

Appendix I
Hacienda at Fairview Valley Existing Plus Project
Conditions Supplemental Traffic and Air Quality
Analysis-2011

November 30, 2011

Mr. Eric Flodine
STRATA EQUITY GROUP
4370 La Jolla Village Drive, Suite 960
San Diego, CA 92122

Subject: Hacienda at Fairview Valley Existing Plus Project Conditions Supplemental Traffic and Air Quality Analysis

Dear Mr. Flodine:

INTRODUCTION

Urban Crossroads, Inc. is pleased to submit this supplemental analysis to support the ongoing environmental approval process for the proposed Hacienda at Fairview Valley project in the County of San Bernardino. This letter includes quantitative traffic analysis of Existing Plus Project conditions, along with a quantitative evaluation of Existing Plus Project conditions air quality impacts. The traffic analysis is based on existing conditions data that was collected in late 2007 and is generally representative of conditions at the time that the Notice of Preparation (NOP) was released in 2008. The primary purpose of the Existing Plus Project conditions analysis is to allow the project team to better understand the potential for direct project impacts. The analysis (presented in this report) evaluates whether any impacts occur for Existing Plus Project conditions that have not *already* been identified for Interim Year With Project conditions in the previously published traffic and air quality study reports.

EXISTING PLUS PROJECT TRAFFIC CONDITIONS

The Existing Plus Project traffic volume development process is described first, followed by the results of the Existing Plus Project traffic operations analysis.

Existing Plus Project Traffic Volume Development

The overall project trip generation was previously presented on Table 2-2 of the previously published traffic study. The overall project is anticipated to generate 19,432 external trips on a daily basis, with

965 external trips occurring in the AM peak hour and 1,592 external trips occurring during the PM peak hour. The Existing Plus Project traffic volumes have been developed by applying the trip distribution shown on Exhibit A to the overall project trip generation from report. The project trip distribution shown on Exhibit A generally reflects existing conditions at the time the NOP for the project was issued in 2008 in terms of the available (existing) paved roadway network and also the areas of existing development that would be destinations for trips to and from the proposed project. It is anticipated that project traffic will utilize Cahuilla Road west of Joshua Road under Near Term conditions, which is currently a dirt road. It is understood that the project will be conditioned to improve the unpaved portion of Cahuilla Road west of Joshua Road to provide a two lane paved roadway suitable for use by project traffic. Project traffic is not expected to utilize any other unpaved roadways under Existing Plus Project conditions.

Existing Plus Project Traffic Operations Analysis

Table 1 summarizes the results of the Existing Plus Project conditions analysis and also includes the: 1.) Existing conditions and 2.) Interim Year With Project conditions (With Improvements) analysis results from the previously published traffic study report. Attachment "A" includes the detailed operations analysis worksheets for the new Existing Plus Project conditions analysis. The worksheets in Attachment "A" also show the project only volumes (as "Added Vol"). Table 1 also presents the required improvements that are necessary to achieve acceptable LOS for Existing Plus Project conditions. As shown on Table 1, no new intersections improvements are required for Existing Plus Project conditions in comparison to the improvements required for Interim Year With Project conditions (as identified in the previously published traffic study report).

The analysis results generally fall into three categories:

- No deficiency is anticipated for either Existing conditions or Existing Plus Project conditions;
- A deficiency already exists under Existing conditions and the proposed project will contribute to the deficiency under Existing Plus Project conditions; or
- No deficiency exists under Existing conditions and the additional traffic resulting from the proposed project will result in a deficiency under Existing Plus Project conditions.

Table 2 identifies which of the three categories each potentially impacted existing analysis location falls into. Intersections falling into the first category (no deficiency is anticipated under either Existing conditions or Existing Plus Project conditions) include:

Dale Evans Parkway (NS) at:

- Corwin Road (EW)

South Dale Evans Parkway (NS) at:

- Waalew Road (EW)

North Dale Evans Parkway (NS) at:

- Waalew Road (EW)

Dale Evans Parkway (NS) at:

- Otoe Road (EW)

Navajo Road (NS) at:

- Waalew Road (EW)
- Thunderbird Road (EW)
- Highway 18 (EW)

Central Road (NS) at:

- Waalew Road (EW)
- Esaws Avenue (EW)
- Highway 18 (EW)

Joshua Road (NS) at:

- Waalew Road (EW)
- Standing Rock Avenue (EW)

Intersections that already experience a deficiency under Existing conditions are:

Central Road (NS) at:

- Ottawa Road (EW)
- Nisqually Road (EW)

Highway 18 (NS) at:

- Bear Valley Road (EW)

Milpas Drive (NS) at:

- Highway 18 (EW)

Finally, the following intersections experience acceptable operations under Existing conditions, and the additional traffic resulting from the proposed project will result in a deficiency under Existing Plus Project conditions (the improvements required are also summarized for this group of intersections):

Dale Evans Parkway (NS) at:

- Thunderbird Road (EW) – Install a traffic signal

Central Road (NS) at:

- Cahuilla Road / Otoe Road (EW) – Install a traffic signal
- Thunderbird Road (EW) – Install a traffic signal, an exclusive northbound left turn lane, and an exclusive eastbound left turn lane
- Standing Rock Avenue (EW) - Install a traffic signal and exclusive left turn lanes on each approach

Joshua Road (NS) at:

- Cahuilla Road (EW) - Install a traffic signal and exclusive left turn lanes on each approach
- Highway 18 (EW) - Install a traffic signal, an exclusive northbound left turn lane, and reconstruct the southbound approach to provide an exclusive southbound left turn lane and a shared through-right turn lane

As shown on Table 2, 12 of the 22 intersections will continue to experience acceptable traffic operations under Existing Plus Project conditions, 4 of the 22 intersections already experience deficient traffic operations and will continue to experience deficient operations with the addition of project traffic under Existing Plus Project conditions, while 6 of the 22 intersections currently experience acceptable traffic operations and will deteriorate to unacceptable operating conditions through the addition of the project traffic.

EXISTING PLUS PROJECT CONDITIONS AIR QUALITY IMPACTS

The Existing Plus Project air quality evaluation results generally parallel the previously identified air quality analysis results, in other words, the impacts would still exceed the South Coast Air Quality Management District's (SCAQMD's) numerical thresholds for emissions of VOCs, NOx, CO, and PM10. A numerical analysis of the Existing Plus Project conditions is provided herein and the model outputs are included in Attachment "B".

Ultimately, no new emissions thresholds are exceeded for Existing Plus Project conditions in comparison to the emissions exceeded for Long Range (full project occupancy) conditions (as identified in the previously published air quality study report).

For greenhouse gas (GHG) emissions, the results of an Existing Plus Project evaluation would be the same as the analysis already presented in the Draft EIR since the significance threshold is related to achieving the State's GHG reduction goal by 2020. As identified in the EIR, the reductions from Business As Usual (BAU) under both the Interim and Buildout phases of the project would comply with the Assembly Bill 32 (AB 32) reductions. AB 32 requires the reduction of GHG emissions to 1990 levels by 2020 which would require a 28 to 33 percent reduction in BAU of GHG emissions for the entire State. As noted in the EIR, although the proposed project would not hinder the State from meeting its GHG reduction goal, and GHG emissions are less than significant on an individual project basis, the project's incremental contribution to GHG emissions may be cumulatively considerable.

The difference in emissions would not change the ultimate CEQA significance conclusions already presented in the EIR. Accordingly, the air quality impacts that are already identified and disclosed for Long Range conditions (including potentially significant impacts) would also occur under Existing Plus Project conditions.

SUMMARY AND CLOSING

The purpose of the Existing Plus Project conditions analysis is to allow the project team to better understand the potential for direct project impacts. The traffic analysis (presented in this report) evaluates whether any intersection improvements are required for Existing Plus Project conditions that have not *already* been identified for Interim Year With Project conditions in the previously published traffic study report (Hacienda at Fairview Valley Traffic Impact Analysis (Revised), Urban Crossroads, Inc., 2009).

The majority (12 of 22) of the study area intersections will continue to experience acceptable traffic operations, even with the addition of project traffic to existing traffic. Four (4) of the 22 study area intersections already experience deficient traffic operations and will continue to experience deficient operations with the addition of project traffic. Finally, 6 of the 22 existing intersections analyzed currently experience acceptable traffic operations and will deteriorate to unacceptable operating conditions through the addition of the project traffic. At the same time, the improvements required to provide acceptable traffic operations have been shown to be equal to or less than the improvements included in the previously published traffic study report (dated 2009) to provide acceptable traffic operations under Interim Year With Project conditions (when the project is only anticipated to be partially occupied).

In terms of air quality impacts, the project air quality impacts that were previously identified for Long Range (full project occupancy) conditions would still be expected to occur under Existing Plus Project conditions. Urban Crossroads, Inc. is pleased to provide this supplemental evaluation for use in the ongoing processing of the proposed project through the required CEQA environmental process. If you have any questions, please contact us at (949) 660-1994.

Respectfully submitted,
URBAN CROSSROADS, INC.



Carleton Waters, P.E.
Principal



Haseeb Qureshi
Senior Associate

CW:HQ:DM:rd
JN: 04946-35 E+P Analysis
Attachments

EXHIBIT A PROJECT TRIP DISTRIBUTION

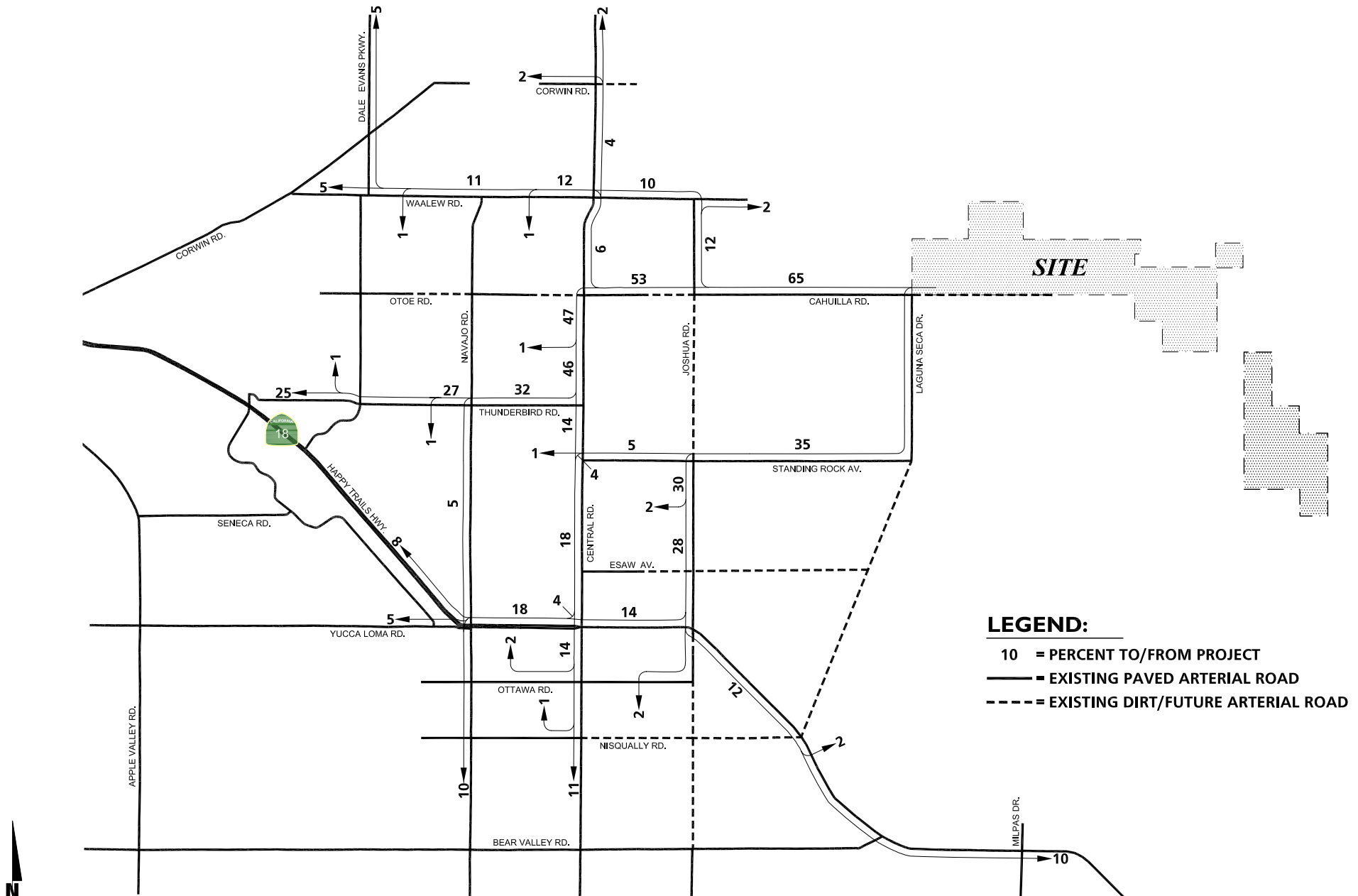


TABLE 1
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EXISTING + PROJECT CONDITIONS
INTERSECTION ANALYSIS SUMMARY

INTERSECTION	TRAFFIC CONTROL ³	INTERSECTION APPROACH LANES ¹												DELAY ² (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Dale Evans Pkwy. (NS) at: • Corwin Rd. (EW) - Existing ⁵ - Existing + Project (E+P)	CSS CSS	0.5	0.5	1	0	1	0	0	1	0	0.5	0.5	1	10.2	12.0	B	B
South Dale Evans Pkwy. (NS) at: • Waalew Rd. (EW) - Existing ⁵ - Existing + Project (E+P)	CSS CSS	0.5	0	0.5	0	0	0	0	1	0	0.5	0.5	0	10.5	13.1	B	B
North Dale Evans Pkwy. (NS) at: • Waalew Rd. (EW) - Existing ⁵ - Existing + Project (E+P)	CSS CSS	0	0	0	0.5	0	0.5	0.5	0.5	0	0	1	0	11.4	12.4	B	B
Dale Evans Pkwy. (NS) at: • Otoe Rd. (EW) - Existing ⁵ - Existing + Project (E+P) • Thunderbird Rd. (EW) - Existing ⁵ - Existing + Project (E+P) - E+P With Minimum Required Improvements - Interim Year W/ Project Required Improvements ⁵	CSS CSS AWS AWS <u>TS</u> <u>TS</u>	0	1	0	0	1	0	0	1	0	0.5	0.5	1	10.0	11.0	B	B
Navajo Rd. (NS) at: • Waalew Rd. (EW) - Existing ⁵ - Existing + Project (E+P) • Thunderbird Rd. (EW) - Existing ⁵ - Existing + Project (E+P) • Hwy 18 (EW) - Existing ⁵ - Existing + Project (E+P)	AWS AWS AWS AWS TS TS	0	1	0	0	1	0	0	1	0	0	1	0	8.7	8.3	A	A
Central Rd. (NS) at: • Waalew Rd. (EW) - Existing ⁵ - Existing + Project (E+P) • Otoe Rd.-Cahuilla Rd. (EW) - Existing ⁵ - Existing + Project (E+P) - E+P With Minimum Required Improvements - Interim Year W/ Project Required Improvements ⁵	AWS AWS CSS CSS <u>TS</u> <u>TS</u>	0	1	0	0	1	0	0	1	0	0	1	0	8.3	8.4	A	A

TABLE 1
(Page 2 of 3)

EXISTING + PROJECT CONDITIONS
INTERSECTION ANALYSIS SUMMARY

INTERSECTION	TRAFFIC CONTROL ³	INTERSECTION APPROACH LANES ¹												DELAY ² (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
• Thunderbird Rd. (EW)																	
- Existing ⁵	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	13.5	13.6	B	B
- Existing + Project (E+P)	CSS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	32.2	-- ⁴	D	F
- E+P With Minimum Required Improvements	<u>TS</u>	<u>1</u>	1	0	0	1	0	<u>1</u>	<u>1</u>	0	0	1	0	18.0	12.5	B	B
- Interim Year W/ Project Required Improvements ⁵	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	<u>1</u>	0	<u>1</u>	1	0	23.8	31.7	C	C
• Standing Rock Av. (EW)																	
- Existing ⁵	CSS	0	1	0	0	1	0	0	1	0	0	1	0	12.1	12.8	B	B
- Existing + Project (E+P)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	16.4	26.3	C	D
- E+P With Minimum Required Improvements	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	21.1	14.4	C	B
- Interim Year W/ Project Required Improvements ⁵	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	20.5	20.1	C	C
• Esaws Av. (EW)																	
- Existing ⁵	TS	1	1	1	1	1	1	0	1	0	0.5	0.5	1	33.7	31.5	C	C
- Existing + Project (E+P)	TS	1	1	1	1	1	1	0	1	0	0.5	0.5	1	30.0	28.7	C	C
• Hwy 18 (EW)																	
- Existing ⁵	TS	1	1	1	1	1	1	1	2	1	1	2	1	15.1	14.7	B	B
- Existing + Project (E+P)	TS	1	1	1	1	1	1	1	2	1	1	2	1	15.8	15.1	B	B
• Ottawa Rd. (EW)																	
- Existing ⁵	CSS	0	1	0	0	1	0	0	1	0	0	1	0	-- ⁴	15.9	F	C
- Existing + Project (E+P)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	-- ⁴	22.7	F	C
- E+P With Minimum Required Improvements ⁶	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	25.4	21.8	C	C
- Interim Year W/ Project Required Improvements ⁵	<u>TS</u>	<u>1</u>	1	<u>1</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	32.6	21.8	C	C
• Nisqually Rd. (EW)																	
- Existing ⁵	CSS	0	1	0	0	1	0	0	1	0	0.5	0.5	1	34.9	17.1	D	C
- Existing + Project (E+P)	CSS	0	1	0	0	1	0	0	1	0	0.5	0.5	1	47.4	24.6	E	C
- E+P With Minimum Required Improvements	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	24.5	20.7	C	C
- Interim Year W/ Project Required Improvements ⁵	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	<u>1</u>	0	31.7	23.0	C	C
Joshua Rd. (NS) at:																	
• Waalew Rd. (EW)																	
- Existing ⁵	CSS	0	1	0	0	0	0	0	1	0	0	1	0	9.2	9.0	A	A
- Existing + Project (E+P)	CSS	0	1	0	0	0	0	0	1	0	0	1	0	10.0	10.1	B	B
• Cahuilla Rd. (EW)																	
- Existing ⁵	CSS	0	1	0	0	1	0	0	1	0	0	1	0	9.2	9.5	A	A
- Existing + Project (E+P)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	57.7	-- ⁴	F	F
- E+P With Minimum Required Improvements	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	23.2	25.5	C	C
- Interim Year W/ Project Required Improvements ⁵	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	1	0	20.2	21.1	C	C
• Standing Rock Av. (EW)																	
- Existing ⁵	AWS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	7.8	7.7	A	A
- Existing + Project (E+P)	AWS	0	1	0	0	1	0	0.5	0.5	1	0	1	0	11.0	12.8	B	B
• Hwy 18 (EW)																	
- Existing ⁵	CSS	0	1	0	0.5	0.5	1	1	1	0	1	1	1	15.0	23.2	C	C
- Existing + Project (E+P)	CSS	0	1	0	0.5	0.5	1	1	1	0	1	1	1	24.2	-- ⁴	C	F
- E+P With Minimum Required Improvements	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	<u>1</u>	0	1	1	0	1	1	1	20.7	23.9	C	C
- Interim Year W/ Project Required Improvements ⁵	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	<u>1</u>	0	<u>2</u>	1	0	1	1	1	27.9	30.1	C	C

TABLE 1
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EXISTING + PROJECT CONDITIONS
INTERSECTION ANALYSIS SUMMARY

INTERSECTION	TRAFFIC CONTROL ³	INTERSECTION APPROACH LANES ¹												DELAY ² (SECS.)		LEVEL OF SERVICE	
		NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Hwy 18 (NS) at: • Bear Valley Rd. (EW) ⁵																	
- Existing ⁵	CSS	1	1	0	0.5	0.5	1	1	0	1	0	0	0	11.2	28.6	B	D
- Existing + Project (E+P)	CSS	1	1	0	0.5	0.5	1	1	0	1	0	0	0	12.0	35.8	B	E
- E+P With Minimum Required Improvements	TS	1	1	0	0.5	0.5	1	1	0	1	0	0	0	16.2	19.1	B	B
- Interim Year W/ Project Required Improvements ⁵	TS	1	1	0	0	1	1	1	0	1 ≥	0	0	0	10.0	32.5	A	C
Milpas Dr. (NS) at: • Hwy 18 (EW)																	
- Existing ⁵	CSS	0	1	0	0	1	0	0	1	0	0.5	0.5	1	18.2	30.6	C	D
- Existing + Project (E+P)	CSS	0	1	0	0	1	0	0	1	0	0.5	0.5	1	21.3	41.7	C	E
- E+P With Minimum Required Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	0	20.4	19.8	C	B
- Interim Year W/ Project Required Improvements ⁵	TS	1	1	0	1	1	0	1	2	0	1	2	0	19.6	17.5	B	B
Laguna Seca Dr (NS) at: • Cahuilla Rd (EW)																	
- Existing ⁵	--	DOES NOT EXIST												--	--	--	--
- Existing + Project (E+P)	TS	1	1	0	1	1	0	1	1	0	1	1	0	18.0	21.0	B	C

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = IMPROVEMENT

² Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop.

⁴ -- = Delay High or V/C Ratio exceeding 1.0, Intersection Unstable, Level of Service "F".

⁵ Analysis results copied from previously published Hacienda at Fairview Valley TIA (dated May 26, 2009)

⁶ Although not present at the time the previously published traffic study was completed, northbound and southbound left turn lanes have recently been constructed at this location.

TABLE 2

**EXISTING + PROJECT CONDITIONS
POTENTIAL IMPACT SUMMARY**

INTERSECTION	NO DEFICIENCY	EXISTING DEFICIENCY	EXISTING PLUS PROJECT DEFICIENCY
Dale Evans Pkwy. (NS) at: • Corwin Rd. (EW)	X		
South Dale Evans Pkwy. (NS) at: • Waalew Rd. (EW)	X		
North Dale Evans Pkwy. (NS) at: • Waalew Rd. (EW)	X		
Dale Evans Pkwy. (NS) at: • Otoe Rd. (EW) • Thunderbird Rd. (EW)	X		X
Navajo Rd. (NS) at: • Waalew Rd. (EW) • Thunderbird Rd. (EW) • Hwy 18 (EW)	X X X		
Central Rd. (NS) at: • Waalew Rd. (EW) • Cahuilla Rd. (EW) • Thunderbird Rd. (EW) • Standing Rock Av. (EW) • Esaws Av. (EW) • Hwy 18 (EW) • Ottawa Rd. (EW) • Nisqually Rd. (EW)	X X X 	 X X	 X X X
Joshua Rd. (NS) at: • Waalew Rd. (EW) • Cahuilla Rd. (EW) • Standing Rock Av. (EW) • Hwy 18 (EW)	X X		 X X
Hwy 18 (NS) at: • Bear Valley Rd. (EW) ⁵		X	
Milpas Dr. (NS) at: • Hwy 18 (EW)		X	
TOTAL	12	4	6

ATTACHMENT A

OPERATIONS ANALYSIS WORKSHEETS

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Dale Evans Pkwy (NS)/Corwin Rd (EW)

Average Delay (sec/veh): 9.3 Worst Case Level Of Service: B[10.3]

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 1 0 0 1 0 0 1 0 0 0 0 1 0 0 0 1
-----|-----|-----|-----|

Volume Module:
Base Vol: 1 116 9 5 52 8 18 8 7 2 3 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: 1 116 9 5 52 8 18 8 7 2 3 1
Added Vol: 0 28 0 0 20 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 1 144 9 5 72 8 18 8 7 2 3 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: 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89
PHF Volume: 1 161 10 6 81 9 20 9 8 2 3 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 1 161 10 6 81 9 20 9 8 2 3 1
-----|-----|-----|-----|

Critical Gap Module:
Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxx xxxxx 4.1 xxxx xxxxx
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx
-----|-----|-----|-----|

Capacity Module:
Cnflct Vol: 107 62 13 147 65 3 4 xxxx xxxxx 17 xxxx xxxxx
Potent Cap.: 878 832 1073 826 830 1086 1630 xxxx xxxxx 1614 xxxx xxxxx
Move Cap.: 796 821 1073 688 818 1086 1630 xxxx xxxxx 1614 xxxx xxxxx
Volume/Cap: 0.00 0.20 0.01 0.01 0.10 0.01 0.01 xxxx xxxx 0.00 xxxx xxxx
-----|-----|-----|-----|

Level Of Service Module:
2Way95thQ: xxxx xxxx 0.0 xxxx xxxx xxxxx 0.0 xxxx xxxxx 0.0 xxxx xxxxx
Control Del:xxxxx xxxx 8.4 xxxxx xxxx xxxxx 7.2 xxxx xxxxx 7.2 xxxx xxxxx
LOS by Move: * * A * * * A * * A * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: 821 xxxx xxxxx xxxx 828 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
SharedQueue: 0.7 xxxx xxxxx xxxxx 0.4 xxxxx xxxxx xxxx xxxxx 0.0 xxxx xxxxx
Shrd ConDel: 10.5 xxxx xxxxx xxxxx 9.9 xxxxx xxxxx xxxx xxxxx 7.2 xxxx xxxxx
Shared LOS: B * * * A * * * A * *
ApproachDel: 10.3 9.9 xxxxxx xxxxxx
ApproachLOS: B A * *

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 S. Dale Evans Pkwy (NS)/Waalew Rd (EW)

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: B[10.8]

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 1! 0 0 0 0 0 0 0 1 0 0 1 0 0 0
-----|-----|-----|-----|

Volume Module:

Base Vol:	41	0	86	0	0	0	0	66	33	53	178	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	0	86	0	0	0	0	66	33	53	178	0
Added Vol:	0	0	0	0	0	0	0	20	0	0	28	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	0	86	0	0	0	0	86	33	53	206	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	46	0	97	0	0	0	0	97	37	60	233	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	46	0	97	0	0	0	0	97	37	60	233	0

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	468	468	116	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	134	xxxxx	xxxxx
Potent Cap.:	557	496	942	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	1462	xxxxx	xxxxx
Move Cap.:	539	475	942	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	1462	xxxxx	xxxxx
Volume/Cap:	0.09	0.00	0.10	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.04	xxxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx
Control Del:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	7.6	xxxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	759	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx
Shrd ConDel:	xxxxx	10.8	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	7.6	xxxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	A	*	*
ApproachDel:	10.8			xxxxxx			xxxxxx		xxxxxx		xxxxxx	
ApproachLOS:	B			*			*		*		*	

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 N. Dale Evans Pkwy (NS)/Waalew Rd (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: B[12.9]

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 0 0 0 0 0 1 0
-----|-----|-----|-----|

Volume Module:

Base Vol:	0	0	0	23	0	24	63	89	0	0	207	55
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	23	0	24	63	89	0	0	207	55
Added Vol:	0	0	0	20	0	0	0	20	0	0	28	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	43	0	24	63	109	0	0	235	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	0	0	0	48	0	27	71	122	0	0	264	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	48	0	27	71	122	0	0	264	93

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	575	575	311	357	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	483	431	734	1213	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	461	405	734	1213	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.10	0.00	0.04	0.06	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	532	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	12.9	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			12.9			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Dale Evans Pkwy (NS)/Otoe Rd (EW)

Average Delay (sec/veh): 2.4 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: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 1! 0 0 0 0 0 1 0 0 0 1! 0 0 0 1 0 0 1
-----|-----|-----|-----|

Volume Module:

Base Vol:	6	80	6	0	63	22	36	3	8	2	2	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:	6	80	6	0	63	22	36	3	8	2	2	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	80	6	0	63	22	36	3	8	2	2	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:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	7	92	7	0	72	25	41	3	9	2	2	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	92	7	0	72	25	41	3	9	2	2	1

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	97	xxxx	xxxxx	xxxx	xxxx	xxxxx	195	197	85	200	206	95
Potent Cap.:	1509	xxxx	xxxxx	xxxx	xxxx	xxxxx	768	702	980	763	694	967
Move Cap.:	1509	xxxx	xxxxx	xxxx	xxxx	xxxxx	763	699	980	750	691	967
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.00	0.01	0.00	0.00	0.00

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.7
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	788	xxxxx	719	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.9	xxxxx	10.0	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	A	*	B	*	*
ApproachDel:	xxxxxx			xxxxxx				9.9			9.8	
ApproachLOS:	*			*				A			A	

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

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

Intersection #4 Dale Evans Pkwy (NS)/Thunderbird Rd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 1.348
Loss Time (sec): 0 Average Delay (sec/veh): 88.7
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: 1 0 1 0 1 1 0 1 0 1 1 0 1 0 1

Volume Module:

Base Vol:	57	54	31	32	55	34	17	160	57	71	290	11
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:	57	54	31	32	55	34	17	160	57	71	290	11
Added Vol:	0	0	0	0	0	0	0	103	0	0	148	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	54	31	32	55	34	17	263	57	71	438	11
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:	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
PHF Volume:	84	80	46	47	81	50	25	388	84	105	646	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	80	46	47	81	50	25	388	84	105	646	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:	84	80	46	47	81	50	25	388	84	105	646	16

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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	378	398	431	371	392	423	427	462	499	436	479	505

Capacity Analysis Module:

Vol/Sat:	0.22	0.20	0.11	0.13	0.21	0.12	0.06	0.84	0.17	0.24	1.35	0.03
Crit Moves:	****			****			****			****		
Delay/Veh:	14.3	13.4	11.6	13.3	13.6	11.8	11.5	38.8	11.1	13.1	191	9.7
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:	14.3	13.4	11.6	13.3	13.6	11.8	11.5	38.8	11.1	13.1	191	9.7
LOS by Move:	B	B	B	B	B	B	B	E	B	B	F	A
ApproachDel:	13.4			13.0			32.8			163.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.4			13.0			32.8			163.1		
LOS by Appr:	B			B			D			F		
AllWayAvgQ:	0.3	0.2	0.1	0.1	0.2	0.1	0.1	3.6	0.2	0.3	24.1	0.0

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Dale Evans Pkwy (NS)/Thunderbird Rd (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.509
Loss Time (sec): 8 Average Delay (sec/veh): 25.6
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	1	1	0	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	57	54	31	32	55	34	17	160	57	71	290	11
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:	57	54	31	32	55	34	17	160	57	71	290	11
Added Vol:	0	0	0	0	0	0	0	103	0	0	148	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	54	31	32	55	34	17	263	57	71	438	11
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:	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
PHF Volume:	84	80	46	47	81	50	25	388	84	105	646	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	80	46	47	81	50	25	388	84	105	646	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:	84	80	46	47	81	50	25	388	84	105	646	16

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.05	0.04	0.03	0.03	0.05	0.03	0.01	0.22	0.05	0.06	0.36	0.01
Crit Moves:	****			****			****			****		
Green/Cycle:	0.10	0.20	0.20	0.10	0.20	0.20	0.10	0.42	0.42	0.20	0.52	0.52
Volume/Cap:	0.49	0.22	0.13	0.28	0.23	0.14	0.15	0.51	0.11	0.31	0.69	0.02
Delay/Veh:	44.9	33.8	33.0	42.5	33.8	33.1	41.5	21.8	17.5	34.9	20.2	11.6
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:	44.9	33.8	33.0	42.5	33.8	33.1	41.5	21.8	17.5	34.9	20.2	11.6
LOS by Move:	D	C	C	D	C	C	D	C	B	C	C	B
HCM2kAvgQ:	3	2	1	2	2	1	1	9	2	3	16	0

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

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

Intersection #5 Navajo Rd (NS)/Waalew Rd (EW)

Cycle (sec): 0 Critical Vol./Cap.(X): 0.410
Loss Time (sec): 0 Average Delay (sec/veh): 9.6
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:	0	0	1! 0 0	0	0	0 1 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module:

Base Vol:	72	2	10	0	2	6	3	74	32	13	177	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:	72	2	10	0	2	6	3	74	32	13	177	1
Added Vol:	0	0	0	0	0	0	0	44	0	0	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	2	10	0	2	6	3	118	32	13	239	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:	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PHF Volume:	93	3	13	0	3	8	4	152	41	17	308	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	3	13	0	3	8	4	152	41	17	308	1
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:	93	3	13	0	3	8	4	152	41	17	308	1

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:	0.86	0.02	0.12	0.00	0.25	0.75	0.02	0.77	0.21	0.05	0.94	0.01
Final Sat.:	557	15	77	0	170	509	15	609	165	41	753	3

Capacity Analysis Module:

Vol/Sat:	0.17	0.17	0.17	xxxx	0.02	0.02	0.25	0.25	0.25	0.41	0.41	0.41
Crit Moves:	****			****			****			****		
Delay/Veh:	9.1	9.1	9.1	0.0	7.8	7.8	8.8	8.8	8.8	10.4	10.4	10.4
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:	9.1	9.1	9.1	0.0	7.8	7.8	8.8	8.8	8.8	10.4	10.4	10.4
LOS by Move:	A	A	A	*	A	A	A	A	A	B	B	B
ApproachDel:	9.1			7.8			8.8			10.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.1			7.8			8.8			10.4		
LOS by Appr:	A			A			A			B		
AllWayAvgQ:	0.2	0.2	0.2	0.0	0.0	0.0	0.3	0.3	0.3	0.6	0.6	0.6

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

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

Intersection #6 Navajo Rd (NS)/Thunderbird Rd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.845
Loss Time (sec): 0 Average Delay (sec/veh): 22.4
Optimal Cycle: 0 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:	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:	73	91	14	15	65	20	5	83	88	19	161	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:	73	91	14	15	65	20	5	83	88	19	161	8
Added Vol:	0	0	20	0	0	0	0	107	0	28	153	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	73	91	34	15	65	20	5	190	88	47	314	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:	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
PHF Volume:	99	124	46	20	88	27	7	259	120	64	427	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	124	46	20	88	27	7	259	120	64	427	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:	99	124	46	20	88	27	7	259	120	64	427	11

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:	0.37	0.46	0.17	0.15	0.65	0.20	0.02	0.67	0.31	0.13	0.85	0.02
Final Sat.:	183	228	85	67	292	90	10	387	179	76	506	13

Capacity Analysis Module:

Vol/Sat:	0.54	0.54	0.54	0.30	0.30	0.30	0.67	0.67	0.67	0.84	0.84	0.84
Crit Moves:	****			****			****			****		
Delay/Veh:	16.0	16.0	16.0	12.4	12.4	12.4	18.9	18.9	18.9	31.3	31.3	31.3
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:	16.0	16.0	16.0	12.4	12.4	12.4	18.9	18.9	18.9	31.3	31.3	31.3
LOS by Move:	C	C	C	B	B	B	C	C	C	D	D	D
ApproachDel:	16.0			12.4			18.9			31.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	16.0			12.4			18.9			31.3		
LOS by Appr:	C			B			C			D		
AllWayAvgQ:	0.9	0.9	0.9	0.3	0.3	0.3	1.6	1.6	1.6	3.7	3.7	3.7

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Navajo Rd (NS)/Hwy 18 (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.373
Loss Time (sec): 6 Average Delay (sec/veh): 16.2
Optimal Cycle: 62 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	26	26	26	26	26	26	10	20	20	10	20	20
Y+R:	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lanes:	1	0	1	1	0	1	1	0	2	0	1	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	186	113	75	21	127	16	13	286	149	133	438	23
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:	186	113	75	21	127	16	13	286	149	133	438	23
Added Vol:	0	20	20	0	28	0	0	52	0	28	74	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	186	133	95	21	155	16	13	338	149	161	512	23
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:	207	148	106	23	172	18	14	376	166	179	570	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	207	148	106	23	172	18	14	376	166	179	570	26
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	1.05	1.05	1.00	1.05	1.05	1.00	1.05	1.00	1.00	1.05	1.00
FinalVolume:	207	155	111	23	181	19	14	395	166	179	598	26

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.17	0.83	1.00	1.81	0.19	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	2100	1500	1700	3263	337	1700	3600	1800	1700	3600	1800

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.12	0.07	0.07	0.01	0.06	0.06	0.01	0.11	0.09	0.11	0.17	0.01
Crit Moves:	****			****			****			****		
Green/Cycle:	0.42	0.42	0.42	0.42	0.42	0.42	0.16	0.32	0.32	0.16	0.32	0.32
Volume/Cap:	0.29	0.18	0.18	0.03	0.13	0.13	0.05	0.34	0.29	0.65	0.51	0.04
Delay/Veh:	12.1	11.3	11.3	10.6	11.1	11.1	22.1	16.2	15.9	29.9	17.5	14.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.1	11.3	11.3	10.6	11.1	11.1	22.1	16.2	15.9	29.9	17.5	14.5
LOS by Move:	B	B	B	B	B	B	C	B	B	C	B	B
HCM2kAvgQ:	3	2	2	0	1	1	0	3	3	5	5	0

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

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

Intersection #8 Central Rd (NS)/Waalew Rd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.364
Loss Time (sec): 0 Average Delay (sec/veh): 9.3
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:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	45	32	20	5	17	12	2	36	22	28	122	25
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:	45	32	20	5	17	12	2	36	22	28	122	25
Added Vol:	11	23	0	0	16	0	0	40	8	0	57	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	55	20	5	33	12	2	76	30	28	179	25
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:	67	66	24	6	40	14	2	91	36	34	215	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	66	24	6	40	14	2	91	36	34	215	30
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:	67	66	24	6	40	14	2	91	36	34	215	30

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
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:	0.43	0.42	0.15	0.10	0.66	0.24	0.02	0.70	0.28	0.12	0.77	0.11
Final Sat.:	295	290	105	67	445	162	14	525	207	92	591	83

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.23	0.23	0.23	0.09	0.09	0.09	0.17	0.17	0.17	0.36	0.36	0.36
Crit Moves:	****			****			****			****		
Delay/Veh:	9.2	9.2	9.2	8.3	8.3	8.3	8.5	8.5	8.5	10.0	10.0	10.0
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:	9.2	9.2	9.2	8.3	8.3	8.3	8.5	8.5	8.5	10.0	10.0	10.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	9.2			8.3			8.5			10.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.2			8.3			8.5			10.0		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.3	0.3	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.5	0.5	0.5

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Central Rd (NS)/Otoe Rd (EW) / *Cahvilla Rd.*

Average Delay (sec/veh): 9.4 Worst Case Level Of Service: C[23.1]

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 0 1 0 0 1 0 0 0 0 0 0 0 1! 0 0
-----|-----|-----|-----|

Volume Module:

Base Vol:	0	129	8	1	158	0	0	0	0	27	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
Initial Bse:	0	129	8	1	158	0	0	0	0	27	0	3
Added Vol:	0	0	187	24	0	0	0	0	0	267	0	34
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	129	195	25	158	0	0	0	0	294	0	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	143	216	28	175	0	0	0	0	326	0	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	143	216	28	175	0	0	0	0	326	0	41

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	360	xxxx	xxxxx	xxxx	xxxx	xxxxx	482	482	251
Potent Cap.:	xxxx	xxxx	xxxxx	1210	xxxx	xxxxx	xxxx	xxxx	xxxxx	547	487	792
Move Cap.:	xxxx	xxxx	xxxxx	1210	xxxx	xxxxx	xxxx	xxxx	xxxxx	537	475	792
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.61	0.00	0.05

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	557	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	4.8	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	23.1	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx				23.1	
ApproachLOS:	*			*			*				C	

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Central Rd (NS) at Otoe Rd / Cahuilla Rd (EW)

Cycle (sec): 63 Critical Vol./Cap.(X): 0.584
Loss Time (sec): 6 Average Delay (sec/veh): 19.6
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	20	20	10	10	0	0	0	0	20	0	20
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:	0	0	0	1	0	0	0	0	0	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	129	8	1	158	0	0	0	0	27	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
Initial Bse:	0	129	8	1	158	0	0	0	0	27	0	3
Added Vol:	0	0	187	24	0	0	0	0	0	267	0	34
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	129	195	25	158	0	0	0	0	294	0	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	143	216	28	175	0	0	0	0	326	0	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	143	216	28	175	0	0	0	0	326	0	41
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
Final Volume:	0	143	216	28	175	0	0	0	0	326	0	41

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	0.40	0.60	0.14	0.86	0.00	0.00	0.00	0.00	0.89	0.00	0.11
Final Sat.:	0	717	1083	244	1542	0	0	0	0	1519	0	191

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.20	0.20	0.11	0.11	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.34	0.34	0.19	0.19	0.00	0.00	0.00	0.00	0.37	0.00	0.37
Volume/Cap:	0.00	0.58	0.58	0.58	0.58	0.00	0.00	0.00	0.00	0.58	0.00	0.58
Delay/Veh:	0.0	18.5	18.5	25.6	25.6	0.0	0.0	0.0	0.0	17.4	0.0	17.4
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:	0.0	18.5	18.5	25.6	25.6	0.0	0.0	0.0	0.0	17.4	0.0	17.4
LOS by Move:	A	B	B	C	C	A	A	A	A	B	A	B
HCM2kAvgQ:	0	7	7	5	5	0	0	0	0	6	0	6

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Central Rd (NS)/Thunderbird Rd (EW)

Average Delay (sec/veh): 7.1 Worst Case Level Of Service: D[26.6]

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 0 0 1 0 0 1 0 1 0 0 0
-----|-----|-----|-----|

Volume Module:
Base Vol: 79 109 1 0 136 45 27 3 57 1 2 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 79 109 1 0 136 45 27 3 57 1 2 0
Added Vol: 0 56 0 0 80 182 127 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 79 165 1 0 216 227 154 3 57 1 2 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.87 0.87 0.87 0.87 0.87 0.87 0.87 0.87 0.87 0.87 0.87 0.87
PHF Volume: 90 189 1 0 247 260 176 3 65 1 2 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 90 189 1 0 247 260 176 3 65 1 2 0
-----|-----|-----|-----|

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx xxxxxx xxxxx xxxxx 7.1 6.5 6.2 7.1 6.5 xxxxx
FollowUpTim: 2.2 xxxxx xxxxx xxxxxx xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 xxxxx
-----|-----|-----|-----|

Capacity Module:
Cnflct Vol: 507 xxxxx xxxxx xxxxx xxxxx xxxxx 749 749 377 782 878 xxxxxx
Potent Cap.: 1068 xxxxx xxxxx xxxxx xxxxx xxxxx 331 343 674 314 289 xxxxxx
Move Cap.: 1068 xxxxx xxxxx xxxxx xxxxx xxxxx 306 312 674 262 263 xxxxxx
Volume/Cap: 0.08 xxxxx xxxxx xxxxx xxxxx xxxxx 0.58 0.01 0.10 0.00 0.01 xxxxx
-----|-----|-----|-----|

Level Of Service Module:
2Way95thQ: 0.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.3 xxxxx xxxxx xxxxx
Control Del: 8.7 xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx 10.9 xxxxxx xxxxx xxxxxx
LOS by Move: A * * * * * * * B * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 306 xxxxx xxxxxx 263 xxxxx xxxxxx
SharedQueue: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 3.5 xxxxx xxxxxx 0.0 xxxxx xxxxxx
Shrd ConDel: xxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx 32.2 xxxxx xxxxxx 18.9 xxxxx xxxxxx
Shared LOS: * * * * * * * D * * C * *
ApproachDel: xxxxxx xxxxxx 26.6 18.9
ApproachLOS: * * D C

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)

Existing + Project Conditions

AM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Central Rd (NS)/Thunderbird Rd (EW)

Cycle (sec): 75 Critical Vol./Cap. (X): 0.434

Loss Time (sec): 8 Average Delay (sec/veh): 18.0

Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	20	20	20	20	20	20	10	20	20	20	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	79	109	1	0	136	45	27	3	57	1	2	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	109	1	0	136	45	27	3	57	1	2	0
Added Vol:	0	56	0	0	80	182	127	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	165	1	0	216	227	154	3	57	1	2	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	90	189	1	0	247	260	176	3	65	1	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	189	1	0	247	260	176	3	65	1	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	189	1	0	247	260	176	3	65	1	2	0

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.99	0.01	0.00	0.49	0.51	1.00	0.05	0.95	0.35	0.65	0.00
Final Sat.:	1700	1789	11	0	878	922	1700	90	1710	588	1177	0

Capacity Analysis Module:

Vol/Sat:	0.05	0.11	0.11	0.00	0.28	0.28	0.10	0.04	0.04	0.00	0.00	0.00
Crit Moves:				****				****				****
Green/Cycle:	0.46	0.46	0.46	0.00	0.46	0.46	0.17	0.44	0.44	0.27	0.27	0.00
Volume/Cap:	0.12	0.23	0.23	0.00	0.62	0.62	0.62	0.09	0.09	0.01	0.01	0.00
Delay/Veh:	11.7	12.5	12.5	0.0	16.7	16.7	32.9	12.5	12.5	20.2	20.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.7	12.5	12.5	0.0	16.7	16.7	32.9	12.5	12.5	20.2	20.2	0.0
LOS by Move:	B	B	B	A	B	B	C	B	B	C	C	A
HCM2kAvgQ:	1	3	3	0	10	10	5	0	1	0	0	0

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Central Rd (NS)/Standing Rock Ave (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C[16.4]

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 0 1! 0 0 0 1 0 0 0 0 0 1! 0 0 0 0 1! 0 0
-----|-----|-----|-----|

Volume Module:

Base Vol:	7	173	9	11	197	0	1	2	9	32	2	25
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	173	9	11	197	0	1	2	9	32	2	25
Added Vol:	0	56	16	0	80	0	0	4	0	23	6	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	229	25	11	277	0	1	6	9	55	8	25
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:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	8	274	30	13	331	0	1	7	11	66	10	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	274	30	13	331	0	1	7	11	66	10	30

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	331	xxxx	xxxxx	304	xxxx	xxxxx	683	678	331	672	663	289
Potent Cap.:	1239	xxxx	xxxxx	1269	xxxx	xxxxx	366	377	715	372	384	755
Move Cap.:	1239	xxxx	xxxxx	1269	xxxx	xxxxx	340	370	715	356	377	755
Volume/Cap:	0.01	xxxx	xxxx	0.01	xxxx	xxxx	0.00	0.02	0.02	0.18	0.03	0.04

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.9	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	504	xxxxx	xxxx	422	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	1.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	12.4	xxxxx	xxxxx	16.4	xxxxx
Shared LOS:	*	*	*	A	*	*	*	B	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx				12.4			16.4	
ApproachLOS:	*			*				B			C	

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Central Rd (NS)/Standing Rock Ave (EW)

Cycle (sec): 85 Critical Vol./Cap. (X): 0.262
Loss Time (sec): 8 Average Delay (sec/veh): 21.1
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	7	173	9	11	197	0	1	2	9	32	2	25
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	173	9	11	197	0	1	2	9	32	2	25
Added Vol:	0	56	16	0	80	0	0	4	0	23	6	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	229	25	11	277	0	1	6	9	55	8	25
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:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	8	274	30	13	331	0	1	7	11	66	10	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	274	30	13	331	0	1	7	11	66	10	30
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	274	30	13	331	0	1	7	11	66	10	30

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.90	0.10	1.00	1.00	0.00	1.00	0.40	0.60	1.00	0.24	0.76
Final Sat.:	1700	1623	177	1700	1800	0	1700	720	1080	1700	436	1364

Capacity Analysis Module:

Vol/Sat:	0.00	0.17	0.17	0.01	0.18	0.00	0.00	0.01	0.01	0.04	0.02	0.02
Crit Moves:	****			****			****			****		
Green/Cycle:	0.12	0.37	0.37	0.18	0.44	0.00	0.12	0.24	0.24	0.12	0.24	0.24
Volume/Cap:	0.04	0.46	0.46	0.04	0.42	0.00	0.01	0.04	0.04	0.33	0.09	0.09
Delay/Veh:	33.3	20.9	20.9	28.6	17.0	0.0	33.1	25.1	25.1	35.4	25.5	25.5
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:	33.3	20.9	20.9	28.6	17.0	0.0	33.1	25.1	25.1	35.4	25.5	25.5
LOS by Move:	C	C	C	C	B	A	C	C	C	D	C	C
HCM2kAvgQ:	0	6	6	0	6	0	0	0	0	2	1	1

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Central Rd (NS)/Esaws Ave (EW)

Cycle (sec): 85 Critical Vol./Cap.(X): 0.368
Loss Time (sec): 8 Average Delay (sec/veh): 30.0
Optimal Cycle: 72 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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	14	14	10	14	14	20	20	20	20	20	20
Y+R:	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lanes:	1	0	1	0	1	0	1	0	0	1	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	15	192	66	7	254	6	2	2	17	100	5	37
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	192	66	7	254	6	2	2	17	100	5	37
Added Vol:	0	72	0	0	102	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	264	66	7	356	6	2	2	17	100	5	37
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:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	18	314	79	8	424	7	2	2	20	119	6	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	314	79	8	424	7	2	2	20	119	6	44
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	314	79	8	424	7	2	2	20	119	6	44

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.10	0.09	0.81	0.95	0.05	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	170	170	1449	1623	81	1800

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.01	0.17	0.04	0.00	0.24	0.00	0.01	0.01	0.01	0.07	0.07	0.02
Crit Moves:	****			****			****			****		
Green/Cycle:	0.12	0.26	0.26	0.18	0.32	0.32	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.09	0.67	0.17	0.03	0.74	0.01	0.06	0.06	0.06	0.31	0.31	0.10
Delay/Veh:	33.6	32.0	24.5	29.1	31.0	19.9	25.3	25.3	25.3	27.3	27.3	25.6
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:	33.6	32.0	24.5	29.1	31.0	19.9	25.3	25.3	25.3	27.3	27.3	25.6
LOS by Move:	C	C	C	C	C	B	C	C	C	C	C	C
HCM2kAvgQ:	0	9	2	0	11	0	1	1	1	3	3	1

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Central Rd (NS)/Hwy 18 (EW)

Cycle (sec): 60 Critical Vol./Cap. (X): 0.547
Loss Time (sec): 6 Average Delay (sec/veh): 15.8
Optimal Cycle: 62 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	26	26	26	23	23	23	10	20	20	10	20	20
Y+R:	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lanes:	1	0	1	0	1	0	1	1	0	2	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	95	179	25	27	261	102	75	197	99	55	339	79
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:	95	179	25	27	261	102	75	197	99	55	339	79
Added Vol:	0	56	0	0	80	23	16	56	0	0	79	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	235	25	27	341	125	91	253	99	55	418	79
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:	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
PHF Volume:	129	318	34	37	461	169	123	342	134	74	566	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	318	34	37	461	169	123	342	134	74	566	107
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	1.05	1.00	1.00	1.05	1.00
Final Volume:	129	318	34	37	461	169	123	359	134	74	594	107

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.08	0.18	0.02	0.02	0.26	0.09	0.07	0.10	0.07	0.04	0.16	0.06
Crit Moves:				****			****			****		
Green/Cycle:	0.42	0.42	0.42	0.42	0.42	0.42	0.16	0.32	0.32	0.16	0.32	0.32
Volume/Cap:	0.18	0.42	0.04	0.05	0.61	0.22	0.45	0.31	0.23	0.27	0.51	0.18
Delay/Veh:	11.4	13.1	10.7	10.7	15.5	11.7	24.7	16.0	15.6	23.3	17.4	15.3
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:	11.4	13.1	10.7	10.7	15.5	11.7	24.7	16.0	15.6	23.3	17.4	15.3
LOS by Move:	B	B	B	B	B	B	C	B	B	C	B	B
HCM2kAvgQ:	2	5	0	0	8	2	3	3	2	2	5	2

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Central Rd (NS)/Ottawa Rd (EW)

Average Delay (sec/veh): 35.7 Worst Case Level Of Service: F[229.2]

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:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	6	273	40	118	302	13	1	23	16	48	29	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	273	40	118	302	13	1	23	16	48	29	74
Added Vol:	0	48	0	0	68	11	8	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	321	40	118	370	24	9	23	16	48	29	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
PHF Volume:	8	445	55	164	513	33	12	32	22	67	40	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	445	55	164	513	33	12	32	22	67	40	103

Critical Gap Module:	North Bound			South Bound			East Bound			West Bound		
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:	North Bound			South Bound			East Bound			West Bound		
Cnflct Vol:	546	xxxx	xxxxx	501	xxxx	xxxxx	1418	1374	530	1374	1363	473
Potent Cap.:	1033	xxxx	xxxxx	1074	xxxx	xxxxx	116	147	553	124	149	595
Move Cap.:	1033	xxxx	xxxxx	1074	xxxx	xxxxx	62	121	553	83	123	595
Volume/Cap:	0.01	xxxx	xxxx	0.15	xxxx	xxxx	0.20	0.26	0.04	0.80	0.33	0.17

Level Of Service Module:	North Bound			South Bound			East Bound			West Bound		
2Way95thQ:	0.0	xxxx	xxxxx	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.5	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxxx	xxxx	xxxxx	xxxxxx	xxxx	xxxxx
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	132	xxxxx	xxxx	161	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.4	xxxxx	xxxxx	12.4	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	57.0	xxxxx	xxxxx	229	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			57.0			229.2		
ApproachLOS:	*			*			F			F		

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Central Rd (NS)/Ottawa Rd (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.430
Loss Time (sec): 8 Average Delay (sec/veh): 25.4
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	6	273	40	118	302	13	1	23	16	48	29	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	273	40	118	302	13	1	23	16	48	29	74
Added Vol:	0	48	0	0	68	11	8	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	321	40	118	370	24	9	23	16	48	29	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
PHF Volume:	8	445	55	164	513	33	12	32	22	67	40	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	445	55	164	513	33	12	32	22	67	40	103
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	445	55	164	513	33	12	32	22	67	40	103

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.89	0.11	1.00	0.94	0.06	1.00	0.59	0.41	1.00	0.28	0.72
Final Sat.:	1700	1601	199	1700	1690	110	1700	1062	738	1700	507	1293

Capacity Analysis Module:

Vol/Sat:	0.00	0.28	0.28	0.10	0.30	0.30	0.01	0.03	0.03	0.04	0.08	0.08
Crit Moves:	****			****			****			****		
Green/Cycle:	0.10	0.46	0.46	0.16	0.52	0.52	0.10	0.20	0.20	0.10	0.20	0.20
Volume/Cap:	0.05	0.61	0.61	0.59	0.58	0.58	0.07	0.15	0.15	0.39	0.40	0.40
Delay/Veh:	40.8	21.8	21.8	41.9	17.5	17.5	41.0	33.2	33.2	43.6	35.5	35.5
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:	40.8	21.8	21.8	41.9	17.5	17.5	41.0	33.2	33.2	43.6	35.5	35.5
LOS by Move:	D	C	C	D	B	B	D	C	C	D	D	D
HCM2kAvgQ:	0	11	11	6	12	12	0	1	1	2	4	4

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Central Rd (NS)/Nisqually Rd (EW)

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: E[47.4]

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 0 1! 0 0 0 0 1! 0 0 0 0 1 0 0 1
-----|-----|-----|-----|

Volume Module:
Base Vol: 73 294 14 4 295 59 35 13 73 4 0 4
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: 73 294 14 4 295 59 35 13 73 4 0 4
Added Vol: 0 44 0 0 62 6 4 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 73 338 14 4 357 65 39 13 73 4 0 4
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: 102 472 20 6 499 91 54 18 102 6 0 6
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 102 472 20 6 499 91 54 18 102 6 0 6
-----|-----|-----|-----|

Critical Gap Module:
Critical Gp: 4.1 xxxxx xxxxx 4.1 xxxxx xxxxx 7.1 6.5 6.2 7.1 6.5 6.2
FollowUpTim: 2.2 xxxxx xxxxx 2.2 xxxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
-----|-----|-----|-----|

Capacity Module:
Cnflict Vol: 589 xxxxx xxxxx 492 xxxxx xxxxx 1244 1251 544 1301 1286 482
Potent Cap.: 996 xxxxx xxxxx 1082 xxxxx xxxxx 153 174 543 139 166 589
Move Cap.: 996 xxxxx xxxxx 1082 xxxxx xxxxx 138 154 543 94 147 589
Volume/Cap: 0.10 xxxxx xxxxx 0.01 xxxxx xxxxx 0.39 0.12 0.19 0.06 0.00 0.01
-----|-----|-----|-----|

Level Of Service Module:
2Way95thQ: 0.3 xxxxx xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0
Control Del: 9.0 xxxxx xxxxx 8.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 11.2
LOS by Move: A * * A * * * * * B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 249 xxxxx 94 xxxxx xxxxx
SharedQueue: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 4.7 xxxxx 0.2 xxxxx xxxxx
Shrd ConDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 47.4 xxxxx 45.6 xxxxx xxxxx
Shared LOS: * * * * * * * E * * *
ApproachDel: xxxxxx xxxxxx 47.4 28.4
ApproachLOS: * * E D

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 Central Rd (NS)/Nisqually Rd (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.495
Loss Time (sec): 8 Average Delay (sec/veh): 24.5
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	73	294	14	4	295	59	35	13	73	4	0	4
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:	73	294	14	4	295	59	35	13	73	4	0	4
Added Vol:	0	44	0	0	62	6	4	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	73	338	14	4	357	65	39	13	73	4	0	4
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:	102	472	20	6	499	91	54	18	102	6	0	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	472	20	6	499	91	54	18	102	6	0	6
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:	102	472	20	6	499	91	54	18	102	6	0	6

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.96	0.04	1.00	0.85	0.15	1.00	0.15	0.85	1.00	0.00	1.00
Final Sat.:	1700	1728	72	1700	1523	277	1700	272	1528	1700	0	1800

Capacity Analysis Module:

Vol/Sat:	0.06	0.27	0.27	0.00	0.33	0.33	0.03	0.07	0.07	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.10	0.47	0.47	0.16	0.54	0.54	0.10	0.19	0.19	0.10	0.00	0.19
Volume/Cap:	0.61	0.58	0.58	0.02	0.61	0.61	0.34	0.35	0.35	0.03	0.00	0.02
Delay/Veh:	51.6	21.0	21.0	36.8	17.7	17.7	45.6	37.5	37.5	43.2	0.0	34.5
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:	51.6	21.0	21.0	36.8	17.7	17.7	45.6	37.5	37.5	43.2	0.0	34.5
LOS by Move:	D	C	C	D	B	B	D	D	D	D	A	C
HCM2kAvgQ:	4	12	12	0	13	13	2	4	4	0	0	0

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Joshua Rd (NS)/Waalew Rd (EW)

Average Delay (sec/veh): 5.3 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: Stop Sign Stop Sign Uncontrolled Uncontrolled
Rights: Include Include Include Include
Lanes: 0 0 1! 0 0 0 0 0 0 0 0 0 1 0 0 1 0 0 0 0
-----|-----|-----|-----|

Volume Module:
Base Vol: 42 0 5 0 0 0 0 0 20 25 3 23 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: 42 0 5 0 0 0 0 0 20 25 3 23 0
Added Vol: 57 0 11 0 0 0 0 0 0 40 8 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 99 0 16 0 0 0 0 0 20 65 11 23 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: 0.72 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: 137 0 22 0 0 0 0 0 28 90 15 32 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 137 0 22 0 0 0 0 0 28 90 15 32 0
-----|-----|-----|-----|

Critical Gap Module:
Critical Gp: 6.4 6.5 6.2 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 4.1 xxxxx xxxxx
FollowUpTim: 3.5 4.0 3.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 2.2 xxxxx xxxxx
-----|-----|-----|-----|

Capacity Module:
Cnflct Vol: 135 135 73 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 118 xxxxx xxxxx
Potent Cap.: 863 759 995 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1483 xxxxx xxxxx
Move Cap.: 856 751 995 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 1483 xxxxx xxxxx
Volume/Cap: 0.16 0.00 0.02 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.01 xxxxx xxxxx
-----|-----|-----|-----|

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx 0.0 xxxxx xxxxxx
Control Del: xxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx 7.5 xxxxx xxxxxx
LOS by Move: * * * * * * * * * * A * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx 873 xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx xxxxx xxxxx xxxxxx
SharedQueue: xxxxx 0.7 xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx 0.0 xxxxx xxxxxx
Shrd ConDel: xxxxx 10.0 xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx 7.5 xxxxx xxxxxx
Shared LOS: * B * * * * * * * * * A * *
ApproachDel: 10.0 xxxxxx xxxxxx xxxxxx
ApproachLOS: B * * *

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #17 Joshua Rd (NS) at Cahuilla Rd (EW)

Average Delay (sec/veh): 37.0 Worst Case Level Of Service: F[57.7]

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 0 0 1! 0 0 0 0 1! 0 0
-----|-----|-----|-----|

Volume Module:

Base Vol:	1	40	9	9	38	1	3	0	4	18	0	38
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:	1	40	9	9	38	1	3	0	4	18	0	38
Added Vol:	0	0	0	48	0	0	0	211	0	0	301	68
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	40	9	57	38	1	3	211	4	18	301	106
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:	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
PHF Volume:	1	58	13	83	55	1	4	306	6	26	437	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	58	13	83	55	1	4	306	6	26	437	154

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	57	xxxx	xxxxx	71	xxxx	xxxxx	584	295	56	445	290	65
Potent Cap.:	1561	xxxx	xxxxx	1542	xxxx	xxxxx	426	619	1016	527	624	1005
Move Cap.:	1561	xxxx	xxxxx	1542	xxxx	xxxxx	137	584	1016	295	588	1005
Volume/Cap:	0.00	xxxx	xxxx	0.05	xxxx	xxxx	0.03	0.52	0.01	0.09	0.74	0.15

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	563	xxxxx	xxxx	627	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	3.5	xxxxx	xxxxx	14.6	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	19.3	xxxxx	xxxxx	57.7	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			19.3			57.7		
ApproachLOS:	*			*			C			F		

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour With Improvements

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

Intersection #17 Joshua Rd (NS) at Cahuilla Rd (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.453
Loss Time (sec): 8 Average Delay (sec/veh): 23.2
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	1	40	9	9	38	1	3	0	4	18	0	38
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:	1	40	9	9	38	1	3	0	4	18	0	38
Added Vol:	0	0	0	48	0	0	0	211	0	0	301	68
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	40	9	57	38	1	3	211	4	18	301	106
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:	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
PHF Volume:	1	58	13	83	55	1	4	306	6	26	437	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	58	13	83	55	1	4	306	6	26	437	154
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:	1	58	13	83	55	1	4	306	6	26	437	154

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.82	0.18	1.00	0.97	0.03	1.00	0.98	0.02	1.00	0.74	0.26
Final Sat.:	1700	1469	331	1700	1754	46	1700	1767	33	1700	1331	469

Capacity Analysis Module:

Vol/Sat:	0.00	0.04	0.04	0.05	0.03	0.03	0.00	0.17	0.17	0.02	0.33	0.33
Crit Moves:	****			****			****			****		
Green/Cycle:	0.10	0.19	0.19	0.10	0.19	0.19	0.10	0.43	0.43	0.21	0.54	0.54
Volume/Cap:	0.01	0.21	0.21	0.51	0.17	0.17	0.03	0.41	0.41	0.07	0.60	0.60
Delay/Veh:	43.0	36.1	36.1	47.9	35.8	35.8	43.2	21.3	21.3	33.1	17.4	17.4
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:	43.0	36.1	36.1	47.9	35.8	35.8	43.2	21.3	21.3	33.1	17.4	17.4
LOS by Move:	D	D	D	D	D	D	D	C	C	C	B	B
HCM2kAvgQ:	0	2	2	3	2	2	0	7	7	1	13	13

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

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

Intersection #18 Joshua Rd (NS)/Standing Rock Ave (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.516
Loss Time (sec): 0 Average Delay (sec/veh): 11.0
Optimal Cycle: 0 Level Of Service: B

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

Volume Module:

Base Vol:	1	39	18	2	56	14	5	13	3	38	46	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:	1	39	18	2	56	14	5	13	3	38	46	3
Added Vol:	0	0	119	0	0	0	0	20	0	170	29	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	39	137	2	56	14	5	33	3	208	75	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:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	1	49	174	3	71	18	6	42	4	264	95	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	49	174	3	71	18	6	42	4	264	95	4
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
Final Volume:	1	49	174	3	71	18	6	42	4	264	95	4

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:	0.01	0.22	0.77	0.03	0.78	0.19	0.13	0.87	1.00	0.73	0.26	0.01
Final Sat.:	4	161	566	18	503	126	78	513	675	511	184	7

Capacity Analysis Module:

Vol/Sat:	0.31	0.31	0.31	0.14	0.14	0.14	0.08	0.08	0.01	0.52	0.52	0.52
Crit Moves:	****			****			****			****		
Delay/Veh:	9.5	9.5	9.5	8.9	8.9	8.9	8.9	8.9	7.6	12.8	12.8	12.8
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	9.5	9.5	8.9	8.9	8.9	8.9	8.9	7.6	12.8	12.8	12.8
LOS by Move:	A	A	A	A	A	A	A	A	A	B	B	B
ApproachDel:	9.5			8.9			8.8			12.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.5			8.9			8.8			12.8		
LOS by Appr:	A			A			A			B		
AllWayAvgQ:	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.0	0.9	0.9	0.9

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #19 Joshua Rd (NS)/Hwy 18 (EW)

Average Delay (sec/veh): 6.4 Worst Case Level Of Service: C[19.0]

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:	0	0	1	0	0	1	1	0	0	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	1	0	1	8	2	136	72	180	0	0	254	11
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:	1	0	1	8	2	136	72	180	0	0	254	11
Added Vol:	0	8	0	68	11	79	56	0	0	0	0	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	8	1	76	13	215	128	180	0	0	254	59
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:	1	9	1	84	14	239	142	200	0	0	282	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	9	1	84	14	239	142	200	0	0	282	66

Critical Gap Module:	North Bound			South Bound			East Bound			West Bound		
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx

Capacity Module:	North Bound			South Bound			East Bound			West Bound		
Cnflct Vol:	926	832	200	772	767	282	348	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Potent Cap.:	251	307	846	319	335	761	1222	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Move Cap.:	151	271	846	283	296	761	1222	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Volume/Cap:	0.01	0.03	0.00	0.30	0.05	0.31	0.12	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx

Level Of Service Module:	North Bound			South Bound			East Bound			West Bound		
2Way95thQ:	xxxx	xxxx	xxxxxx	xxxx	xxxx	1.3	0.4	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	11.9	8.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	268	xxxxxx	285	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	0.1	xxxxxx	1.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	19.0	xxxxxx	24.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	C	*	C	*	*	*	*	*	*	*	*
ApproachDel:	19.0			15.5			xxxxxxx			xxxxxxx		
ApproachLOS:	C			C			*			*		

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Joshua Rd (NS)/Hwy 18 (EW)

Cycle (sec): 65 Critical Vol./Cap. (X): 0.433
Loss Time (sec): 8 Average Delay (sec/veh): 20.7
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	1

Volume Module:

Base Vol:	1	0	1	8	2	136	72	180	0	0	254	11
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:	1	0	1	8	2	136	72	180	0	0	254	11
Added Vol:	0	8	0	68	11	79	56	0	0	0	0	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	8	1	76	13	215	128	180	0	0	254	59
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:	1	9	1	84	14	239	142	200	0	0	282	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	9	1	84	14	239	142	200	0	0	282	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:	1	9	1	84	14	239	142	200	0	0	282	66

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.89	0.11	1.00	0.06	0.94	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	1700	1600	200	1700	103	1697	1700	1800	0	1700	1800	1800

Capacity Analysis Module:

Vol/Sat:	0.00	0.01	0.01	0.05	0.14	0.14	0.08	0.11	0.00	0.00	0.16	0.04
Crit Moves:	****			****			****			****		
Green/Cycle:	0.15	0.29	0.29	0.15	0.29	0.29	0.15	0.44	0.00	0.00	0.29	0.29
Volume/Cap:	0.00	0.02	0.02	0.34	0.48	0.48	0.57	0.25	0.00	0.00	0.53	0.12
Delay/Veh:	24.8	17.1	17.1	26.8	20.4	20.4	30.1	12.1	0.0	0.0	21.1	17.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.8	17.1	17.1	26.8	20.4	20.4	30.1	12.1	0.0	0.0	21.1	17.7
LOS by Move:	C	B	B	C	C	C	C	B	A	A	C	B
HCM2kAvgQ:	0	0	0	2	5	5	4	3	0	0	6	1

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Hwy 18 (NS)/Bear Valley Rd (EW)

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: B[12.0]

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: 1 0 1 0 0 0 0 1 0 0 0 1 0 0 0 0 0
-----|-----|-----|-----|

Volume Module:

Base Vol:	276	257	0	0	173	3	0	0	270	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	276	257	0	0	173	3	0	0	270	0	0	0
Added Vol:	0	40	0	0	57	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	276	297	0	0	230	3	0	0	270	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	295	317	0	0	245	3	0	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	295	317	0	0	245	3	0	0	288	0	0	0

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	249	xxxx	xxxxx	xxxx	xxxx	xxxxx	1152	xxxx	245	xxxx	xxxx	xxxxx
Potent Cap.:	1329	xxxx	xxxxx	xxxx	xxxx	xxxxx	221	xxxx	798	xxxx	xxxx	xxxxx
Move Cap.:	1329	xxxx	xxxxx	xxxx	xxxx	xxxxx	183	xxxx	798	xxxx	xxxx	xxxxx
Volume/Cap:	0.22	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	0.36	xxxx	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	0.8	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1.7	xxxx	xxxx	xxxxx
Control Del:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.0	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	B	*	*	*
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	12.0	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx
ApproachLOS:	*	*	*	*	*	*	B	*	*	*	*	*

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #20 Hwy 18 (NS)/Bear Valley Rd (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.518

Loss Time (sec): 6 Average Delay (sec/veh): 16.2

Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	0	20	20	20	20	20	0	0	0
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	0	0	1	0	0	0	1	0	0

Volume Module:

Base Vol:	276	257	0	0	173	3	0	0	270	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	276	257	0	0	173	3	0	0	270	0	0	0
Added Vol:	0	40	0	0	57	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	276	297	0	0	230	3	0	0	270	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	295	317	0	0	245	3	0	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	295	317	0	0	245	3	0	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	295	317	0	0	245	3	0	0	288	0	0	0

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1700	1800	0	0	1800	1800	1700	0	1800	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.17	0.18	0.00	0.00	0.14	0.00	0.00	0.00	0.16	0.00	0.00	0.00
Crit Moves:	****			****					****			
Green/Cycle:	0.29	0.60	0.00	0.00	0.31	0.31	0.00	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.59	0.29	0.00	0.00	0.44	0.01	0.00	0.00	0.52	0.00	0.00	0.00
Delay/Veh:	21.6	6.5	0.0	0.0	18.6	15.6	0.0	0.0	19.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.6	6.5	0.0	0.0	18.6	15.6	0.0	0.0	19.4	0.0	0.0	0.0
LOS by Move:	C	A	A	A	B	B	A	A	B	A	A	A
HCM2kAvgQ:	6	3	0	0	4	0	0	0	5	0	0	0

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Milpas Dr (NS)/Hwy 18 (EW)

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: C[21.3]

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 0 0 0 0 1 0 0 1! 0 0 0 1 0 0 1
-----|-----|-----|-----|

Volume Module:

Base Vol:	66	3	4	0	0	8	3	324	20	3	323	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	66	3	4	0	0	8	3	324	20	3	323	0
Added Vol:	0	0	0	0	0	0	0	57	0	0	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	3	4	0	0	8	3	381	20	3	363	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	71	3	4	0	0	9	3	408	21	3	389	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	71	3	4	0	0	9	3	408	21	3	389	0

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	824	820	419	xxxxx	xxxxx	389	389	xxxxx	xxxxx	429	xxxxx	xxxxx
Potent Cap.:	294	312	639	xxxxx	xxxxx	664	1181	xxxxx	xxxxx	1141	xxxxx	xxxxx
Move Cap.:	289	310	639	xxxxx	xxxxx	664	1181	xxxxx	xxxxx	1141	xxxxx	xxxxx
Volume/Cap:	0.24	0.01	0.01	xxxxx	xxxxx	0.01	0.00	xxxxx	xxxxx	0.00	xxxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.5	8.1	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	299	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	21.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	A	*	*
ApproachDel:	21.3					10.5	xxxxxxx			xxxxxxx		
ApproachLOS:	C					B	*			*		

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #21 Milpas Dr (NS)/Hwy 18 (EW)

Cycle (sec): 105 Critical Vol./Cap. (X): 0.310
Loss Time (sec): 8 Average Delay (sec/veh): 20.4
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	66	3	4	0	0	8	3	324	20	3	323	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	66	3	4	0	0	8	3	324	20	3	323	0
Added Vol:	0	0	0	0	0	0	0	57	0	0	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	3	4	0	0	8	3	381	20	3	363	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	71	3	4	0	0	9	3	408	21	3	389	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	3	4	0	0	9	3	408	21	3	389	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	3	4	0	0	9	3	408	21	3	389	0

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.43	0.57	1.00	0.00	1.00	1.00	0.95	0.05	1.00	1.00	0.00
Final Sat.:	1700	771	1029	1700	0	1800	1700	1710	90	1700	1800	0

Capacity Analysis Module:

Vol/Sat:	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24	0.00	0.22	0.00
Crit Moves:	****					****		****		****		
Green/Cycle:	0.10	0.29	0.29	0.00	0.00	0.19	0.20	0.54	0.54	0.10	0.44	0.00
Volume/Cap:	0.44	0.01	0.01	0.00	0.00	0.02	0.01	0.44	0.44	0.02	0.49	0.00
Delay/Veh:	46.7	26.9	26.9	0.0	0.0	34.6	34.1	14.7	14.7	43.1	21.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.7	26.9	26.9	0.0	0.0	34.6	34.1	14.7	14.7	43.1	21.3	0.0
LOS by Move:	D	C	C	A	A	C	C	B	B	D	C	A
HCM2kAvgQ:	3	0	0	0	0	0	0	8	8	0	9	0

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #22 Laguna Seca Dr (NS)/Cahuilla Rd (EW)

Cycle (sec): 60 Critical Vol./Cap. (X): 0.375
Loss Time (sec): 8 Average Delay (sec/veh): 18.0
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	0	0	0	0	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
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	0	32	107	0	15	26	60	199	0	184	343	0
PasserByVol:	0	2	-2	0	0	0	10	-10	0	0	0	0
Initial Fut:	0	34	105	0	15	26	70	189	0	184	343	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	36	111	0	16	27	74	199	0	194	361	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	36	111	0	16	27	74	199	0	194	361	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	36	111	0	16	27	74	199	0	194	361	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.24	0.76	1.00	0.37	0.63	1.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	1700	440	1360	1700	659	1141	1700	1800	0	1700	1800	0

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.08	0.08	0.00	0.02	0.02	0.04	0.11	0.00	0.11	0.20	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.33	0.33	0.00	0.33	0.33	0.17	0.36	0.00	0.18	0.37	0.00
Volume/Cap:	0.00	0.24	0.24	0.00	0.07	0.07	0.26	0.31	0.00	0.64	0.55	0.00
Delay/Veh:	0.0	14.7	14.7	0.0	13.7	13.7	22.3	14.3	0.0	27.5	16.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.7	14.7	0.0	13.7	13.7	22.3	14.3	0.0	27.5	16.0	0.0
LOS by Move:	A	B	B	A	B	B	C	B	A	C	B	A
HCM2kAvgQ:	0	2	2	0	1	1	1	3	0	5	6	0

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

 HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
 Existing + Project Conditions
 PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

 Intersection #1 Dale Evans Pkwy (NS)/Corwin Rd (EW)

Average Delay (sec/veh): 11.5 Worst Case Level Of Service: B[13.0]

 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: 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1

Volume Module:
 Base Vol: 3 79 8 1 181 56 22 8 0 9 8 4
 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 79 8 1 181 56 22 8 0 9 8 4
 Added Vol: 0 35 0 0 45 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 3 114 8 1 226 56 22 8 0 9 8 4
 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: 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76
 PHF Volume: 4 150 11 1 297 74 29 11 0 12 11 5
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 FinalVolume: 4 150 11 1 297 74 29 11 0 12 11 5

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

Capacity Module:
 Cnflct Vol: 290 108 11 183 102 11 16 xxxx xxxxx 11 xxxx xxxxx
 Potent Cap.: 666 786 1077 783 791 1077 1615 xxxx xxxxx 1622 xxxx xxxxx
 Move Cap.: 426 766 1077 646 771 1077 1615 xxxx xxxxx 1622 xxxx xxxxx
 Volume/Cap: 0.01 0.20 0.01 0.00 0.39 0.07 0.02 xxxx xxxxx 0.01 xxxx xxxxx

Level Of Service Module:
 2Way95thQ: xxxx xxxx 0.0 xxxx xxxx xxxxx 0.1 xxxx xxxxx 0.0 xxxx xxxxx
 Control Del:xxxxx xxxx 8.4 xxxxx xxxx xxxxx 7.3 xxxx xxxxx 7.2 xxxx xxxxx
 LOS by Move: * * A * * * A * * A * *
 Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
 Shared Cap.: 751 xxxx xxxxx xxxx 817 xxxxx xxxx xxxx xxxxx
 SharedQueue: 0.8 xxxx xxxxx xxxxx 2.4 xxxxx 0.1 xxxx xxxxx 0.0 xxxx xxxxx
 Shrd ConDel: 11.0 xxxx xxxxx xxxxx 13.0 xxxxx 7.3 xxxx xxxxx 7.2 xxxx xxxxx
 Shared LOS: B * * * B * A * * A * *
 ApproachDel: 10.9 13.0 xxxxxx xxxxxx
 ApproachLOS: B B * *

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 S. Dale Evans Pkwy (NS)/Waalew Rd (EW)

Average Delay (sec/veh): 4.7 Worst Case Level Of Service: B[14.3]

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 0 0 0 0 0 1 0 0 1 0 0 0 0
-----|-----|-----|-----|

Volume Module:

Base Vol:	58	0	74	0	0	0	0	145	57	143	95	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	0	74	0	0	0	0	145	57	143	95	0
Added Vol:	0	0	0	0	0	0	0	45	0	0	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	0	74	0	0	0	0	190	57	143	130	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	63	0	81	0	0	0	0	208	62	156	142	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	63	0	81	0	0	0	0	208	62	156	142	0

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	694	694	239	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	270	xxxxx	xxxxx
Potent Cap.:	412	369	805	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	1305	xxxxx	xxxxx
Move Cap.:	370	320	805	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	1305	xxxxx	xxxxx
Volume/Cap:	0.17	0.00	0.10	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.12	xxxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx
Control Del:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	8.1	xxxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	531	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
SharedQueue:	xxxxx	1.1	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx
Shrd ConDel:	xxxxx	14.3	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	8.1	xxxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	A	*	*
ApproachDel:	14.3			xxxxxx			xxxxxx		xxxxxx		xxxxxx	
ApproachLOS:	B			*			*		*		*	

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 N. Dale Evans Pkwy (NS)/Waalew Rd (EW)

Average Delay (sec/veh): 6.1 Worst Case Level Of Service: C[16.0]

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:	0	0	0	0	0	1	0	0	0	0	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	0	0	87	0	126	55	164	0	0	112	39
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	87	0	126	55	164	0	0	112	39
Added Vol:	0	0	0	45	0	0	0	45	0	0	35	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	132	0	126	55	209	0	0	147	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	0	0	0	145	0	138	60	230	0	0	162	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	145	0	138	60	230	0	0	162	81

Critical Gap Module:	North Bound			South Bound			East Bound			West Bound		
Critical Gp:	xxxxx	xxxxx	xxxxx	6.4	6.5	6.2	4.1	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
FollowUpTim:	xxxxx	xxxxx	xxxxx	3.5	4.0	3.3	2.2	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx

Capacity Module:	North Bound			South Bound			East Bound			West Bound		
Cnflct Vol:	xxxxx	xxxxx	xxxxx	553	553	202	243	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Potent Cap.:	xxxxx	xxxxx	xxxxx	498	444	844	1335	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Move Cap.:	xxxxx	xxxxx	xxxxx	480	423	844	1335	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Volume/Cap:	xxxxx	xxxxx	xxxxx	0.30	0.00	0.16	0.05	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx

Level Of Service Module:	North Bound			South Bound			East Bound			West Bound		
2Way95thQ:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Control Del:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	7.8	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxxx	xxxxx	xxxxx	608	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
SharedQueue:	xxxxx	xxxxx	xxxxx	xxxxx	2.5	xxxxx	0.1	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shrd ConDel:	xxxxx	xxxxx	xxxxx	xxxxx	16.0	xxxxx	7.8	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxxx			16.0			xxxxxxx			xxxxxxx		
ApproachLOS:	*			C			*			*		

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Dale Evans Pkwy (NS)/Otoe Rd (EW)

Average Delay (sec/veh): 2.4 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	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0	0	1	0 0 1

Volume Module:

Base Vol:	18	104	4	6	149	36	31	4	17	8	4	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:	18	104	4	6	149	36	31	4	17	8	4	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	104	4	6	149	36	31	4	17	8	4	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:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	20	114	4	7	164	40	34	4	19	9	4	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	114	4	7	164	40	34	4	19	9	4	3

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	204	xxxx	xxxxx	119	xxxx	xxxxx	357	355	184	365	373	117
Potent Cap.:	1380	xxxx	xxxxx	1482	xxxx	xxxxx	602	573	864	595	561	941
Move Cap.:	1380	xxxx	xxxxx	1482	xxxx	xxxxx	588	563	864	570	550	941
Volume/Cap:	0.01	xxxx	xxxx	0.00	xxxx	xxxx	0.06	0.01	0.02	0.02	0.01	0.00

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	7.6	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.8
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	A
Movement:	LT - LTR - RT	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	654	xxxxx	563	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	0.1	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.0	xxxxx	11.5	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	B	*	*
ApproachDel:	xxxxxx	xxxxxx			11.0			11.0				
ApproachLOS:	*	*			B			B				

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

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

Intersection #4 Dale Evans Pkwy (NS)/Thunderbird Rd (EW)

Cycle (sec): 0 Critical Vol./Cap.(X): 0.971
Loss Time (sec): 0 Average Delay (sec/veh): 32.1
Optimal Cycle: 0 Level Of Service: D

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	1	0	1	0	1	0	1	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	39	119	109	15	109	31	37	191	57	75	127	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:	39	119	109	15	109	31	37	191	57	75	127	14
Added Vol:	0	0	0	0	0	0	0	234	0	0	180	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	119	109	15	109	31	37	425	57	75	307	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	42	129	118	16	118	34	40	461	62	81	333	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	129	118	16	118	34	40	461	62	81	333	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:	42	129	118	16	118	34	40	461	62	81	333	15

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	388	412	447	369	391	420	429	475	502	418	450	483

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.11	0.31	0.26	0.04	0.30	0.08	0.09	0.97	0.12	0.19	0.74	0.03
Crit Moves:	****			****			****			****		
Delay/Veh:	12.7	14.7	13.0	12.4	15.0	11.4	11.6	61.2	10.5	13.0	28.9	10.1
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:	12.7	14.7	13.0	12.4	15.0	11.4	11.6	61.2	10.5	13.0	28.9	10.1
LOS by Move:	B	B	B	B	B	B	B	F	B	B	D	B
ApproachDel:	13.7			14.0			52.1			25.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.7			14.0			52.1			25.2		
LOS by Appr:	B			B			F			D		
AllWayAvgQ:	0.1	0.4	0.3	0.0	0.4	0.1	0.1	6.7	0.1	0.2	2.3	0.0

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

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HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Dale Evans Pkwy (NS)/Thunderbird Rd (EW)

Cycle (sec): 80 Critical Vol./Cap.(X): 0.439
Loss Time (sec): 8 Average Delay (sec/veh): 23.2
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	1	1	0	1	0	1

Volume Module:

Base Vol:	39	119	109	15	109	31	37	191	57	75	127	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:	39	119	109	15	109	31	37	191	57	75	127	14
Added Vol:	0	0	0	0	0	0	0	234	0	0	180	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	119	109	15	109	31	37	425	57	75	307	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	42	129	118	16	118	34	40	461	62	81	333	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	129	118	16	118	34	40	461	62	81	333	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:	42	129	118	16	118	34	40	461	62	81	333	15

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800

Capacity Analysis Module:

Vol/Sat:	0.02	0.07	0.07	0.01	0.07	0.02	0.02	0.26	0.03	0.05	0.19	0.01
Crit Moves:	****			****			****			****		
Green/Cycle:	0.13	0.25	0.25	0.13	0.25	0.25	0.18	0.40	0.40	0.13	0.35	0.35
Volume/Cap:	0.20	0.29	0.26	0.08	0.26	0.07	0.14	0.64	0.09	0.38	0.53	0.02
Delay/Veh:	31.9	24.6	24.4	31.1	24.4	23.0	28.1	21.3	15.0	33.3	21.6	17.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.9	24.6	24.4	31.1	24.4	23.0	28.1	21.3	15.0	33.3	21.6	17.1
LOS by Move:	C	C	C	C	C	C	C	C	B	C	C	B
HCM2kAvgQ:	1	3	2	0	2	1	1	10	1	2	7	0

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

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

Intersection #5 Navajo Rd (NS)/Waalew Rd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.438
Loss Time (sec): 0 Average Delay (sec/veh): 9.6
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:	0	0	1	0	0	1	0	0	0	0	1	0

Volume Module:

Base Vol:	46	1	25	3	1	1	1	135	121	10	89	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	1	25	3	1	1	1	135	121	10	89	0
Added Vol:	0	0	0	0	0	0	0	99	0	0	76	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	1	25	3	1	1	1	234	121	10	165	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	49	1	27	3	1	1	1	249	129	11	176	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	1	27	3	1	1	1	249	129	11	176	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	1	27	3	1	1	1	249	129	11	176	0

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:	0.64	0.01	0.35	0.60	0.20	0.20	0.01	0.65	0.34	0.06	0.94	0.00
Final Sat.:	422	9	230	375	125	125	2	568	294	45	739	0

Capacity Analysis Module:

Vol/Sat:	0.12	0.12	0.12	0.01	0.01	0.01	0.44	0.44	0.44	0.24	0.24	xxxx
Crit Moves:	****			****			****			****		
Delay/Veh:	8.6	8.6	8.6	8.2	8.2	8.2	10.2	10.2	10.2	8.8	8.8	0.0
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:	8.6	8.6	8.6	8.2	8.2	8.2	10.2	10.2	10.2	8.8	8.8	0.0
LOS by Move:	A	A	A	A	A	A	B	B	B	A	A	*
ApproachDel:	8.6			8.2			10.2			8.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.6			8.2			10.2			8.8		
LOS by Appr:	A			A			B			A		
AllWayAvgQ:	0.1	0.1	0.1	0.0	0.0	0.0	0.7	0.7	0.7	0.3	0.3	0.3

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

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

Intersection #6 Navajo Rd (NS)/Thunderbird Rd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.863
Loss Time (sec): 0 Average Delay (sec/veh): 24.1
Optimal Cycle: 0 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: 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
-----|-----|-----|-----|

Volume Module:

Base Vol:	56	106	31	24	140	18	24	133	75	20	106	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:	56	106	31	24	140	18	24	133	75	20	106	18
Added Vol:	0	0	45	0	0	0	0	243	0	35	187	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	106	76	24	140	18	24	376	75	55	293	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:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	59	112	80	25	148	19	25	396	79	58	309	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	112	80	25	148	19	25	396	79	58	309	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:	59	112	80	25	148	19	25	396	79	58	309	19

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:	0.23	0.45	0.32	0.13	0.77	0.10	0.05	0.79	0.16	0.15	0.80	0.05
Final Sat.:	113	213	153	59	347	45	29	459	92	81	433	27

Capacity Analysis Module:

Vol/Sat:	0.52	0.52	0.52	0.43	0.43	0.43	0.86	0.86	0.86	0.71	0.71	0.71
Crit Moves:	****			****			****					****
Delay/Veh:	15.8	15.8	15.8	14.3	14.3	14.3	33.6	33.6	33.6	21.9	21.9	21.9
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:	15.8	15.8	15.8	14.3	14.3	14.3	33.6	33.6	33.6	21.9	21.9	21.9
LOS by Move:	C	C	C	B	B	B	D	D	D	C	C	C
ApproachDel:	15.8			14.3			33.6			21.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.8			14.3			33.6			21.9		
LOS by Appr:	C			B			D			C		
AllWayAvgQ:	0.8	0.8	0.8	0.5	0.5	0.5	4.0	4.0	4.0	1.9	1.9	1.9

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Navajo Rd (NS)/Hwy 18 (EW)

Cycle (sec): 75 Critical Vol./Cap.(X): 0.509
Loss Time (sec): 6 Average Delay (sec/veh): 19.8
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	26	26	26	26	26	26	10	20	20	10	20	20
Y+R:	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lanes:	1	0	1	1	0	1	1	0	2	0	1	1

Volume Module:												
Base Vol:	161	196	107	34	194	26	66	551	239	187	446	33
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:	161	196	107	34	194	26	66	551	239	187	446	33
Added Vol:	0	45	45	0	35	0	0	117	0	35	90	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	241	152	34	229	26	66	668	239	222	536	33
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:	171	256	162	36	244	28	70	711	254	236	570	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	256	162	36	244	28	70	711	254	236	570	35
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	1.05	1.05	1.00	1.05	1.05	1.00	1.05	1.00	1.00	1.05	1.00
Final Volume:	171	269	170	36	256	29	70	746	254	236	599	35

Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.23	0.77	1.00	1.80	0.20	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	2208	1392	1700	3233	367	1700	3600	1800	1700	3600	1800

Capacity Analysis Module:												
Vol/Sat:	0.10	0.12	0.12	0.02	0.08	0.08	0.04	0.21	0.14	0.14	0.17	0.02
Crit Moves:	****						****			****		
Green/Cycle:	0.35	0.35	0.35	0.35	0.35	0.35	0.19	0.34	0.34	0.23	0.38	0.38
Volume/Cap:	0.29	0.35	0.35	0.06	0.23	0.23	0.22	0.60	0.41	0.60	0.44	0.05
Delay/Veh:	18.1	18.4	18.4	16.4	17.5	17.5	25.9	21.3	19.3	28.5	17.4	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:	18.1	18.4	18.4	16.4	17.5	17.5	25.9	21.3	19.3	28.5	17.4	14.6
LOS by Move:	B	B	B	B	B	B	C	C	B	C	B	B
HCM2kAvgQ:	3	4	4	1	2	2	2	8	5	6	5	1

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

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

Intersection #8 Central Rd (NS)/Waalew Rd (EW)

Cycle (sec): 0 Critical Vol./Cap. (X): 0.396
Loss Time (sec): 0 Average Delay (sec/veh): 10.0
Optimal Cycle: 0 Level Of Service: B

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	1! 0	0	0	1! 0	0	0	1! 0

Volume Module:

Base Vol:	36	29	32	24	70	13	8	110	50	32	71	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:	36	29	32	24	70	13	8	110	50	32	71	1
Added Vol:	14	28	0	0	36	0	0	90	18	0	69	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	57	32	24	106	13	8	200	68	32	140	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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	52	59	33	25	110	14	8	208	71	33	146	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	59	33	25	110	14	8	208	71	33	146	1
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:	52	59	33	25	110	14	8	208	71	33	146	1

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:	0.36	0.41	0.23	0.17	0.74	0.09	0.03	0.72	0.25	0.18	0.81	0.01
Final Sat.:	231	264	148	107	474	58	21	525	179	124	545	4

Capacity Analysis Module:

Vol/Sat:	0.23	0.23	0.23	0.23	0.23	0.23	0.40	0.40	0.40	0.27	0.27	0.27
Crit Moves:	****			****			****			****		
Delay/Veh:	9.5	9.5	9.5	9.6	9.6	9.6	10.6	10.6	10.6	9.7	9.7	9.7
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:	9.5	9.5	9.5	9.6	9.6	9.6	10.6	10.6	10.6	9.7	9.7	9.7
LOS by Move:	A	A	A	A	A	A	B	B	B	A	A	A
ApproachDel:	9.5			9.6			10.6			9.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.5			9.6			10.6			9.7		
LOS by Appr:	A			A			B			A		
AllWayAvgQ:	0.2	0.2	0.2	0.3	0.3	0.3	0.6	0.6	0.6	0.3	0.3	0.3

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Central Rd (NS)/Otoe Rd (EW)

Average Delay (sec/veh): 38.5 Worst Case Level Of Service: F[125.4]

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	0	1	0	1	0	0	0	0	0	1	0

Volume Module:

Base Vol:	0	172	26	5	202	0	0	0	0	17	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	172	26	5	202	0	0	0	0	17	0	1
Added Vol:	0	0	423	54	0	0	0	0	0	325	0	41
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	172	449	59	202	0	0	0	0	342	0	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	187	488	64	220	0	0	0	0	372	0	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	187	488	64	220	0	0	0	0	372	0	46

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	675	xxxx	xxxxx	xxxx	xxxx	xxxxx	779	779	431
Potent Cap.:	xxxx	xxxx	xxxxx	926	xxxx	xxxxx	xxxx	xxxx	xxxxx	367	330	629
Move Cap.:	xxxx	xxxx	xxxxx	926	xxxx	xxxxx	xxxx	xxxx	xxxxx	347	306	629
Volume/Cap:	xxxx	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	1.07	0.00	0.07

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	365	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	125	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			125.4		
ApproachLOS:	*			*			*			F		

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Central Rd (NS) at Otoe Rd / Cahuilla Rd (EW)

Cycle (sec): 68 Critical Vol./Cap. (X): 0.854
Loss Time (sec): 6 Average Delay (sec/veh): 33.5
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:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	20	20	10	10	0	0	0	0	20	0	20
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:	0	0	0	1	0	0	0	0	0	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	172	26	5	202	0	0	0	0	17	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	172	26	5	202	0	0	0	0	17	0	1
Added Vol:	0	0	423	54	0	0	0	0	0	325	0	41
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	172	449	59	202	0	0	0	0	342	0	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	187	488	64	220	0	0	0	0	372	0	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	187	488	64	220	0	0	0	0	372	0	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	187	488	64	220	0	0	0	0	372	0	46

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.00	0.28	0.72	0.24	0.76	0.00	0.00	0.00	0.00	0.90	0.00	0.10
Final Sat.:	0	499	1301	402	1375	0	0	0	0	1523	0	187

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.38	0.38	0.16	0.16	0.00	0.00	0.00	0.00	0.24	0.00	0.24
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.43	0.43	0.18	0.18	0.00	0.00	0.00	0.00	0.29	0.00	0.29
Volume/Cap:	0.00	0.87	0.87	0.87	0.87	0.00	0.00	0.00	0.00	0.83	0.00	0.83
Delay/Veh:	0.0	27.5	27.5	47.6	47.6	0.0	0.0	0.0	0.0	33.5	0.0	33.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	27.5	27.5	47.6	47.6	0.0	0.0	0.0	0.0	33.5	0.0	33.5
LOS by Move:	A	C	C	D	D	A	A	A	A	C	A	C
HCM2kAvgQ:	0	16	16	9	9	0	0	0	0	9	0	9

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Central Rd (NS)/Thunderbird Rd (EW)

Average Delay (sec/veh): 52.8 Worst Case Level Of Service: F[170.4]

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	0	1	0	0	1	0	1	0	0	1	0

Volume Module:

Base Vol:	74	158	2	0	190	33	38	0	73	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	158	2	0	190	33	38	0	73	0	0	0
Added Vol:	0	126	0	0	97	221	288	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	74	284	2	0	287	254	326	0	73	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	82	316	2	0	320	283	363	0	81	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	82	316	2	0	320	283	363	0	81	0	0	0

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	602	xxxx	xxxxx	xxxx	xxxx	xxxxx	943	944	461	984	1085	317
Potent Cap.:	985	xxxx	xxxxx	xxxx	xxxx	xxxxx	294	264	605	230	219	728
Move Cap.:	985	xxxx	xxxxx	xxxx	xxxx	xxxxx	274	241	605	185	199	728
Volume/Cap:	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	1.32	0.00	0.13	0.00	0.00	0.00

Level Of Service Module:

2Way95thQ:	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.5	xxxx	xxxx	xxxxx
Control Del:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.9	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	B	*	*	*
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	274	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	18.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	205.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	170.4	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx
ApproachLOS:	*	*	*	*	*	*	F	*	*	*	*	*

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)

Existing + Project Conditions

PM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

 Intersection #10 Central Rd (NS)/Thunderbird Rd (EW)

Cycle (sec): 60 Critical Vol./Cap. (X): 0.438
 Loss Time (sec): 8 Average Delay (sec/veh): 12.5
 Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	20	20	20	20	20	20	10	20	20	20	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	74	158	2	0	190	33	38	0	73	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	158	2	0	190	33	38	0	73	0	0	0
Added Vol:	0	126	0	0	97	221	288	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	74	284	2	0	287	254	326	0	73	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	82	316	2	0	320	283	363	0	81	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	316	2	0	320	283	363	0	81	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	82	316	2	0	320	283	363	0	81	0	0	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.99	0.01	0.00	0.53	0.47	1.00	0.00	1.00	0.00	1.00	0.00
Final Sat.:	1700	1787	13	0	955	845	1700	0	1800	0	1800	0

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.05	0.18	0.18	0.00	0.33	0.33	0.21	0.00	0.05	0.00	0.00	0.00
Crit Moves:				****						****		
Green/Cycle:	0.53	0.53	0.53	0.00	0.53	0.53	0.34	0.00	0.34	0.00	0.00	0.00
Volume/Cap:	0.09	0.33	0.33	0.00	0.63	0.63	0.63	0.00	0.13	0.00	0.00	0.00
Delay/Veh:	7.0	8.3	8.3	0.0	11.4	11.4	19.0	0.0	13.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.0	8.3	8.3	0.0	11.4	11.4	19.0	0.0	13.9	0.0	0.0	0.0
LOS by Move:	A	A	A	A	B	B	B	A	B	A	A	A
HCM2kAvgQ:	1	4	4	0	9	9	7	0	1	0	0	0

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

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HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Central Rd (NS)/Standing Rock Ave (EW)

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: D[26.3]

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 0 1 0 0 1 0 0 0 0 1 0 0
-----|-----|-----|-----|

Volume Module:

Base Vol:	0	324	10	21	355	0	0	0	0	10	0	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:	0	324	10	21	355	0	0	0	0	10	0	12
Added Vol:	0	126	36	0	97	0	0	9	0	28	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	450	46	21	452	0	0	9	0	38	7	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:	0.92	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	489	50	23	491	0	0	10	0	41	8	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	489	50	23	491	0	0	10	0	41	8	13

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	539	xxxx	xxxxxx	xxxx	1075	xxxxxx	1055	1050	514
Potent Cap.:	xxxx	xxxx	xxxxx	1040	xxxx	xxxxxx	xxxx	221	xxxxxx	205	229	565
Move Cap.:	xxxx	xxxx	xxxxx	1040	xxxx	xxxxxx	xxxx	216	xxxxxx	195	224	565
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	0.05	xxxx	0.21	0.03	0.02

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxxx	xxxx	0.1	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxxx	xxxxxx	22.4	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	*	*	*	A	*	*	*	C	*	*	*	*
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	230	xxxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	1.0	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	8.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	26.3	xxxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	D	*
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	22.4	xxxxxx	xxxxxx	xxxxxx	26.3	xxxxxx
ApproachLOS:	*	*	*	*	*	*	C	*	*	*	D	*

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Central Rd (NS)/Standing Rock Ave (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.367
Loss Time (sec): 8 Average Delay (sec/veh): 14.4
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	0	324	10	21	355	0	0	0	0	10	0	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:	0	324	10	21	355	0	0	0	0	10	0	12
Added Vol:	0	126	36	0	97	0	0	9	0	28	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	450	46	21	452	0	0	9	0	38	7	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:	0.92	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	489	50	23	491	0	0	10	0	41	8	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	489	50	23	491	0	0	10	0	41	8	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:	0	489	50	23	491	0	0	10	0	41	8	13

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.91	0.09	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.37	0.63
Final Sat.:	1700	1633	167	1700	1800	0	1700	1800	0	1700	663	1137

Capacity Analysis Module:

Vol/Sat:	0.00	0.30	0.30	0.01	0.27	0.00	0.00	0.01	0.00	0.02	0.01	0.01
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.60	0.60	0.08	0.68	0.00	0.00	0.17	0.00	0.08	0.25	0.25
Volume/Cap:	0.00	0.50	0.50	0.16	0.40	0.00	0.00	0.03	0.00	0.29	0.05	0.05
Delay/Veh:	0.0	14.1	14.1	51.6	8.5	0.0	0.0	41.9	0.0	52.8	34.2	34.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.1	14.1	51.6	8.5	0.0	0.0	41.9	0.0	52.8	34.2	34.2
LOS by Move:	A	B	B	D	A	A	A	D	A	D	C	C
HCM2kAvgQ:	0	11	11	1	8	0	0	0	0	2	1	1

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

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

Intersection #12 Central Rd (NS)/Esaws Ave (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.447
Loss Time (sec): 8 Average Delay (sec/veh): 28.7
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				Split Phase				Split Phase							
Rights:	Include				Include				Include				Include							
Min. Green:	10		14		14	10		14		14	20		20		20	20		20		20
Y+R:	2.0		2.0		2.0	2.0		2.0		2.0	2.0		2.0		2.0	2.0		2.0		2.0
Lanes:	1	0	1	0	1	1	0	1	0	1	0	0	1	0	0	0	1	0	0	1

Volume Module:

Base Vol:	8	236	107	44	239	4	2	12	10	153	13	62
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:	8	236	107	44	239	4	2	12	10	153	13	62
Added Vol:	0	162	0	0	125	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	398	107	44	364	4	2	12	10	153	13	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	9	462	124	51	422	5	2	14	12	177	15	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	462	124	51	422	5	2	14	12	177	15	72
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:	9	462	124	51	422	5	2	14	12	177	15	72

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.50	0.41	0.93	0.07	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	149	896	746	1574	134	1800

Capacity Analysis Module:

Vol/Sat:	0.01	0.26	0.07	0.03	0.23	0.00	0.02	0.02	0.02	0.11	0.11	0.04
Crit Moves:	****			****			****			****		
Green/Cycle:	0.15	0.45	0.45	0.09	0.39	0.39	0.18	0.18	0.18	0.20	0.20	0.20
Volume/Cap:	0.04	0.56	0.15	0.33	0.60	0.01	0.09	0.09	0.09	0.56	0.56	0.20
Delay/Veh:	39.8	22.9	17.7	48.1	27.9	20.3	37.5	37.5	37.5	41.9	41.9	36.9
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:	39.8	22.9	17.7	48.1	27.9	20.3	37.5	37.5	37.5	41.9	41.9	36.9
LOS by Move:	D	C	B	D	C	C	D	D	D	D	D	D
HCM2kAvgQ:	0	12	2	2	12	0	1	1	1	7	7	2

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Central Rd (NS)/Hwy 18 (EW)

Cycle (sec): 60 Critical Vol./Cap. (X): 0.388
Loss Time (sec): 6 Average Delay (sec/veh): 15.1
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	26	26	26	23	23	23	10	20	20	10	20	20
Y+R:	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lanes:	1	0	1	0	1	0	1	1	0	2	0	1

Volume Module:

Base Vol:	102	153	58	44	158	110	97	313	136	25	257	42
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:	102	153	58	44	158	110	97	313	136	25	257	42
Added Vol:	0	126	0	0	97	28	36	126	0	0	97	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	279	58	44	255	138	133	439	136	25	354	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	106	291	60	46	266	144	139	457	142	26	369	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	291	60	46	266	144	139	457	142	26	369	44
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	1.05	1.00	1.00	1.05	1.00
Final Volume:	106	291	60	46	266	144	139	480	142	26	387	44

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	3600	1800	1700	3600	1800

Capacity Analysis Module:

Vol/Sat:	0.06	0.16	0.03	0.03	0.15	0.08	0.08	0.13	0.08	0.02	0.11	0.02
Crit Moves:	****			****			****			****		
Green/Cycle:	0.42	0.42	0.42	0.42	0.42	0.42	0.16	0.32	0.32	0.16	0.32	0.32
Volume/Cap:	0.15	0.39	0.08	0.06	0.35	0.19	0.51	0.41	0.24	0.09	0.33	0.08
Delay/Veh:	11.2	12.8	10.9	10.8	12.5	11.5	25.3	16.7	15.7	22.3	16.1	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:	11.2	12.8	10.9	10.8	12.5	11.5	25.3	16.7	15.7	22.3	16.1	14.6
LOS by Move:	B	B	B	B	B	B	C	B	B	C	B	B
HCM2kAvgQ:	1	4	1	1	4	2	3	4	2	1	3	1

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #14 Central Rd (NS)/Ottawa Rd (EW)

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: C[22.7]

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 0 0 1! 0 0 0 0 1! 0 0
-----|-----|-----|-----|

Volume Module:

Base Vol:	8	295	37	32	316	5	2	14	21	20	25	52
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:	8	295	37	32	316	5	2	14	21	20	25	52
Added Vol:	0	108	0	0	83	14	18	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	403	37	32	399	19	20	14	21	20	25	52
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:	9	436	40	35	432	21	22	15	23	22	27	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	436	40	35	432	21	22	15	23	22	27	56

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	452	xxxx	xxxxx	476	xxxx	xxxxx	1027	1005	442	1004	995	456
Potent Cap.:	1119	xxxx	xxxxx	1097	xxxx	xxxxx	215	243	620	222	247	608
Move Cap.:	1119	xxxx	xxxxx	1097	xxxx	xxxxx	173	234	620	198	237	608
Volume/Cap:	0.01	xxxx	xxxx	0.03	xxxx	xxxx	0.13	0.06	0.04	0.11	0.11	0.09

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.2	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	262	xxxxx	xxxx	332	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.9	xxxxx	xxxxx	1.3	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	22.7	xxxxx	xxxxx	20.8	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	C	*
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	22.7	xxxxxx	xxxxxx	20.8	xxxxxx	xxxxxx
ApproachLOS:	*	*	*	*	*	*	C	*	*	C	*	*

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Central Rd (NS)/Ottawa Rd (EW)

Cycle (sec): 115 Critical Vol./Cap.(X): 0.370
Loss Time (sec): 8 Average Delay (sec/veh): 21.8
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	8	295	37	32	316	5	2	14	21	20	25	52
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:	8	295	37	32	316	5	2	14	21	20	25	52
Added Vol:	0	108	0	0	83	14	18	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	403	37	32	399	19	20	14	21	20	25	52
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:	9	436	40	35	432	21	22	15	23	22	27	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	436	40	35	432	21	22	15	23	22	27	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:	9	436	40	35	432	21	22	15	23	22	27	56

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.95	0.05	1.00	0.40	0.60	1.00	0.32	0.68
Final Sat.:	1700	1649	151	1700	1718	82	1700	720	1080	1700	584	1216

Capacity Analysis Module:

Vol/Sat:	0.01	0.26	0.26	0.02	0.25	0.25	0.01	0.02	0.02	0.01	0.05	0.05
Crit Moves:	****			****			****			****		
Green/Cycle:	0.17	0.58	0.58	0.09	0.50	0.50	0.09	0.17	0.17	0.09	0.17	0.17
Volume/Cap:	0.03	0.45	0.45	0.23	0.51	0.51	0.15	0.12	0.12	0.15	0.27	0.27
Delay/Veh:	39.7	13.9	13.9	49.7	19.9	19.9	49.0	40.3	40.3	49.0	41.6	41.6
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:	39.7	13.9	13.9	49.7	19.9	19.9	49.0	40.3	40.3	49.0	41.6	41.6
LOS by Move:	D	B	B	D	B	B	D	D	D	D	D	D
HCM2kAvgQ:	0	9	9	1	11	11	1	1	1	1	3	3

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Central Rd (NS)/Nisqually Rd (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: C[24.6]

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 0 1! 0 0 0 0 1 0 0 0 1
-----|-----|-----|-----|

Volume Module:

Base Vol:	31	285	5	4	296	31	46	2	28	0	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:	31	285	5	4	296	31	46	2	28	0	3	3
Added Vol:	0	99	0	0	76	7	9	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	384	5	4	372	38	55	2	28	0	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:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	36	442	6	5	429	44	63	2	32	0	3	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	36	442	6	5	429	44	63	2	32	0	3	3

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	472	xxxx	xxxxxx	448	xxxx	xxxxxx	980	979	450	994	998	445
Potent Cap.:	1100	xxxx	xxxxxx	1123	xxxx	xxxxxx	231	252	613	226	246	617
Move Cap.:	1100	xxxx	xxxxxx	1123	xxxx	xxxxxx	221	243	613	207	237	617
Volume/Cap:	0.03	xxxx	xxxx	0.00	xxxx	xxxx	0.29	0.01	0.05	0.00	0.01	0.01

Level Of Service Module:

2Way95thQ:	0.1	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.0
Control Del:	8.4	xxxx	xxxxxx	8.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	10.9
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	B
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	280	xxxxxx	237	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	1.5	xxxxxx	0.0	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	24.6	xxxxxx	20.4	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	C	*	*
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	24.6	xxxxxx	xxxxxx	xxxxxx	xxxxxx
ApproachLOS:	*	*	*	*	*	*	*	C	*	C	*	*

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 Central Rd (NS)/Nisqually Rd (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.348

Loss Time (sec): 8 Average Delay (sec/veh): 20.7

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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	31	285	5	4	296	31	46	2	28	0	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:	31	285	5	4	296	31	46	2	28	0	3	3
Added Vol:	0	99	0	0	76	7	9	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	384	5	4	372	38	55	2	28	0	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:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	36	442	6	5	429	44	63	2	32	0	3	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	442	6	5	429	44	63	2	32	0	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:	36	442	6	5	429	44	63	2	32	0	3	3

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.99	0.01	1.00	0.91	0.09	1.00	0.07	0.93	1.00	0.50	0.50
Final Sat.:	1700	1777	23	1700	1633	167	1700	120	1680	1700	900	900

Capacity Analysis Module:

Vol/Sat:	0.02	0.25	0.25	0.00	0.26	0.26	0.04	0.02	0.02	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.08	0.51	0.51	0.17	0.60	0.60	0.08	0.25	0.25	0.00	0.17	0.17
Volume/Cap:	0.25	0.49	0.49	0.02	0.44	0.44	0.44	0.08	0.08	0.00	0.02	0.02
Delay/Veh:	52.4	19.5	19.5	41.4	13.4	13.4	54.3	34.3	34.3	0.0	41.9	41.9
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:	52.4	19.5	19.5	41.4	13.4	13.4	54.3	34.3	34.3	0.0	41.9	41.9
LOS by Move:	D	B	B	D	B	B	D	C	C	A	D	D
HCM2kAvgQ:	2	11	11	0	9	9	3	1	1	0	0	0

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Joshua Rd (NS)/Waalew Rd (EW)

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: B[10.1]

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: 0 0 1! 0 0 0 0 0 0 0 0 0 1 0 0 1 0 0 0
-----|-----|-----|-----|

Volume Module:

Base Vol:	20	0	6	0	0	0	0	44	35	3	30	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	0	6	0	0	0	0	44	35	3	30	0
Added Vol:	69	0	14	0	0	0	0	0	90	18	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	0	20	0	0	0	0	44	125	21	30	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	94	0	21	0	0	0	0	46	132	22	32	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	94	0	21	0	0	0	0	46	132	22	32	0

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	188	188	112	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	178	xxxxx	xxxxxx
Potent Cap.:	806	710	946	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	1410	xxxxx	xxxxxx
Move Cap.:	796	699	946	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	1410	xxxxx	xxxxxx
Volume/Cap:	0.12	0.00	0.02	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	0.02	xxxxx	xxxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	0.0	xxxxx	xxxxxx
Control Del:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	7.6	xxxxxx	xxxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	820	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx
SharedQueue:	xxxxxx	0.5	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	0.0	xxxxxx	xxxxxx
Shrd ConDel:	xxxxxx	10.1	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	7.6	xxxxxx	xxxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	A	*	*
ApproachDel:	10.1			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #17 Joshua Rd (NS) at Cahuilla Rd (EW)

Average Delay (sec/veh): 174.3 Worst Case Level Of Service: F[360.1]

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:	5	28	29	25	34	2	3	2	2	22	1	4
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:	5	28	29	25	34	2	3	2	2	22	1	4
Added Vol:	0	0	0	108	0	0	0	478	0	0	366	83
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	28	29	133	34	2	3	480	2	22	367	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	5	29	30	137	35	2	3	495	2	23	379	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	29	30	137	35	2	3	495	2	23	379	90

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	37	xxxx	xxxxx	59	xxxx	xxxxx	599	380	36	614	366	44
Potent Cap.:	1586	xxxx	xxxxx	1558	xxxx	xxxxx	416	556	1042	407	566	1032
Move Cap.:	1586	xxxx	xxxxx	1558	xxxx	xxxxx	140	501	1042	26	510	1032
Volume/Cap:	0.00	xxxx	xxxx	0.09	xxxx	xxxx	0.02	0.99	0.00	0.87	0.74	0.09

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	494	xxxxx	xxxx	289	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.1	xxxxx	xxxxx	31.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	72.8	xxxxx	xxxxx	360	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	F	*
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	72.8	xxxxxx	xxxxxx	xxxxxx	360.1	xxxxxx
ApproachLOS:	*	*	*	*	*	*	F	*	*	*	F	*

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)

Existing + Project Conditions
PM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Joshua Rd (NS) at Cahuilla Rd (EW)

Cycle (sec): 95 Critical Vol./Cap. (X): 0.440
Loss Time (sec): 8 Average Delay (sec/veh): 25.5
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	5	28	29	25	34	2	3	2	2	22	1	4
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:	5	28	29	25	34	2	3	2	2	22	1	4
Added Vol:	0	0	0	108	0	0	0	478	0	0	366	83
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	28	29	133	34	2	3	480	2	22	367	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	5	29	30	137	35	2	3	495	2	23	379	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	29	30	137	35	2	3	495	2	23	379	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	29	30	137	35	2	3	495	2	23	379	90

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.49	0.51	1.00	0.94	0.06	1.00	0.99	0.01	1.00	0.81	0.19
Final Sat.:	1700	884	916	1700	1700	100	1700	1793	7	1700	1455	345

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.03	0.03	0.08	0.02	0.02	0.00	0.28	0.28	0.01	0.26	0.26
Crit Moves:	****			****			****			****		
Green/Cycle:	0.12	0.21	0.21	0.14	0.23	0.23	0.16	0.46	0.46	0.11	0.41	0.41
Volume/Cap:	0.03	0.16	0.16	0.60	0.09	0.09	0.01	0.60	0.60	0.13	0.64	0.64
Delay/Veh:	37.3	30.8	30.8	42.8	28.8	28.8	33.3	20.0	20.0	38.9	24.6	24.6
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:	37.3	30.8	30.8	42.8	28.8	28.8	33.3	20.0	20.0	38.9	24.6	24.6
LOS by Move:	D	C	C	D	C	C	C	C	C	D	C	C
HCM2kAvgQ:	0	1	1	5	1	1	0	11	11	1	12	12

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

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HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

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

Intersection #18 Joshua Rd (NS)/Standing Rock Ave (EW)

Cycle (sec): 0 Critical Vol./Cap.(X): 0.563
Loss Time (sec): 0 Average Delay (sec/veh): 12.8
Optimal Cycle: 0 Level Of Service: B

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	1	0 0 1	0	0	1! 0 0

Volume Module:

Base Vol:	4	42	54	3	25	11	13	54	3	19	35	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:	4	42	54	3	25	11	13	54	3	19	35	1
Added Vol:	0	0	270	0	0	0	0	45	0	207	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	42	324	3	25	11	13	99	3	226	70	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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	4	47	361	3	28	12	14	110	3	252	78	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	47	361	3	28	12	14	110	3	252	78	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	47	361	3	28	12	14	110	3	252	78	1

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:	0.01	0.11	0.88	0.08	0.64	0.28	0.12	0.88	1.00	0.76	0.23	0.01
Final Sat.:	8	83	642	44	366	161	64	485	621	480	149	2

Capacity Analysis Module:

Vol/Sat:	0.56	0.56	0.56	0.08	0.08	0.08	0.23	0.23	0.01	0.52	0.52	0.52
Crit Moves:	****			****			****			****		
Delay/Veh:	13.0	13.0	13.0	9.0	9.0	9.0	10.4	10.4	8.1	13.8	13.8	13.8
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:	13.0	13.0	13.0	9.0	9.0	9.0	10.4	10.4	8.1	13.8	13.8	13.8
LOS by Move:	B	B	B	A	A	A	B	B	A	B	B	B
ApproachDel:	13.0			9.0			10.3			13.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.0			9.0			10.3			13.8		
LOS by Appr:	B			A			B			B		
AllWayAvgQ:	1.1	1.1	1.1	0.1	0.1	0.1	0.2	0.2	0.0	0.9	0.9	0.9

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #19 Joshua Rd (NS)/Hwy 18 (EW)

Average Delay (sec/veh): 15.9 Worst Case Level Of Service: F[54.0]

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:	0	1	0	0	1	0	1	0	0	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	1	0	0	10	2	92	133	283	1	0	233	9
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:	1	0	0	10	2	92	133	283	1	0	233	9
Added Vol:	0	18	0	83	14	97	126	0	0	0	0	108
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	18	0	93	16	189	259	283	1	0	233	117
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:	1	20	0	103	18	210	287	314	1	0	258	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	20	0	103	18	210	287	314	1	0	258	130

Critical Gap Module:	North Bound			South Bound			East Bound			West Bound		
Critical Gp:	7.1	6.5	xxxxx	7.1	6.5	6.2	4.1	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
FollowUpTim:	3.5	4.0	xxxxx	3.5	4.0	3.3	2.2	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx

Capacity Module:	North Bound			South Bound			East Bound			West Bound		
Cnflct Vol:	1325	1277	xxxxx	1157	1147	258	388	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Potent Cap.:	134	168	xxxxx	175	201	785	1181	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Move Cap.:	73	127	xxxxx	126	152	785	1181	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Volume/Cap:	0.02	0.16	xxxx	0.82	0.12	0.27	0.24	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx

Level Of Service Module:	North Bound			South Bound			East Bound			West Bound		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.1	1.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	11.2	9.0	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	122	xxxxx	xxxxx	129	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
SharedQueue:	0.6	xxxxx	xxxxx	6.2	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shrd ConDel:	40.4	xxxxx	xxxxx	128.1	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Shared LOS:	E	*	*	F	*	*	*	*	*	*	*	*
ApproachDel:	40.4			54.0			xxxxxxx			xxxxxxx		
ApproachLOS:	E			F			*			*		

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)

Existing + Project Conditions

PM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Joshua Rd (NS)/Hwy 18 (EW)

 Cycle (sec): 80 Critical Vol./Cap. (X): 0.488
 Loss Time (sec): 8 Average Delay (sec/veh): 23.9
 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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	1

Volume Module:

Base Vol:	1	0	0	10	2	92	133	283	1	0	233	9
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:	1	0	0	10	2	92	133	283	1	0	233	9
Added Vol:	0	18	0	83	14	97	126	0	0	0	0	108
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	18	0	93	16	189	259	283	1	0	233	117
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:	1	20	0	103	18	210	287	314	1	0	258	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	20	0	103	18	210	287	314	1	0	258	130
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:	1	20	0	103	18	210	287	314	1	0	258	130

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	0.08	0.92	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1700	1800	0	1700	140	1660	1700	1794	6	1700	1800	1800

Capacity Analysis Module:

Vol/Sat:	0.00	0.01	0.00	0.06	0.13	0.13	0.17	0.17	0.17	0.00	0.14	0.07
Crit Moves:	****			****			****			****		
Green/Cycle:	0.13	0.25	0.00	0.13	0.25	0.25	0.28	0.53	0.53	0.00	0.25	0.25
Volume/Cap:	0.01	0.04	0.00	0.49	0.51	0.51	0.61	0.33	0.33	0.00	0.57	0.29
Delay/Veh:	30.7	22.8	0.0	34.3	26.7	26.7	27.7	11.1	11.1	0.0	28.1	24.6
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:	30.7	22.8	0.0	34.3	26.7	26.7	27.7	11.1	11.1	0.0	28.1	24.6
LOS by Move:	C	C	A	C	C	C	C	B	B	A	C	C
HCM2kAvgQ:	0	0	0	3	5	5	7	5	5	0	6	3

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

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

Intersection #20 Hwy 18 (NS)/Bear Valley Rd (EW)

Average Delay (sec/veh): 6.3 Worst Case Level Of Service: C[15.6]

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:	1	0	0	0	0	1	1	0	0	0	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	330	217	0	0	254	6	5	0	327	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	217	0	0	254	6	5	0	327	0	0	0
Added Vol:	0	90	0	0	69	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	330	307	0	0	323	6	5	0	327	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	356	331	0	0	348	6	5	0	353	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	356	331	0	0	348	6	5	0	353	0	0	0

Critical Gap Module:	North Bound			South Bound			East Bound			West Bound		
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.4	xxxx	6.2	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx

Capacity Module:	North Bound			South Bound			East Bound			West Bound		
Cnflct Vol:	355	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1392	xxxx	348	xxxx	xxxx	xxxxxx
Potent Cap.:	1215	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	158	xxxx	699	xxxx	xxxx	xxxxxx
Move Cap.:	1215	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	122	xxxx	699	xxxx	xxxx	xxxxxx
Volume/Cap:	0.29	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.04	xxxx	0.50	xxxx	xxxx	xxxxxx

Level Of Service Module:	North Bound			South Bound			East Bound			West Bound		
2Way95thQ:	1.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.1	xxxx	2.9	xxxx	xxxx	xxxxxx
Control Del:	9.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	35.8	xxxx	15.3	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	E	*	C	*	*	*
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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	15.6	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx
ApproachLOS:	*	*	*	*	*	*	C	*	*	*	*	*

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #20 Hwy 18 (NS)/Bear Valley Rd (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.660
Loss Time (sec): 6 Average Delay (sec/veh): 19.1
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	0	20	20	20	20	20	0	0	0
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	0	0	1	0	1	1	0	0	0

Volume Module:

Base Vol:	330	217	0	0	254	6	5	0	327	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	217	0	0	254	6	5	0	327	0	0	0
Added Vol:	0	90	0	0	69	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	330	307	0	0	323	6	5	0	327	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	356	331	0	0	348	6	5	0	353	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	356	331	0	0	348	6	5	0	353	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	356	331	0	0	348	6	5	0	353	0	0	0

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1700	1800	0	0	1800	1800	1700	0	1800	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.21	0.18	0.00	0.00	0.19	0.00	0.00	0.00	0.20	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.29	0.60	0.00	0.00	0.31	0.31	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.72	0.31	0.00	0.00	0.63	0.01	0.01	0.00	0.64	0.00	0.00	0.00
Delay/Veh:	25.5	6.5	0.0	0.0	21.6	15.6	15.6	0.0	21.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.5	6.5	0.0	0.0	21.6	15.6	15.6	0.0	21.8	0.0	0.0	0.0
LOS by Move:	C	A	A	A	C	B	B	A	C	A	A	A
HCM2kAvgQ:	8	3	0	0	7	0	0	0	7	0	0	0

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Milpas Dr (NS)/Hwy 18 (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: E[41.7]

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 1! 0 0 0 0 0 0 1 0 0 1! 0 0 0 1 0 0 1
-----|-----|-----|-----|

Volume Module:

Base Vol:	33	2	1	0	0	4	5	512	70	3	476	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:	33	2	1	0	0	4	5	512	70	3	476	1
Added Vol:	0	0	0	0	0	0	0	69	0	0	90	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	2	1	0	0	4	5	581	70	3	566	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:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	36	2	1	0	0	4	6	639	77	3	623	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	36	2	1	0	0	4	6	639	77	3	623	1

Critical Gap Module:

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

Capacity Module:

Cnflct Vol:	1321	1319	678	xxxxx	xxxxx	623	624	xxxxx	xxxxxx	716	xxxxx	xxxxxx
Potent Cap.:	135	158	456	xxxxx	xxxxx	490	967	xxxxx	xxxxxx	894	xxxxx	xxxxxx
Move Cap.:	133	157	456	xxxxx	xxxxx	490	967	xxxxx	xxxxxx	894	xxxxx	xxxxxx
Volume/Cap:	0.27	0.01	0.00	xxxxx	xxxxx	0.01	0.01	xxxxx	xxxxxx	0.00	xxxxx	xxxxxx

Level Of Service Module:

2Way95thQ:	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	0.0	0.0	xxxxx	xxxxxx	0.0	xxxxx	xxxxxx
Control Del:	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	12.4	8.7	xxxxx	xxxxxx	9.0	xxxxx	xxxxxx
LOS by Move:	*	*	*	*	*	B	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	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxxx	137	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx
SharedQueue:	xxxxxx	1.1	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	0.0	xxxxxx	xxxxxx
Shrd ConDel:	xxxxxx	41.7	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	9.0	xxxxxx	xxxxxx
Shared LOS:	*	E	*	*	*	*	*	*	*	A	*	*
ApproachDel:	41.7			12.4			xxxxxxx			xxxxxxx		
ApproachLOS:	E			B			*			*		

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour With Improvements

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #21 Milpas Dr (NS)/Hwy 18 (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.454
Loss Time (sec): 8 Average Delay (sec/veh): 19.8
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	33	2	1	0	0	4	5	512	70	3	476	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:	33	2	1	0	0	4	5	512	70	3	476	1
Added Vol:	0	0	0	0	0	0	0	69	0	0	90	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	2	1	0	0	4	5	581	70	3	566	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:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	36	2	1	0	0	4	6	639	77	3	623	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	2	1	0	0	4	6	639	77	3	623	1
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:	36	2	1	0	0	4	6	639	77	3	623	1

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.67	0.33	1.00	0.00	1.00	1.00	0.89	0.11	1.00	0.99	0.01
Final Sat.:	1700	1200	600	1700	0	1800	1700	1606	194	1700	1797	3

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.40	0.00	0.35	0.35
Crit Moves:	****			****			****			****		
Green/Cycle:	0.08	0.25	0.25	0.00	0.00	0.17	0.13	0.60	0.60	0.08	0.55	0.55
Volume/Cap:	0.26	0.01	0.01	0.00	0.00	0.01	0.02	0.66	0.66	0.02	0.63	0.63
Delay/Veh:	52.5	33.8	33.8	0.0	0.0	41.8	45.3	17.5	17.5	50.6	19.8	19.8
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:	52.5	33.8	33.8	0.0	0.0	41.8	45.3	17.5	17.5	50.6	19.8	19.8
LOS by Move:	D	C	C	A	A	D	D	B	B	D	B	B
HCM2kAvgQ:	2	0	0	0	0	0	0	18	18	0	16	16

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

HACIENDA AT FAIRVIEW VALLEY TRAFFIC ANALYSIS (JN 04946)
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #22 Laguna Seca Dr (NS)/Cahuilla Rd (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.629
Loss Time (sec): 8 Average Delay (sec/veh): 21.0
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	20	20	10	20	20
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	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	0	0	0	0	0	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
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	0	98	217	0	45	80	182	404	0	197	369	0
PasserByVol:	0	13	-13	0	0	0	53	-53	0	0	0	0
Initial Fut:	0	111	204	0	45	80	235	351	0	197	369	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	117	215	0	47	84	247	369	0	207	388	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	117	215	0	47	84	247	369	0	207	388	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	117	215	0	47	84	247	369	0	207	388	0

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.35	0.65	1.00	0.36	0.64	1.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	1700	634	1166	1700	648	1152	1700	1800	0	1700	1800	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.18	0.00	0.07	0.07	0.15	0.21	0.00	0.12	0.22	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.00	0.33	0.33	0.00	0.33	0.33	0.20	0.36	0.00	0.18	0.33	0.00
Volume/Cap:	0.00	0.55	0.55	0.00	0.22	0.22	0.73	0.58	0.00	0.69	0.65	0.00
Delay/Veh:	0.0	17.5	17.5	0.0	14.6	14.6	30.2	17.0	0.0	29.5	19.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	17.5	17.5	0.0	14.6	14.6	30.2	17.0	0.0	29.5	19.5	0.0
LOS by Move:	A	B	B	A	B	B	C	B	A	C	B	A
HCM2kAvgQ:	0	6	6	0	2	2	6	6	0	5	7	0

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

ATTACHMENT B

URBEMIS 2007 Version 9.2.4
Operational Emissions Outputs

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: U:\UcJobs_05600-06000\05900\05924\Urbemis\E+P Project Buildout (2008).urb924

Project Name: Hacienda at Fairview Ops Existing Plus Project 2008

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	211.50	67.78	182.07	0.01	0.54	0.54
TOTALS (lbs/day, mitigated)	210.73	57.82	177.75	0.01	0.52	0.52
Percent Reduction	0.36	14.69	2.37	0.00	3.70	3.70

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	231.58	353.95	2,572.89	2.05	327.60	67.10
TOTALS (lbs/day, mitigated)	227.48	346.88	2,521.43	2.02	321.05	65.76
Percent Reduction	1.77	2.00	2.00	1.46	2.00	2.00

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	443.08	421.73	2,754.96	2.06	328.14	67.64
TOTALS (lbs/day, mitigated)	438.21	404.70	2,699.18	2.03	321.57	66.28
Percent Reduction	1.10	4.04	2.02	1.46	2.00	2.01

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Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
Natural Gas	4.35	56.41	24.47	0.00	0.11	0.11
Hearth - No Summer Emissions						
Landscape	27.35	1.41	153.28	0.01	0.41	0.41
Consumer Products	159.75					
Architectural Coatings	19.28					
TOTALS (lbs/day, mitigated)	210.73	57.82	177.75	0.01	0.52	0.52

Area Source Changes to Defaults

- Percent residential using natural gas changed from 78% to 100%
- Percentage of residences with wood stoves changed from 10% to 0%
- Percentage of residences with wood fireplaces changed from 5% to 0%
- Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>
Single family housing	28.47	44.50	328.63	0.26	41.23	8.45
Retirement community	117.72	162.43	1,199.43	0.95	150.47	30.84
Shopping Center	81.29	139.95	993.37	0.81	129.35	26.47
TOTALS (lbs/day, mitigated)	227.48	346.88	2,521.43	2.02	321.05	65.76

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Operational Settings:

Does not include correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 17.02 Nonresidential Trip % Reduction: 21.26

Analysis Year: 2008 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

<u>Summary of Land Uses</u>						
Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	99.67	7.94	dwelling units	299.00	2,374.31	23,987.20
Retirement community	563.00	3.08	dwelling units	2,815.00	8,665.77	87,548.52
Shopping Center		41.95	1000 sq ft	200.00	8,391.00	75,292.44
					19,431.08	186,828.16

<u>Vehicle Fleet Mix</u>				
Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	47.1	1.9	97.9	0.2
Light Truck < 3750 lbs	10.1	5.0	90.0	5.0
Light Truck 3751-5750 lbs	20.8	1.0	98.5	0.5
Med Truck 5751-8500 lbs	11.2	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	11.1	88.9
Heavy-Heavy Truck 33,001-60,000 lbs	1.8	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0

<u>Vehicle Fleet Mix</u>				
Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.1	75.6	24.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.3	7.7	84.6	7.7

<u>Travel Conditions</u>						
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Shopping Center				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: U:\UcJobs_05600-06000\05900\05924\Urbemis\E+P Project Buildout (2008).urb924

Project Name: Hacienda at Fairview Ops Existing Plus Project 2008

Project Location: San Bernadino County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	185.66	92.20	39.78	0.16	2.22	2.20
TOTALS (lbs/day, mitigated)	184.89	82.24	35.46	0.16	2.20	2.18
Percent Reduction	0.41	10.80	10.86	0.00	0.90	0.91

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	246.60	419.25	2,523.81	1.75	327.60	67.10
TOTALS (lbs/day, mitigated)	241.90	410.87	2,473.34	1.71	321.05	65.76
Percent Reduction	1.91	2.00	2.00	2.29	2.00	2.00

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
TOTALS (lbs/day, unmitigated)	432.26	511.45	2,563.59	1.91	329.82	69.30
TOTALS (lbs/day, mitigated)	426.79	493.11	2,508.80	1.87	323.25	67.94
Percent Reduction	1.27	3.59	2.14	2.09	1.99	1.96

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Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
Natural Gas	4.35	56.41	24.47	0.00	0.11	0.11
Hearth	1.51	25.83	10.99	0.16	2.09	2.07
Landscaping - No Winter Emissions						
Consumer Products	159.75					
Architectural Coatings	19.28					
TOTALS (lbs/day, mitigated)	184.89	82.24	35.46	0.16	2.20	2.18

Area Source Changes to Defaults

Percent residential using natural gas changed from 78% to 100%

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>
Single family housing	30.85	52.73	321.37	0.22	41.23	8.45
Retirement community	118.58	192.44	1,172.92	0.81	150.47	30.84
Shopping Center	92.47	165.70	979.05	0.68	129.35	26.47
TOTALS (lbs/day, mitigated)	241.90	410.87	2,473.34	1.71	321.05	65.76

Operational Settings:

Does not include correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 17.02 Nonresidential Trip % Reduction: 21.26

Analysis Year: 2008 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

<u>Summary of Land Uses</u>						
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Shopping Center		41.95	1000 sq ft	200.00	8,391.00	75,292.44
					19,431.08	186,828.16

<u>Vehicle Fleet Mix</u>				
Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	47.1	1.9	97.9	0.2
Light Truck < 3750 lbs	10.1	5.0	90.0	5.0
Light Truck 3751-5750 lbs	20.8	1.0	98.5	0.5
Med Truck 5751-8500 lbs	11.2	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	11.1	88.9
Heavy-Heavy Truck 33,001-60,000 lbs	1.8	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0

<u>Vehicle Fleet Mix</u>				
Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.1	75.6	24.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.3	7.7	84.6	7.7

<u>Travel Conditions</u>						
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
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Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Shopping Center				2.0	1.0	97.0