol	575	984		636	1334							
vCu, unblocked vol	1774	2183	584	1614	2312	419	1303			837		
tC, single (s)	7.6	6.6	7.0	7.6	6.6	7.0	4.2			4.2		
tC, 2 stage (s)	6.6	5.6		6.6	5.6							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	89	98	96	99	93	98	86			98		
cM capacity (veh/h)	132	134	453	148	98	580	522			786		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	37	20	73	550	287	16	584	584	135
Volume Left	15	1	73	0	0	16	0	0	0
Volume Right	20	12	0	0	12	0	0	0	135
cSH	213	205	522	1700	1700	786	1700	1700	1700
Volume to Capacity	0.17	0.10	0.14	0.32	0.17	0.02	0.34	0.34	0.08
Queue Length 95th (ft)	15	8	12	0	0	2	0	0	0
Control Delay (s)	25.5	24.5	13.0	0.0	0.0	9.7	0.0	0.0	0.0
Lane LOS	D	C	B			A			
Approach Delay (s)	25.5	24.5	1.0			0.1			
Approach LOS	D	C							

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑↑↱		↰	↑↑	↱
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	12	2	17	0	5	9	69	828	11	12	968	104
Peak Hour Factor	0.81	0.81	0.81	0.75	0.75	0.75	0.94	0.94	0.94	0.77	0.77	0.77
Hourly flow rate (vph)	15	2	21	0	7	12	73	881	12	16	1257	135
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1891	2328	629	1715	2457	446	1392			893		
vC1, stage 1 conf vol	1288	1288		1034	1034							
vC2, stage 2 conf vol	603	1039		682	1423							
vCu, unblocked vol	1891	2328	629	1715	2457	446	1392			893		
tC, single (s)	7.6	6.6	7.0	7.6	6.6	7.0	4.2			4.2		
tC, 2 stage (s)	6.6	5.6		6.6	5.6							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	87	98	95	100	92	98	85			98		
cM capacity (veh/h)	117	120	423	133	85	557	482			749		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	38	19	73	587	305	16	629	629	135
Volume Left	15	0	73	0	0	16	0	0	0
Volume Right	21	12	0	0	12	0	0	0	135
cSH	194	186	482	1700	1700	749	1700	1700	1700
Volume to Capacity	0.20	0.10	0.15	0.35	0.18	0.02	0.37	0.37	0.08
Queue Length 95th (ft)	18	8	13	0	0	2	0	0	0
Control Delay (s)	28.0	26.5	13.8	0.0	0.0	9.9	0.0	0.0	0.0
Lane LOS	D	D	B			A			
Approach Delay (s)	28.0	26.5	1.0			0.1			
Approach LOS	D	D							

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑↑↱		↰	↑↑	↱
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	59	1	33	6	1	8	8	857	5	9	888	14
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.94	0.94	0.94	0.87	0.87	0.87
Hourly flow rate (vph)	79	1	44	8	1	11	9	912	5	10	1021	16
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1526	1975	510	1507	1989	459	1037			917		
vC1, stage 1 conf vol	1041	1041		931	931							
vC2, stage 2 conf vol	484	934		576	1057							
vCu, unblocked vol	1526	1975	510	1507	1989	459	1037			917		
tC, single (s)	7.6	6.6	7.0	7.6	6.6	7.0	4.2			4.2		
tC, 2 stage (s)	6.6	5.6		6.6	5.6							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	56	99	91	96	99	98	99			99		
cM capacity (veh/h)	178	169	506	184	167	547	660			733		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	124	20	9	608	309	10	510	510	16
Volume Left	79	8	9	0	0	10	0	0	0
Volume Right	44	11	0	0	5	0	0	0	16
cSH	231	282	660	1700	1700	733	1700	1700	1700
Volume to Capacity	0.54	0.07	0.01	0.36	0.18	0.01	0.30	0.30	0.01
Queue Length 95th (ft)	72	6	1	0	0	1	0	0	0
Control Delay (s)	37.4	18.7	10.5	0.0	0.0	10.0	0.0	0.0	0.0
Lane LOS	E	C	B			A			
Approach Delay (s)	37.4	18.7	0.1			0.1			
Approach LOS	E	C							

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑↑↱		↰	↑↑	↗
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	59	1	33	6	1	8	9	993	5	9	950	14
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.94	0.94	0.94	0.87	0.87	0.87
Hourly flow rate (vph)	79	1	44	8	1	11	10	1056	5	10	1092	16
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1671	2193	546	1690	2207	531	1108			1062		
vC1, stage 1 conf vol	1113	1113		1078	1078							
vC2, stage 2 conf vol	559	1081		611	1129							
vCu, unblocked vol	1671	2193	546	1690	2207	531	1108			1062		
tC, single (s)	7.6	6.6	7.0	7.6	6.6	7.0	4.2			4.2		
tC, 2 stage (s)	6.6	5.6		6.6	5.6							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	50	99	91	95	99	98	98			98		
cM capacity (veh/h)	156	145	479	153	144	490	620			646		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	124	20	10	704	357	10	546	546	16
Volume Left	79	8	10	0	0	10	0	0	0
Volume Right	44	11	0	0	5	0	0	0	16
cSH	205	240	620	1700	1700	646	1700	1700	1700
Volume to Capacity	0.60	0.08	0.02	0.41	0.21	0.02	0.32	0.32	0.01
Queue Length 95th (ft)	86	7	1	0	0	1	0	0	0
Control Delay (s)	46.1	21.3	10.9	0.0	0.0	10.7	0.0	0.0	0.0
Lane LOS	E	C	B			B			
Approach Delay (s)	46.1	21.3	0.1			0.1			
Approach LOS	E	C							

Intersection Summary				
Average Delay	2.7			
Intersection Capacity Utilization	42.8%	ICU Level of Service		A
Analysis Period (min)	15			

Analysis of Intersection #9

BMW Drive / I-25 Frontage Rd

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	16	0	0	444	19
Peak Hour Factor	0.75	0.75	0.85	0.85	0.77	0.77
Hourly flow rate (vph)	0	21	0	0	577	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	589	301	601			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	589	301	601			
tC, single (s)	6.9	7.0	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	100			
cM capacity (veh/h)	437	692	965			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	21	384	217
Volume Left	0	0	0
Volume Right	21	0	25
cSH	692	1700	1700
Volume to Capacity	0.03	0.23	0.13
Queue Length 95th (ft)	2	0	0
Control Delay (s)	10.4	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.4	0.0	
Approach LOS	B		

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	22.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	47	0	0	444	61
Peak Hour Factor	0.75	0.75	0.85	0.85	0.77	0.77
Hourly flow rate (vph)	0	63	0	0	577	79
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	577	288	656			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	577	288	656			
tC, single (s)	6.9	7.0	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	91	100			
cM capacity (veh/h)	445	705	921			

Direction, Lane #	EB 1	SB 1	SB 2	SB 3
Volume Total	63	288	288	79
Volume Left	0	0	0	0
Volume Right	63	0	0	79
cSH	705	1700	1700	1700
Volume to Capacity	0.09	0.17	0.17	0.05
Queue Length 95th (ft)	7	0	0	0
Control Delay (s)	10.6	0.0	0.0	0.0
Lane LOS	B			
Approach Delay (s)	10.6	0.0		
Approach LOS	B			

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	22.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	65	0	0	566	7
Peak Hour Factor	0.75	0.75	0.85	0.85	0.75	0.75
Hourly flow rate (vph)	0	87	0	0	755	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	759	382	764			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	759	382	764			
tC, single (s)	6.9	7.0	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	86	100			
cM capacity (veh/h)	340	613	838			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	87	503	261
Volume Left	0	0	0
Volume Right	87	0	9
cSH	613	1700	1700
Volume to Capacity	0.14	0.30	0.15
Queue Length 95th (ft)	12	0	0
Control Delay (s)	11.8	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.8	0.0	
Approach LOS	B		

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	26.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	158	0	0	566	43
Peak Hour Factor	0.75	0.75	0.85	0.85	0.75	0.75
Hourly flow rate (vph)	0	211	0	0	755	57
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	755	377	812			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	755	377	812			
tC, single (s)	6.9	7.0	4.2			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	66	100			
cM capacity (veh/h)	343	617	804			

Direction, Lane #	EB 1	SB 1	SB 2	SB 3
Volume Total	211	377	377	57
Volume Left	0	0	0	0
Volume Right	211	0	0	57
cSH	617	1700	1700	1700
Volume to Capacity	0.34	0.22	0.22	0.03
Queue Length 95th (ft)	38	0	0	0
Control Delay (s)	13.8	0.0	0.0	0.0
Lane LOS	B			
Approach Delay (s)	13.8	0.0		
Approach LOS	B			

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		

Analysis of Intersection #10

Driveway 'A' / Jefferson St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	15	898	2	0	993
Peak Hour Factor	0.85	0.85	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	18	955	2	0	1056
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh)	1					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1485	479			957	
vC1, stage 1 conf vol	956					
vC2, stage 2 conf vol	528					
vCu, unblocked vol	1485	479			957	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)	5.9					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	237	530			708	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	18	637	321	528	528
Volume Left	0	0	0	0	0
Volume Right	18	0	2	0	0
cSH	530	1700	1700	1700	1700
Volume to Capacity	0.03	0.37	0.19	0.31	0.31
Queue Length 95th (ft)	3	0	0	0	0
Control Delay (s)	12.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.0	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	34.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	41	973	2	0	995
Peak Hour Factor	0.85	0.85	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	48	1035	2	0	1059
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh)	1					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1565	519			1037	
vC1, stage 1 conf vol	1036					
vC2, stage 2 conf vol	529					
vCu, unblocked vol	1565	519			1037	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)	5.9					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	90			100	
cM capacity (veh/h)	219	499			660	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	48	690	347	529	529
Volume Left	0	0	0	0	0
Volume Right	48	0	2	0	0
cSH	499	1700	1700	1700	1700
Volume to Capacity	0.10	0.41	0.20	0.31	0.31
Queue Length 95th (ft)	8	0	0	0	0
Control Delay (s)	13.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	13.0	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

Analysis of Intersection #11

Driveway 'B' / Jefferson St

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	11	17	13	862	923	8
Peak Hour Factor	0.85	0.85	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	13	20	14	917	982	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh)	1					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1472	495	990			
vC1, stage 1 conf vol	986					
vC2, stage 2 conf vol	486					
vCu, unblocked vol	1472	495	990			
tC, single (s)	6.9	7.0	4.2			
tC, 2 stage (s)	5.9					
tF (s)	3.5	3.3	2.2			
p0 queue free %	94	96	98			
cM capacity (veh/h)	233	517	688			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	33	14	459	459	655	336
Volume Left	13	14	0	0	0	0
Volume Right	20	0	0	0	0	9
cSH	350	688	1700	1700	1700	1700
Volume to Capacity	0.09	0.02	0.27	0.27	0.39	0.20
Queue Length 95th (ft)	8	2	0	0	0	0
Control Delay (s)	16.3	10.3	0.0	0.0	0.0	0.0
Lane LOS	C	B				
Approach Delay (s)	16.3	0.2			0.0	
Approach LOS	C					

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	11	1	17	22	1	31	13	869	85	70	923	8
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	13	1	20	26	1	36	14	924	90	74	982	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1662	2178	495	1658	2137	507	990			1015		
vC1, stage 1 conf vol	1135	1135		997	997							
vC2, stage 2 conf vol	527	1043		660	1139							
vCu, unblocked vol	1662	2178	495	1658	2137	507	990			1015		
tC, single (s)	7.6	6.6	7.0	7.6	6.6	7.0	4.2			4.2		
tC, 2 stage (s)	6.6	5.6		6.6	5.6							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	90	99	96	84	99	93	98			89		
cM capacity (veh/h)	136	124	517	157	139	508	688			673		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	34	64	14	616	399	565	499
Volume Left	13	26	14	0	0	74	0
Volume Right	20	36	0	0	90	0	9
cSH	238	259	688	1700	1700	673	1700
Volume to Capacity	0.14	0.25	0.02	0.36	0.23	0.11	0.29
Queue Length 95th (ft)	12	23	2	0	0	9	0
Control Delay (s)	22.6	23.3	10.3	0.0	0.0	2.9	0.0
Lane LOS	C	C	B			A	
Approach Delay (s)	22.6	23.3	0.1			1.6	
Approach LOS	C	C					

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	68.8%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	30	53	47	877	933	35
Peak Hour Factor	0.85	0.85	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	35	62	50	933	993	37
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh)	1					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1578	515	1030			
vC1, stage 1 conf vol	1011					
vC2, stage 2 conf vol	566					
vCu, unblocked vol	1578	515	1030			
tC, single (s)	6.9	7.0	4.2			
tC, 2 stage (s)	5.9					
tF (s)	3.5	3.3	2.2			
p0 queue free %	83	88	92			
cM capacity (veh/h)	212	502	664			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	98	50	466	466	662	368
Volume Left	35	50	0	0	0	0
Volume Right	62	0	0	0	0	37
cSH	336	664	1700	1700	1700	1700
Volume to Capacity	0.29	0.08	0.27	0.27	0.39	0.22
Queue Length 95th (ft)	30	6	0	0	0	0
Control Delay (s)	20.0	10.9	0.0	0.0	0.0	0.0
Lane LOS	C	B				
Approach Delay (s)	20.0	0.6			0.0	
Approach LOS	C					

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑↑↕			↕	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	30	1	53	69	1	82	47	892	63	62	933	35
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	35	1	62	81	1	96	50	949	67	66	993	37
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1815	2259	515	1774	2244	508	1030			1016		
vC1, stage 1 conf vol	1143	1143		1082	1082							
vC2, stage 2 conf vol	672	1116		691	1162							
vCu, unblocked vol	1815	2259	515	1774	2244	508	1030			1016		
tC, single (s)	7.6	6.6	7.0	7.6	6.6	7.0	4.2			4.2		
tC, 2 stage (s)	6.6	5.6		6.6	5.6							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	69	99	88	35	99	81	92			90		
cM capacity (veh/h)	112	113	502	125	116	507	664			672		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	99	179	50	633	383	562	534
Volume Left	35	81	50	0	0	66	0
Volume Right	62	96	0	0	67	0	37
cSH	220	211	664	1700	1700	672	1700
Volume to Capacity	0.45	0.85	0.08	0.37	0.23	0.10	0.31
Queue Length 95th (ft)	54	161	6	0	0	8	0
Control Delay (s)	34.1	75.7	10.9	0.0	0.0	2.6	0.0
Lane LOS	D	F	B			A	
Approach Delay (s)	34.1	75.7	0.5			1.3	
Approach LOS	D	F					

Intersection Summary				
Average Delay	7.8			
Intersection Capacity Utilization	78.2%	ICU Level of Service	D	
Analysis Period (min)	15			

Analysis of Intersection #12

Driveway 'C' / Jefferson St

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	5	949	47	0	945
Peak Hour Factor	0.85	0.85	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	6	1010	50	0	1005
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1537	530			1060	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1537	530			1060	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	106	491			647	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	6	673	387	503	503
Volume Left	0	0	0	0	0
Volume Right	6	0	50	0	0
cSH	491	1700	1700	1700	1700
Volume to Capacity	0.01	0.40	0.23	0.30	0.30
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	12.4	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.4	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	13	942	35	0	1002
Peak Hour Factor	0.85	0.85	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	15	1002	37	0	1066
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh)	1					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1554	520			1039	
vC1, stage 1 conf vol	1021					
vC2, stage 2 conf vol	533					
vCu, unblocked vol	1554	520			1039	
tC, single (s)	6.9	7.0			4.2	
tC, 2 stage (s)	5.9					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	222	499			659	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	15	668	371	533	533
Volume Left	0	0	0	0	0
Volume Right	15	0	37	0	0
cSH	499	1700	1700	1700	1700
Volume to Capacity	0.03	0.39	0.22	0.31	0.31
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	12.4	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.4	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		

Data Entry Sheet

Determination of Warrants for Deceleration Lanes
NM DOT State Access Management Manual Criteria
BMW Driveway / I-25 W. Frontage Rd

Project Information:

Project Name:	**Fraternal Order of Police**
Project Location:	**Bear Canyon Arroyo / Jefferson St**
Implemenation Year:	**2009**
Project Environment:	**Urban Multi-Lane**

Street Information:

Major Street Name:	**I-25 W. Frontage Rd**
Minor Street Name:	**BMW Driveway**

Intersection Information:

	Orientation	Prevailing Speed	No. Lanes Each Direction
BMW Driveway	**Eastbound**	**25**	**N/A**
I-25 W. Frontage Rd	**North-South**	**45**	**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

I-25 W. Frontage Rd is Case **2**
Speed Category **45 to 55**

SB Right Turn Volumes		**SB Thru Volumes**
2009 AM Pk. Hr. NO BUILD	19	444
2009 AM Pk. Hr. BUILD	61	444
2009 PM Pk. Hr. NO BUILD	7	566
2009 PM Pk. Hr. BUILD	43	566

NB Left Turn Volumes		**NB Thru Volumes**
2009 AM Pk. Hr. NO BUILD	0	0
2009 AM Pk. Hr. BUILD	0	0
2009 PM Pk. Hr. NO BUILD	0	0
2009 PM Pk. Hr. BUILD	0	0

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

Determination of Warrants for Auxiliary Lanes

Project Name: **Fraternal Order of Police**
Name of Highway: **I-25 W. Frontage Rd**
Name of Cross Street: **BMW Driveway**

Determination of Warrants for: Eastbound Driveway

Implementation Year Volumes - **2009** **Posted Speed Limit:** **45**

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	**2009**	19	192	222	✓	400	1.00	-	**400**	**12.5:1**
AM Peak Hour BUILD	**2009**	61	1	222	✓	400	1.00	-	**400**	**12.5:1**
PM Peak Hour NO BUILD	**2009**	7	398	283		N/A		-	**N/A**	**N/A**
PM Peak Hour BUILD	**2009**	43	44	283	✓	400	1.00	-	**400**	**12.5:1**

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	**2009**	-	-	-		N/A		N/A	**N/A**	**N/A**
AM Peak Hour BUILD	**2009**	-	-	-		N/A		N/A	**N/A**	**N/A**
PM Peak Hour NO BUILD	**2009**	-	-	-		N/A		N/A	**N/A**	**N/A**
PM Peak Hour BUILD	**2009**	-	-	-		N/A		N/A	**N/A**	**N/A**

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 eastbound BMW Driveway 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

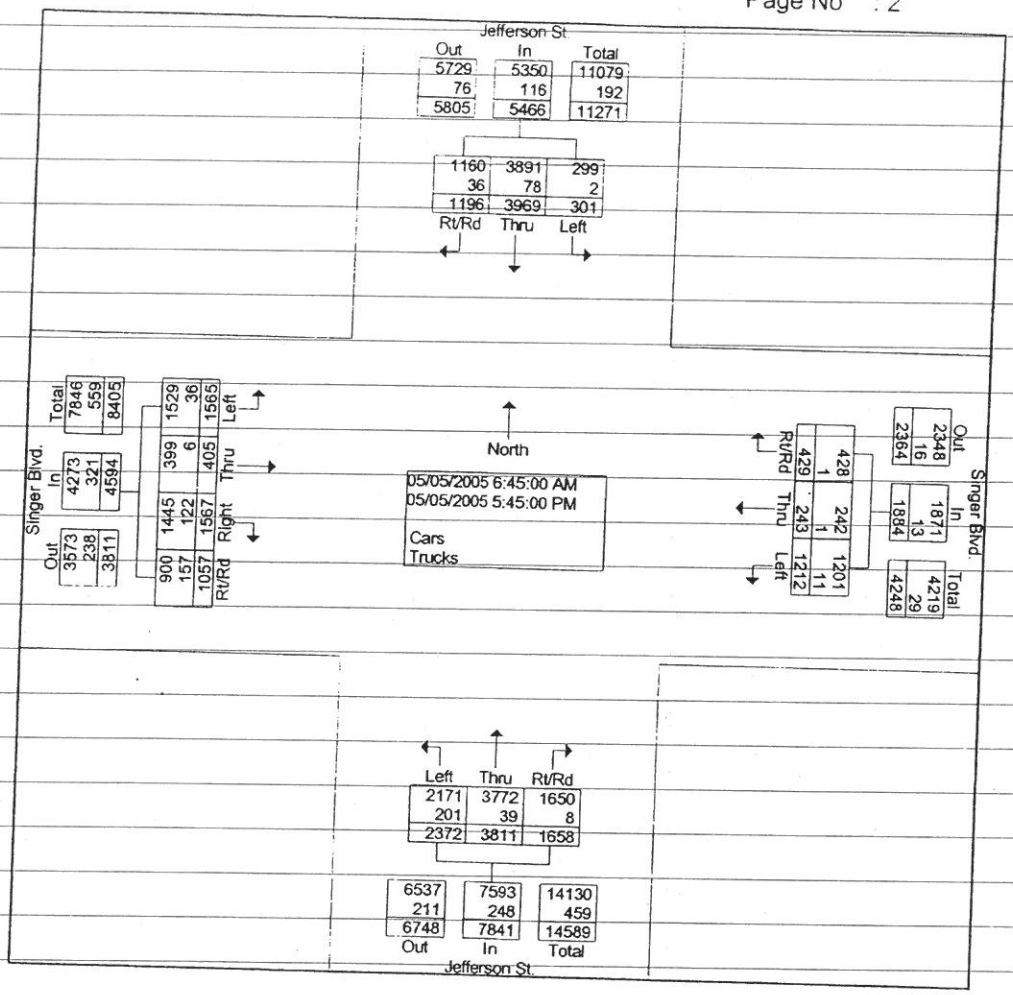
Turning Volume[1] (vph)	LEFT-TURN DECELERATION LANE			RIGHT-TURN DECELERATION LANE		
	Minimum Directional Volume in the Through Lane (vphpl)[2]			Minimum Directional Volume in the Through Lane (vphpl)[2]		
	≤30 mph	35 to 40 mph	45 to 55 mph	≤30 mph	35 to 40 mph	45 to 55 mph
<5	**Not Required**	**Not 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.*

Mid-Region Council of Governments
Intersection Turning Movement Analysis

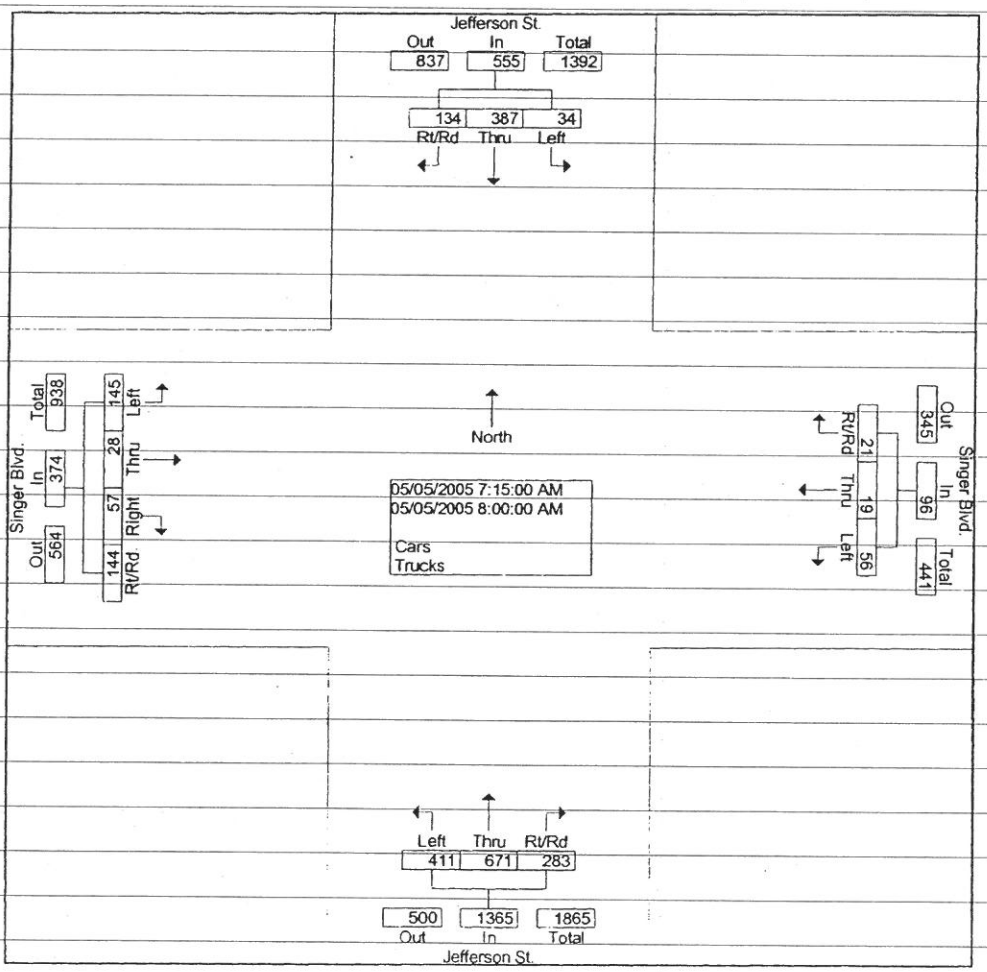
File Name : Singer Blvd. and Jefferson St.
Site Code : 00025880
Start Date : 05/05/2005
Page No : 2



Mid-Region Council of Governments
IntersectionTurning Movement Analysis

File Name : Singer Blvd. and Jefferson St.
Site Code : 00025880
Start Date : 05/05/2005
Page No : 3

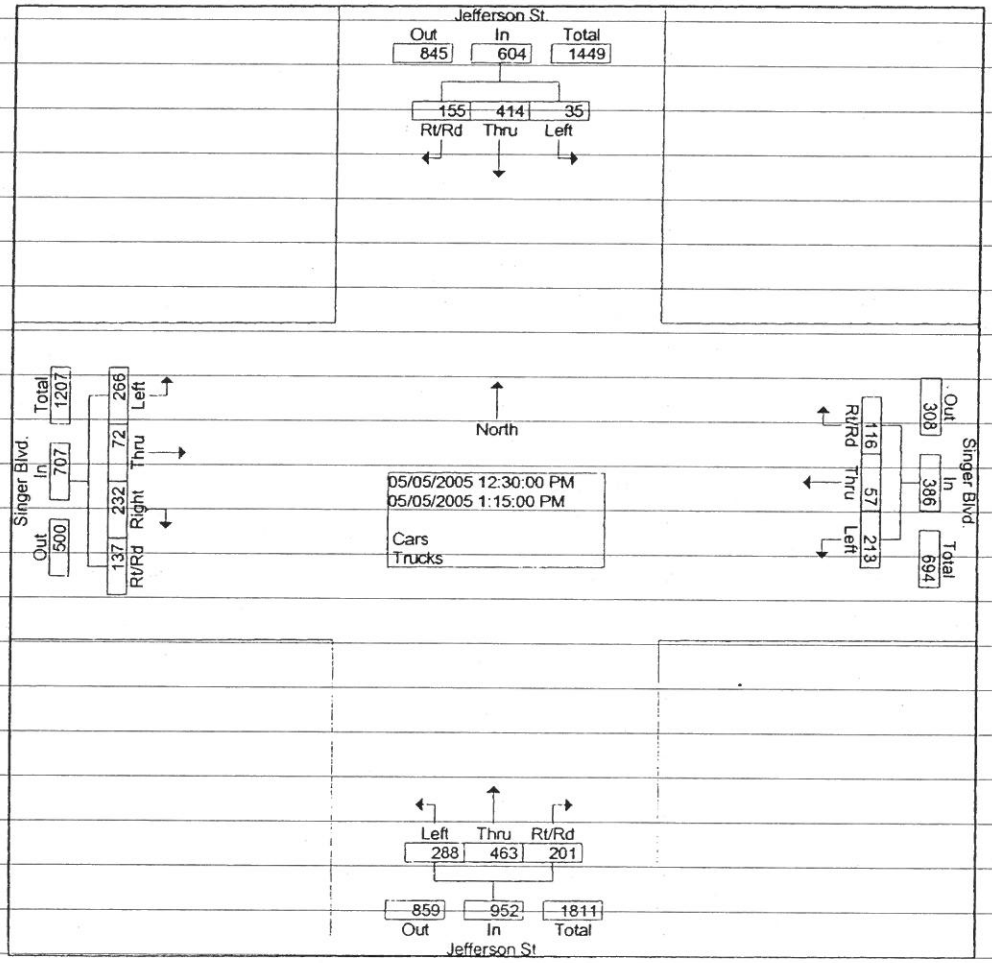
	Jefferson St. From North					Singer Blvd. From East					Jefferson St. From South					Singer Blvd. From West					
Start Time	Left	Thru	Right	Rt/R d	App. Total	Left	Thru	Right	Rt/R d	App. Total	Left	Thru	Right	Rt/R d	App. Total	Left	Thru	Right	Rt/R d	App. Total	Int. Total
Peak Hour From 06:45 to 09:30 - Peak 1 of 1																					
Intersection	07:15																				
Volume	34	387	121	13	555	56	19	21	0	96	411	671	282	1	1365	145	28	57	144	374	2390
Percent	6.1	69.7	21.8	2.3		58.3	19.8	21.9	0.0		30.1	49.2	20.7	0.1		38.8	7.5	15.2	38.5		
Volume	34	387	121	13	555	56	19	21	0	96	411	671	282	1	1365	145	28	57	144	374	2390
Volume	14	107	39	8	168	9	9	3	0	21	108	189	87	0	384	41	10	20	46	117	690
Peak Factor																					0.866
High Int.	07:45					08:00					07:45					07:45					
Volume	14	107	39	8	168	23	8	8	0	39	108	189	87	0	384	41	10	20	46	117	
Peak Factor					0.826					0.615					0.889					0.799	



Mid-Region Council of Governments
Intersection Turning Movement Analysis

File Name : Singer Blvd. and Jefferson St.
Site Code : 00025880
Start Date : 05/05/2005
Page No : 4

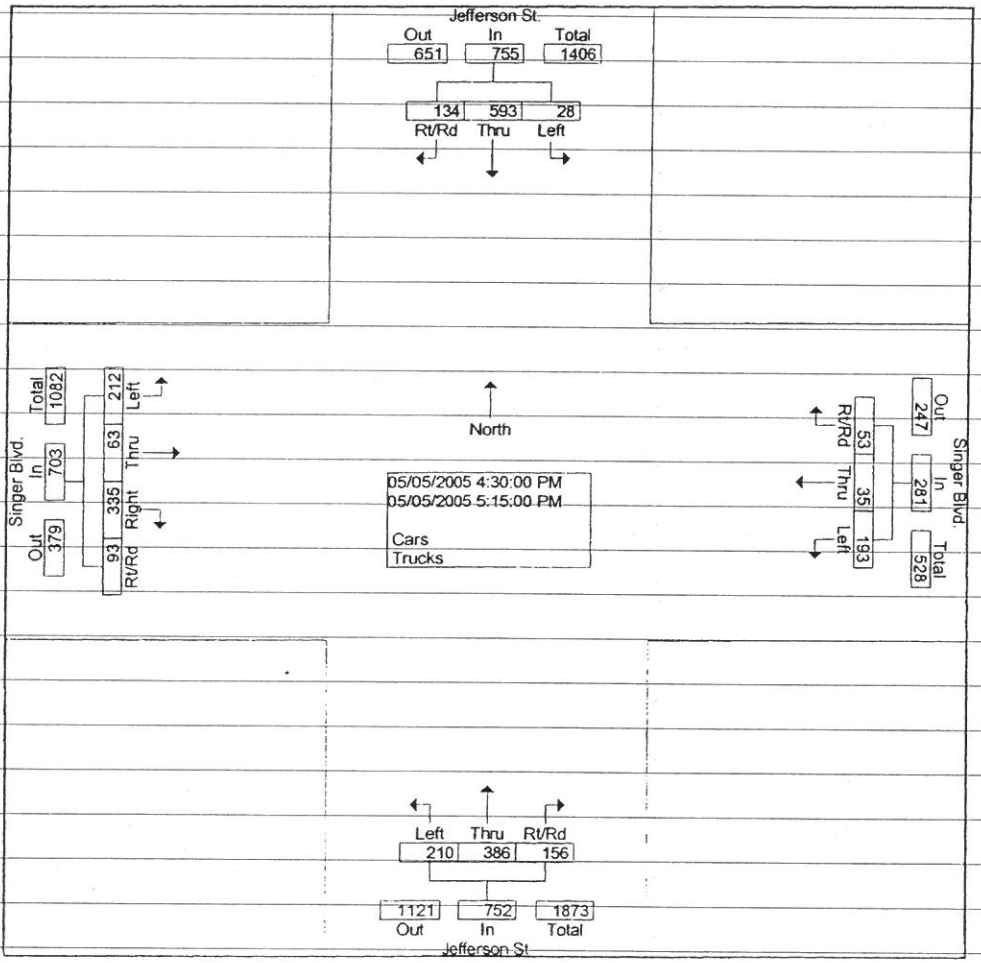
	Jefferson St. From North					Singer Blvd. From East					Jefferson St. From South					Singer Blvd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App Total	Int Total
Peak Hour From 11:00 to 13:45 - Peak 1 of 1																					
Intersection	12:30																				
Volume	35	414	142	13	604	213	57	116	0	386	288	463	201	0	952	266	72	232	137	707	2649
Percent	5.8	68.5	23.5	2.2		55.2	14.8	30.1	0.0		30.3	48.6	21.1	0.0		37.6	10.2	32.8	19.4		
Volume	35	414	142	13	604	213	57	116	0	386	288	463	201	0	952	266	72	232	137	707	2649
Volume	10	126	31	2	169	55	10	34	0	99	79	119	62	0	260	67	21	76	35	199	727
Peak Factor																					0.911
High Int	13:00					12:30					13:00					13:00					
Volume	10	126	31	2	169	58	17	34	0	109	79	119	62	0	260	67	21	76	35	199	
Peak Factor					0.893					0.885					0.915					0.888	



Mid-Region Council of Governments
Intersection Turning Movement Analysis

File Name : Singer Blvd. and Jefferson St.
Site Code : 00025880
Start Date : 05/05/2005
Page No : 5

	Jefferson St. From North					Singer Blvd From East					Jefferson St From South					Singer Blvd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 15:00 to 17:45 - Peak 1 of 1																					
Intersection	16:30																				
Volume	28	593	131	3	755	193	35	53	0	281	210	386	154	2	752	212	63	335	93	703	2491
Percent	3.7	78.5	17.4	0.4		68.7	12.5	18.9	0.0		27.9	51.3	20.5	0.3		30.2	9.0	47.7	13.2		
Volume	28	593	131	3	755	193	35	53	0	281	210	386	154	2	752	212	63	335	93	703	2491
Volume	7	144	26	0	177	58	9	27	0	94	71	96	38	0	205	63	41	136	10	250	726
Peak Factor																					0.858
High Int.	16:30					17:00					16:30					17:00					
Volume	7	176	37	0	220	58	9	27	0	94	64	104	38	1	207	63	41	136	10	250	
Peak Factor					0.858					0.747					0.908					0.703	



Mid-Region Council of Governments
IntersectionTurning Movement Analysis

File Name : Jefferson St. and Pan American West
Site Code : 00025239
Start Date : 05/03/2005
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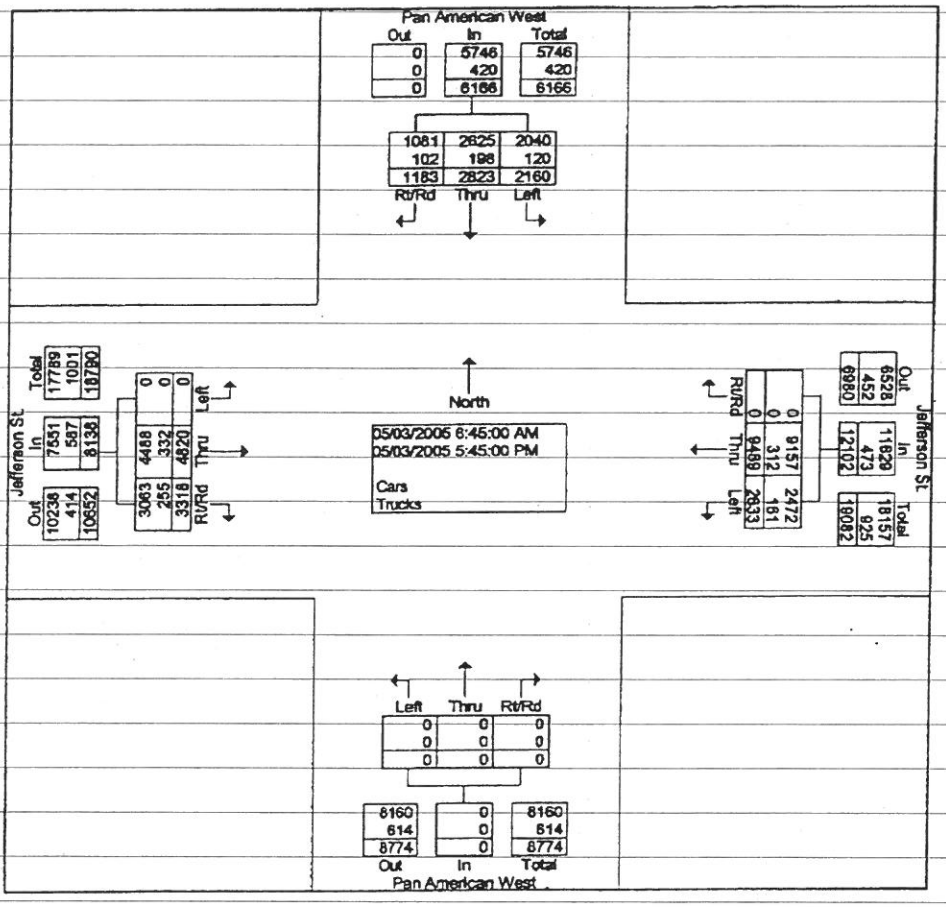
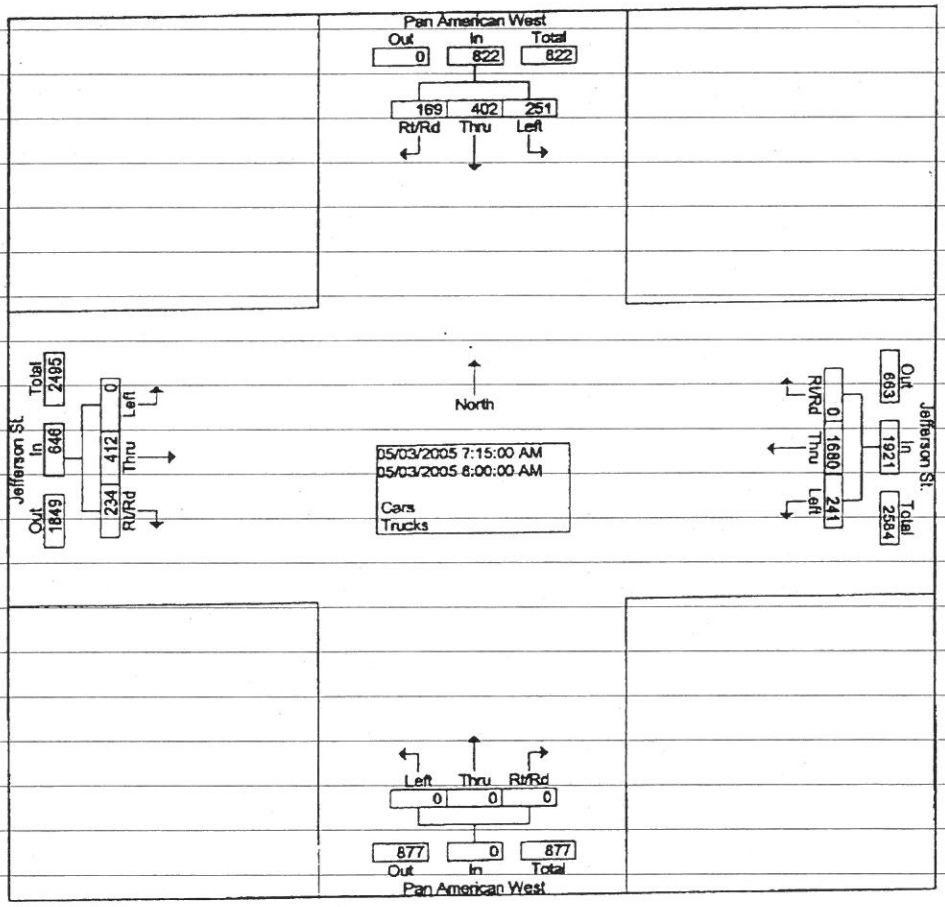


Mid-Region Council of Governments
Intersection Turning Movement Analysis

File Name : Jefferson St. and Pan American West
Site Code : 00025239
Start Date : 05/03/2005
Page No : 3

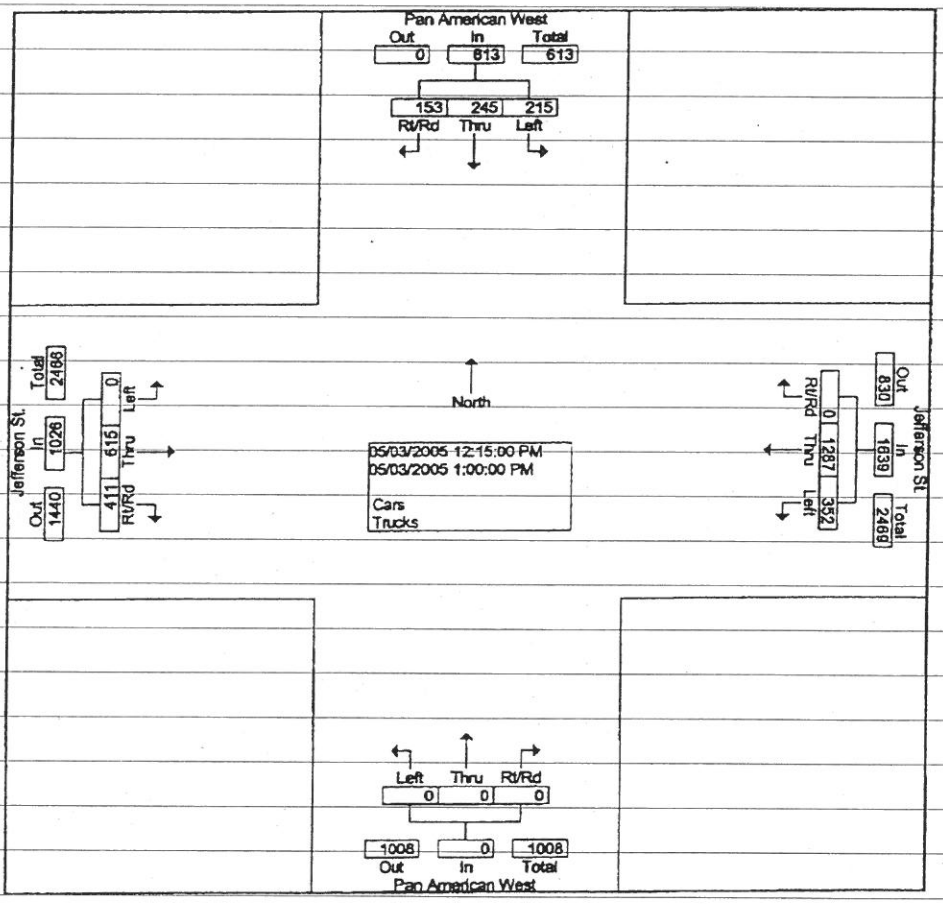
	Pan American West From North					Jefferson St. From East					Pan American West From South					Jefferson St. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 06:45 to 09:30 - Peak 1 of 1																					
Intersection	07:15																				
Volume	251	402	97	72	822	241	1680	0	0	1921	0	0	0	0	0	0	412	217	17	646	3389
Percent	30.5	48.9	11.8	8.8		12.5	87.5	0.0	0.0		0.0	0.0	0.0	0.0		0.0	63.8	33.6	2.6		
Volume	251	402	97	72	822	241	1680	0	0	1921	0	0	0	0	0	0	412	217	17	646	3389
Volume	87	133	47	15	282	39	526	0	0	565	0	0	0	0	0	0	118	67	3	188	1035
Peak Factor																					0.819
High Int.	07:45					07:45					6:30:00 AM					07:45					
Volume	87	133	47	15	282	39	526	0	0	565	0	0	0	0	0	0	118	67	3	188	
Peak Factor					0.729					0.850										0.859	



Mid-Region Council of Governments
Intersection Turning Movement Analysis

File Name : Jefferson St. and Pan American West
Site Code : 00025239
Start Date : 05/03/2005
Page No : 4

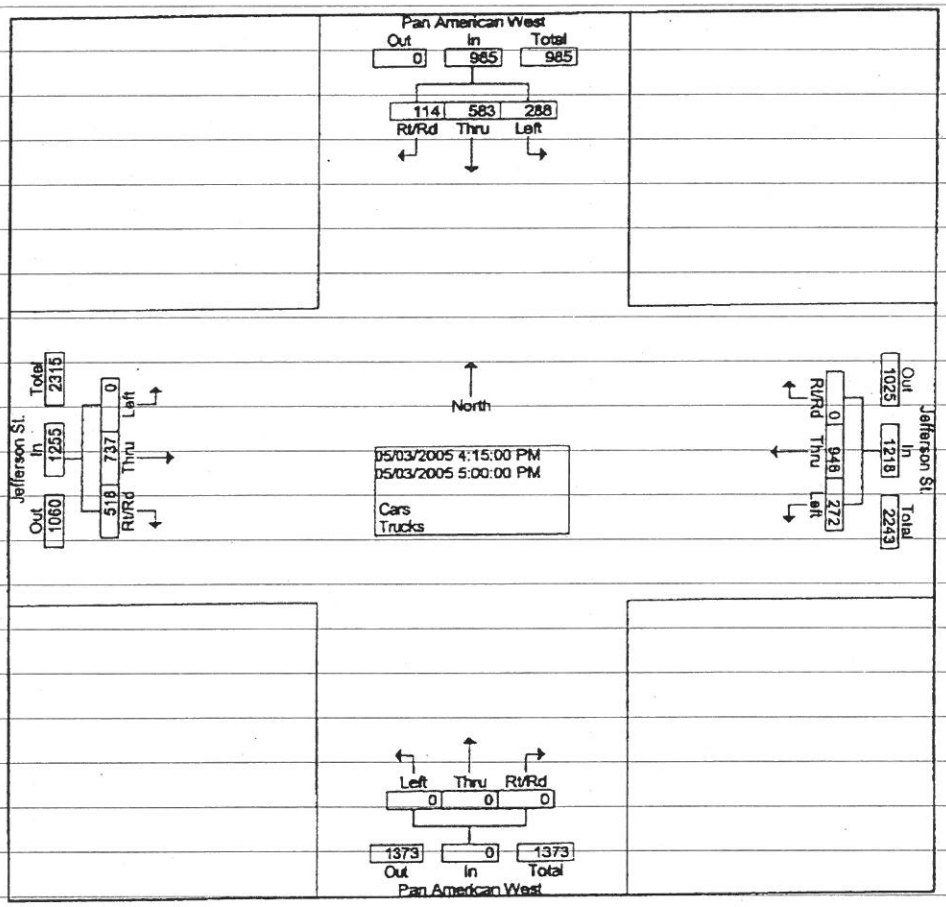
	Pan American West From North					Jefferson St. From East					Pan American West From South					Jefferson St. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 11:00 to 13:45 - Peak 1 of 1																					
Intersection	12:15																				
Volume	215	245	95	58	613	352	1287	0	0	1639	0	0	0	0	0	0	615	381	30	1026	3278
Percent	35.1	40.0	15.5	9.5		21.5	78.5	0.0	0.0		0.0	0.0	0.0	0.0		0.0	59.9	37.1	2.9		
Volume	215	245	95	58	613	352	1287	0	0	1639	0	0	0	0	0	0	615	381	30	1026	3278
Volume	82	89	16	12	179	95	323	0	0	418	0	0	0	0	0	0	171	89	14	274	871
Peak Factor																					0.941
High Int.	13:00					12:15										13:00					
Volume	82	89	16	12	179	94	337	0	0	431	0	0	0	0	0	0	171	89	14	274	
Peak Factor					0.856					0.951										0.936	



Mid-Region Council of Governments
Intersection Turning Movement Analysis

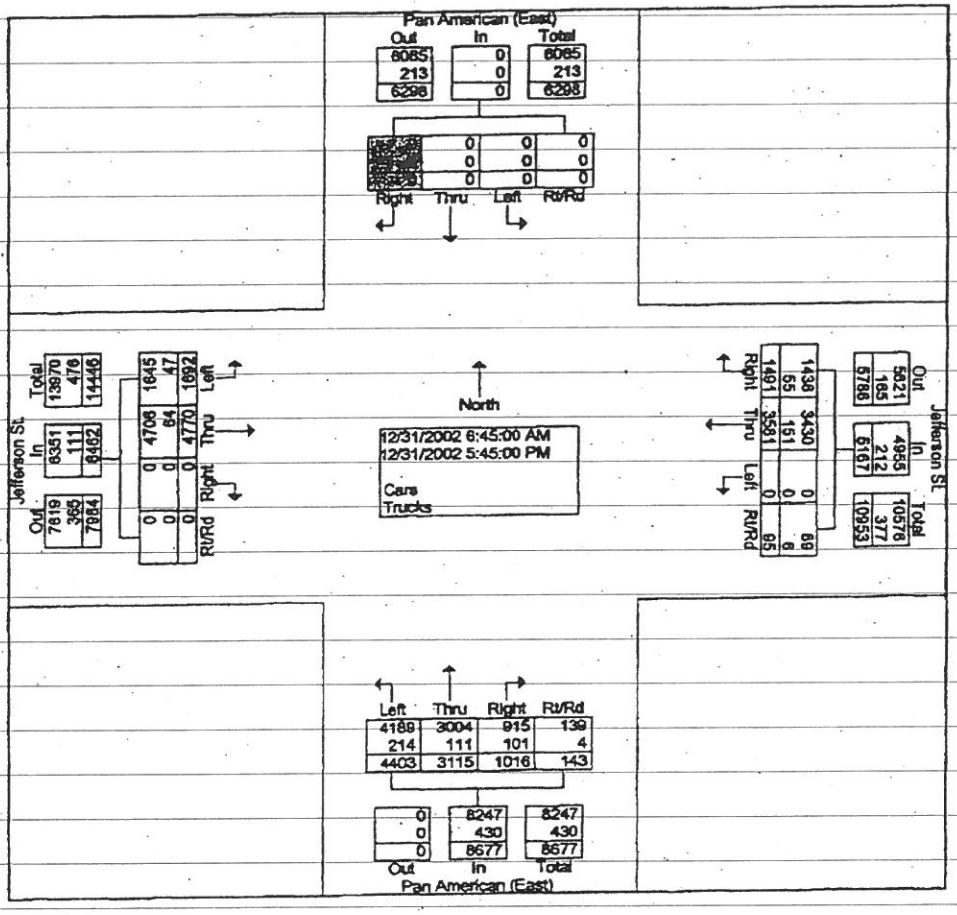
File Name : Jefferson St. and Pan American West
Site Code : 00025239
Start Date : 05/03/2005
Page No : 5

	Pan American West From North					Jefferson St. From East					Pan American West From South					Jefferson St. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 15:00 to 17:45 - Peak 1 of 1																					
Intersection	16:15																				
Volume	288	583	62	52	985	272	946	0	0	1218	0	0	0	0	0	0	737	503	15	1255	3458
Percent	29.2	59.2	6.3	5.3		22.3	77.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	58.7	40.1	1.2		
Volume	288	583	62	52	985	272	946	0	0	1218	0	0	0	0	0	0	737	503	15	1255	3458
Volume	74	150	12	18	254	79	227	0	0	306	0	0	0	0	0	0	182	130	3	315	875
Peak Factor																					0.988
High Int.	16:30					16:45										17:00					
Volume	74	150	12	18	254	85	253	0	0	318	0	0	0	0	0	0	215	113	5	333	
Peak Factor					0.969					0.958										0.942	



Mid-Region Council of Governments
Intersection Turning Movement Analysis

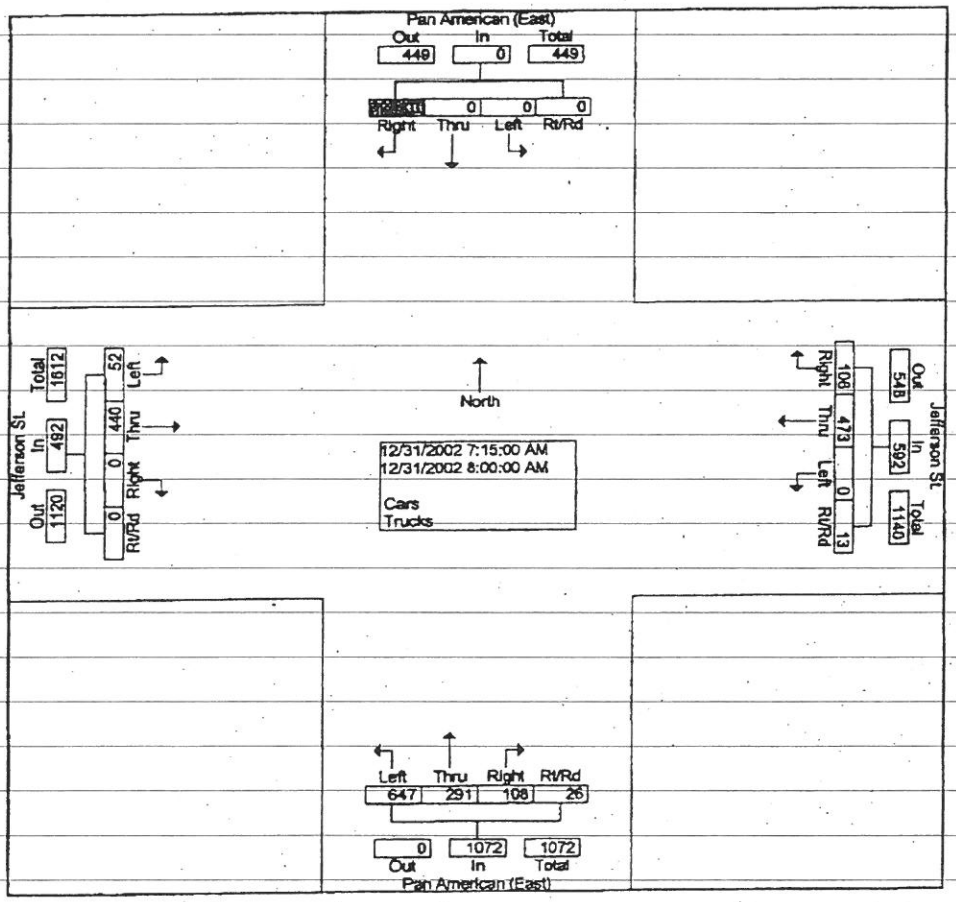
File Name : Jefferson St. and Pan American (East)
Site Code : 00025240
Start Date : 12/31/2002
Page No : 2



Mid-Region Council of Governments
Intersection Turning Movement Analysis

File Name : Jefferson St. and Pan American (East)
Site Code : 00025240
Start Date : 12/31/2002
Page No : 4

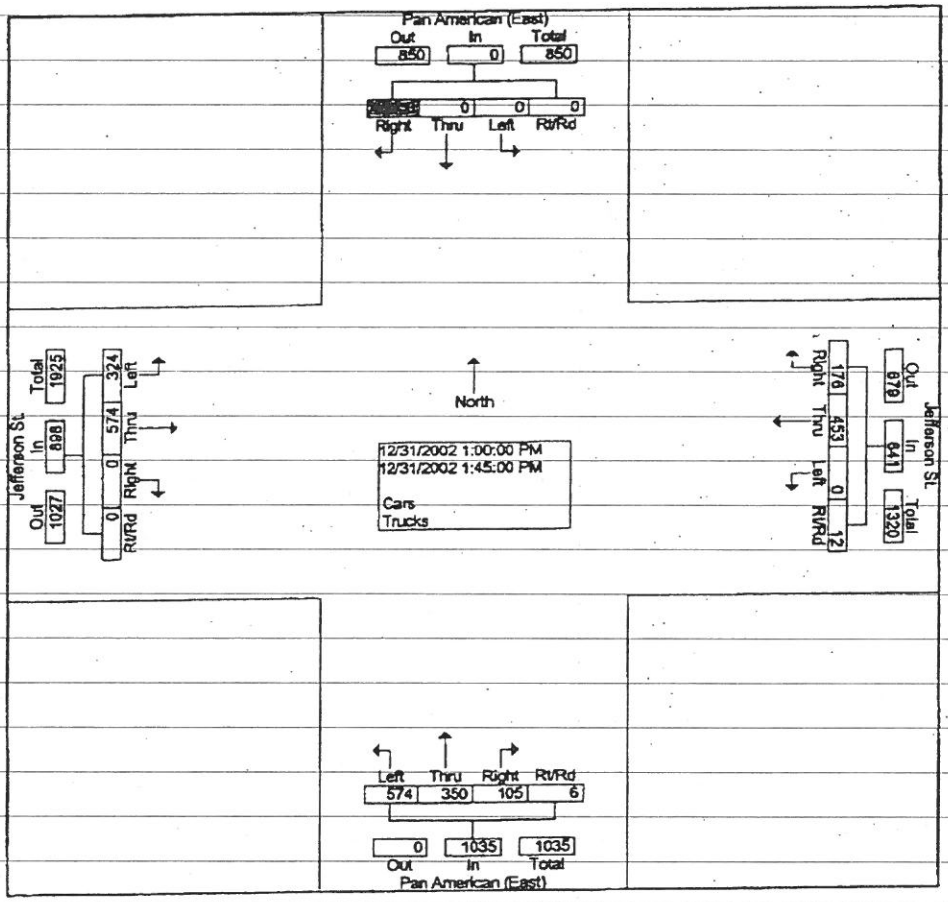
	Pan American (East) From North					Jefferson St. From East					Pan American (East) From South					Jefferson St. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 06:45 to 09:45 - Peak 1 of 1																					
Intersection	07:15																				
Volume	0	0	0	0	0	0	473	106	13	592	647	291	108	26	1072	52	440	0	0	492	2156
Percent	0.0	0.0	0.0	0.0		0.0	79.9	17.9	2.2		60.4	27.1	10.1	2.4		10.6	89.4	0.0	0.0		
Volume	0	0	0	0	0	0	473	106	13	592	647	291	108	26	1072	52	440	0	0	492	2156
Volume	0	0	0	0	0	0	162	39	3	204	176	84	32	8	300	15	133	0	0	148	852
Peak Factor																					0.827
High Int.	6:30:00 AM					07:45					07:30					07:45					
Volume	0	0	0	0	0	0	162	39	3	204	206	71	26	4	309	15	133	0	0	148	
Peak Factor										0.725					0.867					0.831	



Mid-Region Council of Governments
Intersection Turning Movement Analysis

File Name : Jefferson St. and Pan American (East)
Site Code : 00025240
Start Date : 12/31/2002
Page No : 5

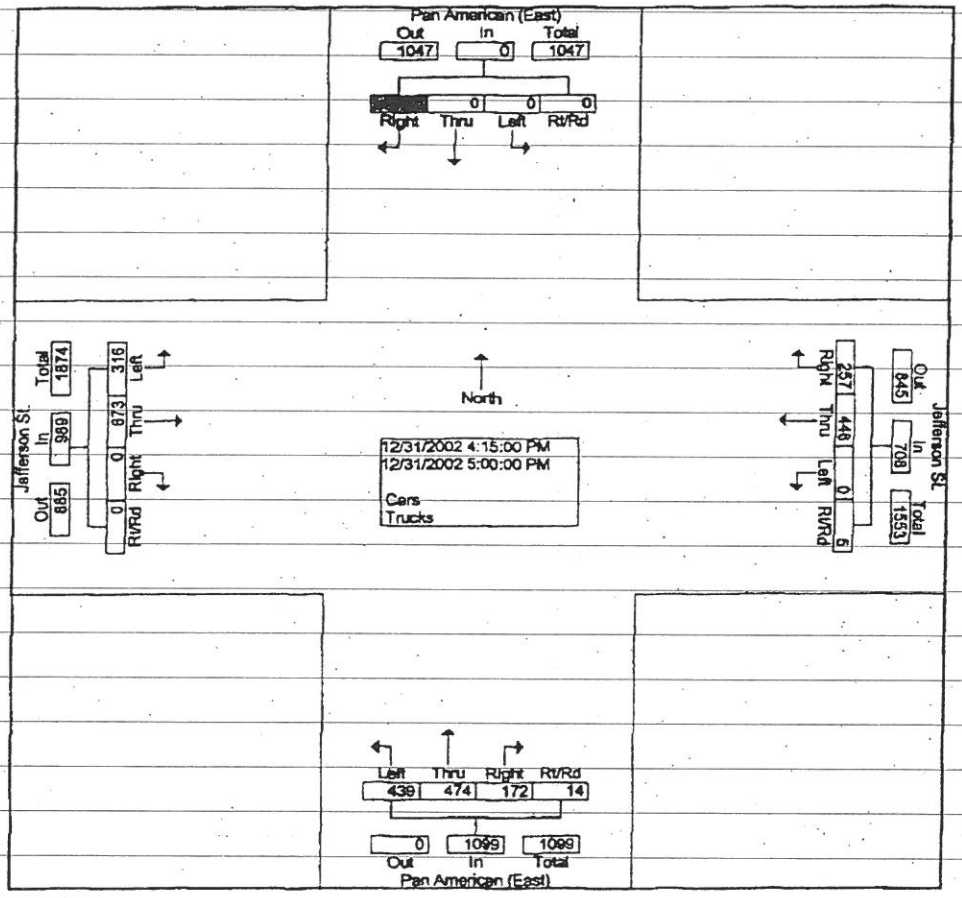
	Pan American (East) From North					Jefferson St. From East					Pan American (East) From South					Jefferson St. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 10:00 to 13:45 - Peak 1 of 1																					
Intersection	13:00																				
Volume	0	0	0	0	0	0	453	176	12	641	574	350	105	6	1035	324	574	0	0	898	2574
Percent	0.0	0.0	0.0	0.0		0.0	70.7	27.5	1.9		55.5	33.8	10.1	0.6		36.1	63.9	0.0	0.0		
Volume	0	0	0	0	0	0	453	176	12	641	574	350	105	6	1035	324	574	0	0	898	2574
Volume	0	0	0	0	0	0	136	58	1	195	149	98	33	3	283	80	164	0	0	244	722
Peak Factor																					0.891
High Int.						13:45					13:45					13:45					
Volume	0	0	0	0	0	0	136	58	1	195	149	98	33	3	283	80	164	0	0	244	
Peak Factor										0.822					0.914					0.920	



Mid-Region Council of Governments
Intersection Turning Movement Analysis

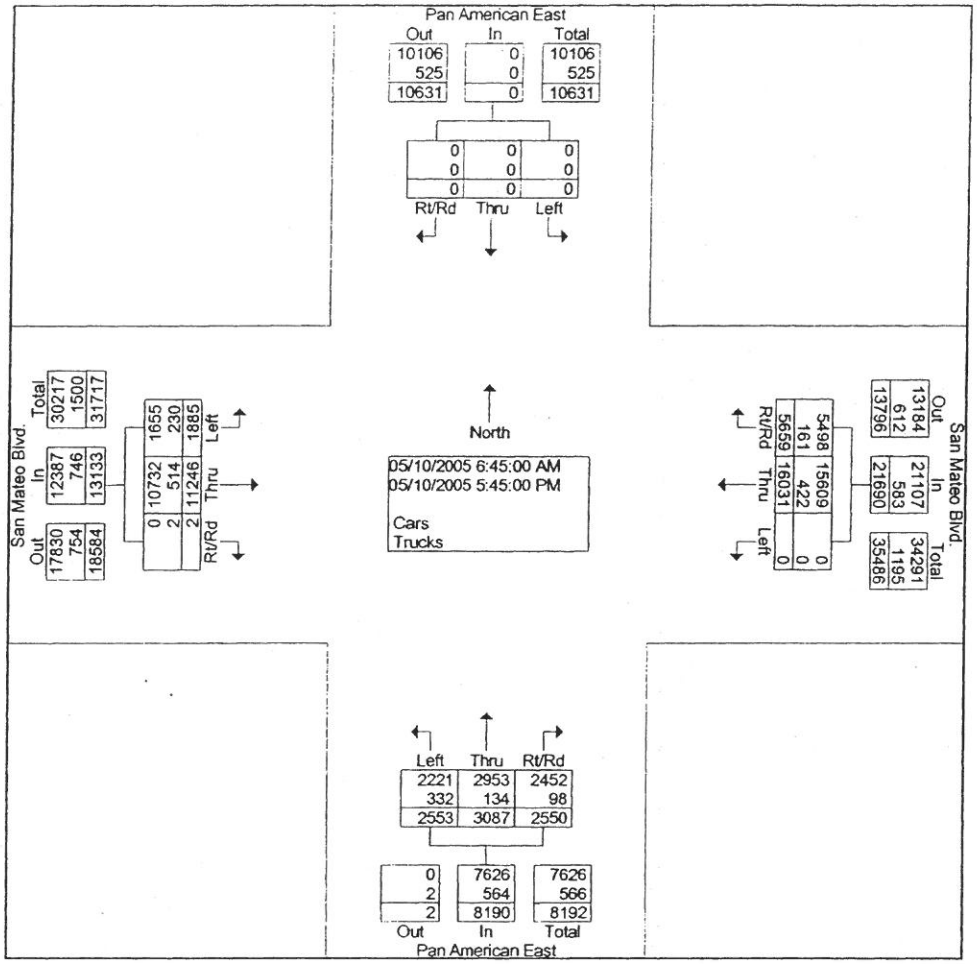
File Name : Jefferson St. and Pan American (East)
Site Code : 00025240
Start Date : 12/31/2002
Page No : 6

	Pan American (East) From North					Jefferson St. From East					Pan American (East) From South					Jefferson St. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 14:00 to 17:45 - Peak 1 of 1																					
Intersection	16:15																				
Volume	0	0	0	0	0	0	446	257	5	708	439	474	172	14	1099	316	673	0	0	989	2796
Percent	0.0	0.0	0.0	0.0		0.0	63.0	36.3	0.7		39.9	43.1	15.7	1.3		32.0	68.0	0.0	0.0		
Volume	0	0	0	0	0	0	446	257	5	708	439	474	172	14	1099	316	673	0	0	989	2796
Volume	0	0	0	0	0	0	118	68	0	186	95	132	28	2	257	104	191	0	0	295	738
Peak Factor																					0.947
High Int.						17:00					16:15					17:00					
Volume	0	0	0	0	0	0	118	68	0	186	129	104	49	6	288	104	191	0	0	295	
Peak Factor									0.952						0.954					0.838	



Mid-Region Council of Governments
IntersectionTurning Movement Analysis

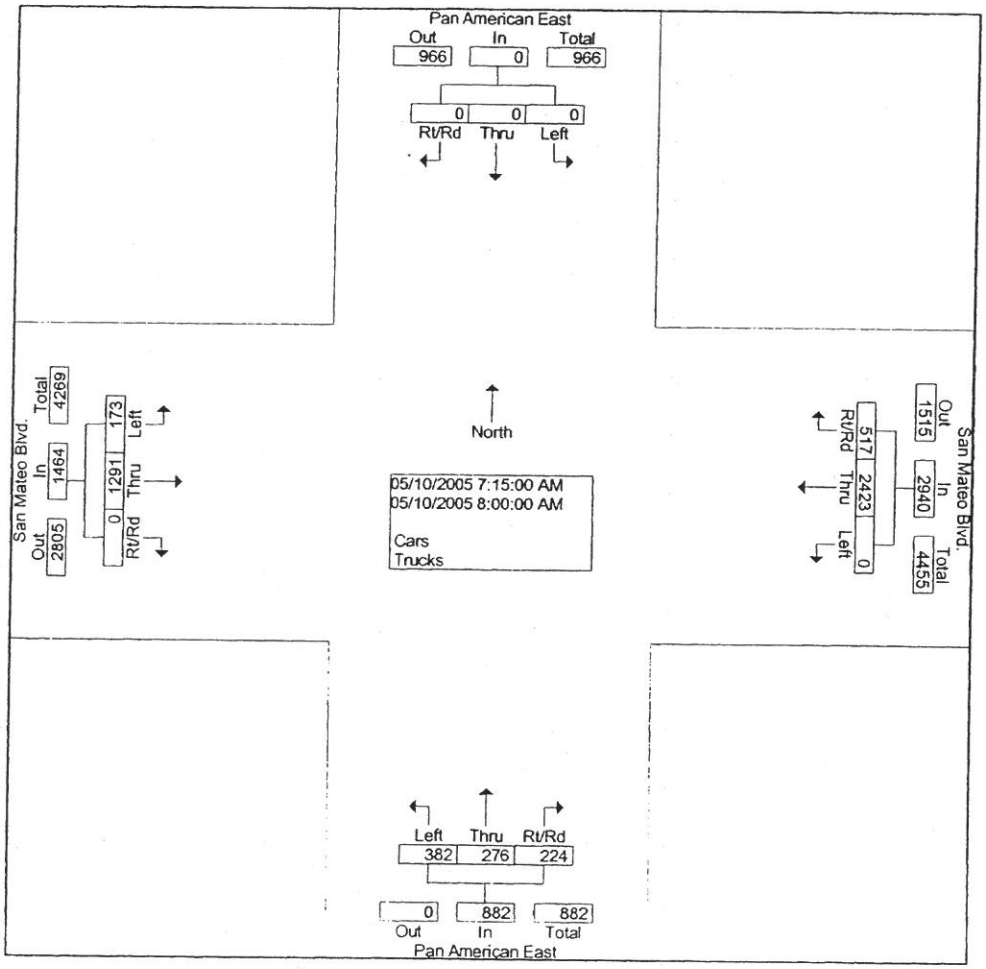
File Name : San Mateo Blvd. and Pan American East
Site Code : 00025375
Start Date : 05/10/2005
Page No : 2



Mid-Region Council of Governments
IntersectionTurning Movement Analysis

File Name : San Mateo Blvd. and Pan American East
Site Code : 00025375
Start Date : 05/10/2005
Page No : 3

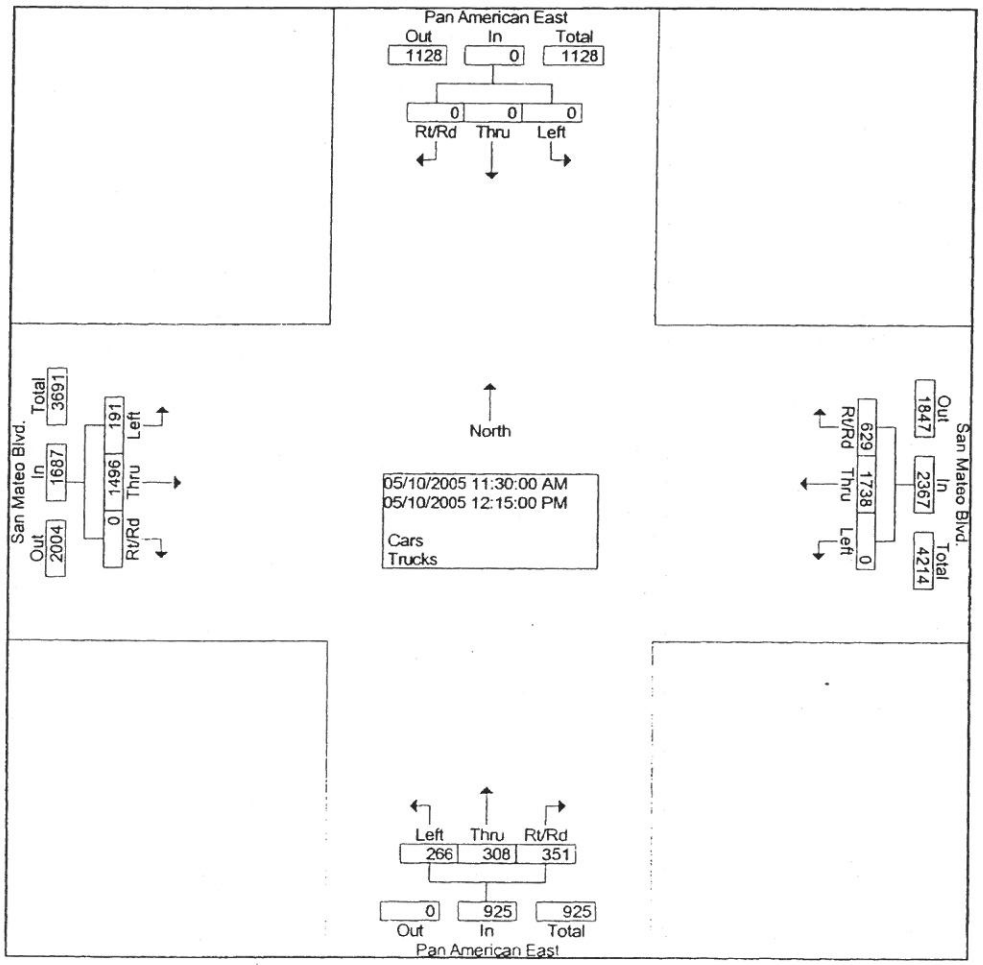
	Pan American East From North					San Mateo Blvd. From East					Pan American East From South					San Mateo Blvd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 06:45 to 09:30 - Peak 1 of 1																					
Intersection	07:15																				
Volume	0	0	0	0	0	0	2423	460	57	2940	382	276	135	89	882	173	1291	0	0	1464	5286
Percent	0.0	0.0	0.0	0.0		0.0	82.4	15.6	1.9		43.3	31.3	15.3	10.1		11.8	88.2	0.0	0.0		
Volume	0	0	0	0	0	0	2423	460	57	2940	382	276	135	89	882	173	1291	0	0	1464	5286
Volume	0	0	0	0	0	0	544	103	20	667	113	87	41	21	262	51	413	0	0	464	1393
Peak Factor																					0.949
High Int.	6:30:00 AM					07:15					07:45					07:45					
Volume	0	0	0	0	0	0	711	129	15	855	113	87	41	21	262	51	413	0	0	464	
Peak Factor										0.860					0.842					0.789	



Mid-Region Council of Governments
IntersectionTurning Movement Analysis

File Name : San Mateo Blvd. and Pan American East
Site Code : 00025375
Start Date : 05/10/2005
Page No : 4

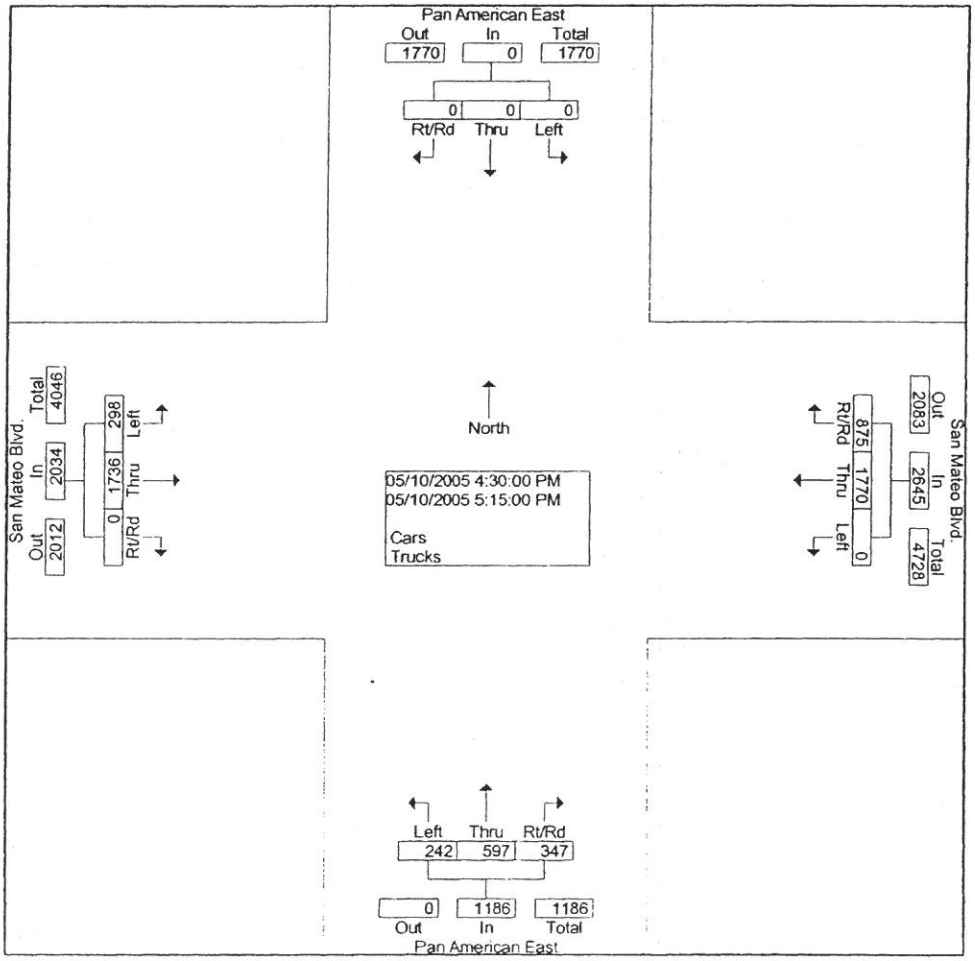
	Pan American East From North					San Mateo Blvd. From East					Pan American East From South					San Mateo Blvd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 11:00 to 13:45 - Peak 1 of 1																					
Intersection	11:30																				
Volume	0	0	0	0	0	0	1738	592	37	2367	266	308	253	98	925	191	1496	0	0	1687	4979
Percent	0.0	0.0	0.0	0.0		0.0	73.4	25.0	1.6		28.8	33.3	27.4	10.6		11.3	88.7	0.0	0.0		
Volume	0	0	0	0	0	0	1738	592	37	2367	266	308	253	98	925	191	1496	0	0	1687	4979
Volume	0	0	0	0	0	0	465	129	9	603	68	75	72	24	239	57	380	0	0	437	1279
Peak Factor																					0.973
High Int.						11:30					12:00					12:00					
Volume	0	0	0	0	0	0	465	129	9	603	67	88	77	24	256	53	385	0	0	438	
Peak Factor										0.981					0.903					0.963	



Mid-Region Council of Governments
IntersectionTurning Movement Analysis

File Name : San Mateo Blvd. and Pan American East
Site Code : 00025375
Start Date : 05/10/2005
Page No : 5

	Pan American East From North					San Mateo Blvd. From East					Pan American East From South					San Mateo Blvd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 15:00 to 17:45 - Peak 1 of 1																					
Intersection	16:30																				
Volume	0	0	0	0	0	0	1770	823	52	2645	242	597	286	61	1186	298	1736	0	0	2034	5865
Percent	0.0	0.0	0.0	0.0		0.0	66.9	31.1	2.0		20.4	50.3	24.1	5.1		14.7	85.3	0.0	0.0		
Volume	0	0	0	0	0	0	1770	823	52	2645	242	597	286	61	1186	298	1736	0	0	2034	5865
Volume	0	0	0	0	0	0	473	219	10	702	51	158	76	11	296	66	432	0	0	498	1496
Peak Factor																					0.980
High Int.						17:00					17:15					16:45					
Volume	0	0	0	0	0	0	473	219	10	702	59	148	88	10	305	75	456	0	0	531	
Peak Factor										0.942					0.972					0.958	



Mid-Region Council of Governments
IntersectionTurning Movement Analysis

File Name : Osuna Rd. and Pan American West
Site Code : 00025374
Start Date : 05/05/2005
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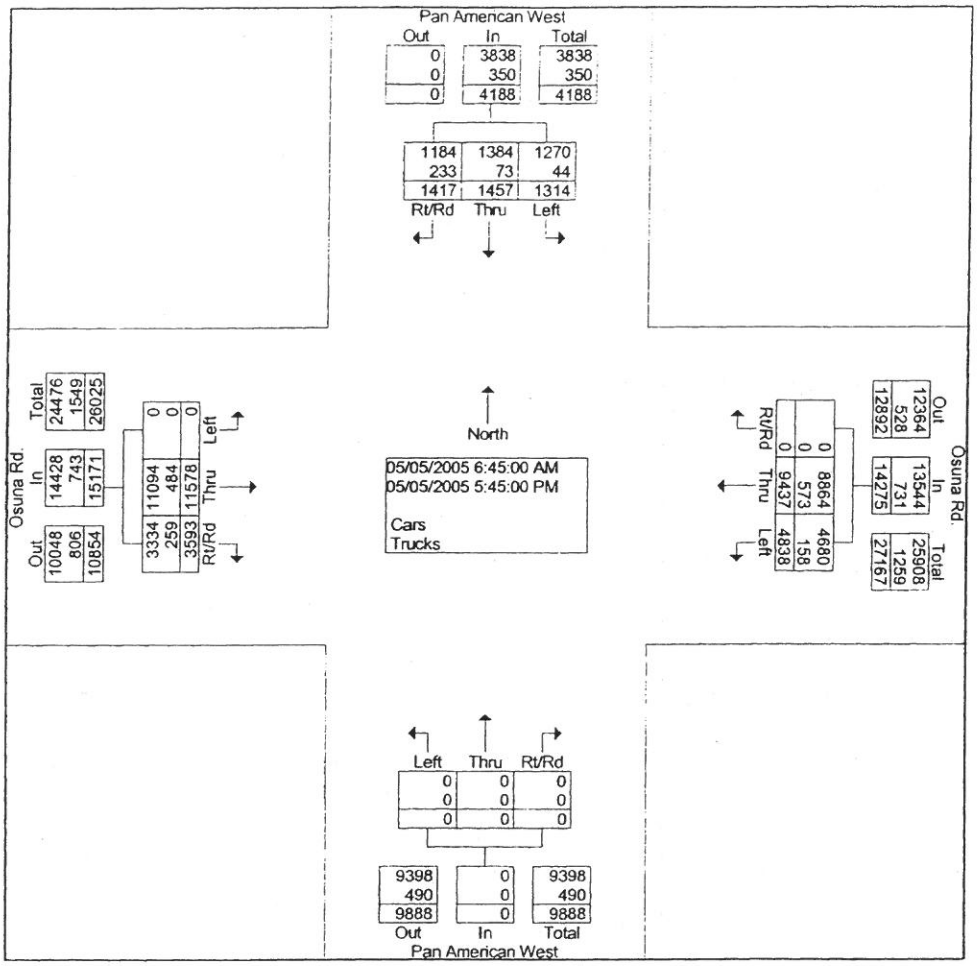
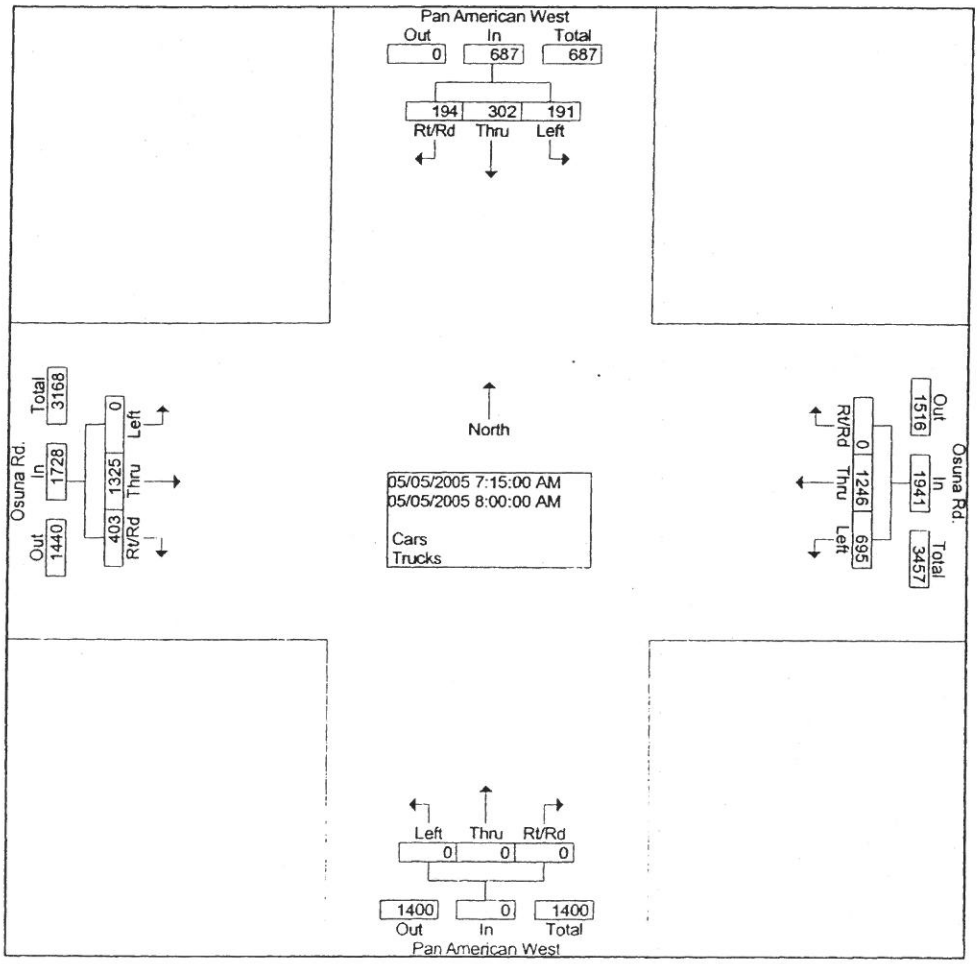


Mid-Region Council of Governments
IntersectionTurning Movement Analysis

File Name : Osuna Rd. and Pan American West
Site Code : 00025374
Start Date : 05/05/2005
Page No : 3

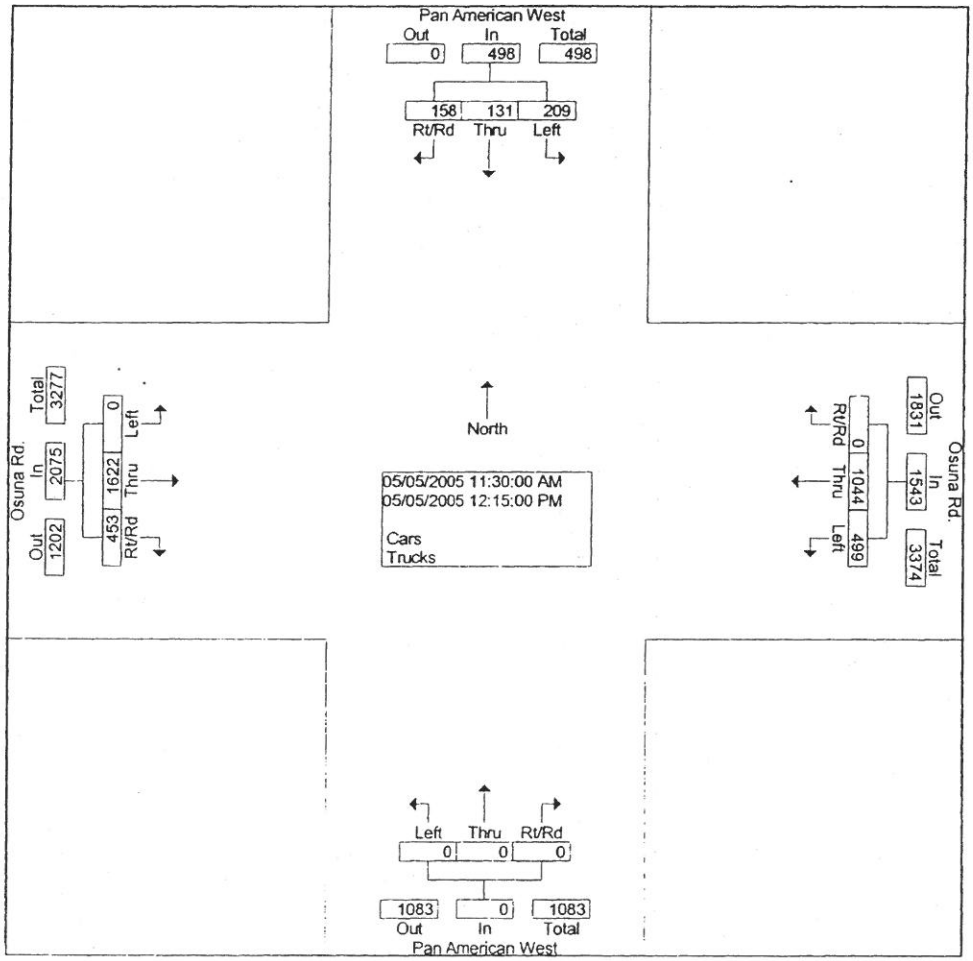
	Pan American West From North					Osuna Rd. From East					Pan American West From South					Osuna Rd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 06:45 to 09:30 - Peak 1 of 1																					
Intersection	07:15																				
Volume	191	302	140	54	687	695	1246	0	0	1941	0	0	0	0	0	0	1325	349	54	1728	4356
Percent	27.8	44.0	20.4	7.9		35.8	64.2	0.0	0.0		0.0	0.0	0.0	0.0		0.0	76.7	20.2	3.1		
Volume	191	302	140	54	687	695	1246	0	0	1941	0	0	0	0	0	0	1325	349	54	1728	4356
Volume	45	90	45	16	196	192	349	0	0	541	0	0	0	0	0	0	384	121	17	522	1259
Peak Factor																					0.865
High Int.	07:45					07:30					6:30:00 AM					07:30					
Volume	52	101	39	15	207	192	349	0	0	541	0	0	0	0	0	0	384	121	17	522	
Peak Factor					0.830					0.897										0.828	



Mid-Region Council of Governments
IntersectionTurning Movement Analysis

File Name : Osuna Rd. and Pan American West
Site Code : 00025374
Start Date : 05/05/2005
Page No : 4

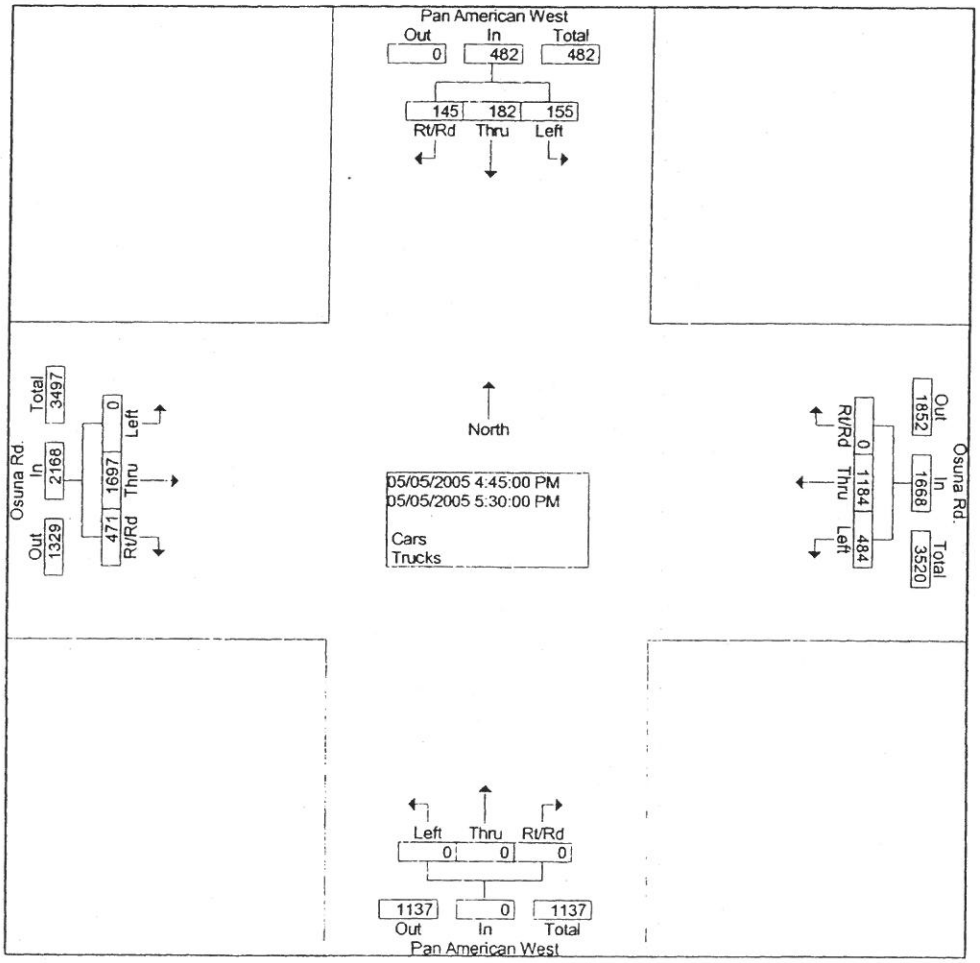
	Pan American West From North					Osuna Rd From East					Pan American West From South					Osuna Rd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 11:00 to 13:45 - Peak 1 of 1																					
Intersection	11:30																				
Volume	209	131	94	64	498	499	1044	0	0	1543	0	0	0	0	0	0	1622	433	20	2075	4116
Percent	42.0	26.3	18.9	12.9		32.3	67.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	78.2	20.9	1.0		
Volume	209	131	94	64	498	499	1044	0	0	1543	0	0	0	0	0	0	1622	433	20	2075	4116
Volume	56	29	26	17	128	122	286	0	0	408	0	0	0	0	0	0	446	100	5	551	1087
Peak Factor																					0.947
High Int.	11:45					12:15										12:00					
Volume	49	34	29	18	130	131	282	0	0	413	0	0	0	0	0	0	446	100	5	551	
Peak Factor					0.958					0.934										0.941	



Mid-Region Council of Governments
IntersectionTurning Movement Analysis

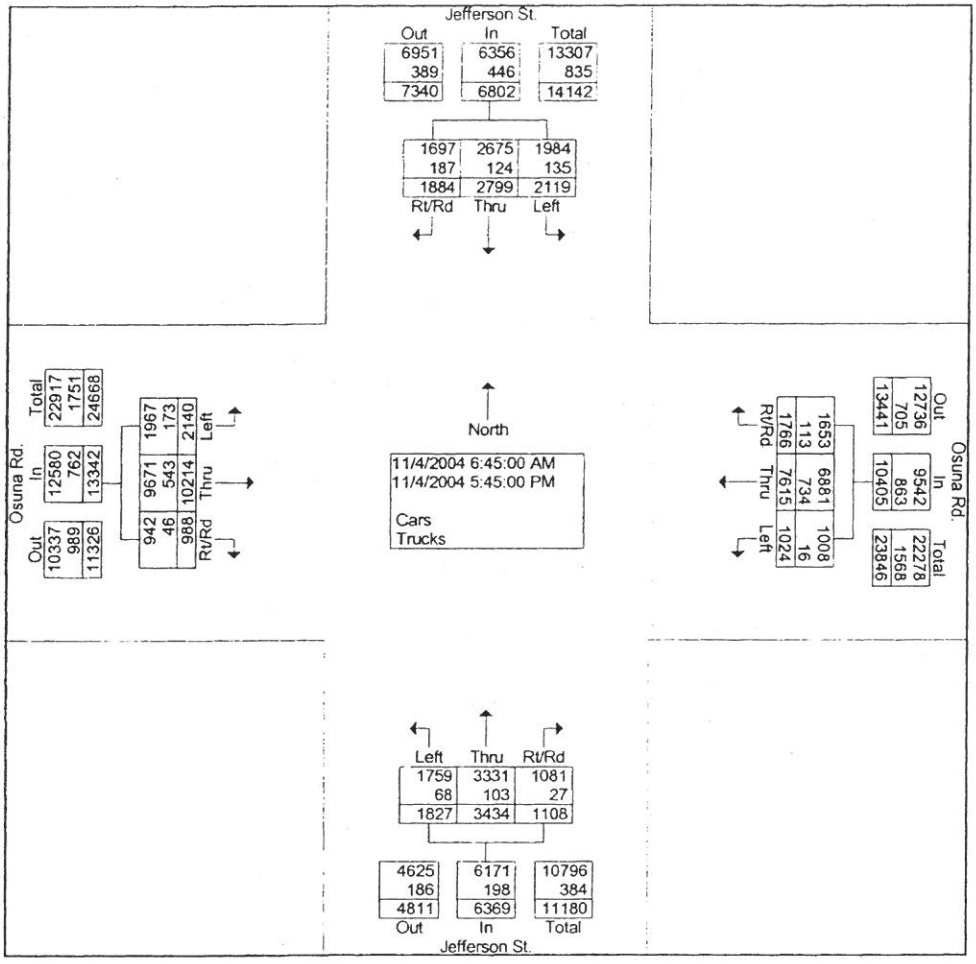
File Name : Osuna Rd. and Pan American West
Site Code : 00025374
Start Date : 05/05/2005
Page No : 5

	Pan American West From North					Osuna Rd From East					Pan American West From South					Osuna Rd From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 15:00 to 17:45 - Peak 1 of 1																					
Intersection	16:45																				
Volume	155	182	80	65	482	484	1184	0	0	1668	0	0	0	0	0	0	1697	450	21	2168	4318
Percent	32.2	37.8	16.6	13.5		29.0	71.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	78.3	20.8	1.0		
Volume	155	182	80	65	482	484	1184	0	0	1668	0	0	0	0	0	0	1697	450	21	2168	4318
Volume	45	45	14	19	123	130	250	0	0	380	0	0	0	0	0	0	515	125	5	645	1148
Peak Factor																					0.940
High Int.	16:45					17:30										17:00					
Volume	37	58	26	20	141	124	344	0	0	468	0	0	0	0	0	0	515	125	5	645	
Peak Factor					0.855					0.891										0.840	



Mid-Region Council of Governments
Intersection Turning Movement Analysis

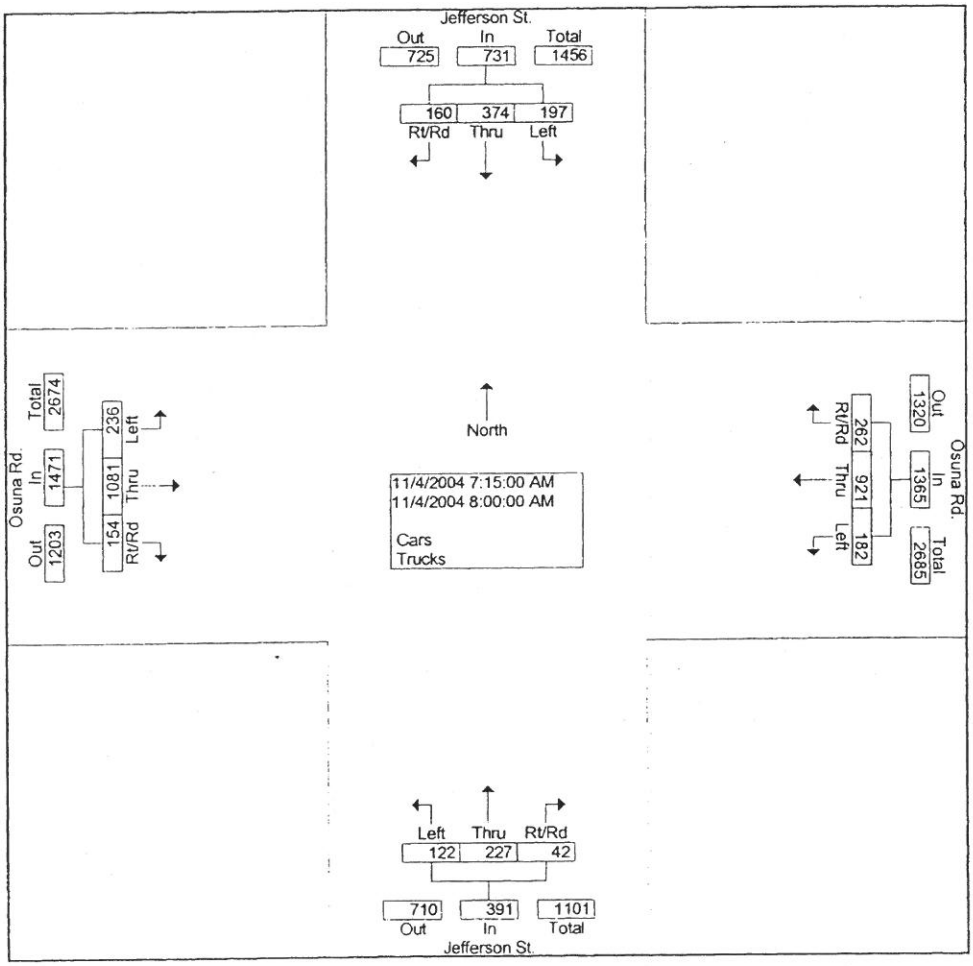
File Name : Osuna Rd. and Jefferson St.
Site Code : 00025373
Start Date : 11/04/2004
Page No : 2



Mid-Region Council of Governments
Intersection Turning Movement Analysis

File Name : Osuna Rd. and Jefferson St.
Site Code : 00025373
Start Date : 11/04/2004
Page No : 3

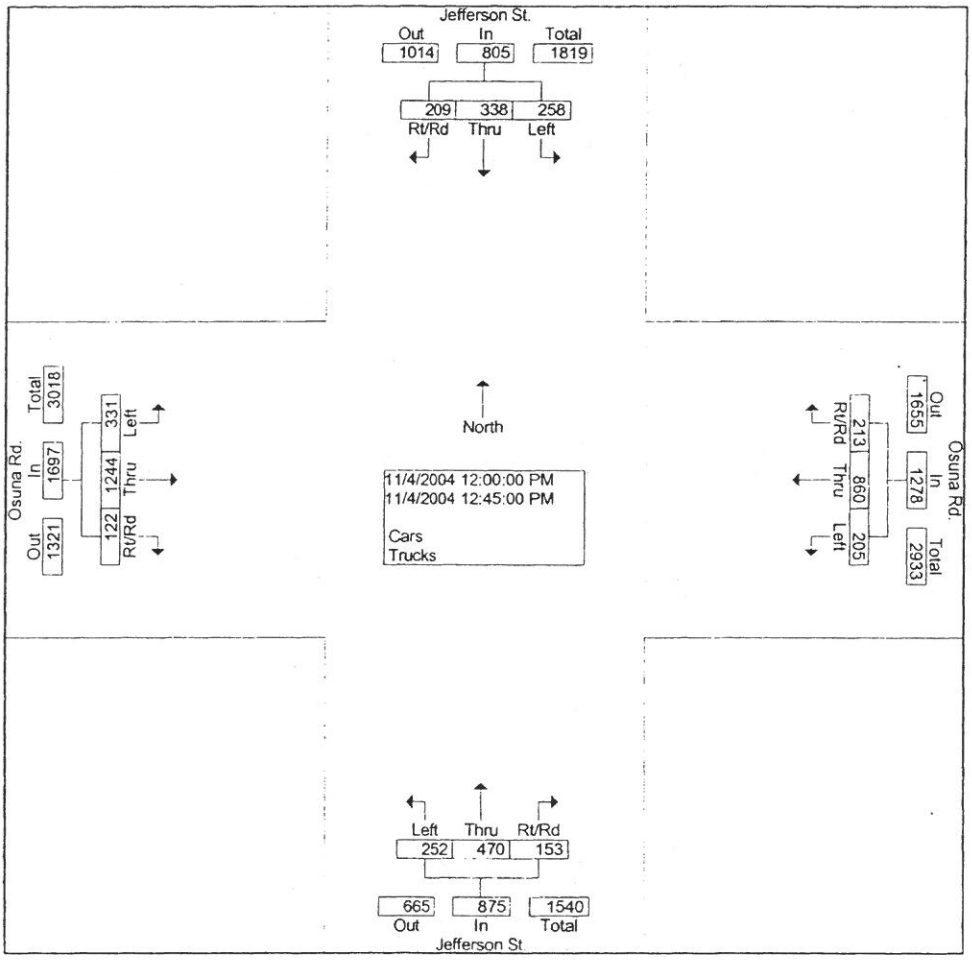
	Jefferson St. From North					Osuna Rd. From East					Jefferson St. From South					Osuna Rd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 06:45 to 09:30 - Peak 1 of 1																					
Intersection	07:15																				
Volume	197	374	157	3	731	182	921	251	11	1365	122	227	30	12	391	236	1081	147	7	1471	3958
Percent	26.9	51.2	21.5	0.4		13.3	67.5	18.4	0.8		31.2	58.1	7.7	3.1		16.0	73.5	10.0	0.5		
Volume	197	374	157	3	731	182	921	251	11	1365	122	227	30	12	391	236	1081	147	7	1471	3958
Volume	58	105	47	1	211	53	264	74	0	391	34	61	9	4	108	91	285	41	1	418	1128
Peak Factor																					0.877
High Int.	07:45					07:45					07:45					07:45					
Volume	58	105	47	1	211	53	264	74	0	391	34	61	9	4	108	91	285	41	1	418	
Peak Factor					0.866					0.873					0.905					0.880	



Mid-Region Council of Governments
Intersection Turning Movement Analysis

File Name : Osuna Rd. and Jefferson St.
Site Code : 00025373
Start Date : 11/04/2004
Page No : 4

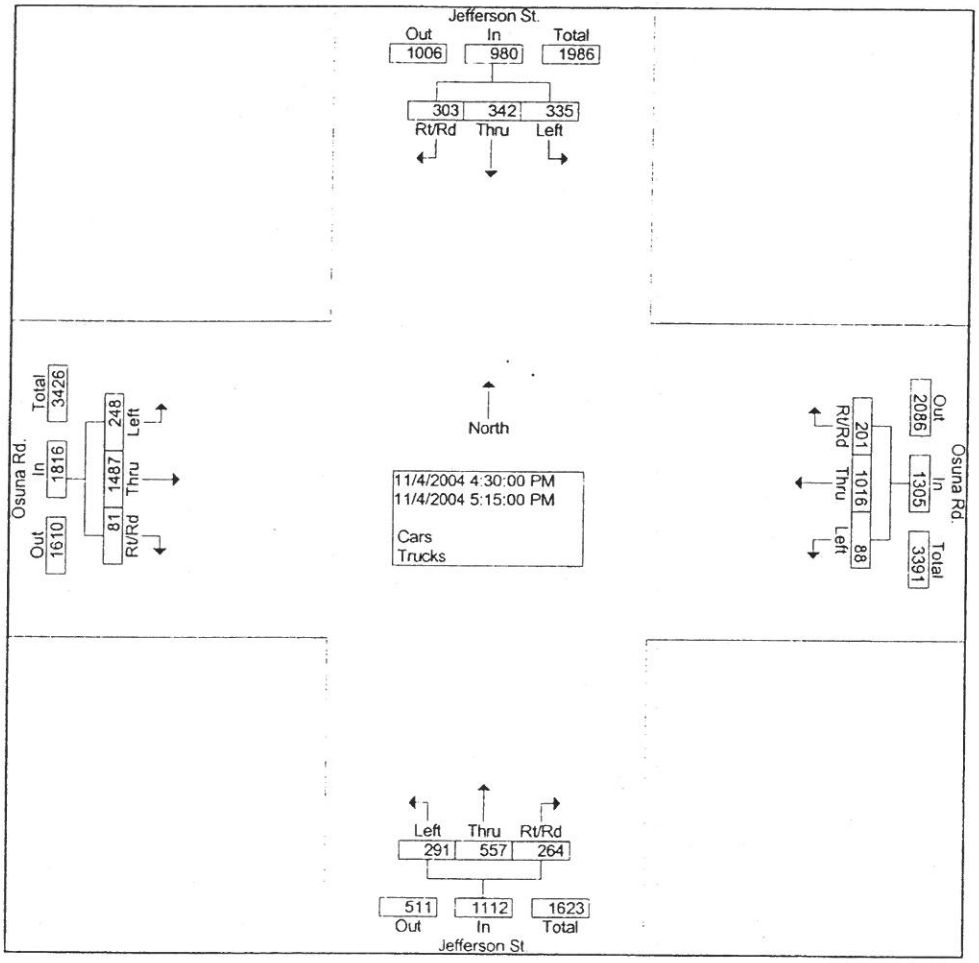
	Jefferson St. From North					Osuna Rd. From East					Jefferson St. From South					Osuna Rd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 11:00 to 13:45 - Peak 1 of 1																					
Intersection	12:00																				
Volume	258	338	206	3	805	205	860	206	7	1278	252	470	126	27	875	331	1244	118	4	1697	4655
Percent	32.0	42.0	25.6	0.4		16.0	67.3	16.1	0.5		28.8	53.7	14.4	3.1		19.5	73.3	7.0	0.2		
Volume	258	338	206	3	805	205	860	206	7	1278	252	470	126	27	875	331	1244	118	4	1697	4655
Volume	66	84	52	0	202	47	225	44	5	321	68	132	47	3	250	85	317	30	0	432	1205
Peak Factor																					0.966
High Int.	12:15					12:45					12:30					12:30					
Volume	67	79	56	2	204	49	223	66	0	338	68	132	47	3	250	85	317	30	0	432	
Peak Factor					0.987					0.945					0.875					0.982	



Mid-Region Council of Governments
Intersection Turning Movement Analysis

File Name : Osuna Rd. and Jefferson St.
Site Code : 00025373
Start Date : 11/04/2004
Page No : 5

	Jefferson St. From North					Osuna Rd. From East					Jefferson St. From South					Osuna Rd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 15:00 to 17:45 - Peak 1 of 1																					
Intersection	16:30																				
Volume	335	342	297	6	980	88	1016	176	25	1305	291	557	219	45	1112	248	1487	80	1	1816	5213
Percent	34.2	34.9	30.3	0.6		6.7	77.9	13.5	1.9		26.2	50.1	19.7	4.0		13.7	81.9	4.4	0.1		
Volume	335	342	297	6	980	88	1016	176	25	1305	291	557	219	45	1112	248	1487	80	1	1816	5213
Volume	89	115	104	1	309	29	268	55	6	358	72	142	69	14	297	80	382	13	0	475	1439
Peak Factor																					0.906
High Int.	17:00					17:00					17:15					16:30					
Volume	89	115	104	1	309	29	268	55	6	358	88	158	52	10	308	71	399	15	0	485	
Peak Factor					0.793					0.911					0.903					0.936	



Traffic Count Data Sheet

Year Counts Taken: **2006**

E-W Street **Presidential St**
N-S Street: **Jefferson St**

Speed Limit (Presidential St)= **25** MPH
Speed Limit (Jefferson St)= **35** MPH
Date of Count: 9/20/06

Begin Time	End Time	Eastbound (Presidential St)			Westbound (Presidential St)			Northbound (Jefferson St)			Southbound (Jefferson St)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	~~0~~	~~0~~	~~0~~	~~7~~	~~0~~	~~1~~	~~0~~	~~85~~	~~0~~	~~5~~	~~154~~	~~0~~
7:15 AM	7:30 AM	**0**	**0**	**0**	**17**	**0**	**4**	**0**	**129**	**2**	**4**	**192**	**0**
7:30 AM	7:45 AM	**0**	**0**	**0**	**16**	**0**	**5**	**0**	**153**	**2**	**2**	**212**	**0**
7:45 AM	8:00 AM	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**136**	**3**	**0**	**202**	**0**
8:00 AM	8:15 AM	**0**	**0**	**0**	**13**	**0**	**2**	**0**	**131**	**2**	**5**	**189**	**0**
8:15 AM	8:30 AM	~~0~~	~~0~~	~~0~~	~~17~~	~~0~~	~~2~~	~~0~~	~~98~~	~~6~~	~~4~~	~~176~~	~~0~~
8:30 AM	8:45 AM	~~0~~	~~0~~	~~0~~	~~7~~	~~0~~	~~2~~	~~0~~	~~110~~	~~0~~	~~3~~	~~144~~	~~0~~
8:45 AM	9:00 AM	~~0~~	~~0~~	~~0~~	~~10~~	~~0~~	~~6~~	~~0~~	~~108~~	~~3~~	~~3~~	~~120~~	~~0~~
AM Peak Hour Volumes		**0**	**0**	**0**	**60**	**0**	**11**	**0**	**549**	**9**	**11**	**795**	**0**
% of Total Traffic		0.0%	0.0%	0.0%	4.2%	0.0%	0.8%	0.0%	38.3%	0.6%	0.8%	55.4%	0.0%
% Directional			0.0%			4.9%			38.9%			56.2%	
AM Peak Hour Factor						***0.85***			***0.90***			***0.94***	

Begin Time	End Time	Eastbound (Presidential St)			Westbound (Presidential St)			Northbound (Jefferson St)			Southbound (Jefferson St)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	~~0~~	~~0~~	~~0~~	~~2~~	~~0~~	~~4~~	~~0~~	~~198~~	~~7~~	~~2~~	~~134~~	~~0~~
4:15 PM	4:30 PM	~~0~~	~~0~~	~~0~~	~~4~~	~~0~~	~~2~~	~~0~~	~~119~~	~~4~~	~~5~~	~~86~~	~~0~~
4:30 PM	4:45 PM	~~0~~	~~0~~	~~0~~	~~6~~	~~0~~	~~5~~	~~0~~	~~155~~	~~3~~	~~10~~	~~102~~	~~0~~
4:45 PM	5:00 PM	**0**	**0**	**0**	**10**	**0**	**10**	**0**	**166**	**4**	**24**	**119**	**0**
5:00 PM	5:15 PM	**0**	**0**	**0**	**7**	**0**	**6**	**0**	**216**	**6**	**17**	**146**	**0**
5:15 PM	5:30 PM	**0**	**0**	**0**	**8**	**0**	**4**	**0**	**185**	**6**	**12**	**154**	**0**
5:30 PM	5:45 PM	**0**	**0**	**0**	**4**	**0**	**1**	**0**	**170**	**5**	**8**	**108**	**0**
5:45 PM	6:00 PM	~~0~~	~~0~~	~~0~~	~~6~~	~~0~~	~~1~~	~~0~~	~~138~~	~~5~~	~~5~~	~~91~~	~~0~~
PM Peak Hour Volumes		**0**	**0**	**0**	**29**	**0**	**21**	**0**	**737**	**21**	**61**	**527**	**0**
% of Total Traffic		0.0%	0.0%	0.0%	2.1%	0.0%	1.5%	0.0%	52.8%	1.5%	4.4%	37.8%	0.0%
% Directional			0.0%			3.6%			54.3%			42.1%	
PM Peak Hour Factor						***0.63***			***0.85***			***0.89***	

Traffic Count Data Sheet

Year Counts Taken: **2006**

E-W Street **Jefferson Pl**
N-S Street: **Jefferson St**

Speed Limit (Jefferson Pl)= **25** MPH
Speed Limit (Jefferson St)= **35** MPH
Date of Count: **9/19/06**

Begin Time	End Time	Eastbound (Jefferson Pl)			Westbound (Jefferson Pl)			Northbound (Jefferson St)			Southbound (Jefferson St)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	~~6~~	~~0~~	~~2~~	~~1~~	~~2~~	~~0~~	~~19~~	~~110~~	~~0~~	~~3~~	~~118~~	~~19~~
7:15 AM	7:30 AM	2	0	6	0	0	2	19	151	3	2	162	18
7:30 AM	7:45 AM	4	1	3	0	2	2	15	178	1	3	193	22
7:45 AM	8:00 AM	3	1	2	0	1	1	13	172	4	0	258	24
8:00 AM	8:15 AM	1	0	3	0	1	3	12	160	1	5	153	25
8:15 AM	8:30 AM	~~1~~	~~0~~	~~5~~	~~0~~	~~1~~	~~0~~	~~9~~	~~152~~	~~0~~	~~5~~	~~168~~	~~14~~
8:30 AM	8:45 AM	~~1~~	~~0~~	~~3~~	~~2~~	~~1~~	~~1~~	~~8~~	~~137~~	~~2~~	~~1~~	~~159~~	~~7~~
8:45 AM	9:00 AM	~~4~~	~~0~~	~~4~~	~~0~~	~~1~~	~~2~~	~~8~~	~~138~~	~~1~~	~~4~~	~~155~~	~~8~~
AM Peak Hour Volumes		**10**	**2**	**14**	**0**	**4**	**8**	**59**	**661**	**9**	**10**	**766**	**89**
% of Total Traffic		0.6%	0.1%	0.9%	0.0%	0.2%	0.5%	3.6%	40.5%	0.6%	0.6%	46.9%	5.5%
% Directional			1.6%			0.7%			44.7%			53.0%	
AM Peak Hour Factor			*0.81*			*0.75*			*0.94*			*0.77*	

Begin Time	End Time	Eastbound (Jefferson Pl)			Westbound (Jefferson Pl)			Northbound (Jefferson St)			Southbound (Jefferson St)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	~~19~~	~~0~~	~~25~~	~~2~~	~~0~~	~~1~~	~~2~~	~~178~~	~~3~~	~~6~~	~~168~~	~~11~~
4:15 PM	4:30 PM	~~13~~	~~0~~	~~14~~	~~6~~	~~1~~	~~0~~	~~4~~	~~161~~	~~3~~	~~3~~	~~190~~	~~4~~
4:30 PM	4:45 PM	~~11~~	~~1~~	~~9~~	~~2~~	~~0~~	~~0~~	~~1~~	~~126~~	~~1~~	~~2~~	~~135~~	~~5~~
4:45 PM	5:00 PM	~~10~~	~~0~~	~~7~~	~~1~~	~~0~~	~~0~~	~~4~~	~~137~~	~~1~~	~~0~~	~~159~~	~~1~~
5:00 PM	5:15 PM	18	0	10	2	0	2	2	194	2	2	218	2
5:15 PM	5:30 PM	11	0	5	1	0	2	2	174	0	2	196	5
5:30 PM	5:45 PM	11	0	8	1	0	1	2	171	1	3	177	1
5:45 PM	6:00 PM	10	0	5	1	0	2	1	191	1	1	165	4
PM Peak Hour Volumes		**50**	**0**	**28**	**5**	**0**	**7**	**7**	**730**	**4**	**8**	**756**	**12**
% of Total Traffic		3.1%	0.0%	1.7%	0.3%	0.0%	0.4%	0.4%	45.4%	0.2%	0.5%	47.0%	0.7%
% Directional			4.9%			0.7%			46.1%			48.3%	
PM Peak Hour Factor			*0.70*			*0.75*			*0.94*			*0.87*	

Traffic Count Data Sheet

Year Counts Taken: **2006**

E-W Street **BMW Drive**
N-S Street: **West Frontage Rd**

Speed Limit (BMW Drive)= **25** MPH
Speed Limit (West Frontage Rd)= **45** MPH
Date of Count: 9/15/06

Begin Time	End Time	Eastbound (BMW Drive)			Westbound (BMW Drive)			Northbound (West Frontage Rd)			Southbound (West Frontage Rd)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~36~~	~~0~~
7:15 AM	7:30 AM	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**67**	**6**
7:30 AM	7:45 AM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**	**3**
7:45 AM	8:00 AM	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**122**	**5**
8:00 AM	8:15 AM	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**96**	**2**
8:15 AM	8:30 AM	~~0~~	~~0~~	~~2~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~65~~	~~5~~
8:30 AM	8:45 AM	~~0~~	~~0~~	~~4~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~40~~	~~4~~
8:45 AM	9:00 AM	~~0~~	~~0~~	~~7~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~47~~	~~11~~
AM Peak Hour Volumes		**0**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**377**	**16**
% of Total Traffic		0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	92.6%	3.9%
% Directional			3.4%			0.0%			0.0%			96.6%	
AM Peak Hour Factor			***0.70***									***0.77***	

Begin Time	End Time	Eastbound (BMW Drive)			Westbound (BMW Drive)			Northbound (West Frontage Rd)			Southbound (West Frontage Rd)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	~~0~~	~~0~~	~~8~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~117~~	~~1~~
4:15 PM	4:30 PM	~~0~~	~~0~~	~~8~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~110~~	~~5~~
4:30 PM	4:45 PM	~~0~~	~~0~~	~~14~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~50~~	~~3~~
4:45 PM	5:00 PM	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~25~~	~~0~~
5:00 PM	5:15 PM	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**178**	**3**
5:15 PM	5:30 PM	**0**	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**137**	**1**
5:30 PM	5:45 PM	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**	**0**
5:45 PM	6:00 PM	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**74**	**2**
PM Peak Hour Volumes		**0**	**0**	**55**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**481**	**6**
% of Total Traffic		0.0%	0.0%	10.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	88.7%	1.1%
% Directional			10.1%			0.0%			0.0%			89.9%	
PM Peak Hour Factor			***0.72***									***0.67***	

Intersection Data Sheet

Intersection: **Singer Blvd / Jefferson St**

Posted Speed Limit (E-W Street): 35 Date: 10/26/2005

Eastbound Approach: Singer Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	0	1	0

Length: 175'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: **Singer Blvd**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	1	1	0

Length: 165'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): 35

Northbound Approach: Jefferson St

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	1

Length: 130' 325'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **Yes**

Southbound Approach: **Jefferson St**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	1	1	0

Length: 150'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Intersection Data Sheet

Intersection: **Jefferson St / I-25 W. ramp**

Posted Speed Limit (E-W Street): 35 Date: 9/19/2006

Eastbound Approach: **Jefferson St**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
0	0	1	1	0

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: **Jefferson St**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	0

Length: 150 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): _____

Northbound Approach: **I-25 W. ramp**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
	DOESN'T EXIST			

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?

Is there a right turn slip lane that by-passes the traffic signal? **No**

Southbound Approach: **I-25 W. ramp**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	1

Length: 600 feet Length: 350 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Intersection Data Sheet

Intersection: **Jefferson St / I-25 E. ramp**

Posted Speed Limit (E-W Street): 35 Date: 9/19/2006

Eastbound Approach: Jefferson St

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	0

Length: 125 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: **Jefferson St**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
0	0	1	1	0

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): 35

Northbound Approach: I-25 E. ramp

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	1	1	0	1

Length: 275 feet Length: 325 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Southbound Approach: **I-25 E. ramp**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
	DOESN'T EXIST			

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?

Is there a right turn slip lane that by-passes the traffic signal? **Yes/No**

Intersection Data Sheet

Intersection: **San Mateo Blvd / I-25 E. ramp**

Posted Speed Limit (E-W Street): 40 Date: 9/19/2006

Eastbound Approach: San Mateo Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	3	0	0

Length: 110 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	N

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Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: San Mateo Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
0	0	1	1	1

Length: Length: 400 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): 35

Northbound Approach: I-25 E. ramp

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	1	0	1

Length: 240 feet Length: 40 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Southbound Approach: I-25 E. ramp

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
	DOES NOT EXIST			

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?

Is there a right turn slip lane that by-passes the traffic signal? **Yes/No**

Intersection Data Sheet

Intersection: **Osuna Blvd / I-25 W. ramp**

Posted Speed Limit (E-W Street): 45 Date: 9/19/2006

Eastbound Approach: Osuna Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
0	0	2	0	1

Length: Length: 70 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: Osuna Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	3	0	0

Length: 200 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): 35

Northbound Approach: I-25 W. ramp

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
	DOESN'T EXIST			

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?

Is there a right turn slip lane that by-passes the traffic signal? **Yes/No**

Southbound Approach: I-25 W. ramp

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	1

Length: 150 feet Length: 150 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Intersection Data Sheet

Intersection: **Osuna Blvd / Jefferson St**

Posted Speed Limit (E-W Street): 45 Date: 9/19/2006

Eastbound Approach: Osuna Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	2	1	0

Length: 200 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: **Osuna Blvd**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	2	0	1

Length: 175 feet Length: 300 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): 35

Northbound Approach: Jefferson St

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	1

Length: 175 feet Length: 175 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **Yes/No**

Southbound Approach: **Jefferson St**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	1	1	0

Length: 200 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **No**

Signalized Intersection Information Sheet

Intersection: **Presidential St. / Jefferson St.**

Speed Limit - E-W Street: 25 M.P.H.
Speed Limit - N-S Street: 35 M.P.H.
Type of Intersection Control: Two-Way Stop

Date: **9/18/2006**

East Bound Approach: Presidential St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	-	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

West Bound Approach: Presidential St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	1	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

North Bound Approach: Jefferson St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	2	-	1
Length	0				225 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

South Bound Approach: Jefferson St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	1	-	2	-	-
Length	150 feet				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

NOTE: Southbound left turn is mostly U turns, no pavement markings. Right turn lane is more a wide shoulder than a lane

Signalized Intersection Information Sheet

Intersection: **Jefferson Pl / Jefferson St.**

Speed Limit - E-W Street: 25 M.P.H.
Speed Limit - N-S Street: 35 M.P.H.
Type of Intersection Control: Two-Way Stop

Date: **9/19/2006**

East Bound Approach: Jefferson Pl

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	1	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

West Bound Approach: Jefferson Pl

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	1	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

North Bound Approach: Jefferson St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	1	-	1	1	-
Length	250'				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

South Bound Approach: Jefferson St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	1	-	2	-	1
Length	100'				175'

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

NOTE: No pavement markings W/B movement is out of a parking lot

Signalized Intersection Information Sheet

Intersection: **BMW Driveway / West Frontage Rd**

Speed Limit - E-W Street: UNKNOWN
Speed Limit - N-S Street: 45 M.P.H.
Type of Intersection Control: Two-Way Stop

Date: **9/15/2006**

East Bound Approach: BMW Driveway

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	-	-	1
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

West Bound Approach: BMW Driveway

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	-	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

North Bound Approach: West Frontage Rd

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	-	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

South Bound Approach: West Frontage Rd

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	1	1	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

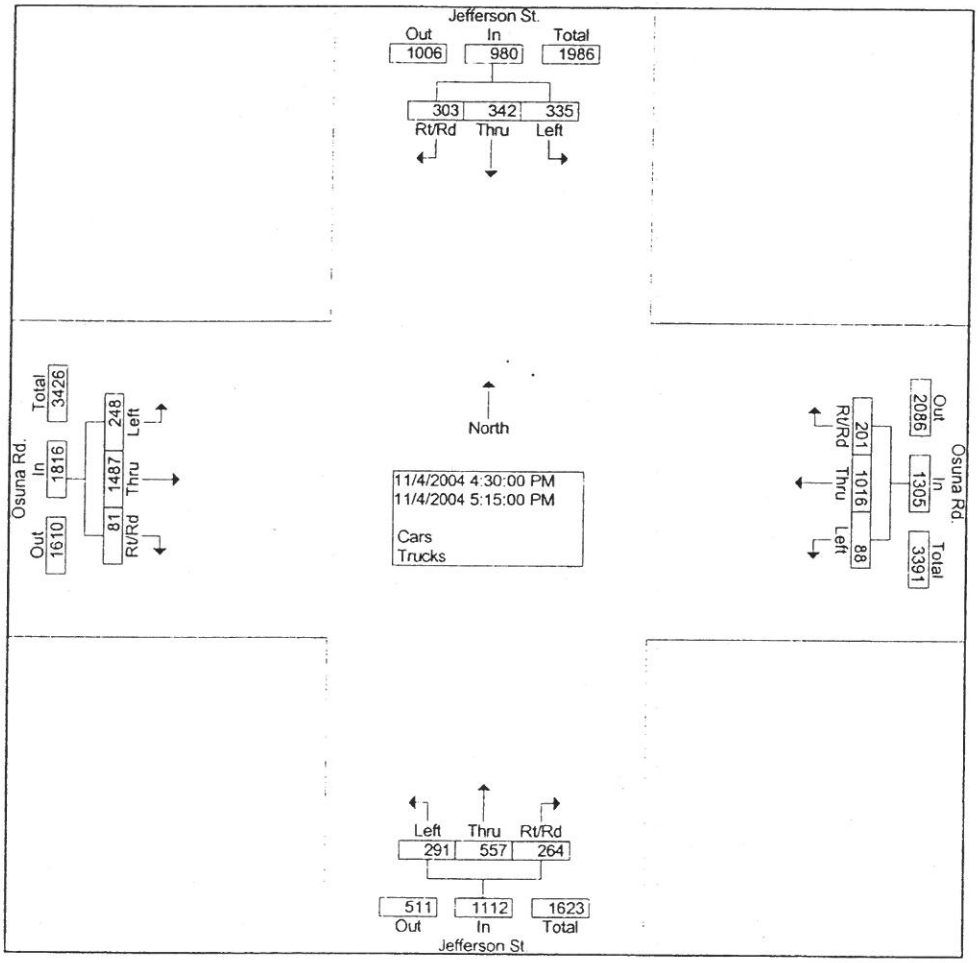
Is there a right turn slip laned that by-passes the traffic signal? NO

NOTE: West Frontage Rd is one way Southbound. There is no westbound access

Mid-Region Council of Governments
Intersection Turning Movement Analysis

File Name : Osuna Rd. and Jefferson St.
Site Code : 00025373
Start Date : 11/04/2004
Page No : 5

	Jefferson St. From North					Osuna Rd. From East					Jefferson St. From South					Osuna Rd. From West					
Start Time	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Left	Thru	Right	Rt/Rd	App. Total	Int. Total
Peak Hour From 15:00 to 17:45 - Peak 1 of 1																					
Intersection	16:30																				
Volume	335	342	297	6	980	88	1016	176	25	1305	291	557	219	45	1112	248	1487	80	1	1816	5213
Percent	34.2	34.9	30.3	0.6		6.7	77.9	13.5	1.9		26.2	50.1	19.7	4.0		13.7	81.9	4.4	0.1		
Volume	335	342	297	6	980	88	1016	176	25	1305	291	557	219	45	1112	248	1487	80	1	1816	5213
Volume	89	115	104	1	309	29	268	55	6	358	72	142	69	14	297	80	382	13	0	475	1439
Peak Factor																					0.906
High Int.	17:00					17:00					17:15					16:30					
Volume	89	115	104	1	309	29	268	55	6	358	88	158	52	10	308	71	399	15	0	485	
Peak Factor					0.793					0.911					0.903					0.936	



Traffic Count Data Sheet

Year Counts Taken: **2006**

E-W Street **Presidential St**
N-S Street: **Jefferson St**

Speed Limit (Presidential St)= **25** MPH
Speed Limit (Jefferson St)= **35** MPH
Date of Count: 9/20/06

Begin Time	End Time	Eastbound (Presidential St)			Westbound (Presidential St)			Northbound (Jefferson St)			Southbound (Jefferson St)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	~~0~~	~~0~~	~~0~~	~~7~~	~~0~~	~~1~~	~~0~~	~~85~~	~~0~~	~~5~~	~~154~~	~~0~~
7:15 AM	7:30 AM	**0**	**0**	**0**	**17**	**0**	**4**	**0**	**129**	**2**	**4**	**192**	**0**
7:30 AM	7:45 AM	**0**	**0**	**0**	**16**	**0**	**5**	**0**	**153**	**2**	**2**	**212**	**0**
7:45 AM	8:00 AM	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**136**	**3**	**0**	**202**	**0**
8:00 AM	8:15 AM	**0**	**0**	**0**	**13**	**0**	**2**	**0**	**131**	**2**	**5**	**189**	**0**
8:15 AM	8:30 AM	~~0~~	~~0~~	~~0~~	~~17~~	~~0~~	~~2~~	~~0~~	~~98~~	~~6~~	~~4~~	~~176~~	~~0~~
8:30 AM	8:45 AM	~~0~~	~~0~~	~~0~~	~~7~~	~~0~~	~~2~~	~~0~~	~~110~~	~~0~~	~~3~~	~~144~~	~~0~~
8:45 AM	9:00 AM	~~0~~	~~0~~	~~0~~	~~10~~	~~0~~	~~6~~	~~0~~	~~108~~	~~3~~	~~3~~	~~120~~	~~0~~
AM Peak Hour Volumes		**0**	**0**	**0**	**60**	**0**	**11**	**0**	**549**	**9**	**11**	**795**	**0**
% of Total Traffic		0.0%	0.0%	0.0%	4.2%	0.0%	0.8%	0.0%	38.3%	0.6%	0.8%	55.4%	0.0%
% Directional			0.0%			4.9%			38.9%			56.2%	
AM Peak Hour Factor						***0.85***			***0.90***			***0.94***	

Begin Time	End Time	Eastbound (Presidential St)			Westbound (Presidential St)			Northbound (Jefferson St)			Southbound (Jefferson St)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	~~0~~	~~0~~	~~0~~	~~2~~	~~0~~	~~4~~	~~0~~	~~198~~	~~7~~	~~2~~	~~134~~	~~0~~
4:15 PM	4:30 PM	~~0~~	~~0~~	~~0~~	~~4~~	~~0~~	~~2~~	~~0~~	~~119~~	~~4~~	~~5~~	~~86~~	~~0~~
4:30 PM	4:45 PM	~~0~~	~~0~~	~~0~~	~~6~~	~~0~~	~~5~~	~~0~~	~~155~~	~~3~~	~~10~~	~~102~~	~~0~~
4:45 PM	5:00 PM	**0**	**0**	**0**	**10**	**0**	**10**	**0**	**166**	**4**	**24**	**119**	**0**
5:00 PM	5:15 PM	**0**	**0**	**0**	**7**	**0**	**6**	**0**	**216**	**6**	**17**	**146**	**0**
5:15 PM	5:30 PM	**0**	**0**	**0**	**8**	**0**	**4**	**0**	**185**	**6**	**12**	**154**	**0**
5:30 PM	5:45 PM	**0**	**0**	**0**	**4**	**0**	**1**	**0**	**170**	**5**	**8**	**108**	**0**
5:45 PM	6:00 PM	~~0~~	~~0~~	~~0~~	~~6~~	~~0~~	~~1~~	~~0~~	~~138~~	~~5~~	~~5~~	~~91~~	~~0~~
PM Peak Hour Volumes		**0**	**0**	**0**	**29**	**0**	**21**	**0**	**737**	**21**	**61**	**527**	**0**
% of Total Traffic		0.0%	0.0%	0.0%	2.1%	0.0%	1.5%	0.0%	52.8%	1.5%	4.4%	37.8%	0.0%
% Directional			0.0%			3.6%			54.3%			42.1%	
PM Peak Hour Factor						***0.63***			***0.85***			***0.89***	

Traffic Count Data Sheet

Year Counts Taken: **2006**

E-W Street **Jefferson Pl**
N-S Street: **Jefferson St**

Speed Limit (Jefferson Pl)= **25** MPH
Speed Limit (Jefferson St)= **35** MPH
Date of Count: **9/19/06**

Begin Time	End Time	Eastbound (Jefferson Pl)			Westbound (Jefferson Pl)			Northbound (Jefferson St)			Southbound (Jefferson St)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	~~6~~	~~0~~	~~2~~	~~1~~	~~2~~	~~0~~	~~19~~	~~110~~	~~0~~	~~3~~	~~118~~	~~19~~
7:15 AM	7:30 AM	2	0	6	0	0	2	19	151	3	2	162	18
7:30 AM	7:45 AM	4	1	3	0	2	2	15	178	1	3	193	22
7:45 AM	8:00 AM	3	1	2	0	1	1	13	172	4	0	258	24
8:00 AM	8:15 AM	1	0	3	0	1	3	12	160	1	5	153	25
8:15 AM	8:30 AM	~~1~~	~~0~~	~~5~~	~~0~~	~~1~~	~~0~~	~~9~~	~~152~~	~~0~~	~~5~~	~~168~~	~~14~~
8:30 AM	8:45 AM	~~1~~	~~0~~	~~3~~	~~2~~	~~1~~	~~1~~	~~8~~	~~137~~	~~2~~	~~1~~	~~159~~	~~7~~
8:45 AM	9:00 AM	~~4~~	~~0~~	~~4~~	~~0~~	~~1~~	~~2~~	~~8~~	~~138~~	~~1~~	~~4~~	~~155~~	~~8~~
AM Peak Hour Volumes		**10**	**2**	**14**	**0**	**4**	**8**	**59**	**661**	**9**	**10**	**766**	**89**
% of Total Traffic		0.6%	0.1%	0.9%	0.0%	0.2%	0.5%	3.6%	40.5%	0.6%	0.6%	46.9%	5.5%
% Directional			1.6%			0.7%			44.7%			53.0%	
AM Peak Hour Factor			*0.81*			*0.75*			*0.94*			*0.77*	

Begin Time	End Time	Eastbound (Jefferson Pl)			Westbound (Jefferson Pl)			Northbound (Jefferson St)			Southbound (Jefferson St)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	~~19~~	~~0~~	~~25~~	~~2~~	~~0~~	~~1~~	~~2~~	~~178~~	~~3~~	~~6~~	~~168~~	~~11~~
4:15 PM	4:30 PM	~~13~~	~~0~~	~~14~~	~~6~~	~~1~~	~~0~~	~~4~~	~~161~~	~~3~~	~~3~~	~~190~~	~~4~~
4:30 PM	4:45 PM	~~11~~	~~1~~	~~9~~	~~2~~	~~0~~	~~0~~	~~1~~	~~126~~	~~1~~	~~2~~	~~135~~	~~5~~
4:45 PM	5:00 PM	~~10~~	~~0~~	~~7~~	~~1~~	~~0~~	~~0~~	~~4~~	~~137~~	~~1~~	~~0~~	~~159~~	~~1~~
5:00 PM	5:15 PM	18	0	10	2	0	2	2	194	2	2	218	2
5:15 PM	5:30 PM	11	0	5	1	0	2	2	174	0	2	196	5
5:30 PM	5:45 PM	11	0	8	1	0	1	2	171	1	3	177	1
5:45 PM	6:00 PM	10	0	5	1	0	2	1	191	1	1	165	4
PM Peak Hour Volumes		**50**	**0**	**28**	**5**	**0**	**7**	**7**	**730**	**4**	**8**	**756**	**12**
% of Total Traffic		3.1%	0.0%	1.7%	0.3%	0.0%	0.4%	0.4%	45.4%	0.2%	0.5%	47.0%	0.7%
% Directional			4.9%			0.7%			46.1%			48.3%	
PM Peak Hour Factor			*0.70*			*0.75*			*0.94*			*0.87*	

Traffic Count Data Sheet

Year Counts Taken: **2006**

E-W Street **BMW Drive**
N-S Street: **West Frontage Rd**

Speed Limit (BMW Drive)= **25** MPH
Speed Limit (West Frontage Rd)= **45** MPH
Date of Count: 9/15/06

Begin Time	End Time	Eastbound (BMW Drive)			Westbound (BMW Drive)			Northbound (West Frontage Rd)			Southbound (West Frontage Rd)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~36~~	~~0~~
7:15 AM	7:30 AM	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**67**	**6**
7:30 AM	7:45 AM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**	**3**
7:45 AM	8:00 AM	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**122**	**5**
8:00 AM	8:15 AM	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**96**	**2**
8:15 AM	8:30 AM	~~0~~	~~0~~	~~2~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~65~~	~~5~~
8:30 AM	8:45 AM	~~0~~	~~0~~	~~4~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~40~~	~~4~~
8:45 AM	9:00 AM	~~0~~	~~0~~	~~7~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~47~~	~~11~~
AM Peak Hour Volumes		**0**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**377**	**16**
% of Total Traffic		0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	92.6%	3.9%
% Directional			3.4%			0.0%			0.0%			96.6%	
AM Peak Hour Factor			***0.70***									***0.77***	

Begin Time	End Time	Eastbound (BMW Drive)			Westbound (BMW Drive)			Northbound (West Frontage Rd)			Southbound (West Frontage Rd)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	~~0~~	~~0~~	~~8~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~117~~	~~1~~
4:15 PM	4:30 PM	~~0~~	~~0~~	~~8~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~110~~	~~5~~
4:30 PM	4:45 PM	~~0~~	~~0~~	~~14~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~50~~	~~3~~
4:45 PM	5:00 PM	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~25~~	~~0~~
5:00 PM	5:15 PM	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**178**	**3**
5:15 PM	5:30 PM	**0**	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**137**	**1**
5:30 PM	5:45 PM	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**	**0**
5:45 PM	6:00 PM	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**74**	**2**
PM Peak Hour Volumes		**0**	**0**	**55**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**481**	**6**
% of Total Traffic		0.0%	0.0%	10.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	88.7%	1.1%
% Directional			10.1%			0.0%			0.0%			89.9%	
PM Peak Hour Factor			***0.72***									***0.67***	

Intersection Data Sheet

Intersection: **Singer Blvd / Jefferson St**

Posted Speed Limit (E-W Street): 35 Date: 10/26/2005

Eastbound Approach: Singer Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	0	1	0

Length: 175'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: **Singer Blvd**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	1	1	0

Length: 165'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): 35

Northbound Approach: Jefferson St

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	1

Length: 130' 325'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **Yes**

Southbound Approach: **Jefferson St**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	1	1	0

Length: 150'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Intersection Data Sheet

Intersection: **Jefferson St / I-25 W. ramp**

Posted Speed Limit (E-W Street): 35 Date: 9/19/2006

Eastbound Approach: **Jefferson St**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
0	0	1	1	0

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: **Jefferson St**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	0

Length: 150 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): _____

Northbound Approach: **I-25 W. ramp**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
	DOESN'T EXIST			

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?

Is there a right turn slip lane that by-passes the traffic signal? **No**

Southbound Approach: **I-25 W. ramp**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	1

Length: 600 feet Length: 350 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Intersection Data Sheet

Intersection: **Jefferson St / I-25 E. ramp**

Posted Speed Limit (E-W Street): 35 Date: 9/19/2006

Eastbound Approach: Jefferson St

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	0

Length: 125 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: **Jefferson St**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
0	0	1	1	0

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): 35

Northbound Approach: I-25 E. ramp

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	1	1	0	1

Length: 275 feet Length: 325 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Southbound Approach: **I-25 E. ramp**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
	DOESN'T EXIST			

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?

Is there a right turn slip lane that by-passes the traffic signal? **Yes/No**

Intersection Data Sheet

Intersection: **San Mateo Blvd / I-25 E. ramp**

Posted Speed Limit (E-W Street): 40 Date: 9/19/2006

Eastbound Approach: San Mateo Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	3	0	0

Length: 110 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	N

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Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: San Mateo Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
0	0	1	1	1

Length: Length: 400 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): 35

Northbound Approach: I-25 E. ramp

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	1	0	1

Length: 240 feet Length: 40 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Southbound Approach: I-25 E. ramp

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
	DOES NOT EXIST			

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?

Is there a right turn slip lane that by-passes the traffic signal? **Yes/No**

Intersection Data Sheet

Intersection: **Osuna Blvd / I-25 W. ramp**

Posted Speed Limit (E-W Street): 45 Date: 9/19/2006

Eastbound Approach: Osuna Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
0	0	2	0	1

Length: Length: 70 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: Osuna Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	3	0	0

Length: 200 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): 35

Northbound Approach: I-25 W. ramp

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
	DOESN'T EXIST			

Length: Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?

Is there a right turn slip lane that by-passes the traffic signal? **Yes/No**

Southbound Approach: I-25 W. ramp

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	1

Length: 150 feet Length: 150 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Intersection Data Sheet

Intersection: **Osuna Blvd / Jefferson St**

Posted Speed Limit (E-W Street): 45 Date: 9/19/2006

Eastbound Approach: Osuna Blvd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	2	1	0

Length: 200 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: **Osuna Blvd**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	2	0	1

Length: 175 feet Length: 300 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y(only)	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **No**

Posted Speed Limit (N-S Street): 35

Northbound Approach: Jefferson St

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	2	0	1

Length: 175 feet Length: 175 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **Yes/No**

Southbound Approach: **Jefferson St**

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
1	0	1	1	0

Length: 200 feet Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y	Y	Y

Is there a right turn slip lane that by-passes the traffic signal? **No**

Signalized Intersection Information Sheet

Intersection: **Presidential St. / Jefferson St.**

Speed Limit - E-W Street: 25 M.P.H.
Speed Limit - N-S Street: 35 M.P.H.
Type of Intersection Control: Two-Way Stop

Date: **9/18/2006**

East Bound Approach: Presidential St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	-	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

West Bound Approach: Presidential St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	1	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

North Bound Approach: Jefferson St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	2	-	1
Length	0				225 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

South Bound Approach: Jefferson St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	1	-	2	-	-
Length	150 feet				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

NOTE: Southbound left turn is mostly U turns, no pavement markings. Right turn lane is more a wide shoulder than a lane

Signalized Intersection Information Sheet

Intersection: **Jefferson Pl / Jefferson St.**

Speed Limit - E-W Street: 25 M.P.H.
Speed Limit - N-S Street: 35 M.P.H.
Type of Intersection Control: Two-Way Stop

Date: **9/19/2006**

East Bound Approach: Jefferson Pl

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	1	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

West Bound Approach: Jefferson Pl

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	1	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

North Bound Approach: Jefferson St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	1	-	1	1	-
Length	250'				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

South Bound Approach: Jefferson St.

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	1	-	2	-	1
Length	100'				175'

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

NOTE: No pavement markings W/B movement is out of a parking lot

Signalized Intersection Information Sheet

Intersection: **BMW Driveway / West Frontage Rd**

Speed Limit - E-W Street: UNKNOWN
Speed Limit - N-S Street: 45 M.P.H.
Type of Intersection Control: Two-Way Stop

Date: **9/15/2006**

East Bound Approach: BMW Driveway

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	-	-	1
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

West Bound Approach: BMW Driveway

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	-	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

North Bound Approach: West Frontage Rd

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	-	-	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

South Bound Approach: West Frontage Rd

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	1	1	-
Length	0				0

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	NO	NO

Is there a right turn slip laned that by-passes the traffic signal? NO

NOTE: West Frontage Rd is one way Southbound. There is no westbound access