

APPENDIX G
Traffic Due Diligence Assessment

Gateway Grand TRAFFIC IMPACT ANALYSIS REPORT

Prepared for

Gateway Grand Project Owner, LLC

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Draft: June 8, 2016

JN 150130

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EXECUTIVE SUMMARY

This study analyzes the forecast traffic impact of the proposed Gateway Grand project, located on the 2.6-acre former Escondido Police Station site at 700 West Grand Avenue in the City of Escondido. The proposed project will consist of 126 apartment units as well as 1,000 SF of flex retail. For the purposes of this analysis, it was assumed that the flex retail area would be occupied by a convenience market, which has the highest trip generation rate out of the various options that were considered by the applicant. The project also proposes to install a pedestrian-only signal and crosswalk on Valley Parkway on the east side of the SPRINTER rail line to provide direct pedestrian access between the project site and the Escondido Transit Center. It should be noted that a second pedestrian-only signalized crosswalk on Grand Avenue at South Spruce Street west of the project site is also being considered and if constructed by the project, would provide a potential public benefit to improve pedestrian mobility in the area.

The project will take access from one driveway on West Grand Avenue and one driveway on Valley Parkway. A second driveway on Valley Parkway will be provided for emergency access only. The project will generate approximately 955 trips per day, which includes approximately 76 a.m. peak hour trips and approximately 83 p.m. peak hour trips.

The results of the analysis show that all study intersections and roadway segments are currently operating at acceptable levels of service (LOS D or better). The addition of project-related trips to existing traffic volumes do not result in significant impacts at the study intersections or roadway segments. Therefore, no mitigation measures are required under Existing Plus Project conditions.

The Existing Plus Cumulative conditions analysis includes the addition of traffic generated by six (6) approved or pending projects located in the City of Escondido. The cumulative projects are forecast to generate approximately 12,119 trips per day, which includes approximately 700 a.m. peak hour trips and approximately 827 p.m. peak hour trips.

The Existing Plus Cumulative conditions analysis results show that all study intersections and roadway segments are forecast to operate at acceptable levels of service (LOS D or better). The addition of project-related trips to Existing Plus Cumulative conditions traffic volumes do not result in significant impacts at the study intersections or roadway segments. Therefore, no mitigation measures are required under Existing Plus Cumulative conditions with the proposed project.

Table ES-1 summarizes the results of the peak hour intersection analysis under all scenarios. Results of the daily roadway segment analysis under all scenarios are summarized in Table ES-2.

**Table ES-1
Summary of Peak Hour Intersection Operations**

Study Intersection		Existing Conditions		Existing Plus Project Conditions		Change in Delay (sec.)		Existing Plus Cumulative Conditions				Change in Delay (sec.)	
		AM Delay ⁽¹⁾ – LOS	PM Delay ⁽¹⁾ – LOS	AM Delay ⁽¹⁾ – LOS	PM Delay ⁽¹⁾ – LOS	AM	PM	Without Project		With Project		AM	PM
								AM Delay ⁽¹⁾ – LOS	PM Delay ⁽¹⁾ – LOS	AM Delay ⁽¹⁾ – LOS	PM Delay ⁽¹⁾ – LOS		
1.	Valley Parkway / I-15 Southbound Ramps	44.5 – D	46.9 – D	44.5 – D	47.5 – D	0.0	0.6	47.5 – D	51.2 – D	47.7 – D	52.2 – D	0.2	1.0
2.	Valley Parkway / I-15 Northbound Ramps	30.4 – C	35.9 – D	30.6 – C	36.6 – D	0.2	0.7	32.2 – C	40.0 – D	32.4 – C	41.3 – D	0.2	1.3
3.	Valley Parkway / La Terraza Blvd.- Plaza Las Palmas	17.6 – B	23.2 – C	17.6 – B	23.2 – C	0.0	0.0	19.9 – B	27.3 – C	19.9 – B	27.3 – C	0.0	0.0
4.	Valley Parkway / North Tulip Street	27.9 – C	29.8 – C	27.9 – C	29.8 – C	0.0	0.0	27.8 – C	30.1 – C	27.8 – C	30.1 – C	0.0	0.0
5.	Valley Parkway / Gateway Driveway	2.1 – A	5.6 – A	2.1 – A	5.6 – A	0.0	0.0	2.1 – A	5.5 – A	2.1 – A	5.5 – A	0.0	0.0
6.	Valley Parkway / Quince Street	19.1 – B	20.3 – C	19.1 – B	20.3 – C	0.0	0.0	19.4 – B	20.7 – C	19.4 – B	20.7 – C	0.0	0.0
7.	Valley Parkway / Centre City Parkway	22.1 – C	21.2 – C	22.2 – C	21.3 – C	0.1	0.1	23.2 – C	22.1 – C	23.3 – C	22.2 – C	0.1	0.1
8.	Grand Avenue / Quince Street	17.7 – B	25.8 – C	17.8 – B	25.8 – C	0.1	0.0	17.8 – B	26.0 – C	17.9 – B	26.0 – C	0.0	0.0
9.	Grand Avenue / Centre City Parkway	14.2 – B	20.3 – C	14.3 – B	20.3 – C	0.1	0.0	14.5 – B	20.7 – C	14.5 – B	20.7 – C	0.0	0.0
10.	Second Avenue / Quince Street	14.5 – B	19.9 – B	14.5 – B	19.9 – B	0.0	0.0	14.5 – B	19.9 – B	14.5 – B	19.9 – B	0.0	0.0
11.	Second Avenue / Centre City Parkway	17.8 – B	22.1 – C	18.0 – B	22.1 – C	0.2	0.0	18.2 – B	22.9 – C	18.4 – B	23.0 – C	0.1	0.1
12.	North Hale Avenue / North Tulip Street	14.5 – B	22.7 – C	14.6 – B	22.7 – C	0.1	0.0	14.8 – B	25.6 – C	14.8 – B	25.7 – C	0.1	0.1
13.	Valley Parkway / Project Driveway ⁽²⁾	–	–	12.6 – B	12.2 – B	–	–	–	–	13.2 – B	12.7 – B	–	–
14.	West Grand Avenue / Project Driveway ⁽²⁾	–	–	10.3 – B	12.5 – B	–	–	–	–	10.5 – B	13.1 – B	–	–

⁽¹⁾ Seconds of delay per vehicle.

⁽²⁾ Unsignalized, minor street stop-sign controlled intersection.

**Table ES-2
Summary of Daily Roadway Segment Operations**

Street	Location	Existing Conditions		Existing Plus Project Conditions		Significant Impact?	Existing Plus Cumulative Conditions				Significant Impact?
							Without Project		With Project		
		ADT	LOS	ADT	LOS		ADT	LOS	ADT	LOS	
Valley Parkway	I-15 to North Tulip Street	37,513	C	38,187	C	No	39,028	C	39,702	C	No
	North Tulip Street to Project Site	15,937	C	16,302	C	No	16,436	C	16,801	C	No
	Project Site to Quince Street	16,717	C	16,905	C	No	17,216	C	17,404	C	No
	Quince Street to Centre City Parkway	15,740	C	15,917	C	No	16,239	C	16,416	C	No
West Grand Avenue	North Tulip Street to Project Site	15,273	C	15,638	C	No	15,772	C	16,137	C	No
Second Avenue	Project Site to Quince Street	14,800	B	14,944	C	No	15,251	B	15,394	B	No
	Quince Street to Centre City Parkway	11,663	B	11,807	B	No	12,114	B	12,257	B	No
North Tulip Street	Valley Parkway to North Hale Avenue	11,041	A	11,096	A	No	11,149	A	11,204	A	No
North Hale Avenue	I-15 DAR to North Tulip Street	15,532	B	15,587	B	No	15,869	B	15,924	B	No

INTRODUCTION

This study analyzes the forecast traffic impact of the proposed Gateway Grand project, located on the 2.6-acre former Escondido Police Station site at 700 West Grand Avenue in the City of Escondido. The proposed project will consist of 126 apartment units as well as 1,000 SF of flex retail. The project also proposes to install a pedestrian-only signal and crosswalk on Valley Parkway on the east side of the SPRINTER rail line to provide direct pedestrian access between the project site and the Escondido Transit Center. It should be noted that a second pedestrian-only signalized crosswalk on Grand Avenue at South Spruce Street west of the project site is also being considered and if constructed by the project, would provide a potential public benefit to improve pedestrian mobility in the area. The project will take access from one driveway on West Grand Avenue and one driveway on Valley Parkway. A second driveway on Valley Parkway will be provided for emergency access only. **Exhibit 1** shows the regional project vicinity. The project site plan is illustrated in **Exhibit 2**.

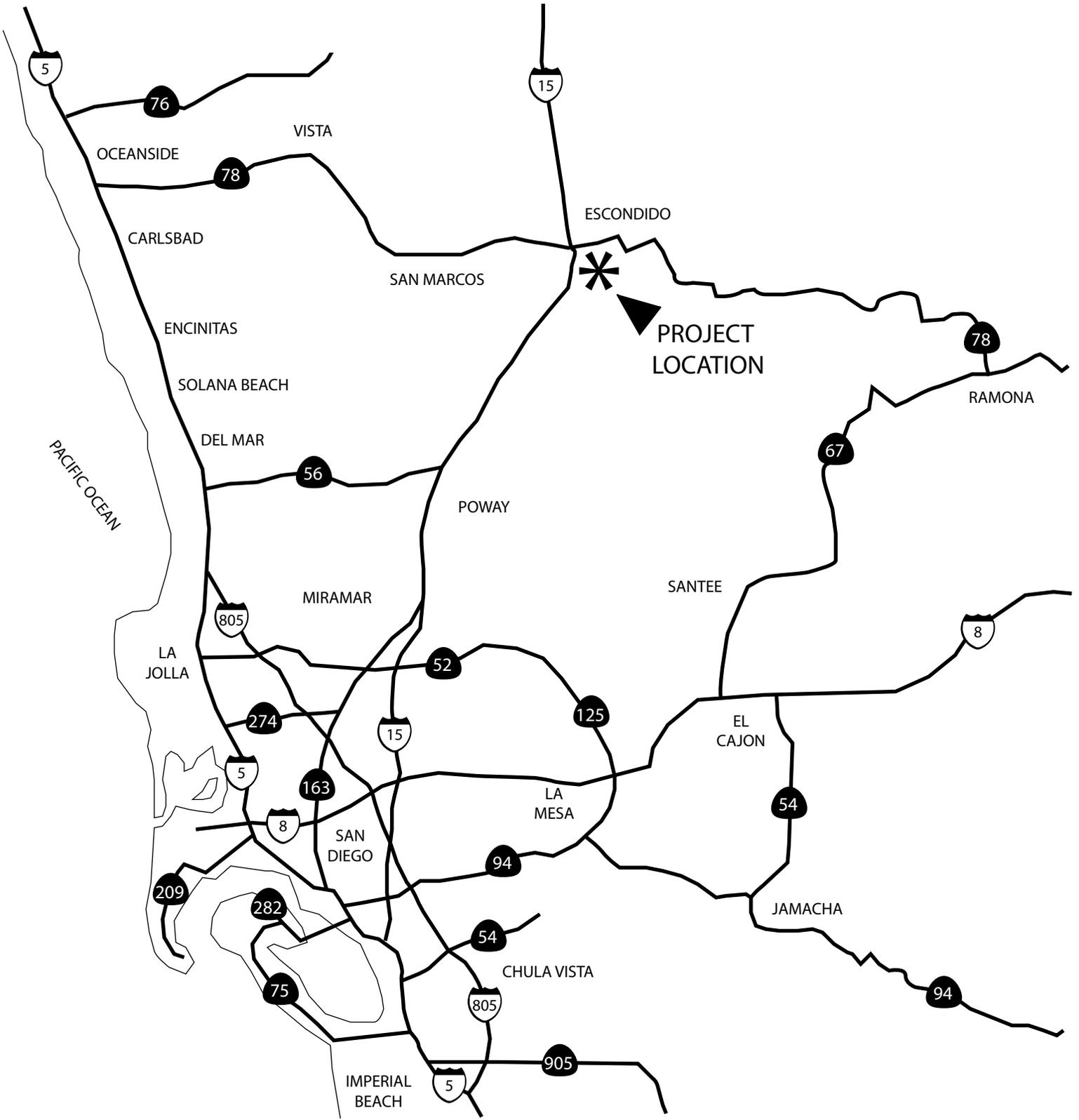
This traffic impact analysis has been prepared in accordance with the City of Escondido Traffic Impact Analysis Guidelines and the SANTEC/ITE *Guidelines for Traffic Impact Studies in the San Diego Region* (March 2000). The City requires a traffic impact analysis to be prepared for any project that generates more than 2% of the ADT for LOS C on any roadway segment within the study area. Based on this threshold, the addition of project-generated trips to the segments of Valley Parkway and West Grand Avenue adjacent to the project site trigger the need for a traffic impact analysis. The project will generate a net increase of approximately 955 trips per day, which includes approximately 76 a.m. peak hour trips and approximately 96 p.m. peak hour trips.

Project Study Area

The project study area was defined based on direction from the City of Escondido. The study area includes the following fourteen (14) intersections and nine (9) roadway segments:

Intersections

1. Valley Parkway / I-15 Southbound Ramps
2. Valley Parkway / I-15 Northbound Ramps
3. Valley Parkway / La Terraza Blvd.-Plaza Las Palmas
4. Valley Parkway / North Tulip Street
5. Valley Parkway / Gateway Driveway
6. Valley Parkway / Quince Street
7. Valley Parkway / Centre City Parkway
8. Grand Avenue / Quince Street
9. Grand Avenue / Centre City Parkway
10. Second Avenue / Quince Street
11. Second Avenue / Centre City Parkway
12. North Hale Avenue / North Tulip Street
13. Valley Parkway / Project Driveway
14. West Grand Avenue / Project Driveway

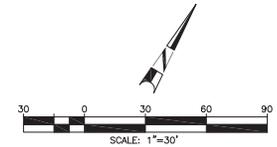
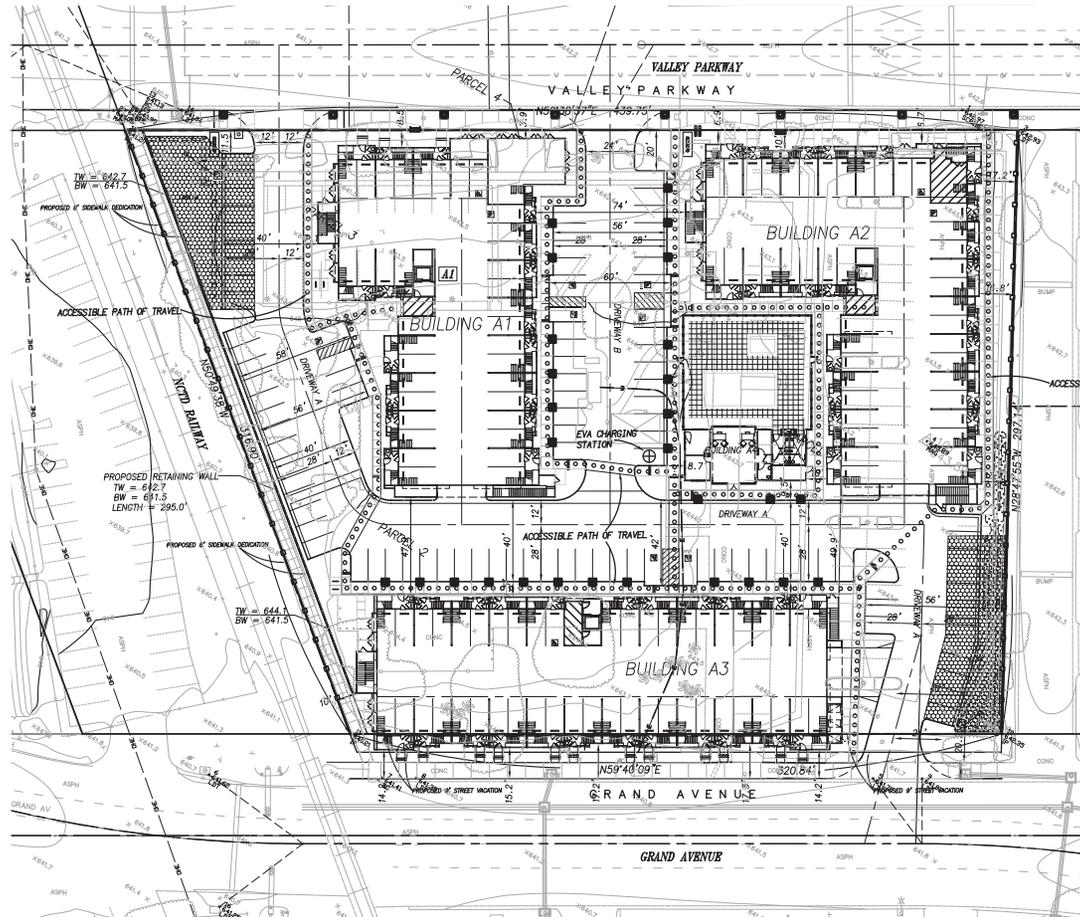


NOT TO SCALE

PRECISE DEVELOPMENT PLAN, MASTER DEVELOPMENT PLAN, AND TENTATIVE SUBDIVISION MAP

ESCONDIDO GATEWAY

City of ESCONDIDO, California



NO.	REVISIONS	DATE	BY
1	FIRST SUBMITTAL	2-29-16	LES
2	SECOND SUBMITTAL	4-19-16	LES
3	THIRD SUBMITTAL	5-27-16	LES
4			
5			
6			
7			

PREPARED BY:
Lundstrom
 Engineering and Surveying, Inc.
 5333 Mission Center Dr., Ste 115 • San Diego, CA 92138
 Phone: (619) 514-1220 • Fax: (619) 441-9500

DEVELOPMENT PLAN SITE PLAN
 ESCONDIDO GATEWAY
 City of Escondido, California

C2

Roadway Segments

1. Valley Parkway, from I-15 to North Tulip Street
2. Valley Parkway, from North Tulip Street to Project Site
3. Valley Parkway, from Project Site to Quince Street
4. Valley Parkway, from Quince Street to Centre City Parkway
5. West Grand Avenue, North Tulip Street to Project Site
6. Second Avenue, from Project Site to Quince Street
7. Second Avenue, from Quince Street to Centre City Parkway
8. North Tulip Street, from Valley Parkway to North Hale Avenue
9. North Hale Avenue, from I-15 DAR to North Tulip Street

The project study area is shown in **Exhibit 3**.

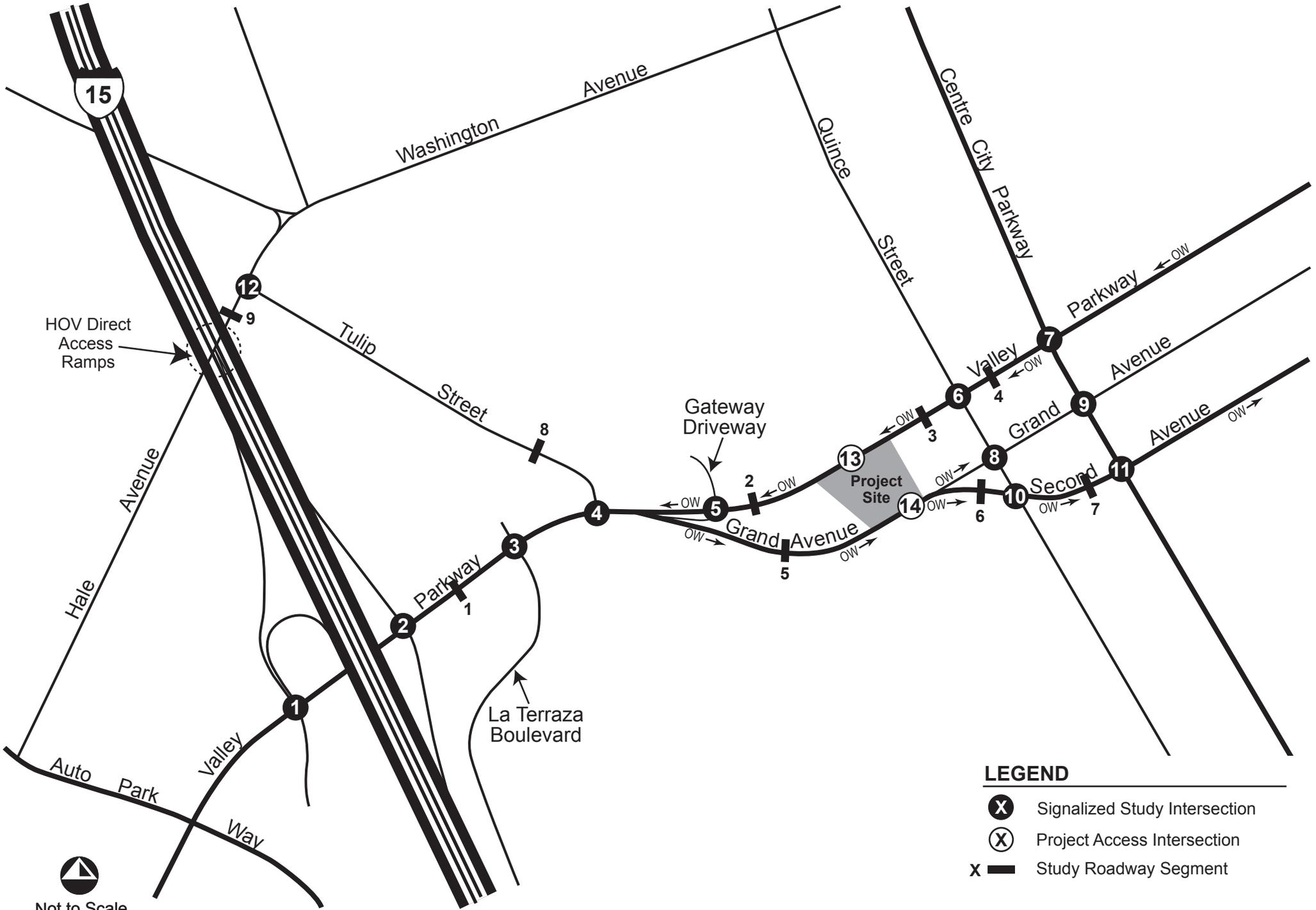
ANALYSIS METHODOLOGY

In accordance with the City of Escondido Traffic Impact Analysis Guidelines and the SANTEC/ITE *Guidelines for Traffic Impact Studies in the San Diego Region* (March 2000), this study analyzes the following study scenarios:

- **Existing Conditions** – Analysis of existing traffic count volumes, intersection geometry and existing roadway network.
- **Existing Plus Project Conditions** – Analysis of existing traffic volumes overlaid with the forecast traffic generated by the proposed project. The existing intersection geometry and roadway network were used in this analysis.
- **Existing Plus Cumulative Conditions Without Project** – Analysis of existing traffic volumes overlaid with traffic associated with approved or pending projects anticipated to be constructed by project opening year (approximately Year 2018).
- **Existing Plus Cumulative Conditions With Project** – Analysis of existing traffic volumes overlaid with cumulative project traffic and traffic generated by the proposed project.

Analysis of all intersections and roadway segments in the project study area is based on the City of Escondido Traffic Impact Analysis Guidelines, the SANTEC/ITE *Guidelines for Traffic Impact Studies in the San Diego Region*, and the City of Escondido General Plan Mobility Element.

As required, the 2000 Highway Capacity Manual (HCM) operation methodology for *Signalized and Unsignalized Intersections* was used to determine the operating Levels of Service (LOS) of the study intersections. The Traffix™ software package was used to evaluate the study intersections using the HCM methodology. The HCM methodology describes the operation of an intersection using a range of levels of service (LOS) from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on corresponding delay per vehicle thresholds for signalized and unsignalized intersections shown in Table 1. The City of Escondido considers LOS D or better to be acceptable intersection operating conditions during peak traffic periods.



LEGEND

-  Signalized Study Intersection
-  Project Access Intersection
-  Study Roadway Segment



Not to Scale

**Table 1
Level of Service & Delay Ranges**

LOS	Delay (seconds/vehicle)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: 2000 Highway Capacity Manual.

A daily roadway segment analysis was conducted for all study area roadways, in accordance with the City of Escondido General Plan Mobility Element and the City's Traffic Impact Analysis Guidelines. The roadway segment level of service criteria is included in Table 2.

**Table 2
Daily Level of Service Thresholds for Roadway Segments**

Classification / Lanes	Level of Service				
	A	B	C	D	E
Prime Arterial / 8	23,800	37,800	51,800	62,300	70,000
Prime Arterial / 7 ⁽¹⁾	22,100	35,100	48,100	57,900	65,000
Prime Arterial / 6	20,400	32,400	44,400	53,400	60,000
Major Road / 6	17,000	27,000	37,000	44,500	50,000
Major Road / 4	12,600	20,000	27,400	32,900	37,000
Collector / 4 (No Parking)	11,600	18,500	25,300	30,400	34,200
One-Way Collector / 3 ⁽²⁾ (No Parking)	8,700	13,900	19,000	22,900	25,700
Collector / 4 (With Parking)	6,800	10,800	14,800	17,800	20,000
Local Collector / 2 (No Parking)	5,100	8,100	11,100	13,400	15,000
Local Collector / 2 (With Parking)	3,400	5,400	7,400	8,900	10,000

Source: City of Escondido Traffic Impact Analysis Guidelines.

⁽¹⁾ Valley Parkway between I-15 and North Tulip Street is constructed with 7 travel lanes (3 eastbound and 4 westbound lanes). The volume-to-capacity values utilized to determine LOS thresholds per the City's Traffic Impact Analysis Guidelines were used to calculate the LOS thresholds for a 7-lane Prime Arterial.

⁽²⁾ Valley Parkway and West Grand Avenue-Second Avenue are constructed as a couplet providing 3-4 westbound and eastbound one-way lanes. The volume-to-capacity values utilized to determine LOS thresholds per the City's Traffic Impact Analysis Guidelines were used to calculate the LOS thresholds for a 3-lane one-way Collector.

According to the City's General Plan Mobility Element, the City's goal is LOS C for all City roadways; however, the City accepts LOS D for overall daily traffic conditions.

The City's Downtown Specific Plan allows for LOS E operations on roadway segments and intersections within the Downtown area. The Downtown LOS E Threshold Area (Figure III-2 from the Downtown Specific Plan) is provided in Appendix A.

EXISTING CONDITIONS

Existing and General Plan Land Use

Currently the 2.6-acre project site is occupied by the vacant former Police Station. The project site is located in the Gateway Transit District within the Downtown Specific Plan Area. According to the Downtown Specific Plan, ground-floor and above residential use is permitted for the project site.

Existing Roadway Circulation System

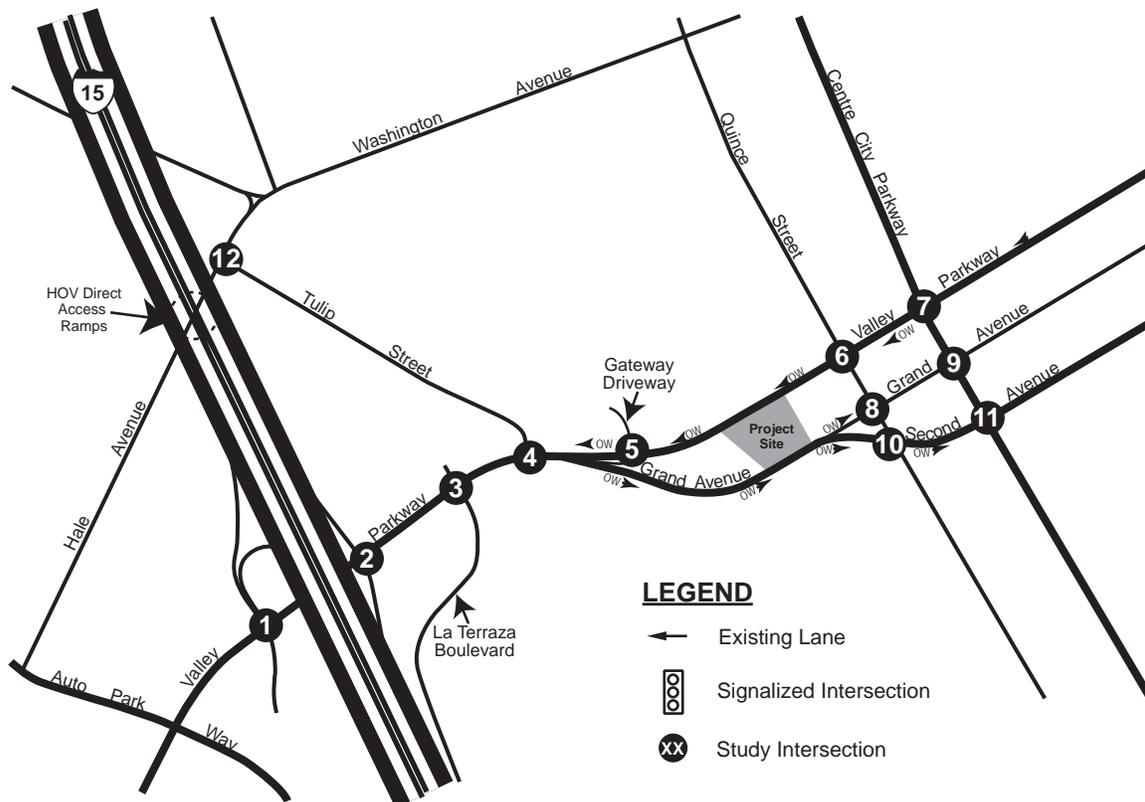
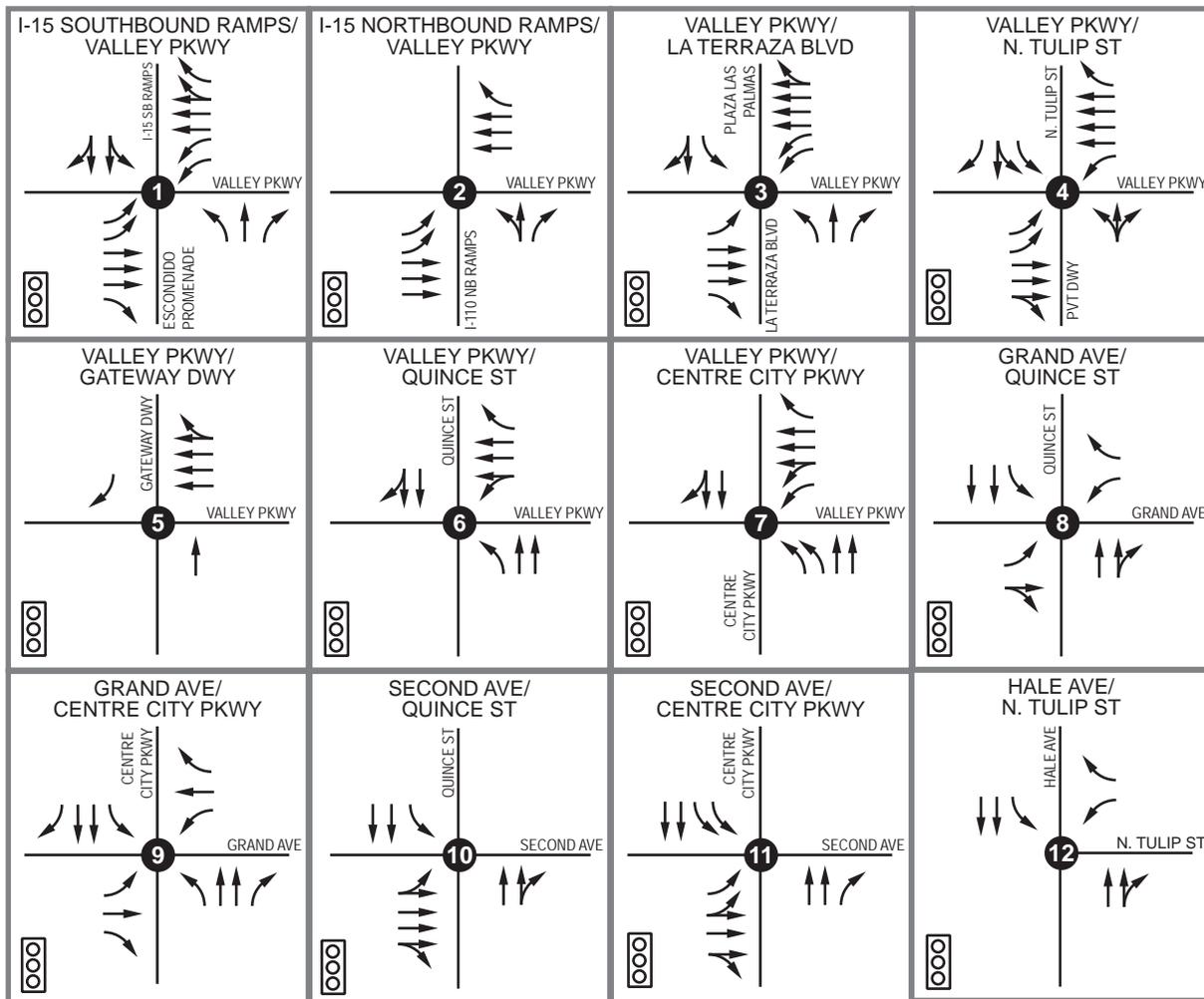
A detailed field review was conducted to determine the existing intersection geometry, traffic control devices, signal phasing and other factors, which may affect intersection or roadway segment capacity. The existing intersection geometry is illustrated in **Exhibit 4**. The following is a detailed description of roadways in the study area.

Interstate (I-15) provides regional access to Escondido as a major freeway facility, generally oriented in a north-south direction. Regional project access is provided at the Valley Parkway / I-15 interchange.

Valley Parkway extends through the City of Escondido from Via Rancho Parkway to El Norte Parkway and is oriented in a northeast-southwest direction. Within the Downtown Escondido area, Valley Parkway is built as a westbound one-way only street between North Tulip Street and Hickory Street, and forms a couplet with Grand Avenue/Second Avenue. Within the project study area, Valley Parkway is constructed as a 7-lane roadway between I-15 and North Tulip Street (3 eastbound and 4 westbound lanes), and is built with 3-4 westbound one-way only lanes east of North Tulip Street. The City of Escondido General Plan Mobility Element classifies Valley Parkway as a Prime Arterial between Auto Parkway and North Tulip Street. Within the Downtown Escondido area, the westbound one-way only section of Valley Parkway is classified as a Collector.

Grand Avenue begins near South Tulip Street and initially extends one-way eastbound as part of the couplet with Valley Parkway. Grand Avenue is constructed with 3-4 eastbound one-way only lanes from South Tulip Street to just west of Quince Street. Approximately 300 feet west of Quince Street, Grand Avenue and Second Avenue split into two separate roadways. East of Quince Street, Grand Avenue is built as a two-way street with one lane in each direction between Quince Street and Centre City Parkway. East of Centre City Parkway, Grand Avenue is constructed as a four-lane roadway. The City of Escondido General Plan Mobility Element classifies Grand Avenue as a Collector except for the short two-lane section between Quince Street and Centre City Parkway, which is classified as a Local Collector.

Second Avenue begins approximately 300 feet west of Quince Street where Grand Avenue and Second Avenue split into two separate roadways. Second Avenue is constructed with 3-4 eastbound one-way only lanes, extending from just west of Quince Street to Valley Parkway/Grand Avenue at the eastern end of the couplet through the Downtown Escondido area. The City of Escondido General Plan Mobility Element classifies Second Avenue as a Collector.



LEGEND

- ← Existing Lane
- ⊞ Signalized Intersection
- ⊗ Study Intersection



Not to Scale

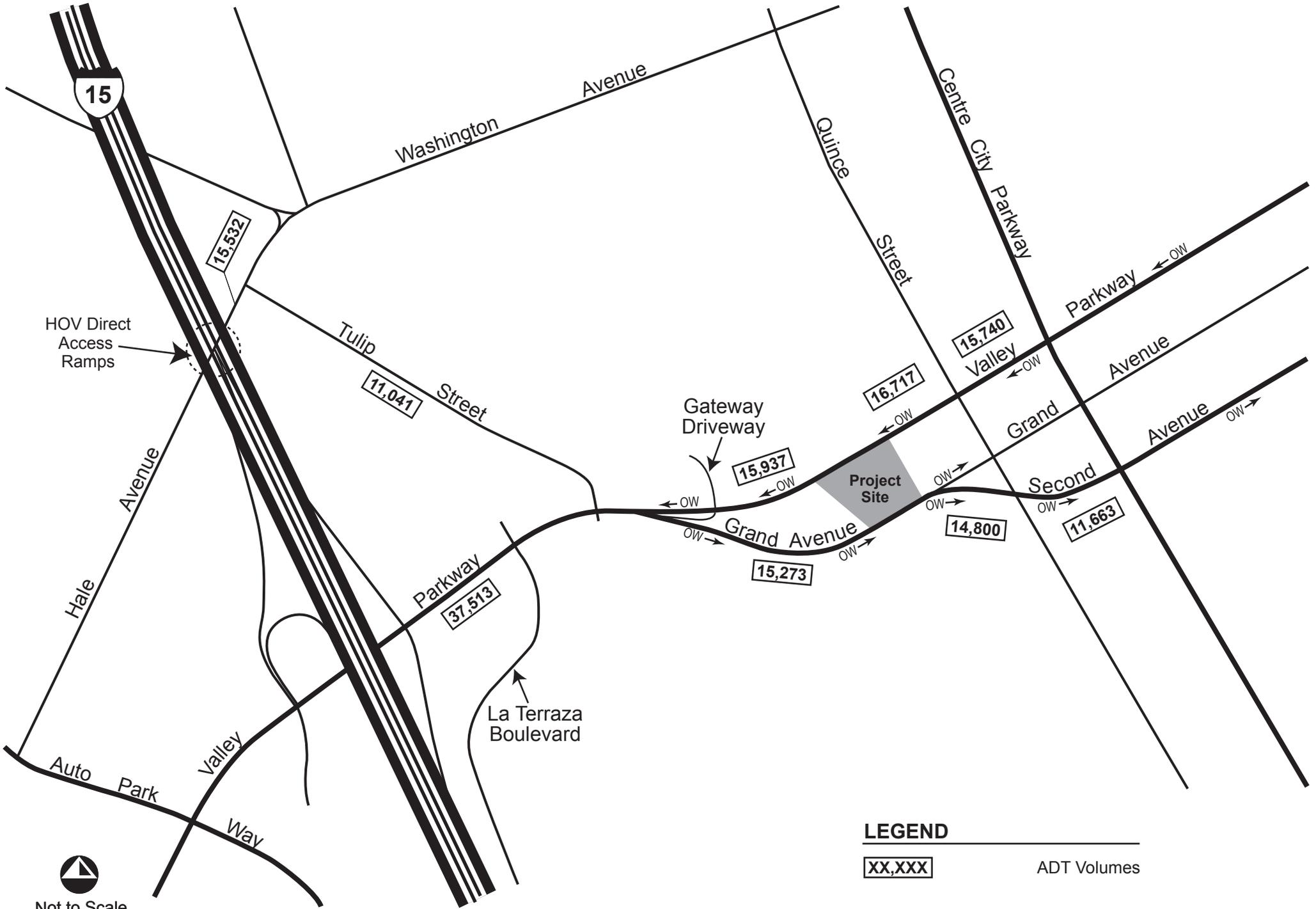
North Tulip Street is constructed as a four-lane roadway with a continuous two-way left-turn lane, extending from North Hale Avenue to Valley Parkway and is oriented in a northwest-southeast direction. The City of Escondido General Plan Mobility Element classifies North Tulip Street as a Collector.

North Hale Avenue is constructed with 2-4 travel lanes oriented in a northeast/southwest direction, extending from Auto Parkway to Metcalf Street/Washington Avenue. North Hale Avenue is built with two travel lanes from Auto Parkway to Simpson Way, and is constructed with four lanes between Simpson Way and Metcalf Street/Washington Avenue. Access to the I-15 Express Lanes is provided from North Hale Avenue at an intersection with the Direct Access Ramps (DAR) located between Simpson Way and North Tulip Street. The City of Escondido General Plan Mobility Element classifies North Hale Avenue as a Collector from Auto Parkway to North Tulip Street. The short segment of North Hale Avenue between North Tulip Street and Metcalf Street/Washington Avenue is classified as a Super Major Road.

Existing Conditions Traffic Volumes

To determine the existing operations of the study intersections and roadway segments, traffic counts were collected in September, November and December 2015 on a typical weekday during the a.m. (7:00 to 9:00 a.m.) and p.m. (4:00 to 6:00 p.m.) peak periods and over a 24-hour period.

Exhibit 5 shows existing a.m. and p.m. peak hour turning movement volumes at each of the study intersections. Existing daily traffic volumes on the study roadway segments are illustrated in **Exhibit 6**. Detailed count data is contained in Appendix B.



LEGEND

XX,XXX

ADT Volumes



Not to Scale

Michael Baker

INTERNATIONAL

JN 150130 DECEMBER 2015

EXISTING DAILY ROADWAY SEGMENT VOLUMES

EXHIBIT 6

Existing Levels of Service

Table 3 summarizes the existing a.m. and p.m. peak hour intersection LOS of the study intersections based on the existing peak hour intersection volumes and existing intersection geometry. Detailed HCM calculation sheets are contained in Appendix C.

**Table 3
Existing Peak Hour Intersection Conditions**

Study Intersection		Existing Conditions	
		AM Delay ⁽¹⁾ – LOS	PM Delay ⁽¹⁾ – LOS
1.	Valley Parkway / I-15 Southbound Ramps	44.5 – D	46.9 – D
2.	Valley Parkway / I-15 Northbound Ramps	30.4 – C	35.9 – D
3.	Valley Parkway / La Terraza Blvd.-Plaza Las Palmas	17.6 – B	23.2 – C
4.	Valley Parkway / North Tulip Street	27.9 – C	29.8 – C
5.	Valley Parkway / Gateway Driveway	2.1 – A	5.6 – A
6.	Valley Parkway / Quince Street	19.1 – B	20.3 – C
7.	Valley Parkway / Centre City Parkway	22.1 – C	21.2 – C
8.	Grand Avenue / Quince Street	17.7 – B	25.8 – C
9.	Grand Avenue / Centre City Parkway	14.2 – B	20.3 – C
10.	Second Avenue / Quince Street	14.5 – B	19.9 – B
11.	Second Avenue / Centre City Parkway	17.8 – B	22.1 – C
12.	North Hale Avenue / North Tulip Street	14.5 – B	22.7 – C

⁽¹⁾ Seconds of delay per vehicle.

As shown in Table 3, all study intersections currently operate at acceptable levels of service (LOS D or better) during the peak hours.

Daily roadway segment levels of service were calculated based on the roadway classification and capacity as well as existing ADT volumes. Table 4 presents the results of the existing conditions daily roadway segment level of service analysis.

As shown in Table 4, all study roadway segments are currently operating at LOS C or better based on existing ADT volumes and roadway capacity.

**Table 4
Existing Daily Roadway Segment Conditions**

Roadway	Segment	Class (# Lanes)	LOS E Capacity	Existing Conditions		
				ADT	V/C	LOS
Valley Parkway	I-15 to North Tulip Street	Prime Arterial (7 / Two-Way)	65,000	37,513	0.577	C
	North Tulip Street to Project Site	Collector (3 / One-Way)	25,700	15,937	0.620	C
	Project Site to Quince Street	Collector (3 / One-Way)	25,700	16,717	0.650	C
	Quince Street to Centre City Parkway	Collector (3 / One-Way)	25,700	15,740	0.612	C
West Grand Avenue	North Tulip Street to Project Site	Collector (3 / One-Way)	25,700	15,273	0.594	C
Second Avenue	Project Site to Quince Street	Collector (4 / One-Way)	34,200	14,800	0.433	B
	Quince Street to Centre City Parkway	Collector (3 / One-Way)	25,700	11,663	0.454	B
North Tulip Street	Valley Parkway to North Hale Avenue	Collector (4)	34,200	11,041	0.323	A
North Hale Avenue	I-15 DAR to North Tulip Street	Collector (4)	34,200	15,532	0.454	B

Existing and Proposed Bicycle and Pedestrian Conditions

There are currently no bike lanes on Valley Parkway or on Grand Avenue and Second Avenue through the project study area. However, future Class II bike lanes are proposed on Valley Parkway and Grand/Second Avenue according to the City's General Plan Mobility Element (Figure III-3). The Inland Rail Trail, a Class I multi-use facility, begins on the north side of the Escondido Transit Center approximately 500 feet north of Valley Parkway. The Inland Rail Trail currently extends from the Escondido Transit Center to the Palomar College Transit Center in San Marcos, along the general route of the SPRINTER rail line.

Sidewalks are currently provided on both Valley Parkway and on West Grand Avenue along the project frontage, but pedestrian access is discontinuous west of the SPRINTER rail line along both roadways to the western end of the couplet. No sidewalks are provided along West Grand Avenue and Second Avenue between the project site and Quince Street. East of Quince Street, there is continuous sidewalk on both sides of Grand Avenue and Second Avenue.

Continuous sidewalk is provided along the south side of Valley Parkway eastward from the SPRINTER rail line into the Downtown area. Currently pedestrians must cross Valley Parkway at Quince Street to access the Escondido Transit Center located directly across Valley Parkway from the project site.

The project proposes to install a pedestrian-only signal and crosswalk on Valley Parkway on the east side of the SPRINTER rail line to provide direct pedestrian access between the project site and the Escondido Transit Center. The project will need to work with the North County Transit District (NCTD) for approval of the pedestrian signal and crosswalk location and installation. It should be noted that a second pedestrian-only signalized crosswalk on Grand Avenue at South Spruce Street west of the project site is also being considered and if constructed by the project, would provide a potential public benefit to improve pedestrian mobility in the area.

Existing Transit Conditions

The project site is located directly across Valley Parkway from the Escondido Transit Center. The Escondido Transit Center provides access to both the SPRINTER rail line and the BREEZE bus routes. The SPRINTER rail line extends from Escondido to Oceanside, with transit stations provided at CSU San Marcos, Palomar College, downtown Vista, and downtown Oceanside, where transfers to either the COASTER or AmTrak rail services are provided.

The Escondido Transit Center also provides access to the following BREEZE bus routes:

- Route 305 (Escondido to Vista via Mission Road and South Santa Fe Avenue)
- Route 308 (Escondido to Solana Beach via Del Dios Highway)
- Route 350 (Escondido to Del Lago Transit Station via Westfield North County Mall)
- Route 351/352 (Escondido Circulator)
- Route 353 (Palomar Medical Center to Nordahl Marketplace via Citracado Pkwy.)
- Route 354 (Orange Glen High School via Mission, Lincoln and Citrus)
- Route 355/357 (El Norte Pkwy. and Valley Pkwy.)
- Route 356 (Morning View Dr., El Norte Pkwy., and Escondido Blvd.)
- Route 358/359 (N. Broadway, Country Club and El Norte Pkwy.)
- Route 371 FLEX (Ramona FLEX Commuter)
- Route 388/389 (Escondido to Pala)

PROPOSED PROJECT

The proposed Gateway Grand project is located on the 2.6-acre former Escondido Police Station site at 700 West Grand Avenue in the City of Escondido. The proposed project will consist of 126 apartment units as well as 1,000 SF of flex retail. For the purposes of this analysis, it was assumed that the flex retail area would be occupied by a convenience market, which has the highest trip generation rate out of the various options that were considered by the applicant. The project also proposes to install a pedestrian-only signal and crosswalk on Valley Parkway on the east side of the SPRINTER rail line to provide direct pedestrian access between the project site and the Escondido Transit Center. A second pedestrian-only signalized crosswalk on Grand Avenue at South Spruce Street west of the project site is also being considered and if constructed by the project, would provide a potential public benefit to improve pedestrian mobility in the area.

The project will take access from one driveway on West Grand Avenue and one driveway on Valley Parkway. A second driveway on Valley Parkway will be provided for emergency access only.

Project Trip Generation

To determine the trips forecast to be generated by the proposed project, the SANDAG (*Not So*) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (April 2002) were utilized in accordance with the City of Escondido and SANTEC/ITE Traffic Study Guidelines.

SANDAG allows a 5% trip reduction for land uses located within ¼ mile of a transit station. The project site is located across Valley Parkway from the Escondido SPRINTERS Station and Transit Center; therefore, a 5% trip reduction is applied to the trip generation for the project as well as a 30% pass-by reduction for the convenience market only. In addition, SANDAG also allows up to a 10% trip reduction for mixed use developments. The project site proposes apartments and a convenience market, therefore a conservative 7% reduction was applied to the daily volumes and the a.m. and p.m. peak hour volumes.

Table 5 summarizes the proposed project trip generation. As summarized in Table 5, the proposed project will generate a net increase of approximately 955 trips per day, which includes approximately 76 a.m. peak hour trips and approximately 83 p.m. peak hour trips.

Table 5
Proposed Project Trip Generation

Land Use	Unit	Daily (per unit)	AM Peak Hour			PM Peak Hour			
			Total (of daily)	Inbound (% AM)	Outbound (% AM)	Total (of daily)	Inbound (% PM)	Outbound (% PM)	
Trip Generation Rates									
Apartments	DU	6	8%	20%	80%	9%	70%	30%	
Convenience Market	TSF	500	8%	50%	50%	8%	50%	50%	
Forecast Project Generated Trips									
Land Use	Size	Unit	Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	Inbound	Outbound	Total	Inbound	Outbound
Apartments	126	DU	756	60	12	48	68	48	20
Convenience Market	1	TSF	500	40	20	20	40	20	20
Subtotal			1,256	100	32	68	108	68	40
5% Transit Trip Reduction			-63	-5	-2	-3	-5	-3	-2
30% Pass-By Trip Reduction			-150	-12	-6	-6	-12	-6	-6
Mixed Use Trip Reduction (7%)			-88	-7	-2	-5	-8	-5	-3
Net Project Trips			955	76	22	54	83	54	30

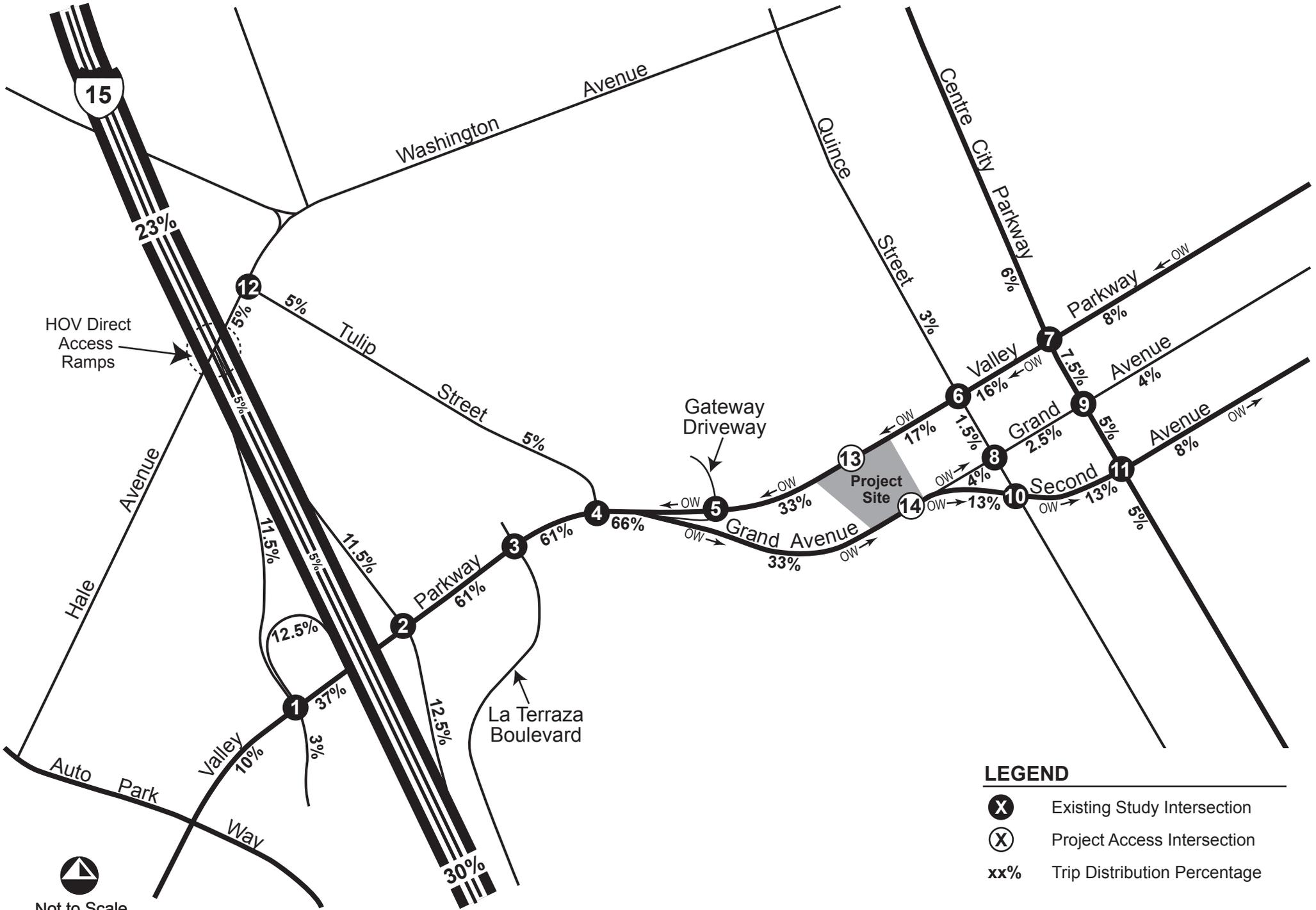
Source: SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (April 2002).

Project Trip Distribution and Assignment

The project trip distribution was developed based on the proposed land use, the existing roadway network, and existing traffic patterns in the study area.

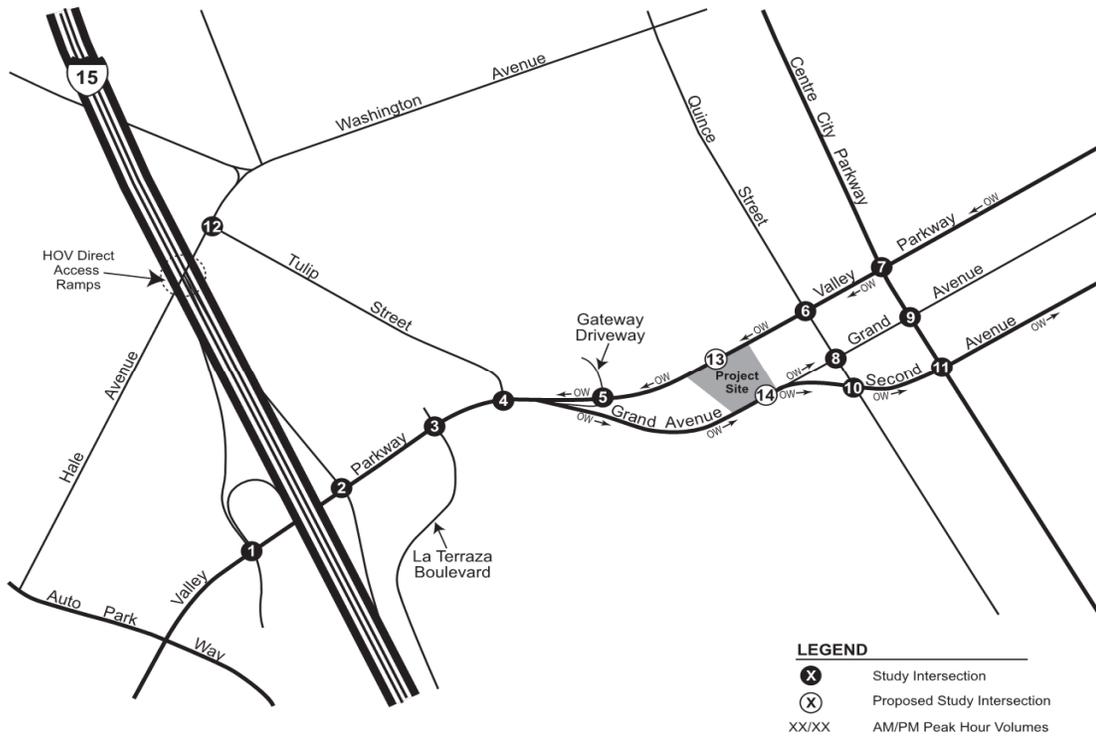
Exhibit 7 illustrates the project trip distribution. Utilizing the project trip distribution shown in Exhibit 6, the forecast project-generated trips were assigned to the roadway network. The peak hour and daily project trips are illustrated in **Exhibit 8** and **Exhibit 9**, respectively.

EX-7 Project Trip Distribution



Not to Scale

I-15 SB Ramps / Valley Pkwy.		I-15 NB Ramps / Valley Pkwy.		Valley Pkwy. / La Terraza Blvd.		Valley Pkwy. / Tulip Street	
5/12 ↗	H-15 SB Ramps ↖ 14/8 ← 5/3 ↘ 2/1		H-15 NB Ramps ↗ 12/7 ← 21/11	Plaza Las Palmas ← 33/18		1/3 ↘	Tulip St. ↖ 3/2 ← 33/18
Valley Pkwy.	1 Valley Pkwy.	Valley Pkwy.	2 Valley Pkwy.	Valley Pkwy.	3 Valley Pkwy.	Valley Pkwy.	4 Valley Pkwy.
2/5 →	Escondido Promenade ↗ 1/2	8/19 →	H-15 NB Ramps ↗ 6/14	13/33 →	La Terraza Blvd.	13/33 →	Private Dwy.
Valley Pkwy. / Gateway Driveway		Valley Pkwy. / Quince Street		Valley Pkwy. / Centre City Pkwy.		Grand Ave. / Quince Street	
	Gateway Dwy. ← 36/20	1/2 ↘	Quince St. ← 7/17	1/3 ↘	Centre City Pkwy. ← 4/9		Quince St.
Valley Pkwy.	5 Valley Pkwy.	Valley Pkwy.	6 Valley Pkwy.	Valley Pkwy.	7 Valley Pkwy.	Grand Ave.	8 Grand Ave.
	Gateway Dwy.		Quince St. ↑ 2/1		Centre City Pkwy. ↖ 2/5 ↑ 3/2	2/1 ↗ 3/2 →	Quince St.
Grand Ave. / Centre City Pkwy.		Second Ave. / Quince Street		Second Ave. / Centre City Pkwy.		Hale Ave. / Tulip Street	
	Centre City Pkwy. ↖ 1/2		Quince St.		Central Ave.		Hale Ave. ↖ 3/2
Grand Ave.	9 Grand Ave.	Second Ave.	10 Second Ave.	Second Ave.	11 Second Ave.	Second Ave.	12 Tulip St.
2/1 ↗ 1/1 →	Centre City Pkwy. ↑ 3/4 ↑ 1/1	14/8 →	Quince St.	3/2 ↗ 9/5 → 3/2 ↘	Central Ave. ↑ 1/3		Hale Ave. ↗ 1/3
Valley Pkwy. / Project Driveway		Grand Ave. / Project Driveway					
	Project Dwy. ↖ 7/18		Project Dwy. 18/10 ↘				
Valley Pkwy.	13 Valley Pkwy.	Grand Ave.	14 Grand Ave.				
	Project Dwy. ↖ 36/20	15/36 ↗					





Not to Scale

EXISTING PLUS PROJECT CONDITIONS

To determine the Existing Plus Project operating conditions at the study intersections, the project-generated trips were added to the existing conditions volumes. **Exhibit 10** shows Existing Plus Project a.m. and p.m. peak hour volumes at the study intersections. The Existing Plus Project daily roadway segment volumes are illustrated in **Exhibit 11**.

Table 6 summarizes the Existing Plus Project a.m. and p.m. peak hour intersection LOS for the study intersections. Detailed HCM calculation sheets are contained in Appendix D.

Table 6
Existing Plus Project Peak Hour Intersection Conditions

Study Intersection		Existing Conditions		Existing + Project		Change in Delay ⁽¹⁾	
		AM Delay ⁽¹⁾ – LOS	PM Delay ⁽¹⁾ – LOS	AM Delay ⁽¹⁾ – LOS	PM Delay ⁽¹⁾ – LOS	AM	PM
1.	Valley Parkway / I-15 Southbound Ramps	44.5 – D	46.9 – D	44.5 – D	47.4 – D	0.0	0.5
2.	Valley Parkway / I-15 Northbound Ramps	30.4 – C	35.9 – D	30.6 – C	36.5 – D	0.2	0.6
3.	Valley Parkway / La Terraza Blvd.- Plaza Las Palmas	17.6 – B	23.2 – C	17.6 – B	23.2 – C	0.0	0.0
4.	Valley Parkway / North Tulip Street	27.9 – C	29.8 – C	27.9 – C	29.8 – C	0.0	0.0
5.	Valley Parkway / Gateway Driveway	2.1 – A	5.6 – A	2.1 – A	5.6 – A	0.0	0.0
6.	Valley Parkway / Quince Street	19.1 – B	20.3 – C	19.1 – B	20.3 – C	0.0	0.0
7.	Valley Parkway / Centre City Parkway	22.1 – C	21.2 – C	22.2 – C	21.3 – C	0.1	0.1
8.	Grand Avenue / Quince Street	17.7 – B	25.8 – C	17.8 – B	25.8 – C	0.1	0.0
9.	Grand Avenue / Centre City Parkway	14.2 – B	20.3 – C	14.3 – B	20.3 – C	0.1	0.0
10.	Second Avenue / Quince Street	14.5 – B	19.9 – B	14.5 – B	19.9 – B	0.0	0.0
11.	Second Avenue / Centre City Parkway	17.8 – B	22.1 – C	18.0 – B	22.1 – C	0.2	0.0
12.	North Hale Avenue / North Tulip Street	14.5 – B	22.7 – C	14.6 – B	22.7 – C	0.1	0.0
13.	Valley Parkway / Project Driveway ⁽²⁾	–	–	12.4 – B	12.1 – B	–	–
14.	West Grand Avenue / Project Driveway ⁽²⁾	–	–	10.2 – B	12.3 – B	–	–

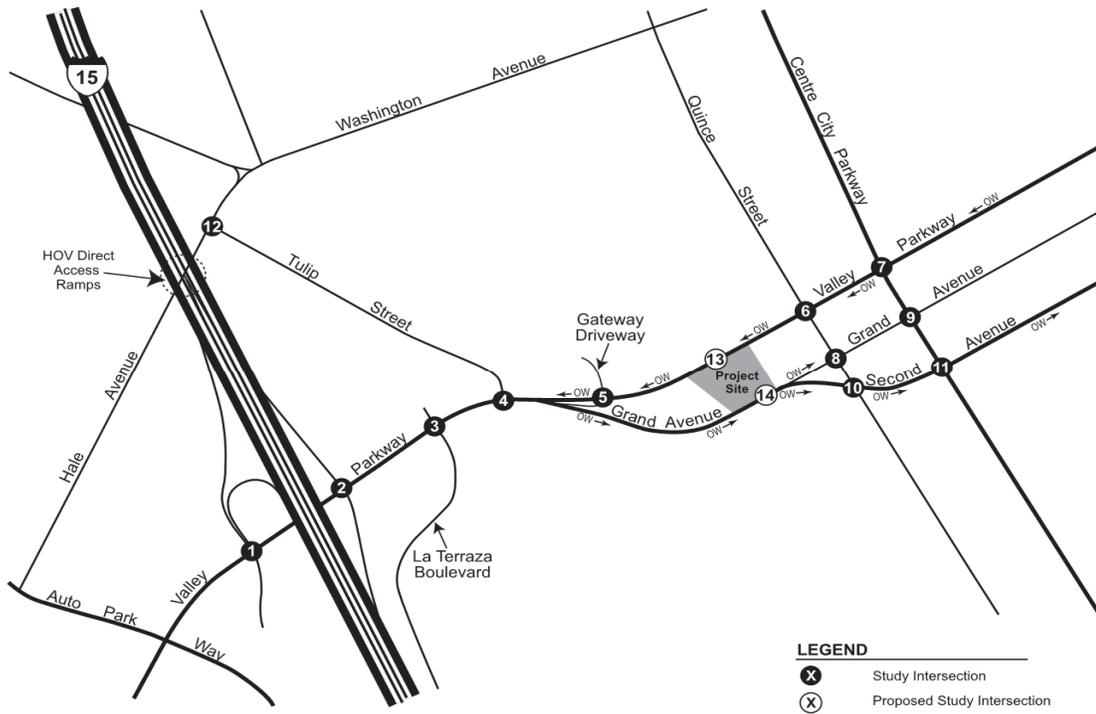
⁽¹⁾ Seconds of delay per vehicle.

⁽²⁾ Unsignalized, minor street stop-sign controlled intersection.

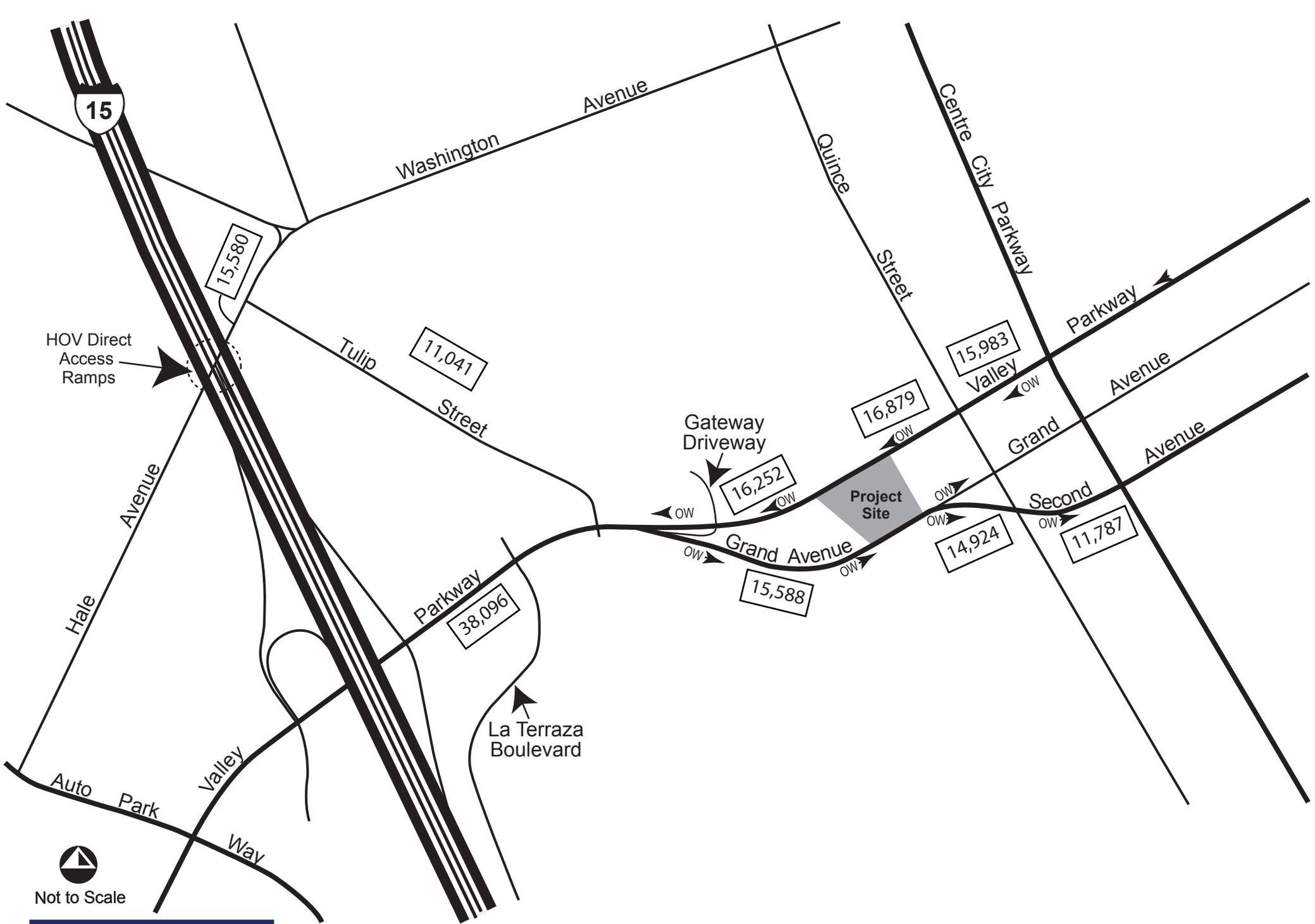
As shown in Table 6, consistent with existing conditions, the study intersections are forecast to continue operating at LOS D or better with the addition of project-generated traffic to existing a.m. and p.m. peak hour volumes. The project-related increases in delay do not exceed the City's significant impact thresholds; therefore, no significant impacts were identified and no mitigation measures are required at the study intersections under Existing Plus Project conditions.

The results of the Existing Plus Project conditions daily roadway segment analysis is presented in Table 7. Table 7 shows that consistent with existing conditions, the study roadway segments will continue operating at acceptable levels of service (LOS D or better) with the addition of project-generated traffic to existing daily traffic volumes. The project-related increases in the volume-to-capacity ratios (v/c) do not exceed the City's significant impact thresholds; therefore, no significant impacts were identified and no mitigation measures are required on the study roadway segments under Existing Plus Project conditions.

I-15 SB Ramps / Valley Pkwy.		I-15 NB Ramps / Valley Pkwy.		Valley Pkwy. / La Terraza Blvd.		Valley Pkwy. / Tulip Street							
699/375 ↙	75/140 →	252/268 ↘	↖ 245/392 ↙ 1121/754 ↘ 85/190	↖ 175/341 ↙ 1070/1145	60/129 ↙	23/13 ↘	23/55 ↘	Plaza Las Palmas ↖ 49/57 ↙ 1090/1170 ↘ 96/98	183/240 ↙	10/15 ↘	65/244 ↘	Tulip St. ↖ 244/138 ↙ 1060/1062 ↘ 11/25	
Valley Pkwy.	1	Valley Pkwy.	Valley Pkwy.	2	Valley Pkwy.	3	Valley Pkwy.	4	Valley Pkwy.	4	Valley Pkwy.	Valley Pkwy.	
74/56 ↘	756/1339 →	59/111 ↘	↖ 3/151 ↙ 30/54 ↘ 82/301	↖ 266/647 ↙ 813/1256 ↘ 369/175	↖ 510/475 ↙ 130 ↘ 369/175	81/103 ↘	1002/1534 →	118/64 ↘	La Terraza Blvd. ↖ 83/159 ↙ 24/18 ↘ 54/151	224/320 ↘	854/1384 →	2/6 ↘	Private Dwy. ↖ 4/17 ↙ 4/6 ↘ 3/10
Valley Pkwy. / Gateway Driveway		Valley Pkwy. / Quince Street		Valley Pkwy. / Centre City Pkwy.		Grand Ave. / Quince Street							
7/94 ↙	↖ 19/65 ↙ 1308/1214	↖ 323/457 ↙ 175/160	↖ 96/81 ↙ 1254/1160 ↘ 21/45	↖ 96/81 ↙ 1254/1160 ↘ 21/45	90/107 ↙	952/828 ↘	↖ 224/325 ↙ 1088/994 ↘ 314/263	↖ 21/31 ↙ 4/13	11/67 ↘	319/405 ↘	Quince St. ↖ 21/31 ↙ 4/13		
Valley Pkwy.	5	Valley Pkwy.	Valley Pkwy.	6	Valley Pkwy.	7	Valley Pkwy.	8	Grand Ave.	8	Grand Ave.		
	↖ 10/18		↖ 71/74 ↙ 195/229	↖ 71/74 ↙ 195/229		↖ 152/145 ↙ 644/966	81/100 ↘	179/317 →	0/1 ↘	168/156 ↘	2/7 ↘		
Grand Ave. / Centre City Pkwy.		Second Ave. / Quince Street		Second Ave. / Centre City Pkwy.		Hale Ave. / Tulip Street							
75/100 ↘	1217/87 ↘	12/21 ↙	↖ 126/160 ↙ 22/24 ↘ 51/68	↖ 102/173 ↙ 254/273	↖ 1097/79 ↘	150/176 ↘	↖ 167/352 ↙ 269/88	175/258 ↘	857/397 ↘	Hale Ave. ↖ 167/352 ↙ 269/88			
Grand Ave.	9	Grand Ave.	Grand Ave.	10	Second Ave.	11	Second Ave.	12	Tulip St.	12	Tulip St.		
38/75 ↘	149/309 →	4/16 ↘	↖ 3/11 ↙ 681/935 ↘ 58/100	1/2 ↘	618/1164 →	25/46 ↘	↖ 20/64 ↙ 192/170	↖ 200/222 ↙ 703/850	↖ 55/209 ↙ 297/817	Hale Ave. ↖ 55/209 ↙ 297/817			
Valley Pkwy. / Project Driveway		Grand Ave. / Project Driveway											
	↖ 1488/1369 ↙ 7/20	20/11 ↘	Project Dwy. ↖ 17/39 ↙ 893/1643										
Valley Pkwy.	13	Valley Pkwy.	Grand Ave.	14	Grand Ave.								
	↖ 38/22												



LEGEND
 (X) Study Intersection
 (X) Proposed Study Intersection
 XX/XX AM/PM Peak Hour Volumes



Not to Scale

**Table 7
Existing Plus Project Daily Roadway Segment Conditions**

Segment	Location	Class (# Lanes)	LOS E Capacity	Existing Conditions			Existing + Project			Change in V/C
				ADT	V/C	LOS	ADT	V/C	LOS	
Valley Parkway	I-15 to North Tulip Street	Prime Arterial (7 / Two-Way)	65,000	37,513	0.577	C	38,096	0.586	C	0.009
	North Tulip Street to Project Site	Collector (3 / One-Way)	25,700	15,937	0.620	C	16,252	0.632	C	0.012
	Project Site to Quince Street	Collector (3 / One-Way)	25,700	16,717	0.650	C	16,879	0.657	C	0.006
	Quince Street to Centre City Parkway	Collector (3 / One-Way)	25,700	15,740	0.612	C	15,893	0.618	C	0.006
West Grand Avenue	North Tulip Street to Project Site	Collector (3 / One-Way)	25,700	15,273	0.594	C	15,588	0.607	C	0.012
Second Avenue	Project Site to Quince Street	Collector (4 / One-Way)	34,200	14,800	0.433	B	14,924	0.436	C	0.004
	Quince Street to Centre City Parkway	Collector (3 / One-Way)	25,700	11,663	0.454	B	11,787	0.459	B	0.005
North Tulip Street	Valley Parkway to North Hale Avenue	Collector (4)	34,200	11,041	0.323	A	11,089	0.324	A	0.001
North Hale Avenue	I-15 DAR to North Tulip Street	Collector (4)	34,200	15,532	0.454	B	15,580	0.456	B	0.001

EXISTING PLUS CUMULATIVE CONDITIONS – WITHOUT AND WITH PROJECT

To determine the Existing Plus Cumulative conditions in the project study area, forecast project traffic associated with City of Escondido approved or pending projects was added to existing traffic volumes. City of Escondido staff provided a list of six (6) cumulative projects that would generate traffic into the study area by the project opening year (approximately 2018). Cumulative project traffic data through the study area is based on information from traffic impact studies prepared for the cumulative projects where available. The list of cumulative projects and the trips generated by each project are presented in Table 8. **Exhibit 12** shows the locations of the cumulative projects. **Exhibit 13** illustrates the a.m. and p.m. peak hour cumulative project trips at the study intersections. The daily cumulative project trips on the study roadway segments are shown in Exhibit 14.

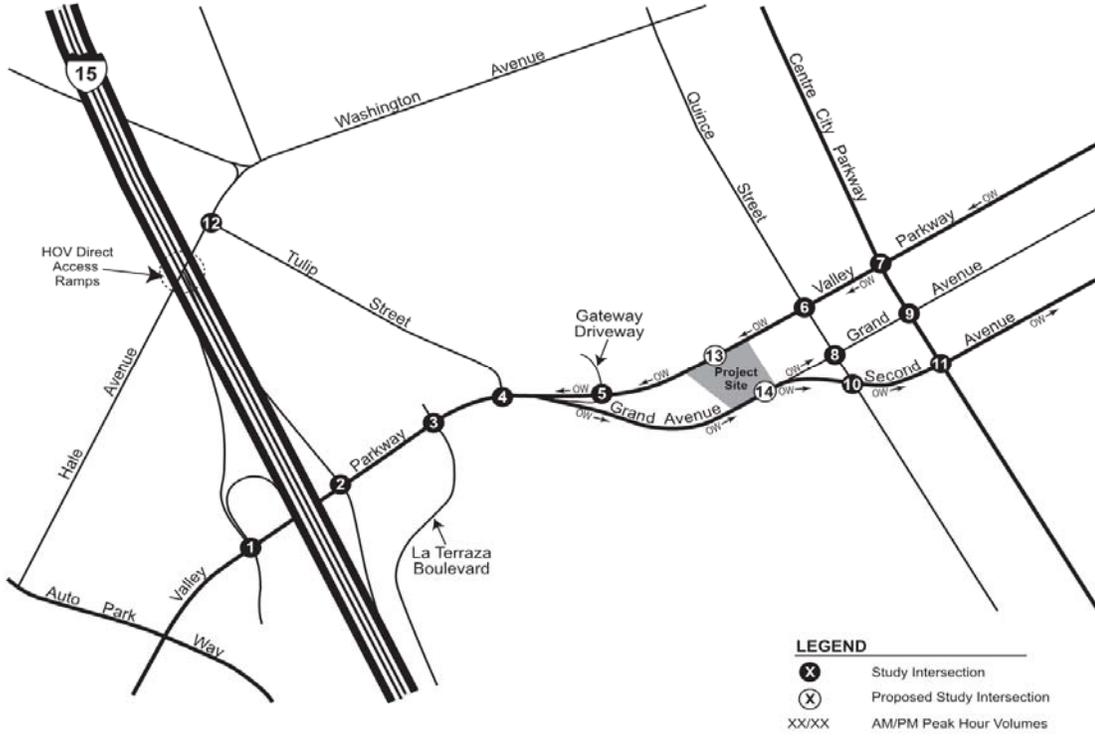
As presented in Table 8, the cumulative projects are forecast to generate approximately 12,119 trips per day, which includes approximately 700 a.m. peak hour trips and approximately 827 p.m. peak hour trips.

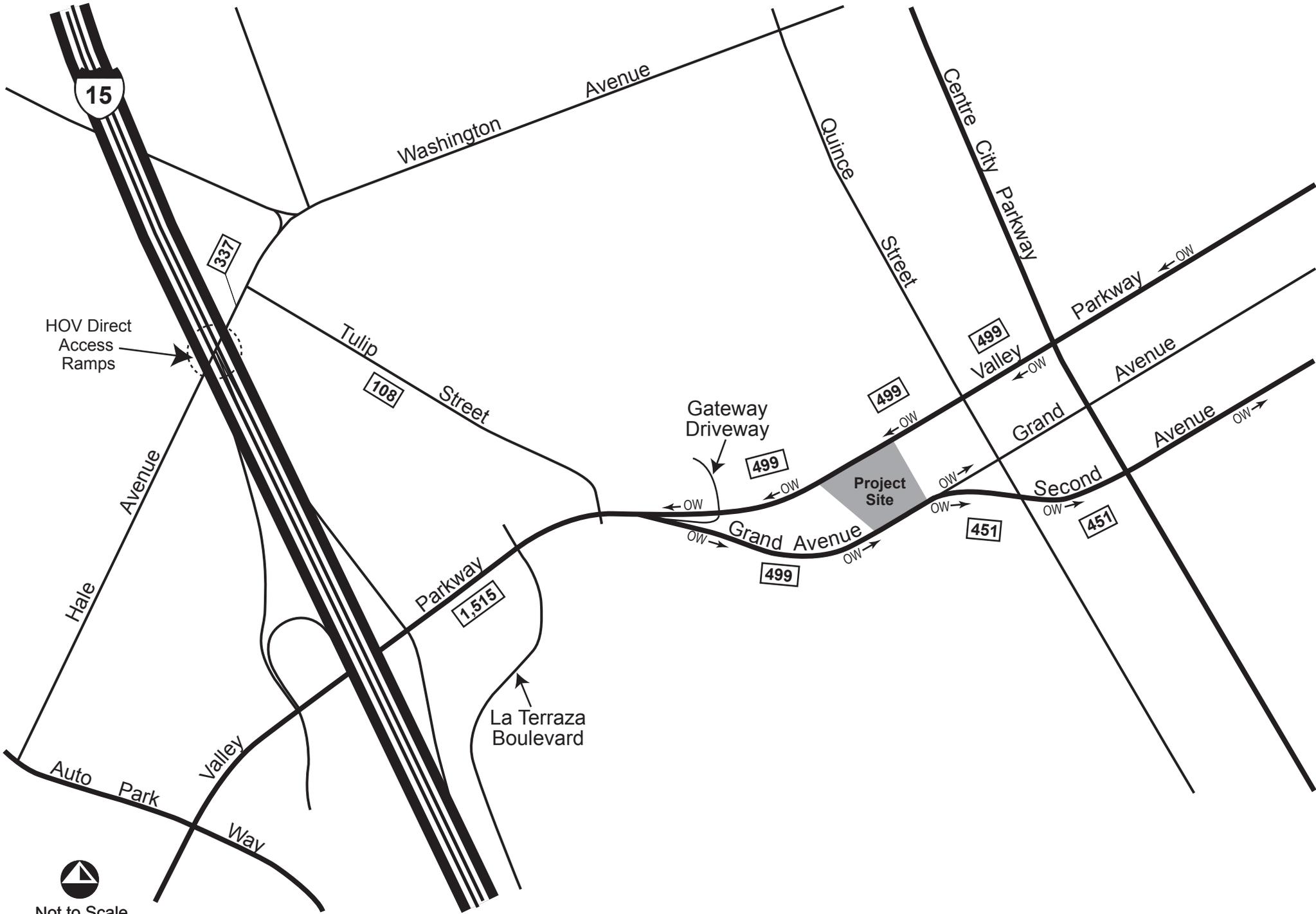
To determine the Existing Plus Cumulative operating conditions, the cumulative project trips were added to the existing traffic volumes at the intersections and roadway segments within the project study area.

**Table 8
Cumulative Projects Trip Generation**

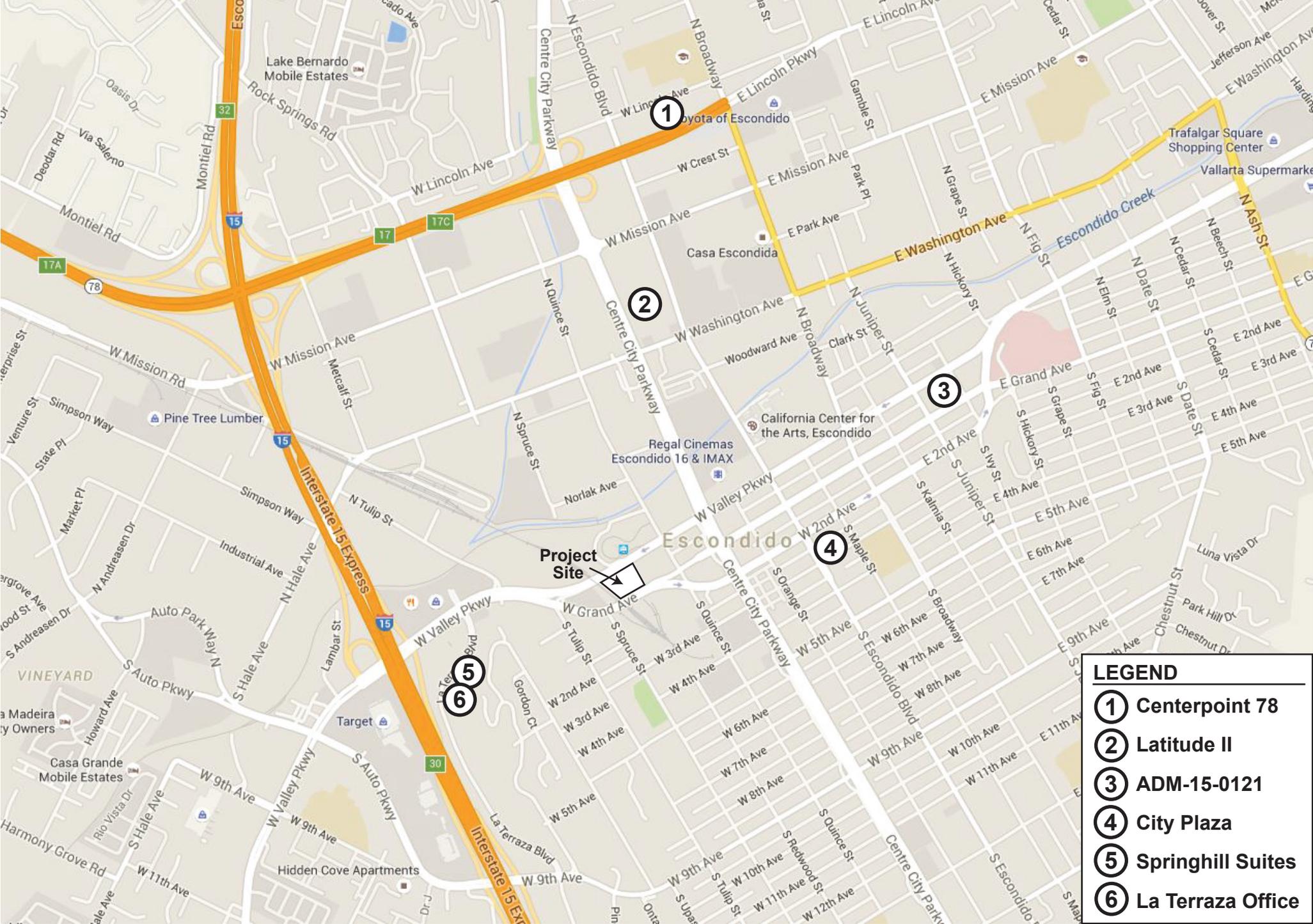
Project		Land Use	Intensity	Unit	Daily Trips	AM Peak Hour			PM Peak Hour		
						Total	In	Out	Total	In	Out
1	Centerpoint 78 Commercial Project	Supermarket	43.500	TSF	6,525	261	183	78	392	196	196
		Fast-Food Restaurant (With Drive-Thru)	3.200	TSF	2,080	146	73	73	88	44	44
		<i>Total Project Trips</i>				8,605	407	256	151	480	240
2	Latitude II	Condominiums	112	DU	896	72	14	57	90	63	27
3	ADM 15-0121 (Mixed-Use Project)	Apartments	20	DU	120	10	2	8	11	8	3
		Specialty Retail	2.378	TSF	95	3	2	1	9	4	4
		<i>Total Project Trips</i>				215	12	4	9	19	12
4	City Plaza	Apartments	55	DU	330	26	5	21	30	21	9
		Specialty Retail	5.198	TSF	208	6	4	2	19	9	9
		Office	4.158	TSF	83	12	10	1	11	2	9
		<i>Total Project Trips</i>				621	44	20	25	59	32
5	Springhill Suites	Hotel	105	rooms	1,050	63	38	25	84	50	34
6	La Terraza Office	Office	36.614	TSF	732	102	92	10	95	19	76
Total Cumulative Project Trips					12,119	700	423	277	827	416	411

I-15 SB Ramps / Valley Pkwy.		I-15 NB Ramps / Valley Pkwy.		Valley Pkwy. / La Terraza Blvd.		Valley Pkwy. / Tulip Street	
34/19 ↗	I-15 SB Ramps	25/38 ↖ 7/13 ← 2/2 ↙	Valley Pkwy.	10/29 ↖ 34/53 ←	I-15 NB Ramps	23/16 ← 46/24 ↙	Plaza Las Palmas
Valley Pkwy.	1	Valley Pkwy.	Valley Pkwy.	2	Valley Pkwy.	3	Valley Pkwy.
0/0 ↗ 14/11 → 0/0 ↘	Escondido Promenade	2/3 ↗	Valley Pkwy.	49/32 →	I-15 NB Ramps	10/27 → 78/41 ↘	La Terraza Blvd.
Valley Pkwy. / Gateway Driveway		Valley Pkwy. / Quince Street		Valley Pkwy. / Centre City Pkwy.		Grand Ave. / Quince Street	
	Gateway Dwy.	63/38 ←	Valley Pkwy.	2/2 ↘	Quince St.	6/11 ↗ 34/21 ← 1/0 ↙	Centre City Pkwy.
Valley Pkwy.	5	Valley Pkwy.	Valley Pkwy.	6	Valley Pkwy.	7	Valley Pkwy.
	Gateway Dwy.		Valley Pkwy.	3/2 ↗	Quince St.	2/6 ↗ 20/60 →	Private Dwy.
Grand Ave. / Centre City Pkwy.		Second Ave. / Quince Street		Second Ave. / Centre City Pkwy.		Hale Ave. / Tulip Street	
14/17 ↘ 3/2 ↗	Centre City Pkwy.	3/6 ↗	Grand Ave.	0/0 ↗ 2/2 ↘	Quince St.	9/10 ↘ 6/7 ↗	Central Ave.
Grand Ave.	9	Grand Ave.	Second Ave.	10	Second Ave.	11	Second Ave.
1/3 ↗ 1/2 →	Centre City Pkwy.	21/34 ↗	Grand Ave.	19/57 →	Quince St.	5/18 ↗ 13/33 → 2/6 ↘	Central Ave.
Valley Pkwy. / Project Driveway		Grand Ave. / Project Driveway					
	Valley Pkwy.	63/38 ←	Valley Pkwy.		Project Dwy.		
Valley Pkwy.	13	Valley Pkwy.	Grand Ave.	14	Grand Ave.		
	Project Dwy.		21/61 →		Grand Ave.		






 Not to Scale



LEGEND	
①	Centerpoint 78
②	Latitude II
③	ADM-15-0121
④	City Plaza
⑤	Springhill Suites
⑥	La Terraza Office

Existing Plus Cumulative Conditions Level of Service Analysis

Table 9 summarizes the Existing Plus Cumulative conditions peak hour intersection analysis using HCM methodology, without and with the proposed project. Detailed HCM calculation sheets are contained in Appendix E. **Exhibit 15** and **Exhibit 16** show the Existing Plus Cumulative without project a.m. and p.m. peak hour and daily traffic volumes, respectively. The Existing Plus Cumulative a.m. and p.m. peak hour and daily traffic volumes with the proposed project are illustrated in **Exhibit 17** and **Exhibit 18**, respectively.

Table 9
Existing Plus Cumulative Peak Hour Intersection Conditions
Without and With Project

Study Intersection		Without Project		With Project		Change in Delay ⁽¹⁾	
		AM Delay ⁽¹⁾ – LOS	PM Delay ⁽¹⁾ – LOS	AM Delay ⁽¹⁾ – LOS	PM Delay ⁽¹⁾ – LOS	AM	PM
1.	Valley Parkway / I-15 Southbound Ramps	47.5 – D	51.2 – D	47.7 – D	52.1 – D	0.2	0.9
2.	Valley Parkway / I-15 Northbound Ramps	32.2 – C	40.0 – D	32.4 – C	41.1 – D	0.2	1.1
3.	Valley Parkway / La Terraza Blvd.- Plaza Las Palmas	19.9 – B	27.3 – C	19.9 – B	27.3 – C	0.0	0.0
4.	Valley Parkway / North Tulip Street	27.8 – C	30.1 – C	27.8 – C	30.1 – C	0.0	0.0
5.	Valley Parkway / Gateway Driveway	2.1 – A	5.5 – A	2.1 – A	5.5 – A	0.0	0.0
6.	Valley Parkway / Quince Street	19.4 – B	20.7 – C	19.4 – B	20.7 – C	0.0	0.0
7.	Valley Parkway / Centre City Parkway	23.2 – C	22.1 – C	23.3 – C	22.2 – C	0.1	0.1
8.	Grand Avenue / Quince Street	17.8 – B	26.0 – C	17.9 – B	26.0 – C	0.0	0.0
9.	Grand Avenue / Centre City Parkway	14.5 – B	20.7 – C	14.5 – B	20.7 – C	0.0	0.0
10.	Second Avenue / Quince Street	14.5 – B	19.9 – B	14.5 – B	19.9 – B	0.0	0.0
11.	Second Avenue / Centre City Parkway	18.2 – B	22.9 – C	18.4 – B	23.0 – C	0.1	0.1
12.	North Hale Avenue / North Tulip Street	14.8 – B	25.6 – C	14.8 – B	25.7 – C	0.1	0.1
13.	Valley Parkway / Project Driveway ⁽²⁾	–	–	13.0 – B	12.5 – B	–	–
14.	West Grand Avenue / Project Driveway ⁽²⁾	–	–	10.4 – B	12.8 – B	–	–

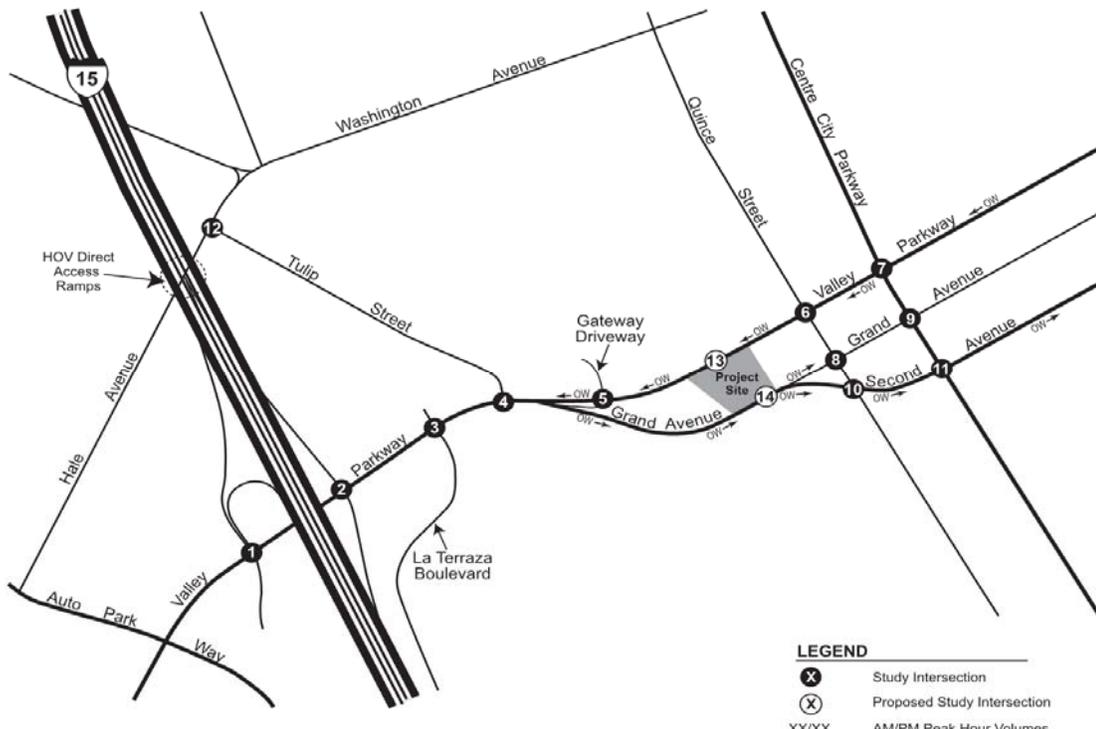
⁽¹⁾ Seconds of delay per vehicle.

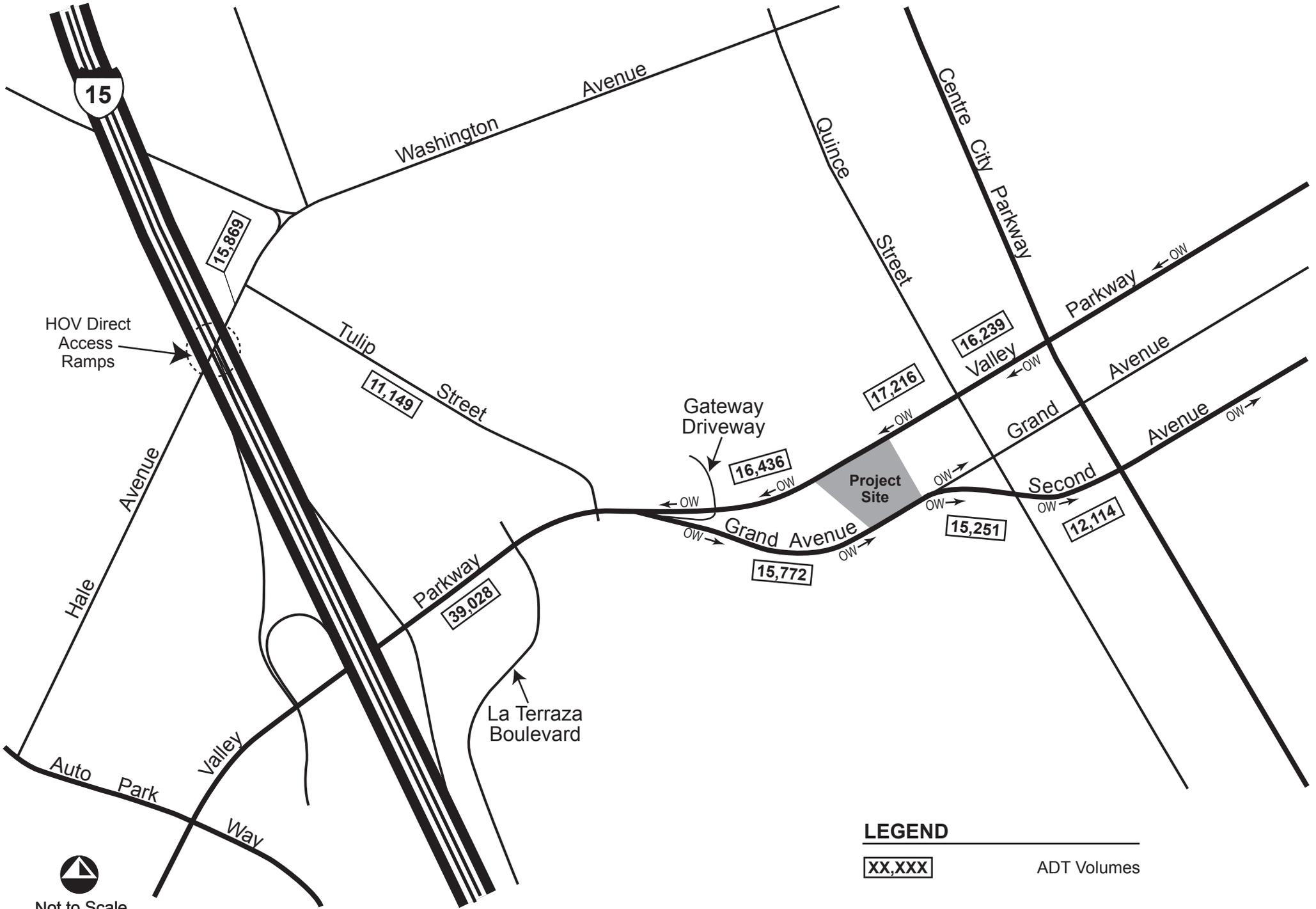
⁽²⁾ Unsignalized, minor street stop-sign controlled intersection.

As shown in Table 9, all study intersections are forecast to operate at acceptable levels of service (LOS D or better) during the peak hours under Existing Plus Cumulative conditions both without and with the proposed project. The project-related increases in delay do not exceed the City's significant impact thresholds; therefore, no significant impacts were identified and no mitigation measures are required at the study intersections under Existing Plus Cumulative conditions with the proposed project.

Table 10 presents the results of the Existing Plus Cumulative conditions roadway segment level of service analysis, without and with the proposed project. As shown in Table 10, all study roadway segments are forecast to operate at acceptable levels of service (LOS D or better) both without and with the proposed project. The project-related increases in the volume-to-capacity ratios (v/c) do not exceed the City's significant impact thresholds; therefore, no significant impacts were identified and no mitigation measures are required on the study roadway segments under Existing Plus Cumulative conditions with the proposed project.

I-15 SB Ramps / Valley Pkwy.		I-15 NB Ramps / Valley Pkwy.		Valley Pkwy. / La Terraza Blvd.		Valley Pkwy. / Tulip Street	
645/360 ↙	262/265 ↘	237/407 ↙	1037/735 ↘	161/351 ↙	1009/1148 ↘	47/54 ↙	1027/1108 ↘
69/135 ↘	262/265 ↘	78/184 ↙		571/22 ↙	221/2 ↘	17/230 ↙	9/14 ↘
Valley Pkwy.	1	Valley Pkwy.	2	Valley Pkwy.	3	Valley Pkwy.	4
68/54 ↘	710/1293 ↘	54/107 ↘	248/625 ↘	798/1226 ↘	77/98 ↘	950/1450 ↘	190/102 ↘
Valley Pkwy. / Gateway Driveway	Valley Pkwy. / Quince Street	Valley Pkwy. / Centre City Pkwy.	Valley Pkwy. / La Terraza Blvd.	Valley Pkwy. / Tulip Street	Valley Pkwy. / Quince St.	Valley Pkwy. / Centre City Pkwy.	Valley Pkwy. / Tulip Street
78/4 ↙	18/58 ↙	1291/1107 ↘	305/417 ↘	163/143 ↘	90/74 ↙	1232/1074 ↘	20/41 ↙
Valley Pkwy.	5	Valley Pkwy.	6	Valley Pkwy.	7	Valley Pkwy.	8
	10/16 ↙		90/74 ↙	1232/1074 ↘	20/41 ↙	926/771 ↘	106/104 ↘
Valley Pkwy. / Gateway Driveway	Valley Pkwy. / Quince St.	Valley Pkwy. / Centre City Pkwy.	Valley Pkwy. / La Terraza Blvd.	Valley Pkwy. / Tulip Street	Valley Pkwy. / Quince St.	Valley Pkwy. / Centre City Pkwy.	Valley Pkwy. / Tulip Street
Valley Pkwy.	5	Valley Pkwy.	6	Valley Pkwy.	7	Valley Pkwy.	8
Valley Pkwy. / Gateway Driveway	Valley Pkwy. / Quince St.	Valley Pkwy. / Centre City Pkwy.	Valley Pkwy. / La Terraza Blvd.	Valley Pkwy. / Tulip Street	Valley Pkwy. / Quince St.	Valley Pkwy. / Centre City Pkwy.	Valley Pkwy. / Tulip Street
Valley Pkwy.	5	Valley Pkwy.	6	Valley Pkwy.	7	Valley Pkwy.	8
Grand Ave. / Centre City Pkwy.	Second Ave. / Quince Street	Second Ave. / Centre City Pkwy.	Second Ave. / Quince Street	Second Ave. / Centre City Pkwy.	Second Ave. / Quince Street	Second Ave. / Centre City Pkwy.	Second Ave. / Quince Street
124/158 ↙	21/23 ↙	49/65 ↙	124/158 ↙	21/23 ↙	49/65 ↙	124/158 ↙	21/23 ↙
Grand Ave.	9	Grand Ave.	10	Grand Ave.	11	Grand Ave.	12
36/74 ↘	144/298 ↘	4/15 ↘	1/2 ↘	558/1123 ↘	22/42 ↘	1/2 ↘	558/1123 ↘
Valley Pkwy. / Project Driveway	Grand Ave. / Project Driveway	Valley Pkwy. / Project Driveway	Grand Ave. / Project Driveway	Valley Pkwy. / Project Driveway	Grand Ave. / Project Driveway	Valley Pkwy. / Project Driveway	Grand Ave. / Project Driveway
Proposed Project Intersection		Proposed Project Intersection		Proposed Project Intersection		Proposed Project Intersection	
Valley Pkwy.	13	Valley Pkwy.	14	Grand Ave.	14	Grand Ave.	14

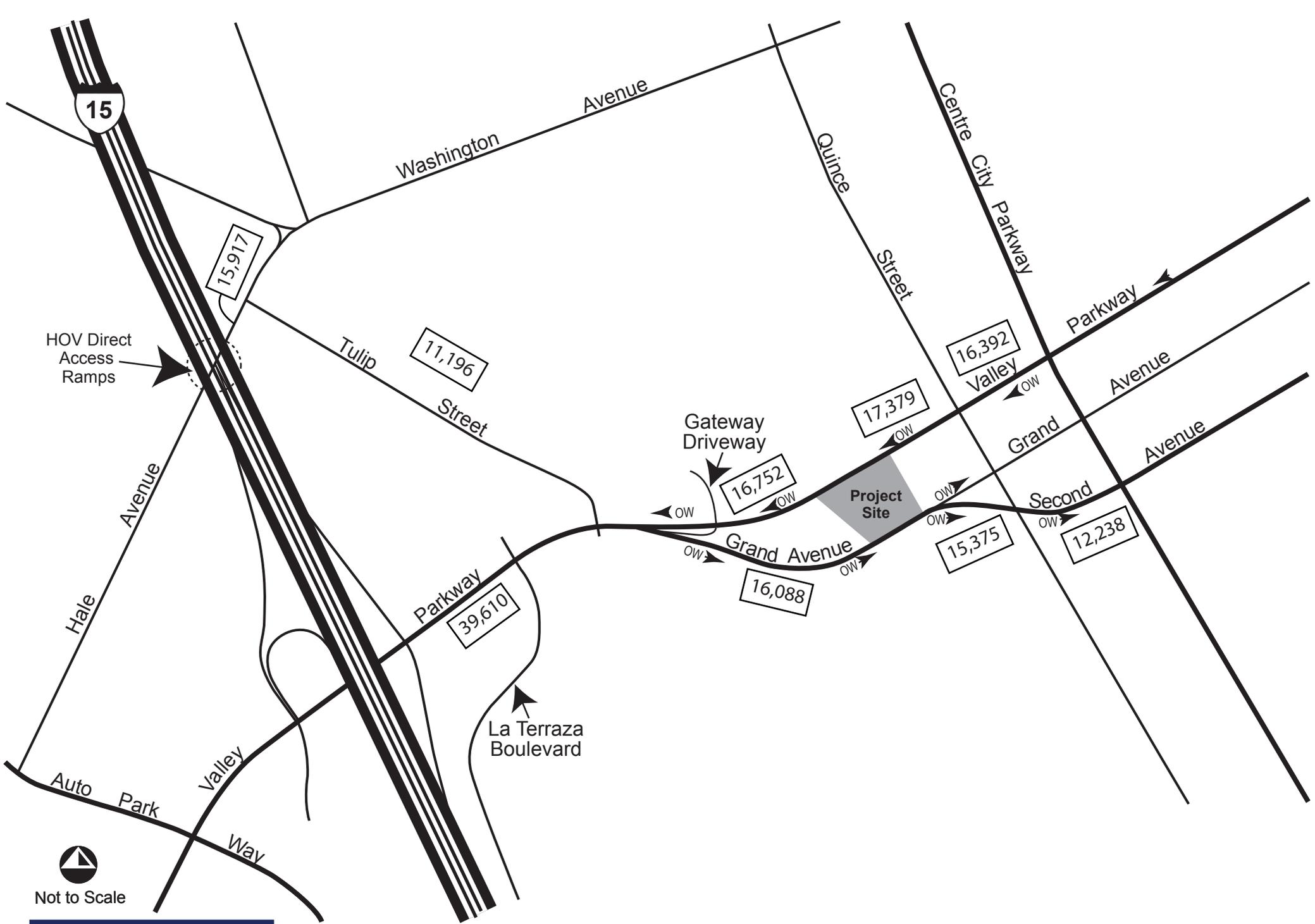




LEGEND

XX,XXX ADT Volumes

Not to Scale



Not to Scale

**Table 10
Existing Plus Cumulative Daily Roadway Segment Conditions
Without and With Project**

Segment	Location	Class (# Lanes)	LOS E Capacity	Without Project			With Project			Change in V/C
				ADT	V/C	LOS	ADT	V/C	LOS	
Valley Parkway	I-15 to North Tulip Street	Prime Arterial (7 / Two-Way)	65,000	39,028	0.600	C	39,610	0.609	C	0.009
	North Tulip Street to Project Site	Collector (3 / One-Way)	25,700	16,436	0.640	C	16,752	0.652	C	0.012
	Project Site to Quince Street	Collector (3 / One-Way)	25,700	17,216	0.670	C	17,379	0.676	C	0.006
	Quince Street to Centre City Parkway	Collector (3 / One-Way)	25,700	16,239	0.632	C	16,392	0.638	C	0.006
West Grand Avenue	North Tulip Street to Project Site	Collector (3 / One-Way)	25,700	15,772	0.614	C	16,088	0.626	C	0.012
Second Avenue	Project Site to Quince Street	Collector (4 / One-Way)	34,200	15,251	0.446	B	15,375	0.450	B	0.004
	Quince Street to Centre City Parkway	Collector (3 / One-Way)	25,700	12,114	0.471	B	12,238	0.476	B	0.005
North Tulip Street	Valley Parkway to North Hale Avenue	Collector (4)	34,200	11,149	0.326	A	11,196	0.327	A	0.001
North Hale Avenue	I-15 DAR to North Tulip Street	Collector (4)	34,200	15,869	0.464	B	15,917	0.465	B	0.001

SIGNIFICANT IMPACTS AND MITIGATION

Based on the City of Escondido's significant impact criteria and in accordance with SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region, a project-related significant impact is forecast to occur if:

1. The addition of project-generated traffic results in a change in level of service from LOS D to LOS E or F at an intersection or along a roadway segment; OR
2. Within the Downtown Specific Plan LOS E threshold area, the addition of project-generated traffic results in a change in level of service from LOS E to LOS F at an intersection or along a roadway segment ; OR
3. At a location operating at **LOS D, E, or F** without the project, the addition of project traffic results in an increase in delay of greater than 2.0 seconds at an intersection, or an increase in v/c ratio of greater than 0.020 on a roadway segment; OR
4. Within the Downtown Specific Plan LOS E threshold area, if a location is operating at **LOS E or F** without the project, a significant impact occurs if the addition of project traffic results in an increase in delay of greater than 2.0 seconds at an intersection, or an increase in v/c ratio of greater than 0.020 on a roadway segment.

Based on the results of the analysis, no significant impacts are forecast to occur with the addition of project-related traffic to the study intersections and roadway segments. Therefore, no mitigation measures are required.

SITE ACCESS, CIRCULATION AND PARKING

The proposed Gateway Grand project will take access from one driveway on Valley Parkway (one-way westbound only) and one driveway on West Grand Avenue (one-way eastbound only). A second driveway on Valley Parkway will be provided at the northwest corner of the project site for emergency access only. The existing driveways for the former police station will be removed.

One lane will be provided at each driveway intersection approach that will allow only left-turn movements because Valley Parkway is one-way westbound and West Grand Avenue is one-way eastbound. Both driveway intersections would be unsignalized and controlled by stop signs at the outbound driveway approaches of the intersections.

The proposed project access driveway on Valley Parkway is located approximately 220 feet to the east of the SPINTER rail crossing. The nearest existing off-site driveway is located approximately 260 feet to the east of the proposed Valley Parkway driveway.

The proposed project access driveway on West Grand Avenue is located approximately 300 feet to the east of the SPINTER rail crossing. An existing driveway serving the adjacent California Bank office building is located approximately 60 feet to the east of the proposed West Grand Avenue driveway.

City of Escondido Traffic Engineering staff reviewed the driveway locations as shown on the current project site plan, and concurred that the close spacing of the proposed project driveway and the existing California Bank driveway on West Grand Avenue is acceptable would not create any operational or safety issues.

The proposed project will provide a total of 226 parking spaces, which includes 126 garage spaces, 93 open spaces, and 7 disabled spaces. Based on SANDAG Parking Strategies for Smart Growth, it is recommended the project provide 208 parking spaces. Therefore the project will provided a surplus of 18 parking spaces.

SIGHT DISTANCE ASSESSMENT

A sight distance assessment was performed for the project driveway locations as shown in the project site plan to determine if adequate intersection corner sight distance would be provided for vehicles exiting the project site.

The design speed used to determine the minimum sight distance requirement is the greater of the posted speed limit, the current prevailing (85th percentile) speed, or the design speed of the respective road classification based on the City's Minimum Street Design Standards (page 16 of the *City of Escondido Design Standards and Standard Drawings*). The posted speed limit on both Valley Parkway and West Grand Avenue is 35 miles per hour (mph). The segments of Valley Parkway and West Grand Avenue adjacent to the project site are classified as Collector roadways according to the City's General Plan Mobility Element. Based on the City's Minimum Street Design Standards, a Collector roadway has a design speed of 40 mph.

To determine the current prevailing (85th percentile) speeds, radar speed surveys were conducted over a two-hour period on a typical weekday during non-peak hours in December 2015 on Valley Parkway and on West Grand Avenue in front of the approximate locations of the project driveways. The radar speed data results for Valley Parkway and West Grand Avenue are provided in Appendix F.

The results of the speed surveys showed that the prevailing (85th percentile) speed on Valley Parkway is approximately **41 mph**, and the prevailing speed on West Grand Avenue is approximately **40 mph**. Therefore, the current prevailing (85th percentile) speeds and the design speed according to the City's Minimum Street Design Standards are approximately the same.

According to the Caltrans *Highway Design Manual*, the minimum corner sight distance needed based on a prevailing or design speed of 40 mph is 440 feet. Therefore, the minimum required line of sight from the project driveways is **440 feet**.

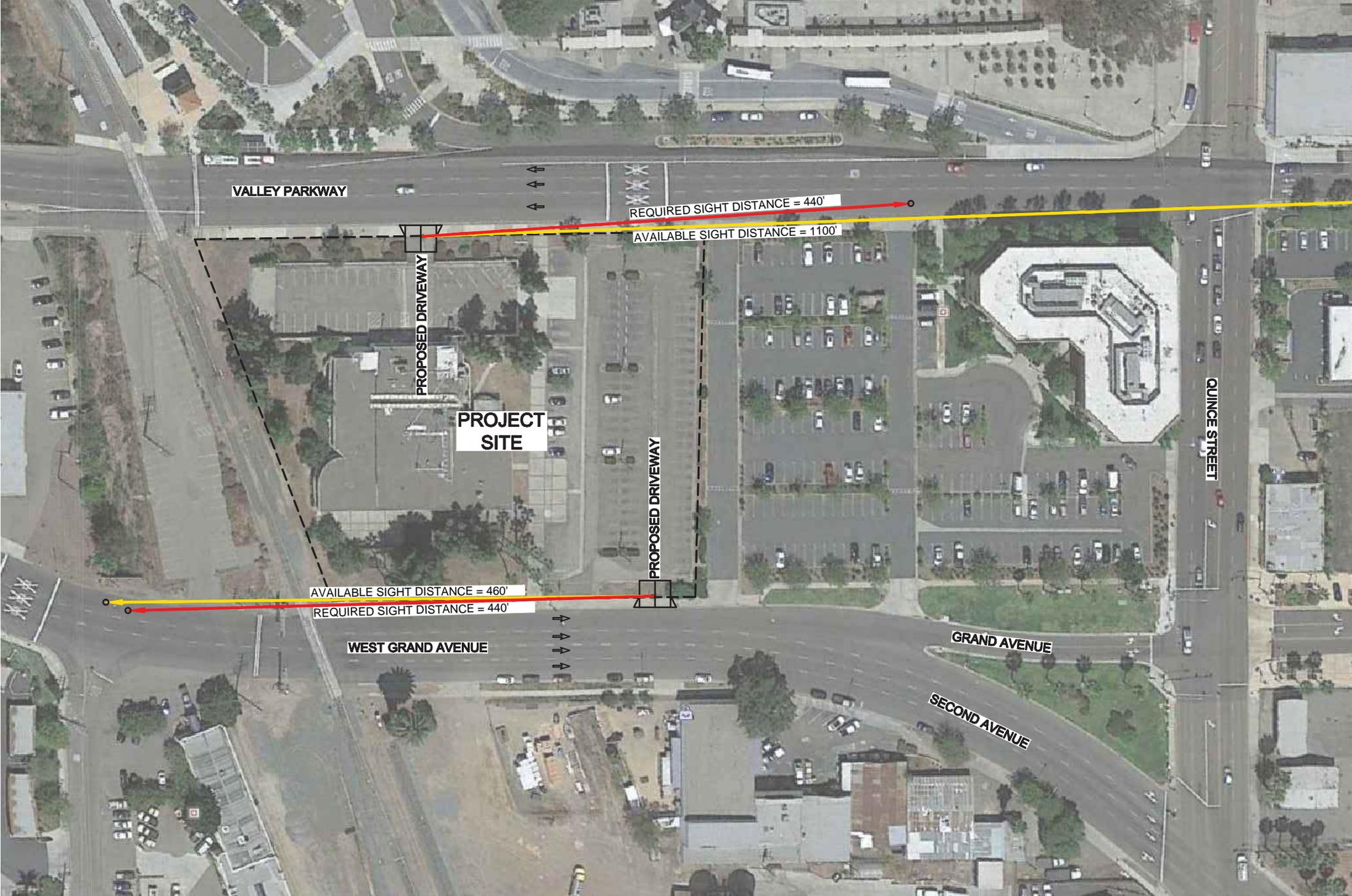
Field line of sight measurements were conducted at the approximate locations of the Valley Parkway and West Grand Avenue project driveways as shown in the project site plan. Intersection corner sight distance is measured along the direction of travel from a point on the minor road at least 10 feet from the edge of the major road pavement and is measured from a height of eye of 3.5 feet on the minor road to a height of object of 4.25 feet on the major road.

Looking east from the approximate driveway location on Valley Parkway, there is a clear line of sight to the intersection with Centre City Parkway, a distance of approximately **1,100 feet**. Therefore, adequate corner sight distance would be provided from the project driveway on Valley Parkway.

Looking west from the approximate driveway location on West Grand Avenue, there is a horizontal curvature to the roadway that limits the available line of sight. There is a railroad crossing approximately 290 feet west of the project driveway location; however, line of sight is not obstructed by the railroad crossing.

The field-measured line of sight looking west is approximately **460 feet** from the West Grand Avenue driveway location. The minimum required corner sight distance is 440 feet. Therefore, adequate corner sight distance would be provided from the project driveway on West Grand Avenue.

Exhibit 19 shows the field-measured line of sight and the minimum required corner sight distance at both the Valley Parkway and West Grand Avenue project driveways.



CONCLUSIONS

This study analyzed the forecast traffic impact of the proposed Gateway Grand project, located on the 2.6-acre former Escondido Police Station site at 700 West Grand Avenue in the City of Escondido. The proposed project will consist of 130 apartment units. The project also proposes to install a pedestrian-only signal and crosswalk on Valley Parkway on the east side of the SPRINTER rail line to provide direct pedestrian access between the project site and the Escondido Transit Center. As discussed previously, a second pedestrian-only signalized crosswalk on Grand Avenue at South Spruce Street west of the project site is also being considered and if constructed by the project, would provide a potential public benefit to improve pedestrian mobility in the area. The project will take access from one driveway on West Grand Avenue and one driveway on Valley Parkway. A second driveway on Valley Parkway will be provided for emergency access only. The project will generate approximately 955 trips per day, which includes approximately 76 a.m. peak hour trips and approximately 83 p.m. peak hour trips.

Existing / Existing Plus Project Conditions

The results of the existing conditions analysis show that the study intersections are currently operating at acceptable levels of service (LOS D or better). The study intersections will continue operating at LOS D or better with the addition of project-related trips to existing a.m. and p.m. peak hour volumes. The project-related increases in delay do not exceed the City's significant impact thresholds; therefore, no significant impacts were identified and no mitigation measures are required at the study intersections under Existing Plus Project conditions.

The results of the Existing Plus Project conditions daily roadway segment analysis show that consistent with existing conditions, the study roadway segments will continue operating at acceptable levels of service (LOS D or better) with the addition of project-generated traffic to existing daily traffic volumes. The project-related increases in the volume-to-capacity ratios (v/c) do not exceed the City's significant impact thresholds; therefore, no significant impacts were identified and no mitigation measures are required under Existing Plus Project conditions.

Existing Plus Cumulative Conditions

The Existing Plus Cumulative conditions analysis includes the addition of traffic generated by six (6) approved or pending projects located in the City of Escondido. The cumulative projects are forecast to generate approximately 12,119 trips per day, which includes approximately 700 a.m. peak hour trips and approximately 827 p.m. peak hour trips.

The Existing Plus Cumulative Conditions analysis results show that all study intersections are forecast to operate at acceptable levels of service (LOS D or better) during the peak hours under Existing Plus Cumulative conditions both without and with the proposed project. The project-related increases in delay do not exceed the City's significant impact thresholds; therefore, no significant impacts were identified and no mitigation measures are required at the study intersections under Existing Plus Cumulative conditions with the proposed project.

The results of the roadway segment analysis under Existing Plus Cumulative conditions show that all study roadway segments are forecast to operate at acceptable levels of service (LOS D or better) both without and with the proposed project. The project-related increases in the volume-to-capacity ratios (v/c) do not exceed the City's significant impact thresholds; therefore, no significant

impacts were identified and no mitigation measures are required on the study roadway segments under Existing Plus Cumulative conditions with the proposed project.

Sight Distance Assessment

A sight distance assessment was performed for the project driveway locations as shown in the project site plan to determine if adequate intersection corner sight distance would be provided for vehicles exiting the project site.

Field line of sight measurements were conducted at the approximate locations of the Valley Parkway and West Grand Avenue project driveways as shown in the project site plan. The findings of the sight distance assessment showed that the available line of sight at both project driveways would meet the minimum intersection corner sight distance requirement.

APPENDIX A

Downtown Specific Plan LOS E Threshold Area

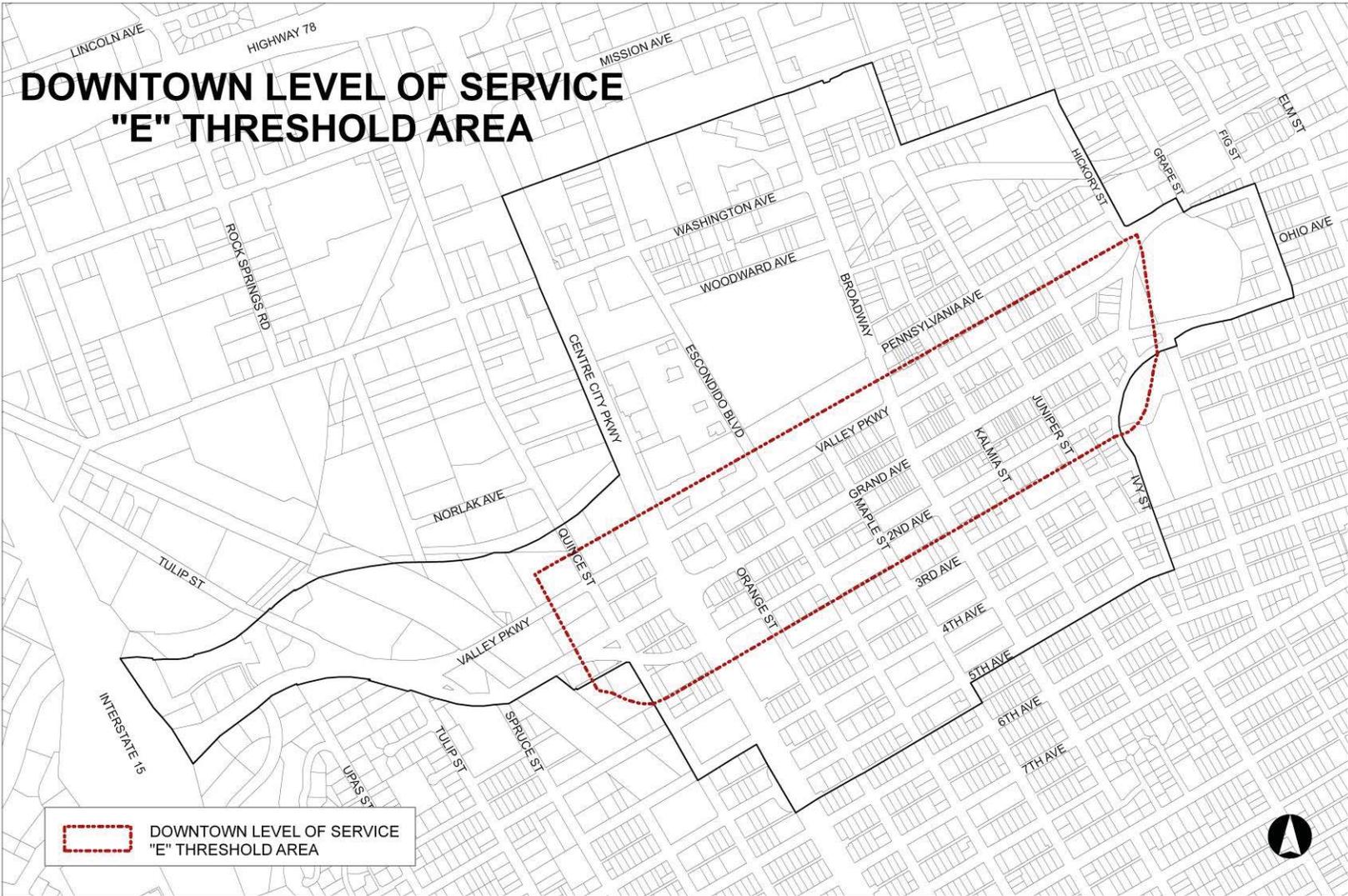


FIGURE III-2

DESIGN PRINCIPLES, GUIDELINES & STANDARDS

APPENDIX B

Traffic Count Data Sheets

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4260-001

Day: Tuesday

City: Escondido

Date: 9/1/2015

		AM												
NS/EW Streets:	I-15 SB Ramps			I-15 SB Ramps			Valley Pkwy			Valley Pkwy				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	1	1	1	0.5	1	0.5	2	3	1	2	3.5	1.5		
7:00 AM	12	8	17	31	15	140	22	141	16	17	271	60	750	
7:15 AM	6	6	14	37	16	150	20	207	11	8	253	55	783	
7:30 AM	8	8	15	49	18	145	22	171	9	15	261	59	780	
7:45 AM	7	7	20	65	13	185	10	136	12	29	241	53	778	
8:00 AM	8	7	26	77	22	165	16	182	22	24	275	45	869	
8:15 AM	4	6	24	52	31	133	21	188	19	28	223	51	780	
8:30 AM	12	12	28	81	24	151	16	127	22	28	172	51	724	
8:45 AM	14	12	31	84	35	148	14	178	17	17	190	45	785	
TOTAL VOLUMES :	71	66	175	476	174	1217	141	1330	128	166	1886	419	6249	
APPROACH %'s :	22.76%	21.15%	56.09%	25.50%	9.32%	65.18%	8.82%	83.18%	8.01%	6.72%	76.33%	16.96%		
PEAK HR START TIME :	7:15 AM												TOTAL	
PEAK HR VOL :	29	28	75	228	69	645	68	696	54	76	1030	212	3210	
PEAK HR FACTOR :	0.805			0.892			0.859			0.958			0.923	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4260-001

Day: Tuesday

City: Escondido

Date: 9/1/2015

NS/EW Streets:	PM												TOTAL
	I-15 SB Ramps			I-15 SB Ramps			Valley Pkwy			Valley Pkwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 0.5	ST 1	SR 0.5	EL 2	ET 3	ER 1	WL 2	WT 3.5	WR 1.5	
4:00 PM	11	12	59	70	29	96	21	345	24	38	150	96	951
4:15 PM	13	9	79	79	33	106	16	301	26	71	157	79	969
4:30 PM	15	12	74	60	38	76	15	321	24	28	187	71	921
4:45 PM	9	11	68	70	40	92	18	288	22	52	185	92	947
5:00 PM	14	17	84	72	27	82	10	313	26	54	165	113	977
5:15 PM	11	12	61	44	30	110	11	360	35	48	185	93	1000
5:30 PM	15	12	86	65	47	89	14	260	19	47	156	87	897
5:45 PM	8	14	86	62	35	90	11	252	26	55	166	69	874
TOTAL VOLUMES :	96	99	597	522	279	741	116	2440	202	393	1351	700	7536
APPROACH %'s :	12.12%	12.50%	75.38%	33.85%	18.09%	48.05%	4.21%	88.47%	7.32%	16.08%	55.28%	28.64%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	49	52	287	246	135	360	54	1282	107	182	722	369	3845
PEAK HR FACTOR :	0.843			0.917			0.889			0.959			0.961

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

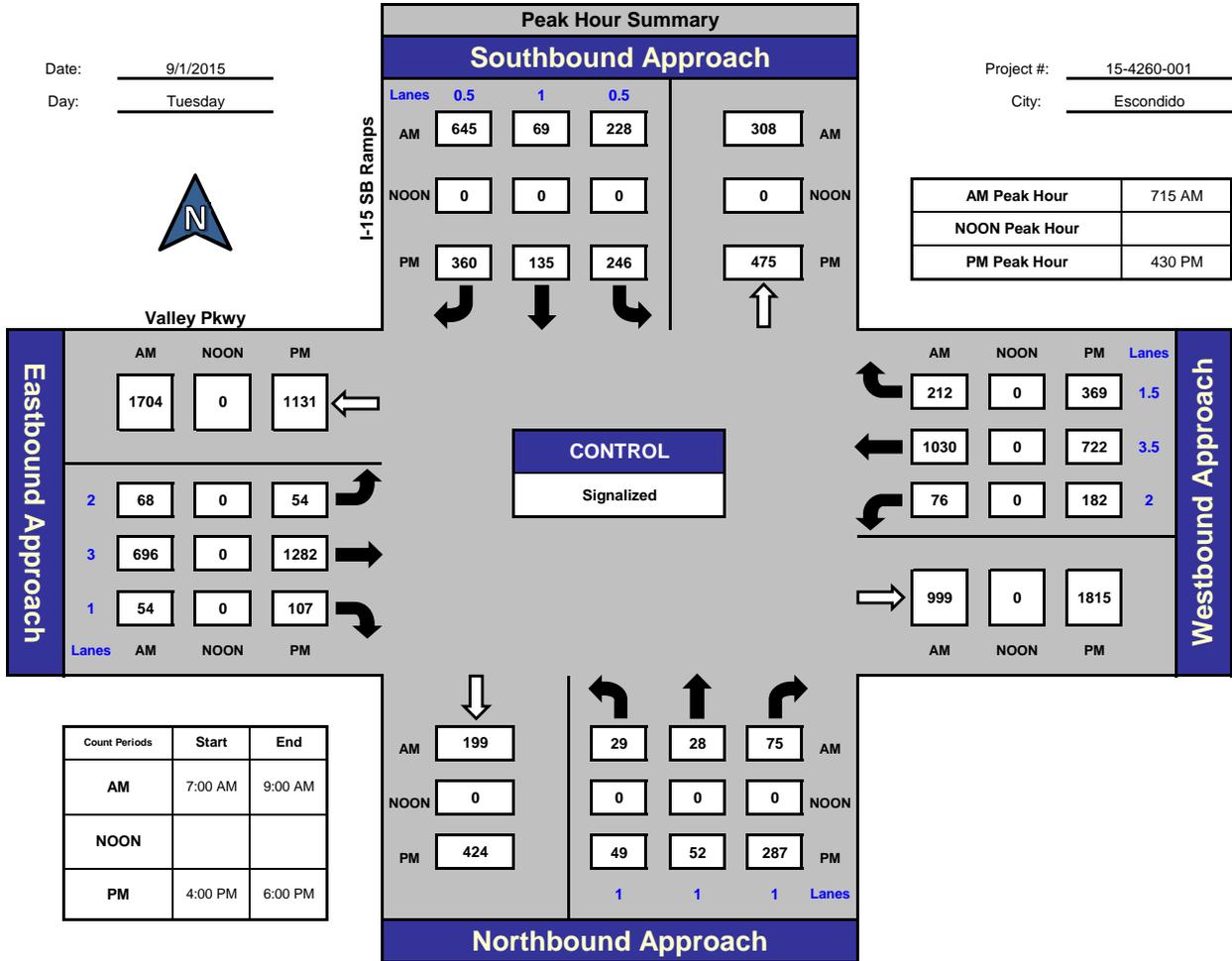
I-15 SB Ramps and Valley Pkwy, Escondido

Date: 9/1/2015

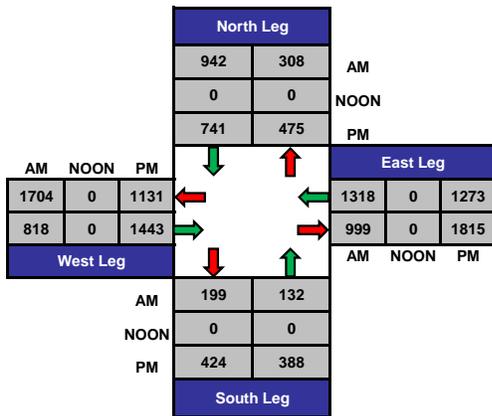
Day: Tuesday

Project #: 15-4260-001

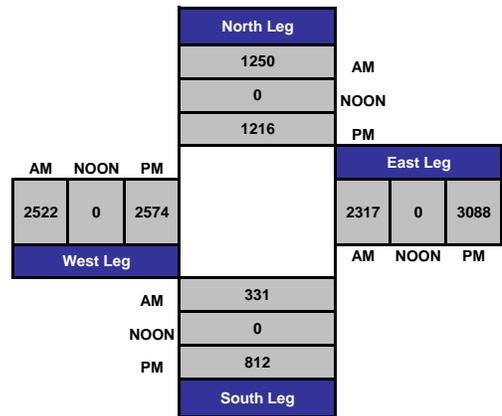
City: Escondido



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4260-002

Day: Tuesday

City: Escondido

Date: 9/1/2015

		AM												
NS/EW Streets:	I-15 NB Ramps			I-15 NB Ramps			Valley Pkwy			Valley Pkwy				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	0.5	0.5	1	0	0	0	2	3	0	0	3	1		
7:00 AM	100	0	98	0	0	0	61	135	0	0	242	40	676	
7:15 AM	84	3	116	0	0	0	70	179	0	0	248	41	741	
7:30 AM	79	2	115	0	0	0	56	188	0	0	235	31	706	
7:45 AM	85	5	119	0	0	0	62	154	0	0	250	34	709	
8:00 AM	96	2	119	0	0	0	60	228	0	0	242	45	792	
8:15 AM	90	1	117	0	0	0	79	169	0	0	216	34	706	
8:30 AM	81	3	106	0	0	0	85	167	0	0	158	29	629	
8:45 AM	69	1	102	0	0	0	80	208	0	0	189	37	686	
TOTAL VOLUMES :	684	17	892	0	0	0	553	1428	0	0	1780	291	5645	
APPROACH %'s :	42.94%	1.07%	55.99%	#DIV/0!	#DIV/0!	#DIV/0!	27.92%	72.08%	0.00%	0.00%	85.95%	14.05%		
PEAK HR START TIME :	715 AM												TOTAL	
PEAK HR VOL :	344	12	469	0	0	0	248	749	0	0	975	151	2948	
PEAK HR FACTOR :	0.950			0.000			0.865			0.974			0.931	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4260-002

Day: Tuesday

City: Escondido

Date: 9/1/2015

		PM												
NS/EW Streets:	I-15 NB Ramps			I-15 NB Ramps			Valley Pkwy			Valley Pkwy				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	0.5	0.5	1	0	0	0	2	3	0	0	3	1		
4:00 PM	52	1	121	0	0	0	172	298	0	0	243	80	967	
4:15 PM	31	0	108	0	0	0	153	312	0	0	264	83	951	
4:30 PM	45	0	129	0	0	0	140	293	0	0	247	70	924	
4:45 PM	37	0	105	0	0	0	147	303	0	0	286	83	961	
5:00 PM	44	0	108	0	0	0	170	298	0	0	295	81	996	
5:15 PM	43	0	103	0	0	0	168	300	0	0	267	88	969	
5:30 PM	40	0	90	0	0	0	157	242	0	0	249	67	845	
5:45 PM	50	0	77	0	0	0	138	274	0	0	237	94	870	
TOTAL VOLUMES :	342	1	841	0	0	0	1245	2320	0	0	2088	646	7483	
APPROACH %'s :	28.89%	0.08%	71.03%	#DIV/0!	#DIV/0!	#DIV/0!	34.92%	65.08%	0.00%	0.00%	76.37%	23.63%		
PEAK HR START TIME :	430 PM												TOTAL	
PEAK HR VOL :	169	0	445	0	0	0	625	1194	0	0	1095	322	3850	
PEAK HR FACTOR :	0.882			0.000			0.972			0.942			0.966	

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

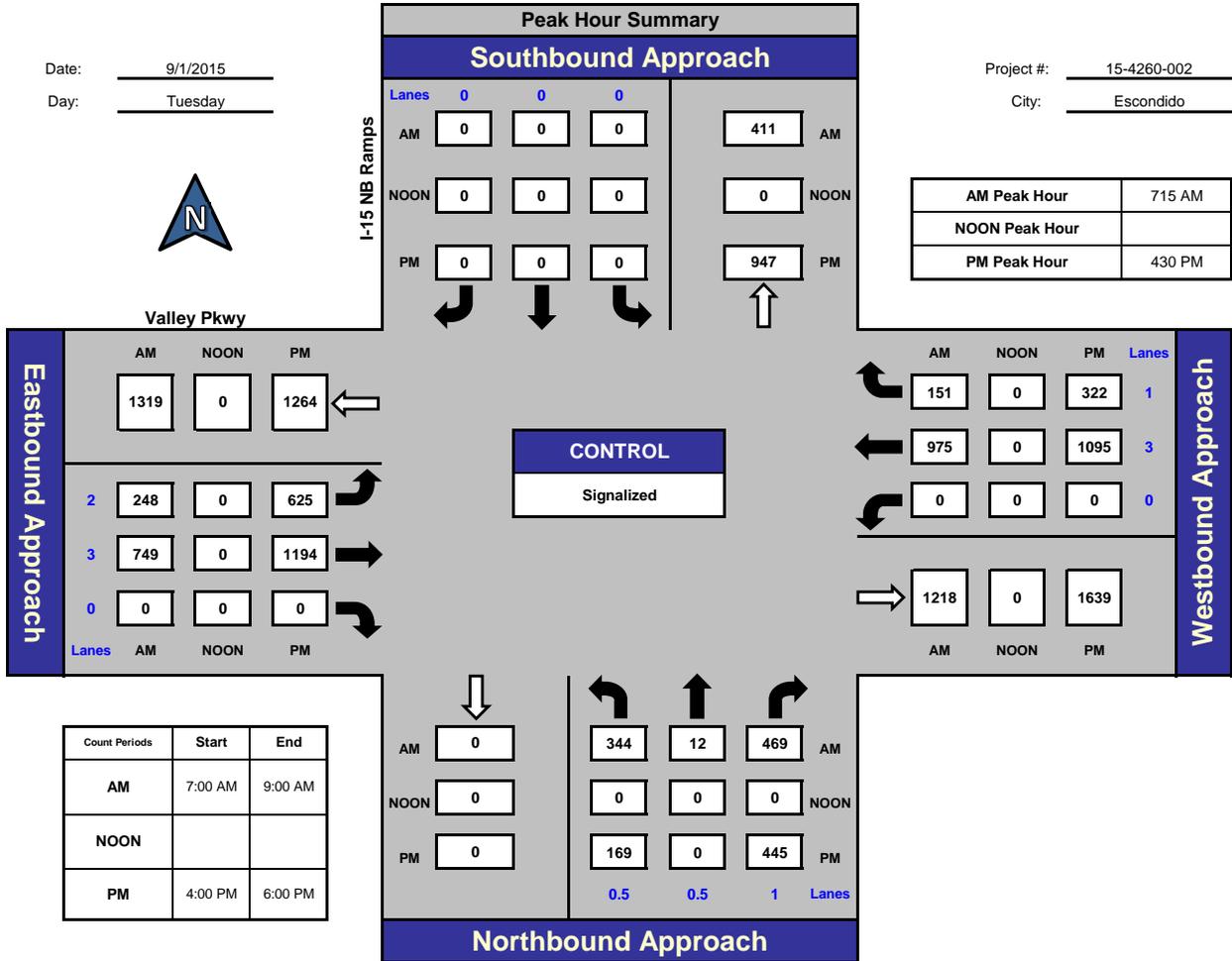


National Data & Surveying Services

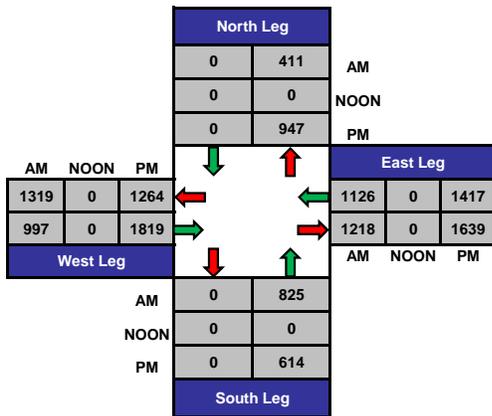
I-15 NB Ramps and Valley Pkwy, Escondido

Date: 9/1/2015
Day: Tuesday

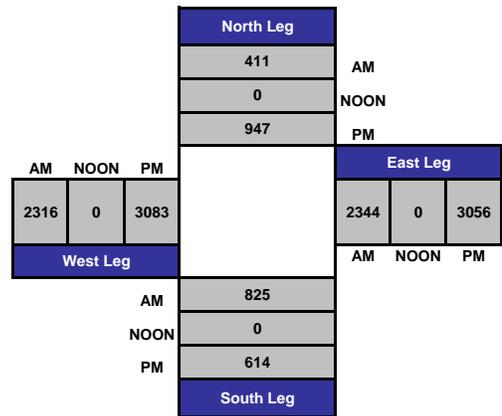
Project #: 15-4260-002
City: Escondido



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-001

Day: Tuesday

City: Escondido

Date: 11/17/2015

		AM												
NS/EW Streets:		Plaza Las Palmas			Plaza Las Palmas			Valley Pkwy			Valley Pkwy			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		1	1	1	1	0.5	0.5	1	3	1	2	4	0	
	7:00 AM	18	3	7	4	3	12	12	153	8	8	218	7	453
	7:15 AM	24	5	14	6	3	7	12	228	11	11	239	6	566
	7:30 AM	23	3	10	5	3	15	24	229	20	18	271	12	633
	7:45 AM	27	7	12	3	12	15	12	261	23	28	250	14	664
	8:00 AM	14	5	16	5	3	12	12	198	27	29	257	14	592
	8:15 AM	15	8	13	9	4	15	29	252	42	16	226	7	636
	8:30 AM	28	5	18	10	4	14	25	214	32	16	183	13	562
	8:45 AM	21	2	21	9	7	19	30	264	28	18	160	8	587
TOTAL VOLUMES :		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		170	38	111	51	39	109	156	1799	191	144	1804	81	4693
APPROACH %'s :		53.29%	11.91%	34.80%	25.63%	19.60%	54.77%	7.27%	83.83%	8.90%	7.10%	88.91%	3.99%	
PEAK HR START TIME :		730 AM												TOTAL
PEAK HR VOL :		79	23	51	22	22	57	77	940	112	91	1004	47	2525
PEAK HR FACTOR :		0.832			0.842			0.874			0.949			0.951

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-001

Day: Tuesday

City: Escondido

Date: 11/17/2015

		PM												
NS/EW Streets:		Plaza Las Palmas			Plaza Las Palmas			Valley Pkwy			Valley Pkwy			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		1	1	1	1	0.5	0.5	1	3	1	2	4	0	
4:00 PM		28	7	36	8	6	33	23	327	12	24	300	13	817
4:15 PM		26	5	28	9	3	21	24	338	18	18	250	16	756
4:30 PM		33	7	32	10	5	20	17	377	5	28	258	11	803
4:45 PM		34	2	33	18	3	32	26	358	12	18	243	10	789
5:00 PM		40	7	41	11	3	36	21	362	20	32	290	11	874
5:15 PM		45	4	37	6	2	17	21	366	17	18	304	10	847
5:30 PM		32	4	32	17	4	37	30	337	12	25	255	23	808
5:45 PM		29	10	24	13	5	24	28	281	18	12	213	17	674
TOTAL VOLUMES :		267	46	263	92	31	220	190	2746	114	175	2113	111	6368
APPROACH %'s :		46.35%	7.99%	45.66%	26.82%	9.04%	64.14%	6.23%	90.03%	3.74%	7.29%	88.08%	4.63%	
PEAK HR START TIME :		445 PM												TOTAL
PEAK HR VOL :		151	17	143	52	12	122	98	1423	61	93	1092	54	3318
PEAK HR FACTOR :		0.884			0.802			0.979			0.930			0.949

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

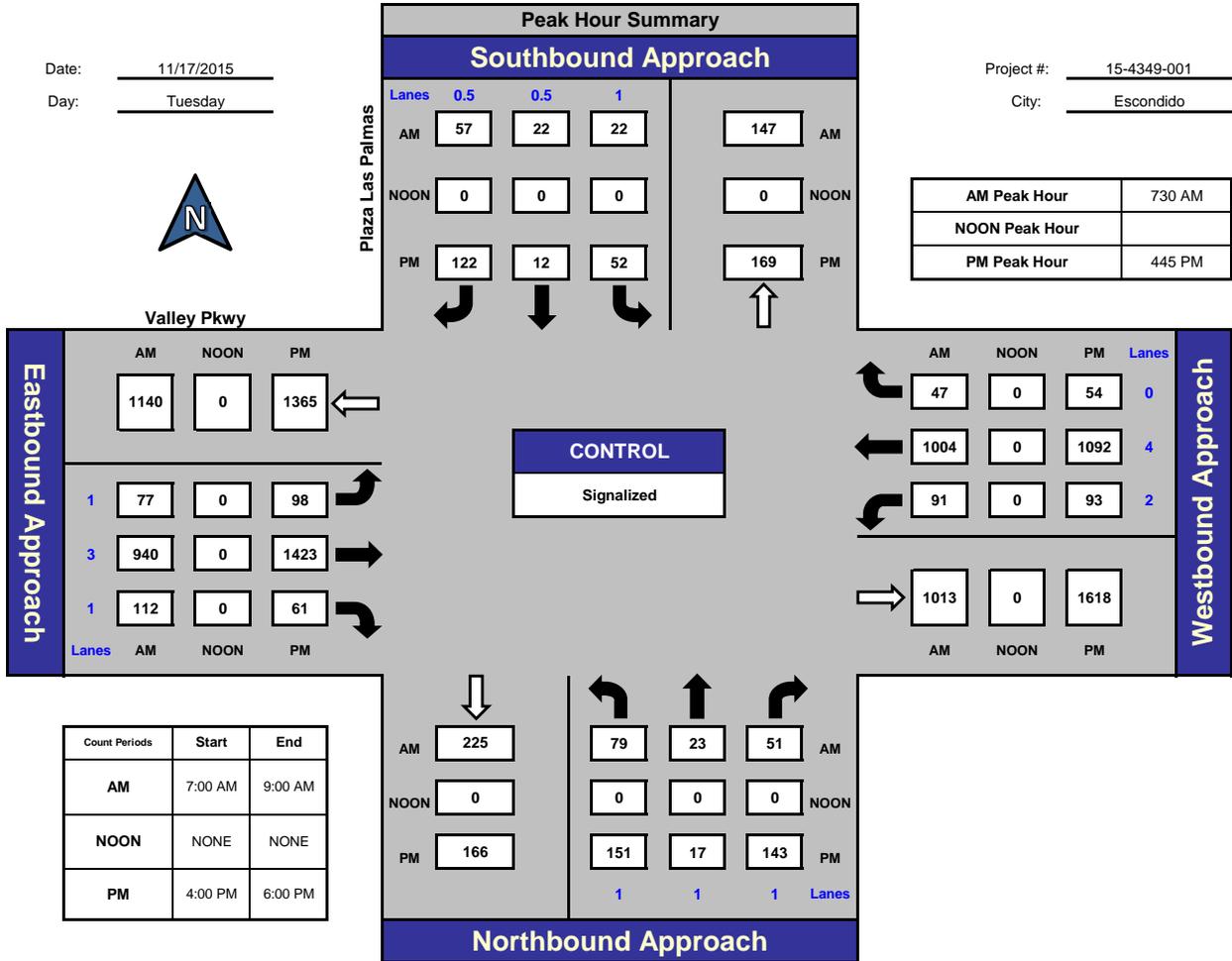
Plaza Las Palmas and Valley Pkwy, Escondido

Date: 11/17/2015

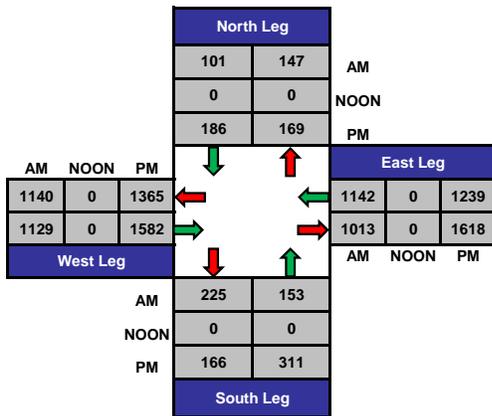
Day: Tuesday

Project #: 15-4349-001

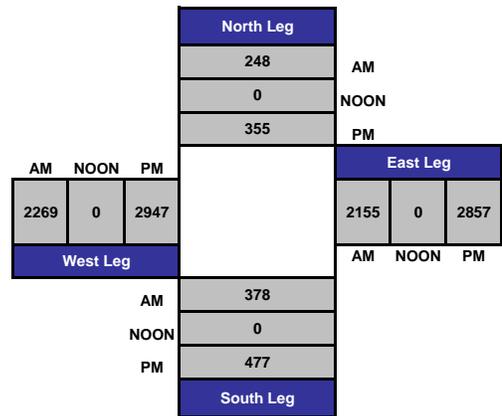
City: Escondido



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-002

Day: Tuesday

City: Escondido

Date: 11/17/2015

		AM												
NS/EW Streets:		N Tulip St			N Tulip St			Valley Pkwy			Valley Pkwy			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		2	2	1	9	3	31	56	98	0	1	203	44	450
7:15 AM		0	2	0	9	2	32	67	163	0	4	247	57	583
7:30 AM		2	1	0	17	3	41	46	204	0	3	240	58	615
7:45 AM		0	1	0	12	2	50	56	217	1	3	246	64	652
8:00 AM		1	1	3	12	2	46	38	157	1	1	248	49	559
8:15 AM		1	1	0	18	2	32	67	198	0	3	212	51	585
8:30 AM		0	1	0	16	4	51	47	192	0	0	174	35	520
8:45 AM		1	0	1	9	2	36	58	224	2	3	138	30	504
TOTAL VOLUMES :		7	9	5	102	20	319	435	1453	4	18	1708	388	4468
APPROACH %'s :		33.33%	42.86%	23.81%	23.13%	4.54%	72.34%	22.99%	76.80%	0.21%	0.85%	80.79%	18.35%	
PEAK HR START TIME :		730 AM												TOTAL
PEAK HR VOL :		4	4	3	59	9	169	207	776	2	10	946	222	2411
PEAK HR FACTOR :		0.550			0.926			0.899			0.941			0.924

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-002

Day: Tuesday

City: Escondido

Date: 11/17/2015

		PM												
NS/EW Streets:	N Tulip St			N Tulip St			Valley Pkwy			Valley Pkwy				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	0	1	0	1.5	0.5	1	2	3	0	1	4	1		
4:00 PM	1	0	1	71	2	62	66	311	2	4	272	37	829	
4:15 PM	2	2	3	60	3	44	76	291	6	6	235	28	756	
4:30 PM	6	1	4	52	4	46	60	329	1	8	236	33	780	
4:45 PM	5	2	1	56	7	52	84	308	1	3	215	35	769	
5:00 PM	2	1	3	67	1	78	71	314	2	11	271	31	852	
5:15 PM	3	2	1	53	2	51	87	324	2	2	264	29	820	
5:30 PM	1	0	3	48	0	74	53	339	2	3	225	23	771	
5:45 PM	3	0	1	36	0	37	52	271	4	2	218	20	644	
TOTAL VOLUMES :	23	8	17	443	19	444	549	2487	20	39	1936	236	6221	
APPROACH %'s :	47.92%	16.67%	35.42%	48.90%	2.10%	49.01%	17.96%	81.38%	0.65%	1.76%	87.56%	10.67%		
PEAK HR START TIME :	430 PM												TOTAL	
PEAK HR VOL :	16	6	9	228	14	227	302	1275	6	24	986	128	3221	
PEAK HR FACTOR :	0.705			0.803			0.958			0.909			0.945	

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

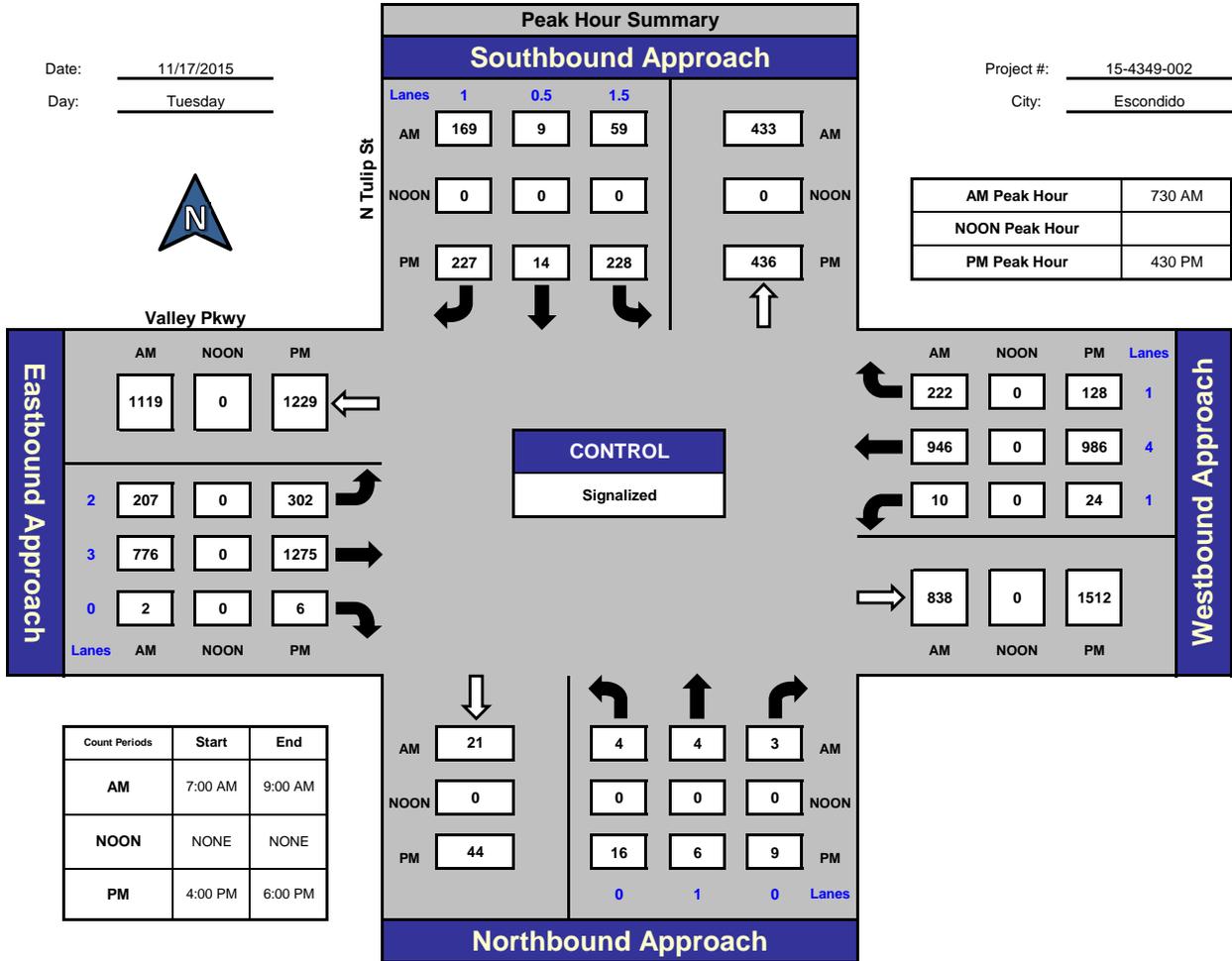
N Tulip St and Valley Pkwy, Escondido

Date: 11/17/2015

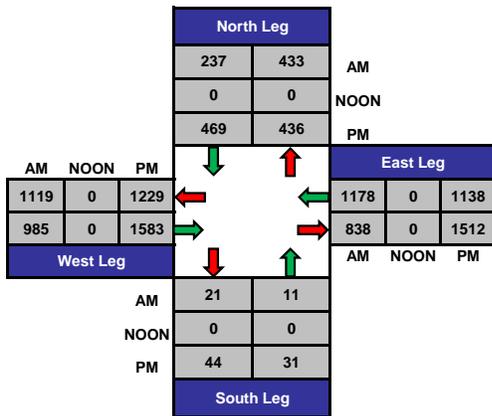
Day: Tuesday

Project #: 15-4349-002

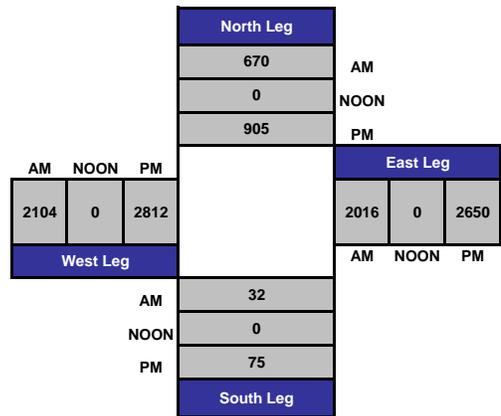
City: Escondido



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-003

Day: Tuesday

City: Escondido

Date: 11/17/2015

		AM												
NS/EW Streets:	Gateway Dwy			Gateway Dwy			Valley Pkwy			Valley Pkwy				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	0	1	0	0	1	0	0	0	0	0	4	0		
7:00 AM	0	2	0	0	0	1	0	0	0	0	241	3	247	
7:15 AM	1	1	0	0	0	1	0	0	0	0	310	2	315	
7:30 AM	0	2	0	0	0	0	0	0	0	0	314	1	317	
7:45 AM	1	3	0	0	0	4	0	0	0	0	314	5	327	
8:00 AM	0	2	0	0	0	2	0	0	0	0	290	10	304	
8:15 AM	0	0	0	0	0	1	0	0	0	0	266	5	272	
8:30 AM	0	3	0	0	0	1	0	0	0	0	202	4	210	
8:45 AM	0	0	0	0	0	3	0	0	0	0	171	10	184	
TOTAL VOLUMES :	2	13	0	0	0	13	0	0	0	0	2108	40	2176	
APPROACH %'s :	13.33%	86.67%	0.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	98.14%	1.86%		
PEAK HR START TIME :	715 AM												TOTAL	
PEAK HR VOL :	2	8	0	0	0	7	0	0	0	0	1228	18	1263	
PEAK HR FACTOR :	0.625			0.438			0.000			0.976			0.966	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-003

Day: Tuesday

City: Escondido

Date: 11/17/2015

PM

NS/EW Streets:	Gateway Dwy			Gateway Dwy			Valley Pkwy			Valley Pkwy			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1	0	0	1	0	0	0	0	0	4	0	
4:00 PM	0	3	0	0	0	18	0	0	0	0	275	25	321
4:15 PM	0	2	0	0	0	28	0	0	0	0	254	14	298
4:30 PM	0	6	0	0	0	21	0	0	0	0	267	14	308
4:45 PM	0	2	0	0	0	22	0	0	0	0	241	11	276
5:00 PM	0	6	0	0	0	25	0	0	0	0	297	14	342
5:15 PM	0	2	0	0	0	16	0	0	0	0	264	19	301
5:30 PM	0	5	0	0	0	18	0	0	0	0	239	18	280
5:45 PM	0	2	0	0	0	25	0	0	0	0	209	11	247
TOTAL VOLUMES :	0	28	0	0	0	173	0	0	0	0	2046	126	2373
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	94.20%	5.80%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	16	0	0	0	84	0	0	0	0	1069	58	1227
PEAK HR FACTOR :	0.667		0.840			0.000			0.906			0.897	

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

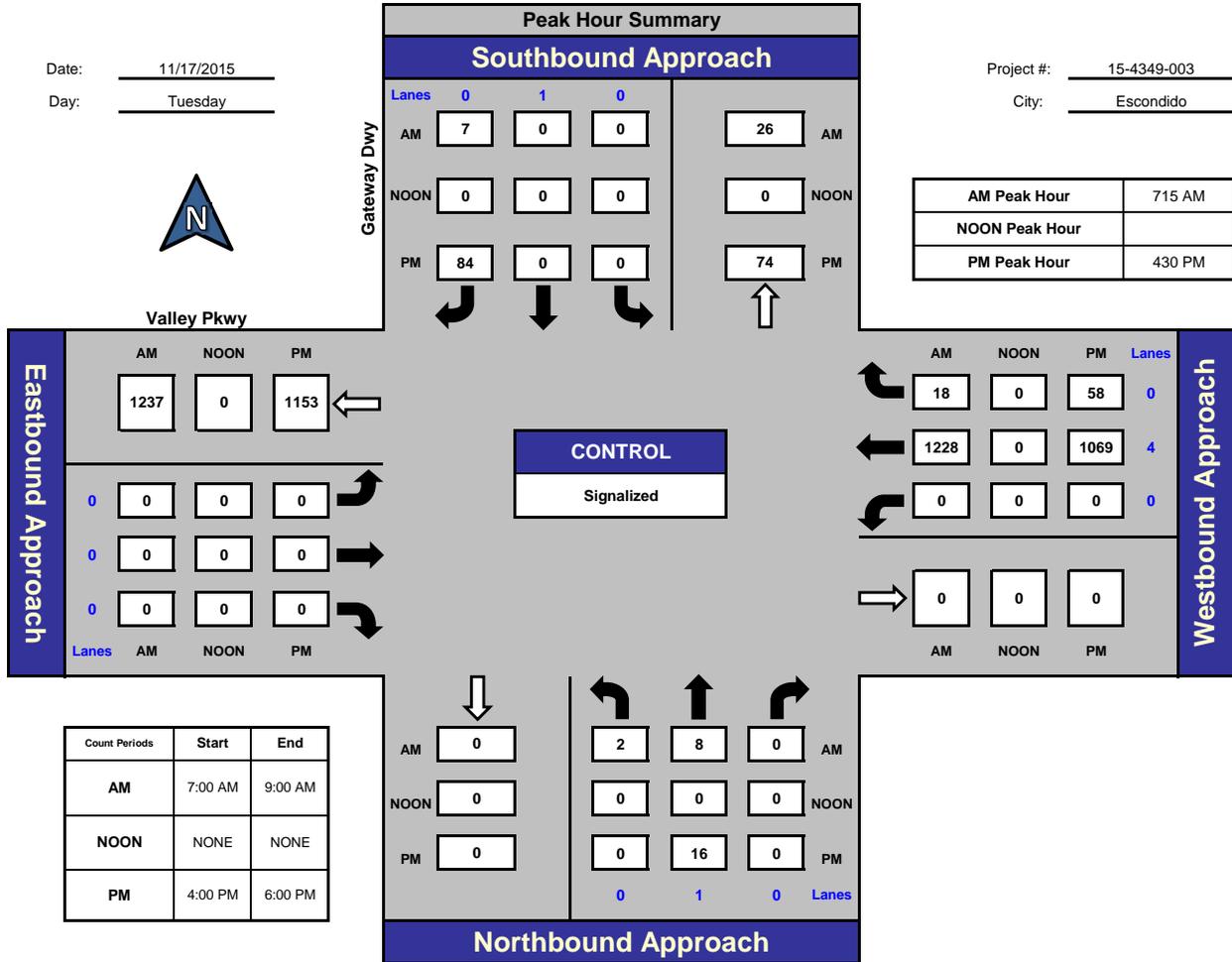
Gateway Dwy and Valley Pkwy, Escondido

Date: 11/17/2015

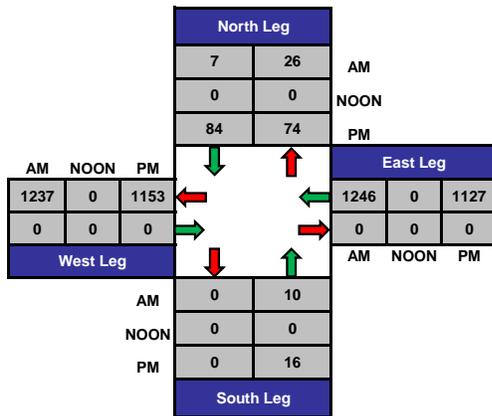
Day: Tuesday

Project #: 15-4349-003

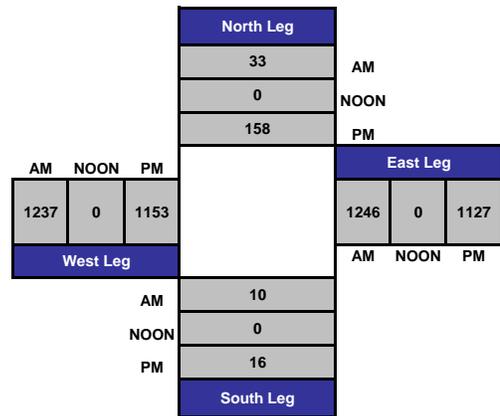
City: Escondido



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-004

Day: Tuesday

City: Escondido

Date: 11/17/2015

		AM												
NS/EW Streets:		Quince St			Quince St			Valley Pkwy			Valley Pkwy			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		1	2	0	0	2	0	0	0	0	0.5	2.5	1	
	7:00 AM	7	27	0	0	51	39	0	0	0	6	235	15	380
	7:15 AM	10	45	0	0	71	43	0	0	0	7	295	15	486
	7:30 AM	23	34	0	0	66	34	0	0	0	6	292	25	480
	7:45 AM	12	58	0	0	87	39	0	0	0	2	311	22	531
	8:00 AM	22	44	0	0	79	47	0	0	0	5	271	28	496
	8:15 AM	12	49	0	0	68	20	0	0	0	11	262	15	437
	8:30 AM	14	44	0	0	53	35	0	0	0	10	173	26	355
	8:45 AM	13	43	0	0	58	17	0	0	0	14	187	11	343
TOTAL VOLUMES :		113	344	0	0	533	274	0	0	0	61	2026	157	3508
APPROACH %'s :		24.73%	75.27%	0.00%	0.00%	66.05%	33.95%	#DIV/0!	#DIV/0!	#DIV/0!	2.72%	90.29%	7.00%	
PEAK HR START TIME :		715 AM												
PEAK HR VOL :		67	181	0	0	303	163	0	0	0	20	1169	90	1993
PEAK HR FACTOR :		0.886			0.925			0.000			0.954			0.938

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-004

Day: Tuesday

City: Escondido

Date: 11/17/2015

		PM												
NS/EW Streets:		Quince St			Quince St			Valley Pkwy			Valley Pkwy			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		1	2	0	0	2	0	0	0	0	0.5	2.5	1	
4:00 PM		23	70	0	0	101	43	0	0	0	4	260	11	512
4:15 PM		29	65	0	0	100	29	0	0	0	9	242	16	490
4:30 PM		20	52	0	0	102	37	0	0	0	12	250	15	488
4:45 PM		13	50	0	0	95	34	0	0	0	10	240	9	451
5:00 PM		18	52	0	0	109	40	0	0	0	9	291	27	546
5:15 PM		16	53	0	0	109	32	0	0	0	10	255	23	498
5:30 PM		19	59	0	0	87	41	0	0	0	8	226	5	445
5:45 PM		17	40	0	0	58	32	0	0	0	3	204	12	366
TOTAL VOLUMES :		155	441	0	0	761	288	0	0	0	65	1968	118	3796
APPROACH %'s :		26.01%	73.99%	0.00%	0.00%	72.55%	27.45%	#DIV/0!	#DIV/0!	#DIV/0!	3.02%	91.49%	5.49%	
PEAK HR START TIME :		430 PM												TOTAL
PEAK HR VOL :		67	207	0	0	415	143	0	0	0	41	1036	74	1983
PEAK HR FACTOR :		0.951			0.936			0.000			0.880			0.908

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

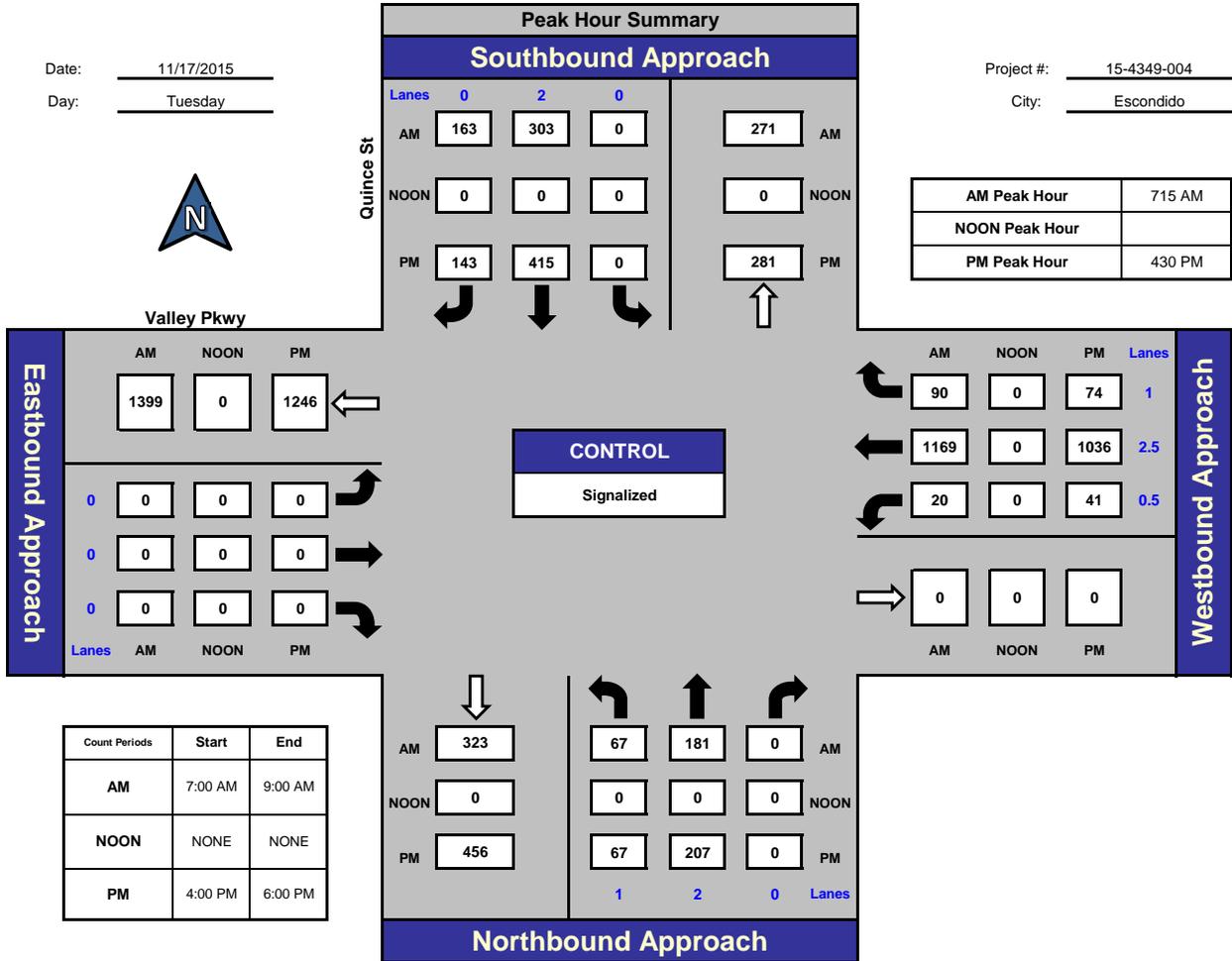
Quince St and Valley Pkwy, Escondido

Date: 11/17/2015

Day: Tuesday

Project #: 15-4349-004

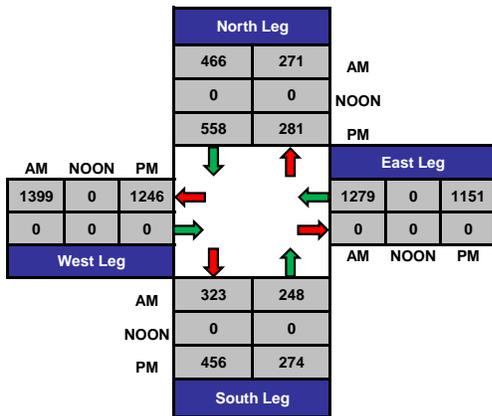
City: Escondido



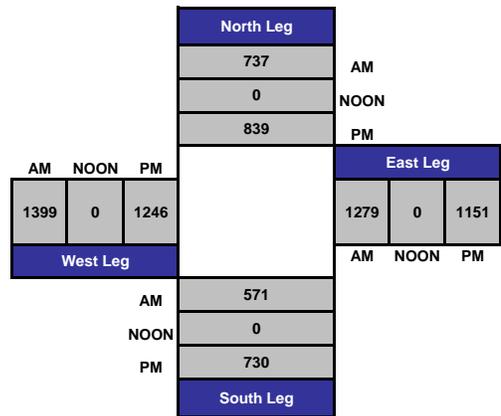
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4260-003

Day: Tuesday

City: Escondido

Date: 9/1/2015

AM

NS/EW Streets:	Centre City Pkwy			Centre City Pkwy			Valley Pkwy			Valley Pkwy			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	2	0	0	3	0	0	0	0	1.5	2.5	1	
7:00 AM	34	121	0	0	224	26	0	0	0	60	216	53	734
7:15 AM	32	153	0	0	244	15	0	0	0	82	270	67	863
7:30 AM	38	147	0	0	257	21	0	0	0	71	254	55	843
7:45 AM	41	151	0	0	225	22	0	0	0	76	288	53	856
8:00 AM	32	161	0	0	183	27	0	0	0	71	223	39	736
8:15 AM	43	162	0	0	235	29	0	0	0	56	202	51	778
8:30 AM	24	127	0	0	196	23	0	0	0	51	182	35	638
8:45 AM	21	136	0	0	190	15	0	0	0	46	182	35	625
TOTAL VOLUMES :	265	1158	0	0	1754	178	0	0	0	513	1817	388	6073
APPROACH %'s :	18.62%	81.38%	0.00%	0.00%	90.79%	9.21%	#DIV/0!	#DIV/0!	#DIV/0!	18.87%	66.85%	14.28%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	143	612	0	0	909	85	0	0	0	300	1035	214	3298
PEAK HR FACTOR :	0.978		0.894			0.000			0.924			0.955	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4260-003

Day: Tuesday

City: Escondido

Date: 9/1/2015

		PM												
NS/EW Streets:	Centre City Pkwy			Centre City Pkwy			Valley Pkwy			Valley Pkwy				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	2	2	0	0	3	0	0	0	0	1.5	2.5	1		
4:00 PM	36	224	0	0	191	24	0	0	0	67	218	79	839	
4:15 PM	45	194	0	0	148	26	0	0	0	52	236	71	772	
4:30 PM	37	217	0	0	179	23	0	0	0	52	210	73	791	
4:45 PM	28	201	0	0	170	24	0	0	0	52	223	83	781	
5:00 PM	36	223	0	0	211	26	0	0	0	80	243	83	902	
5:15 PM	26	235	0	0	193	21	0	0	0	55	219	56	805	
5:30 PM	33	221	0	0	176	23	0	0	0	64	224	41	782	
5:45 PM	32	171	0	0	160	20	0	0	0	45	205	52	685	
TOTAL VOLUMES :	273	1686	0	0	1428	187	0	0	0	467	1778	538	6357	
APPROACH %'s :	13.94%	86.06%	0.00%	0.00%	88.42%	11.58%	#DIV/0!	#DIV/0!	#DIV/0!	16.78%	63.89%	19.33%		
PEAK HR START TIME :	430 PM												TOTAL	
PEAK HR VOL :	127	876	0	0	753	94	0	0	0	239	895	295	3279	
PEAK HR FACTOR :	0.961			0.893			0.000			0.880			0.909	

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

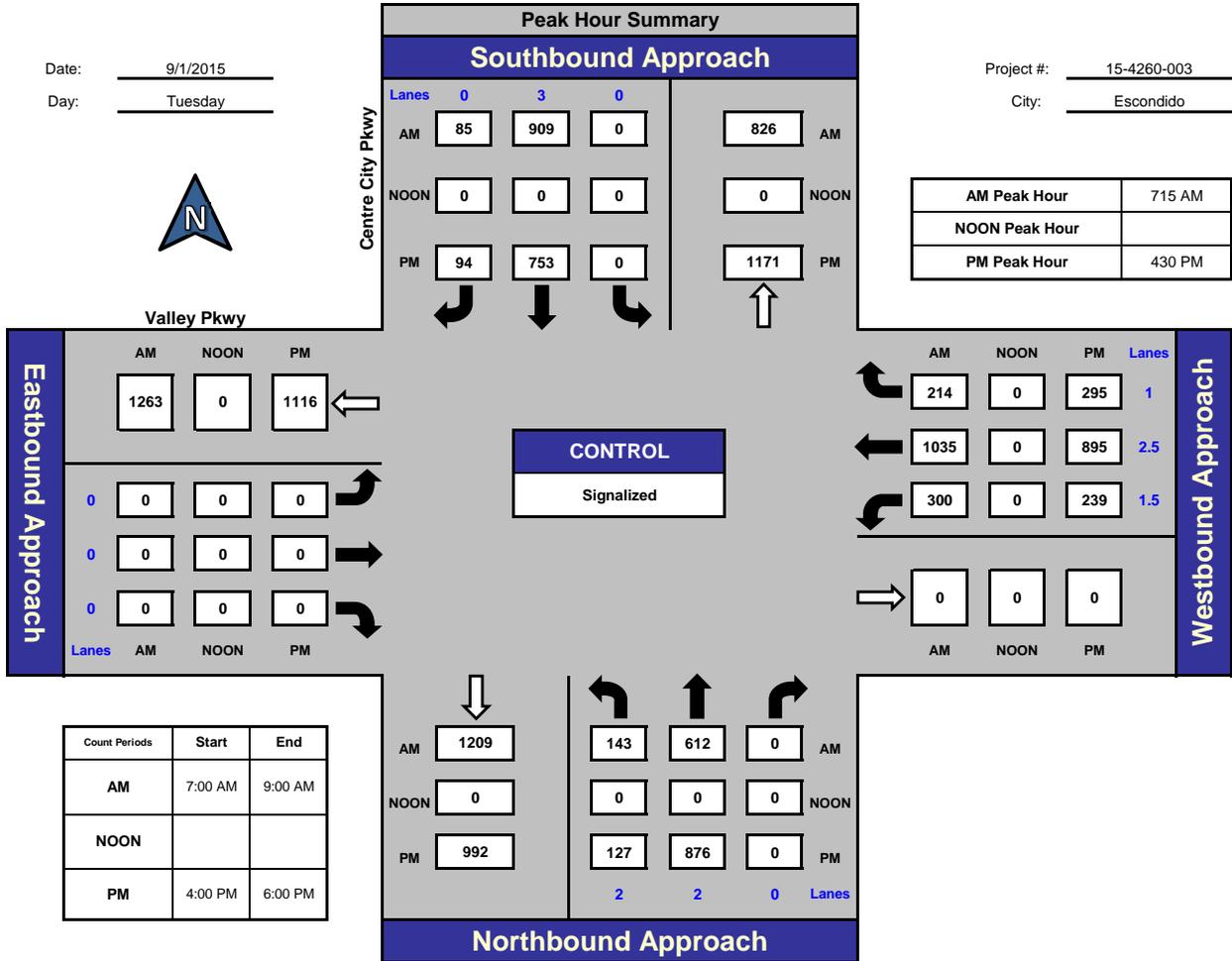


National Data & Surveying Services

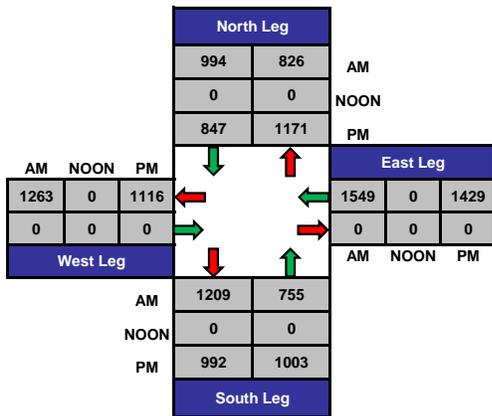
Centre City Pkwy and Valley Pkwy, Escondido

Date: 9/1/2015
Day: Tuesday

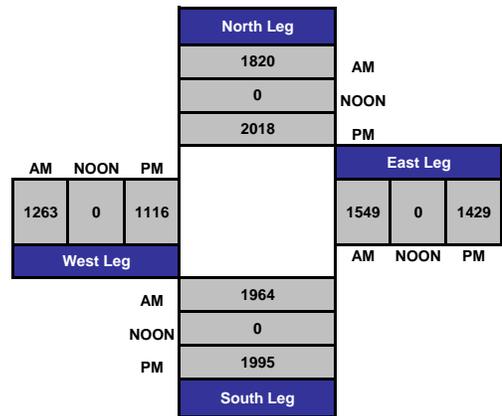
Project #: 15-4260-003
City: Escondido



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-005

Day: Tuesday

City: Escondido

Date: 11/17/2015

		AM												
NS/EW Streets:		Quince St			Quince St			Grand Ave			Grand Ave			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		0	2	0	1	2	0	1	0.5	0.5	1	0	1	
7:00 AM		0	19	0	2	55	0	10	19	0	0	0	6	111
7:15 AM		0	42	4	1	76	0	11	24	1	2	0	7	168
7:30 AM		0	38	0	3	69	0	12	35	0	2	0	6	165
7:45 AM		0	43	0	0	87	0	20	39	0	1	0	5	195
8:00 AM		0	41	2	2	80	0	22	39	0	1	0	6	193
8:15 AM		0	38	0	5	67	0	21	54	0	0	0	3	188
8:30 AM		0	35	0	7	54	0	17	45	0	1	0	5	164
8:45 AM		0	30	1	7	62	0	29	47	0	1	0	6	183
TOTAL VOLUMES :		0	286	7	27	550	0	142	302	1	8	0	44	1367
APPROACH %'s :		0.00%	97.61%	2.39%	4.68%	95.32%	0.00%	31.91%	67.87%	0.22%	15.38%	0.00%	84.62%	
PEAK HR START TIME :		730 AM												TOTAL
PEAK HR VOL :		0	160	2	10	303	0	75	167	0	4	0	20	741
PEAK HR FACTOR :		0.942			0.899			0.807			0.750			0.950

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-005

Day: Tuesday

City: Escondido

Date: 11/17/2015

NS/EW Streets:		PM												TOTAL
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	0	2	0	1	2	0	1	0.5	0.5	1	0	1		
4:00 PM	0	54	3	8	97	0	31	52	1	1	0	12	259	
4:15 PM	0	50	4	11	97	0	23	63	0	2	0	11	261	
4:30 PM	0	41	1	13	101	0	25	80	0	3	0	6	270	
4:45 PM	0	30	2	16	95	0	25	76	0	4	0	10	258	
5:00 PM	0	35	4	17	99	0	22	69	0	3	0	9	258	
5:15 PM	0	45	0	19	97	0	24	80	1	3	0	5	274	
5:30 PM	0	30	4	12	87	0	36	80	1	6	0	7	263	
5:45 PM	0	28	4	3	58	0	21	49	0	4	0	9	176	
TOTAL VOLUMES :	0	313	22	99	731	0	207	549	3	26	0	69	2019	
APPROACH %'s :	0.00%	93.43%	6.57%	11.93%	88.07%	0.00%	27.27%	72.33%	0.40%	27.37%	0.00%	72.63%		
PEAK HR START TIME :	4:30 PM												TOTAL	
PEAK HR VOL :	0	151	7	65	392	0	96	305	1	13	0	30	1060	
PEAK HR FACTOR :	0.878			0.985			0.957			0.768			0.967	

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

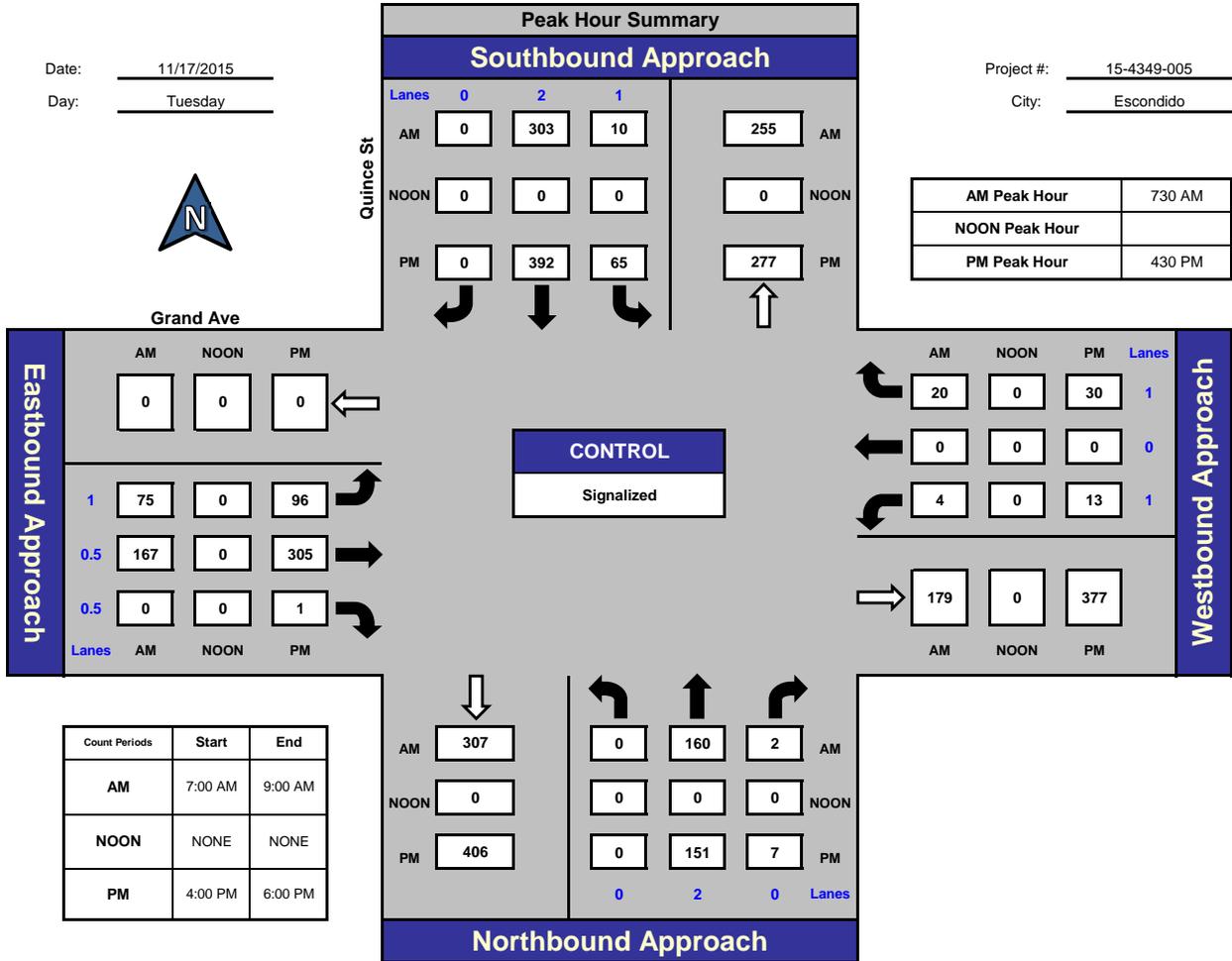
Quince St and Grand Ave, Escondido

Date: 11/17/2015

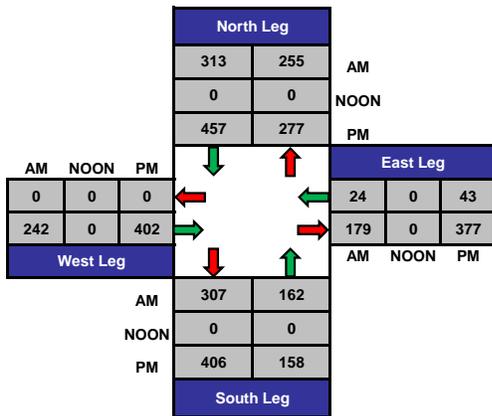
Day: Tuesday

Project #: 15-4349-005

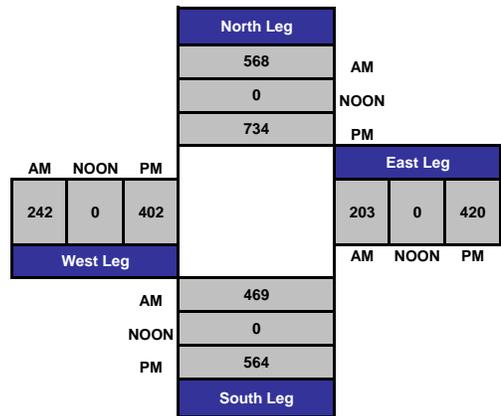
City: Escondido



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-007

Day: Tuesday

City: Escondido

Date: 11/17/2015

		AM												
NS/EW Streets:		Centre City Pkwy			Centre City Pkwy			Grand Ave			Grand Ave			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		1	2	0	1	2	0	1	2	0	1	1	1	
	7:00 AM	0	118	12	13	280	2	2	24	0	10	3	36	500
	7:15 AM	1	153	15	11	283	1	2	20	0	7	8	35	536
	7:30 AM	0	157	12	23	305	1	8	33	0	13	5	29	586
	7:45 AM	1	157	18	21	315	4	10	26	0	18	7	30	607
	8:00 AM	1	169	13	13	272	3	10	35	3	11	7	42	579
	8:15 AM	1	174	12	16	287	4	7	49	1	7	2	20	580
	8:30 AM	0	148	17	26	257	2	4	50	0	10	2	27	543
	8:45 AM	2	151	15	17	216	1	5	49	3	13	3	28	503
TOTAL VOLUMES :		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		6	1227	114	140	2215	18	48	286	7	89	37	247	4434
APPROACH %'s :		0.45%	91.09%	8.46%	5.90%	93.34%	0.76%	14.08%	83.87%	2.05%	23.86%	9.92%	66.22%	
PEAK HR START TIME :		730 AM												TOTAL
PEAK HR VOL :		3	657	55	73	1179	12	35	143	4	49	21	121	2352
PEAK HR FACTOR :					0.956			0.929			0.798			0.969

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-007

Day: Tuesday

City: Escondido

Date: 11/17/2015

PM

NS/EW Streets:	Centre City Pkwy			Centre City Pkwy			Grand Ave			Grand Ave			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 1	WR 1	
4:00 PM	3	224	25	18	196	0	14	52	9	17	8	29	595
4:15 PM	2	232	26	24	221	2	12	55	4	14	7	27	626
4:30 PM	2	216	17	26	209	6	12	80	4	21	6	34	633
4:45 PM	3	206	26	20	196	6	21	77	3	15	3	35	611
5:00 PM	4	230	23	29	204	3	19	68	4	18	8	52	662
5:15 PM	2	242	29	21	230	5	19	71	4	11	6	31	671
5:30 PM	3	192	26	9	200	4	23	62	5	9	11	30	574
5:45 PM	6	164	23	26	179	5	18	41	3	10	6	27	508
TOTAL VOLUMES :	25	1706	195	173	1635	31	138	506	36	115	55	265	4880
APPROACH %'s :	1.30%	88.58%	10.12%	9.41%	88.91%	1.69%	20.29%	74.41%	5.29%	26.44%	12.64%	60.92%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	11	894	95	96	839	20	71	296	15	65	23	152	2577
PEAK HR FACTOR :	0.916			0.933			0.946			0.769			0.960

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

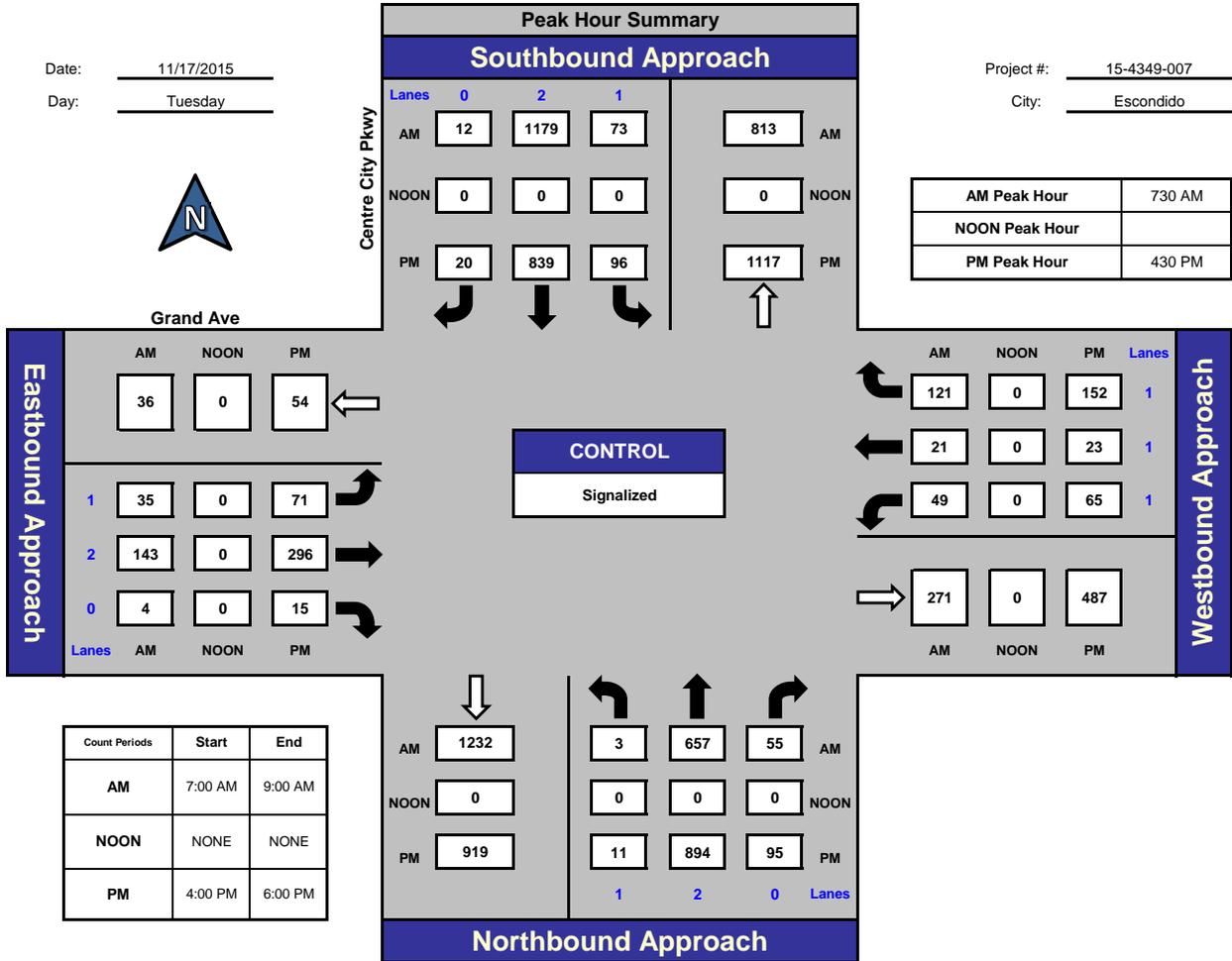
Centre City Pkwy and Grand Ave, Escondido

Date: 11/17/2015

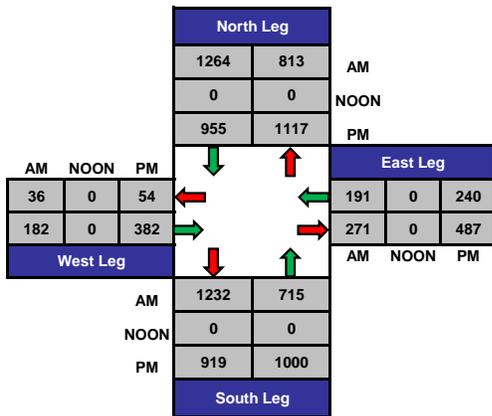
Day: Tuesday

Project #: 15-4349-007

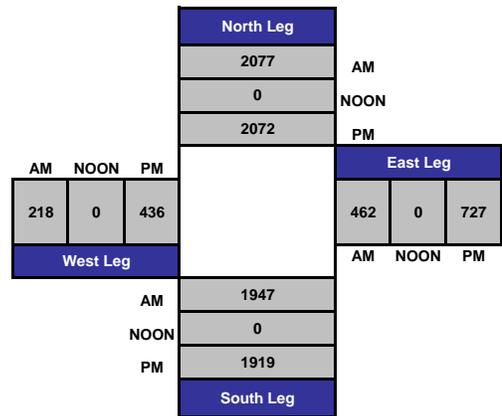
City: Escondido



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-006

Day: Tuesday

City: Escondido

Date: 11/17/2015

NS/EW Streets:		AM												TOTAL
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		
	0	2	0	1	2	0	0.5	3	0.5	0	0	0		
7:00 AM	0	18	2	14	41	0	0	83	10	0	0	0	168	
7:15 AM	0	43	1	24	58	0	0	128	2	0	0	0	256	
7:30 AM	0	43	5	18	57	0	0	152	6	0	0	0	281	
7:45 AM	0	44	3	31	57	0	1	153	10	0	0	0	299	
8:00 AM	0	42	9	18	55	0	0	106	4	0	0	0	234	
8:15 AM	0	37	3	21	45	0	0	131	8	0	0	0	245	
8:30 AM	0	28	7	10	44	0	1	140	5	0	0	0	235	
8:45 AM	0	32	3	16	48	0	1	139	5	0	0	0	244	
TOTAL VOLUMES :	0	287	33	152	405	0	3	1032	50	0	0	0	1962	
APPROACH %'s :	0.00%	89.69%	10.31%	27.29%	72.71%	0.00%	0.28%	95.12%	4.61%	#DIV/0!	#DIV/0!	#DIV/0!		
PEAK HR START TIME :	7:15 AM												TOTAL	
PEAK HR VOL :	0	172	18	91	227	0	1	539	22	0	0	0	1070	
PEAK HR FACTOR :	0.931		0.903			0.857			0.000			0.895		

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4349-006

Day: Tuesday

City: Escondido

Date: 11/17/2015

PM

NS/EW Streets:	Quince St			Quince St			2nd Ave			2nd Ave			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	1	2	0	0.5	3	0.5	0	0	0	
4:00 PM	0	51	7	37	60	0	3	259	16	0	0	0	433
4:15 PM	0	51	8	41	54	0	4	225	13	0	0	0	396
4:30 PM	0	49	19	47	60	0	0	283	13	0	0	0	471
4:45 PM	0	29	13	35	67	0	0	258	8	0	0	0	410
5:00 PM	0	43	12	39	65	0	0	264	14	0	0	0	437
5:15 PM	0	36	15	39	60	0	2	261	7	0	0	0	420
5:30 PM	0	30	8	36	53	0	2	257	8	0	0	0	394
5:45 PM	0	32	4	23	41	0	2	217	9	0	0	0	328
TOTAL VOLUMES :	0	321	86	297	460	0	13	2024	88	0	0	0	3289
APPROACH %'s :	0.00%	78.87%	21.13%	39.23%	60.77%	0.00%	0.61%	95.25%	4.14%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	157	59	160	252	0	2	1066	42	0	0	0	1738
PEAK HR FACTOR :	0.794			0.963			0.938			0.000			0.923

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

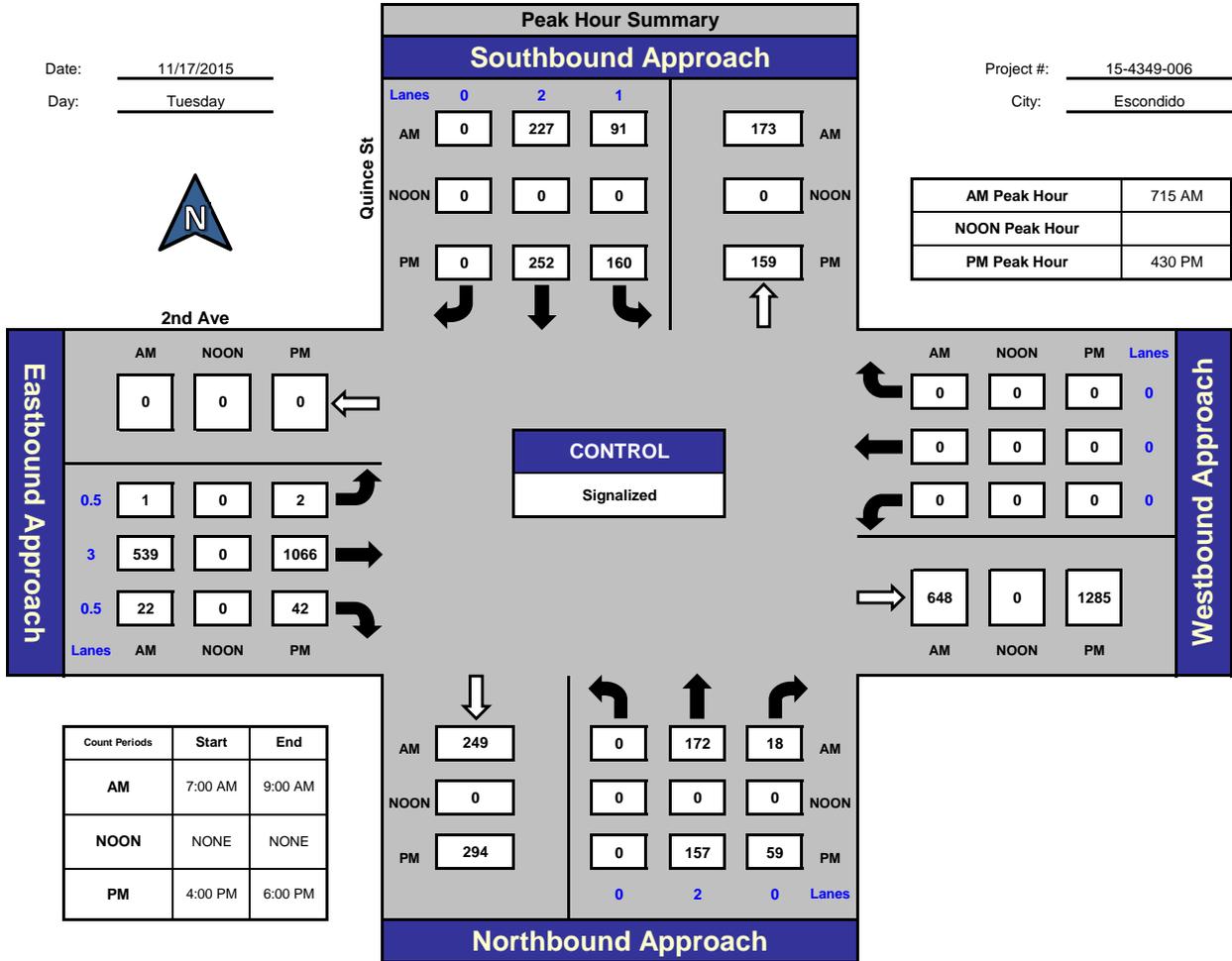
Quince St and 2nd Ave, Escondido

Date: 11/17/2015

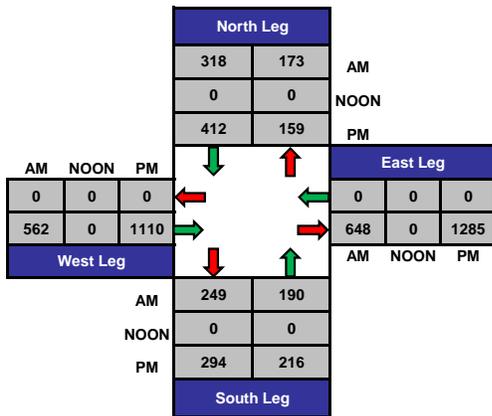
Day: Tuesday

Project #: 15-4349-006

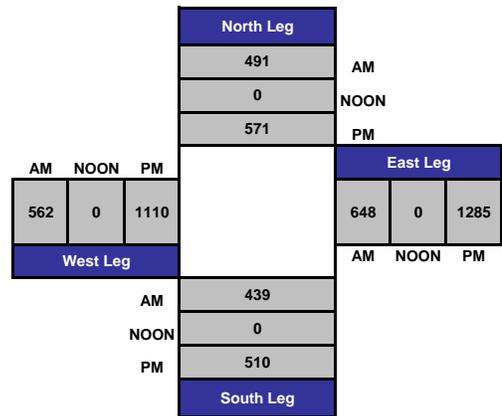
City: Escondido



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4260-004

Day: Tuesday

City: Escondido

Date: 9/1/2015

		AM													
NS/EW Streets:		Centre City Pkwy			Centre City Pkwy			2nd Ave			2nd Ave				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
		0	2	1	2	2	0	1.5	2	0.5	0	0	0		
	7:00 AM	0	133	34	27	255	0	5	125	8	0	0	0	587	
	7:15 AM	0	173	36	34	288	0	3	126	11	0	0	0	671	
	7:30 AM	0	155	46	50	276	0	9	170	7	0	0	0	713	
	7:45 AM	0	149	51	31	239	0	5	168	10	0	0	0	653	
	8:00 AM	0	174	53	24	215	0	10	123	11	0	0	0	610	
	8:15 AM	0	182	39	49	225	0	7	145	11	0	0	0	658	
	8:30 AM	0	132	56	36	193	0	6	131	9	0	0	0	563	
	8:45 AM	0	140	64	43	177	0	10	111	14	0	0	0	559	
TOTAL VOLUMES :		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
		0	1238	379	294	1868	0	55	1099	81	0	0	0	5014	
APPROACH %'s :		0.00%	76.56%	23.44%	13.60%	86.40%	0.00%	4.45%	88.99%	6.56%	#DIV/0!	#DIV/0!	#DIV/0!		
PEAK HR START TIME :		715 AM												TOTAL	
PEAK HR VOL :		0	651	186	139	1018	0	27	587	39	0	0	0	2647	
PEAK HR FACTOR :					0.922			0.887			0.878			0.000	0.928

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4260-004

Day: Tuesday

City: Escondido

Date: 9/1/2015

		PM												
NS/EW Streets:		Centre City Pkwy			Centre City Pkwy			2nd Ave			2nd Ave			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
		0	2	1	2	2	0	1.5	2	0.5	0	0	0	
4:00 PM		0	214	63	40	205	0	17	249	16	0	0	0	804
4:15 PM		0	198	49	30	156	0	19	249	23	0	0	0	724
4:30 PM		0	212	57	38	176	0	31	296	32	0	0	0	842
4:45 PM		0	172	53	40	176	0	16	285	23	0	0	0	765
5:00 PM		0	199	53	49	212	0	18	263	31	0	0	0	825
5:15 PM		0	226	49	41	191	0	23	235	20	0	0	0	785
5:30 PM		0	201	51	28	204	0	25	251	26	0	0	0	786
5:45 PM		0	192	41	36	153	0	10	183	20	0	0	0	635
TOTAL VOLUMES :		0	1614	416	302	1473	0	159	2011	191	0	0	0	6166
APPROACH %'s :		0.00%	79.51%	20.49%	17.01%	82.99%	0.00%	6.73%	85.18%	8.09%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :		430 PM												TOTAL
PEAK HR VOL :		0	809	212	168	755	0	88	1079	106	0	0	0	3217
PEAK HR FACTOR :		0.928			0.884			0.886			0.000			0.955

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

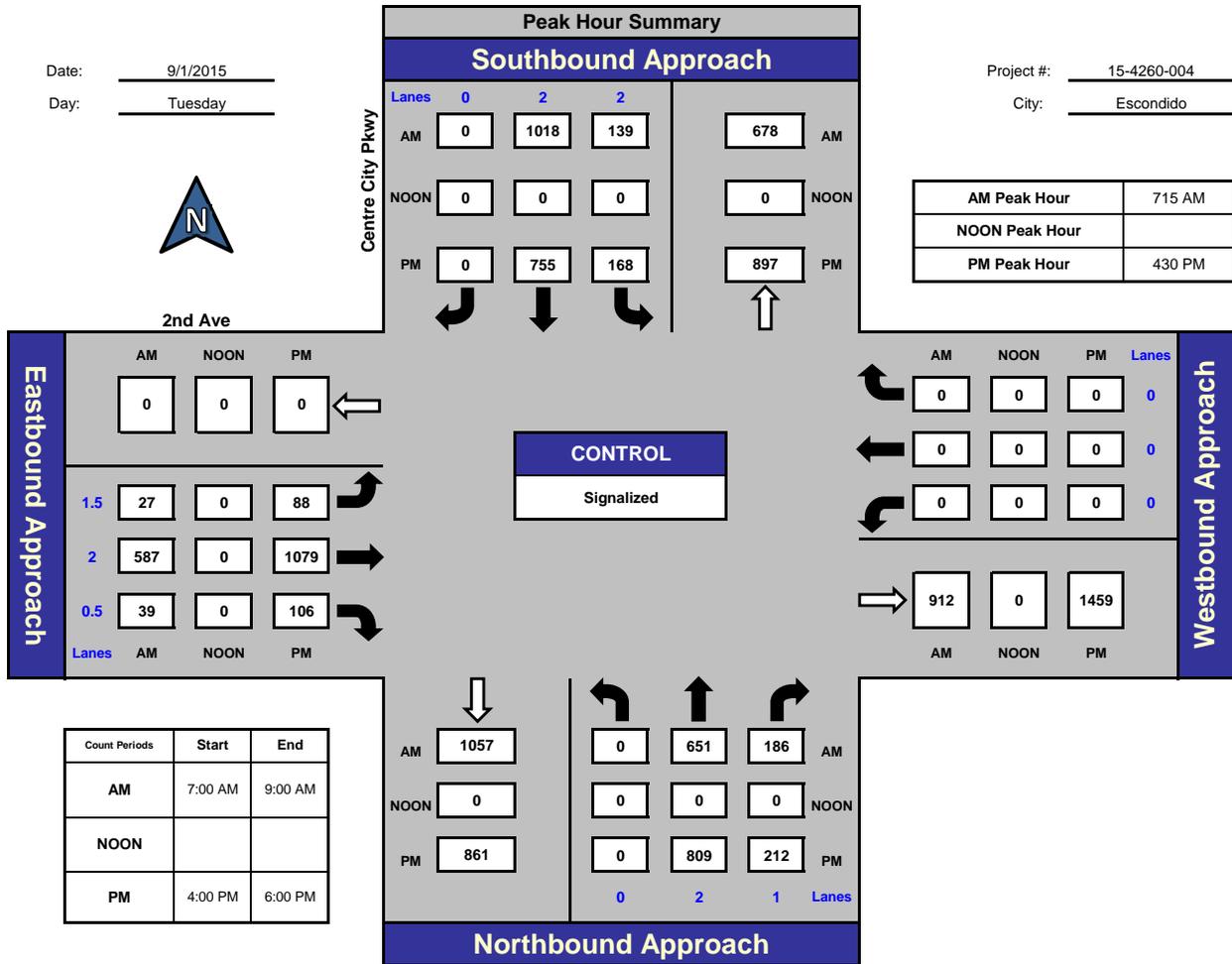


National Data & Surveying Services

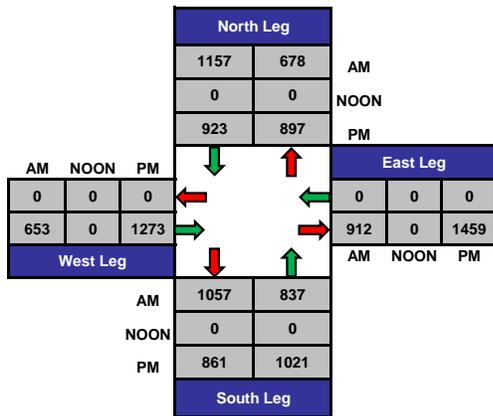
Centre City Pkwy and 2nd Ave, Escondido

Date: 9/1/2015
Day: Tuesday

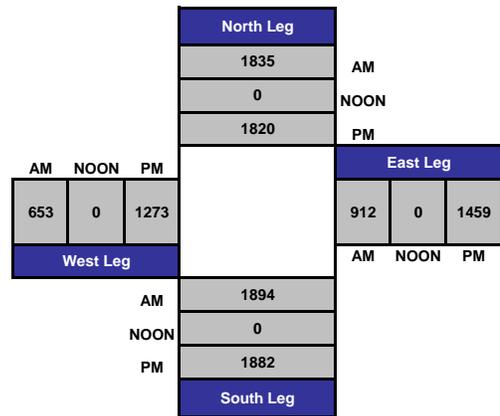
Project #: 15-4260-004
City: Escondido



Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4371-001

Day: Thursday

City: Escondido

Date: 12/17/2015

AM													
NS/EW Streets:	Hale Ave			Hale Ave			N Tulip St			N Tulip St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	44	9	38	155	1	0	2	1	37	0	26	313
7:15 AM	0	59	10	29	215	0	0	0	0	49	0	32	394
7:30 AM	1	65	8	37	158	2	0	0	0	63	0	37	371
7:45 AM	0	73	13	43	207	0	0	0	1	80	0	38	455
8:00 AM	0	63	16	44	169	0	0	0	0	40	0	39	371
8:15 AM	0	38	12	42	114	0	0	0	0	33	0	25	264
8:30 AM	0	68	13	36	108	0	0	0	0	54	0	44	323
8:45 AM	0	44	15	53	113	0	0	1	0	40	0	41	307
TOTAL VOLUMES :	1	454	96	322	1239	3	0	3	2	396	0	282	2798
APPROACH %'s :	0.18%	82.40%	17.42%	20.59%	79.22%	0.19%	0.00%	60.00%	40.00%	58.41%	0.00%	41.59%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	1	260	47	153	749	2	0	0	1	232	0	146	1591
PEAK HR FACTOR :	0.895			0.904			0.250			0.801			0.874

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-4371-001

Day: Thursday

City: Escondido

Date: 12/17/2015

PM

NS/EW Streets:	Hale Ave			Hale Ave			N Tulip St			N Tulip St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	166	54	66	75	0	0	1	0	21	0	63	446
4:15 PM	0	191	48	68	72	0	0	0	0	24	0	93	496
4:30 PM	0	207	44	62	86	0	0	0	0	35	0	92	526
4:45 PM	0	177	43	41	108	0	0	0	1	18	0	94	482
5:00 PM	0	207	59	86	89	0	0	0	0	13	0	75	529
5:15 PM	0	196	52	59	99	0	0	0	0	17	0	78	501
5:30 PM	0	152	46	41	68	0	0	0	0	14	0	86	407
5:45 PM	0	125	22	51	72	0	0	0	0	20	0	40	330
TOTAL VOLUMES :	0	1421	368	474	669	0	0	1	1	162	0	621	3717
APPROACH %'s :	0.00%	79.43%	20.57%	41.47%	58.53%	0.00%	0.00%	50.00%	50.00%	20.69%	0.00%	79.31%	
PEAK HR START TIME :	4:30 PM												TOTAL
PEAK HR VOL :	0	787	198	248	382	0	0	0	1	83	0	339	2038
PEAK HR FACTOR :		0.926			0.900			0.250			0.831		0.963

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

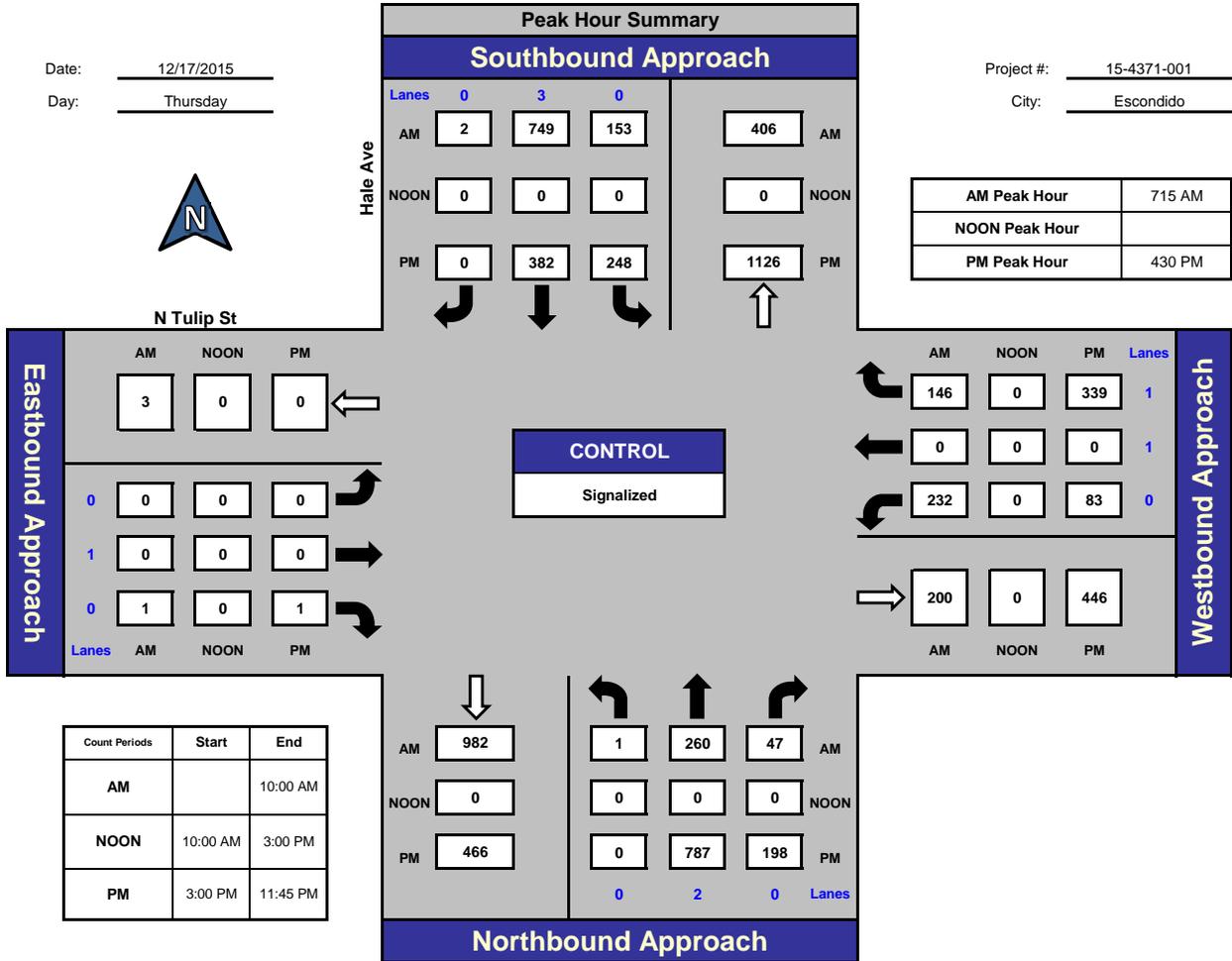
Hale Ave and N Tulip St, Escondido

Date: 12/17/2015

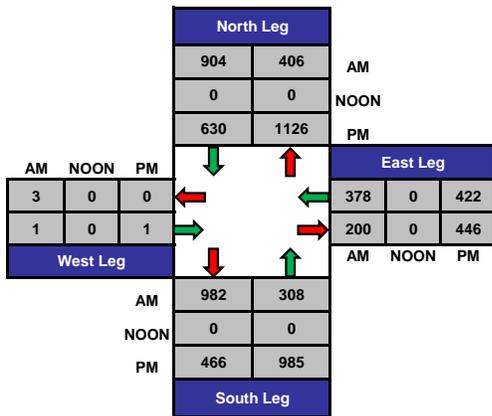
Day: Thursday

Project #: 15-4371-001

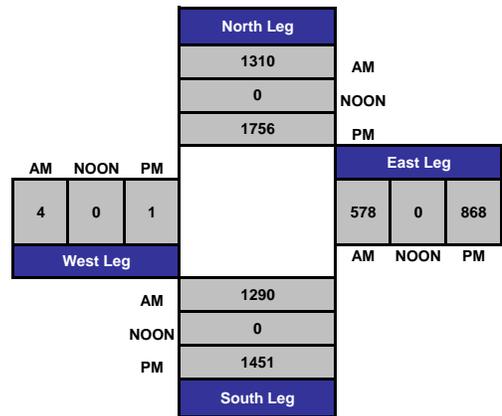
City: Escondido



Total Ins & Outs



Total Volume Per Leg



VOLUME

Valley Pkwy Bet. I-15 & Plaza Las Palmas-La Terraza Blvd

Day: Tuesday
Date: 11/17/2015

City: Escondido
Project #: CA15_4350_001

DAILY TOTALS					NB	SB						Total			
					0	0						37,513			
					19,065					18,448					
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00			24	28	52		12:00			321	390	711			
00:15			26	22	48		12:15			382	341	723			
00:30			22	17	39		12:30			392	349	741			
00:45			13	85	14	81	12:45			376	1471	371	1451	747	2922
01:00			11	7	18		13:00			379	361	740			
01:15			7	6	13		13:15			368	343	711			
01:30			11	12	23		13:30			345	305	650			
01:45			7	36	23	48	13:45			404	1496	306	1315	710	2811
02:00			13	9	22		14:00			365	318	683			
02:15			11	13	24		14:15			310	310	620			
02:30			13	10	23		14:30			377	288	665			
02:45			16	53	14	46	14:45			424	1476	305	1221	729	2697
03:00			8	8	16		15:00			425	354	779			
03:15			13	7	20		15:15			349	375	724			
03:30			15	17	32		15:30			375	341	716			
03:45			17	53	26	58	15:45			435	1584	324	1394	759	2978
04:00			20	25	45		16:00			347	314	661			
04:15			21	26	47		16:15			378	316	694			
04:30			24	23	47		16:30			410	300	710			
04:45			44	109	48	122	16:45			399	1534	317	1247	716	2781
05:00			37	54	91		17:00			375	331	706			
05:15			57	99	156		17:15			394	353	747			
05:30			77	93	170		17:30			371	313	684			
05:45			116	287	123	369	17:45			360	1500	275	1272	635	2772
06:00			114	150	264		18:00			310	288	598			
06:15			107	247	354		18:15			289	264	553			
06:30			128	280	408		18:30			276	291	567			
06:45			183	532	246	923	18:45			244	1119	227	1070	471	2189
07:00			163	273	436		19:00			201	233	434			
07:15			231	265	496		19:15			189	188	377			
07:30			252	284	536		19:30			188	211	399			
07:45			316	962	284	1106	19:45			150	728	187	819	337	1547
08:00			229	282	511		20:00			155	153	308			
08:15			299	269	568		20:15			134	138	272			
08:30			279	231	510		20:30			158	139	297			
08:45			330	1137	216	998	20:45			139	586	133	563	272	1149
09:00			295	217	512		21:00			115	131	246			
09:15			239	238	477		21:15			109	117	226			
09:30			281	235	516		21:30			89	125	214			
09:45			295	1110	285	975	21:45			62	375	95	468	157	843
10:00			266	288	554		22:00			70	76	146			
10:15			298	297	595		22:15			54	51	105			
10:30			272	290	562		22:30			47	49	96			
10:45			309	1145	300	1175	22:45			44	215	36	212	80	427
11:00			326	324	650		23:00			39	41	80			
11:15			324	310	634		23:15			42	44	86			
11:30			341	343	684		23:30			31	60	91			
11:45			347	1338	358	1335	23:45			22	134	35	180	57	314
TOTALS			6847	7236	14083		TOTALS			12218	11212	23430			
SPLIT %			48.6%	51.4%	37.5%		SPLIT %			52.1%	47.9%	62.5%			

DAILY TOTALS					NB	SB						Total		
					0	0						37,513		
					19,065					18,448				

AM Peak Hour			11:45	11:45	11:45		PM Peak Hour			15:00	12:00	15:00	
AM Pk Volume			1442	1438	2880		PM Pk Volume			1584	1451	2978	
Pk Hr Factor			0.920	0.922	0.972		Pk Hr Factor			0.910	0.930	0.956	
7 - 9 Volume	0	0	2099	2104	4203		4 - 6 Volume	0	0	3034	2519	5553	
7 - 9 Peak Hour			08:00	07:30	07:30		4 - 6 Peak Hour			16:30	16:45	16:30	
7 - 9 Pk Volume	0	0	1137	1119	2215		4 - 6 Pk Volume	0	0	1578	1314	2879	
Pk Hr Factor	0.000	0.000	0.861	0.985	0.923		Pk Hr Factor	0.000	0.000	0.962	0.931	0.964	

VOLUME

Valley Pkwy E/O Gateway Dwy

Day: Tuesday
Date: 11/17/2015

City: Escondido
Project #: CA15_4350_002

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	0	15,937	15,937		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	6	6	12:00			0	348	348
00:15			0	19	19	12:15			0	296	296
00:30			0	14	14	12:30			0	327	327
00:45			0	11 50	11 50	12:45			0	298 1269	298 1269
01:00			0	10	10	13:00			0	300	300
01:15			0	5	5	13:15			0	259	259
01:30			0	10	10	13:30			0	294	294
01:45			0	18 43	18 43	13:45			0	257 1110	257 1110
02:00			0	8	8	14:00			0	275	275
02:15			0	6	6	14:15			0	278	278
02:30			0	7	7	14:30			0	275	275
02:45			0	9 30	9 30	14:45			0	269 1097	269 1097
03:00			0	9	9	15:00			0	334	334
03:15			0	6	6	15:15			0	336	336
03:30			0	13	13	15:30			0	324	324
03:45			0	10 38	10 38	15:45			0	283 1277	283 1277
04:00			0	13	13	16:00			0	295	295
04:15			0	13	13	16:15			0	287	287
04:30			0	27	27	16:30			0	283	283
04:45			0	28 81	28 81	16:45			0	261 1126	261 1126
05:00			0	45	45	17:00			0	300	300
05:15			0	82	82	17:15			0	292	292
05:30			0	75	75	17:30			0	239	239
05:45			0	125 327	125 327	17:45			0	239 1070	239 1070
06:00			0	139	139	18:00			0	230	230
06:15			0	218	218	18:15			0	194	194
06:30			0	257	257	18:30			0	177	177
06:45			0	257 871	257 871	18:45			0	174 775	174 775
07:00			0	262	262	19:00			0	185	185
07:15			0	282	282	19:15			0	141	141
07:30			0	300	300	19:30			0	145	145
07:45			0	308 1152	308 1152	19:45			0	145 616	145 616
08:00			0	317	317	20:00			0	114	114
08:15			0	277	277	20:15			0	98	98
08:30			0	184	184	20:30			0	107	107
08:45			0	179 957	179 957	20:45			0	85 404	85 404
09:00			0	196	196	21:00			0	101	101
09:15			0	187	187	21:15			0	80	80
09:30			0	211	211	21:30			0	104	104
09:45			0	260 854	260 854	21:45			0	87 372	87 372
10:00			0	253	253	22:00			0	60	60
10:15			0	244	244	22:15			0	40	40
10:30			0	226	226	22:30			0	33	33
10:45			0	268 991	268 991	22:45			0	34 167	34 167
11:00			0	250	250	23:00			0	28	28
11:15			0	273	273	23:15			0	20	20
11:30			0	308	308	23:30			0	24	24
11:45			0	337 1168	337 1168	23:45			0	20 92	20 92
TOTALS					6562	6562	TOTALS		9375	9375	
SPLIT %					100.0%	41.2%	SPLIT %		100.0%	58.8%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	0	15,937	15,937

AM Peak Hour				11:45	11:45	PM Peak Hour				15:00	15:00
AM Pk Volume				1308	1308	PM Pk Volume				1277	1277
Pk Hr Factor				0.940	0.940	Pk Hr Factor				0.950	0.950
7 - 9 Volume	0	0	0	2109	2109	4 - 6 Volume	0	0	0	2196	2196
7 - 9 Peak Hour				07:15	07:15	4 - 6 Peak Hour				16:30	16:30
7 - 9 Pk Volume	0	0	0	1207	1207	4 - 6 Pk Volume	0	0	0	1136	1136
Pk Hr Factor	0.000	0.000	0.000	0.952	0.952	Pk Hr Factor	0.000	0.000	0.000	0.947	0.947

VOLUME

Valley Pkwy W/O Quince St

Day: Tuesday
Date: 11/17/2015

City: Escondido
Project #: CA15_4350_004

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	0	16,717	16,717		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	24	24	12:00			0	333	333
00:15			0	15	15	12:15			0	282	282
00:30			0	10	10	12:30			0	302	302
00:45			0	11 60	11 60	12:45			0	277 1194	277 1194
01:00			0	7	7	13:00			0	290	290
01:15			0	7	7	13:15			0	273	273
01:30			0	11	11	13:30			0	295	295
01:45			0	14 39	14 39	13:45			0	255 1113	255 1113
02:00			0	10	10	14:00			0	271	271
02:15			0	11	11	14:15			0	275	275
02:30			0	8	8	14:30			0	276	276
02:45			0	10 39	10 39	14:45			0	273 1095	273 1095
03:00			0	8	8	15:00			0	309	309
03:15			0	8	8	15:15			0	323	323
03:30			0	14	14	15:30			0	326	326
03:45			0	9 39	9 39	15:45			0	327 1285	327 1285
04:00			0	9	9	16:00			0	317	317
04:15			0	16	16	16:15			0	299	299
04:30			0	30	30	16:30			0	300	300
04:45			0	45 100	45 100	16:45			0	288 1204	288 1204
05:00			0	50	50	17:00			0	309	309
05:15			0	99	99	17:15			0	327	327
05:30			0	98	98	17:30			0	264	264
05:45			0	157 404	157 404	17:45			0	251 1151	251 1151
06:00			0	174	174	18:00			0	258	258
06:15			0	278	278	18:15			0	203	203
06:30			0	263	263	18:30			0	194	194
06:45			0	322 1037	322 1037	18:45			0	183 838	183 838
07:00			0	297	297	19:00			0	182	182
07:15			0	343	343	19:15			0	135	135
07:30			0	325	325	19:30			0	153	153
07:45			0	377 1342	377 1342	19:45			0	141 611	141 611
08:00			0	354	354	20:00			0	112	112
08:15			0	314	314	20:15			0	98	98
08:30			0	220	220	20:30			0	95	95
08:45			0	231 1119	231 1119	20:45			0	76 381	76 381
09:00			0	216	216	21:00			0	101	101
09:15			0	227	227	21:15			0	88	88
09:30			0	230	230	21:30			0	102	102
09:45			0	264 937	264 937	21:45			0	71 362	71 362
10:00			0	256	256	22:00			0	56	56
10:15			0	227	227	22:15			0	42	42
10:30			0	239	239	22:30			0	34	34
10:45			0	250 972	250 972	22:45			0	30 162	30 162
11:00			0	249	249	23:00			0	25	25
11:15			0	268	268	23:15			0	22	22
11:30			0	297	297	23:30			0	26	26
11:45			0	327 1141	327 1141	23:45			0	19 92	19 92
TOTALS				7229	7229	TOTALS				9488	9488
SPLIT %				100.0%	43.2%	SPLIT %				100.0%	56.8%

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	0	16,717	16,717

AM Peak Hour			07:15	07:15	PM Peak Hour			15:15	15:15		
AM Pk Volume			1399	1399	PM Pk Volume			1293	1293		
Pk Hr Factor			0.928	0.928	Pk Hr Factor			0.989	0.989		
7 - 9 Volume	0	0	0	2461	2461	4 - 6 Volume	0	0	0	2355	2355
7 - 9 Peak Hour			07:15	07:15	4 - 6 Peak Hour			16:30	16:30		
7 - 9 Pk Volume	0	0	0	1399	1399	4 - 6 Pk Volume	0	0	0	1224	1224
Pk Hr Factor	0.000	0.000	0.000	0.928	0.928	Pk Hr Factor	0.000	0.000	0.000	0.936	0.936

VOLUME

Valley Pkwy Bet. Quince St & Centre City Pkwy

Day: Tuesday
Date: 11/17/2015

City: Escondido
Project #: CA15_4350_006

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	0	15,740	15,740		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	21	21	12:00			0	330	330
00:15			0	12	12	12:15			0	293	293
00:30			0	16	16	12:30			0	294	294
00:45			0	8 57	8 57	12:45			0	267 1184	267 1184
01:00			0	8	8	13:00			0	287	287
01:15			0	11	11	13:15			0	286	286
01:30			0	9	9	13:30			0	280	280
01:45			0	15 43	15 43	13:45			0	270 1123	270 1123
02:00			0	3	3	14:00			0	263	263
02:15			0	7	7	14:15			0	268	268
02:30			0	11	11	14:30			0	294	294
02:45			0	6 27	6 27	14:45			0	261 1086	261 1086
03:00			0	7	7	15:00			0	314	314
03:15			0	7	7	15:15			0	315	315
03:30			0	9	9	15:30			0	306	306
03:45			0	3 26	3 26	15:45			0	299 1234	299 1234
04:00			0	16	16	16:00			0	284	284
04:15			0	12	12	16:15			0	273	273
04:30			0	29	29	16:30			0	272	272
04:45			0	38 95	38 95	16:45			0	251 1080	251 1080
05:00			0	47	47	17:00			0	304	304
05:15			0	76	76	17:15			0	280	280
05:30			0	91	91	17:30			0	234	234
05:45			0	146 360	146 360	17:45			0	241 1059	241 1059
06:00			0	160	160	18:00			0	219	219
06:15			0	236	236	18:15			0	196	196
06:30			0	252	252	18:30			0	184	184
06:45			0	278 926	278 926	18:45			0	167 766	167 766
07:00			0	273	273	19:00			0	174	174
07:15			0	305	305	19:15			0	121	121
07:30			0	282	282	19:30			0	134	134
07:45			0	344 1204	344 1204	19:45			0	130 559	130 559
08:00			0	311	311	20:00			0	111	111
08:15			0	293	293	20:15			0	93	93
08:30			0	186	186	20:30			0	88	88
08:45			0	218 1008	218 1008	20:45			0	97 389	97 389
09:00			0	171	171	21:00			0	95	95
09:15			0	198	198	21:15			0	90	90
09:30			0	213	213	21:30			0	97	97
09:45			0	235 817	235 817	21:45			0	56 338	56 338
10:00			0	238	238	22:00			0	52	52
10:15			0	249	249	22:15			0	46	46
10:30			0	247	247	22:30			0	29	29
10:45			0	266 1000	266 1000	22:45			0	28 155	28 155
11:00			0	254	254	23:00			0	24	24
11:15			0	276	276	23:15			0	16	16
11:30			0	292	292	23:30			0	19	19
11:45			0	300 1122	300 1122	23:45			0	23 82	23 82
TOTALS				6685	6685	TOTALS				9055	9055
SPLIT %				100.0%	42.5%	SPLIT %				100.0%	57.5%

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	0	15,740	15,740

AM Peak Hour			07:15	07:15	PM Peak Hour			15:00	15:00		
AM Pk Volume			1242	1242	PM Pk Volume			1234	1234		
Pk Hr Factor			0.903	0.903	Pk Hr Factor			0.979	0.979		
7 - 9 Volume	0	0	0	2212	2212	4 - 6 Volume	0	0	0	2139	2139
7 - 9 Peak Hour			07:15	07:15	4 - 6 Peak Hour			16:30	16:30		
7 - 9 Pk Volume	0	0	0	1242	1242	4 - 6 Pk Volume	0	0	0	1107	1107
Pk Hr Factor	0.000	0.000	0.000	0.903	0.903	Pk Hr Factor	0.000	0.000	0.000	0.910	0.910

VOLUME

Grand Ave Bet. S Tulip St & Spruce St

Day: Tuesday
Date: 11/17/2015

City: Escondido
Project #: CA15_4350_003

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	15,273	0	15,273		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			17	0	17	12:00			272	0	272
00:15			13	0	13	12:15			279	0	279
00:30			15	0	15	12:30			300	0	300
00:45			10	55	10 55	12:45			306	1157	306 1157
01:00			10	0	10	13:00			287	0	287
01:15			8	0	8	13:15			288	0	288
01:30			3	0	3	13:30			249	0	249
01:45			7	28	7 28	13:45			297	1121	297 1121
02:00			8	0	8	14:00			297	0	297
02:15			5	0	5	14:15			296	0	296
02:30			6	0	6	14:30			300	0	300
02:45			10	29	10 29	14:45			387	1280	387 1280
03:00			6	0	6	15:00			361	0	361
03:15			8	0	8	15:15			305	0	305
03:30			7	0	7	15:30			329	0	329
03:45			5	26	5 26	15:45			388	1383	388 1383
04:00			15	0	15	16:00			336	0	336
04:15			12	0	12	16:15			354	0	354
04:30			13	0	13	16:30			389	0	389
04:45			19	59	19 59	16:45			367	1446	367 1446
05:00			17	0	17	17:00			355	0	355
05:15			32	0	32	17:15			366	0	366
05:30			35	0	35	17:30			352	0	352
05:45			68	152	68 152	17:45			320	1393	320 1393
06:00			83	0	83	18:00			270	0	270
06:15			64	0	64	18:15			235	0	235
06:30			84	0	84	18:30			240	0	240
06:45			114	345	114 345	18:45			215	960	215 960
07:00			116	0	116	19:00			171	0	171
07:15			155	0	155	19:15			159	0	159
07:30			217	0	217	19:30			144	0	144
07:45			222	710	222 710	19:45			125	599	125 599
08:00			171	0	171	20:00			125	0	125
08:15			204	0	204	20:15			103	0	103
08:30			205	0	205	20:30			121	0	121
08:45			230	810	230 810	20:45			116	465	116 465
09:00			210	0	210	21:00			90	0	90
09:15			181	0	181	21:15			78	0	78
09:30			187	0	187	21:30			65	0	65
09:45			233	811	233 811	21:45			58	291	58 291
10:00			208	0	208	22:00			77	0	77
10:15			219	0	219	22:15			57	0	57
10:30			197	0	197	22:30			39	0	39
10:45			221	845	221 845	22:45			31	204	31 204
11:00			225	0	225	23:00			36	0	36
11:15			243	0	243	23:15			37	0	37
11:30			260	0	260	23:30			27	0	27
11:45			259	987	259 987	23:45			17	117	17 117
TOTALS			4857		4857	TOTALS			10416		10416
SPLIT %			100.0%		31.8%	SPLIT %			100.0%		68.2%

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	15,273	0	15,273		
AM Peak Hour			11:45		11:45	PM Peak Hour			16:30		16:30
AM Pk Volume			1110		1110	PM Pk Volume			1477		1477
Pk Hr Factor			0.925		0.925	Pk Hr Factor			0.949		0.949
7 - 9 Volume	0	0	1520	0	1520	4 - 6 Volume	0	0	2839	0	2839
7 - 9 Peak Hour			07:30		07:30	4 - 6 Peak Hour			16:30		16:30
7 - 9 Pk Volume	0	0	814	0	814	4 - 6 Pk Volume	0	0	1477	0	1477
Pk Hr Factor	0.000	0.000	0.917	0.000	0.917	Pk Hr Factor	0.000	0.000	0.949	0.000	0.949

VOLUME

Second Ave W/O Quince St

Day: Tuesday
Date: 11/17/2015City: Escondido
Project #: CA15_4350_005

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	14,800	0	14,800		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			16	0	16	12:00			263	0	263
00:15			13	0	13	12:15			274	0	274
00:30			14	0	14	12:30			286	0	286
00:45			11	54	65	12:45			282	1105	1387
01:00			9	0	9	13:00			260	0	260
01:15			8	0	8	13:15			275	0	275
01:30			3	0	3	13:30			243	0	243
01:45			6	26	32	13:45			280	1058	1338
02:00			5	0	5	14:00			275	0	275
02:15			4	0	4	14:15			269	0	269
02:30			5	0	5	14:30			268	0	268
02:45			7	21	28	14:45			332	1144	1476
03:00			6	0	6	15:00			353	0	353
03:15			8	0	8	15:15			289	0	289
03:30			7	0	7	15:30			315	0	315
03:45			3	24	27	15:45			368	1325	1693
04:00			14	0	14	16:00			338	0	338
04:15			10	0	10	16:15			333	0	333
04:30			8	0	8	16:30			355	0	355
04:45			13	45	58	16:45			398	1424	1822
05:00			22	0	22	17:00			355	0	355
05:15			28	0	28	17:15			358	0	358
05:30			40	0	40	17:30			353	0	353
05:45			59	149	208	17:45			340	1406	1746
06:00			73	0	73	18:00			267	0	267
06:15			62	0	62	18:15			234	0	234
06:30			85	0	85	18:30			239	0	239
06:45			126	346	472	18:45			203	943	1146
07:00			127	0	127	19:00			172	0	172
07:15			162	0	162	19:15			165	0	165
07:30			212	0	212	19:30			161	0	161
07:45			207	708	915	19:45			122	620	742
08:00			176	0	176	20:00			127	0	127
08:15			212	0	212	20:15			103	0	103
08:30			207	0	207	20:30			113	0	113
08:45			221	816	1037	20:45			105	448	553
09:00			208	0	208	21:00			93	0	93
09:15			175	0	175	21:15			77	0	77
09:30			179	0	179	21:30			59	0	59
09:45			233	795	1028	21:45			67	296	363
10:00			188	0	188	22:00			73	0	73
10:15			231	0	231	22:15			54	0	54
10:30			196	0	196	22:30			38	0	38
10:45			209	824	1033	22:45			33	198	231
11:00			205	0	205	23:00			36	0	36
11:15			225	0	225	23:15			32	0	32
11:30			244	0	244	23:30			28	0	28
11:45			237	911	1148	23:45			18	114	132
TOTALS			4719		4719	TOTALS			10081		10081
SPLIT %			100.0%		31.9%	SPLIT %			100.0%		68.1%

DAILY TOTALS					NB	SB	EB	WB	Total	
					0	0	14,800	0	14,800	
AM Peak Hour			11:45		11:45	PM Peak Hour			16:30	16:30
AM Pk Volume			1060		1060	PM Pk Volume			1466	1466
Pk Hr Factor			0.927		0.927	Pk Hr Factor			0.921	0.921
7 - 9 Volume	0	0	1524	0	1524	4 - 6 Volume	0	0	2830	2830
7 - 9 Peak Hour			08:00		08:00	4 - 6 Peak Hour			16:30	16:30
7 - 9 Pk Volume	0	0	816	0	816	4 - 6 Pk Volume	0	0	1466	1466
Pk Hr Factor	0.000	0.000	0.923	0.000	0.923	Pk Hr Factor	0.000	0.000	0.921	0.921

VOLUME

Second Ave Bet. Quince St & Centre City Pkwy

Day: Tuesday
Date: 11/17/2015

City: Escondido
Project #: CA15_4350_008

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	11,663	0	11,663		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			10	0	10	12:00			190	0	190
00:15			11	0	11	12:15			213	0	213
00:30			12	0	12	12:30			210	0	210
00:45			12	45	12 45	12:45			213	826	213 826
01:00			7	0	7	13:00			225	0	225
01:15			7	0	7	13:15			188	0	188
01:30			4	0	4	13:30			229	0	229
01:45			4	22	4 22	13:45			209	851	209 851
02:00			3	0	3	14:00			220	0	220
02:15			2	0	2	14:15			221	0	221
02:30			4	0	4	14:30			212	0	212
02:45			2	11	2 11	14:45			262	915	262 915
03:00			8	0	8	15:00			287	0	287
03:15			6	0	6	15:15			238	0	238
03:30			9	0	9	15:30			258	0	258
03:45			1	24	1 24	15:45			304	1087	304 1087
04:00			11	0	11	16:00			260	0	260
04:15			8	0	8	16:15			268	0	268
04:30			10	0	10	16:30			291	0	291
04:45			12	41	12 41	16:45			323	1142	323 1142
05:00			16	0	16	17:00			308	0	308
05:15			20	0	20	17:15			298	0	298
05:30			22	0	22	17:30			259	0	259
05:45			33	91	33 91	17:45			283	1148	283 1148
06:00			56	0	56	18:00			204	0	204
06:15			47	0	47	18:15			195	0	195
06:30			58	0	58	18:30			198	0	198
06:45			102	263	102 263	18:45			167	764	167 764
07:00			95	0	95	19:00			137	0	137
07:15			148	0	148	19:15			120	0	120
07:30			167	0	167	19:30			127	0	127
07:45			176	586	176 586	19:45			84	468	84 468
08:00			144	0	144	20:00			91	0	91
08:15			153	0	153	20:15			88	0	88
08:30			150	0	150	20:30			94	0	94
08:45			167	614	167 614	20:45			86	359	86 359
09:00			154	0	154	21:00			73	0	73
09:15			123	0	123	21:15			81	0	81
09:30			152	0	152	21:30			60	0	60
09:45			154	583	154 583	21:45			47	261	47 261
10:00			136	0	136	22:00			54	0	54
10:15			181	0	181	22:15			51	0	51
10:30			147	0	147	22:30			38	0	38
10:45			155	619	155 619	22:45			24	167	24 167
11:00			151	0	151	23:00			30	0	30
11:15			173	0	173	23:15			23	0	23
11:30			174	0	174	23:30			25	0	25
11:45			187	685	187 685	23:45			13	91	13 91
TOTALS			3584		3584	TOTALS			8079		8079
SPLIT %			100.0%		30.7%	SPLIT %			100.0%		69.3%

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	11,663	0	11,663

AM Peak Hour			11:45		11:45	PM Peak Hour			16:30		16:30
AM Pk Volume			800		800	PM Pk Volume			1220		1220
Pk Hr Factor			0.939		0.939	Pk Hr Factor			0.944		0.944
7 - 9 Volume	0	0	1200	0	1200	4 - 6 Volume	0	0	2290	0	2290
7 - 9 Peak Hour			07:30		07:30	4 - 6 Peak Hour			16:30		16:30
7 - 9 Pk Volume	0	0	640	0	640	4 - 6 Pk Volume	0	0	1220	0	1220
Pk Hr Factor	0.000	0.000	0.909	0.000	0.909	Pk Hr Factor	0.000	0.000	0.944	0.000	0.944

VOLUME

N Tulip St Bet. Canal Bridge & Valley Pkwy

Day: Thursday
Date: 12/17/2015

City: Escondido
Project #: CA15_4372_002

DAILY TOTALS					NB	SB	EB	WB	Total		
					5,696	5,345	0	0	11,041		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	11	16			27	12:00	121	122			243
00:15	1	1			2	12:15	116	100			216
00:30	4	5			9	12:30	102	106			208
00:45	4	20	4	26	8	12:45	113	452	99	427	212
01:00	1	0			1	13:00	109	125			234
01:15	0	3			3	13:15	130	125			255
01:30	1	0			1	13:30	105	106			211
01:45	4	6	1	4	5	13:45	125	469	101	457	226
02:00	1	2			3	14:00	107	104			211
02:15	2	2			4	14:15	136	101			237
02:30	1	4			5	14:30	109	122			231
02:45	9	13	2	10	11	14:45	97	449	102	429	199
03:00	0	0			0	15:00	122	114			236
03:15	3	7			10	15:15	112	117			229
03:30	5	4			9	15:30	106	123			229
03:45	5	13	7	18	12	15:45	131	471	98	452	229
04:00	4	6			10	16:00	116	131			247
04:15	12	6			18	16:15	106	119			225
04:30	24	7			31	16:30	109	115			224
04:45	21	61	11	30	32	16:45	102	433	104	469	206
05:00	17	37			54	17:00	94	117			211
05:15	30	26			56	17:15	114	112			226
05:30	43	21			64	17:30	99	98			197
05:45	60	150	35	119	95	17:45	82	389	91	418	173
06:00	52	36			88	18:00	73	92			165
06:15	66	49			115	18:15	72	72			144
06:30	64	43			107	18:30	65	64			129
06:45	85	267	49	177	134	18:45	50	260	70	298	120
07:00	77	57			134	19:00	44	49			93
07:15	93	50			143	19:15	39	42			81
07:30	108	52			160	19:30	32	54			86
07:45	118	396	61	220	179	19:45	44	159	42	187	86
08:00	85	72			157	20:00	30	40			70
08:15	68	72			140	20:15	34	34			68
08:30	103	52			155	20:30	35	27			62
08:45	85	341	62	258	147	20:45	30	129	19	120	49
09:00	67	76			143	21:00	14	14			28
09:15	81	68			149	21:15	34	11			45
09:30	71	83			154	21:30	22	29			51
09:45	79	298	75	302	154	21:45	17	87	22	76	39
10:00	80	78			158	22:00	17	15			32
10:15	94	100			194	22:15	8	9			17
10:30	97	90			187	22:30	5	6			11
10:45	99	370	107	375	206	22:45	12	42	5	35	17
11:00	123	96			219	23:00	3	24			27
11:15	89	93			182	23:15	6	7			13
11:30	99	96			195	23:30	5	10			15
11:45	92	403	105	390	197	23:45	4	18	7	48	11
TOTALS	2338	1929			4267	TOTALS	3358	3416			6774
SPLIT %	54.8%	45.2%			38.6%	SPLIT %	49.6%	50.4%			61.4%

DAILY TOTALS					NB	SB	EB	WB	Total
					5,696	5,345	0	0	11,041

AM Peak Hour	11:45	11:45			11:45	PM Peak Hour	13:45	15:30			15:15
AM Pk Volume	431	433			864	PM Pk Volume	477	471			934
Pk Hr Factor	0.890	0.887			0.889	Pk Hr Factor	0.877	0.899			0.945
7 - 9 Volume	737	478	0	0	1215	4 - 6 Volume	822	887	0	0	1709
7 - 9 Peak Hour	07:15	08:00			07:15	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	404	258	0	0	639	4 - 6 Pk Volume	433	469	0	0	902
Pk Hr Factor	0.856	0.896	0.000	0.000	0.892	Pk Hr Factor	0.933	0.895	0.000	0.000	0.913

VOLUME

Hale Ave Bet. I-15 HOV Ramps & N Tulip St

Day: Thursday
Date: 12/17/2015

City: Escondido
Project #: CA15_4372_001

DAILY TOTALS					NB	SB	EB	WB	Total		
					7,442	8,090	0	0	15,532		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	7	4			11	12:00	125	134			259
00:15	4	1			5	12:15	137	147			284
00:30	6	4			10	12:30	140	159			299
00:45	5	22	2	11	40	12:45	158	560	163	603	1163
01:00	5	4			9	13:00	161	147			308
01:15	3	5			8	13:15	134	132			266
01:30	0	3			3	13:30	108	150			258
01:45	4	12	5	17	38	13:45	122	525	126	555	1080
02:00	4	2			6	14:00	116	142			258
02:15	6	3			9	14:15	119	143			262
02:30	8	4			12	14:30	168	126			294
02:45	3	21	7	16	47	14:45	154	557	137	548	1105
03:00	5	3			8	15:00	203	133			336
03:15	7	5			12	15:15	186	141			327
03:30	4	8			12	15:30	222	136			358
03:45	8	24	5	21	58	15:45	215	826	115	525	1351
04:00	3	1			4	16:00	228	98			326
04:15	4	6			10	16:15	230	95			325
04:30	7	18			25	16:30	259	124			383
04:45	7	21	23	48	99	16:45	213	930	123	440	1370
05:00	8	41			49	17:00	270	107			377
05:15	6	44			50	17:15	242	113			355
05:30	11	73			84	17:30	203	90			293
05:45	29	54	133	291	407	17:45	139	854	87	397	1251
06:00	29	113			142	18:00	185	108			293
06:15	60	179			239	18:15	121	95			216
06:30	40	218			258	18:30	117	89			206
06:45	54	183	215	725	1177	18:45	93	516	58	350	866
07:00	52	206			258	19:00	71	57			128
07:15	70	249			319	19:15	56	44			100
07:30	71	232			303	19:30	56	32			88
07:45	90	283	279	966	1618	19:45	55	238	42	175	413
08:00	75	220			295	20:00	50	35			85
08:15	56	136			192	20:15	46	25			71
08:30	77	169			246	20:30	39	31			70
08:45	60	268	150	675	1153	20:45	39	174	28	119	293
09:00	80	127			207	21:00	30	30			60
09:15	65	114			179	21:15	28	18			46
09:30	82	113			195	21:30	42	28			70
09:45	66	293	103	457	919	21:45	28	128	22	98	226
10:00	100	108			208	22:00	27	17			44
10:15	83	96			179	22:15	14	14			28
10:30	103	117			220	22:30	15	8			23
10:45	75	361	132	453	1021	22:45	12	68	12	51	119
11:00	97	127			224	23:00	23	7			30
11:15	117	128			245	23:15	8	13			21
11:30	116	132			248	23:30	17	5			22
11:45	138	468	131	518	1255	23:45	8	56	6	31	87
TOTALS	2010	4198			6208	TOTALS	5432	3892			9324
SPLIT %	32.4%	67.6%			40.0%	SPLIT %	58.3%	41.7%			60.0%

DAILY TOTALS					NB	SB	EB	WB	Total
					7,442	8,090	0	0	15,532

AM Peak Hour	11:45	07:15		07:15	PM Peak Hour	16:30	12:15		16:30
AM Pk Volume	540	980		1286	PM Pk Volume	984	616		1451
Pk Hr Factor	0.964	0.878		0.871	Pk Hr Factor	0.911	0.945		0.947
7 - 9 Volume	551	1641	0	2192	4 - 6 Volume	1784	837	0	2621
7 - 9 Peak Hour	07:15	07:15		07:15	4 - 6 Peak Hour	16:30	16:30		16:30
7 - 9 Pk Volume	306	980	0	1286	4 - 6 Pk Volume	984	467	0	1451
Pk Hr Factor	0.850	0.878	0.000	0.871	Pk Hr Factor	0.911	0.942	0.000	0.947

APPENDIX C

**Existing Conditions
HCM Intersection Analysis Worksheets**

Gateway Grand TIA
Existing AM Peak Hour

Scenario Report

Scenario: ex am
 Command: ex am
 Volume: ex am
 Geometry: ex am
 Impact Fee: Default Impact Fee
 Trip Generation: none
 Trip Distribution: none
 Paths: Default Path
 Routes: Default Route
 Configuration: ex am

Gateway Grand TIA
Existing AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
# 1 Valley Pkwy / I-15 Southbound	D	44.5	0.739	D	44.5	0.739	+ 0.000 D/V
# 2 Valley Pkwy / I-15 Northbound	C	30.4	0.672	C	30.4	0.672	+ 0.000 D/V
# 3 Valley Pkwy / La Terraza Blvd-	B	17.6	0.314	B	17.6	0.314	+ 0.000 D/V
# 4 Valley Pkwy / North Tulip St	C	27.9	0.386	C	27.9	0.386	+ 0.000 D/V
# 5 Valley Pkwy / Gateway Dwy	A	2.1	0.222	A	2.1	0.222	+ 0.000 D/V
# 6 Valley Pkwy / Quince St	B	19.1	0.496	B	19.1	0.496	+ 0.000 D/V
# 7 Valley Pkwy / Centre City Pkwy	C	22.1	0.648	C	22.1	0.648	+ 0.000 D/V
# 8 Grand Ave / Quince St	B	17.7	0.202	B	17.7	0.202	+ 0.000 D/V
# 9 Grand Ave / Centre City Pkwy	B	14.2	0.480	B	14.2	0.480	+ 0.000 D/V
# 10 Second Ave / Quince St	B	14.5	0.259	B	14.5	0.259	+ 0.000 D/V
# 11 Second Ave / Centre City Pkwy	B	17.8	0.513	B	17.8	0.513	+ 0.000 D/V
# 12 Hale Ave / North Tulip St	B	14.5	0.481	B	14.5	0.481	+ 0.000 D/V

Gateway Grand TIA Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

***** Intersection #1 Valley Pkwy / I-15 Southbound Ramps *****

Cycle (sec): 115 Critical Vol./Cap.(X): 0.739
Loss Time (sec): 16 Average Delay (sec/veh): 44.5
Optimal Cycle: 78 Level Of Service: D

Table with columns: Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module: Table with columns: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Table with columns: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

***** Intersection #2 Valley Pkwy / I-15 Northbound Ramps *****

Cycle (sec): 115 Critical Vol./Cap.(X): 0.672
Loss Time (sec): 12 Average Delay (sec/veh): 30.4
Optimal Cycle: 57 Level Of Service: C

Table with columns: Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module: Table with columns: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Table with columns: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Valley Pkwy / La Terraza Blvd-Plaza Las Palmas Dwy

Cycle (sec): 115 Critical Vol./Cap.(X): 0.314
Loss Time (sec): 12 Average Delay (sec/veh): 17.6
Optimal Cycle: 32 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Valley Pkwy / North Tulip St

Cycle (sec): 115 Critical Vol./Cap.(X): 0.386
Loss Time (sec): 16 Average Delay (sec/veh): 27.9
Optimal Cycle: 43 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Valley Pkwy / Gateway Dwy

Cycle (sec): 60 Critical Vol./Cap.(X): 0.222
Loss Time (sec): 8 Average Delay (sec/veh): 2.1
Optimal Cycle: 21 Level Of Service: A

Street Name: Gateway Dwy Valley Pkwy

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected

Rights: Include Include Include Include

Min. Green: 0 5 0 0 0 5 0 0 0 0 5 5

Y+R: 4.0 4.5 4.0 4.0 4.0 4.5 4.0 4.0 4.0 4.0 5.5 5.5

Lanes: 0 0 1 0 0 0 0 0 0 0 0 0 3 1 0

Volume Module:

Base Vol: 0 10 0 0 0 7 0 0 0 0 1228 18

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 10 0 0 0 7 0 0 0 0 1228 18

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 0 10 0 0 0 7 0 0 0 0 1228 18

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97

PHF Volume: 0 10 0 0 0 7 0 0 0 0 1271 19

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 10 0 0 0 7 0 0 0 0 1271 19

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 10 0 0 0 7 0 0 0 0 1271 19

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 1.00 1.00 1.00 1.00 1.00 0.87 1.00 1.00 1.00 1.00 0.91 0.91

Lanes: 0.00 1.00 0.00 0.00 0.00 1.00 0.00 0.00 0.00 0.00 3.94 0.06

Final Sat.: 0 1900 0 0 0 1644 0 0 0 0 6802 100

Capacity Analysis Module:

Vol/Sat: 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.19 0.19

Crit Moves: ****

Green/Cycle: 0.00 0.08 0.00 0.00 0.00 0.08 0.00 0.00 0.00 0.00 0.78 0.78

Volume/Cap: 0.00 0.07 0.00 0.00 0.00 0.05 0.00 0.00 0.00 0.00 0.24 0.24

Delay/Veh: 0.0 25.5 0.0 0.0 0.0 25.5 0.0 0.0 0.0 0.0 1.8 1.8

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 0.0 25.5 0.0 0.0 0.0 25.5 0.0 0.0 0.0 0.0 1.8 1.8

LOS by Move: A C A A A C A A A A A A

HCM2kAvgQ: 0 0 0 0 0 0 0 0 0 0 2 2

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Valley Pkwy / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.496
Loss Time (sec): 12 Average Delay (sec/veh): 19.1
Optimal Cycle: 40 Level Of Service: B

Street Name: Quince St Valley Pkwy

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Split Phase Split Phase

Rights: Include Include Include Include

Min. Green: 5 5 0 0 5 5 0 0 0 0 5 5 5 5

Y+R: 4.5 5.0 4.0 4.0 5.0 5.0 4.0 4.0 4.0 4.0 5.5 5.5 5.5 5.5

Lanes: 1 0 2 0 0 0 0 1 1 0 0 0 0 0 0 0 1 2 0 1

Volume Module:

Base Vol: 67 181 0 0 303 163 0 0 0 0 20 1169 90

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 67 181 0 0 303 163 0 0 0 0 20 1169 90

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 67 181 0 0 303 163 0 0 0 0 20 1169 90

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94

PHF Volume: 71 193 0 0 323 174 0 0 0 0 21 1246 96

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 71 193 0 0 323 174 0 0 0 0 21 1246 96

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 71 193 0 0 323 174 0 0 0 0 21 1246 96

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.95 0.95 1.00 1.00 0.90 0.90 1.00 1.00 1.00 0.91 0.91 0.85

Lanes: 1.00 2.00 0.00 0.00 1.30 0.70 0.00 0.00 0.00 0.05 2.95 1.00

Final Sat.: 1805 3610 0 0 2225 1197 0 0 0 0 87 5090 1615

Capacity Analysis Module:

Vol/Sat: 0.04 0.05 0.00 0.00 0.15 0.15 0.00 0.00 0.00 0.24 0.24 0.06

Crit Moves: ****

Green/Cycle: 0.08 0.37 0.00 0.00 0.29 0.29 0.00 0.00 0.00 0.49 0.49 0.49

Volume/Cap: 0.50 0.14 0.00 0.00 0.50 0.50 0.00 0.00 0.00 0.50 0.50 0.12

Delay/Veh: 42.3 18.8 0.0 0.0 26.7 26.7 0.0 0.0 0.0 15.4 15.4 12.3

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 42.3 18.8 0.0 0.0 26.7 26.7 0.0 0.0 0.0 15.4 15.4 12.3

LOS by Move: D B A A C C A A A A B B B

HCM2kAvgQ: 2 2 0 0 6 6 0 0 0 0 8 8 1

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

***** Intersection #7 Valley Pkwy / Centre City Pkwy *****

Cycle (sec): 90 Critical Vol./Cap.(X): 0.648
Loss Time (sec): 12 Average Delay (sec/veh): 22.1
Optimal Cycle: 52 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

***** Intersection #8 Grand Ave / Quince St *****

Cycle (sec): 60 Critical Vol./Cap.(X): 0.202
Loss Time (sec): 16 Average Delay (sec/veh): 17.7
Optimal Cycle: 36 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Grand Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.480
Loss Time (sec): 12 Average Delay (sec/veh): 14.2
Optimal Cycle: 39 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Second Ave / Quince St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.259
Loss Time (sec): 12 Average Delay (sec/veh): 14.5
Optimal Cycle: 29 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

***** Intersection #11 Second Ave / Centre City Pkwy *****

Cycle (sec): 90 Critical Vol./Cap.(X): 0.513
Loss Time (sec): 12 Average Delay (sec/veh): 17.8
Optimal Cycle: 41 Level Of Service: B

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Centre City Pkwy and Second Ave with various movement and control details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

***** Intersection #12 Hale Ave / North Tulip St *****

Cycle (sec): 60 Critical Vol./Cap.(X): 0.481
Loss Time (sec): 12 Average Delay (sec/veh): 14.5
Optimal Cycle: 37 Level Of Service: B

Table with columns for Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound with various movement and control details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing PM Peak Hour

Scenario Report

Scenario: ex pm
 Command: ex pm
 Volume: ex pm
 Geometry: ex pm
 Impact Fee: Default Impact Fee
 Trip Generation: none
 Trip Distribution: none
 Paths: Default Path
 Routes: Default Route
 Configuration: ex pm

Gateway Grand TIA
Existing PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	LOS	Veh C	LOS	Veh C	
# 1 Valley Pkwy / I-15 Southbound	D	46.9 0.855	D	46.9 0.855	+ 0.000 D/V
# 2 Valley Pkwy / I-15 Northbound	D	35.9 0.777	D	35.9 0.777	+ 0.000 D/V
# 3 Valley Pkwy / La Terraza Blvd-	C	23.2 0.507	C	23.2 0.507	+ 0.000 D/V
# 4 Valley Pkwy / North Tulip St	C	29.8 0.508	C	29.8 0.508	+ 0.000 D/V
# 5 Valley Pkwy / Gateway Dwy	A	5.6 0.277	A	5.6 0.277	+ 0.000 D/V
# 6 Valley Pkwy / Quince St	C	20.3 0.517	C	20.3 0.517	+ 0.000 D/V
# 7 Valley Pkwy / Centre City Pkwy	C	21.2 0.593	C	21.2 0.593	+ 0.000 D/V
# 8 Grand Ave / Quince St	C	25.8 0.312	C	25.8 0.312	+ 0.000 D/V
# 9 Grand Ave / Centre City Pkwy	C	20.3 0.549	C	20.3 0.549	+ 0.000 D/V
# 10 Second Ave / Quince St	B	19.9 0.391	B	19.9 0.391	+ 0.000 D/V
# 11 Second Ave / Centre City Pkwy	C	22.1 0.623	C	22.1 0.623	+ 0.000 D/V
# 12 Hale Ave / North Tulip St	C	22.7 0.816	C	22.7 0.816	+ 0.000 D/V

Gateway Grand TIA Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Valley Pkwy / I-15 Southbound Ramps

Cycle (sec): 125 Critical Vol./Cap.(X): 0.855
Loss Time (sec): 16 Average Delay (sec/veh): 46.9
Optimal Cycle: 111 Level Of Service: D

Table with columns: Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for I-15 Southbound Ramps and Valley Pkwy.

Volume Module: Table with columns: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume. Rows for I-15 Southbound Ramps and Valley Pkwy.

Saturation Flow Module: Table with columns: Sat/Lane, Adjustment, Lanes, Final Sat. Rows for I-15 Southbound Ramps and Valley Pkwy.

Capacity Analysis Module: Table with columns: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ. Rows for I-15 Southbound Ramps and Valley Pkwy.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Valley Pkwy / I-15 Northbound Ramps

Cycle (sec): 125 Critical Vol./Cap.(X): 0.777
Loss Time (sec): 12 Average Delay (sec/veh): 35.9
Optimal Cycle: 77 Level Of Service: D

Table with columns: Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for I-15 Northbound Ramps and Valley Pkwy.

Volume Module: Table with columns: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume. Rows for I-15 Northbound Ramps and Valley Pkwy.

Saturation Flow Module: Table with columns: Sat/Lane, Adjustment, Lanes, Final Sat. Rows for I-15 Northbound Ramps and Valley Pkwy.

Capacity Analysis Module: Table with columns: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ. Rows for I-15 Northbound Ramps and Valley Pkwy.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Valley Pkwy / La Terraza Blvd-Plaza Las Palmas Dwy

Cycle (sec): 125 Critical Vol./Cap.(X): 0.507
Loss Time (sec): 12 Average Delay (sec/veh): 23.2
Optimal Cycle: 42 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Valley Pkwy / North Tulip St

Cycle (sec): 125 Critical Vol./Cap.(X): 0.508
Loss Time (sec): 16 Average Delay (sec/veh): 29.8
Optimal Cycle: 51 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

***** Intersection #5 Valley Pkwy / Gateway Dwy *****

Cycle (sec): 60 Critical Vol./Cap.(X): 0.277
Loss Time (sec): 8 Average Delay (sec/veh): 5.6
Optimal Cycle: 23 Level Of Service: A

Table with columns: Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

***** Intersection #6 Valley Pkwy / Quince St *****

Cycle (sec): 90 Critical Vol./Cap.(X): 0.517
Loss Time (sec): 12 Average Delay (sec/veh): 20.3
Optimal Cycle: 41 Level Of Service: C

Table with columns: Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

***** Intersection #7 Valley Pkwy / Centre City Pkwy *****

Cycle (sec): 90 Critical Vol./Cap.(X): 0.593
Loss Time (sec): 12 Average Delay (sec/veh): 21.2
Optimal Cycle: 47 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

***** Intersection #8 Grand Ave / Quince St *****

Cycle (sec): 90 Critical Vol./Cap.(X): 0.312
Loss Time (sec): 16 Average Delay (sec/veh): 25.8
Optimal Cycle: 38 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Grand Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.549
Loss Time (sec): 12 Average Delay (sec/veh): 20.3
Optimal Cycle: 43 Level Of Service: C

Street Name: Centre City Pkwy Grand Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 5 5 5 5 5 5 5 5 5 5 5 5
Y+R: 4.5 5.5 5.5 4.5 5.5 5.5 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 1 0 1 1 0 1 0 1

Volume Module:
Base Vol: 11 894 95 96 839 20 71 296 15 65 23 152
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 11 894 95 96 839 20 71 296 15 65 23 152
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 11 894 95 96 839 20 71 296 15 65 23 152
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96
PHF Volume: 11 931 99 100 874 21 74 308 16 68 24 158
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 11 931 99 100 874 21 74 308 16 68 24 158
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 11 931 99 100 874 21 74 308 16 68 24 158

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.85 0.95 0.95 0.85 0.75 1.00 0.85 0.37 1.00 0.85
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1805 3610 1615 1805 3610 1615 1423 1900 1615 711 1900 1615

Capacity Analysis Module:
Vol/Sat: 0.01 0.26 0.06 0.06 0.24 0.01 0.05 0.16 0.01 0.10 0.01 0.10
Crit Moves: **** **** ****
Green/Cycle: 0.11 0.47 0.47 0.10 0.46 0.46 0.30 0.30 0.30 0.30 0.30 0.30
Volume/Cap: 0.06 0.55 0.13 0.55 0.52 0.03 0.18 0.55 0.03 0.32 0.04 0.33
Delay/Veh: 36.3 17.4 13.5 42.0 17.3 13.1 23.7 27.8 22.6 25.6 22.6 25.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 36.3 17.4 13.5 42.0 17.3 13.1 23.7 27.8 22.6 25.6 22.6 25.2
LOS by Move: D B B B B C C C C C C C
HCM2kAvgQ: 0 9 1 3 9 0 1 7 0 2 0 4

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Second Ave / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.391
Loss Time (sec): 12 Average Delay (sec/veh): 19.9
Optimal Cycle: 34 Level Of Service: B

Street Name: Quince St Second Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 5 5 0 5 5 0 5 5 5 5 0 0 0 0
Y+R: 4.0 5.0 5.0 4.5 5.0 4.0 5.5 5.5 5.5 4.0 4.0 4.0
Lanes: 0 0 1 1 0 1 0 2 0 0 0 1 2 1 0 0 0 0 0 0

Volume Module:
Base Vol: 0 157 59 160 252 0 2 1066 42 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 157 59 160 252 0 2 1066 42 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 157 59 160 252 0 2 1066 42 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92
PHF Volume: 0 170 64 173 273 0 2 1155 46 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 170 64 173 273 0 2 1155 46 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 170 64 173 273 0 2 1155 46 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.91 0.91 0.95 0.95 1.00 0.90 0.90 0.90 1.00 1.00 1.00
Lanes: 0.00 1.45 0.55 1.00 2.00 0.00 0.01 3.84 0.15 0.00 0.00 0.00
Final Sat.: 0 2516 946 1805 3610 0 12 6602 260 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.07 0.07 0.10 0.08 0.00 0.17 0.17 0.17 0.00 0.00 0.00
Crit Moves: **** **** ****
Green/Cycle: 0.00 0.17 0.17 0.25 0.42 0.00 0.45 0.45 0.45 0.00 0.00 0.00
Volume/Cap: 0.00 0.39 0.39 0.39 0.18 0.00 0.39 0.39 0.39 0.00 0.00 0.00
Delay/Veh: 0.0 33.4 33.4 28.9 16.5 0.0 16.7 16.7 16.7 0.0 0.0 0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 33.4 33.4 28.9 16.5 0.0 16.7 16.7 16.7 0.0 0.0 0.0
LOS by Move: A C C B A B B A A A A A
HCM2kAvgQ: 0 3 3 4 2 0 6 6 6 0 0 0

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Second Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.623
Loss Time (sec): 12 Average Delay (sec/veh): 22.1
Optimal Cycle: 50 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Centre City Pkwy and Second Ave with various movement and control details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Hale Ave / North Tulip St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.816
Loss Time (sec): 12 Average Delay (sec/veh): 22.7
Optimal Cycle: 66 Level Of Service: C

Table with columns for Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include North Bound, South Bound, East Bound, West Bound with various movement and control details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

APPENDIX D

**Existing Plus Project Conditions
HCM Intersection Analysis Worksheets**

 Gateway Grand TIA
 Existing Plus Project Conditions
 AM Peak Hour

Scenario Report

Scenario: exp am
 Command: exp am
 Volume: ex am
 Geometry: ex am
 Impact Fee: Default Impact Fee
 Trip Generation: am
 Trip Distribution: project
 Paths: Default Path
 Routes: Default Route
 Configuration: exp am

 Gateway Grand TIA
 Existing Plus Project Conditions
 AM Peak Hour

Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	LOS	Del/Veh	LOS	Del/Veh	
# 1 Valley Pkwy / I-15 Southbound	D	44.5 0.739	D	44.5 0.739	+ 0.034 D/V
# 2 Valley Pkwy / I-15 Northbound	C	30.4 0.672	C	30.6 0.682	+ 0.148 D/V
# 3 Valley Pkwy / La Terraza Blvd-	B	17.6 0.314	B	17.4 0.317	-0.177 D/V
# 4 Valley Pkwy / North Tulip St	C	27.9 0.386	C	27.6 0.338	-0.269 D/V
# 5 Valley Pkwy / Gateway Dwy	A	2.1 0.222	A	2.1 0.228	+ 0.003 D/V
# 6 Valley Pkwy / Quince St	B	19.1 0.496	B	19.1 0.498	-0.001 D/V
# 7 Valley Pkwy / Centre City Pkwy	C	22.1 0.648	C	22.2 0.650	+ 0.046 D/V
# 8 Grand Ave / Quince St	B	17.7 0.202	B	17.8 0.204	+ 0.038 D/V
# 9 Grand Ave / Centre City Pkwy	B	14.2 0.480	B	14.3 0.481	+ 0.051 D/V
# 10 Second Ave / Quince St	B	14.5 0.259	B	14.4 0.262	-0.030 D/V
# 11 Second Ave / Centre City Pkwy	B	17.8 0.513	B	18.0 0.516	+ 0.142 D/V
# 12 Hale Ave / North Tulip St	B	14.5 0.481	B	14.6 0.483	+ 0.052 D/V
# 13 Valley Pkwy / Project Driveway	A	7.2 0.000	B	12.4 0.073	+ 5.206 D/V
# 14 West Grand Ave / Project Drive	A	7.2 0.000	B	10.2 0.028	+ 3.017 D/V

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Valley Pkwy / I-15 Southbound Ramps

Cycle (sec): 115 Critical Vol./Cap.(X): 0.739
Loss Time (sec): 16 Average Delay (sec/veh): 44.5
Optimal Cycle: 78 Level Of Service: D

Street Name:	I-15 Southbound Ramps				Valley Pkwy			
	North Bound		South Bound		East Bound		West Bound	
Movement:	L	T - R	L	T - R	L	T - R	L	T - R
Control:	Split Phase		Split Phase		Protected		Protected	
Rights:	Include		Include		Include		Include	
Min. Green:	12	12	12	5	5	8	10	7
Y+R:	5.1	5.1	5.1	5.1	4.7	5.8	5.8	4.7
Lanes:	1	0	1	0	1	0	2	0

Volume Module:	North Bound		South Bound		East Bound		West Bound	
Base Vol:	29	28	75	228	69	645	68	696
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	28	75	228	69	645	68	696
Added Vol:	0	0	1	5	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0
Initial Fut:	29	28	76	233	69	645	68	698
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	31	30	82	252	75	699	74	756
Reduct Vol:	0	0	0	0	0	0	0	0
Reduced Vol:	31	30	82	252	75	699	74	756
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	30	82	252	75	699	74	756

Saturation Flow Module:	North Bound		South Bound		East Bound		West Bound	
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.83	0.83	0.83	0.90	0.89
Lanes:	1.00	1.00	1.00	0.77	0.23	1.00	2.00	3.00
Final Sat.:	1769	1862	1583	1211	359	1569	3432	5083

Capacity Analysis Module:	North Bound		South Bound		East Bound		West Bound	
Vol/Sat:	0.02	0.02	0.05	0.21	0.21	0.45	0.02	0.15
Crit Moves:	****	****	****	****	****	****	****	****
Green/Cycle:	0.10	0.10	0.10	0.50	0.50	0.50	0.05	0.17
Volume/Cap:	0.17	0.16	0.50	0.42	0.42	0.89	0.41	0.89
Delay/Veh:	47.4	47.3	51.0	18.1	18.1	34.3	54.4	58.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.4	47.3	51.0	18.1	18.1	34.3	54.4	58.0
LOS by Move:	D	D	D	B	B	C	D	E
HCM2kAvgQ:	1	1	3	8	8	26	2	13

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Valley Pkwy / I-15 Northbound Ramps

Cycle (sec): 115 Critical Vol./Cap.(X): 0.682
Loss Time (sec): 12 Average Delay (sec/veh): 30.6
Optimal Cycle: 59 Level Of Service: C

Street Name:	I-15 Northbound Ramps						Valley Pkwy										
	North Bound		South Bound		East Bound		West Bound										
Movement:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Split Phase		Split Phase		Protected		Protected										
Rights:	Include		Include		Include		Include										
Min. Green:	5	5	5	0	0	0	5	6	0	0	5	5					
Y+R:	5.1	5.1	5.1	0.0	0.0	0.0	4.7	5.8	0.0	0.0	5.8	5.8					
Lanes:	0	1	0	0	1	0	0	0	0	2	0	3	0	0	3	0	1

Volume Module:

Base Vol:	344	12	469	0	0	0	248	749	0	0	975	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	344	12	469	0	0	0	248	749	0	0	975	151
Added Vol:	0	0	6	0	0	0	0	8	0	0	21	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	344	12	475	0	0	0	248	757	0	0	996	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	369	13	510	0	0	0	266	813	0	0	1070	175
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	369	13	510	0	0	0	266	813	0	0	1070	175
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	369	13	510	0	0	0	266	813	0	0	1070	175

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.83	1.00	1.00	1.00	0.90	0.89	1.00	1.00	0.89	0.83
Lanes:	0.97	0.03	1.00	0.00	0.00	0.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	1688	59	1583	0	0	0	3432	5083	0	0	5083	1583

Capacity Analysis Module:

Vol/Sat:	0.22	0.22	0.32	0.00	0.00	0.00	0.08	0.16	0.00	0.00	0.21	0.11
Crit Moves:	****						****			****		
Green/Cycle:	0.47	0.47	0.47	0.00	0.00	0.00	0.11	0.42	0.00	0.00	0.31	0.31
Volume/Cap:	0.46	0.46	0.68	0.00	0.00	0.00	0.68	0.38	0.00	0.00	0.68	0.36
Delay/Veh:	20.9	20.9	26.1	0.0	0.0	0.0	53.8	22.9	0.0	0.0	36.0	31.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.9	20.9	26.1	0.0	0.0	0.0	53.8	22.9	0.0	0.0	36.0	31.3
LOS by Move:	C	C	C	A	A	A	D	C	A	A	D	C
HCM2kAvgQ:	9	9	15	0	0	0	4	7	0	0	12	5

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Valley Pkwy / La Terraza Blvd-Plaza Las Palmas Dwy

Cycle (sec): 115 Critical Vol./Cap.(X): 0.317
Loss Time (sec): 12 Average Delay (sec/veh): 17.4
Optimal Cycle: 32 Level Of Service: B

Street Name: La Terraza Blvd-Plaza Las Palmas Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted			Permitted			Protected			Protected						
Rights:	Include			Include			Include			Include						
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5				
Y+R:	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.5	5.5	4.5	5.5	5.5				
Lanes:	1	0	1	0	1	0	1	0	3	0	1	2	0	3	1	0

Volume Module:
Base Vol: 79 23 51 22 22 57 77 940 112 91 1004 47
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 79 23 51 22 22 57 77 940 112 91 1004 47
Added Vol: 0 0 0 0 0 0 0 0 13 0 0 33 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 79 23 51 22 22 57 77 953 112 91 1037 47
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 83 24 54 23 23 60 81 1002 118 96 1090 49
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 83 24 54 23 23 60 81 1002 118 96 1090 49
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 83 24 54 23 23 60 81 1002 118 96 1090 49

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.69 1.00 0.85 0.75 0.89 0.89 0.95 0.91 0.85 0.92 0.90 0.90
Lanes: 1.00 1.00 1.00 1.00 0.28 0.72 1.00 3.00 1.00 2.00 3.83 0.17
Final Sat.: 1307 1900 1615 1423 472 1223 1805 5187 1615 3502 6576 298

Capacity Analysis Module:
Vol/Sat: 0.06 0.01 0.03 0.02 0.05 0.05 0.04 0.19 0.07 0.03 0.17 0.17
Crit Moves: **** ****
Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.20 0.15 0.61 0.61 0.09 0.55 0.55
Volume/Cap: 0.32 0.06 0.17 0.08 0.24 0.24 0.30 0.32 0.12 0.32 0.30 0.30
Delay/Veh: 40.0 37.3 38.3 37.5 39.0 39.0 44.3 10.9 9.5 50.0 14.2 14.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 40.0 37.3 38.3 37.5 39.0 39.0 44.3 10.9 9.5 50.0 14.2 14.2
LOS by Move: D D D D D D B A D B B B
HCM2kAvgQ: 3 1 2 1 3 3 2 6 2 2 6 6

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Valley Pkwy / North Tulip St

Cycle (sec): 115 Critical Vol./Cap.(X): 0.338
Loss Time (sec): 16 Average Delay (sec/veh): 27.6
Optimal Cycle: 40 Level Of Service: C

Street Name: North Tulip St Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 5 5 5 5 5 5 5 5 5 5 5 5
Y+R: 4.5 4.5 4.5 4.5 4.5 4.5 4.5 5.5 5.5 4.5 5.5 5.5
Lanes: 0 0 1! 0 0 1 1 0 0 1 2 0 2 1 0 1 0 4 0 1

Volume Module:
Base Vol: 4 4 3 59 9 169 207 776 2 10 946 222
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 4 4 3 59 9 169 207 776 2 10 946 222
Added Vol: 0 0 0 1 0 0 0 13 0 0 33 3
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 4 4 3 60 9 169 207 789 2 10 979 225
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92
PHF Volume: 4 4 3 65 10 183 224 854 2 11 1060 244
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 4 4 3 65 10 183 224 854 2 11 1060 244
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 4 4 3 65 10 183 224 854 2 11 1060 244

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.95 0.96 0.96 0.85 0.92 0.91 0.91 0.95 0.91 0.85
Lanes: 0.37 0.36 0.27 1.74 0.26 1.00 2.00 2.99 0.01 1.00 4.00 1.00
Final Sat.: 653 653 490 3166 475 1615 3502 5174 13 1805 6916 1615

Capacity Analysis Module:
Vol/Sat: 0.01 0.01 0.01 0.02 0.02 0.11 0.06 0.17 0.17 0.01 0.15 0.15
Crit Moves: **** **** ****
Green/Cycle: 0.04 0.04 0.04 0.31 0.31 0.31 0.15 0.46 0.46 0.04 0.35 0.35
Volume/Cap: 0.15 0.15 0.15 0.07 0.07 0.36 0.43 0.36 0.36 0.14 0.43 0.43
Delay/Veh: 53.9 53.9 53.9 27.6 27.6 30.9 45.2 20.3 20.3 53.7 28.4 28.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 53.9 53.9 53.9 27.6 27.6 30.9 45.2 20.3 20.3 53.7 28.4 28.7
LOS by Move: D D D C C C D C C D C C
HCM2kAvgQ: 1 1 1 1 1 1 5 4 7 7 0 8 7

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Valley Pkwy / Gateway Dwy

Cycle (sec): 60 Critical Vol./Cap.(X): 0.228
Loss Time (sec): 8 Average Delay (sec/veh): 2.1
Optimal Cycle: 21 Level Of Service: A

Street Name: Gateway Dwy Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted				Protected												
Rights:	Include				Include												
Min. Green:	0	5	0	0	0	0	5	0	0	0	5	5					
Y+R:	4.0	4.5	4.0	4.0	4.0	4.0	4.5	4.0	4.0	4.0	4.0	4.0	5.5	5.5			
Lanes:	0	0	1	0	0	0	0	1	0	0	0	0	0	0	3	1	0

Volume Module:
Base Vol: 0 10 0 0 0 7 0 0 0 0 1228 18
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 10 0 0 0 7 0 0 0 0 1228 18
Added Vol: 0 0 0 0 0 0 0 0 0 0 36 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 10 0 0 0 7 0 0 0 0 1264 18
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97
PHF Volume: 0 10 0 0 0 7 0 0 0 0 1308 19
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 10 0 0 0 7 0 0 0 0 1308 19
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 10 0 0 0 7 0 0 0 0 1308 19

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 1.00 0.87 1.00 1.00 1.00 1.00 0.91 0.91
Lanes: 0.00 1.00 0.00 0.00 0.00 1.00 0.00 0.00 0.00 0.00 3.94 0.06
Final Sat.: 0 1900 0 0 0 1644 0 0 0 0 6805 97

Capacity Analysis Module:
Vol/Sat: 0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.19 0.19
Crit Moves: ****
Green/Cycle: 0.00 0.08 0.00 0.00 0.00 0.08 0.00 0.00 0.00 0.00 0.78 0.78
Volume/Cap: 0.00 0.07 0.00 0.00 0.00 0.05 0.00 0.00 0.00 0.00 0.25 0.25
Delay/Veh: 0.0 25.5 0.0 0.0 0.0 25.5 0.0 0.0 0.0 0.0 1.8 1.8
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 25.5 0.0 0.0 0.0 25.5 0.0 0.0 0.0 0.0 1.8 1.8
LOS by Move: A C A A A C A A A A A A
HCM2kAvgQ: 0 0 0 0 0 0 0 0 0 0 2 2

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Valley Pkwy / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.498
Loss Time (sec): 12 Average Delay (sec/veh): 19.1
Optimal Cycle: 40 Level Of Service: B

Street Name:	Quince St				Valley Pkwy			
	North Bound		South Bound		East Bound		West Bound	
Movement:	L	T - R	L	T - R	L	T - R	L	T - R
Control:	Protected		Protected		Split Phase		Split Phase	
Rights:	Include		Include		Include		Include	
Min. Green:	5	5	0	0	5	5	0	5
Y+R:	4.5	5.0	4.0	4.0	5.0	5.0	4.0	4.0
Lanes:	1	0	2	0	0	0	1	1

Volume Module:

Base Vol:	67	181	0	0	303	163	0	0	0	20	1169	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	181	0	0	303	163	0	0	0	20	1169	90
Added Vol:	0	2	0	0	0	1	0	0	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	183	0	0	303	164	0	0	0	20	1176	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	71	195	0	0	323	175	0	0	0	21	1254	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	195	0	0	323	175	0	0	0	21	1254	96
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	195	0	0	323	175	0	0	0	21	1254	96

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.90	0.90	1.00	1.00	1.00	0.91	0.91	0.85
Lanes:	1.00	2.00	0.00	0.00	1.30	0.70	0.00	0.00	0.00	0.05	2.95	1.00
Final Sat.:	1805	3610	0	0	2218	1201	0	0	0	87	5090	1615

Capacity Analysis Module:

Vol/Sat:	0.04	0.05	0.00	0.00	0.15	0.15	0.00	0.00	0.00	0.25	0.25	0.06
Crit Moves:	****				****					****		
Green/Cycle:	0.08	0.37	0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.49	0.49	0.49
Volume/Cap:	0.50	0.15	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.50	0.50	0.12
Delay/Veh:	42.4	18.8	0.0	0.0	26.8	26.8	0.0	0.0	0.0	15.4	15.4	12.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.4	18.8	0.0	0.0	26.8	26.8	0.0	0.0	0.0	15.4	15.4	12.3
LOS by Move:	D	B	A	A	C	C	A	A	A	B	B	B
HCM2kAvgQ:	2	2	0	0	6	6	0	0	0	8	8	1

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Valley Pkwy / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.650
Loss Time (sec): 12 Average Delay (sec/veh): 22.2
Optimal Cycle: 52 Level Of Service: C

Street Name:	Centre City Pkwy				Valley Pkwy				
	North Bound		South Bound		East Bound		West Bound		
Movement:	L	T	R	L	T	R	L	T	R
Control:	Protected		Protected		Split Phase		Split Phase		
Rights:	Include		Include		Include		Include		
Min. Green:	5	5	0	0	5	5	0	0	5
Y+R:	4.5	5.5	0.0	0.0	5.5	5.5	0.0	0.0	5.0
Lanes:	2	0	2	0	0	0	1	1	0

Volume Module:

Base Vol:	143	612	0	0	909	85	0	0	0	300	1035	214
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	612	0	0	909	85	0	0	0	300	1035	214
Added Vol:	2	3	0	0	0	1	0	0	0	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	145	615	0	0	909	86	0	0	0	300	1039	214
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	152	644	0	0	952	90	0	0	0	314	1088	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	644	0	0	952	90	0	0	0	314	1088	224
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	644	0	0	952	90	0	0	0	314	1088	224

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	1.00	1.00	0.92	0.92	1.00	1.00	1.00	0.87	0.87	0.83
Lanes:	2.00	2.00	0.00	0.00	1.83	0.17	0.00	0.00	0.00	1.00	3.00	1.00
Final Sat.:	3432	3538	0	0	3190	302	0	0	0	1645	4936	1583

Capacity Analysis Module:

Vol/Sat:	0.04	0.18	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.19	0.22	0.14
Crit Moves:	****				****					****		
Green/Cycle:	0.07	0.53	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.34	0.34	0.34
Volume/Cap:	0.65	0.35	0.00	0.00	0.65	0.65	0.00	0.00	0.00	0.56	0.65	0.42
Delay/Veh:	47.2	12.4	0.0	0.0	19.7	19.7	0.0	0.0	0.0	24.6	25.9	23.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.2	12.4	0.0	0.0	19.7	19.7	0.0	0.0	0.0	24.6	25.9	23.4
LOS by Move:	D	B	A	A	B	B	A	A	A	C	C	C
HCM2kAvgQ:	2	5	0	0	12	12	0	0	0	8	10	5

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Grand Ave / Quince St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.204
Loss Time (sec): 16 Average Delay (sec/veh): 17.8
Optimal Cycle: 36 Level Of Service: B

Street Name:	Quince St				Grand Ave							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R			
Control:	Protected		Protected		Protected		Protected					
Rights:	Include		Include		Include		Include					
Min. Green:	0	5	5	5	5	0	5	5	5			
Y+R:	4.0	5.0	5.0	4.5	5.0	4.0	4.5	4.5	4.5			
Lanes:	0	0	1	1	0	2	0	0	1	0	0	1

Volume Module:

Base Vol:	0	160	2	10	303	0	75	167	0	4	0	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	160	2	10	303	0	75	167	0	4	0	20
Added Vol:	0	0	0	0	0	0	2	3	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	160	2	10	303	0	77	170	0	4	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	168	2	11	319	0	81	179	0	4	0	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	168	2	11	319	0	81	179	0	4	0	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	168	2	11	319	0	81	179	0	4	0	21

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.95	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	1.98	0.02	1.00	2.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3558	44	1805	3610	0	1805	1900	0	1805	0	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.05	0.05	0.01	0.09	0.00	0.04	0.09	0.00	0.00	0.00	0.01
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.19	0.19	0.08	0.27	0.00	0.23	0.38	0.00	0.08	0.00	0.08
Volume/Cap:	0.00	0.25	0.25	0.07	0.32	0.00	0.20	0.25	0.00	0.03	0.00	0.16
Delay/Veh:	0.0	20.9	20.9	25.6	17.6	0.0	18.8	13.0	0.0	25.3	0.0	26.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	20.9	20.9	25.6	17.6	0.0	18.8	13.0	0.0	25.3	0.0	26.1
LOS by Move:	A	C	C	C	B	A	B	B	A	C	A	C
HCM2kAvgQ:	0	1	1	0	2	0	1	2	0	0	0	0

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Grand Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.481
Loss Time (sec): 12 Average Delay (sec/veh): 14.3
Optimal Cycle: 39 Level Of Service: B

Street Name:	Centre City Pkwy				Grand Ave										
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Protected		Protected		Permitted		Permitted								
Rights:	Include		Include		Include		Include								
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5			
Y+R:	4.5	5.5	5.5	4.5	5.5	5.5	5.0	5.0	5.0	5.0	5.0	5.0			
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	1	0	1

Volume Module:

Base Vol:	3	657	55	73	1179	12	35	143	4	49	21	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	657	55	73	1179	12	35	143	4	49	21	121
Added Vol:	0	3	1	0	0	0	2	1	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	660	56	73	1179	12	37	144	4	49	21	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	3	681	58	75	1217	12	38	149	4	51	22	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	681	58	75	1217	12	38	149	4	51	22	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	681	58	75	1217	12	38	149	4	51	22	126

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.75	1.00	0.85	0.52	1.00	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3610	1615	1805	3610	1615	1425	1900	1615	986	1900	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.19	0.04	0.04	0.34	0.01	0.03	0.08	0.00	0.05	0.01	0.08
Crit Moves:	****			****			****			****		
Green/Cycle:	0.06	0.55	0.55	0.16	0.66	0.66	0.15	0.15	0.15	0.15	0.15	0.15
Volume/Cap:	0.03	0.34	0.06	0.26	0.51	0.01	0.18	0.51	0.02	0.34	0.07	0.51
Delay/Veh:	40.3	11.3	9.4	33.4	8.1	5.3	33.6	36.6	32.4	35.4	32.8	36.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.3	11.3	9.4	33.4	8.1	5.3	33.6	36.6	32.4	35.4	32.8	36.8
LOS by Move:	D	B	A	C	A	A	C	D	C	D	C	D
HCM2kAvgQ:	0	5	1	2	9	0	1	4	0	2	1	4

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Second Ave / Quince St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.262
Loss Time (sec): 12 Average Delay (sec/veh): 14.4
Optimal Cycle: 29 Level Of Service: B

Street Name: Quince St Second Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 5 5 5 5 0 5 5 5 0 0 0
Y+R: 4.0 5.0 5.0 4.5 5.0 4.0 5.5 5.5 5.5 4.0 4.0 4.0
Lanes: 0 0 1 1 0 1 0 2 0 0 0 1 2 1 0 0 0 0 0 0

Volume Module:
Base Vol: 0 172 18 91 227 0 1 539 22 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 172 18 91 227 0 1 539 22 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 14 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 172 18 91 227 0 1 553 22 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume: 0 192 20 102 254 0 1 618 25 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 192 20 102 254 0 1 618 25 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 192 20 102 254 0 1 618 25 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.94 0.94 0.95 0.95 1.00 0.90 0.90 0.90 1.00 1.00 1.00
Lanes: 0.00 1.81 0.19 1.00 2.00 0.00 0.01 3.84 0.15 0.00 0.00 0.00
Final Sat.: 0 3222 337 1805 3610 0 12 6600 263 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.06 0.06 0.06 0.07 0.00 0.09 0.09 0.09 0.00 0.00 0.00
Crit Moves: **** *
Green/Cycle: 0.00 0.23 0.23 0.22 0.44 0.00 0.36 0.36 0.36 0.00 0.00 0.00
Volume/Cap: 0.00 0.26 0.26 0.26 0.16 0.00 0.26 0.26 0.26 0.00 0.00 0.00
Delay/Veh: 0.0 19.2 19.2 20.0 10.1 0.0 13.7 13.7 13.7 0.0 0.0 0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 19.2 19.2 20.0 10.1 0.0 13.7 13.7 13.7 0.0 0.0 0.0
LOS by Move: A B B B B A B B B A A A
HCM2kAvgQ: 0 2 2 2 1 0 2 2 2 0 0 0

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Second Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.516
Loss Time (sec): 12 Average Delay (sec/veh): 18.0
Optimal Cycle: 41 Level Of Service: B

Street Name:	Centre City Pkwy				Second Ave			
	North Bound		South Bound		East Bound		West Bound	
Movement:	L	T - R	L	T - R	L	T - R	L	T - R
Control:	Protected		Protected		Split Phase		Split Phase	
Rights:	Include		Include		Include		Include	
Min. Green:	0	5	5	5	0	5	5	0
Y+R:	0.0	5.5	5.5	4.5	5.5	0.0	5.0	5.0
Lanes:	0	0	2	0	1	2	0	0

Volume Module:

Base Vol:	0	651	186	139	1018	0	27	587	39	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	651	186	139	1018	0	27	587	39	0	0	0
Added Vol:	0	1	0	0	0	0	3	9	3	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	652	186	139	1018	0	30	596	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	703	200	150	1097	0	32	642	45	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	703	200	150	1097	0	32	642	45	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	703	200	150	1097	0	32	642	45	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.83	0.90	0.93	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	1.00	2.80	0.20	0.00	0.00	0.00
Final Sat.:	0	3538	1583	3432	3538	0	1667	4673	329	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.13	0.04	0.31	0.00	0.02	0.14	0.14	0.00	0.00	0.00
Crit Moves:	****			****					****			
Green/Cycle:	0.00	0.47	0.47	0.13	0.60	0.00	0.27	0.27	0.27	0.00	0.00	0.00
Volume/Cap:	0.00	0.42	0.27	0.33	0.52	0.00	0.07	0.52	0.52	0.00	0.00	0.00
Delay/Veh:	0.0	16.0	14.7	35.9	10.6	0.0	24.7	28.4	28.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.0	14.7	35.9	10.6	0.0	24.7	28.4	28.4	0.0	0.0	0.0
LOS by Move:	A	B	B	D	B	A	C	C	C	A	A	A
HCM2kAvgQ:	0	7	3	2	9	0	1	6	6	0	0	0

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Hale Ave / North Tulip St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.483
Loss Time (sec): 12 Average Delay (sec/veh): 14.6
Optimal Cycle: 37 Level Of Service: B

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and Movement (L, T, R). Rows include Control, Rights, Lanes, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and FinalVolume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 Valley Pkwy / Project Driveway "A"

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B [12.4]

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and Movement (L, T, R). Rows include Control, Rights, Lanes, and Volume Module.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module table with columns for Critical Gap, FollowUpTim, and Capacity Module.

Capacity Module table with columns for Conflict Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 West Grand Ave / Project Driveway "B"

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[10.2]

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 4 sub-columns for Movement (L, T, R). Rows include Control, Rights, and Lanes.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume for each approach and movement.

Critical Gap Module table showing Critical Gp, FollowUpTim, and other metrics for each approach and movement.

Capacity Module table showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap. for each approach and movement.

Level Of Service Module table showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS for each approach and movement.

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Project Conditions
 PM Peak Hour

Scenario Report

Scenario: exp pm
 Command: exp pm
 Volume: ex pm
 Geometry: ex pm
 Impact Fee: Default Impact Fee
 Trip Generation: pm
 Trip Distribution: project
 Paths: Default Path
 Routes: Default Route
 Configuration: exp pm

 Gateway Grand TIA
 Existing Plus Project Conditions
 PM Peak Hour

Impact Analysis Report
 Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
# 1 Valley Pkwy / I-15 Southbound	D	46.9	0.855	D	47.4	0.862	+ 0.502 D/V
# 2 Valley Pkwy / I-15 Northbound	D	35.9	0.777	D	36.5	0.790	+ 0.615 D/V
# 3 Valley Pkwy / La Terraza Blvd-	C	23.2	0.507	C	23.0	0.515	-0.172 D/V
# 4 Valley Pkwy / North Tulip St	C	29.8	0.508	C	29.6	0.516	-0.203 D/V
# 5 Valley Pkwy / Gateway Dwy	A	5.6	0.277	A	5.5	0.281	-0.056 D/V
# 6 Valley Pkwy / Quince St	C	20.3	0.517	C	20.3	0.522	+ 0.013 D/V
# 7 Valley Pkwy / Centre City Pkwy	C	21.2	0.593	C	21.3	0.596	+ 0.113 D/V
# 8 Grand Ave / Quince St	C	25.8	0.312	C	25.8	0.314	+ 0.004 D/V
# 9 Grand Ave / Centre City Pkwy	C	20.3	0.549	C	20.3	0.551	+ 0.015 D/V
# 10 Second Ave / Quince St	B	19.9	0.391	B	19.8	0.392	-0.032 D/V
# 11 Second Ave / Centre City Pkwy	C	22.1	0.623	C	22.1	0.626	+ 0.042 D/V
# 12 Hale Ave / North Tulip St	C	22.7	0.816	C	22.7	0.817	+ 0.043 D/V
# 13 Valley Pkwy / Project Driveway	A	7.2	0.000	B	12.1	0.041	+ 4.861 D/V
# 14 West Grand Ave / Project Drive	A	7.2	0.000	B	12.3	0.024	+ 5.108 D/V

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Valley Pkwy / I-15 Southbound Ramps

Cycle (sec): 125 Critical Vol./Cap.(X): 0.862
Loss Time (sec): 16 Average Delay (sec/veh): 47.4
Optimal Cycle: 114 Level Of Service: D

Street Name:	I-15 Southbound Ramps						Valley Pkwy									
	North Bound		South Bound		East Bound		West Bound									
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Split Phase		Split Phase		Protected		Protected									
Rights:	Include		Include		Include		Include									
Min. Green:	12	12	12	5	5	5	5	8	8	10	7	7				
Y+R:	5.1	5.1	5.1	5.1	5.1	5.1	4.7	5.8	5.8	4.7	5.8	5.8				
Lanes:	1	0	1	0	1	0	2	0	3	0	1	2	0	3	1	1

Volume Module:

Base Vol:	49	52	287	246	135	360	54	1282	107	182	722	369
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	49	52	287	246	135	360	54	1282	107	182	722	369
Added Vol:	0	0	2	12	0	0	0	5	0	1	3	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	52	289	258	135	360	54	1287	107	183	725	377
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	51	54	301	268	140	375	56	1339	111	190	754	392
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	54	301	268	140	375	56	1339	111	190	754	392
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	54	301	268	140	375	56	1339	111	190	754	392

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.85	0.85	0.85	0.90	0.89	0.83	0.90	0.85	0.85
Lanes:	1.00	1.00	1.00	0.68	0.36	0.96	2.00	3.00	1.00	2.00	3.29	1.71
Final Sat.:	1769	1862	1583	1106	579	1543	3432	5083	1583	3432	5289	2751

Capacity Analysis Module:

Vol/Sat:	0.03	0.03	0.19	0.24	0.24	0.24	0.02	0.26	0.07	0.06	0.14	0.14
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.22	0.22	0.22	0.28	0.28	0.28	0.08	0.30	0.30	0.08	0.30	0.30
Volume/Cap:	0.13	0.13	0.88	0.88	0.88	0.88	0.20	0.88	0.23	0.69	0.48	0.48
Delay/Veh:	39.7	39.7	69.4	53.3	53.3	53.3	53.8	47.8	33.2	63.5	36.2	36.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.7	39.7	69.4	53.3	53.3	53.3	53.8	47.8	33.2	63.5	36.2	36.2
LOS by Move:	D	D	E	D	D	D	D	C	E	D	D	D
HCM2kAvgQ:	2	2	14	18	18	18	1	21	3	4	7	7

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Valley Pkwy / I-15 Northbound Ramps

Cycle (sec): 125 Critical Vol./Cap.(X): 0.790
Loss Time (sec): 12 Average Delay (sec/veh): 36.5
Optimal Cycle: 80 Level Of Service: D

Street Name:	I-15 Northbound Ramps						Valley Pkwy										
	North Bound			South Bound			East Bound			West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Split Phase			Split Phase			Protected			Protected							
Rights:	Include			Include			Include			Include							
Min. Green:	5	5	5	0	0	0	5	6	0	0	5	5					
Y+R:	5.1	5.1	5.1	0.0	0.0	0.0	4.7	5.8	0.0	0.0	5.8	5.8					
Lanes:	0	1	0	0	1	0	0	0	0	2	0	3	0	0	3	0	1

Volume Module:

Base Vol:	169	0	445	0	0	0	625	1194	0	0	1095	322
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	0	445	0	0	0	625	1194	0	0	1095	322
Added Vol:	0	0	14	0	0	0	0	19	0	0	11	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	0	459	0	0	0	625	1213	0	0	1106	329
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	175	0	475	0	0	0	647	1256	0	0	1145	341
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	0	475	0	0	0	647	1256	0	0	1145	341
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	175	0	475	0	0	0	647	1256	0	0	1145	341

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	0.90	0.89	1.00	1.00	0.89	0.83
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	1773	0	1583	0	0	0	3432	5083	0	0	5083	1583

Capacity Analysis Module:

Vol/Sat:	0.10	0.00	0.30	0.00	0.00	0.00	0.19	0.25	0.00	0.00	0.23	0.22
Crit Moves:	****			****			****			****		
Green/Cycle:	0.38	0.00	0.38	0.00	0.00	0.00	0.24	0.52	0.00	0.00	0.29	0.29
Volume/Cap:	0.26	0.00	0.79	0.00	0.00	0.00	0.79	0.47	0.00	0.00	0.79	0.75
Delay/Veh:	26.9	0.0	41.3	0.0	0.0	0.0	49.8	18.9	0.0	0.0	44.2	47.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.9	0.0	41.3	0.0	0.0	0.0	49.8	18.9	0.0	0.0	44.2	47.8
LOS by Move:	C	A	D	A	A	A	D	B	A	A	D	D
HCM2kAvgQ:	5	0	18	0	0	0	11	10	0	0	15	12

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Valley Pkwy / La Terraza Blvd-Plaza Las Palmas Dwy

Cycle (sec): 125 Critical Vol./Cap.(X): 0.515
Loss Time (sec): 12 Average Delay (sec/veh): 23.0
Optimal Cycle: 43 Level Of Service: C

Street Name: La Terraza Blvd-Plaza Las Palmas Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Y+R:	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.5	5.5	4.5	5.5	5.5
Lanes:	1	0	1	0	1	0	1	0	3	0	1	2

Volume Module:

Base Vol:	151	17	143	52	12	122	98	1423	61	93	1092	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	17	143	52	12	122	98	1423	61	93	1092	54
Added Vol:	0	0	0	0	0	0	0	33	0	0	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	151	17	143	52	12	122	98	1456	61	93	1110	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	159	18	151	55	13	129	103	1534	64	98	1170	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	18	151	55	13	129	103	1534	64	98	1170	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	159	18	151	55	13	129	103	1534	64	98	1170	57

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.59	1.00	0.85	0.75	0.86	0.86	0.95	0.91	0.85	0.92	0.90	0.90
Lanes:	1.00	1.00	1.00	1.00	0.09	0.91	1.00	3.00	1.00	2.00	3.81	0.19
Final Sat.:	1121	1900	1615	1433	147	1493	1805	5187	1615	3502	6549	319

Capacity Analysis Module:

Vol/Sat:	0.14	0.01	0.09	0.04	0.09	0.09	0.06	0.30	0.04	0.03	0.18	0.18
Crit Moves:	****						****			****		
Green/Cycle:	0.28	0.28	0.28	0.28	0.28	0.28	0.15	0.57	0.57	0.05	0.48	0.48
Volume/Cap:	0.52	0.03	0.34	0.14	0.31	0.31	0.38	0.52	0.07	0.52	0.38	0.38
Delay/Veh:	39.7	33.1	36.6	34.3	36.3	36.3	48.5	16.3	11.8	59.9	21.0	21.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.7	33.1	36.6	34.3	36.3	36.3	48.5	16.3	11.8	59.9	21.0	21.0
LOS by Move:	D	C	D	C	D	D	D	B	B	E	C	C
HCM2kAvgQ:	6	0	5	2	4	4	3	13	1	2	8	8

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Valley Pkwy / North Tulip St

Cycle (sec): 125 Critical Vol./Cap.(X): 0.516
Loss Time (sec): 16 Average Delay (sec/veh): 29.6
Optimal Cycle: 52 Level Of Service: C

Street Name:	North Tulip St			Valley Pkwy		
	North Bound	South Bound	East Bound	West Bound		
Movement:	L - T - R	L - T - R	L - T - R	L - T - R		
Control:	Split Phase	Split Phase	Protected	Protected		
Rights:	Include	Include	Include	Include		
Min. Green:	5 5 5	5 5 5	5 5 5	5 5 5		
Y+R:	4.5 4.5 4.5	4.5 4.5 4.5	4.5 5.5 5.5	4.5 5.5 5.5		
Lanes:	0 0 1! 0 0	1 1 0 0 1	2 0 2 1 0	1 0 4 0 1		

Volume Module:

Base Vol:	16	6	9	228	14	227	302	1275	6	24	986	128
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	6	9	228	14	227	302	1275	6	24	986	128
Added Vol:	0	0	0	3	0	0	0	33	0	0	18	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	6	9	231	14	227	302	1308	6	24	1004	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	17	6	10	244	15	240	320	1384	6	25	1062	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	6	10	244	15	240	320	1384	6	25	1062	138
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	6	10	244	15	240	320	1384	6	25	1062	138

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.94	0.94	0.94	0.96	0.96	0.85	0.92	0.91	0.91	0.95	0.91	0.85
Lanes:	0.52	0.19	0.29	1.89	0.11	1.00	2.00	2.99	0.01	1.00	4.00	1.00
Final Sat.:	919	345	517	3422	207	1615	3502	5158	24	1805	6916	1615

Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.02	0.07	0.07	0.15	0.09	0.27	0.27	0.01	0.15	0.09
Crit Moves:	****			****		****		****		****		****
Green/Cycle:	0.04	0.04	0.04	0.28	0.28	0.28	0.20	0.51	0.51	0.04	0.34	0.34
Volume/Cap:	0.46	0.46	0.46	0.25	0.25	0.53	0.45	0.53	0.53	0.35	0.45	0.25
Delay/Veh:	63.3	63.3	63.3	34.8	34.8	38.9	43.9	20.7	20.7	61.4	31.8	29.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.3	63.3	63.3	34.8	34.8	38.9	43.9	20.7	20.7	61.4	31.8	29.6
LOS by Move:	E	E	E	C	C	D	D	C	C	E	C	C
HCM2kAvgQ:	2	2	2	4	4	8	5	13	13	1	9	4

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Valley Pkwy / Gateway Dwy

Cycle (sec): 60 Critical Vol./Cap.(X): 0.281
Loss Time (sec): 8 Average Delay (sec/veh): 5.5
Optimal Cycle: 23 Level Of Service: A

Street Name:	Gateway Dwy			Valley Pkwy		
	North Bound	South Bound	East Bound	West Bound		
Movement:	L - T - R	L - T - R	L - T - R	L - T - R		
Control:	Permitted	Permitted	Protected	Protected		
Rights:	Include	Include	Include	Include		
Min. Green:	0 5 0	0 0 5	0 0 0	0 5 5		
Y+R:	4.0 4.5 4.0	4.0 4.0 4.5	4.0 4.0 4.0	4.0 5.5 5.5		
Lanes:	0 0 1 0 0	0 0 0 0 1	0 0 0 0 0	0 0 3 1 0		

Volume Module:

Base Vol:	0	16	0	0	0	84	0	0	0	0	1069	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	16	0	0	0	84	0	0	0	0	1069	58
Added Vol:	0	0	0	0	0	0	0	0	0	0	20	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	16	0	0	0	84	0	0	0	0	1089	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	18	0	0	0	94	0	0	0	0	1214	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	18	0	0	0	94	0	0	0	0	1214	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	18	0	0	0	94	0	0	0	0	1214	65

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.87	1.00	1.00	1.00	1.00	0.90	0.90
Lanes:	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	3.80	0.20
Final Sat.:	0	1900	0	0	0	1644	0	0	0	0	6514	347

Capacity Analysis Module:

Vol/Sat:	0.00	0.01	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.19	0.19
Crit Moves:						****					****	
Green/Cycle:	0.00	0.20	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.66	0.66
Volume/Cap:	0.00	0.05	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.28	0.28
Delay/Veh:	0.0	19.3	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	4.2	4.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	19.3	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	4.2	4.2
LOS by Move:	A	B	A	A	A	C	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	2	0	0	0	0	3	3

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Valley Pkwy / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.522
Loss Time (sec): 12 Average Delay (sec/veh): 20.3
Optimal Cycle: 42 Level Of Service: C

Street Name:	Quince St			Valley Pkwy		
	North Bound	South Bound	East Bound	West Bound	North Bound	South Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Split Phase	Split Phase		
Rights:	Include	Include	Include	Include		
Min. Green:	5 5 0	0 5 5	0 0 0	5 5 5		
Y+R:	4.5 5.0 4.0	4.0 5.0 5.0	4.0 4.0 4.0	5.5 5.5 5.5		
Lanes:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 1 2 0 1		

Volume Module:

Base Vol:	67	207	0	0	415	143	0	0	0	41	1036	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	207	0	0	415	143	0	0	0	41	1036	74
Added Vol:	0	1	0	0	0	2	0	0	0	0	17	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	208	0	0	415	145	0	0	0	41	1053	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	74	229	0	0	457	160	0	0	0	45	1160	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	229	0	0	457	160	0	0	0	45	1160	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	229	0	0	457	160	0	0	0	45	1160	81

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	0.91	0.91	0.85
Lanes:	1.00	2.00	0.00	0.00	1.48	0.52	0.00	0.00	0.00	0.11	2.89	1.00
Final Sat.:	1805	3610	0	0	2571	898	0	0	0	193	4968	1615

Capacity Analysis Module:

Vol/Sat:	0.04	0.06	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.23	0.23	0.05
Crit Moves:	****				****					****		
Green/Cycle:	0.08	0.42	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.45	0.45	0.45
Volume/Cap:	0.52	0.15	0.00	0.00	0.52	0.52	0.00	0.00	0.00	0.52	0.52	0.11
Delay/Veh:	43.3	16.3	0.0	0.0	24.2	24.2	0.0	0.0	0.0	18.1	18.1	14.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.3	16.3	0.0	0.0	24.2	24.2	0.0	0.0	0.0	18.1	18.1	14.5
LOS by Move:	D	B	A	A	C	C	A	A	A	B	B	B
HCM2kAvgQ:	2	2	0	0	8	8	0	0	0	8	8	1

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Valley Pkwy / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.596
Loss Time (sec): 12 Average Delay (sec/veh): 21.3
Optimal Cycle: 47 Level Of Service: C

Street Name:	Centre City Pkwy				Valley Pkwy			
	North Bound		South Bound		East Bound		West Bound	
Movement:	L	T - R	L	T - R	L	T - R	L	T - R
Control:	Protected		Protected		Split Phase		Split Phase	
Rights:	Include		Include		Include		Include	
Min. Green:	5	5	0	0	5	5	0	0
Y+R:	4.5	5.5	0.0	0.0	5.5	5.5	0.0	0.0
Lanes:	2	0	2	0	0	0	1	1

Volume Module:

Base Vol:	127	876	0	0	753	94	0	0	0	239	895	295
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	127	876	0	0	753	94	0	0	0	239	895	295
Added Vol:	5	2	0	0	0	3	0	0	0	0	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	878	0	0	753	97	0	0	0	239	904	295
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	145	966	0	0	828	107	0	0	0	263	994	325
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	966	0	0	828	107	0	0	0	263	994	325
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	145	966	0	0	828	107	0	0	0	263	994	325

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	1.00	1.00	0.92	0.92	1.00	1.00	1.00	0.87	0.87	0.83
Lanes:	2.00	2.00	0.00	0.00	1.77	0.23	0.00	0.00	0.00	1.00	3.00	1.00
Final Sat.:	3432	3538	0	0	3081	397	0	0	0	1652	4956	1583

Capacity Analysis Module:

Vol/Sat:	0.04	0.27	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.16	0.20	0.21
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.07	0.52	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.34	0.34	0.34
Volume/Cap:	0.60	0.52	0.00	0.00	0.60	0.60	0.00	0.00	0.00	0.46	0.58	0.60
Delay/Veh:	44.5	14.4	0.0	0.0	19.2	19.2	0.0	0.0	0.0	23.1	24.6	26.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.5	14.4	0.0	0.0	19.2	19.2	0.0	0.0	0.0	23.1	24.6	26.1
LOS by Move:	D	B	A	A	B	B	A	A	A	C	C	C
HCM2kAvgQ:	2	9	0	0	11	11	0	0	0	6	9	8

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Grand Ave / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.314
Loss Time (sec): 16 Average Delay (sec/veh): 25.8
Optimal Cycle: 38 Level Of Service: C

Street Name:	Quince St				Grand Ave												
Approach:	North Bound		South Bound		East Bound		West Bound										
Movement:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Protected		Protected		Protected		Protected		Protected		Protected						
Rights:	Include		Include		Include		Include		Include		Include						
Min. Green:	0	5	5	5	5	0	5	5	5	5	0	5					
Y+R:	4.0	5.0	5.0	4.5	5.0	4.0	4.5	4.5	4.5	4.5	4.0	4.5					
Lanes:	0	0	1	1	0	1	0	0	1	0	0	1	0	1	0	0	1

Volume Module:

Base Vol:	0	151	7	65	392	0	96	305	1	13	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	151	7	65	392	0	96	305	1	13	0	30
Added Vol:	0	0	0	0	0	0	1	2	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	151	7	65	392	0	97	307	1	13	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	156	7	67	405	0	100	317	1	13	0	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	156	7	67	405	0	100	317	1	13	0	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	156	7	67	405	0	100	317	1	13	0	31

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	1.91	0.09	1.00	2.00	0.00	1.00	0.99	0.01	1.00	0.00	1.00
Final Sat.:	0	3426	159	1805	3610	0	1805	1894	6	1805	0	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.05	0.05	0.04	0.11	0.00	0.06	0.17	0.17	0.01	0.00	0.02
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.00	0.14	0.14	0.11	0.25	0.00	0.28	0.51	0.51	0.06	0.00	0.06
Volume/Cap:	0.00	0.33	0.33	0.33	0.44	0.00	0.20	0.33	0.33	0.13	0.00	0.35
Delay/Veh:	0.0	35.3	35.3	37.6	28.6	0.0	24.6	13.0	13.0	41.1	0.0	43.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	35.3	35.3	37.6	28.6	0.0	24.6	13.0	13.0	41.1	0.0	43.2
LOS by Move:	A	D	D	D	C	A	C	B	B	D	A	D
HCM2kAvgQ:	0	2	2	2	5	0	2	5	5	0	0	1

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Grand Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.551
Loss Time (sec): 12 Average Delay (sec/veh): 20.3
Optimal Cycle: 44 Level Of Service: C

Street Name: Centre City Pkwy Grand Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 5 5 5 5 5 5 5 5 5 5 5 5
Y+R: 4.5 5.5 5.5 4.5 5.5 5.5 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 1 0 1

Volume Module:
Base Vol: 11 894 95 96 839 20 71 296 15 65 23 152
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 11 894 95 96 839 20 71 296 15 65 23 152
Added Vol: 0 4 1 0 0 0 1 1 0 0 0 2
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 11 898 96 96 839 20 72 297 15 65 23 154
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96
PHF Volume: 11 935 100 100 874 21 75 309 16 68 24 160
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 11 935 100 100 874 21 75 309 16 68 24 160
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 11 935 100 100 874 21 75 309 16 68 24 160

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.85 0.95 0.95 0.85 0.75 1.00 0.85 0.37 1.00 0.85
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1805 3610 1615 1805 3610 1615 1423 1900 1615 707 1900 1615

Capacity Analysis Module:
Vol/Sat: 0.01 0.26 0.06 0.06 0.24 0.01 0.05 0.16 0.01 0.10 0.01 0.10
Crit Moves: **** *
Green/Cycle: 0.11 0.47 0.47 0.10 0.46 0.46 0.30 0.30 0.30 0.30 0.30 0.30
Volume/Cap: 0.06 0.55 0.13 0.55 0.52 0.03 0.18 0.55 0.03 0.32 0.04 0.34
Delay/Veh: 36.3 17.4 13.5 42.1 17.3 13.1 23.8 27.8 22.6 25.6 22.6 25.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 36.3 17.4 13.5 42.1 17.3 13.1 23.8 27.8 22.6 25.6 22.6 25.2
LOS by Move: D B B D B B C C C C C C
HCM2kAvgQ: 0 9 1 3 9 0 1 7 0 2 0 4

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Second Ave / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.392
Loss Time (sec): 12 Average Delay (sec/veh): 19.8
Optimal Cycle: 35 Level Of Service: B

Street Name:	Quince St			Second Ave		
	North Bound	South Bound	East Bound	West Bound		
Movement:	L - T - R	L - T - R	L - T - R	L - T - R		
Control:	Protected	Protected	Split Phase	Split Phase		
Rights:	Include	Include	Include	Include		
Min. Green:	0 5 5	5 5 0	5 5 5	0 0 0		
Y+R:	4.0 5.0 5.0	4.5 5.0 4.0	5.5 5.5 5.5	4.0 4.0 4.0		
Lanes:	0 0 1 1 0	1 0 2 0 0	0 1 2 1 0	0 0 0 0 0		

Volume Module:

Base Vol:	0	157	59	160	252	0	2	1066	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	157	59	160	252	0	2	1066	42	0	0	0
Added Vol:	0	0	0	0	0	0	0	8	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	157	59	160	252	0	2	1074	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	170	64	173	273	0	2	1164	46	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	170	64	173	273	0	2	1164	46	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	170	64	173	273	0	2	1164	46	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	0.95	0.95	1.00	0.90	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	1.45	0.55	1.00	2.00	0.00	0.01	3.84	0.15	0.00	0.00	0.00
Final Sat.:	0	2516	946	1805	3610	0	12	6604	258	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.07	0.10	0.08	0.00	0.18	0.18	0.18	0.00	0.00	0.00
Crit Moves:	****			****			****					
Green/Cycle:	0.00	0.17	0.17	0.24	0.42	0.00	0.45	0.45	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.39	0.39	0.39	0.18	0.00	0.39	0.39	0.39	0.00	0.00	0.00
Delay/Veh:	0.0	33.5	33.5	29.0	16.6	0.0	16.6	16.6	16.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	33.5	33.5	29.0	16.6	0.0	16.6	16.6	16.6	0.0	0.0	0.0
LOS by Move:	A	C	C	C	B	A	B	B	B	A	A	A
HCM2kAvgQ:	0	3	3	4	2	0	6	6	6	0	0	0

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Second Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.626
Loss Time (sec): 12 Average Delay (sec/veh): 22.1
Optimal Cycle: 50 Level Of Service: C

Street Name:	Centre City Pkwy				Second Ave			
	North Bound		South Bound		East Bound		West Bound	
Movement:	L	T - R	L	T - R	L	T - R	L	T - R
Control:	Protected		Protected		Split Phase		Split Phase	
Rights:	Include		Include		Include		Include	
Min. Green:	0	5	5	5	0	5	5	0
Y+R:	0.0	5.5	5.5	4.5	5.5	0.0	5.0	5.0
Lanes:	0	0	2	0	1	2	0	0

Volume Module:

Base Vol:	0	809	212	168	755	0	88	1079	106	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	809	212	168	755	0	88	1079	106	0	0	0
Added Vol:	0	3	0	0	0	0	2	5	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	812	212	168	755	0	90	1084	108	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	0	850	222	176	791	0	94	1135	113	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	850	222	176	791	0	94	1135	113	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	850	222	176	791	0	94	1135	113	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.83	0.90	0.93	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	1.00	2.73	0.27	0.00	0.00	0.00
Final Sat.:	0	3538	1583	3432	3538	0	1656	4517	450	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.24	0.14	0.05	0.22	0.00	0.06	0.25	0.25	0.00	0.00	0.00
Crit Moves:	****			****			****					
Green/Cycle:	0.00	0.38	0.38	0.08	0.47	0.00	0.40	0.40	0.40	0.00	0.00	0.00
Volume/Cap:	0.00	0.63	0.37	0.63	0.48	0.00	0.14	0.63	0.63	0.00	0.00	0.00
Delay/Veh:	0.0	23.4	20.3	44.4	16.8	0.0	17.1	22.1	22.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	23.4	20.3	44.4	16.8	0.0	17.1	22.1	22.1	0.0	0.0	0.0
LOS by Move:	A	C	C	D	B	A	B	C	C	A	A	A
HCM2kAvgQ:	0	11	5	2	8	0	2	10	10	0	0	0

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Hale Ave / North Tulip St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.817
Loss Time (sec): 12 Average Delay (sec/veh): 22.7
Optimal Cycle: 66 Level Of Service: C

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement, Control, Rights. Includes lane counts and control types like Protected and Split Phase.

Volume Module table with 10 columns (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume) and 10 rows for different approaches.

Saturation Flow Module table with 10 columns (Sat/Lane, Adjustment, Lanes, Final Sat) and 4 rows for different approaches.

Capacity Analysis Module table with 10 columns (Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ) and 10 rows for different approaches.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 Valley Pkwy / Project Driveway "A"

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[12.1]

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement, Control, Rights. Includes lane counts and control types like Stop Sign and Uncontrolled.

Volume Module table with 10 columns (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume) and 10 rows for different approaches.

Critical Gap Module table with 10 columns (Critical Gp, FollowUpTim) and 2 rows for different approaches.

Capacity Module table with 10 columns (Conflict Vol, Potent Cap, Move Cap, Volume/Cap) and 4 rows for different approaches.

Level Of Service Module table with 10 columns (2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap, SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS) and 10 rows for different approaches.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 West Grand Ave / Project Driveway "B"

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[12.3]

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 4 sub-columns for Movement (L, T, R). Rows include Control, Rights, and Lanes.

Volume Module table with 12 columns for volume types (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume) and 4 columns for movements (L, T, R).

Critical Gap Module table with 4 columns for movements (L, T, R) and 4 sub-columns for gap types (xxxx).

Capacity Module table with 4 columns for movements (L, T, R) and 4 sub-columns for capacity types (xxxx).

Level Of Service Module table with 4 columns for movements (L, T, R) and 4 sub-columns for LOS types (xxxx).

Note: Queue reported is the number of cars per lane.

APPENDIX E

**Existing Plus Cumulative Conditions
Without and With Project
HCM Intersection Analysis Worksheets**

Existing Plus Cumulative Conditions Without Project

 Gateway Grand TIA
 Existing Plus Cumulative Without Project Conditions
 AM Peak Hour

Scenario Report

Scenario: exc am
 Command: exc am
 Volume: exc am
 Geometry: ex am
 Impact Fee: Default Impact Fee
 Trip Generation: none
 Trip Distribution: none
 Paths: Default Path
 Routes: Default Route
 Configuration: exc am

 Gateway Grand TIA
 Existing Plus Cumulative Without Project Conditions
 AM Peak Hour

Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	LOS	Del/Veh	LOS	Del/Veh	
# 1 Valley Pkwy / I-15 Southbound	D	47.7 0.778	D	47.5 0.780	-0.173 D/V
# 2 Valley Pkwy / I-15 Northbound	C	31.1 0.707	C	32.2 0.747	+ 1.028 D/V
# 3 Valley Pkwy / La Terraza Blvd-	B	17.8 0.332	B	19.9 0.370	+ 2.163 D/V
# 4 Valley Pkwy / North Tulip St	C	28.0 0.406	C	27.8 0.424	-0.146 D/V
# 5 Valley Pkwy / Gateway Dwy	A	2.1 0.234	A	2.1 0.245	+ 0.008 D/V
# 6 Valley Pkwy / Quince St	B	19.4 0.522	B	19.4 0.538	-0.068 D/V
# 7 Valley Pkwy / Centre City Pkwy	C	22.7 0.682	C	23.2 0.708	+ 0.483 D/V
# 8 Grand Ave / Quince St	B	17.8 0.212	B	17.8 0.215	-0.002 D/V
# 9 Grand Ave / Centre City Pkwy	B	14.4 0.506	B	14.5 0.513	+ 0.063 D/V
# 10 Second Ave / Quince St	B	14.5 0.273	B	14.5 0.278	-0.022 D/V
# 11 Second Ave / Centre City Pkwy	B	18.0 0.540	B	18.2 0.548	+ 0.187 D/V
# 12 Hale Ave / North Tulip St	B	14.7 0.506	B	14.8 0.511	+ 0.057 D/V

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Valley Pkwy / I-15 Southbound Ramps

Cycle (sec): 115 Critical Vol./Cap.(X): 0.780
Loss Time (sec): 16 Average Delay (sec/veh): 47.5
Optimal Cycle: 86 Level Of Service: D

Street Name:	I-15 Southbound Ramps						Valley Pkwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	12	12	12	5	5	5	5	8	8	10	7	7
Y+R:	5.1	5.1	5.1	5.1	5.1	5.1	4.7	5.8	5.8	4.7	5.8	5.8
Lanes:	1	0	1	0	1	0	2	0	3	0	1	1

Volume Module:

Base Vol:	29	28	75	228	69	645	68	696	54	76	1030	212
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	28	75	228	69	645	68	696	54	76	1030	212
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative:	0	0	2	34	0	0	0	14	0	2	7	25
Initial Fut:	29	28	77	262	69	645	68	710	54	78	1037	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	33	32	88	299	79	736	78	810	62	89	1183	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	32	88	299	79	736	78	810	62	89	1183	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	32	88	299	79	736	78	810	62	89	1183	270

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.83	0.83	0.83	0.90	0.89	0.83	0.90	0.87	0.87
Lanes:	1.00	1.00	1.00	0.79	0.21	1.00	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	1769	1862	1583	1245	328	1573	3432	5083	1583	3432	6588	1647

Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.06	0.24	0.24	0.47	0.02	0.16	0.04	0.03	0.18	0.16
Crit Moves:	***					***		***		***		
Green/Cycle:	0.10	0.10	0.10	0.50	0.50	0.50	0.05	0.17	0.17	0.09	0.21	0.21
Volume/Cap:	0.18	0.16	0.53	0.48	0.48	0.94	0.45	0.94	0.23	0.30	0.87	0.79
Delay/Veh:	47.5	47.3	52.1	19.1	19.1	40.6	55.0	64.3	41.6	49.8	49.2	45.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.5	47.3	52.1	19.1	19.1	40.6	55.0	64.3	41.6	49.8	49.2	45.7
LOS by Move:	D	D	D	B	B	D	D	E	D	D	D	D
HCM2kAvgQ:	1	1	4	9	9	30	2	14	2	1	11	10

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Valley Pkwy / I-15 Northbound Ramps

Cycle (sec): 115 Critical Vol./Cap.(X): 0.747
Loss Time (sec): 12 Average Delay (sec/veh): 32.2
Optimal Cycle: 69 Level Of Service: C

Street Name: I-15 Northbound Ramps Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 5 5 5 0 0 0 5 6 0 0 5 5
Y+R: 5.1 5.1 5.1 0.0 0.0 0.0 4.7 5.8 0.0 0.0 5.8 5.8
Lanes: 0 1 0 0 1 0 0 0 0 0 2 0 3 0 0 0 0 3 0 1
Volume Module:
Base Vol: 344 12 469 0 0 0 248 749 0 0 975 151
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 344 12 469 0 0 0 248 749 0 0 975 151
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Cumulative: 0 0 39 0 0 0 0 49 0 0 34 10
Initial Fut: 344 12 508 0 0 0 248 798 0 0 1009 161
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88
PHF Volume: 389 14 574 0 0 0 280 902 0 0 1141 182
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 389 14 574 0 0 0 280 902 0 0 1141 182
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 389 14 574 0 0 0 280 902 0 0 1141 182
Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.92 0.92 0.83 1.00 1.00 1.00 0.90 0.89 1.00 1.00 0.89 0.83
Lanes: 0.97 0.03 1.00 0.00 0.00 0.00 2.00 3.00 0.00 0.00 3.00 1.00
Final Sat.: 1691 59 1583 0 0 0 3432 5083 0 0 5083 1583
Capacity Analysis Module:
Vol/Sat: 0.23 0.23 0.36 0.00 0.00 0.00 0.08 0.18 0.00 0.00 0.22 0.12
Crit Moves: ****
Green/Cycle: 0.49 0.49 0.49 0.00 0.00 0.00 0.11 0.41 0.00 0.00 0.30 0.30
Volume/Cap: 0.47 0.47 0.75 0.00 0.00 0.00 0.75 0.43 0.00 0.00 0.75 0.38
Delay/Veh: 20.2 20.2 27.9 0.0 0.0 0.0 57.7 24.5 0.0 0.0 38.4 32.3
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 20.2 20.2 27.9 0.0 0.0 0.0 57.7 24.5 0.0 0.0 38.4 32.3
LOS by Move: C C C A A A E C A A D C
HCM2kAvgQ: 9 9 17 0 0 0 5 8 0 0 14 5

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Valley Pkwy / La Terraza Blvd-Plaza Las Palmas Dwy

Cycle (sec): 115 Critical Vol./Cap.(X): 0.370
Loss Time (sec): 12 Average Delay (sec/veh): 19.9
Optimal Cycle: 34 Level Of Service: B

Street Name:La Terraza Blvd-Plaza Las Palmas Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Y+R:	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.5	5.5	4.5	5.5	5.5
Lanes:	1	0	1	0	1	0	1	0	3	0	1	2

Volume Module:

Base Vol:	79	23	51	22	22	57	77	940	112	91	1004	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	23	51	22	22	57	77	940	112	91	1004	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative:	21	0	12	0	0	0	0	10	78	46	23	0
Initial Fut:	100	23	63	22	22	57	77	950	190	137	1027	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	111	25	70	24	24	63	85	1052	210	152	1137	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	25	70	24	24	63	85	1052	210	152	1137	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	111	25	70	24	24	63	85	1052	210	152	1137	52

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	1.00	0.85	0.75	0.89	0.89	0.95	0.91	0.85	0.92	0.90	0.90
Lanes:	1.00	1.00	1.00	1.00	0.28	0.72	1.00	3.00	1.00	2.00	3.82	0.18
Final Sat.:	1303	1900	1615	1421	472	1223	1805	5187	1615	3502	6567	301

Capacity Analysis Module:

Vol/Sat:	0.08	0.01	0.04	0.02	0.05	0.05	0.05	0.20	0.13	0.04	0.17	0.17
Crit Moves:	****						****			****		
Green/Cycle:	0.23	0.23	0.23	0.23	0.23	0.23	0.14	0.55	0.55	0.12	0.52	0.52
Volume/Cap:	0.37	0.06	0.19	0.07	0.22	0.22	0.33	0.37	0.24	0.37	0.33	0.33
Delay/Veh:	38.0	34.6	35.9	34.8	36.3	36.3	45.1	14.8	13.6	47.4	15.9	15.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.0	34.6	35.9	34.8	36.3	36.3	45.1	14.8	13.6	47.4	15.9	15.9
LOS by Move:	D	C	D	C	D	D	D	B	B	D	B	B
HCM2kAvgQ:	4	1	2	1	3	3	3	7	4	2	6	6

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Valley Pkwy / North Tulip St

Cycle (sec): 115 Critical Vol./Cap.(X): 0.424
Loss Time (sec): 16 Average Delay (sec/veh): 27.8
Optimal Cycle: 45 Level Of Service: C

Street Name:	North Tulip St			Valley Pkwy								
	North Bound	South Bound	East Bound	West Bound	West Bound	West Bound						
Approach:	North Bound			South Bound								
Movement:	L	T	R	L	T	R						
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	
Y+R:	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.5	5.5	4.5	5.5	
Lanes:	0	0	1	0	0	1	2	0	2	1	0	
Lanes:	0	0	1	0	0	1	2	0	2	1	0	
Lanes:	0	0	1	0	0	1	2	0	2	1	0	
Lanes:	0	0	1	0	0	1	2	0	2	1	0	

Volume Module:

Base Vol:	4	4	3	59	9	169	207	776	2	10	946	222
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	4	3	59	9	169	207	776	2	10	946	222
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative:	0	0	0	1	0	7	2	20	0	0	62	1
Initial Fut:	4	4	3	60	9	176	209	796	2	10	1008	223
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	5	5	3	68	10	201	238	907	2	11	1148	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	5	3	68	10	201	238	907	2	11	1148	254
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	5	3	68	10	201	238	907	2	11	1148	254

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.96	0.96	0.85	0.92	0.91	0.91	0.95	0.91	0.85
Lanes:	0.37	0.36	0.27	1.74	0.26	1.00	2.00	2.99	0.01	1.00	4.00	1.00
Final Sat.:	653	653	490	3166	475	1615	3502	5174	13	1805	6916	1615

Capacity Analysis Module:

Vol/Sat:	0.01	0.01	0.01	0.02	0.02	0.12	0.07	0.18	0.18	0.01	0.17	0.16
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.04	0.04	0.04	0.28	0.28	0.28	0.16	0.43	0.43	0.11	0.38	0.38
Volume/Cap:	0.16	0.16	0.16	0.08	0.08	0.44	0.44	0.41	0.41	0.06	0.44	0.42
Delay/Veh:	53.9	53.9	53.9	30.2	30.2	34.4	44.6	22.9	22.9	46.4	26.7	26.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	53.9	53.9	30.2	30.2	34.4	44.6	22.9	22.9	46.4	26.7	26.8
LOS by Move:	D	D	D	C	C	C	D	C	C	D	C	C
HCM2kAvgQ:	1	1	1	1	1	6	4	8	8	0	8	7

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Valley Pkwy / Gateway Dwy

Cycle (sec):	60	Critical Vol./Cap.(X):	0.245
Loss Time (sec):	8	Average Delay (sec/veh):	2.1
Optimal Cycle:	22	Level Of Service:	A

Street Name:	Gateway Dwy	Valley Pkwy		
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R

Control:	Permitted	Permitted	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 5 0	0 0 5	0 0 0	0 5 5
Y+R:	4.0 4.5 4.0	4.0 4.0 4.5	4.0 4.0 4.0	4.0 5.5 5.5
Lanes:	0 0 1 0 0	0 0 0 0 1	0 0 0 0 0	0 0 3 1 0

Volume Module:

Base Vol:	0 10 0	0 0 7	0 0 0	0 1228 18
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	0 10 0	0 0 7	0 0 0	0 1228 18
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Cumulative:	0 0 0	0 0 0	0 0 0	0 63 0
Initial Fut:	0 10 0	0 0 7	0 0 0	0 1291 18
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.92 0.92 0.92	0.92 0.92 0.92	0.92 0.92 0.92	0.92 0.92 0.92
PHF Volume:	0 11 0	0 0 8	0 0 0	0 1407 20
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	0 11 0	0 0 8	0 0 0	0 1407 20
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	0 11 0	0 0 8	0 0 0	0 1407 20

Saturation Flow Module:

Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	1.00 1.00 1.00	1.00 1.00 0.87	1.00 1.00 1.00	1.00 0.91 0.91
Lanes:	0.00 1.00 0.00	0.00 0.00 1.00	0.00 0.00 0.00	0.00 3.94 0.06
Final Sat.:	0 1900 0	0 0 1644	0 0 0	0 6807 95

Capacity Analysis Module:

Vol/Sat:	0.00 0.01 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.21 0.21
Crit Moves:	****			****
Green/Cycle:	0.00 0.08 0.00	0.00 0.00 0.08	0.00 0.00 0.00	0.00 0.78 0.78
Volume/Cap:	0.00 0.07 0.00	0.00 0.00 0.06	0.00 0.00 0.00	0.00 0.26 0.26
Delay/Veh:	0.0 25.5 0.0	0.0 0.0 25.5	0.0 0.0 0.0	0.0 1.8 1.8
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	0.0 25.5 0.0	0.0 0.0 25.5	0.0 0.0 0.0	0.0 1.8 1.8
LOS by Move:	A C A	A A A	A A A	A A A
HCM2kAvgQ:	0 0 0	0 0 0	0 0 0	0 2 2

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Valley Pkwy / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.538
Loss Time (sec): 12 Average Delay (sec/veh): 19.4
Optimal Cycle: 43 Level Of Service: B

Street Name:	Quince St			Valley Pkwy								
	North Bound		South Bound	East Bound			West Bound					
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	0	0	5	5	0	0	0	5	5	5
Y+R:	4.5	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	5.5	5.5	5.5
Lanes:	1	0	2	0	0	1	0	0	0	0	1	2

Volume Module:

Base Vol:	67	181	0	0	303	163	0	0	0	20	1169	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	181	0	0	303	163	0	0	0	20	1169	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative:	0	3	0	0	2	0	0	0	0	0	63	0
Initial Fut:	67	184	0	0	305	163	0	0	0	20	1232	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	75	206	0	0	342	183	0	0	0	22	1383	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	206	0	0	342	183	0	0	0	22	1383	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	75	206	0	0	342	183	0	0	0	22	1383	101

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.90	0.90	1.00	1.00	1.00	0.91	0.91	0.85
Lanes:	1.00	2.00	0.00	0.00	1.30	0.70	0.00	0.00	0.00	0.05	2.95	1.00
Final Sat.:	1805	3610	0	0	2230	1192	0	0	0	83	5094	1615

Capacity Analysis Module:

Vol/Sat:	0.04	0.06	0.00	0.00	0.15	0.15	0.00	0.00	0.00	0.27	0.27	0.06
Crit Moves:	****			****						****		
Green/Cycle:	0.08	0.36	0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.50	0.50	0.50
Volume/Cap:	0.54	0.16	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.54	0.54	0.12
Delay/Veh:	44.1	19.5	0.0	0.0	27.8	27.8	0.0	0.0	0.0	15.4	15.4	11.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.1	19.5	0.0	0.0	27.8	27.8	0.0	0.0	0.0	15.4	15.4	11.9
LOS by Move:	D	B	A	A	C	C	A	A	A	B	B	B
HCM2kAvgQ:	2	2	0	0	7	7	0	0	0	9	9	1

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Valley Pkwy / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.708
Loss Time (sec): 12 Average Delay (sec/veh): 23.2
Optimal Cycle: 59 Level Of Service: C

Street Name: Centre City Pkwy Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 5 5 0 0 5 5 0 0 0 5 5 5
Y+R: 4.5 5.5 0.0 0.0 5.5 5.5 0.0 0.0 0.0 5.0 5.0 5.0
Lanes: 2 0 2 0 0 0 0 1 1 0 0 0 0 0 1 1 2 0 1
Volume Module:
Base Vol: 143 612 0 0 909 85 0 0 0 300 1035 214
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 143 612 0 0 909 85 0 0 0 300 1035 214
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Cumulative: 8 16 0 0 17 21 0 0 0 0 34 6
Initial Fut: 151 628 0 0 926 106 0 0 0 300 1069 220
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91
PHF Volume: 166 692 0 0 1021 117 0 0 0 331 1178 242
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 166 692 0 0 1021 117 0 0 0 331 1178 242
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 166 692 0 0 1021 117 0 0 0 331 1178 242
Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.90 0.93 1.00 1.00 0.92 0.92 1.00 1.00 1.00 0.87 0.87 0.83
Lanes: 2.00 2.00 0.00 0.00 1.79 0.21 0.00 0.00 0.00 1.00 3.00 1.00
Final Sat.: 3432 3538 0 0 3127 358 0 0 0 1647 4941 1583
Capacity Analysis Module:
Vol/Sat: 0.05 0.20 0.00 0.00 0.33 0.33 0.00 0.00 0.00 0.20 0.24 0.15
Crit Moves: ****
Green/Cycle: 0.07 0.53 0.00 0.00 0.46 0.46 0.00 0.00 0.00 0.34 0.34 0.34
Volume/Cap: 0.71 0.37 0.00 0.00 0.71 0.71 0.00 0.00 0.00 0.60 0.71 0.45
Delay/Veh: 50.6 12.5 0.0 0.0 20.9 20.9 0.0 0.0 0.0 25.1 27.1 24.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 50.6 12.5 0.0 0.0 20.9 20.9 0.0 0.0 0.0 25.1 27.1 24.0
LOS by Move: D B A A C C A A A C C C
HCM2kAvgQ: 3 6 0 0 14 14 0 0 0 9 12 6

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Grand Ave / Quince St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.215
Loss Time (sec): 16 Average Delay (sec/veh): 17.8
Optimal Cycle: 36 Level Of Service: B

Street Name: Quince St Grand Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 5 5 5 5 0 5 5 5 5 0 5
Y+R: 4.0 5.0 5.0 4.5 5.0 4.0 4.5 4.5 4.5 4.5 4.0 4.5
Lanes: 0 0 1 1 0 1 0 2 0 0 1 0 0 0 0 1
Volume Module:
Base Vol: 0 160 2 10 303 0 75 167 0 4 0 20
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 160 2 10 303 0 75 167 0 4 0 20
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Cumulative: 0 3 0 0 2 0 0 2 0 0 0 0
Initial Fut: 0 163 2 10 305 0 75 169 0 4 0 20
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume: 0 181 2 11 338 0 83 187 0 4 0 22
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 181 2 11 338 0 83 187 0 4 0 22
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 181 2 11 338 0 83 187 0 4 0 22
Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.95 0.95 0.95 0.95 1.00 0.95 1.00 1.00 0.95 1.00 0.85
Lanes: 0.00 1.98 0.02 1.00 2.00 0.00 1.00 1.00 0.00 1.00 0.00 1.00
Final Sat.: 0 3559 44 1805 3610 0 1805 1900 0 1805 0 1615
Capacity Analysis Module:
Vol/Sat: 0.00 0.05 0.05 0.01 0.09 0.00 0.05 0.10 0.00 0.00 0.00 0.01
Crit Moves: **** **** ****
Green/Cycle: 0.00 0.19 0.19 0.08 0.28 0.00 0.23 0.37 0.00 0.08 0.00 0.08
Volume/Cap: 0.00 0.26 0.26 0.07 0.34 0.00 0.20 0.26 0.00 0.03 0.00 0.16
Delay/Veh: 0.0 20.8 20.8 25.6 17.6 0.0 19.0 13.2 0.0 25.4 0.0 26.1
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 20.8 20.8 25.6 17.6 0.0 19.0 13.2 0.0 25.4 0.0 26.1
LOS by Move: A C C C B A B B A C A C
HCM2kAvgQ: 0 1 1 0 3 0 1 3 0 0 0 0

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Grand Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.513
Loss Time (sec): 12 Average Delay (sec/veh): 14.5
Optimal Cycle: 41 Level Of Service: B

Street Name:	Centre City Pkwy			Grand Ave		
	North Bound	South Bound	East Bound	West Bound	West Bound	West Bound
Approach:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected			Permitted		
Rights:	Include			Include		
Min. Green:	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5
Y+R:	4.5 5.5 5.5	4.5 5.5 5.5	5.0 5.0 5.0	5.0 5.0 5.0	5.0 5.0 5.0	5.0 5.0 5.0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1	1 0 1 0 1	1 0 1 0 1	1 0 1 0 1

Volume Module:

Base Vol:	3 657 55	73 1179 12	35 143 4	49 21 121
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	3 657 55	73 1179 12	35 143 4	49 21 121
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Cumulative:	0 21 0	3 14 0	1 1 0	0 0 3
Initial Fut:	3 678 55	76 1193 12	36 144 4	49 21 124
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.92 0.92 0.92	0.92 0.92 0.92	0.92 0.92 0.92	0.92 0.92 0.92
PHF Volume:	3 737 60	83 1296 13	39 156 4	53 23 135
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	3 737 60	83 1296 13	39 156 4	53 23 135
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	3 737 60	83 1296 13	39 156 4	53 23 135

Saturation Flow Module:

Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.95 0.95 0.85	0.95 0.95 0.85	0.75 1.00 0.85	0.50 1.00 0.85
Lanes:	1.00 2.00 1.00	1.00 2.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Sat.:	1805 3610 1615	1805 3610 1615	1423 1900 1615	948 1900 1615

Capacity Analysis Module:

Vol/Sat:	0.00 0.20 0.04	0.05 0.36 0.01	0.03 0.08 0.00	0.06 0.01 0.08
Crit Moves:	****	****		****
Green/Cycle:	0.06 0.56 0.56	0.15 0.66 0.66	0.15 0.15 0.15	0.15 0.15 0.15
Volume/Cap:	0.03 0.36 0.07	0.30 0.55 0.01	0.18 0.54 0.02	0.37 0.08 0.55
Delay/Veh:	40.3 11.0 9.0	34.5 8.5 5.3	33.6 37.2 32.4	35.8 32.8 37.8
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	40.3 11.0 9.0	34.5 8.5 5.3	33.6 37.2 32.4	35.8 32.8 37.8
LOS by Move:	D B A	C A A	C D C	D C D
HCM2kAvgQ:	0 6 1	2 10 0	1 4 0	2 1 4

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Second Ave / Quince St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.278
Loss Time (sec): 12 Average Delay (sec/veh): 14.5
Optimal Cycle: 29 Level Of Service: B

Street Name: Quince St Second Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 5 5 5 5 0 5 5 5 0 0 0
Y+R: 4.0 5.0 5.0 4.5 5.0 4.0 5.5 5.5 5.5 4.0 4.0 4.0
Lanes: 0 0 1 1 0 1 0 2 0 0 0 1 2 1 0 0 0 0 0 0
Volume Module:
Base Vol: 0 172 18 91 227 0 1 539 22 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 172 18 91 227 0 1 539 22 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Cumulative: 0 3 0 0 2 0 0 19 0 0 0 0
Initial Fut: 0 175 18 91 229 0 1 558 22 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85
PHF Volume: 0 206 21 107 269 0 1 656 26 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 206 21 107 269 0 1 656 26 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 206 21 107 269 0 1 656 26 0 0 0
Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.94 0.94 0.95 0.95 1.00 0.90 0.90 0.90 1.00 1.00 1.00
Lanes: 0.00 1.81 0.19 1.00 2.00 0.00 0.01 3.84 0.15 0.00 0.00 0.00
Final Sat.: 0 3227 332 1805 3610 0 12 6602 260 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.00 0.06 0.06 0.06 0.07 0.00 0.10 0.10 0.10 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.23 0.23 0.21 0.44 0.00 0.36 0.36 0.36 0.00 0.00 0.00
Volume/Cap: 0.00 0.28 0.28 0.28 0.17 0.00 0.28 0.28 0.28 0.00 0.00 0.00
Delay/Veh: 0.0 19.2 19.2 20.1 10.1 0.0 13.8 13.8 13.8 0.0 0.0 0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 19.2 19.2 20.1 10.1 0.0 13.8 13.8 13.8 0.0 0.0 0.0
LOS by Move: A B B C B A B B B A A A
HCM2kAvgQ: 0 2 2 2 2 0 3 3 3 0 0 0

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Second Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.548
Loss Time (sec): 12 Average Delay (sec/veh): 18.2
Optimal Cycle: 43 Level Of Service: B

Street Name: Centre City Pkwy Second Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 5 5 5 5 0 5 5 5 0 0 0
Y+R: 0.0 5.5 5.5 4.5 5.5 0.0 5.0 5.0 5.0 0.0 0.0 0.0
Lanes: 0 0 2 0 1 2 0 2 0 0 1 1 1 1 0 0 0 0 0 0
Volume Module:
Base Vol: 0 651 186 139 1018 0 27 587 39 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 651 186 139 1018 0 27 587 39 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Cumulative: 0 16 0 6 9 0 5 13 2 0 0 0
Initial Fut: 0 667 186 145 1027 0 32 600 41 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88
PHF Volume: 0 757 211 164 1165 0 36 681 47 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 757 211 164 1165 0 36 681 47 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 757 211 164 1165 0 36 681 47 0 0 0
Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.93 0.83 0.90 0.93 1.00 0.88 0.88 0.88 1.00 1.00 1.00
Lanes: 0.00 2.00 1.00 2.00 2.00 0.00 1.00 2.81 0.19 0.00 0.00 0.00
Final Sat.: 0 3538 1583 3432 3538 0 1667 4682 320 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.00 0.21 0.13 0.05 0.33 0.00 0.02 0.15 0.15 0.00 0.00 0.00
Crit Moves: **** **** ****
Green/Cycle: 0.00 0.48 0.48 0.12 0.60 0.00 0.27 0.27 0.27 0.00 0.00 0.00
Volume/Cap: 0.00 0.45 0.28 0.39 0.55 0.00 0.08 0.55 0.55 0.00 0.00 0.00
Delay/Veh: 0.0 15.8 14.4 36.9 11.0 0.0 24.8 28.9 28.9 0.0 0.0 0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 15.8 14.4 36.9 11.0 0.0 24.8 28.9 28.9 0.0 0.0 0.0
LOS by Move: A B B D B A C C C A A A
HCM2kAvgQ: 0 7 4 2 10 0 1 6 6 0 0 0

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Hale Ave / North Tulip St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.511
Loss Time (sec): 12 Average Delay (sec/veh): 14.8
Optimal Cycle: 39 Level Of Service: B

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Split Phase), Rights (Include), and values for Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for different volume adjustments (Base Vol, Growth Adj, Initial Bse, Added Vol, Cumulative, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume) and 12 rows of values.

Saturation Flow Module: Table with 12 columns for saturation flow adjustments (Sat/Lane, Adjustment, Lanes, Final Sat) and 12 rows of values.

Capacity Analysis Module: Table with 12 columns for capacity analysis metrics (Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ) and 12 rows of values.

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative Without Project Conditions
 PM Peak Hour

Scenario Report

Scenario: exc pm
 Command: exc pm
 Volume: exc pm
 Geometry: ex pm
 Impact Fee: Default Impact Fee
 Trip Generation: none
 Trip Distribution: none
 Paths: Default Path
 Routes: Default Route
 Configuration: exc pm

 Gateway Grand TIA
 Existing Plus Cumulative Without Project Conditions
 PM Peak Hour

Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	LOS	Del/V/ Veh C	LOS	Del/V/ Veh C	
# 1 Valley Pkwy / I-15 Southbound	D	50.1 0.900	D	51.2 0.913	+ 1.141 D/V
# 2 Valley Pkwy / I-15 Northbound	D	37.4 0.818	D	40.0 0.859	+ 2.664 D/V
# 3 Valley Pkwy / La Terraza Blvd-	C	23.7 0.537	C	27.3 0.616	+ 3.616 D/V
# 4 Valley Pkwy / North Tulip St	C	30.2 0.535	C	30.1 0.552	-0.138 D/V
# 5 Valley Pkwy / Gateway Dwy	A	5.6 0.292	A	5.5 0.299	-0.102 D/V
# 6 Valley Pkwy / Quince St	C	20.7 0.544	C	20.7 0.554	+ 0.017 D/V
# 7 Valley Pkwy / Centre City Pkwy	C	21.7 0.624	C	22.1 0.647	+ 0.355 D/V
# 8 Grand Ave / Quince St	C	26.0 0.329	C	26.0 0.333	+ 0.018 D/V
# 9 Grand Ave / Centre City Pkwy	C	20.6 0.578	C	20.7 0.592	+ 0.024 D/V
# 10 Second Ave / Quince St	C	20.1 0.411	B	19.9 0.423	-0.182 D/V
# 11 Second Ave / Centre City Pkwy	C	22.6 0.656	C	22.9 0.675	+ 0.358 D/V
# 12 Hale Ave / North Tulip St	C	25.2 0.859	C	25.6 0.866	+ 0.417 D/V

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

 Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #1 Valley Pkwy / I-15 Southbound Ramps

 Cycle (sec): 125 Critical Vol./Cap.(X): 0.913
 Loss Time (sec): 16 Average Delay (sec/veh): 51.2
 Optimal Cycle: 139 Level Of Service: D

 Street Name: I-15 Southbound Ramps Valley Pkwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

 Control: Split Phase Split Phase Protected Protected
 Rights: Include Include Include Include
 Min. Green: 12 12 12 5 5 5 5 8 8 10 7 7
 Y+R: 5.1 5.1 5.1 5.1 5.1 5.1 4.7 5.8 5.8 4.7 5.8 5.8
 Lanes: 1 0 1 0 1 0 1 0 1 0 2 0 3 1 1

 Volume Module:
 Base Vol: 49 52 287 246 135 360 54 1282 107 182 722 369
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 49 52 287 246 135 360 54 1282 107 182 722 369
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Cumulative: 0 0 3 19 0 0 0 11 0 2 13 38
 Initial Fut: 49 52 290 265 135 360 54 1293 107 184 735 407
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91
 PHF Volume: 54 57 318 290 148 394 59 1416 117 202 805 446
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 54 57 318 290 148 394 59 1416 117 202 805 446
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 54 57 318 290 148 394 59 1416 117 202 805 446

 Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 0.93 0.98 0.83 0.85 0.85 0.85 0.90 0.89 0.83 0.90 0.84 0.84
 Lanes: 1.00 1.00 1.00 0.70 0.35 0.95 2.00 3.00 1.00 2.00 3.22 1.78
 Final Sat.: 1769 1862 1583 1127 574 1530 3432 5083 1583 3432 5164 2859

 Capacity Analysis Module:
 Vol/Sat: 0.03 0.03 0.20 0.26 0.26 0.26 0.02 0.28 0.07 0.06 0.16 0.16
 Crit Moves: **** **** **** ****
 Green/Cycle: 0.22 0.22 0.22 0.28 0.28 0.28 0.08 0.30 0.30 0.08 0.30 0.30
 Volume/Cap: 0.14 0.14 0.93 0.93 0.93 0.93 0.22 0.93 0.25 0.73 0.52 0.52
 Delay/Veh: 39.8 39.8 79.5 59.9 59.9 59.9 54.6 53.1 33.4 66.0 36.3 36.3
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 39.8 39.8 79.5 59.9 59.9 59.9 54.6 53.1 33.4 66.0 36.3 36.3
 LOS by Move: D D E E E E D D C E D D
 HCM2kAvgQ: 2 2 16 20 20 20 1 23 3 4 8 8

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

 Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Valley Pkwy / I-15 Northbound Ramps

Cycle (sec): 125 Critical Vol./Cap.(X): 0.859
Loss Time (sec): 12 Average Delay (sec/veh): 40.0
Optimal Cycle: 102 Level Of Service: D

Street Name:	I-15 Northbound Ramps						Valley Pkwy												
Approach:	North Bound			South Bound			East Bound			West Bound									
Movement:	L	T	R	L	T	R	L	T	R	L	T	R							
Control:	Split Phase			Split Phase			Protected			Protected									
Rights:	Include			Include			Include			Include									
Min. Green:	5	5	5	0	0	0	5	6	0	0	5	5							
Y+R:	5.1	5.1	5.1	0.0	0.0	0.0	4.7	5.8	0.0	0.0	5.8	5.8							
Lanes:	0	1	0	0	1	0	0	0	0	2	0	3	0	0	0	0	3	0	1

Volume Module:

Base Vol:	169	0	445	0	0	0	625	1194	0	0	1095	322
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	0	445	0	0	0	625	1194	0	0	1095	322
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative:	0	0	37	0	0	0	0	32	0	0	53	29
Initial Fut:	169	0	482	0	0	0	625	1226	0	0	1148	351
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	184	0	525	0	0	0	681	1336	0	0	1251	382
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	0	525	0	0	0	681	1336	0	0	1251	382
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	0	525	0	0	0	681	1336	0	0	1251	382

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	0.90	0.89	1.00	1.00	0.89	0.83
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	1773	0	1583	0	0	0	3432	5083	0	0	5083	1583

Capacity Analysis Module:

Vol/Sat:	0.10	0.00	0.33	0.00	0.00	0.00	0.20	0.26	0.00	0.00	0.25	0.24
Crit Moves:	****			****			****			****		
Green/Cycle:	0.39	0.00	0.39	0.00	0.00	0.00	0.23	0.52	0.00	0.00	0.29	0.29
Volume/Cap:	0.27	0.00	0.86	0.00	0.00	0.00	0.86	0.51	0.00	0.00	0.86	0.84
Delay/Veh:	26.5	0.0	46.9	0.0	0.0	0.0	55.4	19.9	0.0	0.0	47.6	55.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.5	0.0	46.9	0.0	0.0	0.0	55.4	19.9	0.0	0.0	47.6	55.4
LOS by Move:	C	A	D	A	A	A	E	B	A	A	D	E
HCM2kAvgQ:	5	0	21	0	0	0	12	11	0	0	18	15

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Valley Pkwy / La Terraza Blvd-Plaza Las Palmas Dwy

Cycle (sec): 125 Critical Vol./Cap.(X): 0.616
Loss Time (sec): 12 Average Delay (sec/veh): 27.3
Optimal Cycle: 51 Level Of Service: C

Street Name:La Terraza Blvd-Plaza Las Palmas Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Y+R:	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.5	5.5	4.5	5.5	5.5
Lanes:	1	0	1	0	1	0	1	0	3	0	1	2

Volume Module:

Base Vol:	151	17	143	52	12	122	98	1423	61	93	1092	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	17	143	52	12	122	98	1423	61	93	1092	54
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative:	66	0	39	0	0	0	0	27	41	24	16	0
Initial Fut:	217	17	182	52	12	122	98	1450	102	117	1108	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	241	19	202	58	13	135	109	1608	113	130	1229	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	241	19	202	58	13	135	109	1608	113	130	1229	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	241	19	202	58	13	135	109	1608	113	130	1229	60

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.60	1.00	0.85	0.75	0.86	0.86	0.95	0.91	0.85	0.92	0.90	0.90
Lanes:	1.00	1.00	1.00	1.00	0.09	0.91	1.00	3.00	1.00	2.00	3.81	0.19
Final Sat.:	1146	1900	1615	1431	147	1493	1805	5187	1615	3502	6548	319

Capacity Analysis Module:

Vol/Sat:	0.21	0.01	0.12	0.04	0.09	0.09	0.06	0.31	0.07	0.04	0.19	0.19
Crit Moves:	****						****			****		
Green/Cycle:	0.34	0.34	0.34	0.34	0.34	0.34	0.14	0.50	0.50	0.06	0.43	0.43
Volume/Cap:	0.62	0.03	0.37	0.12	0.27	0.27	0.44	0.62	0.14	0.62	0.44	0.44
Delay/Veh:	37.3	27.4	31.5	28.4	30.1	30.1	50.8	22.8	16.7	62.7	25.4	25.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.3	27.4	31.5	28.4	30.1	30.1	50.8	22.8	16.7	62.7	25.4	25.4
LOS by Move:	D	C	C	C	C	C	D	C	B	E	C	C
HCM2kAvgQ:	8	0	6	2	4	4	4	16	2	3	9	9

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

 Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #4 Valley Pkwy / North Tulip St

 Cycle (sec): 125 Critical Vol./Cap.(X): 0.552
 Loss Time (sec): 16 Average Delay (sec/veh): 30.1
 Optimal Cycle: 55 Level Of Service: C

 Street Name: North Tulip St Valley Pkwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

 Control: Split Phase Split Phase Protected Protected
 Rights: Include Include Include Include
 Min. Green: 5 5 5 5 5 5 5 5 5 5 5 5
 Y+R: 4.5 4.5 4.5 4.5 4.5 4.5 4.5 5.5 5.5 4.5 5.5 5.5
 Lanes: 0 0 1! 0 0 1 1 0 0 1 2 0 2 1 0 1 0 4 0 1

 Volume Module:
 Base Vol: 16 6 9 228 14 227 302 1275 6 24 986 128
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 16 6 9 228 14 227 302 1275 6 24 986 128
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Cumulative: 0 0 0 1 0 3 6 60 0 0 37 1
 Initial Fut: 16 6 9 229 14 230 308 1335 6 24 1023 129
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
 PHF Volume: 18 7 10 255 16 256 343 1487 7 27 1140 144
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 18 7 10 255 16 256 343 1487 7 27 1140 144
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 18 7 10 255 16 256 343 1487 7 27 1140 144

 Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 0.94 0.94 0.94 0.96 0.96 0.85 0.92 0.91 0.91 0.95 0.91 0.85
 Lanes: 0.52 0.19 0.29 1.88 0.12 1.00 2.00 2.99 0.01 1.00 4.00 1.00
 Final Sat.: 919 345 517 3420 209 1615 3502 5159 23 1805 6916 1615

 Capacity Analysis Module:
 Vol/Sat: 0.02 0.02 0.02 0.07 0.07 0.16 0.10 0.29 0.29 0.01 0.16 0.09
 Crit Moves: **** **** ****
 Green/Cycle: 0.04 0.04 0.04 0.28 0.28 0.28 0.21 0.51 0.51 0.04 0.35 0.35
 Volume/Cap: 0.48 0.48 0.48 0.27 0.27 0.56 0.48 0.56 0.56 0.37 0.48 0.26
 Delay/Veh: 63.9 63.9 63.9 35.0 35.0 40.0 44.2 21.3 21.3 61.7 32.2 29.6
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 63.9 63.9 63.9 35.0 35.0 40.0 44.2 21.3 21.3 61.7 32.2 29.6
 LOS by Move: E E E D D D D C C E C C
 HCM2kAvgQ: 2 2 2 4 4 9 6 14 14 1 9 4

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

 Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Valley Pkwy / Gateway Dwy

Cycle (sec): 60 Critical Vol./Cap.(X): 0.299
Loss Time (sec): 8 Average Delay (sec/veh): 5.5
Optimal Cycle: 23 Level Of Service: A

Street Name: Gateway Dwy Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 5 0 0 0 5 0 0 0 0 5 5
Y+R: 4.0 4.5 4.0 4.0 4.0 4.5 4.0 4.0 4.0 4.0 5.5 5.5
Lanes: 0 0 1 0 0 0 0 0 0 0 0 0 0 0 3 1 0

Volume Module:
Base Vol: 0 16 0 0 0 84 0 0 0 0 1069 58
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 16 0 0 0 84 0 0 0 0 1069 58
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Cumulative: 0 0 0 0 0 0 0 0 0 0 38 0
Initial Fut: 0 16 0 0 0 84 0 0 0 0 1107 58
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85
PHF Volume: 0 19 0 0 0 99 0 0 0 0 1299 68
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 19 0 0 0 99 0 0 0 0 1299 68
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 19 0 0 0 99 0 0 0 0 1299 68

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 1.00 0.87 1.00 1.00 1.00 1.00 0.90 0.90
Lanes: 0.00 1.00 0.00 0.00 0.00 1.00 0.00 0.00 0.00 0.00 3.80 0.20
Final Sat.: 0 1900 0 0 0 1644 0 0 0 0 6526 342

Capacity Analysis Module:
Vol/Sat: 0.00 0.01 0.00 0.00 0.00 0.06 0.00 0.00 0.00 0.00 0.20 0.20
Crit Moves: ****
Green/Cycle: 0.00 0.20 0.00 0.00 0.00 0.20 0.00 0.00 0.00 0.00 0.67 0.67
Volume/Cap: 0.00 0.05 0.00 0.00 0.00 0.30 0.00 0.00 0.00 0.00 0.30 0.30
Delay/Veh: 0.0 19.4 0.0 0.0 0.0 20.9 0.0 0.0 0.0 0.0 4.2 4.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 19.4 0.0 0.0 0.0 20.9 0.0 0.0 0.0 0.0 4.2 4.2
LOS by Move: A B A A A C A A A A A A
HCM2kAvgQ: 0 0 0 0 0 2 0 0 0 0 3 3

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Valley Pkwy / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.554
Loss Time (sec): 12 Average Delay (sec/veh): 20.7
Optimal Cycle: 44 Level Of Service: C

Street Name:	Quince St			Valley Pkwy								
	North Bound		South Bound	East Bound			West Bound					
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	0	0	5	5	0	0	0	5	5	5
Y+R:	4.5	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	5.5	5.5	5.5
Lanes:	1	0	2	0	0	1	0	0	0	0	1	2

Volume Module:

Base Vol:	67	207	0	0	415	143	0	0	0	41	1036	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	207	0	0	415	143	0	0	0	41	1036	74
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative:	0	2	0	0	2	0	0	0	0	0	38	0
Initial Fut:	67	209	0	0	417	143	0	0	0	41	1074	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	78	242	0	0	483	166	0	0	0	48	1245	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	242	0	0	483	166	0	0	0	48	1245	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	242	0	0	483	166	0	0	0	48	1245	86

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	0.91	0.91	0.85
Lanes:	1.00	2.00	0.00	0.00	1.49	0.51	0.00	0.00	0.00	0.11	2.89	1.00
Final Sat.:	1805	3610	0	0	2586	887	0	0	0	190	4971	1615

Capacity Analysis Module:

Vol/Sat:	0.04	0.07	0.00	0.00	0.19	0.19	0.00	0.00	0.00	0.25	0.25	0.05
Crit Moves:	****			****						****		
Green/Cycle:	0.08	0.41	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.45	0.45	0.45
Volume/Cap:	0.55	0.16	0.00	0.00	0.55	0.55	0.00	0.00	0.00	0.55	0.55	0.12
Delay/Veh:	44.8	16.6	0.0	0.0	24.9	24.9	0.0	0.0	0.0	18.3	18.3	14.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.8	16.6	0.0	0.0	24.9	24.9	0.0	0.0	0.0	18.3	18.3	14.4
LOS by Move:	D	B	A	A	C	C	A	A	A	B	B	B
HCM2kAvgQ:	2	2	0	0	8	8	0	0	0	9	9	1

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Valley Pkwy / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.647
Loss Time (sec): 12 Average Delay (sec/veh): 22.1
Optimal Cycle: 52 Level Of Service: C

Street Name:	Centre City Pkwy			Valley Pkwy		
	North Bound	South Bound	East Bound	West Bound	West Bound	West Bound
Approach:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Split Phase	Split Phase		
Rights:	Include	Include	Include	Include		
Min. Green:	5 5 0	0 5 5	0 0 0	5 5 5		
Y+R:	4.5 5.5 0.0	0.0 5.5 5.5	0.0 0.0 0.0	5.0 5.0 5.0		
Lanes:	2 0 2 0 0	0 0 1 1 0	0 0 0 0 0	1 1 2 0 1		

Volume Module:

Base Vol:	127 876 0	0 753 94	0 0 0	239 895 295
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	127 876 0	0 753 94	0 0 0	239 895 295
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Cumulative:	6 36 0	0 18 10	0 0 0	0 21 11
Initial Fut:	133 912 0	0 771 104	0 0 0	239 916 306
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.86 0.86 0.86	0.86 0.86 0.86	0.86 0.86 0.86	0.86 0.86 0.86
PHF Volume:	154 1056 0	0 893 120	0 0 0	277 1061 354
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	154 1056 0	0 893 120	0 0 0	277 1061 354
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	154 1056 0	0 893 120	0 0 0	277 1061 354

Saturation Flow Module:

Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.90 0.93 1.00	1.00 0.91 0.91	1.00 1.00 1.00	0.87 0.87 0.83
Lanes:	2.00 2.00 0.00	0.00 1.76 0.24	0.00 0.00 0.00	1.00 3.00 1.00
Final Sat.:	3432 3538 0	0 3061 413	0 0 0	1652 4956 1583

Capacity Analysis Module:

Vol/Sat:	0.04 0.30 0.00	0.00 0.29 0.29	0.00 0.00 0.00	0.17 0.21 0.22
Crit Moves:	****	****		****
Green/Cycle:	0.07 0.52 0.00	0.00 0.45 0.45	0.00 0.00 0.00	0.35 0.35 0.35
Volume/Cap:	0.65 0.57 0.00	0.00 0.65 0.65	0.00 0.00 0.00	0.48 0.62 0.65
Delay/Veh:	46.9 15.2 0.0	0.0 20.1 20.1	0.0 0.0 0.0	23.2 25.0 27.5
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	46.9 15.2 0.0	0.0 20.1 20.1	0.0 0.0 0.0	23.2 25.0 27.5
LOS by Move:	D B A	A C C	A A A	C C C
HCM2kAvgQ:	2 10 0	0 12 12	0 0 0	7 10 9

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #8 Grand Ave / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.333
 Loss Time (sec): 16 Average Delay (sec/veh): 26.0
 Optimal Cycle: 39 Level Of Service: C

Street Name:	Quince St			Grand Ave		
	North Bound	South Bound		East Bound	West Bound	
Approach:	L - T - R	L - T - R		L - T - R	L - T - R	
Control:	Protected			Protected		
Rights:	Include			Include		
Min. Green:	0 5 5	5 5 0		5 5 5	5 0 5	
Y+R:	4.0 5.0 5.0	4.5 5.0 4.0		4.5 4.5 4.5	4.5 4.0 4.5	
Lanes:	0 0 1 1 0	1 0 2 0 0		1 0 0 1 0	1 0 0 0 1	

Volume Module:

Base Vol:	0 151 7	65 392 0		96 305 1	13 0 30	
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00		1.00 1.00 1.00	1.00 1.00 1.00	
Initial Bse:	0 151 7	65 392 0		96 305 1	13 0 30	
Added Vol:	0 0 0	0 0 0		0 0 0	0 0 0	
Cumulative:	0 2 0	0 2 0		0 5 0	0 0 0	
Initial Fut:	0 153 7	65 394 0		96 310 1	13 0 30	
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00		1.00 1.00 1.00	1.00 1.00 1.00	
PHF Adj:	0.92 0.92 0.92	0.92 0.92 0.92		0.92 0.92 0.92	0.92 0.92 0.92	
PHF Volume:	0 167 8	71 429 0		105 337 1	14 0 33	
Reduct Vol:	0 0 0	0 0 0		0 0 0	0 0 0	
Reduced Vol:	0 167 8	71 429 0		105 337 1	14 0 33	
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00		1.00 1.00 1.00	1.00 1.00 1.00	
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00		1.00 1.00 1.00	1.00 1.00 1.00	
FinalVolume:	0 167 8	71 429 0		105 337 1	14 0 33	

Saturation Flow Module:

Sat/Lane:	1900 1900 1900	1900 1900 1900		1900 1900 1900	1900 1900 1900	
Adjustment:	1.00 0.94 0.94	0.95 0.95 1.00		0.95 1.00 1.00	0.95 1.00 0.85	
Lanes:	0.00 1.91 0.09	1.00 2.00 0.00		1.00 0.99 0.01	1.00 0.00 1.00	
Final Sat.:	0 3428 157	1805 3610 0		1805 1894 6	1805 0 1615	

Capacity Analysis Module:

Vol/Sat:	0.00 0.05 0.05	0.04 0.12 0.00		0.06 0.18 0.18	0.01 0.00 0.02	
Crit Moves:	****	****		****	****	
Green/Cycle:	0.00 0.14 0.14	0.11 0.25 0.00		0.29 0.51 0.51	0.06 0.00 0.06	
Volume/Cap:	0.00 0.35 0.35	0.35 0.47 0.00		0.20 0.35 0.35	0.14 0.00 0.36	
Delay/Veh:	0.0 35.4 35.4	37.9 28.9 0.0		24.2 13.2 13.2	41.1 0.0 43.5	
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00		1.00 1.00 1.00	1.00 1.00 1.00	
AdjDel/Veh:	0.0 35.4 35.4	37.9 28.9 0.0		24.2 13.2 13.2	41.1 0.0 43.5	
LOS by Move:	A D D	D C A		C B B	D A D	
HCM2kAvgQ:	0 2 2	2 5 0		2 6 6	0 0 1	

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Grand Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.592
Loss Time (sec): 12 Average Delay (sec/veh): 20.7
Optimal Cycle: 47 Level Of Service: C

Street Name:	Centre City Pkwy			Grand Ave		
	North Bound	South Bound	East Bound	West Bound	West Bound	West Bound
Approach:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected			Permitted		
Rights:	Include			Include		
Min. Green:	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5	5 5 5
Y+R:	4.5 5.5 5.5	4.5 5.5 5.5	5.0 5.0 5.0	5.0 5.0 5.0	5.0 5.0 5.0	5.0 5.0 5.0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1	1 0 1 0 1	1 0 1 0 1	1 0 1 0 1

Volume Module:

Base Vol:	11 894 95	96 839 20	71 296 15	65 23 152
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	11 894 95	96 839 20	71 296 15	65 23 152
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Cumulative:	0 34 0	2 17 0	3 2 0	0 0 6
Initial Fut:	11 928 95	98 856 20	74 298 15	65 23 158
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.91 0.91 0.91	0.91 0.91 0.91	0.91 0.91 0.91	0.91 0.91 0.91
PHF Volume:	12 1018 104	107 939 22	81 327 16	71 25 173
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	12 1018 104	107 939 22	81 327 16	71 25 173
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	12 1018 104	107 939 22	81 327 16	71 25 173

Saturation Flow Module:

Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.95 0.95 0.85	0.95 0.95 0.85	0.75 1.00 0.85	0.34 1.00 0.85
Lanes:	1.00 2.00 1.00	1.00 2.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Sat.:	1805 3610 1615	1805 3610 1615	1421 1900 1615	648 1900 1615

Capacity Analysis Module:

Vol/Sat:	0.01 0.28 0.06	0.06 0.26 0.01	0.06 0.17 0.01	0.11 0.01 0.11
Crit Moves:	****	****	****	****
Green/Cycle:	0.10 0.48 0.48	0.10 0.47 0.47	0.29 0.29 0.29	0.29 0.29 0.29
Volume/Cap:	0.07 0.59 0.14	0.59 0.55 0.03	0.20 0.59 0.04	0.38 0.05 0.37
Delay/Veh:	36.7 17.8 13.3	43.9 17.1 12.6	24.3 29.1 22.9	26.7 23.0 25.9
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	36.7 17.8 13.3	43.9 17.1 12.6	24.3 29.1 22.9	26.7 23.0 25.9
LOS by Move:	D B B	D B B	C C C	C C C
HCM2kAvgQ:	0 10 2	3 9 0	2 8 0	2 1 4

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Second Ave / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.423
Loss Time (sec): 12 Average Delay (sec/veh): 19.9
Optimal Cycle: 36 Level Of Service: B

Street Name:	Quince St			Second Ave																
Approach:	North Bound		South Bound	East Bound		West Bound														
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Protected			Protected			Split Phase			Split Phase										
Rights:	Include			Include			Include			Include										
Min. Green:	0	5	5	5	5	0	5	5	5	0	0	0								
Y+R:	4.0	5.0	5.0	4.5	5.0	4.0	5.5	5.5	5.5	4.0	4.0	4.0								
Lanes:	0	0	1	1	0	1	0	2	0	0	0	1	2	1	0	0	0	0	0	0

Volume Module:

Base Vol:	0	157	59	160	252	0	2	1066	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	157	59	160	252	0	2	1066	42	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative:	0	2	0	0	2	0	0	57	0	0	0	0
Initial Fut:	0	159	59	160	254	0	2	1123	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	181	67	182	290	0	2	1281	48	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	181	67	182	290	0	2	1281	48	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	181	67	182	290	0	2	1281	48	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	0.95	0.95	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Lanes:	0.00	1.46	0.54	1.00	2.00	0.00	0.01	3.85	0.14	0.00	0.00	0.00
Final Sat.:	0	2525	937	1805	3610	0	12	6622	248	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.07	0.10	0.08	0.00	0.19	0.19	0.19	0.00	0.00	0.00
Crit Moves:	****			****			****					
Green/Cycle:	0.00	0.17	0.17	0.24	0.41	0.00	0.46	0.46	0.46	0.00	0.00	0.00
Volume/Cap:	0.00	0.42	0.42	0.42	0.20	0.00	0.42	0.42	0.42	0.00	0.00	0.00
Delay/Veh:	0.0	33.9	33.9	29.6	17.1	0.0	16.5	16.5	16.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	33.9	33.9	29.6	17.1	0.0	16.5	16.5	16.5	0.0	0.0	0.0
LOS by Move:	A	C	C	C	B	A	B	B	B	A	A	A
HCM2kAvgQ:	0	4	4	4	3	0	7	7	7	0	0	0

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Second Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.675
Loss Time (sec): 12 Average Delay (sec/veh): 22.9
Optimal Cycle: 55 Level Of Service: C

Street Name:	Centre City Pkwy			Second Ave		
	North Bound	South Bound	East Bound	West Bound	West Bound	West Bound
Approach:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected			Split Phase		
Rights:	Include			Include		
Min. Green:	0 5 5	5 5 0	5 5 5	0 0 0	0 0 0	0 0 0
Y+R:	0.0 5.5 5.5	4.5 5.5 0.0	5.0 5.0 5.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0
Lanes:	0 0 2 0 1	2 0 2 0 0	1 1 1 1 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0

Volume Module:

Base Vol:	0 809 212	168 755 0	88 1079 106	0 0 0	0 0 0
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	0 809 212	168 755 0	88 1079 106	0 0 0	0 0 0
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Cumulative:	0 15 1	7 10 0	18 33 6	0 0 0	0 0 0
Initial Fut:	0 824 213	175 765 0	106 1112 112	0 0 0	0 0 0
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.91 0.91 0.91	0.91 0.91 0.91	0.91 0.91 0.91	0.91 0.91 0.91	0.91 0.91 0.91
PHF Volume:	0 908 235	193 843 0	117 1226 123	0 0 0	0 0 0
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	0 908 235	193 843 0	117 1226 123	0 0 0	0 0 0
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	0 908 235	193 843 0	117 1226 123	0 0 0	0 0 0

Saturation Flow Module:

Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	1.00 0.93 0.83	0.90 0.93 1.00	0.87 0.87 0.87	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.00 2.00 1.00	2.00 2.00 0.00	1.00 2.73 0.27	0.00 0.00 0.00	0.00 0.00 0.00
Final Sat.:	0 3538 1583	3432 3538 0	1652 4503 454	0 0 0	0 0 0

Capacity Analysis Module:

Vol/Sat:	0.00 0.26 0.15	0.06 0.24 0.00	0.07 0.27 0.27	0.00 0.00 0.00	0.00 0.00 0.00
Crit Moves:	****	****	****	****	****
Green/Cycle:	0.00 0.38 0.38	0.08 0.46 0.00	0.40 0.40 0.40	0.00 0.00 0.00	0.00 0.00 0.00
Volume/Cap:	0.00 0.68 0.39	0.68 0.51 0.00	0.18 0.68 0.68	0.00 0.00 0.00	0.00 0.00 0.00
Delay/Veh:	0.0 24.6 20.7	46.3 17.3 0.0	17.3 22.9 22.9	0.0 0.0 0.0	0.0 0.0 0.0
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	0.0 24.6 20.7	46.3 17.3 0.0	17.3 22.9 22.9	0.0 0.0 0.0	0.0 0.0 0.0
LOS by Move:	A C C	D B A	B C C	A A A	A A A
HCM2kAvgQ:	0 12 5	3 8 0	2 11 11	0 0 0	0 0 0

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative Without Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Hale Ave / North Tulip St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.866
Loss Time (sec): 12 Average Delay (sec/veh): 25.6
Optimal Cycle: 74 Level Of Service: C

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Split Phase), Rights (Include), and values for Min. Green, Y+R, and Lanes.

Volume Module:

Table with 10 columns for various volume and adjustment factors (Base Vol, Growth Adj, Initial Bse, Added Vol, Cumulative, Initial Fut, User Adj, PHF Adj, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume).

Saturation Flow Module:

Table with 10 columns for saturation flow factors (Sat/Lane, Adjustment, Lanes, Final Sat).

Capacity Analysis Module:

Table with 10 columns for capacity analysis factors (Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ).

Note: Queue reported is the number of cars per lane.

Existing Plus Cumulative Conditions With Project

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Scenario Report

Scenario: excp am
 Command: excp am
 Volume: exc am
 Geometry: ex am
 Impact Fee: Default Impact Fee
 Trip Generation: am
 Trip Distribution: project
 Paths: Default Path
 Routes: Default Route
 Configuration: excp am

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	LOS	Del/Veh	LOS	Del/Veh	
# 1 Valley Pkwy / I-15 Southbound	D	47.7 0.778	D	47.7 0.781	+ 0.001 D/V
# 2 Valley Pkwy / I-15 Northbound	C	31.1 0.707	C	32.4 0.757	+ 1.255 D/V
# 3 Valley Pkwy / La Terraza Blvd-	B	17.8 0.332	B	19.8 0.373	+ 1.987 D/V
# 4 Valley Pkwy / North Tulip St	C	28.0 0.406	C	27.6 0.430	-0.422 D/V
# 5 Valley Pkwy / Gateway Dwy	A	2.1 0.234	A	2.1 0.252	+ 0.014 D/V
# 6 Valley Pkwy / Quince St	B	19.4 0.522	B	19.4 0.540	-0.063 D/V
# 7 Valley Pkwy / Centre City Pkwy	C	22.7 0.682	C	23.2 0.710	+ 0.544 D/V
# 8 Grand Ave / Quince St	B	17.8 0.212	B	17.9 0.218	+ 0.037 D/V
# 9 Grand Ave / Centre City Pkwy	B	14.4 0.506	B	14.5 0.513	+ 0.118 D/V
# 10 Second Ave / Quince St	B	14.5 0.273	B	14.5 0.281	-0.052 D/V
# 11 Second Ave / Centre City Pkwy	B	18.0 0.540	B	18.4 0.551	+ 0.335 D/V
# 12 Hale Ave / North Tulip St	B	14.7 0.506	B	14.8 0.513	+ 0.115 D/V
# 13 Valley Pkwy / Project Driveway	A	7.2 0.000	B	13.0 0.082	+ 5.802 D/V
# 14 West Grand Ave / Project Drive	A	7.2 0.000	B	10.4 0.031	+ 3.180 D/V

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #1 Valley Pkwy / I-15 Southbound Ramps

Cycle (sec): 115 Critical Vol./Cap.(X): 0.781
 Loss Time (sec): 16 Average Delay (sec/veh): 47.7
 Optimal Cycle: 87 Level Of Service: D

Street Name:	I-15 Southbound Ramps					Valley Pkwy										
	North Bound		South Bound			East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Split Phase		Split Phase			Protected		Protected								
Rights:	Include		Include			Include		Include								
Min. Green:	12	12	12	5	5	5	5	8	8	10	7	7				
Y+R:	5.1	5.1	5.1	5.1	5.1	5.1	4.7	5.8	5.8	4.7	5.8	5.8				
Lanes:	1	0	1	0	1	0	2	0	3	0	1	2	0	3	1	1

Volume Module:

Base Vol:	29	28	75	228	69	645	68	696	54	76	1030	212
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	28	75	228	69	645	68	696	54	76	1030	212
Added Vol:	0	0	1	5	0	0	0	2	0	2	5	14
Cumulative:	0	0	2	34	0	0	0	14	0	2	7	25
Initial Fut:	29	28	78	267	69	645	68	712	54	80	1042	251
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	33	32	89	304	79	736	78	812	62	91	1188	286
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	32	89	304	79	736	78	812	62	91	1188	286
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	32	89	304	79	736	78	812	62	91	1188	286

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.83	0.83	0.83	0.90	0.89	0.83	0.90	0.87	0.87
Lanes:	1.00	1.00	1.00	0.79	0.21	1.00	2.00	3.00	1.00	2.00	4.00	1.00
Final Sat.:	1769	1862	1583	1250	323	1573	3432	5083	1583	3432	6581	1645

Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.06	0.24	0.24	0.47	0.02	0.16	0.04	0.03	0.18	0.17
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.10	0.10	0.10	0.50	0.50	0.50	0.05	0.17	0.17	0.09	0.21	0.21
Volume/Cap:	0.18	0.16	0.54	0.49	0.49	0.94	0.45	0.94	0.23	0.31	0.87	0.84
Delay/Veh:	47.5	47.3	52.4	19.2	19.2	40.7	55.0	64.3	41.6	49.8	49.3	47.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.5	47.3	52.4	19.2	19.2	40.7	55.0	64.3	41.6	49.8	49.3	47.5
LOS by Move:	D	D	D	B	B	D	D	E	D	D	D	D
HCM2kAvgQ:	1	1	4	9	9	30	2	14	2	1	11	11

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #2 Valley Pkwy / I-15 Northbound Ramps

 Cycle (sec): 115 Critical Vol./Cap.(X): 0.757
 Loss Time (sec): 12 Average Delay (sec/veh): 32.4
 Optimal Cycle: 71 Level Of Service: C

Street Name:	I-15 Northbound Ramps						Valley Pkwy										
	North Bound			South Bound			East Bound			West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Split Phase			Split Phase			Protected			Protected							
Rights:	Include			Include			Include			Include							
Min. Green:	5	5	5	0	0	0	5	6	0	0	5	5					
Y+R:	5.1	5.1	5.1	0.0	0.0	0.0	4.7	5.8	0.0	0.0	5.8	5.8					
Lanes:	0	1	0	0	1	0	0	0	0	2	0	3	0	0	3	0	1

Volume Module:

Base Vol:	344	12	469	0	0	0	248	749	0	0	975	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	344	12	469	0	0	0	248	749	0	0	975	151
Added Vol:	0	0	6	0	0	0	0	8	0	0	21	12
Cumulative:	0	0	39	0	0	0	0	49	0	0	34	10
Initial Fut:	344	12	514	0	0	0	248	806	0	0	1030	173
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	389	14	581	0	0	0	280	911	0	0	1165	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	389	14	581	0	0	0	280	911	0	0	1165	196
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	389	14	581	0	0	0	280	911	0	0	1165	196

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.83	1.00	1.00	1.00	0.90	0.89	1.00	1.00	0.89	0.83
Lanes:	0.97	0.03	1.00	0.00	0.00	0.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	1693	59	1583	0	0	0	3432	5083	0	0	5083	1583

Capacity Analysis Module:

Vol/Sat:	0.23	0.23	0.37	0.00	0.00	0.00	0.08	0.18	0.00	0.00	0.23	0.12
Crit Moves:	****			****			****			****		
Green/Cycle:	0.49	0.49	0.49	0.00	0.00	0.00	0.11	0.41	0.00	0.00	0.30	0.30
Volume/Cap:	0.47	0.47	0.76	0.00	0.00	0.00	0.76	0.44	0.00	0.00	0.76	0.41
Delay/Veh:	20.2	20.2	28.4	0.0	0.0	0.0	58.5	24.5	0.0	0.0	38.5	32.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.2	20.2	28.4	0.0	0.0	0.0	58.5	24.5	0.0	0.0	38.5	32.5
LOS by Move:	C	C	C	A	A	A	E	C	A	A	D	C
HCM2kAvgQ:	9	9	18	0	0	0	5	8	0	0	14	5

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #3 Valley Pkwy / La Terraza Blvd-Plaza Las Palmas Dwy

Cycle (sec): 115 Critical Vol./Cap.(X): 0.373
 Loss Time (sec): 12 Average Delay (sec/veh): 19.8
 Optimal Cycle: 34 Level Of Service: B

Street Name: La Terraza Blvd-Plaza Las Palmas Valley Pkwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted			Permitted			Protected			Protected						
Rights:	Include			Include			Include			Include						
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5				
Y+R:	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.5	5.5	4.5	5.5	5.5				
Lanes:	1	0	1	0	1	0	1	0	3	0	1	2	0	3	1	0

Volume Module:

Base Vol:	79	23	51	22	22	57	77	940	112	91	1004	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	23	51	22	22	57	77	940	112	91	1004	47
Added Vol:	0	0	0	0	0	0	0	13	0	0	33	0
Cumulative:	21	0	12	0	0	0	0	10	78	46	23	0
Initial Fut:	100	23	63	22	22	57	77	963	190	137	1060	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	111	25	70	24	24	63	85	1066	210	152	1173	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	25	70	24	24	63	85	1066	210	152	1173	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	111	25	70	24	24	63	85	1066	210	152	1173	52

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	1.00	0.85	0.75	0.89	0.89	0.95	0.91	0.85	0.92	0.90	0.90
Lanes:	1.00	1.00	1.00	1.00	0.28	0.72	1.00	3.00	1.00	2.00	3.83	0.17
Final Sat.:	1302	1900	1615	1421	472	1223	1805	5187	1615	3502	6583	292

Capacity Analysis Module:

Vol/Sat:	0.09	0.01	0.04	0.02	0.05	0.05	0.05	0.21	0.13	0.04	0.18	0.18
Crit Moves:	****							****				
Green/Cycle:	0.23	0.23	0.23	0.23	0.23	0.23	0.14	0.55	0.55	0.12	0.53	0.53
Volume/Cap:	0.37	0.06	0.19	0.08	0.23	0.23	0.34	0.37	0.24	0.37	0.34	0.34
Delay/Veh:	38.2	34.8	36.1	35.0	36.4	36.4	45.5	14.7	13.4	47.5	15.7	15.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.2	34.8	36.1	35.0	36.4	36.4	45.5	14.7	13.4	47.5	15.7	15.7
LOS by Move:	D	C	D	C	D	D	D	B	B	D	B	B
HCM2kAvgQ:	4	1	2	1	3	3	3	7	4	2	7	7

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #4 Valley Pkwy / North Tulip St

 Cycle (sec): 115 Critical Vol./Cap.(X): 0.430
 Loss Time (sec): 16 Average Delay (sec/veh): 27.6
 Optimal Cycle: 45 Level Of Service: C

Street Name:	North Tulip St						Valley Pkwy					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Y+R:	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.5	5.5	4.5	5.5	5.5
Lanes:	0	0	1	1	0	0	2	0	2	1	0	4

Volume Module:

Base Vol:	4	4	3	59	9	169	207	776	2	10	946	222
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	4	3	59	9	169	207	776	2	10	946	222
Added Vol:	0	0	0	1	0	0	0	13	0	0	33	3
Cumulative:	0	0	0	1	0	7	2	20	0	0	62	1
Initial Fut:	4	4	3	61	9	176	209	809	2	10	1041	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	5	5	3	69	10	201	238	922	2	11	1186	257
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	5	3	69	10	201	238	922	2	11	1186	257
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	5	3	69	10	201	238	922	2	11	1186	257

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.96	0.96	0.85	0.92	0.91	0.91	0.95	0.91	0.85
Lanes:	0.37	0.36	0.27	1.74	0.26	1.00	2.00	2.99	0.01	1.00	4.00	1.00
Final Sat.:	653	653	490	3172	468	1615	3502	5174	13	1805	6916	1615

Capacity Analysis Module:

Vol/Sat:	0.01	0.01	0.01	0.02	0.02	0.12	0.07	0.18	0.18	0.01	0.17	0.16
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.04	0.04	0.04	0.28	0.28	0.28	0.15	0.43	0.43	0.11	0.39	0.39
Volume/Cap:	0.16	0.16	0.16	0.08	0.08	0.44	0.44	0.41	0.41	0.06	0.44	0.41
Delay/Veh:	53.9	53.9	53.9	30.6	30.6	34.8	44.9	22.6	22.6	46.4	26.3	26.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	53.9	53.9	30.6	30.6	34.8	44.9	22.6	22.6	46.4	26.3	26.3
LOS by Move:	D	D	D	C	C	C	D	C	C	D	C	C
HCM2kAvgQ:	1	1	1	1	1	6	4	8	8	0	9	7

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Valley Pkwy / Gateway Dwy

Cycle (sec): 60 Critical Vol./Cap.(X): 0.252
Loss Time (sec): 8 Average Delay (sec/veh): 2.1
Optimal Cycle: 22 Level Of Service: A

Street Name:	Gateway Dwy			Valley Pkwy		
	North Bound	South Bound	East Bound	West Bound	West Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include	Include	Include
Min. Green:	0 5 0	0 0 5	0 0 0	0 0 0	0 0 5	0 5 5
Y+R:	4.0 4.5 4.0	4.0 4.0 4.5	4.0 4.0 4.0	4.0 4.0 4.0	4.0 5.5 5.5	4.0 5.5 5.5
Lanes:	0 0 1 0 0	0 0 0 0 1	0 0 0 0 0	0 0 0 0 0	0 0 3 1 0	0 0 3 1 0

Volume Module:

Base Vol:	0	10	0	0	0	7	0	0	0	0	1228	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	10	0	0	0	7	0	0	0	0	1228	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	36	0
Cumulative:	0	0	0	0	0	0	0	0	0	0	63	0
Initial Fut:	0	10	0	0	0	7	0	0	0	0	1327	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	11	0	0	0	8	0	0	0	0	1446	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	11	0	0	0	8	0	0	0	0	1446	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	11	0	0	0	8	0	0	0	0	1446	20

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.87	1.00	1.00	1.00	1.00	0.91	0.91
Lanes:	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	3.95	0.05
Final Sat.:	0	1900	0	0	0	1644	0	0	0	0	6810	92

Capacity Analysis Module:

Vol/Sat:	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.21
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.00	0.08	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.78	0.78
Volume/Cap:	0.00	0.07	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.27	0.27
Delay/Veh:	0.0	25.5	0.0	0.0	0.0	25.5	0.0	0.0	0.0	0.0	1.8	1.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	25.5	0.0	0.0	0.0	25.5	0.0	0.0	0.0	0.0	1.8	1.8
LOS by Move:	A	C	A	A	A	C	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	2	2

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #6 Valley Pkwy / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.540
 Loss Time (sec): 12 Average Delay (sec/veh): 19.4
 Optimal Cycle: 43 Level Of Service: B

Street Name:	Quince St			Valley Pkwy		
	North Bound	South Bound	East Bound	West Bound		
Movement:	L - T - R	L - T - R	L - T - R	L - T - R		
Control:	Protected	Protected	Split Phase	Split Phase		
Rights:	Include	Include	Include	Include		
Min. Green:	5 5 0	0 5 5	0 0 0	5 5 5		
Y+R:	4.5 5.0 4.0	4.0 5.0 5.0	4.0 4.0 4.0	5.5 5.5 5.5		
Lanes:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 1 2 0 1		

Volume Module:

Base Vol:	67 181 0	0 303 163	0 0 0	20 1169 90
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	67 181 0	0 303 163	0 0 0	20 1169 90
Added Vol:	0 2 0	0 0 1	0 0 0	0 7 0
Cumulative:	0 3 0	0 2 0	0 0 0	0 63 0
Initial Fut:	67 186 0	0 305 164	0 0 0	20 1239 90
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.89 0.89 0.89	0.89 0.89 0.89	0.89 0.89 0.89	0.89 0.89 0.89
PHF Volume:	75 209 0	0 342 184	0 0 0	22 1390 101
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	75 209 0	0 342 184	0 0 0	22 1390 101
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	75 209 0	0 342 184	0 0 0	22 1390 101

Saturation Flow Module:

Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.95 0.95 1.00	1.00 0.90 0.90	1.00 1.00 1.00	0.91 0.91 0.85
Lanes:	1.00 2.00 0.00	0.00 1.30 0.70	0.00 0.00 0.00	0.05 2.95 1.00
Final Sat.:	1805 3610 0	0 2226 1197	0 0 0	82 5094 1615

Capacity Analysis Module:

Vol/Sat:	0.04 0.06 0.00	0.00 0.15 0.15	0.00 0.00 0.00	0.27 0.27 0.06
Crit Moves:	****	****		****
Green/Cycle:	0.08 0.36 0.00	0.00 0.28 0.28	0.00 0.00 0.00	0.51 0.51 0.51
Volume/Cap:	0.54 0.16 0.00	0.00 0.54 0.54	0.00 0.00 0.00	0.54 0.54 0.12
Delay/Veh:	44.2 19.5 0.0	0.0 27.8 27.8	0.0 0.0 0.0	15.4 15.4 11.8
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	44.2 19.5 0.0	0.0 27.8 27.8	0.0 0.0 0.0	15.4 15.4 11.8
LOS by Move:	D B A	A C C	A A A	B B B
HCM2kAvgQ:	2 2 0	0 7 7	0 0 0	9 9 1

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #7 Valley Pkwy / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.710
 Loss Time (sec): 12 Average Delay (sec/veh): 23.2
 Optimal Cycle: 59 Level Of Service: C

Street Name:	Centre City Pkwy				Valley Pkwy			
	North Bound		South Bound		East Bound		West Bound	
Movement:	L	T - R	L	T - R	L	T - R	L	T - R
Control:	Protected		Protected		Split Phase		Split Phase	
Rights:	Include		Include		Include		Include	
Min. Green:	5	5	0	0	5	5	0	0
Y+R:	4.5	5.5	0.0	0.0	5.5	5.5	0.0	0.0
Lanes:	2	0	2	0	0	0	1	1

Volume Module:

Base Vol:	143	612	0	0	909	85	0	0	0	300	1035	214
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	612	0	0	909	85	0	0	0	300	1035	214
Added Vol:	2	3	0	0	0	1	0	0	0	0	4	0
Cumulative:	8	16	0	0	17	21	0	0	0	0	34	6
Initial Fut:	153	631	0	0	926	107	0	0	0	300	1073	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	169	696	0	0	1021	118	0	0	0	331	1183	242
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	696	0	0	1021	118	0	0	0	331	1183	242
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	696	0	0	1021	118	0	0	0	331	1183	242

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	1.00	1.00	0.92	0.92	1.00	1.00	1.00	0.87	0.87	0.83
Lanes:	2.00	2.00	0.00	0.00	1.79	0.21	0.00	0.00	0.00	1.00	3.00	1.00
Final Sat.:	3432	3538	0	0	3121	361	0	0	0	1647	4941	1583

Capacity Analysis Module:

Vol/Sat:	0.05	0.20	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.20	0.24	0.15
Crit Moves:	****				****					****		
Green/Cycle:	0.07	0.53	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.34	0.34	0.34
Volume/Cap:	0.71	0.37	0.00	0.00	0.71	0.71	0.00	0.00	0.00	0.60	0.71	0.45
Delay/Veh:	50.6	12.5	0.0	0.0	21.0	21.0	0.0	0.0	0.0	25.1	27.1	24.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.6	12.5	0.0	0.0	21.0	21.0	0.0	0.0	0.0	25.1	27.1	24.0
LOS by Move:	D	B	A	A	C	C	A	A	A	C	C	C
HCM2kAvgQ:	3	6	0	0	14	14	0	0	0	9	12	6

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Grand Ave / Quince St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.218
Loss Time (sec): 16 Average Delay (sec/veh): 17.9
Optimal Cycle: 36 Level Of Service: B

Street Name: Quince St Grand Ave
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 5 5 5 5 0 5 5 5 5 0 5
Y+R: 4.0 5.0 5.0 4.5 5.0 4.0 4.5 4.5 4.5 4.5 4.0 4.5
Lanes: 0 0 1 1 0 1 0 2 0 0 1 0 0 0 1

Volume Module:
Base Vol: 0 160 2 10 303 0 75 167 0 4 0 20
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 160 2 10 303 0 75 167 0 4 0 20
Added Vol: 0 0 0 0 0 0 2 3 0 0 0 0
Cumulative: 0 3 0 0 2 0 0 2 0 0 0 0
Initial Fut: 0 163 2 10 305 0 77 172 0 4 0 20
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume: 0 181 2 11 338 0 85 191 0 4 0 22
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 181 2 11 338 0 85 191 0 4 0 22
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 181 2 11 338 0 85 191 0 4 0 22

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.95 0.95 0.95 0.95 1.00 0.95 1.00 1.00 0.95 1.00 0.85
Lanes: 0.00 1.98 0.02 1.00 2.00 0.00 1.00 1.00 0.00 1.00 0.00 1.00
Final Sat.: 0 3559 44 1805 3610 0 1805 1900 0 1805 0 1615

Capacity Analysis Module:
Vol/Sat: 0.00 0.05 0.05 0.01 0.09 0.00 0.05 0.10 0.00 0.00 0.00 0.01
Crit Moves: **** *
Green/Cycle: 0.00 0.19 0.19 0.08 0.27 0.00 0.23 0.38 0.00 0.08 0.00 0.08
Volume/Cap: 0.00 0.27 0.27 0.07 0.34 0.00 0.21 0.27 0.00 0.03 0.00 0.16
Delay/Veh: 0.0 20.9 20.9 25.6 17.7 0.0 18.9 13.2 0.0 25.4 0.0 26.1
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 20.9 20.9 25.6 17.7 0.0 18.9 13.2 0.0 25.4 0.0 26.1
LOS by Move: A C C C B A B B A C A C
HCM2kAvgQ: 0 1 1 0 3 0 1 3 0 0 0 0

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Grand Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.513
Loss Time (sec): 12 Average Delay (sec/veh): 14.5
Optimal Cycle: 41 Level Of Service: B

Street Name:	Centre City Pkwy				Grand Ave			
	North Bound		South Bound		East Bound		West Bound	
Movement:	L	T - R	L	T - R	L	T - R	L	T - R
Control:	Protected		Protected		Permitted		Permitted	
Rights:	Include		Include		Include		Include	
Min. Green:	5	5	5	5	5	5	5	5
Y+R:	4.5	5.5	5.5	4.5	5.0	5.0	5.0	5.0
Lanes:	1	0 2 0 1	1	0 2 0 1	1	0 1 0 1	1	0 1 0 1

Volume Module:

Base Vol:	3	657	55	73	1179	12	35	143	4	49	21	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	657	55	73	1179	12	35	143	4	49	21	121
Added Vol:	0	3	1	0	0	0	2	1	0	0	0	1
Cumulative:	0	21	0	3	14	0	1	1	0	0	0	3
Initial Fut:	3	681	56	76	1193	12	38	145	4	49	21	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	3	740	61	83	1296	13	41	158	4	53	23	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	740	61	83	1296	13	41	158	4	53	23	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	740	61	83	1296	13	41	158	4	53	23	136

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.75	1.00	0.85	0.49	1.00	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3610	1615	1805	3610	1615	1423	1900	1615	939	1900	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.04	0.05	0.36	0.01	0.03	0.08	0.00	0.06	0.01	0.08
Crit Moves:	****			****								****
Green/Cycle:	0.06	0.56	0.56	0.15	0.66	0.66	0.15	0.15	0.15	0.15	0.15	0.15
Volume/Cap:	0.03	0.37	0.07	0.30	0.55	0.01	0.19	0.54	0.02	0.37	0.08	0.55
Delay/Veh:	40.3	11.0	9.1	34.5	8.5	5.3	33.6	37.1	32.3	35.7	32.7	37.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.3	11.0	9.1	34.5	8.5	5.3	33.6	37.1	32.3	35.7	32.7	37.7
LOS by Move:	D	B	A	C	A	A	C	D	C	D	C	D
HCM2kAvgQ:	0	6	1	2	10	0	1	4	0	2	1	4

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Second Ave / Quince St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.281
Loss Time (sec): 12 Average Delay (sec/veh): 14.5
Optimal Cycle: 29 Level Of Service: B

Street Name:	Quince St				Second Ave											
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected		Protected		Split Phase		Split Phase									
Rights:	Include		Include		Include		Include									
Min. Green:	0	5	5	5	5	0	5	5	5	0	0	0				
Y+R:	4.0	5.0	5.0	4.5	5.0	4.0	5.5	5.5	5.5	4.0	4.0	4.0				
Lanes:	0	0	1	1	0	0	2	0	0	1	2	1	0	0	0	0

Volume Module:

Base Vol:	0	172	18	91	227	0	1	539	22	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	172	18	91	227	0	1	539	22	0	0	0
Added Vol:	0	0	0	0	0	0	0	14	0	0	0	0
Cumulative:	0	3	0	0	2	0	0	19	0	0	0	0
Initial Fut:	0	175	18	91	229	0	1	572	22	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	206	21	107	269	0	1	673	26	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	206	21	107	269	0	1	673	26	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	206	21	107	269	0	1	673	26	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	0.95	1.00	0.90	0.90	0.90	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	1.00	2.00	0.00	0.01	3.84	0.15	0.00	0.00	0.00
Final Sat.:	0	3227	332	1805	3610	0	12	6609	254	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.06	0.06	0.07	0.00	0.10	0.10	0.10	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.23	0.23	0.21	0.44	0.00	0.36	0.36	0.36	0.00	0.00	0.00
Volume/Cap:	0.00	0.28	0.28	0.28	0.17	0.00	0.28	0.28	0.28	0.00	0.00	0.00
Delay/Veh:	0.0	19.3	19.3	20.3	10.3	0.0	13.7	13.7	13.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	19.3	19.3	20.3	10.3	0.0	13.7	13.7	13.7	0.0	0.0	0.0
LOS by Move:	A	B	B	C	B	A	B	B	B	A	A	A
HCM2kAvgQ:	0	2	2	2	2	0	3	3	3	0	0	0

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #11 Second Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.551
 Loss Time (sec): 12 Average Delay (sec/veh): 18.4
 Optimal Cycle: 44 Level Of Service: B

Street Name: Centre City Pkwy Second Ave
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Protected			Protected			Split Phase			Split Phase							
Rights:	Include			Include			Include			Include							
Min. Green:	0	5	5	5	5	0	5	5	5	0	0	0					
Y+R:	0.0	5.5	5.5	4.5	5.5	0.0	5.0	5.0	5.0	0.0	0.0	0.0					
Lanes:	0	0	2	0	1	2	0	2	0	0	1	1	1	0	0	0	0

Volume Module:
 Base Vol: 0 651 186 139 1018 0 27 587 39 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 651 186 139 1018 0 27 587 39 0 0 0
 Added Vol: 0 1 0 0 0 0 3 9 3 0 0 0
 Cumulative: 0 16 0 6 9 0 5 13 2 0 0 0
 Initial Fut: 0 668 186 145 1027 0 35 609 44 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88
 PHF Volume: 0 758 211 164 1165 0 40 691 50 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 758 211 164 1165 0 40 691 50 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 758 211 164 1165 0 40 691 50 0 0 0

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 1.00 0.93 0.83 0.90 0.93 1.00 0.88 0.88 0.88 1.00 1.00 1.00
 Lanes: 0.00 2.00 1.00 2.00 2.00 0.00 1.00 2.80 0.20 0.00 0.00 0.00
 Final Sat.: 0 3538 1583 3432 3538 0 1664 4656 336 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.00 0.21 0.13 0.05 0.33 0.00 0.02 0.15 0.15 0.00 0.00 0.00
 Crit Moves: **** *
 Green/Cycle: 0.00 0.47 0.47 0.12 0.60 0.00 0.27 0.27 0.27 0.00 0.00 0.00
 Volume/Cap: 0.00 0.45 0.28 0.39 0.55 0.00 0.09 0.55 0.55 0.00 0.00 0.00
 Delay/Veh: 0.0 16.0 14.5 36.9 11.2 0.0 24.6 28.7 28.7 0.0 0.0 0.0
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 16.0 14.5 36.9 11.2 0.0 24.6 28.7 28.7 0.0 0.0 0.0
 LOS by Move: A B B D B A C C C A A A
 HCM2kAvgQ: 0 7 4 2 10 0 1 6 6 0 0 0

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 AM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Hale Ave / North Tulip St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.513
Loss Time (sec): 12 Average Delay (sec/veh): 14.8
Optimal Cycle: 39 Level Of Service: B

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement, Control, Rights. Includes lane configurations and traffic control details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, Cumulative, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume for each approach.

Saturation Flow Module table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each approach.

Capacity Analysis Module table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ values.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 Valley Pkwy / Project Driveway "A"

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B [13.0]

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement, Control, Rights. Includes lane configurations and traffic control details.

Volume Module table showing Base Vol, Growth Adj, Initial Bse, Added Vol, Cumulative, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume for each approach.

Critical Gap Module table showing Critical Gap and FollowUpTim values.

Capacity Module table showing Conflict Vol, Potent Cap., Move Cap., and Volume/Cap. values.

Level Of Service Module table showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS values.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 West Grand Ave / Project Driveway "B"

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[10.4]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module table with 12 columns and 10 rows including Base Vol, Growth Adj, Initial Bse, Added Vol, Cumulative, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module table with 4 columns and 2 rows for Critical Gp and FollowUpTim.

Capacity Module table with 4 columns and 4 rows for Cnflct Vol, Potent Cap, Move Cap, and Volume/Cap.

Level Of Service Module table with 4 columns and 10 rows including 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap, Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Scenario Report

Scenario: excp pm
 Command: excp pm
 Volume: exc pm
 Geometry: ex pm
 Impact Fee: Default Impact Fee
 Trip Generation: pm
 Trip Distribution: project
 Paths: Default Path
 Routes: Default Route
 Configuration: excp pm

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Impact Analysis Report
 Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
# 1 Valley Pkwy / I-15 Southbound	D	50.1	0.900	D	52.1	0.920	+ 2.002 D/V
# 2 Valley Pkwy / I-15 Northbound	D	37.4	0.818	D	41.1	0.872	+ 3.746 D/V
# 3 Valley Pkwy / La Terraza Blvd-	C	23.7	0.537	C	27.2	0.625	+ 3.483 D/V
# 4 Valley Pkwy / North Tulip St	C	30.2	0.535	C	29.9	0.560	-0.317 D/V
# 5 Valley Pkwy / Gateway Dwy	A	5.6	0.292	A	5.5	0.303	-0.154 D/V
# 6 Valley Pkwy / Quince St	C	20.7	0.544	C	20.7	0.560	+ 0.041 D/V
# 7 Valley Pkwy / Centre City Pkwy	C	21.7	0.624	C	22.2	0.650	+ 0.474 D/V
# 8 Grand Ave / Quince St	C	26.0	0.329	C	26.0	0.334	+ 0.014 D/V
# 9 Grand Ave / Centre City Pkwy	C	20.6	0.578	C	20.7	0.594	+ 0.044 D/V
# 10 Second Ave / Quince St	C	20.1	0.411	B	19.8	0.424	-0.212 D/V
# 11 Second Ave / Centre City Pkwy	C	22.6	0.656	C	23.0	0.678	+ 0.403 D/V
# 12 Hale Ave / North Tulip St	C	25.2	0.859	C	25.7	0.868	+ 0.518 D/V
# 13 Valley Pkwy / Project Driveway	A	7.2	0.000	B	12.5	0.046	+ 5.295 D/V
# 14 West Grand Ave / Project Drive	A	7.2	0.000	B	12.8	0.025	+ 5.607 D/V

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #1 Valley Pkwy / I-15 Southbound Ramps

Cycle (sec): 125 Critical Vol./Cap.(X): 0.920
 Loss Time (sec): 16 Average Delay (sec/veh): 52.1
 Optimal Cycle: 144 Level Of Service: D

Street Name: I-15 Southbound Ramps Valley Pkwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	12	12	12	5	5	5	5	8	8	10	7	7
Y+R:	5.1	5.1	5.1	5.1	5.1	5.1	4.7	5.8	5.8	4.7	5.8	5.8
Lanes:	1	0	1	0	1	0	2	0	3	0	1	1

Volume Module:
 Base Vol: 49 52 287 246 135 360 54 1282 107 182 722 369
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 49 52 287 246 135 360 54 1282 107 182 722 369
 Added Vol: 0 0 2 12 0 0 0 5 0 1 3 8
 Cumulative: 0 0 3 19 0 0 0 11 0 2 13 38
 Initial Fut: 49 52 292 277 135 360 54 1298 107 185 738 415
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91
 PHF Volume: 54 57 320 303 148 394 59 1422 117 203 808 455
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 54 57 320 303 148 394 59 1422 117 203 808 455
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 54 57 320 303 148 394 59 1422 117 203 808 455

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 0.93 0.98 0.83 0.85 0.85 0.85 0.90 0.89 0.83 0.90 0.84 0.84
 Lanes: 1.00 1.00 1.00 0.72 0.35 0.93 2.00 3.00 1.00 2.00 3.20 1.80
 Final Sat.: 1769 1862 1583 1159 565 1507 3432 5083 1583 3432 5130 2885

Capacity Analysis Module:
 Vol/Sat: 0.03 0.03 0.20 0.26 0.26 0.26 0.02 0.28 0.07 0.06 0.16 0.16
 Crit Moves: **** *
 Green/Cycle: 0.22 0.22 0.22 0.28 0.28 0.28 0.08 0.30 0.30 0.08 0.30 0.30
 Volume/Cap: 0.14 0.14 0.94 0.94 0.94 0.94 0.23 0.94 0.25 0.74 0.52 0.52
 Delay/Veh: 39.9 39.9 81.4 61.1 61.1 61.1 54.7 54.3 33.5 66.3 36.4 36.4
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 39.9 39.9 81.4 61.1 61.1 61.1 54.7 54.3 33.5 66.3 36.4 36.4
 LOS by Move: D D F E E E D D C E D D
 HCM2kAvgQ: 2 2 16 21 21 21 1 24 3 4 8 8

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #2 Valley Pkwy / I-15 Northbound Ramps

 Cycle (sec): 125 Critical Vol./Cap.(X): 0.872
 Loss Time (sec): 12 Average Delay (sec/veh): 41.1
 Optimal Cycle: 108 Level Of Service: D

Street Name:	I-15 Northbound Ramps						Valley Pkwy										
	North Bound			South Bound			East Bound			West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Split Phase			Split Phase			Protected			Protected							
Rights:	Include			Include			Include			Include							
Min. Green:	5	5	5	0	0	0	5	6	0	0	5	5					
Y+R:	5.1	5.1	5.1	0.0	0.0	0.0	4.7	5.8	0.0	0.0	5.8	5.8					
Lanes:	0	1	0	0	1	0	0	0	0	2	0	3	0	0	3	0	1

Volume Module:

Base Vol:	169	0	445	0	0	0	625	1194	0	0	1095	322
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	0	445	0	0	0	625	1194	0	0	1095	322
Added Vol:	0	0	14	0	0	0	0	19	0	0	11	7
Cumulative:	0	0	37	0	0	0	0	32	0	0	53	29
Initial Fut:	169	0	496	0	0	0	625	1245	0	0	1159	358
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	184	0	540	0	0	0	681	1357	0	0	1263	390
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	0	540	0	0	0	681	1357	0	0	1263	390
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	0	540	0	0	0	681	1357	0	0	1263	390

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	0.90	0.89	1.00	1.00	0.89	0.83
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	2.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	1773	0	1583	0	0	0	3432	5083	0	0	5083	1583

Capacity Analysis Module:

Vol/Sat:	0.10	0.00	0.34	0.00	0.00	0.00	0.20	0.27	0.00	0.00	0.25	0.25
Crit Moves:	****			****			****			****		
Green/Cycle:	0.39	0.00	0.39	0.00	0.00	0.00	0.23	0.51	0.00	0.00	0.28	0.28
Volume/Cap:	0.27	0.00	0.87	0.00	0.00	0.00	0.87	0.52	0.00	0.00	0.87	0.87
Delay/Veh:	26.0	0.0	48.0	0.0	0.0	0.0	57.1	20.5	0.0	0.0	48.6	58.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.0	0.0	48.0	0.0	0.0	0.0	57.1	20.5	0.0	0.0	48.6	58.3
LOS by Move:	C	A	D	A	A	A	E	C	A	A	D	E
HCM2kAvgQ:	5	0	22	0	0	0	12	12	0	0	18	15

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #3 Valley Pkwy / La Terraza Blvd-Plaza Las Palmas Dwy

Cycle (sec): 125 Critical Vol./Cap.(X): 0.625
 Loss Time (sec): 12 Average Delay (sec/veh): 27.2
 Optimal Cycle: 52 Level Of Service: C

Street Name: La Terraza Blvd-Plaza Las Palmas Valley Pkwy
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted			Permitted			Protected			Protected						
Rights:	Include			Include			Include			Include						
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5				
Y+R:	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.5	5.5	4.5	5.5	5.5				
Lanes:	1	0	1	0	1	0	1	0	3	0	1	2	0	3	1	0

Volume Module:

Base Vol:	151	17	143	52	12	122	98	1423	61	93	1092	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	17	143	52	12	122	98	1423	61	93	1092	54
Added Vol:	0	0	0	0	0	0	0	33	0	0	18	0
Cumulative:	66	0	39	0	0	0	0	27	41	24	16	0
Initial Fut:	217	17	182	52	12	122	98	1483	102	117	1126	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	241	19	202	58	13	135	109	1645	113	130	1249	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	241	19	202	58	13	135	109	1645	113	130	1249	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	241	19	202	58	13	135	109	1645	113	130	1249	60

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.60	1.00	0.85	0.75	0.86	0.86	0.95	0.91	0.85	0.92	0.90	0.90
Lanes:	1.00	1.00	1.00	1.00	0.09	0.91	1.00	3.00	1.00	2.00	3.82	0.18
Final Sat.:	1144	1900	1615	1431	147	1493	1805	5187	1615	3502	6553	314

Capacity Analysis Module:

Vol/Sat:	0.21	0.01	0.12	0.04	0.09	0.09	0.06	0.32	0.07	0.04	0.19	0.19
Crit Moves:	****						****			****		
Green/Cycle:	0.34	0.34	0.34	0.34	0.34	0.34	0.14	0.51	0.51	0.06	0.43	0.43
Volume/Cap:	0.62	0.03	0.37	0.12	0.27	0.27	0.44	0.62	0.14	0.62	0.44	0.44
Delay/Veh:	38.0	27.8	31.8	28.7	30.5	30.5	50.9	22.7	16.4	63.3	25.1	25.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.0	27.8	31.8	28.7	30.5	30.5	50.9	22.7	16.4	63.3	25.1	25.1
LOS by Move:	D	C	C	C	C	C	D	C	B	E	C	C
HCM2kAvgQ:	9	0	6	2	4	4	4	16	2	3	9	9

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Valley Pkwy / North Tulip St

Cycle (sec): 125 Critical Vol./Cap.(X): 0.560
Loss Time (sec): 16 Average Delay (sec/veh): 29.9
Optimal Cycle: 55 Level Of Service: C

Street Name: North Tulip St Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 5 5 5 5 5 5 5 5 5 5 5
Y+R: 4.5 4.5 4.5 4.5 4.5 4.5 4.5 5.5 5.5 4.5 5.5 5.5
Lanes: 0 0 1! 0 0 1 1 0 0 1 2 0 2 1 0 1 0 4 0 1

Volume Module:
Base Vol: 16 6 9 228 14 227 302 1275 6 24 986 128
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 16 6 9 228 14 227 302 1275 6 24 986 128
Added Vol: 0 0 0 3 0 0 0 33 0 0 18 2
Cumulative: 0 0 0 1 0 3 6 60 0 0 37 1
Initial Fut: 16 6 9 232 14 230 308 1368 6 24 1041 131
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume: 18 7 10 258 16 256 343 1524 7 27 1160 146
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 18 7 10 258 16 256 343 1524 7 27 1160 146
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 18 7 10 258 16 256 343 1524 7 27 1160 146

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.94 0.94 0.94 0.96 0.96 0.85 0.92 0.91 0.91 0.95 0.91 0.85
Lanes: 0.52 0.19 0.29 1.89 0.11 1.00 2.00 2.99 0.01 1.00 4.00 1.00
Final Sat.: 919 345 517 3422 207 1615 3502 5159 23 1805 6916 1615

Capacity Analysis Module:
Vol/Sat: 0.02 0.02 0.02 0.08 0.08 0.16 0.10 0.30 0.30 0.01 0.17 0.09
Crit Moves: **** **** ****
Green/Cycle: 0.04 0.04 0.04 0.28 0.28 0.28 0.20 0.52 0.52 0.04 0.35 0.35
Volume/Cap: 0.48 0.48 0.48 0.27 0.27 0.57 0.48 0.57 0.57 0.37 0.48 0.26
Delay/Veh: 63.9 63.9 63.9 35.5 35.5 40.7 44.3 21.1 21.1 61.7 31.8 29.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 63.9 63.9 63.9 35.5 35.5 40.7 44.3 21.1 21.1 61.7 31.8 29.2
LOS by Move: E E E D D D D C C E C C
HCM2kAvgQ: 2 2 2 4 4 9 6 14 14 1 10 4

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Valley Pkwy / Gateway Dwy

Cycle (sec): 60 Critical Vol./Cap.(X): 0.303
Loss Time (sec): 8 Average Delay (sec/veh): 5.5
Optimal Cycle: 23 Level Of Service: A

Street Name: Gateway Dwy Valley Pkwy
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted				Protected							
Rights:	Include				Include							
Min. Green:	0	5	0	0	0	0	5	0	0	0	5	5
Y+R:	4.0	4.5	4.0	4.0	4.0	4.0	4.5	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1	0	0	0	0	1	0	0	0	0

Volume Module:
Base Vol: 0 16 0 0 0 84 0 0 0 0 1069 58
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 16 0 0 0 84 0 0 0 0 1069 58
Added Vol: 0 0 0 0 0 0 0 0 0 0 20 0
Cumulative: 0 0 0 0 0 0 0 0 0 0 38 0
Initial Fut: 0 16 0 0 0 84 0 0 0 0 1127 58
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85
PHF Volume: 0 19 0 0 0 99 0 0 0 0 1323 68
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 19 0 0 0 99 0 0 0 0 1323 68
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 19 0 0 0 99 0 0 0 0 1323 68

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 1.00 0.87 1.00 1.00 1.00 1.00 0.90 0.90
Lanes: 0.00 1.00 0.00 0.00 0.00 1.00 0.00 0.00 0.00 0.00 3.80 0.20
Final Sat.: 0 1900 0 0 0 1644 0 0 0 0 6531 336

Capacity Analysis Module:
Vol/Sat: 0.00 0.01 0.00 0.00 0.00 0.06 0.00 0.00 0.00 0.00 0.20 0.20
Crit Moves: ****
Green/Cycle: 0.00 0.20 0.00 0.00 0.00 0.20 0.00 0.00 0.00 0.00 0.67 0.67
Volume/Cap: 0.00 0.05 0.00 0.00 0.00 0.30 0.00 0.00 0.00 0.00 0.30 0.30
Delay/Veh: 0.0 19.5 0.0 0.0 0.0 21.1 0.0 0.0 0.0 0.0 4.2 4.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 19.5 0.0 0.0 0.0 21.1 0.0 0.0 0.0 0.0 4.2 4.2
LOS by Move: A B A A A C A A A A A A
HCM2kAvgQ: 0 0 0 0 0 2 0 0 0 0 3 3

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #6 Valley Pkwy / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.560
 Loss Time (sec): 12 Average Delay (sec/veh): 20.7
 Optimal Cycle: 44 Level Of Service: C

Street Name:	Quince St			Valley Pkwy		
	North Bound	South Bound	East Bound	West Bound		
Approach:	L - T - R	L - T - R	L - T - R	L - T - R		
Control:	Protected	Protected	Split Phase	Split Phase		
Rights:	Include	Include	Include	Include		
Min. Green:	5 5 0	0 5 5	0 0 0	5 5 5		
Y+R:	4.5 5.0 4.0	4.0 5.0 5.0	4.0 4.0 4.0	5.5 5.5 5.5		
Lanes:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 1 2 0 1		

Volume Module:

Base Vol:	67	207	0	0	415	143	0	0	0	41	1036	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	207	0	0	415	143	0	0	0	41	1036	74
Added Vol:	0	1	0	0	0	2	0	0	0	0	17	0
Cumulative:	0	2	0	0	2	0	0	0	0	0	38	0
Initial Fut:	67	210	0	0	417	145	0	0	0	41	1091	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	78	243	0	0	483	168	0	0	0	48	1265	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	243	0	0	483	168	0	0	0	48	1265	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	243	0	0	483	168	0	0	0	48	1265	86

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	0.91	0.91	0.85
Lanes:	1.00	2.00	0.00	0.00	1.48	0.52	0.00	0.00	0.00	0.11	2.89	1.00
Final Sat.:	1805	3610	0	0	2574	895	0	0	0	187	4974	1615

Capacity Analysis Module:

Vol/Sat:	0.04	0.07	0.00	0.00	0.19	0.19	0.00	0.00	0.00	0.25	0.25	0.05
Crit Moves:	****				****					****		
Green/Cycle:	0.08	0.41	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.45	0.45	0.45
Volume/Cap:	0.56	0.16	0.00	0.00	0.56	0.56	0.00	0.00	0.00	0.56	0.56	0.12
Delay/Veh:	45.1	16.7	0.0	0.0	25.1	25.1	0.0	0.0	0.0	18.3	18.3	14.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.1	16.7	0.0	0.0	25.1	25.1	0.0	0.0	0.0	18.3	18.3	14.2
LOS by Move:	D	B	A	A	C	C	A	A	A	B	B	B
HCM2kAvgQ:	2	2	0	0	8	8	0	0	0	9	9	1

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #7 Valley Pkwy / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.650
 Loss Time (sec): 12 Average Delay (sec/veh): 22.2
 Optimal Cycle: 52 Level Of Service: C

Street Name:	Centre City Pkwy					Valley Pkwy						
	North Bound		South Bound			East Bound		West Bound				
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected		Protected			Split Phase		Split Phase				
Rights:	Include		Include			Include		Include				
Min. Green:	5	5	0	0	5	5	0	0	0	5	5	5
Y+R:	4.5	5.5	0.0	0.0	5.5	5.5	0.0	0.0	0.0	5.0	5.0	5.0
Lanes:	2	0	2	0	0	0	1	1	0	0	0	0

Volume Module:

Base Vol:	127	876	0	0	753	94	0	0	0	239	895	295
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	127	876	0	0	753	94	0	0	0	239	895	295
Added Vol:	5	2	0	0	0	3	0	0	0	0	9	0
Cumulative:	6	36	0	0	18	10	0	0	0	0	21	11
Initial Fut:	138	914	0	0	771	107	0	0	0	239	925	306
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	160	1058	0	0	893	124	0	0	0	277	1071	354
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	1058	0	0	893	124	0	0	0	277	1071	354
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	1058	0	0	893	124	0	0	0	277	1071	354

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	1.00	1.00	0.91	0.91	1.00	1.00	1.00	0.87	0.87	0.83
Lanes:	2.00	2.00	0.00	0.00	1.76	0.24	0.00	0.00	0.00	1.00	3.00	1.00
Final Sat.:	3432	3538	0	0	3051	423	0	0	0	1654	4961	1583

Capacity Analysis Module:

Vol/Sat:	0.05	0.30	0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.17	0.22	0.22
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.07	0.52	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.34	0.34	0.34
Volume/Cap:	0.65	0.57	0.00	0.00	0.65	0.65	0.00	0.00	0.00	0.49	0.63	0.65
Delay/Veh:	46.7	15.1	0.0	0.0	20.2	20.2	0.0	0.0	0.0	23.4	25.2	27.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.7	15.1	0.0	0.0	20.2	20.2	0.0	0.0	0.0	23.4	25.2	27.7
LOS by Move:	D	B	A	A	C	C	A	A	A	C	C	C
HCM2kAvgQ:	2	10	0	0	12	12	0	0	0	7	10	9

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #8 Grand Ave / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.334
 Loss Time (sec): 16 Average Delay (sec/veh): 26.0
 Optimal Cycle: 39 Level Of Service: C

Street Name:	Quince St				Grand Ave					
Approach:	North Bound		South Bound		East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	
Control:	Protected		Protected		Protected		Protected			
Rights:	Include		Include		Include		Include			
Min. Green:	0	5	5	5	5	0	5	5	5	
Y+R:	4.0	5.0	5.0	4.5	5.0	4.0	4.5	4.5	4.5	
Lanes:	0	0	1	1	0	2	0	1	0	0

Volume Module:

Base Vol:	0	151	7	65	392	0	96	305	1	13	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	151	7	65	392	0	96	305	1	13	0	30
Added Vol:	0	0	0	0	0	0	1	2	0	0	0	0
Cumulative:	0	2	0	0	2	0	0	5	0	0	0	0
Initial Fut:	0	153	7	65	394	0	97	312	1	13	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	167	8	71	429	0	106	340	1	14	0	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	167	8	71	429	0	106	340	1	14	0	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	167	8	71	429	0	106	340	1	14	0	33

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.94	0.94	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.85
Lanes:	0.00	1.91	0.09	1.00	2.00	0.00	1.00	0.99	0.01	1.00	0.00	1.00
Final Sat.:	0	3428	157	1805	3610	0	1805	1894	6	1805	0	1615

Capacity Analysis Module:

Vol/Sat:	0.00	0.05	0.05	0.04	0.12	0.00	0.06	0.18	0.18	0.01	0.00	0.02
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.14	0.14	0.11	0.25	0.00	0.29	0.51	0.51	0.06	0.00	0.06
Volume/Cap:	0.00	0.35	0.35	0.35	0.47	0.00	0.20	0.35	0.35	0.14	0.00	0.36
Delay/Veh:	0.0	35.4	35.4	37.9	29.0	0.0	24.1	13.1	13.1	41.1	0.0	43.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	35.4	35.4	37.9	29.0	0.0	24.1	13.1	13.1	41.1	0.0	43.5
LOS by Move:	A	D	D	D	C	A	C	B	B	D	A	D
HCM2kAvgQ:	0	2	2	2	5	0	2	6	6	0	0	1

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Note: Queue reported is the number of cars per lane.

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Future Volume Alternative)

 Intersection #9 Grand Ave / Centre City Pkwy

 Cycle (sec): 90 Critical Vol./Cap.(X): 0.594
 Loss Time (sec): 12 Average Delay (sec/veh): 20.7
 Optimal Cycle: 47 Level Of Service: C

Street Name:	Centre City Pkwy					Grand Ave									
Approach:	North Bound		South Bound			East Bound		West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Protected		Protected			Permitted		Permitted							
Rights:	Include		Include			Include		Include							
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5			
Y+R:	4.5	5.5	5.5	4.5	5.5	5.5	5.0	5.0	5.0	5.0	5.0	5.0			
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	1	0	1

Volume Module:

Base Vol:	11	894	95	96	839	20	71	296	15	65	23	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	894	95	96	839	20	71	296	15	65	23	152
Added Vol:	0	4	1	0	0	0	1	1	0	0	0	2
Cumulative:	0	34	0	2	17	0	3	2	0	0	0	6
Initial Fut:	11	932	96	98	856	20	75	299	15	65	23	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	12	1022	105	107	939	22	82	328	16	71	25	175
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	1022	105	107	939	22	82	328	16	71	25	175
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	1022	105	107	939	22	82	328	16	71	25	175

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.75	1.00	0.85	0.34	1.00	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3610	1615	1805	3610	1615	1421	1900	1615	646	1900	1615

Capacity Analysis Module:

Vol/Sat:	0.01	0.28	0.07	0.06	0.26	0.01	0.06	0.17	0.01	0.11	0.01	0.11
Crit Moves:	****			****			****			****		
Green/Cycle:	0.10	0.48	0.48	0.10	0.47	0.47	0.29	0.29	0.29	0.29	0.29	0.29
Volume/Cap:	0.07	0.59	0.14	0.59	0.55	0.03	0.20	0.59	0.04	0.38	0.05	0.37
Delay/Veh:	36.7	17.8	13.3	44.0	17.1	12.6	24.3	29.2	22.9	26.8	23.0	25.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.7	17.8	13.3	44.0	17.1	12.6	24.3	29.2	22.9	26.8	23.0	25.9
LOS by Move:	D	B	B	D	B	B	C	C	C	C	C	C
HCM2kAvgQ:	0	10	2	3	9	0	2	8	0	2	1	4

 Gateway Grand TIA
 Existing Plus Cumulative With Project Conditions
 PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Second Ave / Quince St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.424
Loss Time (sec): 12 Average Delay (sec/veh): 19.8
Optimal Cycle: 36 Level Of Service: B

Street Name:	Quince St				Second Ave			
	North Bound		South Bound		East Bound		West Bound	
Movement:	L	T - R	L	T - R	L	T - R	L	T - R
Control:	Protected		Protected		Split Phase		Split Phase	
Rights:	Include		Include		Include		Include	
Min. Green:	0	5	5	5	0	5	5	0
Y+R:	4.0	5.0	5.0	4.5	5.0	4.0	5.5	5.5
Lanes:	0	0	1	1	0	1	0	0

Volume Module:

Base Vol:	0	157	59	160	252	0	2	1066	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	157	59	160	252	0	2	1066	42	0	0	0
Added Vol:	0	0	0	0	0	0	0	8	0	0	0	0
Cumulative:	0	2	0	0	2	0	0	57	0	0	0	0
Initial Fut:	0	159	59	160	254	0	2	1131	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	181	67	182	290	0	2	1290	48	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	181	67	182	290	0	2	1290	48	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	181	67	182	290	0	2	1290	48	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.91	0.95	0.95	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Lanes:	0.00	1.46	0.54	1.00	2.00	0.00	0.01	3.85	0.14	0.00	0.00	0.00
Final Sat.:	0	2525	937	1805	3610	0	12	6624	246	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.07	0.10	0.08	0.00	0.19	0.19	0.19	0.00	0.00	0.00
Crit Moves:	****			****			****					
Green/Cycle:	0.00	0.17	0.17	0.24	0.41	0.00	0.46	0.46	0.46	0.00	0.00	0.00
Volume/Cap:	0.00	0.42	0.42	0.42	0.20	0.00	0.42	0.42	0.42	0.00	0.00	0.00
Delay/Veh:	0.0	34.0	34.0	29.7	17.2	0.0	16.4	16.4	16.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	34.0	34.0	29.7	17.2	0.0	16.4	16.4	16.4	0.0	0.0	0.0
LOS by Move:	A	C	C	C	B	A	B	B	B	A	A	A
HCM2kAvgQ:	0	4	4	4	3	0	7	7	7	0	0	0

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Second Ave / Centre City Pkwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.678
Loss Time (sec): 12 Average Delay (sec/veh): 23.0
Optimal Cycle: 55 Level Of Service: C

Street Name:	Centre City Pkwy				Second Ave			
	North Bound		South Bound		East Bound		West Bound	
Movement:	L	T - R	L	T - R	L	T - R	L	T - R
Control:	Protected		Protected		Split Phase		Split Phase	
Rights:	Include		Include		Include		Include	
Min. Green:	0	5	5	5	0	5	5	0
Y+R:	0.0	5.5	5.5	4.5	5.5	0.0	5.0	5.0
Lanes:	0	0	2	0	1	2	0	0

Volume Module:

Base Vol:	0	809	212	168	755	0	88	1079	106	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	809	212	168	755	0	88	1079	106	0	0	0
Added Vol:	0	3	0	0	0	0	2	5	2	0	0	0
Cumulative:	0	15	1	7	10	0	18	33	6	0	0	0
Initial Fut:	0	827	213	175	765	0	108	1117	114	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	0	912	235	193	843	0	119	1231	126	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	912	235	193	843	0	119	1231	126	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	912	235	193	843	0	119	1231	126	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.83	0.90	0.93	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	1.00	2.72	0.28	0.00	0.00	0.00
Final Sat.:	0	3538	1583	3432	3538	0	1652	4498	459	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.26	0.15	0.06	0.24	0.00	0.07	0.27	0.27	0.00	0.00	0.00
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.00	0.38	0.38	0.08	0.46	0.00	0.40	0.40	0.40	0.00	0.00	0.00
Volume/Cap:	0.00	0.68	0.39	0.68	0.51	0.00	0.18	0.68	0.68	0.00	0.00	0.00
Delay/Veh:	0.0	24.7	20.7	46.5	17.3	0.0	17.3	22.9	22.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	24.7	20.7	46.5	17.3	0.0	17.3	22.9	22.9	0.0	0.0	0.0
LOS by Move:	A	C	C	D	B	A	B	C	C	A	A	A
HCM2kAvgQ:	0	12	5	3	8	0	2	11	11	0	0	0

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Hale Ave / North Tulip St

Cycle (sec): 60 Critical Vol./Cap.(X): 0.868
Loss Time (sec): 12 Average Delay (sec/veh): 25.7
Optimal Cycle: 75 Level Of Service: C

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 4 rows: Movement, Control, Rights, Lanes.

Volume Module table with 10 columns and 15 rows showing traffic volume and delay metrics.

Saturation Flow Module table with 10 columns and 5 rows showing saturation flow and adjustment factors.

Capacity Analysis Module table with 10 columns and 10 rows showing capacity and delay analysis.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 Valley Pkwy / Project Driveway "A"

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[12.5]

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 4 rows: Movement, Control, Rights, Lanes.

Volume Module table with 10 columns and 15 rows showing traffic volume and delay metrics.

Critical Gap Module table with 10 columns and 3 rows showing critical gap and follow-up time.

Capacity Module table with 10 columns and 5 rows showing capacity and conflict volume.

Level Of Service Module table with 10 columns and 10 rows showing level of service and delay analysis.

Note: Queue reported is the number of cars per lane.

Gateway Grand TIA
Existing Plus Cumulative With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 West Grand Ave / Project Driveway "B"

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[12.8]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module table with 12 columns representing different traffic movements and 10 rows of volume data.

Critical Gap Module table with 4 columns and 2 rows of gap and follow-up time data.

Capacity Module table with 4 columns and 4 rows of capacity and volume data.

Level Of Service Module table with 4 columns and 10 rows of delay and LOS data.

Note: Queue reported is the number of cars per lane.

APPENDIX F

Radar Speed Survey Data Sheets

Spot Speed Study

Prepared by: National Data & Surveying Services

City of Escondido

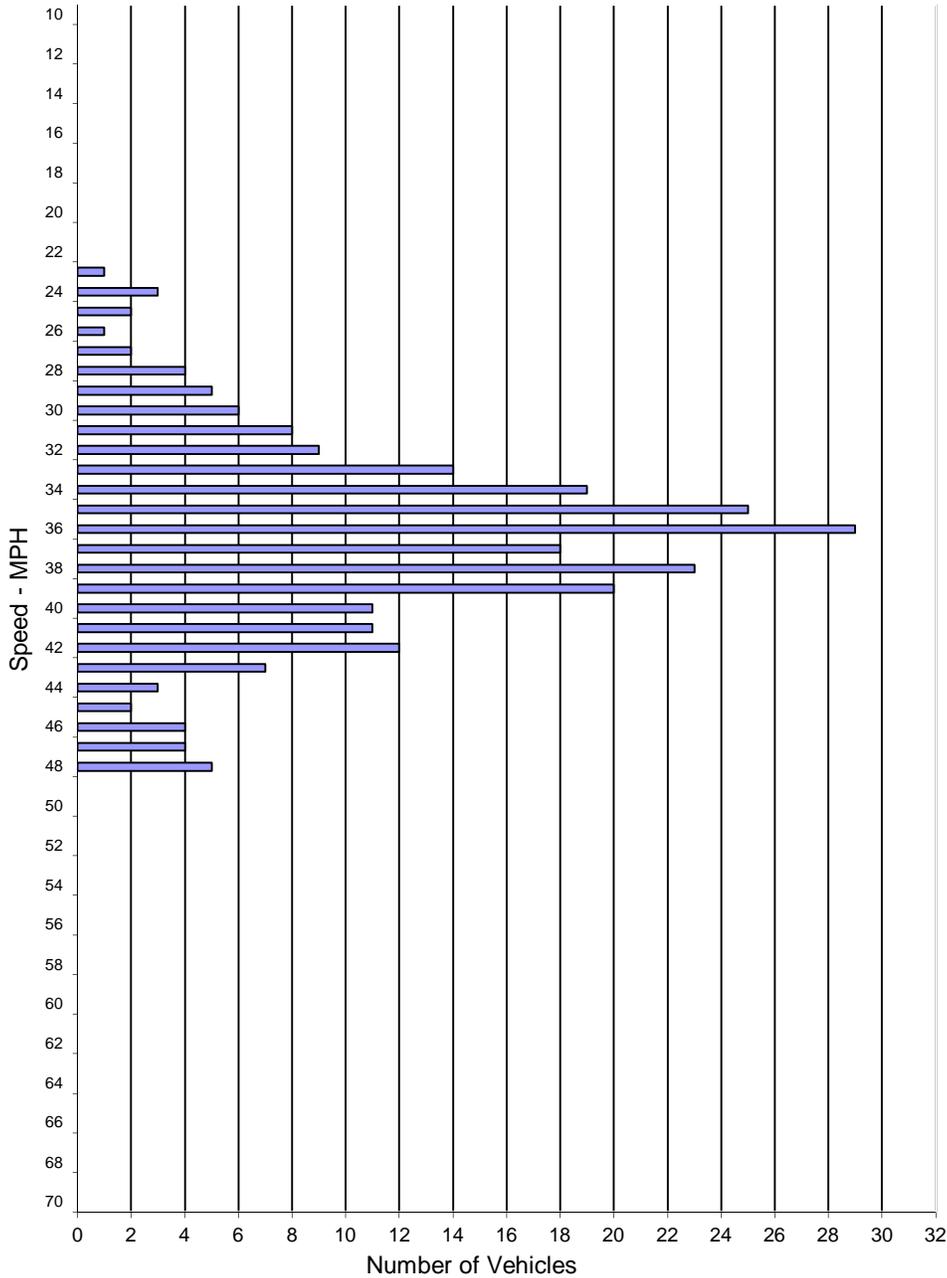
DATE: 12/15/2015
DAY: Tuesday

Location: Valley Pkwy W/O Quince St
Posted Speed: 35 MPH

Project #: 15-4369-001

Westbound Spot Speeds

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	1
24	3
25	2
26	1
27	2
28	4
29	5
30	6
31	8
32	9
33	14
34	19
35	25
36	29
37	18
38	23
39	20
40	11
41	11
42	12
43	7
44	3
45	2
46	4
47	4
48	5
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
>=70	



SPEED PARAMETERS										
Class	Count	Average Speed	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	248	36.6	23 - 48	36 mph	41 mph	33 - 42	182	73%	16% / 41	11% / 25

Spot Speed Study

Prepared by: National Data & Surveying Services

City of Escondido

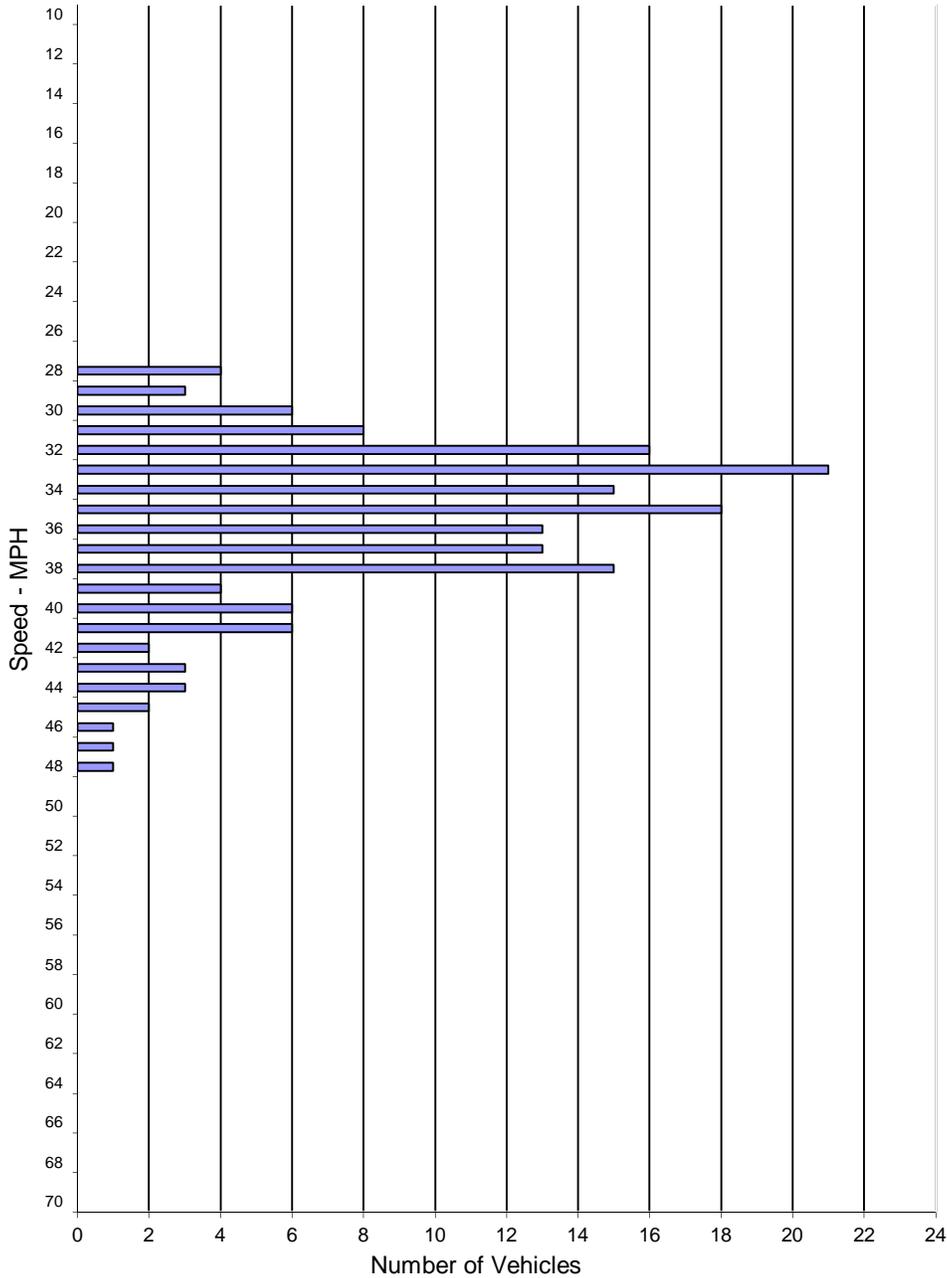
DATE: 12/15/2015
DAY: Tuesday

Location: W Grand Ave W/O Quince St
Posted Speed: 35 MPH

Project #: 15-4369-002

Eastbound Spot Speeds

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	4
29	3
30	6
31	8
32	16
33	21
34	15
35	18
36	13
37	13
38	15
39	4
40	6
41	6
42	2
43	3
44	3
45	2
46	1
47	1
48	1
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
>=70	



SPEED PARAMETERS										
Class	Count	Average Speed	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	161	35.5	28 - 48	35 mph	40 mph	30 - 39	129	80%	4% / 7	16% / 25