

## **APPENDIX 1.1**

Approved Traffic Study Scoping Agreement



## **Janette Cachola**

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**From:** Wally Nesbit [wnesbit@la-quinta.org]  
**Sent:** Tuesday, December 10, 2013 3:42 PM  
**To:** Nazir Lalani Email  
**Cc:** Janette Cachola  
**Subject:** RE: (JN:08773) Vista Soleada (TTM 36590) TIA Scoping Agreement - Revised  
**Attachments:** 0406\_001.pdf

Sincere apologies for the extremely delayed response -

Need to include our most current adopted street sections and roadway classification exhibits (EX 10 and 11 in scope) from the Circulation Element (attached)

LQ projects identified w/in ½ mile per our EB are as follows (augments Attachment A of scope):

TT 31732, 31733 - KB Homes (Palizada) - APPROVED for 326 SFD (adjacent on west side of subject tract) – 80 acres

NOTE: Project in for revision for 418 lots and 14 KSF clubhouse; not approved

**Existing = 0; Completed by 2016 = 40**

SP 2004-072 - Schumacher – APPROVED for 392 SFD

NEC Ave 60 and Monroe Street – 100 acres

**Existing = 0; Completed by 1/1/2016: 0**

SP 2003-067 – Andalusia – IN CONSTRUCTION - APPROVED for 472 SFD

Between Ave 58, Ave 60, west of Monroe – 548 acres

**Existing = 160; Completed by 1/1/2016: 220**

TT 31434 - Monroe Dates – APPROVED for 94 SFD

West side Monroe Street at Ave 61 alignment – 30 acres

**Existing = 0; Completed by 1/1/2016: 20**

Wallace H. Nesbit, Principal Planner  
Community Development Department  
City of La Quinta  
78495 Calle Tampico  
La Quinta CA 92253  
Direct: 760-777-7069 Fax: 760-777-7011  
email: [wnesbit@la-quinta.org](mailto:wnesbit@la-quinta.org)

*W.H. Nesbit*

**From:** nazir.lalani1@gmail.com [mailto:[nazir.lalani1@gmail.com](mailto:nazir.lalani1@gmail.com)] **On Behalf Of** Nazir Lalani

**Sent:** Tuesday, October 29, 2013 2:59 PM

**To:** Wally Nesbit

**Subject:** Fwd: (JN:08773) Vista Soleada (TTM 36590) TIA Scoping Agreement - Revised

Wally, here is another email with a revised agreement.

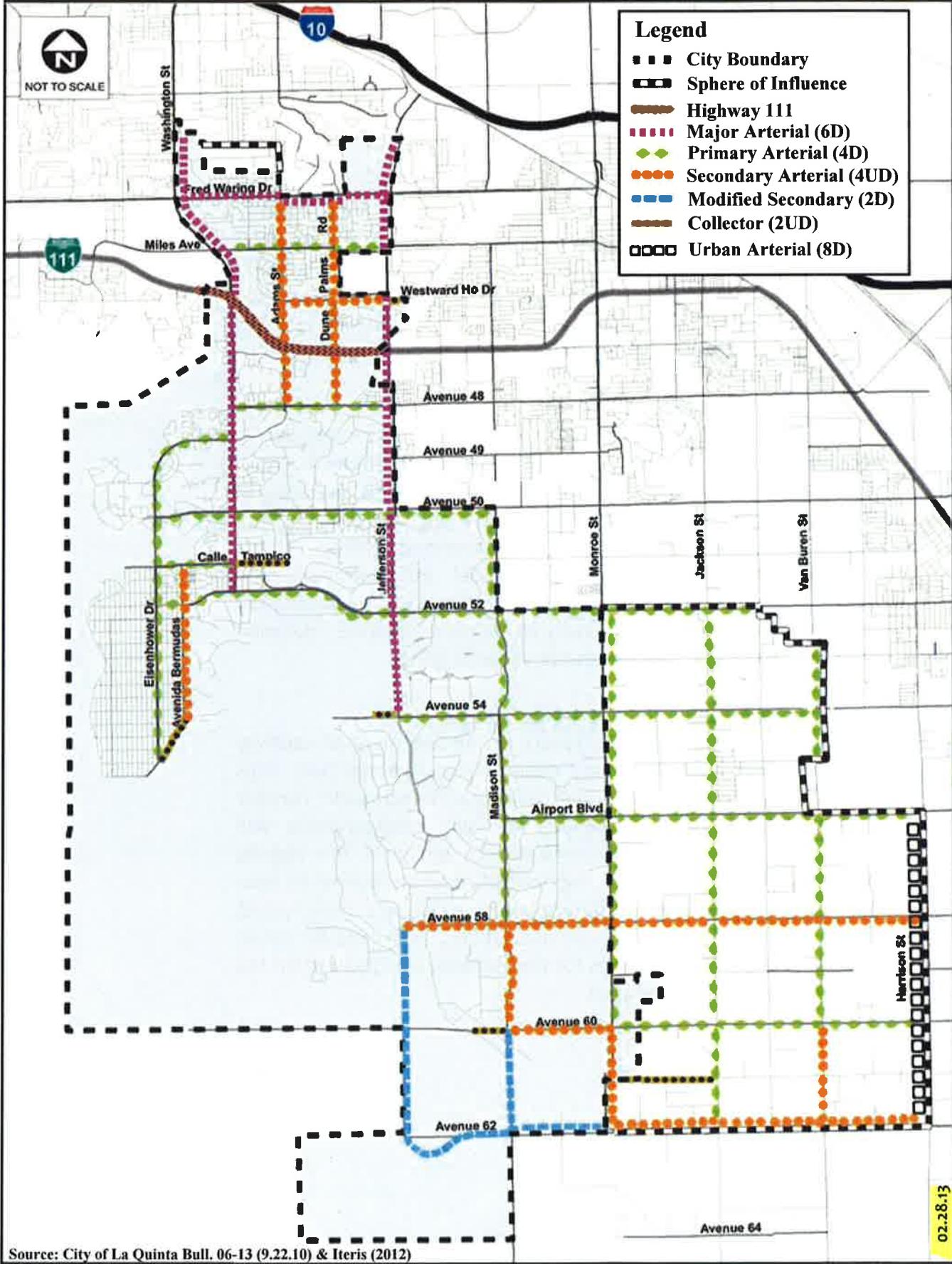
----- Forwarded message -----

From: **Janette Cachola <[JCachola@urbanxroads.com](mailto:JCachola@urbanxroads.com)>**

Date: Mon, Oct 28, 2013 at 8:06 PM

Subject: (JN:08773) Vista Soleada (TTM 36590) TIA Scoping Agreement - Revised

To: "Tsang, Kevin" <[KTSANG@rctlma.org](mailto:KTSANG@rctlma.org)>, "Nazir Lalani ([nlalani@la-quinta.org](mailto:nlalani@la-quinta.org))" <[nlalani@la-quinta.org](mailto:nlalani@la-quinta.org)>,

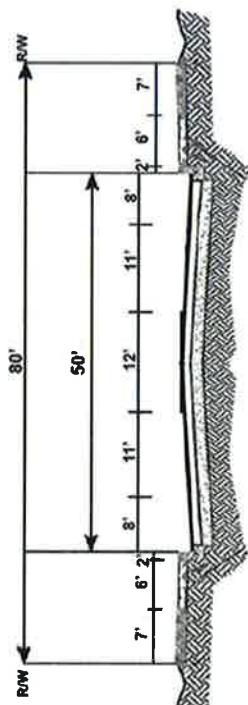


Source: City of La Quinta Bull. 06-13 (9.22.10) & Iteris (2012)

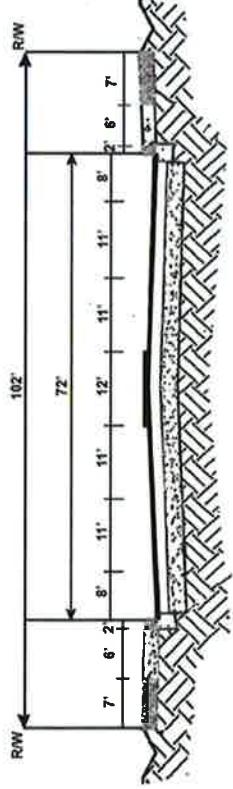


03.11.13  
Exhibit  
II-3

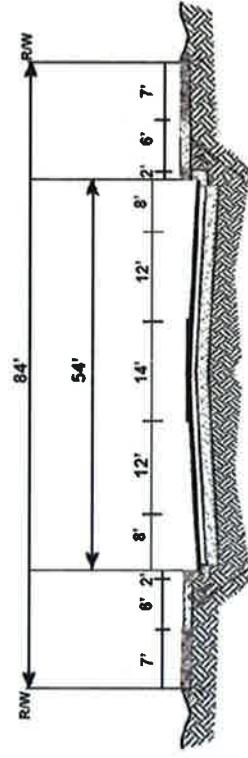
**City of La Quinta General Plan  
General Plan Street Cross Sections  
La Quinta, California**



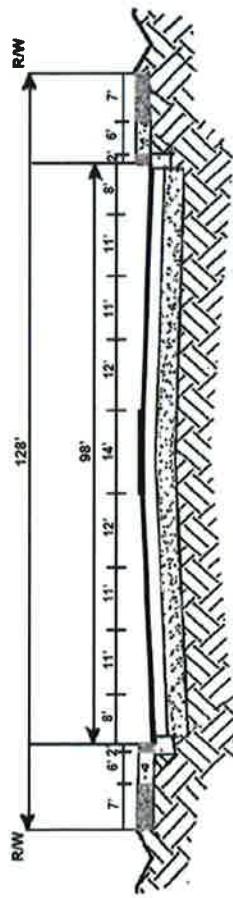
**80' Collector**



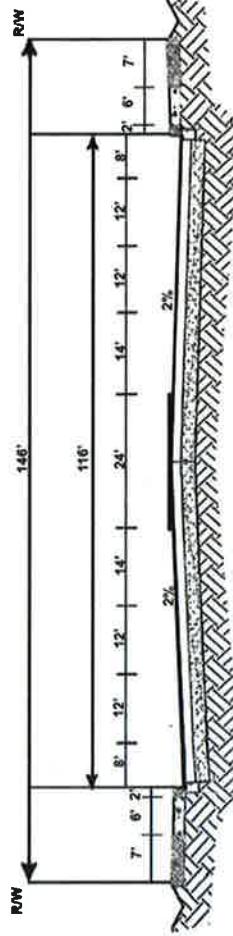
**102' Secondary Arterial**



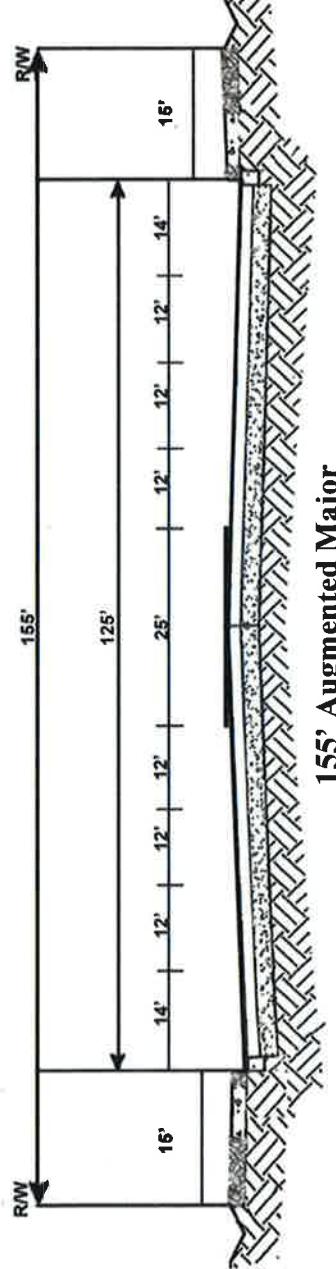
**84' Modified Secondary Arterial**



**128' Major Arterial**



**108' Primary Arterial**



**146' State Highway 111**

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November 13, 2013

Mr. Nazir Lalani  
CITY OF LA QUINTA PUBLIC WORKS DEPARTMENT  
78-495 Calle Tampico  
La Quinta, CA 92253

Mr. Kevin Tsang  
COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT  
4080 Lemon Street, 8<sup>th</sup> Floor  
Riverside, CA 92501

**Subject: Responses to October 29, 2013 City of La Quinta Comments Regarding the Vista Soleada Traffic Impact Analysis Scope**

Dear Gentlemen:

The purpose of this letter is to respond to City of La Quinta comments regarding the Vista Soleada Traffic Impact Analysis scope. As such, the project trip distribution has been adjusted, subject to further review by County of Riverside staff members.

**Comment #1**

This project is located on Avenue 60 east of Monroe Street and comprises 230 residential units. The scoping agreement was received by Public Works directly from Urban Crossroads. It is unclear whether this agreement should have been sent via the Planning Department.

**Response**

*It appears that the appropriate coordination is in place.*

**Comment #2**

Page 2: It is unclear what the "Existing Plus Ambient Growth Plus Project (2016) Conditions" represent. Is this the "Project Opening Year" scenario? Are the study area Intersections consistent with the City of La Quinta's EB 06-13?

**Response**

*The "Existing Plus Ambient Growth Plus Project" (EAP) scenario is included in the scope since it is used to determine project specific impacts based on the Riverside County Traffic Impact Analysis*

*Preparation Guide (April 2008). The TIA will be consistent with all the requirements of EB 06-13 for study intersections within the City of La Quinta.*

**Comment #3**

Page 4: The Scoping Agreement indicates that it will use a saturation flow rate of 1,850 per hour of green per lane consistent with EB 06-13. However, the methodology for calculating intersection levels of service for the City of La Quinta intersections needs to be consistent with all the requirements of EB 06-13 as they relate to HCM capacity analysis methodology.

**Response**

*The TIA will be consistent with all the requirements of EB 06-13 for study intersections within the City of La Quinta. Saturation flow rate was pointed out in the scope since the County of Riverside requires 1900 saturation flow rate while the City of La Quinta uses 1850 saturation flow rate.*

**Comment #4**

Exhibit 2: Is the Project's access on Avenue 60 proposed to be full movement? If so, will the analysis of the project's driveway volumes analyze the possibility of a future traffic signal meeting warrants at that location?

**Response**

*The Project is anticipated to have full access on Avenue 60. Traffic signal warrants will be analyzed.*

**Comment #5**

Exhibit 5: The trip distribution shows 30 percent of the traffic from the subdivision traveling east on Avenue 60 and 61. However, there will not be any land uses to the east of the subdivision to cause this level of trip attraction. The trip distribution should assign no more than 5% of the traffic to each of these corridors.

**Response**

*Per direction from the City of La Quinta staff, the intersection of Madison St./58th Avenue will be included in the study area as shown on Exhibit 4-a. The Project Trip Distribution has been adjusted and is illustrated on Exhibit 5a.*

Mr. Nazir Lalani  
City of La Quinta  
November 13, 2013  
Page 3

**Comment #6**

Exhibits 10 and 11: Both of these Exhibits should be consistent with the General Plan Update adopted by the City Council in 2013.

**Response**

*The Exhibits shown in the signed traffic study scope were extracted from the City website (<http://www.la-quinta.org/Index.aspx?page=620>). The Avenue 60 Cross-Section Reconciliation presented on Exhibit 14 illustrates the proposed Avenue 60 cross-section transition from the City of La Quinta to the County of Riverside, adjacent to the Project's westerly site boundary.*

Kevin and Nazir, please indicate whether you accept the information on attached Exhibits 4a, 5a, and 14. The signed traffic study scope is also attached for your ease of reference. If you have any questions, please contact myself at (949) 660-1994 (ext. 211) or Janette Cachola (ext. 249).

Respectfully submitted,

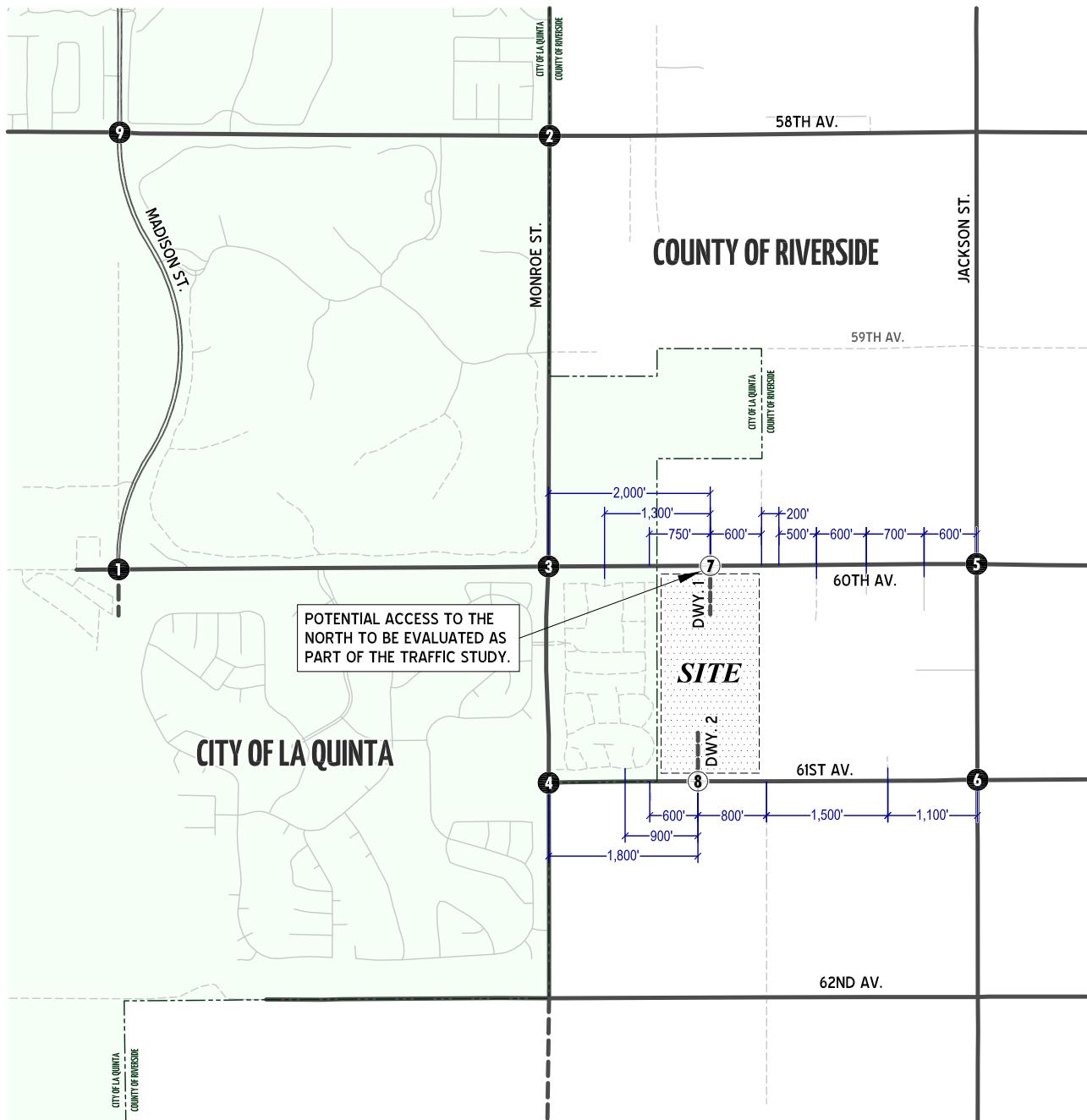
URBAN CROSSROADS, INC.



John Kain, AICP  
President

JN: 08773-03 Scope RTC

EXHIBIT 4a  
**REVISED STUDY AREA MAP**



REVISED: 11/13/2013

# REVISED PROJECT TRIP DISTRIBUTION (INTERIM YEAR)

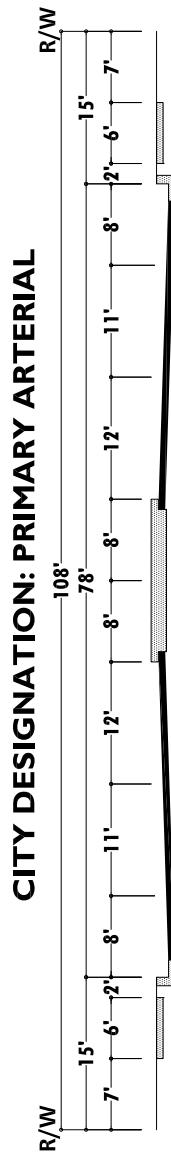
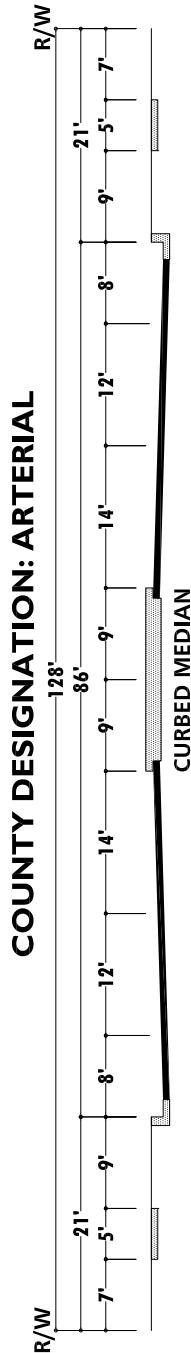
**LEGEND:**

10 = PERCENT TO/FROM PROJECT

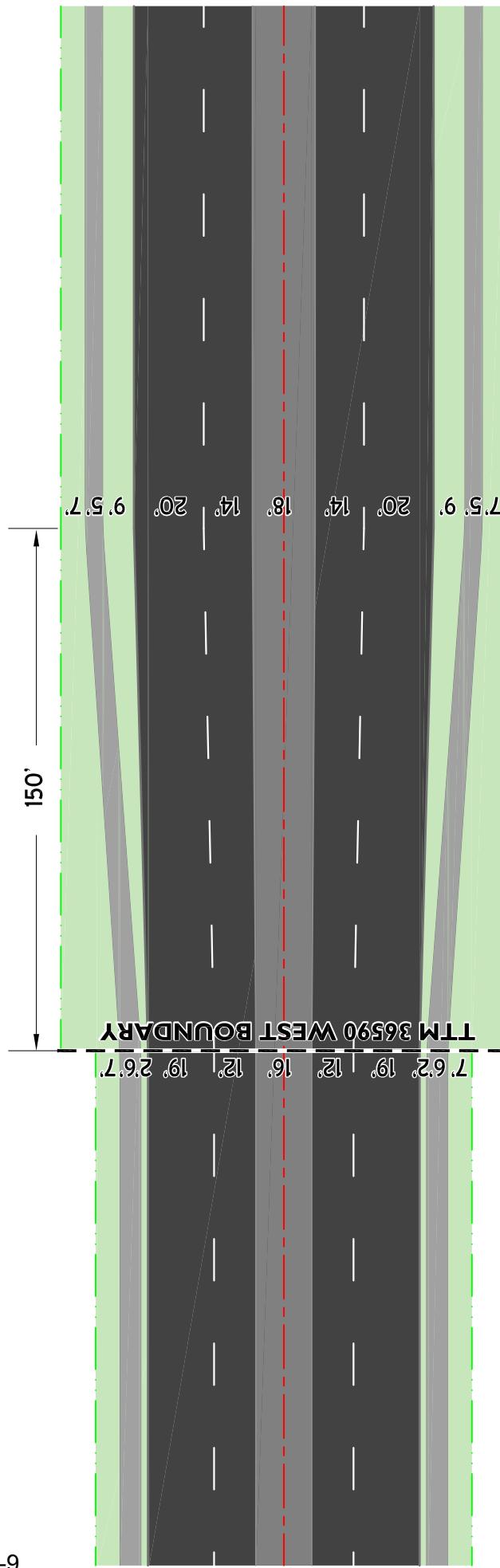
NOM = NOMINAL, LESS THAN 1 PERCENT TO/FROM PROJECT

REVISED: 11/13/2013

**AVENUE 60 CROSS SECTION RECONCILIATION  
ADJACENT TO VISTA SOLEADA (TTM 36590)**



## **EAST/WEST TRANSITION RECOMMENDED AT CITY BOUNDARY**



October 28, 2013

Mr. Kevin Tsang  
COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT  
4080 Lemon Street, 8<sup>th</sup> Floor  
Riverside, CA 92501

**Subject: Traffic Impact Analysis Scoping Agreement for the Proposed Vista Soleada  
(TTM 36590) Residential Development**

The firm of Urban Crossroads, Inc. is pleased to submit this scoping letter regarding the traffic impact analysis for the proposed Vista Soleada Tentative Tract Map No. 36590 ("Project"), which is generally located 0.25 miles east of Monroe Street and south of 60th Avenue in the unincorporated area of Riverside County, adjacent to the City of La Quinta, in the community area of Vista Santa Rosa. The proposed Project is to consist of 230 single family homes and a 1.40 acre equestrian way station.

A preliminary site plan for the proposed Project is shown on Exhibit 1. Exhibit 2 provides an illustrative plan for the overall Project, and Exhibit 3 shows the potential equestrian way station which is located at the northeast corner of the Project. The 76-acre Project is characterized by multiple pocket parks, citrus themed country lanes and a 100' wide perimeter grove of date palm trees. Residential density within the project averages approximately 3 dwelling units per gross acre (du/ac), consisting of 211 residential lots (min. 4,000 s.f., avg. 6,000 s.f.) at the core of the project and 19 estate lots ( $\frac{3}{4}$ -1 acre) that surround them.

Exhibit 4 depicts the location of the proposed Project in relation to the existing roadway network. For purposes of the traffic impact analysis the Project's opening year is anticipated to be 2016 (i.e., fully built and occupied). Local access to the project site is provided from Driveway 1 via 60th Avenue and Driveway 2 via 61st Avenue. To achieve a "country lane" feel within the community, the Project proposes customized rural road sections and street standards with reduced centerline radii, hammerhead turnarounds rather than cul-de-sacs, traffic circles rather than standard T-intersections, and turf-lined drainage swales in place of concrete curb and gutter.

### **TRIP GENERATION**

In order to estimate the traffic characteristics of the proposed Project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation (9<sup>th</sup> Edition, 2012) manual for the proposed land use (ITE Land Use Code 210 Single Family Detached Residential) were used. For the equestrian way station, ITE Trip Generation Manual does not include comprehensive trip rates, and therefore SANDAG's daily trip rate for neighborhood/county (undeveloped) park is utilized. For the

equestrian way station (a staging area for loading/unloading of horses and access to trails) peak hour rates, SANDAG's trip generation peak to daily percentage and in/out ratio for City (developed) park is applied.

Table 1 presents the trip generation rates and resulting trips generated by the number of dwelling units and acres of equestrian way station associated with the proposed Project. As shown in Table 1, the proposed Project is anticipated to generate a net total of approximately 2,197 trip-ends per day, with 175 vehicles per hour (VPH) during the AM peak hour and 232 VPH during the PM peak hour.

### **TRIP DISTRIBUTION**

Trip Distribution patterns for the project are illustrated on Exhibit 5 and resulting AM and PM peak hour link volumes for the proposed study area are shown on Exhibit 6.

### **ANALYSIS SCENARIOS**

Consistent with the County's Traffic Impact Analysis Preparation Guide (April 2008), intersection analysis will be provided for the following scenarios:

- Existing (2013) Conditions
- Existing plus Project Conditions
- Existing plus Ambient Growth plus Project (2016) Conditions
- Existing plus Ambient Growth plus Project Plus Cumulative Projects (2016) Conditions

As the Project proposes a zone change, the following long-range traffic scenarios will also be evaluated:

- Long Range (2035) Conditions without Project
- Long Range (2035) Conditions with Project

### **STUDY AREA INTERSECTIONS**

Based on the Project's anticipated travel patterns and trip generation characteristics, the following eight (8) study area intersection locations shown on Exhibit 4 and listed below were selected for analysis based on the County of Riverside's 50 peak hour trip threshold and proximity to the Project.

ID	Intersection Location	Jurisdiction
1	Madison Street / 60th Avenue	City of La Quinta
2	Monroe Street / 58th Avenue	City of La Quinta / County of Riverside
3	Monroe Street / 60th Avenue	City of La Quinta / County of Riverside
4	Monroe Street / 61st Avenue	City of La Quinta / County of Riverside
5	Jackson Street / 60th Avenue	County of Riverside
6	Jackson Street / 61st Avenue	County of Riverside
7	Driveway 1 / 60th Avenue – <i>Future Intersection</i>	County of Riverside
8	Driveway 2 / 61st Avenue – <i>Future Intersection</i>	County of Riverside

### **GENERAL PLAN CIRCULATION NETWORK**

Since the County of Riverside has not yet included the circulation network map in the recently updated County of Riverside General Plan Circulation Element, the proposed roadway classification within the study area based on the South Valley Parkway Traffic Study, dated October 2006, needs to be confirmed by County staff members. The 2003 adopted Riverside County General Plan Circulation Element is shown on Exhibit 7. The Draft South Valley Road and Bridge District Proposed Roadway Network is presented on Exhibit 8. Exhibit 9 includes the County of Riverside General Plan Roadway Cross-Sections.

As shown on Exhibit 7, 60th Avenue is classified as an Expressway and 62nd Avenue as a Secondary roadway. However, the proposed roadway network shown on Exhibit 8 indicates a classification change for both 60th Avenue and 62nd Avenue, wherein 60th Avenue is proposed as an Arterial roadway and 62nd Avenue is proposed as an Expressway. Per County of Riverside staff, the proposed changes in roadway classification have not been adopted by the County and the status of the South Valley Road and Bridge Benefit District has no definitive timing.

The City of La Quinta General Plan Roadway Classification is shown on Exhibit 10. Exhibit 11 presents the City of La Quinta's General Plan Street Cross-Sections. As shown on Exhibit 10, Avenue 60 is classified as a Primary Arterial roadway, east of Monroe Street. This is consistent with the proposed roadway network shown previously on Exhibit 8. However, Avenue 62 is still shown as a Secondary roadway. Per County of Riverside staff, these differences still remain between City and County classifications.

### **INTERSECTION INTERVALS**

Table 2 includes the County of Riverside intersection interval requirements. The City of La Quinta's intersection interval requirements are shown on Table 3. Table 3 also indicates the Project's driveway distances from Monroe Street.

Exhibit 4 depicts the Project's driveway distances from other existing / future driveways along 60th Avenue and 61st Avenue.

60th Avenue is classified as a 4-lane Arterial roadway (128' ROW) in the proposed roadway network for Riverside County with a minimum interval of one-quarter mile (1,320 ft.) between other streets or highways. For the City of La Quinta, 60th Avenue is classified as a 4-Lane Primary Arterial roadway (108' ROW) with a minimum interval of 1,060 feet between intersections and more than 275 feet between driveways.

61st Avenue is not shown in the County's circulation network. For the City of La Quinta, 61th Avenue is classified as a 2-Lane Collector roadway (80' ROW) with a minimum interval of 300 feet between intersections and more than 250 feet between driveways.

As shown on Exhibit 4, the Project driveways at 60th Avenue and 61st Avenue fall within the allowed intersection intervals.

### **TRAILS**

The CVAG Non-Motorized Transportation Plan Update (2010) produced a comprehensive network of hiking and equestrian trails in the Coachella and Palo Verde Valleys. As shown on the attached Exhibit 12, an equestrian trail is proposed along 60th Avenue adjacent to the Project. The Vista Santa Rosa Community Plan map also shows a trail along 61st Avenue (see attached Exhibit 13). The Project incorporates a perimeter date palm orchard and multi-use trail, with equestrian way station.

### **ANALYSIS CRITERIA**

Highway Capacity Manual (HCM) analysis will be performed for study area intersections. For signalized intersections, average total delay per vehicle for the overall intersection is used to determine level of service. Levels of service at the study intersections will be evaluated using an HCM intersection analysis program. The level of service will be determined at signalized intersections using data collected describing the intersection configuration, traffic signal timing, and traffic volumes to calculate average intersection delay.

For intersections within the County of Riverside, a saturation flow rate of 1,900 vehicles per hour of green (vphg) per lane will be utilized based on the County's traffic impact analysis guidelines.

For intersections within the City of La Quinta, a saturation flow rate of 1,850 vehicles per hour of green (vphg) per lane will be utilized based on the City's traffic study guidelines (Engineering Bulletin #06-13, dated June 29, 2012).

The study area intersections which are stop sign controlled with stop-control on the minor street only will be analyzed using the two-way stop-controlled unsignalized intersection analysis methodology of the HCM. For these intersections, the calculation of level of service is dependent on the occurrence of gaps occurring in the traffic flow of the major street. The level of service criteria for this type of intersection analysis is based on total delay per vehicle for the worst minor street movement(s).

### **Definition of Deficiency**

Riverside County General Plan Policy C 2.1 states that the County will maintain the following County-wide target level of service (LOS): LOS "C" on all County-maintained roads and conventional State Highways. As an exception, LOS "D" may be allowed in Community Development areas at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways or conventional State Highways. LOS "E" may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. As such, LOS "D" will be considered the limit of acceptable operations for all study area intersections.

The City of La Quinta's required level of service (LOS) has been obtained from the City of La Quinta traffic study guideline (Engineering Bulletin #06-13). The City has established LOS "D" as the minimum level of service for its intersections. Therefore, any intersection operating at LOS "E" or "F" will be considered deficient for the purposes of this analysis. As an exception, LOS "E" is allowable on the side street for two-way (cross-street) stop controlled intersections.

### **TRAFFIC VOLUMES**

The City of La Quinta's traffic study guidelines (Engineering Bulletin #06-13), requires the morning peak volumes to be measured between 6:00 to 8:30 am and afternoon peak volumes between 2:30 to 5:30 pm. The County of Riverside normally measures peak volumes between 7:00 to 9:00 am and 4:00 to 6:00 pm. For the purpose of this report, the morning peak hour volumes will be measured between 6:00 to 9:00 am and afternoon peak hour volumes will be measured between 2:30 to 6:00 pm.

In addition, the City of La Quinta requires seasonal adjustments to consider the seasonal population variations within the City. Since the counts are anticipated to be collected this October, a 10% increase will be applied consistent with the City of La Quinta's traffic study guidelines.

### **CUMULATIVE DEVELOPMENT PROJECTS – (OPEN ITEMS)**

We are requesting that the County of Riverside staff members and City of La Quinta staff members to provide a list of cumulative projects to be included that might potentially affect our study area. Nearby development projects are included in Attachment A. For long range future (2035) conditions, we anticipate utilizing available RIVTAM projections and/or available City of La Quinta General Plan forecasts.

If you have any questions, please contact Janette Cachola at (949) 660-1994, extension 249.

Respectfully submitted,



John Kain, AICP  
President

JN:08773-02 Scope (revised)

xc: Nazir Lalani  
Traffic Engineer  
CITY OF LA QUINTA

Ed Wimmer  
Public Works Department  
CITY OF LA QUINTA

## EXHIBIT B

### SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the Riverside County Transportation Department requirements for traffic impact analysis of the following project. The analysis must follow the Riverside County Transportation Department Traffic Study Guidelines dated February 2005.

Case No. \_\_\_\_\_  
Related Cases- \_\_\_\_\_  
SP No. \_\_\_\_\_  
EIR No. \_\_\_\_\_  
GPA No. \_\_\_\_\_  
CZ No. \_\_\_\_\_  
Project Name: Vista Soleada (TTM 36590)  
Project Address: 0.25 miles east of Monroe St. and south of 60th Av. in the unincorporated area of Riverside County.  
Project Description: 230 Single Family Residential Dwelling Units and 1.40 AC Equestrian Way Station (See Exhibit 1)

<u>Consultant</u>		<u>Developer</u>	
Name:	Urban Crossroads Inc. - John Kain	SABAL FINANCIAL GROUP, L.P. - Jim Stockhausen	
Address:	41 Corporate Park, Suite 300 Irvine, CA 92606	4675 MacArthur Ct., Suite 1550 Newport Beach, CA 92660	
Telephone:	(949) 660-1994 ext. 211		
Fax:	(949) 660-1911		

**A. Trip Generation Source:** ITE 9th Edition (2012) (See Table 1)

Current GP Land Use	AG	Proposed Land Use	Residential
Current Zoning	A-1-10	Proposed Zoning	Residential
Current Trip Generation			
	In      Out      Total	Proposed Trip Generation	
AM Trips	0      0      0	In      Out      Total	45      130      175
PM Trips	0      0      0		146      86      232

Internal Trip Allowance       Yes       No      ( \_\_\_\_\_ % Trip Discount)  
Pass-By Trip Allowance       Yes       No      ( \_\_\_\_\_ % Trip Discount)

A passby trip discount of 25% is allowed for appropriate land uses. The passby trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

**B. Trip Geographic Distribution:** (See attached Exhibit 5 for detailed assignment)  
N 40 %      S 5 %      E 30 %      W 25 %

**C. Background Traffic**  
Project Build-out Year: 2016      Annual Ambient Growth Rate: 2 %  
Phase Year(s) 2016

Other area Projects to be analyzed: \_\_\_\_\_ County/City to provide list of cumulative projects (nearby projects included in Attachment A)  
Model/Forecast Methodology: RIVTAM 2035 and/or City of La Quinta General Plan forecasts

**D. Study Intersections:** (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments form other agencies). (See Exhibit 4)

- |   |     |
|---|-----|
| 1. Madison Street / 60th Avenue                   | 9.  |
| 2. Monroe Street / 58th Avenue                    | 10. |
| 3. Monroe Street / 60th Avenue                    | 11. |
| 4. Monroe Street / 61st Avenue                    | 12. |
| 5. Jackson Street / 60th Avenue                   | 13. |
| 6. Jackson Street / 61st Avenue                   | 14. |
| 7. Driveway 1 / 60th Avenue - Future Intersection | 15. |
| 8. Driveway 2 / 61st Avenue - Future Intersection | 16. |

**E. Study Roadway Segments:** (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments form other agencies).

1. \_\_\_\_\_ 2. \_\_\_\_\_

**F. Other Jurisdictional Impacts**

Is this project within a City's Sphere of influence or one mile radius of City boundaries:  Yes  No

If so, name of City jurisdiction: City of La Quinta

**G. Site Plan** (please attach reduced copy) (see Exhibit 1)

**H. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline)** (To be filled out by Transportation Department)

(NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted", or similar statement) at an existing unsignalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.)

**I. Existing Conditions**

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.

Date of counts October 2013

\*NOTE\* Traffic Study Submittal Form and appropriate fee must be submitted with, or prior to submittal of this form. Transportation Department staff will not process the Scoping Agreement prior to receipt of the fee.

Recommended by:



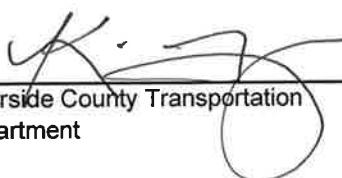
10/10/2013

Consultant's Representative

Date

Scoping Agreement Revised on 10/28/2013

Approved Scoping Agreement:

  
Riverside County Transportation  
Department

10/29/2013  
Date

EXHIBIT 1  
**PRELIMINARY SITE PLAN**

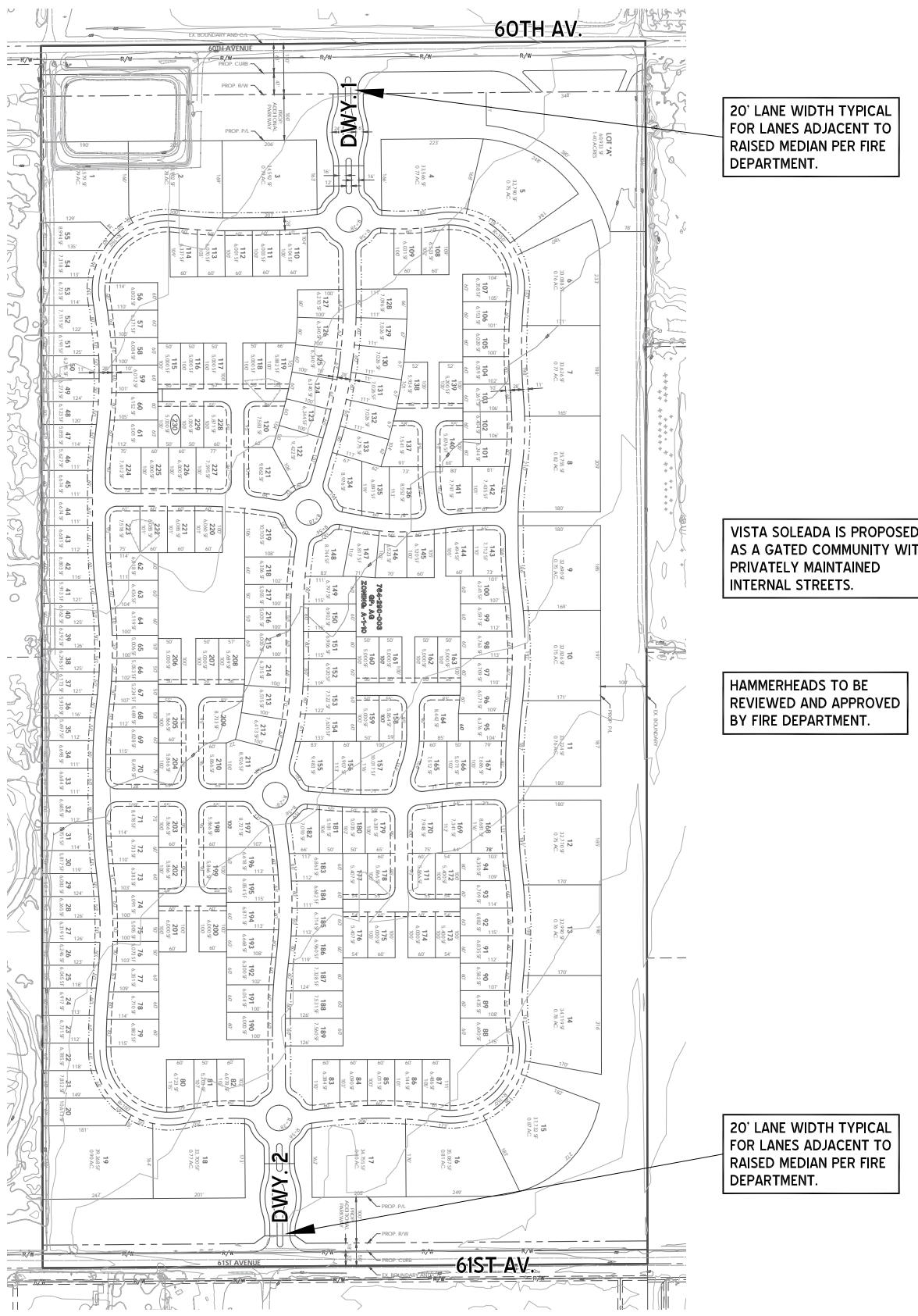
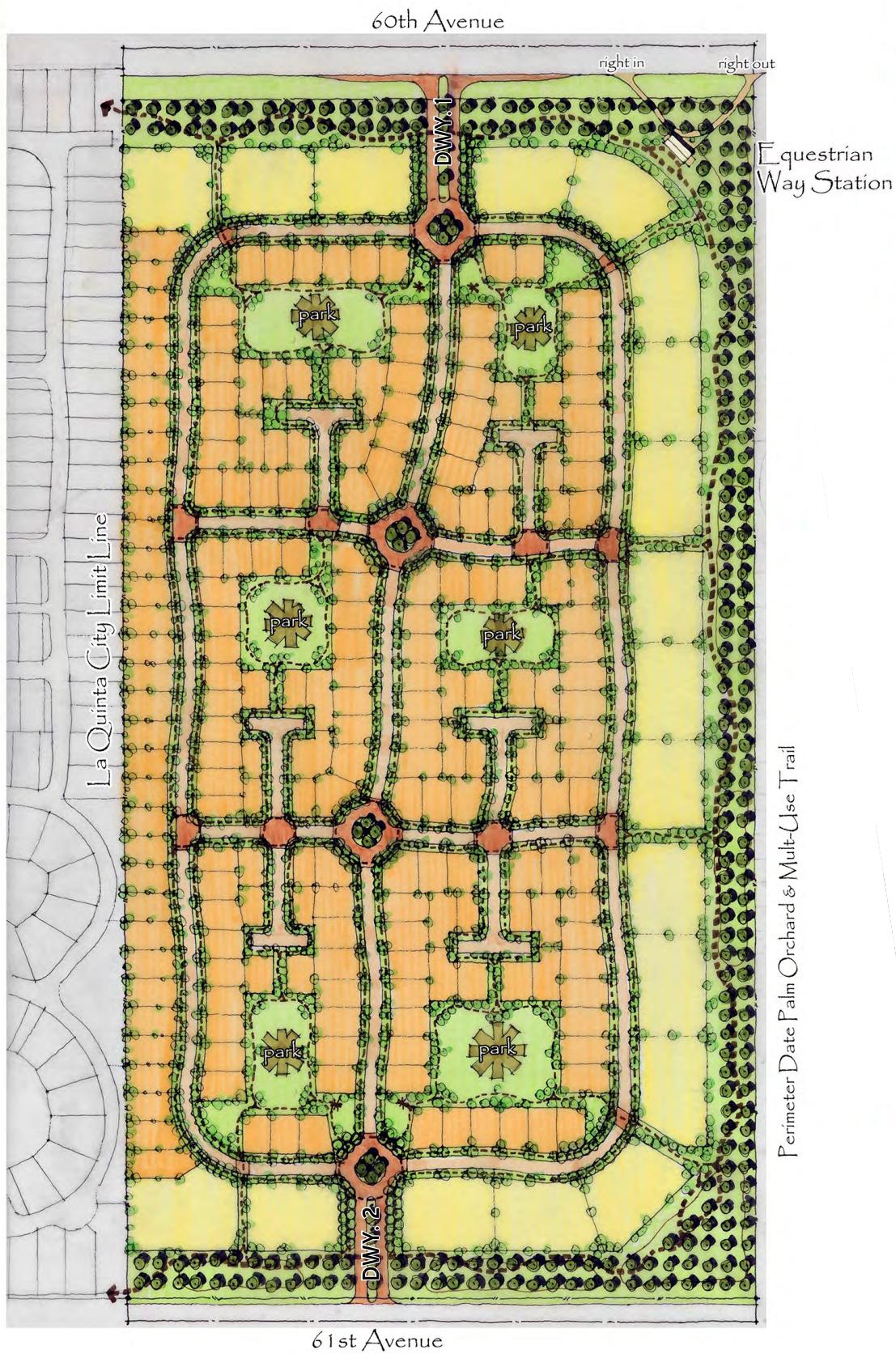
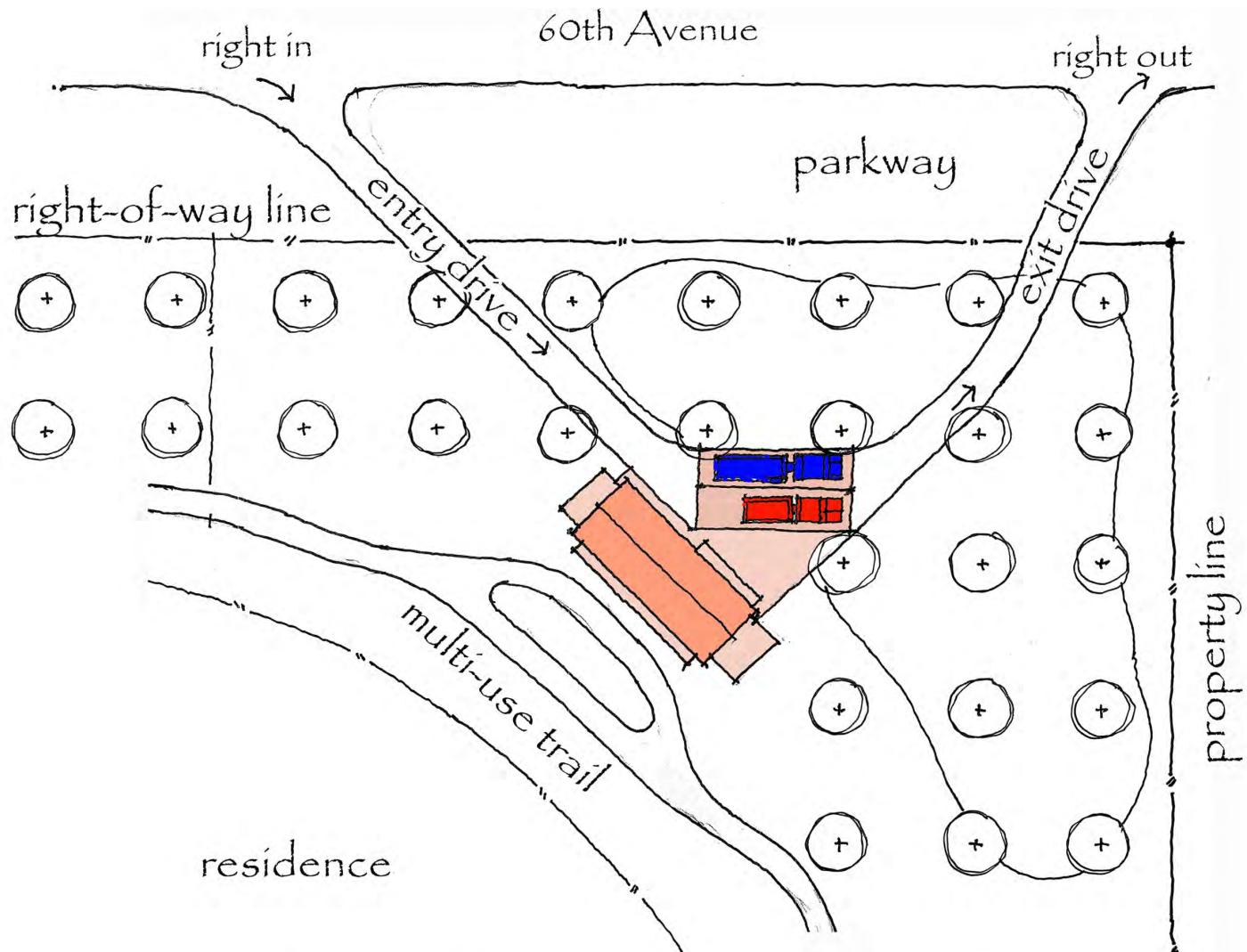


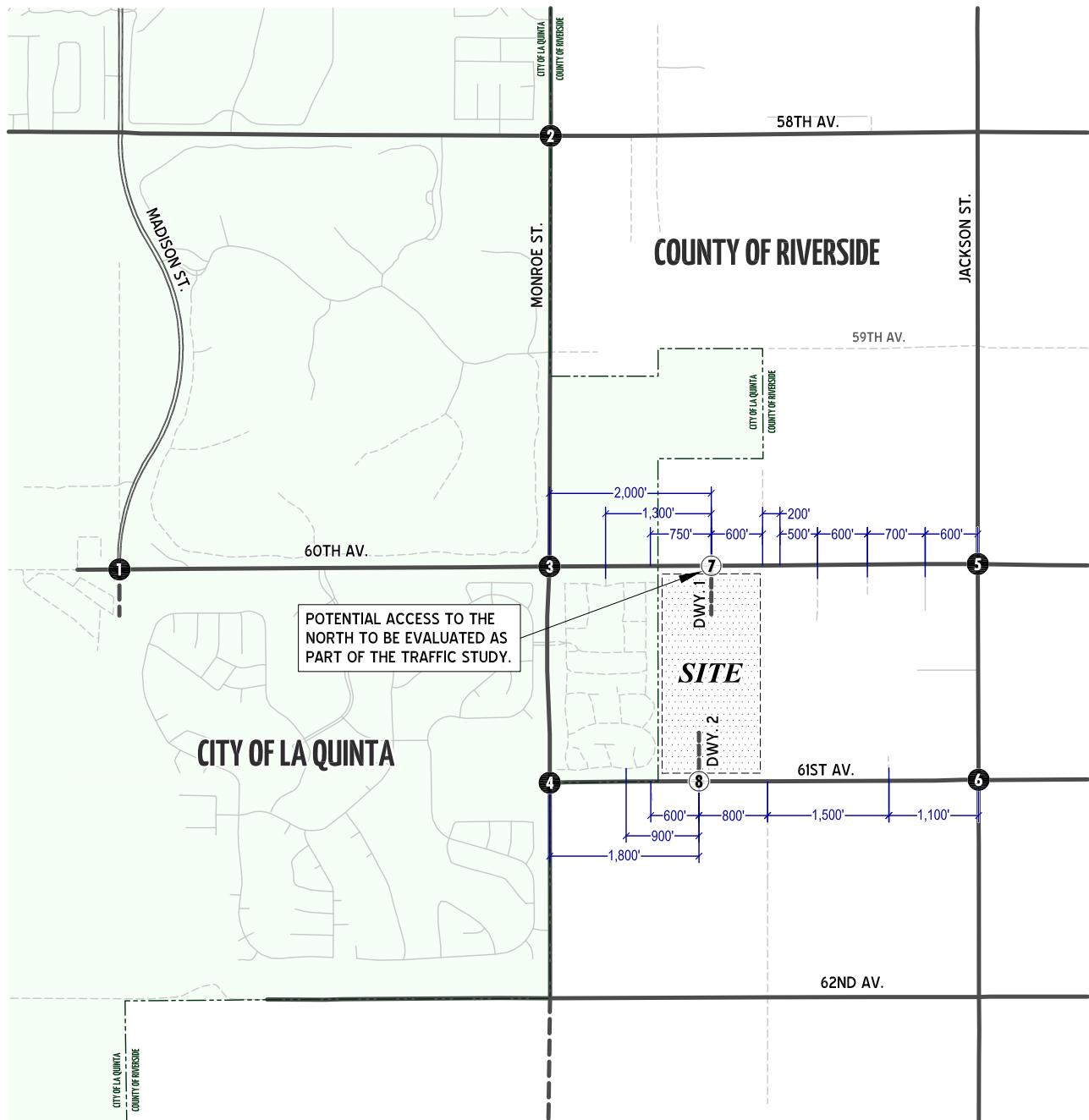
EXHIBIT 2  
**PROJECT ILLUSTRATIVE PLAN**



**POTENTIAL EQUESTRIAN WAY STATION**

# EXHIBIT 4

# LOCATION MAP



## **LEGEND:**

- ⑥ = EXISTING ANALYSIS LOCATION
  - ② = FUTURE ANALYSIS LOCATION
  - = FUTURE ROADWAY / DIRT
  - 100' = INTERSECTION/DRIVEWAY INTERVALS  
(FUTURE AND EXISTING)



**TABLE 1****VISTA SOLEADA (TTM 36590) PROJECT TRIP GENERATION SUMMARY**

TRIP GENERATION RATES <sup>1</sup>										
Land Use	ITE CODE	Quantity	Units <sup>2</sup>	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday Daily
				In	Out	Total	In	Out	Total	
Single Family Detached	210	230	DU	0.19	0.56	0.75	0.63	0.37	1.00	9.52
Equestrian Way Station	- <sup>3</sup>	1.40	AC	0.33	0.32	0.65	0.23	0.22	0.45	5.00

TRIP GENERATION TOTAL										
Land Use	ITE CODE	Quantity	Units <sup>1</sup>	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday Daily
				In	Out	Total	In	Out	Total	
Single Family Detached	210	230	DU	44	129	173	145	85	230	2,190
Equestrian Way Station	- <sup>3</sup>	1.40	AC	1	1	2	1	1	2	7
<b>TOTAL</b>				<b>45</b>	<b>130</b>	<b>175</b>	<b>146</b>	<b>86</b>	<b>232</b>	<b>2,197</b>

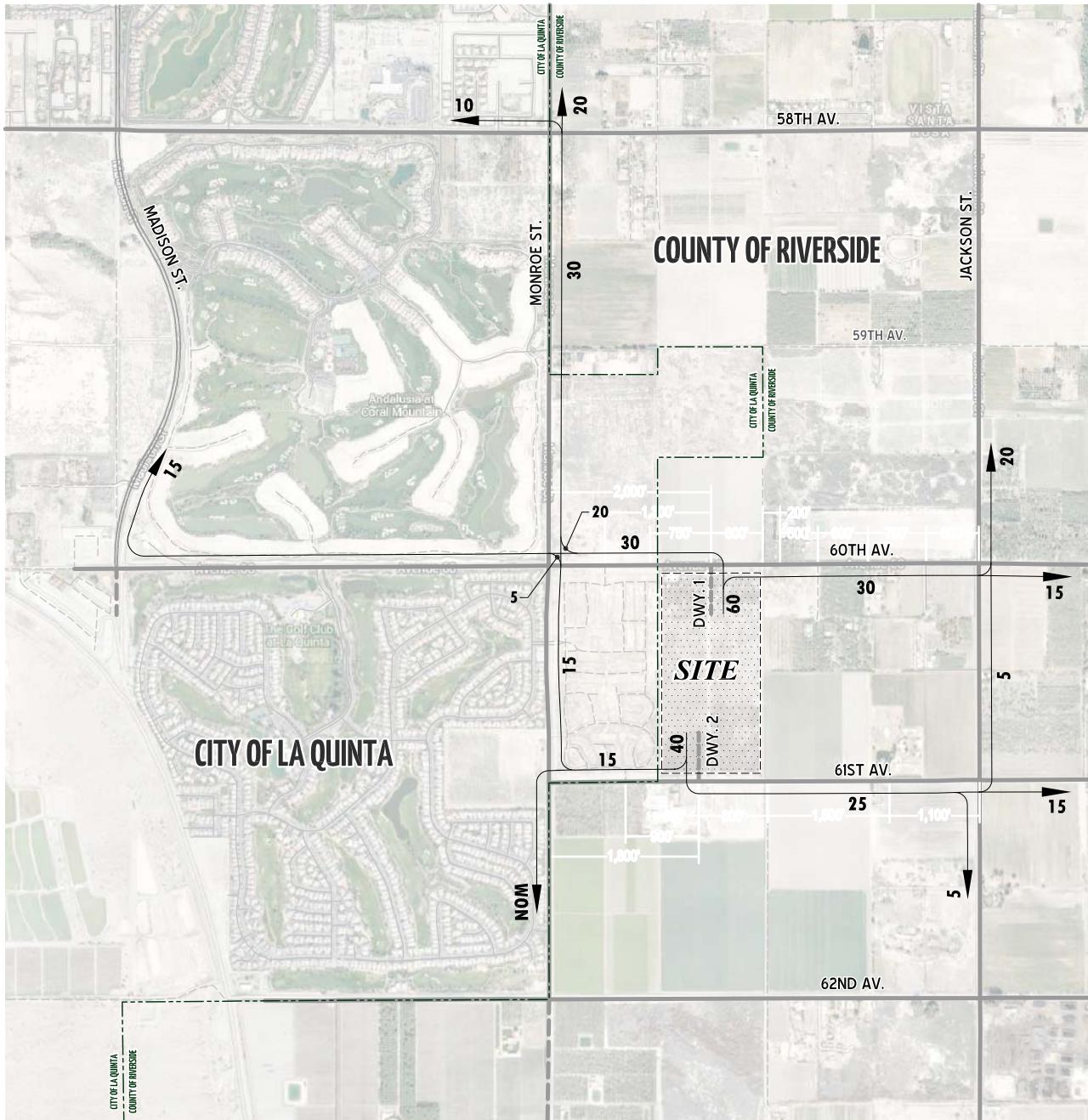
<sup>1</sup> Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 9th Edition (2012).

<sup>2</sup> DU = Dwelling Unit; AC = Acre

<sup>3</sup> Since ITE does not have trip rates for an equestrian way station, similar use based on SANDAG's neighborhood/county (undeveloped) park daily rates are utilized. For the peak hour rates, SANDAG's in/out ratio for City (developed) park is applied.

EXHIBIT 5

# PROJECT TRIP DISTRIBUTION (INTERIM YEAR)

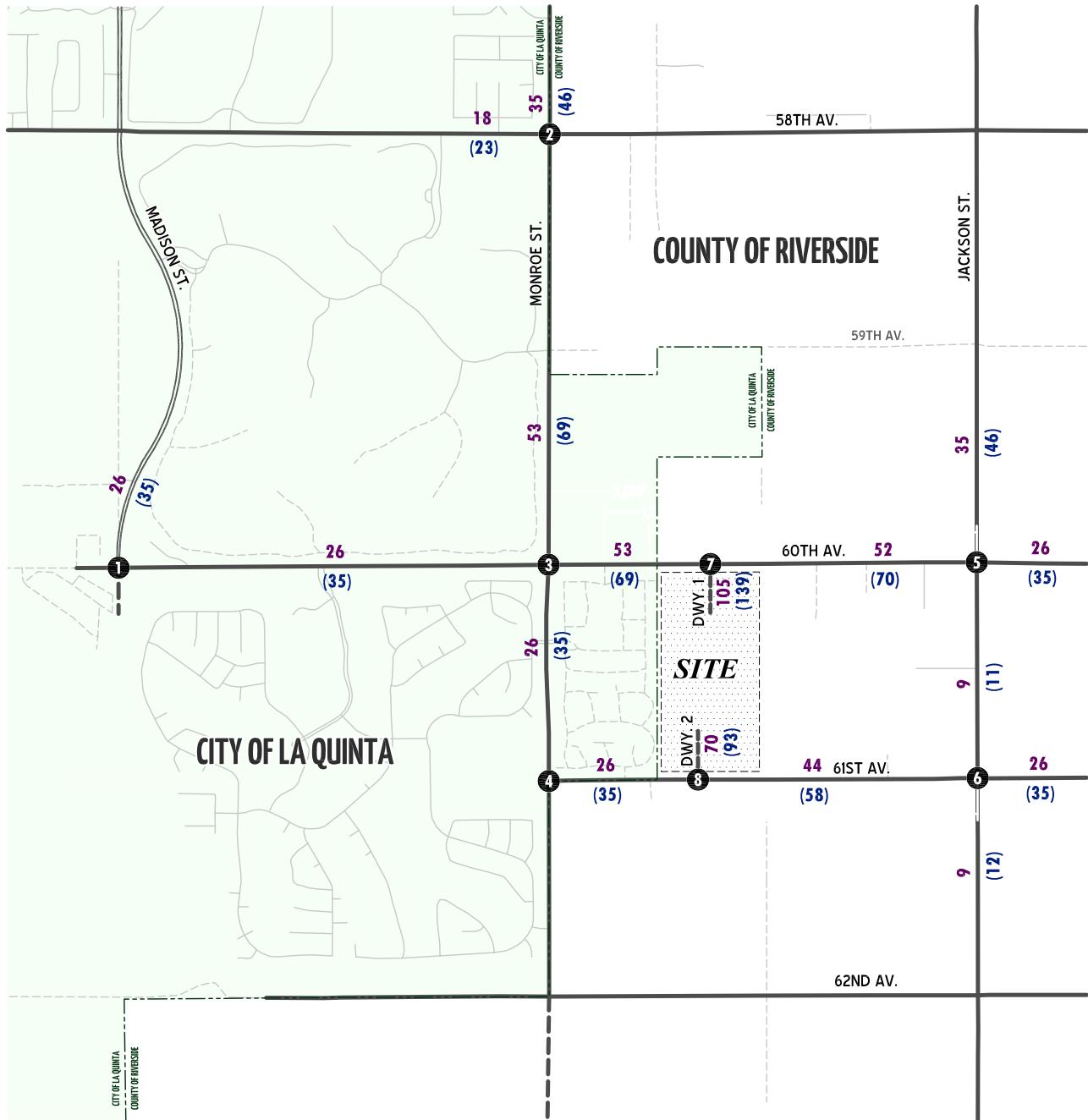


**LEGEND:**

10 = PERCENT TO/FROM PROJECT  
NOM = NOMINAL, LESS THAN 1 PERCENT TO/FROM PROJECT



**PROJECT ONLY PEAK HOUR LINK VOLUMES**

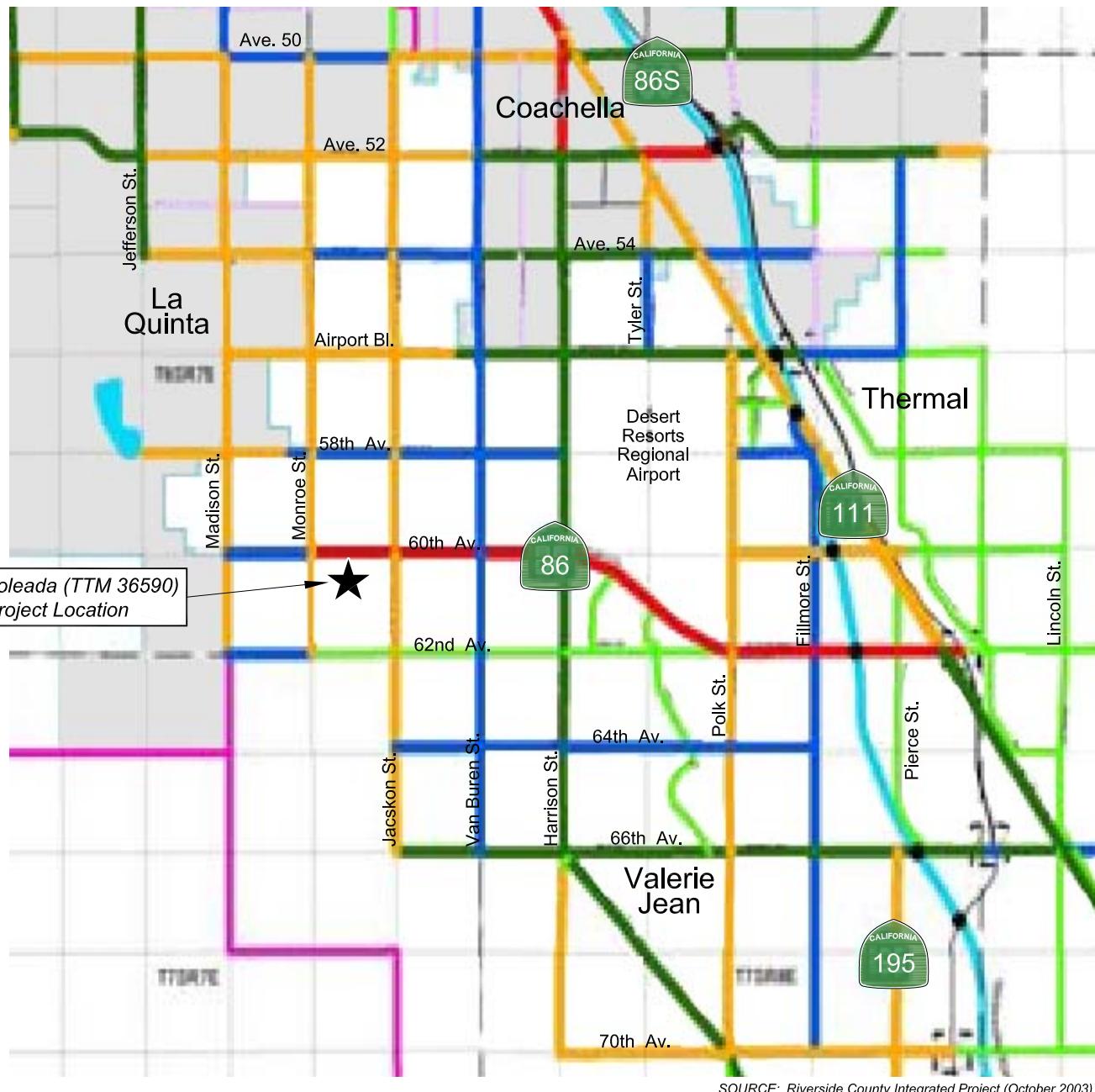


## **LEGEND:**

- 8** = INTERSECTION ID
  - 100** = PROJECT ONLY AM PEAK HOUR LINK (2-WAY) VOLUMES
  - (100)** = PROJECT ONLY PM PEAK HOUR LINK (2-WAY) VOLUMES



# 2003 RIVERSIDE COUNTY GENERAL PLAN CIRCULATION ELEMENT



SOURCE: Riverside County Integrated Project (October 2003)

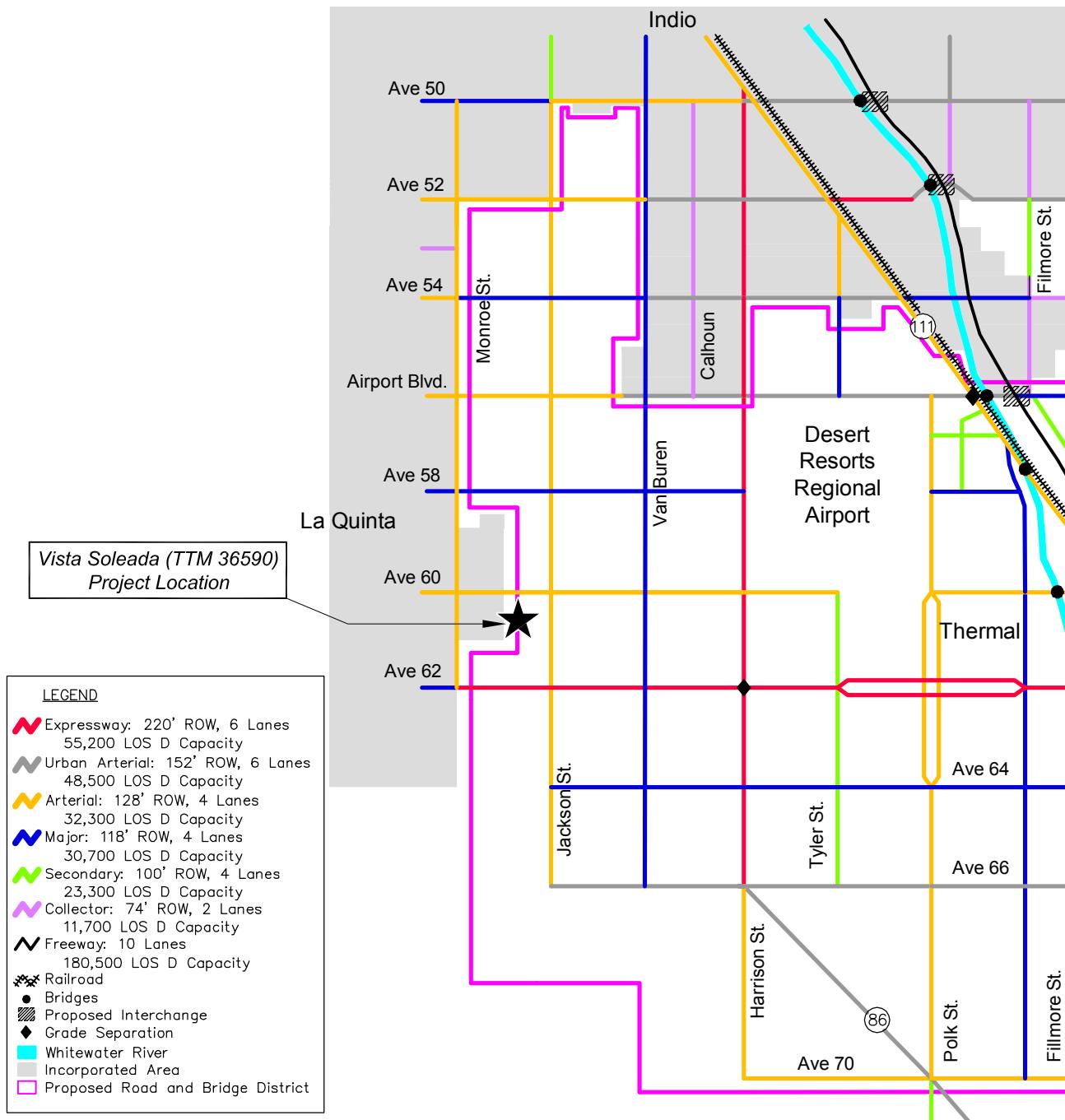
- Expressway (184' ROW)
- Urban Arterial (152' ROW)
- Arterial (128' ROW)
- Major (118' ROW)
- Secondary (100' ROW)
- Collector (74' ROW)
- Mountain Arterial (110' ROW)
- Freeway
- Railroad

- Bridges
- Moreno Valley to San Bernardino Corridor Alternatives
- Hemet to Corona/Lake Elsinore Corridor Alternatives
- SR-79 Re-alignment Alternatives
- Proposed Interchange
- Existing Interchange

- Area Plan Boundary
- Township
- Section
- Water
- City



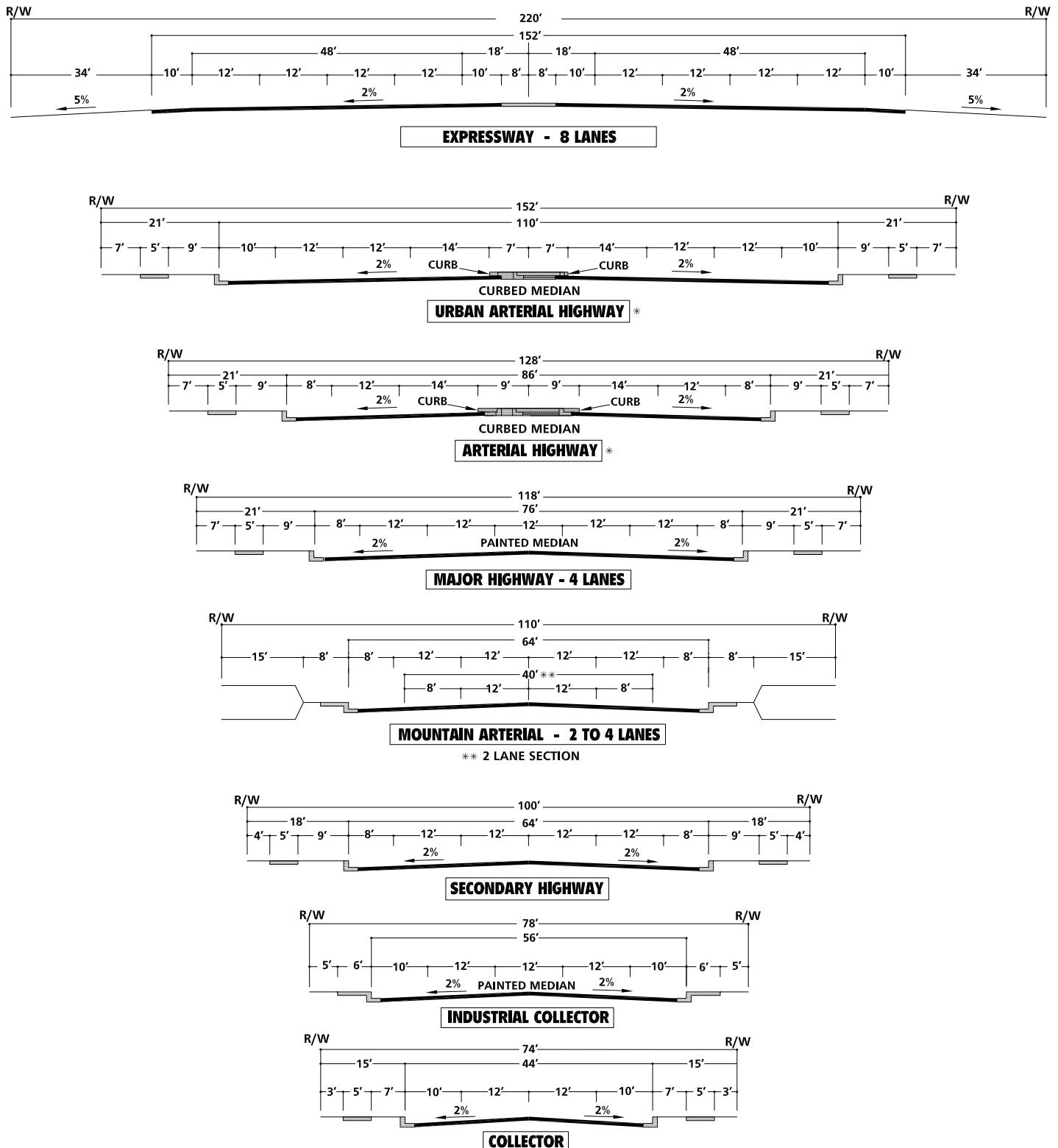
# DRAFT SOUTH VALLEY ROAD AND BRIDGE DISTRICT PROPOSED ROADWAY NETWORK



SOURCE: South Valley Parkway Traffic Study and Roadway Phasing Plan (October 2006)



EXHIBIT 9



\* IMPROVEMENTS MAY BE RECONFIGURED TO ACCOMMODATE EXCLUSIVE TRANSIT LANES OR ALTERNATIVE LANE ARRANGEMENTS ADDITIONAL RIGHT OF WAY MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE ULTIMATE IMPROVEMENTS FOR STATE HIGHWAYS SHALL CONFORM TO CAI TRAVEL DESIGN STANDARDS

*NOT TO SCALE*

Vista Soleada (TTM 36590) Traffic Impact Analysis  
County of Riverside, CA (JN - 08773:03 s)

SOURCE: COUNTY OF RIVERSIDE

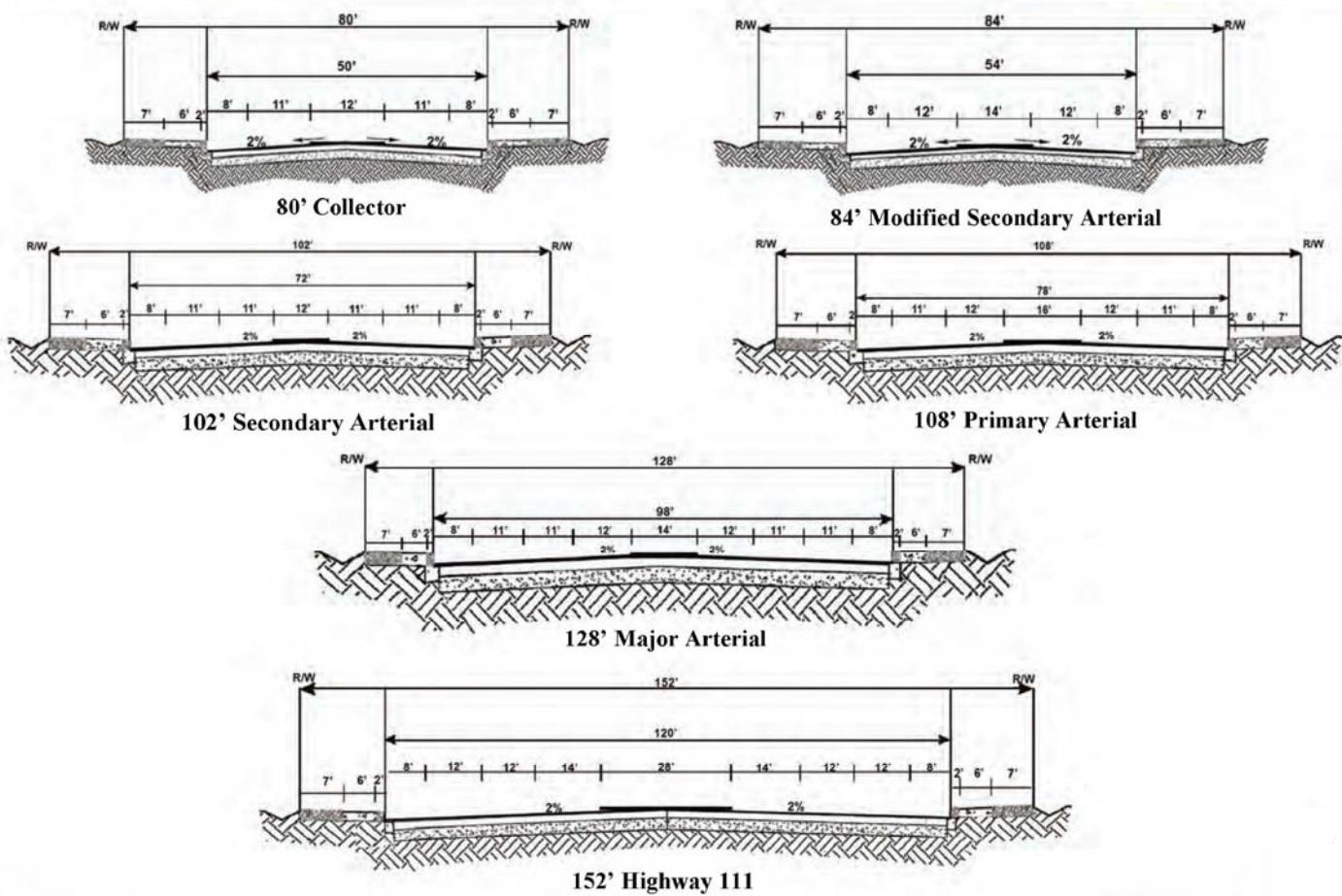


# CITY OF LA QUINTA GENERAL PLAN ROADWAY CLASSIFICATIONS



Source: City of La Quinta Bull. 06-13 (9.22.10) & Iteris (2012)

# CITY OF LA QUINTA GENERAL PLAN STREET CROSS-SECTIONS



07.02.12

# EXISTING AND PROPOSED HIKING AND EQUESTRIAN TRAIL FACILITIES SOUTH COACHELLA VALLEY



## Legend

### Trail Facilities

#### CLASS, STATUS

— Hiking & Equestrian Trail, Existing

Trailhead, Existing

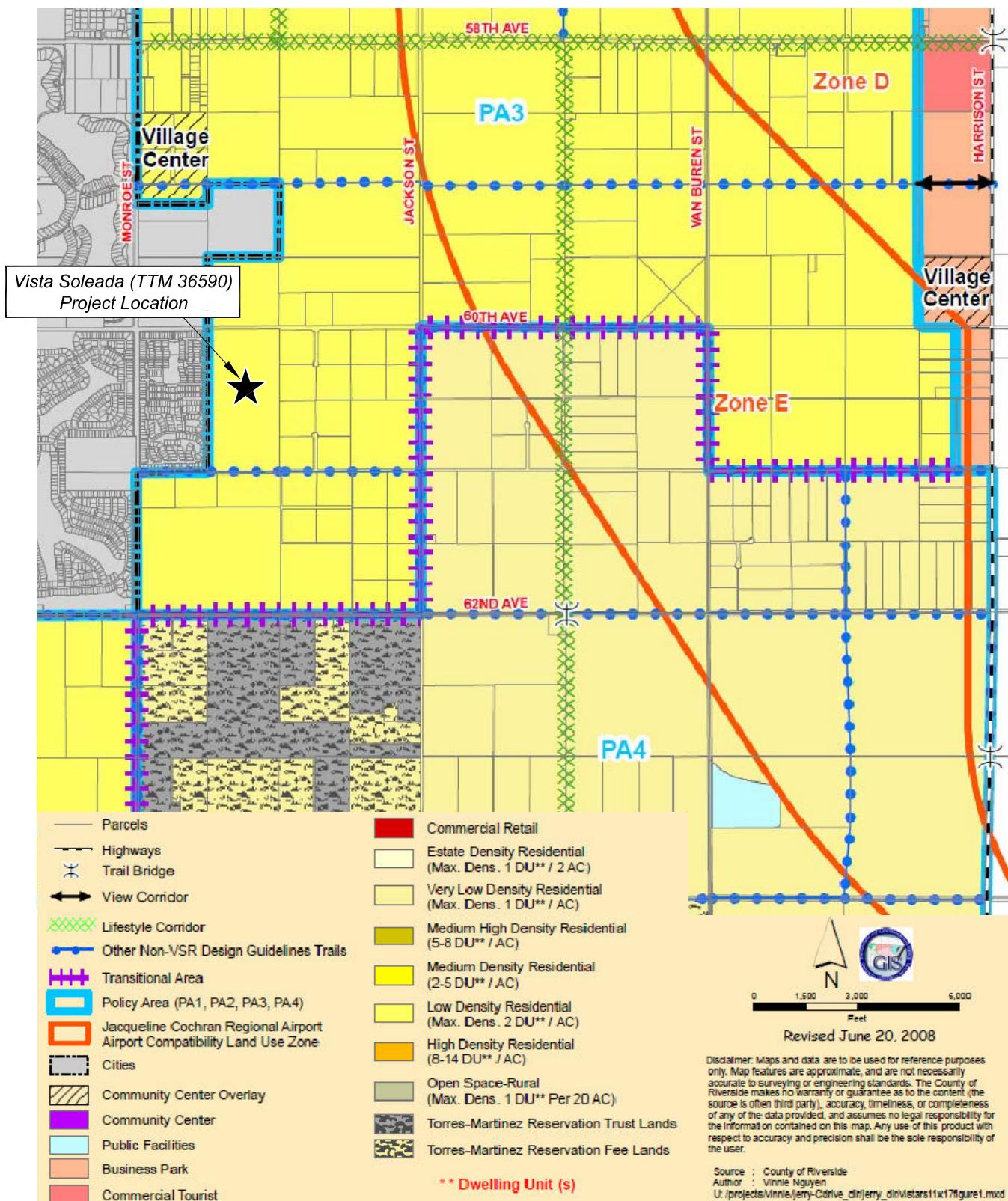
— Hiking & Equestrian Trail, Proposed

Trailhead, Proposed

June 2018



# VISTA SANTA ROSA COMMUNITY LAND USE CONCEPT PLAN MAP



**TABLE 2**  
**COUNTY OF RIVERSIDE INTERSECTION INTERVALS**

**Street Classification as identified in the city Transportation Department Standards and Specifications**

Classification	Definition	Minimum Right-of-Way Width Required	Number of Lanes Required (Approximate)
<i>Freeway</i>	Highway upon which the abutter's rights of access are controlled and which provides separated grades at intersecting streets.	To be determined by Caltrans	To be determined by Caltrans
<i>Expressway</i>	Multi-modal highway corridor for through traffic to which access from abutting property is restricted. Intersections with other streets or highways shall be limited to approximately one-half mile intervals.	220 to 184 feet	6 or 8 lanes, additional rights-of-way may be needed at intersections
<i>Urban Arterial</i>	Highway primarily for through traffic where anticipated traffic volumes exceed four-lane capacity. Access from other streets or highways shall be limited to approximately one-quarter mile intervals.	152 feet	6 or 8 lanes, additional rights-of-way may be required at intersections
<i>Arterial Highway</i>	Divided highway primarily for through traffic to which access from abutting property shall be kept at a minimum. Intersections with other streets or highways shall be limited to approximately one-quarter mile intervals.	128 feet	4 or 6 lanes, additional right of way may be required at intersections
<i>Arterial Mountain Highway</i>	Highway intended to serve through traffic in mountainous areas zoned for low density residential development. Access from abutting property shall be kept at a minimum. Intersections with other streets or highways shall be limited to approximately 330-foot intervals.	110 feet	2 to 4 lanes, additional right-of-way may be required at intersections.
<i>Major Highway</i>	Highway intended to serve property zoned for major industrial and commercial uses, or to serve through traffic. Intersections with other streets or highways may be limited to approximately 660-foot intervals.	118 feet	4 lanes, additional rights-of-way may be required at intersections
<i>Secondary Highway</i>	Highway intended to serve through traffic along longer routes between major traffic generating areas or to serve property zoned for multiple residential, secondary industrial or commercial uses. Intersections with other streets and highways may be limited to 330-foot intervals.	100 feet	4 lanes, generally no turn lanes, and additional right-of-way may be required at intersections
<i>Collector Street</i>	Street intended to serve intensive residential land use, multiple-family dwellings, or to convey traffic through an area to roads of equal or similar classification or higher. It may also serve as a cul-de-sac in industrial or commercial use areas but shall not exceed 660 feet in length when so used.	74 feet	2 lanes
<i>Industrial Collector</i>	A circulatory street with a continuous left-turn lane with at least one end connecting to a road of equal or greater classification.	78 feet	2 lanes

Source: Riverside County General Plan (2013 update). Chapter 4 - Circulation Element (Page C-15)

**TABLE 3**  
**CITY OF LA QUINTA INTERSECTION INTERVALS**

Roadway Classification	Design Speed (mph)	Intersection Spacing (ft.)				
		Residential	Commercial	Access (measured between the curb returns)		
				Approach leg to a full turn intersection	On the exit leg from a full turn intersection	Between Driveways
Major Arterial	55	2,600	1,060	>250	>150	>275
Primary Arterial	45	1,060	1,060	>250	>150	>275
Secondary Arterial	40	600	600	>250	>150	>250
Collectors	30	300	300	>250	>150	>250
Local	25	250	250	-	-	-

\* Source: La Quinta General Plan (2012 update). Chapter 2 - Community Development (Pages 120-122)

Vista Soleada (Residential) Project Driveway Intervals			
Roadway	Road Segment	Roadway Classification	Distance
60th Avenue	From Monroe Street to Driveway 1	Primary Arterial	2,000
61st Avenue	From Monroe Street to Driveway 2	Collector	1,800

**ATTACHMENT A**

Nearby Development Projects





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## **APPENDIX 3.1**

Traffic Count Data – October 2013



Counts Unlimited, Inc.  
 PO Box 1178  
 Corona, CA 92878  
 (951) 268-6268

City of La Quinta  
 N/S: Madison Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAMA60AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

	Madison Street Southbound			60th Avenue Westbound			60th Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
06:00 AM	6	0	6	0	12	12	0	0	0	18
06:15 AM	7	0	7	0	10	10	0	0	0	17
06:30 AM	13	0	13	0	18	18	0	0	0	31
06:45 AM	14	0	14	0	8	8	0	0	0	22
Total	40	0	40	0	48	48	0	0	0	88
07:00 AM	14	0	14	1	12	13	1	0	1	28
07:15 AM	16	0	16	0	22	22	0	0	0	38
07:30 AM	18	0	18	0	21	21	0	0	0	39
07:45 AM	22	0	22	0	17	17	0	0	0	39
Total	70	0	70	1	72	73	1	0	1	144
08:00 AM	10	0	10	1	29	30	0	1	1	41
08:15 AM	14	0	14	0	25	25	0	0	0	39
08:30 AM	13	0	13	0	41	41	0	0	0	54
08:45 AM	17	0	17	1	22	23	0	1	1	41
Total	54	0	54	2	117	119	0	2	2	175
Grand Total	164	0	164	3	237	240	1	2	3	407
Apprch %	100	0		1.2	98.8		33.3	66.7		
Total %	40.3	0	40.3	0.7	58.2	59	0.2	0.5	0.7	

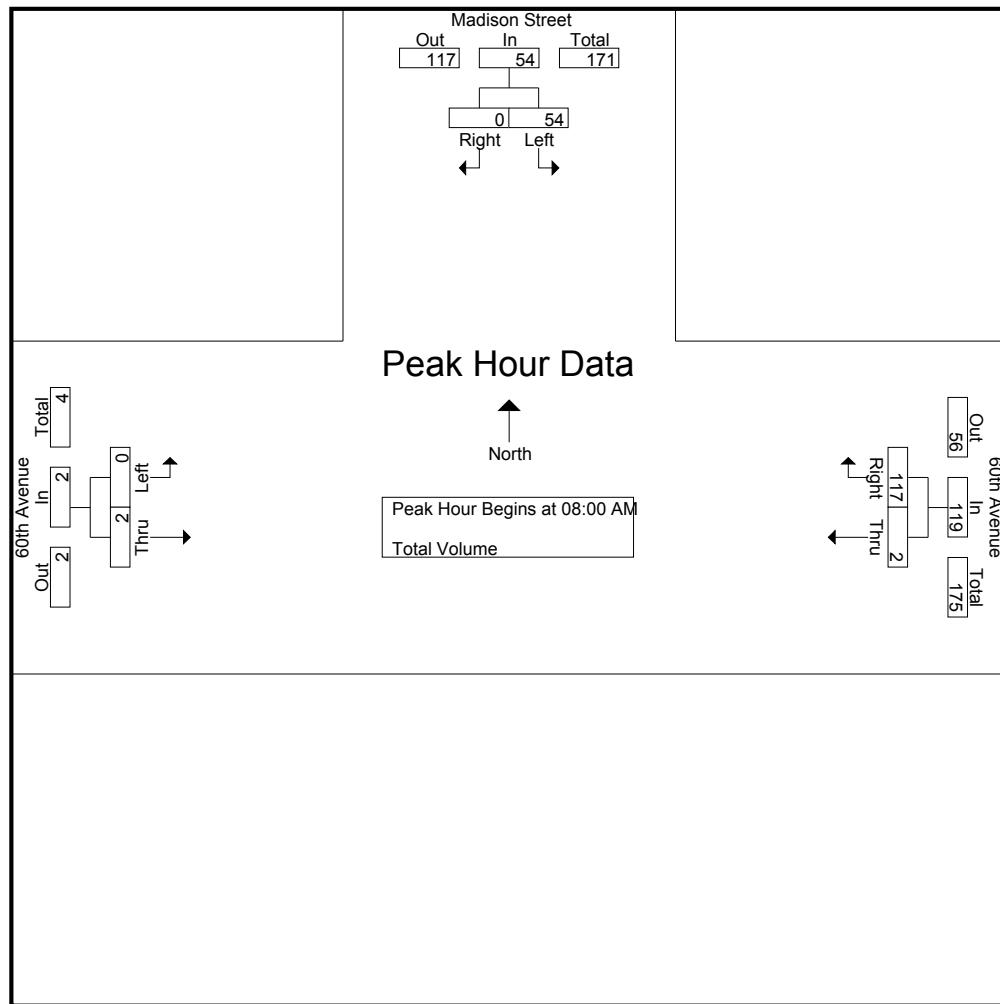
Groups Printed- Total Volume

	Madison Street Southbound			60th Avenue Westbound			60th Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
<b>Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1</b>										
<b>Peak Hour for Entire Intersection Begins at 08:00 AM</b>										
08:00 AM	10	0	10	1	29	30	0	1	1	41
08:15 AM	14	0	14	0	25	25	0	0	0	39
08:30 AM	13	0	13	0	41	41	0	0	0	54
08:45 AM	17	0	17	1	22	23	0	1	1	41
Total Volume	54	0	54	2	117	119	0	2	2	175
% App. Total	100	0		1.7	98.3		0	100		
PHF	.794	.000	.794	.500	.713	.726	.000	.500	.500	.810

Counts Unlimited, Inc.  
 PO Box 1178  
 Corona, CA 92878  
 (951) 268-6268

City of La Quinta  
 N/S: Madison Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAMA60AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



#### Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			08:00 AM			08:00 AM		
+0 mins.	14	0	14	1	29	30	0	1	1
+15 mins.	16	0	16	0	25	25	0	0	0
+30 mins.	18	0	18	0	41	41	0	0	0
+45 mins.	22	0	22	1	22	23	0	1	1
Total Volume	70	0	70	2	117	119	0	2	2
% App. Total	100	0		1.7	98.3		0	100	
PHF	.795	.000	.795	.500	.713	.726	.000	.500	.500

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 Corona, CA 92878  
 (951) 268-6268

City of La Quinta  
 N/S: Madison Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAMA60PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

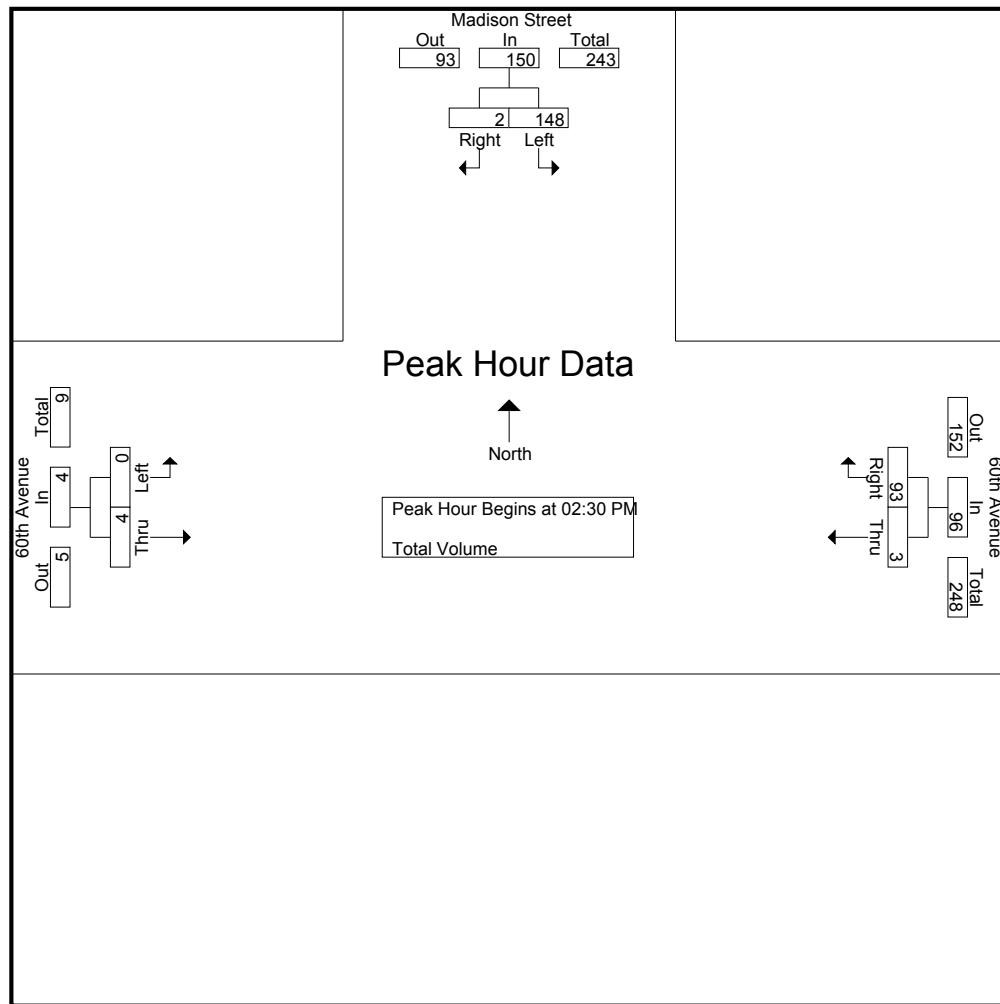
	Madison Street Southbound			60th Avenue Westbound			60th Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
02:30 PM	35	1	36	1	36	37	0	2	2	75
02:45 PM	35	1	36	0	16	16	0	1	1	53
Total	70	2	72	1	52	53	0	3	3	128
03:00 PM	38	0	38	0	20	20	0	0	0	58
03:15 PM	40	0	40	2	21	23	0	1	1	64
03:30 PM	38	0	38	0	14	14	1	0	1	53
03:45 PM	37	1	38	1	24	25	0	0	0	63
Total	153	1	154	3	79	82	1	1	2	238
04:00 PM	32	0	32	0	14	14	0	0	0	46
04:15 PM	49	1	50	0	18	18	0	0	0	68
04:30 PM	27	2	29	0	12	12	1	1	2	43
04:45 PM	34	0	34	1	18	19	0	0	0	53
Total	142	3	145	1	62	63	1	1	2	210
05:00 PM	32	2	34	0	24	24	0	0	0	58
05:15 PM	21	0	21	0	24	24	0	1	1	46
05:30 PM	18	1	19	1	19	20	0	0	0	39
05:45 PM	22	0	22	0	15	15	0	0	0	37
Total	93	3	96	1	82	83	0	1	1	180
Grand Total	458	9	467	6	275	281	2	6	8	756
Apprch %	98.1	1.9		2.1	97.9		25	75		
Total %	60.6	1.2	61.8	0.8	36.4	37.2	0.3	0.8	1.1	

	Madison Street Southbound			60th Avenue Westbound			60th Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:30 PM										
02:30 PM	35	1	36	1	36	37	0	2	2	75
02:45 PM	35	1	36	0	16	16	0	1	1	53
03:00 PM	38	0	38	0	20	20	0	0	0	58
03:15 PM	40	0	40	2	21	23	0	1	1	64
Total Volume	148	2	150	3	93	96	0	4	4	250
% App. Total	98.7	1.3		3.1	96.9		0	100		
PHF	.925	.500	.938	.375	.646	.649	.000	.500	.500	.833

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City of La Quinta  
 N/S: Madison Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAMA60PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



#### Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:30 PM			02:30 PM			02:30 PM		
+0 mins.	38	0	38	1	36	37	0	2	2
+15 mins.	37	1	38	0	16	16	0	1	1
+30 mins.	32	0	32	0	20	20	0	0	0
+45 mins.	49	1	50	2	21	23	0	1	1
Total Volume	156	2	158	3	93	96	0	4	4
% App. Total	98.7	1.3		3.1	96.9		0	100	
PHF	.796	.500	.790	.375	.646	.649	.000	.500	.500

Counts Unlimited, Inc.  
 PO Box 1178  
 Corona, CA 92878  
 (951) 268-6268

City of La Quinta  
 N/S: Monroe Street  
 E/W: 58th Avenue  
 Weather: Sunny

File Name : LQAMO58AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

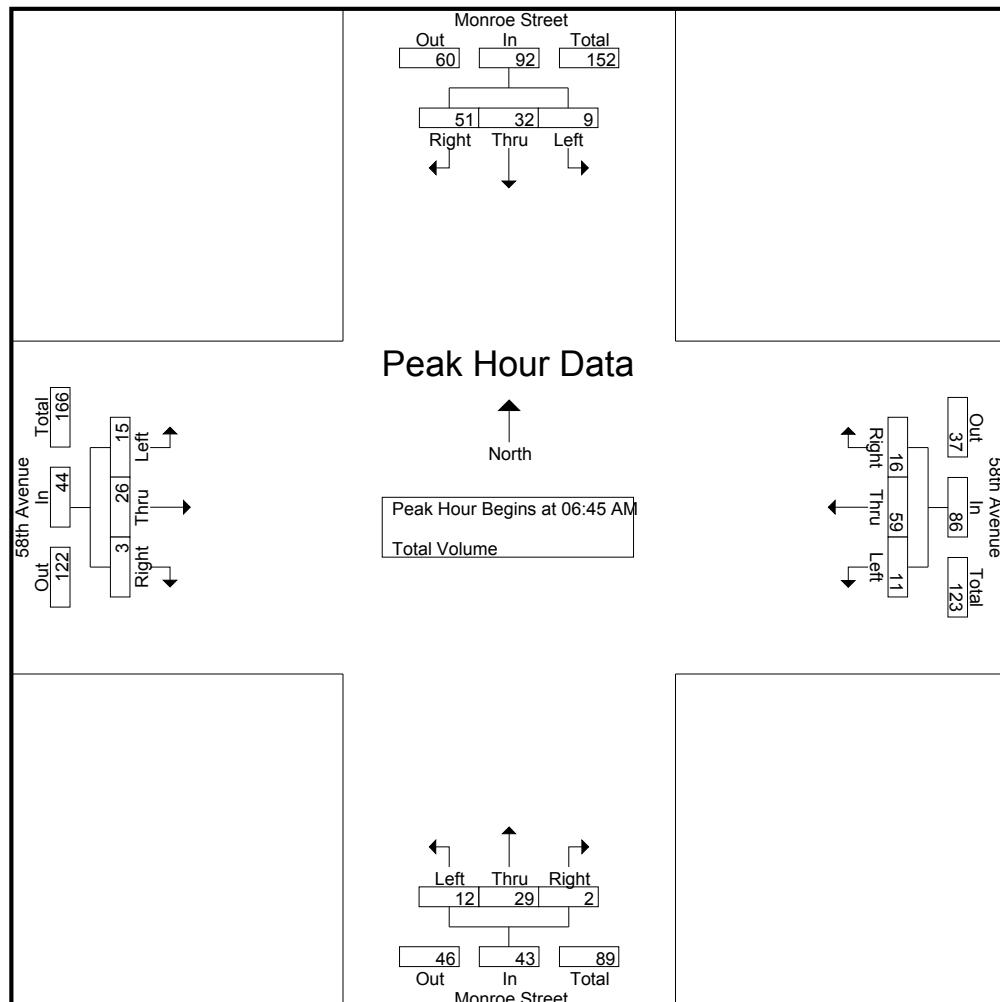
	Monroe Street Southbound				58th Avenue Westbound				Monroe Street Northbound				58th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	0	9	2	11	1	9	2	12	1	8	0	9	0	3	0	3	35
06:15 AM	1	6	6	13	3	10	2	15	0	4	0	4	2	4	2	8	40
06:30 AM	1	8	5	14	4	23	3	30	2	5	4	11	1	2	0	3	58
06:45 AM	5	11	21	37	1	18	4	23	5	7	0	12	1	8	1	10	82
Total	7	34	34	75	9	60	11	80	8	24	4	36	4	17	3	24	215
07:00 AM	2	6	18	26	5	15	2	22	2	6	0	8	5	4	2	11	67
07:15 AM	1	4	3	8	3	18	5	26	3	6	1	10	2	5	0	7	51
07:30 AM	1	11	9	21	2	8	5	15	2	10	1	13	7	9	0	16	65
07:45 AM	7	12	8	27	0	13	4	17	1	11	1	13	5	3	1	9	66
Total	11	33	38	82	10	54	16	80	8	33	3	44	19	21	3	43	249
08:00 AM	3	7	7	17	0	4	2	6	0	11	1	12	0	9	0	9	44
08:15 AM	1	11	6	18	0	2	4	6	3	7	0	10	4	11	2	17	51
08:30 AM	3	7	10	20	0	6	4	10	1	8	0	9	5	9	1	15	54
08:45 AM	0	4	7	11	0	4	0	4	2	11	0	13	9	8	1	18	46
Total	7	29	30	66	0	16	10	26	6	37	1	44	18	37	4	59	195
Grand Total	25	96	102	223	19	130	37	186	22	94	8	124	41	75	10	126	659
Apprch %	11.2	43	45.7		10.2	69.9	19.9		17.7	75.8	6.5		32.5	59.5	7.9		
Total %	3.8	14.6	15.5	33.8	2.9	19.7	5.6	28.2	3.3	14.3	1.2	18.8	6.2	11.4	1.5		19.1

	Monroe Street Southbound				58th Avenue Westbound				Monroe Street Northbound				58th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:45 AM																	
06:45 AM	5	11	21	37	1	18	4	23	5	7	0	12	1	8	1	10	82
07:00 AM	2	6	18	26	5	15	2	22	2	6	0	8	5	4	2	11	67
07:15 AM	1	4	3	8	3	18	5	26	3	6	1	10	2	5	0	7	51
07:30 AM	1	11	9	21	2	8	5	15	2	10	1	13	7	9	0	16	65
Total Volume	9	32	51	92	11	59	16	86	12	29	2	43	15	26	3	44	265
% App. Total	9.8	34.8	55.4		12.8	68.6	18.6		27.9	67.4	4.7		34.1	59.1	6.8		
PHF	.450	.727	.607	.622	.550	.819	.800	.827	.600	.725	.500	.827	.536	.722	.375	.688	.808

Counts Unlimited, Inc.  
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City of La Quinta  
 N/S: Monroe Street  
 E/W: 58th Avenue  
 Weather: Sunny

File Name : LQAMO58AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



#### Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				06:30 AM				07:15 AM				08:00 AM			
+0 mins.	5	11	21	37	4	23	3	30	3	6	1	10	0	9	0	9
+15 mins.	2	6	18	26	1	18	4	23	2	10	1	13	4	11	2	17
+30 mins.	1	4	3	8	5	15	2	22	1	11	1	13	5	9	1	15
+45 mins.	1	11	9	21	3	18	5	26	0	11	1	12	9	8	1	18
Total Volume	9	32	51	92	13	74	14	101	6	38	4	48	18	37	4	59
% App. Total	9.8	34.8	55.4		12.9	73.3	13.9		12.5	79.2	8.3		30.5	62.7	6.8	
PHF	.450	.727	.607	.622	.650	.804	.700	.842	.500	.864	1.000	.923	.500	.841	.500	.819

Counts Unlimited, Inc.  
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City of La Quinta  
 N/S: Monroe Street  
 E/W: 58th Avenue  
 Weather: Sunny

File Name : LQAMO58PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

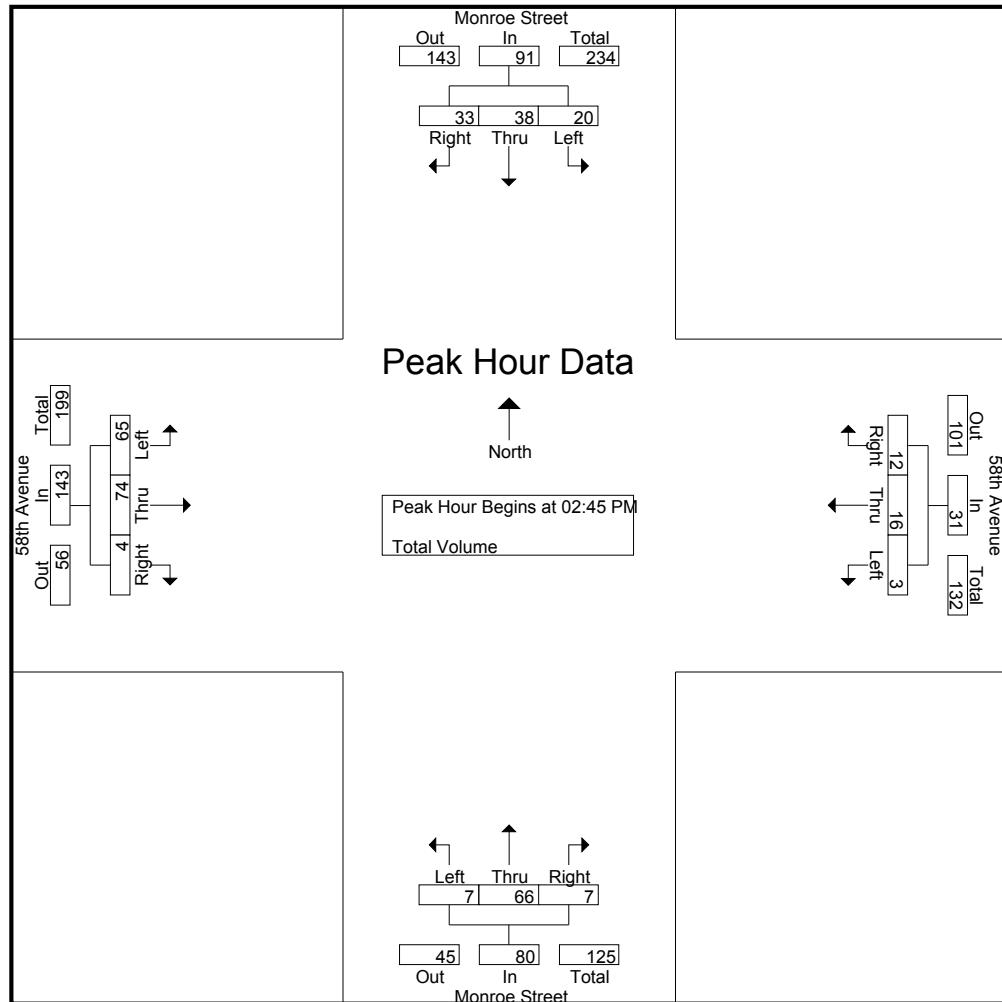
	Monroe Street Southbound				58th Avenue Westbound				Monroe Street Northbound				58th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:30 PM	2	14	8	24	1	13	2	16	2	20	4	26	7	10	2	19	85
02:45 PM	3	8	10	21	0	6	3	9	3	21	1	25	12	7	1	20	75
Total	5	22	18	45	1	19	5	25	5	41	5	51	19	17	3	39	160
03:00 PM	3	7	9	19	2	3	5	10	1	13	3	17	10	13	2	25	71
03:15 PM	6	9	6	21	1	4	1	6	1	16	1	18	20	21	0	41	86
03:30 PM	8	14	8	30	0	3	3	6	2	16	2	20	23	33	1	57	113
03:45 PM	3	11	7	21	1	3	2	6	0	6	1	7	17	13	1	31	65
Total	20	41	30	91	4	13	11	28	4	51	7	62	70	80	4	154	335
04:00 PM	2	8	7	17	0	5	2	7	1	11	1	13	14	24	2	40	77
04:15 PM	5	7	5	17	2	3	5	10	1	12	2	15	8	7	1	16	58
04:30 PM	6	5	7	18	2	3	5	10	1	11	1	13	8	7	0	15	56
04:45 PM	5	11	2	18	0	6	2	8	0	7	0	7	4	10	2	16	49
Total	18	31	21	70	4	17	14	35	3	41	4	48	34	48	5	87	240
05:00 PM	3	7	1	11	0	9	3	12	2	13	0	15	11	7	2	20	58
05:15 PM	5	9	0	14	0	10	1	11	0	3	1	4	9	4	1	14	43
05:30 PM	4	7	0	11	0	1	6	7	0	5	0	5	7	7	2	16	39
05:45 PM	5	7	1	13	1	1	4	6	1	8	0	9	1	6	0	7	35
Total	17	30	2	49	1	21	14	36	3	29	1	33	28	24	5	57	175
Grand Total	60	124	71	255	10	70	44	124	15	162	17	194	151	169	17	337	910
Apprch %	23.5	48.6	27.8		8.1	56.5	35.5		7.7	83.5	8.8		44.8	50.1	5		
Total %	6.6	13.6	7.8		28	1.1	7.7	4.8	13.6	1.6	17.8	1.9	21.3	16.6	18.6	1.9	37

	Monroe Street Southbound				58th Avenue Westbound				Monroe Street Northbound				58th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:45 PM																	
02:45 PM	3	8	10	21	0	6	3	9	3	21	1	25	12	7	1	20	75
03:00 PM	3	7	9	19	2	3	5	10	1	13	3	17	10	13	2	25	71
03:15 PM	6	9	6	21	1	4	1	6	1	16	1	18	20	21	0	41	86
03:30 PM	8	14	8	30	0	3	3	6	2	16	2	20	23	33	1	57	113
Total Volume	20	38	33	91	3	16	12	31	7	66	7	80	65	74	4	143	345
% App. Total	22	41.8	36.3		9.7	51.6	38.7		8.8	82.5	8.8		45.5	51.7	2.8		
PHF	.625	.679	.825	.758	375	667	.600	.775	.583	.786	.583	.800	.707	.561	.500	.627	.763

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City of La Quinta  
 N/S: Monroe Street  
 E/W: 58th Avenue  
 Weather: Sunny

File Name : LQAMO58PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	02:45 PM				02:30 PM				02:30 PM				03:15 PM			
	3	8	10	21	1	13	2	16	2	20	4	26	20	21	0	41
+0 mins.	3	8	10	21	1	13	2	16	2	20	4	26	20	21	0	41
+15 mins.	3	7	9	19	0	6	3	9	3	21	1	25	23	33	1	57
+30 mins.	6	9	6	21	2	3	5	10	1	13	3	17	17	13	1	31
+45 mins.	8	14	8	30	1	4	1	6	1	16	1	18	14	24	2	40
Total Volume	20	38	33	91	4	26	11	41	7	70	9	86	74	91	4	169
% App. Total	22	41.8	36.3		9.8	63.4	26.8		8.1	81.4	10.5		43.8	53.8	2.4	
PHF	.625	.679	.825	.758	.500	.500	.550	.641	.583	.833	.563	.827	.804	.689	.500	.741

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City of La Quinta  
 N/S: Monroe Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAMO60AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

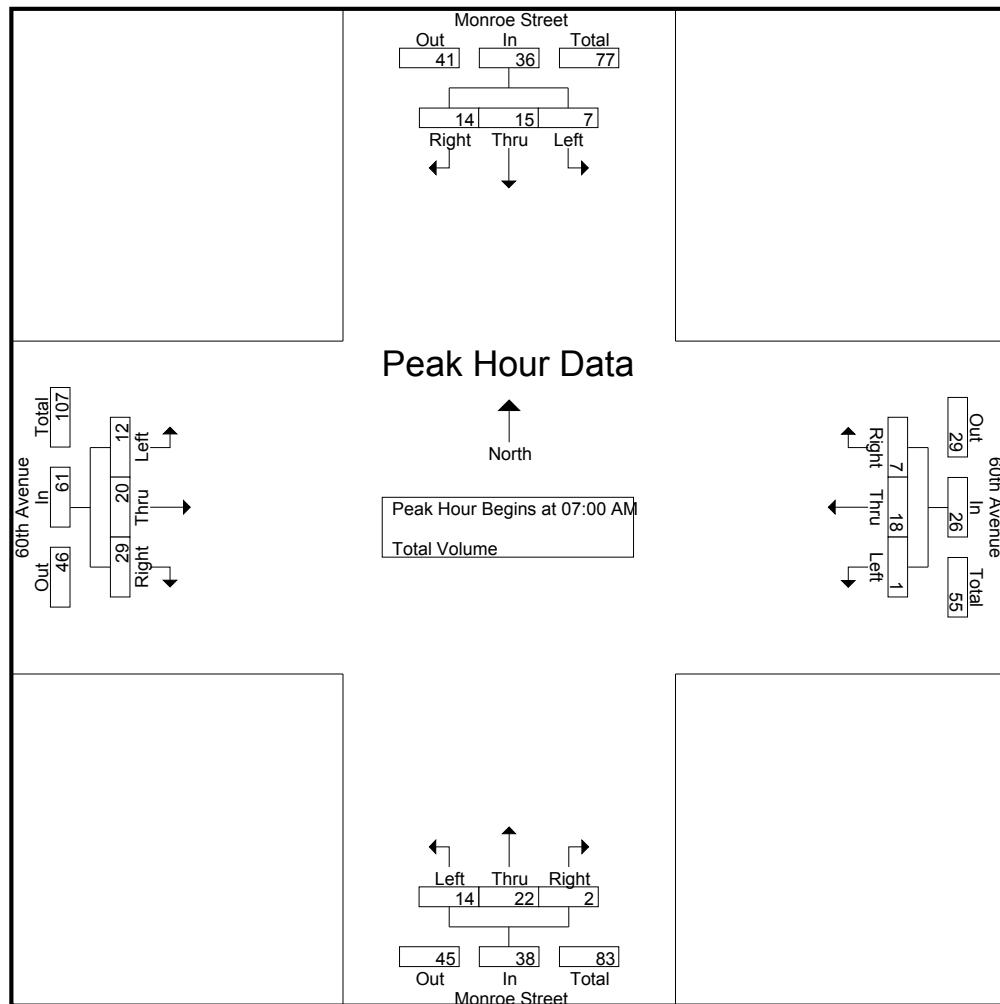
	Monroe Street Southbound				60th Avenue Westbound				Monroe Street Northbound				60th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	3	7	0	10	0	4	0	4	0	7	0	7	0	3	2	5	26
06:15 AM	2	3	0	5	0	4	0	4	0	3	0	3	0	2	4	6	18
06:30 AM	1	5	2	8	0	6	4	10	4	8	1	13	1	2	8	11	42
06:45 AM	1	9	0	10	1	2	2	5	1	8	0	9	0	6	7	13	37
Total	7	24	2	33	1	16	6	23	5	26	1	32	1	13	21	35	123
07:00 AM	2	2	5	9	0	4	3	7	5	4	0	9	1	7	4	12	37
07:15 AM	0	1	3	4	0	5	2	7	1	5	0	6	0	4	8	12	29
07:30 AM	3	3	3	9	1	4	2	7	4	6	1	11	3	3	6	12	39
07:45 AM	2	9	3	14	0	5	0	5	4	7	1	12	8	6	11	25	56
Total	7	15	14	36	1	18	7	26	14	22	2	38	12	20	29	61	161
08:00 AM	1	1	3	5	0	5	1	6	2	7	0	9	1	2	3	6	26
08:15 AM	1	1	5	7	0	1	2	3	3	4	1	8	1	2	3	6	24
08:30 AM	1	6	2	9	0	3	1	4	4	9	2	15	0	3	3	6	34
08:45 AM	1	2	3	6	0	3	1	4	1	8	1	10	4	2	4	10	30
Total	4	10	13	27	0	12	5	17	10	28	4	42	6	9	13	28	114
Grand Total	18	49	29	96	2	46	18	66	29	76	7	112	19	42	63	124	398
Apprch %	18.8	51	30.2		3	69.7	27.3		25.9	67.9	6.2		15.3	33.9	50.8		
Total %	4.5	12.3	7.3	24.1	0.5	11.6	4.5	16.6	7.3	19.1	1.8	28.1	4.8	10.6	15.8		31.2

	Monroe Street Southbound				60th Avenue Westbound				Monroe Street Northbound				60th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	2	2	5	9	0	4	3	7	5	4	0	9	1	7	4	12	37
07:15 AM	0	1	3	4	0	5	2	7	1	5	0	6	0	4	8	12	29
07:30 AM	3	3	3	9	1	4	2	7	4	6	1	11	3	3	6	12	39
07:45 AM	2	9	3	14	0	5	0	5	4	7	1	12	8	6	11	25	56
Total Volume	7	15	14	36	1	18	7	26	14	22	2	38	12	20	29	61	161
% App. Total	19.4	41.7	38.9		3.8	69.2	26.9		36.8	57.9	5.3		19.7	32.8	47.5		
PHF	.583	.417	.700	.643	.250	.900	.583	.929	.700	.786	.500	.792	.375	.714	.659	.610	.719

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 Corona, CA 92878  
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City of La Quinta  
 N/S: Monroe Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAMO60AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



#### Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				06:30 AM				07:45 AM				07:00 AM			
+0 mins.	2	2	5	9	0	6	4	10	4	7	1	12	1	7	4	12
+15 mins.	0	1	3	4	1	2	2	5	2	7	0	9	0	4	8	12
+30 mins.	3	3	3	9	0	4	3	7	3	4	1	8	3	3	6	12
+45 mins.	2	9	3	14	0	5	2	7	4	9	2	15	8	6	11	25
Total Volume	7	15	14	36	1	17	11	29	13	27	4	44	12	20	29	61
% App. Total	19.4	41.7	38.9		3.4	58.6	37.9		29.5	61.4	9.1		19.7	32.8	47.5	
PHF	.583	.417	.700	.643	.250	.708	.688	.725	.813	.750	.500	.733	.375	.714	.659	.610

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City of La Quinta  
 N/S: Monroe Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAMO60PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

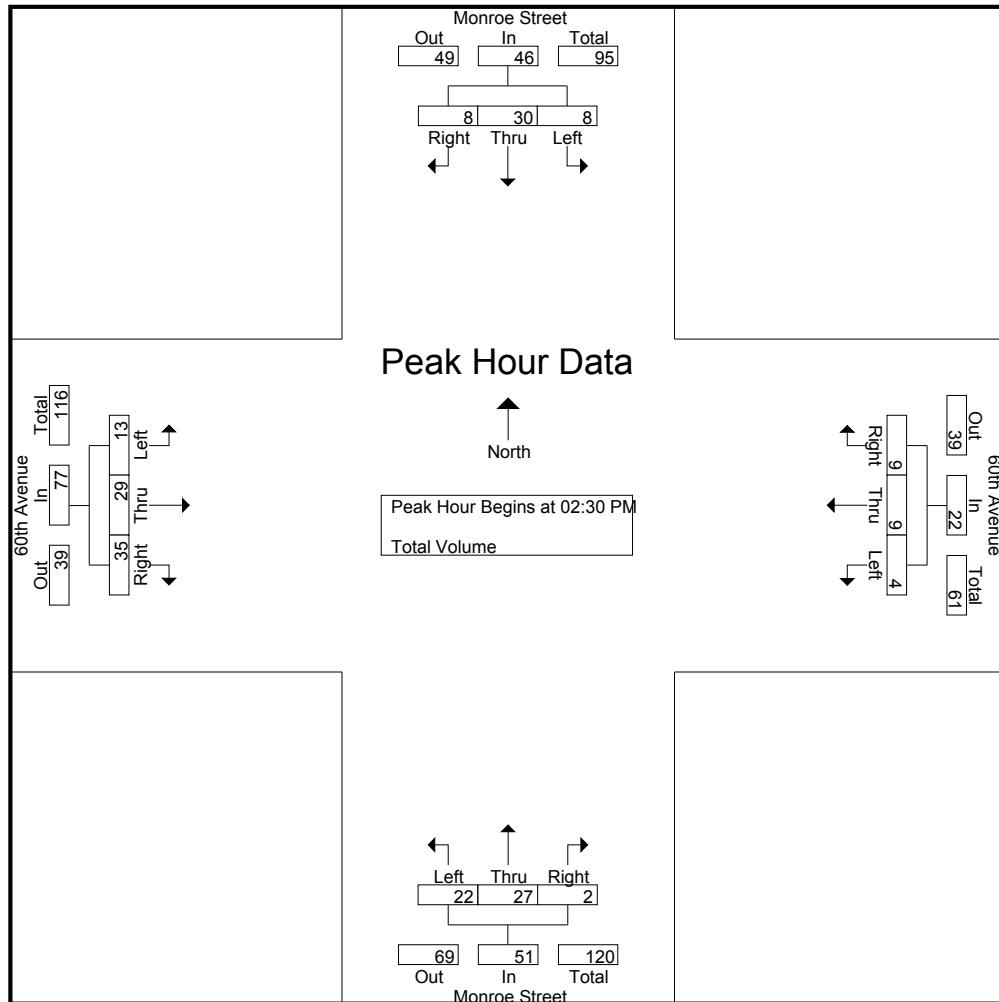
Groups Printed- Total Volume																	
	Monroe Street Southbound				60th Avenue Westbound				Monroe Street Northbound				60th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:30 PM	3	8	2	13	1	3	2	6	7	6	1	14	7	14	7	28	61
02:45 PM	1	6	3	10	0	3	2	5	2	9	0	11	3	5	5	13	39
Total	4	14	5	23	1	6	4	11	9	15	1	25	10	19	12	41	100
03:00 PM	3	11	0	14	1	2	4	7	9	8	1	18	0	4	10	14	53
03:15 PM	1	5	3	9	2	1	1	4	4	4	0	8	3	6	13	22	43
03:30 PM	1	6	2	9	0	4	2	6	4	7	0	11	3	4	7	14	40
03:45 PM	1	9	5	15	0	4	2	6	5	5	0	10	2	3	1	6	37
Total	6	31	10	47	3	11	9	23	22	24	1	47	8	17	31	56	173
04:00 PM	3	3	4	10	0	5	2	7	3	4	0	7	7	9	8	24	48
04:15 PM	2	7	0	9	0	5	4	9	4	7	0	11	3	7	5	15	44
04:30 PM	1	3	2	6	1	1	1	3	1	3	0	4	5	5	1	11	24
04:45 PM	0	7	5	12	0	3	0	3	1	2	0	3	3	4	5	12	30
Total	6	20	11	37	1	14	7	22	9	16	0	25	18	25	19	62	146
05:00 PM	0	6	1	7	1	1	2	4	7	7	0	14	6	6	5	17	42
05:15 PM	4	9	0	13	2	7	0	9	4	1	0	5	0	3	2	5	32
05:30 PM	2	4	1	7	0	4	0	4	1	2	0	3	3	3	3	9	23
05:45 PM	2	5	2	9	0	1	3	4	6	3	0	9	4	4	4	12	34
Total	8	24	4	36	3	13	5	21	18	13	0	31	13	16	14	43	131
Grand Total	24	89	30	143	8	44	25	77	58	68	2	128	49	77	76	202	550
Apprch %	16.8	62.2	21		10.4	57.1	32.5		45.3	53.1	1.6		24.3	38.1	37.6		
Total %	4.4	16.2	5.5		26	1.5	8	4.5	14	10.5	12.4	0.4	23.3	8.9	14	13.8	36.7

	Monroe Street Southbound				60th Avenue Westbound				Monroe Street Northbound				60th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:30 PM																	
02:30 PM	3	8	2	13	1	3	2	6	7	6	1	14	7	14	7	28	61
02:45 PM	1	6	3	10	0	3	2	5	2	9	0	11	3	5	5	13	39
03:00 PM	3	11	0	14	1	2	4	7	9	8	1	18	0	4	10	14	53
03:15 PM	1	5	3	9	2	1	1	4	4	4	0	8	3	6	13	22	43
Total Volume	8	30	8	46	4	9	9	22	22	27	2	51	13	29	35	77	196
% App. Total	17.4	65.2	17.4		18.2	40.9	40.9		43.1	52.9	3.9		16.9	37.7	45.5		
PHF	.667	.682	.667	.821	.500	.750	.563	.786	.611	.750	.500	.708	.464	.518	.673	.688	.803

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City of La Quinta  
 N/S: Monroe Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAMO60PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



#### Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:00 PM				03:30 PM				02:30 PM				02:30 PM			
+0 mins.	3	11	0	14	0	4	2	6	7	6	1	14	7	14	7	28
+15 mins.	1	5	3	9	0	4	2	6	2	9	0	11	3	5	5	13
+30 mins.	1	6	2	9	0	5	2	7	9	8	1	18	0	4	10	14
+45 mins.	1	9	5	15	0	5	4	9	4	4	0	8	3	6	13	22
Total Volume	6	31	10	47	0	18	10	28	22	27	2	51	13	29	35	77
% App. Total	12.8	66	21.3		0	64.3	35.7		43.1	52.9	3.9		16.9	37.7	45.5	
PHF	.500	.705	.500	.783	.000	.900	.625	.778	.611	.750	.500	.708	.464	.518	.673	.688

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City of La Quinta  
 N/S: Monroe Street  
 E/W: 61st Avenue  
 Weather: Sunny

File Name : LQAMO61AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

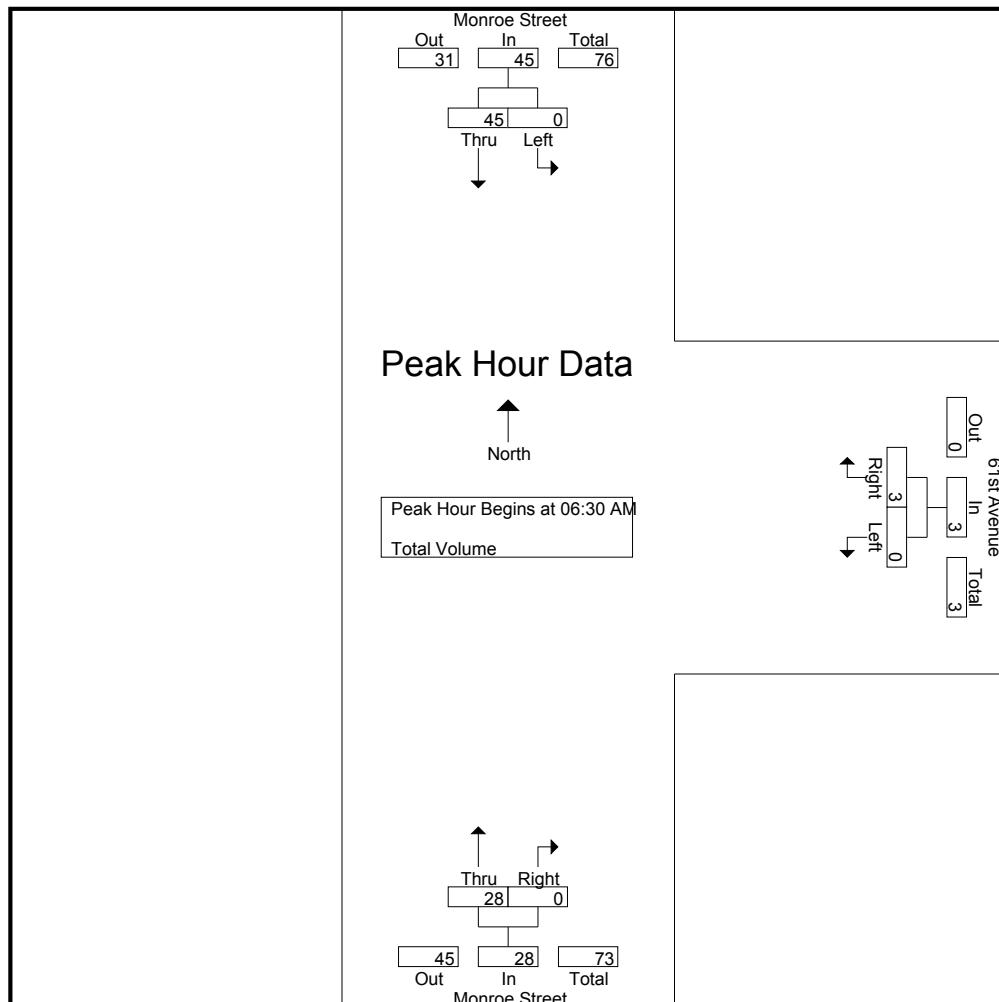
	Monroe Street Southbound			61st Avenue Westbound			Monroe Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:00 AM	0	4	4	0	0	0	5	0	5	9
06:15 AM	0	8	8	0	0	0	2	0	2	10
06:30 AM	0	11	11	0	1	1	9	0	9	21
06:45 AM	0	20	20	0	0	0	8	0	8	28
Total	0	43	43	0	1	1	24	0	24	68
07:00 AM	0	7	7	0	2	2	7	0	7	16
07:15 AM	0	7	7	0	0	0	4	0	4	11
07:30 AM	0	10	10	0	2	2	7	0	7	19
07:45 AM	0	18	18	0	0	0	8	0	8	26
Total	0	42	42	0	4	4	26	0	26	72
08:00 AM	0	3	3	0	0	0	7	0	7	10
08:15 AM	0	2	2	0	0	0	6	0	6	8
08:30 AM	1	7	8	0	0	0	11	0	11	19
08:45 AM	1	7	8	0	0	0	7	0	7	15
Total	2	19	21	0	0	0	31	0	31	52
Grand Total	2	104	106	0	5	5	81	0	81	192
Apprch %	1.9	98.1		0	100		100	0		
Total %	1	54.2	55.2	0	2.6	2.6	42.2	0	42.2	

	Monroe Street Southbound			61st Avenue Westbound			Monroe Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 06:30 AM										
06:30 AM	0	11	11	0	1	1	9	0	9	21
06:45 AM	0	20	20	0	0	0	8	0	8	28
07:00 AM	0	7	7	0	2	2	7	0	7	16
07:15 AM	0	7	7	0	0	0	4	0	4	11
Total Volume	0	45	45	0	3	3	28	0	28	76
% App. Total	0	100		0	100		100	0		
PHF	.000	.563	.563	.000	.375	.375	.778	.000	.778	.679

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City of La Quinta  
 N/S: Monroe Street  
 E/W: 61st Avenue  
 Weather: Sunny

File Name : LQAMO61AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:15 AM	06:45 AM	07:45 AM
+0 mins.	0 8 8	0 0 0	0 8 8
+15 mins.	0 11 11	0 2 2	7 0 7
+30 mins.	0 20 20	0 0 0	6 0 6
+45 mins.	0 7 7	0 2 2	11 0 11
Total Volume	0 46 46	0 4 4	32 0 32
% App. Total	0 100	0 100	100 0
PHF	.000 .575 .575	.000 .500 .500	.727 .000 .727

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City of La Quinta  
 N/S: Monroe Street  
 E/W: 61st Avenue  
 Weather: Sunny

File Name : LQAMO61PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

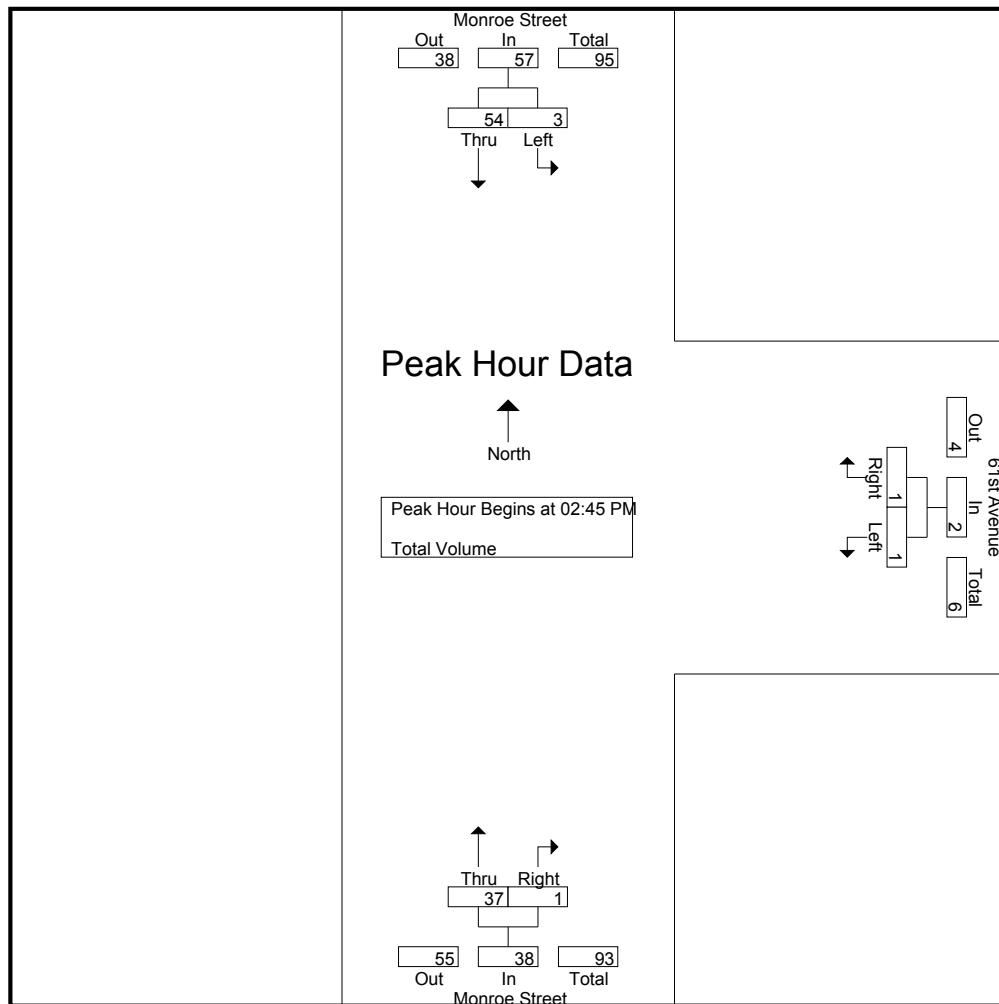
	Monroe Street Southbound			61st Avenue Westbound			Monroe Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
02:30 PM	2	11	13	0	2	2	7	0	7	22
02:45 PM	0	8	8	0	1	1	7	0	7	16
Total	2	19	21	0	3	3	14	0	14	38
03:00 PM	2	15	17	1	0	1	11	1	12	30
03:15 PM	1	17	18	0	0	0	7	0	7	25
03:30 PM	0	14	14	0	0	0	12	0	12	26
03:45 PM	1	6	7	0	1	1	7	1	8	16
Total	4	52	56	1	1	2	37	2	39	97
04:00 PM	0	9	9	0	1	1	8	0	8	18
04:15 PM	1	9	10	0	0	0	7	0	7	17
04:30 PM	1	0	1	0	0	0	2	0	2	3
04:45 PM	0	7	7	0	0	0	5	0	5	12
Total	2	25	27	0	1	1	22	0	22	50
05:00 PM	1	11	12	0	0	0	13	0	13	25
05:15 PM	0	9	9	1	0	1	5	1	6	16
05:30 PM	0	9	9	0	0	0	3	0	3	12
05:45 PM	0	6	6	0	0	0	7	0	7	13
Total	1	35	36	1	0	1	28	1	29	66
Grand Total	9	131	140	2	5	7	101	3	104	251
Apprch %	6.4	93.6		28.6	71.4		97.1	2.9		
Total %	3.6	52.2	55.8	0.8	2	2.8	40.2	1.2	41.4	

	Monroe Street Southbound			61st Avenue Westbound			Monroe Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:45 PM										
02:45 PM	0	8	8	0	1	1	7	0	7	16
03:00 PM	2	15	17	1	0	1	11	1	12	30
03:15 PM	1	17	18	0	0	0	7	0	7	25
03:30 PM	0	14	14	0	0	0	12	0	12	26
Total Volume	3	54	57	1	1	2	37	1	38	97
% App. Total	5.3	94.7		50	50		97.4	2.6		
PHF	.375	.794	.792	.250	.250	.500	.771	.250	.792	.808

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City of La Quinta  
 N/S: Monroe Street  
 E/W: 61st Avenue  
 Weather: Sunny

File Name : LQAMO61PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



#### Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:45 PM	02:30 PM	03:00 PM
+0 mins.	0      8      8	0      2      2	11     1      12
+15 mins.	<b>2</b> 15    17	0      1      1	7      0      7
+30 mins.	1 <b>17</b> <b>18</b>	<b>1</b> 0      1	<b>12</b> 0      12
+45 mins.	0      14    14	0      0      0	7      1      8
Total Volume	3      54    57	1      3      4	37     2      39
% App. Total	5.3    94.7	25    75	94.9    5.1
PHF	.375    .794    .792	.250    .375	.500    .771    .500    .813

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 (951) 268-6268

City of La Quinta  
 N/S: Jackson Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAJA60AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

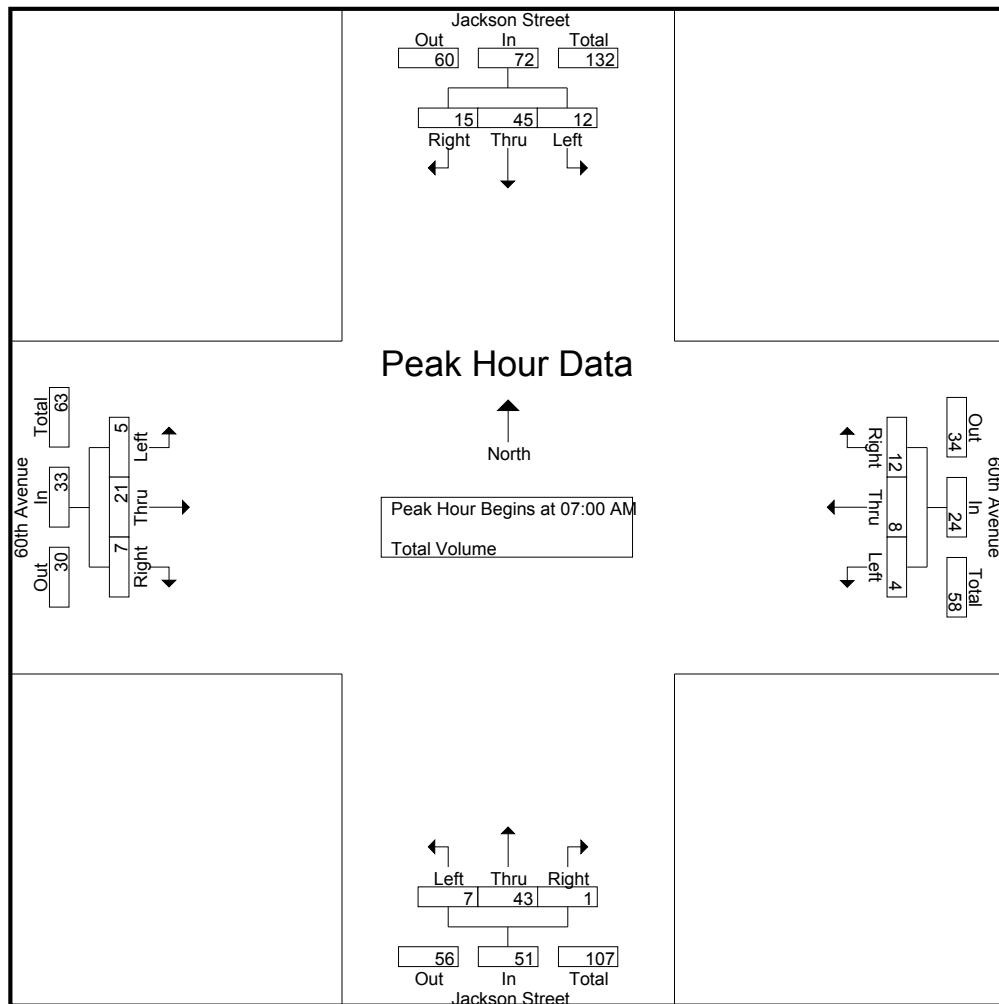
	Jackson Street Southbound				60th Avenue Westbound				Jackson Street Northbound				60th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	2	17	0	19	1	2	1	4	0	8	1	9	0	2	4	6	38
06:15 AM	2	6	1	9	1	6	3	10	1	7	0	8	0	1	3	4	31
06:30 AM	1	6	0	7	0	4	3	7	5	17	1	23	2	1	0	3	40
06:45 AM	1	11	3	15	2	2	4	8	2	9	0	11	1	8	0	9	43
Total	6	40	4	50	4	14	11	29	8	41	2	51	3	12	7	22	152
07:00 AM	3	8	4	15	0	0	4	4	2	13	1	16	1	8	1	10	45
07:15 AM	4	16	6	26	1	2	3	6	1	10	0	11	0	4	1	5	48
07:30 AM	1	9	2	12	3	2	2	7	2	9	0	11	1	3	3	7	37
07:45 AM	4	12	3	19	0	4	3	7	2	11	0	13	3	6	2	11	50
Total	12	45	15	72	4	8	12	24	7	43	1	51	5	21	7	33	180
08:00 AM	4	16	1	21	0	1	1	2	2	4	0	6	1	4	2	7	36
08:15 AM	1	14	0	15	1	1	0	2	0	11	0	11	1	3	1	5	33
08:30 AM	1	2	0	3	0	5	2	7	0	7	0	7	3	1	4	8	25
08:45 AM	0	8	1	9	1	3	1	5	0	7	0	7	0	3	0	3	24
Total	6	40	2	48	2	10	4	16	2	29	0	31	5	11	7	23	118
Grand Total	24	125	21	170	10	32	27	69	17	113	3	133	13	44	21	78	450
Apprch %	14.1	73.5	12.4		14.5	46.4	39.1		12.8	85	2.3		16.7	56.4	26.9		
Total %	5.3	27.8	4.7	37.8	2.2	7.1	6	15.3	3.8	25.1	0.7	29.6	2.9	9.8	4.7		17.3

	Jackson Street Southbound				60th Avenue Westbound				Jackson Street Northbound				60th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	8	4	15	0	0	4	4	2	13	1	16	1	8	1	10	45
07:15 AM	4	16	6	26	1	2	3	6	1	10	0	11	0	4	1	5	48
07:30 AM	1	9	2	12	3	2	2	7	2	9	0	11	1	3	3	7	37
07:45 AM	4	12	3	19	0	4	3	7	2	11	0	13	3	6	2	11	50
Total Volume	12	45	15	72	4	8	12	24	7	43	1	51	5	21	7	33	180
% App. Total	16.7	62.5	20.8		16.7	33.3	50		13.7	84.3	2		15.2	63.6	21.2		
PHF	.750	.703	.625	.692	.333	.500	.750	.857	.875	.827	.250	.797	.417	.656	.583	.750	.900

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City of La Quinta  
 N/S: Jackson Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAJA60AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



#### Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				06:00 AM				06:30 AM				07:00 AM			
+0 mins.	4	16	6	26	1	2	1	4	5	17	1	23	1	8	1	10
+15 mins.	1	9	2	12	1	6	3	10	2	9	0	11	0	4	1	5
+30 mins.	4	12	3	19	0	4	3	7	2	13	1	16	1	3	3	7
+45 mins.	4	16	1	21	2	2	4	8	1	10	0	11	3	6	2	11
Total Volume	13	53	12	78	4	14	11	29	10	49	2	61	5	21	7	33
% App. Total	16.7	67.9	15.4		13.8	48.3	37.9		16.4	80.3	3.3		15.2	63.6	21.2	
PHF	.813	.828	.500	.750	.500	.583	.688	.725	.500	.721	.500	.663	.417	.656	.583	.750

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City of La Quinta  
 N/S: Jackson Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAJA60PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

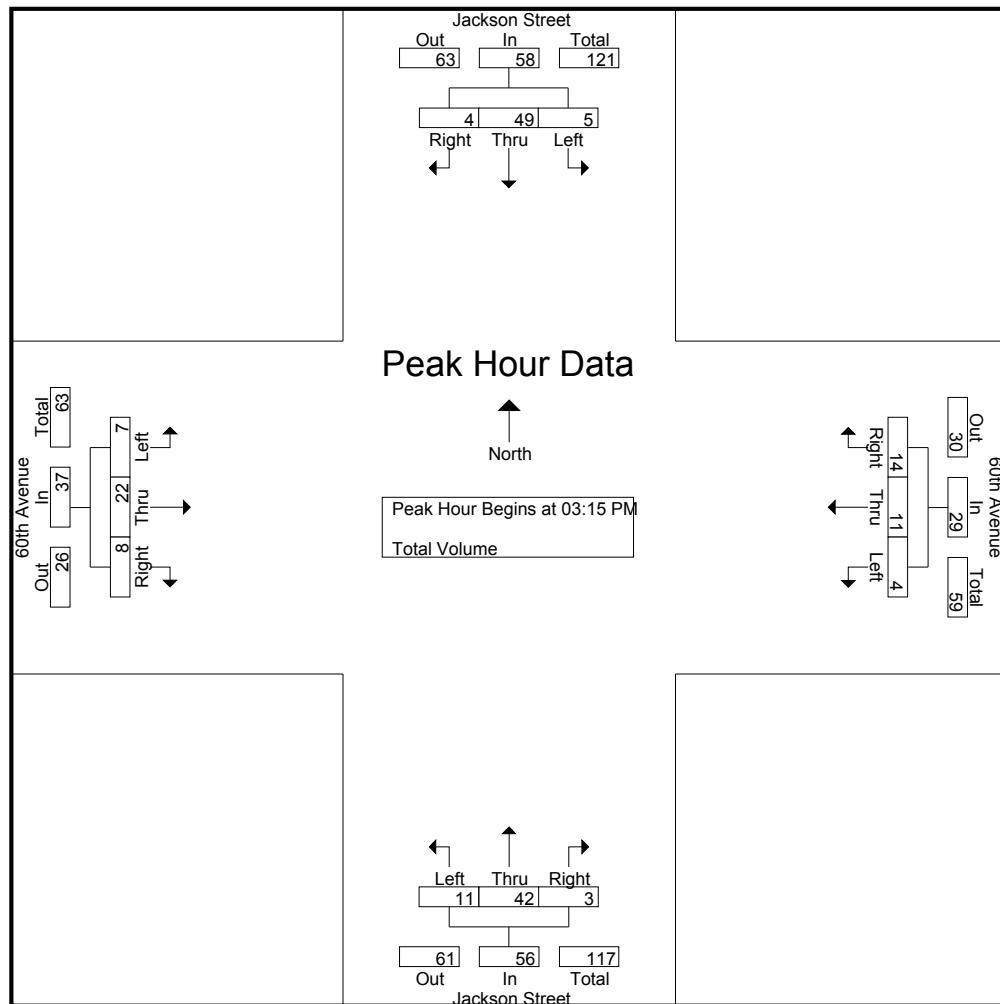
	Jackson Street Southbound				60th Avenue Westbound				Jackson Street Northbound				60th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:30 PM	2	6	2	10	2	1	3	6	3	12	1	16	4	13	2	19	51
02:45 PM	1	5	1	7	2	2	0	4	2	14	0	16	2	4	2	8	35
Total	3	11	3	17	4	3	3	10	5	26	1	32	6	17	4	27	86
03:00 PM	3	8	2	13	1	3	2	6	6	11	1	18	1	3	3	7	44
03:15 PM	1	10	2	13	2	2	5	9	2	10	2	14	1	6	2	9	45
03:30 PM	1	12	0	13	0	5	3	8	3	17	0	20	2	3	2	7	48
03:45 PM	2	12	1	15	0	2	4	6	3	7	0	10	1	6	2	9	40
Total	7	42	5	54	3	12	14	29	14	45	3	62	5	18	9	32	177
04:00 PM	1	15	1	17	2	2	2	6	3	8	1	12	3	7	2	12	47
04:15 PM	1	8	3	12	1	5	3	9	1	9	3	13	2	4	1	7	41
04:30 PM	4	8	1	13	0	2	3	5	0	13	0	13	2	2	1	5	36
04:45 PM	3	11	2	16	0	2	1	3	2	16	1	19	3	3	1	7	45
Total	9	42	7	58	3	11	9	23	6	46	5	57	10	16	5	31	169
05:00 PM	2	5	0	7	0	2	2	4	4	9	0	13	3	5	2	10	34
05:15 PM	1	12	2	15	1	4	1	6	1	17	2	20	1	6	1	8	49
05:30 PM	3	11	1	15	0	2	1	3	0	12	1	13	1	1	1	3	34
05:45 PM	0	10	1	11	1	0	0	1	1	9	1	11	2	3	1	6	29
Total	6	38	4	48	2	8	4	14	6	47	4	57	7	15	5	27	146
Grand Total	25	133	19	177	12	34	30	76	31	164	13	208	28	66	23	117	578
Apprch %	14.1	75.1	10.7		15.8	44.7	39.5		14.9	78.8	6.2		23.9	56.4	19.7		
Total %	4.3	23	3.3	30.6	2.1	5.9	5.2	13.1	5.4	28.4	2.2	36	4.8	11.4	4	20.2	

	Jackson Street Southbound				60th Avenue Westbound				Jackson Street Northbound				60th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:15 PM																	
03:15 PM	1	10	<b>2</b>	13	<b>2</b>	2	<b>5</b>	9	2	10	<b>2</b>	14	1	6	<b>2</b>	9	45
03:30 PM	1	12	0	13	0	<b>5</b>	3	8	<b>3</b>	<b>17</b>	0	<b>20</b>	2	3	2	7	<b>48</b>
03:45 PM	<b>2</b>	12	1	15	0	2	4	6	3	7	0	10	1	6	2	9	40
04:00 PM	1	<b>15</b>	1	<b>17</b>	2	2	2	6	3	8	1	12	<b>3</b>	<b>7</b>	2	<b>12</b>	47
Total Volume	5	49	4	58	4	11	14	29	11	42	3	56	7	22	8	37	180
% App. Total	8.6	84.5	6.9		13.8	37.9	48.3		19.6	75	5.4		18.9	59.5	21.6		
PHF	.625	.817	.500	.853	.500	.550	.700	.806	.917	.618	.375	.700	.583	.786	1.00	.771	.938

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 Corona, CA 92878  
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City of La Quinta  
 N/S: Jackson Street  
 E/W: 60th Avenue  
 Weather: Sunny

File Name : LQAJA60PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



#### Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM				03:00 PM				02:45 PM				02:30 PM			
+0 mins.	1	10	<b>2</b>	13	1	3	2	6	2	14	0	16	<b>4</b>	<b>13</b>	2	<b>19</b>
+15 mins.	1	12	0	13	<b>2</b>	2	<b>5</b>	<b>9</b>	<b>6</b>	11	1	18	2	4	2	8
+30 mins.	<b>2</b>	12	1	15	0	<b>5</b>	3	8	2	10	<b>2</b>	14	1	3	<b>3</b>	7
+45 mins.	1	<b>15</b>	1	<b>17</b>	0	2	4	6	3	<b>17</b>	0	<b>20</b>	1	6	2	9
Total Volume	5	49	4	58	3	12	14	29	13	52	3	68	8	26	9	43
% App. Total	8.6	84.5	6.9		10.3	41.4	48.3		19.1	76.5	4.4		18.6	60.5	20.9	
PHF	.625	.817	.500	.853	.375	.600	.700	.806	.542	.765	.375	.850	.500	.500	.750	.566

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City of La Quinta  
 N/S: Jackson Street  
 E/W: 61st Avenue  
 Weather: Sunny

File Name : LQAJA61AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

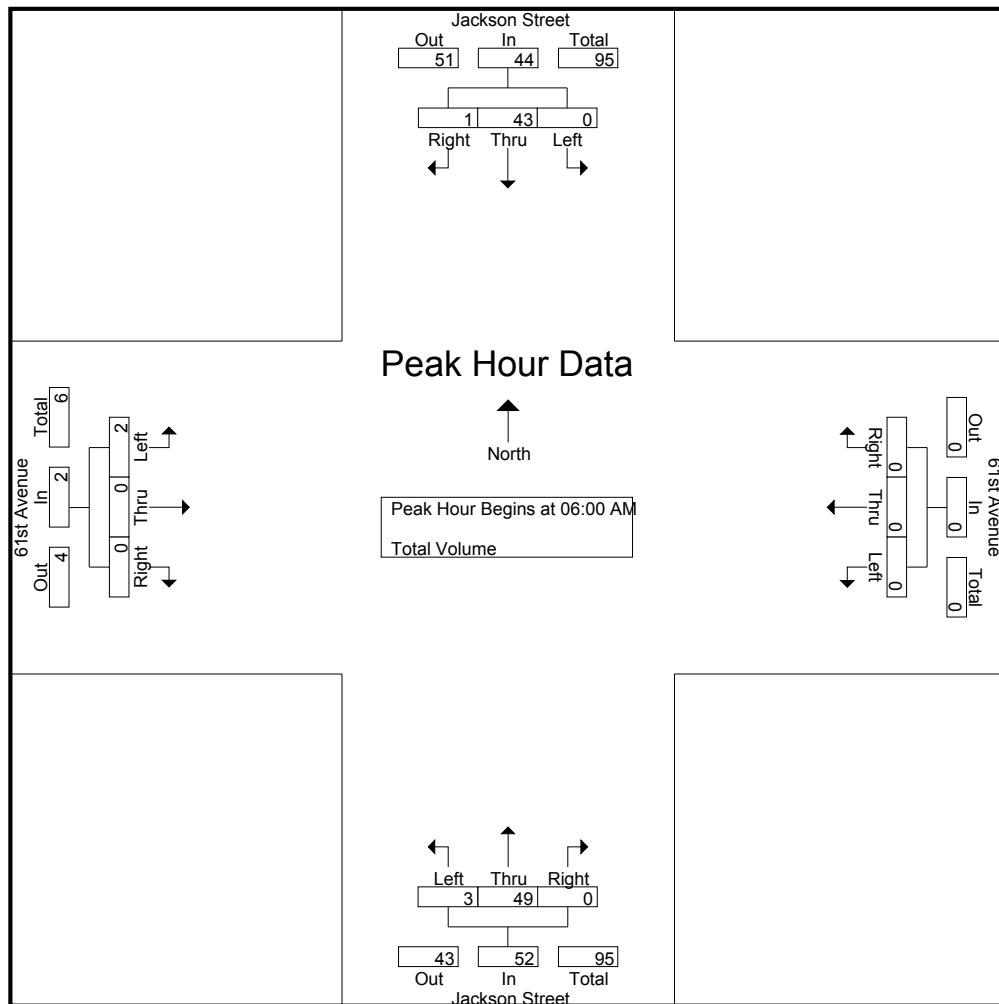
	Jackson Street Southbound				61st Avenue Westbound				Jackson Street Northbound				61st Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	0	19	0	19	0	0	0	0	1	9	0	10	0	0	0	0	29
06:15 AM	0	11	1	12	0	0	0	0	2	9	0	11	0	0	0	0	23
06:30 AM	0	5	0	5	0	0	0	0	0	20	0	20	2	0	0	2	27
06:45 AM	0	8	0	8	0	0	0	0	0	11	0	11	0	0	0	0	19
Total	0	43	1	44	0	0	0	0	3	49	0	52	2	0	0	2	98
07:00 AM	0	9	0	9	0	2	0	2	1	12	1	14	0	0	0	0	25
07:15 AM	0	11	0	11	0	0	0	0	0	11	0	11	0	0	0	0	22
07:30 AM	0	10	3	13	0	0	1	1	0	9	0	9	0	0	0	0	23
07:45 AM	0	15	0	15	0	0	0	0	0	9	0	9	0	0	0	0	24
Total	0	45	3	48	0	2	1	3	1	41	1	43	0	0	0	0	94
08:00 AM	0	17	0	17	0	0	0	0	0	9	1	10	0	0	0	0	27
08:15 AM	0	14	0	14	0	0	0	0	0	9	0	9	0	0	0	0	23
08:30 AM	0	5	0	5	0	0	0	0	0	10	0	10	0	1	0	1	16
08:45 AM	0	7	0	7	0	0	0	0	0	8	0	8	0	1	0	1	16
Total	0	43	0	43	0	0	0	0	0	36	1	37	0	2	0	2	82
Grand Total	0	131	4	135	0	2	1	3	4	126	2	132	2	2	0	4	274
Apprch %	0	97	3		0	66.7	33.3		3	95.5	1.5		50	50	0		
Total %	0	47.8	1.5	49.3	0	0.7	0.4	1.1	1.5	46	0.7	48.2	0.7	0.7	0	1.5	

	Jackson Street Southbound				61st Avenue Westbound				Jackson Street Northbound				61st Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:00 AM																	
06:00 AM	0	19	0	19	0	0	0	0	1	9	0	10	0	0	0	0	29
06:15 AM	0	11	1	12	0	0	0	0	2	9	0	11	0	0	0	0	23
06:30 AM	0	5	0	5	0	0	0	0	0	20	0	20	2	0	0	2	27
06:45 AM	0	8	0	8	0	0	0	0	0	11	0	11	0	0	0	0	19
Total Volume	0	43	1	44	0	0	0	0	3	49	0	52	2	0	0	2	98
% App. Total	0	97.7	2.3		0	0	0		5.8	94.2	0		100	0	0		
PHF	.000	.566	.250	.579	.000	.000	.000	.000	.375	.613	.000	.650	.250	.000	.000	.250	.845

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City of La Quinta  
 N/S: Jackson Street  
 E/W: 61st Avenue  
 Weather: Sunny

File Name : LQAJA61AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM	08:45 AM	06:15 AM	06:00 AM
+0 mins.	0 10 3 13	0 0 0 0	2 9 0 11	0 0 0 0
+15 mins.	0 15 0 15	0 2 0 20	0 0 0 20	0 0 0 0
+30 mins.	0 17 0 17	0 0 0 11	0 11 0 11	2 0 0 0
+45 mins.	0 14 0 14	0 0 1 1	1 12 1 14	0 0 0 0
Total Volume	0 56 3 59	0 2 1 3	3 52 1 56	2 0 0 2
% App. Total	0 94.9 5.1	0 66.7 33.3	5.4 92.9 1.8	100 0 0
PHF	.000 .824 .250 .868	.000 .250 .250 .375	.375 .650 .250 .700	.250 .000 .000 .250

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City of La Quinta  
 N/S: Jackson Street  
 E/W: 61st Avenue  
 Weather: Sunny

File Name : LQAJA61PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

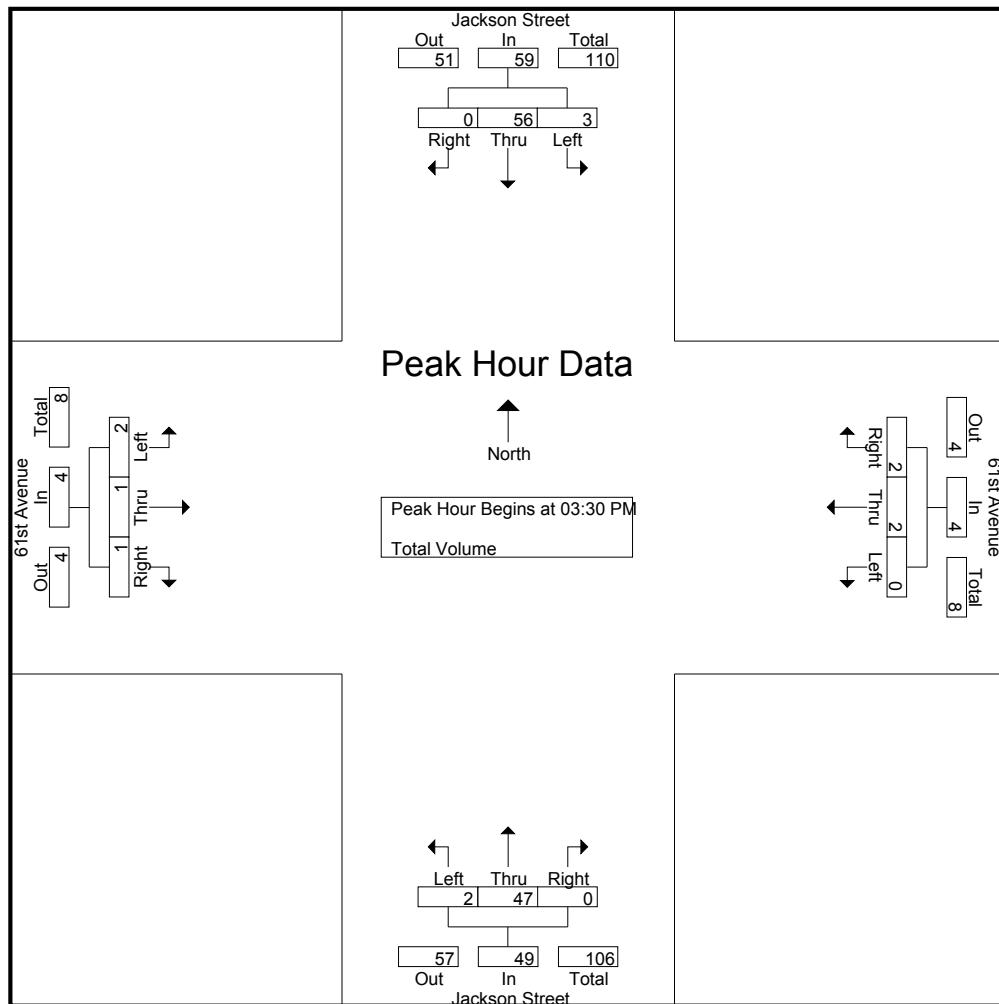
	Jackson Street Southbound				61st Avenue Westbound				Jackson Street Northbound				61st Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:30 PM	1	11	0	12	0	2	1	3	1	13	0	14	0	0	1	1	30
02:45 PM	0	10	2	12	0	1	1	2	0	16	0	16	0	0	1	1	31
Total	1	21	2	24	0	3	2	5	1	29	0	30	0	0	2	2	61
03:00 PM	0	7	0	7	0	0	0	0	0	12	0	12	0	0	0	0	19
03:15 PM	1	10	0	11	0	0	0	0	0	10	0	10	0	1	0	1	22
03:30 PM	0	12	0	12	0	0	0	0	1	18	0	19	0	0	0	0	31
03:45 PM	0	12	0	12	0	1	0	1	1	6	0	7	0	0	1	1	21
Total	1	41	0	42	0	1	0	1	2	46	0	48	0	1	1	2	93
04:00 PM	1	25	0	26	0	0	2	2	0	11	0	11	1	1	0	2	41
04:15 PM	2	7	0	9	0	1	0	1	0	12	0	12	1	0	0	1	23
04:30 PM	0	9	0	9	0	0	0	0	0	11	0	11	1	0	1	2	22
04:45 PM	0	10	0	10	0	0	0	0	0	18	0	18	0	0	0	0	28
Total	3	51	0	54	0	1	2	3	0	52	0	52	3	1	1	5	114
05:00 PM	0	10	0	10	0	0	0	0	0	6	0	6	0	1	1	2	18
05:15 PM	0	10	2	12	1	0	0	1	0	21	0	21	0	0	0	0	34
05:30 PM	1	8	0	9	0	0	1	1	1	8	0	9	1	0	2	3	22
05:45 PM	0	17	1	18	0	0	0	0	0	7	0	7	0	0	0	0	25
Total	1	45	3	49	1	0	1	2	1	42	0	43	1	1	3	5	99
Grand Total	6	158	5	169	1	5	5	11	4	169	0	173	4	3	7	14	367
Apprch %	3.6	93.5	3		9.1	45.5	45.5		2.3	97.7	0		28.6	21.4	50		
Total %	1.6	43.1	1.4		46	0.3	1.4		3	1.1	46	0	47.1	1.1	0.8	1.9	3.8

	Jackson Street Southbound				61st Avenue Westbound				Jackson Street Northbound				61st Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	12	0	12	0	0	0	0	1	18	0	19	0	0	0	0	31
03:45 PM	0	12	0	12	0	1	0	1	1	6	0	7	0	0	1	1	21
04:00 PM	1	25	0	26	0	0	2	2	0	11	0	11	1	1	0	2	41
04:15 PM	2	7	0	9	0	1	0	1	0	12	0	12	1	0	0	1	23
Total Volume	3	56	0	59	0	2	2	4	2	47	0	49	2	1	1	4	116
% App. Total	5.1	94.9	0		0	50	50		4.1	95.9	0		50	25	25		
PHF	.375	.560	.000	.567	.000	.500	.250	.500	.500	.653	.000	.645	.500	.250	.250	.500	.707

Counts Unlimited, Inc.  
 PO Box 1178  
 Corona, CA 92878  
 (951) 268-6268

City of La Quinta  
 N/S: Jackson Street  
 E/W: 61st Avenue  
 Weather: Sunny

File Name : LQAJA61PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



#### Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM			02:30 PM			02:45 PM			03:45 PM		
+0 mins.	1	10	0	11	0	2	1	3	0	16	0	16
+15 mins.	0	12	0	12	0	1	1	2	0	12	0	12
+30 mins.	0	12	0	12	0	0	0	0	0	10	1	0
+45 mins.	1	25	0	26	0	0	0	0	1	18	0	19
Total Volume	2	59	0	61	0	3	2	5	1	56	0	57
% App. Total	3.3	96.7	0		0	60	40		1.8	98.2	0	50
PHF	.500	.590	.000	.587	.000	.375	.500	.417	.250	.778	.000	.750

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 Corona, CA 92878  
 (951) 268-6268

City of La Quinta  
 N/S: Madison Street  
 E/W: 58th Avenue  
 Weather: Sunny

File Name : LQAMA58AM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

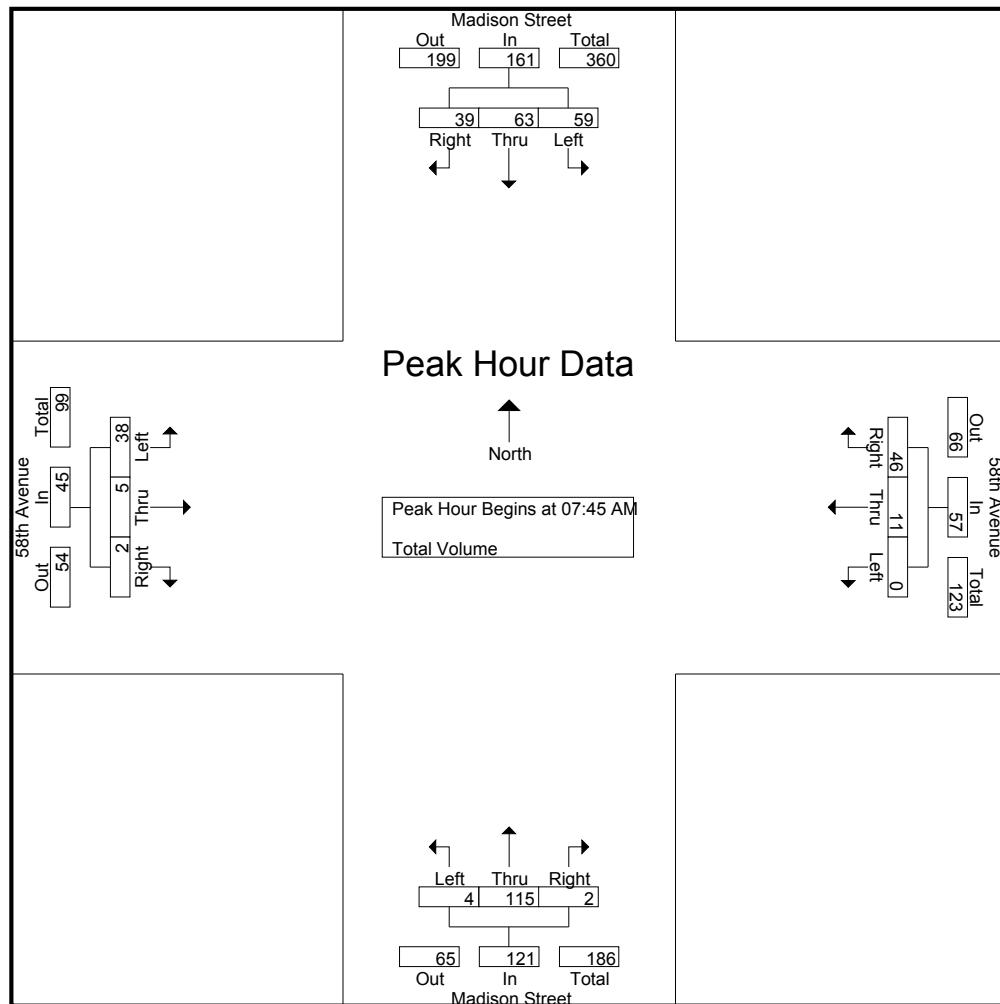
	Madison Street Southbound				58th Avenue Westbound				Madison Street Northbound				58th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	1	7	6	14	1	4	9	14	0	12	1	13	3	0	1	4	45
06:15 AM	7	7	7	21	0	5	7	12	0	10	1	11	1	0	1	2	46
06:30 AM	12	18	7	37	0	9	11	20	0	14	0	14	2	1	0	3	74
06:45 AM	24	12	14	50	1	5	7	13	1	8	1	10	5	0	0	5	78
Total	44	44	34	122	2	23	34	59	1	44	3	48	11	1	2	14	243
07:00 AM	17	16	7	40	0	1	11	12	0	14	0	14	1	1	0	2	68
07:15 AM	8	19	9	36	1	1	17	19	0	18	0	18	7	0	0	7	80
07:30 AM	16	25	7	48	0	2	11	13	0	24	0	24	3	2	0	5	90
07:45 AM	14	16	11	41	0	6	12	18	0	19	1	20	3	0	1	4	83
Total	55	76	34	165	1	10	51	62	0	75	1	76	14	3	1	18	321
08:00 AM	16	17	10	43	0	2	10	12	4	22	1	27	15	1	0	16	98
08:15 AM	14	13	4	31	0	1	7	8	0	31	0	31	9	2	1	12	82
08:30 AM	15	17	14	46	0	2	17	19	0	43	0	43	11	2	0	13	121
08:45 AM	12	17	7	36	0	3	11	14	0	21	1	22	6	1	0	7	79
Total	57	64	35	156	0	8	45	53	4	117	2	123	41	6	1	48	380
Grand Total	156	184	103	443	3	41	130	174	5	236	6	247	66	10	4	80	944
Apprch %	35.2	41.5	23.3		1.7	23.6	74.7		2	95.5	2.4		82.5	12.5	5		
Total %	16.5	19.5	10.9	46.9	0.3	4.3	13.8	18.4	0.5	25	0.6	26.2	7	1.1	0.4	8.5	

	Madison Street Southbound				58th Avenue Westbound				Madison Street Northbound				58th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	14	16	11	41	0	6	12	18	0	19	1	20	3	0	1	4	83
08:00 AM	16	17	10	43	0	2	10	12	4	22	1	27	15	1	0	16	98
08:15 AM	14	13	4	31	0	1	7	8	0	31	0	31	9	2	1	12	82
08:30 AM	15	17	14	46	0	2	17	19	0	43	0	43	11	2	0	13	121
Total Volume	59	63	39	161	0	11	46	57	4	115	2	121	38	5	2	45	384
% App. Total	36.6	39.1	24.2		0	19.3	80.7		3.3	95	1.7		84.4	11.1	4.4		
PHF	.922	.926	.696	.875	.000	.458	.676	.750	.250	.669	.500	.703	.633	.625	.500	.703	.793

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City of La Quinta  
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File Name : LQAMA58AM  
 Site Code : 05113410  
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Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	06:45 AM				06:30 AM				08:00 AM				08:00 AM			
+0 mins.	24	12	14	50	0	9	11	20	4	22	1	27	15	1	0	16
+15 mins.	17	16	7	40	1	5	7	13	0	31	0	31	9	2	1	12
+30 mins.	8	19	9	36	0	1	11	12	0	43	0	43	11	2	0	13
+45 mins.	16	25	7	48	1	1	17	19	0	21	1	22	6	1	0	7
Total Volume	65	72	37	174	2	16	46	64	4	117	2	123	41	6	1	48
% App. Total	37.4	41.4	21.3		3.1	25	71.9		3.3	95.1	1.6		85.4	12.5	2.1	
PHF	.677	.720	.661	.870	.500	.444	.676	.800	.250	.680	.500	.715	.683	.750	.250	.750

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City of La Quinta  
 N/S: Madison Street  
 E/W: 58th Avenue  
 Weather: Sunny

File Name : LQAMA58PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 1

Groups Printed- Total Volume

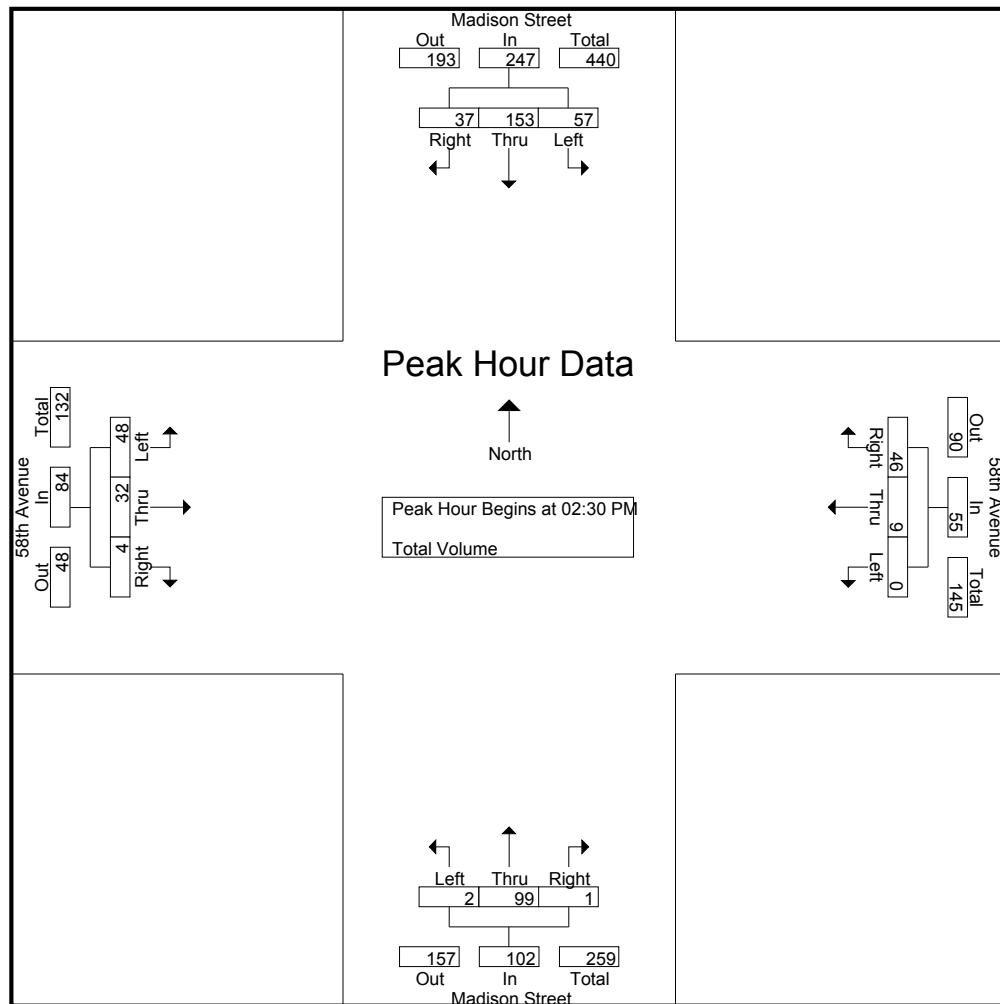
	Madison Street Southbound				58th Avenue Westbound				Madison Street Northbound				58th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:30 PM	18	36	8	62	0	2	9	11	0	42	0	42	11	7	1	19	134
02:45 PM	15	44	6	65	0	2	15	17	0	16	0	16	6	1	1	8	106
Total	33	80	14	127	0	4	24	28	0	58	0	58	17	8	2	27	240
03:00 PM	12	32	14	58	0	2	9	11	2	21	1	24	14	5	1	20	113
03:15 PM	12	41	9	62	0	3	13	16	0	20	0	20	17	19	1	37	135
03:30 PM	6	39	11	56	0	1	24	25	0	18	0	18	11	6	0	17	116
03:45 PM	3	43	2	48	1	1	12	14	0	25	0	25	8	5	0	13	100
Total	33	155	36	224	1	7	58	66	2	84	1	87	50	35	2	87	464
04:00 PM	11	36	9	56	2	0	17	19	0	14	2	16	10	20	0	30	121
04:15 PM	12	43	7	62	0	1	9	10	0	21	0	21	8	4	0	12	105
04:30 PM	6	35	2	43	1	2	11	14	0	14	0	14	8	4	1	13	84
04:45 PM	7	35	5	47	0	1	5	6	1	16	0	17	5	4	0	9	79
Total	36	149	23	208	3	4	42	49	1	65	2	68	31	32	1	64	389
05:00 PM	7	35	5	47	0	1	20	21	0	25	0	25	5	2	0	7	100
05:15 PM	6	21	6	33	0	0	14	14	0	26	0	26	11	1	0	12	85
05:30 PM	6	23	4	33	1	1	6	8	0	13	0	13	2	3	0	5	59
05:45 PM	7	22	4	33	0	0	6	6	0	15	0	15	3	0	0	3	57
Total	26	101	19	146	1	2	46	49	0	79	0	79	21	6	0	27	301
Grand Total	128	485	92	705	5	17	170	192	3	286	3	292	119	81	5	205	1394
Apprch %	18.2	68.8	13		2.6	8.9	88.5		1	97.9	1		58	39.5	2.4		
Total %	9.2	34.8	6.6	50.6	0.4	1.2	12.2	13.8	0.2	20.5	0.2	20.9	8.5	5.8	0.4	14.7	

	Madison Street Southbound				58th Avenue Westbound				Madison Street Northbound				58th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:30 PM																	
02:30 PM	18	36	8	62	0	2	9	11	0	42	0	42	11	7	1	19	134
02:45 PM	15	44	6	65	0	2	15	17	0	16	0	16	6	1	1	8	106
03:00 PM	12	32	14	58	0	2	9	11	2	21	1	24	14	5	1	20	113
03:15 PM	12	41	9	62	0	3	13	16	0	20	0	20	17	19	1	37	135
Total Volume	57	153	37	247	0	9	46	55	2	99	1	102	48	32	4	84	488
% App. Total	23.1	61.9	15		0	16.4	83.6		2	97.1	1		57.1	38.1	4.8		
PHF	.792	.869	.661	.950	.000	.750	.767	.809	.250	.589	.250	.607	.706	.421	1.00	.568	.904

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City of La Quinta  
 N/S: Madison Street  
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File Name : LQAMA58PM  
 Site Code : 05113410  
 Start Date : 10/30/2013  
 Page No : 2



Peak Hour Analysis From 02:30 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:30 PM				03:15 PM				02:30 PM				03:15 PM			
+0 mins.	<b>18</b>	36	8	62	0	<b>3</b>	13	16	0	<b>42</b>	0	<b>42</b>	17	19	1	<b>37</b>
+15 mins.	15	<b>44</b>	6	<b>65</b>	0	1	<b>24</b>	<b>25</b>	0	16	0	16	11	6	0	17
+30 mins.	12	32	<b>14</b>	58	1	1	12	14	<b>2</b>	21	<b>1</b>	24	8	5	0	13
+45 mins.	12	41	9	62	<b>2</b>	0	17	19	0	20	0	20	10	<b>20</b>	0	30
Total Volume	57	153	37	247	3	5	66	74	2	99	1	102	46	50	1	97
% App. Total	23.1	61.9	15		4.1	6.8	89.2		2	97.1	1		47.4	51.5	1	
PHF	.792	.869	.661	.950	.375	.417	.688	.740	.250	.589	.250	.607	.676	.625	.250	.655

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City of La Quinta  
 60th Avenue  
 E/ Monroe Street

**24 Hour Directional Volume Count**

LQA60EMO  
 Site Code: 051-13410  
 Date Start: 30-Oct-13  
 Date End: 30-Oct-13

Start Time	30-Oct-13	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	3			0	9				
12:15		1	1			0	5				
12:30		0	7			0	5				
12:45		1	11	2	22	0	3	0	22	2	44
01:00		0	6			0	7				
01:15		0	9			0	2				
01:30		0	3			0	8				
01:45		0	5	0	23	0	2	0	19	0	42
02:00		0	8			0	7				
02:15		0	10			0	5				
02:30		0	23			0	7				
02:45		0	5	0	46	0	5	0	24	0	70
03:00		0	9			0	7				
03:15		0	5			0	6				
03:30		0	10			0	5				
03:45		0	7	0	31	0	4	0	22	0	53
04:00		0	12			0	7				
04:15		0	11			0	10				
04:30		0	6			0	4				
04:45		0	4	0	33	2	3	2	24	2	57
05:00		1	8			4	4				
05:15		3	5			3	9				
05:30		1	6			17	3				
05:45		4	7	9	26	16	4	40	20	49	46
06:00		4	6			6	4				
06:15		5	2			3	3				
06:30		5	6			10	3				
06:45		8	3	22	17	4	1	23	11	45	28
07:00		6	2			10	0				
07:15		6	0			10	0				
07:30		5	2			8	3				
07:45		11	1	28	5	5	1	33	4	61	9
08:00		3	1			5	0				
08:15		4	4			3	1				
08:30		6	1			4	3				
08:45		5	0	18	6	2	0	14	4	32	10
09:00		3	2			4	0				
09:15		2	2			5	2				
09:30		7	0			4	1				
09:45		5	1	17	5	3	0	16	3	33	8
10:00		8	0			4	1				
10:15		4	0			2	0				
10:30		5	0			7	1				
10:45		4	0	21	0	8	0	21	2	42	2
11:00		10	2			7	0				
11:15		6	0			4	0				
11:30		3	0			5	2				
11:45		4	0	23	2	5	0	21	2	44	4
Total Combined Total		140	216	140	216	170	157	170	157	310	373
AM Peak Vol.	07:00					05:15					
P.H.F.	28					42					
PM Peak Vol.	0.636					0.618					
P.H.F.	02:15						03:30				
	47						26				
	0.511						0.650				
Percentage	39.3%	60.7%				52.0%	48.0%				
ADT/AADT	ADT 683		AADT 683								

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City of La Quinta  
 Monroe Street  
 S/ 60th Avenue

**24 Hour Directional Volume Count**

LQAMOS60  
 Site Code: 051-13410  
 Date Start: 30-Oct-13  
 Date End: 30-Oct-13

Start Time	30-Oct-13	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	7			0	8				
12:15		1	5			1	9				
12:30		0	16			0	10				
12:45		1	10	2	38	1	11	2	38	4	76
01:00		0	10			0	9				
01:15		0	17			0	17				
01:30		0	6			0	14				
01:45		0	8	0	41	0	17	0	57	0	98
02:00		0	8			0	16				
02:15		0	16			0	6				
02:30		0	13			0	18				
02:45		0	11	0	48	0	13	0	53	0	101
03:00		0	13			0	20				
03:15		2	11			0	20				
03:30		0	11			0	15				
03:45		0	10	2	45	0	8	0	63	2	108
04:00		0	7			0	12				
04:15		2	10			0	12				
04:30		0	8			0	6				
04:45		2	4	4	29	3	12	3	42	7	71
05:00		3	12			0	15				
05:15		3	8			4	13				
05:30		7	3			1	9				
05:45		3	11	16	34	6	11	11	48	27	82
06:00		7	9			9	6				
06:15		5	3			6	2				
06:30		11	3			13	7				
06:45		9	5	32	20	23	8	51	23	83	43
07:00		9	3			7	4				
07:15		6	4			5	2				
07:30		11	2			10	4				
07:45		13	3	39	12	29	4	51	14	90	26
08:00		11	1			5	4				
08:15		7	0			3	8				
08:30		19	1			10	7				
08:45		8	0	45	2	9	4	27	23	72	25
09:00		10	2			7	2				
09:15		9	1			12	3				
09:30		11	1			5	3				
09:45		11	0	41	4	8	1	32	9	73	13
10:00		6	0			2	4				
10:15		6	2			3	1				
10:30		13	0			3	1				
10:45		10	1	35	3	8	1	16	7	51	10
11:00		10	0			8	3				
11:15		8	1			5	1				
11:30		11	0			12	0				
11:45		15	0	44	1	7	0	32	4	76	5
Total Combined Total		260	277	260	277	225	381	225	381	485	658
AM Peak Vol.		07:45				06:00					
P.H.F.		50				51					
PM Peak Vol.		0.658				0.554					
PM Peak Vol.		00:30					02:30				
P.H.F.		53					71				
P.H.F.		0.779					0.888				
Percentage		48.4%	51.6%			37.1%	62.9%				
ADT/AADT		ADT 1,143		AADT 1,143							

## EXISTING PEAK HOUR-TO-DAILY TRAFFIC VOLUME RELATIONSHIP

Intsec NumID	Intersection	LEG	ADT Count	AM Peak Hour	AM Ratio	PM Peak Hour	PM Ratio
3	Monroe St. / 60th Av.	South	1,143	91	0.080	132	0.115
		East	683	61	0.089	67	0.098

**TOTAL**

**1,826**

**152**

**199**

AVERAGE

8.300%

10.900%

**ADT CALCULATION FACTOR**

**5.208**

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## **APPENDIX 3.2**

Existing (2013) Conditions  
Intersection Operations Analysis Worksheets



Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Madison St. / Av. 60

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: A[ 8.8]

Approach: North Bound South Bound East Bound West Bound

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

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include Include

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

## Volume Module:

Base Vol: 0 0 0 59 0 0 0 2 0 0 2 129

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 0 0 59 0 0 0 2 0 0 2 129

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: 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81

PHF Volume: 0 0 0 73 0 0 0 2 0 0 2 159

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

FinalVolume: 0 0 0 73 0 0 0 2 0 0 2 159

## Critical Gap Module:

Critical Gp:xxxxx xxxx xxxx 6.4 6.5 6.2 xxxxx xxxx xxxx xxxx xxxx xxxx xxxx

FollowUpTim:xxxxx xxxx xxxx 3.5 4.0 3.3 xxxxx xxxx xxxx xxxx xxxx xxxx

## Capacity Module:

Cnflct Vol: xxxx xxxx xxxx 5 5 2 xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Potent Cap.: xxxx xxxx xxxx 1022 894 1088 xxxx xxxx xxxx xxxx xxxx xxxx

Move Cap.: xxxx xxxx xxxx 1022 894 1088 xxxx xxxx xxxx xxxx xxxx xxxx

Volume/Cap: xxxx xxxx xxxx 0.07 0.00 0.00 xxxx xxxx xxxx xxxx xxxx xxxx

## Level Of Service Module:

2Way95thQ: xxxx xxxx xxxx 0.2 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Control Del:xxxxx xxxx xxxx 8.8 xxxx xxxx xxxx xxxx xxxx xxxx xxxx

LOS by Move: \* \* \* A \* \* \* \* \* \* \* \*

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx xxxx xxxx xxxx xxxx 0 xxxx xxxx xxxx xxxx xxxx xxxx

SharedQueue:xxxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Shrd ConDel:xxxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Shared LOS: \* \* \* \* \* \* \* \* \* \* \*

ApproachDel: xxxxxx 8.8 xxxxxxxx xxxxxxxx

ApproachLOS: \* A \* \*

\*\*\*\*\*

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

\*\*\*\*\*

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.145	
Loss Time (sec):	0	Average Delay (sec/veh):	7.8	
Optimal Cycle:	0	Level Of Service:	A	
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R
<b>Control:</b>	Stop Sign	Stop Sign	Stop Sign	Stop Sign
<b>Rights:</b>	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0	0 0 1! 0 0
<b>Volume Module:</b>				
Base Vol:	13 32 2	10 35 56	17 29 3	12 65 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:	13 32 2	10 35 56	17 29 3	12 65 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:	0.81 0.81 0.81	0.81 0.81 0.81	0.81 0.81 0.81	0.81 0.81 0.81
PHF Volume:	16 40 2	12 43 69	21 36 4	15 80 22
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	16 40 2	12 43 69	21 36 4	15 80 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:	16 40 2	12 43 69	21 36 4	15 80 22
<b>Saturation Flow Module:</b>				
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.28 0.68 0.04	0.22 0.78 1.00	0.35 0.59 0.06	0.13 0.68 0.19
Final Sat.:	210 518 32	154 539 819	269 459 47	102 554 153
<b>Capacity Analysis Module:</b>				
Vol/Sat:	0.08 0.08 0.08	0.08 0.08 0.08	0.08 0.08 0.08	0.15 0.15 0.15
Crit Moves:	****	****	****	****
Delay/Veh:	7.9 7.9 7.9	8.2 8.2 7.3	7.8 7.8 7.8	8.0 8.0 8.0
Delay Adj:	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:	7.9 7.9 7.9	8.2 8.2 7.3	7.8 7.8 7.8	8.0 8.0 8.0
LOS by Move:	A A A	A A A	A A A	A A A
ApproachDel:	7.9	7.7	7.8	8.0
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	7.9	7.7	7.8	8.0
LOS by Appr:	A	A	A	A
AllWayAvgQ:	0.1 0.1 0.1	0.1 0.1 0.1	0.1 0.1 0.1	0.2 0.2 0.2

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 AM Peak Hour

Level Of Service Computation Report  
 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Monroe St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.069			
Loss Time (sec):	0	Average Delay (sec/veh):	7.7			
Optimal Cycle:	0	Level Of Service:	A			
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound		
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R		
<b>Control:</b>	Stop Sign	Stop Sign	Stop Sign	Stop Sign		
<b>Rights:</b>	Include	Include	Include	Include		
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0		
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1	0 0 1! 0 0		
<b>Volume Module:</b>						
Base Vol:	15 24 2 8 17 15 13 22 32 1 20 8					
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:	15 24 2 8 17 15 13 22 32 1 20 8					
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:	0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72					
PHF Volume:	21 33 3 11 24 21 18 31 45 1 28 11					
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0					
Reduced Vol:	21 33 3 11 24 21 18 31 45 1 28 11					
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:	21 33 3 11 24 21 18 31 45 1 28 11					
<b>Saturation Flow Module:</b>						
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00					
Lanes:	1.00 0.92 0.08 1.00 1.00 1.00 0.37 0.63 1.00 0.03 0.69 0.28					
Final Sat.:	656 675 56 643 706 818 263 444 856 26 514 206					
<b>Capacity Analysis Module:</b>						
Vol/Sat:	0.03 0.05 0.05 0.02 0.03 0.03 0.07 0.07 0.05 0.05 0.05 0.05					
Crit Moves:	**** ****					
Delay/Veh:	8.2 7.7 7.7 8.2 7.8 7.1 8.1 8.1 7.0 8.0 8.0 8.0					
Delay Adj:	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:	8.2 7.7 7.7 8.2 7.8 7.1 8.1 8.1 7.0 8.0 8.0 8.0					
LOS by Move:	A A A A A A A A A A A A					
ApproachDel:	7.9	7.6	7.6	8.0	8.0	8.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00
ApprAdjDel:	7.9	7.6	7.6	8.0	8.0	8.0
LOS by Appr:	A	A	A	A	A	A
AllWayAvgQ:	0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.1 0.1 0.1 0.1 0.1 0.1					

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: A[ 8.5]

Approach: North Bound South Bound East Bound West Bound

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

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Rights: Include Include Include Include

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

## Volume Module:

Base Vol: 0 31 0 0 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 3

Growth Adj: 1.00

Initial Bse: 0 31 0 0 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 3

User Adj: 1.00

PHF Adj: 0.68

PHF Volume: 0 46 0 0 74 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 4

Reduct Vol: 0

FinalVolume: 0 46 0 0 74 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 4

Critical Gap Module:

Critical Gp:xxxxx xxxx 6.2

FollowUpTim:xxxxx xxxx 3.3

Capacity Module:

Cnflct Vol: xxxx 46

Potent Cap.: xxxx 1030

Move Cap.: xxxx 1030

Volume/Cap: xxxx 0.00

Level Of Service Module:

2Way95thQ: xxxx 0.0

Control Del:xxxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 8.5

LOS by Move: \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* A

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx xxxx

SharedQueue:xxxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Shrd ConDel:xxxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Shared LOS: \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

ApproachDel: xxxxxxxx xxxxxxxx xxxxxxxx 8.5

ApproachLOS: \* \* \* \* \* \* \* \* \* \* A

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 AM Peak Hour

Level Of Service Computation Report  
 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Jackson St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.090	
Loss Time (sec):	0	Average Delay (sec/veh):	7.3	
Optimal Cycle:	0	Level Of Service:	A	
<hr/>				
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<hr/>				
Volume Module:				
Base Vol:	7 43 1 12 45 15 5 21 7 4 8 12			
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:	7 43 1 12 45 15 5 21 7 4 8 12			
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:	8 48 1 13 50 17 6 23 8 4 9 13			
Reduc Vol:	0 0 0 0 0 0 0 0 0 0 0 0			
Reduced Vol:	8 48 1 13 50 17 6 23 8 4 9 13			
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:	8 48 1 13 50 17 6 23 8 4 9 13			
<hr/>				
Saturation Flow Module:				
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			
Lanes:	0.14 0.84 0.02 0.17 0.62 0.21 0.15 0.64 0.21 0.17 0.33 0.50			
Final Sat.:	118 725 17 148 555 185 129 541 180 147 294 441			
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.07 0.07 0.07 0.09 0.09 0.09 0.04 0.04 0.04 0.03 0.03 0.03			
Crit Moves:	****	****	****	****
Delay/Veh:	7.4 7.4 7.4 7.4 7.4 7.4 7.3 7.3 7.3 7.1 7.1 7.1			
Delay Adj:	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:	7.4 7.4 7.4 7.4 7.4 7.4 7.3 7.3 7.3 7.1 7.1 7.1			
LOS by Move:	A A A A A A A A A A A A			
ApproachDel:	7.4	7.4	7.3	7.1
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	7.4	7.4	7.3	7.1
LOS by Appr:	A	A	A	A
AllWayAvgQ:	0.1 0.1 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.0 0.0 0.0			
<hr/>				

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 AM Peak Hour

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

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Intersection #6 Jackson St. / 61st Av.

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Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[ 9.1]

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Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 1 0 0 0	0 0 0 1 0	1 0 0 0 0	0 0 1! 0 0

---

Volume Module:

Base Vol:	3 49 0 0 43 1 2 0 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
Initial Bse:	3 49 0 0 43 1 2 0 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
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 0.85 0.85
PHF Volume:	4 58 0 0 51 1 2 0 0 0 0 0 0 0
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	4 58 0 0 51 1 2 0 0 0 0 0 0 0

---

Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx xxxx xxxx xxxx 6.4 xxxx xxxx 7.1 6.5 6.2
FollowUpTim:	2.2 xxxx xxxx xxxx xxxx xxxx 3.5 xxxx xxxx 3.5 4.0 3.3

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Capacity Module:

Cnflict Vol:	52 xxxx xxxx xxxx xxxx xxxx 117 xxxx xxxx 117 117 58
Potent Cap.:	1567 xxxx xxxx xxxx xxxx xxxx 884 xxxx xxxx 865 777 1014
Move Cap.:	1567 xxxx xxxx xxxx xxxx xxxx 883 xxxx xxxx 863 775 1014
Volume/Cap:	0.00 xxxx xxxx xxxx xxxx xxxx 0.00 xxxx xxxx 0.00 0.00 0.00

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Level Of Service Module:

2Way95thQ:	0.0 xxxx xxxx xxxx xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx
Control Del:	7.3 xxxx xxxx xxxx xxxx xxxx 9.1 xxxx xxxx xxxx xxxx xxxx
LOS by Move:	A * * * * * A * * * * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx 0 xxxx
SharedQueue:	0.0 xxxx
Shrd ConDel:	7.3 xxxx
Shared LOS:	A * * * * * * * * * *
ApproachDel:	xxxxxx xxxx 9.1 xxxx
ApproachLOS:	* A *

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.136
Loss Time (sec):	0	Average Delay (sec/veh):	8.7
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1
<hr/>			
Volume Module:			
Base Vol:	4 127 2	65 69 43	42 6 2
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	4 127 2	65 69 43	42 6 2
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.79 0.79 0.79	0.79 0.79 0.79	0.79 0.79 0.79
PHF Volume:	5 160 3	82 87 54	53 8 3
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	5 160 3	82 87 54	53 8 3
PCE Adj:	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
FinalVolume:	5 160 3	82 87 54	53 8 3
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 2.00 1.00	1.00 2.00 1.00	1.00 1.00 2.00
Final Sat.:	588 1284 731	602 1312 752	546 591 667
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.01 0.12 0.00	0.14 0.07 0.07	0.10 0.01 0.00
Crit Moves:	****	****	****
Delay/Veh:	8.6 8.8 7.4	9.4 8.3 7.6	9.5 8.5 7.7
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	8.6 8.8 7.4	9.4 8.3 7.6	9.5 8.5 7.7
LOS by Move:	A A A	A A A	A A *
ApproachDel:	8.8	8.5	9.3
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	8.8	8.5	9.3
LOS by Appr:	A	A	A
AllWayAvgQ:	0.0 0.1 0.0	0.1 0.1 0.1	0.0 0.0 0.0
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Note: Queue reported is the number of cars per lane.

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 PM Peak Hour

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

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Intersection #1 Madison St. / Av. 60

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Average Delay (sec/veh): 5.6 Worst Case Level Of Service: A[ 9.4]

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Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 1 0	0 0 1 0 0	0 0 1 0 1

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Volume Module:

Base Vol:	0 0 0 163 0 2 0 4 0 0 3 102
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 0 0 163 0 2 0 4 0 0 3 102
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:	0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83
PHF Volume:	0 0 0 196 0 2 0 5 0 0 4 122
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	0 0 0 196 0 2 0 5 0 0 4 122

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Critical Gap Module:

Critical Gp:xxxxx xxxx xxxx 6.4 6.5 6.2	xxxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
FollowUpTim:xxxxx xxxx xxxx 3.5 4.0 3.3	xxxxx xxxx xxxx xxxx xxxx xxxx xxxx

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Capacity Module:

Cnflict Vol: xxxx xxxx xxxx 8 8 4	xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Potent Cap.: xxxx xxxx xxxx 1017 891 1086	xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Move Cap.: xxxx xxxx xxxx 1017 891 1086	xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Volume/Cap: xxxx xxxx xxxx 0.19 0.00 0.00	xxxx xxxx xxxx xxxx xxxx xxxx xxxx

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Level Of Service Module:

2Way95thQ: xxxx xxxx xxxx 0.7	xxxx xxxx xxxx xxxx xxxx xxxx xxxx		
Control Del:xxxxx xxxx xxxx 9.4	xxxx xxxx xxxx xxxx xxxx xxxx xxxx		
LOS by Move: * * * A *	* * * * * * * *		
Movement: LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.: xxxx xxxx xxxx xxxx xxxx 1086	xxxx xxxx xxxx xxxx xxxx xxxx xxxx		
SharedQueue:xxxxx xxxx xxxx xxxx xxxx 0.0	xxxxx xxxx xxxx xxxx xxxx xxxx xxxx		
Shrd ConDel:xxxxx xxxx xxxx xxxx xxxx 8.3	xxxxx xxxx xxxx xxxx xxxx xxxx xxxx		
Shared LOS: * * * * A	* * * * * * *		
ApproachDel: xxxxxx 9.4	xxxxxxxxxxxxxx		
ApproachLOS: * A	*		

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.274
Loss Time (sec):	0	Average Delay (sec/veh):	8.7
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	8 73 8	22 42 36	72 81 4
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	8 73 8	22 42 36	72 81 4
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.76 0.76 0.76	0.76 0.76 0.76	0.76 0.76 0.76
PHF Volume:	10 96 10	29 55 47	94 106 5
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	10 96 10	29 55 47	94 106 5
PCE Adj:	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
FinalVolume:	10 96 10	29 55 47	94 106 5
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.09 0.82 0.09	0.34 0.66 1.00	0.46 0.52 0.02
Final Sat.:	66 599 66	222 424 764	344 387 19
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.16 0.16 0.16	0.13 0.13 0.06	0.27 0.27 0.27
Crit Moves:	****	****	****
Delay/Veh:	8.5 8.5 8.5	8.8 8.8 7.5	9.3 9.3 9.3
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	8.5 8.5 8.5	8.8 8.8 7.5	9.3 9.3 9.3
LOS by Move:	A A A	A A A	A A A
ApproachDel:	8.5	8.3	9.3
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	8.5	8.3	9.3
LOS by Appr:	A	A	A
AllWayAvgQ:	0.2 0.2 0.2	0.1 0.1 0.1	0.3 0.3 0.3
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 PM Peak Hour

Level Of Service Computation Report  
 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Monroe St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.082	
Loss Time (sec):	0	Average Delay (sec/veh):	7.8	
Optimal Cycle:	0	Level Of Service:	A	
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1	0 0 1! 0 0
Volume Module:				
Base Vol:	24 30 2	9 33 9	14 32 39	4 10 10
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:	24 30 2	9 33 9	14 32 39	4 10 10
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:	0.80 0.80 0.80	0.80 0.80 0.80	0.80 0.80 0.80	0.80 0.80 0.80
PHF Volume:	30 37 2	11 41 11	17 40 49	5 12 12
Reduc Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	30 37 2	11 41 11	17 40 49	5 12 12
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:	30 37 2	11 41 11	17 40 49	5 12 12
Saturation Flow Module:				
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 0.94 0.06	1.00 1.00 1.00	0.30 0.70 1.00	0.16 0.42 0.42
Final Sat.:	655 682 45	639 701 812	214 489 843	123 309 309
Capacity Analysis Module:				
Vol/Sat:	0.05 0.05 0.05	0.02 0.06 0.01	0.08 0.08 0.06	0.04 0.04 0.04
Crit Moves:	****	****	****	****
Delay/Veh:	8.3 7.8 7.8	8.3 8.0 7.0	8.1 8.1 7.1	7.9 7.9 7.9
Delay Adj:	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:	8.3 7.8 7.8	8.3 8.0 7.0	8.1 8.1 7.1	7.9 7.9 7.9
LOS by Move:	A A A	A A A	A A A	A A A
ApproachDel:	8.0	7.9	7.7	7.9
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	8.0	7.9	7.7	7.9
LOS by Appr:	A	A	A	A
AllWayAvgQ:	0.0 0.1 0.1	0.0 0.1 0.0	0.1 0.1 0.1	0.0 0.0 0.0

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 PM Peak Hour

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

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Intersection #4 Monroe St. / 61st Av.

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Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[ 8.9]

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Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 1 0	0 1 0 0 0	0 0 0 0 0	0 0 1! 0 0

---

Volume Module:

Base Vol:	0 41 1 3 59 0 0 0 0 1 0 1
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 41 1 3 59 0 0 0 0 1 0 1
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:	0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81
PHF Volume:	0 51 1 4 73 0 0 0 0 1 0 1
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	0 51 1 4 73 0 0 0 0 1 0 1

---

Critical Gap Module:

Critical Gp:xxxxx xxxx xxxx 4.1 xxxx xxxx xxxx xxxx xxxx 6.4 6.5 6.2
FollowUpTim:xxxxx xxxx xxxx 2.2 xxxx xxxx xxxx xxxx xxxx 3.5 4.0 3.3

---

Capacity Module:

Cnflict Vol: xxxx xxxx xxxx 52 xxxx xxxx xxxx xxxx xxxx 132 132 51
Potent Cap.: xxxx xxxx xxxx 1567 xxxx xxxx xxxx xxxx xxxx 867 763 1022
Move Cap.: xxxx xxxx xxxx 1567 xxxx xxxx xxxx xxxx xxxx 865 761 1022
Volume/Cap: xxxx xxxx xxxx 0.00 xxxx xxxx xxxx xxxx xxxx 0.00 0.00 0.00

---

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:xxxxx xxxx xxxx 7.3 xxxx xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move: * * * A * * * * * * * * *
Movement: LT - LTR - RT
Shared Cap.: xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 937 xxxx
SharedQueue:xxxxx xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx xxxx 0.0 xxxx
Shrd ConDel:xxxxx xxxx xxxx 7.3 xxxx xxxx xxxx xxxx xxxx xxxx 8.9 xxxx
Shared LOS: * * * A * * * * * * * A *
ApproachDel: xxxxxx xxxxxx 8.9
ApproachLOS: * * * * * A

---

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 PM Peak Hour

Level Of Service Computation Report  
 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Jackson St. / Av. 60

Cycle (sec):	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	1!	0	0	0	0	0	1!	0	0	0	0	1!	0
Volume Module:															
Base Vol:	11	42	3	5	49	4	7	22	8	4	11	14			
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	42	3	5	49	4	7	22	8	4	11	14			
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:	12	45	3	5	52	4	7	23	9	4	12	15			
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	12	45	3	5	52	4	7	23	9	4	12	15			
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	45	3	5	52	4	7	23	9	4	12	15			
Saturation Flow Module:															
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Lanes:	0.20	0.75	0.05	0.09	0.84	0.07	0.19	0.59	0.22	0.14	0.38	0.48			
Final Sat.:	169	645	46	75	733	60	162	509	185	123	337	429			
Capacity Analysis Module:															
Vol/Sat:	0.07	0.07	0.07	0.07	0.07	0.07	0.05	0.05	0.05	0.03	0.03	0.03			
Crit Moves:	****		****		****		****		****	****		****			
Delay/Veh:	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.3	7.3	7.1	7.1	7.1			
Delay Adj:	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:	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.3	7.3	7.1	7.1	7.1			
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A			
ApproachDel:		7.4			7.4			7.3			7.1				
Delay Adj:		1.00			1.00			1.00			1.00				
ApprAdjDel:		7.4			7.4			7.3			7.1				
LOS by Appr:		A			A			A			A				
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0			

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: A[ 9.4]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 1 0 0 0	0 1 0 0 0	0 0 1! 0 0	0 0 0 1 0

## Volume Module:

Base Vol:	2 47 0 3 56 0 2 1 1 0 2 2
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:	2 47 0 3 56 0 2 1 1 0 2 2
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:	0.71 0.71 0.71 0.71 0.71 0.71 0.71 0.71 0.71 0.71 0.71 0.71
PHF Volume:	3 66 0 4 79 0 3 1 1 0 3 3
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
Final Volume:	3 66 0 4 79 0 3 1 1 0 3 3

## Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx 4.1 xxxx xxxx 7.1 6.5 6.2 xxxx 6.5 6.2
FollowUpTim:	2.2 xxxx xxxx 2.2 xxxx xxxx 3.5 4.0 3.3 xxxx 4.0 3.3

## Capacity Module:

Cnflict Vol:	79 xxxx xxxx 66 xxxx xxxx 163 160 79 xxxx 160 66
Potent Cap.:	1532 xxxx xxxx 1548 xxxx xxxx 807 736 987 xxxx 736 1003
Move Cap.:	1532 xxxx xxxx 1548 xxxx xxxx 799 733 987 xxxx 733 1003
Volume/Cap:	0.00 xxxx xxxx 0.00 xxxx xxxx 0.00 0.00 0.00 xxxx 0.00 0.00

## Level Of Service Module:

2Way95thQ:	0.0 xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:	7.4 xxxx xxxx 7.3 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move:	A * * A * * * * * * * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxx xxxx xxxx xxxx 820 xxxx xxxx xxxx 847
SharedQueue:	0.0 xxxx xxxx 0.0 xxxx xxxx 0.0 xxxx xxxx xxxx 0.0
Shrd ConDel:	7.4 xxxx xxxx 7.3 xxxx xxxx xxxx 9.4 xxxx xxxx xxxx xxxx 9.3
Shared LOS:	A * * A * * * A * * * A
ApproachDel:	xxxxxx xxxx 9.4 9.3
ApproachLOS:	* * A A

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing (2013) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.125	
Loss Time (sec):	0	Average Delay (sec/veh):	8.6	
Optimal Cycle:	0	Level Of Service:	A	
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R
<b>Control:</b>	Stop Sign	Stop Sign	Stop Sign	Stop Sign
<b>Rights:</b>	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 0	1 0 2 0	1 0 1 0	1 0 2 0
<b>Volume Module:</b>				
Base Vol:	2 109	1 63	168 41	53 35 4
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00 1.00
Initial Bse:	2 109	1 63	168 41	53 35 4
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00 1.00
PHF Volume:	2 109	1 63	168 41	53 35 4
Reduct Vol:	0 0	0 0	0 0	0 0 0
Reduced Vol:	2 109	1 63	168 41	53 35 4
PCE Adj:	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
FinalVolume:	2 109	1 63	168 41	53 35 4
<b>Saturation Flow Module:</b>				
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 2.00	1.00 2.00	1.00 1.00	1.00 1.00 2.00
Final Sat.:	575 1251	709 612	1340 769	554 601 680 544
<b>Capacity Analysis Module:</b>				
Vol/Sat:	0.00 0.09	0.00 0.10	0.13 0.05	0.10 0.06 0.01
Crit Moves:	****	****	****	****
Delay/Veh:	8.7 8.7	7.5 9.0	8.6 7.5	9.5 8.7 7.7
Delay Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	8.7 8.7	7.5 9.0	8.6 7.5	9.5 8.7 7.7
LOS by Move:	A A	A A	A A	A A * A A
ApproachDel:	8.7	8.5		9.1 8.2
Delay Adj:	1.00	1.00		1.00 1.00
ApprAdjDel:	8.7	8.5		9.1 8.2
LOS by Appr:	A	A	A	A
AllWayAvgQ:	0.0 0.1	0.0 0.1	0.1 0.1	0.1 0.0 0.0 0.1

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

## **APPENDIX 3.3**

### Traffic Signal Warrant Analysis Worksheets



## **Existing (2013) Conditions**

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday AM Peak Hour**

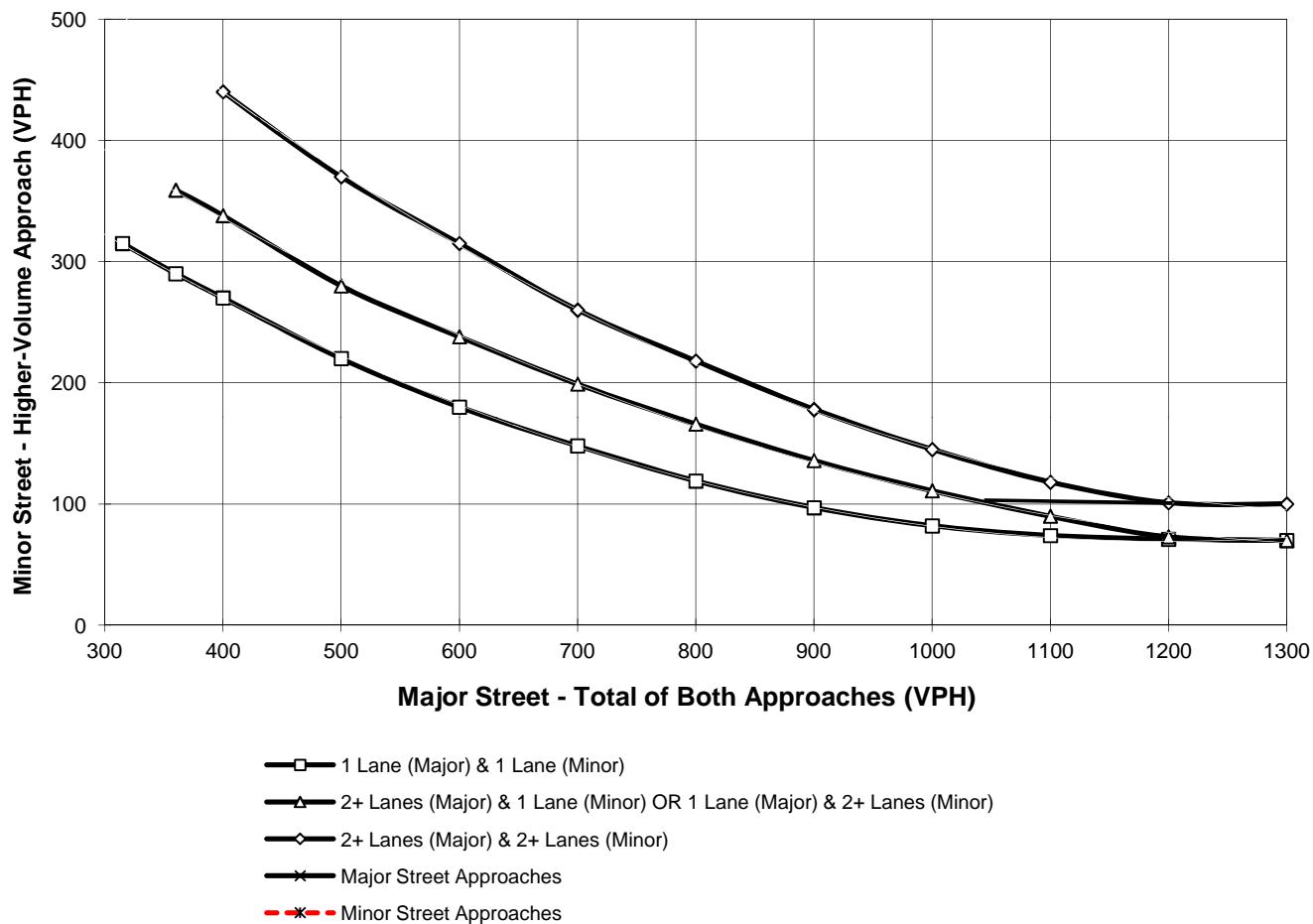
Major Street Name = **60th Av.**

Total of Both Approaches (VPH) = **133**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Madison Street**

High Volume Approach (VPH) = **59**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday PM Peak Hour**

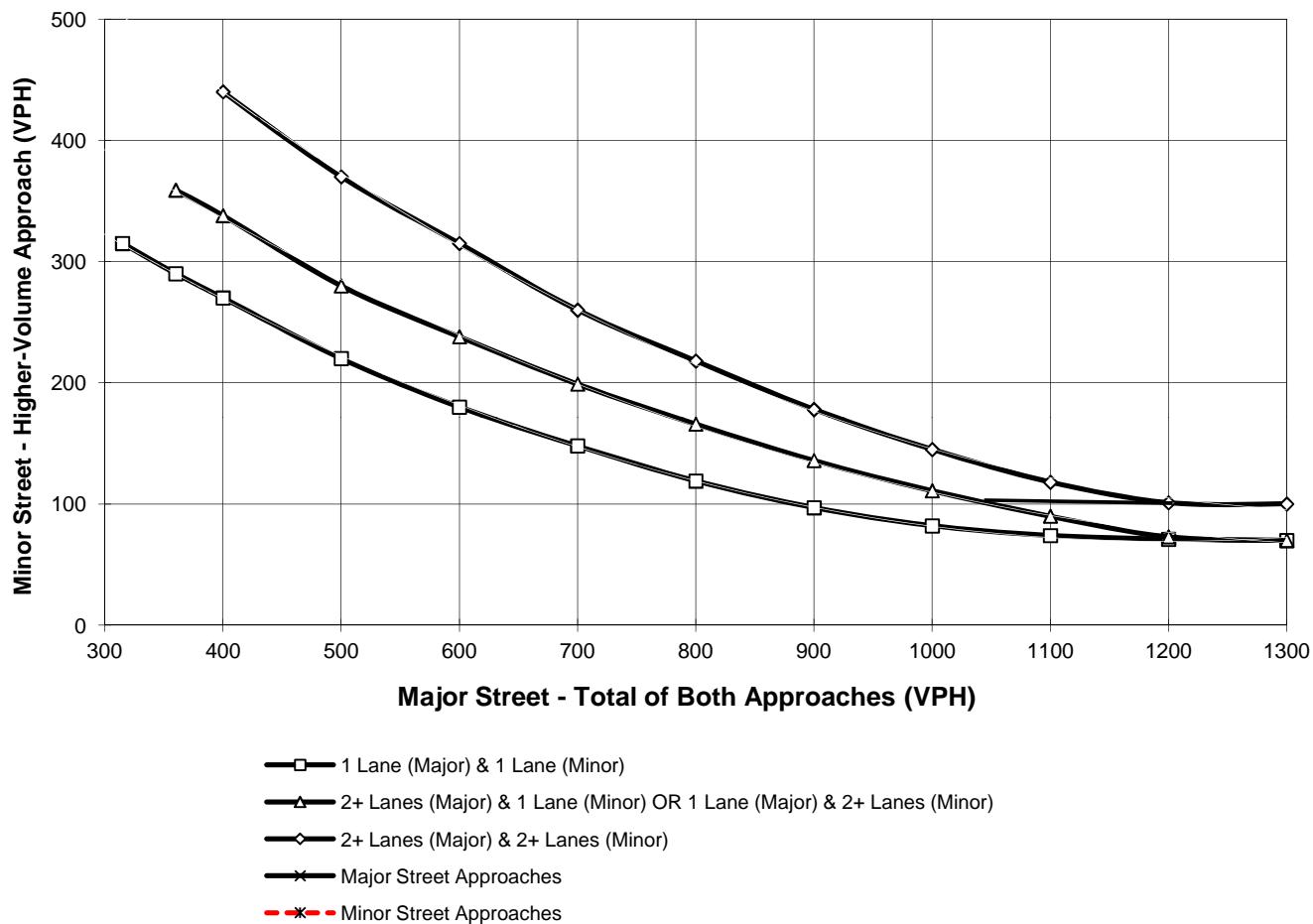
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **165**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **105**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday AM Peak Hour**

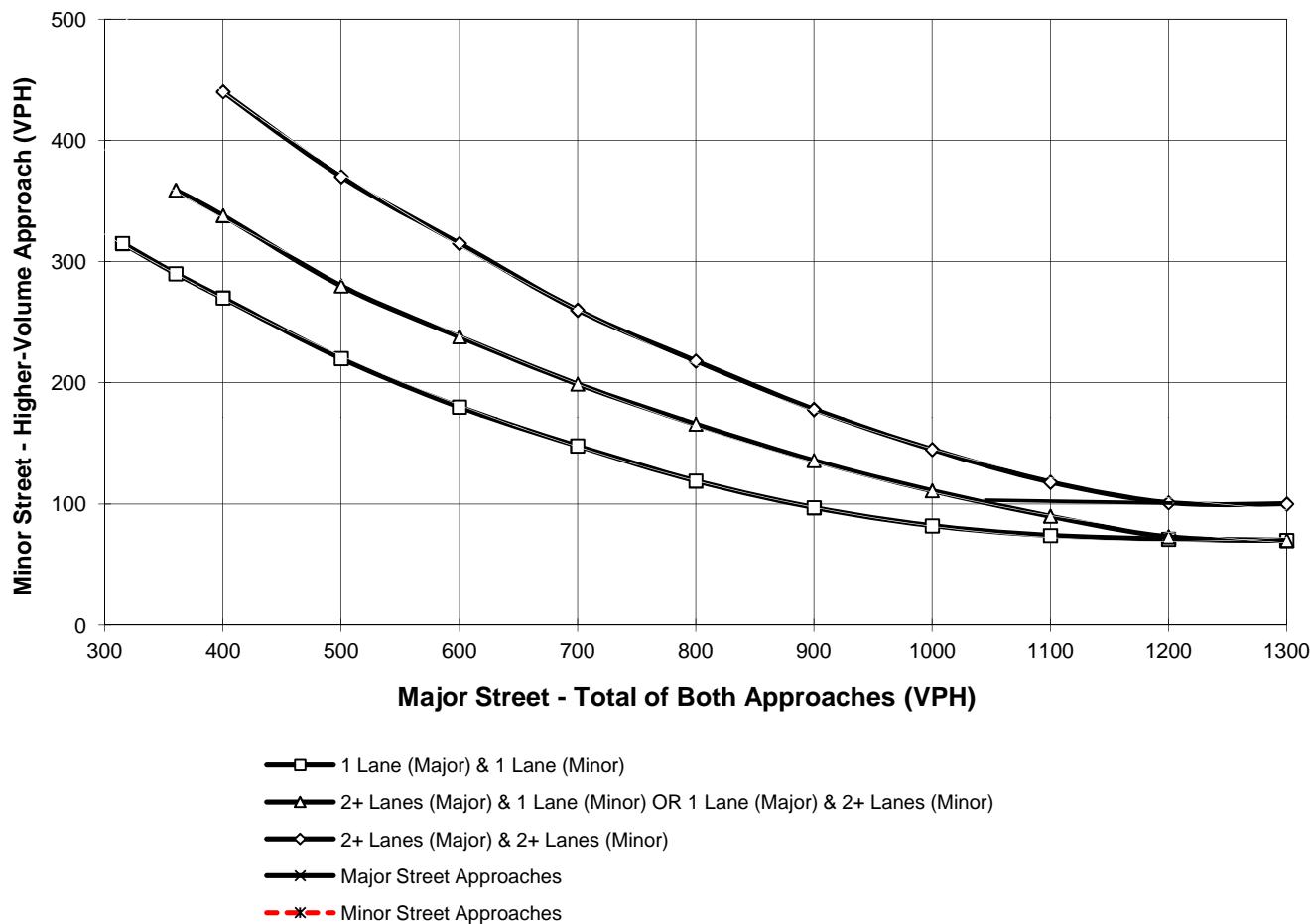
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **148**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **95**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday PM Peak Hour**

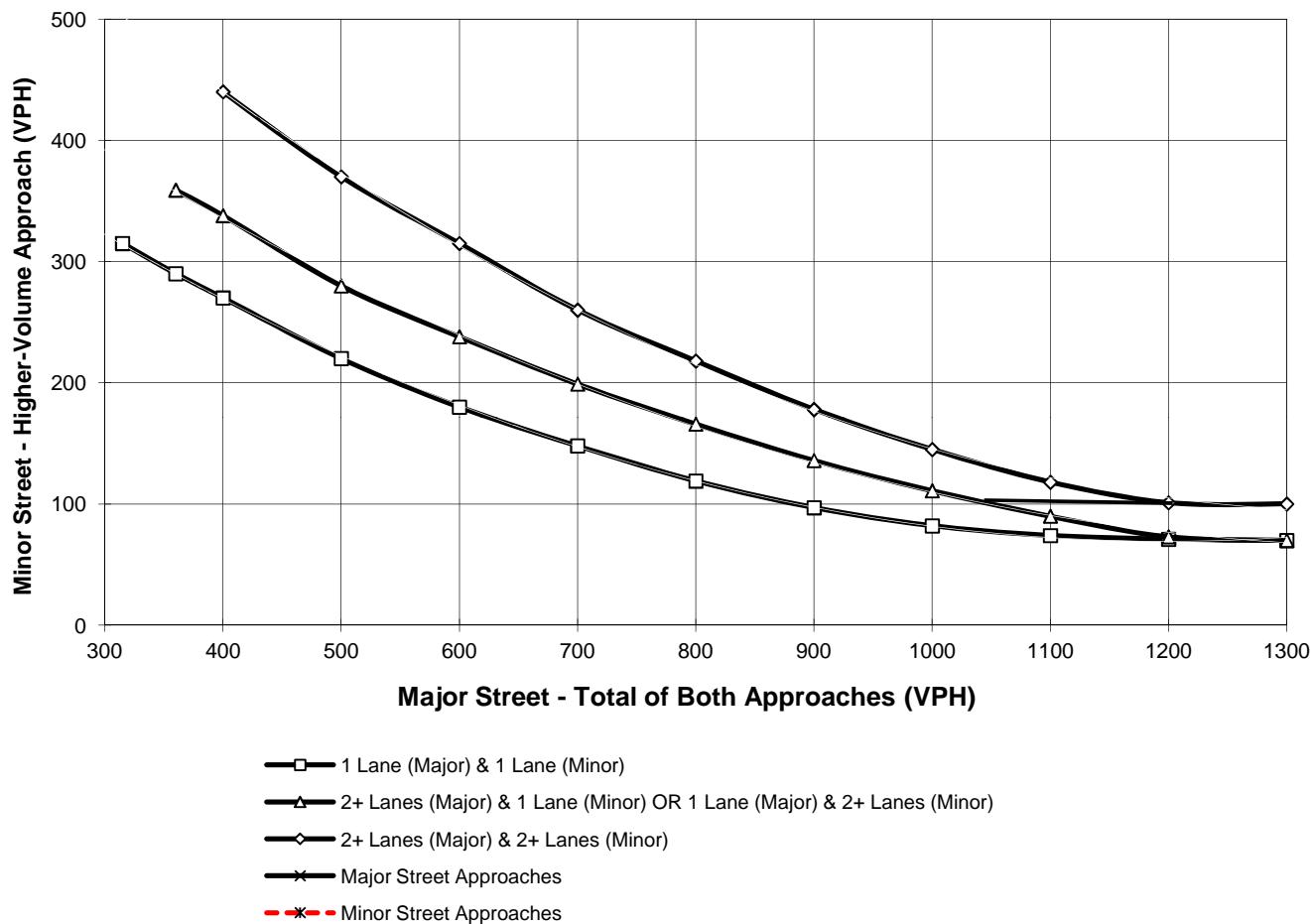
Major Street Name = **58th Avenue**

Total of Both Approaches (VPH) = **191**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Monroe Street**

High Volume Approach (VPH) = **100**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday AM Peak Hour**

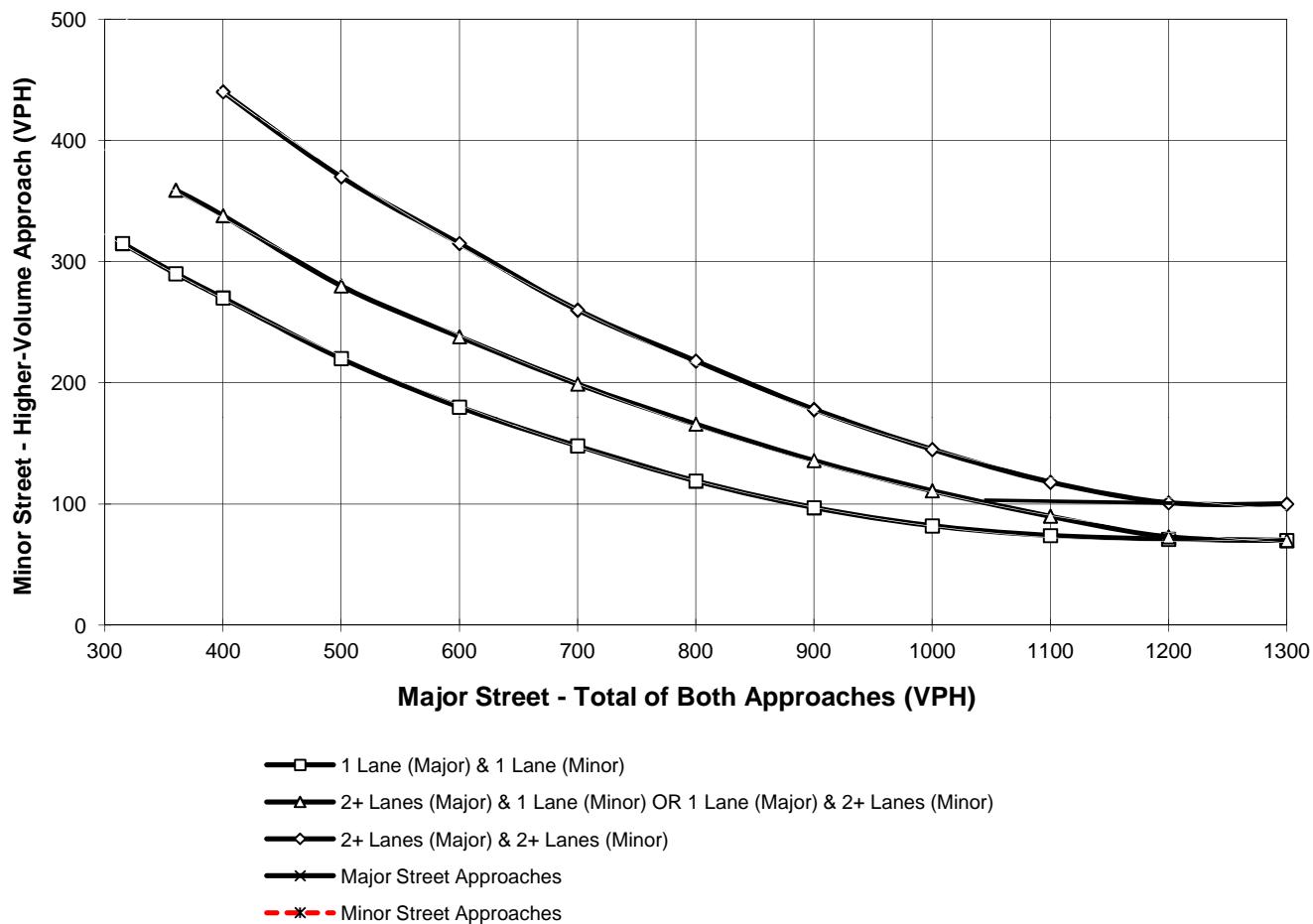
Major Street Name = **60th Av.**

Total of Both Approaches (VPH) = **96**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Monroe Street**

High Volume Approach (VPH) = **41**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday PM Peak Hour**

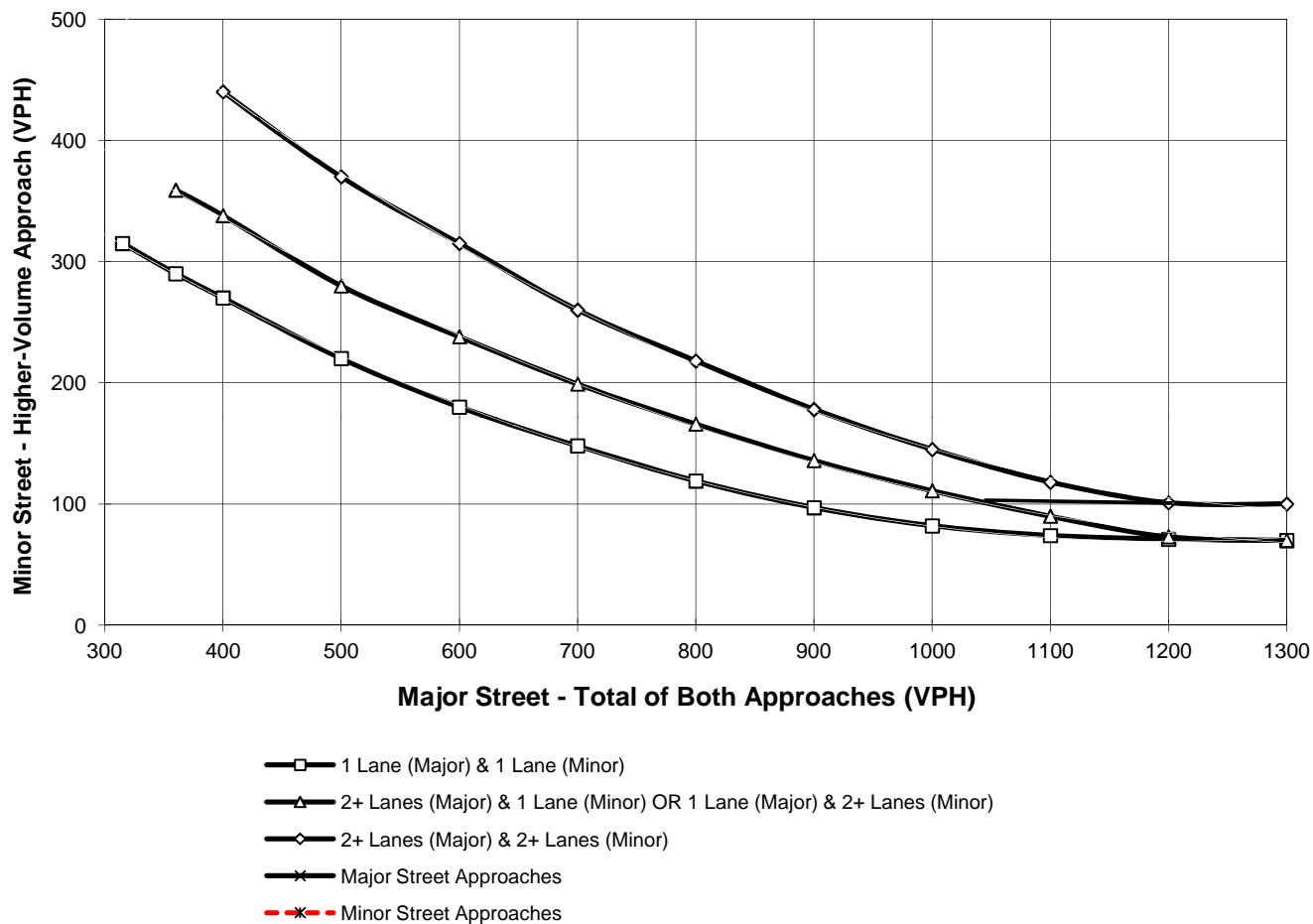
Major Street Name = **60th Av.**

Total of Both Approaches (VPH) = **109**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Monroe Street**

High Volume Approach (VPH) = **56**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday AM Peak Hour**

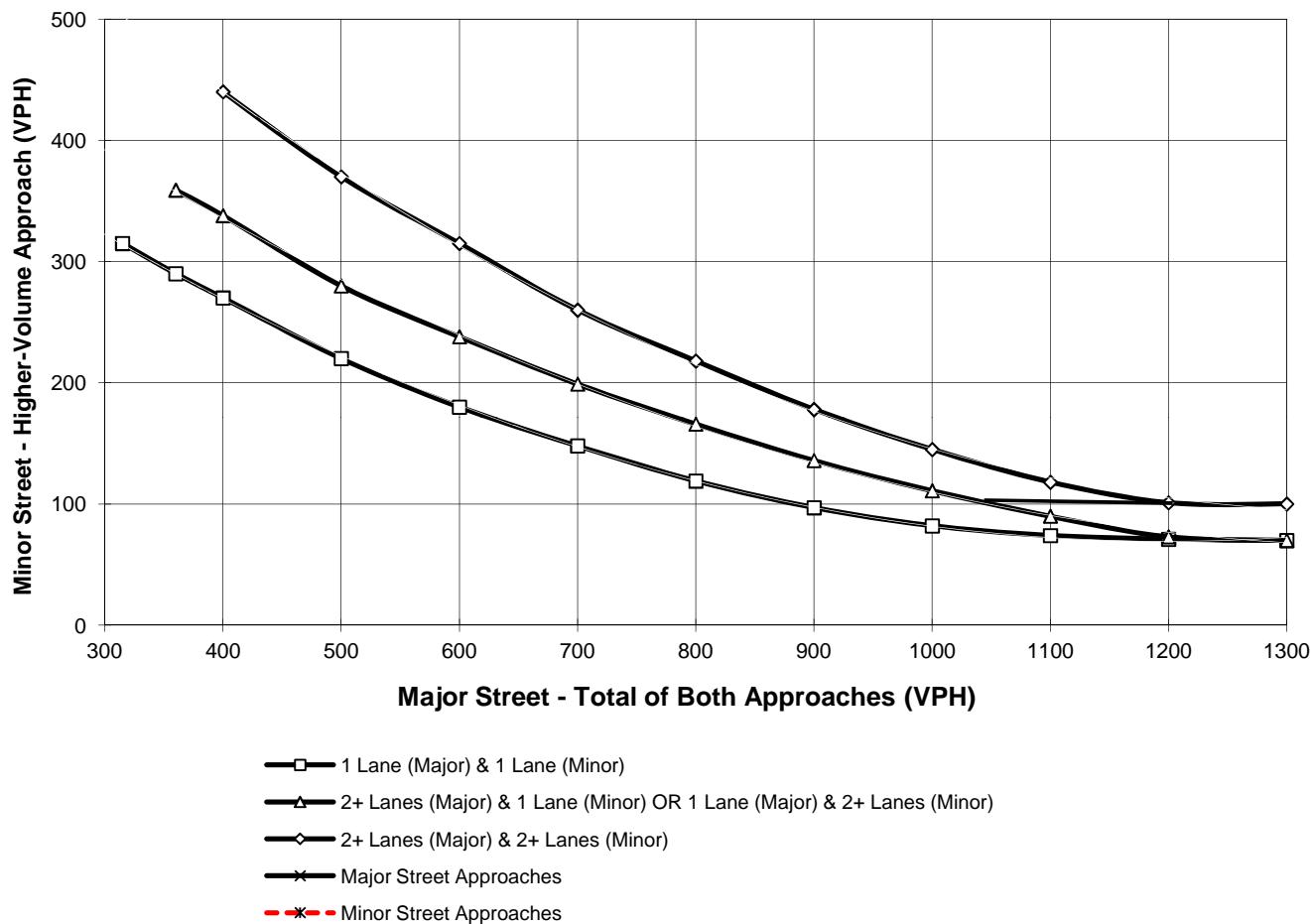
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **81**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **3**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday PM Peak Hour**

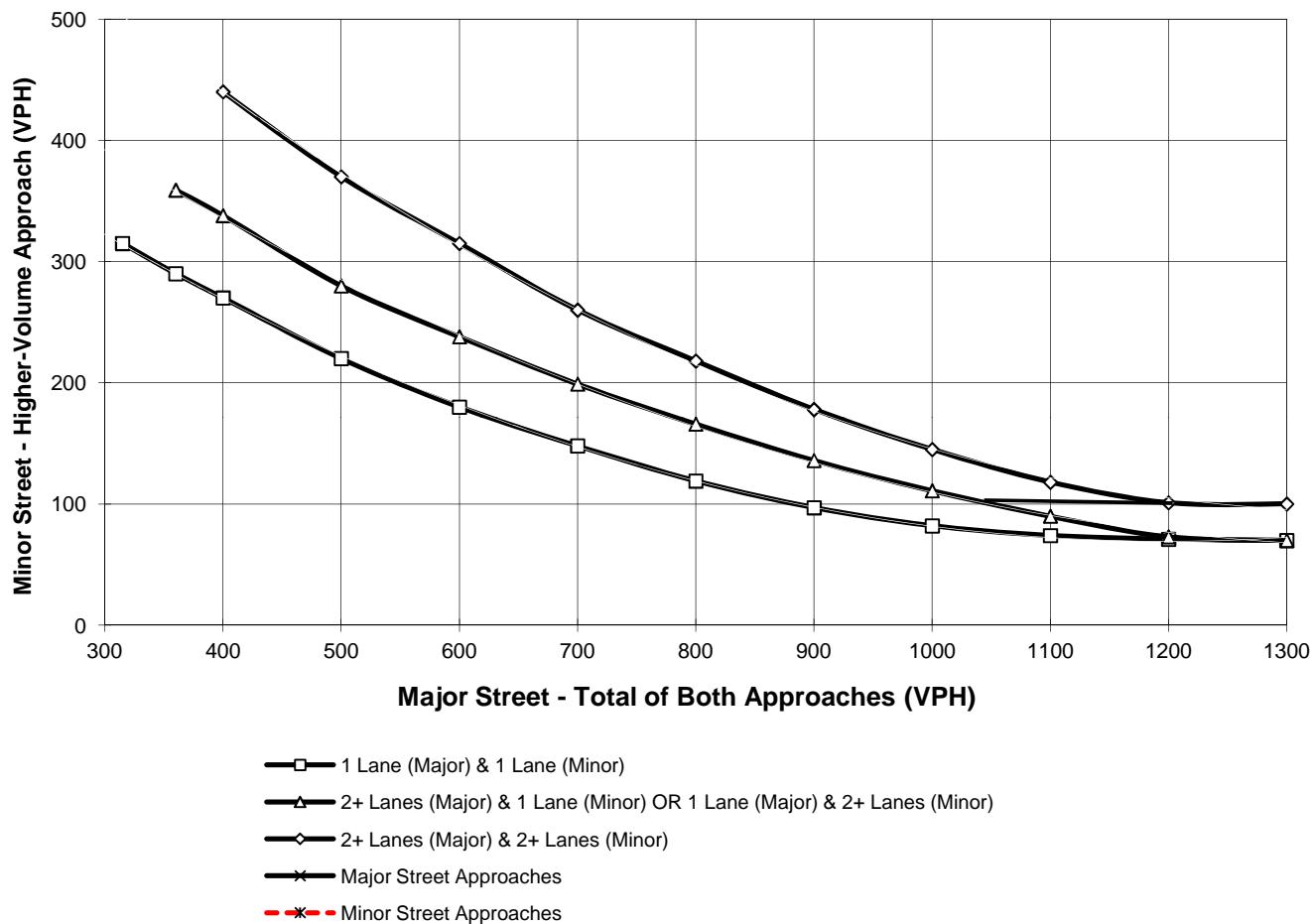
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **104**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **2**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday AM Peak Hour**

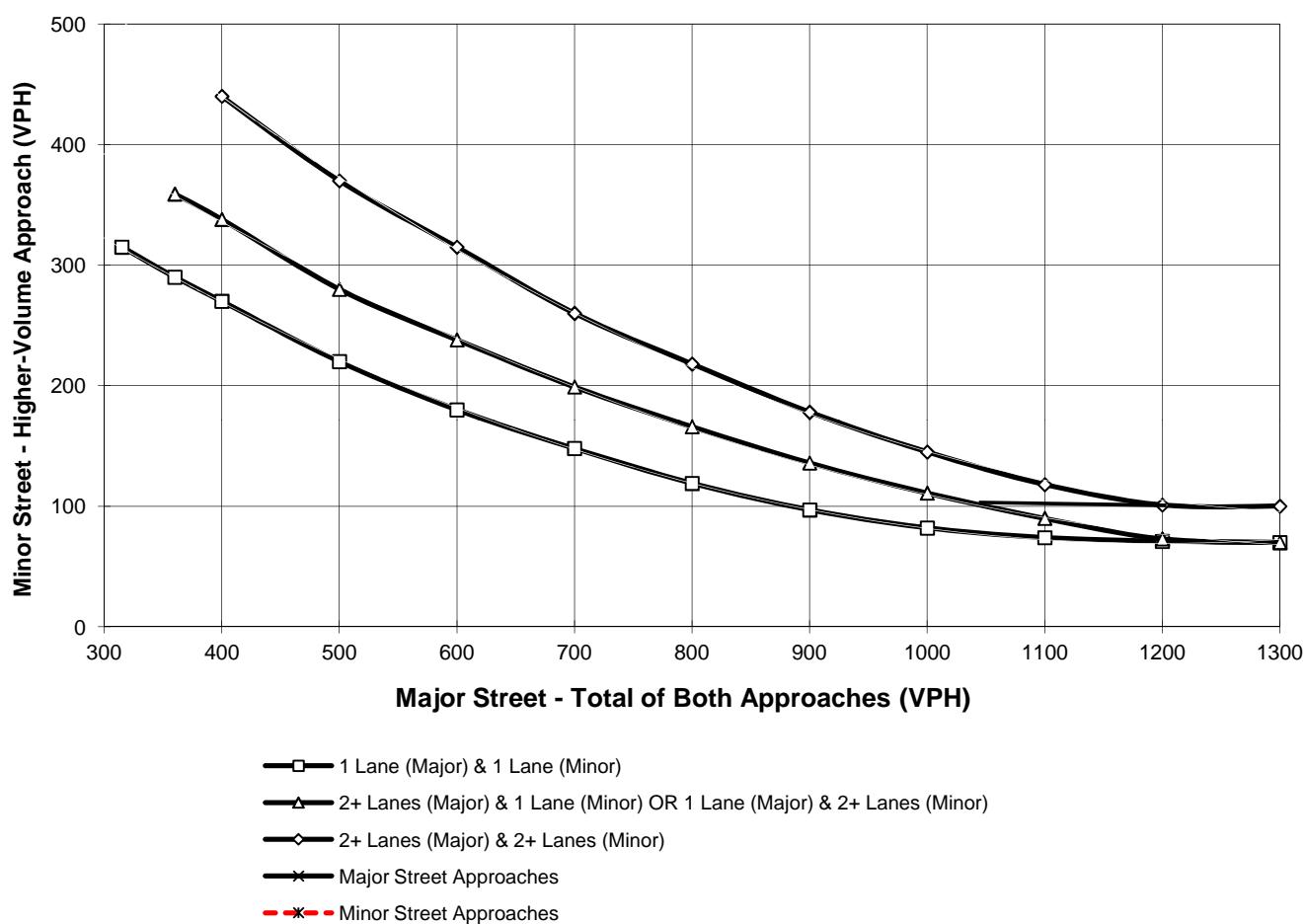
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **123**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **33**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday PM Peak Hour**

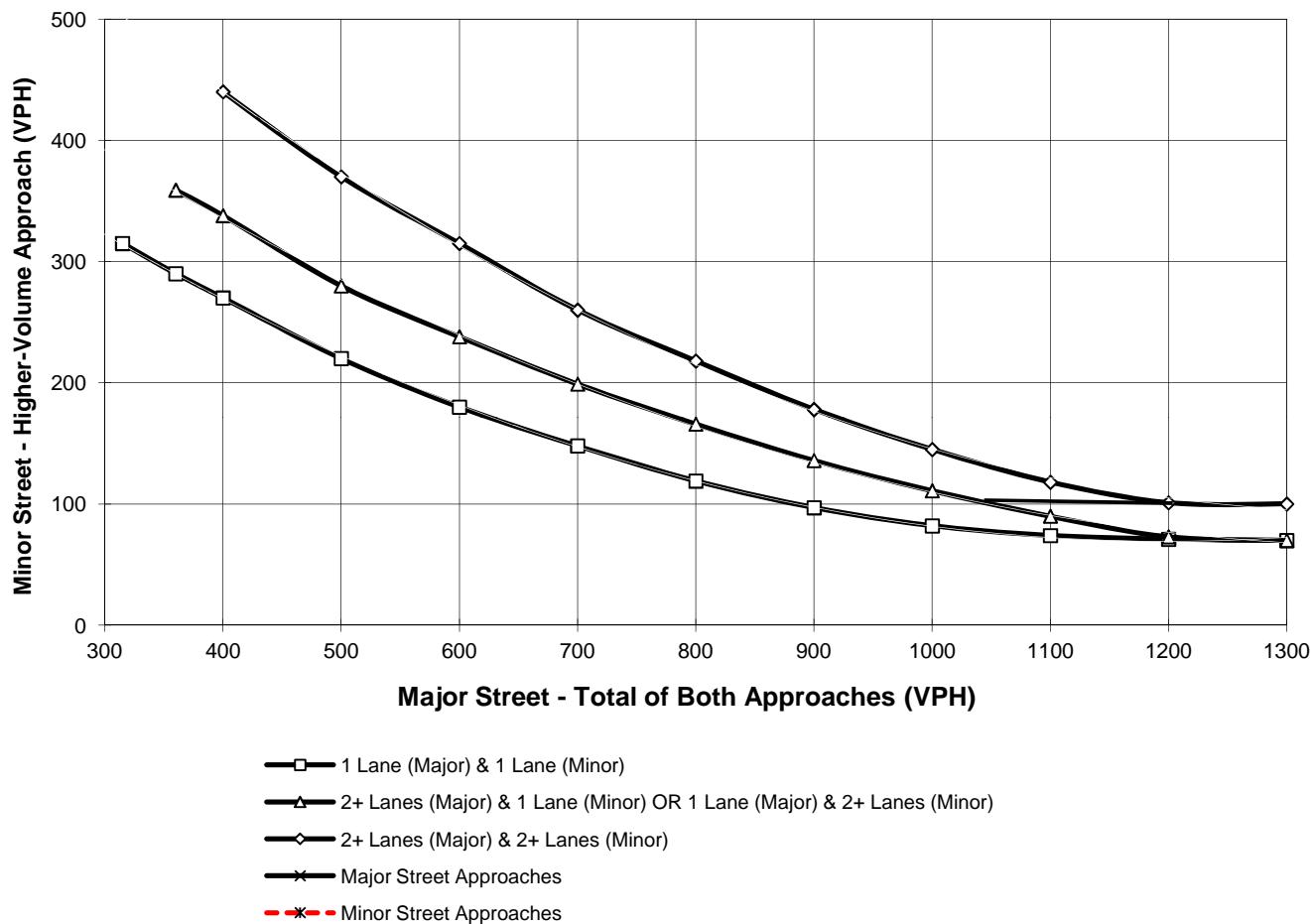
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **114**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **37**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday AM Peak Hour**

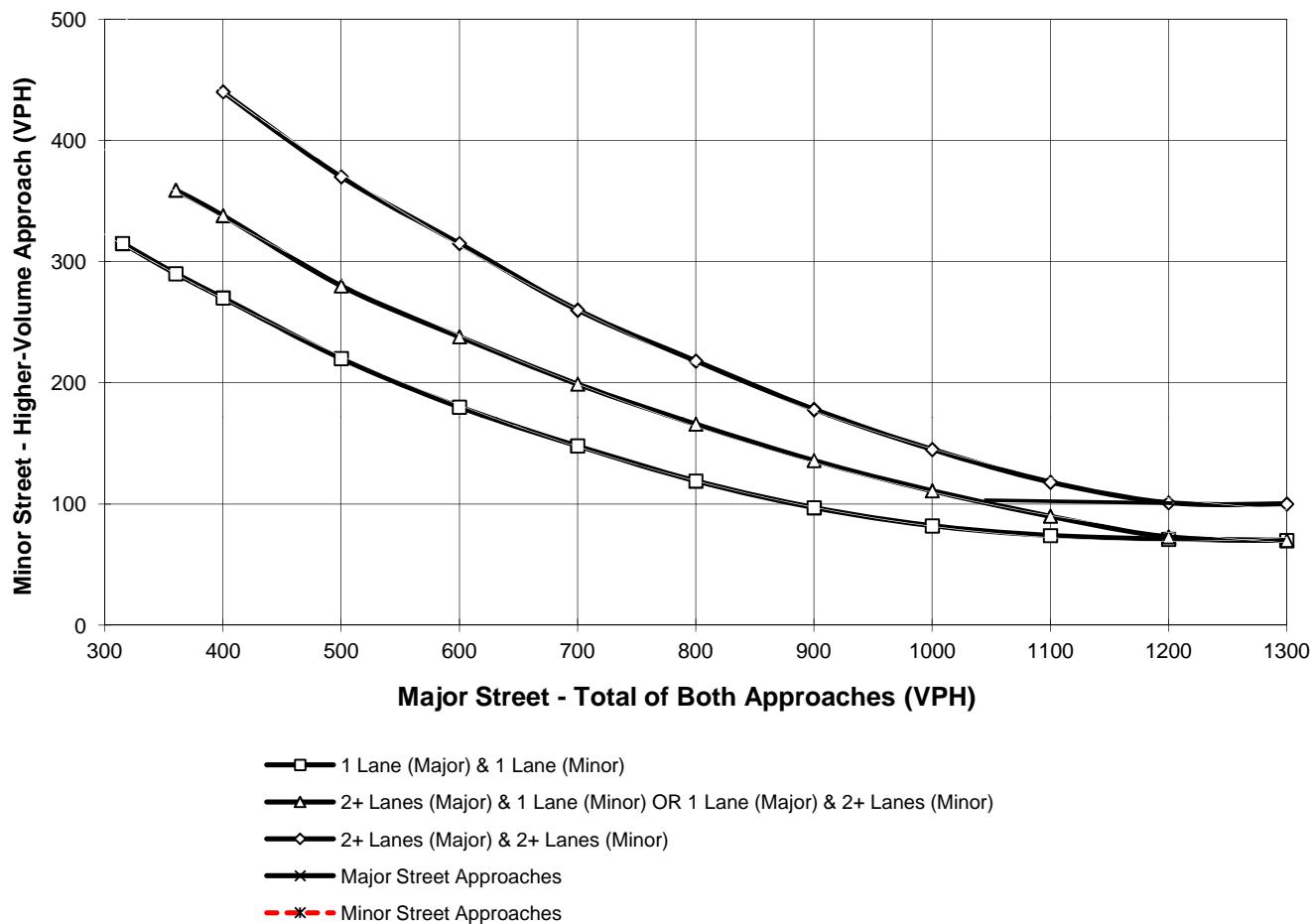
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **96**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **2**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday PM Peak Hour**

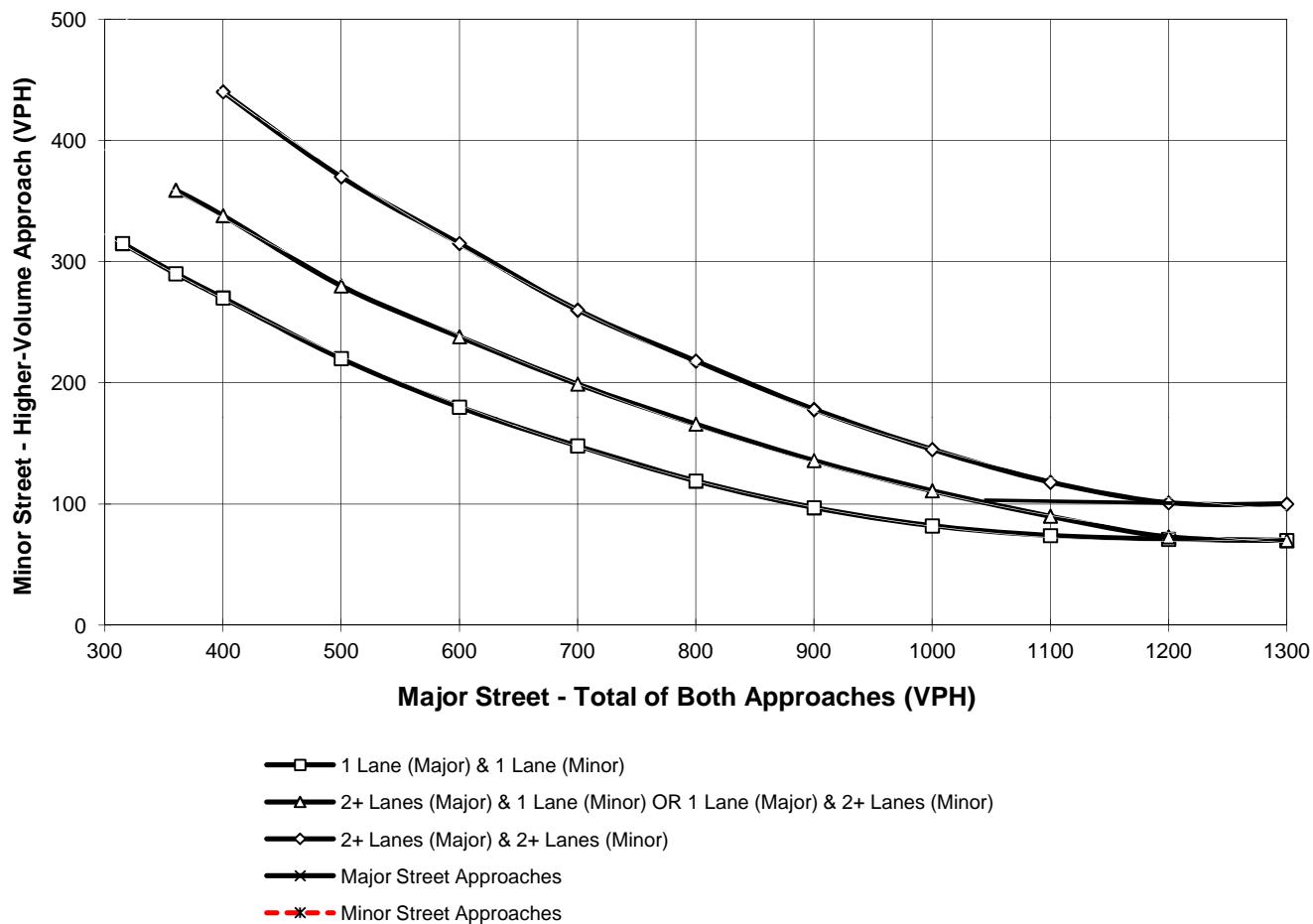
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **108**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **4**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday AM Peak Hour**

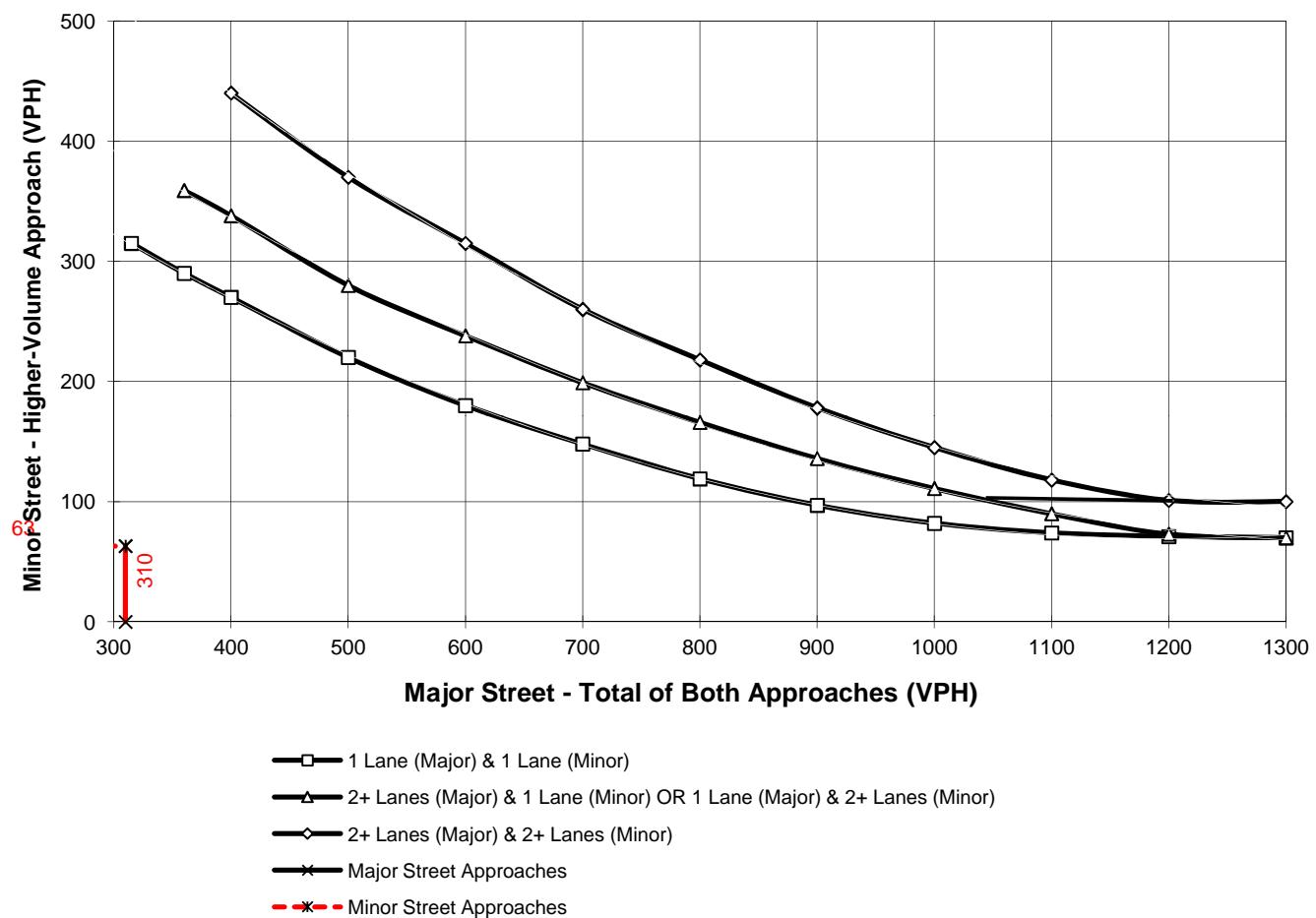
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **310**  
Number of Approach Lanes Major Street = **2**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **63**  
Number of Approach Lanes Minor Street = **2**

#### SIGNAL WARRANT NOT SATISFIED



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2013) Conditions - Weekday PM Peak Hour**

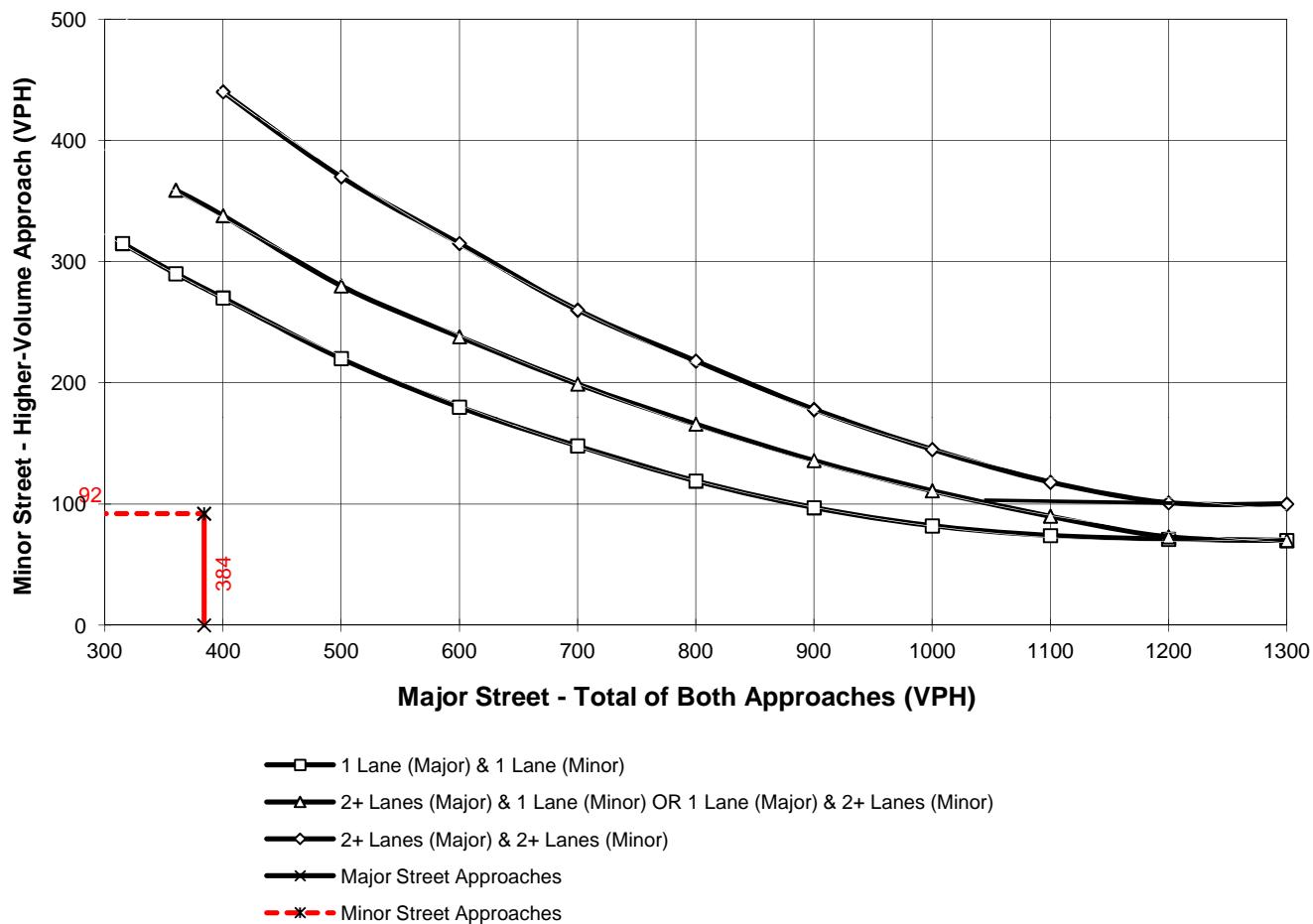
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **384**  
Number of Approach Lanes Major Street = **2**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **92**  
Number of Approach Lanes Minor Street = **2**

#### SIGNAL WARRANT NOT SATISFIED



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

## **Existing plus Project Conditions**

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

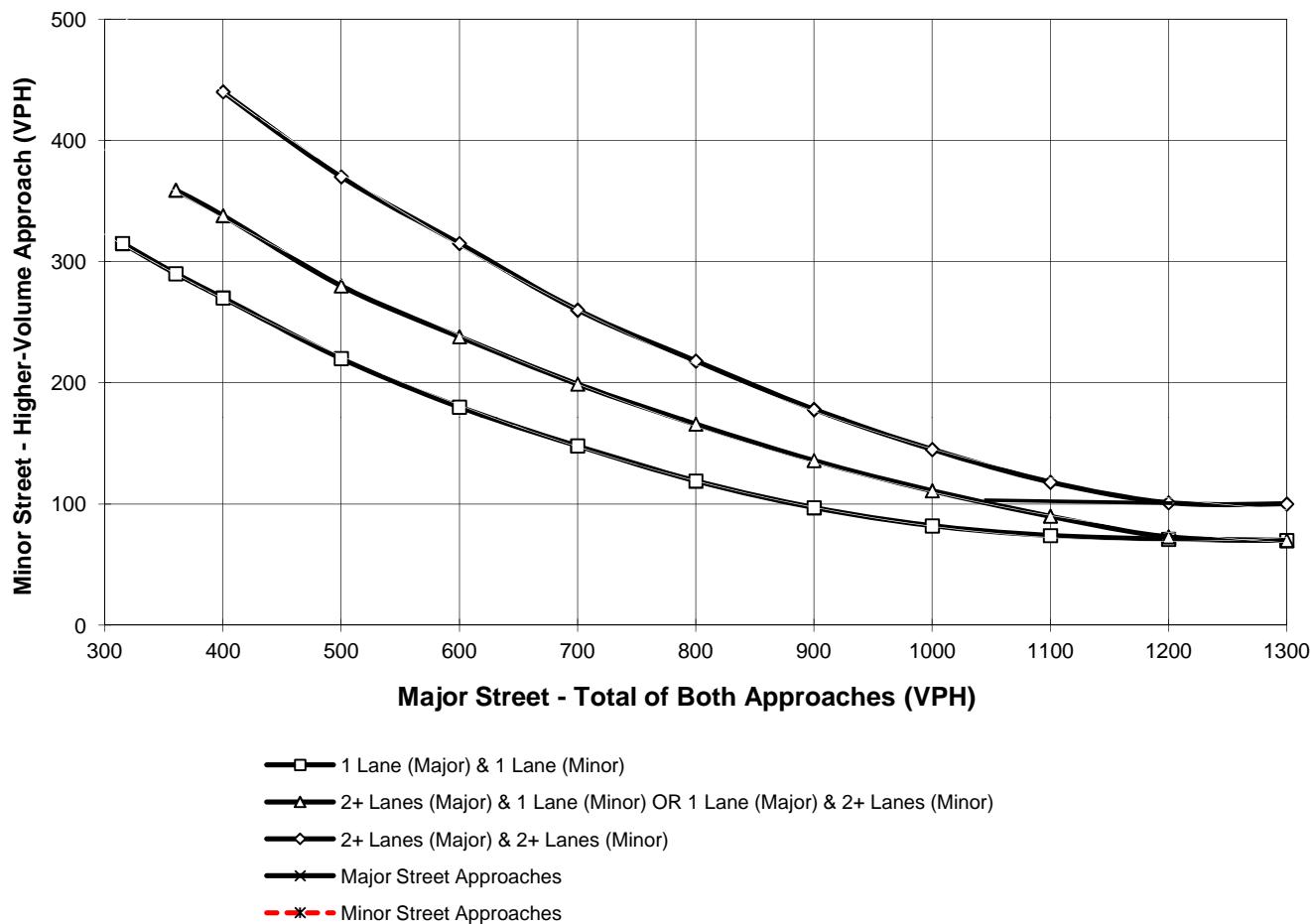
Major Street Name = **60th Av.**

Total of Both Approaches (VPH) = **152**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Madison Street**

High Volume Approach (VPH) = **66**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

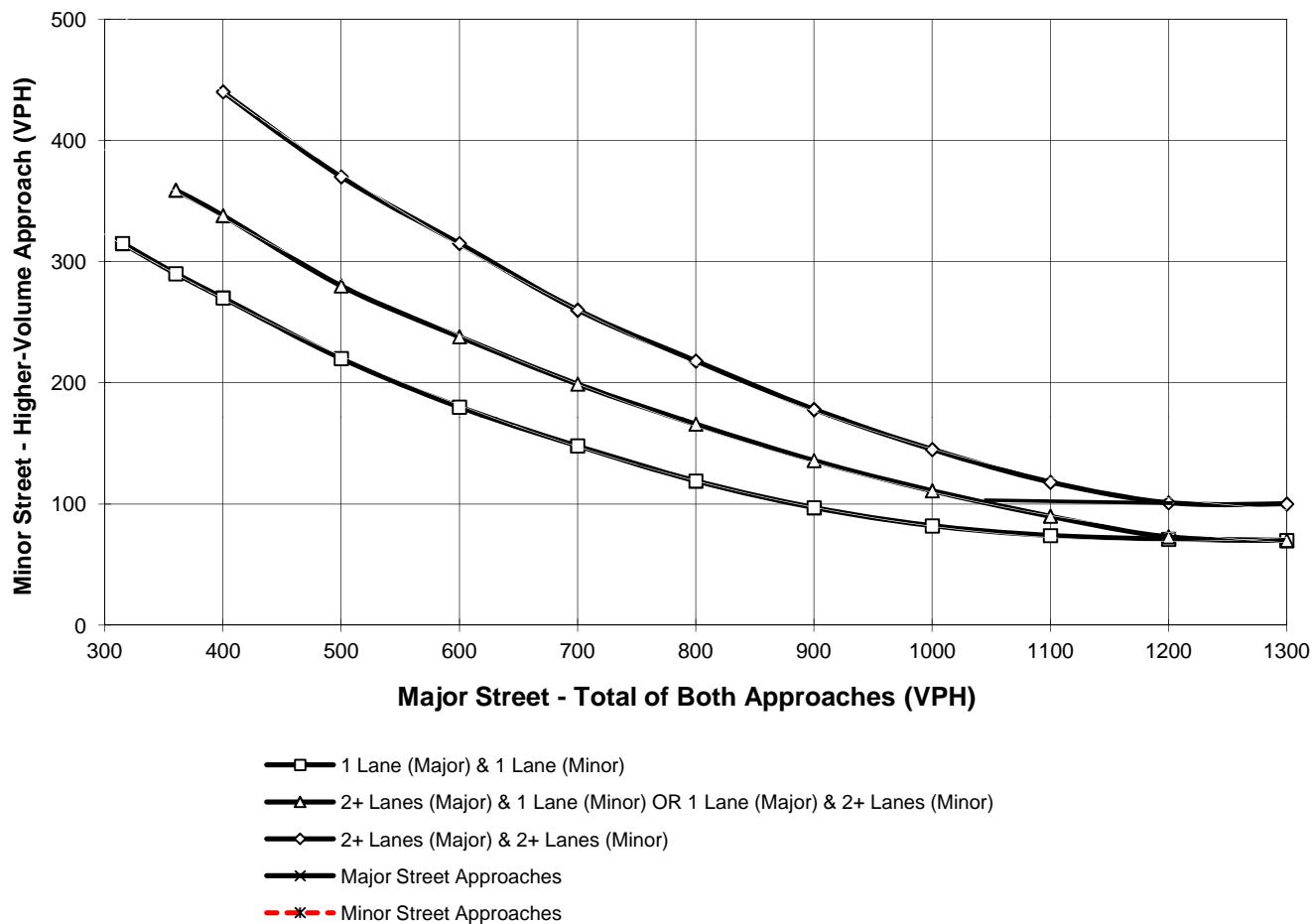
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **187**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **118**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

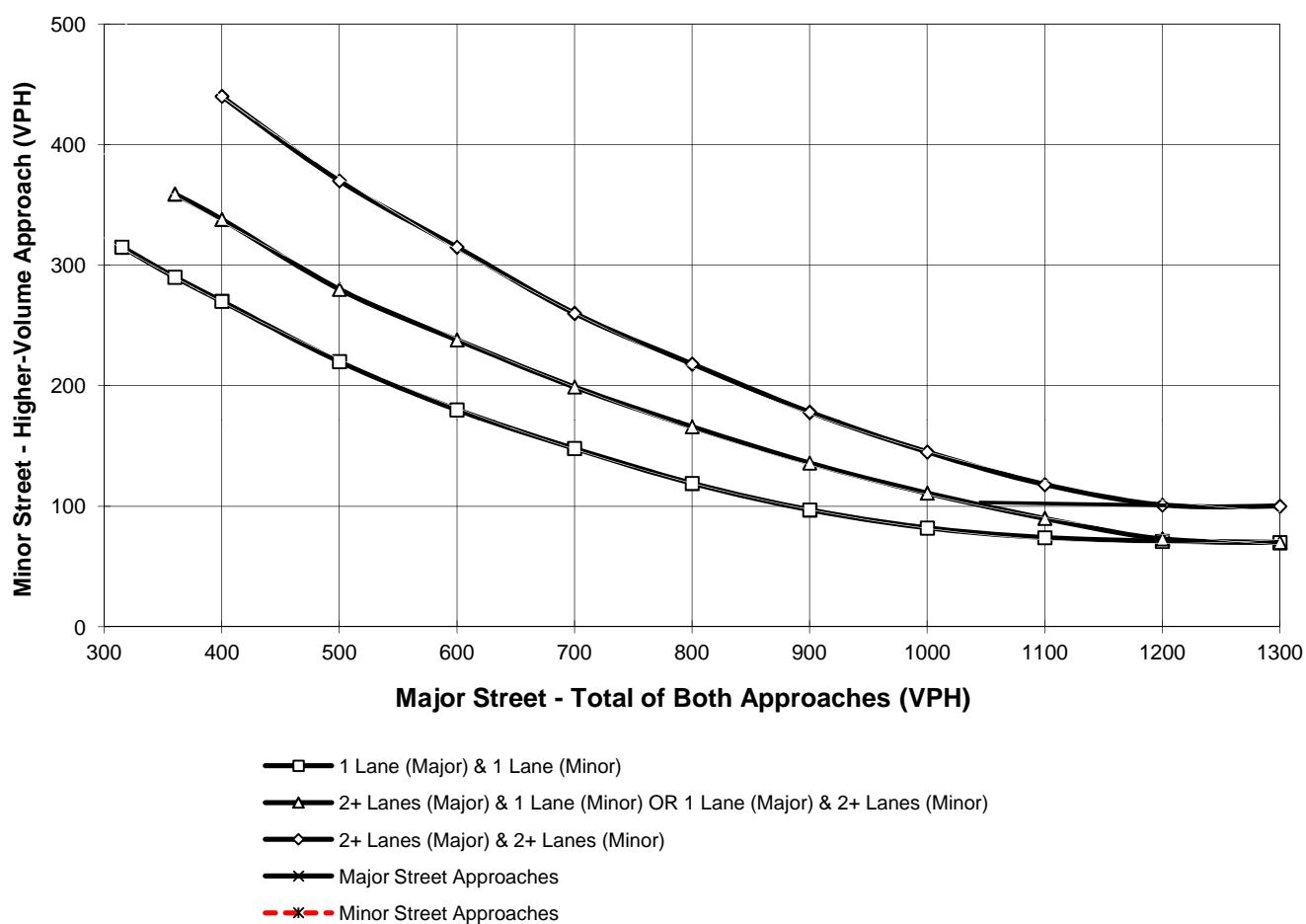
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **209**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **95**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

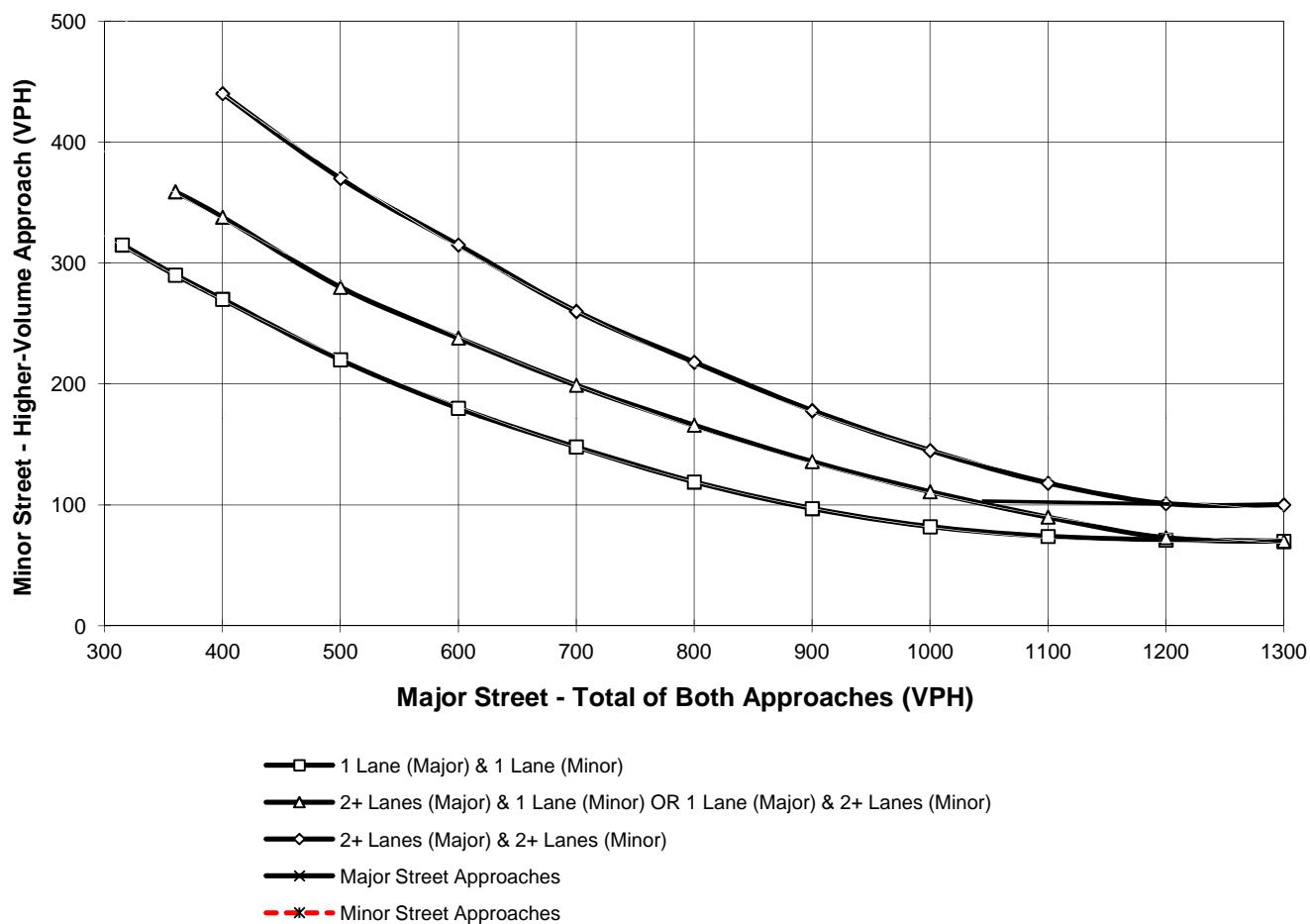
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **252**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **186**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

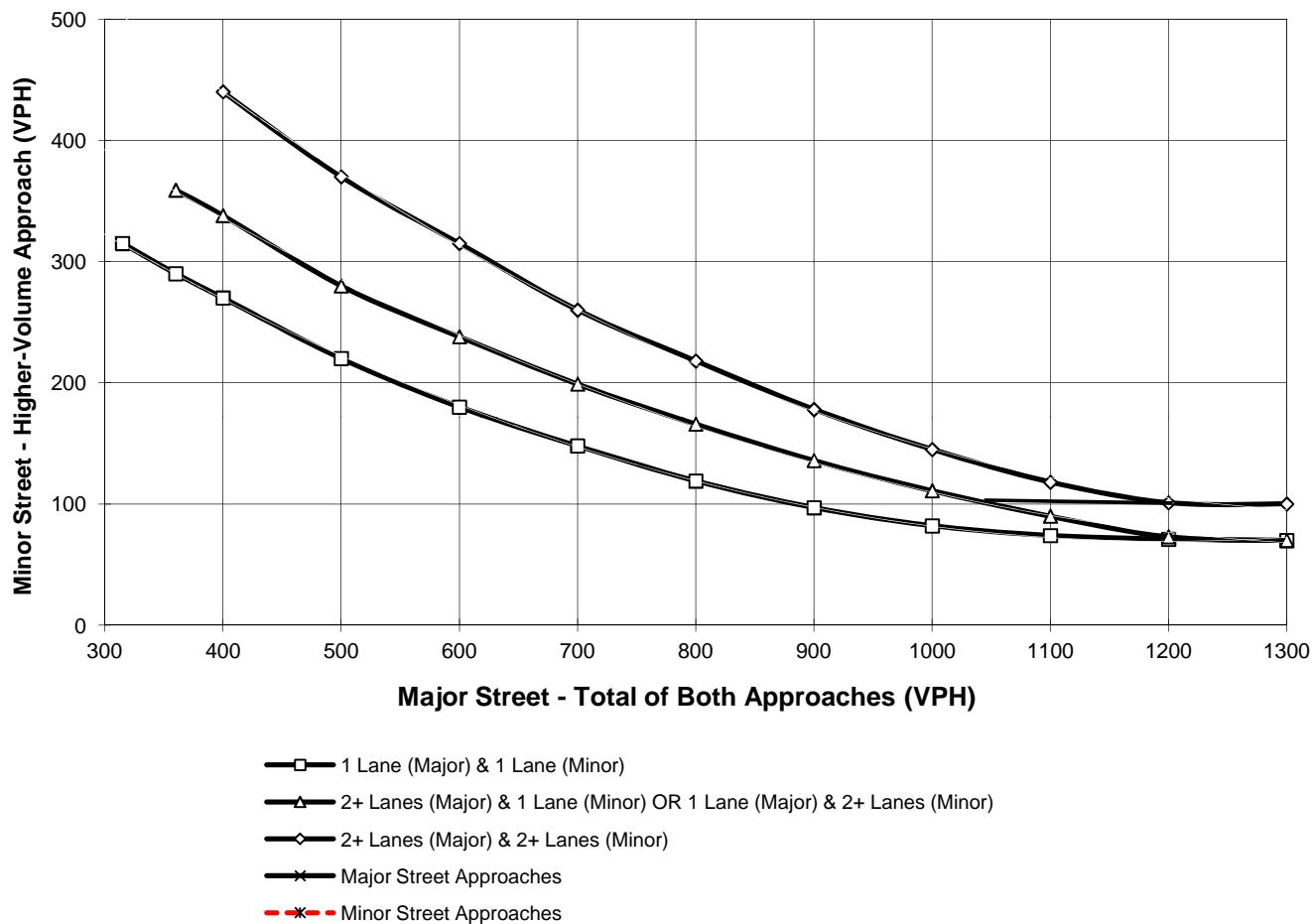
Major Street Name = **60th Av.**

Total of Both Approaches (VPH) = **170**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Monroe Street**

High Volume Approach (VPH) = **61**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

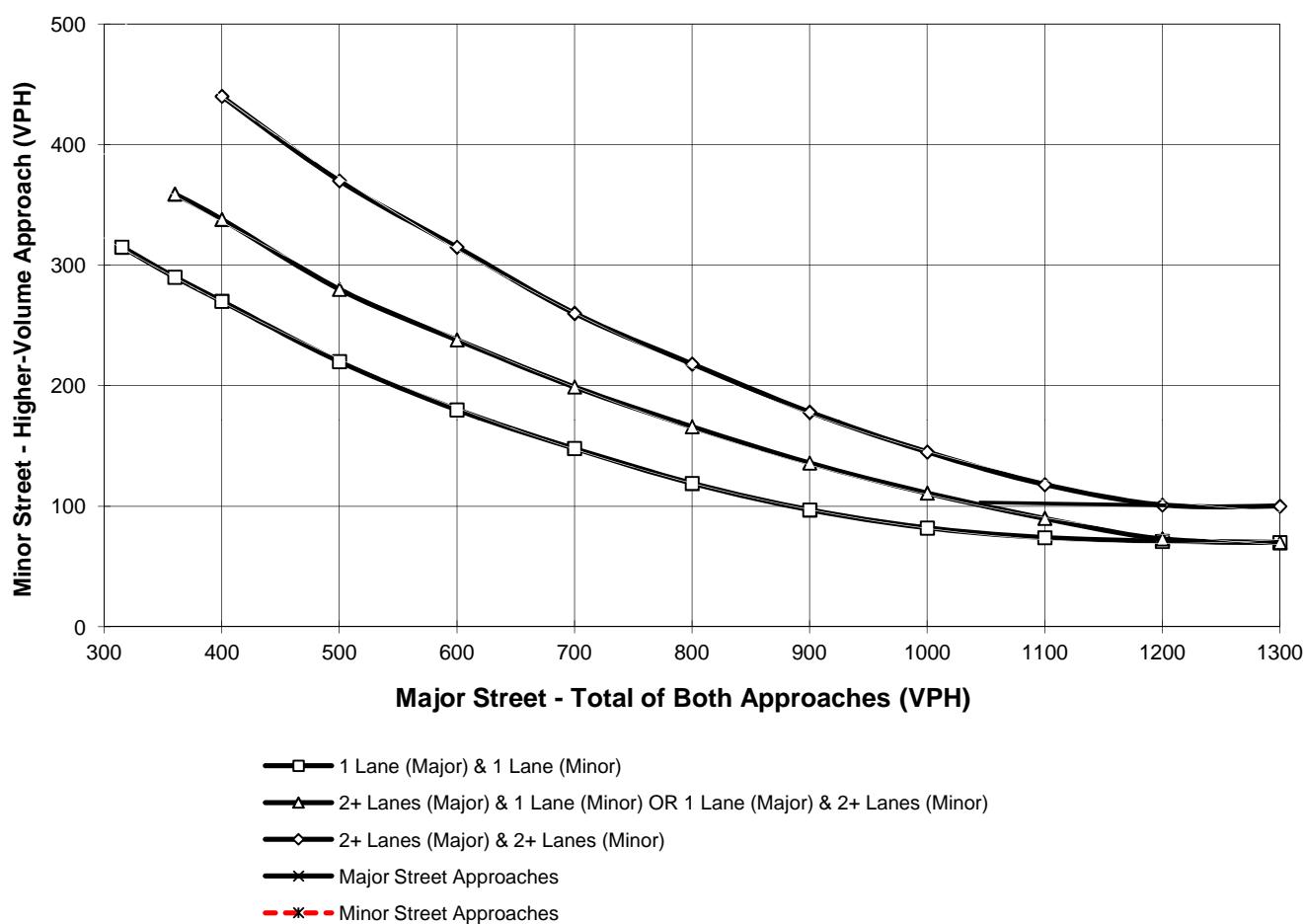
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **185**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **115**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

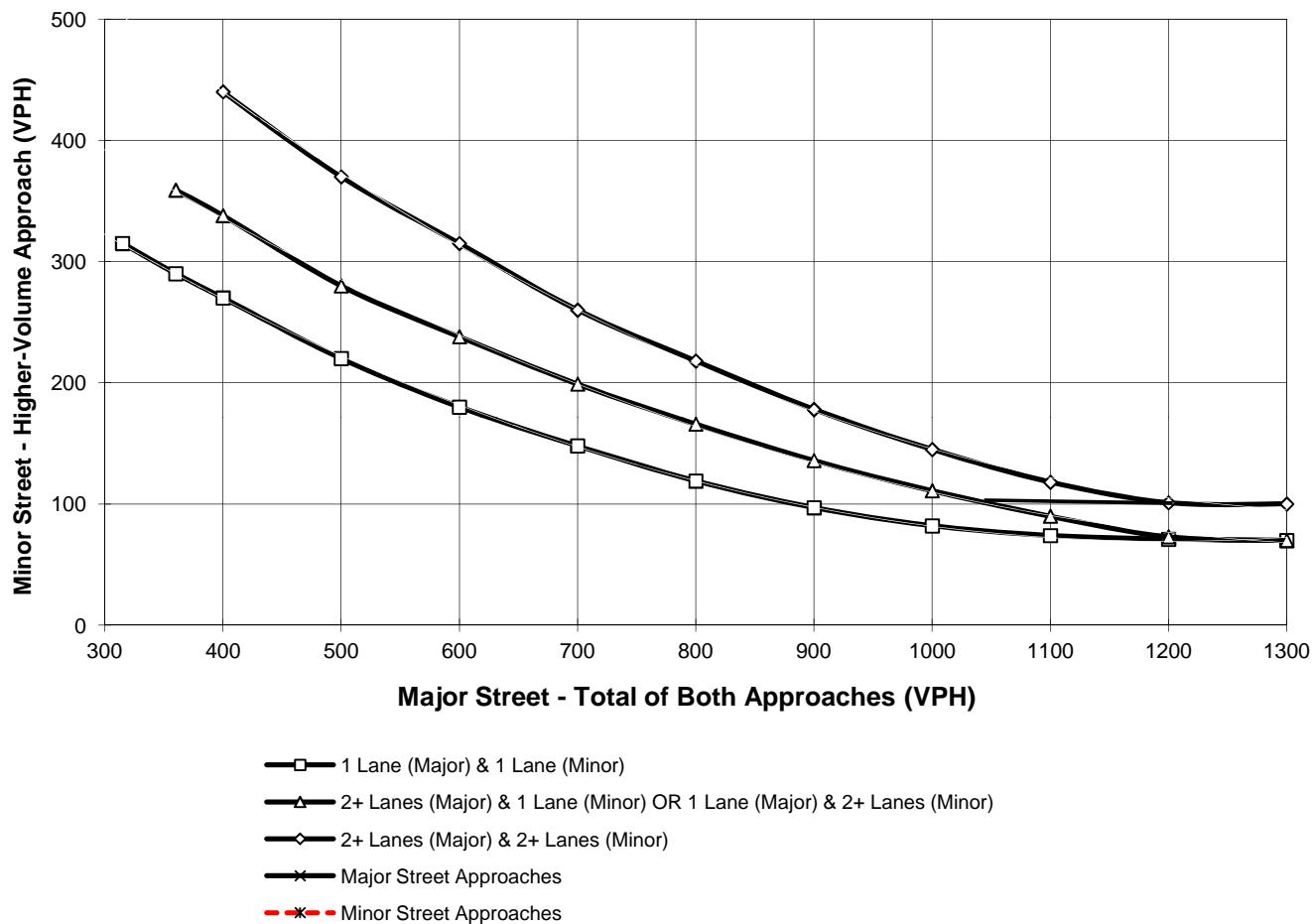
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **88**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **22**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

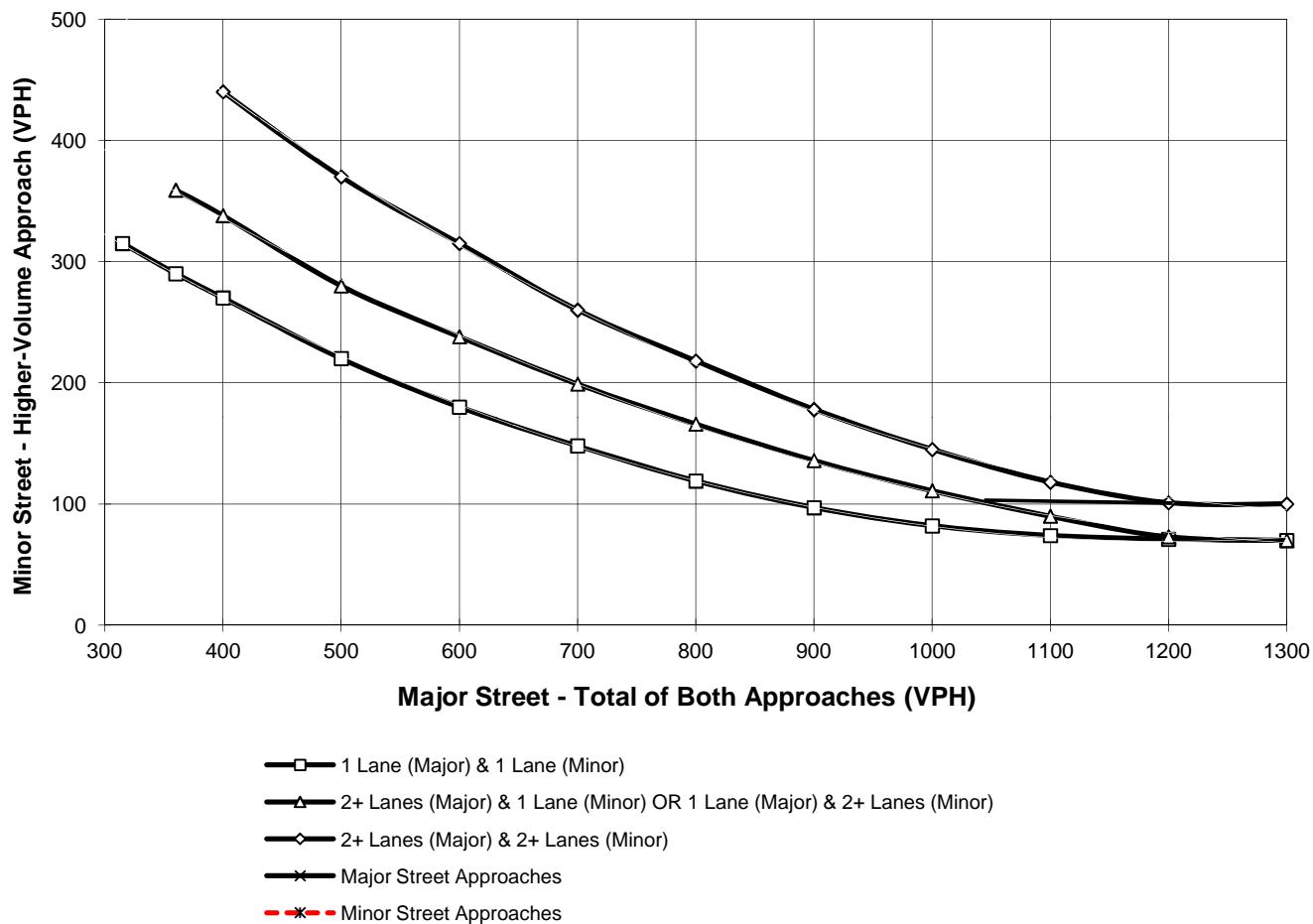
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **126**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **15**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

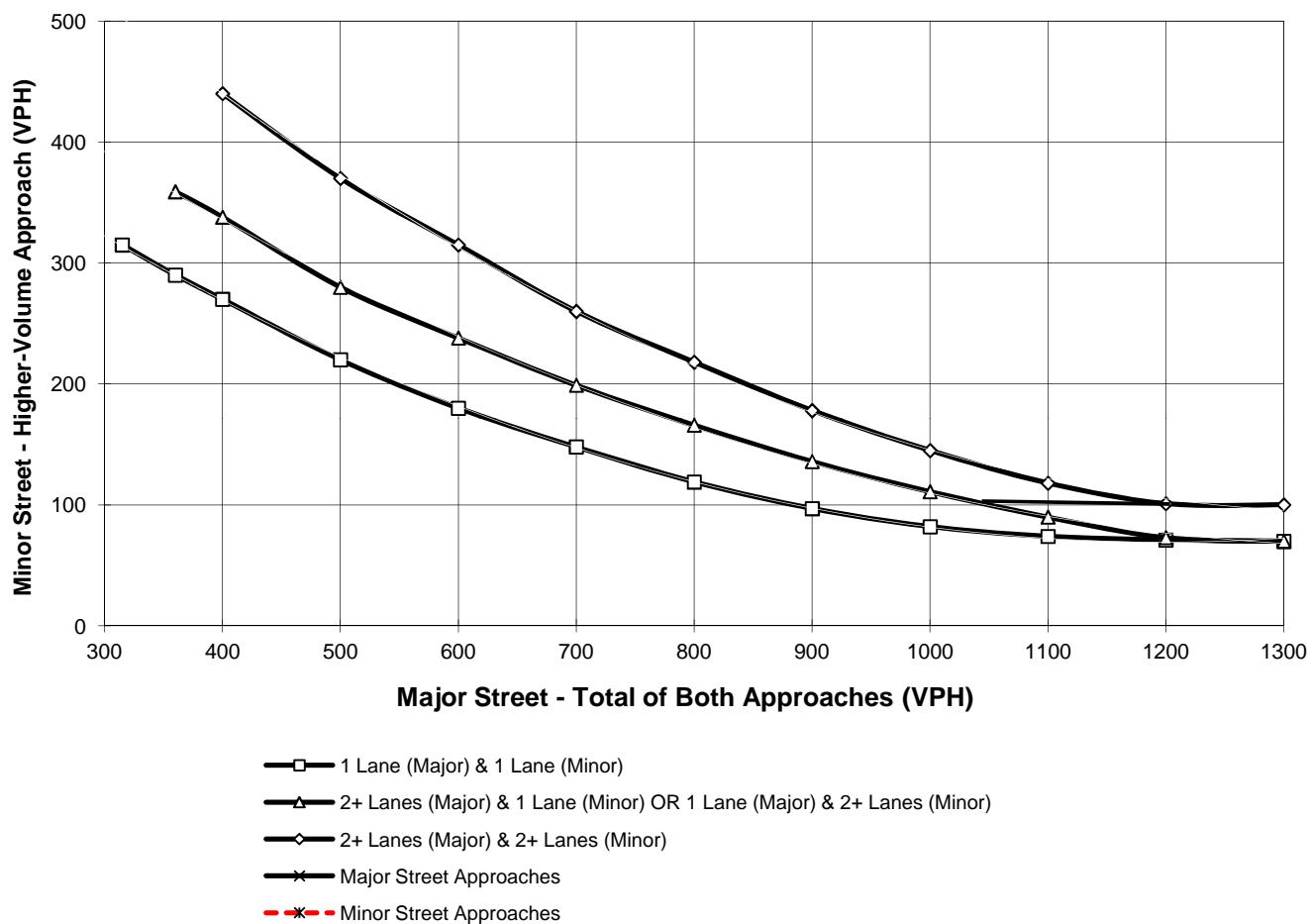
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **Jackson Street**      Total of Both Approaches (VPH) = **139**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**      High Volume Approach (VPH) = **60**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

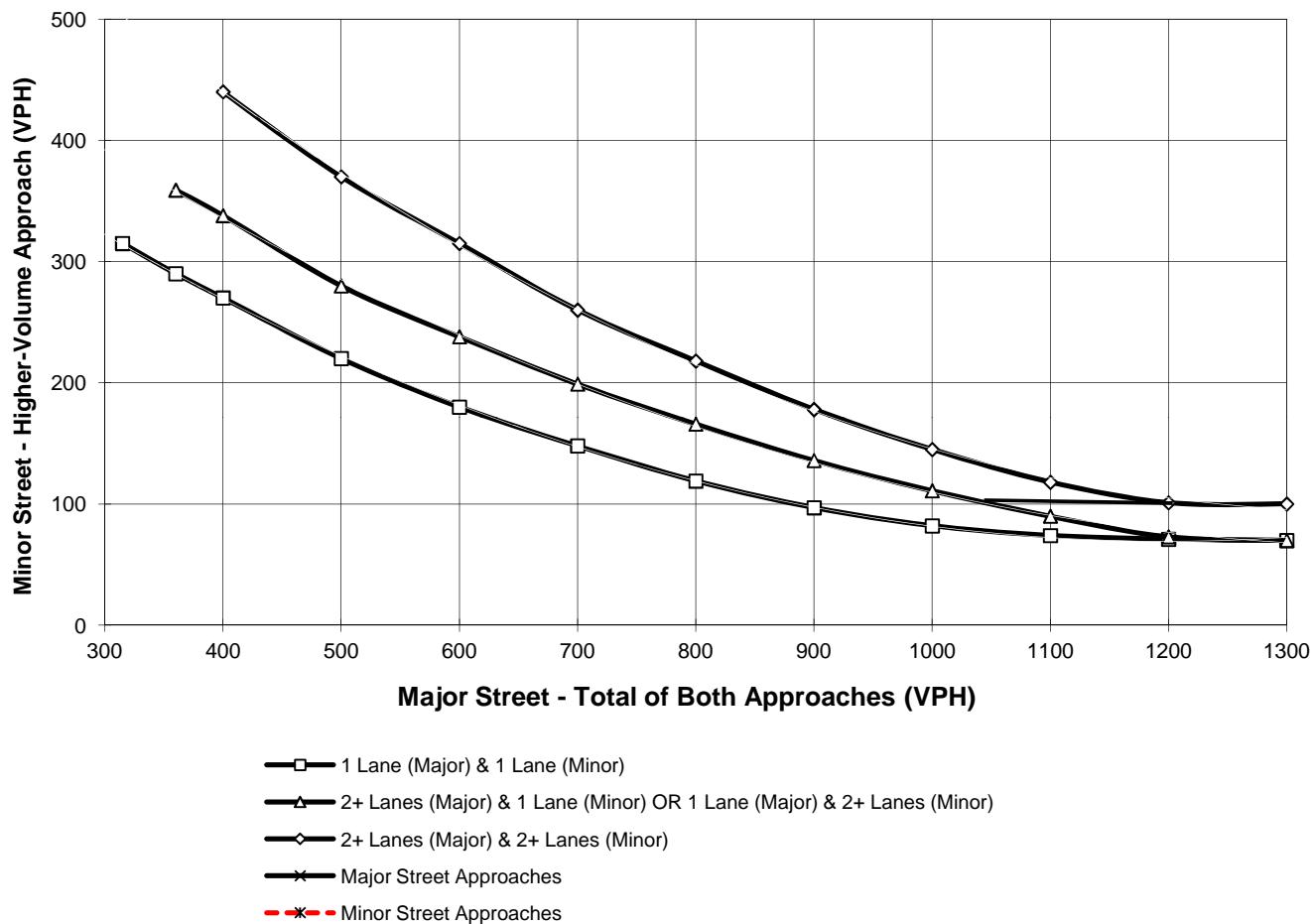
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **147**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **54**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

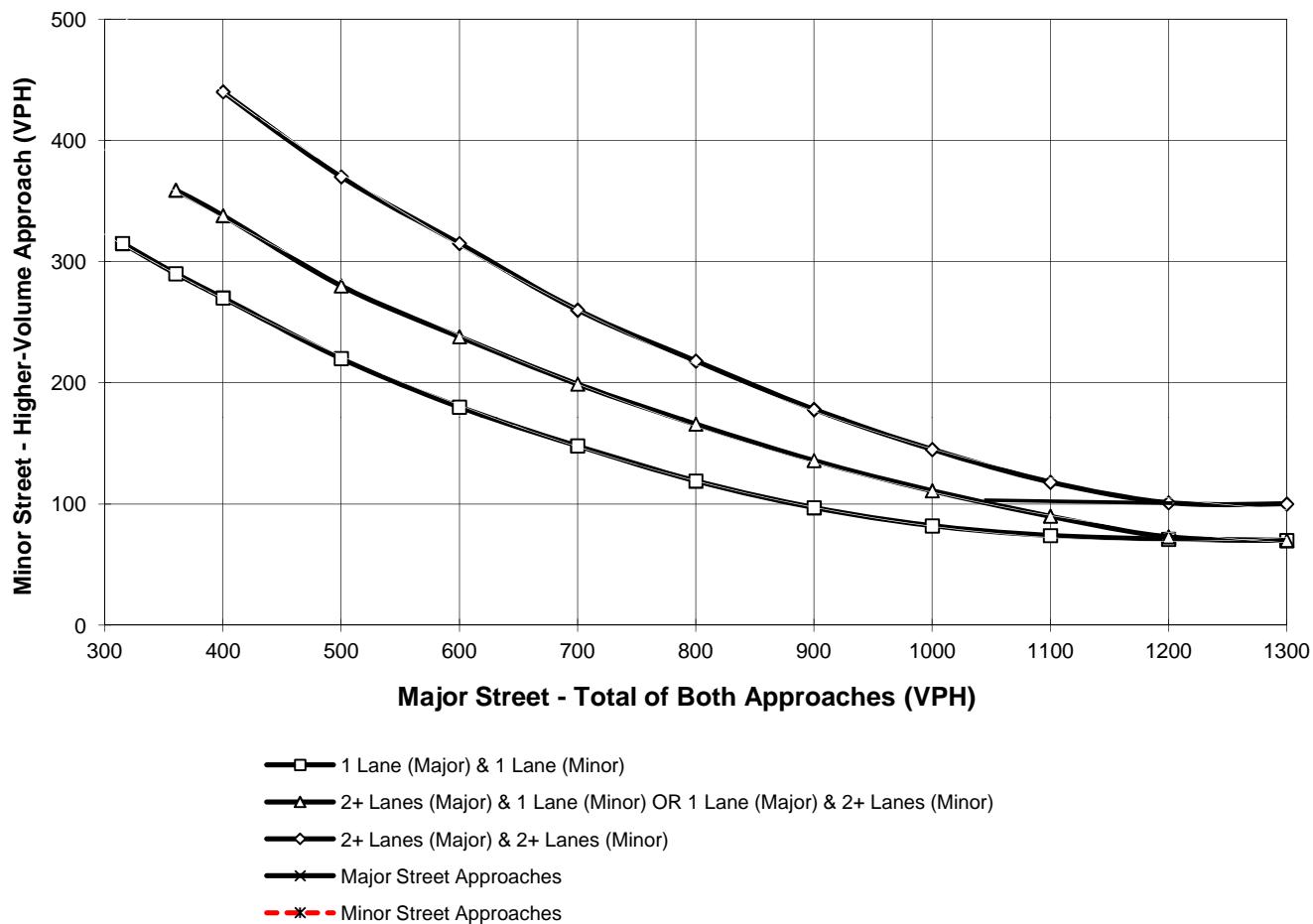
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **100**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **23**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

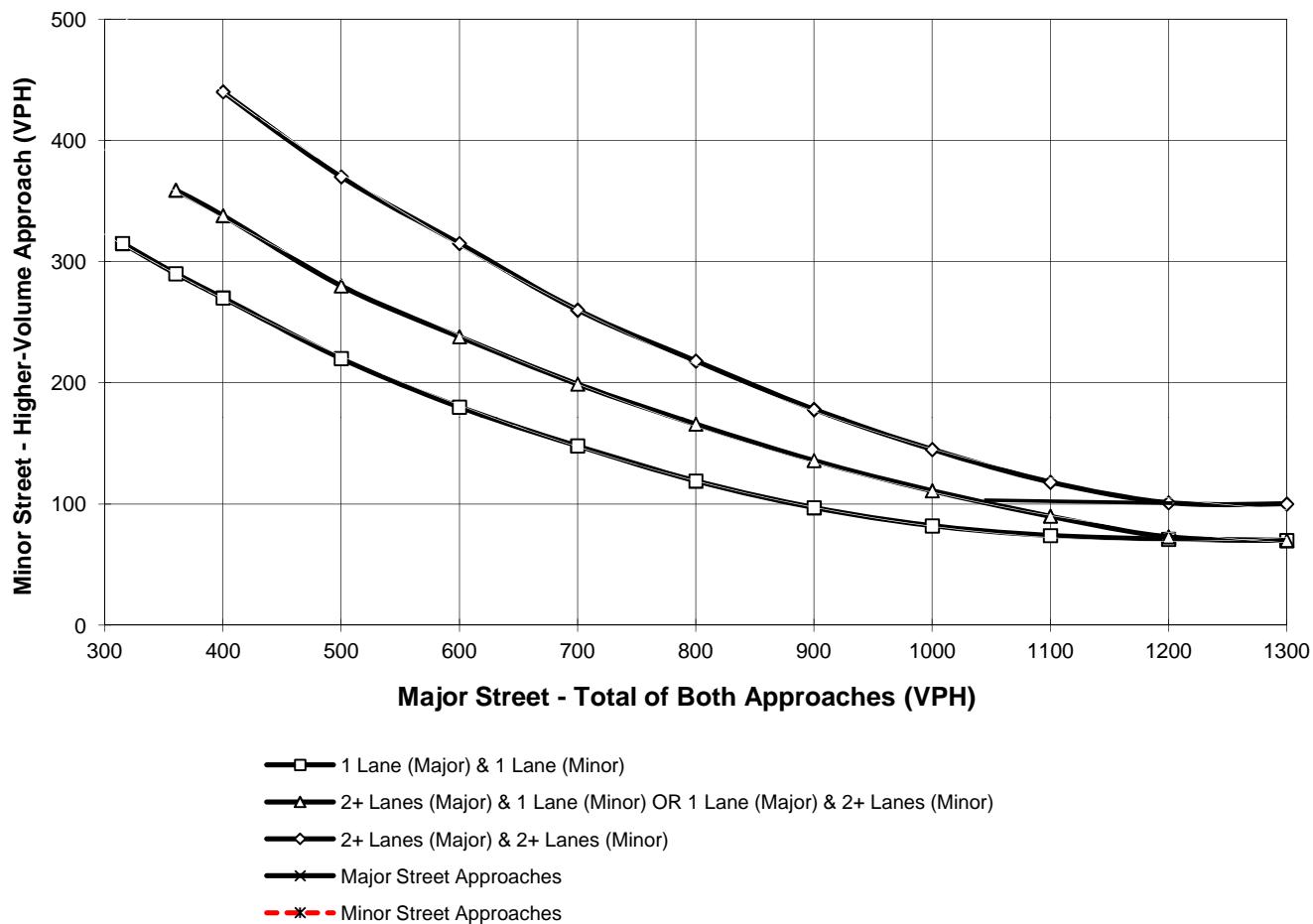
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **122**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **16**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

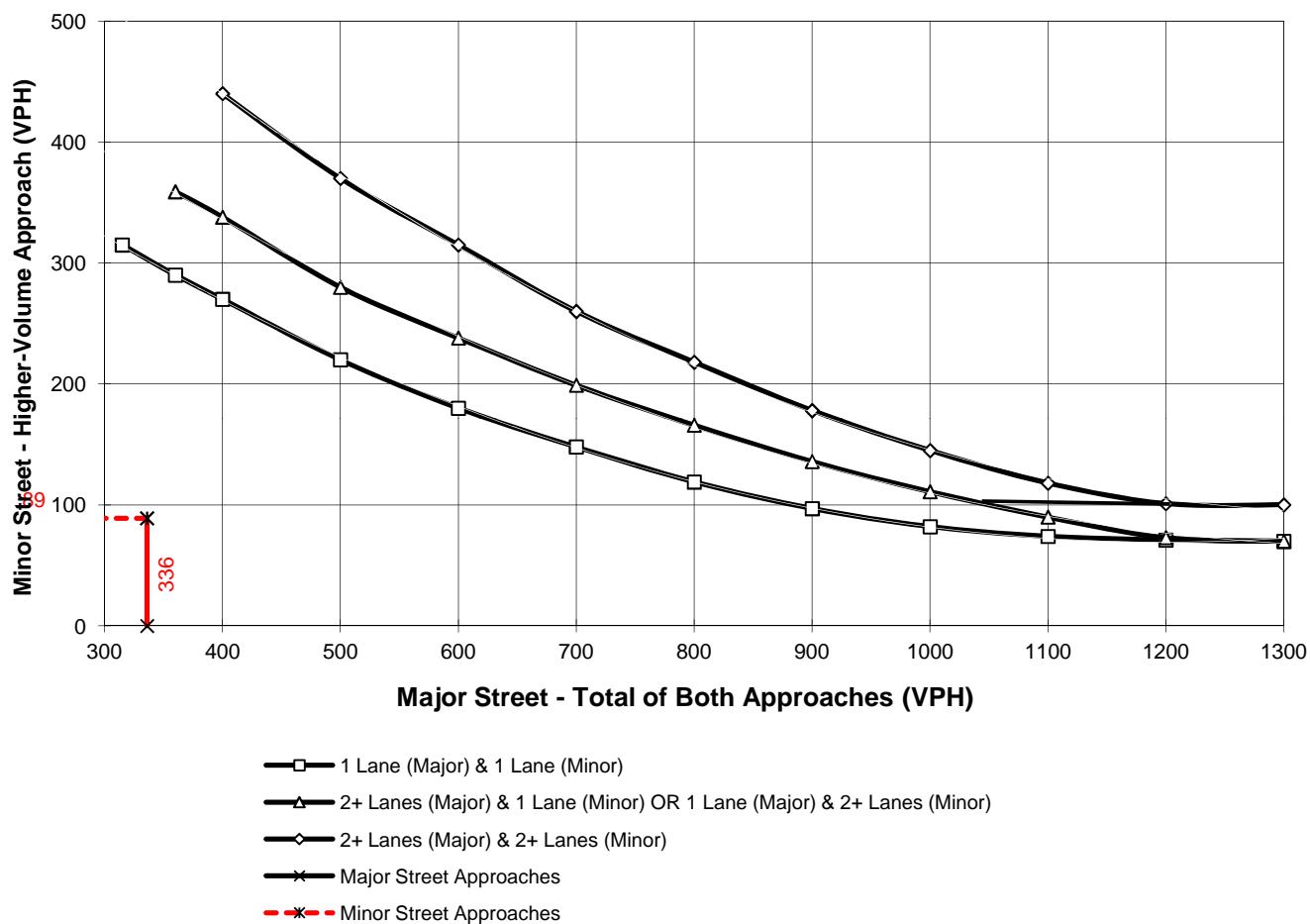
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **336**  
Number of Approach Lanes Major Street = **2**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **89**  
Number of Approach Lanes Minor Street = **2**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

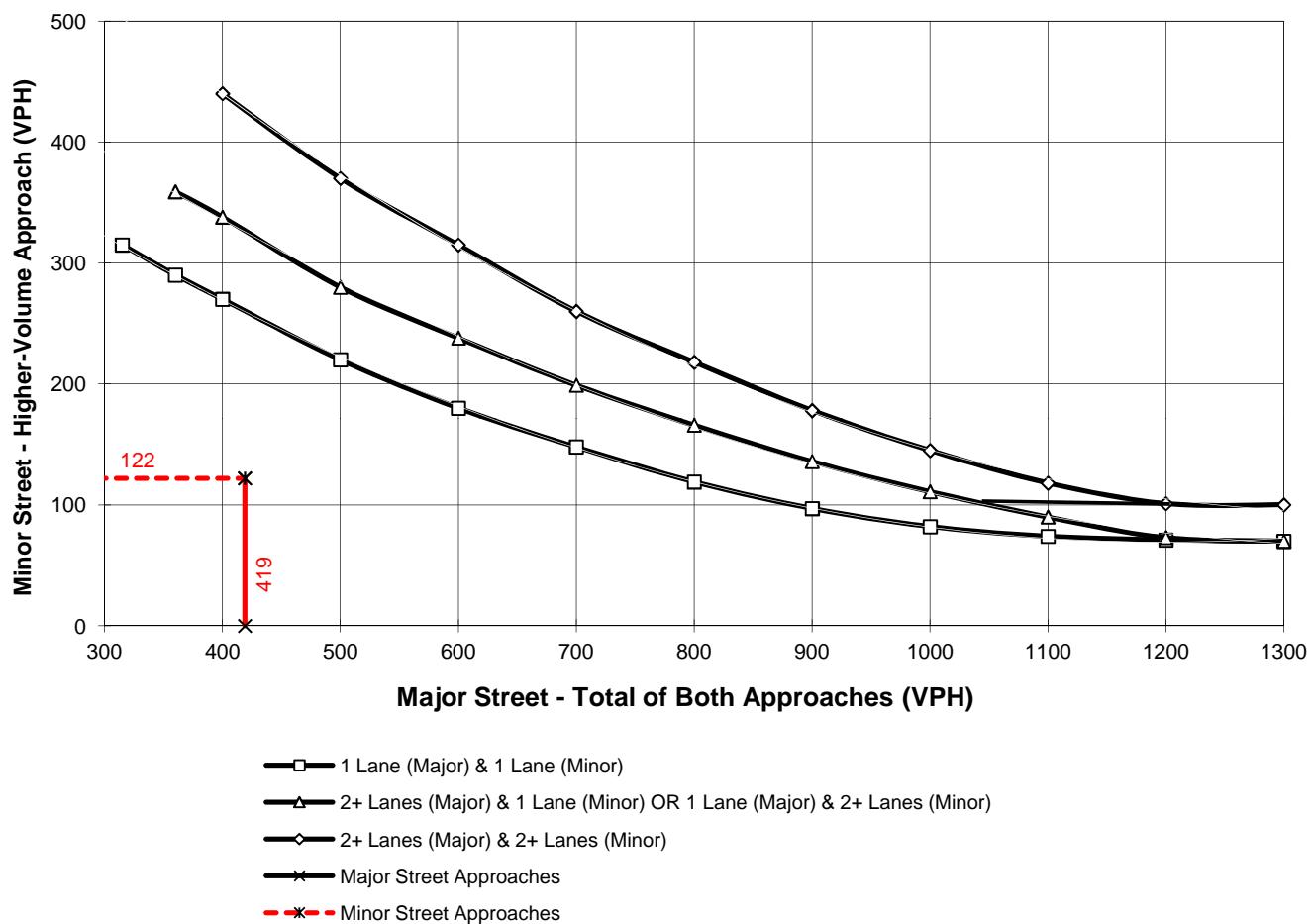
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **419**  
Number of Approach Lanes Major Street = **2**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **122**  
Number of Approach Lanes Minor Street = **2**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

**Figure 4C-103 (CA). Traffic Signal Warrants Worksheet  
(Average Traffic Estimate Form)**

DIST	CO	RTE	PM	CALC	TRAFFIC CONDITIONS	E+P
Jurisdiction: <b>County of Riverside</b>				<b>JC</b>	DATE	12/16/13
Major Street: <b>60th Avenue (EW)</b>				CHK	DATE	
Minor Street: <b>Driveway 1 (NS)</b>					Critical Approach Speed (Major)	55 mph
					Critical Approach Speed (Minor)	35 mph
Major Street Approach Lanes = <b>1</b>				lane	Minor Street Approach Lanes	<b>1</b> lane
Major Street Future ADT = <b>1,521</b>				vpd	Minor Street Future ADT =	<b>770</b> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... <input type="checkbox"/> or <b>RURAL (R)</b>						
In built up area of isolated community of < 10,000 population ..... <input type="checkbox"/>						

**(Based on Estimated Average Daily Traffic - See Note)**

<u>URBAN</u>	<u>RURAL</u> <b>XX</b>	Minimum Requirements			
		EADT		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<b>CONDITION A - Minimum Vehicular Volume</b>					
<u>Satisfied</u>	<u>Not Satisfied</u> <b>XX</b>	Vehicles Per Day on Major Street (Total of Both Approaches)		Urban	Rural
Number of lanes for moving traffic on each approach				Urban	Rural
Major Street	Minor Street			8,000	5,600
1 <b>1,521</b>	1 <b>770</b>			2,400	1,680
2 +	1			2,400	1,680
2 +	2 +			3,200	2,240
1	2 +			3,200	2,240
<b>CONDITION B - Interruption of Continuous Traffic</b>					
<u>Satisfied</u>	<u>Not Satisfied</u> <b>XX</b>	Vehicles Per Day on Major Street (Total of Both Approaches)		Urban	Rural
Number of lanes for moving traffic on each approach				Urban	Rural
Major Street	Minor Street			12,000	8,400
1 <b>1,521</b>	1 <b>770</b>			1,200	850
2 +	1			14,400	10,080
2 +	2 +			14,400	10,080
1	2 +			12,000	8,400
<b>Combination of CONDITIONS A + B</b>					
<u>Satisfied</u>	<u>Not Satisfied</u> <b>XX</b>			Urban	Rural
No one condition satisfied, but following conditions fulfilled 80% or more .....	<b>A</b> <b>27%</b>	<b>B</b> <b>18%</b>	2 CONDITIONS 80%	2 CONDITIONS 80%	

**Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable  
to count actual traffic volumes.**

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

**Figure 4C-103 (CA). Traffic Signal Warrants Worksheet  
(Average Traffic Estimate Form)**

DIST	CO	RTE	PM	CALC	TRAFFIC CONDITIONS	E+P	
Jurisdiction: <b>County of Riverside</b>				<b>JC</b>	DATE	12/16/13	
Major Street: <b>Driveway 2 (NS)</b>				CHK	DATE		
Minor Street: <b>61st Avenue (EW)</b>					Critical Approach Speed (Major)	40 mph	
Major Street Approach Lanes =	<b>1</b>	lane	Minor Street Approach Lanes	<b>1</b>	lane	Critical Approach Speed (Minor)	35 mph
Major Street Future ADT =	<b>329</b>	vpd	Minor Street Future ADT =	<b>191</b>	vpd		
Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....				<input type="checkbox"/>			
				or <b>RURAL (R)</b>			
In built up area of isolated community of < 10,000 population .....				<input type="checkbox"/>			

**(Based on Estimated Average Daily Traffic - See Note)**

URBAN <b>XX</b>		RURAL		Minimum Requirements			
				EADT		Vehicles Per Day	
CONDITION A - Minimum Vehicular Volume				Vehicles Per Day on Major Street (Total of Both Approaches)		on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied			Urban	Rural	Urban	Rural
	<b>XX</b>						
Number of lanes for moving traffic on each approach							
Major Street		Minor Street					
1 <b>329</b>		1 <b>191</b>		8,000	5,600	2,400	1,680
2 +		1		9,600	6,720	2,400	1,680
2 +		2 +		9,600	6,720	3,200	2,240
1		2 +		8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied						
	<b>XX</b>						
Number of lanes for moving traffic on each approach							
Major Street		Minor Street					
1 <b>329</b>		1 <b>191</b>		12,000	8,400	1,200	850
2 +		1		14,400	10,080	1,200	850
2 +		2 +		14,400	10,080	1,600	1,120
1		2 +		12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B							
Satisfied	Not Satisfied						
	<b>XX</b>						
No one condition satisfied, but following conditions fulfilled 80% or more .....		A	B	2 CONDITIONS 80%		2 CONDITIONS 80%	
		<b>4%</b>	<b>3%</b>				

**Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.**

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

## **EAP (2016) Conditions**

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday AM Peak Hour**

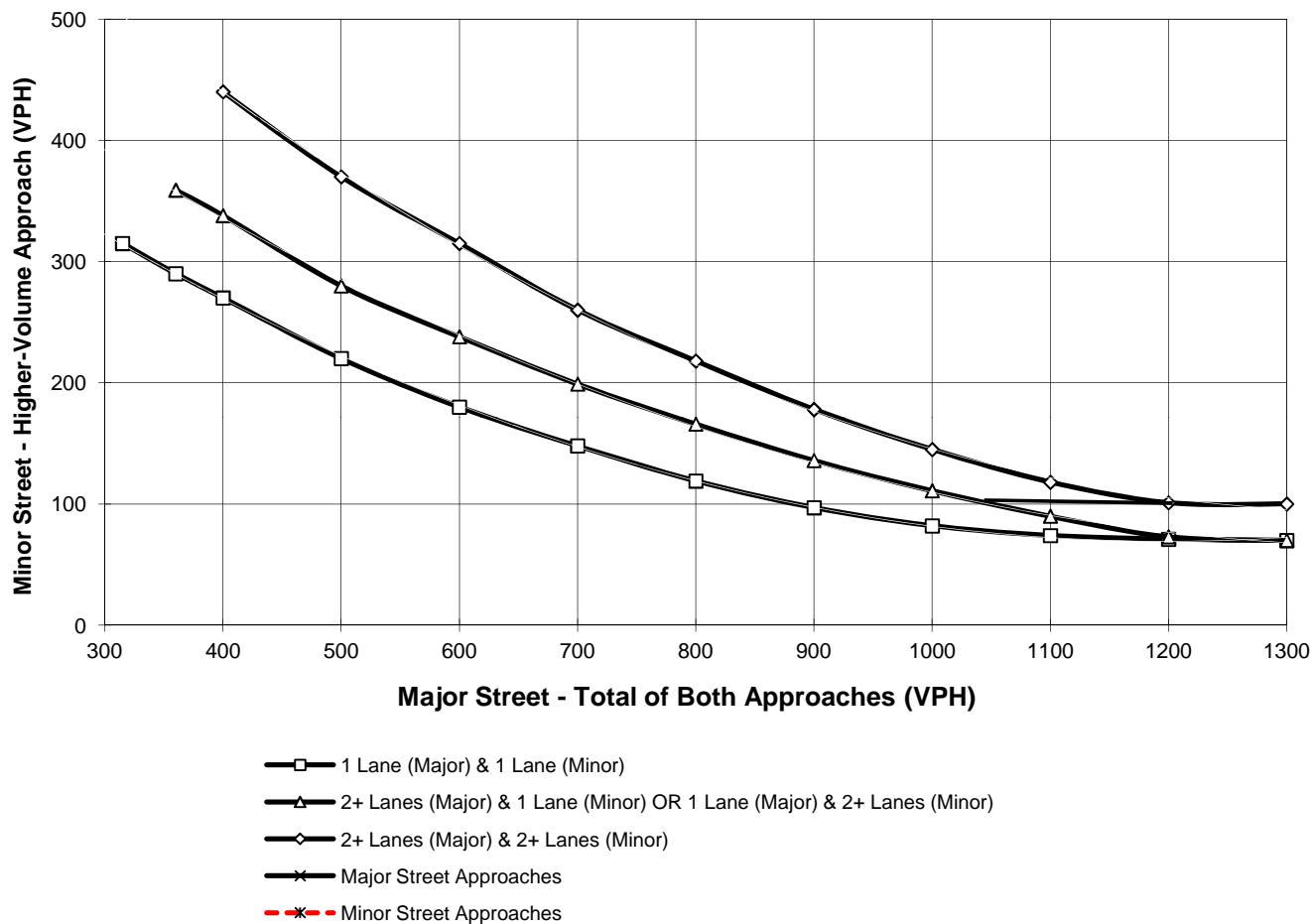
Major Street Name = **60th Av.**

Total of Both Approaches (VPH) = **160**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Madison Street**

High Volume Approach (VPH) = **70**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday PM Peak Hour**

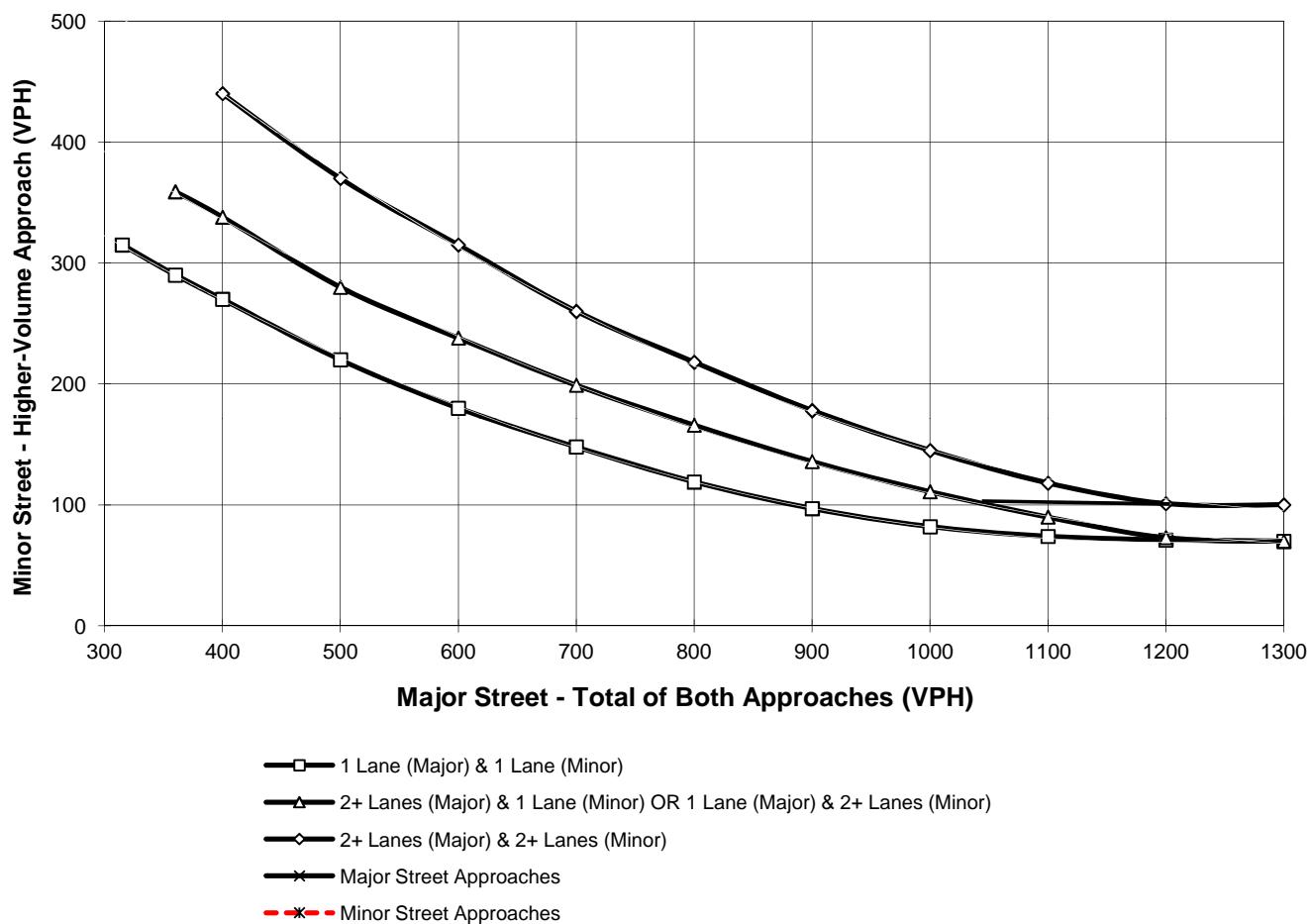
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **197**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **124**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday AM Peak Hour**

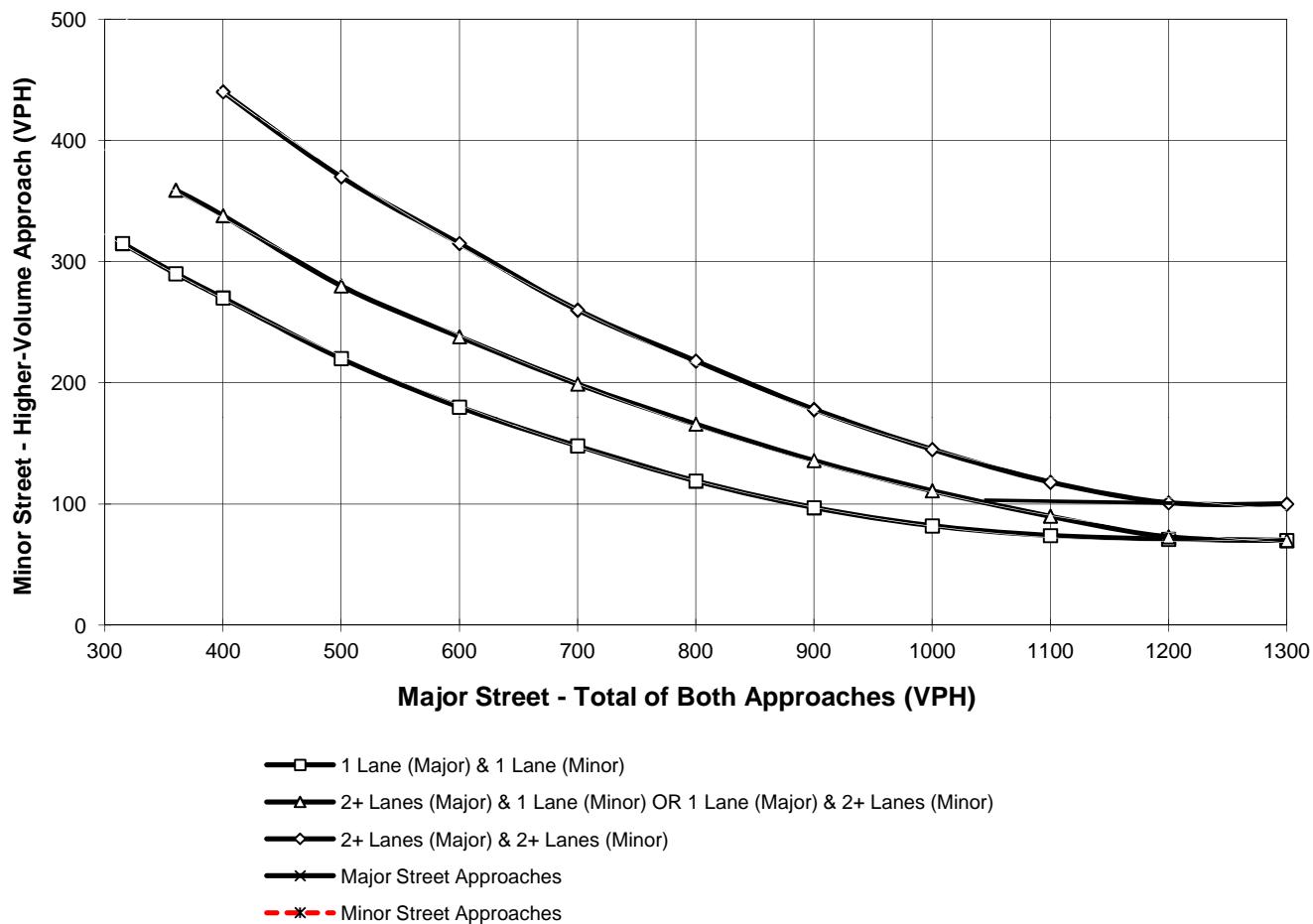
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **218**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **101**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday PM Peak Hour**

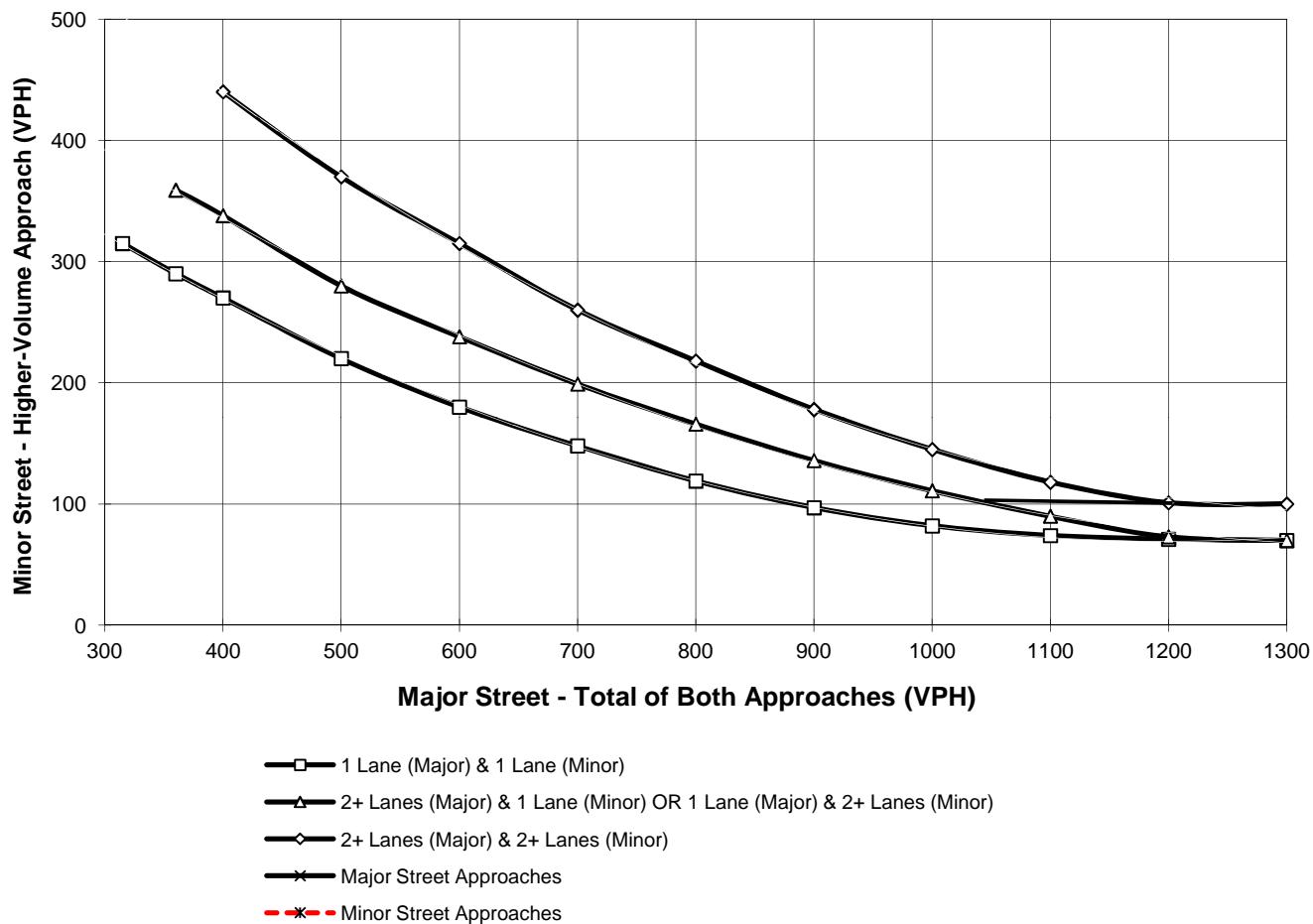
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **262**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **195**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday AM Peak Hour**

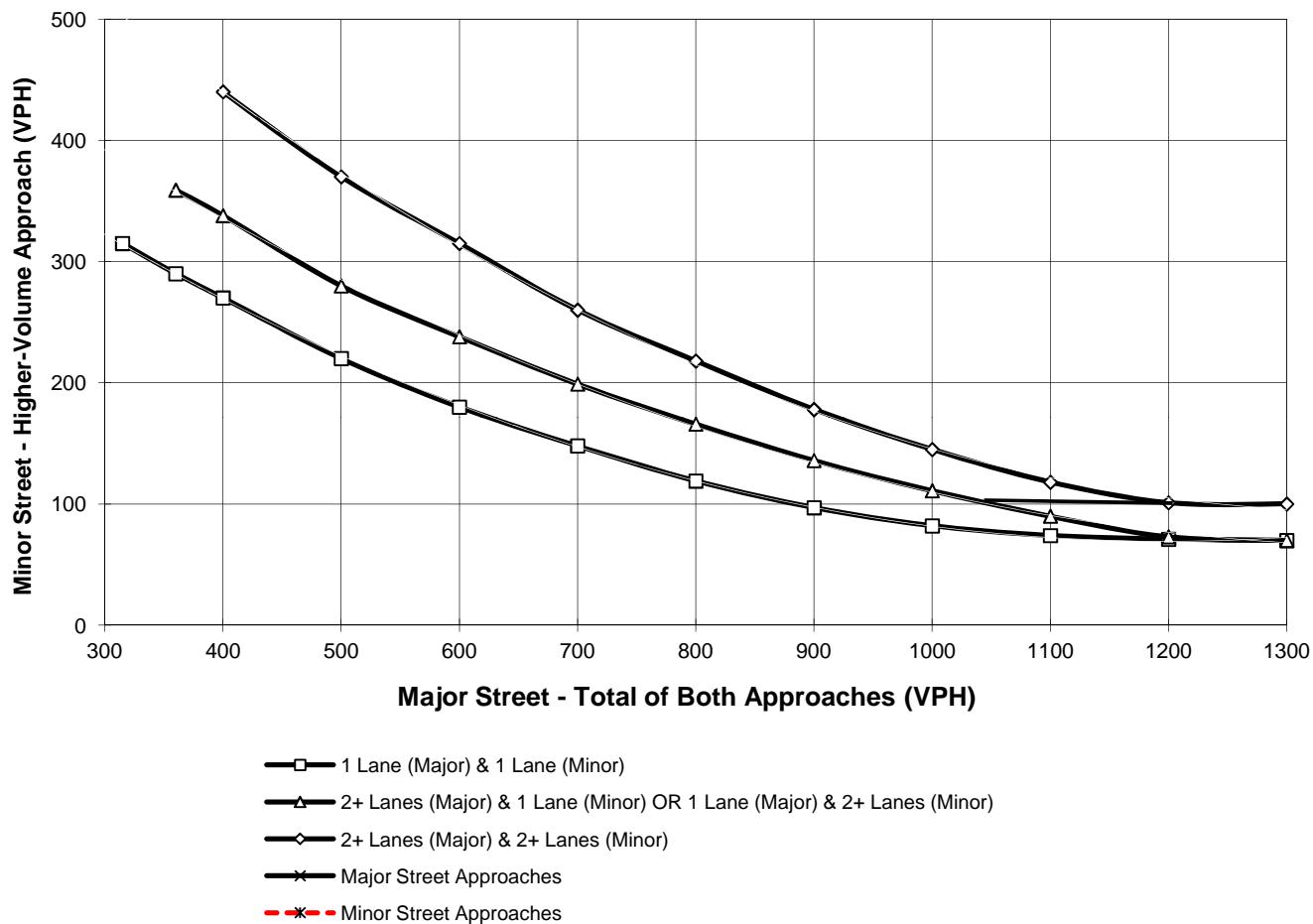
Major Street Name = **60th Av.**

Total of Both Approaches (VPH) = **175**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Monroe Street**

High Volume Approach (VPH) = **63**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday PM Peak Hour**

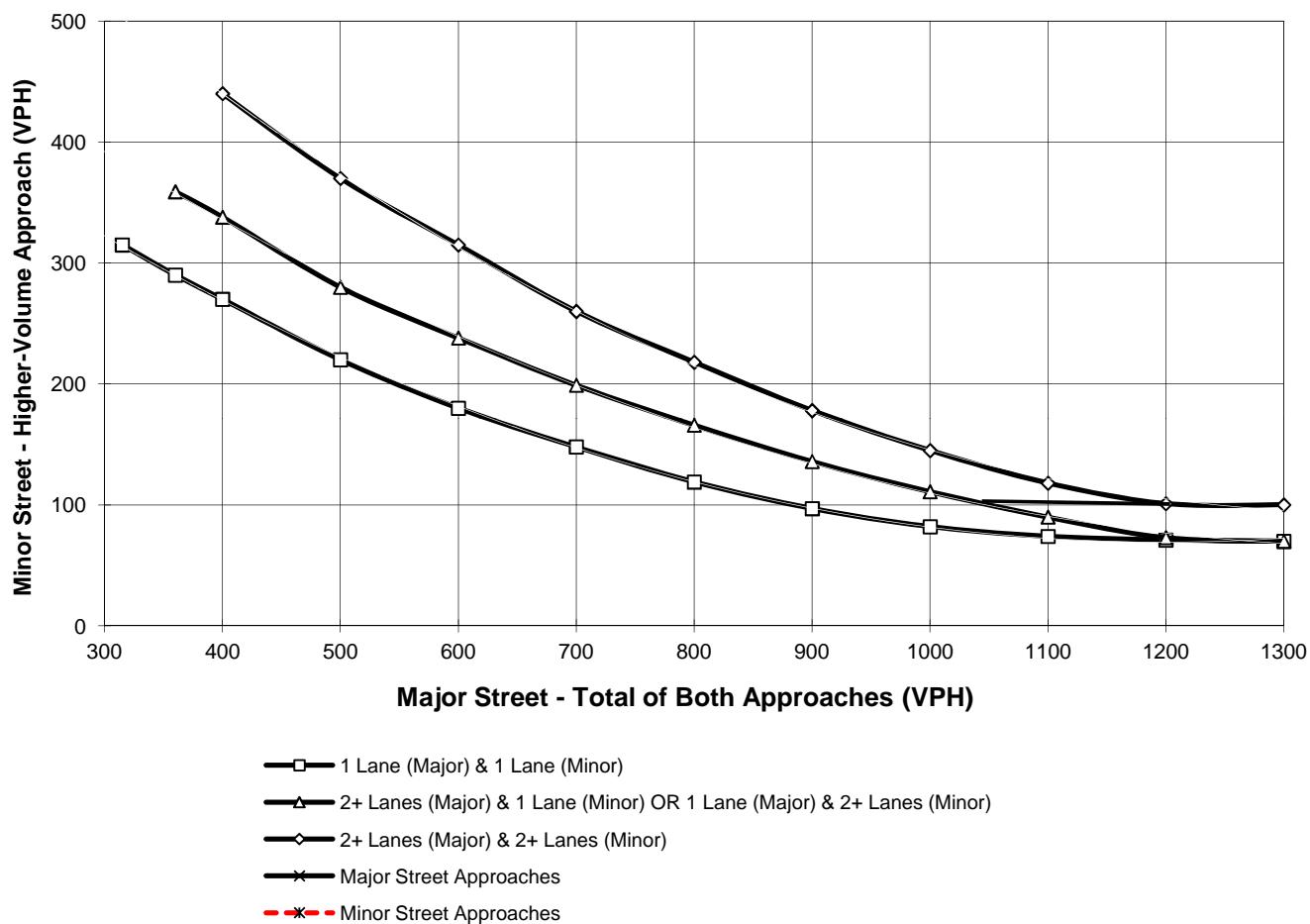
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **192**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **120**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday AM Peak Hour**

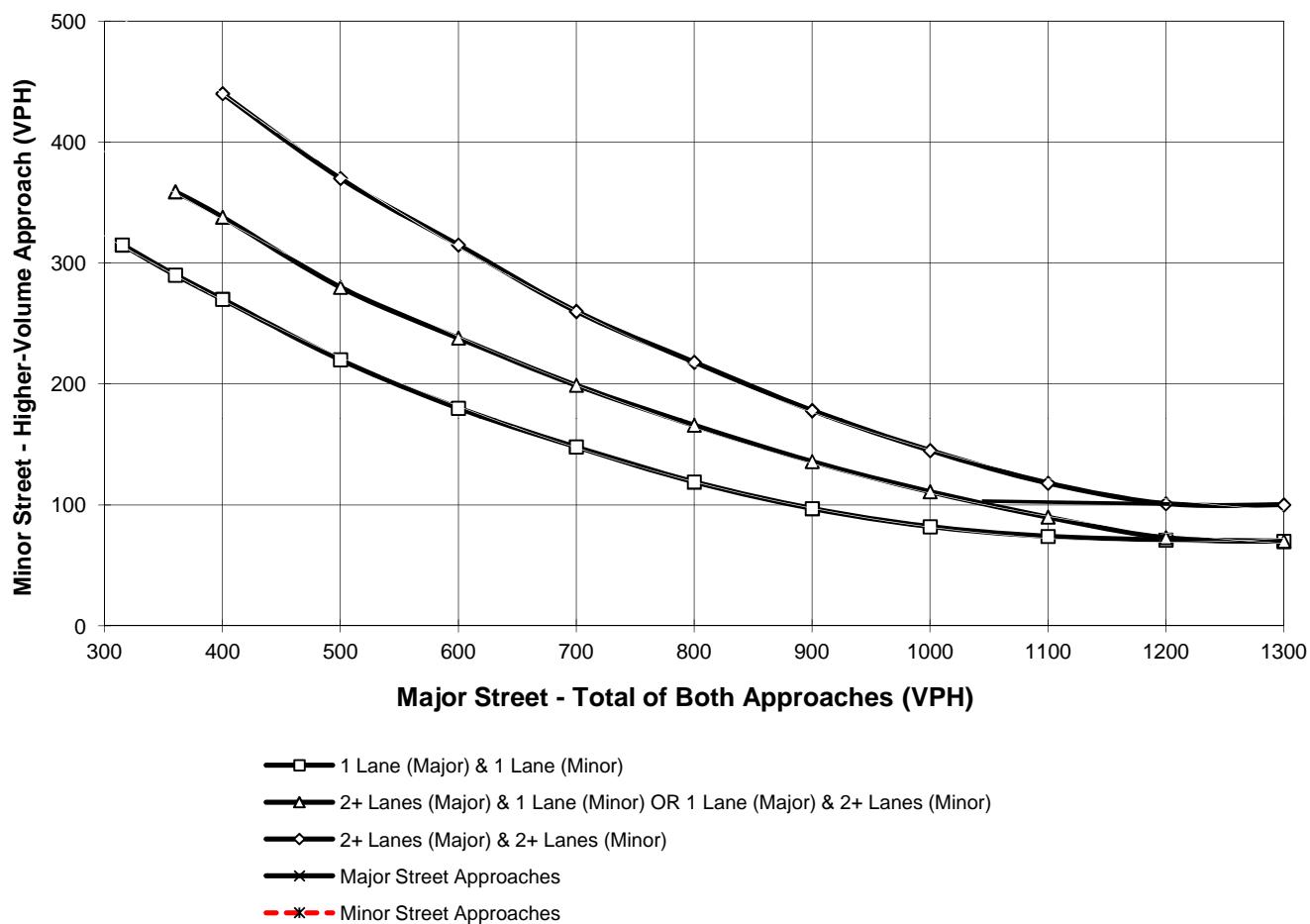
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **93**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **22**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday PM Peak Hour**

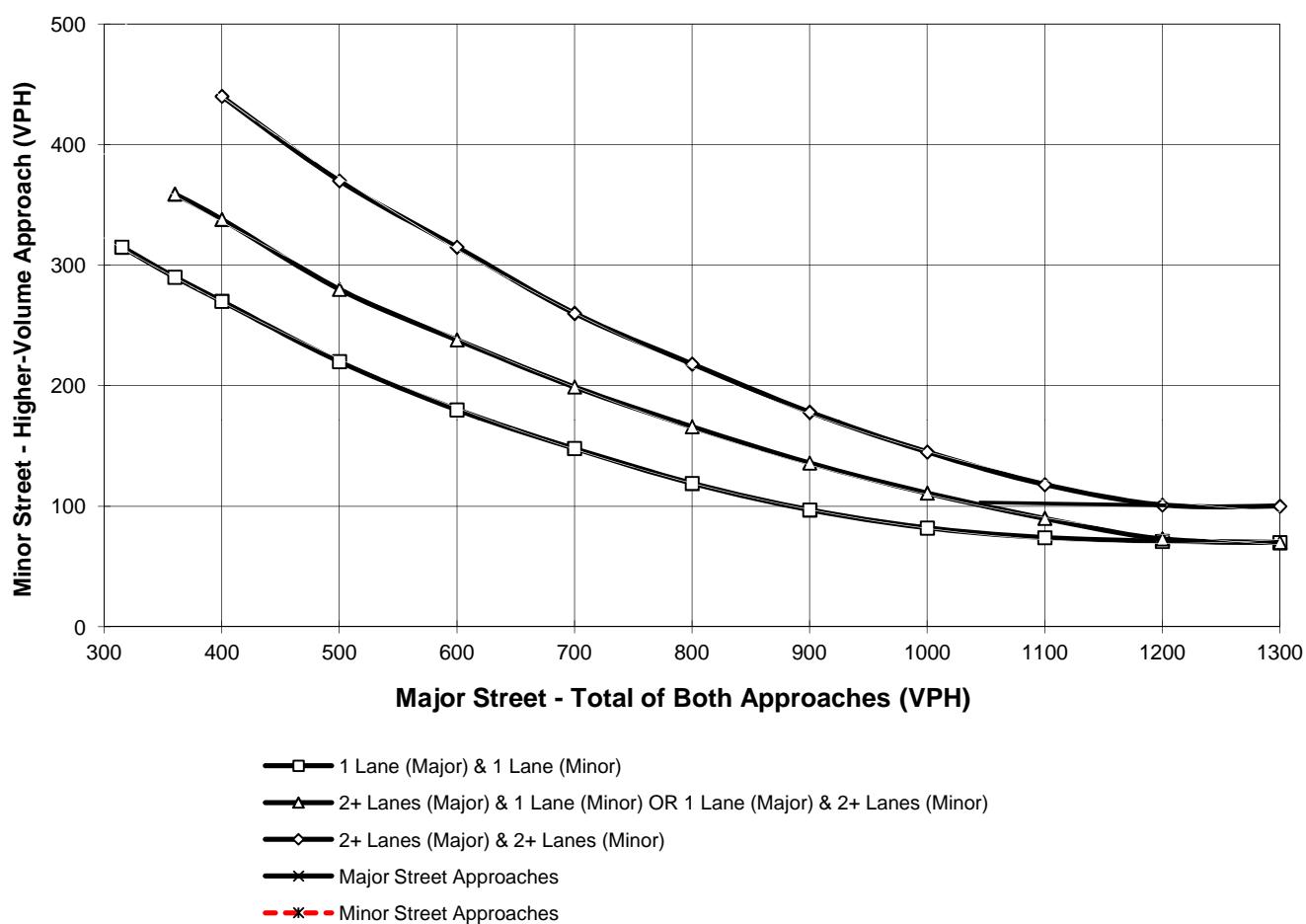
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **133**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **15**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

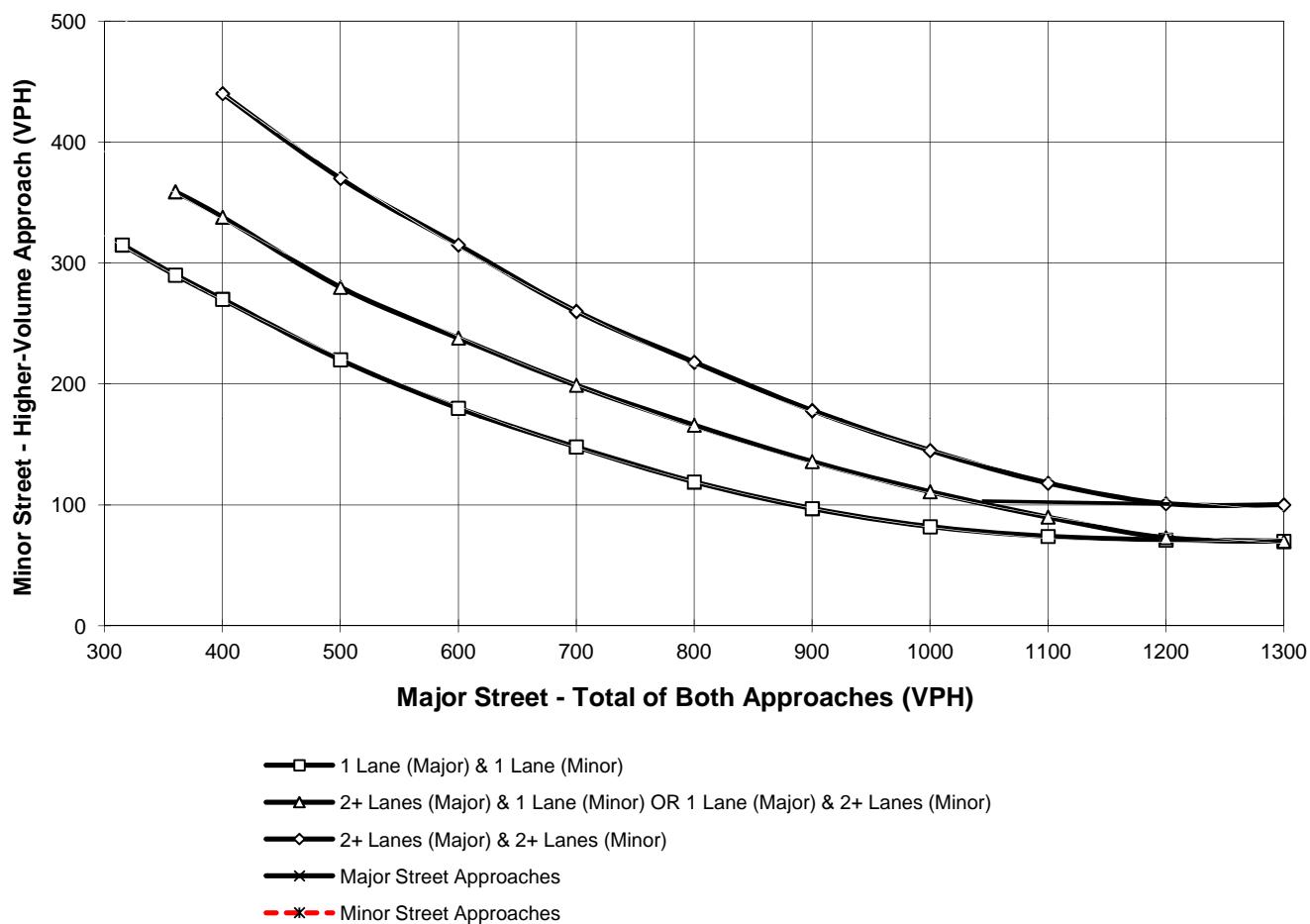
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Jackson Street**      Total of Both Approaches (VPH) = **147**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**      High Volume Approach (VPH) = **61**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday PM Peak Hour**

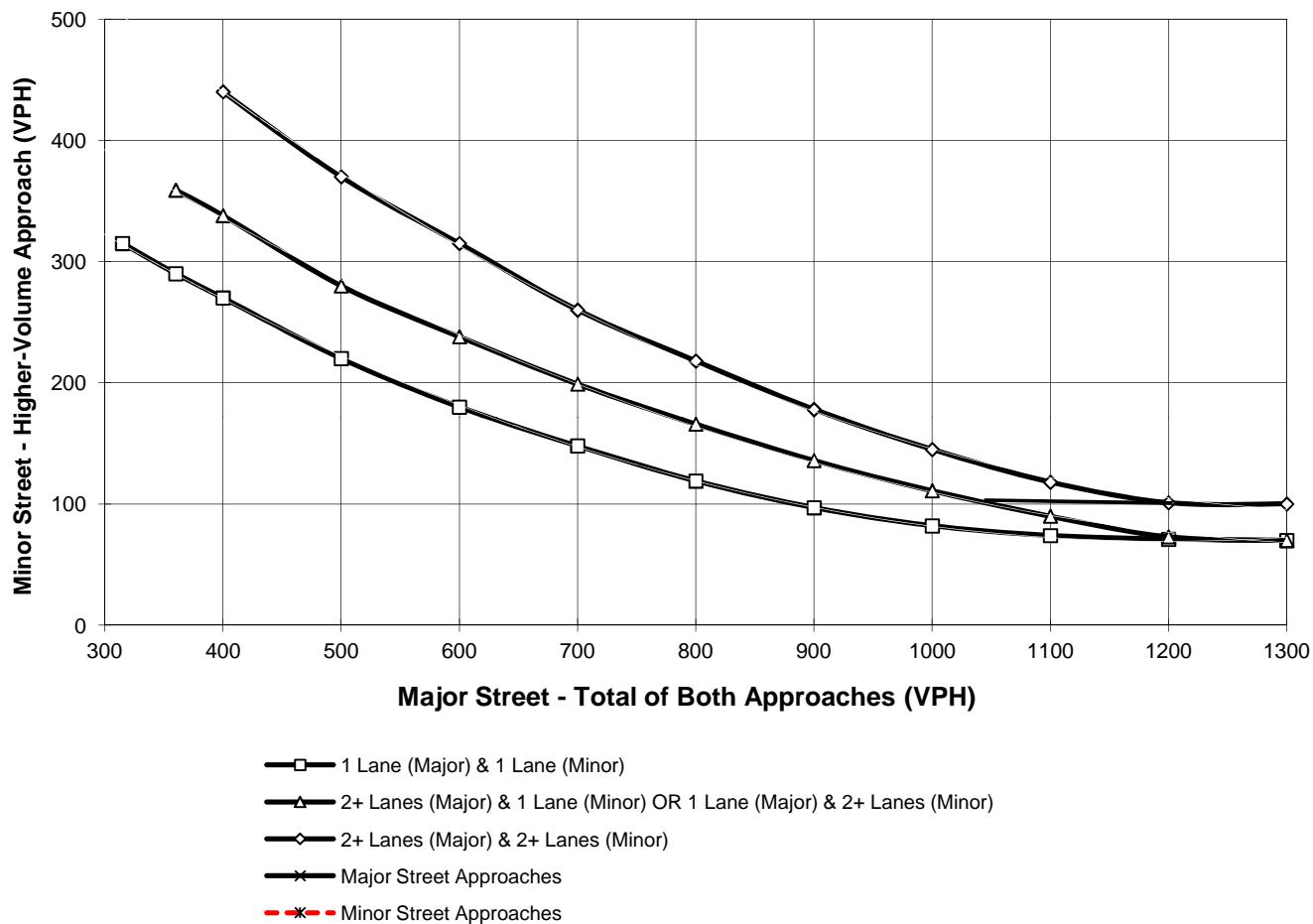
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **154**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **55**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

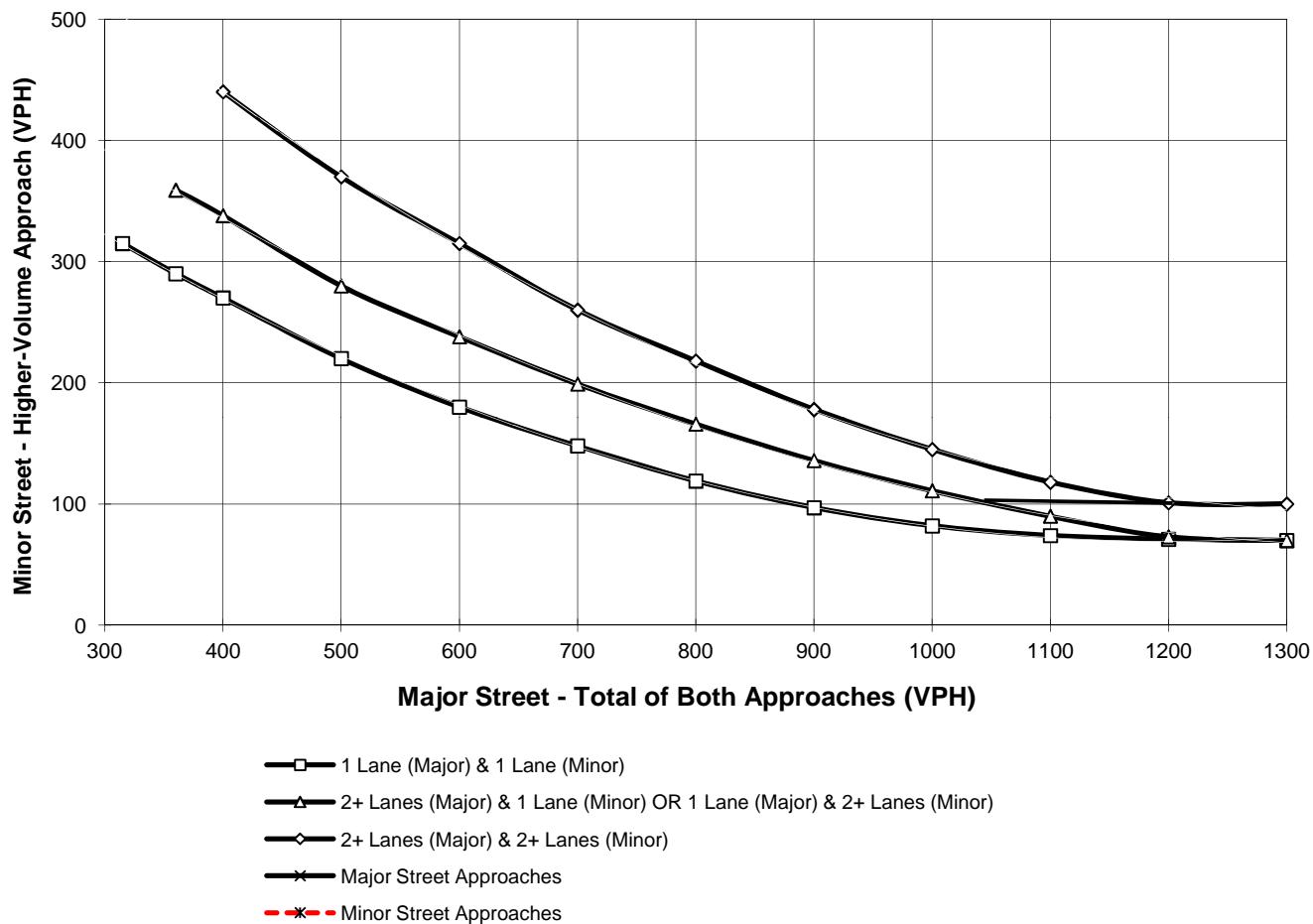
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Jackson Street**      Total of Both Approaches (VPH) = **106**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**      High Volume Approach (VPH) = **23**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday PM Peak Hour**

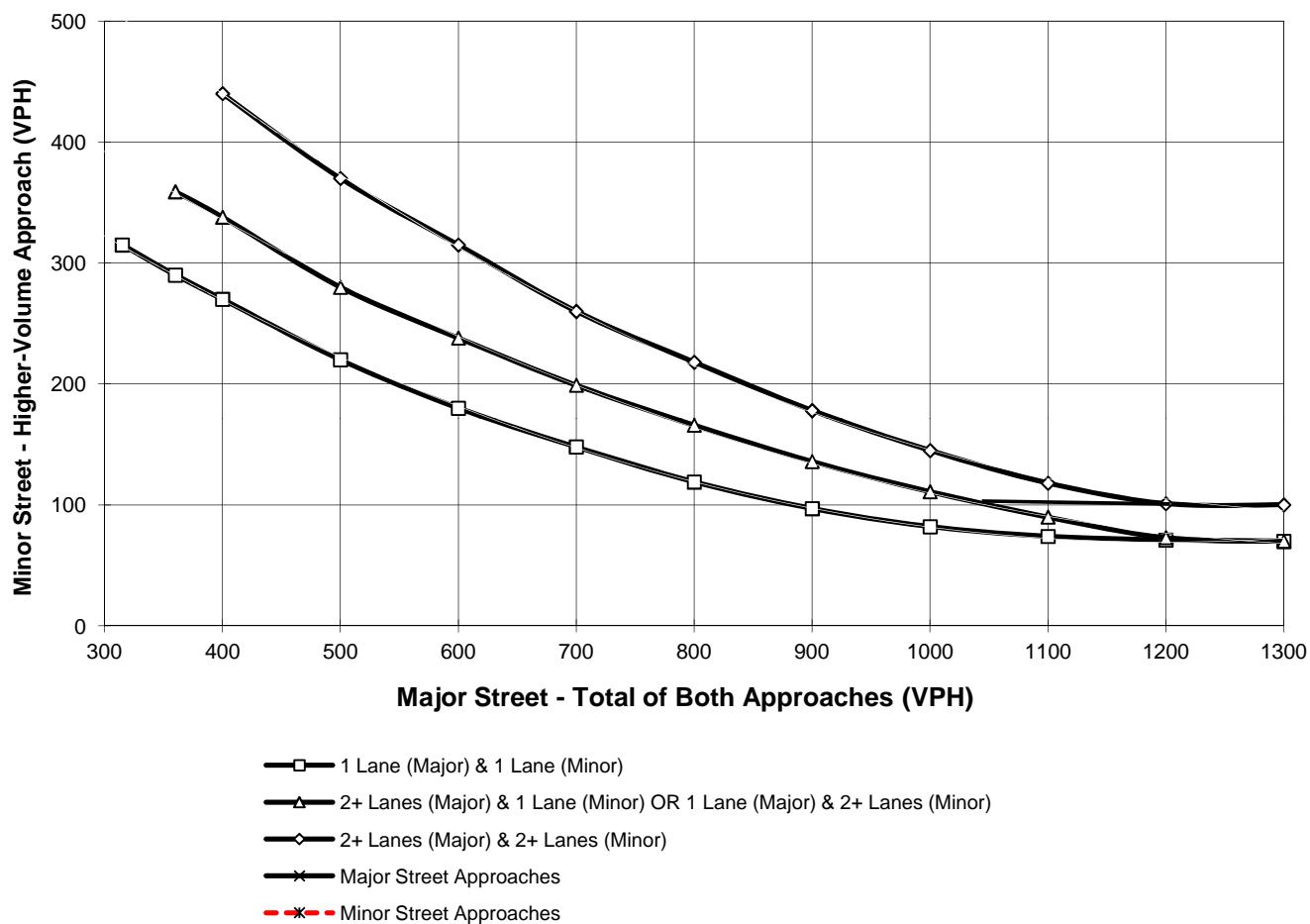
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **128**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **16**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday AM Peak Hour**

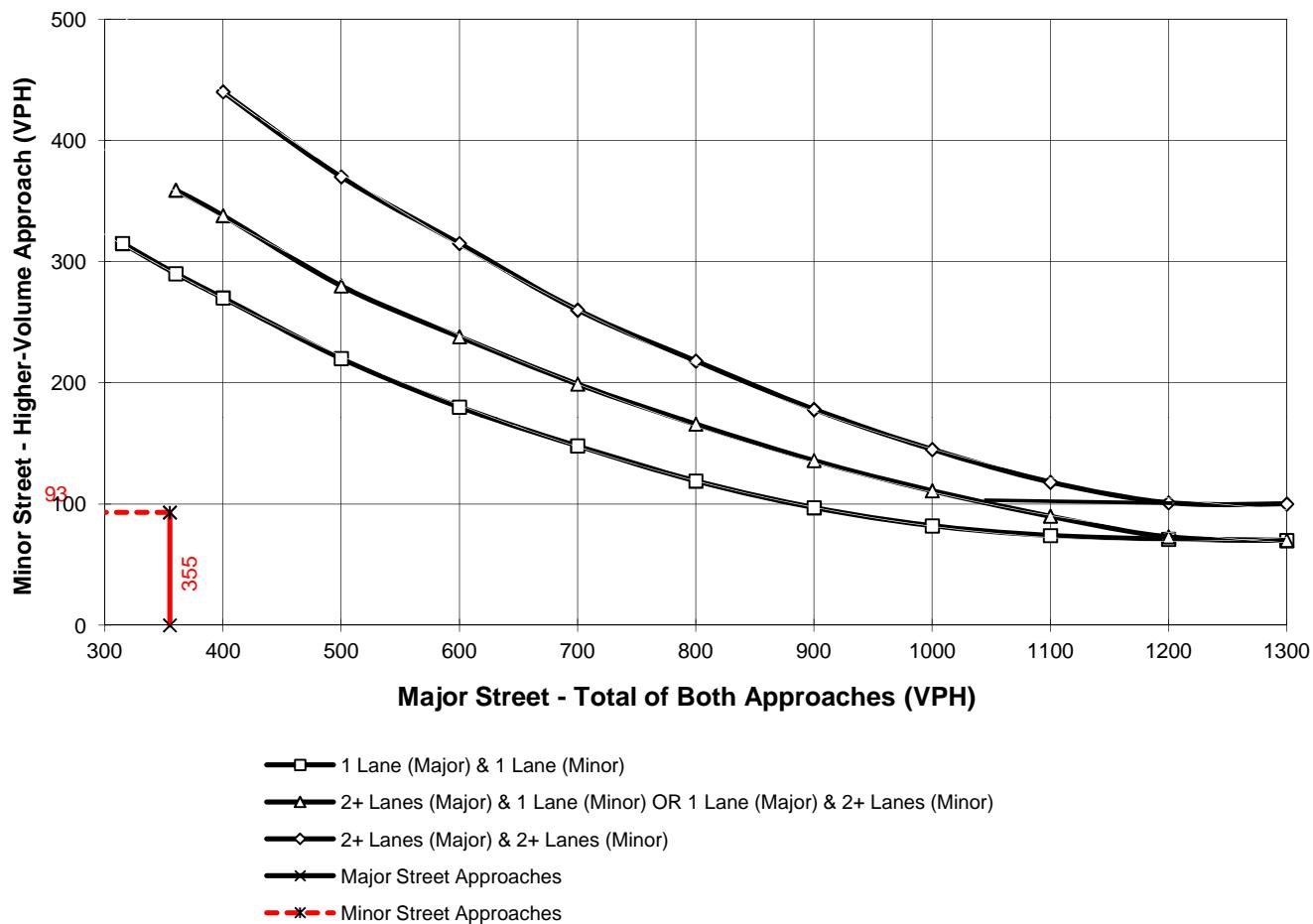
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **355**  
Number of Approach Lanes Major Street = **2**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **93**  
Number of Approach Lanes Minor Street = **2**

#### SIGNAL WARRANT NOT SATISFIED



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2016) Conditions - Weekday PM Peak Hour**

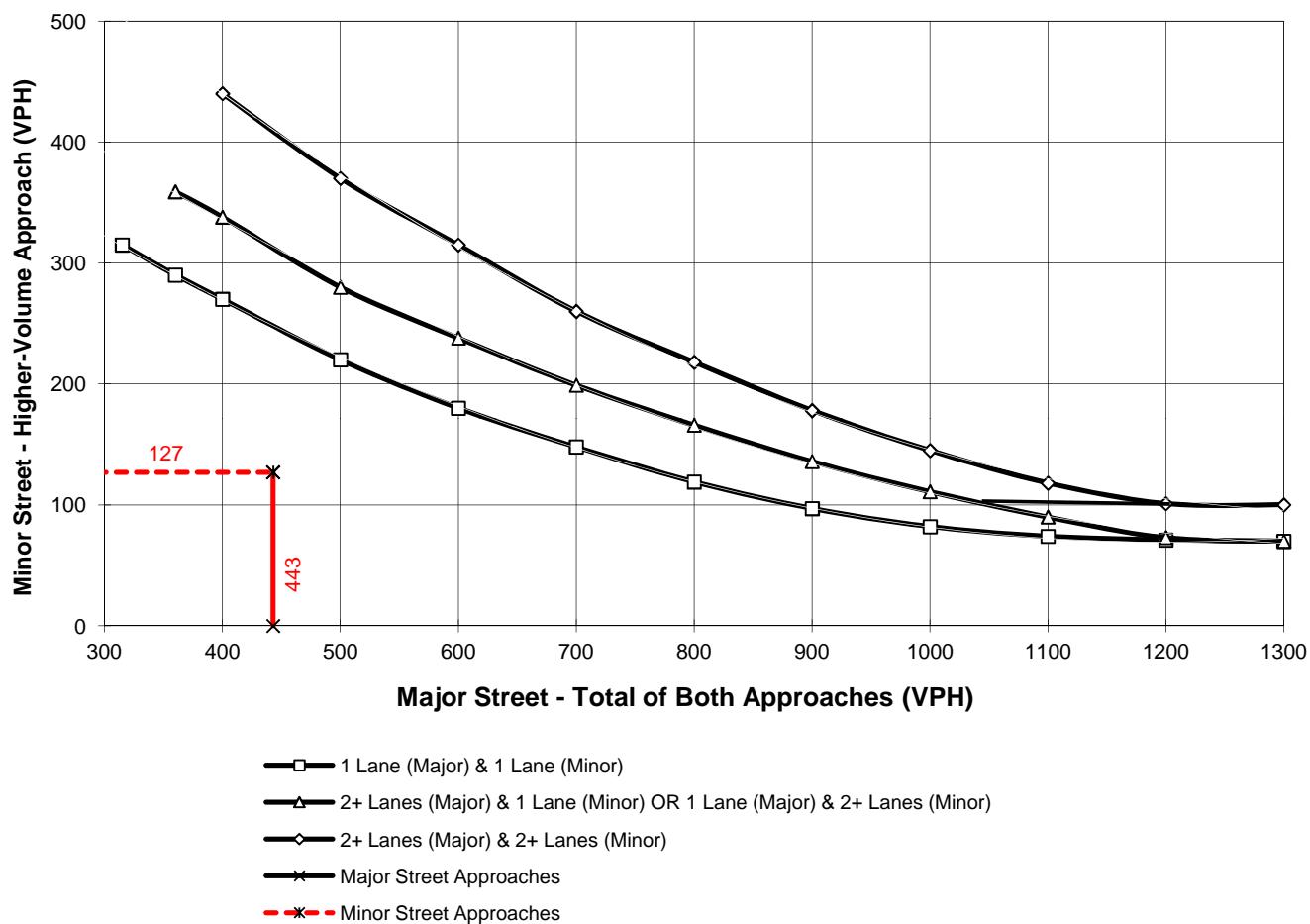
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **443**  
Number of Approach Lanes Major Street = **2**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **127**  
Number of Approach Lanes Minor Street = **2**

#### SIGNAL WARRANT NOT SATISFIED



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

## **EAPC (2016) Conditions**

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

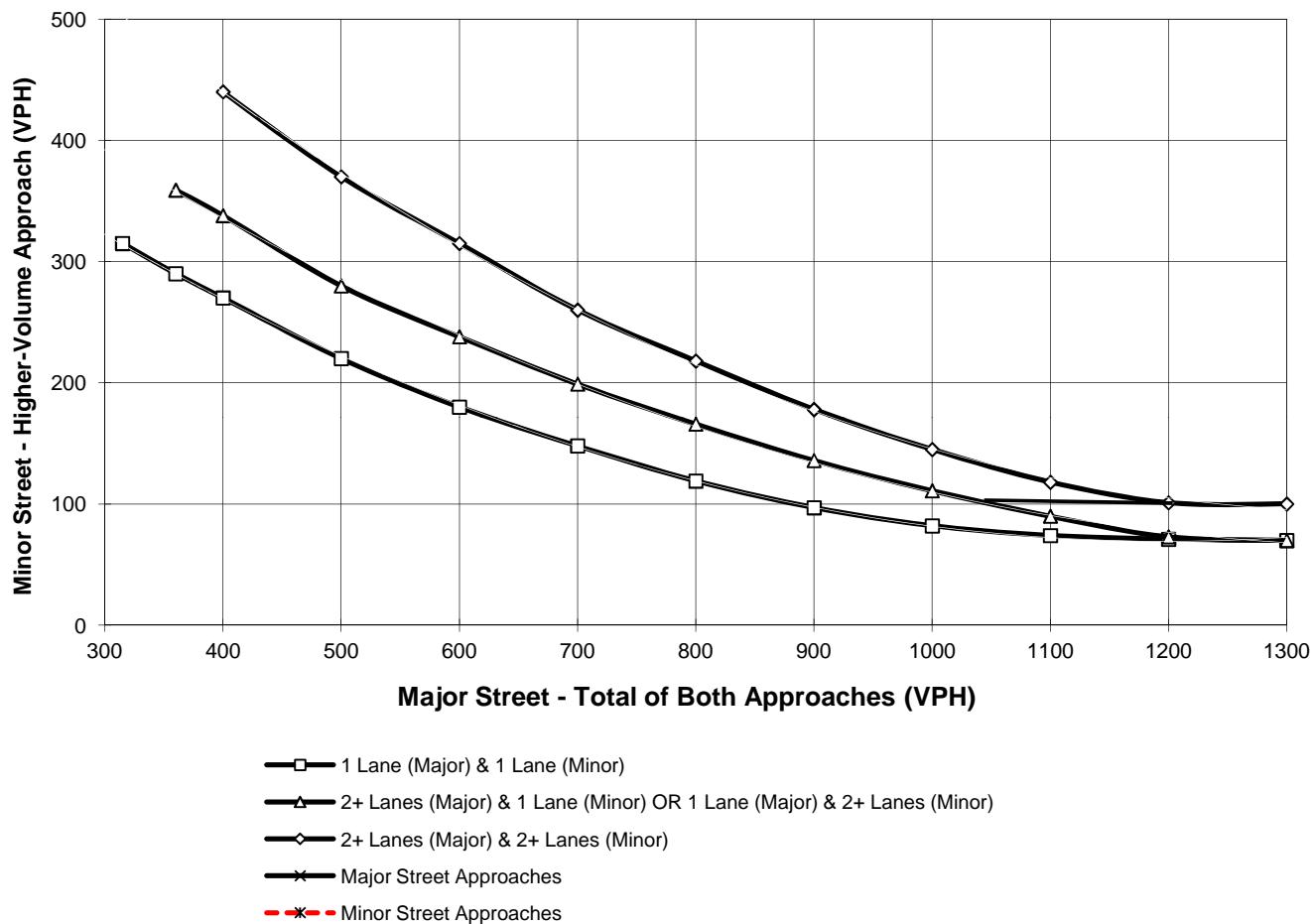
Major Street Name = **60th Av.**

Total of Both Approaches (VPH) = **167**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Madison Street**

High Volume Approach (VPH) = **72**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

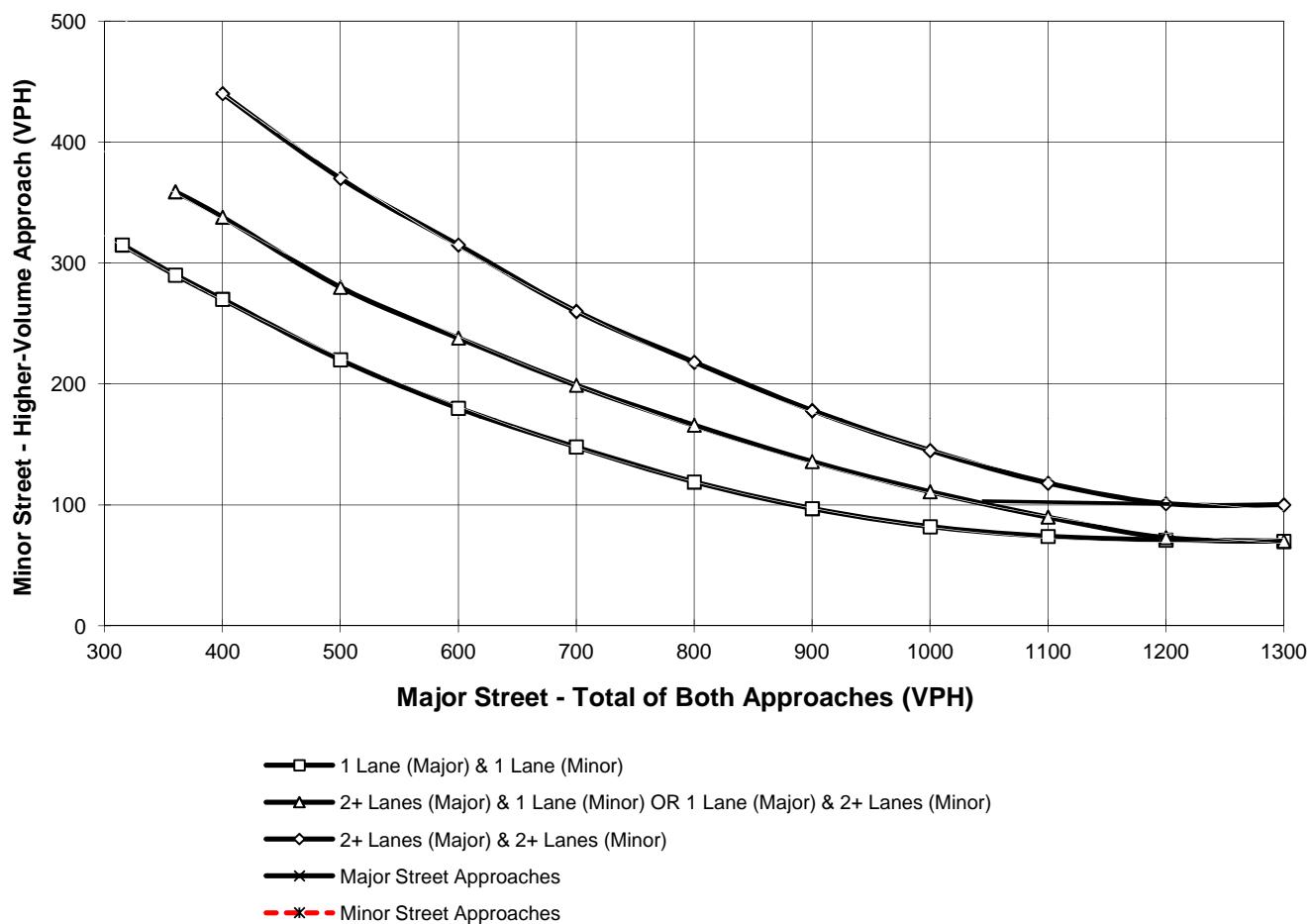
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **205**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **128**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

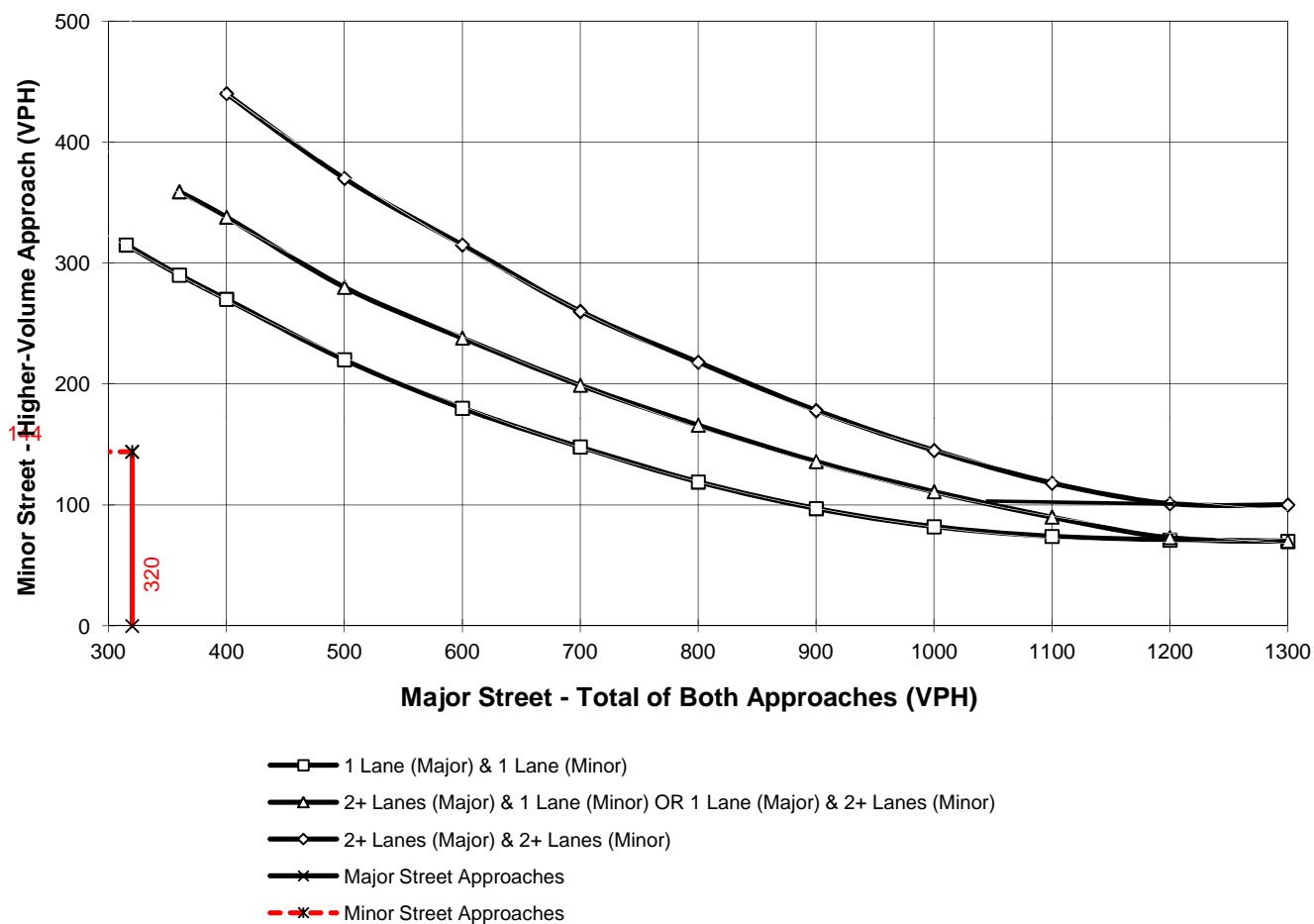
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **320**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **144**  
Number of Approach Lanes Minor Street = **1**

#### SIGNAL WARRANT NOT SATISFIED



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

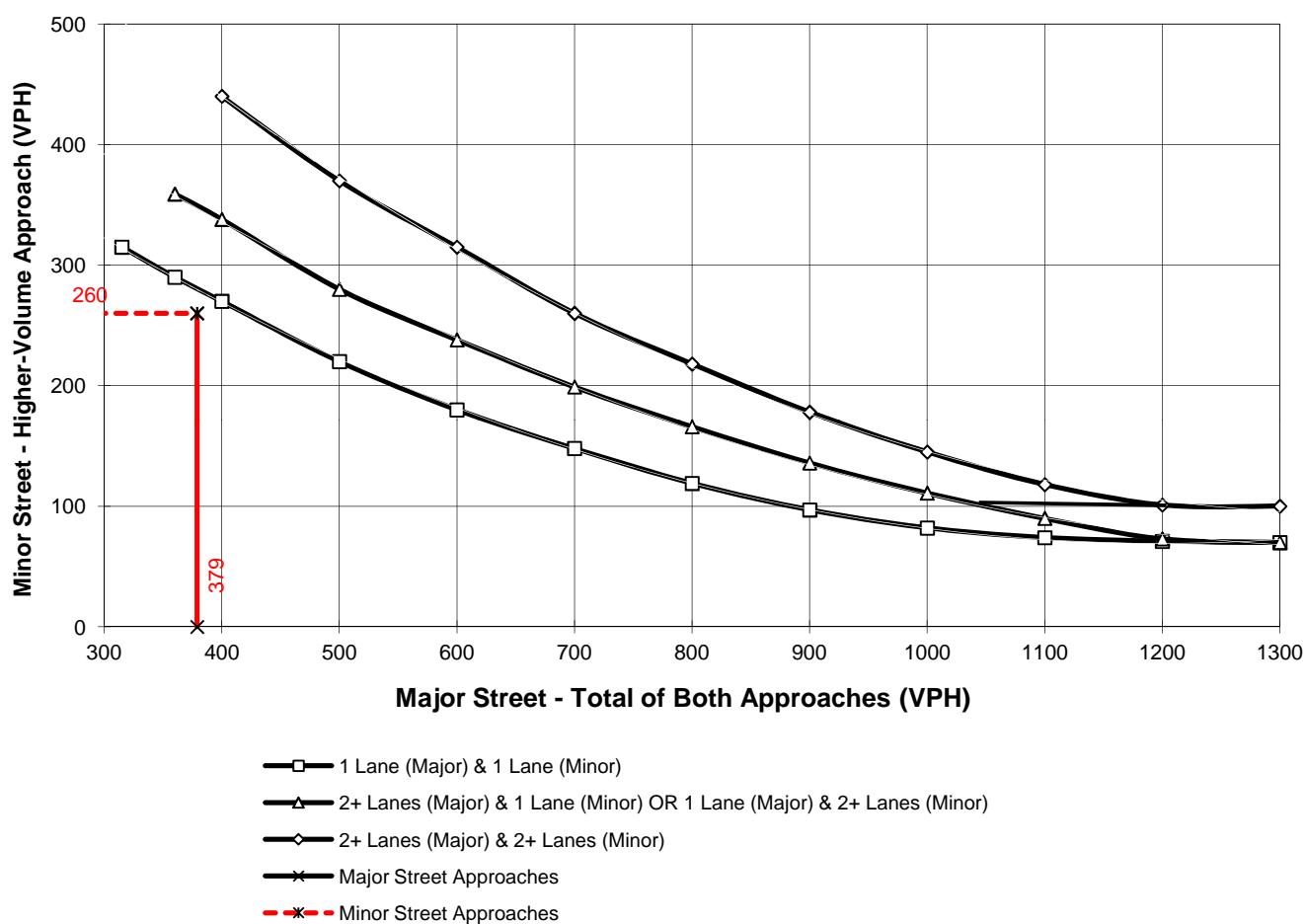
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **379**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **260**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

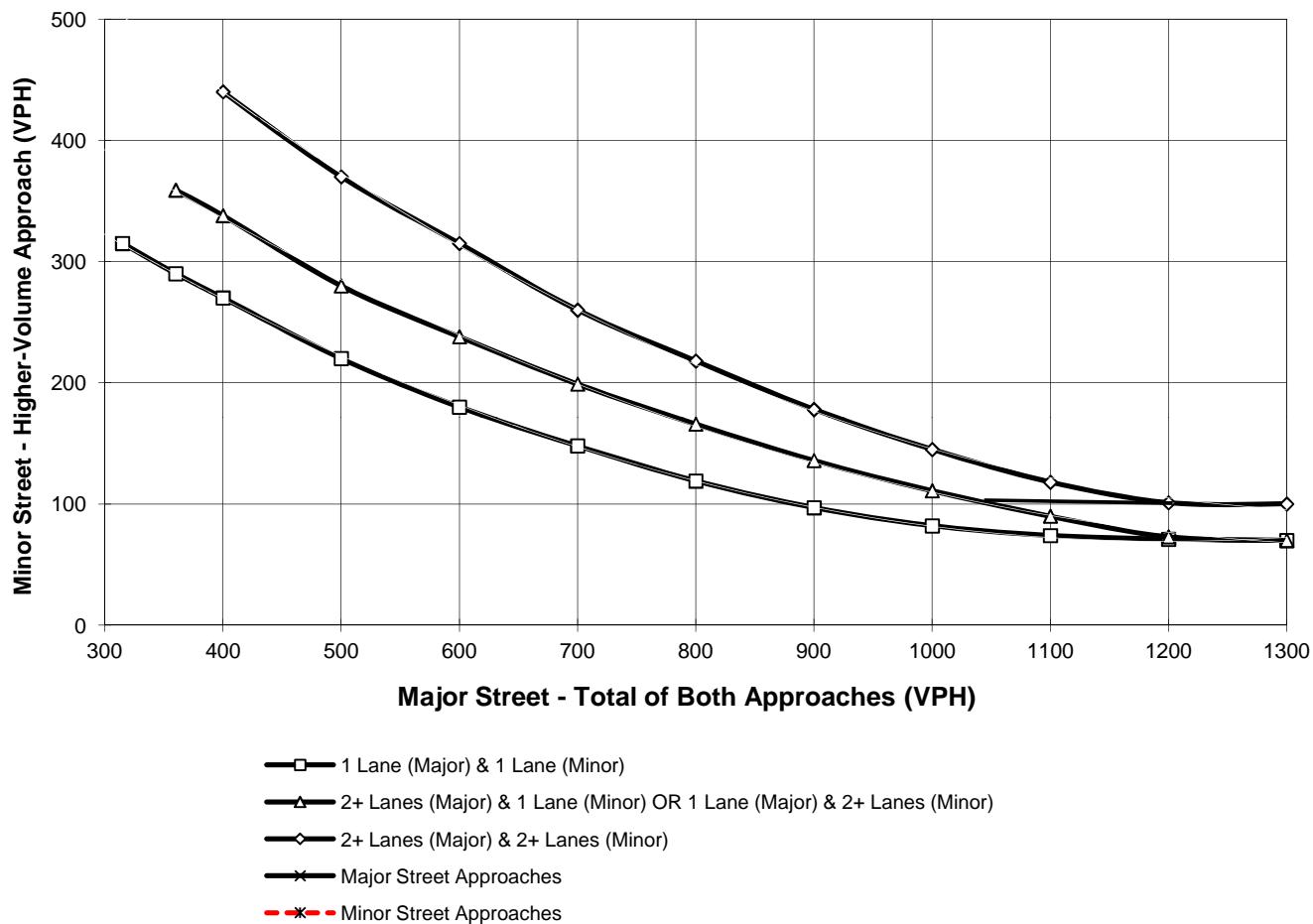
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **205**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **111**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

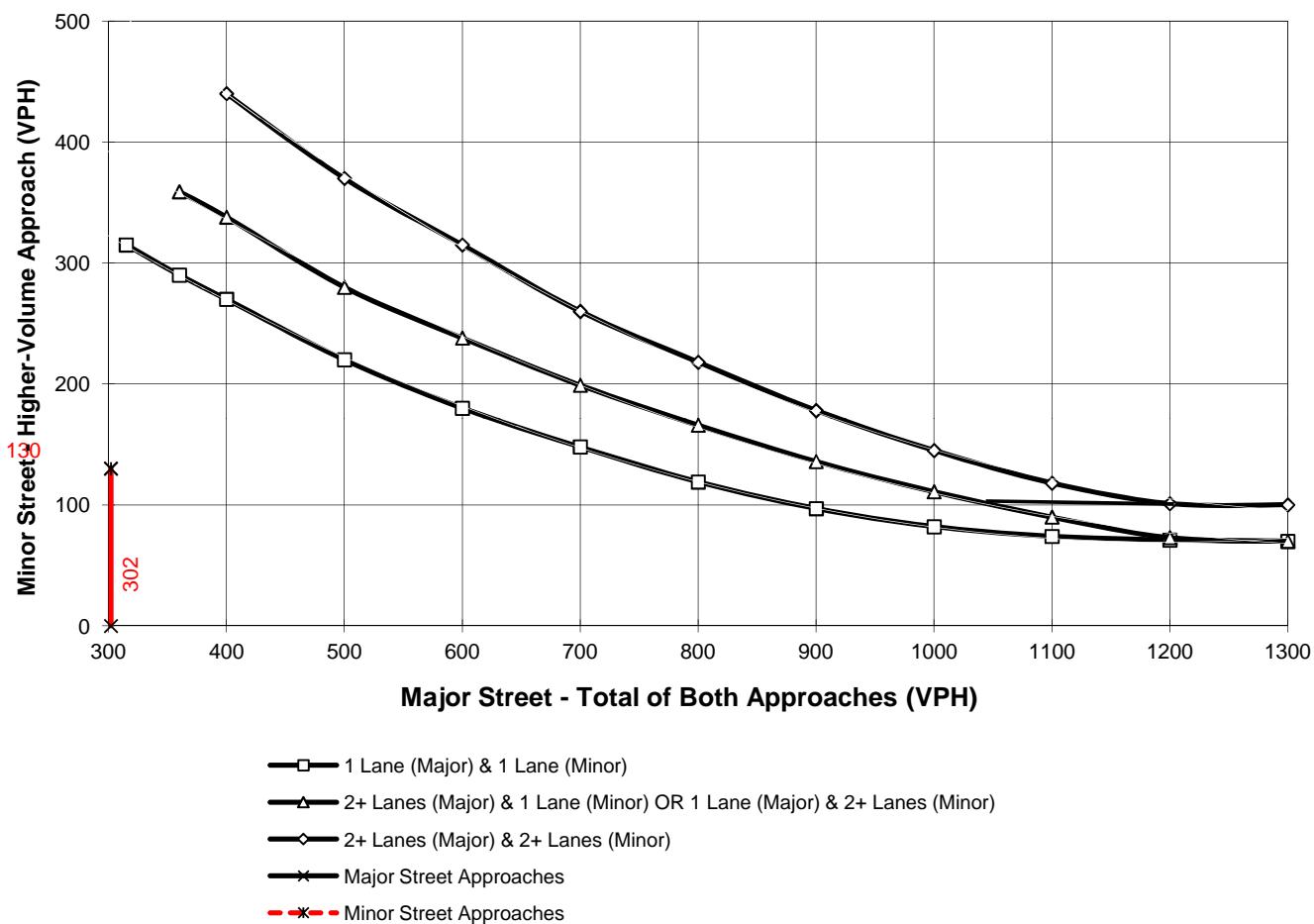
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **302**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **130**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

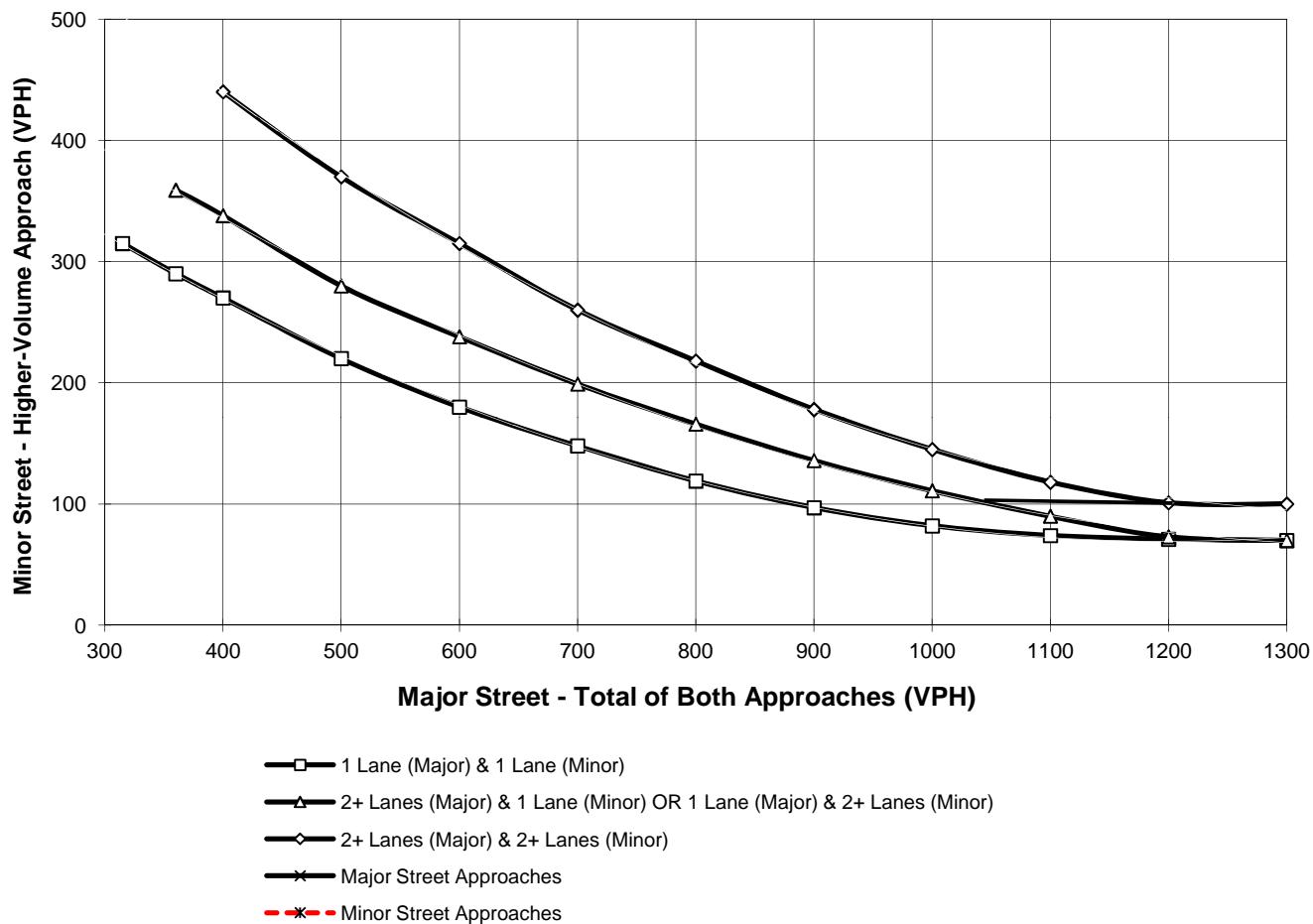
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **111**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **68**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

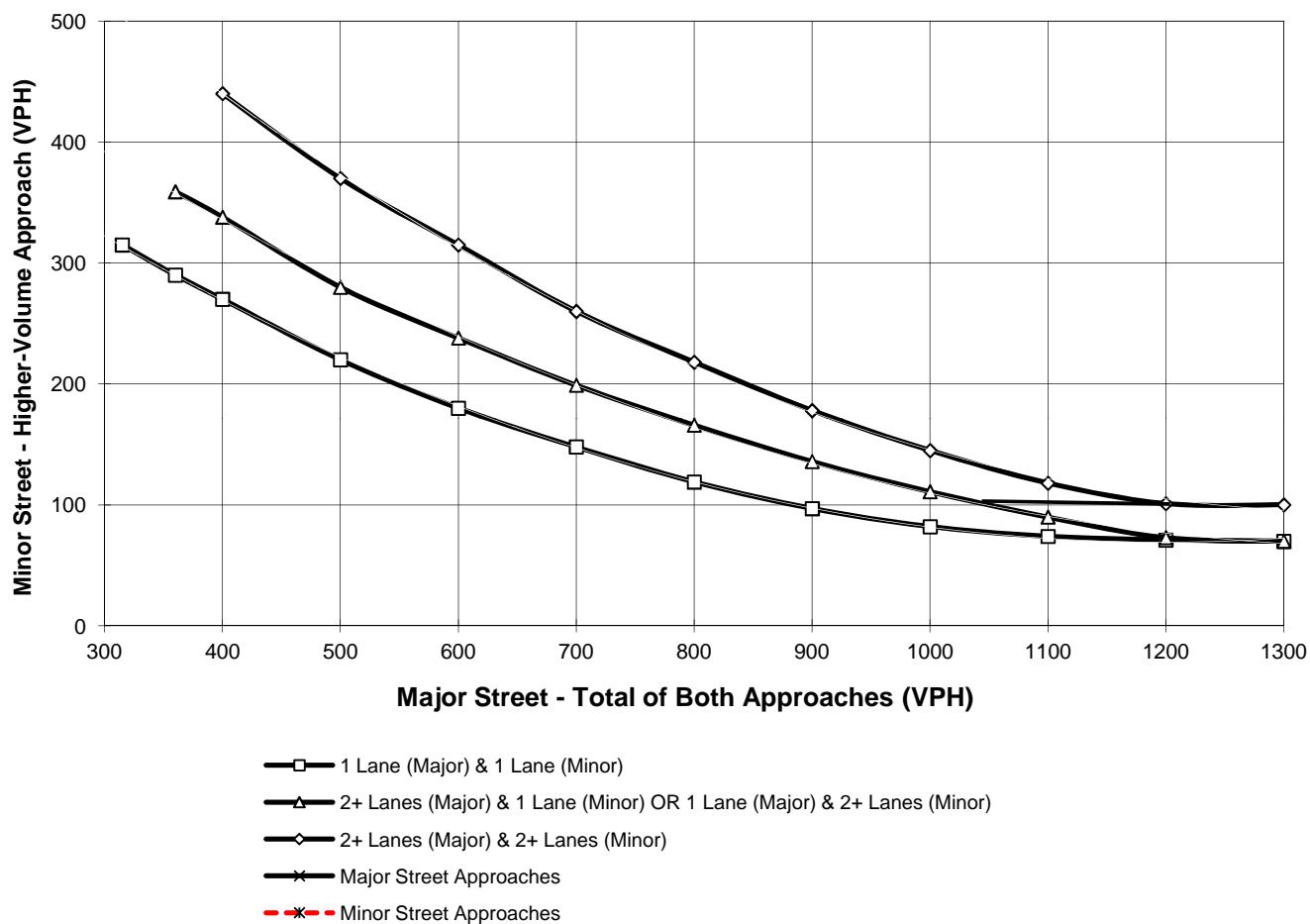
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **193**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **46**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

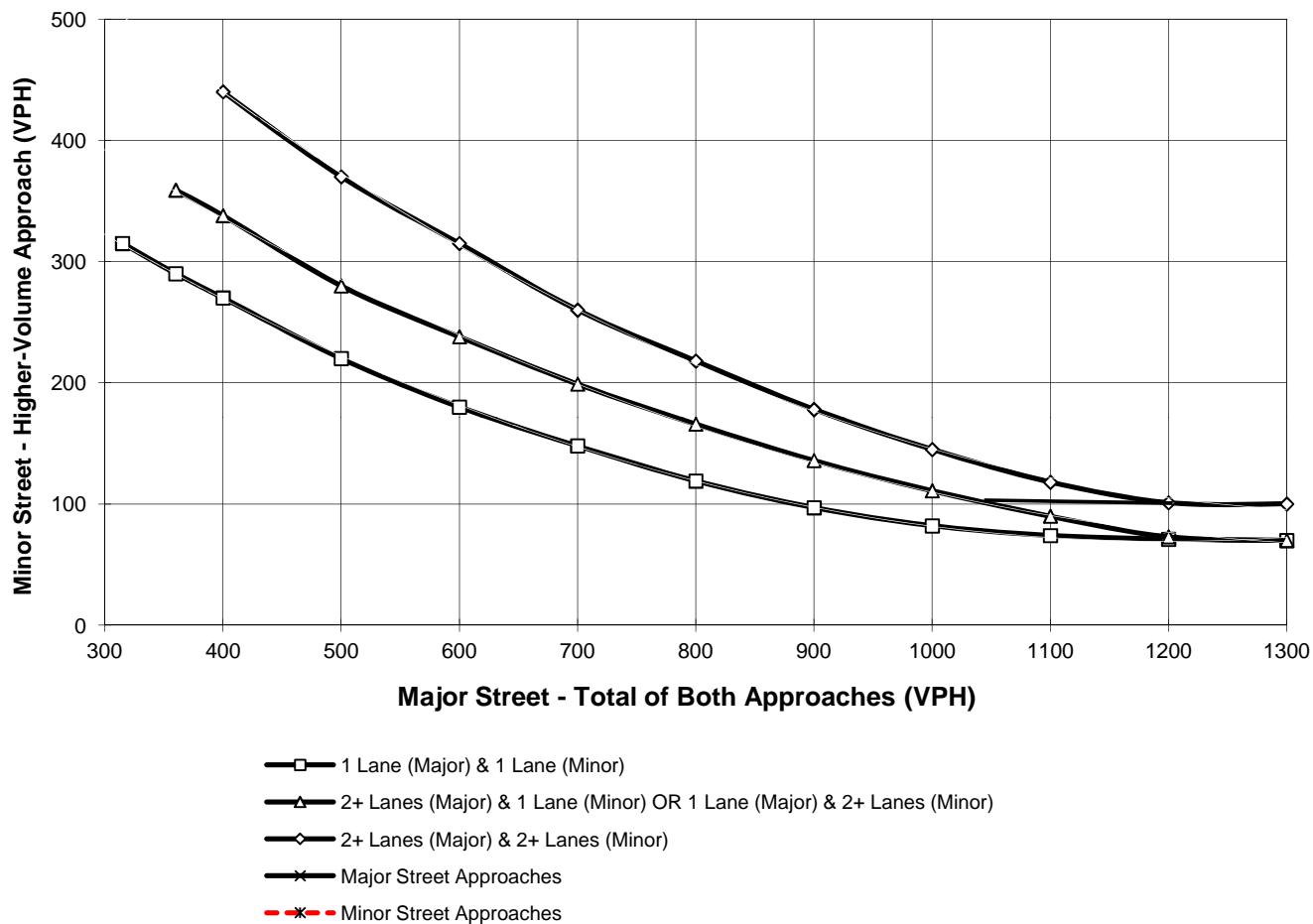
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **161**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **68**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

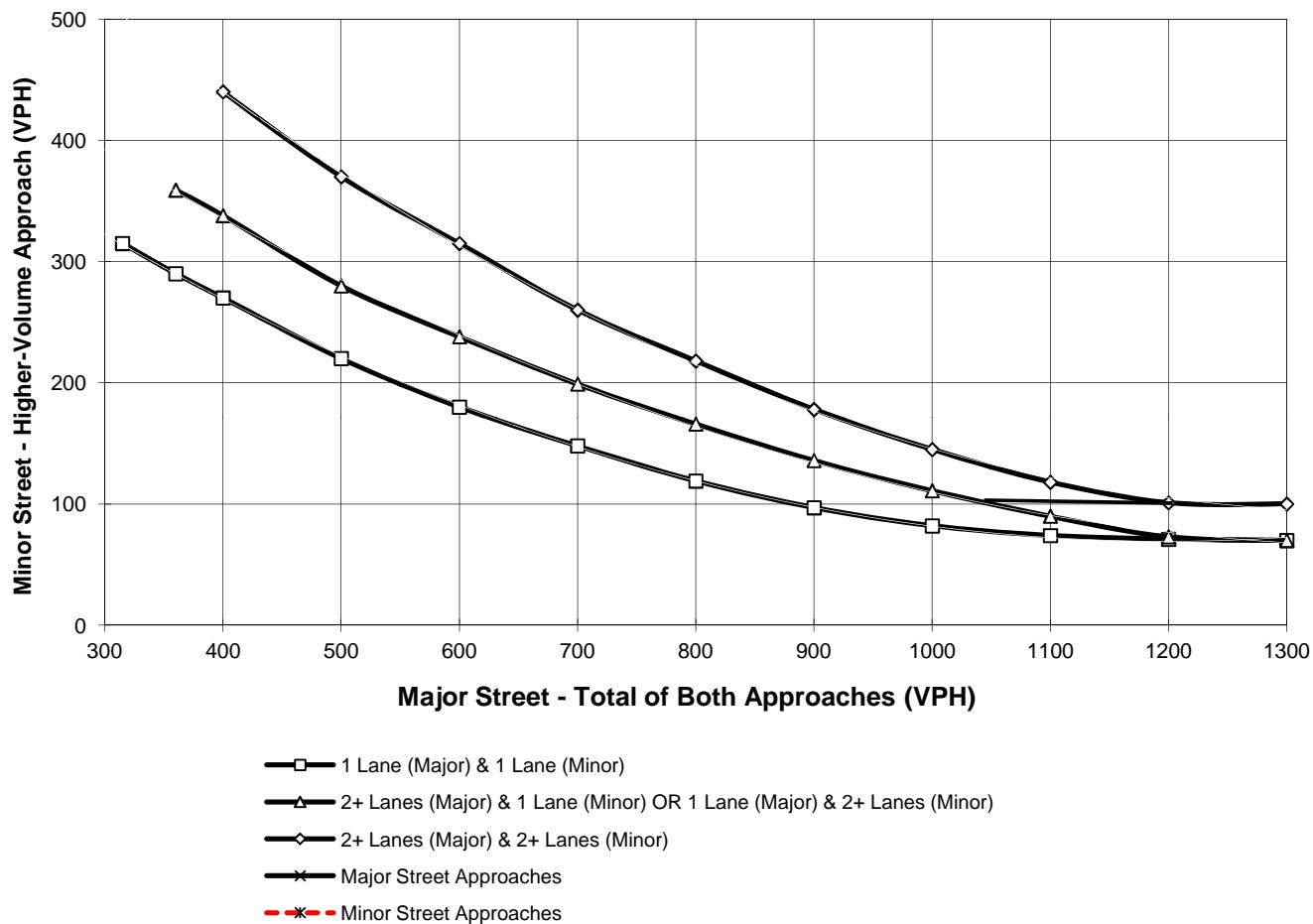
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **170**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **64**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

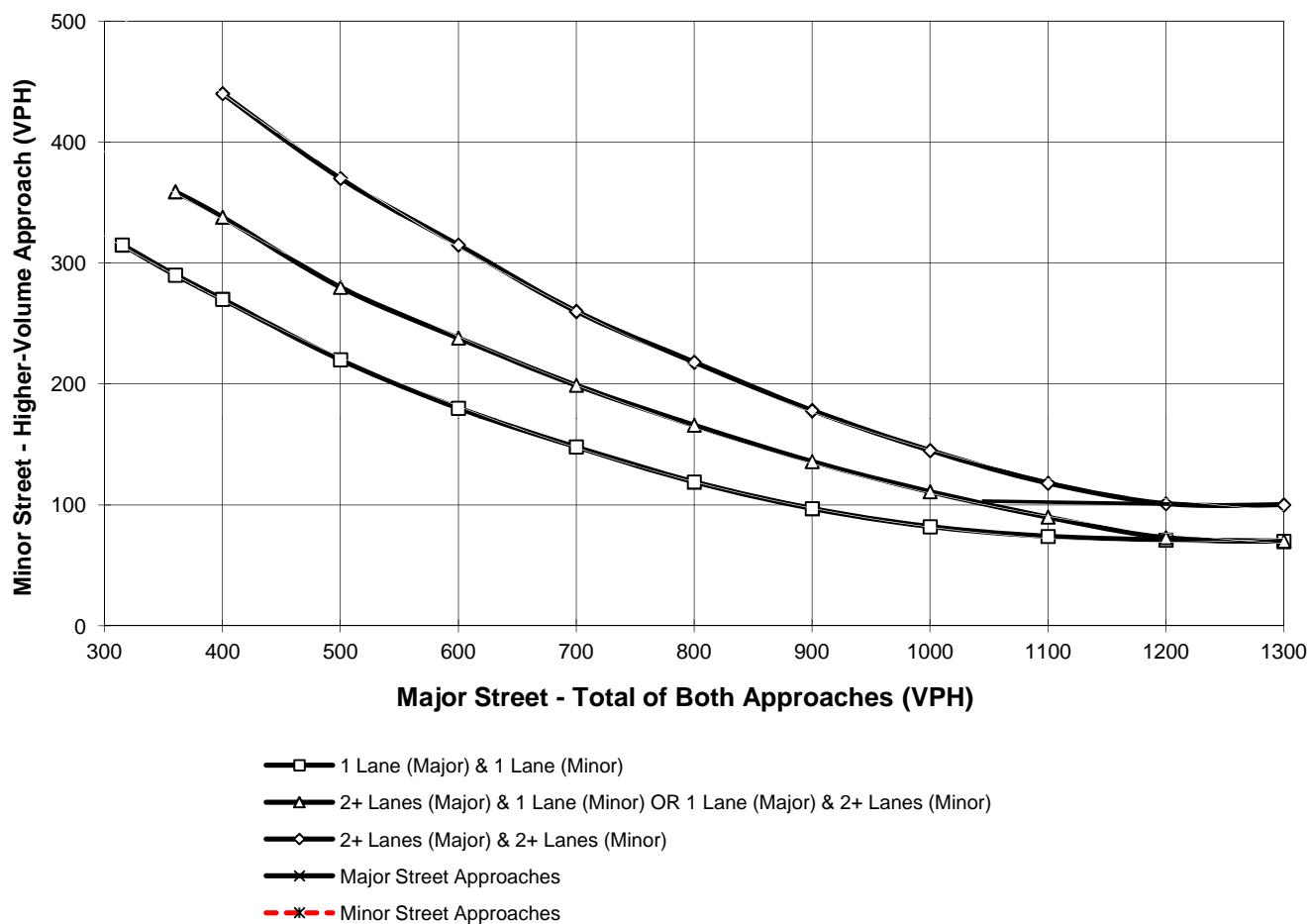
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **110**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **46**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

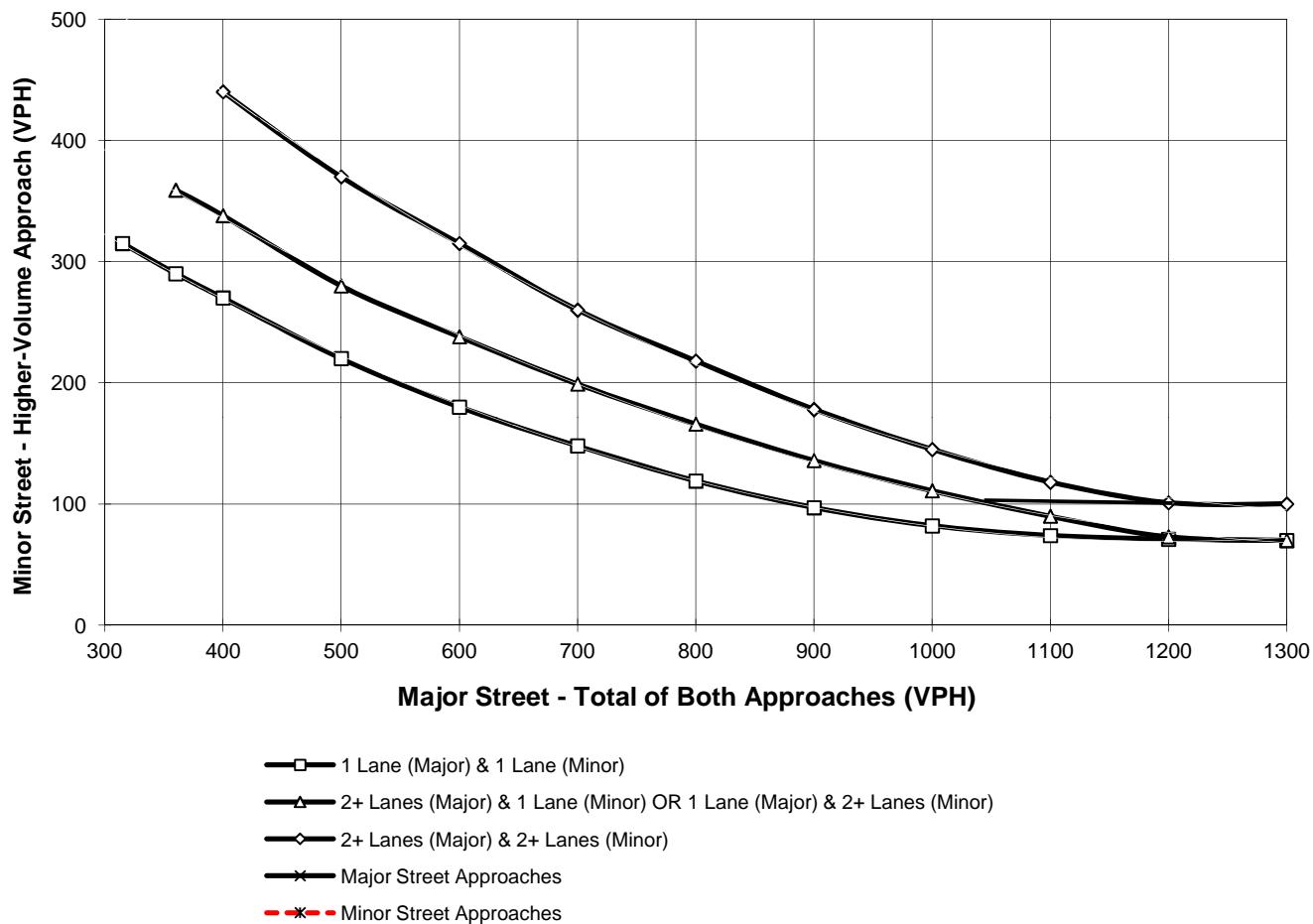
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **135**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **68**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

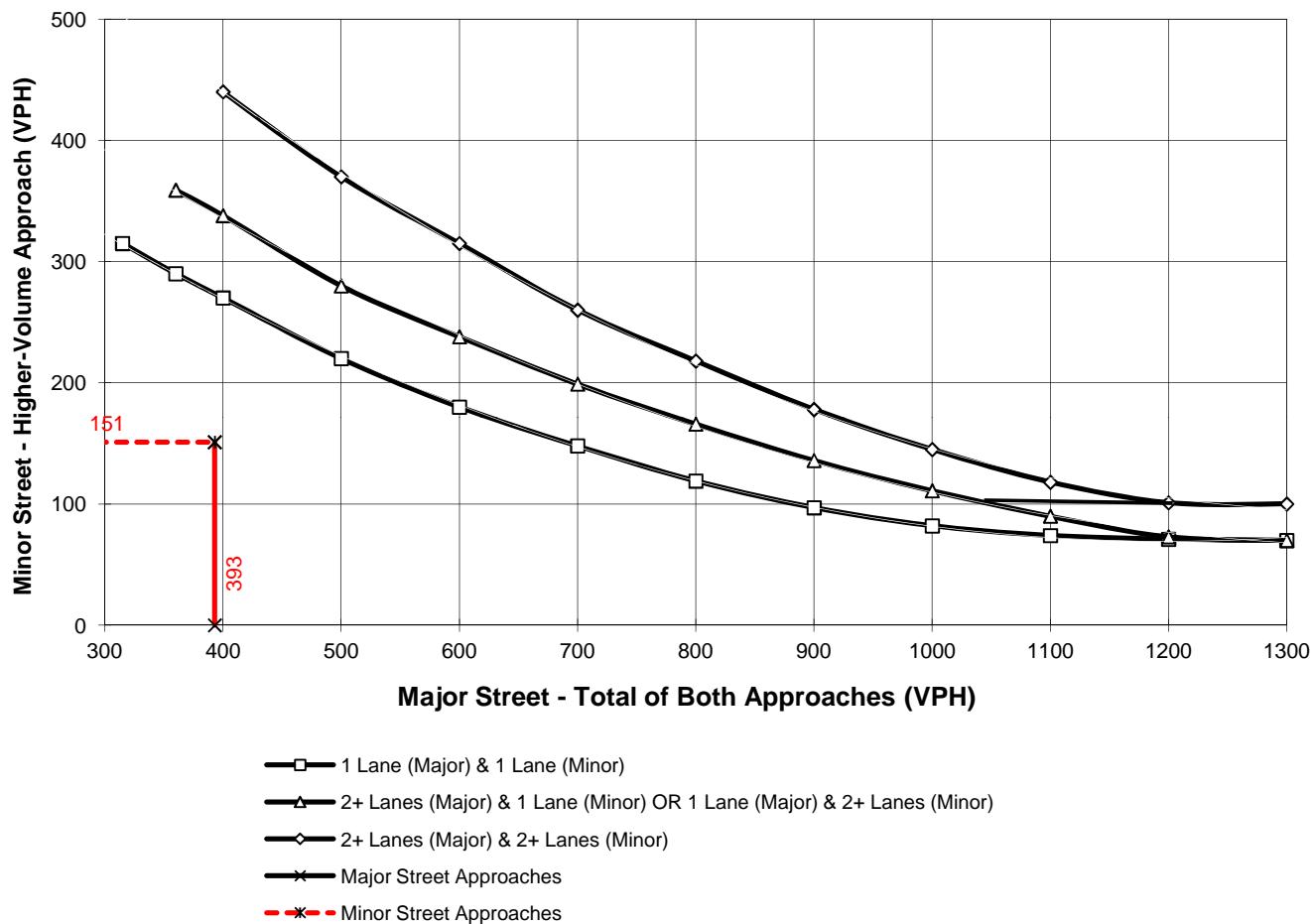
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **393**  
Number of Approach Lanes Major Street = **2**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **151**  
Number of Approach Lanes Minor Street = **2**

#### SIGNAL WARRANT NOT SATISFIED



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

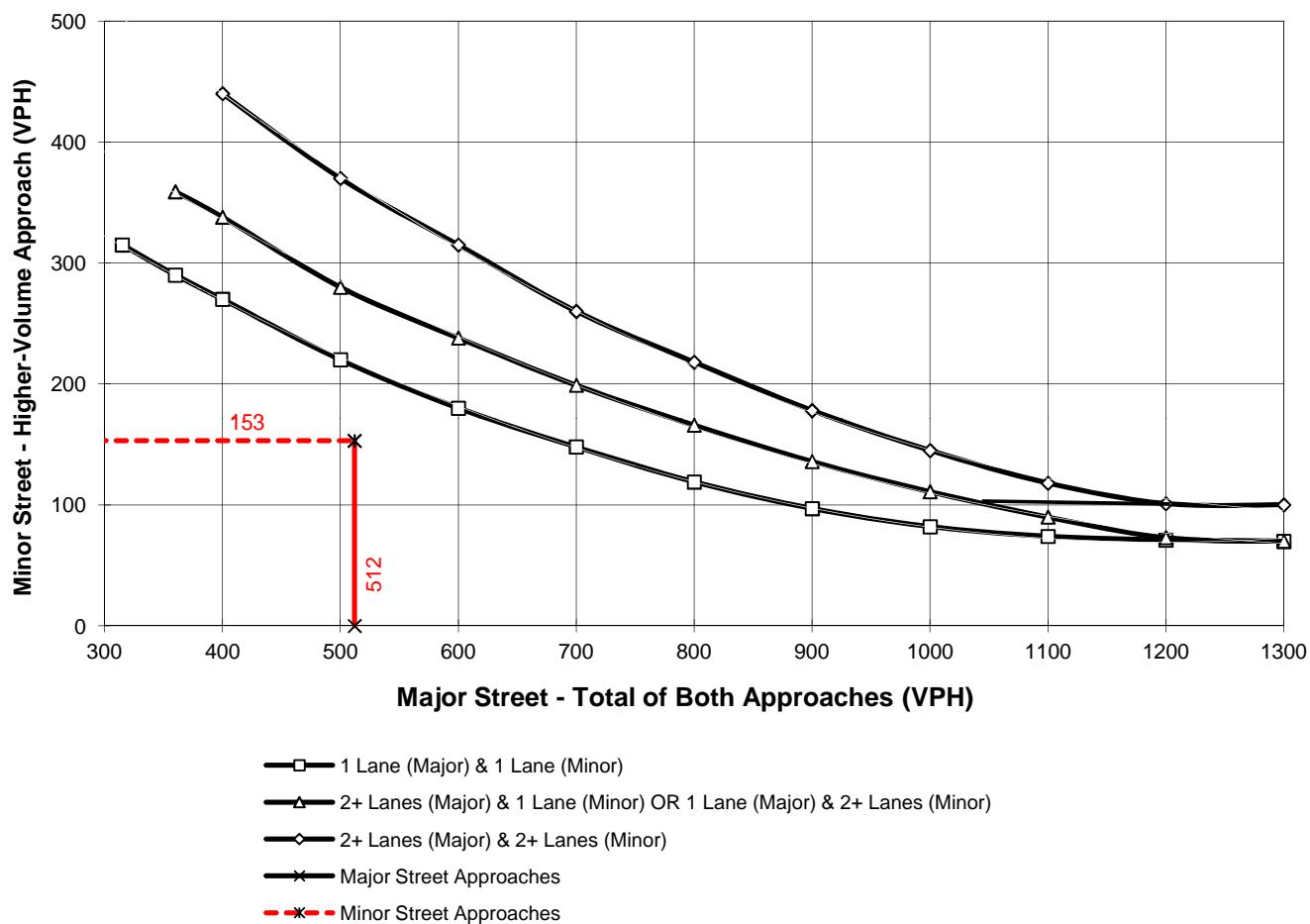
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **512**  
Number of Approach Lanes Major Street = **2**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **153**  
Number of Approach Lanes Minor Street = **2**

#### SIGNAL WARRANT NOT SATISFIED



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

**Figure 4C-103 (CA). Traffic Signal Warrants Worksheet**  
**(Average Traffic Estimate Form)**

DIST	CO	RTE	PM	CALC	TRAFFIC CONDITIONS	2016 With Project
Jurisdiction: <b>County of Riverside</b>				CALC <b>JC</b>	DATE <b>12/16/13</b>	
Major Street: <b>Monroe St. (NS)</b>				CHK	DATE	
Minor Street: <b>61st Avenue - TAZ 6 Dwy. (EW)</b>					Critical Approach Speed (Major)	<b>55 mph</b>
Minor Street Approach Lanes =	<b>1</b>	lane			Critical Approach Speed (Minor)	<b>35 mph</b>
Major Street Future ADT =	<b>1,843</b>	vpd			Minor Street Future ADT =	<b>584</b> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....				<input type="checkbox"/>	or	RURAL (R)
In built up area of isolated community of < 10,000 population .....				<input type="checkbox"/>		

**(Based on Estimated Average Daily Traffic - See Note)**

<u>URBAN</u>		<u>RURAL</u>		Minimum Requirements			
		<b>XX</b>		EADT			
<b>CONDITION A - Minimum Vehicular Volume</b>				Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied	<b>XX</b>		Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach							
Major Street		Minor Street					
1 <b>1,843</b>		1 <b>584</b>		8,000	5,600	2,400	1,680
2 +		1		9,600	6,720	2,400	1,680
2 +		2 +		9,600	6,720	3,200	2,240
1		2 +		8,000	5,600	3,200	2,240
<b>CONDITION B - Interruption of Continuous Traffic</b>				Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied	<b>XX</b>		Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach							
Major Street		Minor Street					
1 <b>1,843</b>		1 <b>584</b>		12,000	8,400	1,200	850
2 +		1		14,400	10,080	1,200	850
2 +		2 +		14,400	10,080	1,600	1,120
1		2 +		12,000	8,400	1,600	1,120
<b>Combination of CONDITIONS A + B</b>							
Satisfied	Not Satisfied	<b>XX</b>		2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% or more .....		A <b>33%</b>	B <b>22%</b>				

**Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.**

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

**Figure 4C-103 (CA). Traffic Signal Warrants Worksheet  
(Average Traffic Estimate Form)**

DIST	CO	RTE	PM	CALC	TRAFFIC CONDITIONS	2016 With Project
Jurisdiction: <b>County of Riverside</b>				<b>JC</b>	DATE	12/16/13
Major Street: <b>60th Avenue (EW)</b>				CHK	DATE	
Minor Street: <b>Driveway 1 (NS)</b>					Critical Approach Speed (Major)	55 mph
					Critical Approach Speed (Minor)	35 mph
Major Street Approach Lanes = <b>1</b>				lane	Minor Street Approach Lanes	<b>1</b> lane
Major Street Future ADT = <b>1,739</b>				vpd	Minor Street Future ADT =	<b>770</b> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... <input type="checkbox"/> or <b>RURAL (R)</b>						
In built up area of isolated community of < 10,000 population ..... <input type="checkbox"/>						

**(Based on Estimated Average Daily Traffic - See Note)**

<u>URBAN</u>	<u>RURAL</u> <b>XX</b>	Minimum Requirements			
		EADT		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<b>CONDITION A - Minimum Vehicular Volume</b>					
<u>Satisfied</u>	<u>Not Satisfied</u> <b>XX</b>	Vehicles Per Day on Major Street (Total of Both Approaches)		Urban	Rural
Number of lanes for moving traffic on each approach				Urban	Rural
<b>Major Street</b>	<b>Minor Street</b>			8,000	5,600
1 <b>1,739</b>	<b>1 770</b>			2,400	1,680
2 +	1			2,400	1,680
2 +	2 +			3,200	2,240
1	2 +			3,200	2,240
<b>CONDITION B - Interruption of Continuous Traffic</b>					
<u>Satisfied</u>	<u>Not Satisfied</u> <b>XX</b>	Vehicles Per Day on Major Street (Total of Both Approaches)		Urban	Rural
Number of lanes for moving traffic on each approach				Urban	Rural
<b>Major Street</b>	<b>Minor Street</b>			12,000	8,400
1 <b>1,739</b>	<b>1 770</b>			1,200	850
2 +	1			14,400	10,080
2 +	2 +			14,400	10,080
1	2 +			12,000	8,400
<b>Combination of CONDITIONS A + B</b>					
<u>Satisfied</u>	<u>Not Satisfied</u> <b>XX</b>			Urban	Rural
No one condition satisfied, but following conditions fulfilled 80% or more .....	<b>A</b> <b>31%</b>	<b>B</b> <b>21%</b>	2 CONDITIONS 80%	2 CONDITIONS 80%	

**Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable  
to count actual traffic volumes.**

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

**Figure 4C-103 (CA). Traffic Signal Warrants Worksheet  
(Average Traffic Estimate Form)**

DIST	CO	RTE	PM	CALC	TRAFFIC CONDITIONS	2016 With Project
Jurisdiction: <b>County of Riverside</b>				<b>JC</b>	DATE	12/16/13
Major Street: <b>61st Avenue (EW)</b>				CHK	DATE	
Minor Street: <b>Driveway 2 (NS)</b>					Critical Approach Speed (Major)	40 mph
					Critical Approach Speed (Minor)	35 mph
Major Street Approach Lanes = <b>1</b>				lane	Minor Street Approach Lanes	<b>1</b> lane
Major Street Future ADT = <b>1,189</b>				vpd	Minor Street Future ADT =	<b>329</b> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... <input type="text"/> or <b>RURAL (R)</b>						
In built up area of isolated community of < 10,000 population ..... <input type="text"/>						

**(Based on Estimated Average Daily Traffic - See Note)**

<b>URBAN</b> <b>XX</b>	<b>RURAL</b>	Minimum Requirements				
		EADT		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)		
<b>CONDITION A - Minimum Vehicular Volume</b>						
<u>Satisfied</u>	<u>Not Satisfied</u>	<b>XX</b>				
Number of lanes for moving traffic on each approach						
<b>Major Street</b>	<b>Minor Street</b>	<b>Urban</b>	<b>Rural</b>	<b>Urban</b>	<b>Rural</b>	
1 <b>1,189</b>	<b>1 329</b>	8,000	5,600	2,400	1,680	
2 +	1	9,600	6,720	2,400	1,680	
2 +	2 +	9,600	6,720	3,200	2,240	
1	2 +	8,000	5,600	3,200	2,240	
<b>CONDITION B - Interruption of Continuous Traffic</b>						
<u>Satisfied</u>	<u>Not Satisfied</u>	<b>XX</b>				
Number of lanes for moving traffic on each approach						
<b>Major Street</b>	<b>Minor Street</b>	<b>Urban</b>	<b>Rural</b>	<b>Urban</b>	<b>Rural</b>	
1 <b>1,189</b>	<b>1 329</b>	12,000	8,400	1,200	850	
2 +	1	14,400	10,080	1,200	850	
2 +	2 +	14,400	10,080	1,600	1,120	
1	2 +	12,000	8,400	1,600	1,120	
<b>Combination of CONDITIONS A + B</b>						
<u>Satisfied</u>	<u>Not Satisfied</u>	<b>XX</b>				
No one condition satisfied, but following conditions fulfilled 80% or more .....		<b>A</b>	<b>B</b>	2 CONDITIONS 80%	2 CONDITIONS 80%	
		<b>14%</b>	<b>10%</b>			

**Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.**

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

## **Long Range (2035) Without Project Conditions**

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

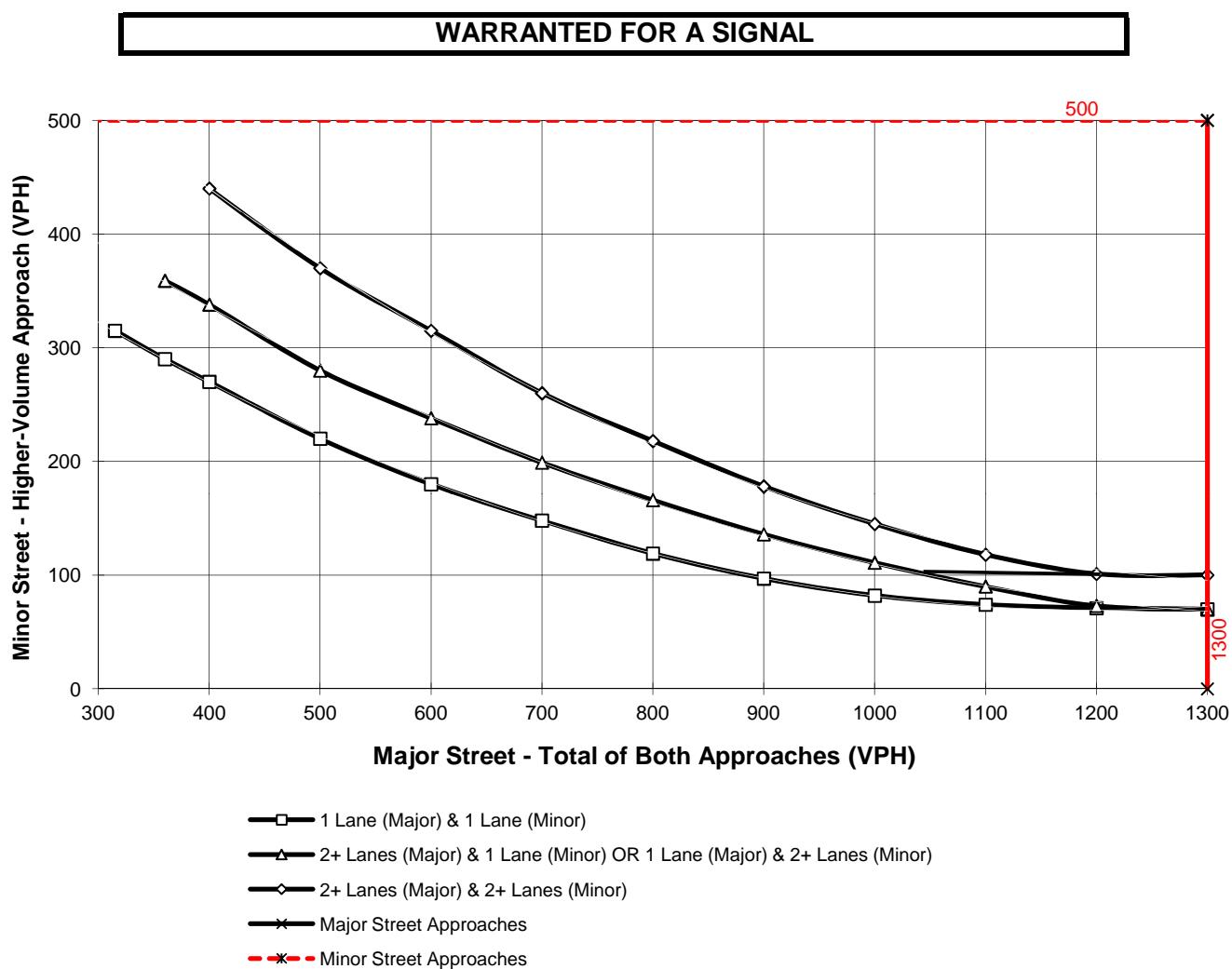
Traffic Conditions = **2035NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **1,830**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **787**  
Number of Approach Lanes Minor Street = **1**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

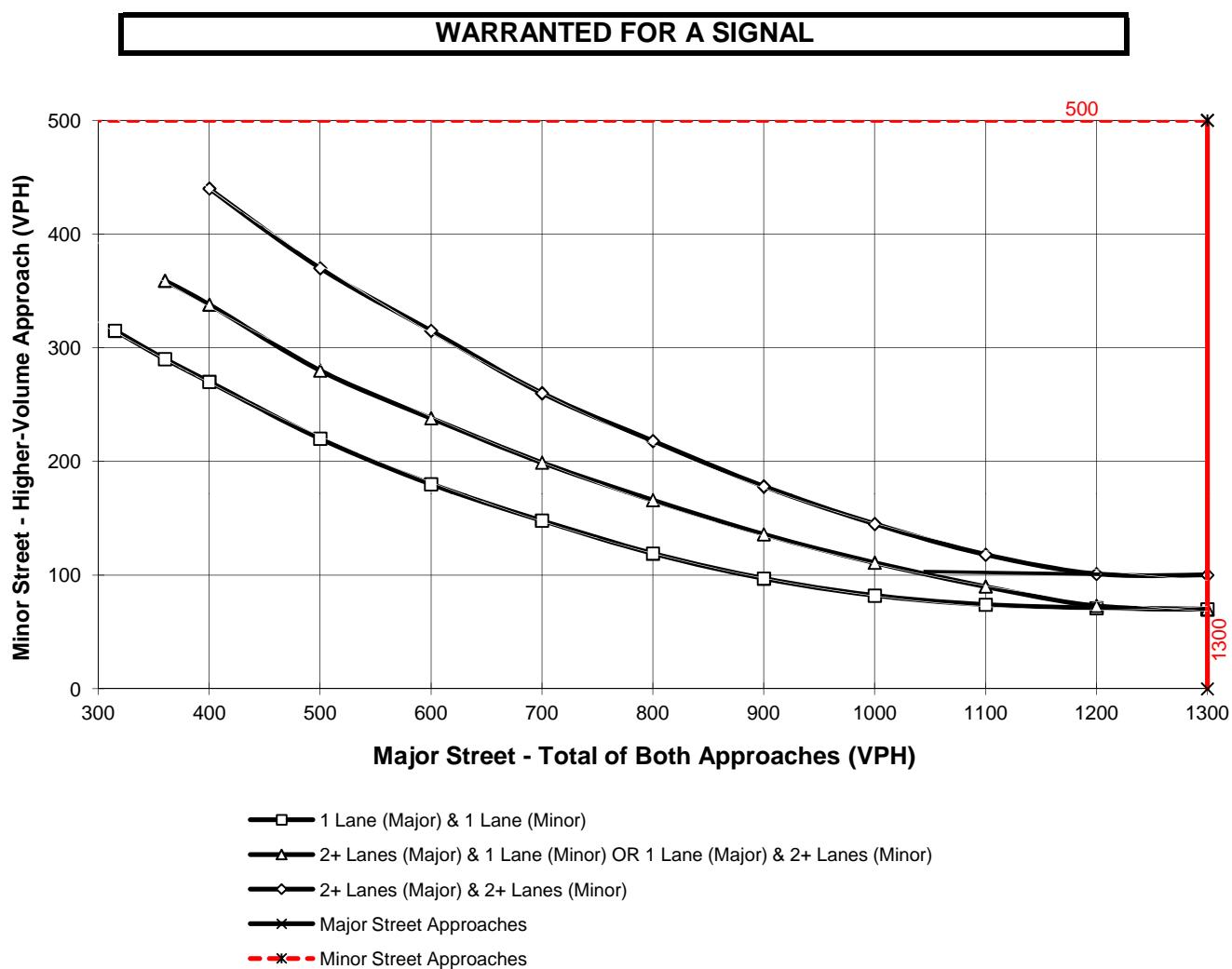
Traffic Conditions = **2035NP Conditions - Weekday PM Peak Hour**

Major Street Name = **60th Av.**

Total of Both Approaches (VPH) = **2,353**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Madison Street**

High Volume Approach (VPH) = **1,233**  
Number of Approach Lanes Minor Street = **1**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

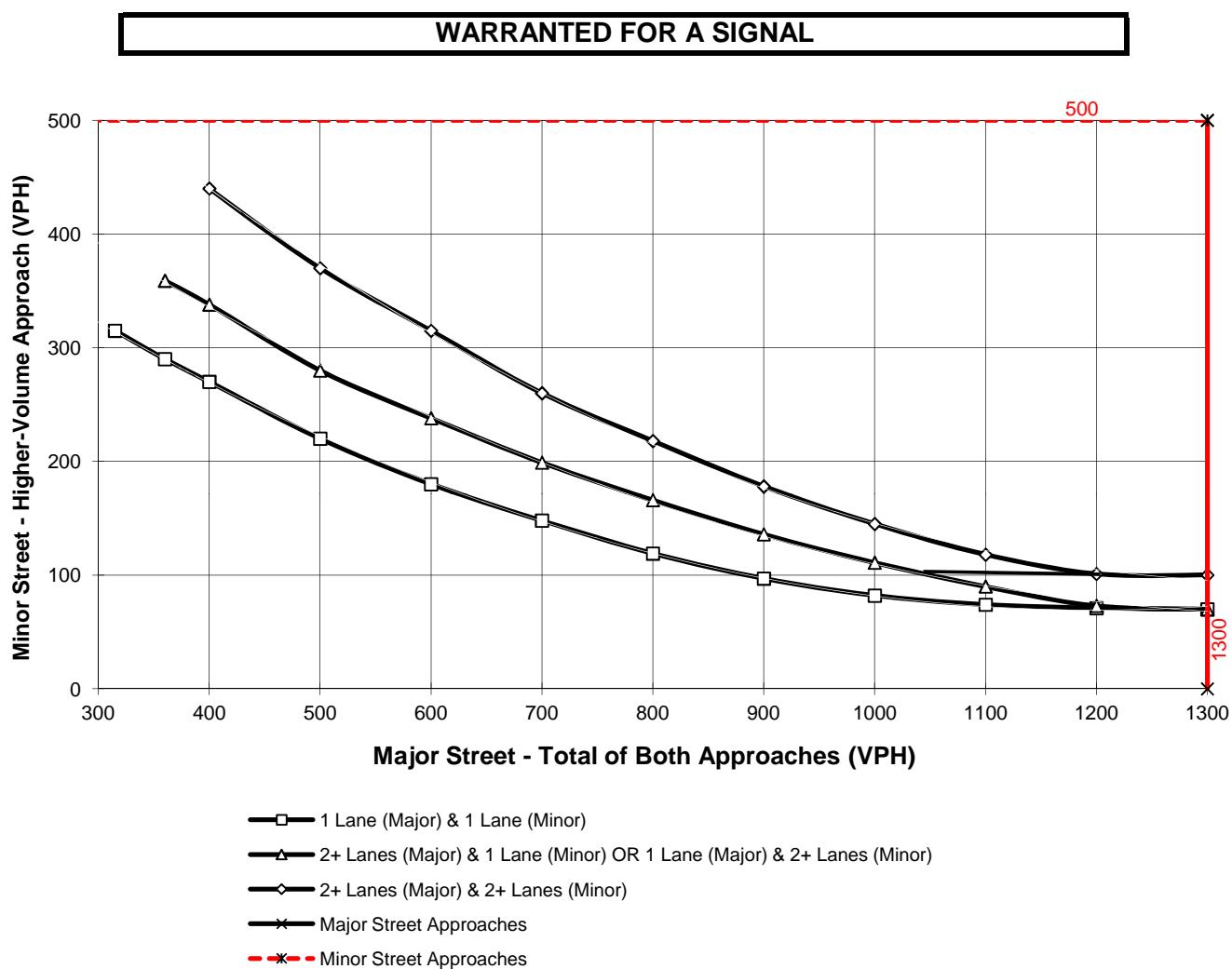
Traffic Conditions = **2035NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **1,953**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **571**  
Number of Approach Lanes Minor Street = **1**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

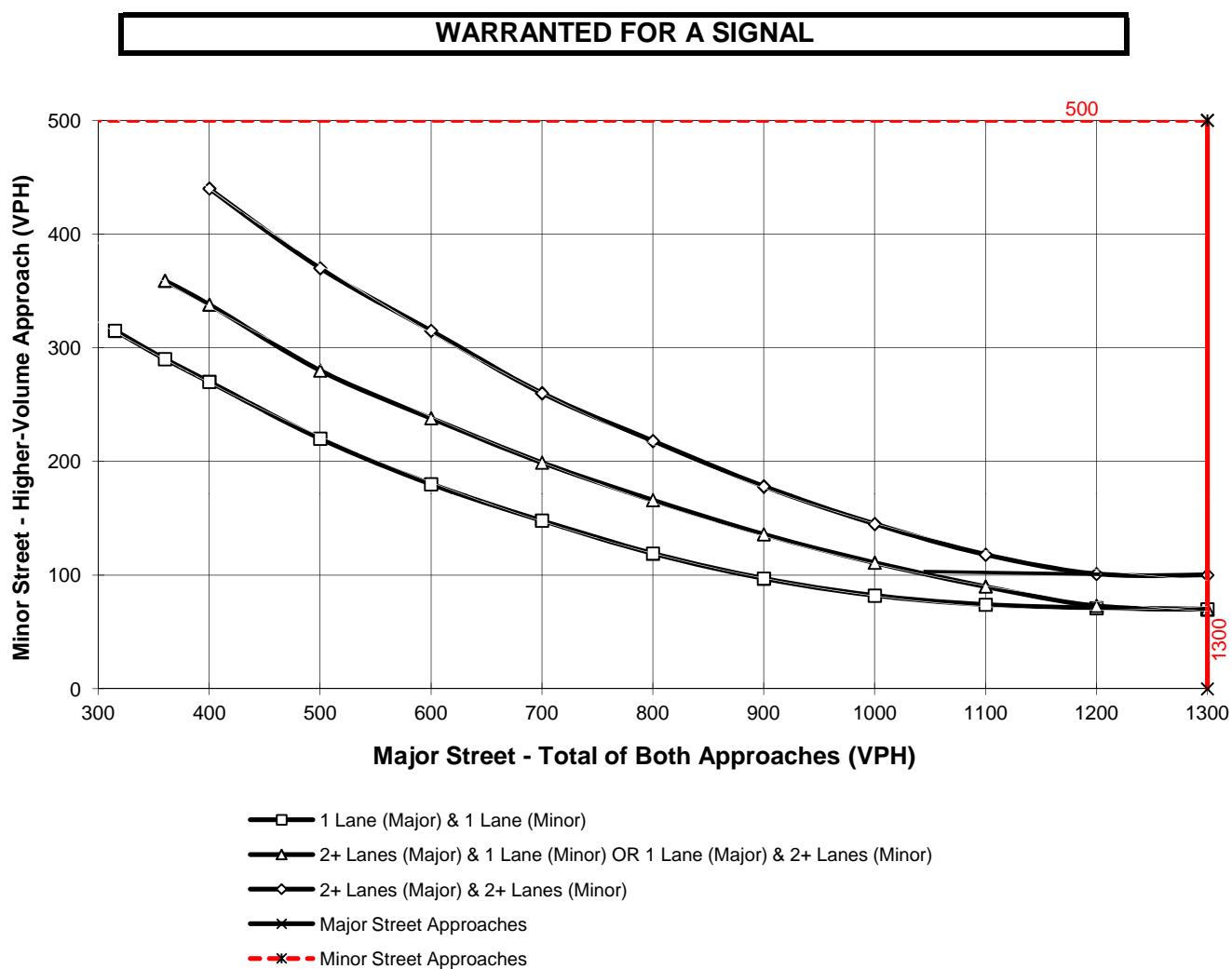
Traffic Conditions = **2035NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **2,549**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **1,062**  
Number of Approach Lanes Minor Street = **1**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

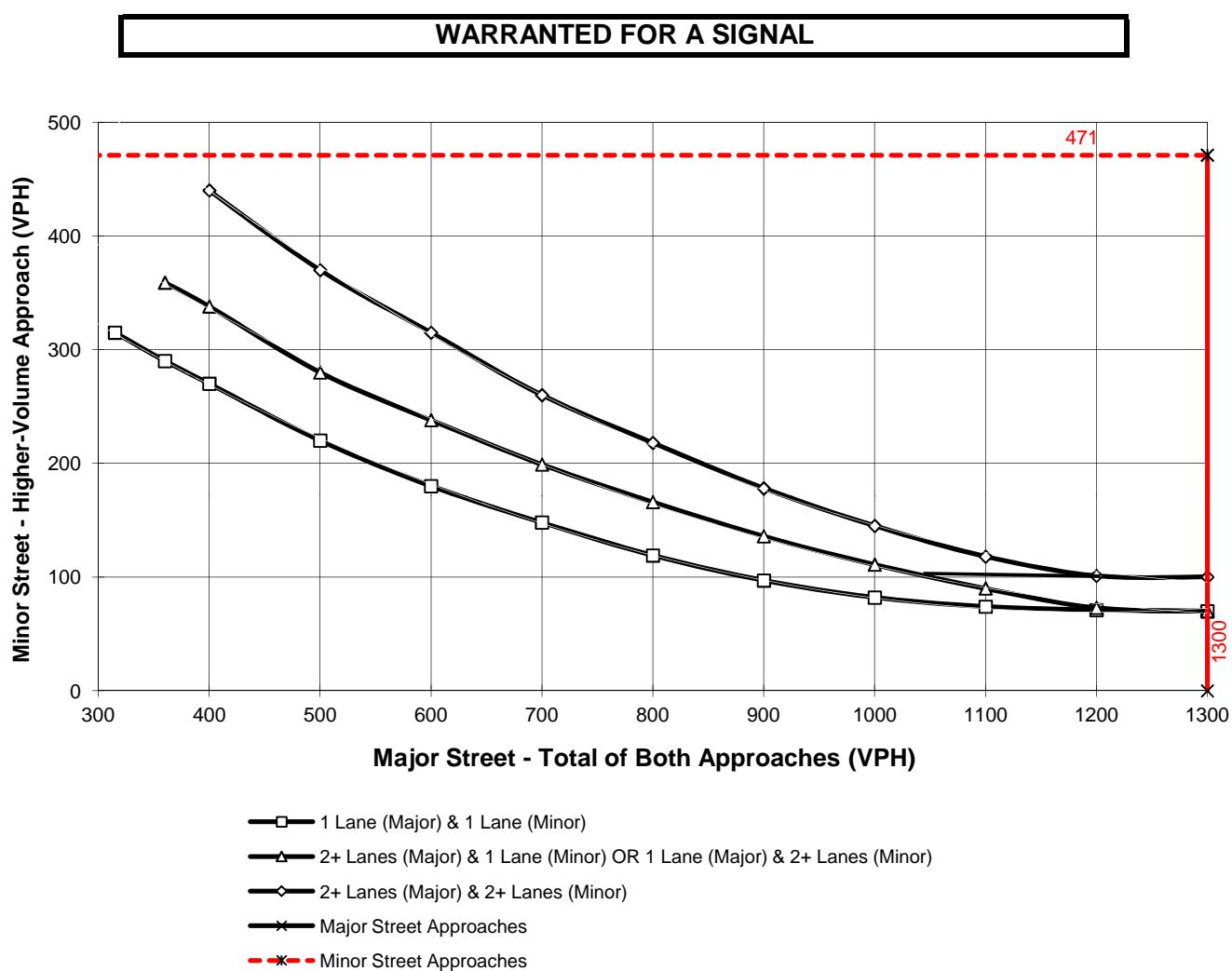
Traffic Conditions = **2035NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **1,436**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **471**  
Number of Approach Lanes Minor Street = **1**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2035NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **2,257**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **761**  
Number of Approach Lanes Minor Street = **1**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2035NP Conditions - Weekday AM Peak Hour**

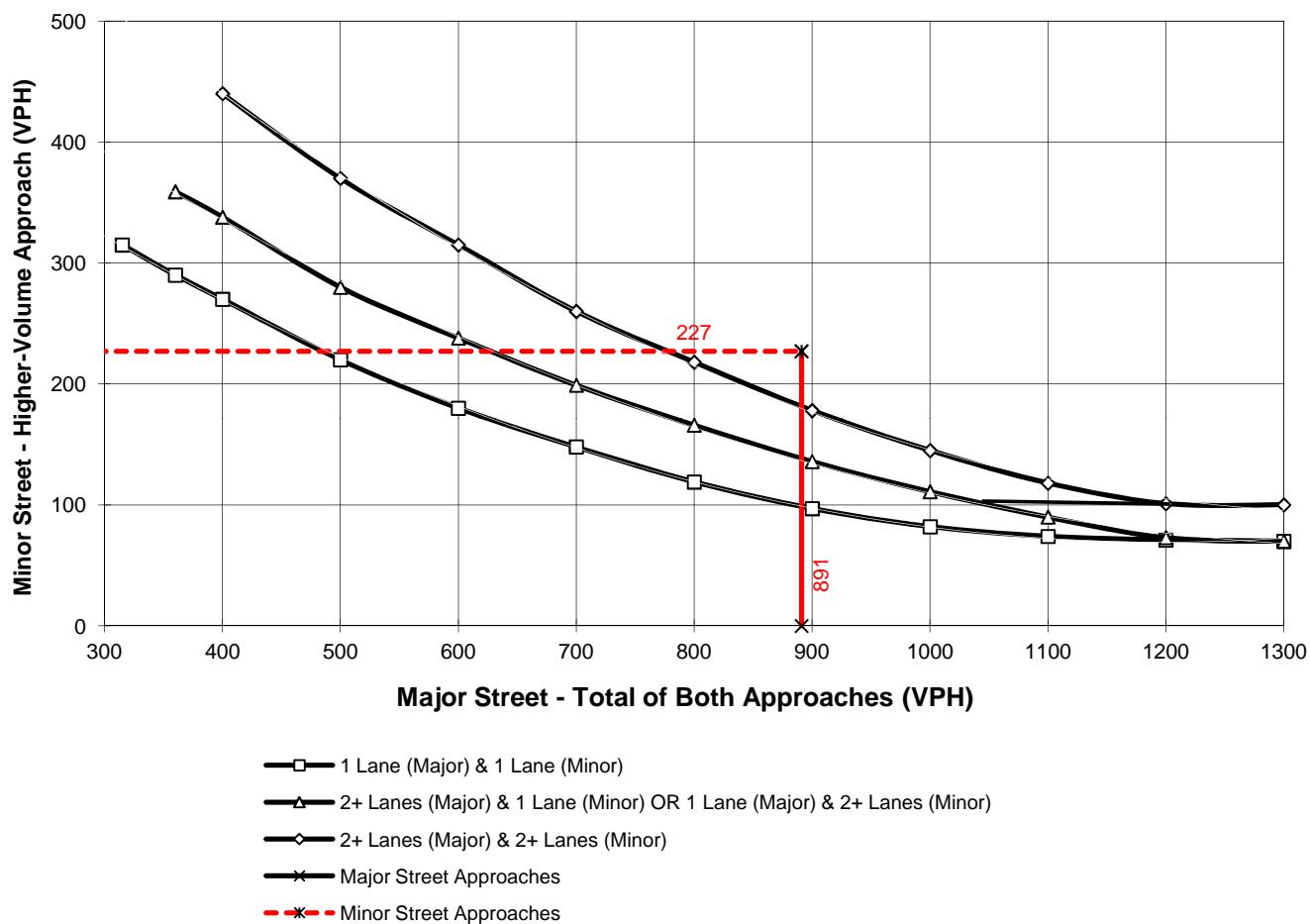
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **891**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **227**  
Number of Approach Lanes Minor Street = **1**

**WARRANTED FOR A SIGNAL**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2035NP Conditions - Weekday PM Peak Hour**

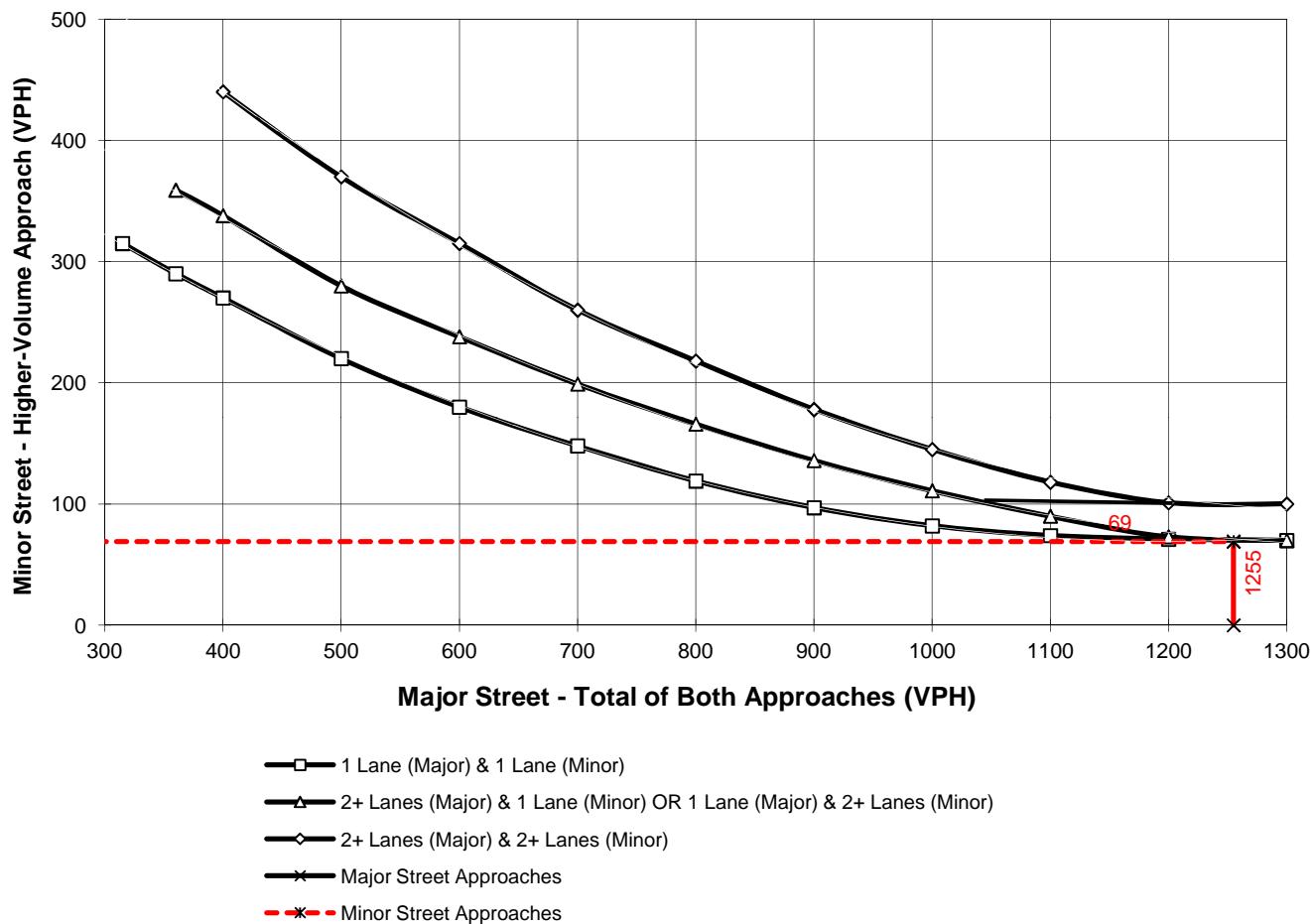
Major Street Name = **Monroe Street**

Total of Both Approaches (VPH) = **1,255**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **69**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

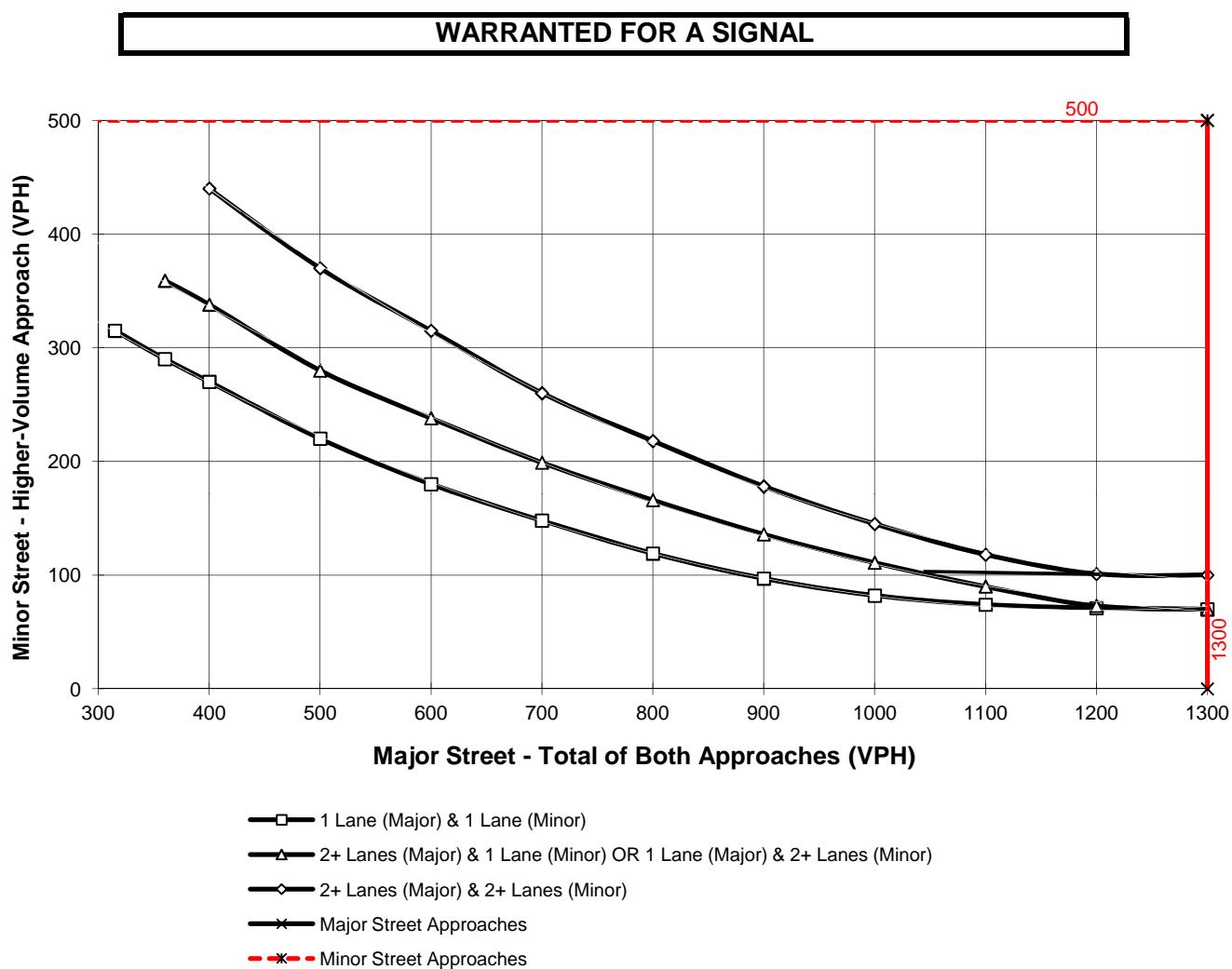
Traffic Conditions = **2035NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **1,492**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **60th Av.**

High Volume Approach (VPH) = **779**  
Number of Approach Lanes Minor Street = **1**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

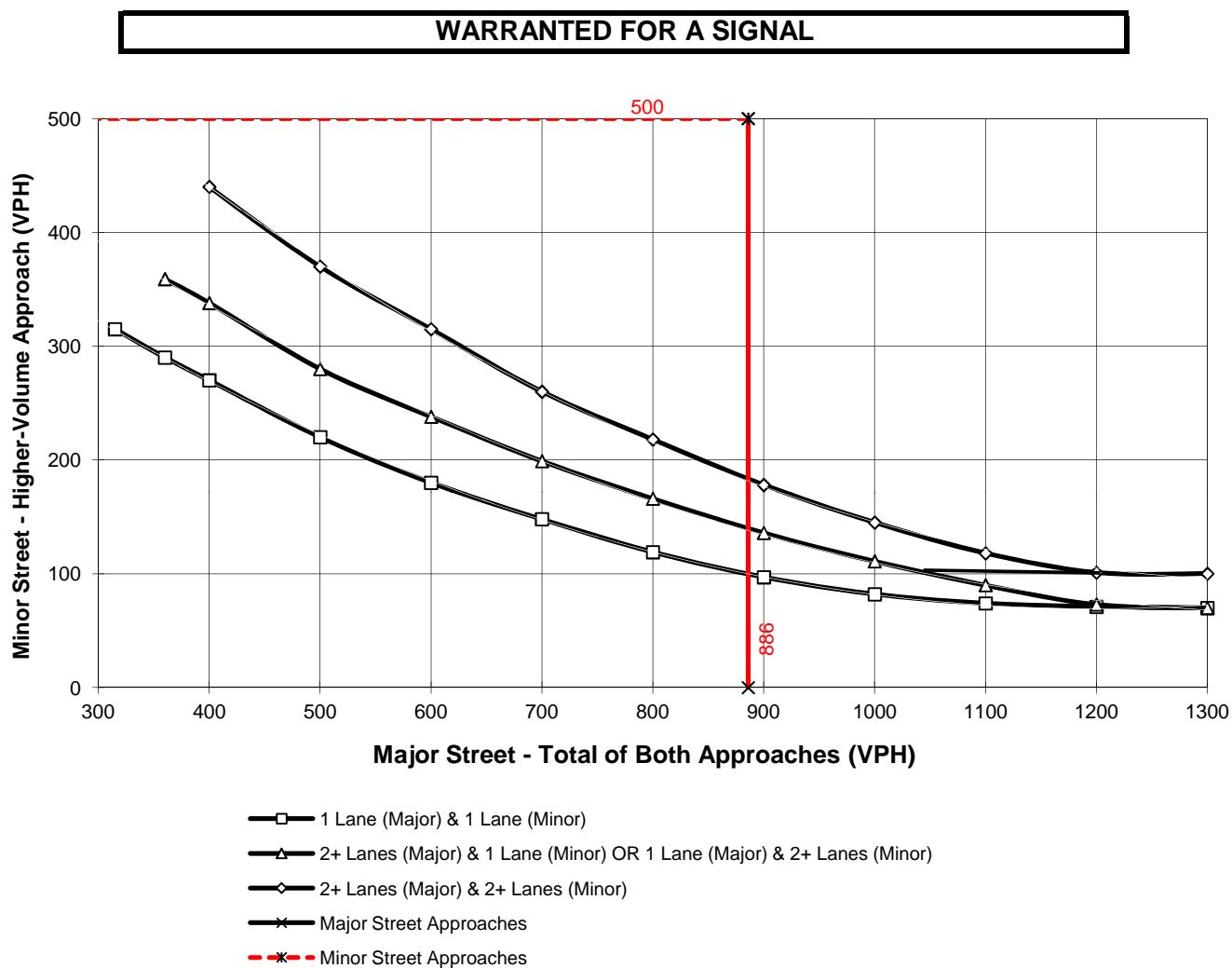
Traffic Conditions = **2035NP Conditions - Weekday PM Peak Hour**

Major Street Name = **60th Av.**

Total of Both Approaches (VPH) = **886**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Jackson Street**

High Volume Approach (VPH) = **625**  
Number of Approach Lanes Minor Street = **1**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2035NP Conditions - Weekday AM Peak Hour**

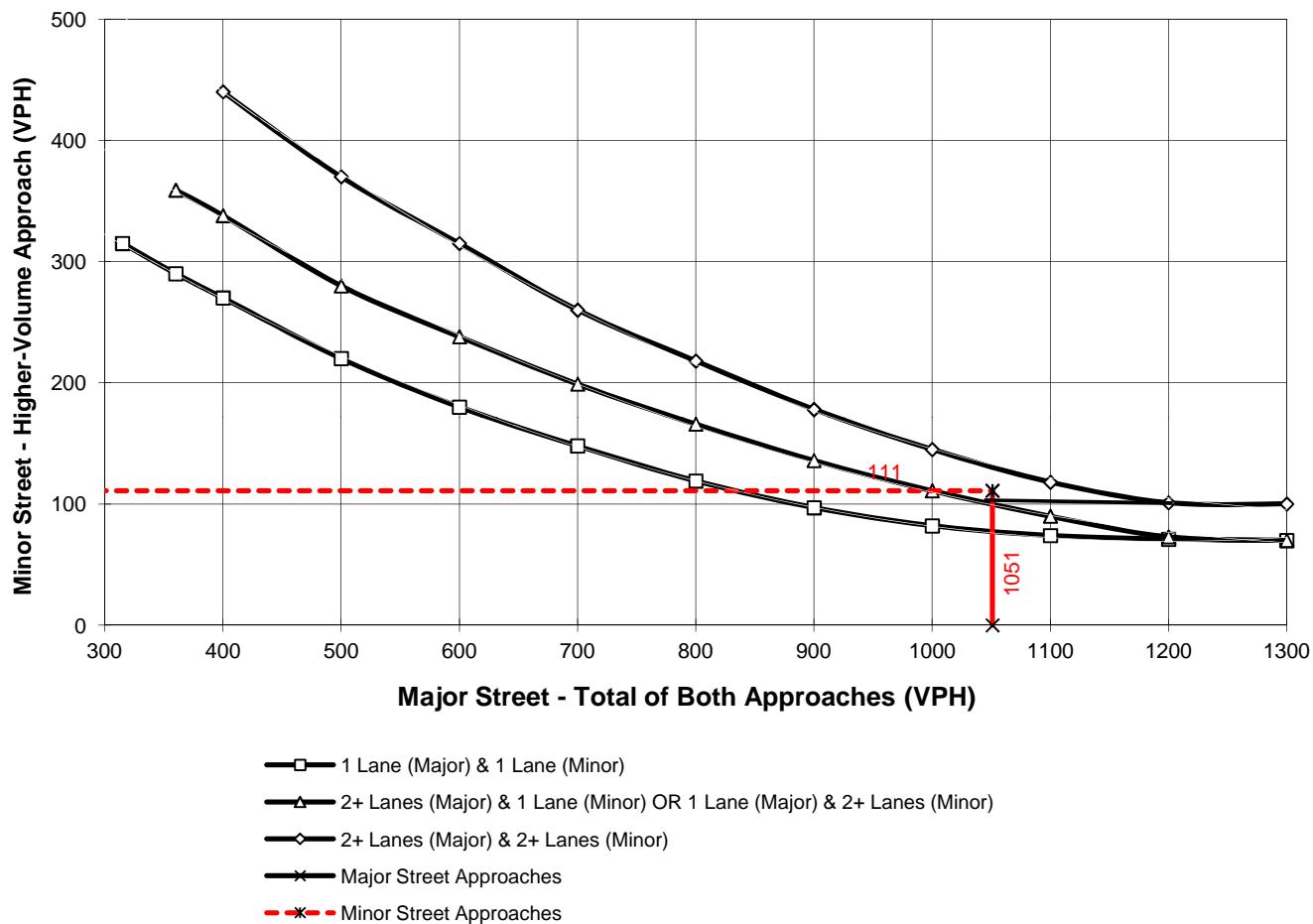
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **1,051**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **111**  
Number of Approach Lanes Minor Street = **1**

#### WARRANTED FOR A SIGNAL



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2035NP Conditions - Weekday PM Peak Hour**

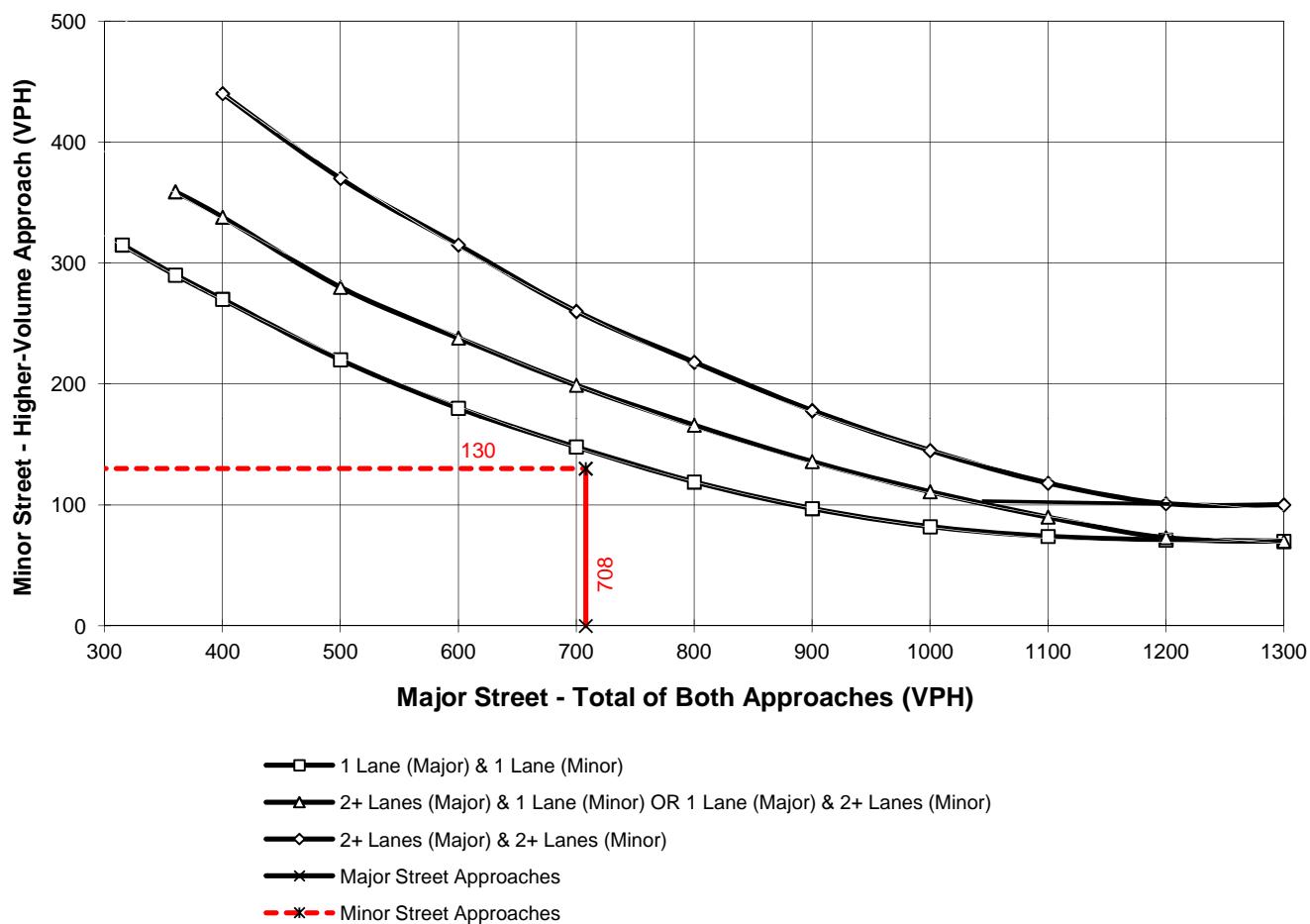
Major Street Name = **Jackson Street**

Total of Both Approaches (VPH) = **708**  
Number of Approach Lanes Major Street = **1**

Minor Street Name = **61st Avenue**

High Volume Approach (VPH) = **130**  
Number of Approach Lanes Minor Street = **1**

**SIGNAL WARRANT NOT SATISFIED**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2035NP Conditions - Weekday AM Peak Hour**

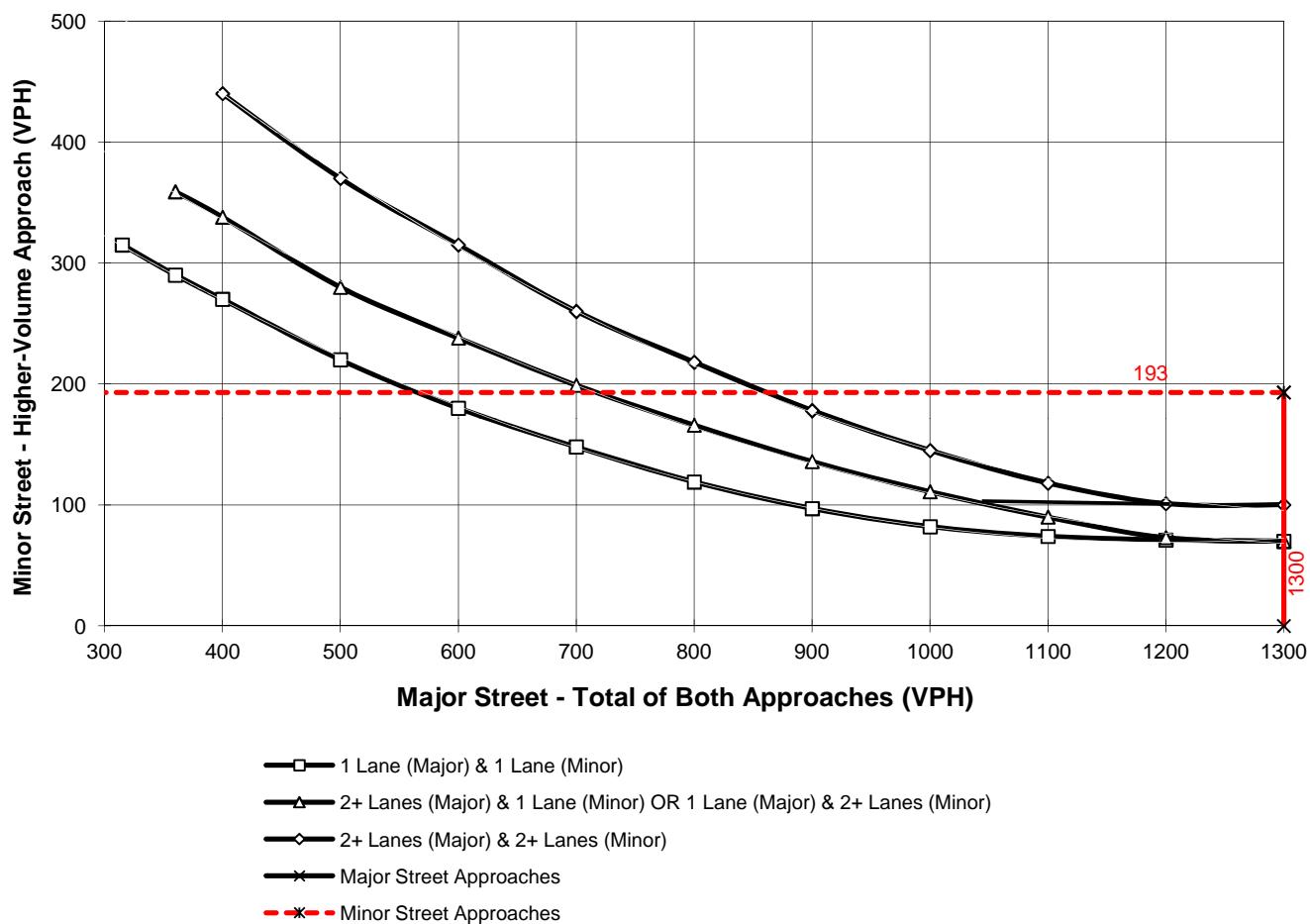
Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **2,540**  
Number of Approach Lanes Major Street = **2**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **193**  
Number of Approach Lanes Minor Street = **2**

#### WARRANTED FOR A SIGNAL



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

### Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

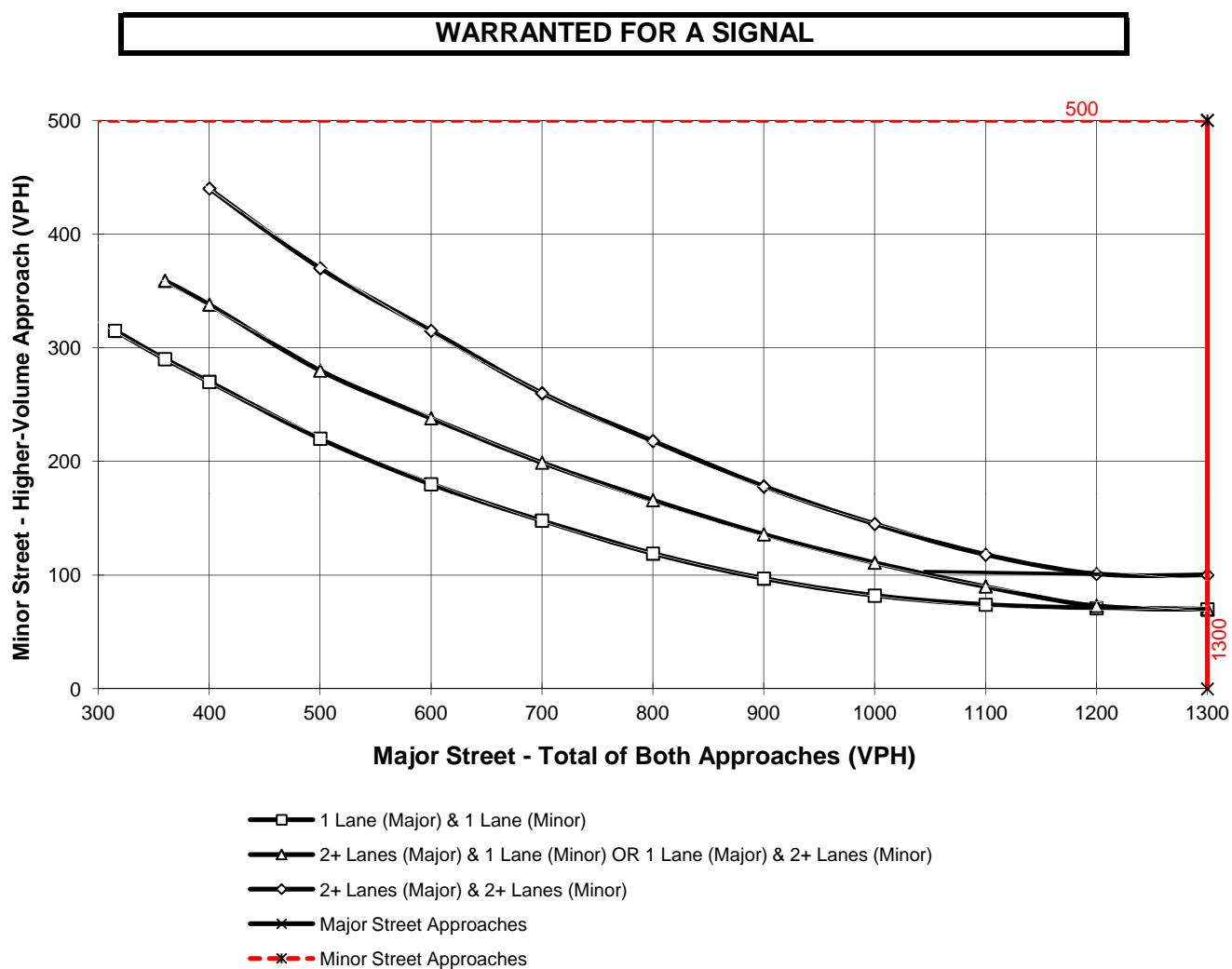
Traffic Conditions = **2035NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Madison Street**

Total of Both Approaches (VPH) = **3,078**  
Number of Approach Lanes Major Street = **2**

Minor Street Name = **58th Avenue**

High Volume Approach (VPH) = **589**  
Number of Approach Lanes Minor Street = **2**



\*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes  
and 75 vph applies as the lower threshold for a minor-street approach with one lane

## **Long Range (2035) With Project Conditions**

**Figure 4C-103 (CA). Traffic Signal Warrants Worksheet  
(Average Traffic Estimate Form)**

DIST	CO	RTE	PM	CALC	TRAFFIC CONDITIONS	2035WP
Jurisdiction: <b>County of Riverside</b>				<b>JC</b>	DATE	12/16/13
Major Street: <b>Monroe St. (NS)</b>				CHK	DATE	
Minor Street: <b>61st Avenue - TAZ 6 Dwy. (EW)</b>					Critical Approach Speed (Major)	55 mph
Major Street Approach Lanes =	1	lane			Critical Approach Speed (Minor)	35 mph
Major Street Future ADT =	<b>22,500</b>	vpd			Minor Street Future ADT =	<b>2,164</b> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....				<input type="checkbox"/>	or	RURAL (R)
In built up area of isolated community of < 10,000 population .....				<input type="checkbox"/>		

**(Based on Estimated Average Daily Traffic - See Note)**

<u>URBAN</u>	<u>RURAL</u> <b>XX</b>	Minimum Requirements			
		EADT		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<b>CONDITION A - Minimum Vehicular Volume</b>					
<u>Satisfied</u>	<u>Not Satisfied</u>	Vehicles Per Day on Major Street (Total of Both Approaches)		Urban	Rural
<b>XX</b>		8,000	5,600 *	2,400	1,680 *
Number of lanes for moving traffic on each approach		9,600	6,720	2,400	1,680
<u>Major Street</u>	<u>Minor Street</u>	9,600	6,720	3,200	2,240
1 <b>22,500</b>	1 <b>2,164</b>	8,000	5,600	3,200	2,240
2 +	1				
2 +	2 +				
1	2 +				
<b>CONDITION B - Interruption of Continuous Traffic</b>					
<u>Satisfied</u>	<u>Not Satisfied</u>	Vehicles Per Day on Major Street (Total of Both Approaches)		Urban	Rural
<b>XX</b>		Vehicles Per Day on Major Street (Total of Both Approaches)		Urban	Rural
Number of lanes for moving traffic on each approach		12,000	8,400 *	1,200	850 *
<u>Major Street</u>	<u>Minor Street</u>	14,400	10,080	1,200	850
1 <b>22,500</b>	1 <b>2,164</b>	14,400	10,080	1,600	1,120
2 +	1	12,000	8,400	1,600	1,120
2 +	2 +				
1	2 +				
<b>Combination of CONDITIONS A + B</b>					
<u>Satisfied</u>	<u>Not Satisfied</u>				
<b>XX</b>		2 CONDITIONS		2 CONDITIONS	
No one condition satisfied, but following conditions fulfilled 80% or more .....	<u>A</u> <b>100%</b>	80%		80%	
	<u>B</u> <b>100%</b>				

**Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable  
to count actual traffic volumes.**

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

**Figure 4C-103 (CA). Traffic Signal Warrants Worksheet  
(Average Traffic Estimate Form)**

DIST	CO	RTE	PM	CALC	TRAFFIC CONDITIONS	2035WP
Jurisdiction: <b>County of Riverside</b>				<b>JC</b>	DATE	12/16/13
Major Street: <b>60th Avenue (EW)</b>				CHK	DATE	
Minor Street: <b>Driveway 1 (NS)</b>					Critical Approach Speed (Major)	55 mph
					Critical Approach Speed (Minor)	35 mph
Major Street Approach Lanes = <b>1</b> lane				Minor Street Approach Lanes <b>1</b> lane		
Major Street Future ADT = <b>20,720</b> vpd				Minor Street Future ADT = <b>770</b> vpd		
Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... <input type="checkbox"/> or <b>RURAL (R)</b>						
In built up area of isolated community of < 10,000 population ..... <input type="checkbox"/>						

**(Based on Estimated Average Daily Traffic - See Note)**

<u>URBAN</u>	<u>RURAL</u> <b>XX</b>	Minimum Requirements			
		EADT		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<b>CONDITION A - Minimum Vehicular Volume</b>	<b>Satisfied</b>	Vehicles Per Day on Major Street (Total of Both Approaches)			
	<b>Not Satisfied</b>				
Number of lanes for moving traffic on each approach					
<b>Major Street</b>	<b>Minor Street</b>	<b>Urban</b>	<b>Rural</b>	<b>Urban</b>	<b>Rural</b>
1 <b>20,720</b>	<b>1 770</b>	8,000	5,600 *	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
<b>CONDITION B - Interruption of Continuous Traffic</b>	<b>Satisfied</b>	Vehicles Per Day on Major Street (Total of Both Approaches)			
	<b>Not Satisfied</b>				
<b>XX</b>					
Number of lanes for moving traffic on each approach					
<b>Major Street</b>	<b>Minor Street</b>	<b>Urban</b>	<b>Rural</b>	<b>Urban</b>	<b>Rural</b>
1 <b>20,720</b>	<b>1 770</b>	12,000	8,400 *	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
<b>Combination of CONDITIONS A + B</b>	<b>Satisfied</b>				
	<b>Not Satisfied</b>				
<b>XX</b>					
No one condition satisfied, but following conditions fulfilled 80% or more .....	<b>A</b> <b>46%</b>	<b>B</b> <b>91%</b>	2 CONDITIONS 80%	2 CONDITIONS 80%	

**Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.**

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

**Figure 4C-103 (CA). Traffic Signal Warrants Worksheet**  
**(Average Traffic Estimate Form)**

DIST	CO	RTE	PM	CALC	TRAFFIC CONDITIONS	2035WP	
Jurisdiction: <b>County of Riverside</b>				CALC <b>JC</b>	DATE <b>12/16/13</b>		
Major Street: <b>61st Avenue (EW)</b>				CHK	DATE		
Minor Street: <b>Driveway 2 (NS)</b>					Critical Approach Speed (Major)	<b>40 mph</b>	
Major Street Approach Lanes =	<b>1</b>	lane	Minor Street Approach Lanes	<b>1</b>	lane	Critical Approach Speed (Minor)	<b>35 mph</b>
Major Street Future ADT =	<b>4,329</b>	vpd	Minor Street Future ADT =	<b>329</b>	vpd		
Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....				<input type="checkbox"/>			
				or	<b>RURAL (R)</b>		
In built up area of isolated community of < 10,000 population .....				<input type="checkbox"/>			

**(Based on Estimated Average Daily Traffic - See Note)**

<u>URBAN</u> <b>XX</b>		<u>RURAL</u> <b>XX</b>		Minimum Requirements			
				EADT		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<b>CONDITION A - Minimum Vehicular Volume</b>				Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>		<u>Not Satisfied</u>	<b>XX</b>	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				8,000	5,600	2,400	1,680
Major Street		Minor Street		9,600	6,720	2,400	1,680
1 <b>4,329</b>		1 <b>329</b>		9,600	6,720	3,200	2,240
2 +		1		8,000	5,600	3,200	2,240
2 +		2 +					
1		2 +					
<b>CONDITION B - Interruption of Continuous Traffic</b>				Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>		<u>Not Satisfied</u>	<b>XX</b>	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				12,000	8,400	1,200	850
Major Street		Minor Street		14,400	10,080	1,200	850
1 <b>4,329</b>		1 <b>329</b>		14,400	10,080	1,600	1,120
2 +		1		12,000	8,400	1,600	1,120
2 +		2 +					
1		2 +					
<b>Combination of CONDITIONS A + B</b>							
<u>Satisfied</u>		<u>Not Satisfied</u>	<b>XX</b>	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% or more .....		<b>A</b>	<b>B</b>				
		<b>14%</b>	<b>27%</b>				

**Note:** To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

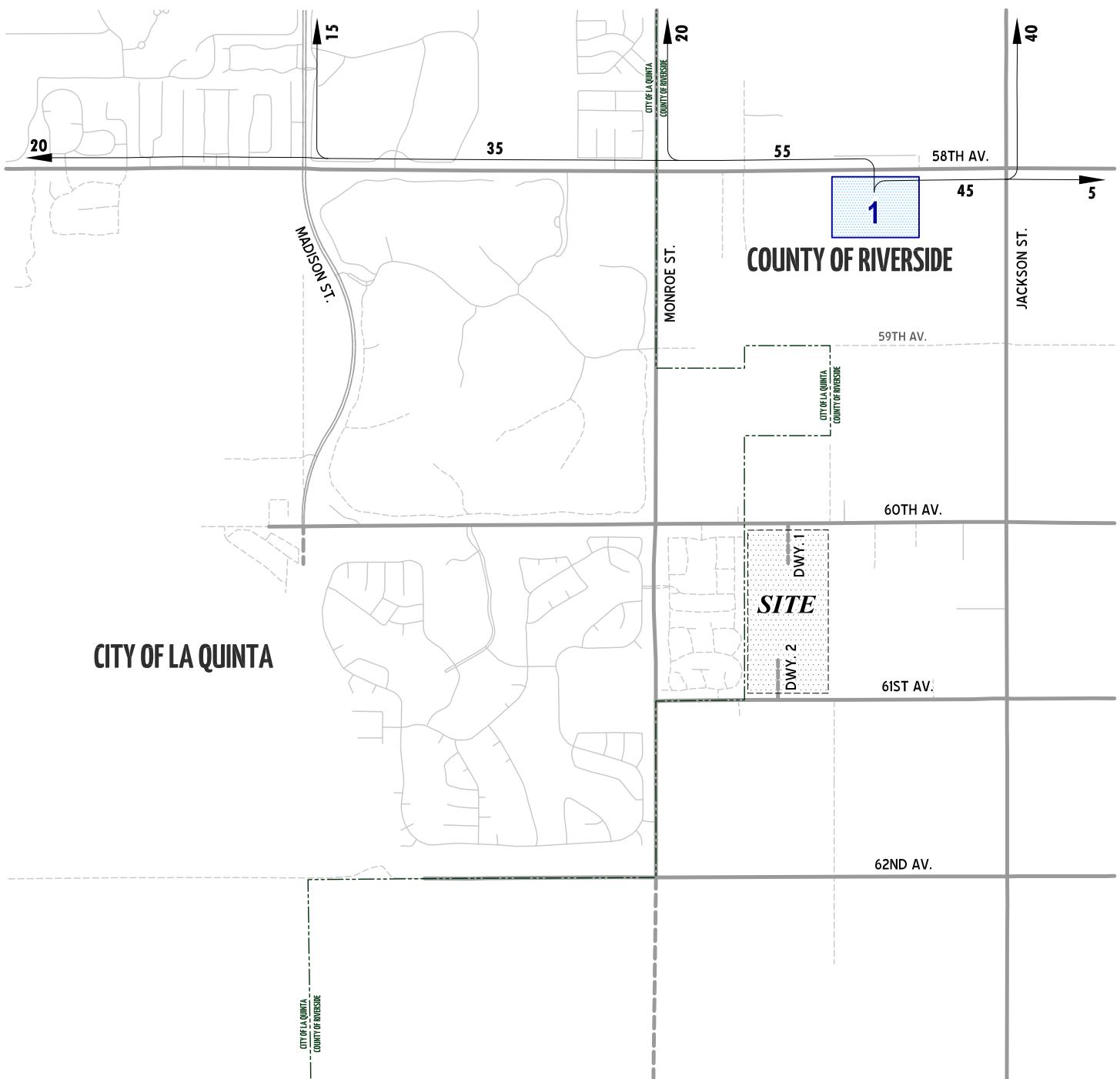
## **APPENDIX 4.1**

Cumulative Development Trip Distribution Patterns



# TAZ 1 (TR 34302)

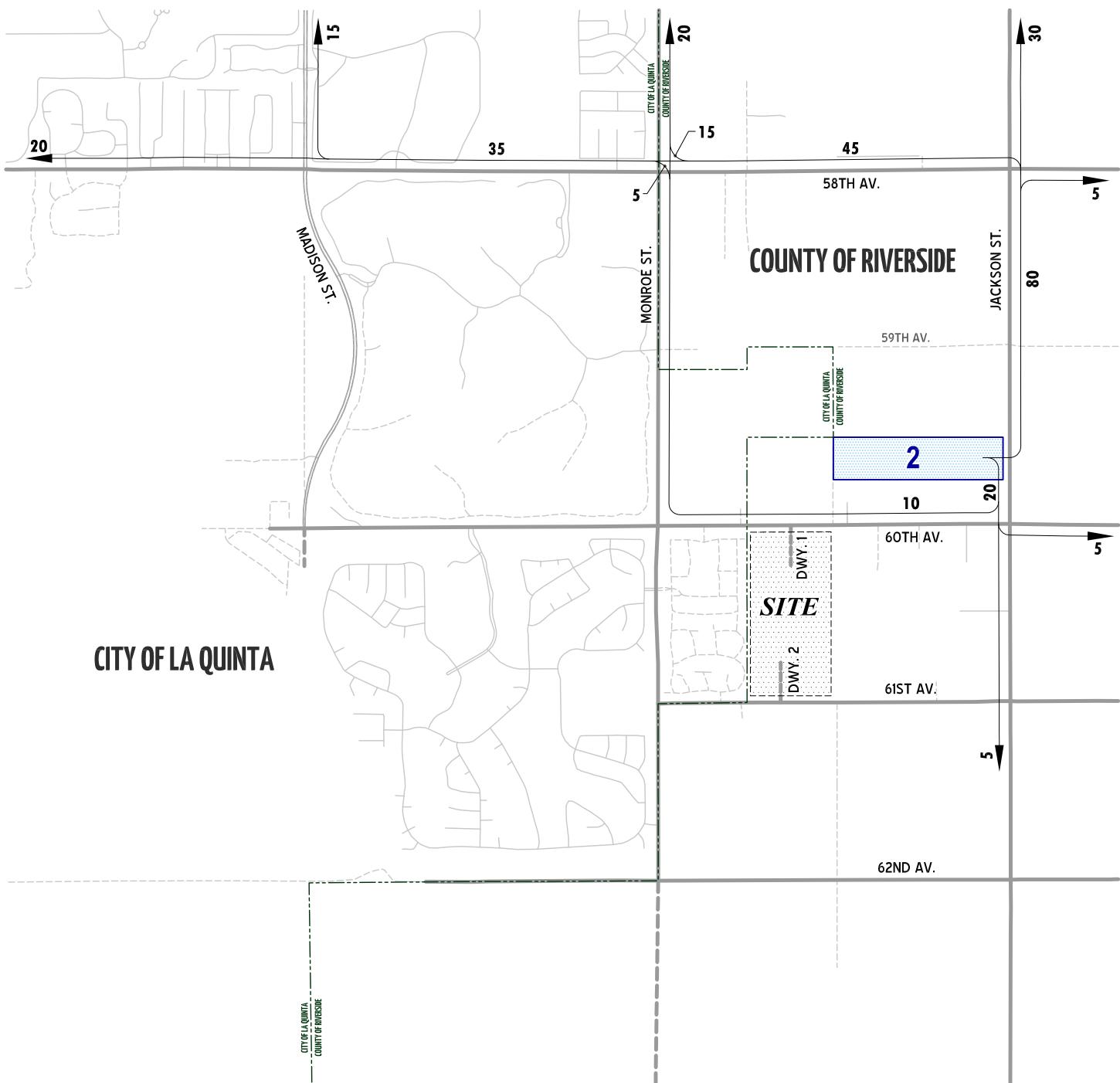
## CUMULATIVE PROJECT DISTRIBUTION

**LEGEND:**

10 = PERCENT TO/FROM PROJECT



# TAZ 2 (TR 36234) CUMULATIVE PROJECT DISTRIBUTION

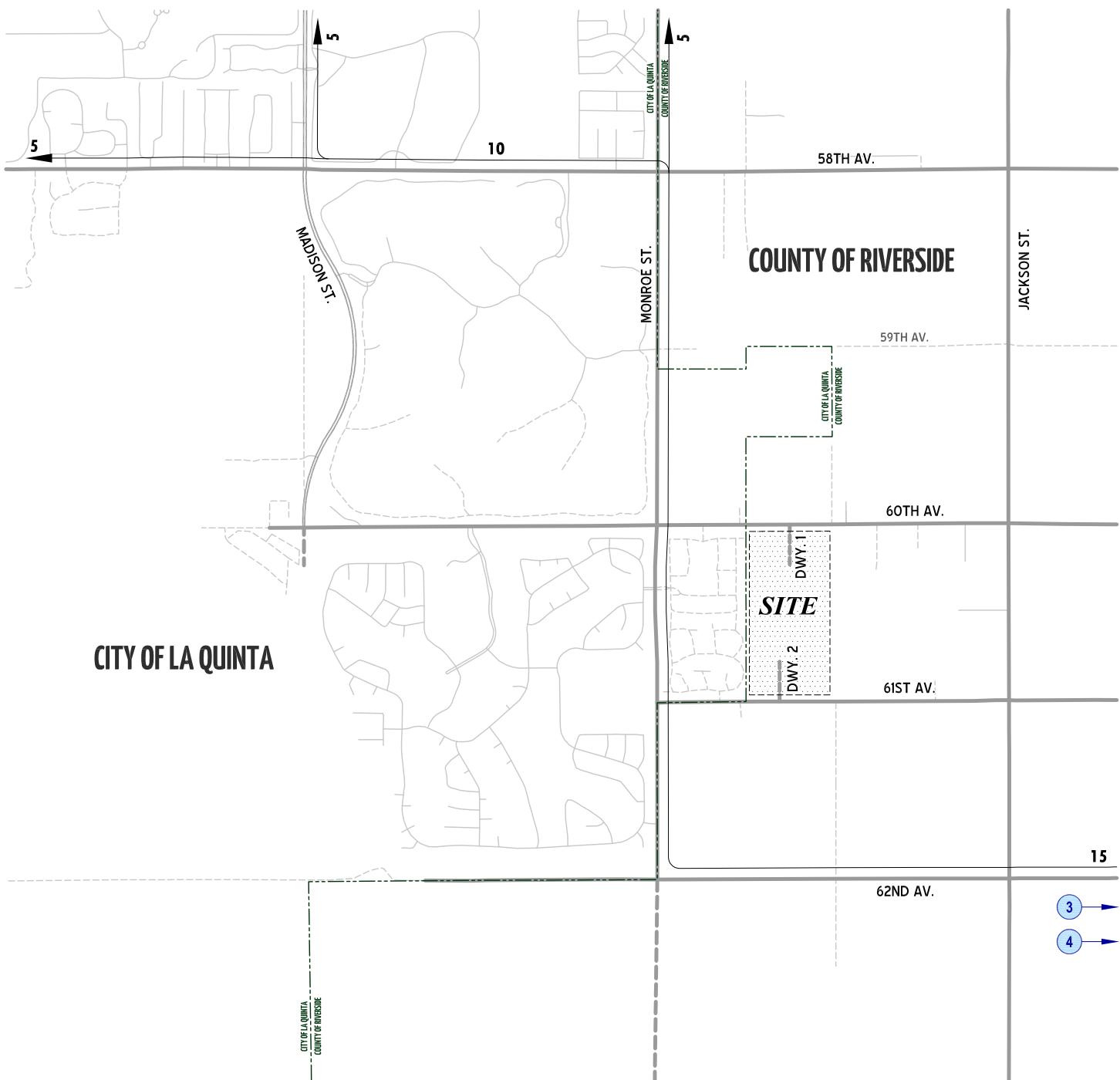


## LEGEND:

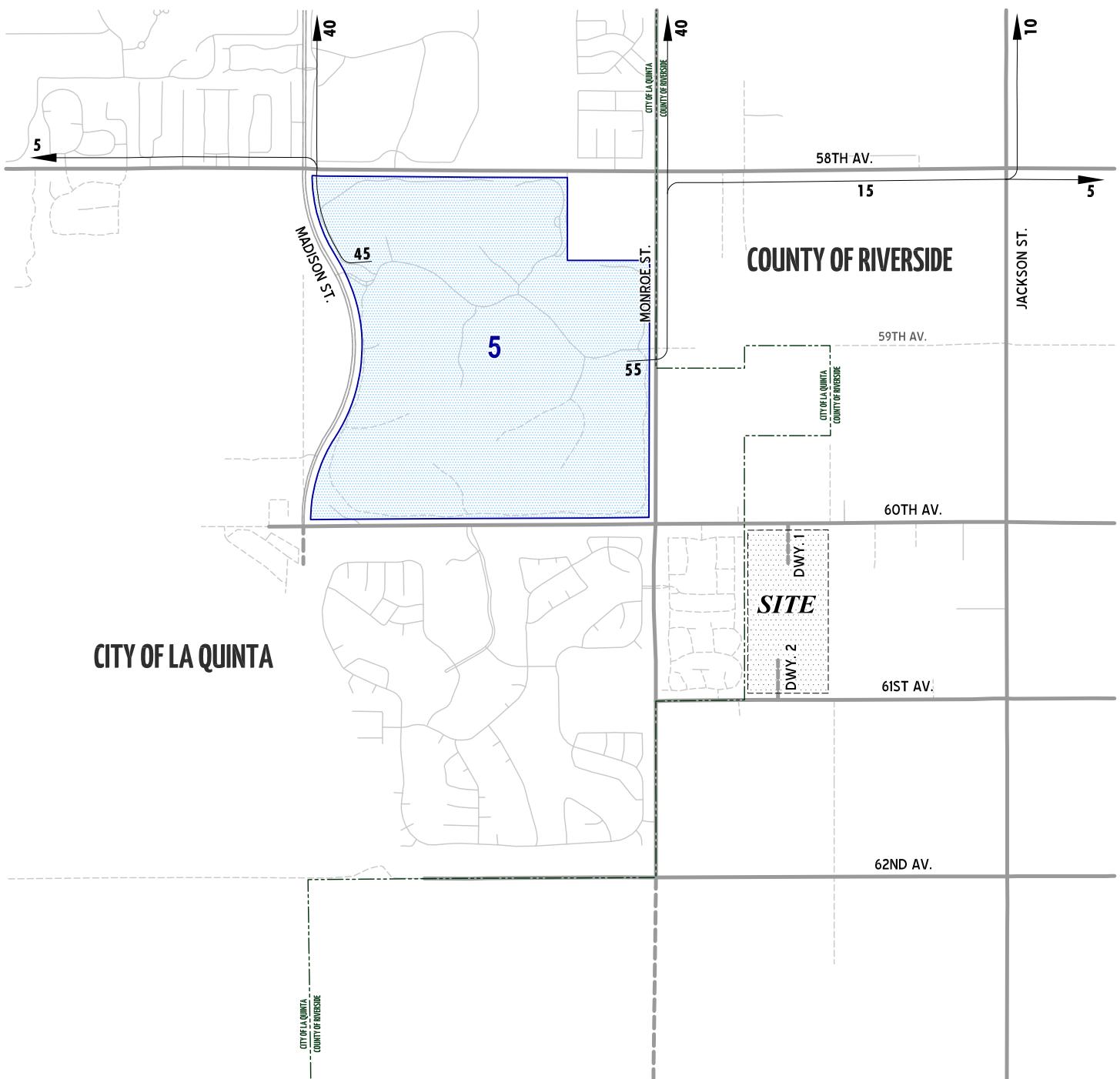
10 = PERCENT TO/FROM PROJECT



# TAZ 3 (TR 32693) AND TAZ 4 (TR 32694) CUMULATIVE PROJECT DISTRIBUTION



# TAZ 5 (SP 2003-067 - ANDALUSIA) CUMULATIVE PROJECT DISTRIBUTION



## LEGEND:

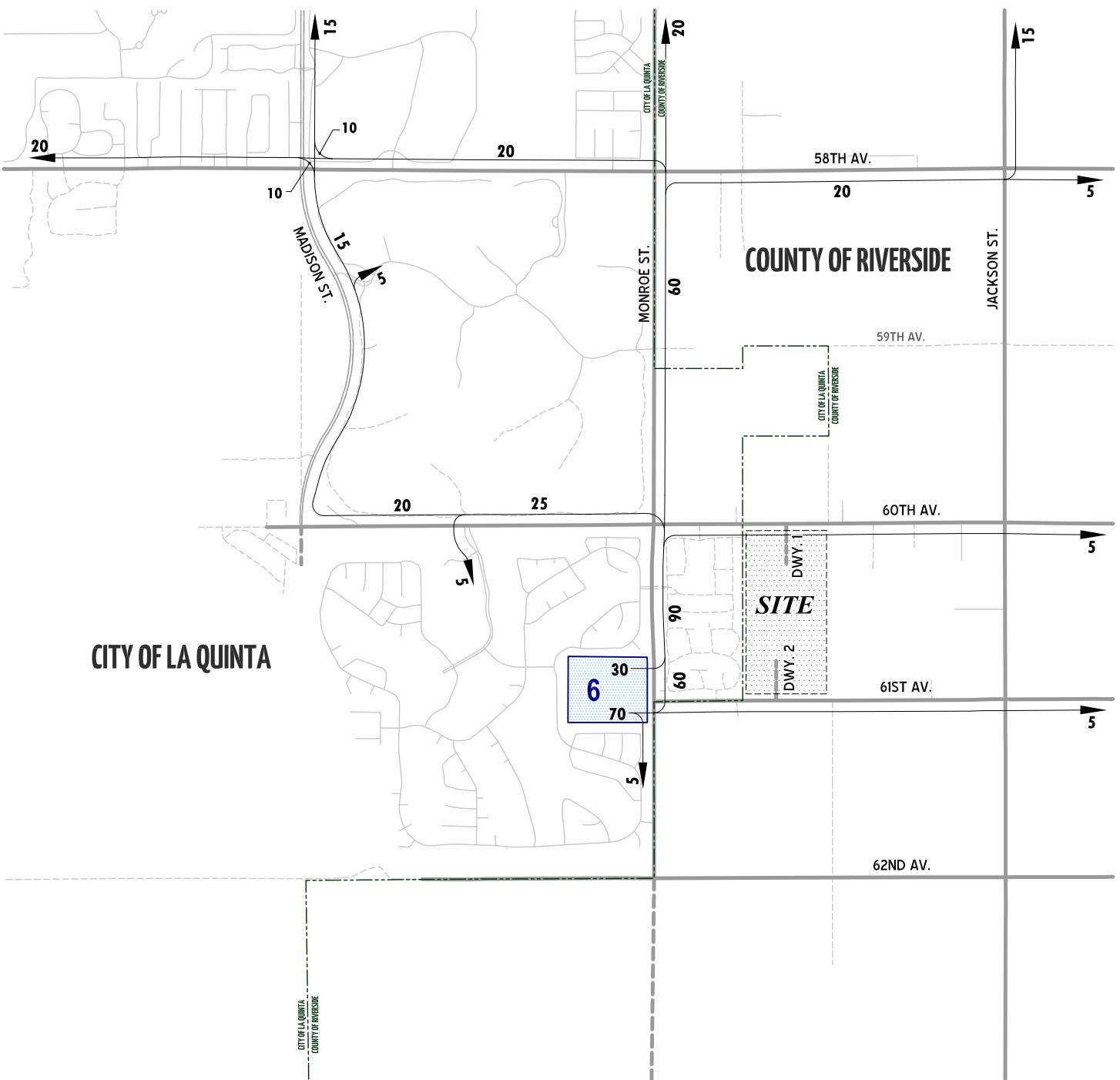
10 = PERCENT TO/FROM PROJECT



EXHIBIT 5

**TAZ 6 (TM 31434)**

**CUMULATIVE PROJECT DISTRIBUTION**



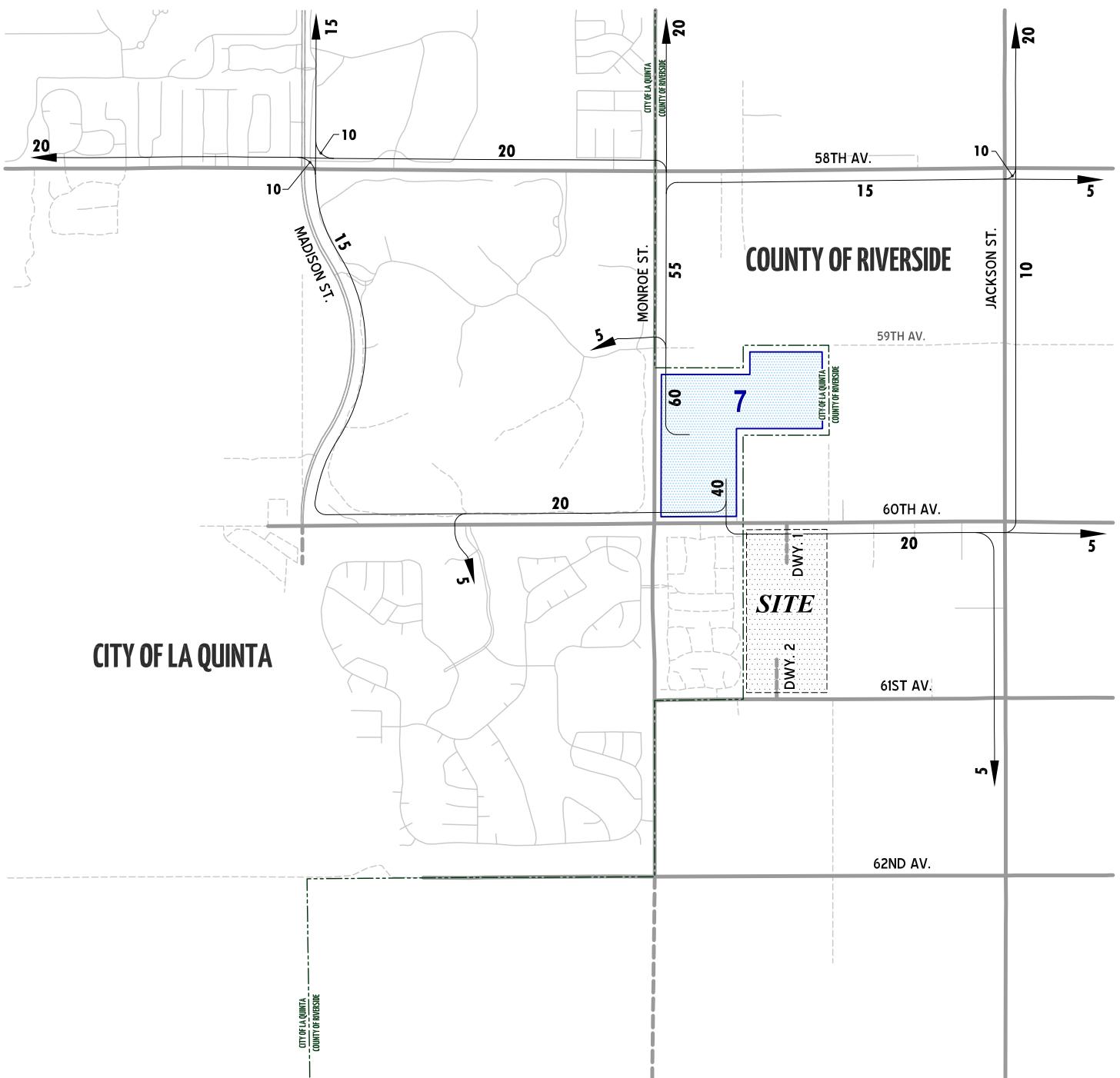
## **LEGEND:**

## **10 = PERCENT TO/FROM PROJECT**



EXHIBIT 6

# **TAZ 7 (SP 2004-07) IBUTION (2035 ONLY)**

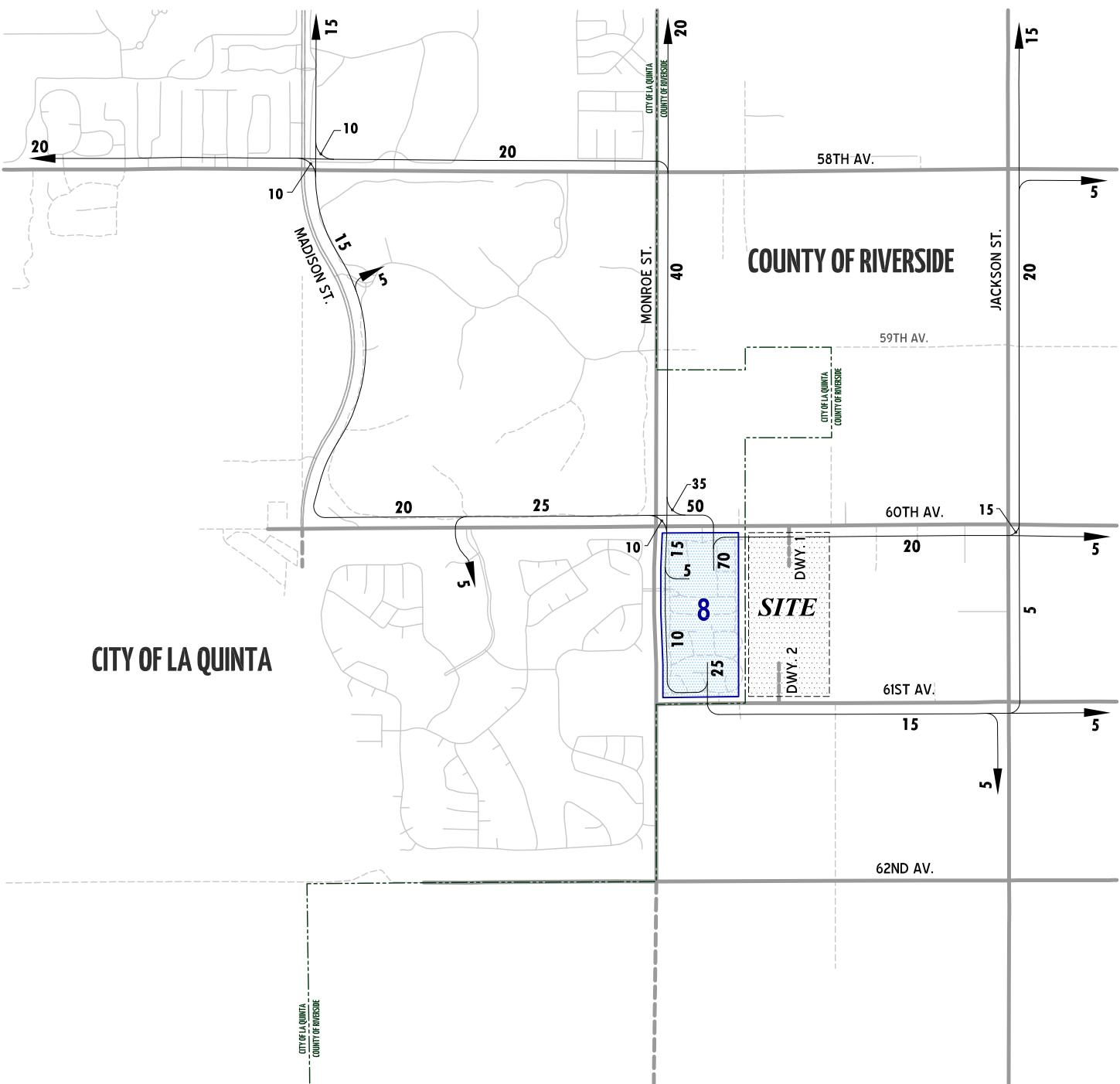


## **LEGEND:**

## **10 = PERCENT TO/FROM PROJECT**



EXHIBIT 7



## **LEGEND:**

#### **10 = PERCENT TO/FROM PROJECT**



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## **APPENDIX 5.1**

Existing plus Project Conditions  
Intersection Operations Analysis Worksheets



E + P AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
AM Peak Hour

Trip Generation Report

Forecast for AM Trip Gen ( P )

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1 SITE (2016)		1.00	RESIDENTIAL	45.00	130.00	45	130	175	100.0
	Zone 1 Subtotal					45	130	175	100.0
TOTAL .....						45	130	175	100.0

E + P AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Madison St. / Av. 60

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: A[ 8.8]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 1 0	0 0 1 0 0	0 0 1 0 1

Volume Module:

Base Vol:	0	0	0	59	0	0	0	2	0	0	2	129
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	0	0	59	0	0	0	2	0	0	2	129
Added Vol:	0	0	0	7	0	0	0	0	0	0	0	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	66	0	0	0	2	0	0	2	148
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:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	0	0	0	81	0	0	0	2	0	0	2	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	81	0	0	0	2	0	0	2	183

Critical Gap Module:

Critical Gp:	xxxxxx	xxxx	xxxxxx	6.4	6.5	6.2	xxxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
FollowUpTim:	xxxxxx	xxxx	xxxxxx	3.5	4.0	3.3	xxxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxxx	5	5	2	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	xxxx	xxxx	xxxxxx	1022	894	1088	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	xxxx	xxxx	xxxxxx	1022	894	1088	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap.:	xxxx	xxxx	xxxx	0.08	0.00	0.00	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxxx	0.3	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	8.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	0	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx				8.8		xxxxxx		xxxxxx		xxxxxx	
ApproachLOS:	*			A			*			*		*

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

\*\*\*\*\*

E + P AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.164
Loss Time (sec):	0	Average Delay (sec/veh):	8.2
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	13 32 2	10 35 56	17 29 3
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	13 32 2	10 35 56	17 29 3
Added Vol:	26 26 0	0 9 0	0 0 9
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	39 58 2	10 44 56	17 29 12
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.81 0.81 0.81	0.81 0.81 0.81	0.81 0.81 0.81
PHF Volume:	48 72 2	12 54 69	21 36 15
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	48 72 2	12 54 69	21 36 15
PCE Adj:	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
FinalVolume:	48 72 2	12 54 69	21 36 15
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.39 0.59 0.02	0.19 0.81 1.00	0.29 0.50 0.21
Final Sat.:	294 438 15	126 555 800	220 375 155
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.16 0.16 0.16	0.10 0.10 0.09	0.10 0.10 0.10
Crit Moves:	****	****	****
Delay/Veh:	8.5 8.5 8.5	8.4 8.4 7.4	8.0 8.0 8.0
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	8.5 8.5 8.5	8.4 8.4 7.4	8.0 8.0 8.0
LOS by Move:	A A A	A A A	A A A
ApproachDel:	8.5	7.9	8.0
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	8.5	7.9	8.0
LOS by Appr:	A	A	A
AllWayAvgQ:	0.2 0.2 0.2	0.1 0.1 0.1	0.1 0.2 0.2
<hr/>			

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

E + P AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.175			
Loss Time (sec):	0	Average Delay (sec/veh):	8.3			
Optimal Cycle:	0	Level Of Service:	A			
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound		
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R		
<b>Control:</b>	Stop Sign	Stop Sign	Stop Sign	Stop Sign		
<b>Rights:</b>	Include	Include	Include	Include		
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0		
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1	0 0 1! 0 0		
<b>Volume Module:</b>						
Base Vol:	15 24 2 8 17 15 13 22 32 1 20 8					
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:	15 24 2 8 17 15 13 22 32 1 20 8					
Added Vol:	13 7 0 18 2 0 0 5 4 0 13 52					
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0					
Initial Fut:	28 31 2 26 19 15 13 27 36 1 33 60					
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:	0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72					
PHF Volume:	39 43 3 36 26 21 18 38 50 1 46 83					
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0					
Reduced Vol:	39 43 3 36 26 21 18 38 50 1 46 83					
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:	39 43 3 36 26 21 18 38 50 1 46 83					
<b>Saturation Flow Module:</b>						
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00					
Lanes:	1.00 0.94 0.06 1.00 1.00 1.00 0.33 0.67 1.00 0.01 0.35 0.64					
Final Sat.:	614 636 41 596 651 745 218 452 798 8 263 477					
<b>Capacity Analysis Module:</b>						
Vol/Sat:	0.06 0.07 0.07 0.06 0.04 0.03 0.08 0.08 0.06 0.17 0.17 0.17					
Crit Moves:	****	****	****	****	****	****
Delay/Veh:	8.7 8.1 8.1 8.9 8.2 7.4 8.4 8.4 7.3 8.6 8.6 8.6					
Delay Adj:	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:	8.7 8.1 8.1 8.9 8.2 7.4 8.4 8.4 7.3 8.6 8.6 8.6					
LOS by Move:	A A A A A A A A A A A A					
ApproachDel:	8.4	8.3	7.9	8.6	8.6	8.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00
ApprAdjDel:	8.4	8.3	7.9	8.6	8.6	8.6
LOS by Appr:	A	A	A	A	A	A
AllWayAvgQ:	0.1 0.1 0.1 0.1 0.0 0.0 0.1 0.1 0.1 0.2 0.2 0.2					

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: A[ 8.6]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1 0 0	0 1 0 0 0	0 0 0 0 0	0 0 0 0 1

Volume Module:

Base Vol:	0 31 0 0 50 0 0 0 0 0 0 0 0 3
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
Initial Bse:	0 31 0 0 50 0 0 0 0 0 0 0 0 3
Added Vol:	0 0 0 7 0 0 0 0 0 0 0 0 0 19
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	0 31 0 7 50 0 0 0 0 0 0 0 0 22
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
PHF Adj:	0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.68
PHF Volume:	0 46 0 10 74 0 0 0 0 0 0 0 0 32
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	0 46 0 10 74 0 0 0 0 0 0 0 0 32

Critical Gap Module:

Critical Gp:	xxxxxx xxxx xxxx 4.1 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 6.2
FollowUpTim:	xxxxxx xxxx xxxx 2.2 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 3.3

Capacity Module:

Cnflct Vol:	xxxxx xxxx xxxx 46 xxxx xxxx xxxx xxxx xxxx xxxx xxxx 46
Potent Cap.:	xxxxx xxxx xxxx 1575 xxxx xxxx xxxx xxxx xxxx xxxx xxxx 1030
Move Cap.:	xxxxx xxxx xxxx 1575 xxxx xxxx xxxx xxxx xxxx xxxx xxxx 1030
Volume/Cap.:	xxxxx xxxx xxxx 0.01 xxxx xxxx xxxx xxxx xxxx xxxx xxxx 0.03

Level Of Service Module:

2Way95thQ:	xxxxx xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx xxxx xxxx 0.1
Control Del:	xxxxxx xxxx xxxx 7.3 xxxx xxxx xxxx xxxx xxxx xxxx xxxx 8.6
LOS by Move:	* * * A * * * * * * * * * * * * * * A
Movement:	LT - LTR - RT
Shared Cap.:	xxxxx xxxx
SharedQueue:	xxxxxx xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Shrd ConDel:	xxxxxx xxxx xxxx 7.3 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Shared LOS:	* * * A * * * * * * * * * * * * * * *
ApproachDel:	xxxxxx xxxx xxxx 8.6
ApproachLOS:	* A

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

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E + P AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.103
Loss Time (sec):	0	Average Delay (sec/veh):	7.5
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	7 43 1	12 45 15	5 21 7
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	7 43 1	12 45 15	5 21 7
Added Vol:	0 7 0	0 0 2	0 0 7
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	7 50 1	12 47 22	25 28 7
User Adj:	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
PHF Volume:	8 56 1	13 52 24	28 31 8
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	8 56 1	13 52 24	28 31 8
PCE Adj:	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
FinalVolume:	8 56 1	13 52 24	28 31 8
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.12 0.86 0.02	0.15 0.58 0.27	0.41 0.47 0.12
Final Sat.:	101 721 14	129 506 237	341 382 95
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.08 0.08 0.08	0.10 0.10 0.10	0.08 0.08 0.08
Crit Moves:	****	****	****
Delay/Veh:	7.5 7.5 7.5	7.5 7.5 7.5	7.6 7.6 7.6
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	7.5 7.5 7.5	7.5 7.5 7.5	7.6 7.6 7.6
LOS by Move:	A A A	A A A	A A A
ApproachDel:	7.5	7.5	7.6
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	7.5	7.5	7.6
LOS by Appr:	A	A	A
AllWayAvgQ:	0.1 0.1 0.1	0.1 0.1 0.1	0.1 0.0 0.0

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

E + P AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: A[ 9.7]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 1 0 0 0	0 0 0 1 0	0 0 1! 0 0	0 0 1 0 0

Volume Module:

Base Vol:	3	49	0	0	43	1	2	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
Initial Bse:	3	49	0	0	43	1	2	0	0	0	0	0	0
Added Vol:	2	0	0	0	0	2	7	7	7	0	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	49	0	0	43	3	9	7	7	0	2	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
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	0.85
PHF Volume:	6	58	0	0	51	4	11	8	8	0	2	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	6	58	0	0	51	4	11	8	8	0	2	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.1	6.5	6.2	xxxxx	6.5	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	4.0	xxxxx

Capacity Module:

Cnflct Vol:	54	xxxx	xxxxx	xxxx	xxxx	xxxxx	124	122	53	xxxx	124	xxxxx
Potent Cap.:	1564	xxxx	xxxxx	xxxx	xxxx	xxxxx	855	772	1021	xxxx	770	xxxxx
Move Cap.:	1564	xxxx	xxxxx	xxxx	xxxx	xxxxx	851	769	1021	xxxx	767	xxxxx
Volume/Cap:	0.00	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.01	0.01	0.01	xxxx	0.00	xxxx

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0.0	xxxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	9.7	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	A	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	867	xxxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxxx	xxxx	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.3	xxxxxx	xxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx		xxxxxx					9.3			9.7	
ApproachLOS:	*		*					A			A	

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

E + P AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Dwy. 1 / 60th Av.

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: A[ 9.1]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 0 1 0	1 0 1! 0 0

Volume Module:

Base Vol:	0 0 0 0 0	0 0 0 32 0	0 0 29 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 0 0 0 0	0 32 0 0 29	0 0 0 0 0
Added Vol:	65 0 26 0 0	0 0 0 23 9	0 0 0 0 0
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	65 0 26 0 0	0 32 23 9 29	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:	0.92 0.92 0.92 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:	71 0 28 0 0	0 35 25 10 32	0 0 0 0 0
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	71 0 28 0 0	0 35 25 10 32	0 0 0 0 0

Critical Gap Module:

Critical Gp:	6.4 xxxx 6.2 xxxxx xxxx xxxx xxxx xxxx xxxx	4.1 xxxx xxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx	2.2 xxxx xxxx

Capacity Module:

Cnflct Vol:	98 xxxx 47 xxxx xxxx xxxx xxxx xxxx xxxx	60 xxxx xxxx
Potent Cap.:	905 xxxx 1028 xxxx xxxx xxxx xxxx xxxx	1557 xxxx xxxx
Move Cap.:	901 xxxx 1028 xxxx xxxx xxxx xxxx xxxx	1557 xxxx xxxx
Volume/Cap.:	0.08 xxxx 0.03 xxxx xxxx xxxx xxxx xxxx	0.01 xxxx xxxx

Level Of Service Module:

2Way95thQ:	0.3 xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx	0.0 xxxx xxxx
Control Del:	9.3 xxxx 8.6 xxxxx xxxx xxxx xxxx xxxx xxxx	7.3 xxxx xxxx
LOS by Move:	A * A * * * * * * * A *	*
Movement:	LT - LTR - RT	
Shared Cap.:	xxxx	
SharedQueue:	xxxxx xxxx	
Shrd ConDel:	xxxxx xxxx	
Shared LOS:	* * * * * * * * * * * * * * *	
ApproachDel:	9.1 xxxxxx	xxxxxx
ApproachLOS:	A *	*

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

E + P AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Dwy. 2 / 61st Av.

Average Delay (sec/veh): 6.9 Worst Case Level Of Service: A[ 8.6]

Approach:	North Bound	South Bound	East Bound	West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled	
Rights:	Include	Include	Include	Include	
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0	
Volume Module:					
Base Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 3	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	1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00
Initial Bse:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 3	0 0 0 0 0
Added Vol:	0 0 0 20 0	0 0 19 7 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 7
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	0 0 0 20 0	0 19 7 0 0	0 0 0 0 0	0 0 0 0 3	0 0 0 0 7
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	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 0.92 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 0 0 22 0	0 21 8 0 0	0 0 0 0 0	0 0 0 0 3	0 0 0 0 8
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	0 0 0 22 0	0 21 8 0 0	0 0 0 0 0	0 0 0 0 3	0 0 0 0 8
Critical Gap Module:					
Critical Gp:	xxxxx xxxx xxxx 6.4	6.5 6.2 4.1	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
FollowUpTim:	xxxxx xxxx xxxx 3.5	4.0 3.3 2.2	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
Capacity Module:					
Cnflct Vol:	xxxx xxxx xxxx 22	22 7 11	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
Potent Cap.:	xxxx xxxx xxxx 999	875 1081 1622	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
Move Cap.:	xxxx xxxx xxxx 996	871 1081 1622	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
Volume/Cap.:	xxxx xxxx xxxx 0.02	0.00 0.02 0.00	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
Level Of Service Module:					
2Way95thQ:	xxxx xxxx xxxx xxxx xxxx xxxx	0.0	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:	xxxxx xxxx xxxx xxxx xxxx xxxx	7.2	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move:	*	*	*	*	A *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxx xxxx 1036	xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
SharedQueue:	xxxxx xxxx xxxx xxxx 0.1	xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
Shrd ConDel:	xxxxx xxxx xxxx xxxx 8.6	xxxx xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
Shared LOS:	*	*	*	*	A *
ApproachDel:	xxxxxx	8.6	xxxxxx	xxxxxx	xxxxxx
ApproachLOS:	*	A	*	*	*

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

E + P AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.152
Loss Time (sec):	0	Average Delay (sec/veh):	8.9
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1
<hr/>			
Volume Module:			
Base Vol:	4 127 2 65 69 43 42 6 2 0 12 51		
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:	4 127 2 65 69 43 42 6 2 0 12 51		
Added Vol:	13 6 0 5 2 0 0 5 5 0 13 13		
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0		
Initial Fut:	17 133 2 70 71 43 42 11 7 0 25 64		
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:	0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79		
PHF Volume:	21 168 3 88 90 54 53 14 9 0 32 81		
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0		
Reduced Vol:	21 168 3 88 90 54 53 14 9 0 32 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:	21 168 3 88 90 54 53 14 9 0 32 81		
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
Lanes:	1.00 2.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 1.00 2.00 1.00		
Final Sat.:	570 1241 702 579 1258 717 529 570 641 534 1155 653		
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.04 0.14 0.00 0.15 0.07 0.08 0.10 0.02 0.01 0.00 0.03 0.12		
Crit Moves:	****	****	****
Delay/Veh:	9.0 9.1 7.6 9.7 8.6 7.9 9.8 8.7 8.0 0.0 8.7 8.5		
Delay Adj:	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:	9.0 9.1 7.6 9.7 8.6 7.9 9.8 8.7 8.0 0.0 8.7 8.5		
LOS by Move:	A A A A A A A A A * A A		
ApproachDel:	9.0	8.8	9.4
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	9.0	8.8	9.4
LOS by Appr:	A	A	A
AllWayAvgQ:	0.0 0.1 0.0 0.2 0.1 0.1 0.1 0.0 0.0 0.0 0.0 0.1		

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

E + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
PM Peak Hour

Trip Generation Report

Forecast for PM Trip Gen ( P )

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1 SITE (2016)		1.00	RESIDENTIAL	146.00	86.00	146	86	232	100.0
	Zone 1 Subtotal					146	86	232	100.0
TOTAL .....						146	86	232	100.0

E + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Madison St. / Av. 60

Average Delay (sec/veh): 5.8 Worst Case Level Of Service: A[ 9.5]

Approach: North Bound South Bound East Bound West Bound

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

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include Include

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

Volume Module:

Base Vol: 0 0 0 163 0 2 0 4 0 0 0 3 102

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: 0 0 0 163 0 2 0 4 0 0 0 3 102

Added Vol: 0 0 0 22 0 0 0 0 0 0 0 0 13

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

Initial Fut: 0 0 0 185 0 2 0 4 0 0 0 3 115

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: 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83

PHF Volume: 0 0 0 222 0 2 0 5 0 0 0 4 138

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

FinalVolume: 0 0 0 222 0 2 0 5 0 0 0 4 138

Critical Gap Module:

Critical Gp:xxxxx xxxx xxxx 6.4 6.5 6.2 xxxx xxxx xxxx xxxx xxxx xxxx xxxx

FollowUpTim:xxxxx xxxx xxxx 3.5 4.0 3.3 xxxx xxxx xxxx xxxx xxxx xxxx

Capacity Module:

Cnflct Vol: xxxx xxxx xxxx 8 8 4 xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Potent Cap.: xxxx xxxx xxxx 1017 891 1086 xxxx xxxx xxxx xxxx xxxx xxxx

Move Cap.: xxxx xxxx xxxx 1017 891 1086 xxxx xxxx xxxx xxxx xxxx xxxx

Volume/Cap: xxxx xxxx xxxx 0.22 0.00 0.00 xxxx xxxx xxxx xxxx xxxx xxxx

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxx 0.8 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Control Del:xxxxx xxxx xxxx 9.5 xxxx xxxx xxxx xxxx xxxx xxxx xxxx

LOS by Move: \* \* \* A \* \* \* \* \* \* \* \* \*

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx xxxx xxxx xxxx xxxx 1086 xxxx xxxx xxxx xxxx xxxx xxxx

SharedQueue:xxxxx xxxx xxxx xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx xxxx

Shrd ConDel:xxxxx xxxx xxxx xxxx xxxx 8.3 xxxx xxxx xxxx xxxx xxxx xxxx

Shared LOS: \* \* \* \* \* A \* \* \* \* \* \* \*

ApproachDel: xxxxxx 9.5 xxxxxxxx xxxxxxxx

ApproachLOS: \* A \* \*

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

E + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.335
Loss Time (sec):	0	Average Delay (sec/veh):	9.4
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	8 73 8	22 42 36	72 81 4
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	8 73 8	22 42 36	72 81 4
Added Vol:	17 17 0	0 29 0	0 0 29
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	25 90 8	22 71 36	72 81 33
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.76 0.76 0.76	0.76 0.76 0.76	0.76 0.76 0.76
PHF Volume:	33 118 10	29 93 47	94 106 43
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	33 118 10	29 93 47	94 106 43
PCE Adj:	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
FinalVolume:	33 118 10	29 93 47	94 106 43
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.20 0.73 0.07	0.24 0.76 1.00	0.39 0.43 0.18
Final Sat.:	142 511 45	149 481 735	282 317 129
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.23 0.23 0.23	0.19 0.19 0.06	0.33 0.33 0.33
Crit Moves:	****	****	****
Delay/Veh:	9.3 9.3 9.3	9.4 9.4 7.6	9.9 9.9 9.9
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	9.3 9.3 9.3	9.4 9.4 7.6	9.9 9.9 9.9
LOS by Move:	A A A	A A A	A A A
ApproachDel:	9.3	8.9	9.9
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	9.3	8.9	9.9
LOS by Appr:	A	A	A
AllWayAvgQ:	0.3 0.3 0.3	0.2 0.2 0.1	0.4 0.4 0.4
<hr/>			

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

E + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.139
Loss Time (sec):	0	Average Delay (sec/veh):	8.5
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1
<hr/>			
Volume Module:			
Base Vol:	24 30 2 9 33 9 14 32 39 4 10 10		
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:	24 30 2 9 33 9 14 32 39 4 10 10		
Added Vol:	9 4 0 58 7 0 0 15 15 0 9 34		
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0		
Initial Fut:	33 34 2 67 40 9 14 47 54 4 19 44		
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:	0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80		
PHF Volume:	41 42 2 83 50 11 17 59 67 5 24 55		
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0		
Reduced Vol:	41 42 2 83 50 11 17 59 67 5 24 55		
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:	41 42 2 83 50 11 17 59 67 5 24 55		
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
Lanes:	1.00 0.94 0.06 1.00 1.00 1.00 0.23 0.77 1.00 0.06 0.28 0.66		
Final Sat.:	608 631 37 601 655 750 151 505 769 42 200 464		
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.07 0.07 0.07 0.14 0.08 0.01 0.12 0.12 0.09 0.12 0.12 0.12		
Crit Moves:	****	****	****
Delay/Veh:	8.8 8.2 8.2 9.4 8.4 7.4 8.7 8.7 7.6 8.5 8.5 8.5		
Delay Adj:	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:	8.8 8.2 8.2 9.4 8.4 7.4 8.7 8.7 7.6 8.5 8.5 8.5		
LOS by Move:	A A A A A A A A A A A A		
ApproachDel:	8.5	8.9	8.2
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	8.5	8.9	8.2
LOS by Appr:	A	A	A
AllWayAvgQ:	0.1 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1 0.1 0.1 0.1		

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

E + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: A[ 8.7]

Approach: North Bound South Bound East Bound West Bound

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

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Rights: Include Include Include Include

Lanes: 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 1! 0 0

Volume Module:

Base Vol: 0 41 1 3 59 0 0 0 0 0 1 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

Initial Bse: 0 41 1 3 59 0 0 0 0 0 1 0 0

Added Vol: 0 0 0 22 0 0 0 0 0 0 0 0 13

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

Initial Fut: 0 41 1 25 59 0 0 0 0 0 1 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

PHF Adj: 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81

PHF Volume: 0 51 1 31 73 0 0 0 0 0 1 0 0

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

FinalVolume: 0 51 1 31 73 0 0 0 0 0 1 0 0

Critical Gap Module:

Critical Gp:xxxxx xxxx xxxx 4.1 xxxx xxxx xxxx xxxx xxxx 6.4 6.5 6.2

FollowUpTim:xxxxx xxxx xxxx 2.2 xxxx xxxx xxxx xxxx xxxx 3.5 4.0 3.3

Capacity Module:

Cnflct Vol: xxxx xxxx xxxx 52 xxxx xxxx xxxx xxxx xxxx 186 186 51

Potent Cap.: xxxx xxxx xxxx 1567 xxxx xxxx xxxx xxxx xxxx 808 712 1022

Move Cap.: xxxx xxxx xxxx 1567 xxxx xxxx xxxx xxxx xxxx 795 697 1022

Volume/Cap: xxxx xxxx xxxx 0.02 xxxx xxxx xxxx xxxx xxxx 0.00 0.00 0.02

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Control Del:xxxxx xxxx xxxx 7.3 xxxx xxxx xxxx xxxx xxxx xxxx xxxx

LOS by Move: \* \* \* A \* \* \* \* \* \* \* \* \*

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 1003 xxxx

SharedQueue:xxxxx xxxx xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx 0.1 xxxx

Shrd ConDel:xxxxx xxxx xxxx 7.3 xxxx xxxx xxxx xxxx xxxx xxxx 8.7 xxxx

Shared LOS: \* \* \* A \* \* \* \* \* \* \* \* A \*

ApproachDel: xxxxxx xxxxxxxx xxxxxxxx 8.7

ApproachLOS: \* \* \* \* \* \* \* \* \* \* A

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

E + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.105
Loss Time (sec):	0	Average Delay (sec/veh):	7.5
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	11 42 3 5 49 4	7 22 8 4 11 14	
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 42 3 5 49 4	7 22 8 4 11 14	
Added Vol:	0 4 0 0 7 22	13 4 0 0 7 0	
PasserByVol:	0 0 0 0 0 0	0 0 0 0 0 0	
Initial Fut:	11 46 3 5 56 26	20 26 8 4 18 14	
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:	12 49 3 5 60 28	21 28 9 4 19 15	
Reduct Vol:	0 0 0 0 0 0	0 0 0 0 0 0	
Reduced Vol:	12 49 3 5 60 28	21 28 9 4 19 15	
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 49 3 5 60 28	21 28 9 4 19 15	
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00 1.00	
Lanes:	0.18 0.77 0.05 0.06 0.64 0.30	0.37 0.48 0.15 0.11 0.50 0.39	
Final Sat.:	154 642 42 51 566 263	304 395 122 95 426 331	
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.08 0.08 0.08 0.11 0.11 0.11	0.07 0.07 0.07 0.05 0.05 0.05	
Crit Moves:	****	****	****
Delay/Veh:	7.5 7.5 7.5 7.5 7.5 7.5	7.6 7.6 7.6 7.3 7.3 7.3	
Delay Adj:	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:	7.5 7.5 7.5 7.5 7.5 7.5	7.6 7.6 7.6 7.3 7.3 7.3	
LOS by Move:	A A A A A A	A A A A A A	
ApproachDel:	7.5	7.5 7.6	7.3
Delay Adj:	1.00	1.00 1.00	1.00
ApprAdjDel:	7.5	7.5 7.6	7.3
LOS by Appr:	A	A A	A
AllWayAvgQ:	0.1 0.1 0.1 0.1 0.1 0.1	0.1 0.1 0.0 0.0 0.0 0.0	

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

E + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: A[ 10.0]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 1 0 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 0 1 0

Volume Module:

Base Vol:	2	47	0	3	56	0	2	1	1	0	2	2
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:	2	47	0	3	56	0	2	1	1	0	2	2
Added Vol:	7	0	0	0	0	7	4	4	4	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	47	0	3	56	7	6	5	5	0	9	2
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:	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
PHF Volume:	13	66	0	4	79	10	8	7	7	0	13	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	13	66	0	4	79	10	8	7	7	0	13	3

Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1	6.5	6.2	xxxxx	6.5	6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5	4.0	3.3	xxxxx	4.0	3.3

Capacity Module:

Cnflct Vol:	89	xxxx xxxx	66	xxxx xxxx	192	185	84	xxxx	190	66
Potent Cap.:	1519	xxxx xxxx	1548	xxxx xxxx	772	713	981	xxxx	709	1003
Move Cap.:	1519	xxxx xxxx	1548	xxxx xxxx	752	705	981	xxxx	701	1003
Volume/Cap:	0.01	xxxx xxxx	0.00	xxxx xxxx	0.01	0.01	0.01	xxxx	0.02	0.00

Level Of Service Module:

2Way95thQ:	0.0	xxxx xxxx	0.0	xxxx xxxx	xxxx	xxxx xxxx	xxxx	xxxx xxxx	xxxx	xxxx xxxx	
Control Del:	7.4	xxxx xxxx	7.3	xxxx xxxx	xxxxxx	xxxx xxxx	xxxxxx	xxxxxx	xxxx	xxxx xxxx	
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT			
Shared Cap.:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	794	xxxxxx	xxxx xxxx	xxxxxx	xxxx	xxxx xxxx	742
SharedQueue:	0.0	xxxx xxxx	xxxxxx	xxxx xxxx	xxxxxx	xxxxxx	0.1	xxxxxx	xxxxxx	xxxx	0.1
Shrd ConDel:	7.4	xxxx xxxx	xxxxxx	xxxx xxxx	xxxxxx	xxxxxx	9.7	xxxxxx	xxxxxx	xxxx	10.0
Shared LOS:	A	*	*	*	*	*	A	*	*	*	A
ApproachDel:	xxxxxx		xxxxxx				9.7			10.0	
ApproachLOS:	*		*				A			A	

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

\*\*\*\*\*

E + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Dwy. 1 / 60th Av.

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: A[ 9.5]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 0 1 0	1 0 1! 0 0

Volume Module:

Base Vol:	0 0 0 0 0	0 0 0 43 0	0 0 24 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
Initial Bse:	0 0 0 0 0	0 43 0 0 24	0 0 0 0 0
Added Vol:	43 0 17 0 0	0 0 73 29 0	0 0 0 0 0
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	43 0 17 0 0	0 43 73 29 24	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
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 0.92 0.92
PHF Volume:	47 0 18 0 0	0 47 79 32 26	0 0 0 0 0
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	47 0 18 0 0	0 47 79 32 26	0 0 0 0 0

Critical Gap Module:

Critical Gp:	6.4 xxxx 6.2 xxxxx xxxx xxxx xxxx xxxx xxxx	4.1 xxxx xxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx	2.2 xxxx xxxx

Capacity Module:

Cnflct Vol:	176 xxxx 86 xxxx xxxx xxxx xxxx xxxx xxxx	126 xxxx xxxx
Potent Cap.:	819 xxxx 978 xxxx xxxx xxxx xxxx xxxx	1473 xxxx xxxx
Move Cap.:	806 xxxx 978 xxxx xxxx xxxx xxxx xxxx	1473 xxxx xxxx
Volume/Cap.:	0.06 xxxx 0.02 xxxx xxxx xxxx xxxx xxxx	0.02 xxxx xxxx

Level Of Service Module:

2Way95thQ:	0.2 xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx	0.0 xxxx xxxx
Control Del:	9.7 xxxx 8.8 xxxxx xxxx xxxx xxxx xxxx xxxx	7.5 xxxx xxxx
LOS by Move:	A * A * * * * * * * * A *	*
Movement:	LT - LTR - RT	
Shared Cap.:	xxxx	
SharedQueue:	xxxxx xxxx	
Shrd ConDel:	xxxxx xxxx	
Shared LOS:	* * * * * * * * * * * * * * *	
ApproachDel:	9.5 xxxxxx	xxxxxxxx
ApproachLOS:	A *	*

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

E + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Project Conditions  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Dwy. 2 / 61st Av.

Average Delay (sec/veh): 5.1 Worst Case Level Of Service: A[ 8.7]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0

Volume Module:

Base Vol:	0 0 0 0 0	0 0 0 0 0	0 0 4 0 0	0 0 2 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	1.00 1.00 1.00 1.00 1.00
Initial Bse:	0 0 0 0 0	0 0 0 0 0	0 4 0 0 0	0 2 0 0 0
Added Vol:	0 0 0 13 0	0 0 13 22 0	0 0 0 0 0	0 0 0 0 22
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	0 0 0 13 0	0 13 22 4 0	0 0 0 0 0	0 2 0 0 22
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	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 0.92 0.92 0.92	0.92 0.92 0.92 0.92 0.92
PHF Volume:	0 0 0 14 0	0 14 24 4 0	0 0 0 0 0	0 2 0 0 24
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	0 0 0 14 0	0 14 24 4 0	0 0 0 0 0	0 2 0 0 24

Critical Gap Module:

Critical Gp:	xxxxxx xxxx xxxx 6.4 6.5 6.2 4.1	xxxx xxxx xxxx xxxx xxxx xxxx xxxx
FollowUpTim:	xxxxxx xxxx xxxx 3.5 4.0 3.3 2.2	xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Capacity Module:

Cnflct Vol:	xxxx xxxx xxxx 66 66 14 26	xxxx xxxx xxxx xxxx xxxx xxxx
Potent Cap.:	xxxx xxxx xxxx 944 828 1072 1601	xxxx xxxx xxxx xxxx xxxx xxxx
Move Cap.:	xxxx xxxx xxxx 933 816 1072 1601	xxxx xxxx xxxx xxxx xxxx xxxx
Volume/Cap.:	xxxx xxxx xxxx 0.02 0.00 0.01 0.01	xxxx xxxx xxxx xxxx xxxx xxxx

Level Of Service Module:

2Way95thQ:	xxxx xxxx xxxx xxxx xxxx xxxx 0.0	xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:	xxxxxx xxxx xxxx xxxx xxxx xxxx 7.3	xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move:	* * * * *	A * * * * *
Movement:	LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxx xxxx 998 xxxx xxxx xxxx xxxx xxxx xxxx	
SharedQueue:	xxxxxx xxxx xxxx xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx xxxx	
Shrd ConDel:	xxxxxx xxxx xxxx xxxx 8.7 xxxx xxxx xxxx xxxx xxxx xxxx xxxx	
Shared LOS:	* * * * A	* * * * * * * *
ApproachDel:	xxxxxx 8.7	xxxxxx xxxx xxxx
ApproachLOS:	*	A *

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

E + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.136
Loss Time (sec):	0	Average Delay (sec/veh):	8.9
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1
<hr/>			
Volume Module:			
Base Vol:	2 109	1 63	41 168
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00
Initial Bse:	2 109	1 63	41 168
Added Vol:	9 4	0 15	7 0
PasserByVol:	0 0	0 0	0 0
Initial Fut:	11 113	1 78	175 41
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00
PHF Volume:	11 113	1 78	175 41
Reduct Vol:	0 0	0 0	0 0
Reduced Vol:	11 113	1 78	175 41
PCE Adj:	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
FinalVolume:	11 113	1 78	175 41
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00
Lanes:	1.00 2.00	1.00 2.00	1.00 1.00
Final Sat.:	553 1200	678 591	1288 735
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.02 0.09	0.00 0.13	0.14 0.06
Crit Moves:	****	****	****
Delay/Veh:	9.0 9.0	7.7 9.5	8.9 7.7
Delay Adj:	1.00 1.00	1.00 1.00	1.00 1.00
AdjDel/Veh:	9.0 9.0	7.7 9.5	8.9 7.7
LOS by Move:	A A	A A	A A
ApproachDel:	9.0	8.9	9.1
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	9.0	8.9	9.1
LOS by Appr:	A	A	A
AllWayAvgQ:	0.0 0.1	0.0 0.1	0.1 0.1
<hr/>			

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

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## **APPENDIX 6.1**

EAP (2016) Conditions  
Intersection Operations Analysis Worksheets



E + A + P AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Ambient + Project (2016) Conditions  
AM Peak Hour

Trip Generation Report

Forecast for AM Trip Gen ( P )

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1 SITE (2016)		1.00	RESIDENTIAL	45.00	130.00	45	130	175	100.0
	Zone 1 Subtotal					45	130	175	100.0
TOTAL .....						45	130	175	100.0

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Madison St. / Av. 60

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: A[ 8.8]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 1 0	0 0 1 0 0	0 0 1 0 1
Volume Module:				
Base Vol:	0 0 0 59 0	0 0 0 2 0	0 0 2 0 0	2 129
Growth Adj:	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 63 0	0 0 0 2 0	0 0 2 0 0	0 2 137
Added Vol:	0 0 0 7 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 19
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	0 0 0 70 0	0 0 0 2 0	0 0 2 0 0	2 156
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	1.00 1.00 1.00 1.00 1.00
PHF Adj:	0.81 0.81 0.81 0.81 0.81	0.81 0.81 0.81 0.81 0.81	0.81 0.81 0.81 0.81 0.81	0.81 0.81 0.81 0.81 0.81
PHF Volume:	0 0 0 86 0	0 0 0 3 0	0 0 3 0 0	0 0 3 192
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	0 0 0 86 0	0 0 0 3 0	0 0 3 0 0	3 192
Critical Gap Module:				
Critical Gp:xxxxx xxxx xxxx 6.4 6.5	6.2 xxxx xxxx xxxx xxxx xxxx xxxx			
FollowUpTim:xxxxx xxxx xxxx 3.5 4.0	3.3 xxxx xxxx xxxx xxxx xxxx xxxx			
Capacity Module:				
Cnflct Vol: xxxx xxxx xxxx 5 5	3 xxxx xxxx xxxx xxxx xxxx xxxx			
Potent Cap.: xxxx xxxx xxxx 1022 894	1087 xxxx xxxx xxxx xxxx xxxx			
Move Cap.: xxxx xxxx xxxx 1022 894	1087 xxxx xxxx xxxx xxxx xxxx			
Volume/Cap: xxxx xxxx xxxx 0.08 0.00	0.00 xxxx xxxx xxxx xxxx xxxx			
Level Of Service Module:				
2Way95thQ: xxxx xxxx xxxx 0.3 xxxx xxxx xxxx xxxx xxxx xxxx				
Control Del:xxxxx xxxx xxxx 8.8 xxxx xxxx xxxx xxxx xxxx xxxx				
LOS by Move: * * * A * * * * * * * * *				
Movement: LT - LTR - RT				
Shared Cap.: xxxx xxxx xxxx xxxx xxxx 0 xxxx xxxx xxxx xxxx xxxx xxxx				
SharedQueue:xxxxx xxxx				
Shrd ConDel:xxxxx xxxx				
Shared LOS: * * * * * * * * * * * * * *				
ApproachDel: xxxxxx 8.8 xxxxxxxx xxxxxxxx				
ApproachLOS: * A * * *				

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.170
Loss Time (sec):	0	Average Delay (sec/veh):	8.3
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	13 32 2	10 35 56	17 29 3
Growth Adj:	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06
Initial Bse:	14 34 2	11 37 59	18 31 3
Added Vol:	26 26 0	0 9 0	0 0 9
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	40 60 2	11 46 59	18 31 12
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.81 0.81 0.81	0.81 0.81 0.81	0.81 0.81 0.81
PHF Volume:	49 74 3	13 57 74	22 38 15
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	49 74 3	13 57 74	22 38 15
PCE Adj:	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
FinalVolume:	49 74 3	13 57 74	22 38 15
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.39 0.59 0.02	0.19 0.81 1.00	0.30 0.50 0.20
Final Sat.:	289 436 15	126 549 793	219 374 148
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.17 0.17 0.17	0.10 0.10 0.09	0.10 0.10 0.10
Crit Moves:	****	****	****
Delay/Veh:	8.6 8.6 8.6	8.4 8.4 7.5	8.1 8.1 8.1
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	8.6 8.6 8.6	8.4 8.4 7.5	8.1 8.1 8.1
LOS by Move:	A A A	A A A	A A A
ApproachDel:	8.6	7.9	8.1
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	8.6	7.9	8.1
LOS by Appr:	A	A	A
AllWayAvgQ:	0.2 0.2 0.2	0.1 0.1 0.1	0.1 0.2 0.2

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.180										
Loss Time (sec):	0	Average Delay (sec/veh):	8.4										
Optimal Cycle:	0	Level Of Service:	A										
<hr/>													
Approach:	North Bound	South Bound	East Bound	West Bound									
Movement:	L - T - R	L - T - R	L - T - R	L - T - R									
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign									
Rights:	Include	Include	Include	Include									
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0									
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1	0 0 1! 0 0									
<hr/>													
Volume Module:													
Base Vol:	15 24 2 8 17 15 13 22 32 1 20 8												
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06												
Initial Bse:	16 25 2 8 18 16 14 23 34 1 21 8												
Added Vol:	13 7 0 18 2 0 0 5 4 0 13 52												
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0												
Initial Fut:	29 32 2 26 20 16 14 28 38 1 34 60												
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:	0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72												
PHF Volume:	40 45 3 37 28 22 19 39 53 1 48 84												
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0												
Reduced Vol:	40 45 3 37 28 22 19 39 53 1 48 84												
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:	40 45 3 37 28 22 19 39 53 1 48 84												
<hr/>													
Saturation Flow Module:													
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00												
Lanes:	1.00 0.94 0.06 1.00 1.00 1.00 0.33 0.67 1.00 0.01 0.36 0.63												
Final Sat.:	612 631 41 593 646 738 218 449 794 8 265 469												
<hr/>													
Capacity Analysis Module:													
Vol/Sat:	0.07 0.07 0.07 0.06 0.04 0.03 0.09 0.09 0.07 0.18 0.18 0.18												
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	****
Delay/Veh:	8.7 8.2 8.2 8.9 8.3 7.5 8.4 8.4 7.4 8.7 8.7 8.7												
Delay Adj:	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:	8.7 8.2 8.2 8.9 8.3 7.5 8.4 8.4 7.4 8.7 8.7 8.7												
LOS by Move:	A A A A A A A A A A A A												
ApproachDel:	8.4	8.3	7.9	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
Delay Adj:	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
ApprAdjDel:	8.4	8.3	7.9	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
LOS by Appr:	A	A	A	A	A	A	A	A	A	A	A	A	A
AllWayAvgQ:	0.1 0.1 0.1 0.1 0.0 0.0 0.1 0.1 0.1 0.2 0.2 0.2 0.2												
<hr/>													

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



Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.109
Loss Time (sec):	0	Average Delay (sec/veh):	7.5
Optimal Cycle:	0	Level Of Service:	A
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
Volume Module:			
Base Vol:	7 43 1	12 45 15	5 21 7
Growth Adj:	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06
Initial Bse:	7 46 1	13 48 16	5 22 7
Added Vol:	0 7 0	0 2 7	0 0 7
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	7 53 1	13 50 23	25 29 7
User Adj:	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
PHF Volume:	8 58 1	14 55 25	28 33 8
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	8 58 1	14 55 25	28 33 8
PCE Adj:	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
FinalVolume:	8 58 1	14 55 25	28 33 8
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.12 0.86 0.02	0.15 0.58 0.27	0.41 0.47 0.12
Final Sat.:	101 717 14	129 505 233	332 384 97
Capacity Analysis Module:			
Vol/Sat:	0.08 0.08 0.08	0.11 0.11 0.11	0.08 0.08 0.08
Crit Moves:	****	****	****
Delay/Veh:	7.6 7.6 7.6	7.5 7.5 7.5	7.7 7.7 7.7
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	7.6 7.6 7.6	7.5 7.5 7.5	7.7 7.7 7.7
LOS by Move:	A A A	A A A	A A A
ApproachDel:	7.6	7.5	7.7
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	7.6	7.5	7.7
LOS by Appr:	A	A	A
AllWayAvgQ:	0.1 0.1 0.1	0.1 0.1 0.1	0.1 0.0 0.0

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: A[ 9.8]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 1 0 0 0	0 0 0 1 0	0 0 1! 0 0	0 0 1 0 0

## Volume Module:

Base Vol:	3 49 0 0 43 1 2 0 0 0 0 0 0 0
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse:	3 52 0 0 46 1 2 0 0 0 0 0 0 0
Added Vol:	2 0 0 0 0 2 7 7 7 0 2 0 0 0
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	5 52 0 0 46 3 9 7 7 0 2 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
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 0.85 0.85
PHF Volume:	6 62 0 0 54 4 11 8 8 0 2 0 0 0
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	6 62 0 0 54 4 11 8 8 0 2 0 0 0

## Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx xxxx xxxx xxxx 7.1 6.5 6.2 xxxx 6.5 xxxx
FollowUpTim:	2.2 xxxx xxxx xxxx xxxx xxxx 3.5 4.0 3.3 xxxx 4.0 xxxx

## Capacity Module:

Cnflct Vol:	58 xxxx xxxx xxxx xxxx xxxx 131 130 56 xxxx 131 xxxx
Potent Cap.:	1560 xxxx xxxx xxxx xxxx 846 765 1016 xxxx 763 xxxx
Move Cap.:	1560 xxxx xxxx xxxx xxxx xxxx 842 762 1016 xxxx 760 xxxx
Volume/Cap:	0.00 xxxx xxxx xxxx xxxx 0.01 0.01 0.01 xxxx 0.00 xxxx

## Level Of Service Module:

2Way95thQ:	0.0 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 0.0 xxxx
Control Del:	7.3 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 9.8 xxxx
LOS by Move:	A * * * * * * * * * * * * A *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxx xxxx xxxx xxxx xxxx 859 xxxx xxxx xxxx xxxx
SharedQueue:	0.0 xxxx xxxx xxxx xxxx xxxx xxxx 0.1 xxxx xxxx xxxx xxxx
Shrd ConDel:	7.3 xxxx xxxx xxxx xxxx xxxx xxxx 9.3 xxxx xxxx xxxx xxxx
Shared LOS:	A * * * * * * A * * * * *
ApproachDel:	xxxxxx xxxx 9.3 9.8
ApproachLOS:	* * A A

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Dwy. 1 / 60th Av.

Average Delay (sec/veh): 4.8 Worst Case Level Of Service: A[ 9.1]

	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 0 1 0	1 0 1 0 0 0

## Volume Module:

Base Vol:	0 0 0 0 0 0 0 0 32 0 0 29 0
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 0 0 0 0 34 0 0 31 0
Added Vol:	65 0 26 0 0 0 0 0 23 9 0 0
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	65 0 26 0 0 0 0 34 23 9 31 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
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 0.92
PHF Volume:	71 0 28 0 0 0 0 37 25 10 33 0
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	71 0 28 0 0 0 0 37 25 10 33 0

## Critical Gap Module:

Critical Gp:	6.4 xxxx 6.2 xxxxx xxxx xxxx xxxx xxxx xxxx 4.1 xxxx xxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx 2.2 xxxx xxxx

## Capacity Module:

Cnflct Vol:	102 xxxx 49 xxxx xxxx xxxx xxxx xxxx xxxx 62 xxxx xxxx
Potent Cap.:	901 xxxx 1025 xxxx xxxx xxxx xxxx xxxx 1554 xxxx xxxx
Move Cap.:	896 xxxx 1025 xxxx xxxx xxxx xxxx xxxx 1554 xxxx xxxx
Volume/Cap.:	0.08 xxxx 0.03 xxxx xxxx xxxx xxxx xxxx 0.01 xxxx xxxx

## Level Of Service Module:

2Way95thQ:	0.3 xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx 0.0 xxxx xxxx
Control Del:	9.4 xxxx 8.6 xxxxx xxxx xxxx xxxx xxxx xxxx 7.3 xxxx xxxx
LOS by Move:	A * A * * * * * * * A * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx
SharedQueue:	xxxxx xxxx
Shrd ConDel:	xxxxx xxxx
Shared LOS:	* * * * * * * * * * * *
ApproachDel:	9.1 xxxxxx xxxxxx xxxxxx xxxxxx
ApproachLOS:	A * * *

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Dwy. 2 / 61st Av.

Average Delay (sec/veh): 6.9 Worst Case Level Of Service: A[ 8.6]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0
Volume Module:				
Base Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 3 0
Growth Adj:	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 3 0
Added Vol:	0 0 0 20 0	0 0 19 7 0	0 0 0 0 0	0 0 0 0 7
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	0 0 0 20 0	0 19 7 0 0	0 0 0 0 0	0 0 3 7
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	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 0.92 0.92 0.92	0.92 0.92 0.92 0.92 0.92
PHF Volume:	0 0 0 22 0	0 21 8 0 0	0 0 0 0 0	0 0 3 8
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	0 0 0 22 0	0 21 8 0 0	0 0 0 0 0	0 0 3 8
Critical Gap Module:				
Critical Gp:xxxxx xxxx xxxx 6.4 6.5 6.2 4.1 xxxx xxxx xxxx xxxx xxxx xxxx				
FollowUpTim:xxxxx xxxx xxxx 3.5 4.0 3.3 2.2 xxxx xxxx xxxx xxxx xxxx xxxx				
Capacity Module:				
Cnflct Vol: xxxx xxxx xxxx 22 22 7 11 xxxx xxxx xxxx xxxx xxxx xxxx				
Potent Cap.: xxxx xxxx xxxx 999 875 1081 1621 xxxx xxxx xxxx xxxx xxxx				
Move Cap.: xxxx xxxx xxxx 996 871 1081 1621 xxxx xxxx xxxx xxxx xxxx				
Volume/Cap: xxxx xxxx xxxx 0.02 0.00 0.02 0.00 xxxx xxxx xxxx xxxx xxxx				
Level Of Service Module:				
2Way95thQ: xxxx xxxx xxxx xxxx xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx				
Control Del:xxxxx xxxx xxxx xxxx xxxx xxxx 7.2 xxxx xxxx xxxx xxxx xxxx				
LOS by Move: * * * * * * A * * * * * *				
Movement: LT - LTR - RT				
Shared Cap.: xxxx xxxx xxxx xxxx 1035 xxxx xxxx xxxx xxxx xxxx xxxx				
SharedQueue:xxxxx xxxx xxxx xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx xxxx				
Shrd ConDel:xxxxx xxxx xxxx xxxx 8.6 xxxx xxxx xxxx xxxx xxxx xxxx xxxx				
Shared LOS: * * * * A * * * * * * * *				
ApproachDel: xxxxxx 8.6 xxxxxx xxxxxx				
ApproachLOS: * A * * *				

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.163
Loss Time (sec):	0	Average Delay (sec/veh):	9.1
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1
<hr/>			
Volume Module:			
Base Vol:	4 127 2	65 69 43	42 6 2
Growth Adj:	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06
Initial Bse:	4 135 2	69 73 46	45 6 2
Added Vol:	13 6 0	5 2 0	0 5 5
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	17 141 2	74 75 46	45 11 7
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.79 0.79 0.79	0.79 0.79 0.79	0.79 0.79 0.79
PHF Volume:	22 178 3	93 95 58	56 14 9
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	22 178 3	93 95 58	56 14 9
PCE Adj:	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
FinalVolume:	22 178 3	93 95 58	56 14 9
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 2.00 1.00	1.00 2.00 1.00	1.00 1.00 2.00
Final Sat.:	563 1225 693	574 1245 707	522 561 630
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.04 0.14 0.00	0.16 0.08 0.08	0.11 0.03 0.01
Crit Moves:	****	****	****
Delay/Veh:	9.1 9.2 7.6	9.9 8.7 8.0	9.9 8.8 8.1
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	9.1 9.2 7.6	9.9 8.7 8.0	9.9 8.8 8.1
LOS by Move:	A A A	A A A	A A *
ApproachDel:	9.2	9.0	9.5
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	9.2	9.0	9.5
LOS by Appr:	A	A	A
AllWayAvgQ:	0.0 0.2 0.0	0.2 0.1 0.1	0.1 0.0 0.0
<hr/>			

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

E + A + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Ambient + Project (2016) Conditions  
PM Peak Hour

Trip Generation Report

Forecast for PM Trip Gen ( P )

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1 SITE (2016)		1.00	RESIDENTIAL	146.00	86.00	146	86	232	100.0
	Zone 1 Subtotal					146	86	232	100.0
TOTAL .....						146	86	232	100.0

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Madison St. / Av. 60

Average Delay (sec/veh): 5.8 Worst Case Level Of Service: A[ 9.6]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 1 0	0 0 1 0 0	0 0 1 0 1

## Volume Module:

Base Vol:	0 0 0 163 0 2 0 4 0 0 3 102
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 173 0 2 0 4 0 0 3 108
Added Vol:	0 0 0 22 0 0 0 0 0 0 0 13
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	0 0 0 195 0 2 0 4 0 0 3 121
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:	0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83
PHF Volume:	0 0 0 234 0 3 0 5 0 0 4 146
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	0 0 0 234 0 3 0 5 0 0 4 146

## Critical Gap Module:

Critical Gp:	xxxxxx xxxx xxxx 6.4 6.5 6.2 xxxx xxxx xxxx xxxx xxxx xxxx xxxx
FollowUpTim:	xxxxxx xxxx xxxx 3.5 4.0 3.3 xxxx xxxx xxxx xxxx xxxx xxxx

## Capacity Module:

Cnflict Vol:	xxxx xxxx xxxx 9 9 4 xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Potent Cap.:	xxxx xxxx xxxx 1017 890 1086 xxxx xxxx xxxx xxxx xxxx xxxx
Move Cap.:	xxxx xxxx xxxx 1017 890 1086 xxxx xxxx xxxx xxxx xxxx xxxx
Volume/Cap.:	xxxx xxxx xxxx 0.23 0.00 0.00 xxxx xxxx xxxx xxxx xxxx xxxx

## Level Of Service Module:

2Way95thQ:	xxxx xxxx xxxx 0.9 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:	xxxxxx xxxx xxxx 9.6 xxxx xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move:	* * * A * * * * * * * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxx xxxx xxxx 1086 xxxx xxxx xxxx xxxx xxxx xxxx
SharedQueue:	xxxxxx xxxx xxxx xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx xxxx
Shrd ConDel:	xxxxxx xxxx xxxx xxxx xxxx 8.3 xxxx xxxx xxxx xxxx xxxx xxxx
Shared LOS:	* * * * * A * * * * * * *
ApproachDel:	xxxxxx 9.6 xxxxxxxx xxxxxxx
ApproachLOS:	* A * *

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

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E + A + P PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.356
Loss Time (sec):	0	Average Delay (sec/veh):	9.6
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	8 73 8	22 42 36	72 81 4
Growth Adj:	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06
Initial Bse:	8 77 8	23 45 38	76 86 4
Added Vol:	17 17 0	0 29 0	0 0 29
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	25 94 8	23 74 38	76 86 33
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.76 0.76 0.76	0.76 0.76 0.76	0.76 0.76 0.76
PHF Volume:	33 124 11	31 96 50	100 113 44
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	33 124 11	31 96 50	100 113 44
PCE Adj:	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
FinalVolume:	33 124 11	31 96 50	100 113 44
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.20 0.73 0.07	0.24 0.76 1.00	0.39 0.44 0.17
Final Sat.:	137 507 46	150 472 725	281 316 122
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.24 0.24 0.24	0.20 0.20 0.07	0.36 0.36 0.36
Crit Moves:	****	****	****
Delay/Veh:	9.5 9.5 9.5	9.6 9.6 7.7	10.2 10.2 10.2
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	9.5 9.5 9.5	9.6 9.6 7.7	10.2 10.2 10.2
LOS by Move:	A A A	A A A	B B B
ApproachDel:	9.5	9.0	10.2
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	9.5	9.0	10.2
LOS by Appr:	A	A	B
AllWayAvgQ:	0.3 0.3 0.3	0.2 0.2 0.1	0.5 0.5 0.5
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.141		
Loss Time (sec):	0	Average Delay (sec/veh):	8.6		
Optimal Cycle:	0	Level Of Service:	A		
<hr/>					
Approach:	North Bound	South Bound	East Bound	West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign	
Rights:	Include	Include	Include	Include	
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0	
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1	0 0 1! 0 0	
<hr/>					
Volume Module:					
Base Vol:	24 30 2 9 33 9 14 32 39 4 10 10				
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06				
Initial Bse:	25 32 2 10 35 10 15 34 41 4 11 11				
Added Vol:	9 4 0 58 7 0 0 15 15 0 9 34				
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0				
Initial Fut:	34 36 2 68 42 10 15 49 56 4 20 45				
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:	0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80				
PHF Volume:	43 45 3 84 52 12 19 61 70 5 24 56				
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0				
Reduced Vol:	43 45 3 84 52 12 19 61 70 5 24 56				
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:	43 45 3 84 52 12 19 61 70 5 24 56				
<hr/>					
Saturation Flow Module:					
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00				
Lanes:	1.00 0.94 0.06 1.00 1.00 1.00 0.23 0.77 1.00 0.06 0.29 0.65				
Final Sat.:	604 627 37 596 649 742 152 500 764 43 201 457				
<hr/>					
Capacity Analysis Module:					
Vol/Sat:	0.07 0.07 0.07 0.14 0.08 0.02 0.12 0.12 0.09 0.12 0.12 0.12				
Crit Moves:	**** ****				
Delay/Veh:	8.8 8.3 8.3 9.4 8.5 7.4 8.7 8.7 7.6 8.6 8.6 8.6				
Delay Adj:	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:	8.8 8.3 8.3 9.4 8.5 7.4 8.7 8.7 7.6 8.6 8.6 8.6				
LOS by Move:	A A A A A A A A A A A A				
ApproachDel:	8.5				
Delay Adj:	1.00				
ApprAdjDel:	8.5				
LOS by Appr:	A A A A A A A A A A A A				
AllWayAvgQ:	0.1 0.1 0.1 0.2 0.1 0.0 0.1 0.1 0.1 0.1 0.1 0.1				
<hr/>					

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Ambient + Project (2016) Conditions  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: A[ 8.7]

Approach: North Bound South Bound East Bound West Bound

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

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Rights: Include Include Include Include

Lanes: 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 1! 0 0

Volume Module:

Base Vol: 0 41 1 3 59 0 0 0 0 0 1 0 1

Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06

Initial Bse: 0 44 1 3 63 0 0 0 0 0 1 0 1

Added Vol: 0 0 0 22 0 0 0 0 0 0 0 0 13

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

Initial Fut: 0 44 1 25 63 0 0 0 0 0 1 0 14

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: 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81

PHF Volume: 0 54 1 31 77 0 0 0 0 0 1 0 17

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

FinalVolume: 0 54 1 31 77 0 0 0 0 0 1 0 17

Critical Gap Module:

Critical Gp:xxxxx xxxx xxxx 4.1 xxxx xxxx xxxx xxxx xxxx 6.4 6.5 6.2

FollowUpTim:xxxxx xxxx xxxx 2.2 xxxx xxxx xxxx xxxx xxxx 3.5 4.0 3.3

Capacity Module:

Cnflct Vol: xxxx xxxx xxxx 55 xxxx xxxx xxxx xxxx xxxx 194 194 55

Potent Cap.: xxxx xxxx xxxx 1563 xxxx xxxx xxxx xxxx xxxx 799 705 1018

Move Cap.: xxxx xxxx xxxx 1563 xxxx xxxx xxxx xxxx xxxx 787 690 1018

Volume/Cap: xxxx xxxx xxxx 0.02 xxxx xxxx xxxx xxxx xxxx 0.00 0.00 0.02

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Control Del:xxxxx xxxx xxxx 7.4 xxxx xxxx xxxx xxxx xxxx xxxx xxxx

LOS by Move: \* \* \* A \* \* \* \* \* \* \* \* \* \*

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 998 xxxx

SharedQueue:xxxxx xxxx xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx 0.1 xxxx

Shrd ConDel:xxxxx xxxx xxxx 7.4 xxxx xxxx xxxx xxxx xxxx xxxx 8.7 xxxx

Shared LOS: \* \* \* A \* \* \* \* \* \* \* \* \* A \*

ApproachDel: xxxxxx xxxxxx xxxxxx 8.7

ApproachLOS: \* \* \* \* \* \* \* \* \* A

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St. / Av. 60

Cycle (sec):	100	Critical Vol./Cap.(X):	0.110
Loss Time (sec):	0	Average Delay (sec/veh):	7.5
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	11 42 3 5 49 4 7 22 8 4 11 14		
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06		
Initial Bse:	12 45 3 5 52 4 7 23 8 4 12 15		
Added Vol:	0 4 0 0 7 22 13 4 0 0 7 0		
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0		
Initial Fut:	12 49 3 5 59 26 20 27 8 4 19 15		
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:	12 52 3 6 63 28 22 29 9 5 20 16		
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0		
Reduced Vol:	12 52 3 6 63 28 22 29 9 5 20 16		
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 52 3 6 63 28 22 29 9 5 20 16		
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
Lanes:	0.18 0.77 0.05 0.06 0.65 0.29 0.36 0.49 0.15 0.11 0.50 0.39		
Final Sat.:	153 638 42 51 570 253 296 397 123 95 418 333		
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.08 0.08 0.08 0.11 0.11 0.11 0.07 0.07 0.07 0.05 0.05 0.05		
Crit Moves:	****	****	****
Delay/Veh:	7.6 7.6 7.6 7.5 7.5 7.5 7.6 7.6 7.6 7.3 7.3 7.3		
Delay Adj:	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:	7.6 7.6 7.6 7.5 7.5 7.5 7.6 7.6 7.6 7.3 7.3 7.3		
LOS by Move:	A A A A A A A A A A A A		
ApproachDel:	7.6	7.5	7.6
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	7.6	7.5	7.6
LOS by Appr:	A	A	A
AllWayAvgQ:	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.0 0.0 0.0		

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: B[ 10.0]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 1 0 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 0 1 0

## Volume Module:

Base Vol:	2	47	0	3	56	0	2	1	1	0	2	2
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	2	50	0	3	59	0	2	1	1	0	2	2
Added Vol:	7	0	0	0	0	7	4	4	4	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	50	0	3	59	7	6	5	5	0	9	2
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:	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
PHF Volume:	13	71	0	5	84	10	9	7	7	0	13	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	13	71	0	5	84	10	9	7	7	0	13	3

## Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1	6.5	6.2	xxxxx	6.5	6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5	4.0	3.3	xxxxx	4.0	3.3

## Capacity Module:

Cnflct Vol:	94 xxxx xxxx	71 xxxx xxxx	202	194	89	xxxx	199	71
Potent Cap.:	1513 xxxx xxxx	1543 xxxx xxxx	760	705	975	xxxx	700	998
Move Cap.:	1513 xxxx xxxx	1543 xxxx xxxx	741	696	975	xxxx	692	998
Volume/Cap.:	0.01 xxxx xxxx	0.00 xxxx xxxx	0.01	0.01	0.01	xxxx	0.02	0.00

## Level Of Service Module:

2Way95thQ:	0.0 xxxx xxxx	0.0 xxxx xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Control Del:	7.4 xxxx xxxx	7.3 xxxx xxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxx
LOS by Move:	A * *	A * *	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT				
Shared Cap.:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx	784	xxxxxx	xxxx	xxxx	735
SharedQueue:	0.0 xxxx xxxx	xxxx xxxx xxxx	xxxxxx	0.1	xxxxxx	xxxx	xxxx	0.1
Shrd ConDel:	7.4 xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx	9.7	xxxxxx	xxxx	xxxx	10.0
Shared LOS:	A * *	*	*	*	A *	*	*	B
ApproachDel:	xxxxxx	xxxxxx		9.7		10.0		
ApproachLOS:	*	*			A		B	

Note: Queue reported is the number of cars per lane.  
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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Ambient + Project (2016) Conditions  
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Dwy. 1 / 60th Av.

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: A[ 9.5]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 0 1 0	1 0 1 0 1! 0 0

Volume Module:

Base Vol:	0 0 0 0 0 0 0 0 43 0 0 24 0
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 0 0 0 0 46 0 0 25 0
Added Vol:	43 0 17 0 0 0 0 0 73 29 0 0
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	43 0 17 0 0 0 0 46 73 29 25 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
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 0.92
PHF Volume:	47 0 18 0 0 0 0 50 79 32 28 0
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	47 0 18 0 0 0 0 50 79 32 28 0

Critical Gap Module:

Critical Gp:	6.4 xxxx 6.2 xxxxx xxxx xxxx xxxx xxxx xxxx 4.1 xxxx xxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx xxxx 2.2 xxxx xxxx

Capacity Module:

Cnflct Vol:	180 xxxx 89 xxxx xxxx xxxx xxxx xxxx xxxx 129 xxxx xxxx
Potent Cap.:	814 xxxx 974 xxxx xxxx xxxx xxxx xxxx 1469 xxxx xxxx
Move Cap.:	801 xxxx 974 xxxx xxxx xxxx xxxx xxxx 1469 xxxx xxxx
Volume/Cap.:	0.06 xxxx 0.02 xxxx xxxx xxxx xxxx xxxx 0.02 xxxx xxxx

Level Of Service Module:

2Way95thQ:	0.2 xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx 0.0 xxxx xxxx
Control Del:	9.8 xxxx 8.8 xxxxx xxxx xxxx xxxx xxxx xxxx 7.5 xxxx xxxx
LOS by Move:	A * A * * * * * * * A * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx
SharedQueue:	xxxxx xxxx
Shrd ConDel:	xxxxx xxxx
Shared LOS:	* * * * * * * * * * * *
ApproachDel:	9.5 xxxxxx xxxxxx xxxxxx xxxxxx
ApproachLOS:	A * * *

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Dwy. 2 / 61st Av.

Average Delay (sec/veh): 5.1 Worst Case Level Of Service: A[ 8.7]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0
Volume Module:				
Base Vol:	0 0 0 0 0	0 0 0 0 4	0 0 0 0 2	0 0 0 0 0
Growth Adj:	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 0 0	0 0 0 0 4	0 0 0 0 2	0 0 0 0 0
Added Vol:	0 0 0 13 0	0 0 13 22 0	0 0 0 0 0	0 0 0 0 22
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	0 0 0 13 0	0 13 22 4	0 0 0 0 2	0 0 0 0 22
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	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 0.92 0.92 0.92	0.92 0.92 0.92 0.92 0.92
PHF Volume:	0 0 0 14 0	0 14 24 5	0 0 0 0 2	0 0 0 0 24
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	0 0 0 14 0	0 14 24 5	0 0 0 0 2	0 0 0 0 24
Critical Gap Module:				
Critical Gp:xxxxx xxxx xxxx 6.4 6.5 6.2 4.1 xxxx xxxx xxxx xxxx xxxx xxxx				
FollowUpTim:xxxxx xxxx xxxx 3.5 4.0 3.3 2.2 xxxx xxxx xxxx xxxx xxxx xxxx				
Capacity Module:				
Cnflct Vol: xxxx xxxx xxxx 67 67 14 26 xxxx xxxx xxxx xxxx xxxx xxxx				
Potent Cap.: xxxx xxxx xxxx 943 828 1071 1601 xxxx xxxx xxxx xxxx xxxx				
Move Cap.: xxxx xxxx xxxx 933 815 1071 1601 xxxx xxxx xxxx xxxx xxxx				
Volume/Cap: xxxx xxxx xxxx 0.02 0.00 0.01 0.01 xxxx xxxx xxxx xxxx xxxx				
Level Of Service Module:				
2Way95thQ: xxxx xxxx xxxx xxxx xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx				
Control Del:xxxxx xxxx xxxx xxxx xxxx xxxx 7.3 xxxx xxxx xxxx xxxx xxxx				
LOS by Move: * * * * * * A * * * * * *				
Movement: LT - LTR - RT				
Shared Cap.: xxxx xxxx xxxx 997 xxxx xxxx xxxx xxxx xxxx xxxx xxxx				
SharedQueue:xxxxx xxxx xxxx xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx xxxx				
Shrd ConDel:xxxxx xxxx xxxx xxxx 8.7 xxxx xxxx xxxx xxxx xxxx xxxx xxxx				
Shared LOS: * * * * A * * * * * * *				
ApproachDel: xxxxxx 8.7 xxxxxxxx xxxxxxxx				
ApproachLOS: * A * * *				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.145
Loss Time (sec):	0	Average Delay (sec/veh):	9.0
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1
<hr/>			
Volume Module:			
Base Vol:	2 109	1 63	168 41
Growth Adj:	1.06 1.06	1.06 1.06	1.06 1.06 1.06
Initial Bse:	2 116	1 67	178 44
Added Vol:	9 4	0 15	7 0
PasserByVol:	0 0	0 0	0 0
Initial Fut:	11 120	1 82	185 44
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00
PHF Volume:	11 120	1 82	185 44
Reduct Vol:	0 0	0 0	0 0
Reduced Vol:	11 120	1 82	185 44
PCE Adj:	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
FinalVolume:	11 120	1 82	185 44
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 2.00	1.00 2.00	1.00 1.00 1.00
Final Sat.:	545 1183	667 585	1273 727
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.02 0.10	0.00 0.14	0.15 0.06
Crit Moves:	****	****	****
Delay/Veh:	9.1 9.1	7.8 9.6	9.0 7.7
Delay Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	9.1 9.1	7.8 9.6	9.0 7.7
LOS by Move:	A A	A A	A A A A
ApproachDel:	9.1	9.0	9.3
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	9.1	9.0	9.3
LOS by Appr:	A	A	A A
AllWayAvgQ:	0.0 0.1	0.0 0.2	0.2 0.1 0.1 0.0
<hr/>			

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

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## **APPENDIX 6.2**

EAPC (2016) Conditions  
Intersection Operations Analysis Worksheets



OY WP AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
AM Peak Hour

Trip Generation Report

Forecast for AM Trip Gen ( P )

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3 TAZ 3 & 4		1.00	SFDR	0.00	0.00	0	0	0	0.0
100 SITE (2016)		1.00	RESIDENTIAL	45.00	130.00	45	130	175	18.3
Zone 100 Subtotal .....						45	130	175	18.3
TOTAL .....						45	130	175	18.3

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 AM Peak Hour

## Trip Generation Report

Forecast for AM Trip Gen ( O )

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1 TAZ 1		1.00	SFDR	11.00	31.00	11	31	42	4.4
	Zone 1 Subtotal					11	31	42	4.4
2 TAZ 2		1.00	SFDR	17.00	50.00	17	50	67	7.0
	Zone 2 Subtotal					17	50	67	7.0
3 TAZ 3 & 4		1.00	SFDR	147.00	434.00	147	434	581	60.8
	Zone 3 Subtotal					147	434	581	60.8
5 TAZ 5		1.00	SFDR	12.00	33.00	12	33	45	4.7
	Zone 5 Subtotal					12	33	45	4.7
6 TAZ 6		1.00	SFDR	4.00	12.00	4	12	16	1.7
	Zone 6 Subtotal					4	12	16	1.7
8 TAZ 8		1.00	SFDR	8.00	22.00	8	22	30	3.1
	Zone 8 Subtotal					8	22	30	3.1
<hr/>									
TOTAL .....						199	582	781	81.7

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Madison St. / 60th Av.

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: A[ 8.9]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 1 0	0 0 1 0 0	0 0 1 0 1

## Volume Module:

Base Vol:	0 0 0 59 0 0 0 2 0 0 2 129
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 63 0 0 0 2 0 0 2 137
Added Vol:	0 0 0 9 0 0 0 0 0 0 0 26
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	0 0 0 72 0 0 0 2 0 0 2 163
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:	0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81
PHF Volume:	0 0 0 88 0 0 0 3 0 0 3 201
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	0 0 0 88 0 0 0 3 0 0 3 201

## Critical Gap Module:

Critical Gp:	xxxxxx xxxx xxxx 6.4 6.5 6.2 xxxxxx xxxx xxxx xxxx xxxx xxxx xxxx
FollowUpTim:	xxxxxx xxxx xxxx 3.5 4.0 3.3 xxxxxx xxxx xxxx xxxx xxxx xxxx

## Capacity Module:

Cnflict Vol:	xxxxx xxxx xxxx 5 5 3 xxxxx xxxx xxxx xxxx xxxx xxxx xxxx
Potent Cap.:	xxxxx xxxx xxxx 1022 894 1087 xxxxx xxxx xxxx xxxx xxxx xxxx
Move Cap.:	xxxxx xxxx xxxx 1022 894 1087 xxxxx xxxx xxxx xxxx xxxx xxxx
Volume/Cap.:	xxxxx xxxx xxxx 0.09 0.00 0.00 xxxxx xxxx xxxx xxxx xxxx xxxx

## Level Of Service Module:

2Way95thQ:	xxxxx xxxx xxxx 0.3 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:	xxxxxx xxxx xxxx 8.9 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move:	* * * A * * * * * * * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxxx xxxx xxxx xxxx xxxx 0 xxxx xxxx xxxx xxxx xxxx xxxx
SharedQueue:	xxxxxx xxxx
Shrd ConDel:	xxxxxx xxxx
Shared LOS:	* * * * * * * * * * * *
ApproachDel:	xxxxxx 8.9 xxxxxxxx xxxxxxx
ApproachLOS:	* A * *

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.326
Loss Time (sec):	0	Average Delay (sec/veh):	9.4
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	13 32 2	10 35 56	17 29 3
Growth Adj:	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06
Initial Bse:	14 34 2	11 37 59	18 31 3
Added Vol:	57 70 7	5 24 0	0 11 20
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	71 104 9	16 61 59	18 42 23
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.81 0.81 0.81	0.81 0.81 0.81	0.81 0.81 0.81
PHF Volume:	88 129 11	19 76 74	22 52 29
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	88 129 11	19 76 74	22 52 29
PCE Adj:	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
FinalVolume:	88 129 11	19 76 74	22 52 29
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.38 0.57 0.05	0.20 0.80 1.00	0.22 0.50 0.28
Final Sat.:	269 395 35	127 496 723	146 338 188
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.33 0.33 0.33	0.15 0.15 0.10	0.15 0.15 0.15
Crit Moves:	****	****	****
Delay/Veh:	10.2 10.2 10.2	9.1 9.1 7.9	8.8 8.8 8.8
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	10.2 10.2 10.2	9.1 9.1 7.9	8.8 8.8 8.8
LOS by Move:	B B B	A A A	A A A
ApproachDel:	10.2	8.6	8.8
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	10.2	8.6	8.8
LOS by Appr:	B	A	A
AllWayAvgQ:	0.4 0.4 0.4	0.2 0.2 0.1	0.2 0.2 0.2
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.225													
Loss Time (sec):	0	Average Delay (sec/veh):	8.9													
Optimal Cycle:	0	Level Of Service:	A													
<hr/>																
Approach:	North Bound	South Bound	East Bound	West Bound												
Movement:	L - T - R	L - T - R	L - T - R	L - T - R												
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign												
Rights:	Include	Include	Include	Include												
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0												
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1	0 0 1! 0 0												
<hr/>																
Volume Module:																
Base Vol:	15 24 2 8 17 15 13 22 32 1 20 8															
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06															
Initial Bse:	16 25 2 8 18 16 14 23 34 1 21 8															
Added Vol:	18 58 1 23 20 0 0 6 6 0 16 65															
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0															
Initial Fut:	34 83 3 31 38 16 14 29 40 1 37 73															
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:	0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72															
PHF Volume:	47 116 4 44 53 22 19 41 56 1 52 102															
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0															
Reduced Vol:	47 116 4 44 53 22 19 41 56 1 52 102															
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:	47 116 4 44 53 22 19 41 56 1 52 102															
<hr/>																
Saturation Flow Module:																
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00															
Lanes:	1.00 0.96 0.04 1.00 1.00 1.00 0.32 0.68 1.00 0.01 0.33 0.66															
Final Sat.:	596 630 24 563 611 694 198 421 725 7 230 454															
<hr/>																
Capacity Analysis Module:																
Vol/Sat:	0.08 0.18 0.18 0.08 0.09 0.03 0.10 0.10 0.08 0.22 0.22 0.22															
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	****			
Delay/Veh:	9.0 9.1 9.1 9.3 8.8 7.8 8.8 8.8 7.8 9.4 9.4 9.4															
Delay Adj:	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:	9.0 9.1 9.1 9.3 8.8 7.8 8.8 8.8 7.8 9.4 9.4 9.4															
LOS by Move:	A A A A A A A A A A A A															
ApproachDel:	9.1	8.8	8.3	9.4												
Delay Adj:	1.00	1.00	1.00	1.00												
ApprAdjDel:	9.1	8.8	8.3	9.4												
LOS by Appr:	A	A	A	A												
AllWayAvgQ:	0.1 0.2 0.2 0.1 0.1 0.0 0.1 0.1 0.1 0.3 0.3 0.3															
<hr/>																

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Average Delay (sec/veh): 4.6 Worst Case Level Of Service: B[ 10.5]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 0 0 1
Volume Module:				
Base Vol:	0 31 0 0 50	0 0 0 0 0	0 0 0 0 0	0 0 0 0 3
Growth Adj:	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 33 0 0 53	0 0 0 0 0	0 0 0 0 0	0 0 0 0 3
Added Vol:	0 0 0 22 0	0 0 0 2 7	1 1 1 1 0	0 0 0 0 65
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	0 33 0 22 53	2 7 1 1 0	1 0 0 0 68	0 0 0 0 68
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	1.00 1.00 1.00 1.00 1.00
PHF Adj:	0.68 0.68 0.68 0.68 0.68	0.68 0.68 0.68 0.68 0.68	0.68 0.68 0.68 0.68 0.68	0.68 0.68 0.68 0.68 0.68
PHF Volume:	0 48 0 32 78	3 10 1 1 0	1 0 0 0 100	0 0 0 0 100
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	0 48 0 32 78	3 10 1 1 0	1 0 0 0 100	0 0 0 0 100
Critical Gap Module:				
Critical Gp:xxxxx xxxx xxxx 4.1 xxxx xxxx 7.1 6.5 6.2	xxxxx xxxx xxxx 7.1 6.5 6.2	xxxxx xxxx 6.2		
FollowUpTim:xxxxx xxxx xxxx 2.2 xxxx xxxx 3.5 4.0 3.3	xxxxx xxxx 3.5 4.0 3.3	xxxxx xxxx 3.3		
Capacity Module:				
Cnflct Vol: xxxx xxxx xxxx 48 xxxx xxxx 243 193 80	xxxx xxxx 48	xxxx xxxx 48		
Potent Cap.: xxxx xxxx xxxx 1572 xxxx xxxx 715 706 986	xxxx xxxx 1572	xxxx xxxx 1026		
Move Cap.: xxxx xxxx xxxx 1572 xxxx xxxx 635 691 986	xxxx xxxx 1572	xxxx xxxx 1026		
Volume/Cap: xxxx xxxx xxxx 0.02 xxxx xxxx 0.02 0.00 0.00	xxxx xxxx 0.02	xxxx xxxx 0.10		
Level Of Service Module:				
2Way95thQ: xxxx xxxx xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx 0.3	xxxx xxxx 0.1	xxxx xxxx 0.3		
Control Del:xxxxx xxxx xxxx 7.3 xxxx xxxx xxxx xxxx xxxx xxxx 8.9	xxxxx xxxx 7.3	xxxxx xxxx 8.9		
LOS by Move: * * * A * * * * * * * * * * * * * * A	* * * A	* * * * * * * * * * * * * * * * * * A		
Movement: LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.: xxxx xxxx xxxx xxxx xxxx xxxx xxxx 667	xxxx xxxx xxxx xxxx 667	xxxx xxxx xxxx xxxx 667		
SharedQueue:xxxxx xxxx xxxx xxxx xxxx xxxx xxxx 0.1	xxxxx xxxx xxxx 0.1	xxxxx xxxx xxxx 0.1		
Shrd ConDel:xxxxx xxxx xxxx xxxx xxxx xxxx xxxx 10.5	xxxxx xxxx xxxx 10.5	xxxxx xxxx xxxx 10.5		
Shared LOS: * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *		
ApproachDel: xxxxxxxx xxxxxxxx 10.5 8.9	xxxxxxxx	10.5	8.9	
ApproachLOS: * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *		

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

OY WP AM

Mon Dec 16, 2013 13:05:29

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.125
Loss Time (sec):	0	Average Delay (sec/veh):	7.6
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	7 43 1	12 45 15	5 21 7
Growth Adj:	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06
Initial Bse:	7 46 1	13 48 16	5 22 7
Added Vol:	0 8 0	3 5 13	24 8 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	7 54 1	16 53 29	29 30 7
User Adj:	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
PHF Volume:	8 60 1	17 59 32	33 34 8
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	8 60 1	17 59 32	33 34 8
PCE Adj:	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
FinalVolume:	8 60 1	17 59 32	33 34 8
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.12 0.86 0.02	0.16 0.54 0.30	0.44 0.45 0.11
Final Sat.:	99 712 14	140 469 257	351 363 89
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.08 0.08 0.08	0.12 0.12 0.12	0.09 0.09 0.09
Crit Moves:	****	****	****
Delay/Veh:	7.6 7.6 7.6	7.6 7.6 7.6	7.7 7.7 7.7
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	7.6 7.6 7.6	7.6 7.6 7.6	7.7 7.7 7.7
LOS by Move:	A A A	A A A	A A A
ApproachDel:	7.6	7.6	7.7
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	7.6	7.6	7.7
LOS by Appr:	A	A	A
AllWayAvgQ:	0.1 0.1 0.1	0.1 0.1 0.1	0.1 0.1 0.1
<hr/>			

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

OY WP AM

Mon Dec 16, 2013 13:05:29

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Average Delay (sec/veh): 4.6 Worst Case Level Of Service: B[ 10.2]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 1 0 0 0	0 0 0 1 0	0 0 1! 0 0	0 0 1 0 0

## Volume Module:

Base Vol:	3 49 0 0 43 1 2 0 0 0 0 0 0 0
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse:	3 52 0 0 46 1 2 0 0 0 0 0 0 0
Added Vol:	3 1 0 0 3 3 8 23 8 0 46 0
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	6 53 0 0 49 4 10 23 8 0 46 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
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 0.85 0.85
PHF Volume:	7 63 0 0 58 5 12 27 9 0 54 0
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	7 63 0 0 58 5 12 27 9 0 54 0

## Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx xxxx xxxx xxxx 7.1 6.5 6.2 xxxx 6.5 xxxx
FollowUpTim:	2.2 xxxx xxxx xxxx xxxx xxxx 3.5 4.0 3.3 xxxx 4.0 xxxx

## Capacity Module:

Cnflct Vol:	62 xxxx xxxx xxxx xxxx xxxx 165 137 60 xxxx 140 xxxx
Potent Cap.:	1553 xxxx xxxx xxxx xxxx 805 757 1011 xxxx 755 xxxx
Move Cap.:	1553 xxxx xxxx xxxx xxxx xxxx 757 754 1011 xxxx 751 xxxx
Volume/Cap:	0.00 xxxx xxxx xxxx xxxx xxxx 0.02 0.04 0.01 xxxx 0.07 xxxx

## Level Of Service Module:

2Way95thQ:	0.0 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 0.2 xxxx
Control Del:	7.3 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx 10.2 xxxx
LOS by Move:	A * * * * * * * * * * * * B *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxx xxxx xxxx xxxx xxxx 794 xxxx xxxx xxxx xxxx
SharedQueue:	0.0 xxxx xxxx xxxx xxxx xxxx xxxx 0.2 xxxx xxxx xxxx xxxx
Shrd ConDel:	7.3 xxxx xxxx xxxx xxxx xxxx xxxx 9.8 xxxx xxxx xxxx xxxx
Shared LOS:	A * * * * * * A * * * * *
ApproachDel:	xxxxxx xxxx 9.8 10.2
ApproachLOS:	* * A B

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

OY WP AM

Thu Dec 19, 2013 12:28:29

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Dwy. 1 / 60th Av.

Average Delay (sec/veh): 4.5 Worst Case Level Of Service: A[ 9.2]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 0 1 0	1 0 1! 0 0

## Volume Module:

Base Vol:	0 0 0 0 0	0 0 0 32 0	0 0 29 0
Growth Adj:	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 0 0	0 0 34 0 0	0 0 31 0 0
Added Vol:	65 0 26 0 0	0 0 7 23 9	7 0 0 7 0
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	65 0 26 0 0	0 0 41 23 9	38 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:	0.92 0.92 0.92 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:	71 0 28 0 0	0 0 45 25 10	41 0 0 0 0
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	71 0 28 0 0	0 0 45 25 10	41 0 0 0 0

## Critical Gap Module:

Critical Gp:	6.4 xxxx 6.2 xxxxx xxxx xxxx xxxx xxxx xxxx	4.1 xxxx xxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx	2.2 xxxx xxxx

## Capacity Module:

Cnflct Vol:	118 xxxx 57 xxxx xxxx xxxx xxxx xxxx xxxx	70 xxxx xxxx
Potent Cap.:	883 xxxx 1015 xxxx xxxx xxxx xxxx xxxx	1544 xxxx xxxx
Move Cap.:	879 xxxx 1015 xxxx xxxx xxxx xxxx xxxx	1544 xxxx xxxx
Volume/Cap.:	0.08 xxxx 0.03 xxxx xxxx xxxx xxxx xxxx	0.01 xxxx xxxx

## Level Of Service Module:

2Way95thQ:	0.3 xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx	0.0 xxxx xxxx
Control Del:	9.5 xxxx 8.6 xxxxx xxxx xxxx xxxx xxxx xxxx	7.3 xxxx xxxx
LOS by Move:	A * A * * * * * * * * A * *	
Movement:	LT - LTR - RT	
Shared Cap.:	xxxx	
SharedQueue:	xxxxx xxxx	
Shrd ConDel:	xxxxx xxxx	
Shared LOS:	* * * * * * * * * * * * * *	
ApproachDel:	9.2 xxxxxx	
ApproachLOS:	A *	

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

OY WP AM

Thu Dec 19, 2013 12:28:29

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Dwy. 2 / 61st Av.

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: A[ 8.9]

Approach:	North Bound	South Bound	East Bound	West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled	
Rights:	Include	Include	Include	Include	
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0	
Volume Module:					
Base Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 3	0 0 0 0 0
Growth Adj:	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 3 0
Added Vol:	0 0 0 20 0	0 0 19 7 19	0 0 0 0 0	0 0 0 0 45	0 0 0 0 7
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	0 0 0 20 0	0 0 19 7 19	0 0 0 0 0	0 0 0 0 48	0 0 0 0 7
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	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 0.92 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 0 0 22 0	0 0 21 8 21	0 0 0 0 0	0 0 0 0 52	0 0 0 0 8
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	0 0 0 22 0	0 0 21 8 21	0 0 0 0 0	0 0 0 0 52	0 0 0 0 8
Critical Gap Module:					
Critical Gp:	xxxxx xxxx xxxx 6.4	6.5 6.2 4.1	xxxxx xxxx xxxx xxxx xxxx xxxx		
FollowUpTim:	xxxxx xxxx xxxx 3.5	4.0 3.3 2.2	xxxxx xxxx xxxx xxxx xxxx xxxx		
Capacity Module:					
Cnflct Vol:	xxxxx xxxx xxxx 92	92 56 60	xxxxx xxxx xxxx xxxx xxxx xxxx		
Potent Cap.:	xxxxx xxxx xxxx 913	802 1016 1556	xxxxx xxxx xxxx xxxx xxxx xxxx		
Move Cap.:	xxxxx xxxx xxxx 910	798 1016 1556	xxxxx xxxx xxxx xxxx xxxx xxxx		
Volume/Cap.:	xxxxx xxxx xxxx 0.02	0.00 0.02 0.00	xxxxx xxxx xxxx xxxx xxxx xxxx		
Level Of Service Module:					
2Way95thQ:	xxxxx xxxx xxxx xxxx xxxx xxxx	0.0	xxxxx xxxx xxxx xxxx xxxx xxxx		
Control Del:	xxxxx xxxx xxxx xxxx xxxx xxxx	7.3	xxxxx xxxx xxxx xxxx xxxx xxxx		
LOS by Move:	*	*	A *	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxxx xxxx xxxx xxxx 958	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx		
SharedQueue:	xxxxxx xxxx xxxx xxxx 0.1	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx		
Shrd ConDel:	xxxxx xxxx xxxx xxxx 8.9	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx		
Shared LOS:	*	*	A *	*	*
ApproachDel:	xxxxxx	8.9	xxxxxx	xxxxxx	
ApproachLOS:	*	A	*	*	*

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

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OY WP AM

Mon Dec 16, 2013 13:05:29

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.212	
Loss Time (sec):	0	Average Delay (sec/veh):	9.6	
Optimal Cycle:	0	Level Of Service:	A	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Stop Sign	
Rights:	Include	Include	Include	
Min. Green:	0 0 0	0 0 0	0 0 0	
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1	
<hr/>				
Volume Module:				
Base Vol:	4 127 2	65 69 43	42 6 2	0 12 51
Growth Adj:	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06
Initial Bse:	4 135 2	69 73 46	45 6 2	0 13 54
Added Vol:	16 21 2	17 8 0	11 6 1	33 50
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	20 156 4	86 81 46	45 17 8	1 46 104
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:	0.79 0.79 0.79	0.79 0.79 0.79	0.79 0.79 0.79	0.79 0.79 0.79
PHF Volume:	26 196 5	108 102 58	56 22 10	1 58 131
Reduced Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	26 196 5	108 102 58	56 22 10	1 58 131
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:	26 196 5	108 102 58	56 22 10	1 58 131
<hr/>				
Saturation Flow Module:				
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 2.00 1.00	1.00 2.00 1.00	1.00 1.00 1.00	1.00 2.00 1.00
Final Sat.:	531 1150 644	541 1166 658	493 528 587	511 1101 619
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.05 0.17 0.01	0.20 0.09 0.09	0.11 0.04 0.02	0.00 0.05 0.21
Crit Moves:	****	****	****	****
Delay/Veh:	9.5 9.8 8.0	10.6 9.1 8.3	10.3 9.3 8.4	9.4 9.2 9.5
Delay Adj:	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:	9.5 9.8 8.0	10.6 9.1 8.3	10.3 9.3 8.4	9.4 9.2 9.5
LOS by Move:	A A A	B A A	B A A	A A A
ApproachDel:	9.7	9.5	9.9	9.4
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	9.7	9.5	9.9	9.4
LOS by Appr:	A	A	A	A
AllWayAvgQ:	0.0 0.2 0.0	0.2 0.1 0.1	0.1 0.0 0.0	0.0 0.0 0.2

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

OY WP PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
PM Peak Hour

Trip Generation Report

Forecast for PM Trip Gen ( P )

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
100 SITE (2016)		1.00	RESIDENTIAL	146.00	86.00	146	86	232	18.3
	Zone 100 Subtotal					146	86	232	18.3
TOTAL .....						146	86	232	18.3

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 PM Peak Hour

## Trip Generation Report

Forecast for PM Trip Gen ( O )

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1 TAZ 1		1.00	SFDR	35.00	21.00	35	21	56	4.4
	Zone 1 Subtotal					35	21	56	4.4
2 TAZ 2		1.00	SFDR	57.00	33.00	57	33	90	7.1
	Zone 2 Subtotal					57	33	90	7.1
3 TAZ 3 & 4		1.00	SFDR	489.00	286.00	489	286	775	61.3
	Zone 3 Subtotal					489	286	775	61.3
5 TAZ 5		1.00	SFDR	34.00	19.00	34	19	53	4.2
	Zone 5 Subtotal					34	19	53	4.2
6 TAZ 6		1.00	SFDR	14.00	8.00	14	8	22	1.7
	Zone 6 Subtotal					14	8	22	1.7
8 TAZ 8		1.00	SFDR	24.00	13.00	24	13	37	2.9
	Zone 8 Subtotal					24	13	37	2.9
<hr/>						653	380	1033	81.7
<hr/>									

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Madison St. / 60th Av.

Average Delay (sec/veh): 5.8 Worst Case Level Of Service: A[ 9.6]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 1 0	0 0 1 0 0	0 0 1 0 1

## Volume Module:

Base Vol:	0 0 0 163 0 2 0 4 0 0 3 102
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 173 0 2 0 4 0 0 3 108
Added Vol:	0 0 0 29 0 0 0 0 0 0 0 17
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	0 0 0 202 0 2 0 4 0 0 3 125
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:	0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83
PHF Volume:	0 0 0 242 0 3 0 5 0 0 4 150
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	0 0 0 242 0 3 0 5 0 0 4 150

## Critical Gap Module:

Critical Gp:	xxxxxx xxxx xxxx 6.4 6.5 6.2 xxxxxx xxxx xxxx xxxx xxxx xxxx xxxx
FollowUpTim:	xxxxxx xxxx xxxx 3.5 4.0 3.3 xxxxxx xxxx xxxx xxxx xxxx xxxx

## Capacity Module:

Cnflct Vol:	xxxxx xxxx xxxx 9 9 4 xxxxx xxxx xxxx xxxx xxxx xxxx xxxx
Potent Cap.:	xxxxx xxxx xxxx 1017 890 1086 xxxxx xxxx xxxx xxxx xxxx xxxx
Move Cap.:	xxxxx xxxx xxxx 1017 890 1086 xxxxx xxxx xxxx xxxx xxxx
Volume/Cap.:	xxxxx xxxx xxxx 0.24 0.00 0.00 xxxxx xxxx xxxx xxxx xxxx

## Level Of Service Module:

2Way95thQ:	xxxxx xxxx xxxx 0.9 xxxxx xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:	xxxxxx xxxx xxxx 9.6 xxxxx xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move:	* * * A * * * * * * * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxxx xxxx xxxx xxxx xxxx 1086 xxxxx xxxx xxxx xxxx xxxx xxxx
SharedQueue:	xxxxxx xxxx xxxx xxxx xxxx xxxx 0.0 xxxxxx xxxx xxxx xxxx xxxx
Shrd ConDel:	xxxxxx xxxx xxxx xxxx xxxx 8.3 xxxxx xxxx xxxx xxxx xxxx
Shared LOS:	* * * * * A * * * * * *
ApproachDel:	xxxxxx 9.6 xxxxxxxx xxxxxxxx
ApproachLOS:	* A * *

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.527
Loss Time (sec):	0	Average Delay (sec/veh):	12.1
Optimal Cycle:	0	Level Of Service:	B
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	8 73 8	22 42 36	72 81 4
Growth Adj:	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06
Initial Bse:	8 77 8	23 45 38	76 86 4
Added Vol:	37 45 4	16 78 0	0 30 64
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	45 122 12	39 123 38	76 116 68
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.76 0.76 0.76	0.76 0.76 0.76	0.76 0.76 0.76
PHF Volume:	60 161 16	52 161 50	100 152 89
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	60 161 16	52 161 50	100 152 89
PCE Adj:	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
FinalVolume:	60 161 16	52 161 50	100 152 89
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.25 0.68 0.07	0.24 0.76 1.00	0.29 0.45 0.26
Final Sat.:	153 412 42	136 424 642	190 289 170
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.39 0.39 0.39	0.38 0.38 0.08	0.53 0.53 0.53
Crit Moves:	****	****	****
Delay/Veh:	11.8 11.8 11.8	12.2 12.2 8.4	13.5 13.5 13.5
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	11.8 11.8 11.8	12.2 12.2 8.4	13.5 13.5 13.5
LOS by Move:	B B B	B B A	B B B
ApproachDel:	11.8	11.4	13.5
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	11.8	11.4	13.5
LOS by Appr:	B	B	B
AllWayAvgQ:	0.5 0.5 0.5	0.5 0.5 0.1	0.9 0.9 0.9
<hr/>			

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

OY WP PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.201	
Loss Time (sec):	0	Average Delay (sec/veh):	9.2	
Optimal Cycle:	0	Level Of Service:	A	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Stop Sign	
Rights:	Include	Include	Include	
Min. Green:	0 0 0	0 0 0	0 0 0	
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1	
<hr/>				
Volume Module:				
Base Vol:	24 30 2 9 33 9 14 32 39 4 10 10			
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06			
Initial Bse:	25 32 2 10 35 10 15 34 41 4 11 11			
Added Vol:	12 38 0 73 66 0 0 18 20 1 11 42			
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0			
Initial Fut:	37 70 2 83 101 10 15 52 61 5 22 53			
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:	0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80			
PHF Volume:	47 87 3 103 126 12 19 65 76 7 27 66			
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0			
Reduced Vol:	47 87 3 103 126 12 19 65 76 7 27 66			
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:	47 87 3 103 126 12 19 65 76 7 27 66			
<hr/>				
Saturation Flow Module:				
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			
Lanes:	1.00 0.97 0.03 1.00 1.00 1.00 0.22 0.78 1.00 0.07 0.27 0.66			
Final Sat.:	580 614 19 576 626 711 133 466 694 42 175 425			
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.08 0.14 0.14 0.18 0.20 0.02 0.14 0.14 0.11 0.15 0.15 0.15			
Crit Moves:	****	****	****	****
Delay/Veh:	9.1 9.0 9.0 10.0 9.6 7.6 9.3 9.3 8.2 9.2 9.2 9.2			
Delay Adj:	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:	9.1 9.0 9.0 10.0 9.6 7.6 9.3 9.3 8.2 9.2 9.2 9.2			
LOS by Move:	A A A A A A A A A A A A			
ApproachDel:	9.0	9.7	8.7	9.2
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	9.0	9.7	8.7	9.2
LOS by Appr:	A	A	A	A
AllWayAvgQ:	0.1 0.1 0.1 0.2 0.2 0.0 0.1 0.1 0.1 0.2 0.2 0.2			
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Average Delay (sec/veh): 4.3 Worst Case Level Of Service: B[ 11.7]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	0 0 1! 0 0	1 0 0 0 0	0 0 1! 0 0
Volume Module:				
Base Vol:	0 41 1 3 59	0 0 0 0 0	0 1 0 0 1	0 1 0 0 1
Growth Adj:	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 44 1 3 63	0 0 0 0 0	0 1 0 0 1	0 1 0 0 1
Added Vol:	1 0 0 73 0	8 5 0 0 0	0 0 0 0 0	0 1 0 0 43
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	1 44 1 76 63	8 5 0 0 0	0 1 1 1 44	1 1 1 1 44
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	1.00 1.00 1.00 1.00 1.00
PHF Adj:	0.81 0.81 0.81 0.81 0.81	0.81 0.81 0.81 0.81 0.81	0.81 0.81 0.81 0.81 0.81	0.81 0.81 0.81 0.81 0.81
PHF Volume:	1 54 1 94 77	10 6 0 0 0	0 1 1 1 55	1 1 1 1 55
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	1 54 1 94 77	10 6 0 0 0	0 1 1 1 55	1 1 1 1 55
Critical Gap Module:				
Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1 xxxx xxxx	7.1 6.5 6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5 xxxx xxxx	3.5 4.0 3.3
Capacity Module:				
Cnflct Vol:	87 xxxx xxxx	55 xxxx xxxx	356 xxxx xxxx	328 333 55
Potent Cap.:	1521 xxxx xxxx	1563 xxxx xxxx	603 xxxx xxxx	629 590 1018
Move Cap.:	1521 xxxx xxxx	1563 xxxx xxxx	542 xxxx xxxx	598 552 1018
Volume/Cap:	0.00 xxxx xxxx	0.06 xxxx xxxx	0.01 xxxx xxxx	0.00 0.00 0.05
Level Of Service Module:				
2Way95thQ:	0.0 xxxx xxxx	0.2 xxxx xxxx	0.0 xxxx xxxx	xxxx xxxx xxxx xxxx xxxx
Control Del:	7.4 xxxx xxxx	7.5 xxxx xxxx	11.7 xxxx xxxx	xxxx xxxx xxxx xxxx xxxx
LOS by Move:	A * * A *	*	B * * * * *	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx 984 xxxx
SharedQueue:	xxxxxx xxxx xxxx xxxx xxxx	xxxxxx xxxx xxxx xxxx	xxxxxx xxxx xxxx xxxx	0.2 xxxx
Shrd ConDel:	xxxxxx xxxx xxxx xxxx xxxx	xxxxxx xxxx xxxx xxxx	xxxxxx xxxx xxxx xxxx	8.9 xxxx
Shared LOS:	* * * * *	*	* * * * *	* A *
ApproachDel:	xxxxxx	xxxxxx	11.7	8.9
ApproachLOS:	*	*	B	A

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.126	
Loss Time (sec):	0	Average Delay (sec/veh):	7.6	
Optimal Cycle:	0	Level Of Service:	A	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Stop Sign	
Rights:	Include	Include	Include	
Min. Green:	0 0 0	0 0 0	0 0 0	
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	
<hr/>				
Volume Module:				
Base Vol:	11 42 3 5 49 4 7 22 8 4 11 14			
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06			
Initial Bse:	12 45 3 5 52 4 7 23 8 4 12 15			
Added Vol:	0 8 0 2 10 29 21 5 0 0 9 3			
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0			
Initial Fut:	12 53 3 7 62 33 28 28 8 4 21 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:	0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94			
PHF Volume:	12 56 3 8 66 35 30 30 9 5 22 19			
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0			
Reduced Vol:	12 56 3 8 66 35 30 30 9 5 22 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:	12 56 3 8 66 35 30 30 9 5 22 19			
<hr/>				
Saturation Flow Module:				
Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			
Lanes:	0.17 0.78 0.05 0.07 0.61 0.32 0.44 0.43 0.13 0.10 0.48 0.42			
Final Sat.:	142 641 39 62 524 281 349 348 104 83 405 349			
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.09 0.09 0.09 0.13 0.13 0.13 0.09 0.09 0.09 0.05 0.05 0.05			
Crit Moves:	****	****	****	****
Delay/Veh:	7.7 7.7 7.7 7.6 7.6 7.6 7.7 7.7 7.7 7.3 7.3 7.3			
Delay Adj:	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:	7.7 7.7 7.7 7.6 7.6 7.6 7.7 7.7 7.7 7.3 7.3 7.3			
LOS by Move:	A A A A A A A A A A A A			
ApproachDel:	7.7	7.6	7.7	7.3
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	7.7	7.6	7.7	7.3
LOS by Appr:	A	A	A	A
AllWayAvgQ:	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1			
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Average Delay (sec/veh): 5.3 Worst Case Level Of Service: B[ 11.0]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 1 0 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 0 1 0

## Volume Module:

Base Vol:	2	47	0	3	56	0	2	1	1	0	2	2
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	2	50	0	3	59	0	2	1	1	0	2	2
Added Vol:	9	3	0	0	2	9	5	54	5	0	38	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	53	0	3	61	9	7	55	6	0	40	2
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:	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
PHF Volume:	16	75	0	5	87	13	10	78	9	0	57	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	16	75	0	5	87	13	10	78	9	0	57	3

## Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1	6.5	6.2	xxxx	6.5	6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5	4.0	3.3	xxxx	4.0	3.3

## Capacity Module:

Cnflct Vol:	100 xxxx xxxx	75 xxxx xxxx	238	209	93	xxxx	215	75
Potent Cap.:	1506 xxxx xxxx	1537 xxxx xxxx	720	692	969	xxxx	686	992
Move Cap.:	1506 xxxx xxxx	1537 xxxx xxxx	665	683	969	xxxx	677	992
Volume/Cap.:	0.01 xxxx xxxx	0.00 xxxx xxxx	0.02	0.11	0.01	xxxx	0.08	0.00

## Level Of Service Module:

2Way95thQ:	0.0 xxxx xxxx	0.0 xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx	
Control Del:	7.4 xxxx xxxx	7.3 xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx	
LOS by Move:	A * *	A * *	* * *	* * *	* * *	* * *	
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	699	xxxxxx	xxxx xxxx	688
SharedQueue:	0.0 xxxx xxxx	0.0 xxxx xxxx	0.0 xxxx xxxx	0.5	xxxxxx	xxxx xxxx	0.3
Shrd ConDel:	7.4 xxxx xxxx	7.4 xxxx xxxx	7.4 xxxx xxxx	11.0	xxxxxx	xxxx xxxx	10.7
Shared LOS:	A * *	A * *	* * *	* * B	* * *	* * B	B
ApproachDel:	xxxxxx	xxxxxx		11.0		10.7	
ApproachLOS:	*	*		B		B	

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Dwy. 1 / 60th Av.

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: A[ 9.6]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 0 1 0	1 0 1 0 0 0

## Volume Module:

Base Vol:	0 0 0 0 0 0 0 0 43 0 0 24 0
Growth Adj:	1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 0 0 0 0 46 0 0 25 0
Added Vol:	43 0 17 0 0 0 0 9 73 29 9 0
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	43 0 17 0 0 0 0 55 73 29 34 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
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 0.92
PHF Volume:	47 0 18 0 0 0 0 59 79 32 37 0
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	47 0 18 0 0 0 0 59 79 32 37 0

## Critical Gap Module:

Critical Gp:	6.4 xxxx 6.2 xxxxx xxxx xxxx xxxx xxxx xxxx 4.1 xxxx xxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx 2.2 xxxx xxxx

## Capacity Module:

Cnflct Vol:	200 xxxx 99 xxxx xxxx xxxx xxxx xxxx xxxx 139 xxxx xxxx
Potent Cap.:	794 xxxx 962 xxxx xxxx xxxx xxxx xxxx 1457 xxxx xxxx
Move Cap.:	781 xxxx 962 xxxx xxxx xxxx xxxx xxxx 1457 xxxx xxxx
Volume/Cap.:	0.06 xxxx 0.02 xxxx xxxx xxxx xxxx xxxx 0.02 xxxx xxxx

## Level Of Service Module:

2Way95thQ:	0.2 xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx 0.0 xxxx xxxx
Control Del:	9.9 xxxx 8.8 xxxxx xxxx xxxx xxxx xxxx xxxx 7.5 xxxx xxxx
LOS by Move:	A * A * * * * * * * A * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxxx xxxx
SharedQueue:	xxxxx xxxx
Shrd ConDel:	xxxxx xxxx
Shared LOS:	* * * * * * * * * * * *
ApproachDel:	9.6 xxxxxx xxxxxx xxxxxx xxxxxx
ApproachLOS:	A * * *

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Dwy. 2 / 61st Av.

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: A[ 9.1]

	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0

## Volume Module:

Base Vol:	0 0 0 0 0	0 0 0 0 0	0 0 4 0 0	0 0 2 0 0
Growth Adj:	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06	1.06 1.06 1.06 1.06 1.06
Initial Bse:	0 0 0 0 0	0 0 0 0 0	0 0 4 0 0	0 0 2 0 0
Added Vol:	0 0 0 13 0	0 0 13 22 51	0 0 51 0 0	0 0 33 0 22
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	0 0 0 13 0	0 0 13 22 55	0 0 55 0 0	0 0 35 0 22
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	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 0.92 0.92 0.92	0.92 0.92 0.92 0.92 0.92
PHF Volume:	0 0 0 14 0	0 0 14 24 60	0 0 60 0 0	0 0 38 0 24
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	0 0 0 14 0	0 0 14 24 60	0 0 60 0 0	0 0 38 0 24

## Critical Gap Module:

Critical Gp:	xxxxxx xxxx xxxx 6.4	6.5 6.2 4.1	xxxx xxxx xxxx xxxx xxxx xxxx xxxx
FollowUpTim:	xxxxxx xxxx xxxx 3.5	4.0 3.3 2.2	xxxx xxxx xxxx xxxx xxxx xxxx xxxx

## Capacity Module:

Cnflct Vol:	xxxx xxxx xxxx 158	158 50 62	xxxx xxxx xxxx xxxx xxxx xxxx
Potent Cap.:	xxxx xxxx xxxx 838	738 1024 1554	xxxx xxxx xxxx xxxx xxxx xxxx
Move Cap.:	xxxx xxxx xxxx 828	726 1024 1554	xxxx xxxx xxxx xxxx xxxx xxxx
Volume/Cap.:	xxxx xxxx xxxx 0.02	0.00 0.01 0.02	xxxx xxxx xxxx xxxx xxxx xxxx

## Level Of Service Module:

2Way95thQ:	xxxx xxxx xxxx xxxx xxxx xxxx	0.0	xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:	xxxxxx xxxx xxxx xxxx xxxx xxxx	7.4	xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move:	* * * * *	A *	* * * * *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxx 916	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
SharedQueue:	xxxxxx xxxx xxxx xxxx 0.1	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
Shrd ConDel:	xxxxxx xxxx xxxx xxxx 9.1	xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx
Shared LOS:	* * * * A	*	* * * * *
ApproachDel:	xxxxxx	9.1	xxxxxx
ApproachLOS:	*	A	*

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Existing + Ambient + Project + Cumulative Projects (2016) Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.221
Loss Time (sec):	0	Average Delay (sec/veh):	9.6
Optimal Cycle:	0	Level Of Service:	A
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1
<hr/>			
Volume Module:			
Base Vol:	2 109	1 63	168 41
Growth Adj:	1.06 1.06	1.06 1.06	1.06 1.06 1.06 1.06
Initial Bse:	2 116	1 67	178 44
Added Vol:	11 13	1 57	23 0
PasserByVol:	0 0	0 0	0 0
Initial Fut:	13 129	2 124	201 44
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00
PHF Volume:	13 129	2 124	201 44
Reduct Vol:	0 0	0 0	0 0
Reduced Vol:	13 129	2 124	201 44
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:	13 129	2 124	201 44
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00
Lanes:	1.00 2.00	1.00 2.00	1.00 1.00 1.00 1.00
Final Sat.:	513 1107	617 560	1212 686 505 544
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.03 0.12	0.00 0.22	0.17 0.06
Crit Moves:	****	****	****
Delay/Veh:	9.5 9.6	8.2 10.6	9.5 8.0
Delay Adj:	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00
AdjDel/Veh:	9.5 9.6	8.2 10.6	9.5 8.0
LOS by Move:	A A	A B	A A B A A
ApproachDel:	9.6	9.7	9.8
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	9.6	9.7	9.8
LOS by Appr:	A	A	A A
AllWayAvgQ:	0.0 0.1	0.0 0.3	0.2 0.1 0.1 0.0
<hr/>			

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

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## **APPENDIX 7.1**

Long Range (2035) Without Project Conditions  
Intersection Operations Analysis Worksheets



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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Madison St. / 60th Av.

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach: North Bound South Bound East Bound West Bound

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

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include Include

Lanes: 0 0 1! 0 0 1 0 0 0 1! 0 0 0 1 0 0 1

## Volume Module:

Base Vol: 240 304 53 199 245 789 375 228 184 51 433 239

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: 240 304 53 199 245 789 375 228 184 51 433 239

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: 261 330 58 216 266 858 408 248 200 55 471 260

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

FinalVolume: 261 330 58 216 266 858 408 248 200 55 471 260

## Critical Gap Module:

Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxx 4.1 xxxx xxxx

FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxx 2.2 xxxx xxxx

## Capacity Module:

Cnflct Vol: 2436 2004 348 1939 1845 471 730 xxxx xxxx 448 xxxx xxxx

Potent Cap.: 22 60 700 50 76 597 883 xxxx xxxx 1123 xxxx xxxx

Move Cap.: 0 23 700 0 29 597 883 xxxx xxxx 1123 xxxx xxxx

Volume/Cap: xxxx14.34 0.08 xxxx 9.19 1.44 0.46 xxxx xxxx 0.05 xxxx xxxx

## Level Of Service Module:

2Way95thQ: xxxx xxxx xxxx xxxx xxxx 2.5 xxxx xxxx 0.2 xxxx xxxx

Control Del:xxxxx xxxx xxxx xxxx xxxx 12.5 xxxx xxxx 8.4 xxxx xxxx

LOS by Move: \* \* \* \* \* \* B \* \* A \* \*

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx 0 xxxx xxxx xxxx 106 xxxx xxxx xxxx xxxx xxxx xxxx xxxx

SharedQueue:xxxxx xxxx xxxx xxxx xxxx 130.5 xxxx xxxx xxxx xxxx 0.2 xxxx xxxx

Shrd ConDel:xxxxx xxxx xxxx xxxx xxxx 4407 xxxx xxxx xxxx 8.4 xxxx xxxx

Shared LOS: \* \* \* \* \* F \* \* \* A \* \*

ApproachDel: xxxxxx +Inf xxxxxxxx xxxxxxxx

ApproachLOS: F F \* \*

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

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

Intersection #1 Madison St. / 60th Av.

Cycle (sec):	120	Critical Vol./Cap.(X):	0.955
Loss Time (sec):	16	Average Delay (sec/veh):	55.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	D
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Ovl	Ovl
Min. Green:	10 22 22	10 22 22	10 24 24
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	2 0 2 0 1	2 0 2 0 1
<hr/>			
Volume Module:			
Base Vol:	240 304 53 199 245	789 375 228	184 51 433 239
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:	240 304 53 199 245	789 375 228	184 51 433 239
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:	261 330 58 216 266	858 408 248	200 55 471 260
Reduc Vol:	0 0 0 0 0	0 0 0	0 0 0 0
Reduced Vol:	261 330 58 216 266	858 408 248	200 55 471 260
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:	261 330 58 216 266	858 408 248	200 55 471 260
<hr/>			
Saturation Flow Module:			
Sat/Lane:	1850 1850 1850 1850 1850	1850 1850 1850	1850 1850 1850 1850
Adjustment:	0.95 0.93 0.93 0.92 0.95	0.85 0.92 0.95	0.85 0.95 0.95 0.85
Lanes:	1.00 1.70 0.30 2.00 2.00	1.00 2.00 2.00	1.00 1.00 2.00 1.00
Final Sat.:	1758 2927 510 3410 3515	1573 3410 3515	1573 1758 3515 1573
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.15 0.11 0.11 0.06 0.08	0.55 0.12 0.07	0.13 0.03 0.13 0.17
Crit Moves:	****	****	****
Green/Cycle:	0.15 0.39 0.39 0.18 0.42	0.54 0.12 0.21	0.36 0.09 0.18 0.36
Volume/Cap:	1.02 0.29 0.29 0.36 0.18	1.02 1.02 0.33	0.35 0.36 0.73 0.46
Delay/Veh:	111.4 25.4 25.4 43.8 21.9	62.6 101.8 40.3	28.7 52.9 50.5 30.0
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:	111.4 25.4 25.4 43.8 21.9	62.6 101.8 40.3	28.7 52.9 50.5 30.0
LOS by Move:	F C C D C E F D	C D D C	
HCM2kAvgQ:	15 5 5 4 3 40 12 4	5 2 10 7	
<hr/>			

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

2035NP AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	2.881	
Loss Time (sec):	0	Average Delay (sec/veh):	568.9	
Optimal Cycle:	0	Level Of Service:	F	
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R
<b>Control:</b>	Stop Sign	Stop Sign	Stop Sign	Stop Sign
<b>Rights:</b>	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0	0 0 1! 0 0
<b>Volume Module:</b>				
Base Vol:	50 554 265	129 894 61	61 252 85	337 132 102
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:	50 554 265	129 894 61	61 252 85	337 132 102
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:	54 602 288	140 972 66	66 274 92	366 143 111
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	54 602 288	140 972 66	66 274 92	366 143 111
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:	54 602 288	140 972 66	66 274 92	366 143 111
<b>Saturation Flow Module:</b>				
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.06 0.64 0.30	0.13 0.87 1.00	0.15 0.64 0.21	0.59 0.23 0.18
Final Sat.:	23 254 121	49 337 420	61 253 85	233 91 70
<b>Capacity Analysis Module:</b>				
Vol/Sat:	2.37 2.37 2.37	2.88 2.88 0.16	1.08 1.08 1.08	1.57 1.57 1.57
Crit Moves:	****	****	****	****
Delay/Veh:	646.0 646 646.0	872.5 872	12.9 100.1	100 100.1 293.7 294 293.7
Delay Adj:	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:	646.0 646 646.0	872.5 872	12.9 100.1	100 100.1 293.7 294 293.7
LOS by Move:	F F F	F F B	F F F	F F F
ApproachDel:	646.0	824.1	100.1	293.7
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	646.0	824.1	100.1	293.7
LOS by Appr:	F	F	F	F
AllWayAvgQ:	70.0 70.0 70.0	92.3 92.3 0.2	9.8 9.8 9.8	30.8 30.8 30.8

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	95	Critical Vol./Cap.(X):	0.520	
Loss Time (sec):	16	Average Delay (sec/veh):	34.2	
Optimal Cycle:	83	Level Of Service:	C	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Protected	Protected	Protected	
Rights:	Ovl	Include	Include	
Min. Green:	10 20 20	10 20 20	10 10 10	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	1 0 2 0 1	1 0 1 1 0	1 0 1 1 0	
<hr/>				
Volume Module:				
Base Vol:	50 554 265	129 894 61	61 252 85	337 132 102
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:	50 554 265	129 894 61	61 252 85	337 132 102
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:	54 602 288	140 972 66	66 274 92	366 143 111
Reduc Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	54 602 288	140 972 66	66 274 92	366 143 111
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:	54 602 288	140 972 66	66 274 92	366 143 111
<hr/>				
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 0.94 0.94	0.95 0.91 0.91	0.95 0.89 0.89
Lanes:	1.00 2.00 1.00	1.00 1.87 0.13	1.00 1.50 0.50	1.00 1.13 0.87
Final Sat.:	1805 3610 1615	1805 3346 228	1805 2597 876	1805 1904 1471
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.03 0.17 0.18	0.08 0.29 0.29	0.04 0.11 0.11	0.20 0.08 0.08
Crit Moves:	****	****	****	****
Green/Cycle:	0.11 0.29 0.55	0.15 0.34 0.34	0.11 0.13 0.13	0.26 0.28 0.28
Volume/Cap:	0.29 0.57 0.32	0.53 0.86 0.86	0.35 0.79 0.79	0.79 0.27 0.27
Delay/Veh:	40.0 29.1 11.9	39.4 36.0 36.0	40.6 48.9 48.9	42.0 26.5 26.5
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:	40.0 29.1 11.9	39.4 36.0 36.0	40.6 48.9 48.9	42.0 26.5 26.5
LOS by Move:	D C B	D D D	D D D	D C C
HCM2kAvgQ:	2 8 5	4 18 18	2 8 8	12 3 3
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Monroe St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.290	
Loss Time (sec):	0	Average Delay (sec/veh):	90.2	
Optimal Cycle:	0	Level Of Service:	F	
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R
<b>Control:</b>	Stop Sign	Stop Sign	Stop Sign	Stop Sign
<b>Rights:</b>	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1	0 0 1! 0 0
<b>Volume Module:</b>	177 364 56 129 415 295 141 141 189 50 121 199	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		
Base Vol:	177 364 56 129 415 295 141 141 189 50 121 199	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:	177 364 56 129 415 295 141 141 189 50 121 199	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:	192 396 61 140 451 321 153 153 205 54 132 216	
Reduc Vol:	0 0 0 0 0 0 0 0 0 0 0 0	Reduced Vol:	192 396 61 140 451 321 153 153 205 54 132 216	
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:	192 396 61 140 451 321 153 153 205 54 132 216			
<b>Saturation Flow Module:</b>	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
Lanes:	1.00 0.87 0.13 1.00 1.00 1.00 0.50 0.50 1.00 0.13 0.33 0.54	Final Sat.:	354 328 50 331 350 375 180 180 396 52 127 209	
<b>Capacity Analysis Module:</b>	0.54 1.21 1.21 0.42 1.29 0.85 0.85 0.85 0.52 1.04 1.04 1.04			
Vol/Sat:	0.54 1.21 1.21 0.42 1.29 0.85 0.85 0.85 0.52 1.04 1.04 1.04	Crit Moves:	**** **** ****	
Delay/Veh:	24.0 144 143.7 21.0 178 48.2 49.6 49.6 21.0 86.2 86.2 86.2	Delay Adj:	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:	24.0 144 143.7 21.0 178 48.2 49.6 49.6 21.0 86.2 86.2 86.2	LOS by Move:	C F F C F E E E C F F F	
ApproachDel:	108.2 108.4 38.1 86.2	Delay Adj:	1.00 1.00 1.00 1.00	
ApprAdjDel:	108.2 108.4 38.1 86.2	LOS by Appr:	F F E F	
AllWayAvgQ:	1.1 13.8 13.8 0.7 16.1 3.7 3.7 3.7 1.0 8.0 8.0 8.0			

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

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

Intersection #3 Monroe St. / 60th Av.

Cycle (sec):	95	Critical Vol./Cap.(X):	0.603	
Loss Time (sec):	16	Average Delay (sec/veh):	33.9	
Optimal Cycle:	OPTIMIZED	Level Of Service:	C	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Protected	Protected	Protected	
Rights:	Include	Include	Include	
Min. Green:	10 20 20	10 20 20	10 27 27	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	1 0 1 1 0	2 0 1 1 0	1 0 1 1 0	
<hr/>				
Volume Module:				
Base Vol:	177 364 56	129 415 295	141 141 189	50 121 199
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:	177 364 56	129 415 295	141 141 189	50 121 199
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:	192 396 61	140 451 321	153 153 205	54 132 216
Reduc Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	192 396 61	140 451 321	153 153 205	54 132 216
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:	192 396 61	140 451 321	153 153 205	54 132 216
<hr/>				
Saturation Flow Module:				
Sat/Lane:	1850 1850 1850	1850 1850 1850	1850 1850 1850	1850 1850 1850
Adjustment:	0.95 0.93 0.93	0.92 0.89 0.89	0.95 0.87 0.87	0.95 1.00 0.85
Lanes:	1.00 1.73 0.27	2.00 1.17 0.83	1.00 1.00 1.00	1.00 1.00 1.00
Final Sat.:	1758 2985 459	3410 1927 1370	1758 1606 1606	1758 1850 1573
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.11 0.13 0.13	0.04 0.23 0.23	0.09 0.10 0.13	0.03 0.07 0.14
Crit Moves:	****	****	****	****
Green/Cycle:	0.14 0.29 0.29	0.15 0.30 0.30	0.11 0.29 0.29	0.11 0.28 0.43
Volume/Cap:	0.79 0.46 0.46	0.28 0.79 0.79	0.79 0.33 0.44	0.29 0.25 0.32
Delay/Veh:	55.0 27.9 27.9	36.5 34.9 34.9	60.0 26.8 28.0	40.0 26.5 18.2
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:	55.0 27.9 27.9	36.5 34.9 34.9	60.0 26.8 28.0	40.0 26.5 18.2
LOS by Move:	E C C D C C	E C C D C B		
HCM2kAvgQ:	8 6 6 2 13 13	6 4 5 2 3 4		
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: E[ 43.1]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0

## Volume Module:

Base Vol:	1 378	62	71	366	13	34	3	3	53	6	168
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1 378	62	71	366	13	34	3	3	53	6	168
User Adj:	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
PHF Volume:	1 411	67	77	398	14	37	3	3	58	7	183
Reduct Vol:	0 0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1 411	67	77	398	14	37	3	3	58	7	183

## Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5	4.0	3.3	3.5	4.0	3.3

## Capacity Module:

Cnflict Vol:	412 xxxx xxxx	478 xxxx xxxx	1101	1040	405	1009	1013	445
Potent Cap.:	1158 xxxx xxxx	1095 xxxx xxxx	191	232	650	221	241	618
Move Cap.:	1158 xxxx xxxx	1095 xxxx xxxx	124	215	650	205	223	618
Volume/Cap:	0.00 xxxx xxxx	0.07 xxxx xxxx	0.30	0.02	0.01	0.28	0.03	0.30

## Level Of Service Module:

2Way95thQ:	0.0 xxxx xxxx	0.2 xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx
Control Del:	8.1 xxxx xxxx	8.5 xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx
LOS by Move:	A *	*	A *	*	*	*	*	*
Movement:	LT - LTR - RT							
Shared Cap.:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	137 xxxx xxxx	xxxx xxxx xxxx	407 xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx
SharedQueue:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	1.3 xxxx xxxx	xxxx xxxx xxxx	3.9 xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx
Shrd ConDel:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	43.1 xxxx xxxx	xxxx xxxx xxxx	26.6 xxxx xxxx	xxxx xxxx xxxx
Shared LOS:	*	*	*	*	*	E	*	D
ApproachDel:	xxxxxx	xxxxxx		43.1		26.6		
ApproachLOS:	*		*		E		D	

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

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

Intersection #4 Monroe St. / 61st Av.

Cycle (sec):	60	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	12	Average Delay (sec/veh):	17.1
Optimal Cycle:	61	Level Of Service:	B
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Permitted
Rights:	Include	Include	Include
Min. Green:	10 19 19	10 19 19	20 20 20
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	1 0 1 1 0	0 0 1! 0 0
Volume Module:	1 378 62	71 366 13	34 3 3
Base Vol:	1 378 62	71 366 13	34 3 3
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	1 378 62	71 366 13	34 3 3
User Adj:	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
PHF Volume:	1 411 67	77 398 14	37 3 3
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	1 411 67	77 398 14	37 3 3
PCE Adj:	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
FinalVolume:	1 411 67	77 398 14	37 3 3
Saturation Flow Module:	1900 1900 1900	1900 1900 1900	1900 1900 1900
Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.95 0.93 0.93	0.95 0.95 0.95	0.72 0.72 0.72
Lanes:	1.00 1.72 0.28	1.00 1.93 0.07	0.85 0.07 0.08
Final Sat.:	1805 3036 498	1805 3469 123	1166 103 103
Capacity Analysis Module:	0.00 0.14 0.14	0.04 0.11 0.11	0.03 0.03 0.03
Vol/Sat:	0.00 0.14 0.14	0.04 0.11 0.11	0.03 0.03 0.03
Crit Moves:	****	****	****
Green/Cycle:	0.16 0.31 0.31	0.16 0.31 0.31	0.33 0.33 0.33
Volume/Cap:	0.00 0.43 0.43	0.26 0.37 0.37	0.10 0.10 0.10
Delay/Veh:	21.3 17.0 17.0	22.7 16.5 16.5	14.3 14.3 14.3
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	21.3 17.0 17.0	22.7 16.5 16.5	14.3 14.3 14.3
LOS by Move:	C B B	C B B	B B B
HCM2kAvgQ:	0 4 4	1 3 3	1 1 1

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Jackson St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	2.142		
Loss Time (sec):	0	Average Delay (sec/veh):	359.2		
Optimal Cycle:	0	Level Of Service:	F		
Approach:	North Bound	South Bound	East Bound	West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign	
Rights:	Include	Include	Include	Include	
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0	
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	
Volume Module:					
Base Vol:	85 829	10 157	167 244	39 83	8 25 222 532
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:	85 829	10 157	167 244	39 83	8 25 222 532
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:	92 901	11 171	182 265	42 90	9 27 241 578
Reduc Vol:	0 0	0 0	0 0	0 0	0 0 0 0
Reduced Vol:	92 901	11 171	182 265	42 90	9 27 241 578
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:	92 901	11 171	182 265	42 90	9 27 241 578
Saturation Flow Module:					
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00 1.00 1.00
Lanes:	0.09 0.90	0.01 0.28	0.29 0.43	0.30 0.64	0.06 0.03 0.28 0.69
Final Sat.:	43 421	5 133	142 207	118 251	24 16 141 339
Capacity Analysis Module:					
Vol/Sat:	2.14 2.14	2.14 1.28	1.28 0.36	0.36 1.71	1.71 1.71
Crit Moves:	****	****	****	****	****
Delay/Veh:	538.5 539	538.5 164.3	164 164.3	17.2 17.2	17.2 345.5 346 345.5
Delay Adj:	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:	538.5 539	538.5 164.3	164 164.3	17.2 17.2	17.2 345.5 346 345.5
LOS by Move:	F F	F F	F C	C C	F F F
ApproachDel:	538.5		164.3	17.2	345.5
Delay Adj:	1.00		1.00	1.00	1.00
ApprAdjDel:	538.5		164.3	17.2	345.5
LOS by Appr:	F		F	C	F
AllWayAvgQ:	68.8 68.8	68.8 20.6	20.6 0.6	0.6 0.6	0.6 46.2 46.2 46.2

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

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

Intersection #5 Jackson St. / 60th Av.

Cycle (sec):	115	Critical Vol./Cap.(X):	0.847	
Loss Time (sec):	16	Average Delay (sec/veh):	47.0	
Optimal Cycle:	105	Level Of Service:	D	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Protected	Protected	Protected	
Rights:	Include	Include	Include	
Min. Green:	10 30 30	10 30 30	10 30 30	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 1 1 0	
<hr/>				
Volume Module:				
Base Vol:	85 829	10 157 167	244 39 83	8 25 222 532
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:	85 829	10 157 167	244 39 83	8 25 222 532
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:	92 901	11 171 182	265 42 90	9 27 241 578
Reduc Vol:	0 0	0 0	0 0	0 0 0 0
Reduced Vol:	92 901	11 171 182	265 42 90	9 27 241 578
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:	92 901	11 171 182	265 42 90	9 27 241 578
<hr/>				
Saturation Flow Module:				
Sat/Lane:	1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900 1900
Adjustment:	0.95 0.95	0.95 0.87 0.87	0.95 0.94 0.94	0.95 0.85 0.85
Lanes:	1.00 1.98	0.02 1.00 1.00	1.00 1.82 0.18	1.00 1.00 1.00 1.00
Final Sat.:	1805 3560	43 1805 1644	1644 1805 3250	313 1805 1614 1614
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.05 0.25	0.25 0.09 0.11	0.16 0.02 0.03	0.03 0.02 0.15 0.36
Crit Moves:	****	****	****	****
Green/Cycle:	0.10 0.28	0.28 0.10 0.29	0.29 0.09 0.36	0.36 0.12 0.39 0.39
Volume/Cap:	0.54 0.91	0.91 0.91 0.39	0.56 0.27 0.08	0.08 0.13 0.38 0.91
Delay/Veh:	52.9 52.5	52.5 92.8 33.2	35.9 50.0 24.3	24.3 45.5 25.0 46.4
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:	52.9 52.5	52.5 92.8 33.2	35.9 50.0 24.3	24.3 45.5 25.0 46.4
LOS by Move:	D D	D F C	D D C	C C D C D
HCM2kAvgQ:	3 18	18 9 6	9 2 1	1 1 1 6 24
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Average Delay (sec/veh): 10.8 Worst Case Level Of Service: F[ 98.3]

Approach: North Bound South Bound East Bound West Bound

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

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Rights: Include Include Include Include

Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0

## Volume Module:

Base Vol: 54 832 3 2 151 9 78 16 17 4 44 8

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: 54 832 3 2 151 9 78 16 17 4 44 8

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: 59 904 3 2 164 10 85 17 18 4 48 9

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

FinalVolume: 59 904 3 2 164 10 85 17 18 4 48 9

## Critical Gap Module:

Critical Gp: 4.1 xxxx xxxx 4.1 xxxx xxxx 7.1 6.5 6.2 7.1 6.5 6.2

FollowUpTim: 2.2 xxxx xxxx 2.2 xxxx xxxx 3.5 4.0 3.3 3.5 4.0 3.3

## Capacity Module:

Cnflct Vol: 174 xxxx xxxx 908 xxxx xxxx 1225 1198 169 1215 1202 906

Potent Cap.: 1415 xxxx xxxx 758 xxxx xxxx 157 187 880 160 186 337

Move Cap.: 1415 xxxx xxxx 758 xxxx xxxx 117 179 880 140 178 337

Volume/Cap: 0.04 xxxx xxxx 0.00 xxxx xxxx 0.72 0.10 0.02 0.03 0.27 0.03

## Level Of Service Module:

2Way95thQ: 0.1 xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx

Control Del: 7.7 xxxx xxxx 9.8 xxxx xxxx xxxx xxxx xxxx xxxx xxxx

LOS by Move: A \* \* A \* \* \* \* \* \* \* \*

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx xxxx xxxx xxxx xxxx xxxx 143 xxxx xxxx 187 xxxx

SharedQueue:xxxxx xxxx xxxx xxxx xxxx xxxx 5.5 xxxx xxxx 1.3 xxxx

Shrd ConDel:xxxxx xxxx xxxx xxxx xxxx xxxx 98.3 xxxx xxxx 33.3 xxxx

Shared LOS: \* \* \* \* \* \* F \* \* D \*

ApproachDel: xxxxxx xxxxxx 98.3 33.3

ApproachLOS: \* \* F D

\*\*\*\*\*

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

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

Intersection #6 Jackson St. / 61st Av.

Cycle (sec):	120	Critical Vol./Cap.(X):	0.350	
Loss Time (sec):	12	Average Delay (sec/veh):	19.8	
Optimal Cycle:	71	Level Of Service:	B	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Protected	Protected	Permitted	
Rights:	Include	Include	Include	
Min. Green:	10 19 19	10 19 19	30 30 30	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 0 1 0	
<hr/>				
Volume Module:				
Base Vol:	54 832 3 2 151	9 78 16 17	4 44 8	
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:	54 832 3 2 151	9 78 16 17	4 44 8	
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:	0.92 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:	59 904 3 2 164	10 85 17 18	4 48 9	
Reduct Vol:	0 0 0 0 0	0 0 0 0	0 0 0 0	
Reduced Vol:	59 904 3 2 164	10 85 17 18	4 48 9	
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:	59 904 3 2 164	10 85 17 18	4 48 9	
<hr/>				
Saturation Flow Module:				
Sat/Lane:	1900 1900 1900 1900 1900	1900 1900 1900 1900	1900 1900 1900 1900	
Adjustment:	0.95 0.95 0.95 0.95 0.94	0.94 0.72 0.92 0.92	0.74 0.98 0.98 0.98	
Lanes:	1.00 1.99 0.01 1.00 1.89	0.11 1.00 0.48 0.52	1.00 0.85 0.85 0.15	
Final Sat.:	1805 3593 13 1805 3380	201 1372 850 903	1404 1571 286	
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.03 0.25 0.25 0.00 0.05 0.05	0.06 0.02 0.02 0.00 0.03 0.03		
Crit Moves:	****	****	****	
Green/Cycle:	0.22 0.57 0.57 0.08 0.43 0.43	0.25 0.25 0.25 0.25 0.25 0.25		
Volume/Cap:	0.15 0.44 0.44 0.01 0.11 0.11	0.25 0.08 0.08 0.01 0.12 0.12		
Delay/Veh:	37.5 15.2 15.2 50.5 20.8 20.8	36.4 34.5 34.5 33.9 34.9 34.9		
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:	37.5 15.2 15.2 50.5 20.8 20.8	36.4 34.5 34.5 33.9 34.9 34.9		
LOS by Move:	D B B D C C	D C C C C C		
HCM2kAvgQ:	2 10 10 0 2 2	3 1 1 0 2 2		
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.568	
Loss Time (sec):	0	Average Delay (sec/veh):	188.4	
Optimal Cycle:	0	Level Of Service:	F	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Stop Sign	
Rights:	Include	Include	Include	
Min. Green:	0 0 0	0 0 0	0 0 0	
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1	
Volume Module:	<hr/>			
Base Vol:	14 899 43	284 1168 132	153 34 6	23 25 86
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:	14 899 43	284 1168 132	153 34 6	23 25 86
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:	15 977 47	309 1270 143	166 37 7	25 27 93
Reduc Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	15 977 47	309 1270 143	166 37 7	25 27 93
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:	15 977 47	309 1270 143	166 37 7	25 27 93
Saturation Flow Module:	<hr/>			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 2.00 1.00	1.00 2.00 1.00	1.00 1.00 1.00	1.00 2.00 1.00
Final Sat.:	339 725 383	382 810 437	285 295 313	280 581 308
Capacity Analysis Module:	<hr/>			
Vol/Sat:	0.04 1.35 0.12	0.81 1.57 0.33	0.58 0.13 0.02	0.09 0.05 0.30
Crit Moves:	****	****	****	****
Delay/Veh:	13.6 201 13.2	41.1 289 14.8	31.2 16.4 14.3	16.6 15.5 19.1
Delay Adj:	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:	13.6 201 13.2	41.1 289 14.8	31.2 16.4 14.3	16.6 15.5 19.1
LOS by Move:	B F B	E F B	D C B	C C C
ApproachDel:	189.6	221.7	28.0	18.0
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	189.6	221.7	28.0	18.0
LOS by Appr:	F	F	D	C
AllWayAvgQ:	0.0 19.0 0.1	3.1 31.2 0.5	1.3 0.1 0.0	0.1 0.0 0.4

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

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

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	70	Critical Vol./Cap.(X):	0.465
Loss Time (sec):	12	Average Delay (sec/veh):	18.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	B
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Permitted
Rights:	Include	Include	Include
Min. Green:	10 10 10	10 22 22	10 29 29
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 1 0
<hr/>			
Volume Module:			
Base Vol:	14 899 43	284 1168 132	153 34 6
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00
Initial Bse:	14 899 43	284 1168 132	153 34 6
User Adj:	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
PHF Volume:	15 977 47	309 1270 143	166 37 7
Reduct Vol:	0 0 0	0 0 0	0 0 0 0
Reduced Vol:	15 977 47	309 1270 143	166 37 7
PCE Adj:	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
FinalVolume:	15 977 47	309 1270 143	166 37 7
<hr/>			
Saturation Flow Module:			
Sat/Lane:	1850 1850 1850	1850 1850 1850	1850 1850 1850
Adjustment:	0.95 0.95 0.85	0.95 0.95 0.85	0.75 0.93 0.93
Lanes:	1.00 2.00 1.00	1.00 2.00 1.00	1.00 1.70 0.30
Final Sat.:	1758 3515 1573	1758 3515 1573	1378 2922 516
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.01 0.28 0.03	0.18 0.36 0.09	0.12 0.01 0.01
Crit Moves:	****	****	****
Green/Cycle:	0.14 0.43 0.43	0.27 0.56 0.56	0.14 0.14 0.14
Volume/Cap:	0.06 0.65 0.07	0.65 0.64 0.16	0.88 0.09 0.09
Delay/Veh:	27.5 17.5 12.3	26.7 11.7 7.8	65.6 27.6 27.6
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	27.5 17.5 12.3	26.7 11.7 7.8	65.6 27.6 27.6
LOS by Move:	C B B C B A E C C C C B		
HCM2kAvgQ:	0 10 1 7 11 2	7 1	1 1 1 0 1
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Madison St. / 60th Av.

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	1 0 0 1 0	0 0 1! 0 0	0 1 0 0 1
Volume Module:				
Base Vol:	333 299 12 514 318 401 967 303 489 55 365 174			
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:	333 299 12 514 318 401 967 303 489 55 365 174			
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:	362 325 13 559 346 436 1051 329 532 60 397 189			
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0			
FinalVolume:	362 325 13 559 346 436 1051 329 532 60 397 189			
Critical Gap Module:				
Critical Gp:	7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxx 4.1 xxxx xxxx			
FollowUpTim:	3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxx 2.2 xxxx xxxx			
Capacity Module:				
Cnflct Vol:	3699 3403 595 3383 3479 397 586 xxxx xxxx 861 xxxx xxxx			
Potent Cap.:	3 7 508 4 7 657 999 xxxx xxxx 789 xxxx xxxx			
Move Cap.:	0 0 508 0 0 657 999 xxxx xxxx 789 xxxx xxxx			
Volume/Cap:	xxxx xxxx 0.03 xxxx xxxx 0.66 1.05 xxxx xxxx 0.08 xxxx xxxx			
Level Of Service Module:				
2Way95thQ:	xxxx xxxx xxxx xxxx xxxx xxxx 23.4 xxxx xxxx 0.2 xxxx xxxx			
Control Del:	xxxx xxxx xxxx xxxx xxxx xxxx 63.3 xxxx xxxx 9.9 xxxx xxxx			
LOS by Move:	* * * * * * * F * * * A * *			
Movement:	LT - LTR - RT			
Shared Cap.:	xxxx 0 xxxx xxxx 0 xxxx xxxx xxxx xxxx xxxx xxxx xxxx			
SharedQueue:	xxxx			
Shrd ConDel:	xxxx			
Shared LOS:	* * * * * * * * * * * A * *			
ApproachDel:	xxxxxx +Inf xxxxxxxx			
ApproachLOS:	F F * *			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

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

Intersection #1 Madison St. / 60th Av.

Cycle (sec):	120	Critical Vol./Cap.(X):	0.837
Loss Time (sec):	16	Average Delay (sec/veh):	52.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	D
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Ovl	Ovl
Min. Green:	10 22 22	10 22 22	10 24 24
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	2 0 2 0 1	2 0 2 0 1
<hr/>			
Volume Module:			
Base Vol:	333 299 12 514 318 401 967 303 489 55 365 174		
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:	333 299 12 514 318 401 967 303 489 55 365 174		
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:	362 325 13 559 346 436 1051 329 532 60 397 189		
Reduc Vol:	0 0 0 0 0 0 0 0 0 0 0 0		
Reduced Vol:	362 325 13 559 346 436 1051 329 532 60 397 189		
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:	362 325 13 559 346 436 1051 329 532 60 397 189		
<hr/>			
Saturation Flow Module:			
Sat/Lane:	1850 1850 1850 1850 1850 1850 1850 1850 1850 1850 1850 1850		
Adjustment:	0.95 0.94 0.94 0.92 0.95 0.85 0.92 0.95 0.85 0.95 0.95 0.85		
Lanes:	1.00 1.92 0.08 2.00 2.00 1.00 2.00 2.00 1.00 1.00 2.00 1.00		
Final Sat.:	1758 3359 135 3410 3515 1573 3410 3515 1573 1758 3515 1573		
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.21 0.10 0.10 0.16 0.10 0.28 0.31 0.09 0.34 0.03 0.11 0.12		
Crit Moves:	****	****	****
Green/Cycle:	0.20 0.20 0.20 0.18 0.18 0.48 0.30 0.34 0.54 0.14 0.18 0.36		
Volume/Cap:	1.03 0.48 0.48 0.91 0.54 0.57 1.03 0.27 0.62 0.24 0.62 0.33		
Delay/Veh:	103.5 42.8 42.8 65.0 45.3 23.3 77.7 28.9 20.5 46.2 46.9 27.9		
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:	103.5 42.8 42.8 65.0 45.3 23.3 77.7 28.9 20.5 46.2 46.9 27.9		
LOS by Move:	F D D E D C E C C D D C		
HCM2kAvgQ:	19 6 6 14 7 12 27 5 14 2 8 5		
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	3.734	
Loss Time (sec):	0	Average Delay (sec/veh):	907.7	
Optimal Cycle:	0	Level Of Service:	F	
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R
<b>Control:</b>	Stop Sign	Stop Sign	Stop Sign	Stop Sign
<b>Rights:</b>	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0	0 0 1! 0 0
<b>Volume Module:</b>	70 1018 269	200 861 131	137 374 43	404 472 186
Base Vol:	70 1018 269	200 861 131	137 374 43	404 472 186
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:	70 1018 269	200 861 131	137 374 43	404 472 186
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:	76 1107 292	217 936 142	149 407 47	439 513 202
Reduc Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	76 1107 292	217 936 142	149 407 47	439 513 202
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:	76 1107 292	217 936 142	149 407 47	439 513 202
<b>Saturation Flow Module:</b>	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Adjustment:	0.05 0.75 0.20	0.19 0.81 1.00	0.25 0.67 0.08	0.38 0.44 0.18
Lanes:	20 296	78 312	420 98	266 31 151 176
Final Sat.:	20 296	78 312	420 98	266 31 151 176
<b>Capacity Analysis Module:</b>	3.73 3.73 3.73	3.00 3.00 0.34	1.53 1.53 1.53	2.92 2.92 2.92
Vol/Sat:	3.73 3.73 3.73	3.00 3.00 0.34	1.53 1.53 1.53	2.92 2.92 2.92
Crit Moves:	****	****	****	****
Delay/Veh:	1255 1255 1255	925.0 925	15.6 273.1 273	273.1 887.9 888
Delay Adj:	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:	1255 1255 1255	925.0 925	15.6 273.1 273	273.1 887.9 888
LOS by Move:	F F F	F F C	F F F	F F F
ApproachDel:	1254.9	825.0	273.1	887.9
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	1254.9	825.0	273.1	887.9
LOS by Appr:	F	F	F	F
AllWayAvgQ:	136 136 136.4	97.5 97.5 0.5	28.6 28.6 28.6	96.3 96.3 96.3

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	105	Critical Vol./Cap.(X):	0.941	
Loss Time (sec):	16	Average Delay (sec/veh):	48.6	
Optimal Cycle:	OPTIMIZED	Level Of Service:	D	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Protected	Protected	Protected	
Rights:	Ovl	Include	Include	
Min. Green:	10 20 20	10 20 20	10 10 10	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	1 0 2 0 1	1 0 1 1 0	1 0 1 1 0	
<hr/>				
Volume Module:				
Base Vol:	70 1018 269	200 861 131	137 374 43	404 472 186
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:	70 1018 269	200 861 131	137 374 43	404 472 186
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:	76 1107 292	217 936 142	149 407 47	439 513 202
Reduc Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	76 1107 292	217 936 142	149 407 47	439 513 202
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:	76 1107 292	217 936 142	149 407 47	439 513 202
<hr/>				
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 0.93 0.93	0.95 0.94 0.94	0.95 0.91 0.91
Lanes:	1.00 2.00 1.00	1.00 1.74 0.26	1.00 1.79 0.21	1.00 1.43 0.57
Final Sat.:	1805 3610 1615	1805 3071 467	1805 3189 367	1805 2481 978
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.04 0.31 0.18	0.12 0.30 0.30	0.08 0.13 0.13	0.24 0.21 0.21
Crit Moves:	****	****	****	****
Green/Cycle:	0.11 0.33 0.58	0.13 0.35 0.35	0.11 0.14 0.14	0.26 0.29 0.29
Volume/Cap:	0.39 0.94 0.31	0.94 0.88 0.88	0.77 0.94 0.94	0.94 0.94 0.72
Delay/Veh:	44.9 48.8 11.3	88.4 40.1 40.1	63.4 71.8 71.8	65.6 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:	44.9 48.8 11.3	88.4 40.1 40.1	63.4 71.8 71.8	65.6 36.2 36.2
LOS by Move:	D D B F D D E E E E D D			
HCM2kAvgQ:	3 23 5 11 20 20	7 12 12 12 18 12	12 18 12 12	12 12
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 PM Peak Hour

Level Of Service Computation Report  
 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Monroe St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	2.869	
Loss Time (sec):	0	Average Delay (sec/veh):	426.8	
Optimal Cycle:	0	Level Of Service:	F	
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R
<b>Control:</b>	Stop Sign	Stop Sign	Stop Sign	Stop Sign
<b>Rights:</b>	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1	0 0 1! 0 0
<b>Volume Module:</b>				
Base Vol:	203 921	32 308	568 225	267 335
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Initial Bse:	203 921	32 308	568 225	267 335
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:	221 1001	35 335	617 245	290 364
Reduc Vol:	0 0	0 0	0 0	0 0
Reduced Vol:	221 1001	35 335	617 245	290 364
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:	221 1001	35 335	617 245	290 364
Saturation Flow Module:				
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Lanes:	1.00 0.97	0.03 1.00	1.00 0.44	0.56 1.00
Final Sat.:	343 349	12 327	343 367	154 193
Capacity Analysis Module:				
Vol/Sat:	0.64 2.87	2.87 1.02	1.80 0.67	1.89 1.89
Crit Moves:	****	****	****	****
Delay/Veh:	30.2 866	866.3 90.1	395 30.0	433.6 434
Delay Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
AdjDel/Veh:	30.2 866	866.3 90.1	395 30.0	433.6 434
LOS by Move:	D F	F F	D F	F F
ApproachDel:	719.5	235.3	347.2	309.9
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	719.5	235.3	347.2	309.9
LOS by Appr:	F	F	F	F
AllWayAvgQ:	1.6 85.6	85.6 6.9	36.4 1.8	40.5 40.5
	0.8	31.9	31.9	31.9

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

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

Intersection #3 Monroe St. / 60th Av.

Cycle (sec):	120	Critical Vol./Cap.(X):	0.757	
Loss Time (sec):	16	Average Delay (sec/veh):	48.8	
Optimal Cycle:	OPTIMIZED	Level Of Service:	D	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Protected	Protected	Protected	
Rights:	Include	Include	Include	
Min. Green:	10 20 20	10 20 20	10 27 27	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	1 0 1 1 0	2 0 1 1 0	1 0 1 1 0	
<hr/>				
Volume Module:				
Base Vol:	203 921 32 308 568 225	267 335 159 22 165 385		
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:	203 921 32 308 568 225	267 335 159 22 165 385		
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:	221 1001 35 335 617 245	290 364 173 24 179 418		
Reduct Vol:	0 0 0 0 0 0	0 0 0 0 0 0		
Reduced Vol:	221 1001 35 335 617 245	290 364 173 24 179 418		
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:	221 1001 35 335 617 245	290 364 173 24 179 418		
<hr/>				
Saturation Flow Module:				
Sat/Lane:	1850 1850 1850 1850 1850 1850	1850 1850 1850 1850 1850 1850		
Adjustment:	0.95 0.95 0.95 0.92 0.91 0.91	0.95 0.90 0.90 0.95 1.00 0.85		
Lanes:	1.00 1.93 0.07 2.00 1.43 0.57	1.00 1.36 0.64 1.00 1.00 1.00		
Final Sat.:	1758 3380 117 3410 2409 954	1758 2269 1077 1758 1850 1573		
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.13 0.30 0.30 0.10 0.26 0.26	0.17 0.16 0.16 0.01 0.10 0.27		
Crit Moves:	****	****	****	****
Green/Cycle:	0.15 0.34 0.34 0.11 0.30 0.30	0.19 0.30 0.30 0.11 0.23 0.34		
Volume/Cap:	0.84 0.87 0.87 0.87 0.84 0.84	0.87 0.53 0.53 0.12 0.43 0.79		
Delay/Veh:	71.2 44.5 44.5 71.5 45.7 45.7	68.6 35.3 35.3 48.2 40.6 43.6		
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:	71.2 44.5 44.5 71.5 45.7 45.7	68.6 35.3 35.3 48.2 40.6 43.6		
LOS by Move:	E D D E D D E D D D D D			
HCM2kAvgQ:	10 22 22 9 18 18 13 9 9 1 6 16			
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

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

Intersection #4 Monroe St. / 61st Av.

Cycle (sec):	60	Critical Vol./Cap.(X):	0.376	
Loss Time (sec):	12	Average Delay (sec/veh):	18.9	
Optimal Cycle:	OPTIMIZED	Level Of Service:	B	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Protected	Protected	Permitted	
Rights:	Include	Include	Include	
Min. Green:	10 19 19	10 19 19	20 20 20	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	1 0 1 1 0	1 0 1 1 0	0 0 1! 0 0	
<hr/>				
Volume Module:				
Base Vol:	3 456	49 169 539	39 22 2	2 16 8 45
Growth Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	3 456	49 169 539	39 22 2	2 16 8 45
User Adj:	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
PHF Volume:	3 496	53 184 586	42 24 2	2 17 9 49
Reduct Vol:	0 0	0 0	0 0	0 0 0 0
Reduced Vol:	3 496	53 184 586	42 24 2	2 17 9 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
MLF Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	3 496	53 184 586	42 24 2	2 17 9 49
<hr/>				
Saturation Flow Module:				
Sat/Lane:	1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.95 0.94	0.94 0.95 0.94	0.94 0.81 0.81	0.81 0.87 0.87
Lanes:	1.00 1.81	0.19 1.00 1.87	0.13 0.84 0.08	0.08 0.23 0.12
Final Sat.:	1805 3211	345 1805 3333	241 1310 119	119 382 191 1075
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.00 0.15	0.15 0.10 0.18	0.18 0.02 0.02	0.02 0.05 0.05 0.05
Crit Moves:	****	****	****	****
Green/Cycle:	0.16 0.31	0.31 0.16 0.31	0.31 0.33 0.33	0.33 0.33 0.33 0.33
Volume/Cap:	0.01 0.50	0.50 0.62 0.56	0.56 0.06 0.06	0.06 0.14 0.14 0.14
Delay/Veh:	21.4 17.4	17.4 27.8 18.2	18.2 14.1 14.1	14.1 14.6 14.6 14.6
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:	21.4 17.4	17.4 27.8 18.2	18.2 14.1 14.1	14.1 14.6 14.6 14.6
LOS by Move:	C B	B C B	B B B	B B B B
HCM2kAvgQ:	0 5	5 4	6 6	0 0 0 1 1 1
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Average Delay (sec/veh): 4.5 Worst Case Level Of Service: F[ 78.2]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0

## Volume Module:

Base Vol:	3 456	49 169	539 39	22 2	2 16	8 45
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:	3 456	49 169	539 39	22 2	2 16	8 45
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:	3 496	53 184	586 42	24 2	2 17	9 49
Reduct Vol:	0 0	0 0	0 0	0 0	0 0	0 0
Final Volume:	3 496	53 184	586 42	24 2	2 17	9 49

## Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1 6.5	6.2 7.1	6.5 6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5 4.0	3.3 3.5	4.0 3.3

## Capacity Module:

Cnflict Vol:	628 xxxx xxxx	549 xxxx xxxx	1532 1530	607 1505	1524 522
Potent Cap.:	963 xxxx xxxx	1031 xxxx xxxx	96 118	500 101	119 558
Move Cap.:	963 xxxx xxxx	1031 xxxx xxxx	69 94	500 83	95 558
Volume/Cap:	0.00 xxxx xxxx	0.18 xxxx xxxx	0.35 0.02	0.00 0.21	0.09 0.09

## Level Of Service Module:

2Way95thQ:	0.0 xxxx xxxx	0.6 xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx
Control Del:	8.7 xxxx xxxx	9.2 xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx
LOS by Move:	A * * A *	* * * * *	* * * * *	* * * * *	* * * *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx 76	xxxxxx xxxx	193 xxxx
SharedQueue:	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx 1.4	xxxxxx xxxx	1.7 xxxx
Shrd ConDel:	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx 78.2	xxxxxx xxxx	35.0 xxxx
Shared LOS:	* * * * *	* * * F	* * D		*
ApproachDel:	xxxxxx	xxxxxx	78.2		35.0
ApproachLOS:	*	*	F		D

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Jackson St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.391	
Loss Time (sec):	0	Average Delay (sec/veh):	120.0	
Optimal Cycle:	0	Level Of Service:	F	
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R
<b>Control:</b>	Stop Sign	Stop Sign	Stop Sign	Stop Sign
<b>Rights:</b>	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
<b>Volume Module:</b>				
Base Vol:	17 117 14	99 501 25	40 416 40	29 248 113
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:	17 117 14	99 501 25	40 416 40	29 248 113
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:	18 124 15	105 533 27	43 443 43	31 264 120
Reduc Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	18 124 15	105 533 27	43 443 43	31 264 120
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:	18 124 15	105 533 27	43 443 43	31 264 120
<b>Saturation Flow Module:</b>				
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.11 0.80 0.09	0.16 0.80 0.04	0.08 0.84 0.08	0.07 0.64 0.29
Final Sat.:	46 313 38	76 383 19	39 403 39	35 301 137
<b>Capacity Analysis Module:</b>				
Vol/Sat:	0.40 0.40 0.40	1.39 1.39 1.39	1.10 1.10 1.10	0.88 0.88 0.88
Crit Moves:	****	****	****	****
Delay/Veh:	17.2 17.2 17.2	210.2 210 210.2	97.3 97.3 97.3	43.4 43.4 43.4
Delay Adj:	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:	17.2 17.2 17.2	210.2 210 210.2	97.3 97.3 97.3	43.4 43.4 43.4
LOS by Move:	C C C	F F F	F F F	E E E
ApproachDel:	17.2	210.2	97.3	43.4
Delay Adj:	1.00	1.00	1.00	1.00
ApprAdjDel:	17.2	210.2	97.3	43.4
LOS by Appr:	C	F	F	E
AllWayAvgQ:	0.6 0.6 0.6	26.5 26.5 26.5	11.6 11.6 11.6	4.3 4.3 4.3

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

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

Intersection #5 Jackson St. / 60th Av.

Cycle (sec):	95	Critical Vol./Cap.(X):	0.383
Loss Time (sec):	16	Average Delay (sec/veh):	28.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Include	Include
Min. Green:	10 30 30	10 30 30	10 30 30
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 1 1 0
<hr/>			
Volume Module:			
Base Vol:	17 117 14 99 501	25 40 416 40	29 248 113
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:	17 117 14 99 501	25 40 416 40	29 248 113
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:	18 124 15 105 533	27 43 443 43	31 264 120
Reduc Vol:	0 0 0 0 0	0 0 0 0	0 0 0 0
Reduced Vol:	18 124 15 105 533	27 43 443 43	31 264 120
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:	18 124 15 105 533	27 43 443 43	31 264 120
<hr/>			
Saturation Flow Module:			
Sat/Lane:	1900 1900 1900 1900 1900	1900 1900 1900 1900	1900 1900 1900 1900
Adjustment:	0.95 0.93 0.93 0.95 0.94	0.94 0.95 0.94 0.94	0.94 0.95 0.91 0.91
Lanes:	1.00 1.79 0.21 1.00 1.90	0.10 1.00 1.82 0.18	1.00 1.37 0.63
Final Sat.:	1805 3173 380 1805 3414	170 1805 3251 313	1805 2363 1077
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.01 0.04 0.04 0.06 0.16	0.16 0.02 0.14 0.14	0.02 0.11 0.11
Crit Moves:	****	****	****
Green/Cycle:	0.10 0.31 0.31 0.10 0.31	0.31 0.10 0.31 0.31	0.10 0.31 0.31
Volume/Cap:	0.10 0.13 0.13 0.56 0.50	0.50 0.23 0.44 0.44	0.16 0.36 0.36
Delay/Veh:	39.1 23.7 23.7 44.7 27.2	27.2 40.1 26.5 26.5	39.6 25.7 25.7
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 1.00
AdjDel/Veh:	39.1 23.7 23.7 44.7 27.2	27.2 40.1 26.5 26.5	39.6 25.7 25.7
LOS by Move:	D C C D C C	D C C D C C	
HCM2kAvgQ:	0 1 1 4 7 7	1 6 6 1 5 5	
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 PM Peak Hour

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

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Intersection #6 Jackson St. / 61st Av.

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Average Delay (sec/veh): 5.2 Worst Case Level Of Service: C[ 24.9]

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Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0

---

Volume Module:

Base Vol:	44	85	2	16	500	61	42	51	37	3	35	3
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:	44	85	2	16	500	61	42	51	37	3	35	3
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:	48	92	2	17	543	66	46	55	40	3	38	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	48	92	2	17	543	66	46	55	40	3	38	3

---

Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5	4.0	3.3	3.5	4.0	3.3

---

Capacity Module:

Cnflict Vol:	610 xxxx xxxx	95 xxxx xxxx	821	802	577	848	834	93
Potent Cap.:	979 xxxx xxxx	1512 xxxx xxxx	296	320	520	283	306	969
Move Cap.:	979 xxxx xxxx	1512 xxxx xxxx	253	300	520	214	288	969
Volume/Cap:	0.05 xxxx xxxx	0.01 xxxx xxxx	0.18	0.18	0.08	0.02	0.13	0.00

---

Level Of Service Module:

2Way95thQ:	0.2 xxxx xxxx	0.0 xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	
Control Del:	8.9 xxxx xxxx	7.4 xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	
LOS by Move:	A *	*	A *	*	*	*	*	*
Movement:	LT - LTR - RT							
Shared Cap.:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	319 xxxx xxxx	xxxx xxxx xxxx	295 xxxx xxxx	xxxx xxxx xxxx	
SharedQueue:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	2.2 xxxx xxxx	xxxx xxxx xxxx	0.5 xxxx xxxx	xxxx xxxx xxxx	
Shrd ConDel:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	24.9 xxxx xxxx	xxxx xxxx xxxx	19.3 xxxx xxxx	xxxx xxxx xxxx	
Shared LOS:	*	*	*	*	*	C	*	*
ApproachDel:	xxxxxx	xxxxxx		24.9		19.3		
ApproachLOS:	*	*		C		C		

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

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

Intersection #6 Jackson St. / 61st Av.

Cycle (sec):	95	Critical Vol./Cap.(X):	0.288		
Loss Time (sec):	12	Average Delay (sec/veh):	20.1		
Optimal Cycle:	OPTIMIZED	Level Of Service:	C		
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:	10 19 19	10 19 19	30 30 30	30 30 30	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 0 1 0	1 0 0 1 0	
Volume Module:	44 85 2 16 500	61 42 51 37	3 35 3	3	
Base Vol:	44 85 2 16 500	61 42 51 37	3 35 3	3	
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:	44 85 2 16 500	61 42 51 37	3 35 3	3	
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:	48 92 2 17 543	66 46 55 40	3 38 3	3	
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	
Reduced Vol:	48 92 2 17 543	66 46 55 40	3 38 3	3	
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:	48 92 2 17 543	66 46 55 40	3 38 3	3	
Saturation Flow Module:	1900 1900 1900 1900 1900	1900 1900 1900 1900 1900	1900 1900 1900 1900 1900	1900 1900 1900 1900 1900	
Sat/Lane:	1900 1900 1900 1900 1900	1900 1900 1900 1900 1900	1900 1900 1900 1900 1900	1900 1900 1900 1900 1900	
Adjustment:	0.95 0.95 0.95	0.95 0.93 0.93	0.73 0.94 0.94	0.69 0.99 0.99	0.99
Lanes:	1.00 1.95 0.05	1.00 1.78 0.22	1.00 0.58 0.42	1.00 0.92 0.08	0.08
Final Sat.:	1805 3516 83	1805 3166 386	1395 1032 749	1317 1729 148	
Capacity Analysis Module:	0.03 0.03 0.03	0.01 0.17 0.17	0.03 0.05 0.05	0.05 0.00 0.02	0.02
Vol/Sat:	0.03 0.03 0.03	0.01 0.17 0.17	0.03 0.05 0.05	0.05 0.00 0.02	0.02
Crit Moves:	****	****	****		
Green/Cycle:	0.11 0.37 0.37	0.19 0.45 0.45	0.32 0.32 0.32	0.32 0.32 0.32	0.32
Volume/Cap:	0.25 0.07 0.07	0.05 0.38 0.38	0.10 0.17 0.17	0.01 0.07 0.07	0.07
Delay/Veh:	39.8 19.7 19.7	31.3 17.3 17.3	23.1 23.6 23.6	22.3 22.8 22.8	22.8
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	1.00
AdjDel/Veh:	39.8 19.7 19.7	31.3 17.3 17.3	23.1 23.6 23.6	22.3 22.8 22.8	22.8
LOS by Move:	D B B C B B	C C C C C C	C C C C C C		
HCM2kAvgQ:	1 1 1 0 6 6	1 2 2 0 1 1			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	2.508																							
Loss Time (sec):	0	Average Delay (sec/veh):	447.7																							
Optimal Cycle:	0	Level Of Service:	F																							
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound																						
<b>Movement:</b>	L - T - R	L - T - R	L - T - R	L - T - R																						
<b>Control:</b>	Stop Sign	Stop Sign	Stop Sign	Stop Sign																						
<b>Rights:</b>	Include	Include	Include	Include																						
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0																						
Lanes:	1 0 2 0	1 0 2 0	1 0 1 0	1 0 2 0																						
<b>Volume Module:</b>	14 1347 67 280 1207 163 223 127 25 28 71 490	14 1347 67 280 1207 163 223 127 25 28 71 490	14 1347 67 280 1207 163 223 127 25 28 71 490	14 1347 67 280 1207 163 223 127 25 28 71 490																						
Base Vol:	14 1347 67 280 1207 163 223 127 25 28 71 490	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:	14 1347 67 280 1207 163 223 127 25 28 71 490	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:	15 1464 73 304 1312 177 242 138 27 30 77 533	Reduc Vol:	0 0 0 0 0 0 0 0 0 0 0 0	Reduced Vol:	15 1464 73 304 1312 177 242 138 27 30 77 533	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:	15 1464 73 304 1312 177 242 138 27 30 77 533					
<b>Saturation Flow Module:</b>	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Lanes:	1.00 2.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 1.00 2.00 1.00	Final Sat.:	280 584 309 306 638 341 274 284 301 274 570 301																			
<b>Capacity Analysis Module:</b>	0.05 2.51 0.24 0.99 2.05 0.52 0.89 0.49 0.09 0.11 0.14 1.77	Vol/Sat:	0.05 2.51 0.24 0.99 2.05 0.52 0.89 0.49 0.09 0.11 0.14 1.77	Crit Moves:	****	*****	****	****	Delay/Veh:	16.2 711 17.8 85.6 508 24.1 67.1 26.7 15.8 17.5 17.3 385.0	Delay Adj:	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:	16.2 711 17.8 85.6 508 24.1 67.1 26.7 15.8 17.5 17.3 385.0	LOS by Move:	C F C F F C F D C C C F	ApproachDel:	671.9 388.4 50.0 323.2	Delay Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	ApprAdjDel:	671.9 388.4 50.0 323.2	LOS by Appr:	F F F F	AllWayAvgQ:	0.1 56.5 0.3 6.1 43.8 1.0 3.9 0.9 0.1 0.1 0.2 31.0

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) Without Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

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

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	80	Critical Vol./Cap.(X):	0.889
Loss Time (sec):	12	Average Delay (sec/veh):	29.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Permitted
Rights:	Include	Include	Include
Min. Green:	10 10 10	10 22 22	10 29 29
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 1 0
<hr/>			
Volume Module:	14 1347 67 280 1207 163 223 127 25 28 71 490		
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:	14 1347 67 280 1207 163 223 127 25 28 71 490		
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:	15 1464 73 304 1312 177 242 138 27 30 77 533		
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0		
Reduced Vol:	15 1464 73 304 1312 177 242 138 27 30 77 533		
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:	15 1464 73 304 1312 177 242 138 27 30 77 533		
<hr/>			
Saturation Flow Module:	1850 1850 1850 1850 1850 1850 1850 1850 1850 1850 1850 1850		
Adj Adjustment:	0.95 0.95 0.85 0.95 0.95 0.85 0.70 0.93 0.93 0.64 0.95 0.85		
Lanes:	1.00 2.00 1.00 1.00 2.00 1.00 1.00 1.67 0.33 1.00 2.00 1.00		
Final Sat.:	1758 3515 1573 1758 3515 1573 1301 2863 564 1186 3515 1573		
<hr/>			
Capacity Analysis Module:	0.01 0.42 0.05 0.17 0.37 0.11 0.19 0.05 0.05 0.03 0.02 0.34		
Crit Moves:	****	****	****
Green/Cycle:	0.17 0.47 0.47 0.19 0.50 0.50 0.19 0.19 0.19 0.19 0.19 0.38		
Volume/Cap:	0.05 0.89 0.10 0.89 0.75 0.23 1.00 0.26 0.26 0.14 0.12 0.89		
Delay/Veh:	28.1 25.7 11.9 54.8 18.0 11.5 90.5 28.0 28.0 27.5 27.2 38.3		
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:	28.1 25.7 11.9 54.8 18.0 11.5 90.5 28.0 28.0 27.5 27.2 38.3		
LOS by Move:	C C B D B B F C C C C C D		
HCM2kAvgQ:	0 21 1 11 15 3 11 2 2 1 1 16		

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

## **APPENDIX 7.2**

Long Range (2035) With Project Conditions  
Intersection Operations Analysis Worksheets

2035WP AM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Long Range (2035) With Project Conditions  
AM Peak Hour

Trip Generation Report

Forecast for AM Trip Gen ( P )

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3 TAZ 3 & 4		1.00	SFDR	0.00	0.00	0	0	0	0.0
100 SITE (2016)		1.00	RESIDENTIAL	45.00	130.00	45	130	175	100.0
Zone 100 Subtotal .....						45	130	175	100.0
TOTAL .....						45	130	175	100.0

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Madison St. / 60th Av.

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	1 0 0 1 0	0 0 1! 0 0	0 1 0 0 1
Volume Module:				
Base Vol:	240 304 53 199 245 789 375 228 184 51 433 239			
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:	240 304 53 199 245 789 375 228 184 51 433 239			
Added Vol:	0 0 0 7 0 0 0 0 0 0 0 19			
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0			
Initial Fut:	240 304 53 206 245 789 375 228 184 51 433 258			
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:	261 330 58 224 266 858 408 248 200 55 471 280			
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0			
FinalVolume:	261 330 58 224 266 858 408 248 200 55 471 280			
Critical Gap Module:				
Critical Gp:	7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxx 4.1 xxxx xxxx			
FollowUpTim:	3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxx 2.2 xxxx xxxx			
Capacity Module:				
Cnflct Vol:	2447 2025 348 1939 1845 471 751 xxxx xxxx 448 xxxx xxxx			
Potent Cap.:	22 58 700 50 76 597 867 xxxx xxxx 1123 xxxx xxxx			
Move Cap.:	0 22 700 0 28 597 867 xxxx xxxx 1123 xxxx xxxx			
Volume/Cap:	xxxx 15.17 0.08 xxxx 9.44 1.44 0.47 xxxx xxxx 0.05 xxxx xxxx			
Level Of Service Module:				
2Way95thQ:	xxxx xxxx xxxx xxxx xxxx xxxx 2.5 xxxx xxxx 0.2 xxxx xxxx			
Control Del:	xxxxxx xxxx xxxx xxxx xxxx xxxx 12.8 xxxx xxxx 8.4 xxxx xxxx			
LOS by Move:	* * * * * * B * * A * *			
Movement:	LT - LTR - RT			
Shared Cap.:	xxxx 0 xxxx xxxx xxxx 103 xxxx xxxx xxxx xxxx xxxx xxxx			
SharedQueue:	xxxxxx xxxx xxxx xxxx xxxx 130.8 xxxx xxxx xxxx xxxx 0.2 xxxx xxxx			
Shrd ConDel:	xxxxxx xxxx xxxx xxxx xxxx 4521 xxxx xxxx xxxx 8.4 xxxx xxxx			
Shared LOS:	* * * * * F * * * A * *			
ApproachDel:	xxxxxx +Inf xxxxxxxx			
ApproachLOS:	F F * *			

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Madison St. / 60th Av.

Cycle (sec):	120	Critical Vol./Cap.(X):	0.955
Loss Time (sec):	16	Average Delay (sec/veh):	54.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	D
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Ovl	Ovl
Min. Green:	10 22 22	10 22 22	10 24 24
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	2 0 2 0 1	2 0 2 0 1
<hr/>			
Volume Module:			
Base Vol:	240 304 53 199 245	789 375 228	184 51 433 239
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:	240 304 53 199 245	789 375 228	184 51 433 239
Added Vol:	0 0 0 7 0	0 0 0	0 0 0 0
PasserByVol:	0 0 0 0 0	0 0 0	0 0 0 0
Initial Fut:	240 304 53 206 245	789 375 228	184 51 433 258
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:	261 330 58 224 266	858 408 248	200 55 471 280
Reduced Vol:	0 0 0 0 0	0 0 0	0 0 0 0
Reduced Vol:	261 330 58 224 266	858 408 248	200 55 471 280
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:	261 330 58 224 266	858 408 248	200 55 471 280
<hr/>			
Saturation Flow Module:			
Sat/Lane:	1850 1850 1850 1850 1850	1850 1850 1850	1850 1850 1850
Adjustment:	0.95 0.93 0.93 0.92 0.95	0.85 0.92 0.95	0.85 0.95 0.95 0.85
Lanes:	1.00 1.70 0.30 2.00 2.00	1.00 2.00 2.00	1.00 1.00 2.00 1.00
Final Sat.:	1758 2927 510 3410 3515	1573 3410 3515	1573 1758 3515 1573
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.15 0.11 0.11 0.07 0.08	0.55 0.12 0.07	0.13 0.03 0.13 0.18
Crit Moves:	****	****	****
Green/Cycle:	0.15 0.39 0.39 0.18 0.42	0.54 0.12 0.21	0.36 0.09 0.18 0.36
Volume/Cap:	1.02 0.29 0.29 0.37 0.18	1.02 1.02 0.33	0.35 0.36 0.73 0.50
Delay/Veh:	111.4 25.4 25.4 43.9 21.9	62.6 101.8 40.3	28.7 52.9 50.5 30.6
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:	111.4 25.4 25.4 43.9 21.9	62.6 101.8 40.3	28.7 52.9 50.5 30.6
LOS by Move:	F C C D C E F D	C D D C	
HCM2kAvgQ:	15 5 5 4 3 40 12 4	5 2 10 8	
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	2.906
Loss Time (sec):	0	Average Delay (sec/veh):	594.7
Optimal Cycle:	0	Level Of Service:	F
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0
<hr/>			
Volume Module:			
Base Vol:	50 554 265	129 894 61	61 252 85
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	50 554 265	129 894 61	61 252 85
Added Vol:	26 26 0	0 9 0	0 0 9
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	76 580 265	129 903 61	61 252 94
User Adj:	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
PHF Volume:	83 630 288	140 982 66	66 274 102
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	83 630 288	140 982 66	66 274 102
PCE Adj:	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
FinalVolume:	83 630 288	140 982 66	66 274 102
<hr/>			
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.08 0.63 0.29	0.12 0.88 1.00	0.15 0.62 0.23
Final Sat.:	33 250 114	48 338 420	60 247 92
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	2.52 2.52 2.52	2.91 2.91 0.16	1.11 1.11 1.11
Crit Moves:	****	****	****
Delay/Veh:	711.4 711 711.4	883.8 884	12.9 107.5 108
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	711.4 711 711.4	883.8 884	12.9 107.5 108
LOS by Move:	F F F	F F B	F F F
ApproachDel:	711.4	835.2	107.5
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	711.4	835.2	107.5
LOS by Appr:	F	F	F
AllWayAvgQ:	77.1 77.1 77.1	93.5 93.5 0.2	10.6 10.6 10.6
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	95	Critical Vol./Cap.(X):	0.542
Loss Time (sec):	16	Average Delay (sec/veh):	34.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	C
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Ovl	Include	Include
Min. Green:	10 20 20	10 20 20	10 10 10
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 2 0 1	1 0 1 1 0	1 0 1 1 0
Volume Module:	50 554 265	129 894 61	61 252 85
Base Vol:	50 554 265	129 894 61	61 252 85
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	50 554 265	129 894 61	61 252 85
Added Vol:	26 26 0	0 0 9	0 0 9
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	76 580 265	129 903 61	61 252 94
User Adj:	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
PHF Volume:	83 630 288	140 982 66	66 274 102
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	83 630 288	140 982 66	66 274 102
PCE Adj:	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
FinalVolume:	83 630 288	140 982 66	66 274 102
Saturation Flow Module:	1900 1900 1900	1900 1900 1900	1900 1900 1900
Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.95 0.95 0.85	0.95 0.94 0.94	0.95 0.91 0.91
Lanes:	1.00 2.00 1.00	1.00 1.87 0.13	1.00 1.46 0.54
Final Sat.:	1805 3610 1615	1805 3351 226	1805 2521 941
Capacity Analysis Module:	0.05 0.17 0.18	0.08 0.29 0.29	0.04 0.11 0.11
Vol/Sat:	0.05 0.17 0.18	0.08 0.29 0.29	0.04 0.11 0.11
Crit Moves:	****	****	****
Green/Cycle:	0.11 0.29 0.55	0.15 0.34 0.34	0.11 0.14 0.14
Volume/Cap:	0.43 0.59 0.33	0.53 0.87 0.87	0.35 0.80 0.80
Delay/Veh:	41.4 29.5 12.0	39.4 36.6 36.6	40.6 49.2 49.2
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	41.4 29.5 12.0	39.4 36.6 36.6	40.6 49.2 49.2
LOS by Move:	D C B	D D D	D D D
HCM2kAvgQ:	3 9 5	4 18 18	2 8 8

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.303
Loss Time (sec):	0	Average Delay (sec/veh):	104.7
Optimal Cycle:	0	Level Of Service:	F
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1
Volume Module:	177 364 56 129 415 295 141 141 189 50 121 199	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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Base Vol:	177 364 56 129 415 295 141 141 189 50 121 199	Initial Bse:	177 364 56 129 415 295 141 141 189 50 121 199
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	Added Vol:	13 7 0 18 2 0 0 5 4 0 13 52
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0	Initial Fut:	190 371 56 147 417 295 141 146 193 50 134 251
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:	0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92
PHF Volume:	207 403 61 160 453 321 153 159 210 54 146 273	Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:	207 403 61 160 453 321 153 159 210 54 146 273	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:	207 403 61 160 453 321 153 159 210 54 146 273
Saturation Flow Module:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Adjustment:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:	1.00 0.87 0.13 1.00 1.00 1.00 0.49 0.51 1.00 0.11 0.31 0.58	Final Sat.:	351 326 49 329 348 372 175 181 392 45 120 224
Capacity Analysis Module:	0.59 1.24 1.24 0.49 1.30 0.86 0.88 0.88 0.54 1.22 1.22 1.22	Vol/Sat:	0.59 1.24 1.24 0.49 1.30 0.86 0.88 0.88 0.54 1.22 1.22 1.22
Crit Moves:	****	Delay/Veh:	26.2 156 156.0 23.2 185 49.5 53.4 53.4 21.8 147.4 147 147.4
Delay Adj:	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:	26.2 156 156.0 23.2 185 49.5 53.4 53.4 21.8 147.4 147 147.4
LOS by Move:	D F F C F E F F C F F F	ApproachDel:	116.0 110.6 40.7 147.4
Delay Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	ApprAdjDel:	116.0 110.6 40.7 147.4
AllWayAvgQ:	1.3 15.0 15.0 0.9 16.6 3.8 4.0 4.0 1.1 14.6 14.6 14.6	LOS by Appr:	F F E F

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Monroe St. / 60th Av.

Cycle (sec):	95	Critical Vol./Cap.(X):	0.623
Loss Time (sec):	16	Average Delay (sec/veh):	34.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	C
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Include	Include
Min. Green:	10 20 20	10 20 20	10 27 27
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	2 0 1 1 0	1 0 1 1 0
Volume Module:	177 364 56 129 415 295 141 141 189 50 121 199	177 364 56 129 415 295 141 141 189 50 121 199	177 364 56 129 415 295 141 141 189 50 121 199
Base Vol:	177 364 56 129 415 295 141 141 189 50 121 199	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:	177 364 56 129 415 295 141 141 189 50 121 199	Added Vol:	13 7 0 18 2 0 0 5 4 0 13 52
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0	Initial Fut:	190 371 56 147 417 295 141 146 193 50 134 251
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:	0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92
PHF Volume:	207 403 61 160 453 321 153 159 210 54 146 273	PHF Volume:	207 403 61 160 453 321 153 159 210 54 146 273
Reduced Vol:	0 0 0 0 0 0 0 0 0 0 0 0	Reduced Vol:	207 403 61 160 453 321 153 159 210 54 146 273
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:	207 403 61 160 453 321 153 159 210 54 146 273	Saturation Flow Module:	1850 1850 1850 1850 1850 1850 1850 1850 1850 1850 1850 1850
Sat/Lane:	1850 1850 1850 1850 1850 1850 1850 1850 1850 1850 1850 1850	Adjustment:	0.95 0.93 0.93 0.92 0.89 0.89 0.95 0.87 0.87 0.95 1.00 0.85
Lanes:	1.00 1.74 0.26 2.00 1.17 0.83 1.00 1.00 1.00 1.00 1.00 1.00	Final Sat.:	1758 2993 452 3410 1931 1366 1758 1608 1608 1758 1850 1573
Capacity Analysis Module:	0.12 0.13 0.13 0.05 0.23 0.23 0.09 0.10 0.13 0.03 0.08 0.17	Crit Moves:	**** **** ****
Vol/Sat:	0.12 0.13 0.13 0.05 0.23 0.23 0.09 0.10 0.13 0.03 0.08 0.17	Green/Cycle:	0.15 0.29 0.29 0.15 0.29 0.29 0.11 0.29 0.29 0.11 0.28 0.43
Volume/Cap:	0.80 0.46 0.46 0.32 0.80 0.80 0.80 0.34 0.46 0.29 0.28 0.40	Delay/Veh:	55.7 27.8 27.8 36.7 36.0 36.0 62.6 27.0 28.2 40.0 26.7 19.0
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:	55.7 27.8 27.8 36.7 36.0 36.0 62.6 27.0 28.2 40.0 26.7 19.0
LOS by Move:	E C C D D D E C C D C B	HCM2kAvgQ:	8 6 6 2 13 13 7 4 6 2 3 6

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Average Delay (sec/veh): 8.1 Worst Case Level Of Service: E[ 48.5]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0

## Volume Module:

Base Vol:	1 378	62	71	366	13	34	3	3	53	6	168
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:	1 378	62	71	366	13	34	3	3	53	6	168
Added Vol:	0 0	0	7	0	0	0	0	0	0	0	19
PasserByVol:	0 0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1 378	62	78	366	13	34	3	3	53	6	187
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:	0.92 0.92	0.92	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:	1 411	67	85	398	14	37	3	3	58	7	203
Reduct Vol:	0 0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1 411	67	85	398	14	37	3	3	58	7	203

## Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5	4.0	3.3	3.5	4.0	3.3

## Capacity Module:

Cnflct Vol:	412 xxxx xxxx	478 xxxx xxxx	1126	1055	405	1024	1028	445
Potent Cap.:	1158 xxxx xxxx	1095 xxxx xxxx	184	228	650	215	236	618
Move Cap.:	1158 xxxx xxxx	1095 xxxx xxxx	113	209	650	198	216	618
Volume/Cap.:	0.00 xxxx xxxx	0.08 xxxx xxxx	0.33	0.02	0.01	0.29	0.03	0.33

## Level Of Service Module:

2Way95thQ:	0.0 xxxx xxxx	0.3 xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
Control Del:	8.1 xxxx xxxx	8.6 xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
LOS by Move:	A * *	A * *	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT				
Shared Cap.:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx	125	xxxxxx xxxx	412	xxxxxx	
SharedQueue:	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx xxxx	1.4	xxxxxx xxxx	4.5	xxxxxx	
Shrd ConDel:	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx xxxx	48.5	xxxxxx xxxx	28.6	xxxxxx	
Shared LOS:	*	*	*	*	E	*	*	*
ApproachDel:	xxxxxx	xxxxxx		48.5		28.6		
ApproachLOS:	*	*	*		E		D	

Note: Queue reported is the number of cars per lane.  
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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Cycle (sec):	60	Critical Vol./Cap.(X):	0.437
Loss Time (sec):	12	Average Delay (sec/veh):	17.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	B
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Permitted
Rights:	Include	Include	Include
Min. Green:	10 19 19	10 19 19	20 20 20
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	1 0 1 1 0	0 0 1! 0 0
Volume Module:	1 378 62	71 366 13	34 3 3
Base Vol:	1 378 62	71 366 13	34 3 3
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	1 378 62	71 366 13	34 3 3
Added Vol:	0 0 0	7 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	1 378 62	78 366 13	34 3 3
User Adj:	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
PHF Volume:	1 411 67	85 398 14	37 3 3
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	1 411 67	85 398 14	37 3 3
PCE Adj:	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
FinalVolume:	1 411 67	85 398 14	37 3 3
Saturation Flow Module:	1900 1900 1900	1900 1900 1900	1900 1900 1900
Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.95 0.93 0.93	0.95 0.95 0.95	0.71 0.71 0.71
Lanes:	1.00 1.72 0.28	1.00 1.93 0.07	0.85 0.07 0.08
Final Sat.:	1805 3036 498	1805 3469 123	1153 102 102
Capacity Analysis Module:	0.00 0.14 0.14	0.05 0.11 0.11	0.03 0.03 0.03
Vol/Sat:	0.00 0.14 0.14	0.05 0.11 0.11	0.03 0.03 0.03
Crit Moves:	****	****	****
Green/Cycle:	0.16 0.31 0.31	0.16 0.31 0.31	0.33 0.33 0.33
Volume/Cap:	0.00 0.43 0.43	0.29 0.37 0.37	0.10 0.10 0.10
Delay/Veh:	21.3 17.0 17.0	22.9 16.5 16.5	14.3 14.3 14.3
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	21.3 17.0 17.0	22.9 16.5 16.5	14.3 14.3 14.3
LOS by Move:	C B B	C B B	B B B
HCM2kAvgQ:	0 4 4	2 3 3	1 1 1

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	2.206								
Loss Time (sec):	0	Average Delay (sec/veh):	377.8								
Optimal Cycle:	0	Level Of Service:	F								
<hr/>											
Approach:	North Bound	South Bound	East Bound	West Bound							
Movement:	L - T - R	L - T - R	L - T - R	L - T - R							
<hr/>											
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign							
Rights:	Include	Include	Include	Include							
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0							
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0							
<hr/>											
Volume Module:											
Base Vol:	85 829	10 157	167 244	39 83	8 25	222 532					
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 1.00	1.00 1.00	1.00 1.00	
Initial Bse:	85 829	10 157	167 244	39 83	8 25	222 532					
Added Vol:	0 7	0 0	2 7	20 7	0 0	0 2	0 0	0 0	0 0	0 0	
PasserByVol:	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
Initial Fut:	85 836	10 157	169 251	59 90	8 25	224 532					
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 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	0.92 0.92	0.92 0.92	0.92 0.92	0.92 0.92	
PHF Volume:	92 909	11 171	184 273	64 98	9 27	243 578					
Reduct Vol:	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
Reduced Vol:	92 909	11 171	184 273	64 98	9 27	243 578					
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 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 1.00	1.00 1.00	1.00 1.00	
FinalVolume:	92 909	11 171	184 273	64 98	9 27	243 578					
<hr/>											
Saturation Flow Module:											
Adjustment:	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 1.00	1.00 1.00	1.00 1.00	
Lanes:	0.09 0.90	0.01 0.27	0.29 0.44	0.38 0.57	0.05 0.05	0.03 0.29	0.68 0.68				
Final Sat.:	42 412	5 128	138 205	148 225	20 20	15 139	330 330				
<hr/>											
Capacity Analysis Module:											
Vol/Sat:	2.21 2.21	2.21 1.33	1.33 1.33	1.33 0.43	0.43 0.43	0.43 1.75	1.75 1.75	1.75 1.75			
Crit Moves:	****	****	****	****	****	****	****	****			
Delay/Veh:	567.7 568	567.7 185.0	185.0 185	185.0 19.0	19.0 19.0	19.0 365.9	365.9 366	365.9 365.9			
Delay Adj:	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 1.00	1.00 1.00	1.00 1.00	
AdjDel/Veh:	567.7 568	567.7 185.0	185.0 185	185.0 19.0	19.0 19.0	19.0 365.9	365.9 366	365.9 365.9			
LOS by Move:	F F	F F	F F	C C	C C	F F	F F	F F			
ApproachDel:	567.7		185.0		19.0			365.9			
Delay Adj:	1.00		1.00		1.00			1.00			
ApprAdjDel:	567.7		185.0		19.0			365.9			
LOS by Appr:	F		F		C			F			
AllWayAvgQ:	70.9 70.9	70.9 22.9	22.9 22.9	22.9 0.7	0.7 0.7	0.7 47.8	47.8 47.8	47.8 47.8			
<hr/>											

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Jackson St. / 60th Av.

Cycle (sec):	105	Critical Vol./Cap.(X):	0.877
Loss Time (sec):	16	Average Delay (sec/veh):	46.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	D
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Include	Include
Min. Green:	10 30 30	10 30 30	10 30 30
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 1 1 0
<hr/>			
Volume Module:			
Base Vol:	85 829	10 157 167	244 39 83
Growth Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00
Initial Bse:	85 829	10 157 167	244 39 83
Added Vol:	0 7	0 0 2	7 20 7
PasserByVol:	0 0	0 0 0	0 0 0
Initial Fut:	85 836	10 157 169	251 59 90
User Adj:	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
PHF Volume:	92 909	11 171 184	273 64 98
Reducet Vol:	0 0	0 0 0	0 0 0
Reduced Vol:	92 909	11 171 184	273 64 98
PCE Adj:	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
FinalVolume:	92 909	11 171 184	273 64 98
<hr/>			
Saturation Flow Module:			
Sat/Lane:	1900 1900	1900 1900 1900	1900 1900 1900 1900 1900
Adjustment:	0.95 0.95	0.95 0.95 0.86	0.86 0.95 0.94 0.94 0.95 0.85
Lanes:	1.00 1.98	0.02 1.00 1.00	1.00 1.00 1.84 0.16 1.00 1.00
Final Sat.:	1805 3560	43 1805 1643	1643 1805 3276 291 1805 1614
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.05 0.26	0.26 0.09 0.11	0.17 0.04 0.03 0.03 0.02 0.15
Crit Moves:	****	****	****
Green/Cycle:	0.10 0.29	0.29 0.10 0.29	0.29 0.10 0.35 0.35 0.12 0.37
Volume/Cap:	0.53 0.89	0.89 0.97 0.39	0.58 0.37 0.09 0.09 0.13 0.41
Delay/Veh:	48.5 46.0	46.0 106.2 30.2	33.0 45.9 23.0 23.0 41.9 24.7
User DelAdj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:	48.5 46.0	46.0 106.2 30.2	33.0 45.9 23.0 23.0 41.9 24.7
LOS by Move:	D D	F C C	D C C D C E
HCM2kAvgQ:	3 16	16 9 5	8 2 1 1 1 6 25
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Average Delay (sec/veh): 15.7 Worst Case Level Of Service: F[129.5]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
Volume Module:				
Base Vol:	54 832 3 2 151 9 78 16 17 4 44 8			
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:	54 832 3 2 151 9 78 16 17 4 44 8			
Added Vol:	2 0 0 0 0 2 7 7 7 0 2 0			
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0			
Initial Fut:	56 832 3 2 151 11 85 23 24 4 46 8			
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:	61 904 3 2 164 12 92 25 26 4 50 9			
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0			
FinalVolume:	61 904 3 2 164 12 92 25 26 4 50 9			
Critical Gap Module:				
Critical Gp:	4.1 xxxx xxxx 4.1 xxxx xxxx 7.1 6.5 6.2 7.1 6.5 6.2			
FollowUpTim:	2.2 xxxx xxxx 2.2 xxxx xxxx 3.5 4.0 3.3 3.5 4.0 3.3			
Capacity Module:				
Cnflct Vol:	176 xxxx xxxx 908 xxxx xxxx 1232 1204 170 1228 1208 906			
Potent Cap.:	1412 xxxx xxxx 758 xxxx xxxx 156 186 879 156 185 337			
Move Cap.:	1412 xxxx xxxx 758 xxxx xxxx 114 177 879 131 176 337			
Volume/Cap:	0.04 xxxx xxxx 0.00 xxxx xxxx 0.81 0.14 0.03 0.03 0.28 0.03			
Level Of Service Module:				
2Way95thQ:	0.1 xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx			
Control Del:	7.7 xxxx xxxx 9.8 xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx			
LOS by Move:	A * * A * * * * * * * *			
Movement:	LT - LTR - RT			
Shared Cap.:	xxxx xxxx xxxx xxxx xxxx xxxx xxxx 146 xxxx xxxx 184 xxxx			
SharedQueue:	xxxx xxxx xxxx xxxx xxxx xxxx xxxx 7.2 xxxx xxxx 1.4 xxxx			
Shrd ConDel:	xxxx xxxx xxxx xxxx xxxx xxxx xxxx 129 xxxx xxxx 34.5 xxxx			
Shared LOS:	* * * * * * * * F * * D *			
ApproachDel:	xxxxxx xxxx 129.5 34.5			
ApproachLOS:	* * F D			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Cycle (sec):	115	Critical Vol./Cap.(X):	0.358
Loss Time (sec):	12	Average Delay (sec/veh):	20.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Permitted
Rights:	Include	Include	Include
Min. Green:	10 19 19	10 19 19	30 30 30
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 0 1 0
<hr/>			
Volume Module:			
Base Vol:	54 832 3	2 151 9	78 16 17
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	54 832 3	2 151 9	78 16 17
Added Vol:	2 0 0	0 0 2	7 7 7
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	56 832 3	2 151 11	85 23 24
User Adj:	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
PHF Volume:	61 904 3	2 164 12	92 25 26
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	61 904 3	2 164 12	92 25 26
PCE Adj:	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
FinalVolume:	61 904 3	2 164 12	92 25 26
<hr/>			
Saturation Flow Module:			
Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.95 0.95 0.95	0.95 0.94 0.94	0.72 0.92 0.92
Lanes:	1.00 1.99 0.01	1.00 1.86 0.14	1.00 0.49 0.51
Final Sat.:	1805 3593 13	1805 3331 243	1368 858 896
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.03 0.25 0.25	0.00 0.05 0.05	0.07 0.03 0.03
Crit Moves:	****	****	****
Green/Cycle:	0.22 0.55 0.55	0.09 0.42 0.42	0.26 0.26 0.26
Volume/Cap:	0.15 0.46 0.46	0.01 0.12 0.12	0.26 0.11 0.11
Delay/Veh:	36.5 15.9 15.9	48.0 20.7 20.7	34.1 32.5 32.5
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	36.5 15.9 15.9	48.0 20.7 20.7	34.1 32.5 32.5
LOS by Move:	D B B	D C C	C C C
HCM2kAvgQ:	2 10 10	0 2 2	3 1 1
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Dwy. 1 / 60th Av.

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: B[ 14.0]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 0 1 0	1 0 1! 0 0

## Volume Module:

Base Vol:	0 0 0 0 0	0 0 0 0 243	0 0 0 0 370	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	1.00 1.00 1.00 1.00 1.00
Initial Bse:	0 0 0 0 0	0 0 0 0 243	0 0 0 0 370	0 0 0 0 0
Added Vol:	65 0 26 0 0	0 0 0 0 0	0 0 0 0 23	9 0 0 0 0
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	65 0 26 0 0	0 0 0 0 243	23 0 0 0 370	9 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	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 0.92 0.92 0.92	0.92 0.92 0.92 0.92 0.92
PHF Volume:	71 0 28 0 0	0 0 0 0 264	25 0 10 0 402	0 0 0 0 0
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	71 0 28 0 0	0 0 0 0 264	25 0 10 0 402	0 0 0 0 0

## Critical Gap Module:

Critical Gp:	6.4 xxxx 6.2 xxxxx xxxx xxxx xxxx xxxx xxxx	4.1 xxxx xxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx	2.2 xxxx xxxx

## Capacity Module:

Cnflict Vol:	698 xxxx 277 xxxx xxxx xxxx xxxx xxxx xxxx	289 xxxx xxxx
Potent Cap.:	409 xxxx 767 xxxx xxxx xxxx xxxx xxxx	1284 xxxx xxxx
Move Cap.:	407 xxxx 767 xxxx xxxx xxxx xxxx xxxx	1284 xxxx xxxx
Volume/Cap.:	0.17 xxxx 0.04 xxxx xxxx xxxx xxxx xxxx	0.01 xxxx xxxx

## Level Of Service Module:

2Way95thQ:	0.6 xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx	0.0 xxxx xxxx
Control Del:	15.7 xxxx 9.9 xxxxx xxxx xxxx xxxx xxxx xxxx	7.8 xxxx xxxx
LOS by Move:	C * A * * * * * * * * A * *	
Movement:	LT - LTR - RT	
Shared Cap.:	xxxx	
SharedQueue:	xxxxx xxxx	
Shrd ConDel:	xxxxx xxxx	
Shared LOS:	* * * * * * * * * * * * * * *	
ApproachDel:	14.0 xxxxxx xxxxxx	
ApproachLOS:	B * * *	

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Dwy. 1 / 60th Av.

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[ 12.1]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 1 1 0	1 0 2 0 0

## Volume Module:

Base Vol:	0 0 0 0 0	0 0 0 0 243	0 0 0 0 370	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	1.00 1.00 1.00 1.00 1.00
Initial Bse:	0 0 0 0 0	0 0 0 0 243	0 0 0 0 370	0 0 0 0 0
Added Vol:	65 0 26 0 0	0 0 0 0 0	0 0 0 0 23	9 0 0 0 0
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	65 0 26 0 0	0 0 0 0 243	23 23 9 370 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	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 0.92 0.92 0.92	0.92 0.92 0.92 0.92 0.92
PHF Volume:	71 0 28 0 0	0 0 0 0 264	25 10 402 0 0	0 0 0 0 0
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	71 0 28 0 0	0 0 0 0 264	25 10 402 0 0	0 0 0 0 0

## Critical Gap Module:

Critical Gp:	6.8 xxxx 6.9 xxxxx xxxx xxxx xxxx xxxx xxxx 4.1 xxxx xxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx xxxx 2.2 xxxx xxxx

## Capacity Module:

Cnflct Vol:	497 xxxx 145 xxxx xxxx xxxx xxxx xxxx xxxx 289 xxxx xxxx
Potent Cap.:	507 xxxx 883 xxxx xxxx xxxx xxxx xxxx 1284 xxxx xxxx
Move Cap.:	504 xxxx 883 xxxx xxxx xxxx xxxx xxxx 1284 xxxx xxxx
Volume/Cap.:	0.14 xxxx 0.03 xxxx xxxx xxxx xxxx xxxx 0.01 xxxx xxxx

## Level Of Service Module:

2Way95thQ:	0.5 xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx 0.0 xxxx xxxx
Control Del:	13.3 xxxx 9.2 xxxxx xxxx xxxx xxxx xxxx xxxx 7.8 xxxx xxxx
LOS by Move:	B * A * * * * * * * * A * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx
SharedQueue:	xxxxx xxxx
Shrd ConDel:	xxxxx xxxx
Shared LOS:	* * * * * * * * * * * * * * *
ApproachDel:	12.1 xxxxxx xxxxxx xxxxxx xxxxxx
ApproachLOS:	B * * * *

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Dwy. 2 / 61st Av.

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[ 10.7]

Approach:	North Bound	South Bound	East Bound	West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled	
Rights:	Include	Include	Include	Include	
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0	
Volume Module:					
Base Vol:	0 0 0 0 0	0 0 0 0 0	0 136	0 0 227	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 0 0 0 0	0 0 0 0 0	0 136	0 0 227	0
Added Vol:	0 0 0 20 0	0 0 19	7 0	0 0 0	0 0 7
PasserByVol:	0 0 0 0 0	0 0 0	0 0	0 0 0	0 0 0
Initial Fut:	0 0 0 20 0	0 19	7 136	0 0 227	7
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:	0.92 0.92 0.92	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 0 0 22 0	0 21	8 148	0 0 247	8
Reduct Vol:	0 0 0 0 0	0 0	0 0	0 0 0	0 0 0
FinalVolume:	0 0 0 22 0	0 21	8 148	0 0 247	8
Critical Gap Module:					
Critical Gp:xxxxx xxxx xxxx 6.4	6.5	6.2	4.1	xxxxx xxxx xxxx xxxx xxxx xxxx	
FollowUpTim:xxxxx xxxx xxxx 3.5	4.0	3.3	2.2	xxxxx xxxx xxxx xxxx xxxx xxxx	
Capacity Module:					
Cnflct Vol: xxxx xxxx xxxx 414	414	251	254	xxxx xxxx xxxx xxxx xxxx xxxx	
Potent Cap.: xxxx xxxx xxxx 599	532	793	1322	xxxx xxxx xxxx xxxx xxxx xxxx	
Move Cap.: xxxx xxxx xxxx 596	529	793	1322	xxxx xxxx xxxx xxxx xxxx xxxx	
Volume/Cap: xxxx xxxx xxxx 0.04	0.00	0.03	0.01	xxxx xxxx xxxx xxxx xxxx xxxx	
Level Of Service Module:					
2Way95thQ: xxxx xxxx xxxx xxxx xxxx xxxx 0.0	xxxx xxxx xxxx xxxx xxxx xxxx				
Control Del:xxxxx xxxx xxxx xxxx xxxx xxxx 7.7	xxxx xxxx xxxx xxxx xxxx xxxx				
LOS by Move: * * * * * * A *	*	*	*	*	
Movement: LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT		
Shared Cap.: xxxx xxxx xxxx 678	xxxxx	xxxx xxxx xxxx xxxx xxxx xxxx			
SharedQueue:xxxxx xxxx xxxx xxxx 0.2	xxxxx	xxxx xxxx xxxx xxxx xxxx xxxx			
Shrd ConDel:xxxxx xxxx xxxx xxxx 10.7	xxxxx	xxxx xxxx xxxx xxxx xxxx xxxx			
Shared LOS: * * * * B	*	*	*	*	
ApproachDel: xxxxxx 10.7		xxxxxx			
ApproachLOS: * B		*		*	

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Dwy. 2 / 61st Av.

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[ 10.7]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0

## Volume Module:

Base Vol:	0 0 0 0 0	0 0 0 0 0	0 136 0 0 227 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 0 0 0 0	0 0 0 136 0 0 227 0	
Added Vol:	0 0 0 20 0	19 7 0 0 0 0 0 7	
PasserByVol:	0 0 0 0 0	0 0 0 0 0 0 0 0	
Initial Fut:	0 0 0 20 0	19 7 136 0 0 227 7	
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:	0.92 0.92 0.92 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 0 0 22 0	21 8 148 0 0 247 8	
Reduct Vol:	0 0 0 0 0	0 0 0 0 0 0 0 0	
FinalVolume:	0 0 0 22 0	21 8 148 0 0 247 8	

## Critical Gap Module:

Critical Gp:	xxxxxx xxxx xxxx 6.4 6.5 6.2 4.1	xxxx xxxx xxxx xxxx xxxx xxxx xxxx
FollowUpTim:	xxxxxx xxxx xxxx 3.5 4.0 3.3 2.2	xxxx xxxx xxxx xxxx xxxx xxxx xxxx

## Capacity Module:

Cnflct Vol:	xxxx xxxx xxxx 414 414 251 254	xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Potent Cap.:	xxxx xxxx xxxx 599 532 793 1322	xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Move Cap.:	xxxx xxxx xxxx 596 529 793 1322	xxxx xxxx xxxx xxxx xxxx xxxx xxxx
Volume/Cap.:	xxxx xxxx xxxx 0.04 0.00 0.03 0.01	xxxx xxxx xxxx xxxx xxxx xxxx xxxx

## Level Of Service Module:

2Way95thQ:	xxxx xxxx xxxx xxxx xxxx xxxx 0.0	xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:	xxxxxx xxxx xxxx xxxx xxxx xxxx	7.7 xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move:	* * * * *	A * * * * *
Movement:	LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxx 678 xxxx xxxx xxxx xxxx xxxx xxxx xxxx	
SharedQueue:	xxxxxx xxxx xxxx xxxx 0.2 xxxx xxxx xxxx xxxx xxxx xxxx xxxx	
Shrd ConDel:	xxxxxx xxxx xxxx xxxx 10.7 xxxx xxxx xxxx xxxx xxxx xxxx xxxx	
Shared LOS:	* * * * B	* * * * * * * *
ApproachDel:	xxxxxx 10.7	xxxxxx xxxx xxxx
ApproachLOS:	*	B *

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.615				
Loss Time (sec):	0	Average Delay (sec/veh):	200.7				
Optimal Cycle:	0	Level Of Service:	F				
<b>Approach:</b>	North Bound	South Bound	East Bound	West Bound			
Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign			
Rights:	Include	Include	Include	Include			
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0			
Lanes:	1 0 2 0	1 0 2 0	1 0 1 0	1 0 2 0			
Volume Module:							
Base Vol:	14 899	43 284	1168 132	153 34	6 23	25 86	
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:	14 899	43 284	1168 132	153 34	6 23	25 86	
Added Vol:	13 6	0 5	2 0	0 5	5 0	13 13	
PasserByVol:	0 0	0 0	0 0	0 0	0 0	0 0	
Initial Fut:	27 905	43 289	1170 132	153 39	11 23	38 99	
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:	29 984	47 314	1272 143	166 42	12 25	41 108	
Reduct Vol:	0 0	0 0	0 0	0 0	0 0	0 0	
Reduced Vol:	29 984	47 314	1272 143	166 42	12 25	41 108	
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:	29 984	47 314	1272 143	166 42	12 25	41 108	
Saturation Flow Module:							
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	
Lanes:	1.00 2.00	1.00 2.00	1.00 2.00	1.00 2.00	1.00 2.00	1.00 2.00	
Final Sat.:	330 706	372 372	787 424	283 293	310 279	579 308	
Capacity Analysis Module:							
Vol/Sat:	0.09 1.39	0.13 0.84	1.61 0.34	0.59 0.14	0.04 0.09	0.07 0.07	0.35 ****
Crit Moves:	****	****	****	****	****	****	****
Delay/Veh:	14.4 221	13.5 46.7	310 15.3	31.7 16.9	14.6 16.7	15.9 20.3	
Delay Adj:	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:	14.4 221	13.5 46.7	310 15.3	31.7 16.9	14.6 16.7	15.9 20.3	
LOS by Move:	B F	B E	F C	D C	B C	C C	
ApproachDel:	206.0		237.8		27.9		18.7
Delay Adj:	1.00		1.00		1.00		1.00
ApprAdjDel:	206.0		237.8		27.9		18.7
LOS by Appr:	F		F		D		C
AllWayAvgQ:	0.1 20.4	0.1 3.6	32.6 0.5	1.3 0.2	0.0 0.1	0.1 0.1	0.5 ****

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

Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 AM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	70	Critical Vol./Cap.(X):	0.475
Loss Time (sec):	12	Average Delay (sec/veh):	18.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	B
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Permitted
Rights:	Include	Include	Include
Min. Green:	10 10 10	10 22 22	10 29 29
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 1 0
Volume Module:	14 899 43 284 1168	132 153 34 6 23 25 86	
Base Vol:	14 899 43 284 1168	132 153 34 6 23 25 86	
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
Initial Bse:	14 899 43 284 1168	132 153 34 6 23 25 86	
Added Vol:	13 6 0 5 2	0 0 5 5 0 13 13	
PasserByVol:	0 0 0 0 0	0 0 0 0 0 0 0	
Initial Fut:	27 905 43 289 1170	132 153 39 11 23 38 99	
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
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 0.92 0.92
PHF Volume:	29 984 47 314 1272	143 166 42 12 25 41 108	
Reduced Vol:	0 0 0 0 0	0 0 0 0 0 0 0	
Reduced Vol:	29 984 47 314 1272	143 166 42 12 25 41 108	
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
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
FinalVolume:	29 984 47 314 1272	143 166 42 12 25 41 108	
Saturation Flow Module:	1850 1850 1850 1850 1850	1850 1850 1850 1850 1850	
Sat/Lane:	1850 1850 1850 1850 1850	1850 1850 1850 1850 1850	
Adjustment:	0.95 0.95 0.85 0.95 0.95	0.85 0.73 0.92 0.92 0.72	0.95 0.85
Lanes:	1.00 2.00 1.00 2.00 1.00	1.00 1.00 1.56 0.44 1.00	2.00 1.00
Final Sat.:	1758 3515 1573 1758 3515	1573 1356 2651 748 1336	3515 1573
Capacity Analysis Module:	0.02 0.28 0.03 0.18 0.36	0.09 0.12 0.02 0.02 0.02	0.01 0.07
Crit Moves:	****	****	****
Green/Cycle:	0.14 0.43 0.43 0.27 0.56	0.56 0.14 0.14 0.14 0.14	0.14 0.14 0.14 0.41
Volume/Cap:	0.12 0.66 0.07 0.66 0.64	0.16 0.90 0.12 0.12 0.14	0.09 0.17
Delay/Veh:	27.9 17.8 12.4 26.8 11.7	7.8 69.1 27.7 27.7 28.0	27.6 13.8
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 1.00 1.00
AdjDel/Veh:	27.9 17.8 12.4 26.8 11.7	7.8 69.1 27.7 27.7 28.0	27.6 13.8
LOS by Move:	C B B C B A E C C C C B		
HCM2kAvgQ:	1 10 1 7 11 2 7 1 1 1 1 0 2		

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Long Range (2035) With Project Conditions  
PM Peak Hour  
-----

Scenario Report

Scenario: 2035WP PM

Command: 2035WP PM  
Volume: 2035NP PM  
Geometry: Existing Geometry  
Impact Fee: Default Impact Fee  
Trip Generation: PM Trip Gen ( P )  
Trip Distribution: Trip Dist  
Paths: Default Path  
Routes: Default Route  
Configuration: Peak Hour

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
Long Range (2035) With Project Conditions  
PM Peak Hour

Trip Generation Report

Forecast for PM Trip Gen ( P )

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
100 SITE (2016)		1.00	RESIDENTIAL	146.00	86.00	146	86	232	100.0
	Zone 100 Subtotal					146	86	232	100.0
TOTAL .....						146	86	232	100.0

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Madison St. / 60th Av.

Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F[xxxxx]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	1 0 0 1 0	0 0 1! 0 0	0 1 0 0 1

## Volume Module:

Base Vol:	333	299	12	514	318	401	967	303	489	55	365	174
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:	333	299	12	514	318	401	967	303	489	55	365	174
Added Vol:	0	0	0	22	0	0	0	0	0	0	0	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	333	299	12	536	318	401	967	303	489	55	365	187
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:	362	325	13	583	346	436	1051	329	532	60	397	203
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	362	325	13	583	346	436	1051	329	532	60	397	203

## Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxxx	xxxxx	4.1	xxxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxxx	xxxxx	2.2	xxxxx	xxxxx

## Capacity Module:

Cnflct Vol:	3706	3417	595	3383	3479	397	600	xxxxx	xxxxx	861	xxxxx	xxxxx
Potent Cap.:	3	7	508	4	7	657	987	xxxxx	xxxxx	789	xxxxx	xxxxx
Move Cap.:	0	0	508	0	0	657	987	xxxxx	xxxxx	789	xxxxx	xxxxx
Volume/Cap.:	xxxxx	xxxxx	0.03	xxxxx	xxxxx	0.66	1.06	xxxxx	xxxxx	0.08	xxxxx	xxxxx

## Level Of Service Module:

2Way95thQ:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	24.3	xxxxx	xxxxx	0.2	xxxxx	xxxxx
Control Del:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	67.6	xxxxx	xxxxx	9.9	xxxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	F	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxxx	0	xxxxx	xxxxx	xxxxx	0	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
SharedQueue:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx
Shrd ConDel:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	9.9	xxxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			+Inf			xxxxxx			xxxxxx		
ApproachLOS:	F			F			*			*		

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Madison St. / 60th Av.

Cycle (sec):	120	Critical Vol./Cap.(X):	0.837									
Loss Time (sec):	16	Average Delay (sec/veh):	53.1									
Optimal Cycle:	OPTIMIZED	Level Of Service:	D									
<hr/>												
Approach:	North Bound	South Bound	East Bound									
Movement:	L - T - R	L - T - R	L - T - R									
Control:	Protected	Protected	Protected									
Rights:	Include	Ovl	Ovl									
Min. Green:	10 22 22	10 22 22	10 24 24									
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0									
Lanes:	1 0 1 1 0	2 0 2 0 1	2 0 2 0 1									
<hr/>												
Volume Module:												
Base Vol:	333 299	12 514	318 401	967 303	489	55	365	174				
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				
Initial Bse:	333 299	12 514	318 401	967 303	489	55	365	174				
Added Vol:	0 0	0 22	0 0	0 0	0 0	0	0 0	0				
PasserByVol:	0 0	0 0	0 0	0 0	0 0	0	0 0	0				
Initial Fut:	333 299	12 536	318 401	967 303	489	55	365	187				
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				
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 0.92	0.92				
PHF Volume:	362 325	13 583	346 436	1051 329	532	60	397	203				
Reducet Vol:	0 0	0 0	0 0	0 0	0 0	0	0 0	0				
Reduced Vol:	362 325	13 583	346 436	1051 329	532	60	397	203				
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				
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				
FinalVolume:	362 325	13 583	346 436	1051 329	532	60	397	203				
<hr/>												
Saturation Flow Module:												
Sat/Lane:	1850 1850	1850 1850	1850 1850	1850 1850	1850 1850	1850 1850	1850 1850	1850 1850	1850 1850	1850 1850	1850 1850	
Adjustment:	0.95 0.94	0.94 0.94	0.92 0.95	0.85 0.85	0.92 0.95	0.85 0.85	0.95 0.95	0.95 0.95	0.85 0.85			
Lanes:	1.00 1.92	0.08 2.00	2.00 2.00	1.00 2.00	2.00 2.00	1.00 2.00	1.00 2.00	1.00 2.00	1.00 2.00	1.00 2.00	1.00 2.00	
Final Sat.:	1758 3359	135 3410	3515 1573	3410 3515	1573 3410	3515 1573	1758 3515	3515 1573	1758 3515	3515 1573	1758 3515	3515 1573
<hr/>												
Capacity Analysis Module:												
Vol/Sat:	0.21 0.10	0.10 0.17	0.10 0.17	0.28 0.31	0.09 0.31	0.34 0.09	0.03 0.34	0.11 0.03	0.13 0.11			
Crit Moves:	****	****	****	****	****	****	****	****	****			
Green/Cycle:	0.20 0.20	0.20 0.19	0.18 0.19	0.48 0.30	0.34 0.30	0.54 0.34	0.14 0.54	0.18 0.14	0.37 0.18			
Volume/Cap:	1.03 0.49	0.49 0.92	0.54 0.92	0.57 1.03	0.27 0.27	0.62 0.27	0.24 0.62	0.62 0.24	0.35 0.62			
Delay/Veh:	103.5 43.2	43.2 67.4	45.3 67.4	23.3 77.7	28.9 28.9	20.5 20.5	46.2 46.2	46.9 46.9	27.9 27.9			
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	1.00 1.00	1.00 1.00	1.00 1.00			
AdjDel/Veh:	103.5 43.2	43.2 67.4	45.3 67.4	23.3 77.7	28.9 28.9	20.5 20.5	46.2 46.2	46.9 46.9	27.9 27.9			
LOS by Move:	F D	D E	E D	C C	E C	C C	D D	D D	C C			
HCM2kAvgQ:	19 6	6 15	7 12	27 27	5 5	14 14	2 2	8 8	5 5			
<hr/>												

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	3.830
Loss Time (sec):	0	Average Delay (sec/veh):	934.0
Optimal Cycle:	0	Level Of Service:	F
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign
Rights:	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0
Lanes:	0 0 1! 0 0	0 1 0 0 1	0 0 1! 0 0
Volume Module:			
Base Vol:	70 1018 269	200 861 131	137 374 43
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	70 1018 269	200 861 131	137 374 43
Added Vol:	17 17 0	0 29 0	0 0 29
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	87 1035 269	200 890 131	137 374 72
User Adj:	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
PHF Volume:	95 1125 292	217 967 142	149 407 78
Reduct Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	95 1125 292	217 967 142	149 407 78
PCE Adj:	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
FinalVolume:	95 1125 292	217 967 142	149 407 78
Saturation Flow Module:			
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.06 0.75 0.19	0.18 0.82 1.00	0.23 0.65 0.12
Final Sat.:	25 294 76	71 314 420	93 254 49
Capacity Analysis Module:			
Vol/Sat:	3.83 3.83 3.83	3.08 3.08 0.34	1.60 1.60 1.60
Crit Moves:	**** ****	*****	*****
Delay/Veh:	1298 1298 1298	961.3 961 15.6	305.0 305 305.0
Delay Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	1298 1298 1298	961.3 961 15.6	305.0 305 305.0
LOS by Move:	F F F	F F C	F F F F F F
ApproachDel:	1297.9	859.8	305.0
Delay Adj:	1.00	1.00	1.00
ApprAdjDel:	1297.9	859.8	305.0
LOS by Appr:	F	F	F F
AllWayAvgQ:	141 141 141.0	101 101 0.5	32.2 32.2 32.2

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Monroe St. / 58th Av.

Cycle (sec):	105	Critical Vol./Cap.(X):	0.959	
Loss Time (sec):	16	Average Delay (sec/veh):	51.0	
Optimal Cycle:	OPTIMIZED	Level Of Service:	D	
<hr/>				
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:	Ovl	Include	Include	Include
Min. Green:	10 20 20	10 20 20	10 10 10	10 27 27
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 2 0 1	1 0 1 1 0	1 0 1 1 0	1 0 1 1 0
<hr/>				
Volume Module:				
Base Vol:	70 1018 269	200 861 131	137 374 43	404 472 186
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:	70 1018 269	200 861 131	137 374 43	404 472 186
Added Vol:	17 17 0	0 29 0	0 0 29	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	87 1035 269	200 890 131	137 374 72	404 472 186
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:	95 1125 292	217 967 142	149 407 78	439 513 202
Reducet Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	95 1125 292	217 967 142	149 407 78	439 513 202
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:	95 1125 292	217 967 142	149 407 78	439 513 202
<hr/>				
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 0.93 0.93	0.95 0.93 0.93	0.95 0.91 0.91
Lanes:	1.00 2.00 1.00	1.00 1.74 0.26	1.00 1.68 0.32	1.00 1.43 0.57
Final Sat.:	1805 3610 1615	1805 3087 454	1805 2955 569	1805 2481 978
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.05 0.31 0.18	0.12 0.31 0.31	0.08 0.14 0.14	0.24 0.21 0.21
Crit Moves:	****	****	****	****
Green/Cycle:	0.11 0.32 0.58	0.13 0.35 0.35	0.11 0.14 0.14	0.25 0.29 0.29
Volume/Cap:	0.50 0.96 0.31	0.96 0.91 0.91	0.77 0.96 0.96	0.96 0.71 0.71
Delay/Veh:	46.4 52.1 11.6	93.8 42.6 42.6	62.5 74.5 74.5	70.3 35.8 35.8
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:	46.4 52.1 11.6	93.8 42.6 42.6	62.5 74.5 74.5	70.3 35.8 35.8
LOS by Move:	D D B F D D	E E E	E E E	D D
HCM2kAvgQ:	4 24 5 11 22 22	7 12 12	12 19 12	12 12
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Monroe St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	2.896			
Loss Time (sec):	0	Average Delay (sec/veh):	442.4			
Optimal Cycle:	0	Level Of Service:	F			
<hr/>						
Approach:	North Bound	South Bound	East Bound			
Movement:	L - T - R	L - T - R	L - T - R			
Control:	Stop Sign	Stop Sign	Stop Sign			
Rights:	Include	Include	Include			
Min. Green:	0 0 0	0 0 0	0 0 0			
Lanes:	1 0 0 1 0	1 0 1 0 1	0 1 0 0 1			
<hr/>						
Volume Module:						
Base Vol:	203 921	32 308	568 225	267 335	159 22	165 385
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:	203 921	32 308	568 225	267 335	159 22	165 385
Added Vol:	9 4	0 58	7 0	0 15	15 0	9 34
PasserByVol:	0 0	0 0	0 0	0 0	0 0	0 0
Initial Fut:	212 925	32 366	575 225	267 350	174 22	174 419
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:	230 1005	35 398	625 245	290 380	189 24	189 455
Reduced Vol:	0 0	0 0	0 0	0 0	0 0	0 0
Reduced Vol:	230 1005	35 398	625 245	290 380	189 24	189 455
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:	230 1005	35 398	625 245	290 380	189 24	189 455
<hr/>						
Saturation Flow Module:						
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Lanes:	1.00 0.97	0.03 1.00	1.00 0.43	0.57 1.00	0.04 0.28	0.68
Final Sat.:	341 347	12 326	341 365	150 196	377 14	109 263
<hr/>						
Capacity Analysis Module:						
Vol/Sat:	0.68 2.90	2.90 1.22	1.83 0.67	1.94 1.94	0.50 1.73	1.73 1.73
Crit Moves:	****	****	****	****	****	****
Delay/Veh:	32.5 879	878.6 155.7	409 30.3	457.1 457	21.3 362.0	362 362.0
Delay Adj:	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:	32.5 879	878.6 155.7	409 30.3	457.1 457	21.3 362.0	362 362.0
LOS by Move:	D F	F F	D F	F C	F F	F
ApproachDel:	725.1		256.4		361.3	362.0
Delay Adj:	1.00		1.00		1.00	1.00
ApprAdjDel:	725.1		256.4		361.3	362.0
LOS by Appr:	F		F		F	F
AllWayAvgQ:	1.8 86.4	86.4 12.9	37.5 1.8	42.6 42.6	1.0 37.5	37.5 37.5
<hr/>						

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Monroe St. / 60th Av.

Cycle (sec):	120	Critical Vol./Cap.(X):	0.786
Loss Time (sec):	16	Average Delay (sec/veh):	51.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	D
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected
Rights:	Include	Include	Include
Min. Green:	10 20 20	10 20 20	10 27 27
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	2 0 1 1 0	1 0 1 1 0
Volume Module:	203 921 32 308 568 225	267 335 159 22 165 385	
Base Vol:	203 921 32 308 568 225	267 335 159 22 165 385	
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:	203 921 32 308 568 225	267 335 159 22 165 385	
Added Vol:	9 4 0 58 7 0	0 15 15 0 9 34	
PasserByVol:	0 0 0 0 0 0	0 0 0 0 0 0	
Initial Fut:	212 925 32 366 575 225	267 350 174 22 174 419	
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:	230 1005 35 398 625 245	290 380 189 24 189 455	
Reducet Vol:	0 0 0 0 0 0	0 0 0 0 0 0	
Reduced Vol:	230 1005 35 398 625 245	290 380 189 24 189 455	
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:	230 1005 35 398 625 245	290 380 189 24 189 455	
Saturation Flow Module:	1850 1850 1850 1850 1850 1850	1850 1850 1850 1850 1850 1850	
Sat/Lane:	1850 1850 1850 1850 1850 1850	1850 1850 1850 1850 1850 1850	
Adjustment:	0.95 0.95 0.95 0.92 0.91 0.91	0.95 0.90 0.90 0.95 1.00 0.85	
Lanes:	1.00 1.93 0.07 2.00 1.44 0.56	1.00 1.34 0.66 1.00 1.00 1.00	
Final Sat.:	1758 3380 117 3410 2420 947	1758 2230 1109 1758 1850 1573	
Capacity Analysis Module:	0.13 0.30 0.30 0.12 0.26 0.26	0.17 0.17 0.17 0.01 0.10 0.29	
Vol/Sat:	0.13 0.30 0.30	0.12 0.26 0.26	
Crit Moves:	****	****	
Green/Cycle:	0.15 0.33 0.33 0.13 0.30 0.30	0.18 0.30 0.30 0.11 0.23 0.35	
Volume/Cap:	0.85 0.90 0.90 0.90 0.85 0.85	0.90 0.57 0.57 0.12 0.45 0.82	
Delay/Veh:	70.8 48.4 48.4 73.0 45.9 45.9	75.1 36.5 36.5 48.4 40.9 44.4	
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:	70.8 48.4 48.4 73.0 45.9 45.9	75.1 36.5 36.5 48.4 40.9 44.4	
LOS by Move:	E D D E D D	E D D D D D	
HCM2kAvgQ:	11 23 23 11 18 18	14 10 10 1 6 17	

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 PM Peak Hour

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

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Intersection #4 Monroe St. / 61st Av.

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Average Delay (sec/veh): 5.3 Worst Case Level Of Service: F[ 96.4]

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Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0

---

Volume Module:

Base Vol:	3 456	49 169	539 39	22 2	2 16	8 45
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:	3 456	49 169	539 39	22 2	2 16	8 45
Added Vol:	0 0	0 22	0 0	0 0	0 0	0 0
PasserByVol:	0 0	0 0	0 0	0 0	0 0	0 0
Initial Fut:	3 456	49 191	539 39	22 2	2 16	8 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:	0.92 0.92	0.92 0.92	0.92 0.92	0.92 0.92	0.92 0.92	0.92 0.92
PHF Volume:	3 496	53 208	586 42	24 2	2 17	9 63
Reduct Vol:	0 0	0 0	0 0	0 0	0 0	0 0
FinalVolume:	3 496	53 208	586 42	24 2	2 17	9 63

---

Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1 6.5	6.2 7.1	6.5 6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5 4.0	3.3 3.5	4.0 3.3

---

Capacity Module:

Cnflct Vol:	628 xxxx xxxx	549 xxxx xxxx	1587 1578	607 1553	1572 522
Potent Cap.:	963 xxxx xxxx	1031 xxxx xxxx	88 111	500 93	111 558
Move Cap.:	963 xxxx xxxx	1031 xxxx xxxx	60 85	500 75	86 558
Volume/Cap.:	0.00 xxxx xxxx	0.20 xxxx xxxx	0.40 0.03	0.00 0.23	0.10 0.11

---

Level Of Service Module:

2Way95thQ:	0.0 xxxx xxxx	0.8 xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx
Control Del:	8.7 xxxx xxxx	9.4 xxxx xxxx	xxxx xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx
LOS by Move:	A * *	A * *	* * *	* *	* *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx	66 xxxx	xxxx 200 xxxx
SharedQueue:	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx xxxx	1.7 xxxx	xxxxxx 2.1 xxxx
Shrd ConDel:	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx xxxx	96.4 xxxx	xxxxxx 36.8 xxxx
Shared LOS:	* * * * *	* * * * *	* * F	* * E	* E *
ApproachDel:	xxxxxx	xxxxxx		96.4	36.8
ApproachLOS:	*	*	F		E

---

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Monroe St. / 61st Av.

Cycle (sec):	65	Critical Vol./Cap.(X):	0.397
Loss Time (sec):	12	Average Delay (sec/veh):	19.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	B
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Permitted
Rights:	Include	Include	Include
Min. Green:	10 19 19	10 19 19	20 20 20
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	1 0 1 1 0	0 0 1! 0 0
Volume Module:	3 456	49 169 539	39 22 2
Base Vol:	3 456	49 169 539	39 22 2
Growth Adj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	3 456	49 169 539	39 22 2
Added Vol:	0 0	0 22 0	0 0 0
PasserByVol:	0 0	0 0 0	0 0 0
Initial Fut:	3 456	49 191 539	39 22 2
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:	3 496	53 208 586	42 24 2
Reduced Vol:	0 0	0 0 0	0 0 0
Reduced Vol:	3 496	53 208 586	42 24 2
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:	3 496	53 208 586	42 24 2
Saturation Flow Module:	1900 1900	1900 1900 1900	1900 1900 1900
Sat/Lane:	1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.95 0.94	0.94 0.95 0.94	0.94 0.81 0.81
Lanes:	1.00 1.81	0.19 1.00 1.87	0.13 0.84 0.08
Final Sat.:	1805 3211	345 1805 3333	241 1296 118
Capacity Analysis Module:	0.00 0.15	0.15 0.12 0.18	0.18 0.02 0.02
Vol/Sat:	0.00 0.15	0.15 0.12 0.18	0.18 0.02 0.02
Crit Moves:	****	****	****
Green/Cycle:	0.18 0.29	0.29 0.22 0.33	0.33 0.31 0.31
Volume/Cap:	0.01 0.53	0.53 0.53 0.53	0.06 0.06 0.06
Delay/Veh:	22.2 19.8	19.8 24.1 18.0	18.0 15.9 15.9
User DelAdj:	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	22.2 19.8	19.8 24.1 18.0	18.0 15.9 15.9
LOS by Move:	C B	B C B	B B B
HCM2kAvgQ:	0 5	5 4	6 6 0

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Jackson St. / 60th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	1.463							
Loss Time (sec):	0	Average Delay (sec/veh):	137.9							
Optimal Cycle:	0	Level Of Service:	F							
<hr/>										
Approach:	North Bound	South Bound	East Bound	West Bound						
Movement:	L - T - R	L - T - R	L - T - R	L - T - R						
<hr/>										
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign						
Rights:	Include	Include	Include	Include						
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0						
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0						
<hr/>										
Volume Module:										
Base Vol:	17 117 14	99 501 25	40 416 40	29 248 113						
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:	17 117 14	99 501 25	40 416 40	29 248 113						
Added Vol:	0 4 0	0 0 7	22 13 4	0 0 7	0 0 0					
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0					
Initial Fut:	17 121 14	99 508 47	53 420 40	29 255 113						
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:	0.94 0.94 0.94	0.94 0.94 0.94	0.94 0.94 0.94	0.94 0.94 0.94	0.94 0.94 0.94					
PHF Volume:	18 129 15	105 540 50	56 447 43	31 271 120						
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0					
Reduced Vol:	18 129 15	105 540 50	56 447 43	31 271 120						
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:	18 129 15	105 540 50	56 447 43	31 271 120						
<hr/>										
Saturation Flow Module:										
Adjustment:	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					
Lanes:	0.11 0.80 0.09	0.15 0.78 0.07	0.10 0.82 0.08	0.07 0.65 0.28						
Final Sat.:	44 315 36	72 369 34	49 390 37	35 303 134						
<hr/>										
Capacity Analysis Module:										
Vol/Sat:	0.41 0.41 0.41	1.46 1.46 1.46	1.15 1.15 1.15	0.89 0.89 0.89						
Crit Moves:	****	****	****	****						
Delay/Veh:	17.5 17.5 17.5	240.4 240 240.4	113.7 114 113.7	46.5 46.5 46.5						
Delay Adj:	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:	17.5 17.5 17.5	240.4 240 240.4	113.7 114 113.7	46.5 46.5 46.5						
LOS by Move:	C C C	F F F	F F F	E E E						
ApproachDel:	17.5	240.4	113.7	46.5						
Delay Adj:	1.00	1.00	1.00	1.00						
ApprAdjDel:	17.5	240.4	113.7	46.5						
LOS by Appr:	C	F	F	E						
AllWayAvgQ:	0.6 0.6 0.6	30.4 30.4 30.4	13.7 13.7 13.7	4.7 4.7 4.7						

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Jackson St. / 60th Av.

Cycle (sec):	95	Critical Vol./Cap.(X):	0.396	
Loss Time (sec):	16	Average Delay (sec/veh):	28.4	
Optimal Cycle:	OPTIMIZED	Level Of Service:	C	
<hr/>				
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Protected	Protected	Protected	
Rights:	Include	Include	Include	
Min. Green:	10 30 30	10 30 30	10 30 30	
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 1 1 0	
<hr/>				
Volume Module:				
Base Vol:	17 117 14 99 501	25 40 416 40	29 248 113	
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:	17 117 14 99 501	25 40 416 40	29 248 113	
Added Vol:	0 4 0 0 7	22 13 4 0	0 0 7 0	
PasserByVol:	0 0 0 0 0	0 0 0 0	0 0 0 0	
Initial Fut:	17 121 14 99 508	47 53 420 40	29 255 113	
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:	18 129 15 105 540	50 56 447 43	31 271 120	
Reducet Vol:	0 0 0 0 0	0 0 0 0	0 0 0 0	
Reduced Vol:	18 129 15 105 540	50 56 447 43	31 271 120	
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:	18 129 15 105 540	50 56 447 43	31 271 120	
<hr/>				
Saturation Flow Module:				
Sat/Lane:	1900 1900 1900 1900 1900	1900 1900 1900 1900	1900 1900 1900 1900	
Adjustment:	0.95 0.93 0.93 0.95 0.94	0.94 0.95 0.94 0.94	0.94 0.95 0.91 0.91	
Lanes:	1.00 1.79 0.21 1.00 1.83	0.17 1.00 1.83 0.17	1.00 1.39 0.61	
Final Sat.:	1805 3184 368 1805 3261	302 1805 3253 310	1805 2386 1058	
<hr/>				
Capacity Analysis Module:				
Vol/Sat:	0.01 0.04 0.04 0.06 0.17	0.17 0.03 0.14 0.14	0.02 0.11 0.11	
Crit Moves:	****	****	****	
Green/Cycle:	0.10 0.31 0.31 0.10 0.31	0.31 0.10 0.31 0.31	0.10 0.31 0.31	
Volume/Cap:	0.10 0.13 0.13 0.56 0.53	0.53 0.30 0.44 0.44	0.16 0.36 0.36	
Delay/Veh:	39.1 23.7 23.7 44.7 27.7	27.7 40.7 26.6 26.6	39.6 25.8 25.8	
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:	39.1 23.7 23.7 44.7 27.7	27.7 40.7 26.6 26.6	39.6 25.8 25.8	
LOS by Move:	D C C D C C	D C C D C C	D C C	
HCM2kAvgQ:	0 2 2 4 8 8	2 6 6 1 5 5		
<hr/>				

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 PM Peak Hour

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

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Intersection #6 Jackson St. / 61st Av.

---

Average Delay (sec/veh): 6.1 Worst Case Level Of Service: D[ 28.2]

---

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0

---

Volume Module:

Base Vol:	44	85	2	16	500	61	42	51	37	3	35	3
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:	44	85	2	16	500	61	42	51	37	3	35	3
Added Vol:	7	0	0	0	0	7	4	4	4	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	51	85	2	16	500	68	46	55	41	3	42	3
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:	55	92	2	17	543	74	50	60	45	3	46	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	55	92	2	17	543	74	50	60	45	3	46	3

---

Critical Gap Module:

Critical Gp:	4.1 xxxx xxxx	4.1 xxxx xxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2 xxxx xxxx	2.2 xxxx xxxx	3.5	4.0	3.3	3.5	4.0	3.3

---

Capacity Module:

Cnflct Vol:	617 xxxx xxxx	95 xxxx xxxx	844	821	580	872	857	93
Potent Cap.:	972 xxxx xxxx	1512 xxxx xxxx	285	312	518	273	297	969
Move Cap.:	972 xxxx xxxx	1512 xxxx xxxx	235	290	518	199	276	969
Volume/Cap.:	0.06 xxxx xxxx	0.01 xxxx xxxx	0.21	0.21	0.09	0.02	0.17	0.00

---

Level Of Service Module:

2Way95thQ:	0.2 xxxx xxxx	0.0 xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx
Control Del:	8.9 xxxx xxxx	7.4 xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx
LOS by Move:	A * *	A * *	* * *	* * *	* * *	* * *	* * *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT			
Shared Cap.:	xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx xxxx	306 xxxx xxxx	xxxx xxxx xxxx	282 xxxx xxxx	xxxx xxxx xxxx
SharedQueue:	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	2.7 xxxx xxxx	0.7 xxxx xxxx	xxxxxx xxxx xxxx
Shrd ConDel:	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxxxx xxxx xxxx	28.2 xxxx xxxx	20.6 xxxx xxxx	xxxxxx xxxx xxxx
Shared LOS:	* * * * *	* * * * *	* * * * *	D	* * * * C	* * * * C	* * * * C
ApproachDel:	xxxxxx	xxxxxx		28.2		20.6	
ApproachLOS:	*	*		D		C	

---

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Jackson St. / 61st Av.

Cycle (sec):	90	Critical Vol./Cap.(X):	0.304
Loss Time (sec):	12	Average Delay (sec/veh):	20.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	C
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Permitted
Rights:	Include	Include	Include
Min. Green:	10 19 19	10 19 19	30 30 30
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 0 1 0
<hr/>			
Volume Module:			
Base Vol:	44 85 2 16 500	61 42 51 37	3 35 3
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:	44 85 2 16 500	61 42 51 37	3 35 3
Added Vol:	7 0 0 0 0	7 4 4 4	0 7 0
PasserByVol:	0 0 0 0 0	0 0 0 0	0 0 0 0
Initial Fut:	51 85 2 16 500	68 46 55 41	3 42 3
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:	0.92 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:	55 92 2 17 543	74 50 60 45	3 46 3
Reduced Vol:	0 0 0 0 0	0 0 0 0	0 0 0 0
Reduced Vol:	55 92 2 17 543	74 50 60 45	3 46 3
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:	55 92 2 17 543	74 50 60 45	3 46 3
<hr/>			
Saturation Flow Module:			
Sat/Lane:	1900 1900 1900 1900 1900	1900 1900 1900 1900	1900 1900 1900 1900
Adjustment:	0.95 0.95 0.95 0.95 0.93	0.93 0.73 0.94 0.94	0.69 0.99 0.99 0.99
Lanes:	1.00 1.95 0.05 1.00 1.76	0.24 1.00 0.57 0.43	1.00 0.93 0.07 0.07
Final Sat.:	1805 3516 83 1805 3121	424 1383 1019 760	1305 1756 125
<hr/>			
Capacity Analysis Module:			
Vol/Sat:	0.03 0.03 0.03 0.01 0.17	0.17 0.04 0.06 0.06	0.00 0.03 0.03 0.03
Crit Moves:	****	****	****
Green/Cycle:	0.11 0.35 0.35 0.18 0.42	0.42 0.33 0.33 0.33	0.33 0.33 0.33 0.33
Volume/Cap:	0.28 0.08 0.08 0.05 0.41	0.41 0.11 0.18 0.18	0.01 0.08 0.08 0.08
Delay/Veh:	37.4 19.6 19.6 30.3 18.4	18.4 20.9 21.4 21.4	20.1 20.6 20.6 20.6
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 1.00
AdjDel/Veh:	37.4 19.6 19.6 30.3 18.4	18.4 20.9 21.4 21.4	20.1 20.6 20.6 20.6
LOS by Move:	D B B C B B	C C C C C C	C C C C C C
HCM2kAvgQ:	2 1 1 0 6 6	1 2 2 0 1 1	
<hr/>			

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 PM Peak Hour

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

---

Intersection #7 Dwy. 1 / 60th Av.

---

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: E[ 35.0]

---

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 0 1 0	1 0 1! 0 0

---

Volume Module:

Base Vol:	0 0 0 0 0	0 675 0 0 572 0
Growth Adj:	1.00 1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00 1.00
Initial Bse:	0 0 0 0 0	0 675 0 0 572 0
Added Vol:	43 0 17 0 0	0 0 73 29 0 0
PasserByVol:	0 0 0 0 0	0 0 0 0 0 0
Initial Fut:	43 0 17 0 0	0 675 73 29 572 0
User Adj:	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
PHF Volume:	47 0 18 0 0	0 734 79 32 622 0
Reduct Vol:	0 0 0 0 0	0 0 0 0 0 0
FinalVolume:	47 0 18 0 0	0 734 79 32 622 0

---

Critical Gap Module:

Critical Gp:	6.4 xxxx 6.2 xxxxx xxxx xxxx xxxx xxxx xxxx 4.1 xxxx xxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx 2.2 xxxx xxxx

---

Capacity Module:

Cnflct Vol:	1458 xxxx 773 xxxx xxxx xxxx xxxx xxxx xxxx 813 xxxx xxxx
Potent Cap.:	144 xxxx 402 xxxx xxxx xxxx xxxx xxxx 823 xxxx xxxx
Move Cap.:	140 xxxx 402 xxxx xxxx xxxx xxxx xxxx 823 xxxx xxxx
Volume/Cap.:	0.33 xxxx 0.05 xxxx xxxx xxxx xxxx xxxx 0.04 xxxx xxxx

---

Level Of Service Module:

2Way95thQ:	1.3 xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx 0.1 xxxx xxxx
Control Del:	43.2 xxxx 14.4 xxxxx xxxx xxxx xxxx xxxx xxxx 9.5 xxxx xxxx
LOS by Move:	E * B * * * * * * A * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxxx xxxx
SharedQueue:	xxxxx xxxx
Shrd ConDel:	xxxxx xxxx
Shared LOS:	* * * * * * * * * * * *
ApproachDel:	35.0 xxxxxx xxxxxx xxxxxx xxxxxx
ApproachLOS:	E * * * *

---

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Dwy. 1 / 60th Av.

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[ 24.7]

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 1 1 0	1 0 2 0 0
Volume Module:				
Base Vol:	0 0 0 0 0	0 0 0 0 675	0 0 675 0 572	0 0 572 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	1.00 1.00 1.00 1.00 1.00
Initial Bse:	0 0 0 0 0	0 0 0 0 675	0 0 675 0 572	0 0 572 0 0
Added Vol:	43 0 17 0 0	0 0 0 0 0	0 0 0 73 29	0 0 29 0 0
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
Initial Fut:	43 0 17 0 0	0 0 0 0 675	73 73 29 572 0	0 0 29 572 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	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 0.92 0.92 0.92	0.92 0.92 0.92 0.92 0.92
PHF Volume:	47 0 18 0 0	0 0 0 0 734	79 79 32 622 0	0 0 32 622 0
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
FinalVolume:	47 0 18 0 0	0 0 0 0 734	79 79 32 622 0	0 0 32 622 0
Critical Gap Module:				
Critical Gp:	6.8 xxxx 6.9 xxxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx	4.1 xxxx xxxx	xxxx xxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx	2.2 xxxx xxxx	xxxx xxxx
Capacity Module:				
Cnflct Vol:	1147 xxxx 407 xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx	813 xxxx xxxx	xxxx xxxx
Potent Cap.:	195 xxxx 600 xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx	823 xxxx xxxx	xxxx xxxx
Move Cap.:	190 xxxx 600 xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx	823 xxxx xxxx	xxxx xxxx
Volume/Cap.:	0.25 xxxx 0.03 xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx	0.04 xxxx xxxx	xxxx xxxx
Level Of Service Module:				
2Way95thQ:	0.9 xxxx 0.1 xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx	0.1 xxxx xxxx	xxxx xxxx
Control Del:	30.1 xxxx 11.2 xxxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx	9.6 xxxx xxxx	xxxx xxxx
LOS by Move:	D * B * * * * * * * A *	*	*	*
Movement:	LT - LTR - RT			
Shared Cap.:	xxxx	xxxx xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx	xxxx xxxx
SharedQueue:	xxxxxx xxxx	xxxxxx xxxx xxxx xxxx xxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxx xxxx
Shrd ConDel:	xxxxxx xxxx	xxxxxx xxxx xxxx xxxx xxxx xxxx	xxxxxx xxxx xxxx	xxxx xxxx
Shared LOS:	* * * * * * * * * * * * * * *	*	*	*
ApproachDel:	24.7 xxxxxx	xxxxxx	xxxxxx	xxxxxx
ApproachLOS:	C *	*	*	*

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Dwy. 2 / 61st Av.

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: A[ 9.9]

Approach:	North Bound	South Bound	East Bound	West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled	
Rights:	Include	Include	Include	Include	
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0	
Volume Module:					
Base Vol:	0 0 0 0 0	0 0 0 0 220	0 0 220 0 69	0 0 69 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	1.00 1.00 1.00 1.00 1.00	
Initial Bse:	0 0 0 0 0	0 0 0 0 220	0 0 220 0 69	0 0 69 0 0	
Added Vol:	0 0 0 13 0	0 0 13 22 0	0 0 22 0 0	0 0 0 0 22	
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	
Initial Fut:	0 0 0 13 0	0 0 13 22 220	0 0 220 0 69	0 0 69 22 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	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 0.92 0.92 0.92	0.92 0.92 0.92 0.92 0.92	
PHF Volume:	0 0 0 14 0	0 0 14 24 239	0 0 24 239 0	0 0 0 75 24	
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	
FinalVolume:	0 0 0 14 0	0 0 14 24 239	0 0 24 239 0	0 0 0 75 24	
Critical Gap Module:					
Critical Gp:	xxxxx xxxx xxxx 6.4	6.5 6.2 4.1	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
FollowUpTim:	xxxxx xxxx xxxx 3.5	4.0 3.3 2.2	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
Capacity Module:					
Cnflct Vol:	xxxxx xxxx xxxx 374	374 87 99	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
Potent Cap.:	xxxxx xxxx xxxx 631	560 977 1507	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
Move Cap.:	xxxxx xxxx xxxx 623	551 977 1507	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
Volume/Cap.:	xxxxx xxxx xxxx 0.02	0.00 0.01 0.02	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
Level Of Service Module:					
2Way95thQ:	xxxxx xxxx xxxx xxxx xxxx xxxx	0.0	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
Control Del:	xxxxx xxxx xxxx xxxx xxxx xxxx	7.4	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
LOS by Move:	*	*	*	*	
Movement:	LT - LTR - RT				
Shared Cap.:	xxxxx xxxx xxxx xxxx 761	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
SharedQueue:	xxxxx xxxx xxxx xxxx 0.1	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
Shrd ConDel:	xxxxx xxxx xxxx xxxx 9.9	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	xxxxx xxxx xxxx xxxx xxxx xxxx	
Shared LOS:	*	*	*	*	
ApproachDel:	xxxxxx	9.9	xxxxxx	xxxxxx	
ApproachLOS:	*	A	*	*	

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Dwy. 2 / 61st Av.

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: A[ 9.9]

Approach:	North Bound	South Bound	East Bound	West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled	
Rights:	Include	Include	Include	Include	
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0	
Volume Module:					
Base Vol:	0 0 0 0 0	0 0 0 0 220	0 0 220 0 69	0 0 69 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	1.00 1.00 1.00 1.00 1.00	
Initial Bse:	0 0 0 0 0	0 0 0 0 220	0 0 220 0 69	0 0 69 0 0	
Added Vol:	0 0 0 13 0	0 0 13 22 0	0 0 22 0 0	0 0 0 0 22	
PasserByVol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	
Initial Fut:	0 0 0 13 0	0 0 13 22 220	0 0 22 220 0	0 0 69 22 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	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 0.92 0.92 0.92	0.92 0.92 0.92 0.92 0.92	
PHF Volume:	0 0 0 14 0	0 0 14 24 239	0 0 24 239 0	0 0 75 24 0	
Reduct Vol:	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	
FinalVolume:	0 0 0 14 0	0 0 14 24 239	0 0 24 239 0	0 0 75 24 0	
Critical Gap Module:					
Critical Gp:xxxxx xxxx xxxx 6.4 6.5 6.2 4.1 xxxx xxxx xxxx xxxx xxxx xxxx					
FollowUpTim:xxxxx xxxx xxxx 3.5 4.0 3.3 2.2 xxxx xxxx xxxx xxxx xxxx xxxx					
Capacity Module:					
Cnflict Vol: xxxx xxxx xxxx 374 374 87 99 xxxx xxxx xxxx xxxx xxxx xxxx					
Potent Cap.: xxxx xxxx xxxx 631 560 977 1507 xxxx xxxx xxxx xxxx xxxx xxxx					
Move Cap.: xxxx xxxx xxxx 623 551 977 1507 xxxx xxxx xxxx xxxx xxxx xxxx					
Volume/Cap: xxxx xxxx xxxx 0.02 0.00 0.01 0.02 xxxx xxxx xxxx xxxx xxxx					
Level Of Service Module:					
2Way95thQ: xxxx xxxx xxxx xxxx xxxx xxxx 0.0 xxxx xxxx xxxx xxxx xxxx					
Control Del:xxxxx xxxx xxxx xxxx xxxx xxxx 7.4 xxxx xxxx xxxx xxxx xxxx					
LOS by Move: * * * * * * A * * * * * *					
Movement: LT - LTR - RT					
Shared Cap.: xxxx xxxx xxxx 761 xxxx xxxx xxxx xxxx xxxx xxxx xxxx					
SharedQueue:xxxxx xxxx xxxx xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx xxxx					
Shrd ConDel:xxxxx xxxx xxxx xxxx 9.9 xxxx xxxx xxxx xxxx xxxx xxxx xxxx					
Shared LOS: * * * * A * * * * * * *					
ApproachDel: xxxxxx 9.9 xxxxxxxx xxxxxxxx					
ApproachLOS: * A * * *					

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

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	100	Critical Vol./Cap.(X):	2.525			
Loss Time (sec):	0	Average Delay (sec/veh):	454.0			
Optimal Cycle:	0	Level Of Service:	F			
<hr/>						
Approach:	North Bound	South Bound	East Bound			
Movement:	L - T - R	L - T - R	L - T - R			
Control:	Stop Sign	Stop Sign	Stop Sign			
Rights:	Include	Include	Include			
Min. Green:	0 0 0	0 0 0	0 0 0			
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 0 1			
<hr/>						
Volume Module:						
Base Vol:	14 1347	67 280	1207 163	223 127	25 28	71 490
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:	14 1347	67 280	1207 163	223 127	25 28	71 490
Added Vol:	9 4	0 15	7 0	0 15	15 0	9 9
PasserByVol:	0 0	0 0	0 0	0 0	0 0	0 0
Initial Fut:	23 1351	67 295	1214 163	223 142	40 28	80 499
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:	25 1468	73 321	1320 177	242 154	43 30	87 542
Reduct Vol:	0 0	0 0	0 0	0 0	0 0	0 0
Reduced Vol:	25 1468	73 321	1320 177	242 154	43 30	87 542
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:	25 1468	73 321	1320 177	242 154	43 30	87 542
<hr/>						
Saturation Flow Module:						
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Lanes:	1.00 2.00	1.00 2.00	1.00 1.00	1.00 1.00	1.00 2.00	1.00 1.00
Final Sat.:	279 581	308 302	630 336	274 284	301 274	570 301
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Capacity Analysis Module:						
Vol/Sat:	0.09 2.53	0.24 1.06	2.09 0.53	0.88 0.54	0.14 0.11	0.15 1.80
Crit Moves:	****	****	****	****	****	****
Delay/Veh:	16.8 721	18.0 105.4	527 24.8	67.1 29.4	16.7 17.5	17.6 399.7
Delay Adj:	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:	16.8 721	18.0 105.4	527 24.8	67.1 29.4	16.7 17.5	17.6 399.7
LOS by Move:	C F	C F	C F	D C	C C	F
ApproachDel:	677.5	403.9	48.9		331.7	
Delay Adj:	1.00	1.00	1.00		1.00	
ApprAdjDel:	677.5	403.9	48.9		331.7	
LOS by Appr:	F	F	E		F	
AllWayAvgQ:	0.1 57.0	0.3 7.6	44.9 1.1	3.9 1.1	0.2 0.1	0.2 32.2

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

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2035WP PM

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Vista Soleada (TTM 36590) Traffic Impact Analysis (JN:08773)  
 Long Range (2035) With Project Conditions (WITH IMPROVEMENTS)  
 PM Peak Hour

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Madison St. / 58th Av.

Cycle (sec):	80	Critical Vol./Cap.(X):	0.897
Loss Time (sec):	12	Average Delay (sec/veh):	31.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C
<hr/>			
Approach:	North Bound	South Bound	East Bound
Movement:	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Permitted
Rights:	Include	Include	Include
Min. Green:	10 10 10	10 22 22	10 29 29
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 2 0 1	1 0 2 0 1	1 0 1 1 0
<hr/>			
Volume Module:			
Base Vol:	14 1347 67	280 1207 163	223 127 25
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	14 1347 67	280 1207 163	223 127 25
Added Vol:	9 4 0	15 7 0	15 15 0
PasserByVol:	0 0 0	0 0 0	0 0 0
Initial Fut:	23 1351 67	295 1214 163	223 142 40
User Adj:	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
PHF Volume:	25 1468 73	321 1320 177	242 154 43
Reduced Vol:	0 0 0	0 0 0	0 0 0
Reduced Vol:	25 1468 73	321 1320 177	242 154 43
PCE Adj:	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
FinalVolume:	25 1468 73	321 1320 177	242 154 43
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Saturation Flow Module:			
Sat/Lane:	1850 1850 1850	1850 1850 1850	1850 1850 1850
Adjustment:	0.95 0.95 0.85	0.95 0.95 0.85	0.69 0.92 0.92
Lanes:	1.00 2.00 1.00	1.00 2.00 1.00	1.56 0.44 1.00
Final Sat.:	1758 3515 1573	1758 3515 1573	1286 2652 747
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Capacity Analysis Module:			
Vol/Sat:	0.01 0.42 0.05	0.18 0.38 0.11	0.19 0.06 0.06
Crit Moves:	****	****	****
Green/Cycle:	0.17 0.47 0.47	0.20 0.50 0.50	0.18 0.18 0.18
Volume/Cap:	0.09 0.90 0.10	0.90 0.75 0.22	1.04 0.32 0.32
Delay/Veh:	28.3 26.6 12.0	55.2 17.7 11.3	102.9 28.8 28.8
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	28.3 26.6 12.0	55.2 17.7 11.3	102.9 28.8 28.8
LOS by Move:	C C B	E B B	F C C
HCM2kAvgQ:	1 22 1	11 15 2	12 2 2
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Note: Queue reported is the number of cars per lane.