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HYDROGEN ENERGY CALIFORNIA
KERN COUNTY, CALIFORNIA

TRAFFIC STUDY
TECHNICAL MEMORANDUM
(REVISION 2)

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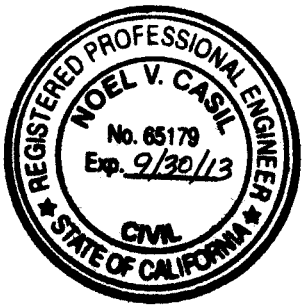

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URS Project Number 28068052

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TABLE OF CONTENTS

1.0 INTRODUCTION 1-1

2.0 SUMMARY OF TRAFFIC STUDY UPDATES 2-1
2.1 PROJECT CONSTRUCTION TRIP GENERATION 2-1
2.2 PROJECT OPERATIONS TRIP GENERATION 2-1
2.3 STUDY INTERSECTIONS 2-1
2.4 NEW ROADWAY SEGMENT ANALYSIS 2-2
2.5 REVISED AND NEW TRAFFIC FIGURES 2-2
2.6 TI INDEX ANALYSIS 2-2
2.7 AUTOTURN ANALYSIS 2-2
2.8 CALTRANS REQUESTED MODELING 2-2
2.9 TRAFFIC MITIGATION MEASURES TABLE 2-2

3.0 EXISTING TRAFFIC CONDITIONS 3-1
3.1 EXISTING INTERSECTION ANALYSIS 3-1
3.2 EXISTING ROADWAY SEGMENT ANALYSIS 3-1

4.0 PROJECT TRIP GENERATION SUMMARIES 4-1
4.1 PROJECT CONSTRUCTION TRIP GENERATION 4-1
4.2 PROJECT OPERATION TRIP GENERATION 4-2

5.0 PROJECT CONSTRUCTION TRAFFIC ASSESSMENT 5-1
5.1 SIGNIFICANT IMPACT CRITERIA AND THRESHOLDS OF SIGNIFICANCE 5-1
5.1.1 Significant Impact Criteria 5-1
5.1.2 Thresholds of Significance 5-1
5.2 YEAR 2016 BASELINE NO PROJECT CONDITIONS 5-1
5.2.1 Year 2016 Baseline No Project Intersection Analysis 5-1
5.2.2 Year 2016 Baseline No Project Roadway Segment Analysis 5-7
5.3 YEAR 2016 PROJECT CONSTRUCTION CONDITIONS 5-7
5.3.1 Year 2016 Project Construction Intersection Analysis 5-8
5.3.2 Year 2016 Project Construction Roadway Segment Analysis 5-8

6.0 PROJECT OPERATIONS TRAFFIC ASSESSMENT 6-1
6.1 YEAR 2017 BASELINE NO PROJECT CONDITIONS 6-1
6.1.1 Year 2017 Baseline No Project Intersection Analysis 6-1
6.1.2 Year 2017 Baseline No Project Roadway Segment Analysis 6-1
6.2 YEAR 2017 PROJECT OPERATIONS CONDITIONS – ALTERNATIVE 1 TRAIN OPTION 6-1
6.2.1 Year 2017 Project Operations Intersection Analysis – Alternative 1 Train Option 6-7
6.2.2 Year 2017 Project Operations Roadway Segment Analysis – Alternative 1 Train Option 6-8
6.3 YEAR 2017 PROJECT OPERATIONS CONDITIONS – ALTERNATIVE 2 TRUCK OPTION 6-13

6.3.1 Year 2017 Project Intersection Analysis – Alternative 2 Truck Option 6-13
6.3.2 Year 2017 Project Operations Roadway Segment Analysis – Alternative 2 Truck Option 6-19

7.0 TRAFFIC INDEX ANALYSIS 7-1

8.0 AUTOTURN ANALYSIS 8-1
8.1 PROJECT CONSTRUCTION AND OPERATIONS AUTOTURN ANALYSIS 8-1

9.0 CALTRANS COORDINATION AND REQUESTED ANALYSIS 9-1
9.1 UPDATED TRIP ASSIGNMENT USING STOCKDALE HIGHWAY 9-3
9.2 SYNCHRO ANALYSIS ALONG STOCKDALE AT I-5 RAMPS AND SR 43 9-3

10.0 MITIGATION 10-1
10.1 PROJECT CONSTRUCTION MITIGATIONS 10-1
10.1.1 Level of Significance after Mitigation 10-4
10.2 PROJECT OPERATIONS MITIGATIONS 10-4
10.2.1 Level of Significance after Mitigation 10-4

11.0 CONCLUSIONS 11-1

12.0 REFERENCES 12-1

List of Tables

Table 3-1 Existing Intersection Levels of Service
Table 3-2 Peak-Hour Roadway Segment LOS – Existing Conditions

Table 4-1 Anticipated Project Construction Trip Generation
Table 4-2 Project Operations Trip Generation (Alternative 1 – Rail Option)
Table 4-3 Project Operations Trip Generation (Alternative 2 – Truck Option)

Table 5-1 Peak-Hour Intersection LOS – Year 2016 No Project Conditions
Table 5-2 Peak-Hour Roadway Segment LOS – Year 2016 No Project Conditions
Table 5-3 Peak-Hour Intersection LOS – Year 2016 Project Construction Conditions
Table 5-4 Peak-Hour Roadway Segment LOS – Year 2016 Project Construction Conditions

Table 6-1 Peak-Hour Intersection LOS – Year 2017 No Project Conditions
Table 6-2 Peak-Hour Roadway Segment LOS – Year 2017 No Project Conditions
Table 6-3 Peak-Hour Intersection LOS – Year 2017 Project Operations Conditions – Alternative 1
Table 6-4 Peak-Hour Roadway Segment LOS – Year 2017 Project Operations Conditions – Alternative 1
Table 6-5 Peak-Hour Intersection LOS – Year 2017 Project Operations Conditions – Alternative 2
Table 6-6 Peak-Hour Roadway Segment LOS – Year 2017 Project Operations Conditions – Alternative 2

Table 7-1 Roadway Segment ADT Volume for Traffic Index Analysis Existing Traffic Volume
Table 7-2 Roadway Segment ADT Volume for Traffic Index Analysis Year 2016 Project Construction
Table 7-3 Roadway Segment ADT Volume for Traffic Index Analysis Year 2017 Project Operations – Alternative 1
Table 7-4 Roadway Segment ADT Volume for Traffic Index Analysis Year 2017 Project Operations – Alternative 2

Table 8-1 Project Construction and Operations AutoTurn Analysis Summary

Table 9-1 2016 Project Construction Synchro Analysis Results at SR 119/Tupman Road
Table 9-2 2017 Project Operation (Alternative 1 – Rail Option, and Alternative 2 – No Rail Option) Synchro Analysis at SR 119/Tupman Road
Table 9-3 2016 Baseline No Project Synchro Analysis Results
Table 9-4 2016 Project Construction Synchro Analysis Results (No Mitigation)
Table 9-5 2016 Project Construction Synchro Analysis Results (With Mitigation)
Table 9-6 2017 Baseline No Project Synchro Analysis Results
Table 9-7 2017 Project Operation Synchro Analysis Results Alternative 1 Train Option (No Mitigation)
Table 9-8 2017 Project Operation Synchro Analysis Results at I-5 Ramps/Stockdale Highway Alternative 2 Truck Option (No Mitigation)

Table 9-9 2017 Project Operation Synchro Analysis Results at I-5 Ramps/Stockdale Highway Alternative 1 Train Option (With Mitigation)
Table 9-10 2017 Project Operation Synchro Analysis Results at I-5 Ramps/Stockdale Highway Alternative 2 Truck Option (With Mitigation)

Table 10-1 Summary Table of Mitigation Measures

List of Figures

Figure 3-1 Regional Vicinity
Figure 3-2 Transportation Setting of the Local Project Area and Affected Roadways
Figure 3-3 Existing Traffic Volumes
Figure 3-4 Existing Intersection Geometrics

Figure 4-1 Project Construction Added Trips
Figure 4-2 Project Distribution as Percent of Construction Trip Generation
Figure 4-3 Project Operations Added Trips – Alternative 1 Train Option
Figure 4-4 Project Operations Added Trips – Alternative 2 Truck Option
Figure 4-5 Project Distribution as Percent of Operation Trip Generation – Alternative 1 Train Option
Figure 4-6 Project Distribution as Percent of Operation Trip Generation – Alternative 2 Truck Option

Figure 5-1 Year 2016 No Project Traffic Volumes
Figure 5-2 Year 2016 Project Construction Traffic Volumes

Figure 6-1 Year 2017 No Project Traffic Volumes
Figure 6-2 Year 2017 Project Operations Traffic Volumes – Alternative 1 Train Option
Figure 6-3 Year 2017 Project Operations Traffic Volumes – Alternative 2 Truck Option

Figure 9-1 I-5 Southbound Ramps/Stockdale Highway Traffic Signal Mitigation Concept
Figure 9-2 SR 43/Stockdale Highway Traffic Signal Mitigation Concept

List of Appendices

Appendix A Traffic Counts
Appendix B LOS Calculation Worksheets
Appendix C AutoTurn Analysis Layouts
Appendix D Traffic Warrant Analysis
Appendix E Synchro Analysis Worksheets

List of Acronyms

AADT	annual average daily traffic
ADT	average daily traffic
AFC	Application for Certification
Caltrans	California Department of Transportation
CEC	California Energy Commission
EB	eastbound
E/W	east/west
HECA	Hydrogen Energy California
I-5	Interstate 5
LOS	level of service
NB	northbound
NDS	National Data Services
N/S	north/south
O&M	operations and maintenance
PCE	Passenger Car Equivalent
petcoke	petroleum coke
Project	HECA power generating facility
Roads Department	Kern County Roads Department
SB	southbound
sec/veh	seconds per vehicle
SJVRR	San Joaquin Valley Railroad
SR	State Route
TDM	Transportation Demand Management
TI	traffic index
URS	URS Corporation
V/C	volume-to-capacity
WB	westbound

1.0 INTRODUCTION

In May 2012, Hydrogen Energy California LLC (HECA LLC or Applicant) filed an Amended Application for Certification (Amended AFC) with the California Energy Commission (CEC) seeking approval to construct and operate the Hydrogen Energy California (HECA) Project. The Project includes two alternative transportation methods for coal delivery. Alternative 1 consists of transporting coal via a new 5-mile railroad spur constructed from the existing San Joaquin Valley Railroad to the HECA Project Site. Alternative 2 consists of transporting coal via trucks from an existing transloading facility approximately 27 miles northeast of the HECA Project Site.

The Amended AFC included an evaluation of traffic and transportation impacts of Alternatives 1 and 2, and identified mitigation measures proposed to address potentially significant impacts. In late December 2012, the Applicant's team was provided with an overview of Kern County Roads Department's (Roads Department) request for additional details required to complete a Traffic Impact Study for the Project that would provide the basis for County input to the CEC related to potential traffic impacts. This overview was then formalized into two letters from the Planning and Community Development Department: a February 26, 2013, letter to the Board of Supervisors; and a March 6, 2013, letter to the CEC. URS Corporation (URS) and HECA LLC also had a teleconference with the Roads Department on February 26, 2013, to clarify details of their requested data requirements. URS then submitted a Traffic Study Technical Memorandum to the Roads Department in April 2013 to address the County's requests. The Roads Department provided comments on the Traffic Study in May 2013, and URS submitted a Revised Traffic Study Technical Memorandum in June 2013 (referred to herein as the June 2013 Traffic Study) to address those County comments.

Subsequent to submitting the June 2013 Traffic Study, URS completed an evaluation of alternatives to the State Route (SR) 119/Tupman Road signalization, based on requests by the California Department of Transportation (Caltrans). Caltrans had previously expressed concerns regarding the signalization of SR 119/Tupman in an October 2012 letter to URS. Consequently, URS and HECA had various technical discussions with Caltrans, including in-person meetings on March 5, 2013; May 30, 2013; and June 27, 2013. Based on these meetings, alternatives to the SR 119/Tupman Road signalization were evaluated, and alternative mitigation was identified.

This July 2013 Traffic Study, Revision 2 (referred to herein as the July 2013 Traffic Study) incorporates the results of the evaluation of alternatives conducted in consultation with Caltrans. Based on the results of this evaluation, the improvements proposed to mitigate traffic impacts previously presented in the June 2013 Traffic Study have been revised, and are presented herein. As shown, minimal traffic pattern adjustments eliminated the previous construction traffic impact at SR 119/Tupman Road; therefore, a signal at this intersection is no longer required to mitigate traffic impacts. The traffic pattern adjustments resulted in impacts at Interstate 5 (I-5) Southbound Ramps/Stockdale Highway, and a signal is now proposed at this intersection that will mitigate traffic impacts.

This technical memorandum is intended to satisfy both the Roads Department's and Caltrans' requested analyses to evaluate potential construction and operations traffic impacts for the HECA Project. Specifically, this memorandum addresses all of the following:

- Comments by the Roads Department outlined in a February 26, 2013 letter from Ms. Lorelei Oviatt, Kern County Planning and Community Development Department, to the Kern County Board of Supervisors;

- Comments by the Roads Department on the Amended AFC emailed to URS on February 26, 2013;

- Information requested during a teleconference between URS and the Roads Department on February 26, 2013; and

- Results of a revised traffic analysis based on updated Project trip generation data for Project construction and operations.

- Requests by Caltrans for an evaluation of alternatives to the SR 119/Tupman Road signalization, including the signalization of I-5 Southbound Ramps/Stockdale Highway. The aforementioned updates are herein incorporated in this July 2013 Traffic Study, Revision 2 technical memorandum.

To address the aforementioned items, this technical memorandum contains the following sections:

- Section 2 summarizes the traffic study elements that have been updated since the filing of the Amended AFC, as well as revisions related to Caltrans' requests;
- Section 3 summarizes existing traffic conditions;
- Section 4 summarizes Project trip generation for construction and operations;
- Section 5 presents the traffic assessment for Project construction;
- Section 6 presents the traffic assessment for Project operations;
- Section 7 provides the roadway segment annual average daily traffic (AADT) values for the Traffic Index (TI) analysis that will be completed by the Roads Department;
- Section 8 summarizes the assumptions and results of the preliminary roadway radius analysis;
- Section 9 summarizes discussions with Caltrans, and subsequent modeling conducted to address Caltrans' concerns and requests;
- Section 10 summarizes the proposed mitigation measures;
- Section 11 summarizes the conclusions of the updated traffic study; and
- Section 12 presents the references cited in this report.

The updated traffic analyses presented in this technical memorandum supersede the technical analyses contained in Section 5.10, Traffic and Transportation, of the Amended AFC. Elements of the Amended AFC analysis are incorporated where needed, and updated data/information are identified to facilitate the review process.

2.0 SUMMARY OF TRAFFIC STUDY UPDATES

The following summaries describe traffic study elements that have been updated since the filing of the Amended AFC in May 2012, and which are reflected in this technical memorandum. In addition, as a result of coordination with Caltrans as described in Section 9 of this technical memorandum, changes were made with respect to the Project construction worker traffic route and the evaluation of alternatives to the SR 119/Tupman Road signalization.

2.1 PROJECT CONSTRUCTION TRIP GENERATION

The Project construction trip generation information presented in Table 5-1 is the same as that presented in the Amended AFC. No updates regarding construction traffic volumes were necessary. Although there was no change in the construction traffic volumes, the traffic routing of Project construction worker traffic was revised. The modeling results presented in the June 2013 Traffic Study assumed that construction worker traffic would use Tupman Road and SR 119 towards Bakersfield. In response to Caltrans' staff recommendation to evaluate alternative mitigations to the SR 119/Tupman Road signal proposal, construction worker traffic was reassigned to use Stockdale Highway towards Bakersfield. Caltrans' comments are discussed further in Section 9 of this study. The results of the revised construction traffic modeling are summarized in Section 5 of this July 2013 Traffic Study.

2.2 PROJECT OPERATIONS TRIP GENERATION

Project operations trip generation data for Alternative 1 (Train Option) and Alternative 2 (Truck Option) were updated in the April 2013 Traffic Study, and are summarized in Section 4, Project Trip Generation Summaries. The update resulted in revision of the TRAFFIX modeling analysis for intersections previously presented in the Amended AFC; the revised analysis is presented below in Sections 5 and 6. The updated data were also used for the new roadway segment analysis calculations requested by the Roads Department. There are no changes to Project operations trip generation data in this July 2013 Traffic Study from those presented in the previous June 2013 Traffic Study submitted to the County. Revised Project operations traffic modeling associated with the worker reroute is summarized in Section 6 of this July 2013 Traffic Study.

2.3 STUDY INTERSECTIONS

In response to a CEC informational request, the intersection of Wasco Way and SR 58 was evaluated under existing Project construction and operations conditions. This change was prompted by the need to minimize evening construction workers using Stockdale Highway and I-5 ramps. The incorporation of this study intersection resulted in the addition of TRAFFIX model link towards SR 58. This update resulted in added traffic at the intersection of Wasco Way and SR 58, but did not result in Project construction impacts.

Additionally, the TRAFFIX model link for SR 58 was extended east to connect with SR 43, resulting in routed traffic at SR 43/SR 58 (Rosedale Highway West) and SR 43/SR 58 (Rosedale Highway East), but this did not result in project construction impacts.

2.4 NEW ROADWAY SEGMENT ANALYSIS

As requested by the Roads Department, new roadway segment analyses were conducted to address potential impacts along roadways used by the Project. The analyses are presented in Sections 5 and 6.

2.5 REVISED AND NEW TRAFFIC FIGURES

As requested by the Roads Department, revisions to the Amended AFC figures and new figures were developed to show added trips during Project construction and operation. These include Figures 4-1 through 4-6, Figure 5-2, and Figures 6-2 and 6-3. Also included as new figures in this report are the mitigation concept plans for the two Caltrans intersections at I-5 Southbound Ramps/Stockdale Highway (illustrated in Figure 9-1) and the SR 43/Stockdale Highway (illustrated in Figure 9-2).

2.6 TI INDEX ANALYSIS

URS provided the Roads Department with TI data on February 25, 2013; that data reflected the assumption that all trucks would travel to the Project Site via Morris Road, as discussed with the Roads Department in previous meetings. However, subsequent to submitting the data, it was determined that the Project still needs to maintain access at Dairy Road, as well as Morris Road, during Project construction and operation. The TI data tables in Section 7 have been updated to incorporate the worker vehicle rerouting; therefore, those tables supersede what was provided to the Roads Department in the June 2013 Traffic Study. However, the changes do not affect truck traffic, and primarily relate to the worker vehicle average daily traffic; therefore, they should not affect the TI findings from the June 2013 Traffic Study data.

2.7 AUTOTURN ANALYSIS

As requested by the Roads Department, a roadway radius analysis (AutoTurn analysis) is provided in Section 8; this is the same analysis provided to the Roads Department in the June 2013 Traffic Study.

2.8 CALTRANS REQUESTED MODELING

Based on Caltrans concerns regarding the previously proposed signalization of SR 119/Tupman Road, and on subsequent discussions with Caltrans District 6 staff, URS evaluated alternatives to installing a signal on SR 119. Based on this evaluation, construction vehicles leaving the Project Site during the p.m. peak hour, which were previously assigned to Tupman Road southbound/ SR 119 eastbound, were reassigned to Stockdale Highway eastbound. This reassignment of construction vehicles resulted in the elimination of the signal at SR 119/Tupman Road, and in the need for a new signal mitigation at I-5 Southbound Ramps/Stockdale Highway. The results of this revised modeling are presented in Section 9 of this July 2013 Traffic Study.

2.9 TRAFFIC MITIGATION MEASURES TABLE

As requested by the Roads Department, a summary table of all the proposed mitigation measures is provided in Table 9-1, Summary Table of Mitigation Measures.

3.0 EXISTING TRAFFIC CONDITIONS

3.1 EXISTING INTERSECTION ANALYSIS

The Project will be located approximately 1.5 miles northwest of the unincorporated community of Tupman. The regional vicinity map of the Project in the surrounding region is depicted on Figure 3-1, Regional Vicinity. The Project location, including major roads, local streets, and highways in the immediate vicinity of the Project, is illustrated on Figure 3-2, Transportation Setting of the Local Project Area and Affected Roadways. The existing traffic volumes in the vicinity of the Project are shown on Figure 3-3, Existing Traffic Volumes (a.m./p.m. peak). The existing geometric configuration of roadway segments and intersections in the vicinity of the Project Site is shown on Figure 3-4, Existing Intersection Geometrics.

The existing traffic volumes are based on traffic counts collected by National Data Services (NDS) in February 2012. The intersection turning movement counts are included in Appendix A. The level of service (LOS) calculation worksheets are provided in Appendix B.

The results of the existing intersection conditions analysis is provided in Table 3-1. This table duplicates Amended AFC Table 5.10-2, with the exception that the intersection of Wasco Way at SR 58 is included, based on a CEC informational request.

As shown in Table 3-1, all study intersections are operating at LOS C or better during both a.m. and p.m. peak hours, with the exception of the intersection of SR 119/Tupman Road, which is currently operating at LOS F during the p.m. peak hour. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets.

3.2 EXISTING ROADWAY SEGMENT ANALYSIS

The results of the existing roadway segment analysis are shown in Table 3-2 below. The roadway segments identified in Table 3-2 were selected based on discussions with Roads Department staff during previous meetings regarding the TI analysis. The roadway segment LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets.

As shown in Table 3-2, all study roadway segments are currently operating at LOS C or better during both the a.m. and p.m.

Table 3-1
Existing Intersection Levels of Service

Intersection	Control	a.m. Peak Hour		p.m. Peak Hour	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1. I-5 NB Ramp/Stockdale Highway	Unsignalized	8.8	A	11.5	B
2. I-5 SB Ramp/Stockdale Highway	Unsignalized	9.2	A	13.2	B
3. I-5 NB Ramp/SR 119	Unsignalized	11.2	B	17.7	C
4. I-5 SB Ramp/SR 119	Unsignalized	12.0	B	18.0	C
5. SR 119/SR 43	Signalized	25.3	C	23.0	C
6. SR 43/Stockdale Highway	Unsignalized	11.3	B	22.8	C
7. Stockdale Highway/Morris Road	Unsignalized	8.8	A	9.3	A
8. SR 119/Tupman Road	Unsignalized	19.3	C	**65.4**	**F**
9. Tupman Road/Grace Avenue	Unsignalized	7.0	A	7.0	A
10. Tupman Road/Station Road	Unsignalized	8.6	A	8.6	A
11. Dairy Road/Stockdale Highway	Unsignalized	8.7	A	9.7	A
12. Dairy Road/Adohr Road	Unsignalized	9.0	A	8.8	A
13. SR 43/Poso Avenue	Unsignalized	10.6	B	11.5	B
14. SR 43/Kimberlina Road	Signalized	23.8	C	20.9	C
15. SR 43/Shafter Avenue	Signalized	12.8	B	12.8	B
16. SR 43/Central Avenue	Signalized	9.0	A	10.4	B
17. SR 43/Lerdo Highway	Signalized	22.1	C	21.6	C
18. SR 43/7th Standard Road	Unsignalized	11.5	B	19.9	C
19. SR 43/SR 58 (Rosedale Hwy West)	Unsignalized	10.6	B	13.6	B
20. SR 43/SR 58 (Rosedale Hwy East)	Unsignalized	10.7	B	14.7	B
21. H Street/9th Street	Unsignalized	8.5	A	8.7	A
22. H Street/Wasco Avenue	Unsignalized	8.7	A	8.9	A
23. Wasco Avenue/Poso Avenue	Unsignalized	10.2	B	10.6	B
24. Wasco Avenue/Kimberlina Road	Unsignalized	10.2	B	10.2	B
25. J Street/9th Street	Unsignalized	8.5	A	8.6	A
26. Wasco Way/SR 58	Unsignalized	13.5	B	13.5	B

Notes:

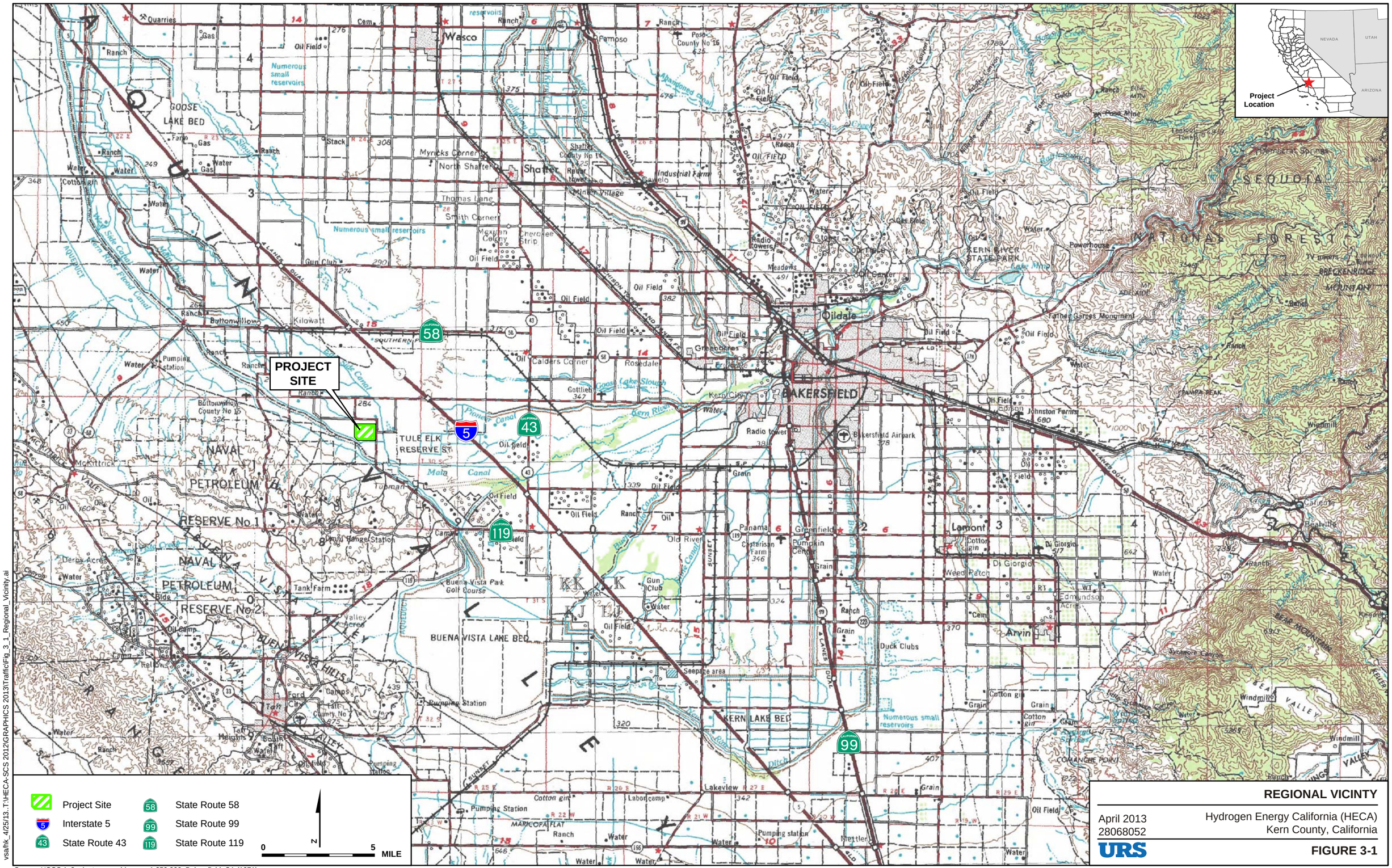
a.m./p.m. = morning/evening
I-5 = Interstate 5
LOS = level of service
NB/SB = northbound/southbound
sec/veh = seconds per vehicle
SR = State Route

Table 3-2
Peak-Hour Roadway Segment LOS –
Existing Conditions

Roadway Segment	a.m. Peak Hour		p.m. Peak Hour	
	V/C	LOS	V/C	LOS
1. SR 43 between Stockdale Highway and SR 58	0.19	B	0.19	B
2. Stockdale Highway between I-5 and SR 43	0.15	B	0.31	C
3. Stockdale Highway between Morris Road and I-5	0.07	B	0.13	B
4. Wasco Way between Stockdale Hwy and Brite Road	0.06	A	0.08	A
5. Dairy Road between Stockdale Hwy and Adohr Road	0.01	A	0.01	A
6. Morris Road between Stockdale Hwy and Station Rd	0.01	A	0.01	A
7. Station Road between Tupman Road and Morris Road	0.01	A	0.01	A
8. Tupman Road between SR 119 and Grace Road	0.01	A	0.01	A
9. SR 119 between Tupman Road and SR 43	0.29	C	0.37	C
10. SR 119 between Tupman Road and Access Road	0.29	C	0.37	C
11. Wasco Ave between Poso Ave and Kimberlina Ave	0.05	A	0.07	A
12. SR 58 between Wasco Way and I-5	0.19	B	0.22	B

Notes:

a.m./p.m. = morning/evening
I-5 = Interstate 5
LOS = level of service
V/C = volume-to-capacity ratio
SR = State Route


PROJECT SITE
Project Site
Interstate 5
State Route 43
State Route 58
State Route 99
State Route 119
0
5
MILE
N
Project Location
NEVADA
UTAH
ARIZONA
Wasco
Shafter
Wasco
Famoso
Oildale
BAKERSFIELD
Arvin
Lamont
Edmundson Acres
Weed Patch
Di Giorgio
Buttonwillow
Kilowatt
Rosedale
Caldars Corner
Gosford
Greenfield
Panama
Old River
Lakeview
Taft
Taft Heights
Fellows
Maricopa
Derby Acres
Valley Acres
Tule Elk Reserve
Naval Petroleum Reserve No 1
Naval Petroleum Reserve No 2
Buena Vista Lake Bed
Kern Lake Bed
Buena Vista Hills
Goose Lake Bed
Sequoia National Forest
Kern River
Pioneer Canal
Main Canal
Buena Vista Golf Course
Kern River Golf Course
Bakersfield Airport
Kern River Flood Canal
Aqueduct
Southern Pacific
Atchison Topeka and Santa Fe
4 Lanes Dual
Numerous small reservoirs
Oil Field
Oil Fields
Water
Ranch
Cem.
Gas
Quarries
Pumping Station
Tank Farm
Oil Camp
Labor camp
Cotton gin
Grain
Windmill
Radio tower
Radio towers
TV towers
Powerhouse
Lookout Tower
Meadows
Golf Course
Duck Clubs
Seepage area
Kern River Ditch
Sunset
Valley
Mountain
Peak
Canyon
Creek
Slough
Lake
Gun Club
Camp
Station
Airpark
Heights
Acres
Farm
Industrial Farms
Thomas Lane
Smith Corner
Myricks Corner
North Shafter
Mexican Colony
Cherokee Strip
Minner Village
Stack
Cottonwood
Kern River Park
Kern River State Park
Father Garces Monument
Tehachapi Mountains
Breckenridge Mountain
Bear Mountain
Caliente
Keene
Tunis
Comanche Point
Pampa Peak
Mt. Adelaide
Johnston Farms
Di Giorgio
Cotton gin
Labor camp
Pumping station
Pumping Station
Water
Ranch
Oil Field
Oil Fields
Oil Center
Oil Camp
Gas Field
Radio Towers
Radio tower
Windmill
Grain
Cotton gin
Powerhouse
Lookout Tower
Tehachapi Mountains
Caliente
Keene
Tunis
Bakersfield Airpark
Edmundson Acres
Weed Patch
Di Giorgio
Arvin
Lamont
Panama
Old River
Greenfield

R4 HWY

BM 287

BM 297

Bowerbank

Gas Wells

Gas Well

BM 293

BM 288

BM 290

SOUTHERN

Landing Strip

EAST SIDE DEPOT

Reservoir

Oil Well

DRAIN

CANAL

Deep Wells Ranch

Well

ROAD

WELLS

UNDER CONSTRUCTION

R5 HWY

BELLEVUE

SR-58: State Highway facility located north of the project site. AADT is 16,000 vehicles per day. Peak-hour is 2,150 vehicles per hour. Trucks = 32%.

Stockdale Highway: Highway facility located north of the project site. Two lanes (one in each direction) with a posted speed limit of 55 mph.

Project Site
Construction Staging Area
Railroad[1]
Carbon Dioxide
Natural Gas[1]
Potable Water
Process Water
Transmission

N

0 1,000 2,000 FEET

Note:
1. Feature temporarily designated as confidential

Sources: USGS (7.5' quads: Buttonwillow 1976, East Elk Hills 1977, Tupman 1977, Stevens, 1977). Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. HECA Project Team (Traffic Data, 2009).

TRANSPORTATION SETTING OF THE LOCAL PROJECT AREA AND AFFECTED ROADWAYS

April 2013
28068052

Hydrogen Energy California (HECA)
Kern County, California

URS

FIGURE 3-2 (1)

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R5 HWY — Stockdale Highway: Highway facility located north of the project site. Two lanes (one in each direction) with a posted speed limit of 55 mph.

R6 COL — Tupman Road: Collector facility located east of the project site. Two lanes (one in each direction) with a posted speed limit of 55 mph.

R7 COL — Station Road: Collector facility located southeast of the project site. Two lanes (one in each direction) with no posted speed limit.

R8 COL — Morris Road: Collector facility located northeast of the project site. Two lanes (one in each direction) with no posted speed limit.

R9 COL — Dairy Road: Collector facility located northwest of the project site. Two lanes (one in each direction) with no posted speed limit.

R10 COL — Adohr Road: Collector facility located north of the project site. Two lanes (one in each direction) with no posted speed limit.

Truck Route
Project Site
Construction Staging Area
Railroad[1]
Carbon Dioxide
Natural Gas[1]
Potable Water
Process Water
Transmission

Note:
1. Feature temporarily designated as confidential

0 1,000 2,000 FEET

TRANSPORTATION SETTING OF THE LOCAL PROJECT AREA AND AFFECTED ROADWAYS

April 2013
28068052

Hydrogen Energy California (HECA)
Kern County, California

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FIGURE 3-2 (2)

Sources: USGS (7.5' quads: Buttonwillow 1976, East Elk Hills 1977, Tupman 1977, Stevens, 1977). Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. HECA Project Team (Traffic Data, 2009).

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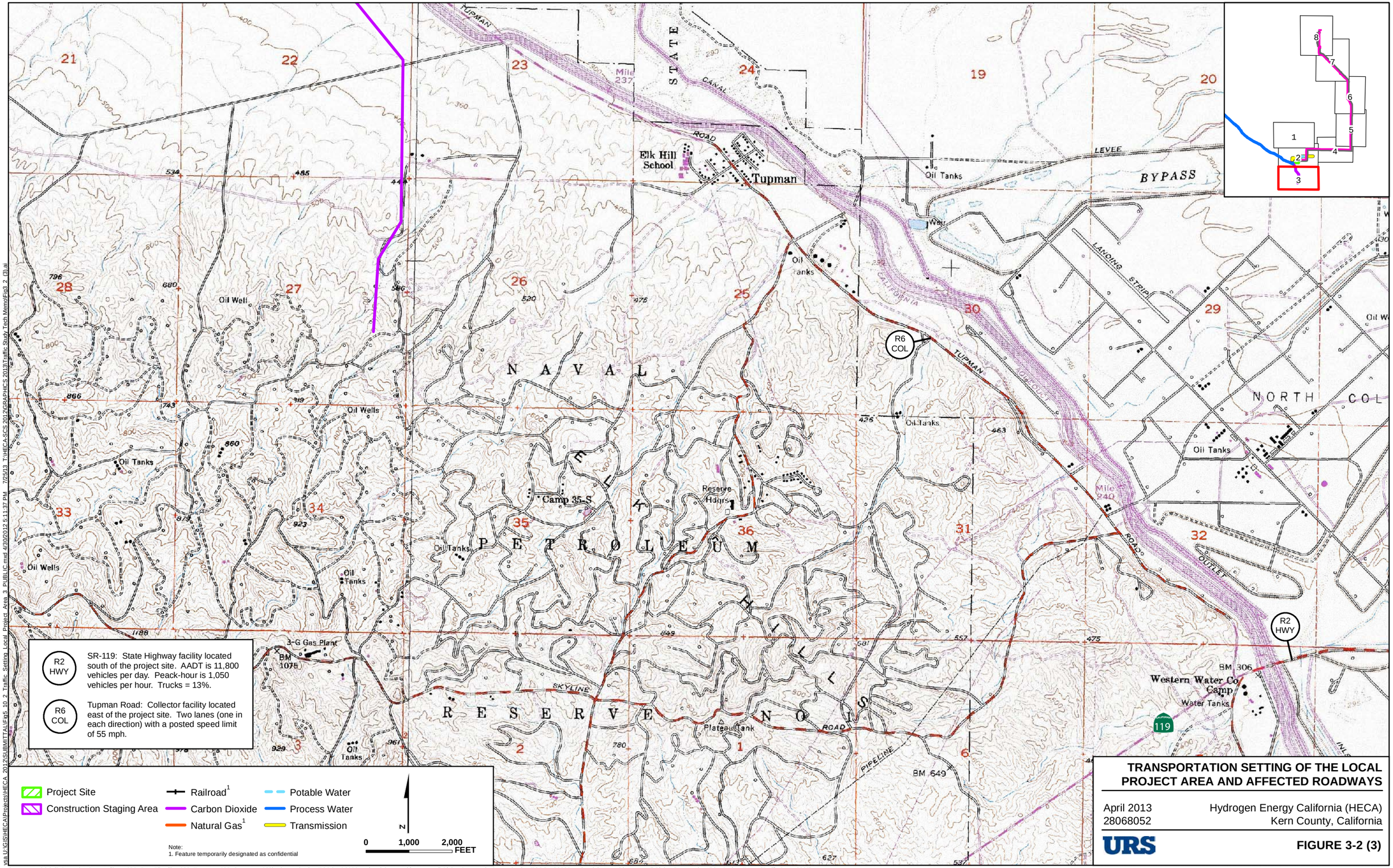

R2 HWY — SR-119: State Highway facility located south of the project site. AADT is 11,800 vehicles per day. Peack-hour is 1,050 vehicles per hour. Trucks = 13%.

R6 COL — Tupman Road: Collector facility located east of the project site. Two lanes (one in each direction) with a posted speed limit of 55 mph.

- Project Site
- Construction Staging Area
- Railroad[1]
- Carbon Dioxide
- Natural Gas[1]
- Potable Water
- Process Water
- Transmission

N

0 1,000 2,000 FEET

Note:
1. Feature temporarily designated as confidential

TRANSPORTATION SETTING OF THE LOCAL PROJECT AREA AND AFFECTED ROADWAYS

April 2013 — Hydrogen Energy California (HECA)
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FIGURE 3-2 (3)

Sources: USGS (7.5' quads: Buttonwillow 1976, East Elk Hills 1977, Tupman 1977, Stevens, 1977). Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. HECA Project Team (Traffic Data, 2009).

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R5 HWY

ROAD

Truck Route

BELLEVUE

ROAD

PIONEER

CANAL

LEVEE

PIPELINE

Buena Vista Ranch

PIPELINE

PIPELINE

CANAL

DIXON

AND

JAMES

R7 COL

R3 HWY

R1 FWY

Well

Res

Oil Well

OIL TANKS

Pipelines

CANAL OIL FIELD

ENOS

PIPE LINE

STRA

Ric Bravo Pumping St

43

1 2 3 4 5 6 7 8 9 10 11 12 15 16 31 32 33 34 35

R1 FWY — I-5: Interstate Freeway facility located east of the project site. AADT is 31,000 vehicles per day. Peak hour is 4,900 vehicles per hour. Trucks = 25%.

R3 HWY — SR-43: State Highway facility located east of the project site. AADT is 5,500 vehicles per day. Peak hour is 630 vehicles per hour. Trucks = 21%.

R5 HWY — Stockdale Highway: Highway facility located north of the project site. Two lanes (one in each direction) with a posted speed limit of 55 mph.

R7 COL — Station Road: Collector facility located southeast of the project site. Two lanes (one in each direction) with no posted speed limit.

- Truck Route
- Project Site
- Construction Staging Area
- Railroad[1]
- Carbon Dioxide
- Natural Gas[1]
- Potable Water
- Process Water
- Transmission

Note:
1. Feature temporarily designated as confidential

N

0 1,000 2,000 FEET

TRANSPORTATION SETTING OF THE LOCAL PROJECT AREA AND AFFECTED ROADWAYS

April 2013
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FIGURE 3-2 (4)

Sources: USGS (7.5' quads: Buttonwillow 1976, East Elk Hills 1977, Tupman 1977, Stevens, 1977). Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. HECA Project Team (Traffic Data, 2009).

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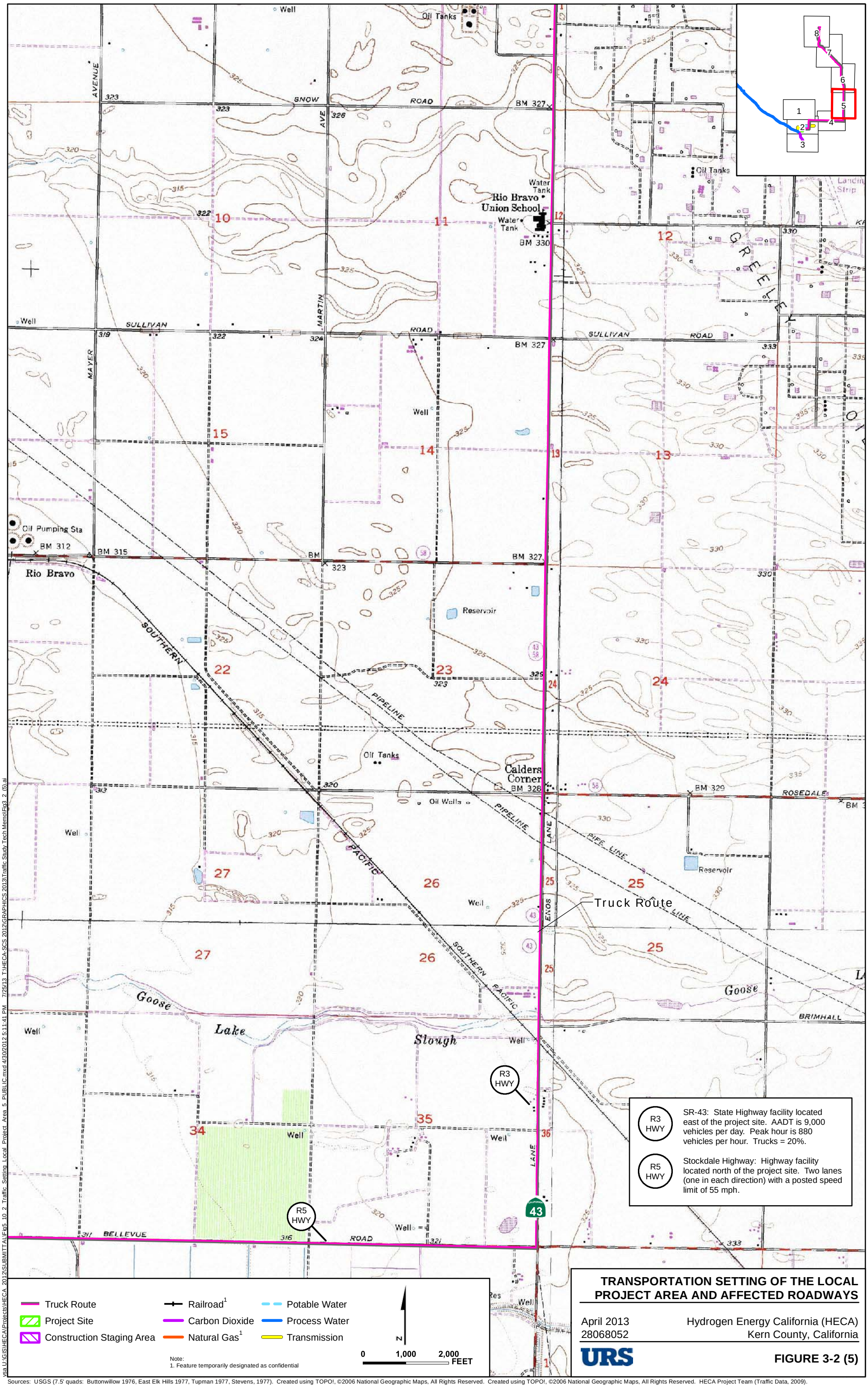

TRANSPORTATION SETTING OF THE LOCAL PROJECT AREA AND AFFECTED ROADWAYS

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FIGURE 3-2 (5)

Sources: USGS (7.5' quads: Buttonwillow 1976, East Elk Hills 1977, Tupman 1977, Stevens, 1977). Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. HECA Project Team (Traffic Data, 2009).

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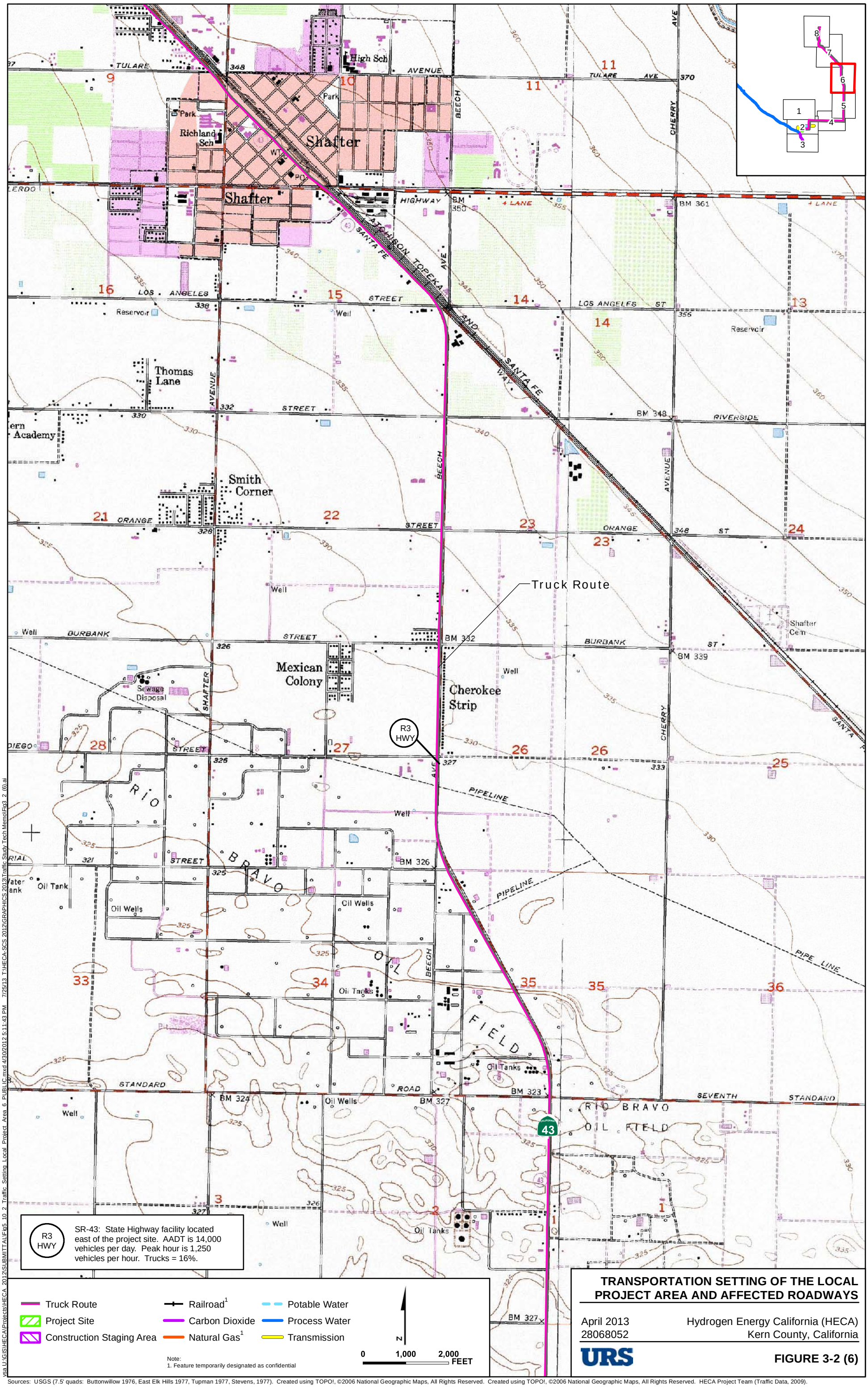

Sources: USGS (7.5' quads: Buttonwillow 1976, East Elk Hills 1977, Tupman 1977, Stevens, 1977). Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. HECA Project Team (Traffic Data, 2009).

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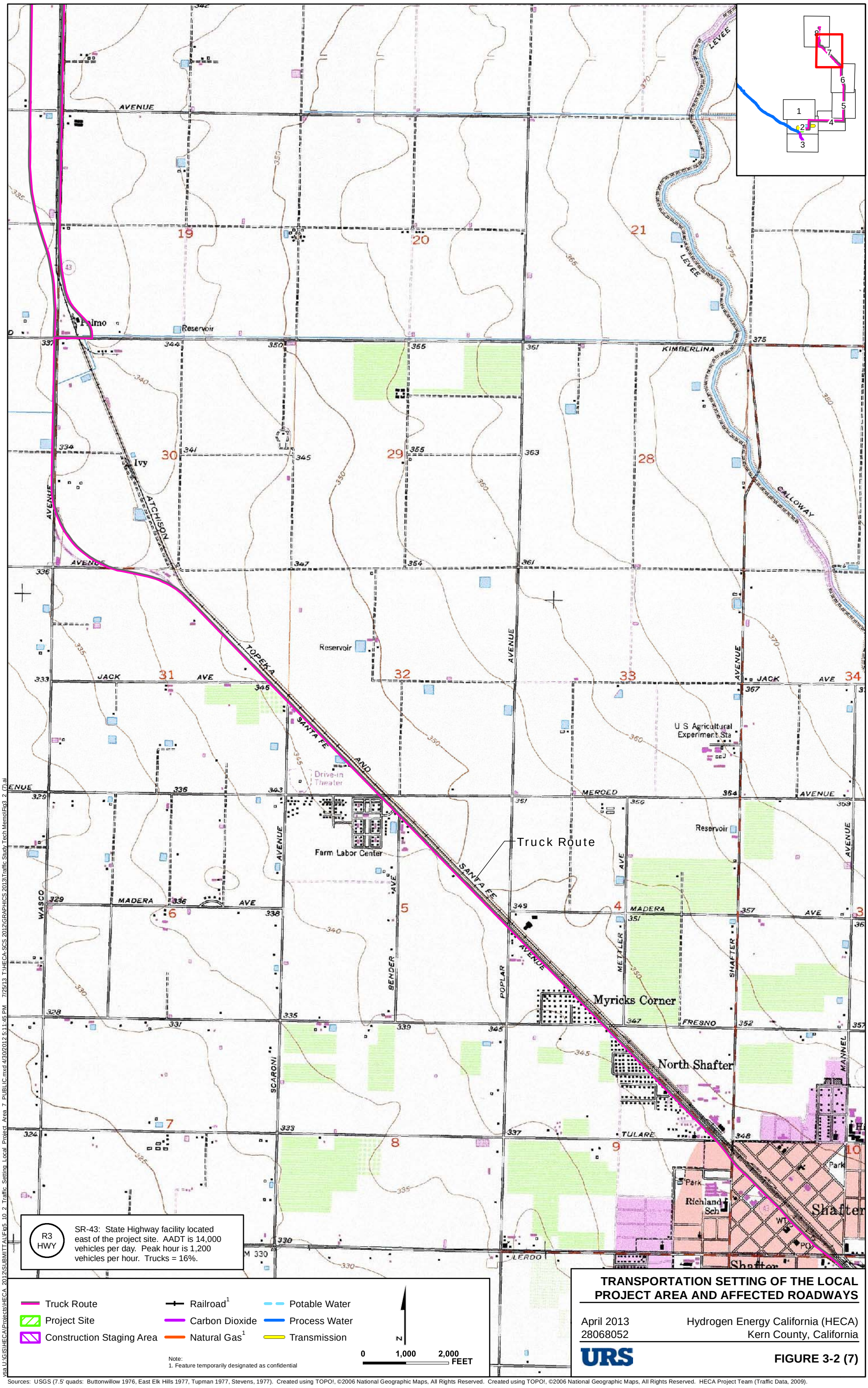

R3 HWY

SR-43: State Highway facility located east of the project site. AADT is 14,000 vehicles per day. Peak hour is 1,200 vehicles per hour. Trucks = 16%.

- Truck Route
- Project Site
- Construction Staging Area
- Railroad[1]
- Carbon Dioxide
- Natural Gas[1]
- Potable Water
- Process Water
- Transmission

N

0 1,000 2,000 FEET

Note:
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TRANSPORTATION SETTING OF THE LOCAL PROJECT AREA AND AFFECTED ROADWAYS

April 2013
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FIGURE 3-2 (7)

Sources: USGS (7.5' quads: Buttonwillow 1976, East Elk Hills 1977, Tupman 1977, Stevens, 1977). Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. HECA Project Team (Traffic Data, 2009).

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Truck Route

R3 HWY

SR-43: State Highway facility located east of the project site. AADT is 10,500 vehicles per day. Peak hour is 1,050 vehicles per hour. Trucks = 11%.

Truck Route
Project Site
Construction Staging Area
Railroad[1]
Carbon Dioxide
Natural Gas[1]
Potable Water
Process Water
Transmission

Note:
1. Feature temporarily designated as confidential

N

0 1,000 2,000 FEET

TRANSPORTATION SETTING OF THE LOCAL PROJECT AREA AND AFFECTED ROADWAYS

April 2013
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FIGURE 3-2 (8)

Sources: USGS (7.5' quads: Buttonwillow 1976, East Elk Hills 1977, Tupman 1977, Stevens, 1977). Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. HECA Project Team (Traffic Data, 2009).

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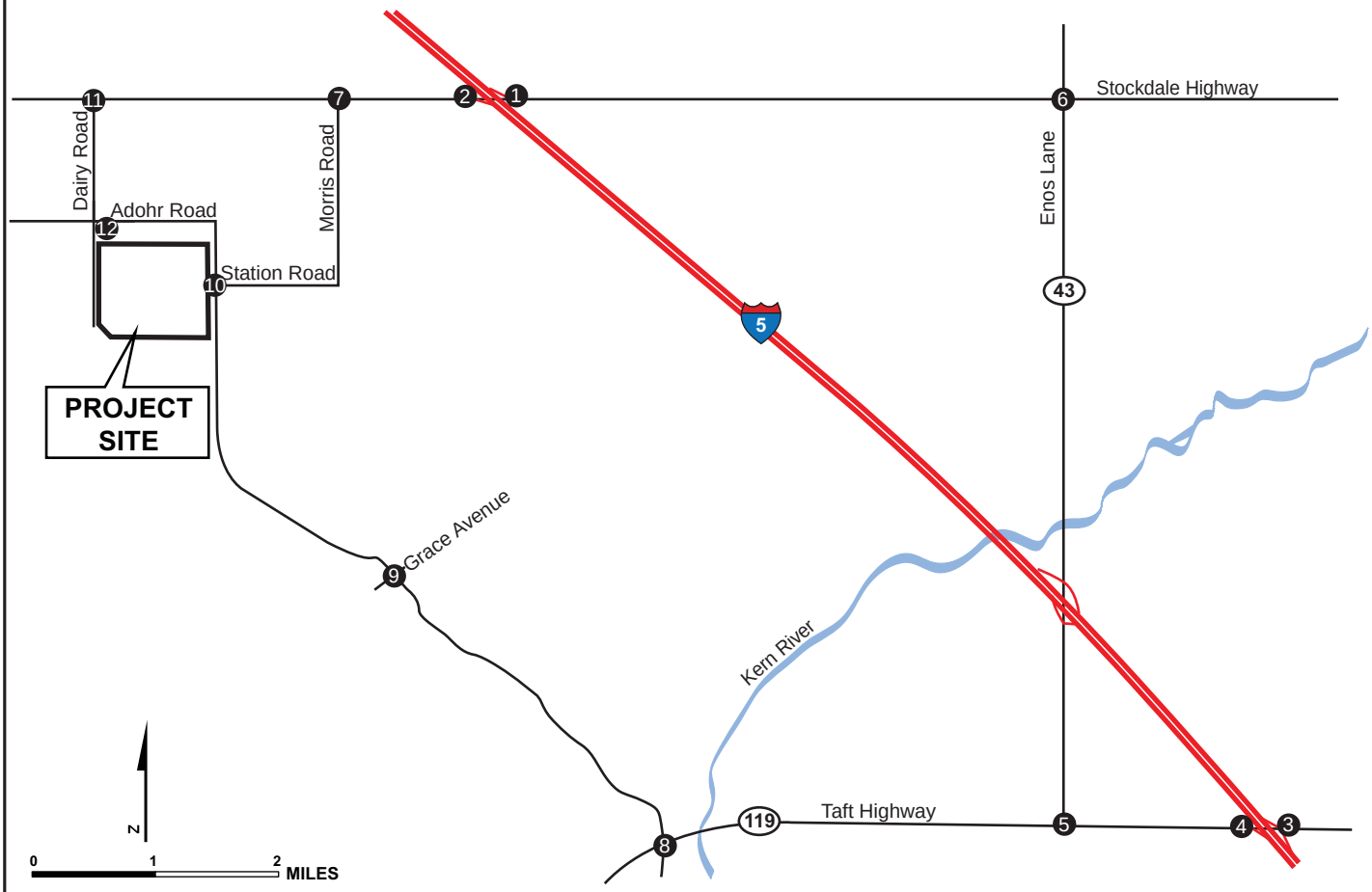
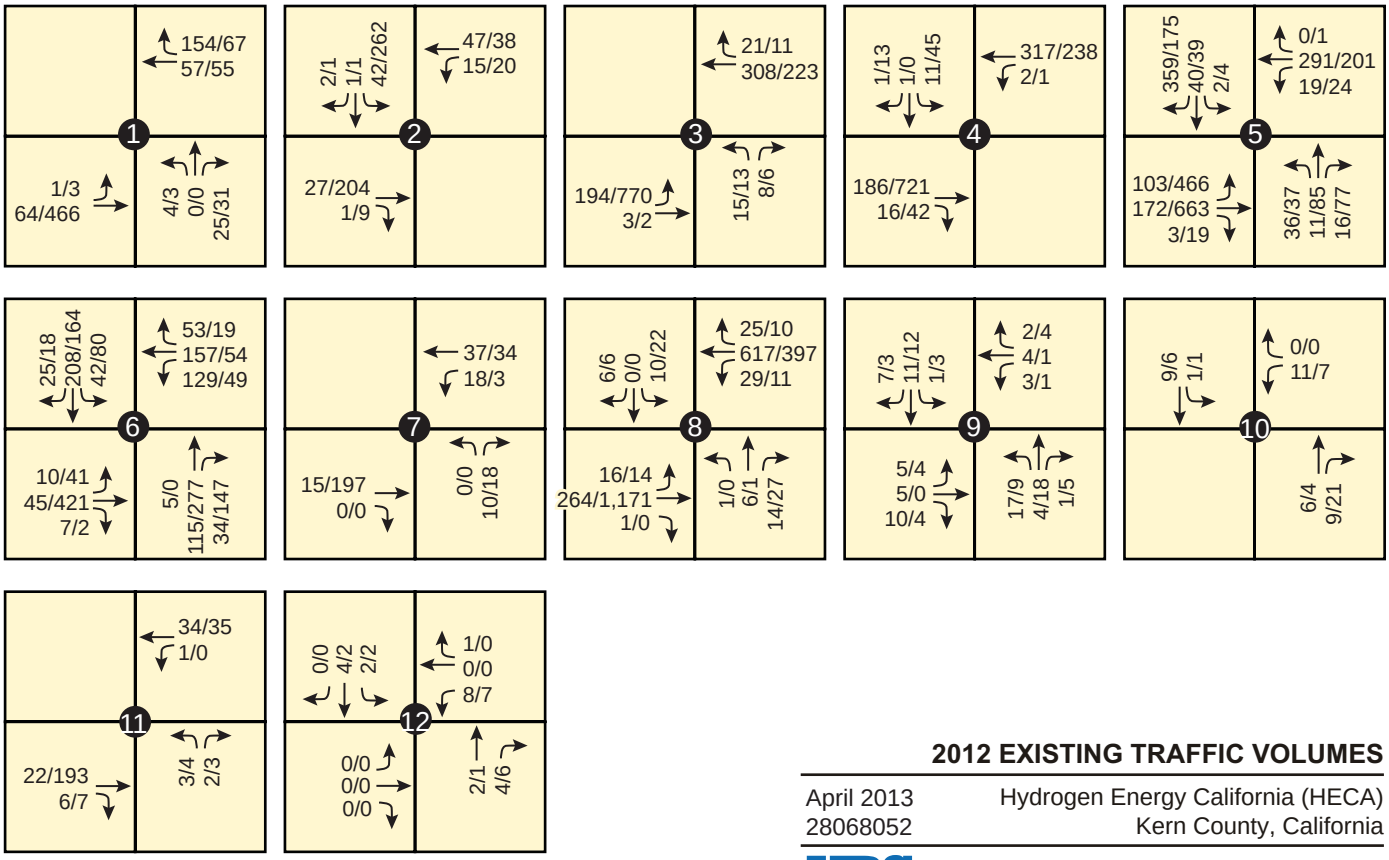


NOTE: Intersection # 7 has been analyzed as a T-intersection. The north leg has minimum/negligible traffic volumes.



2012 EXISTING TRAFFIC VOLUMES

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FIGURE 3-3a

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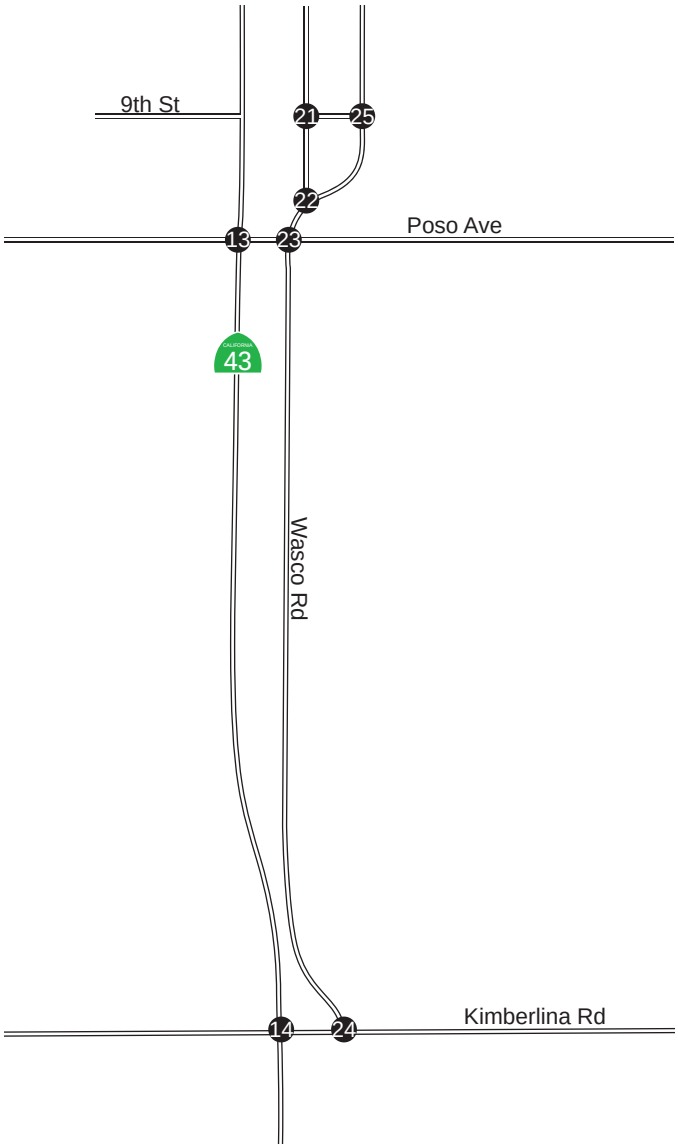

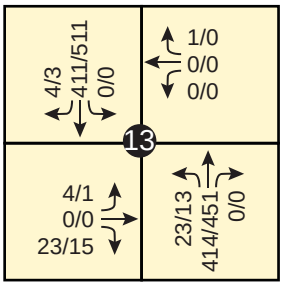

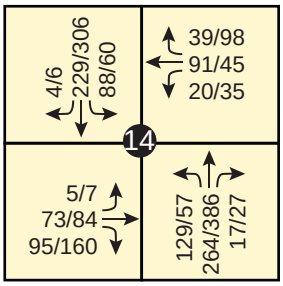

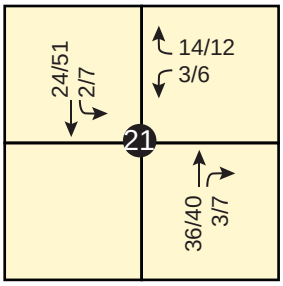

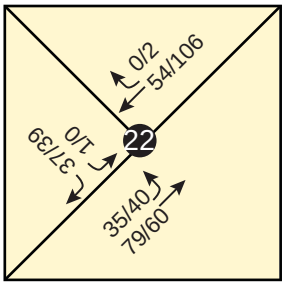

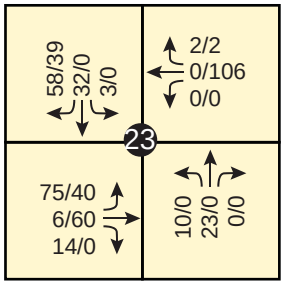

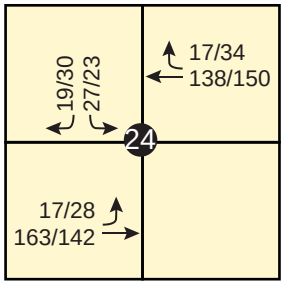

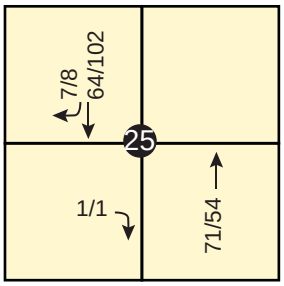

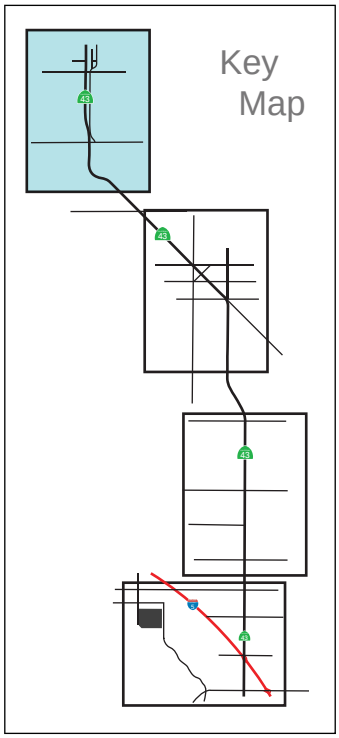

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2012 EXISTING TRAFFIC VOLUMES

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FIGURE 3-3b

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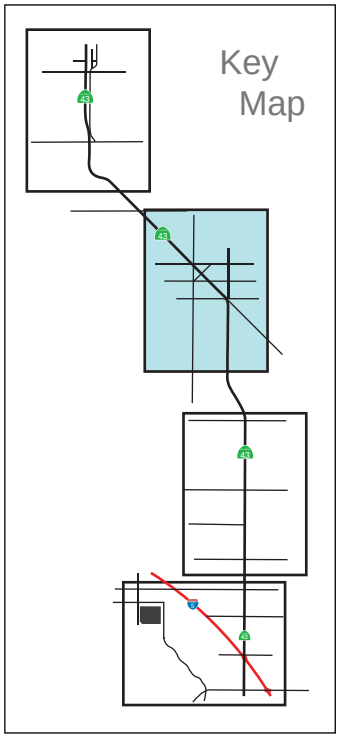

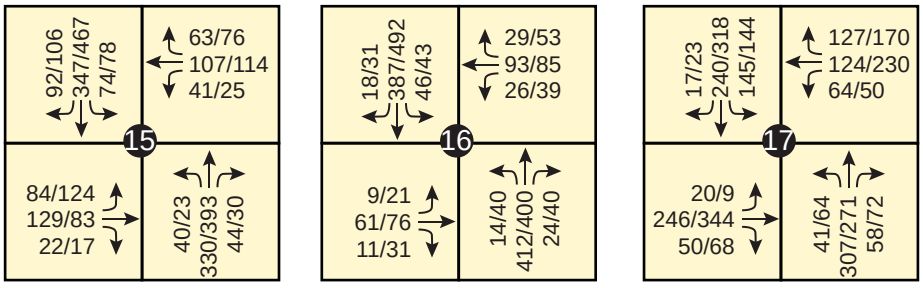

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FIGURE 3-3c

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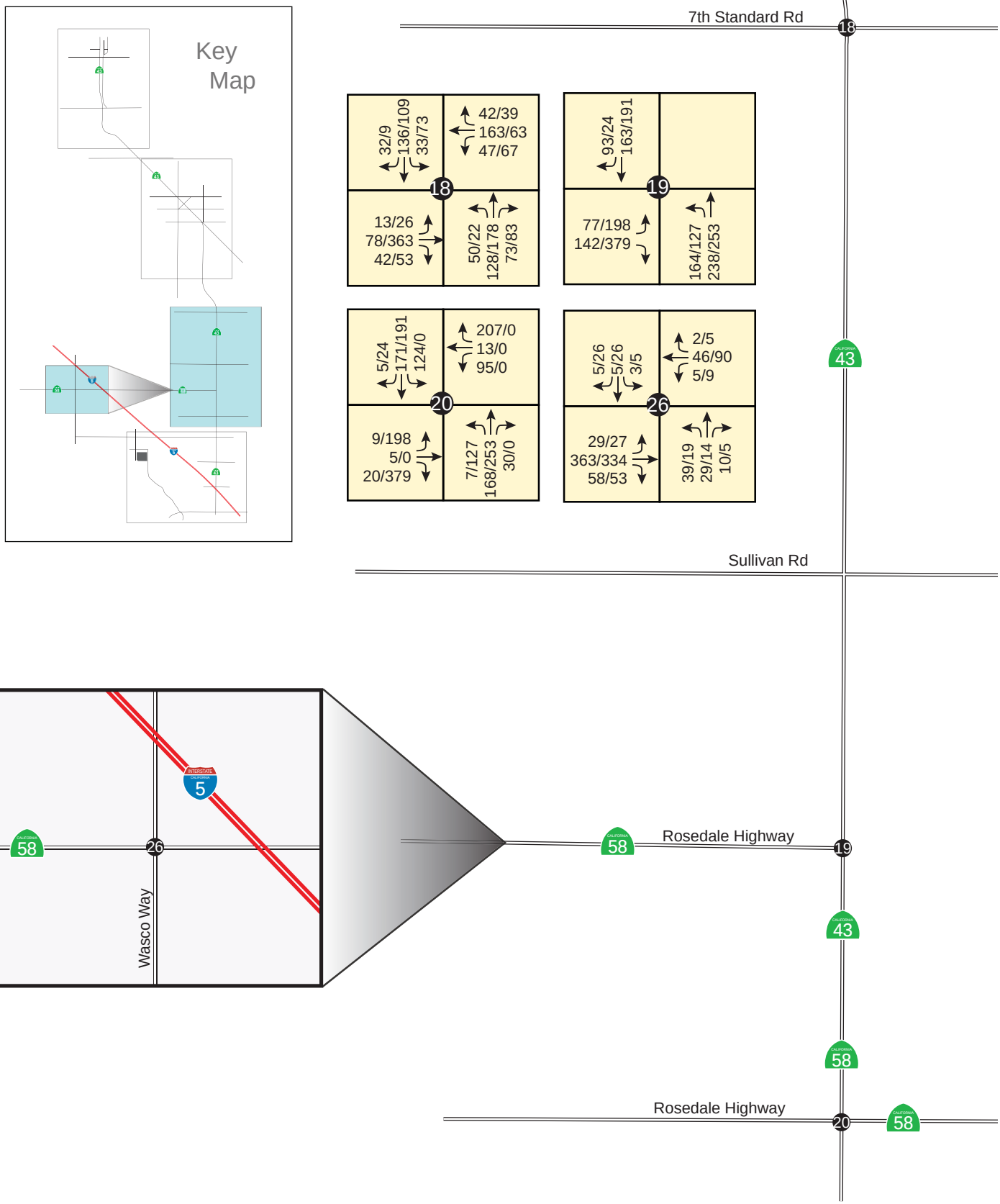

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2012 EXISTING TRAFFIC VOLUMES

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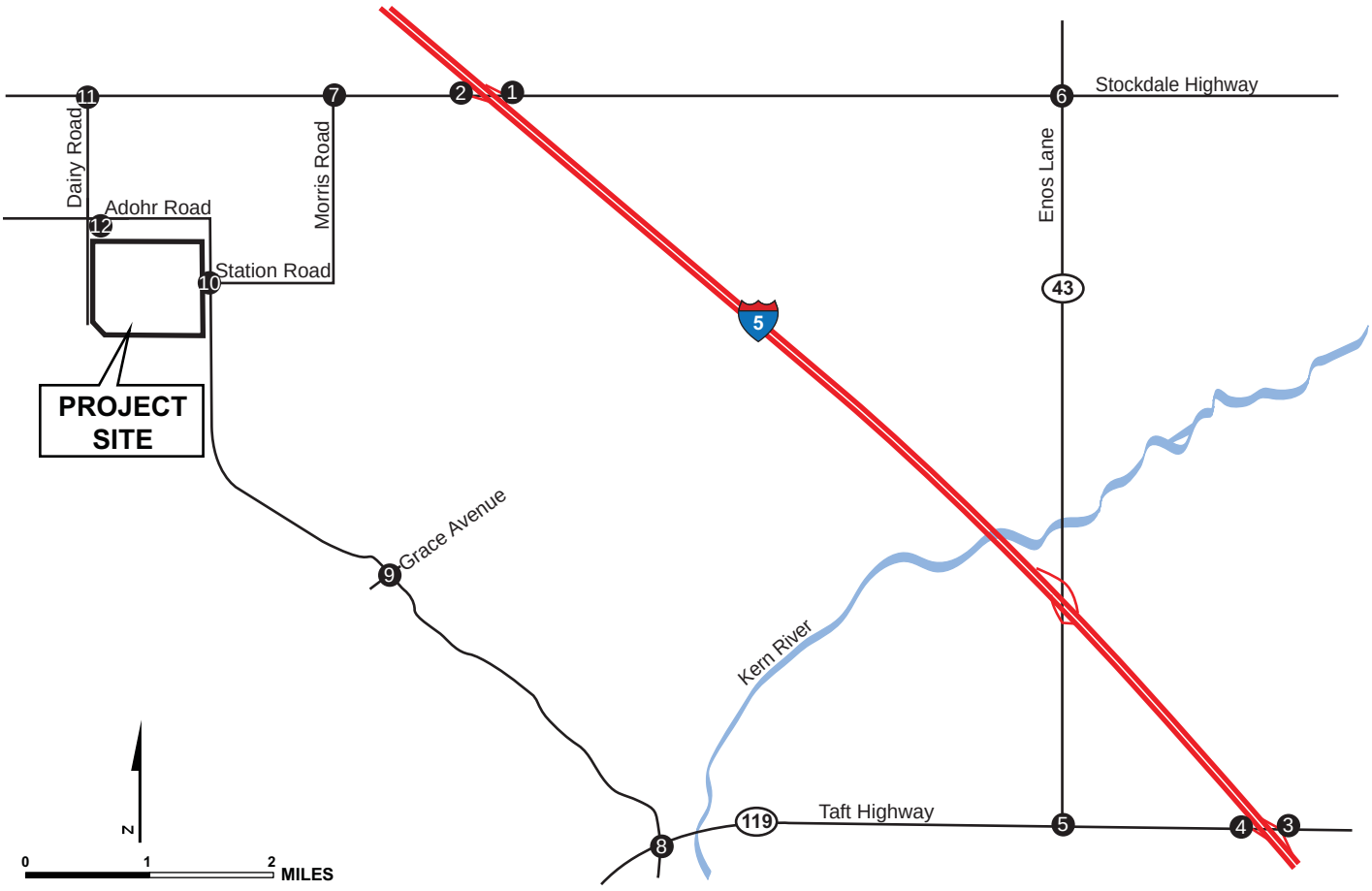
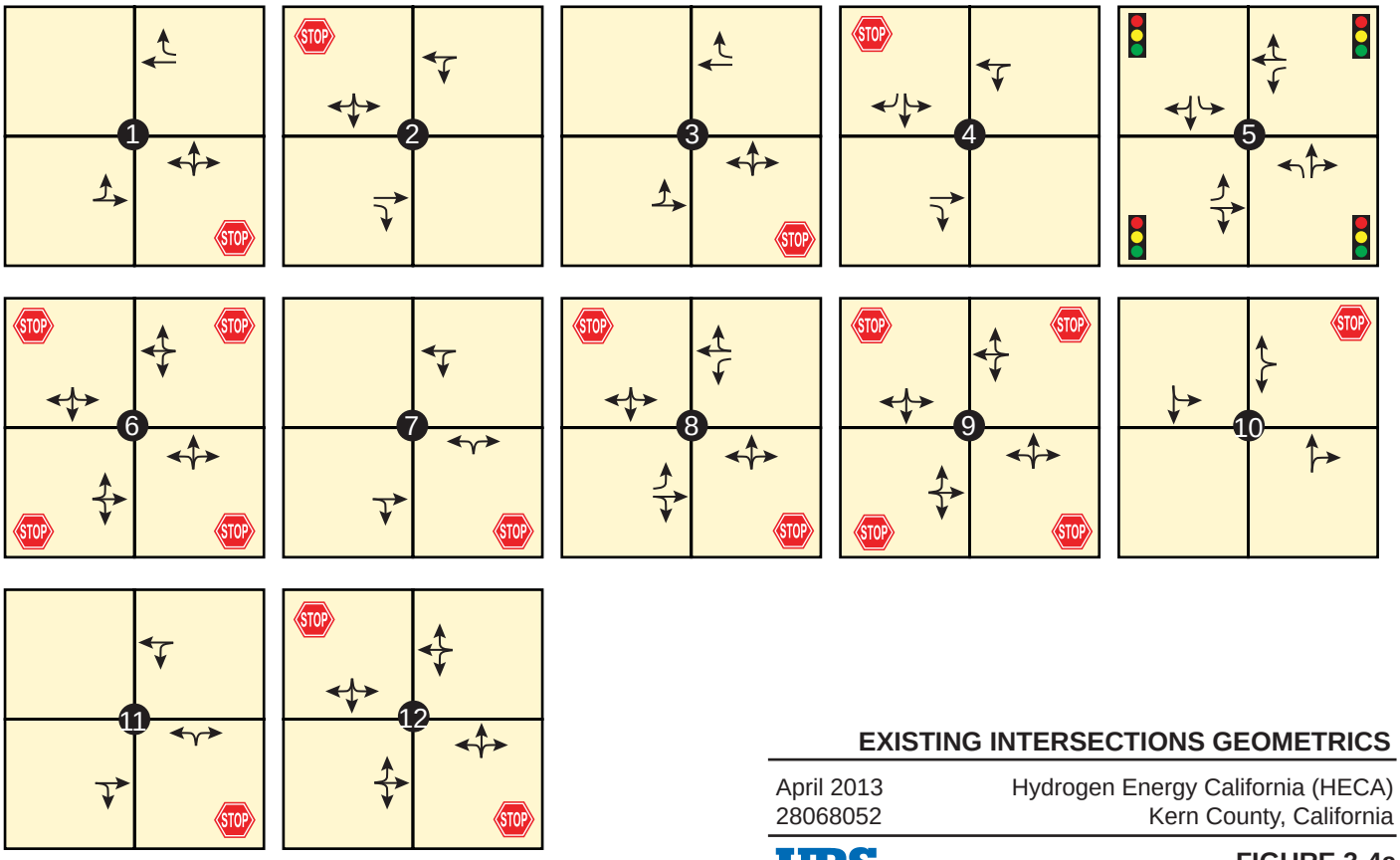
FIGURE 3-3d





EXISTING INTERSECTIONS GEOMETRICS

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FIGURE 3-4a

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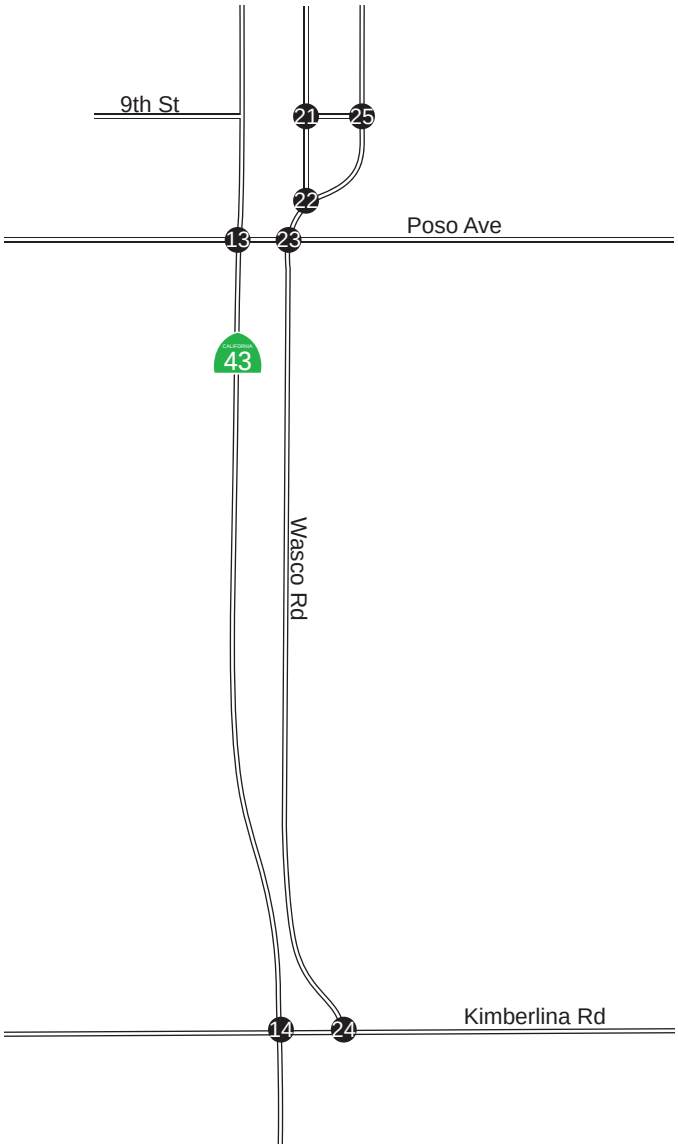

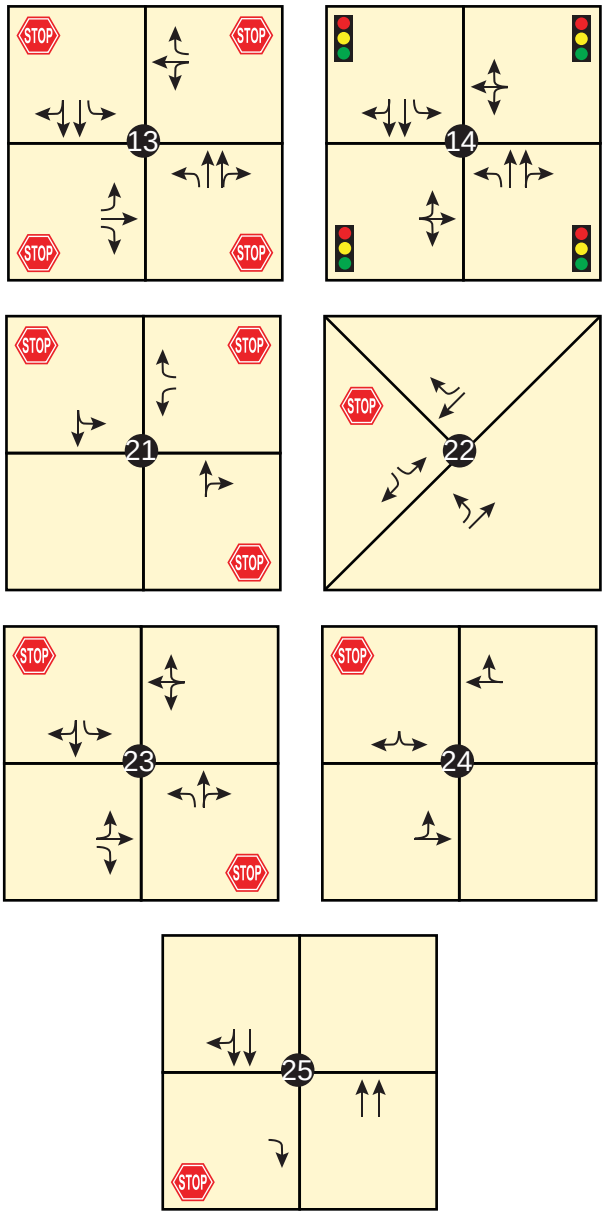

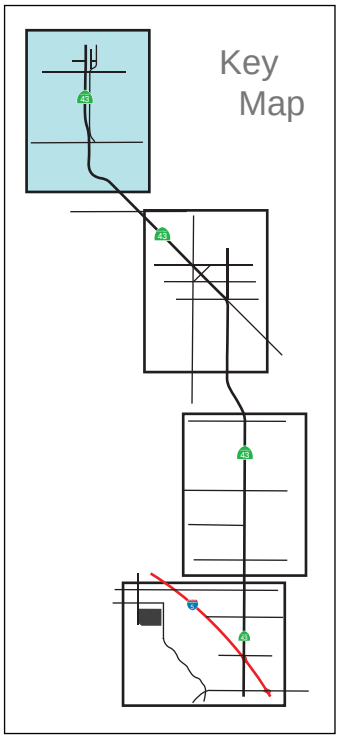

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EXISTING INTERSECTIONS GEOMETRICS

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FIGURE 3-4b

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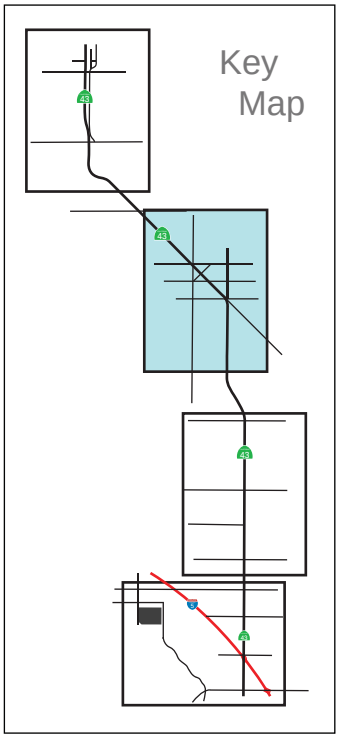

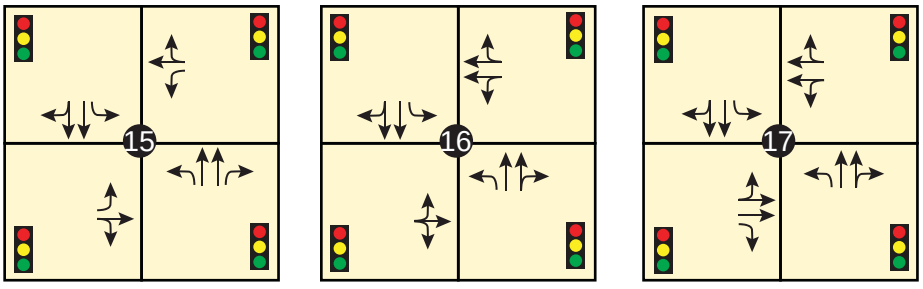

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EXISTING INTERSECTIONS GEOMETRICS

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FIGURE 3-4c

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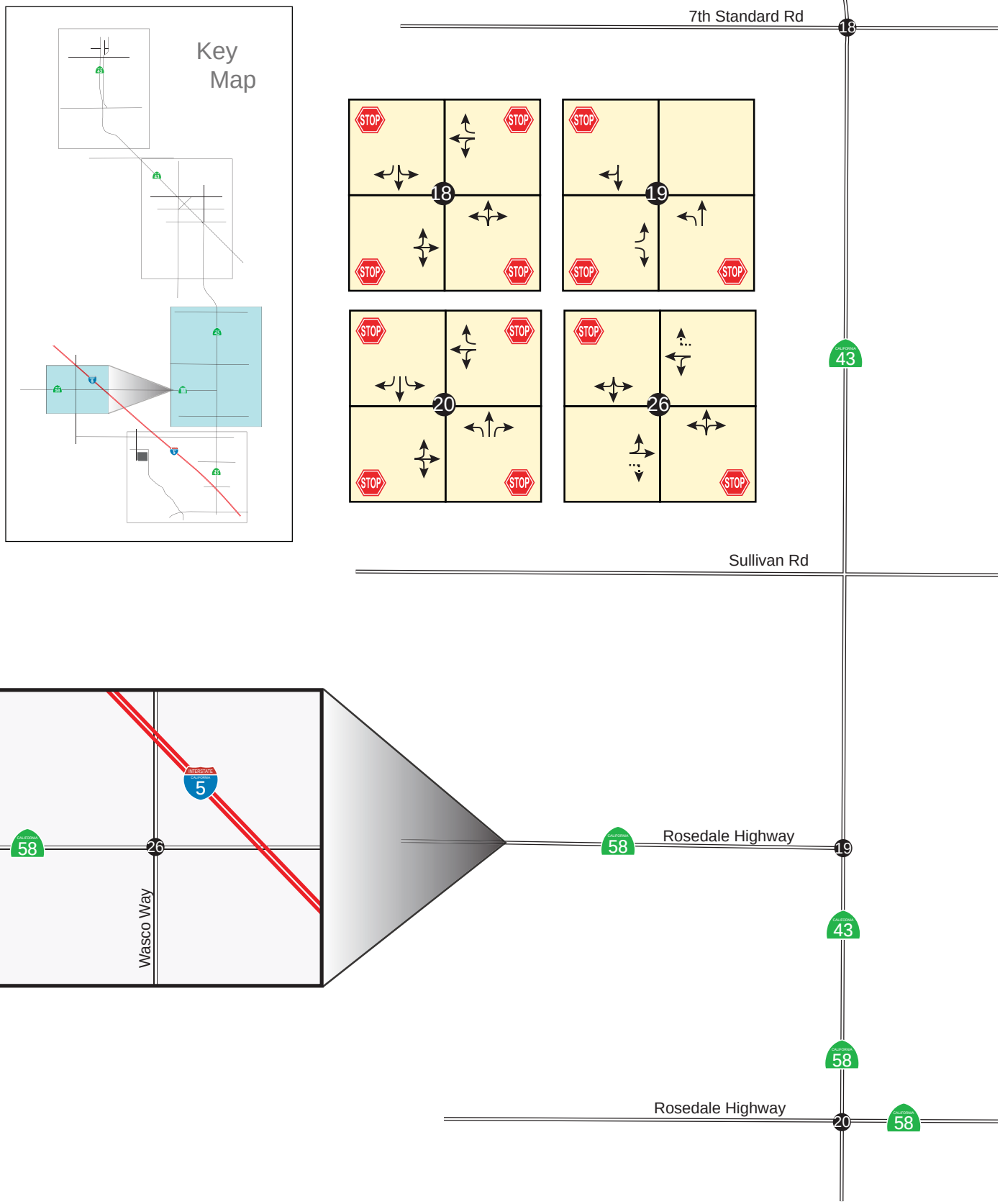

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FIGURE 3-4d

07/26/13 hk T:\HECA-SCS 2012\GRAPHICS 2013\Traffic Study Tech Memo\Figs3_4.indd

4.0 PROJECT TRIP GENERATION SUMMARIES

4.1 PROJECT CONSTRUCTION TRIP GENERATION

During Project construction, the Project area will experience short-term increases in traffic that are associated primarily with construction worker commute trips and material and equipment delivery trips. The traffic analysis evaluated the worst-case Project construction scenario by analyzing the peak-month worker commute plus material and equipment delivery trips.

The Project construction trip generation data in Table 4-1, Anticipated Project Construction Trip Generation, list the trips that would be generated by construction personnel, by construction equipment and material delivery trucks, and by soil fill delivery trucks. Figure 4-1, Project Construction Added Trips, shows the a.m. and p.m. peak-hour Project construction–added trips at the study intersections. Figure 4-2, Project Distribution as Percent of Construction Trip Generation, shows the percent distribution of a.m. and p.m. peak-hour Project construction–added trips at the study intersections in context to the total a.m. and p.m. peak-hour Project construction trip generation.

Table 4-1
Anticipated Project Construction Trip Generation

Vehicle Type	Actual Vehicles (One-Way)	Actual Vehicles (Two-Way)	Peak Daily Trips (PCE)	Peak Hourly Trips (a.m.)			Peak Hourly Trips (p.m.)		
				Inbound	Outbound	Total	Inbound	Outbound	Total
Construction Worker Vehicles[1]	1,230	2,460	2,460	410	0	410	0	1,230	1,230
Truck Deliveries[2]	50	100	300	75	75	150	0	0	0
Soil Fill Deliveries[3]	160	320	960	48	48	96	0	0	0
Total Vehicles	**1,230**	**2,460**	**2,460**	**410**	**0**	**410**	**0**	**1,230**	**1,230**
Total Trucks	**210**	**420**	**1,260**	**123**	**123**	**246**	**0**	**0**	**0**

Source: HECA Project

Notes:

1. Note that 2.0 passenger occupancy per vehicle was assumed to account for the carpooling of approximately 2,461 workers conservatively analyzed during the peak construction month, yielding 1,230 vehicles for the construction workers. It was conservatively assumed that one-third of the worker vehicles will arrive during the a.m. (peak 1 hour between 7:00 to 9:00 a.m.) and all will leave during p.m. (peak 1 hour between 4:00 to 6:00 p.m.) peak hours.
2. Trucks deliveries shown in the table were adjusted into Passenger Car Equivalent (3 PCE) vehicles. The trip generation estimate was based on the average 24-hour and maximum 1-hour truck delivery trips during Project construction. There are 50 (average 24-hour) truck deliveries at 3 PCE/truck = 150 PCE vehicles. Peak daily trips (including both the inbound and outbound trips) = 2 × 150 PCE vehicles = 300 PCE Trips. There are 25 (maximum 1-hour) truck deliveries at 3 PCE/truck = 75 PCE vehicles. Therefore, peak hourly trips (assuming equal number of inbound and outbound trips) = 2 × 75 PCE vehicles = 150 PCE Trips. It was further assumed that there will no Project deliveries during the p.m. peak hour.
3. Average import fill delivery truck trips (at 18-cubic-yard capacity per truck), adjusted into PCE vehicles (3 PCE per truck). The trip generation estimate was based on the average 24-hour and 1-hour trips during Project construction site preparation. There are 160 (average 24-hour) truck deliveries at 3 PCE/truck = 480 PCE vehicles. Peak daily trips (including both the inbound and outbound trips) = 2 × 480 PCE vehicles = 960 PCE Trips. There are 16 (average 1-hour) truck deliveries at 3 PCE/truck = 48 PCE vehicles. Therefore, peak hourly trips (assuming equal number of inbound and outbound trips) = 2 × 48 PCE vehicles = 96 PCE Trips. It must be noted that applying the maximum number of fill material truck loads is not appropriate, as these trips are anticipated to decrease and taper off on the later months of the Project construction schedule. For construction analysis purposes, using the average number of fill material truck loads is very conservative when added to the peak construction workforce, as well as construction material delivery trips, because these peak construction activities overlap. Source data: HECA Project, 2012.

a.m. = morning
p.m. = evening

4.2 PROJECT OPERATION TRIP GENERATION

During Project operations, the Project area will experience increases in traffic associated with operation worker commute trips, feedstock deliveries, process materials and products truck trips, and operations and maintenance (O&M) trips.

During Project operations, 154 workers are anticipated to access the site on a daily basis, with 110 inbound during the 7 to 9 a.m. peak hour; and with 22 inbound and 132 outbound during the 4 to 6 p.m. peak hour. Workers on site, other than the O&M personnel, are not expected to make frequent routine trips to the Project Site.

To evaluate the worst-case scenario, these vehicle trips were assumed to arrive during the a.m. peak period (7:00 a.m. to 9:00 a.m.) and to depart during the p.m. peak period (4:00 p.m. to 6:00 p.m.).

To sustain and support Project operations, regular deliveries of feedstock and O&M supplies are anticipated at the Project Site. Delivery trips will likely arrive and depart throughout the day. The analysis evaluated both coal delivery options, including Alternative 1 (Train Option) and Alternative 2 (Truck Option).

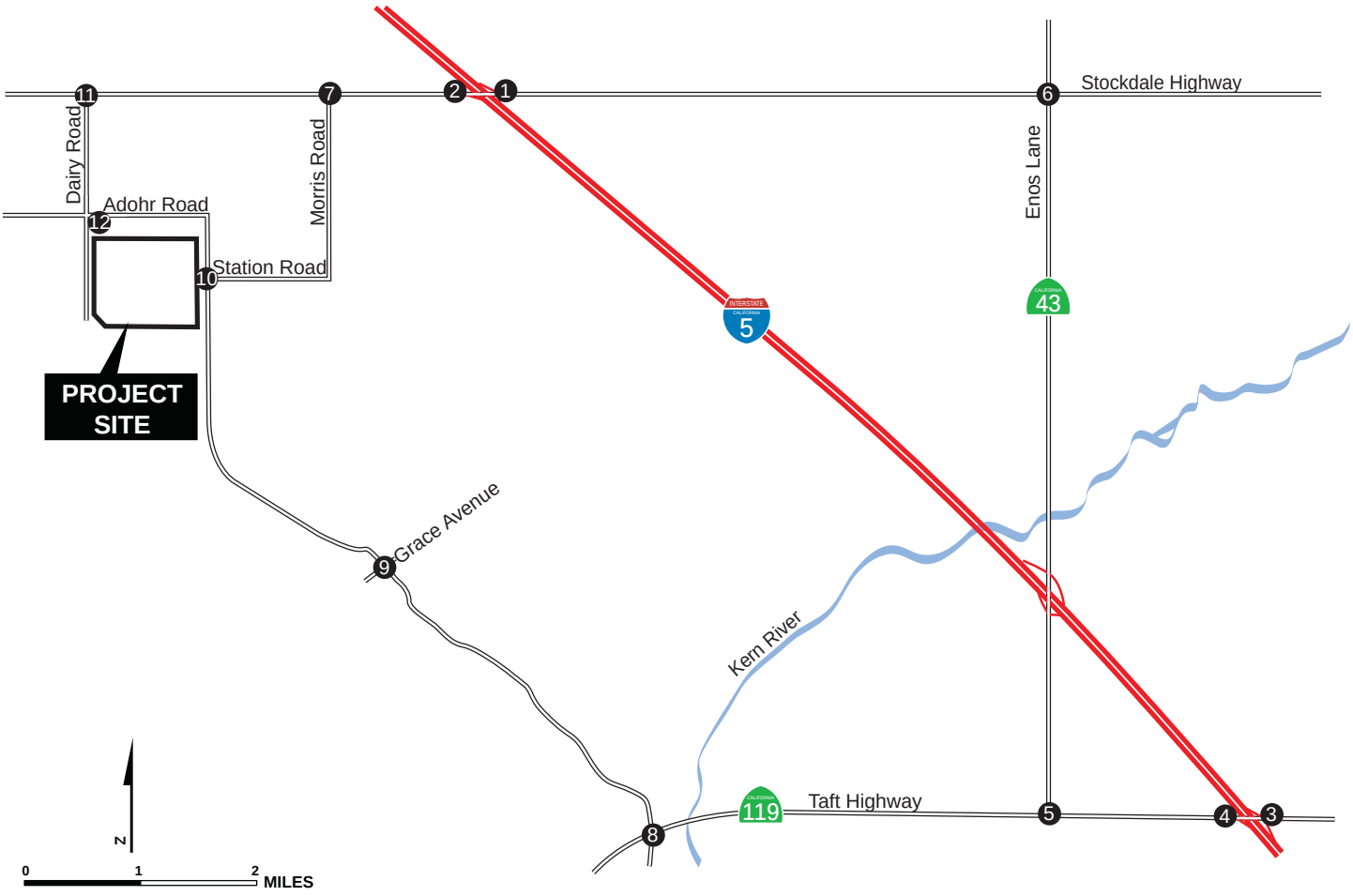
For Alternative 1 (Train Option), the average daily operation will require 107 trucks to access the Project Site over a 24-hour period. This results in 214 truck trips as the trucks travels to and from the site. The traffic study evaluates a special condition of maximum site operation to accommodate the worst-case conditions. This maximum operation will require 164 trucks to access the site, which results in 328 truck trips as the trucks travels to and from the site.

For Alternative 2 (Truck Option), the average daily operation will require 374 trucks to access the Project Site over a 24-hour period. This results in 748 truck trips as the trucks travels to and from the site. The traffic study evaluates a special condition of maximum site operation to accommodate the worst-case conditions. This maximum operation will require 536 trucks to access the site, which results in 1,072 truck trips as the trucks travels to and from the site.

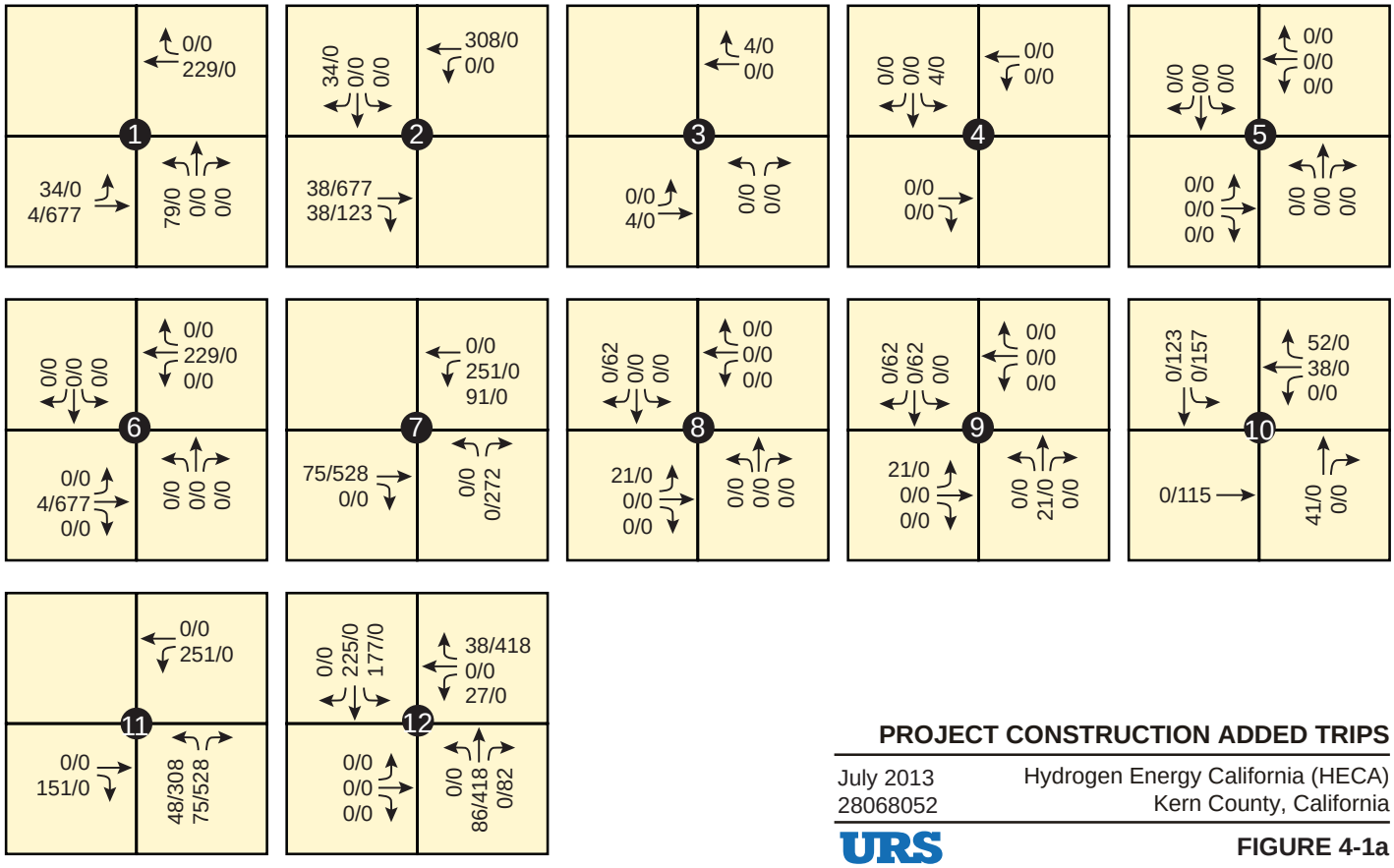
Tables 4-2 and 4-3 summarize the anticipated maximum Project trip generation for Alternative 1 (Train Option) and Alternative 2 (Truck Option), respectively.

Figures 4-3 and 4-4, Project Operations Added Trips, show the a.m. and p.m. peak-hour Project operations added trips at the study intersections for Alternative 1 and Alternative 2, respectively.

Figures 4-5 and 4-6, Project Distribution as Percent of Operations Trip Generation, show the percent distribution of a.m. and p.m. peak-hour Project operations–added trips at the study intersections in context with the total a.m. and p.m. peak-hour Project operations trip generation for Alternative 1 and Alternative 2, respectively.



NOTE: Intersection # 7 has been analyzed as a T-intersection. The north leg has minimum/negligible traffic volumes.



PROJECT CONSTRUCTION ADDED TRIPS

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FIGURE 4-1a

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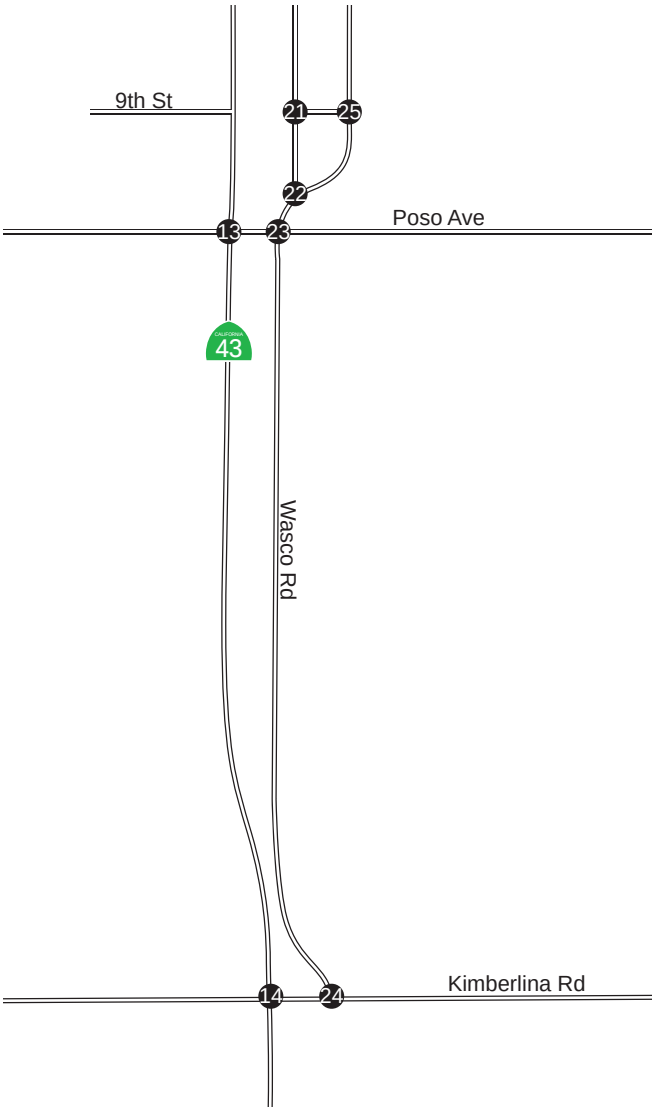

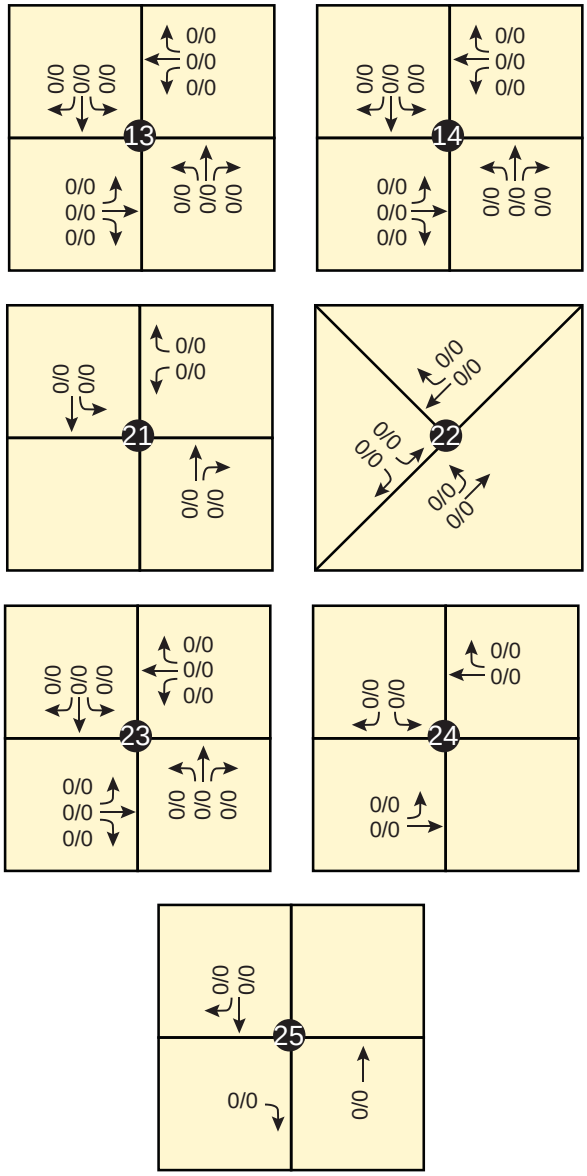

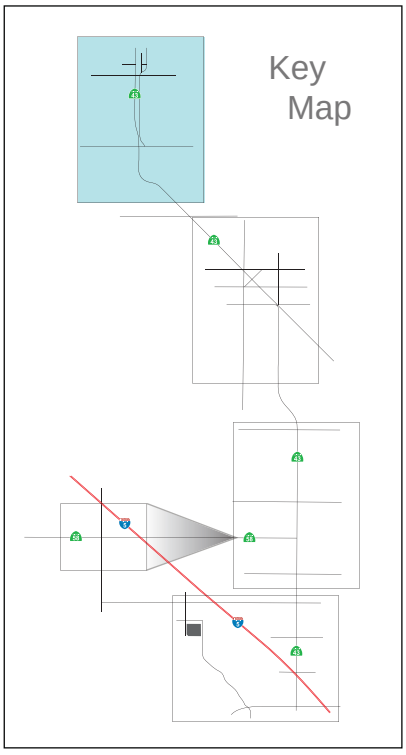

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PROJECT CONSTRUCTION-ADDED TRIPS

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FIGURE 4-1b

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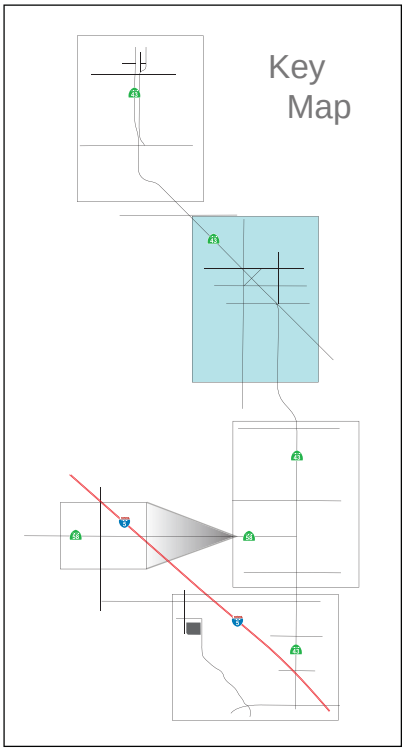

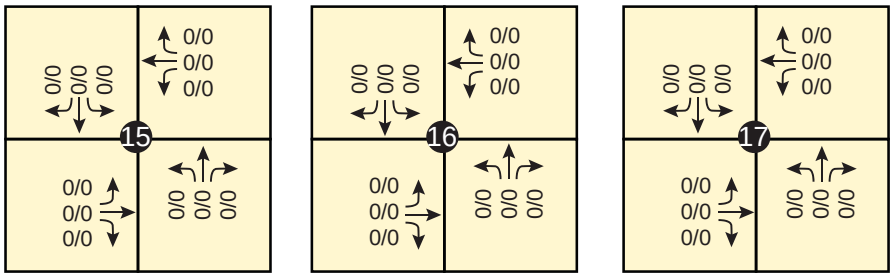

PROJECT CONSTRUCTION-ADDED TRIPS

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FIGURE 4-1c

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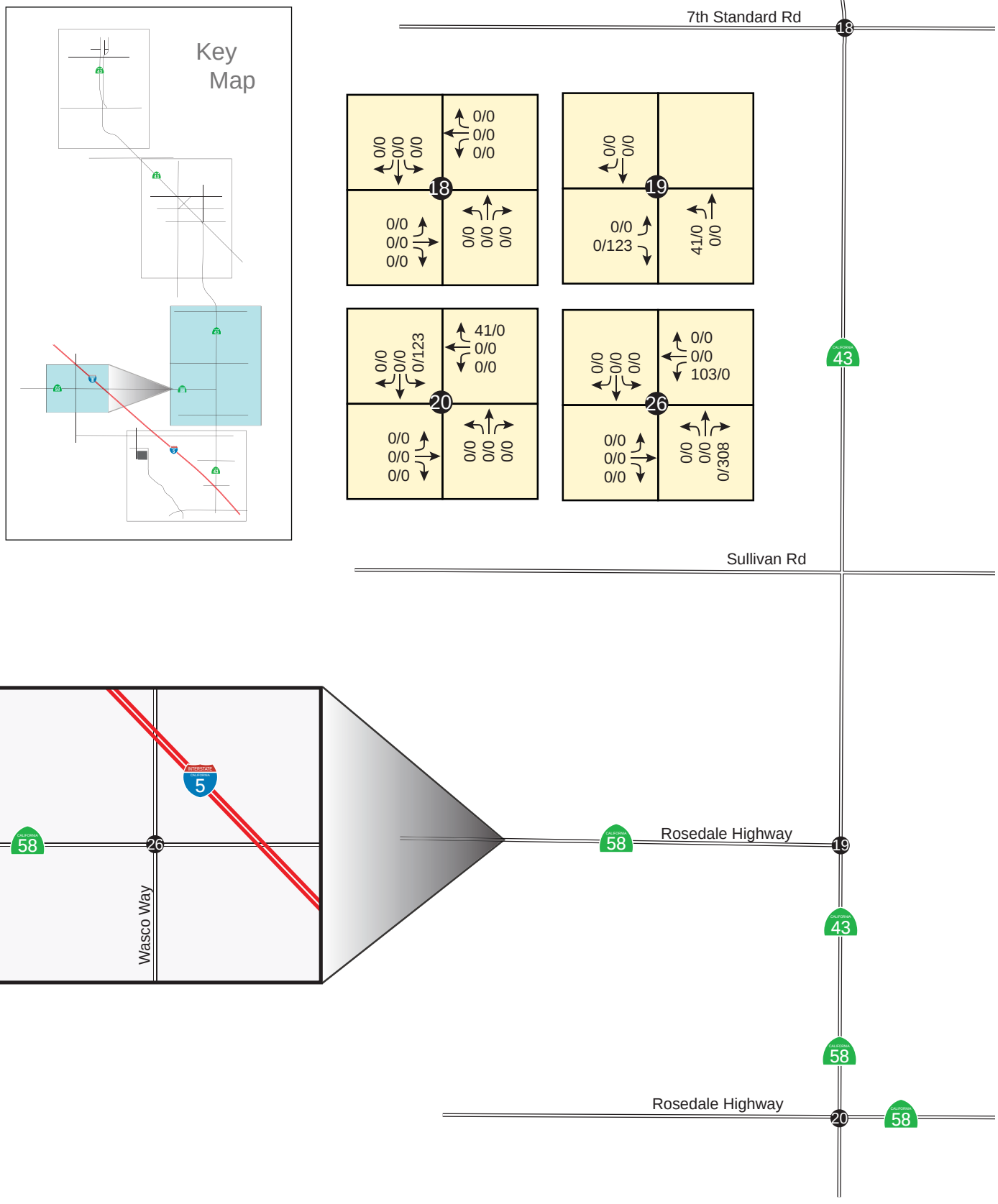

PROJECT CONSTRUCTION-ADDED TRIPS

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FIGURE 4-1d

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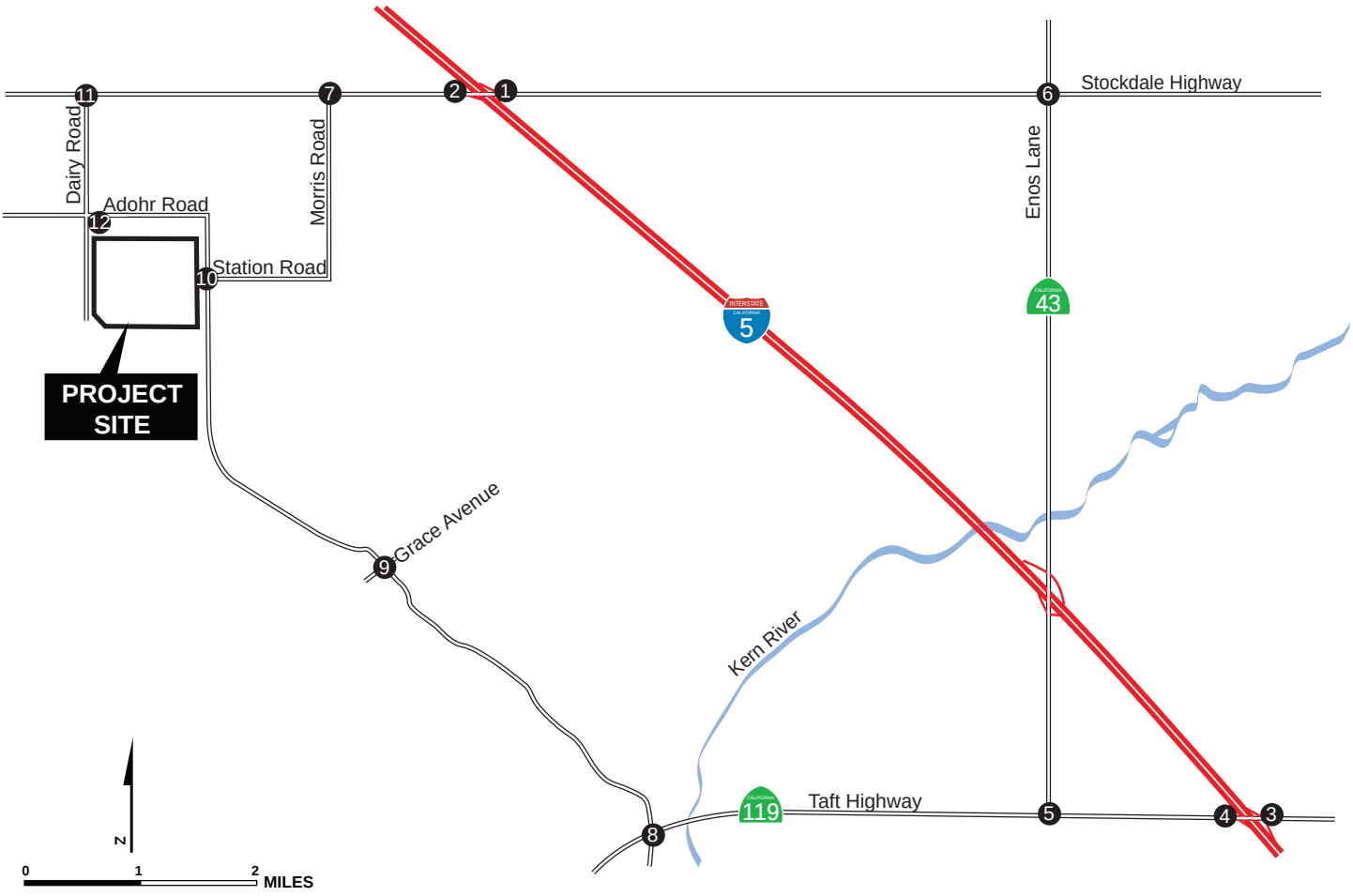
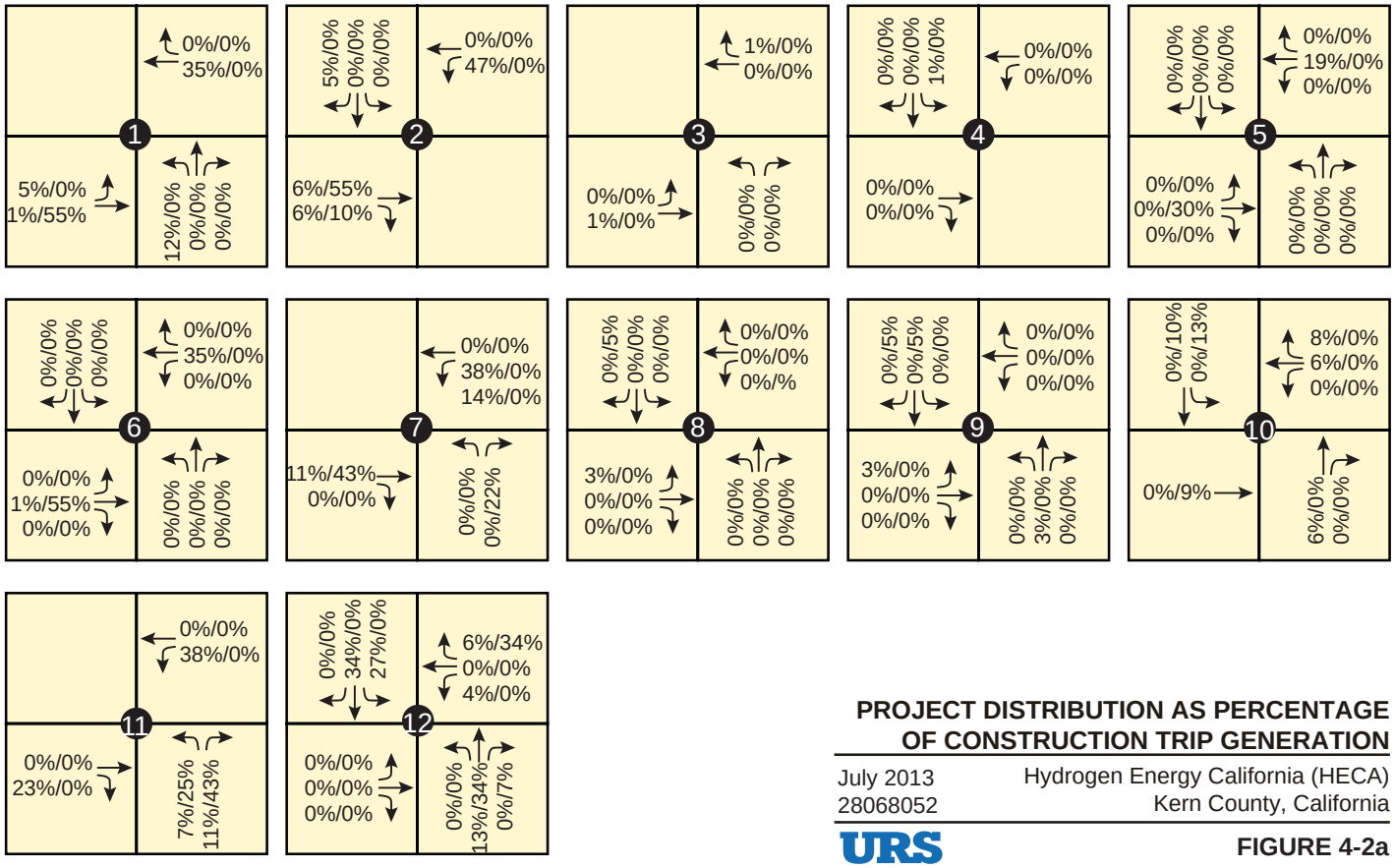


NOTE: Intersection # 7 has been analyzed as a T-intersection. The north leg has minimum/negligible traffic volumes.



PROJECT DISTRIBUTION AS PERCENTAGE OF CONSTRUCTION TRIP GENERATION

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FIGURE 4-2a

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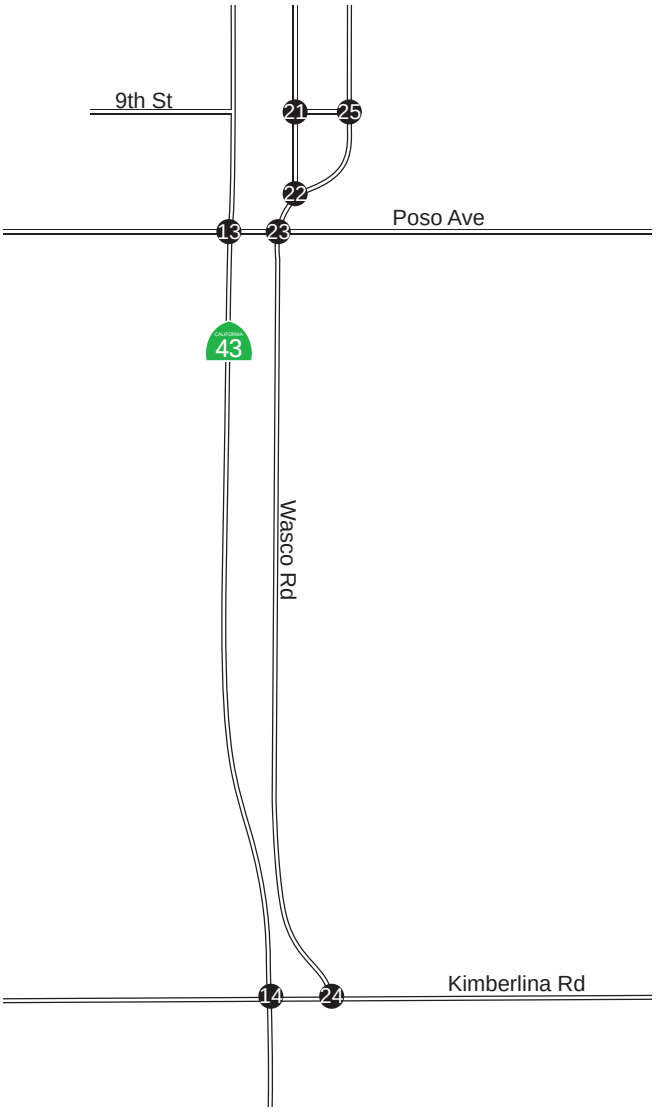

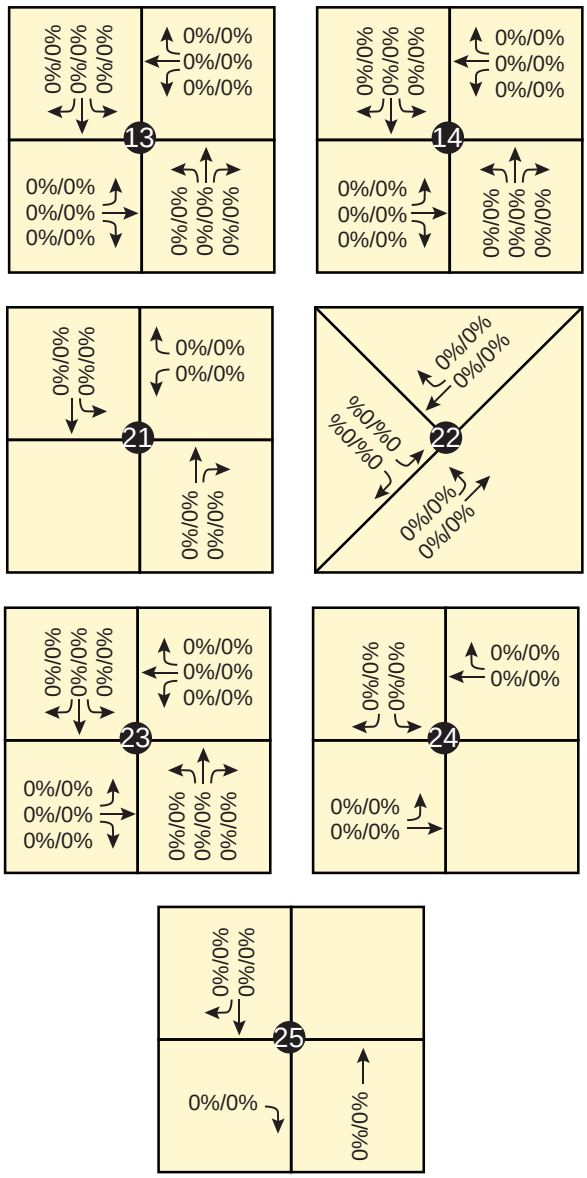

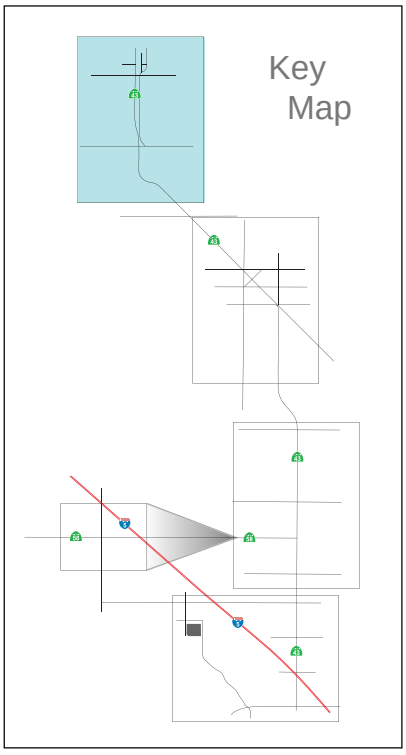

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PROJECT DISTRIBUTION AS PERCENTAGE OF CONSTRUCTION TRIP GENERATION

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FIGURE 4-2b

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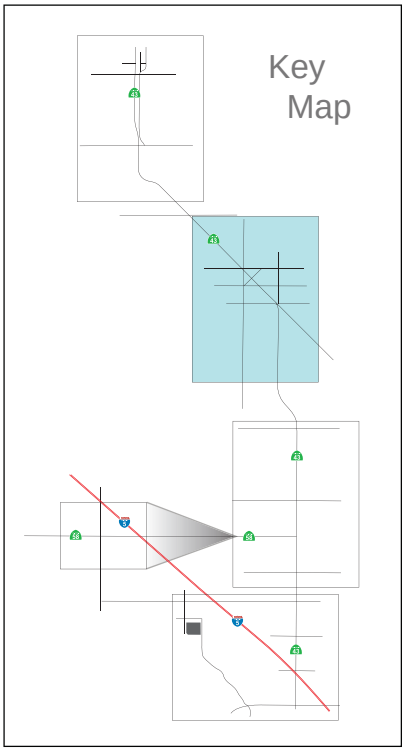

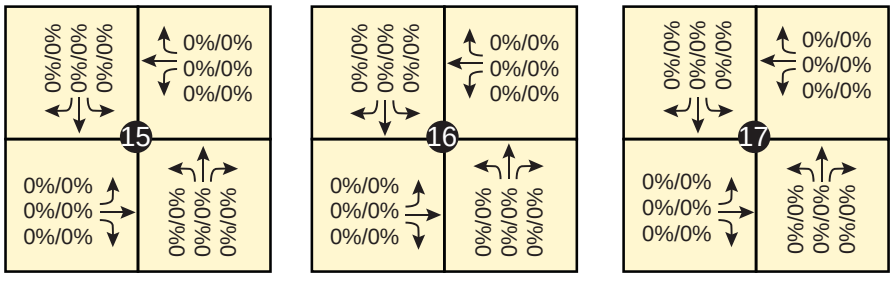

PROJECT DISTRIBUTION AS PERCENTAGE OF CONSTRUCTION TRIP GENERATION

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FIGURE 4-2c

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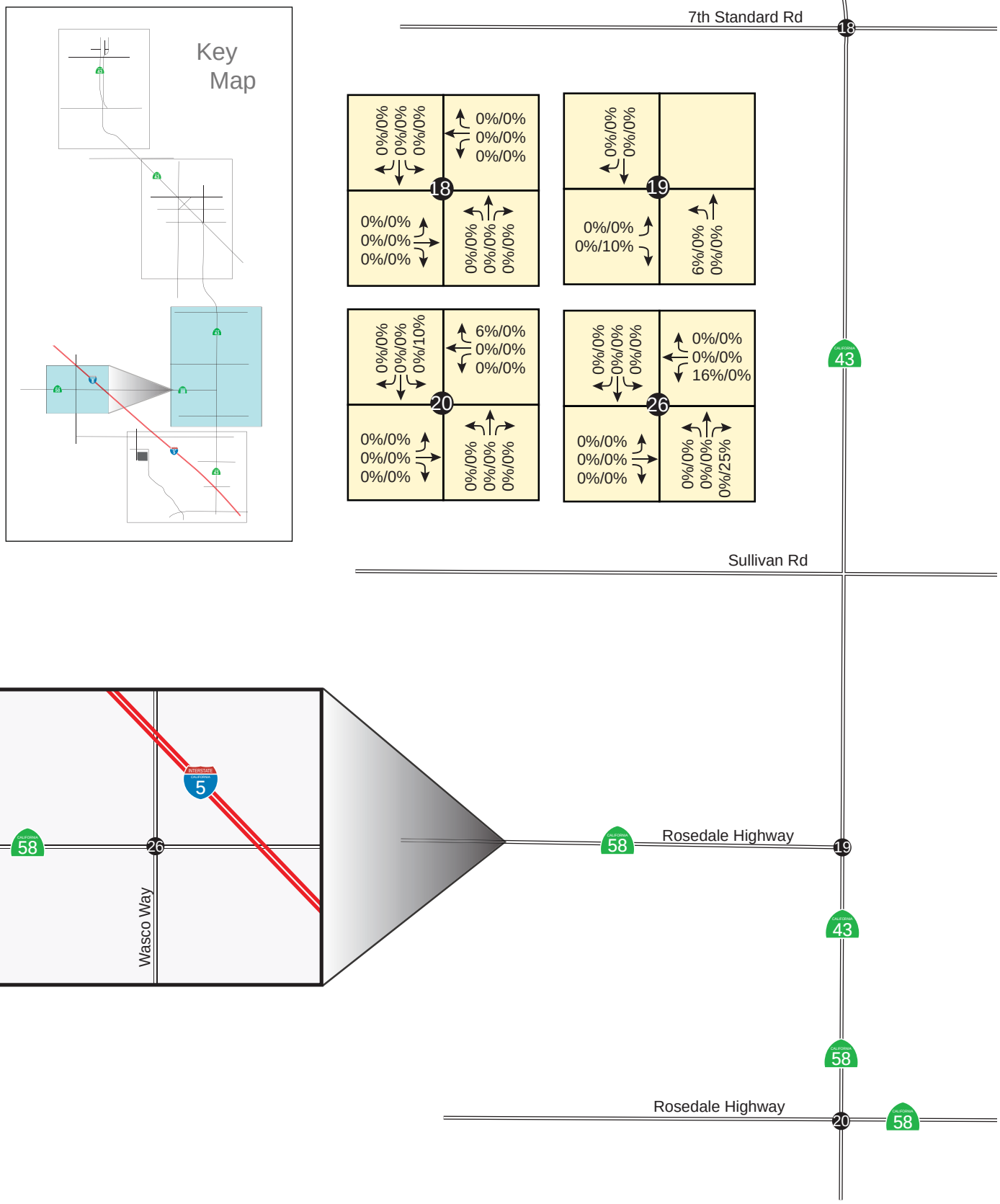

PROJECT DISTRIBUTION AS PERCENTAGE OF CONSTRUCTION TRIP GENERATION

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FIGURE 4-2d

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Table 4-2
Project Operations Trip Generation (Alternative 1 – Rail Option)

Vehicle Type	Trip Purpose	Max Trips (One-Way)	Max Trips (Two-Way)	PCE Daily Trips (One-Way)	PCE Daily Trips (Two-Way)	Peak Hourly Trips (a.m.)			Peak Hourly Trips (p.m.)		
						Inbound	Outbound	Total	Inbound	Outbound	Total
Operations and Maintenance Trips[1]	Workers	154	308	154	308	110	0	110	22	132	154
Process Materials and Byproducts Trips[2]	Liquid Sulfur	3	6	312	624	27	27	54	27	27	54
	Gasification Solids	10	20								
	Urea	35	70								
	UAN-32	56	112								
Maintenance and Other Trucks[3]	Equipment Maintenance	3	6	21	42	3	3	6	3	3	6
	Miscellaneous Activities	4	8								
Feedstock Material Delivery Trips[4]	Flux Additive	7	14	159	318	15	15	30	15	15	30
	Petcoke	46	92								
	Coal	—	—								
Total Vehicles		**154**	**308**	**154**	**308**	**110**	**0**	**110**	**22**	**132**	**154**
Total Trucks		**164**	**328**	**492**	**984**	**45**	**45**	**90**	**45**	**45**	**90**

Notes:

[1] Source: HECA Project. Passenger Car Trips.

[2] Total process materials and byproducts truck trips, adjusted into Passenger Car Equivalent vehicles (3 PCE per truck). The trip generation estimate is based on the maximum 24-hour and 1-hour trips during Project operation. There are 104 (maximum 24-hour) truck deliveries and shipments at 3 PCE/truck = 312 PCE vehicles. Peak daily trips (including both the inbound and outbound trips) = 2 × 333 PCE vehicles = 624 PCE Trips. There are 9 (maximum 1-hour) truck deliveries and shipments at 3 PCE/truck = 27 PCE vehicles. Therefore, peak hourly trips (assuming equal number of inbound and outbound trips) = 2 × 27 PCE vehicles = 54 PCE Trips.

[3] Maintenance and Other truck trips, adjusted into Passenger Car Equivalent vehicles (3 PCE per truck). The trip generation estimate is based on the maximum 24-hour and 1-hour trips during Project operation. There are 7 (maximum 24-hour) truck deliveries and shipments at 3 PCE/truck = 21 PCE vehicles. Peak daily trips (including both the inbound and outbound trips) = 2 × 21 PCE vehicles = 42 PCE Trips. There is one (maximum 1-hour) truck delivery and shipment at 3 PCE/truck = 3 PCE vehicles. Therefore, peak hourly trips (assuming equal number of inbound and outbound trips) = 2 × 3 PCE vehicles = 6 PCE Trips.

[4] Total feedstock material delivery truck trips (including petroleum coke [petcoke] and coal), adjusted into Passenger Car Equivalent vehicles (3 PCE per truck). The trip generation estimate is based on the maximum 24-hour and 1-hour trips during Project operation. There are 53 (maximum 24-hour) truck deliveries at 3 PCE/truck = 159 PCE vehicles. Peak daily trips (including both the inbound and outbound trips) = 2 × 165 PCE vehicles = 318 PCE Trips. There are 5 (maximum 1-hour) truck deliveries at 3 PCE/truck = 15 PCE vehicles. Therefore, peak hourly trips (assuming equal number of inbound and outbound trips) = 2 × 15 PCE vehicles = 30 PCE Trips. The feedstock trip assumption was based on the train delivery of coal and trucking of petcoke to the Project Site.

Table 4-3
Project Operations Trip Generation (Alternative 2 – Truck Option)

Vehicle Type	Trip Purpose	Max Trips (One-Way)	Max Trips (Two-Way)	PCE One-Way Trips	PCE Daily Trips (Two-Way)	Peak Hourly Trips (a.m.)			Peak Hourly Trips (p.m.)		
						Inbound	Outbound	Total	Inbound	Outbound	Total
Operations and Maintenance Trips[1]	Workers	154	308	154	308	110	0	110	22	132	154
Process Materials and Byproducts Trips[2]	Liquid Sulfur	4	8	876	1,752	78	78	156	78	78	156
	Gasification Solids	38	76								
	Urea	138	276								
	UAN-32	112	224								
Maintenance and Other Trucks[3]	Equipment Maintenance	3	6	21	42	3	3	6	3	3	6
	Miscellaneous Activities	4	8								
Feedstock Material Delivery Trips[4]	Flux Additive	7	14	711	1,422	48	48	96	12	12	24
	Petcoke	46	92								
	Coal	184	368								
Total Vehicles		**154**	**308**	**154**	**308**	**110**	**0**	**110**	**22**	**132**	**154**
Total Trucks		**536**	**1,072**	**1,608**	**3,216**	**129**	**129**	**258**	**93**	**93**	**186**

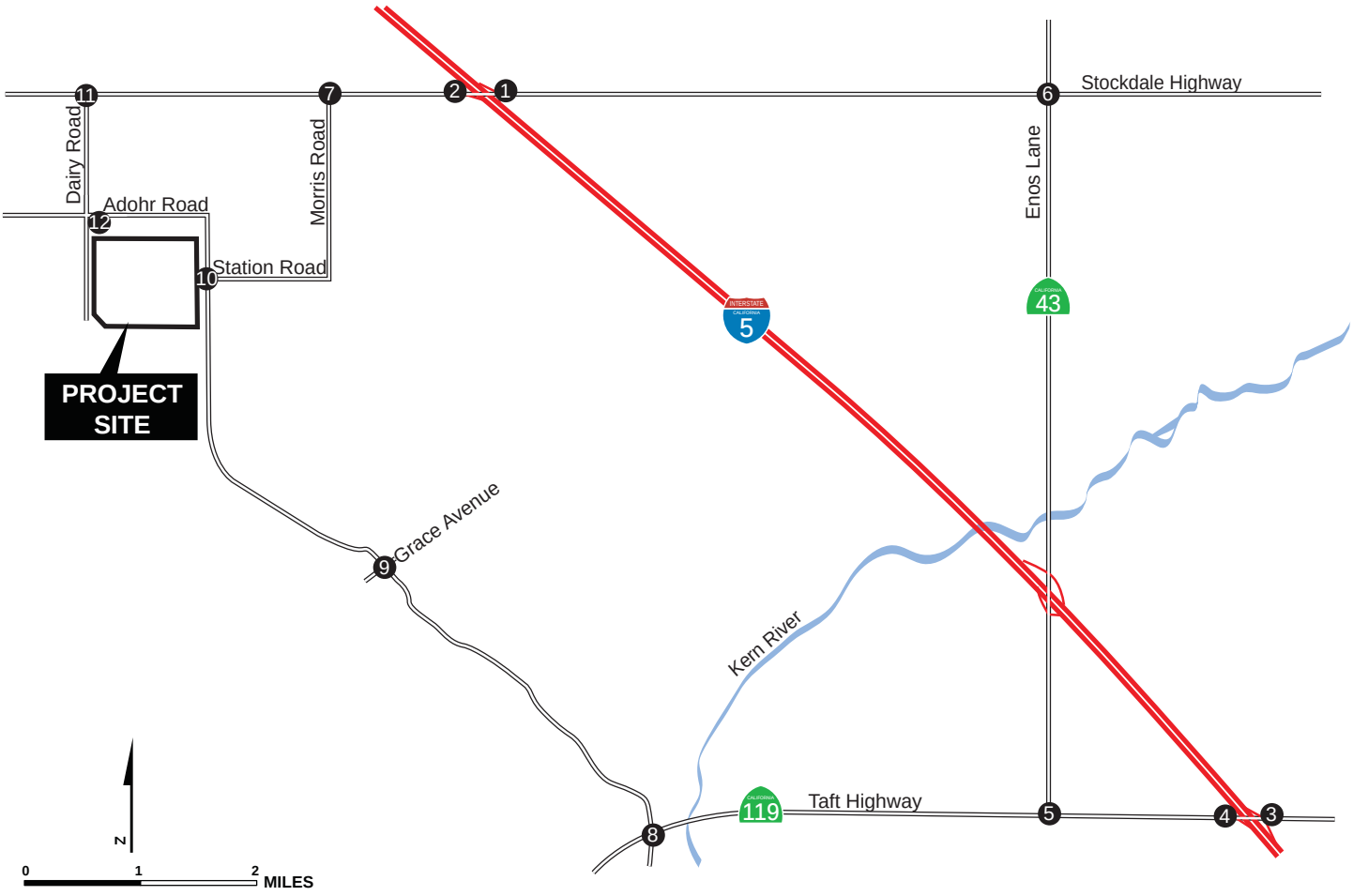
Notes:

[1] Source: HECA Project. Passenger Car Trips.

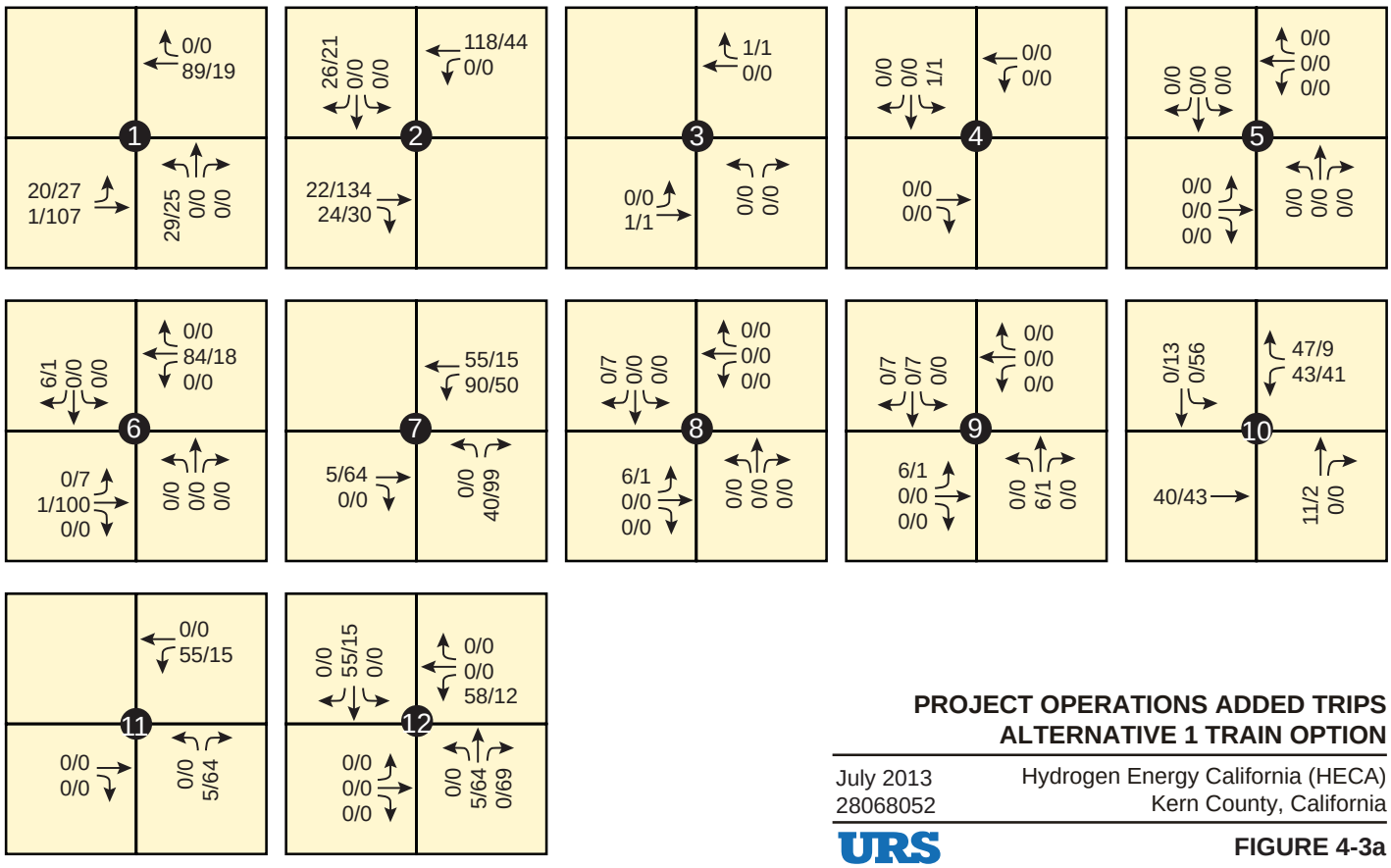
[2] Total byproducts and other truck trips, adjusted into Passenger Car Equivalent vehicles (3 PCE per truck). The trip generation estimate is based on the maximum 24-hour and 1-hour trips during Project operation. There are 292 (maximum 24-hour) truck deliveries and shipments at 3 PCE/truck = 876 PCE vehicles. Peak daily trips (including both the inbound and outbound trips) = 2 × 876 PCE vehicles = 1,752 PCE Trips. There are 26 (maximum 1-hour) truck deliveries and shipments at 3 PCE/truck = 78 PCE vehicles. Therefore, peak hourly trips (assuming equal number of inbound and outbound trips) = 2 × 78 PCE vehicles = 156 PCE Trips.

[3] Maintenance and Other truck trips, adjusted into Passenger Car Equivalent vehicles (3 PCE per truck). The trip generation estimate is based on the maximum 24-hour and 1-hour trips during Project operation. There are 7 (maximum 24-hour) truck deliveries and shipments at 3 PCE/truck = 21 PCE vehicles. Peak daily trips (including both the inbound and outbound trips) = 2 × 21 PCE vehicles = 42 PCE Trips. There is one (maximum 1-hour) truck delivery and shipment at 3 PCE/truck = 3 PCE vehicles. Therefore, peak hourly trips (assuming equal number of inbound and outbound trips) = 2 × 3 PCE vehicles = 6 PCE Trips.

[4] Total feedstock material delivery truck trips (including petroleum coke [petcoke] and coal), adjusted into Passenger Car Equivalent vehicles (3 PCE per truck). The trip generation estimate is based on the maximum 24-hour and 1-hour trips during Project operation. There are 237 (maximum 24-hour) truck deliveries at 3 PCE/truck = 711 PCE vehicles. Peak daily trips (including both the inbound and outbound trips) = 2 × 897 PCE vehicles = 1,794 PCE Trips. There are 16 (maximum 1-hour) truck deliveries at 3 PCE/truck = 48 PCE vehicles. Therefore, peak hourly trips (assuming equal number of inbound and outbound trips) = 2 × 60 PCE vehicles = 96 PCE Trips. There will a break of coal trucking activities during the p.m. peak hour to minimize roadway conflicts with heavy vehicles, and will resume immediately after the peak p.m. traffic has dissipated.



NOTE: Intersection # 7 has been analyzed as a T-intersection. The north leg has minimum/negligible traffic volumes.



PROJECT OPERATIONS ADDED TRIPS
ALTERNATIVE 1 TRAIN OPTION

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FIGURE 4-3a

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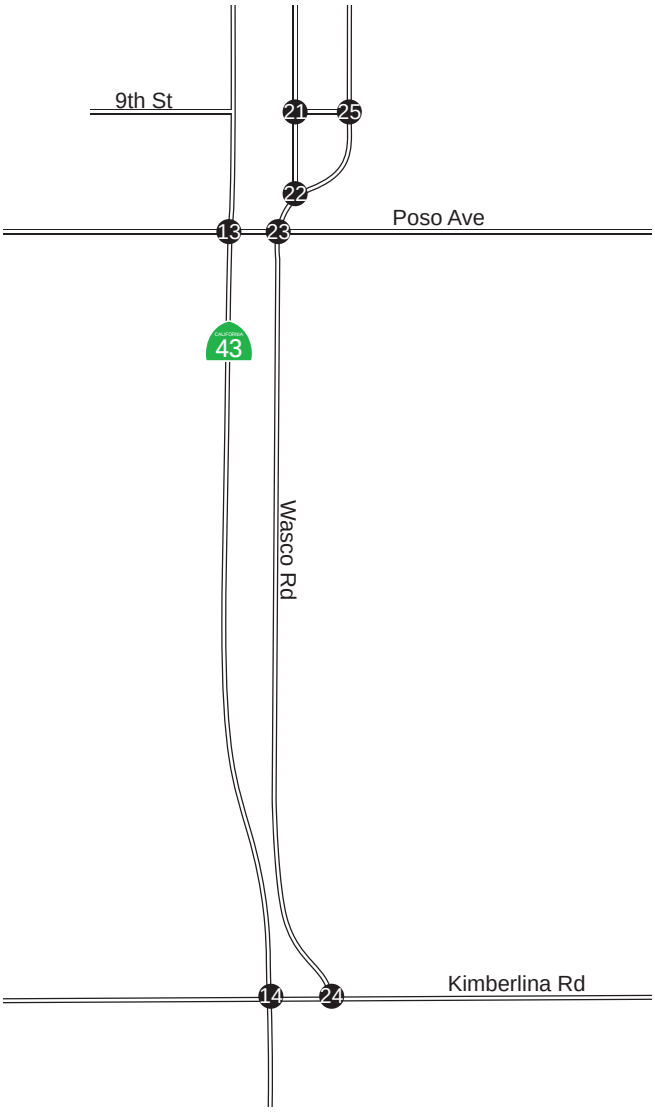

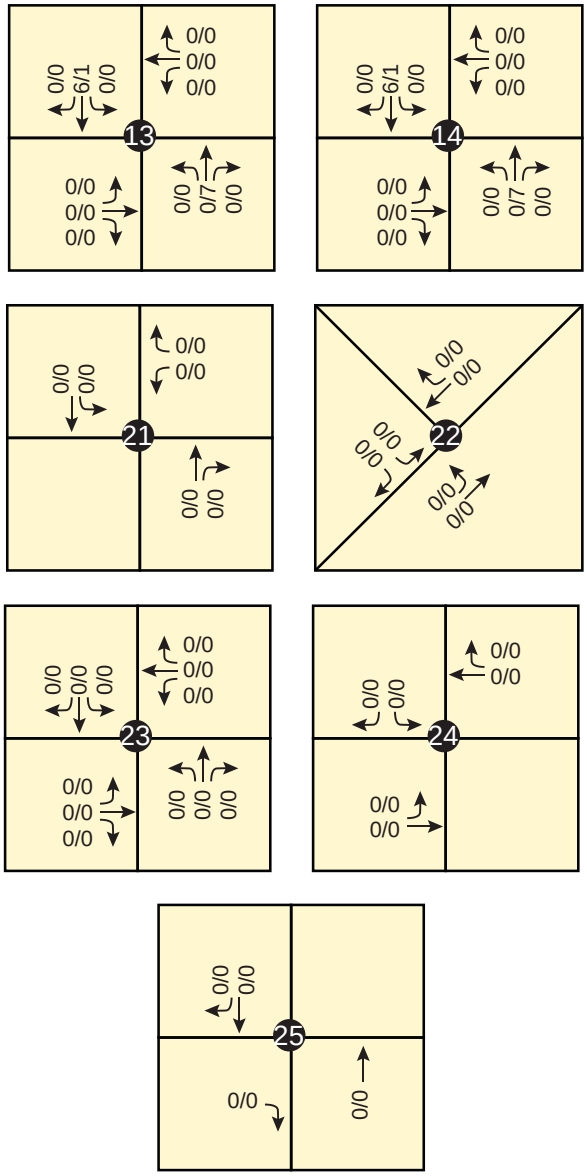

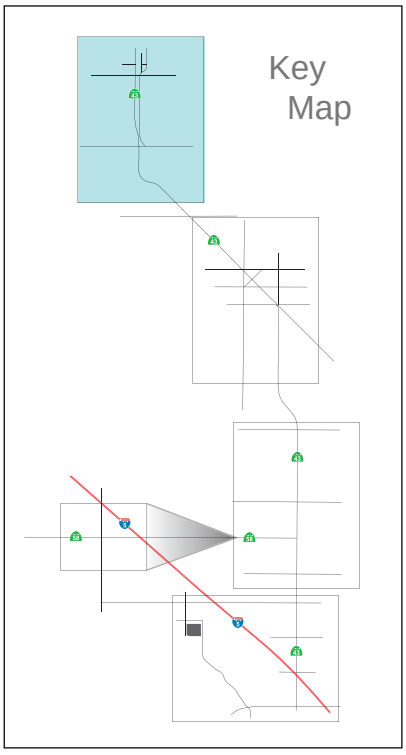

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PROJECT OPERATIONS-ADDED TRIPS
ALTERNATIVE 1 TRAIN OPTION

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FIGURE 4-3b

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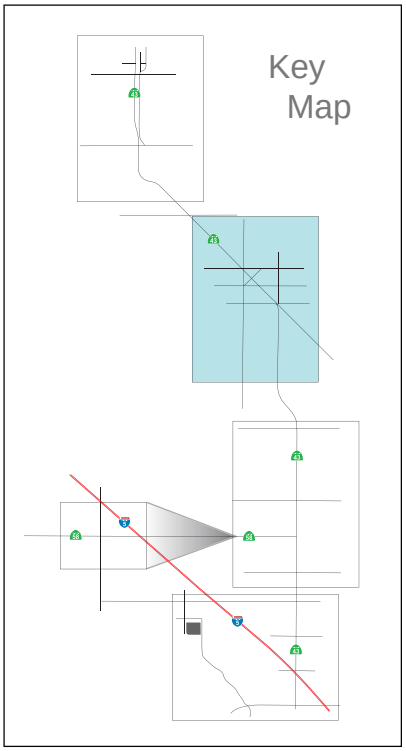

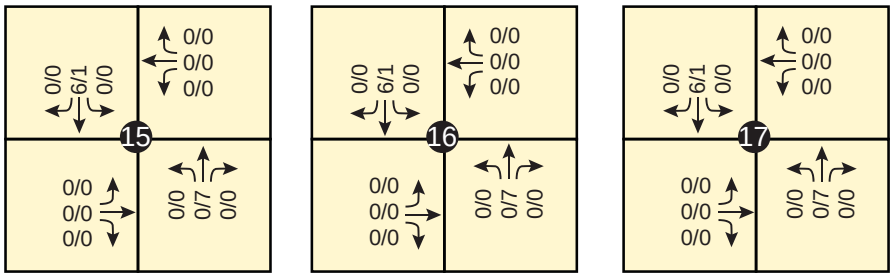

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PROJECT OPERATIONS-ADDED TRIPS
ALTERNATIVE 1 TRAIN OPTION

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FIGURE 4-3c

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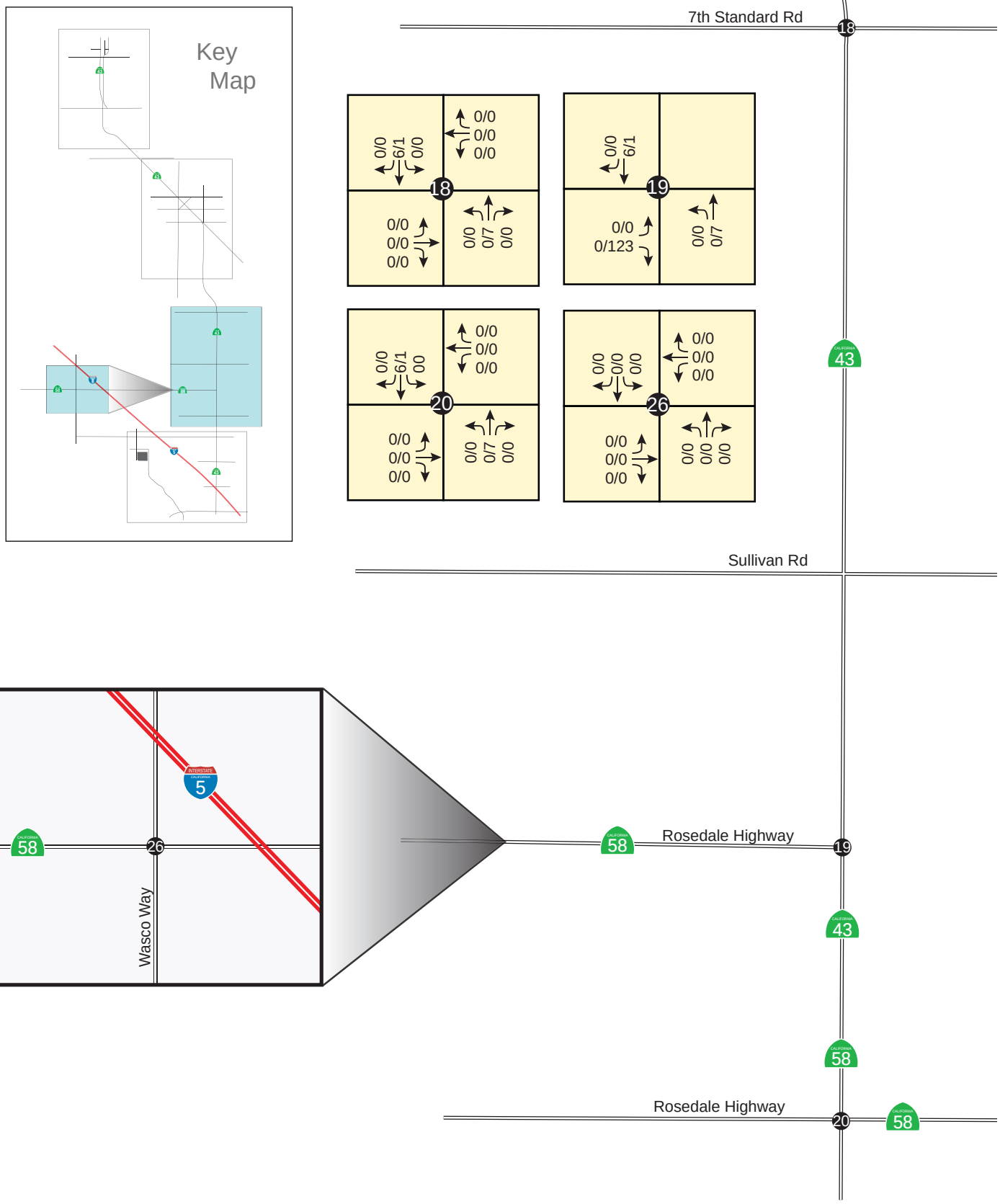

PROJECT OPERATIONS-ADDED TRIPS
ALTERNATIVE 1 TRAIN OPTION

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FIGURE 4-3d

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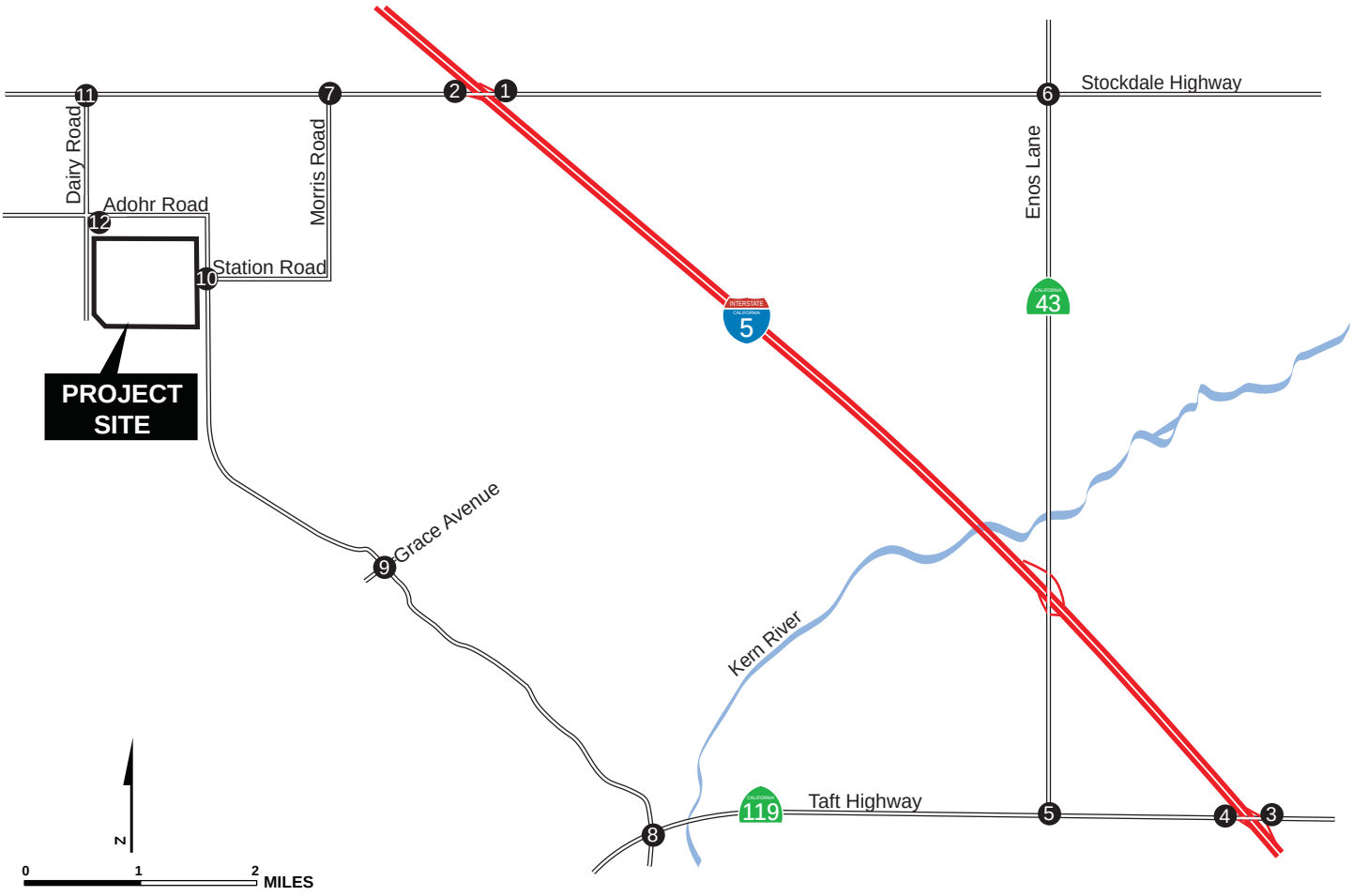

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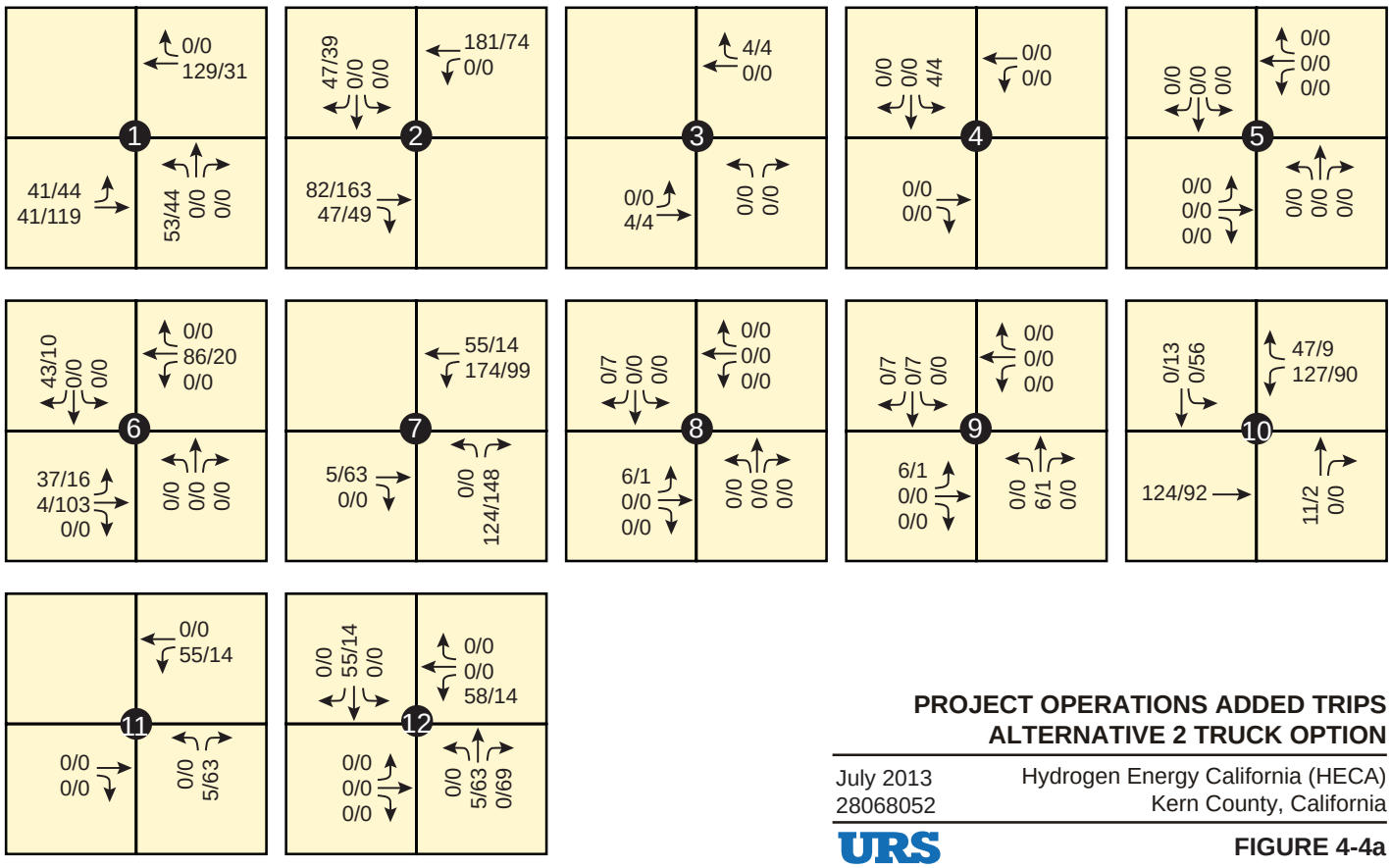

PROJECT OPERATIONS ADDED TRIPS
ALTERNATIVE 2 TRUCK OPTION

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FIGURE 4-4a

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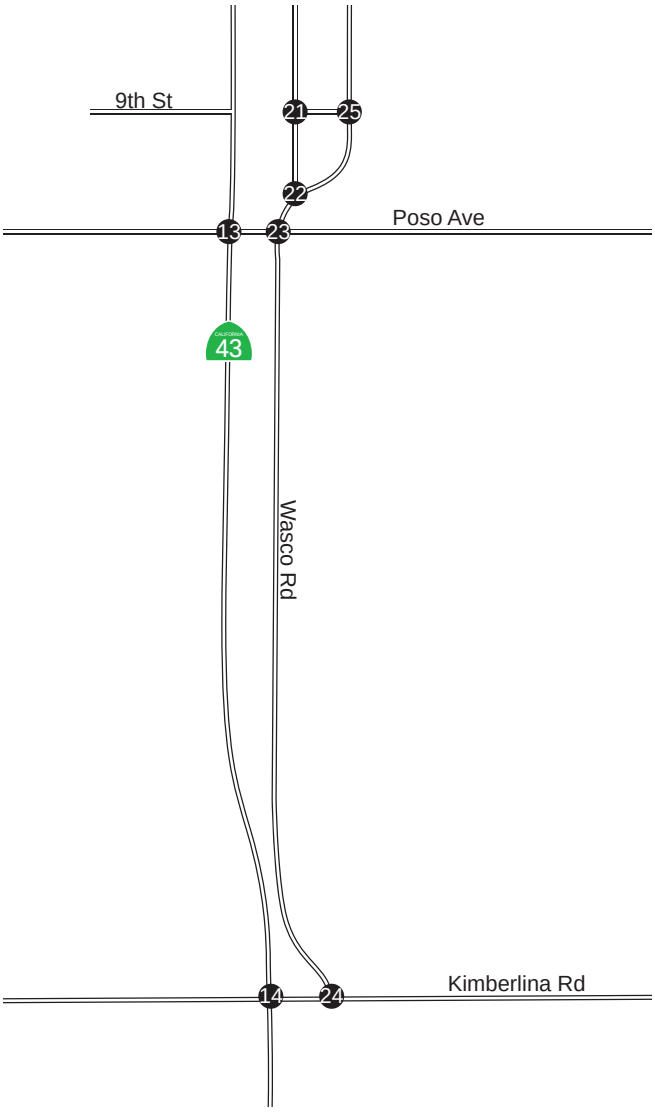

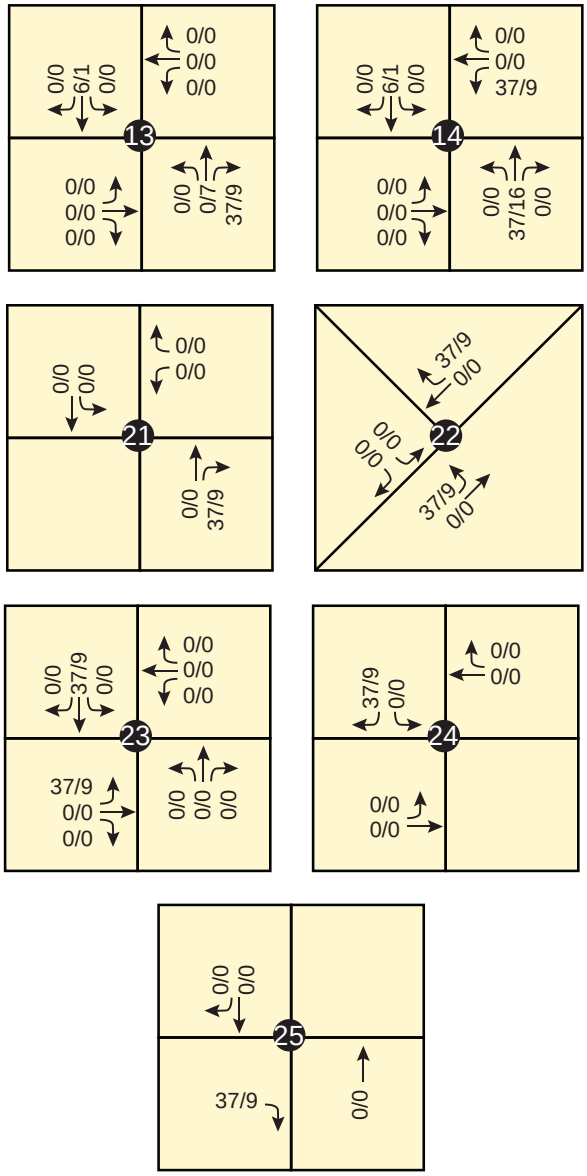

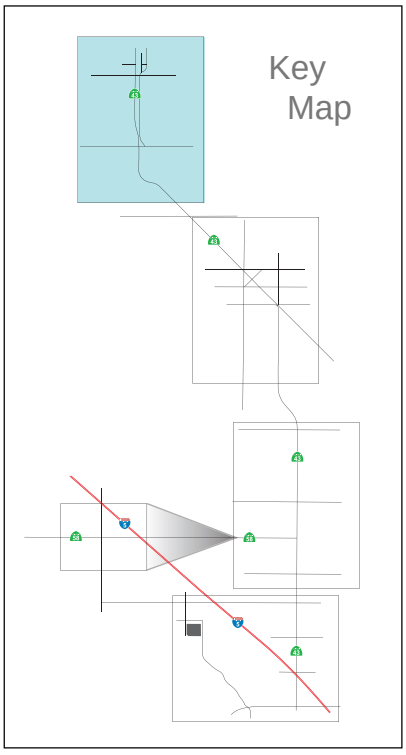

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FIGURE 4-4b

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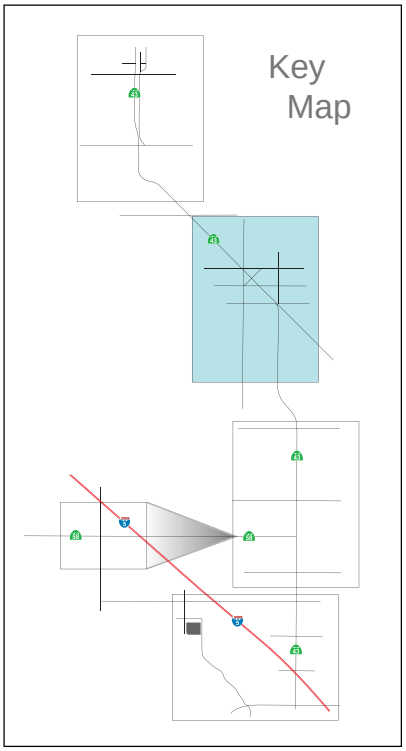

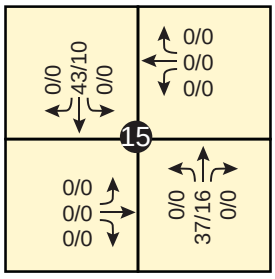

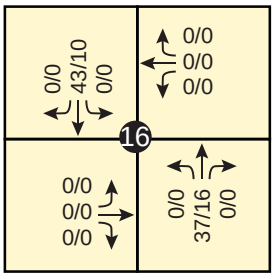

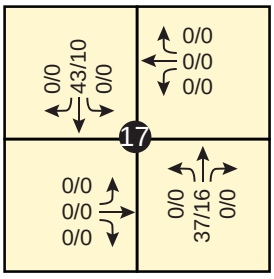

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FIGURE 4-4c

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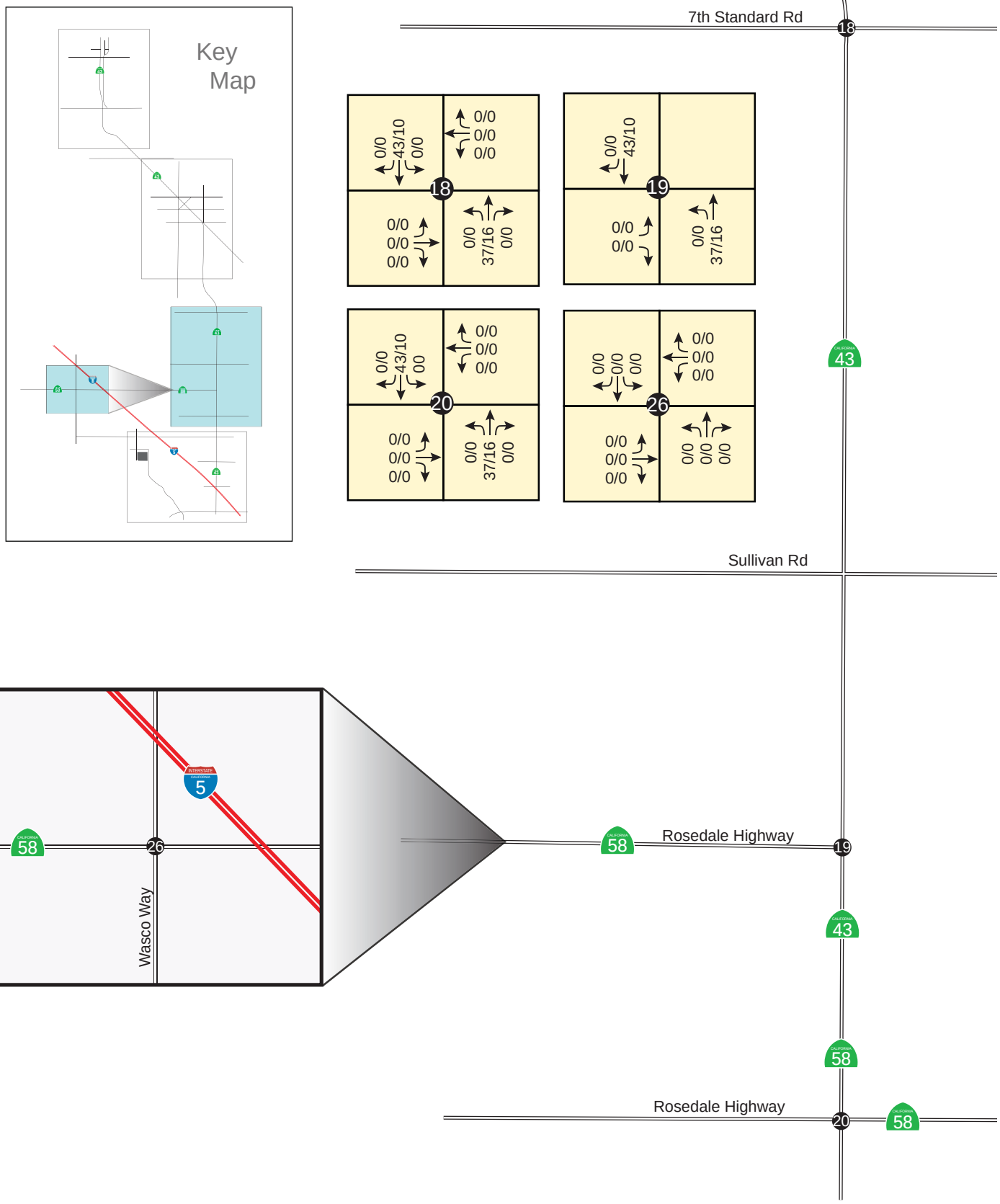

PROJECT OPERATIONS ADDED TRIPS
ALTERNATIVE 2 TRUCK OPTION

July 2013
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FIGURE 4-4d

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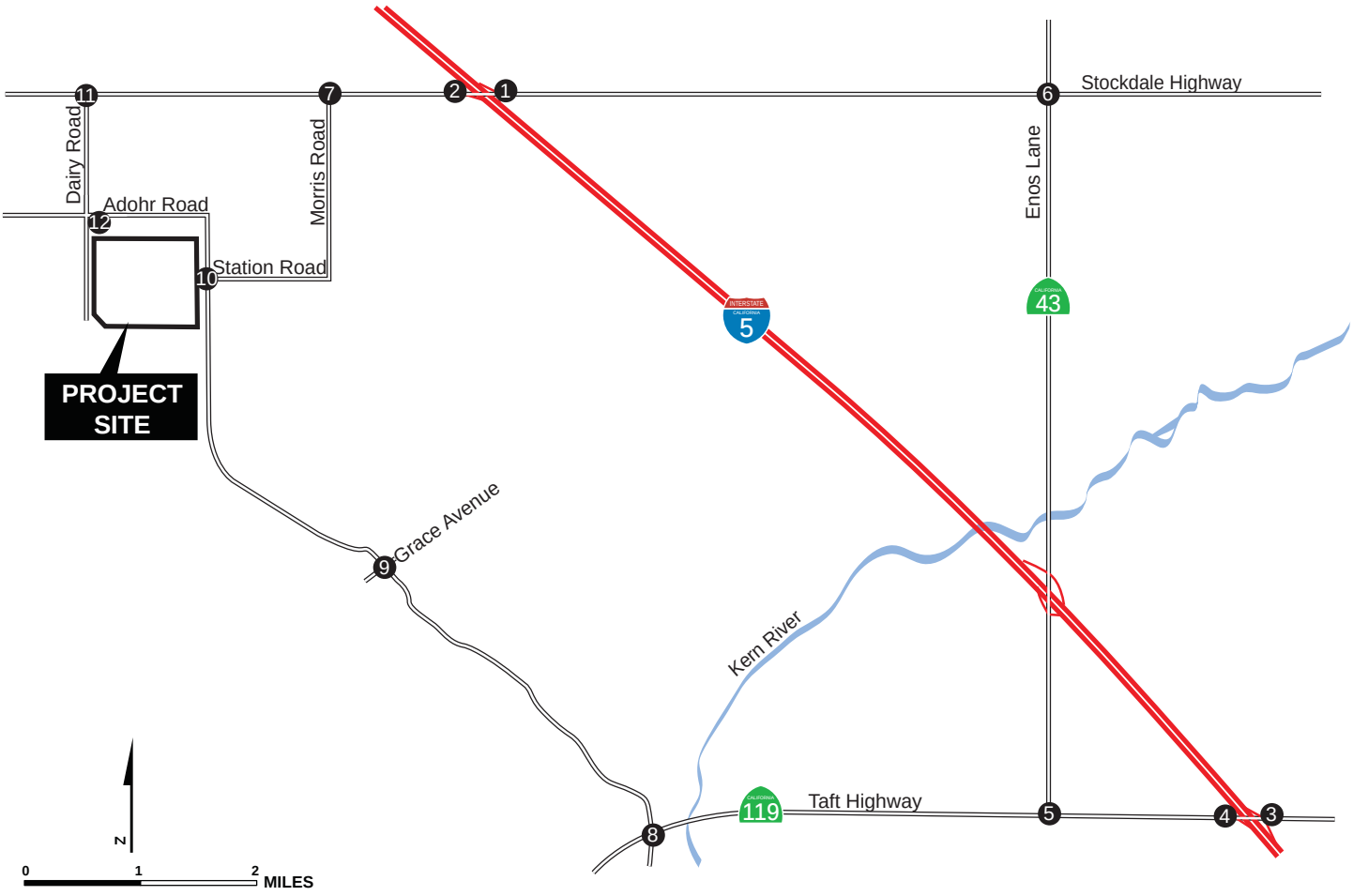
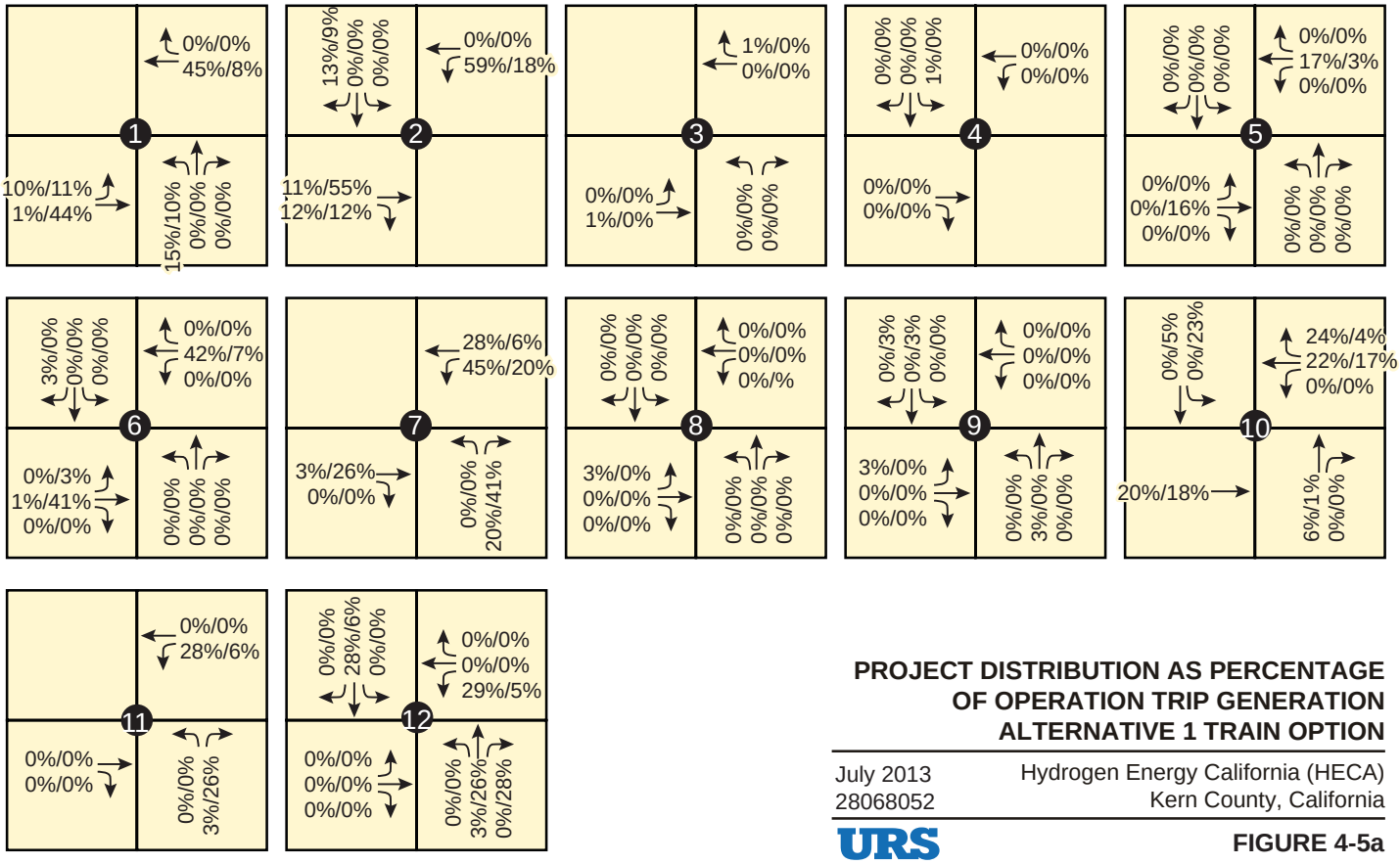


NOTE: Intersection # 7 has been analyzed as a T-intersection. The north leg has minimum/negligible traffic volumes.



PROJECT DISTRIBUTION AS PERCENTAGE OF OPERATION TRIP GENERATION ALTERNATIVE 1 TRAIN OPTION

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FIGURE 4-5a

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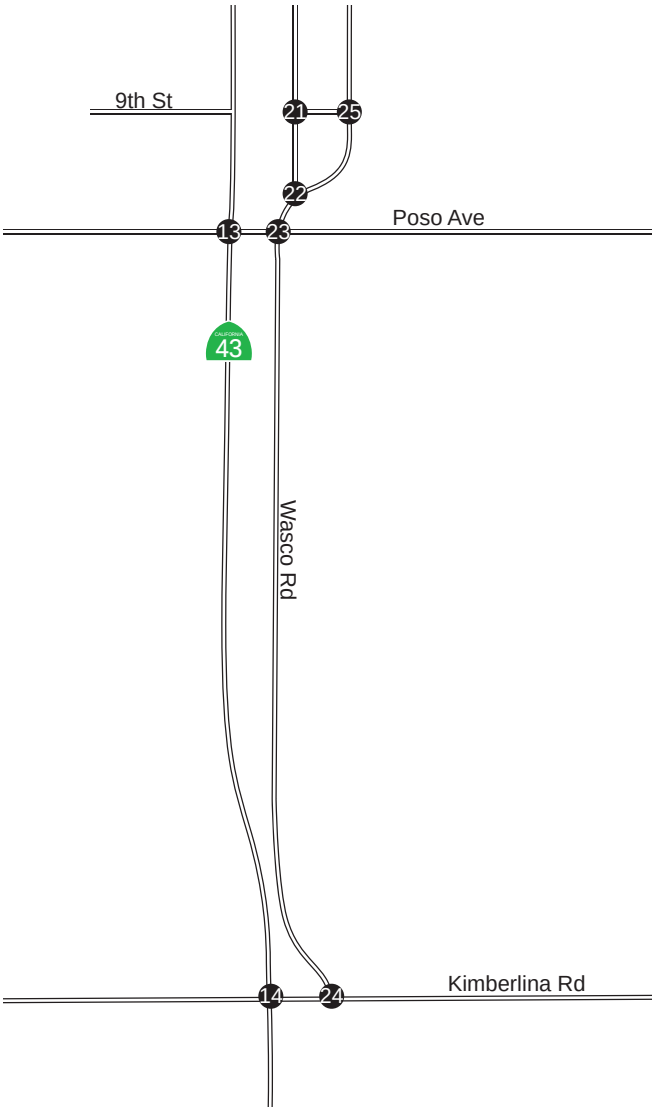

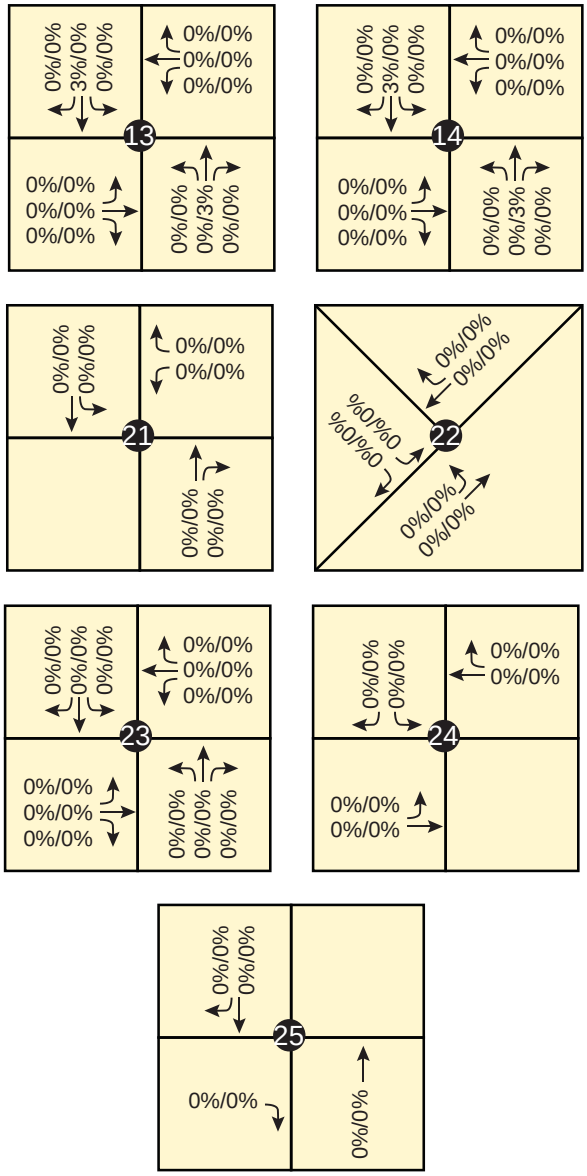

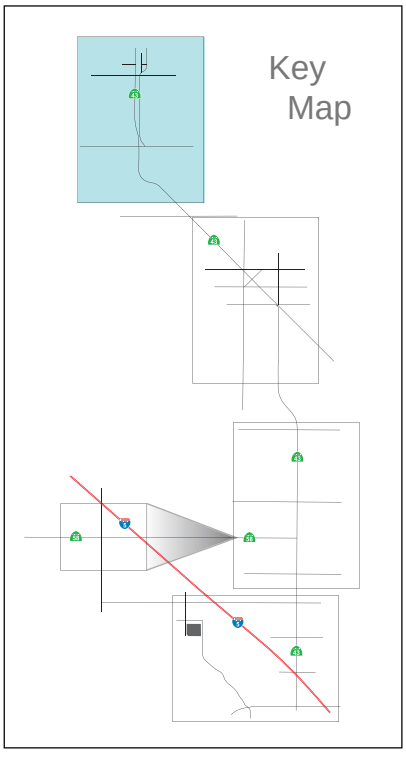

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FIGURE 4-5b

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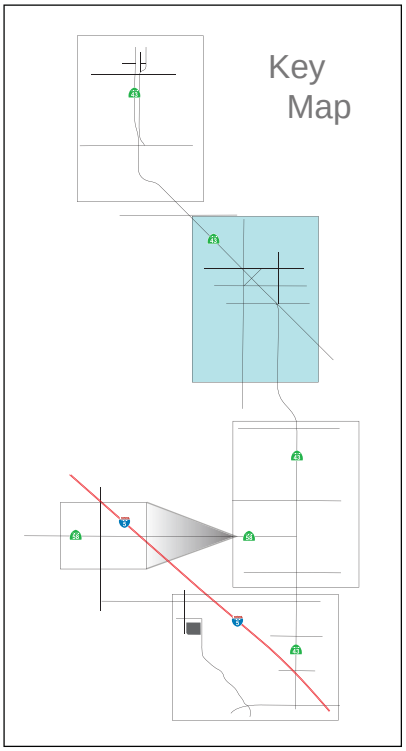

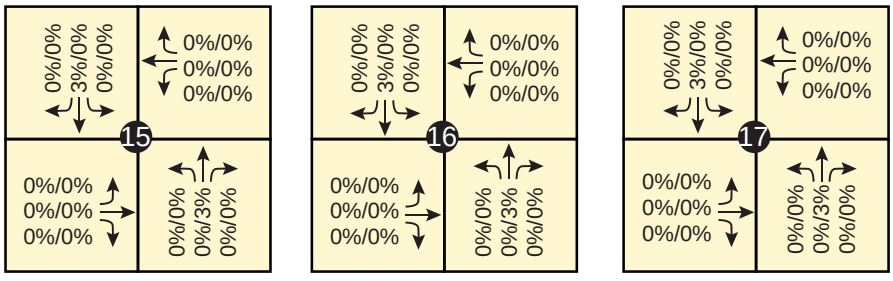

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FIGURE 4-5c

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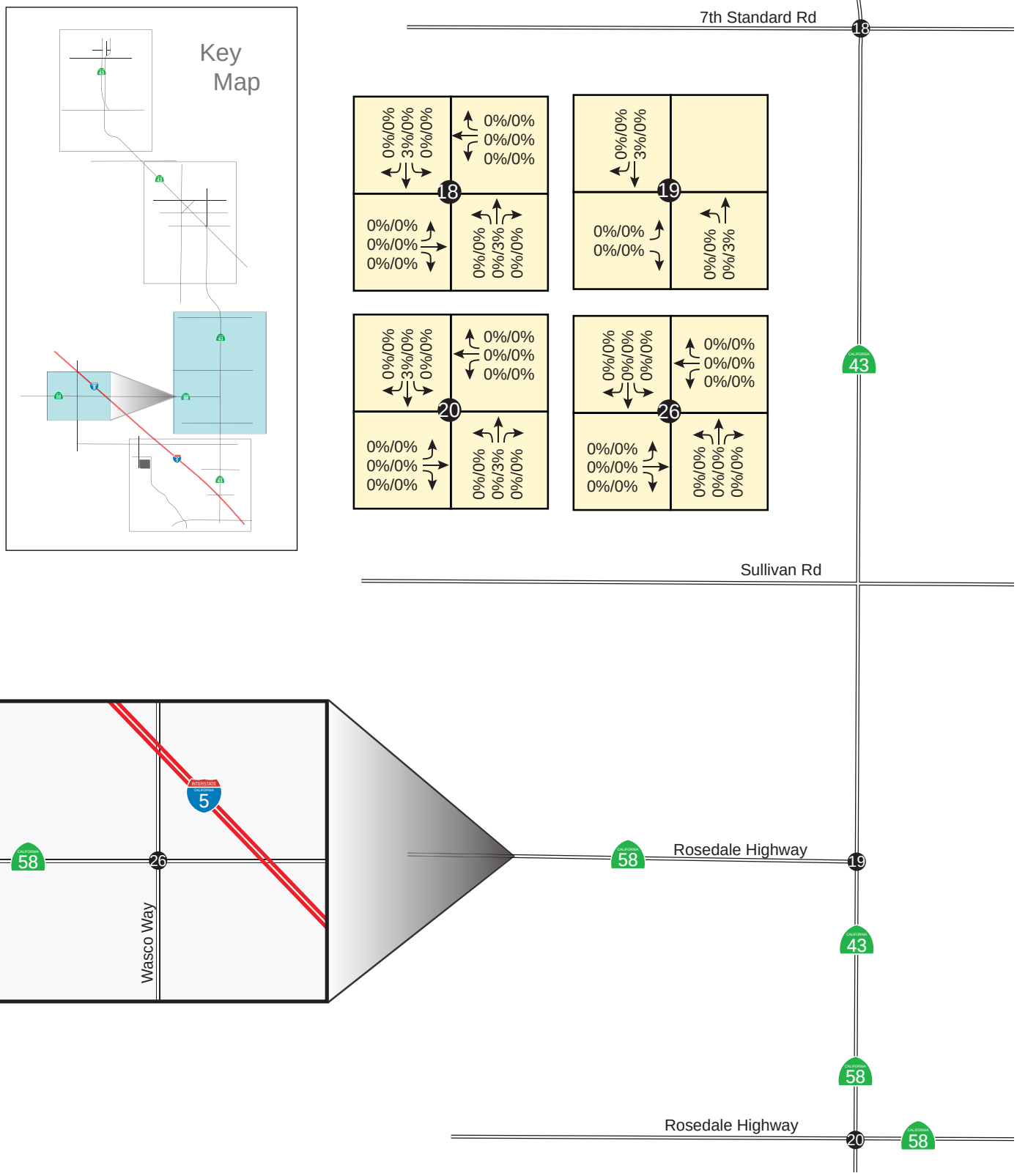

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FIGURE 4-5d

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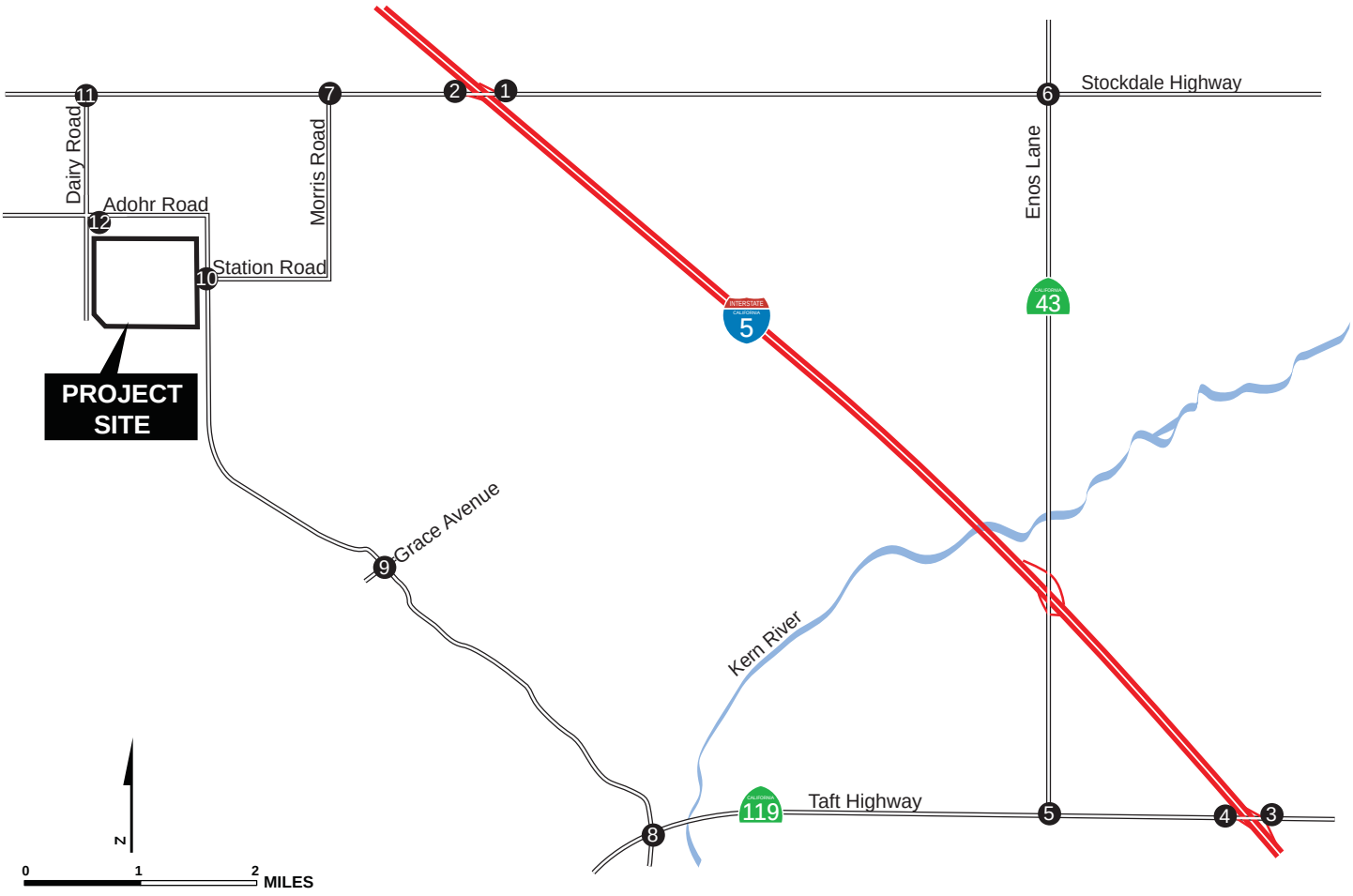

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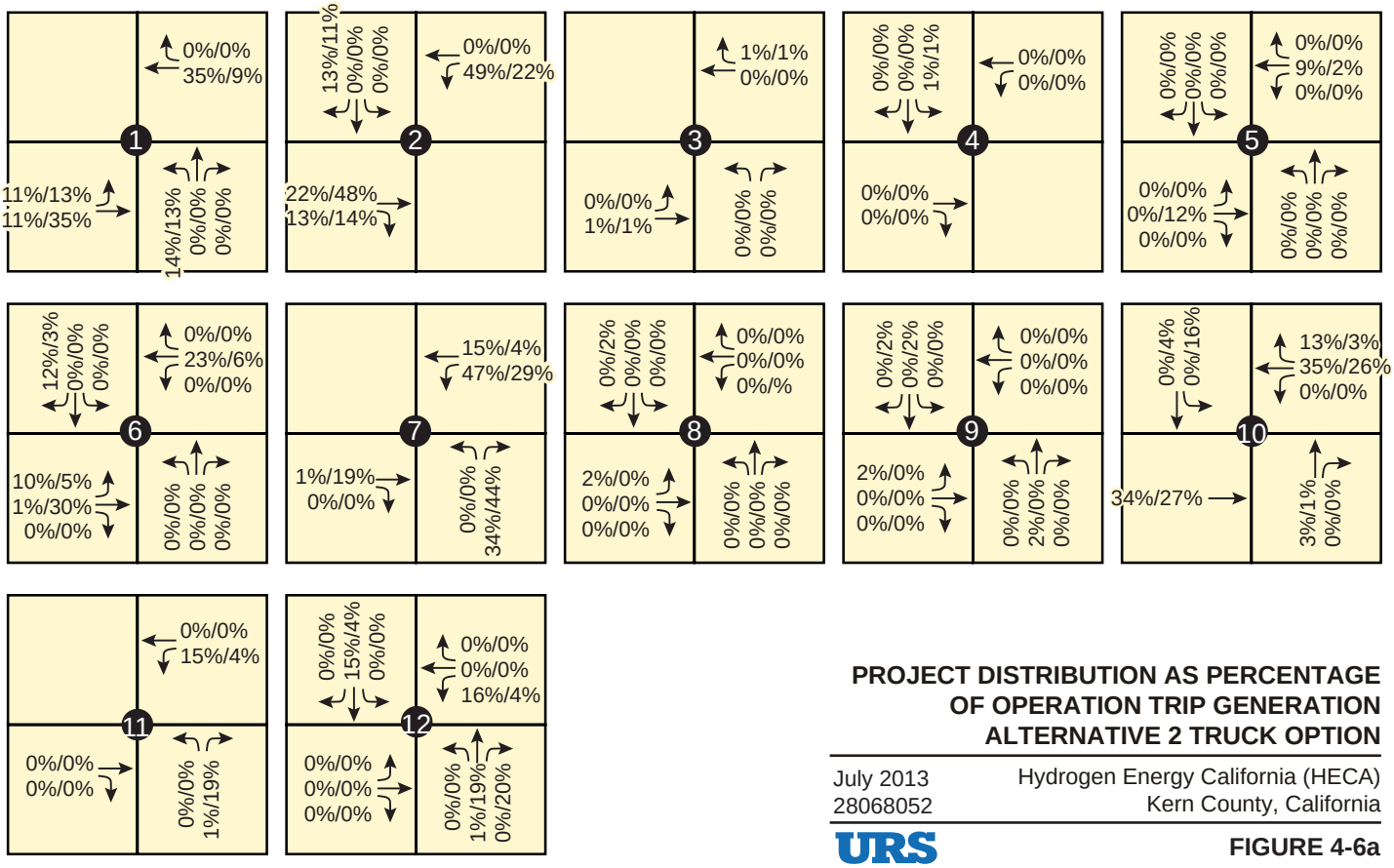

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FIGURE 4-6a

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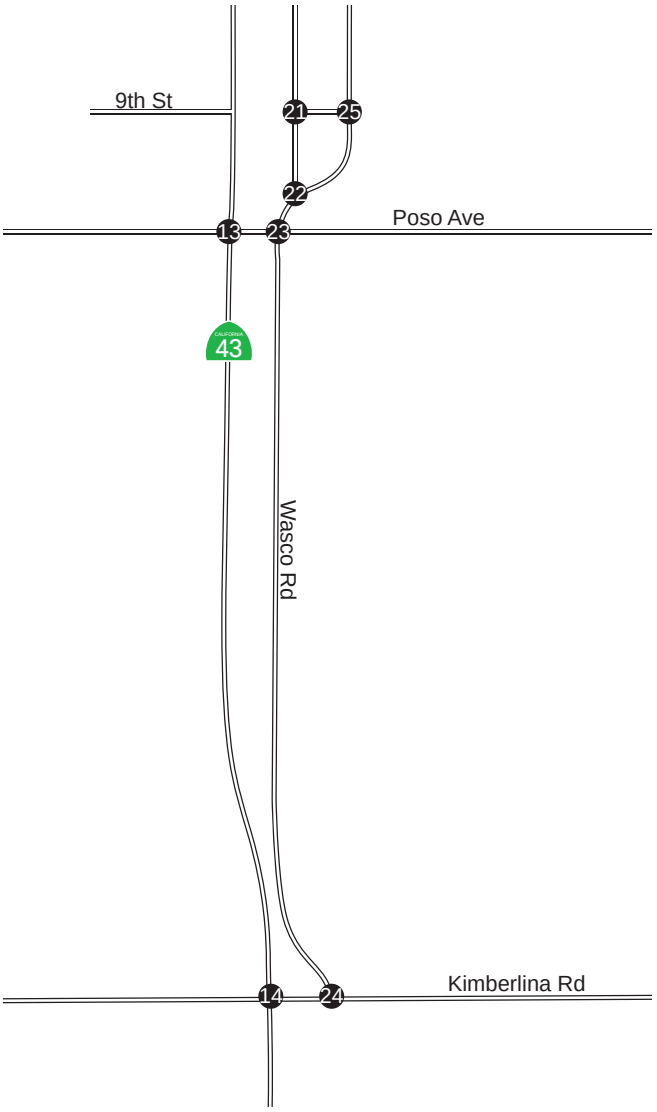

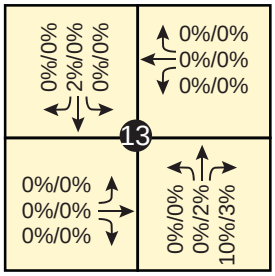

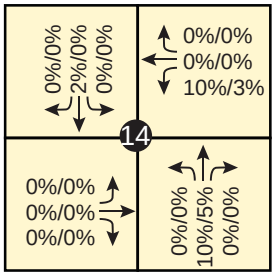

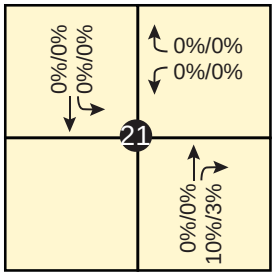

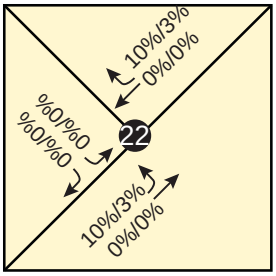

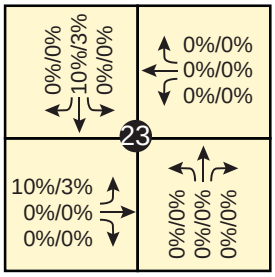

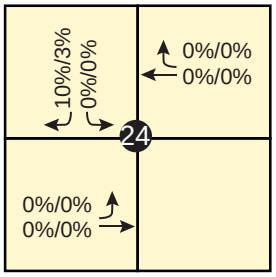

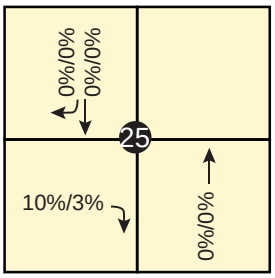

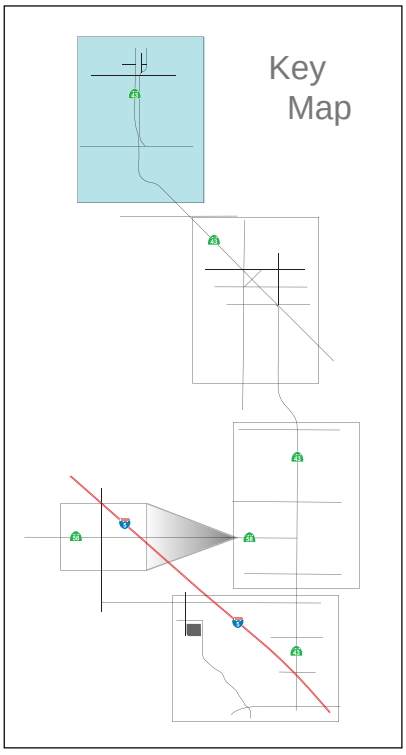

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FIGURE 4-6b

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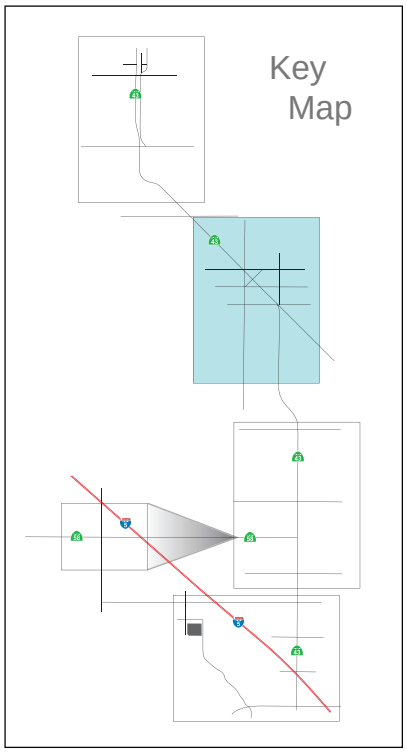

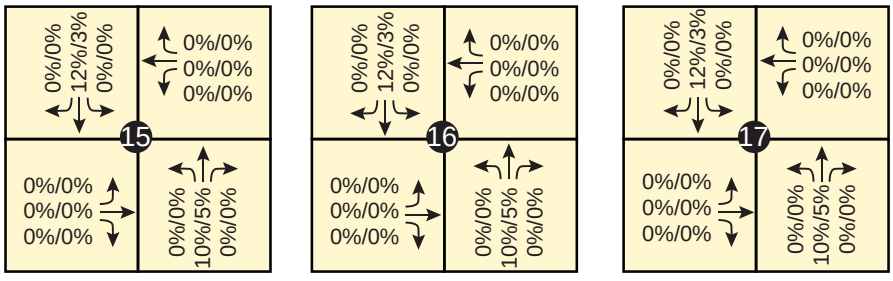

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July 2013
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FIGURE 4-6c

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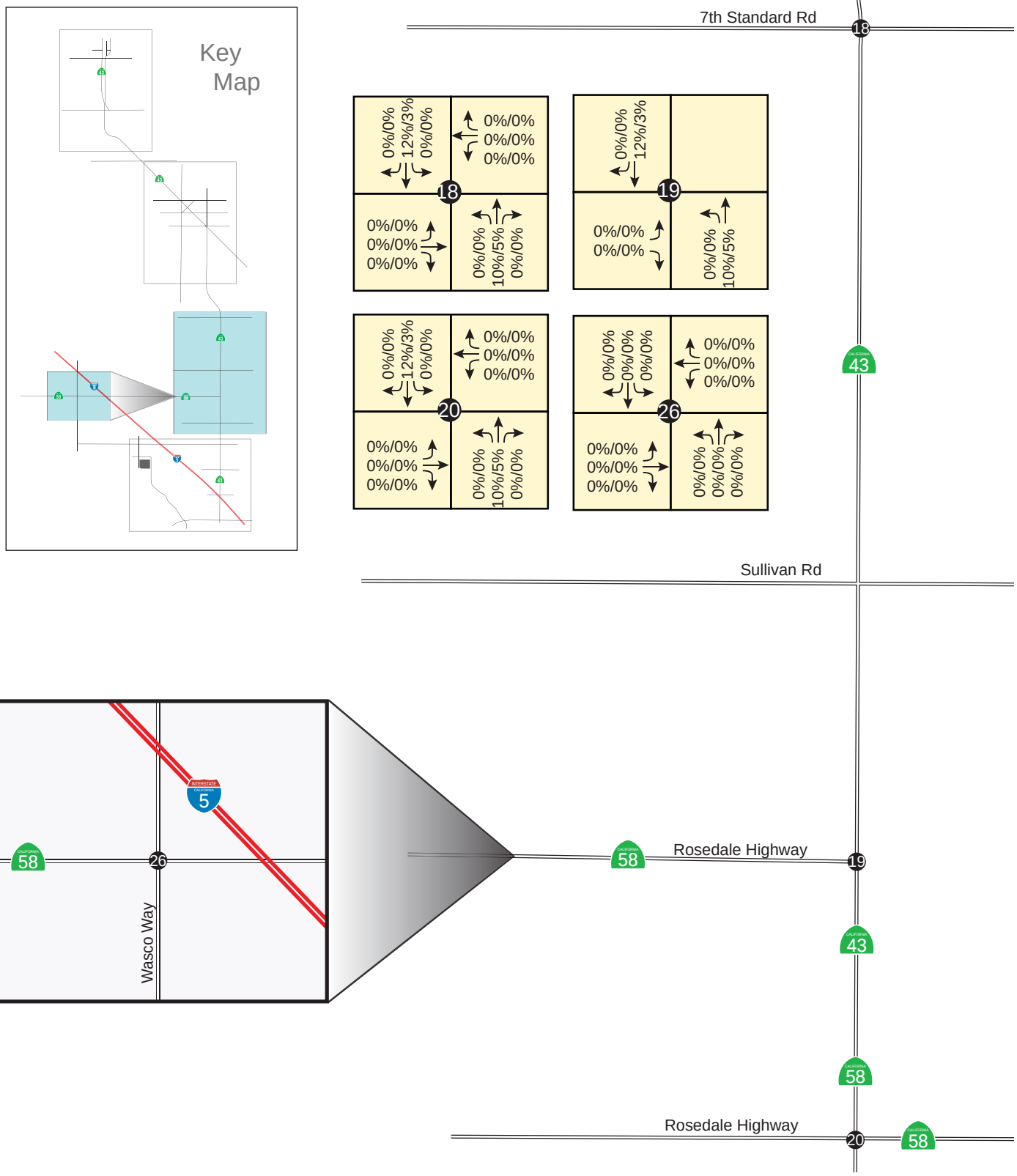

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FIGURE 4-6d

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5.0 PROJECT CONSTRUCTION TRAFFIC ASSESSMENT

5.1 SIGNIFICANT IMPACT CRITERIA AND THRESHOLDS OF SIGNIFICANCE

5.1.1 Significant Impact Criteria

In consultation with County staff, the Project study intersections and roadway segments were evaluated using the Caltrans Guide for the preparation of traffic studies.

- Cause a substantial increase in traffic compared to the existing traffic condition (i.e., result in substantial increase in delay or volume-to-capacity ratio [V/C]); and

- Exceed LOS standard established by Caltrans or Kern County General Plan on designated roads and highways. Caltrans uses minimum acceptable LOS C, except where existing LOS is D or above.

5.1.2 Thresholds of Significance

- Cause No Project Baseline LOS A, B, C, D to degrade to LOS E or F; and
- Cause No Project Baseline LOS E to degrade to LOS F.

Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" (see Appendix "C-3" Caltrans Guide for the Preparation of Traffic Studies) on State highway facilities; however, Caltrans acknowledges that this may not always be feasible, and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the appropriate target LOS, the existing Measure of Effectiveness should be maintained.

5.2 YEAR 2016 BASELINE NO PROJECT CONDITIONS

Project construction is expected to start as early as 2013, with an approximate completion date in late 2016, and with varying levels of manpower, construction delivery, and equipment use. The Project's construction traffic analysis is based on the year 2016, when peak construction activities occur.

The baseline for the No Project Year 2016 scenario is based on the existing traffic conditions (representing Year 2012), increased by an annual ambient traffic growth of 2 percent. This approach is consistent with the Roads Department requirements, and data from previous traffic studies (URS, 2008).

5.2.1 Year 2016 Baseline No Project Intersection Analysis

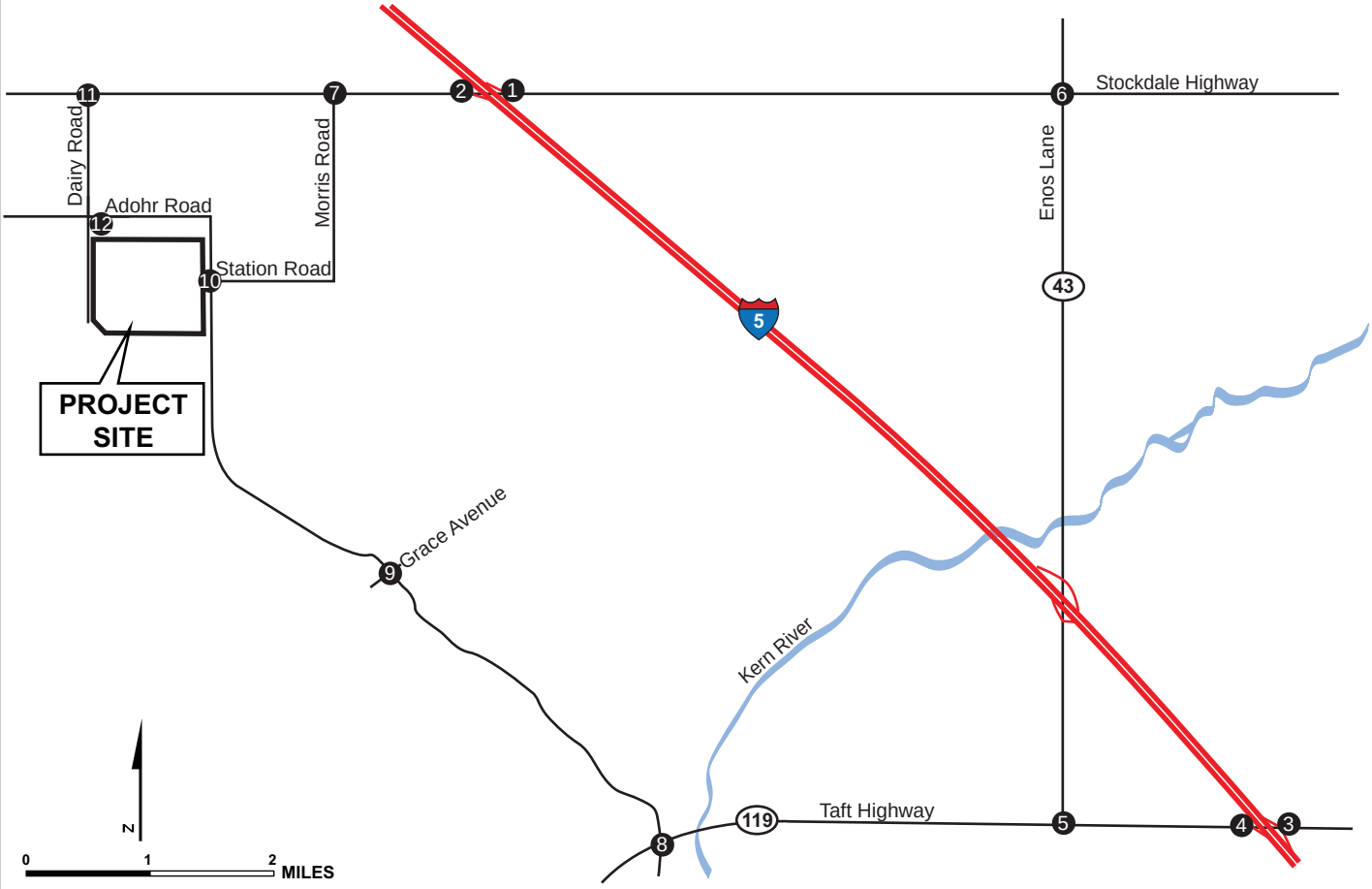
Table 5-1, Peak-Hour Intersection LOS – Year 2016 No Project Conditions, summarizes the results of the intersection LOS analysis at the 26 study intersections. The intersection LOS presented in Table 5-1 is the baseline for which Project construction impacts were evaluated. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets. Figure 5-1, Year 2016 No Project Traffic Volumes, shows Year 2016 No Project a.m. and p.m. peak-hour turning-movement volumes at the study intersections.

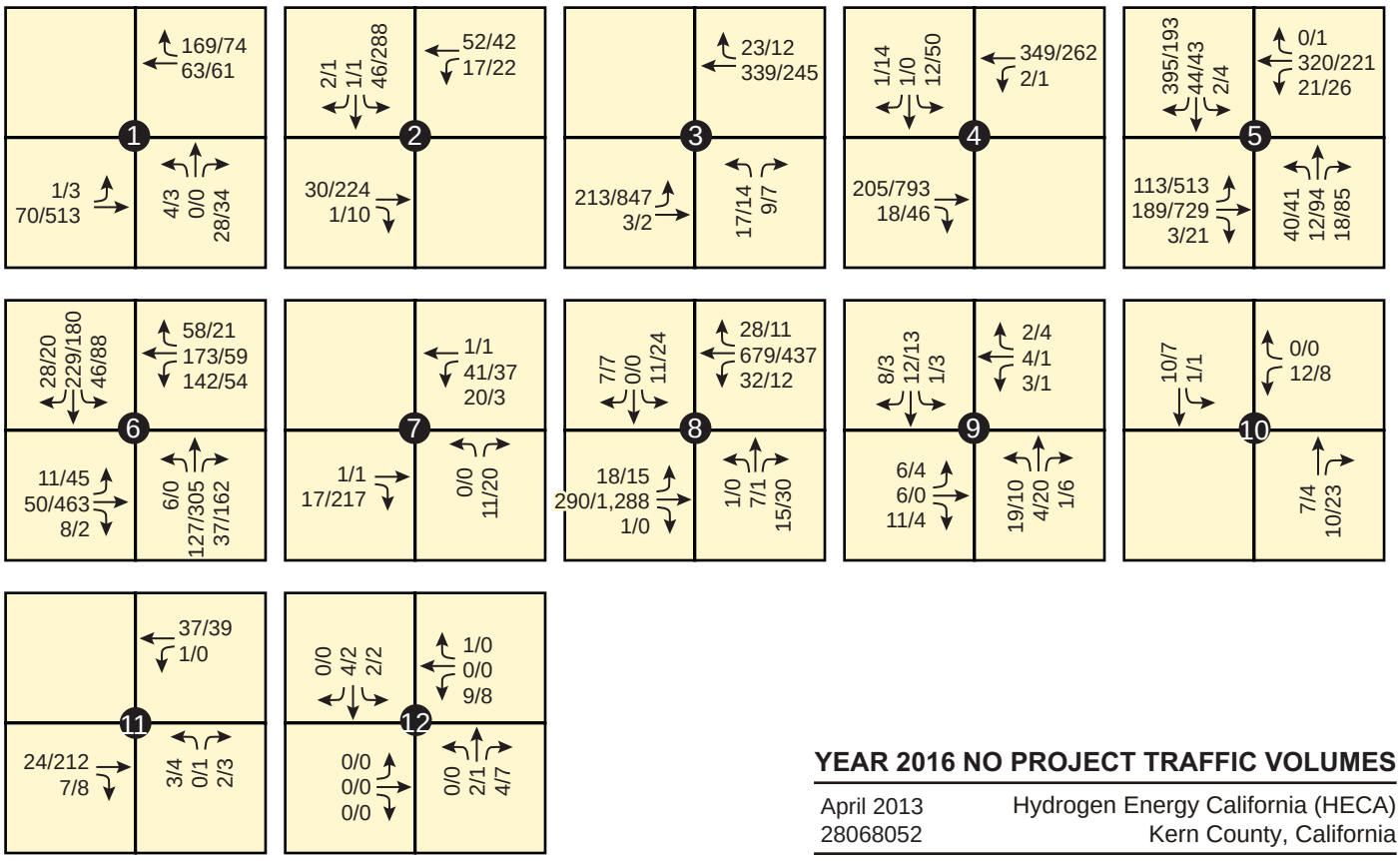
Table 5-1
Peak-Hour Intersection LOS –
Year 2016 No Project Conditions

Intersection	Control	a.m. Peak Hour		p.m. Peak Hour	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1. I-5 NB Ramp/Stockdale Highway	Unsignalized	8.9	A	12.0	B
2. I-5 SB Ramp/Stockdale Highway	Unsignalized	9.3	A	14.3	B
3. I-5 NB Ramp/SR 119	Unsignalized	11.6	B	19.7	C
4. I-5 SB Ramp/SR 119	Unsignalized	12.5	B	20.4	C
5. SR 119/SR 43	Signalized	26.2	C	24.2	C
6. SR 43/Stockdale Highway	Unsignalized	12.5	B	**36.4**	**E**
7. Stockdale Highway/Morris Road	Unsignalized	8.8	A	9.5	A
8. SR 119/Tupman Road	Unsignalized	21.9	C	**105.0**	**F**
9. Tupman Road/Grace Avenue	Unsignalized	7.0	A	7.0	A
10. Tupman Road/Station Road	Unsignalized	8.7	A	8.6	A
11. Dairy Road/Stockdale Highway	Unsignalized	8.7	A	9.8	A
12. Dairy Road/Adohr Road	Unsignalized	9.0	A	8.9	A
13. SR 43/Poso Avenue	Unsignalized	11.2	B	12.4	B
14. SR 43/Kimberlina Road	Signalized	24.1	C	21.2	C
15. SR 43/Shafter Avenue	Signalized	12.9	B	13.2	B
16. SR 43/Central Avenue	Signalized	9.1	A	10.5	B
17. SR 43/Lerdo Highway	Signalized	22.3	C	21.8	C
18. SR 43/7th Standard Road	Unsignalized	12.4	B	27.5	D
19. SR 43/SR 58 (Rosedale Highway – West)	Unsignalized	11.3	B	15.4	C
20. SR 43/SR 58 (Rosedale Highway – East)	Unsignalized	11.3	B	17.2	C
21. H Street/9th Street	Unsignalized	8.6	A	8.7	A
22. H Street/Wasco Avenue	Unsignalized	8.7	A	9.0	A
23. Wasco Avenue/Poso Avenue	Unsignalized	10.4	B	10.8	B
24. Wasco Avenue/Kimberlina Road	Unsignalized	10.5	B	10.4	B
25. J Street/9th Street	Unsignalized	8.5	A	8.6	A
26. Wasco Way/SR 58	Unsignalized	14.5	B	14.3	B

Notes:

a.m./p.m. = morning/evening
I-5 = Interstate 5
NB/SB = northbound/southbound
sec/veh = seconds per vehicle
SR = State Route





YEAR 2016 NO PROJECT TRAFFIC VOLUMES

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FIGURE 5-1a

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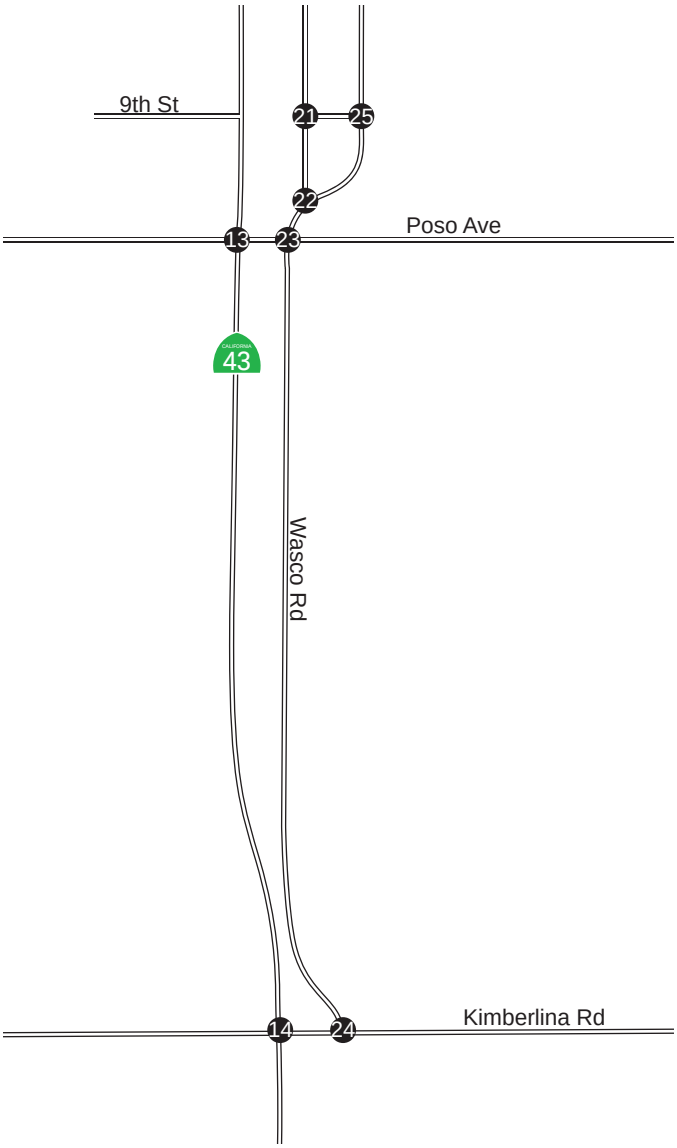

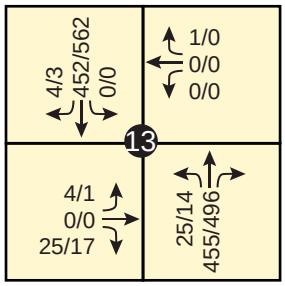

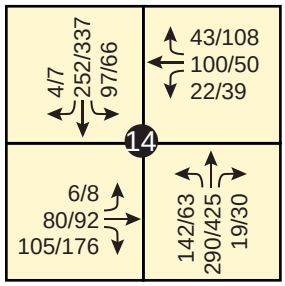

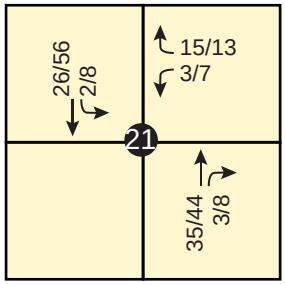

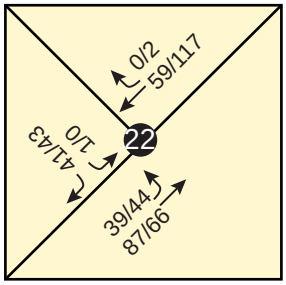

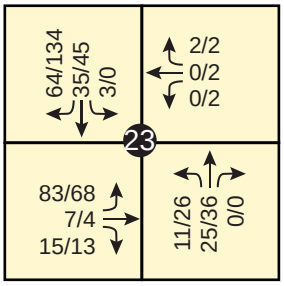

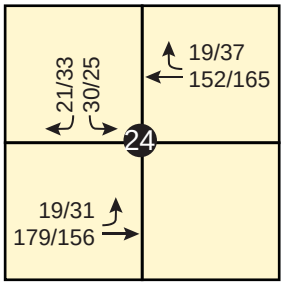

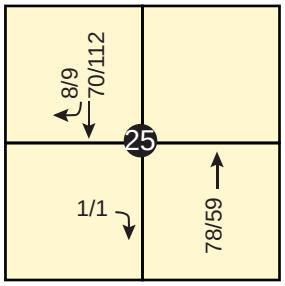

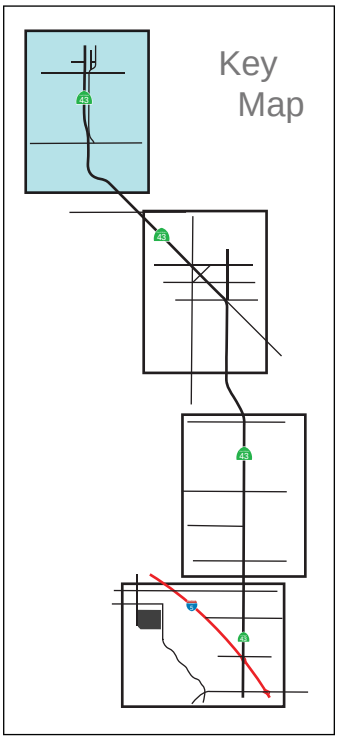

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April 2013
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FIGURE 5-1b

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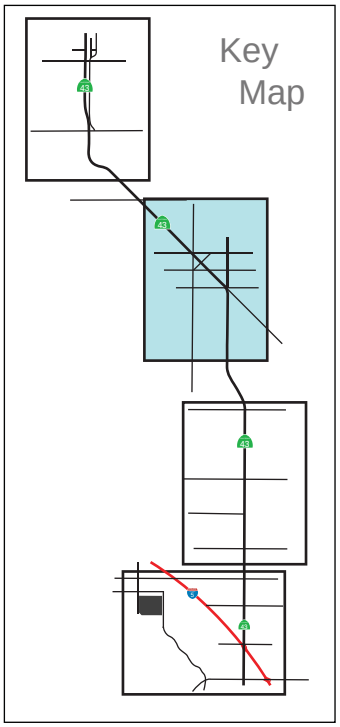

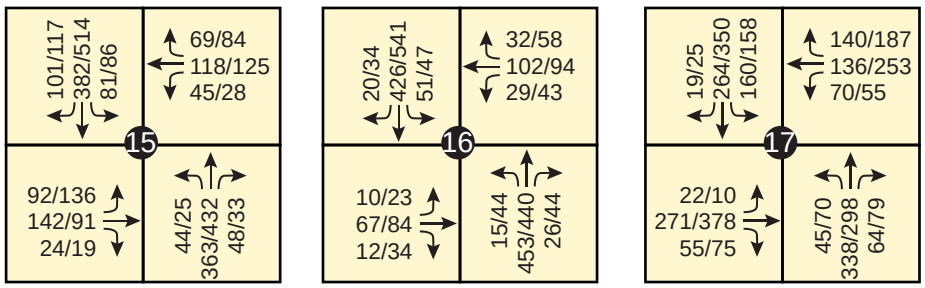

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YEAR 2016 NO PROJECT TRAFFIC VOLUMES

April 2013
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Hydrogen Energy California (HECA)
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FIGURE 5-1c

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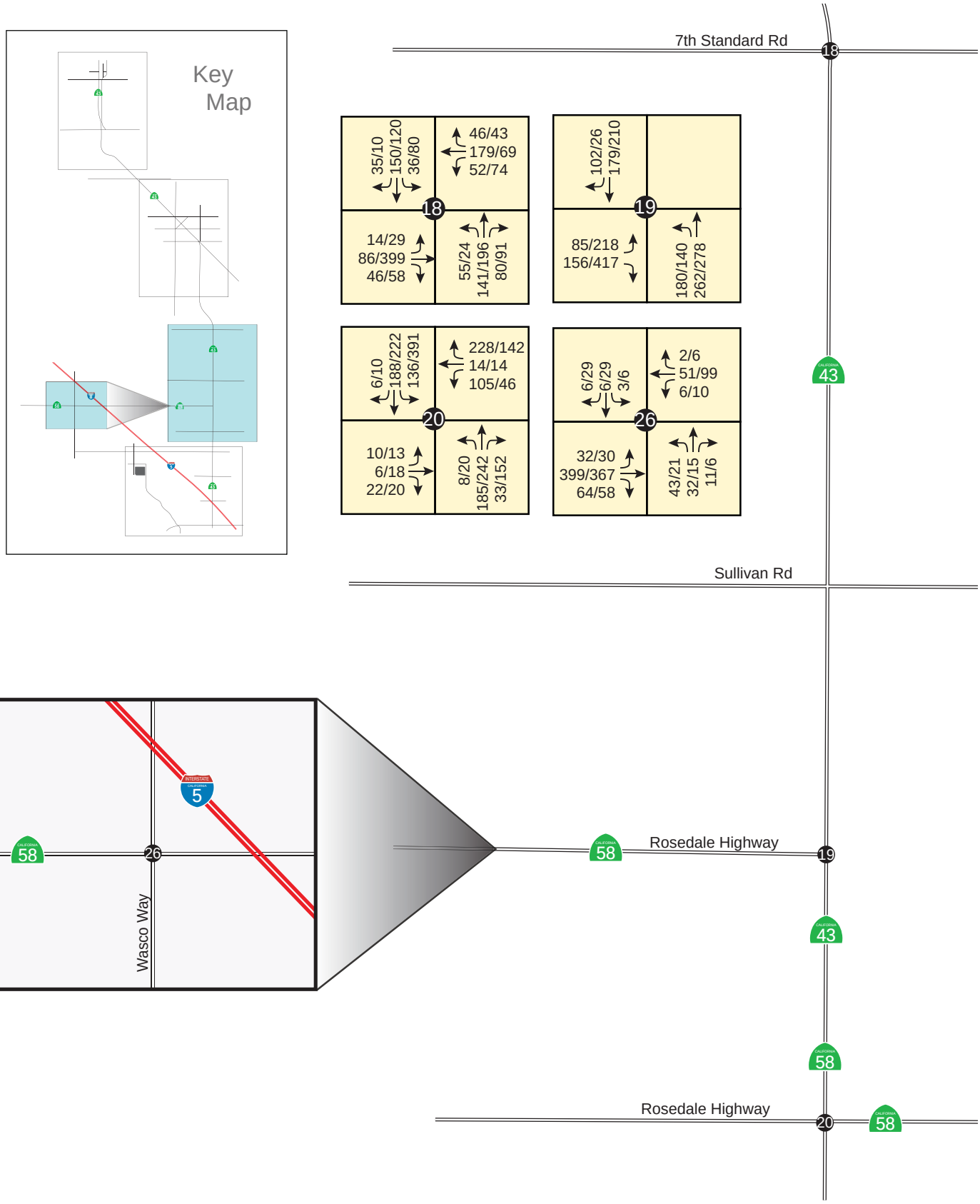

YEAR 2016 NO PROJECT TRAFFIC VOLUMES

April 2013 — Hydrogen Energy California (HECA)
28068052 — Kern County, California

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FIGURE 5-1d

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As shown in Table 5-1, Peak-Hour Intersection LOS – Year 2016 No Project Conditions, all study intersections are forecast to operate at LOS D or better, with the exception of SR 43/ Stockdale Highway and SR 119/Tupman Road, which operate at LOS E and F, respectively, during the p.m. peak hour.

5.2.2 Year 2016 Baseline No Project Roadway Segment Analysis

Table 5-2, Peak-Hour Roadway Segment LOS – Year 2016 No Project Conditions, summarizes the results of the roadway segment LOS analysis at the twelve study roadway segments. The roadway segment LOS presented in Table 5-2 is the baseline for which Project construction roadway segment traffic impacts were evaluated. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets.

Table 5-2
Peak-Hour Roadway Segment LOS –
Year 2016 No Project Conditions

Roadway Segment	a.m. Peak Hour		p.m. Peak Hour	
	V/C	LOS	V/C	LOS
1. SR 43 between Stockdale Highway and SR 58	0.21	B	0.23	B
2. Stockdale Highway between I-5 and SR 43	0.16	B	0.33	C
3. Stockdale Highway between Morris Road and I-5	0.07	B	0.14	B
4. Wasco Way between Stockdale Hwy and Brite Road	0.07	A	0.09	A
5. Dairy Road between Stockdale Hwy and Adohr Road	0.01	A	0.01	A
6. Morris Road between Stockdale Hwy and Station Rd	0.01	A	0.01	A
7. Station Road between Tupman Road and Morris Road	0.01	A	0.01	A
8. Tupman Road between SR 119 and Grace Road	0.01	A	0.01	A
9. SR 119 between Tupman Road and SR 43	0.31	C	0.40	D
10. SR 119 between Tupman Road and Access Road	0.31	C	0.40	D
11. Wasco Ave between Poso Ave and Kimberlina Ave	0.06	A	0.08	A
12. SR 58 between Wasco Way and I-5	0.20	B	0.23	B

Notes:

a.m./p.m. = morning/evening
I-5 = Interstate 5
LOS = level of service
V/C = volume-to-capacity ratio
SR = State Route

As shown in Table 5-2, all study roadway segments are forecast to operate at LOS D or better under Year 2016 No Project conditions.

5.3 YEAR 2016 PROJECT CONSTRUCTION CONDITIONS

The Project construction traffic analysis was updated to reflect the minor change in routing of construction traffic, and to include the intersection of Wasco Way and SR 58. Additionally,

based on consultation with Caltrans District 6 staff, it was determined that the previously proposed signal construction mitigation at SR 119/Tupman Road was not preferred, due to signal queuing along SR 119 during the p.m. peak hour (see Section 9 below for the modeling results). Therefore, construction workers leaving the Project Site during the p.m. peak hour were reassigned from Tupman Road southbound/SR 119 eastbound to Stockdale Highway eastbound in this July 2013 Traffic Study. This reassignment eliminated the impact at SR 119/Tupman Road previously discussed in the June 2013 Traffic Study, and resulted in traffic impacts during construction at Dairy Road/Stockdale Highway, I-5 Southbound Ramps/Stockdale Highway, and SR 43/Stockdale Highway.

5.3.1 Year 2016 Project Construction Intersection Analysis

Table 5-3, Peak-Hour Intersection LOS – Year 2016 Project Construction Conditions, summarizes the results of the intersection LOS analysis at the 26 study intersections. The intersection LOS presented in Table 5-3 is the basis for which Project construction impacts were evaluated. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets. Figure 5-2, Year 2016 Project Construction Traffic Volumes, shows Year 2016 Project Construction a.m. and p.m. peak-hour turning-movement volumes at the study intersections.

As shown in Table 5-3, Peak-Hour Intersection LOS – Year 2016 Project Construction Conditions (updated in this July 2013 Traffic Study), all study intersections are forecast to operate at LOS D or better, with the exception of the following intersections:

- I-5 Southbound Ramps/Stockdale Highway (LOS F, p.m.);
- SR 43/Stockdale Highway (LOS F, p.m.);
- SR 119/Tupman Road (LOS F, p.m.); and
- Dairy Road/Stockdale Highway (LOS F, p.m.).

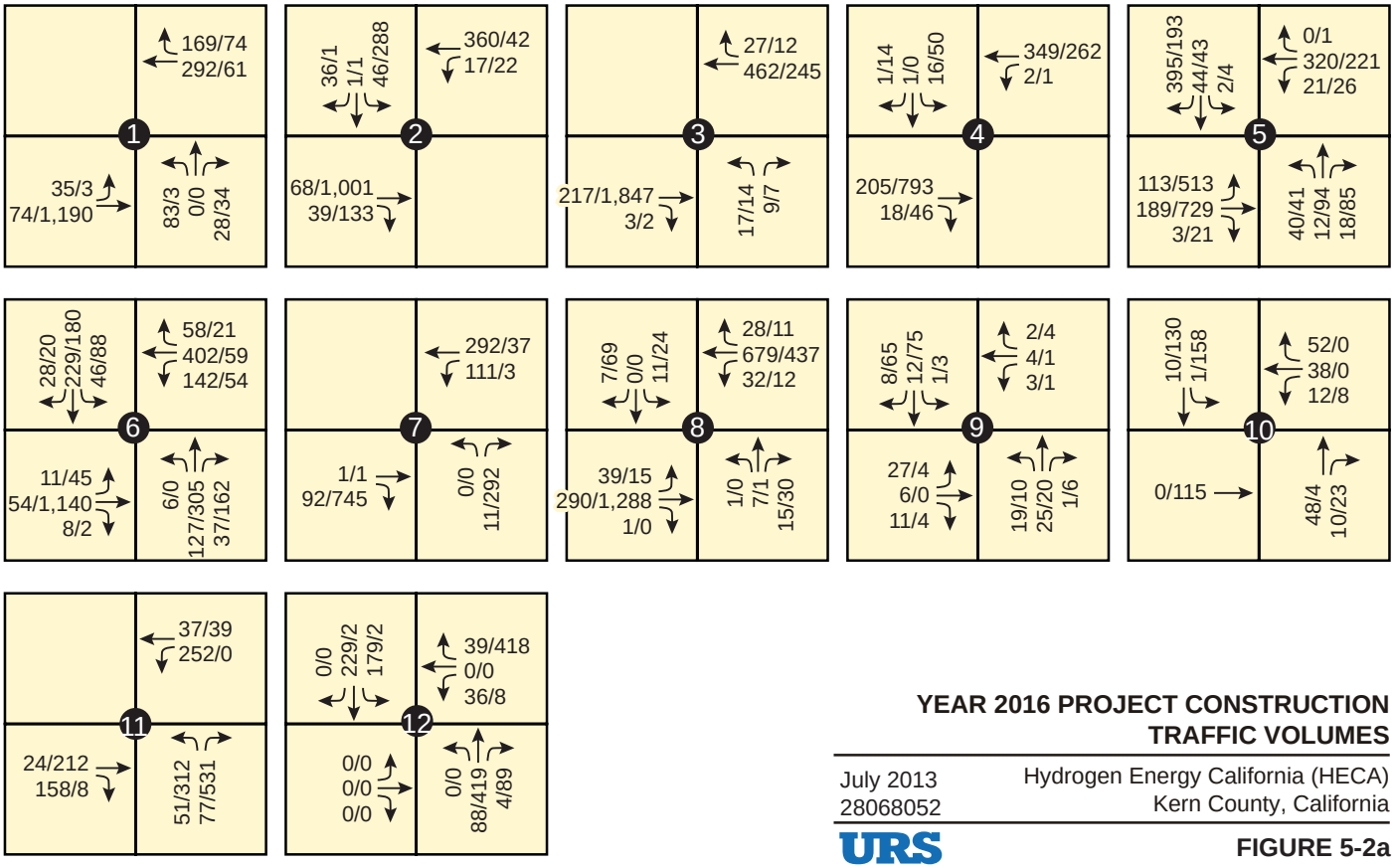
SR 119/Tupman Road is currently at LOS F during the p.m. peak hour regardless of the project, and is not impacted further by Project implementation. The remaining three study intersections will be impacted by Project construction traffic during the p.m. peak hour without mitigation.

5.3.2 Year 2016 Project Construction Roadway Segment Analysis

Table 5-4, Peak-Hour Roadway Segment LOS – Year 2016 Project Construction Conditions (updated in this July 2013 Traffic Study), summarizes the results of the roadway segment LOS analysis at the twelve study roadway segments. The roadway segment LOS presented in Table 5-4 is the basis for which Project construction roadway segment traffic impacts were evaluated. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets.

As shown in Table 5-4, all study roadways are forecast to operate at LOS D or better. No study roadway segments will be significantly impacted in terms of roadway capacity and LOS during Project construction.

NOTE: Intersection # 7 has been analyzed as a T-intersection. The north leg has minimum/negligible traffic volumes.



YEAR 2016 PROJECT CONSTRUCTION TRAFFIC VOLUMES

July 2013
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FIGURE 5-2a

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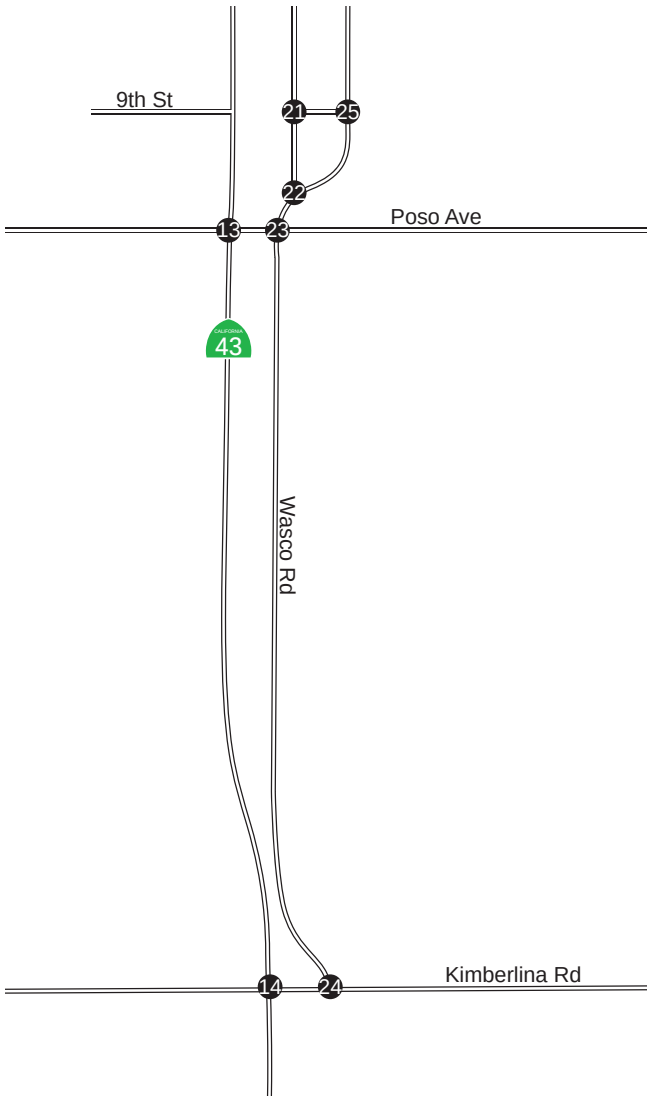

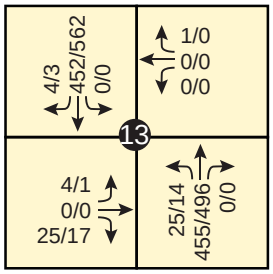

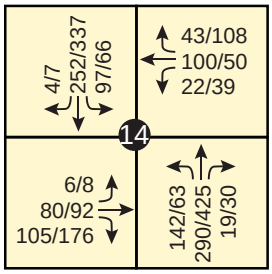

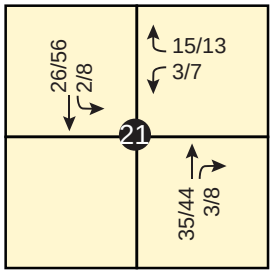

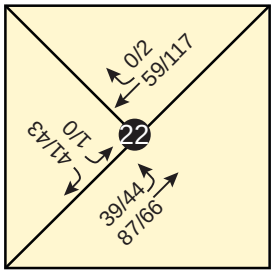

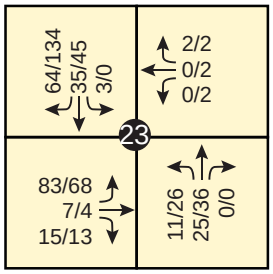

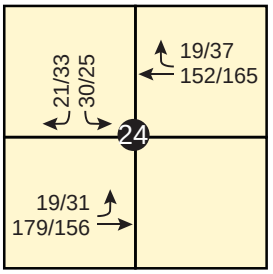

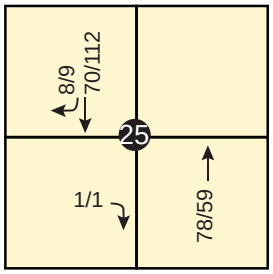

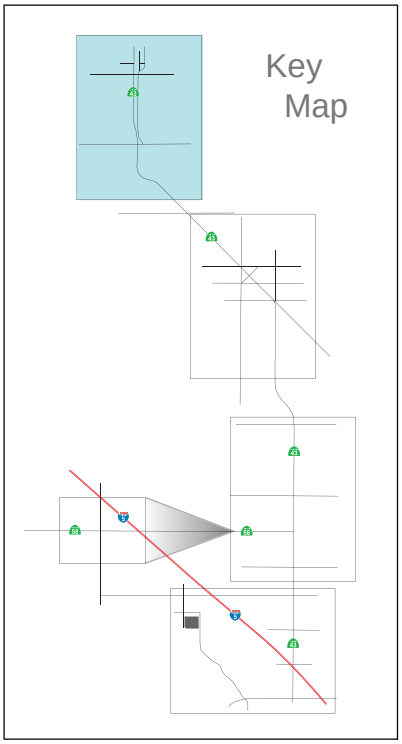

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YEAR 2016 PROJECT CONSTRUCTION TRAFFIC VOLUMES

July 2013
28068052

Hydrogen Energy California (HECA)
Kern County, California

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FIGURE 5-2b

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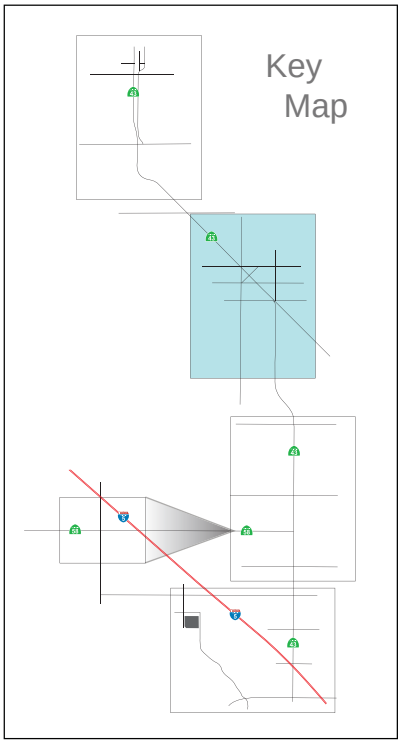

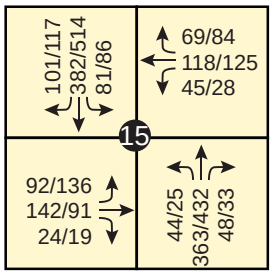

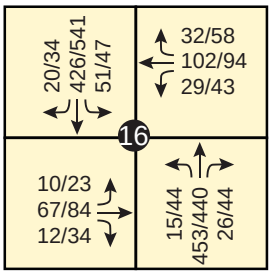

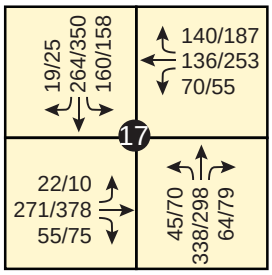

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YEAR 2016 PROJECT CONSTRUCTION TRAFFIC VOLUMES

April 2013
28068052

Hydrogen Energy California (HECA)
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FIGURE 5-2c

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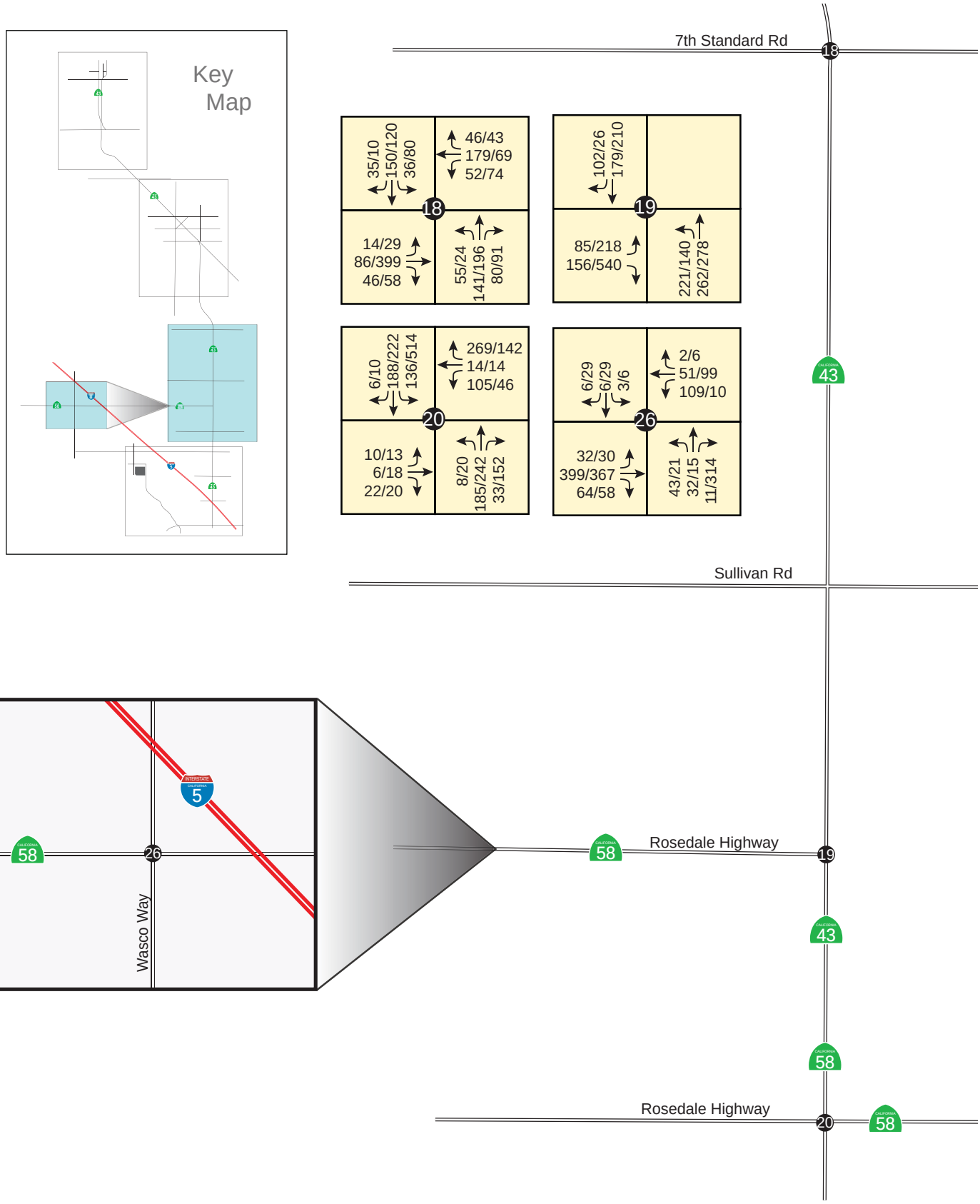

YEAR 2016 PROJECT CONSTRUCTION TRAFFIC VOLUMES

April 2013
28068052

Hydrogen Energy California (HECA)
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FIGURE 5-2d

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Table 5-3
Peak-Hour Intersection LOS –
Year 2016 Project Construction Conditions

Intersection	Control	a.m. Peak Hour		p.m. Peak Hour	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1. I-5 NB Ramp/Stockdale Highway	Unsignalized	12.7	B	24.1	C
2. I-5 SB Ramp/Stockdale Highway	Unsignalized	12.0	B	**230.0**	**F**
3. I-5 NB Ramp/SR 119	Unsignalized	11.6	B	19.7	C
4. I-5 SB Ramp/SR 119	Unsignalized	12.6	B	20.4	C
5. SR 119/SR 43	Signalized	26.2	C	24.2	C
6. SR 43/Stockdale Highway	Unsignalized	26.5	C	**337.5**	**F**
7. Stockdale Highway/Morris Road	Unsignalized	12.2	B	31.3	D
8. SR 119/Tupman Road	Unsignalized	23.2	C	**55.0**	**F**
9. Tupman Road/Grace Avenue	Unsignalized	7.2	A	7.3	A
10. Tupman Road/Station Road	Unsignalized	9.3	A	16.1	C
11. Dairy Road/Stockdale Highway	Unsignalized	12.9	B	**73.0**	**F**
12. Dairy Road/Adohr Road	Unsignalized	14.4	C	30.4	D
13. SR 43/Poso Avenue	Unsignalized	11.2	B	12.4	B
14. SR 43/Kimberlina Road	Signalized	24.1	C	21.2	C
15. SR 43/Shafter Avenue	Signalized	12.9	B	13.2	B
16. SR 43/Central Avenue	Signalized	9.1	A	10.5	B
17. SR 43/Lerdo Highway	Signalized	22.3	C	21.8	C
18. SR 43/7th Standard Road	Unsignalized	12.4	B	27.5	D
19. SR 43/SR 58 (Rosedale Highway – West)	Unsignalized	11.6	B	21.3	C
20. SR 43/SR 58 (Rosedale Highway – East)	Unsignalized	11.7	B	32.2	D
21. H Street/9th Street	Unsignalized	8.6	A	8.7	A
22. H Street/Wasco Avenue	Unsignalized	8.7	A	9.0	A
23. Wasco Avenue/Poso Avenue	Unsignalized	10.4	B	10.8	B
24. Wasco Avenue/Kimberlina Road	Unsignalized	10.5	B	10.4	B
25. J Street/9th Street	Unsignalized	8.5	A	8.6	A
26. Wasco Way/SR 58	Unsignalized	20.0	C	17.3	C

Notes:

a.m./p.m. = morning/evening
I-5 = Interstate 5
NB/SB = northbound/southbound
sec/veh = seconds per vehicle
SR = State Route
OVRFL = Overflow (seconds/vehicle delay exceeds reporting range)

Table 5-4
Peak-Hour Roadway Segment LOS –
Year 2016 Project Construction Conditions

Roadway Segment	a.m. Peak Hour		p.m. Peak Hour	
	Volume-to-Capacity (V/C)	LOS	Volume-to-Capacity (V/C)	LOS
1. SR 43 between Stockdale Highway and SR 58	0.21	B	0.23	B
2. Stockdale Highway between I-5 and SR 43	0.24	B	0.57	D
3. Stockdale Highway between Morris Road and I-5	0.19	B	0.42	D
4. Wasco Way between Stockdale Hwy and Brite Road	0.07	A	0.09	A
5. Dairy Road between Stockdale Hwy and Adohr Road	0.18	A	0.37	C
6. Morris Road between Stockdale Hwy and Station Rd	0.05	A	0.11	A
7. Station Road between Tupman Road and Morris Road	0.04	A	0.11	A
8. Tupman Road between SR 119 and Grace Road	0.02	A	0.04	A
9. SR 119 between Tupman Road and SR 43	0.36	C	0.40	D
10. SR 119 between Tupman Road and Access Road	0.32	C	0.42	D
11. Wasco Ave between Poso Ave and Kimberlina Ave	0.06	A	0.08	A
12. SR 58 between Wasco Way and I-5	0.24	B	0.34	C

Notes:

a.m./p.m. = morning/evening
I-5 = Interstate 5
LOS = level of service
V/C = volume-to -capacity ratio
SR = State Route

6.0 PROJECT OPERATIONS TRAFFIC ASSESSMENT

6.1 YEAR 2017 BASELINE NO PROJECT CONDITIONS

The Project is expected to be in full operation by Year 2017. The baseline for the No Project Year 2017 scenario is based on the existing traffic conditions (representing Year 2012), increased by an annual ambient traffic growth of 2 percent. This approach is consistent with the Roads Department requirements, and data from recently conducted traffic studies.

6.1.1 Year 2017 Baseline No Project Intersection Analysis

Table 6-1, Peak-Hour Intersection LOS – Year 2017 No Project Conditions, summarizes the results of the intersection LOS analysis at the 26 study intersections. The intersection LOS presented in Table 6-1 is the baseline for which Project operations impacts were evaluated. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets. Figure 6-1, Year 2017 No Project Traffic Volumes, shows Year 2017 No Project a.m. and p.m. peak-hour turning-movement volumes at the study intersections.

As shown in Table 6-1, Peak-Hour Intersection LOS – Year 2017 No Project Conditions, all study intersections are forecast to operate at LOS D or better, with the exception of SR 43/ Stockdale Highway and SR 119/Tupman Road, which operate at LOS E and F, respectively, during the p.m. peak hour.

6.1.2 Year 2017 Baseline No Project Roadway Segment Analysis

Table 6-2, Peak-Hour Roadway Segment LOS – Year 2017 No Project Conditions, summarizes the results of the roadway segment LOS analysis at the twelve study roadway segments. The roadway segment LOS presented in Table 6-2 is the baseline for which Project operations roadway segment traffic impacts were evaluated. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets.

As shown in Table 6-2, all study roadway segments are forecast to operate at LOS D or better under Year 2017 No Project conditions.

6.2 YEAR 2017 PROJECT OPERATIONS CONDITIONS – ALTERNATIVE 1 TRAIN OPTION

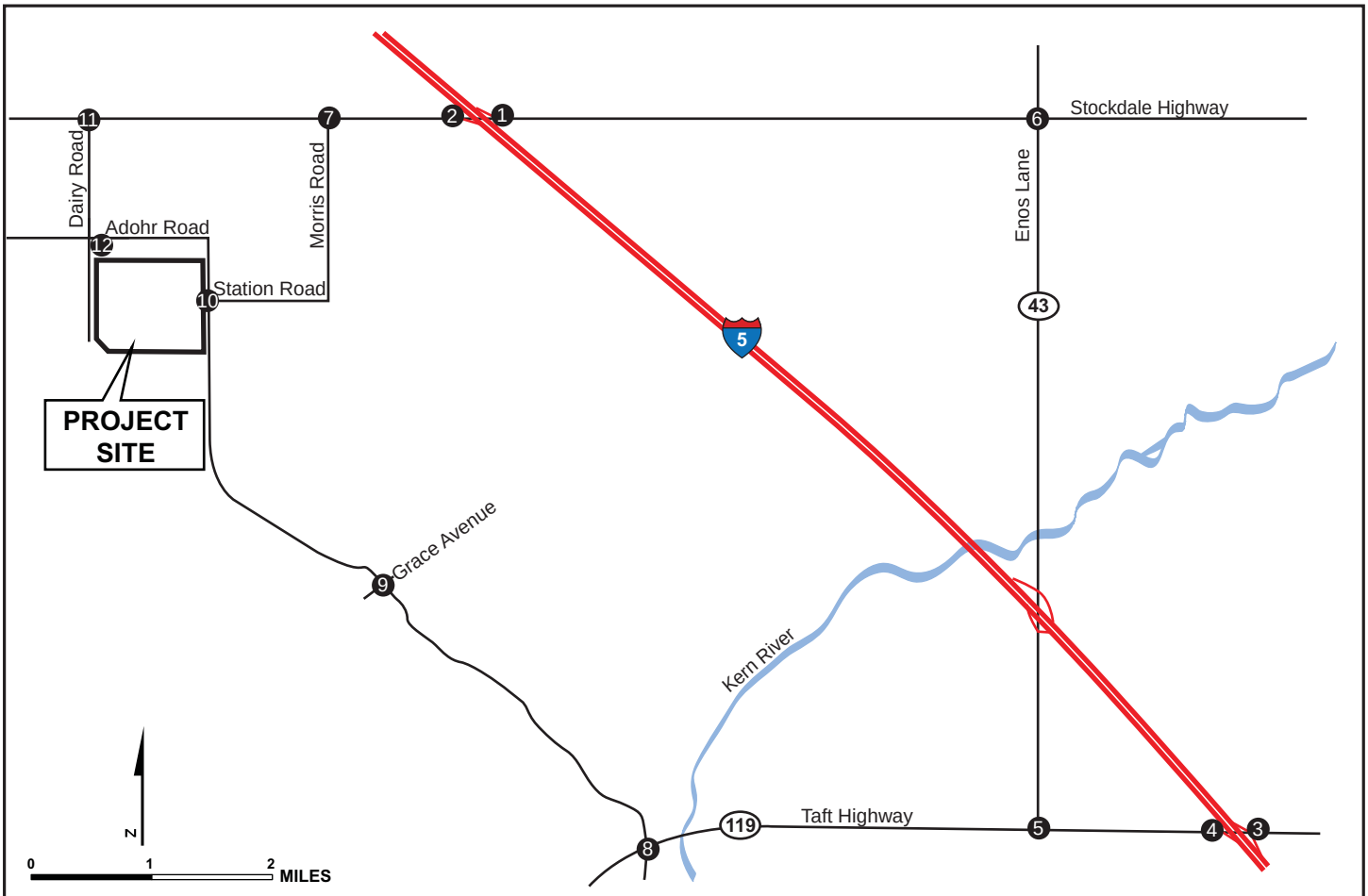
Alternative 1 assumes that rail will be used to transport coal to the Project Site. Rail transportation consists of an approximately 5-mile-long new industrial railroad spur that will connect the Project Site to the existing San Joaquin Valley Railroad (SJVRR) Buttonwillow railroad line, north of the Project Site. This railroad spur will also be used to transport some HECA products to market.

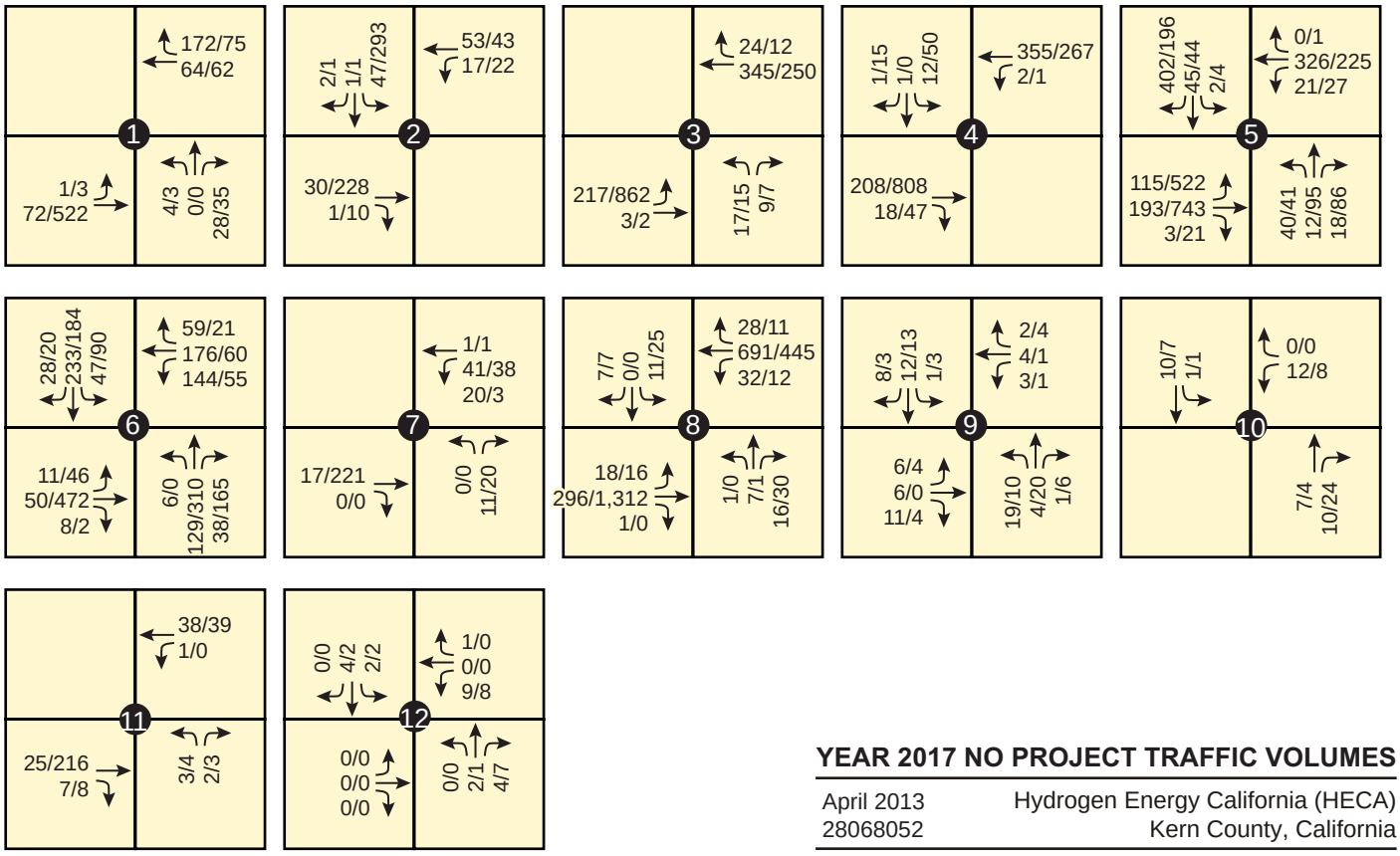
Table 6-1
Peak-Hour Intersection LOS –
Year 2017 No Project Conditions

Intersection	Control	a.m. Peak Hour		p.m. Peak Hour	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1. I-5 NB Ramp/Stockdale Highway	Unsignalized	8.9	A	12.1	B
2. I-5 SB Ramp/Stockdale Highway	Unsignalized	9.3	A	14.6	B
3. I-5 NB Ramp/SR 119	Unsignalized	11.7	B	20.1	C
4. I-5 SB Ramp/SR 119	Unsignalized	12.6	B	21.0	C
5. SR 119/SR 43	Signalized	26.4	C	24.5	C
6. SR 43/Stockdale Highway	Unsignalized	12.8	B	**40.9**	**E**
7. Stockdale Highway/Morris Road	Unsignalized	8.8	A	9.5	A
8. SR 119/Tupman Road	Unsignalized	22.5	C	**117.7**	**F**
9. Tupman Road/Grace Avenue	Unsignalized	7.0	A	7.0	A
10. Tupman Road/Station Road	Unsignalized	8.7	A	8.6	A
11. Dairy Road/Stockdale Highway	Unsignalized	8.7	A	9.8	A
12. Dairy Road/Adohr Road	Unsignalized	9.0	A	8.9	A
13. SR 43/Poso Avenue	Unsignalized	11.3	B	12.6	B
14. SR 43/Kimberlina Road	Signalized	24.1	C	21.2	C
15. SR 43/Shafter Avenue	Signalized	13.0	B	13.3	B
16. SR 43/Central Avenue	Signalized	9.1	A	10.5	B
17. SR 43/Lerdo Highway	Signalized	22.4	C	21.9	C
18. SR 43/7th Standard Road	Unsignalized	12.6	B	29.7	D
19. SR 43/SR 58 (Rosedale Highway – West)	Unsignalized	11.4	B	15.8	C
20. SR 43/SR 58 (Rosedale Highway – East)	Unsignalized	11.5	B	17.9	C
21. H Street/9th Street	Unsignalized	8.6	A	8.8	A
22. H Street/Wasco Avenue	Unsignalized	8.7	A	9.0	A
23. Wasco Avenue/Poso Avenue	Unsignalized	10.4	B	10.9	B
24. Wasco Avenue/Kimberlina Road	Unsignalized	10.5	B	10.5	B
25. J Street/9th Street	Unsignalized	8.5	A	8.6	A
26. Wasco Way/SR 58	Unsignalized	14.7	B	14.5	B

Notes:

a.m./p.m. = morning/evening
I-5 = Interstate 5
NB/SB = northbound/southbound
sec/veh = seconds per vehicle
SR = State Route
OVRFL = Overflow (seconds/vehicle delay exceeds reporting range)





YEAR 2017 NO PROJECT TRAFFIC VOLUMES

April 2013
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Hydrogen Energy California (HECA)
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FIGURE 6-1a

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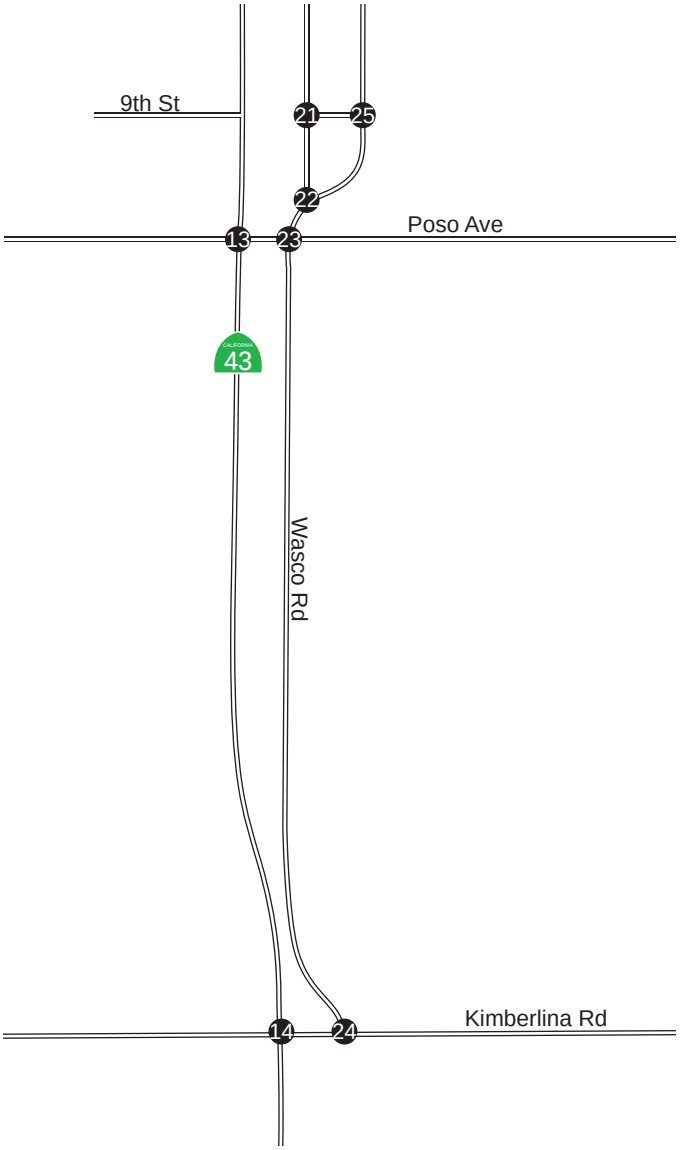

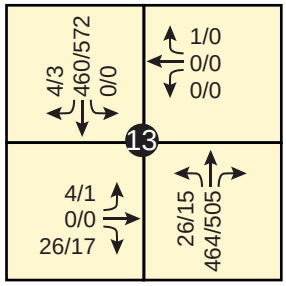

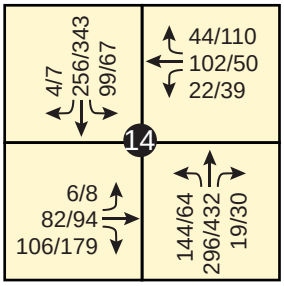

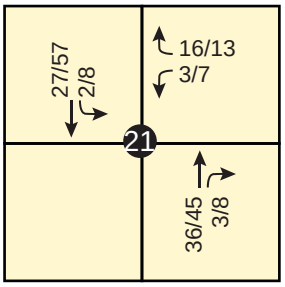

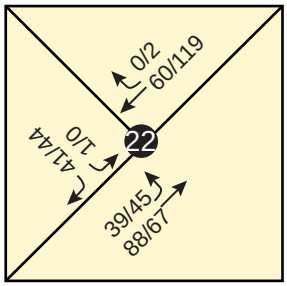

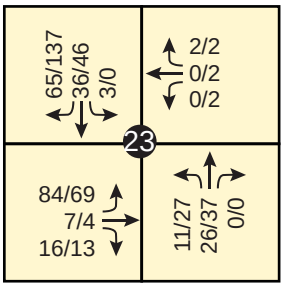

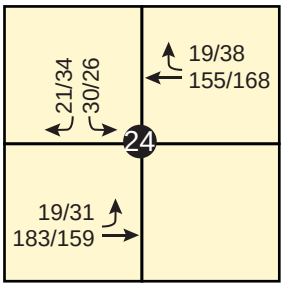

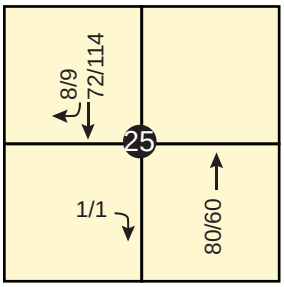

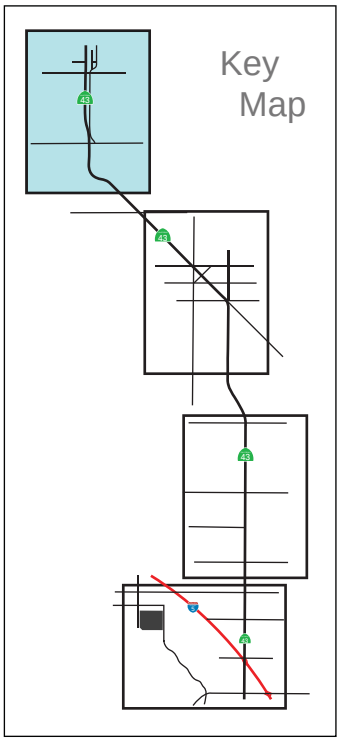

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FIGURE 6-1b

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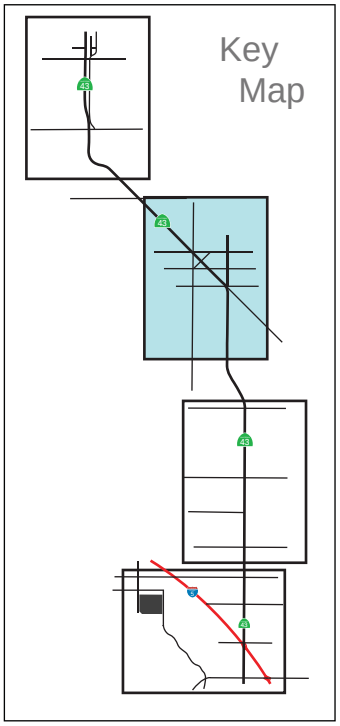

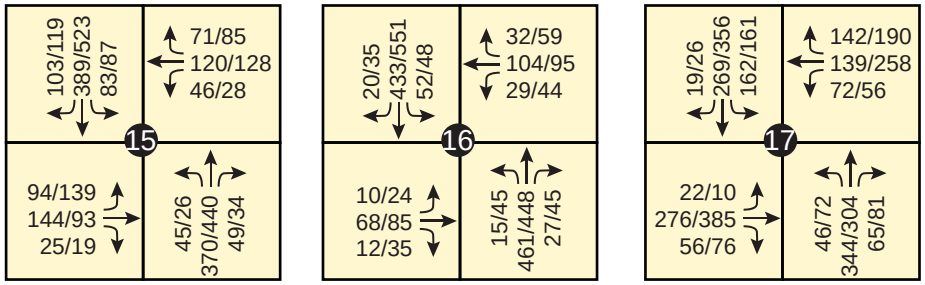

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FIGURE 6-1c

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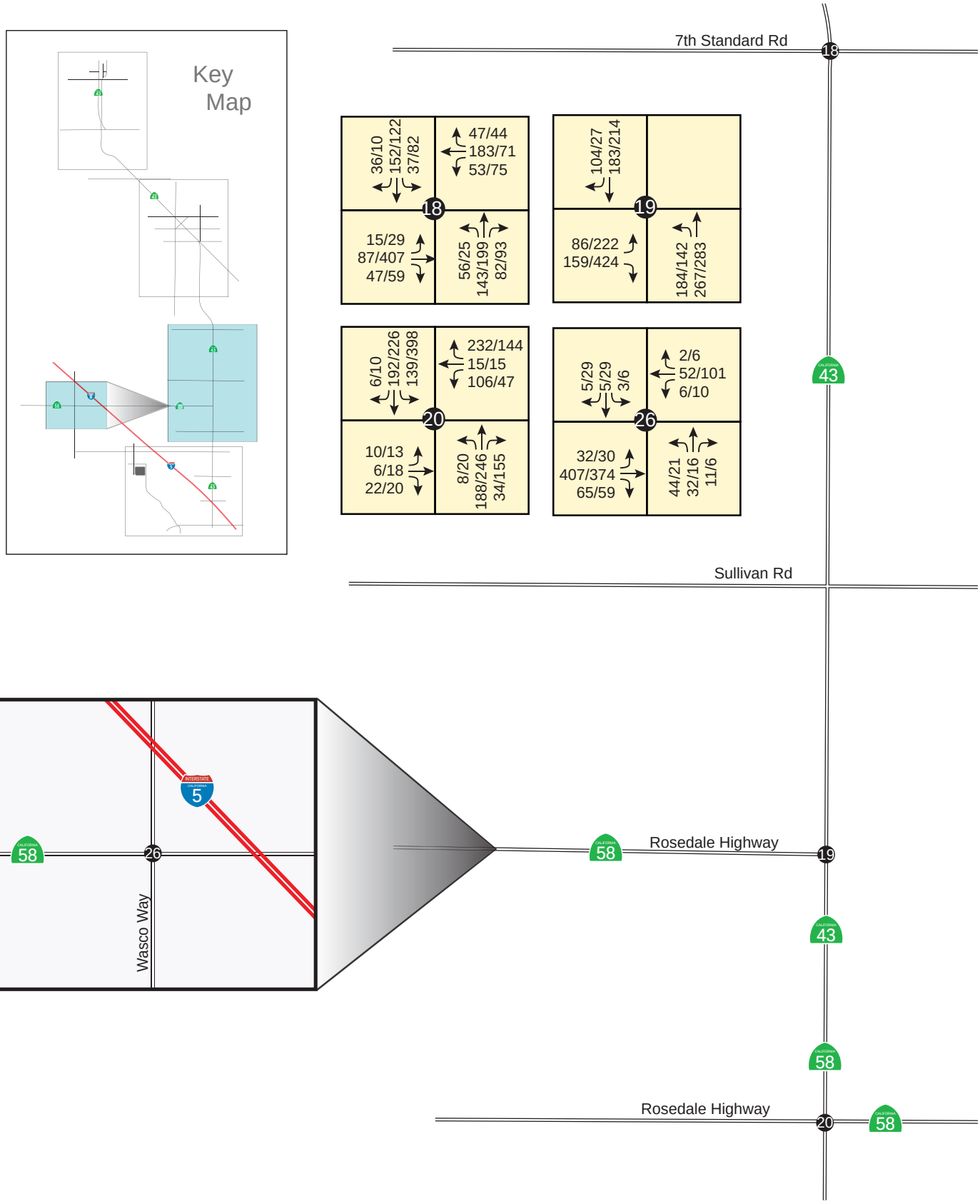

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FIGURE 6-1d

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Table 6-2
Peak-Hour Roadway Segment LOS –
Year 2017 No Project Conditions

Roadway Segment	a.m. Peak Hour		p.m. Peak Hour	
	V/C	LOS	V/C	LOS
1. SR 43 between Stockdale Highway and SR 58	0.21	B	0.23	B
2. Stockdale Highway between I-5 and SR 43	0.16	B	0.34	C
3. Stockdale Highway between Morris Road and I-5	0.07	B	0.14	B
4. Wasco Way between Stockdale Hwy and Brite Road	0.07	A	0.09	A
5. Dairy Road between Stockdale Hwy and Adohr Road	0.01	A	0.01	A
6. Morris Road between Stockdale Hwy and Station Rd	0.01	A	0.01	A
7. Station Road between Tupman Road and Morris Road	0.01	A	0.01	A
8. Tupman Road between SR 119 and Grace Road	0.01	A	0.01	A
9. SR 119 between Tupman Road and SR 43	0.32	C	0.41	D
10. SR 119 between Tupman Road and Access Road	0.32	C	0.41	D
11. Wasco Ave between Poso Ave and Kimberlina Ave	0.06	A	0.08	A
12. SR 58 between Wasco Way and I-5	0.20	B	0.24	B

Notes:

a.m./p.m. = morning/evening
I-5 = Interstate 5
LOS = level of service
V/C = volume-to-capacity ratio
SR = State Route

6.2.1 Year 2017 Project Operations Intersection Analysis – Alternative 1 Train Option

Under Project operations, Alternative 1 Train Option, 12 study intersections were evaluated, as compared to Alternative 2 Truck Option, which will entail trucking of coal from Wasco, therefore requiring a broader study area, including 13 additional study intersections.

Table 6-3, Peak-Hour Intersection LOS – Year 2017 Project Operations Conditions – Alternative 1, summarizes the results of the intersection LOS analysis at the 12 study intersections. The intersection LOS presented in Table 6-3 is the basis for which Alternative 1 Project operations impacts were evaluated. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets. Figure 6-2, Year 2017 Project Operations Traffic Volumes Alternative 1, shows Year 2017 Project Alternative 1 a.m. and p.m. peak-hour turning-movement volumes at the study intersections.

As shown in Table 6-3, Peak-Hour Intersection LOS – Year 2017 Project Operations Conditions – Alternative 1 (updated in this July 2013 Traffic Study), all study intersections are forecast to operate at LOS D or better, with the exception of SR 43/Stockdale Highway and SR 119/Tupman Road, which are both forecast to operate at LOS F during the p.m. peak hour without mitigation. Therefore, without mitigation, the intersection of SR 43/Stockdale Highway will be impacted by Project operations traffic during the p.m. peak hour. The intersection of SR 119/Tupman Road is currently at LOS F during the p.m. peak hour regardless of the Project, and is not impacted further by Project implementation.

Table 6-3
Peak-Hour Intersection LOS –
Year 2017 Project Operations Conditions – Alternative 1

Intersection	Control	Peak Hour (a.m.)		Peak Hour (p.m.)	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1. I-5 NB Ramp/Stockdale Highway	Unsignalized	10.1	B	15.3	C
2. I-5 SB Ramp/Stockdale Highway	Unsignalized	10.2	B	27.2	D
3. I-5 NB Ramp/SR 119	Unsignalized	11.7	B	20.1	C
4. I-5 SB Ramp/SR 119	Unsignalized	12.6	B	21.1	C
5. SR 119/SR 43	Signalized	26.4	C	24.5	C
6. SR 43/Stockdale Highway	Unsignalized	15.5	C	**72.5**	**F**
7. Stockdale Highway/Morris Road	Unsignalized	10.3	B	10.6	B
8. SR 119/Tupman Road	Unsignalized	22.9	C	**102.7**	**F**
9. Tupman Road/Grace Avenue	Unsignalized	7.0	A	7.0	A
10. Tupman Road/Station Road	Unsignalized	9.4	A	10.4	B
11. Dairy Road/Stockdale Highway	Unsignalized	8.8	A	9.9	A
12. Dairy Road/Adohr Road	Unsignalized	10.1	B	9.3	A

Notes:

[1] Assumed to be signalized as part of Project Construction Mitigation.

a.m./p.m. = morning/evening
I-5 = Interstate 5
NB/SB = northbound/southbound
sec/veh = seconds per vehicle
SR = State Route

6.2.2 Year 2017 Project Operations Roadway Segment Analysis – Alternative 1 Train Option

Table 6-4, Peak-Hour Roadway Segment LOS – Year 2017 Project Operations Conditions – Alternative 1 (updated in this July 2013 Traffic Study), summarizes the results of the roadway segment LOS analysis at the twelve study roadway segments. The roadway segment LOS presented in Table 6-4 is the basis for which Alternative 1 Project operations roadway segment traffic impacts were evaluated. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets.

As shown in Table 6-4, all study roadways are forecast to operate at LOS D or better. No study roadway segments will be significantly impacted in terms of roadway capacity and LOS during Alternative 1 Train Option Project operations.

NOTE: Intersection # 7 has been analyzed as a T-intersection. The north leg has minimum/negligible traffic volumes.

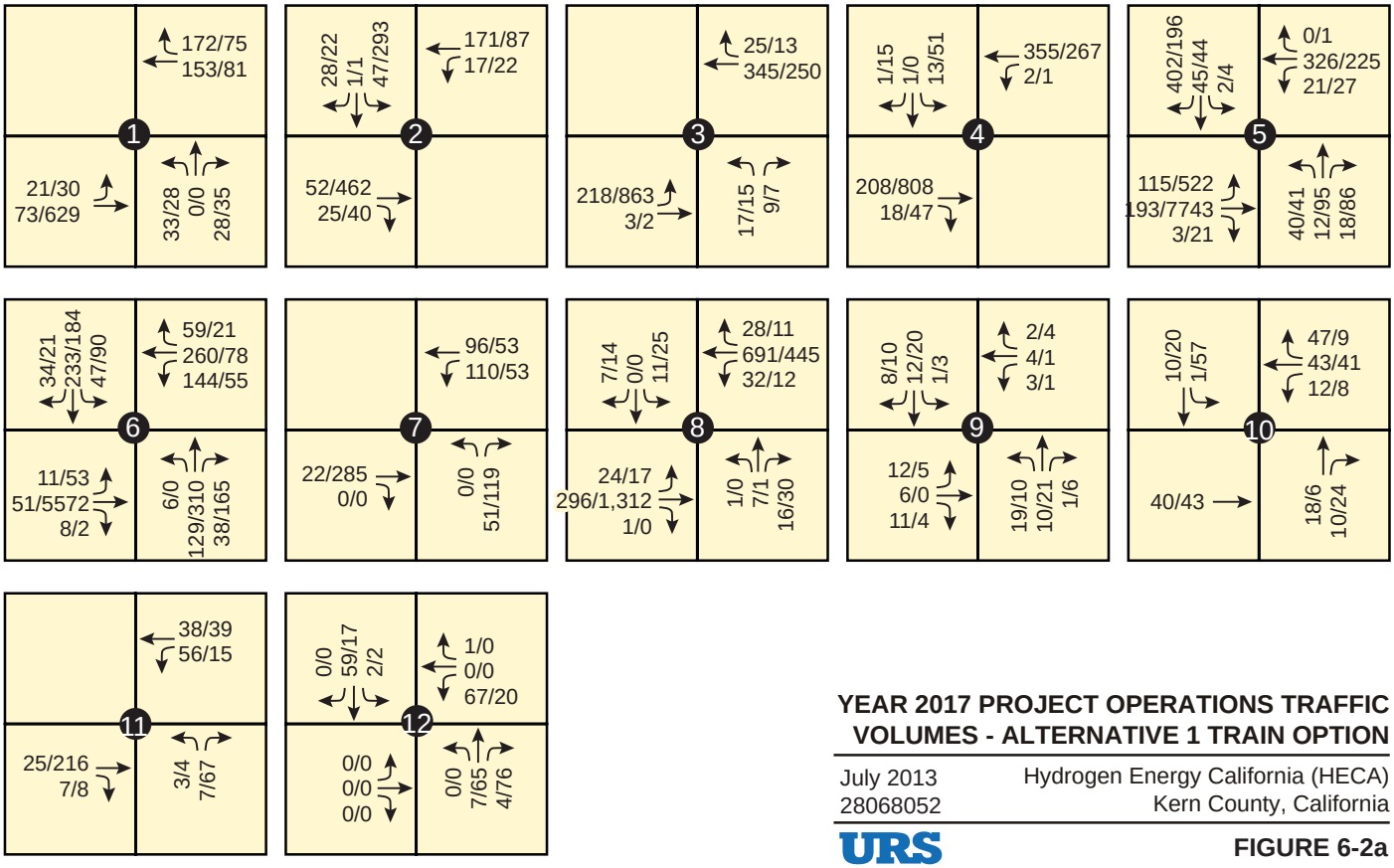

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FIGURE 6-2a

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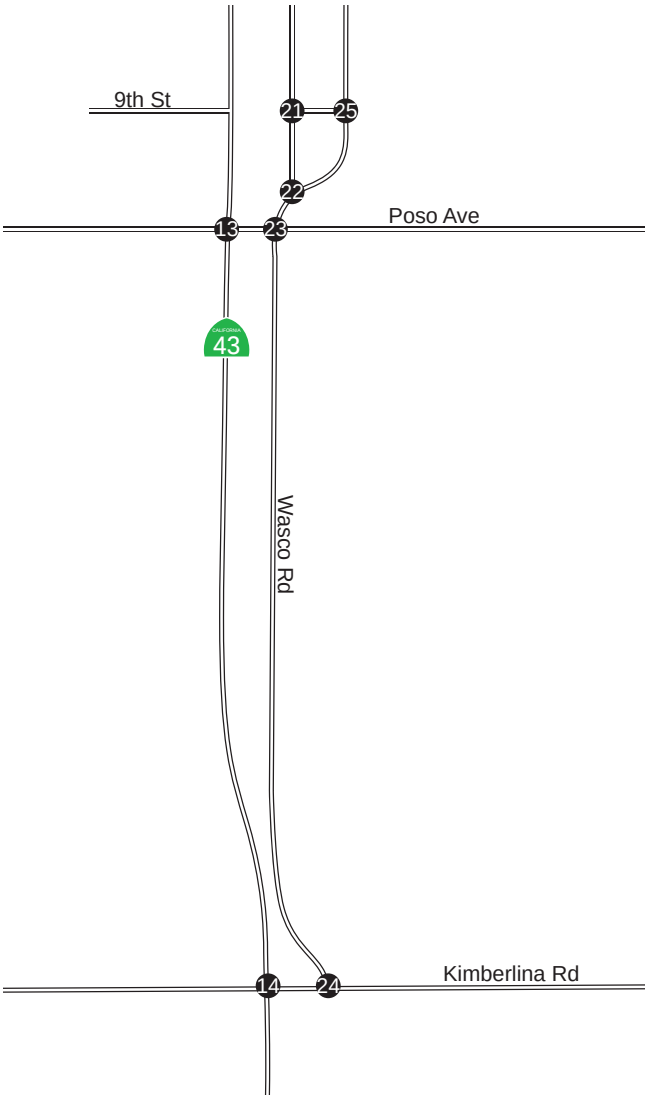

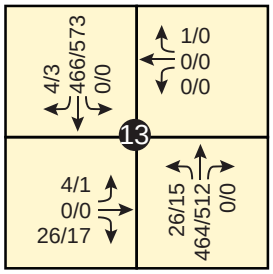

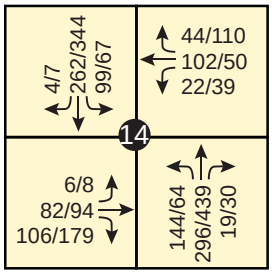

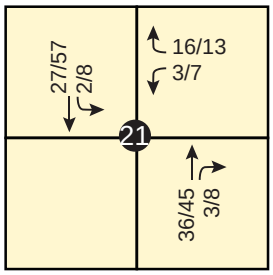

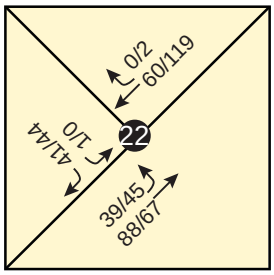

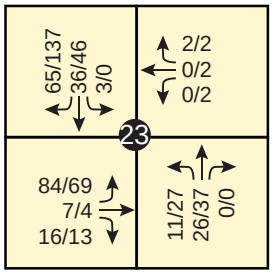

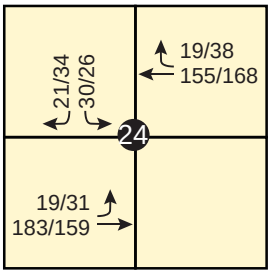

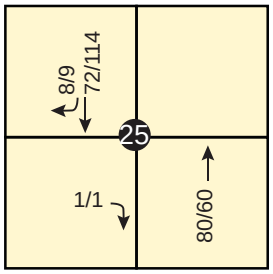

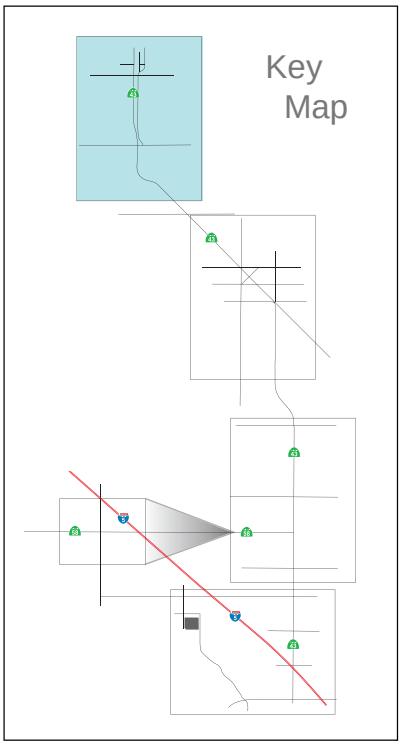

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FIGURE 6-2b

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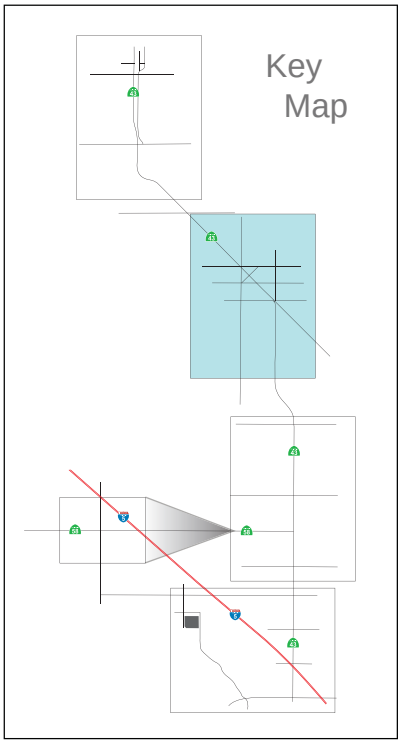

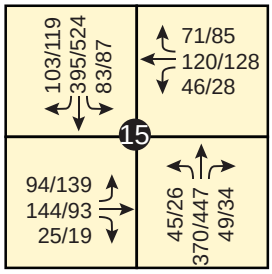

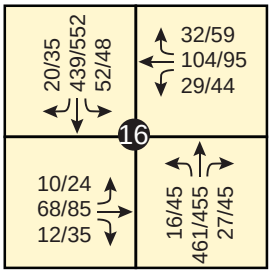

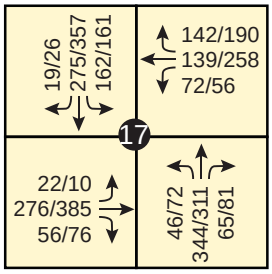

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FIGURE 6-2c

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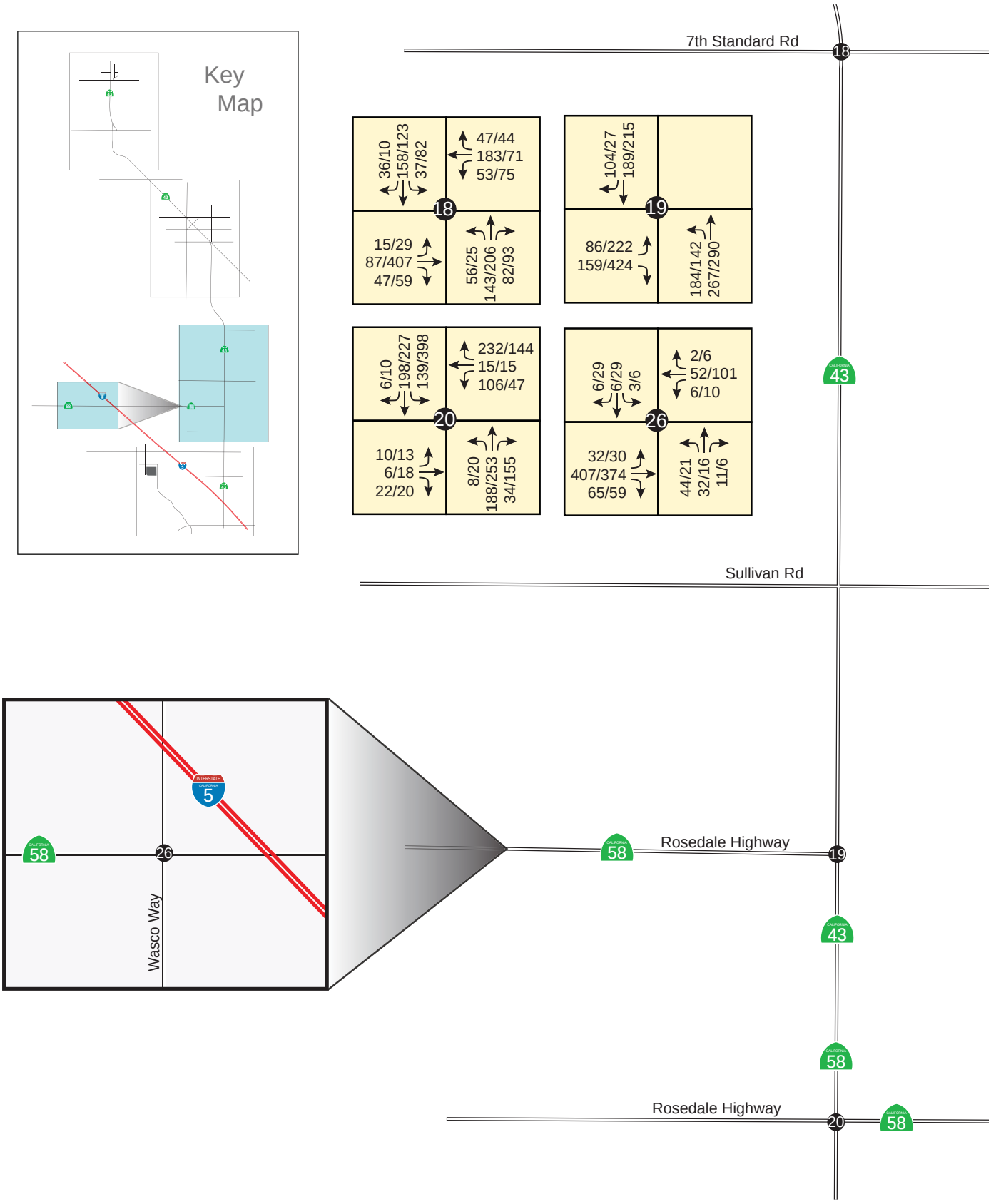

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FIGURE 6-2d

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Table 6-4
Peak-Hour Roadway Segment LOS –
Year 2017 Project Operations Conditions – Alternative 1

Roadway Segment	a.m. Peak Hour		p.m. Peak Hour	
	V/C	LOS	V/C	LOS
1. SR 43 between Stockdale Highway and SR 58	0.23	B	0.23	B
2. Stockdale Highway between I-5 and SR 43	0.19	B	0.38	D
3. Stockdale Highway between Morris Road and I-5	0.13	B	0.20	B
4. Wasco Way between Stockdale Hwy and Brite Road	0.07	A	0.09	A
5. Dairy Road between Stockdale Hwy and Adohr Road	0.07	A	0.04	A
6. Morris Road between Stockdale Hwy and Station Rd	0.08	A	0.05	A
7. Station Road between Tupman Road and Morris Road	0.04	A	0.05	A
8. Tupman Road between SR 119 and Grace Road	0.01	A	0.01	A
9. SR 119 between Tupman Road and SR 43	0.32	C	0.41	D
10. SR 119 between Tupman Road and Access Road	0.32	C	0.41	D
11. Wasco Ave between Poso Ave and Kimberlina Ave	0.06	A	0.08	A
12. SR 58 between Wasco Way and I-5	0.20	B	0.24	B

Notes:

a.m./p.m. = morning/evening
I-5 = Interstate 5
LOS = level of service
V/C = volume-to-capacity ratio
SR = State Route

6.3 YEAR 2017 PROJECT OPERATIONS CONDITIONS – ALTERNATIVE 2 TRUCK OPTION

The second alternative for transporting coal to the Project Site is Alternative 2, truck transportation. This alternative assumes that coal will be transported via truck along an approximately 27-mile-long route via existing roads from an existing transloading facility located in Wasco northeast of the Project Site.

6.3.1 Year 2017 Project Intersection Analysis – Alternative 2 Truck Option

Table 6-5, Peak-Hour Intersection LOS – Year 2017 Project Operations Conditions – Alternative 2 (updated in this July 2013 Traffic Study), summarizes the results of the intersection LOS analysis at the 26 study intersections. The intersection LOS presented in Table 6-5 is the basis for which Alternative 2 Project operations impacts were evaluated. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets. Figure 6-3, Year 2017 Project Operations Traffic Volumes Alternative 2, shows Year 2017 Project Alternative 2 a.m. and p.m. peak-hour turning-movement volumes at the study intersections.

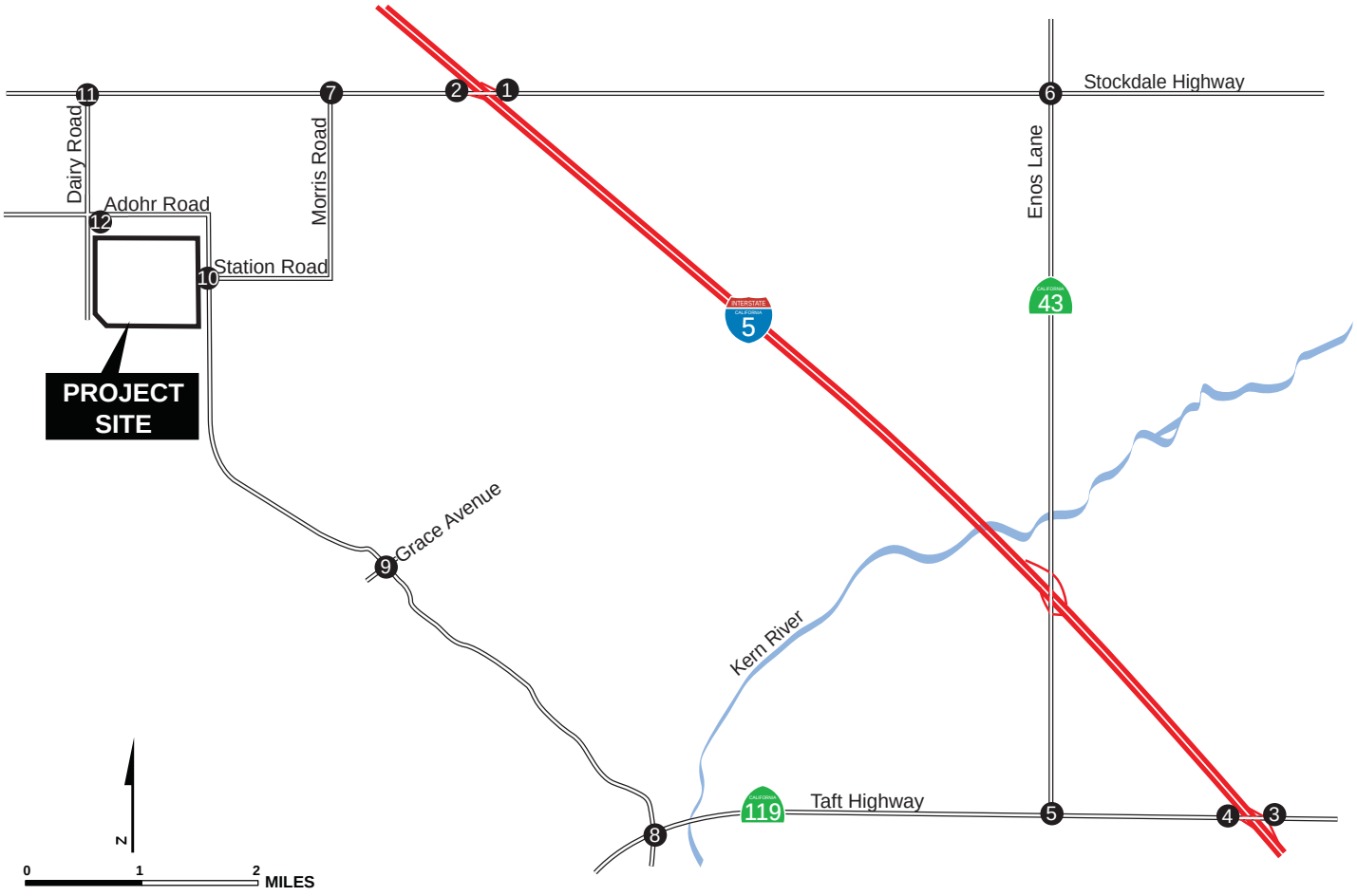
Table 6-5
Peak-Hour Intersection LOS –
Year 2017 Project Operations Conditions – Alternative 2

Intersection	Control	a.m. Peak Hour		p.m. Peak Hour	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1. I-5 NB Ramp/Stockdale Highway	Unsignalized	11.7	B	17.5	C
2. I-5 SB Ramp/Stockdale Highway	Unsignalized	11.1	B	34.7	D
3. I-5 NB Ramp/SR 119	Unsignalized	11.7	B	20.2	C
4. I-5 SB Ramp/SR 119	Unsignalized	12.7	B	21.5	C
5. SR 119/SR 43	Signalized	26.4	C	24.5	C
6. SR 43/Stockdale Highway	Unsignalized	17.0	C	**78.2**	**F**
7. Stockdale Highway/Morris Road	Unsignalized	12.2	B	11.1	B
8. SR 119/Tupman Road	Unsignalized	22.9	C	**102.7**	**F**
9. Tupman Road/Grace Avenue	Unsignalized	7.0	A	7.0	A
10. Tupman Road/Station Road	Unsignalized	10.1	B	10.9	B
11. Dairy Road/Stockdale Highway	Unsignalized	8.8	A	9.9	A
12. Dairy Road/Adohr Road	Unsignalized	10.1	B	9.3	A
13. SR 43/Poso Avenue	Unsignalized	11.6	B	12.7	B
14. SR 43/Kimberlina Road	Unsignalized	24.1	C	21.1	C
15. SR 43/Shafter Avenue	Unsignalized	12.7	B	13.2	B
16. SR 43/Central Avenue	Unsignalized	8.8	A	10.4	B
17. SR 43/Lerdo Highway	Unsignalized	22.1	C	21.9	C
18. SR 43/7th Standard Road	Unsignalized	13.9	B	31.8	D
19. SR 43/SR 58 (Rosedale Highway – West)	Unsignalized	12.3	B	16.3	C
20. SR 43/SR 58 (Rosedale Highway – East)	Unsignalized	12.4	B	18.3	C
21. H Street/9th Street	Unsignalized	8.7	A	8.8	A
22. H Street/Wasco Avenue	Unsignalized	8.9	A	9.1	A
23. Wasco Avenue/Poso Avenue	Unsignalized	11.3	B	11.1	B
24. Wasco Avenue/Kimberlina Road	Unsignalized	10.3	B	10.4	B
25. J Street/9th Street	Unsignalized	8.6	A	8.6	A
26. Wasco Way/SR 58	Unsignalized	14.7	B	14.5	B

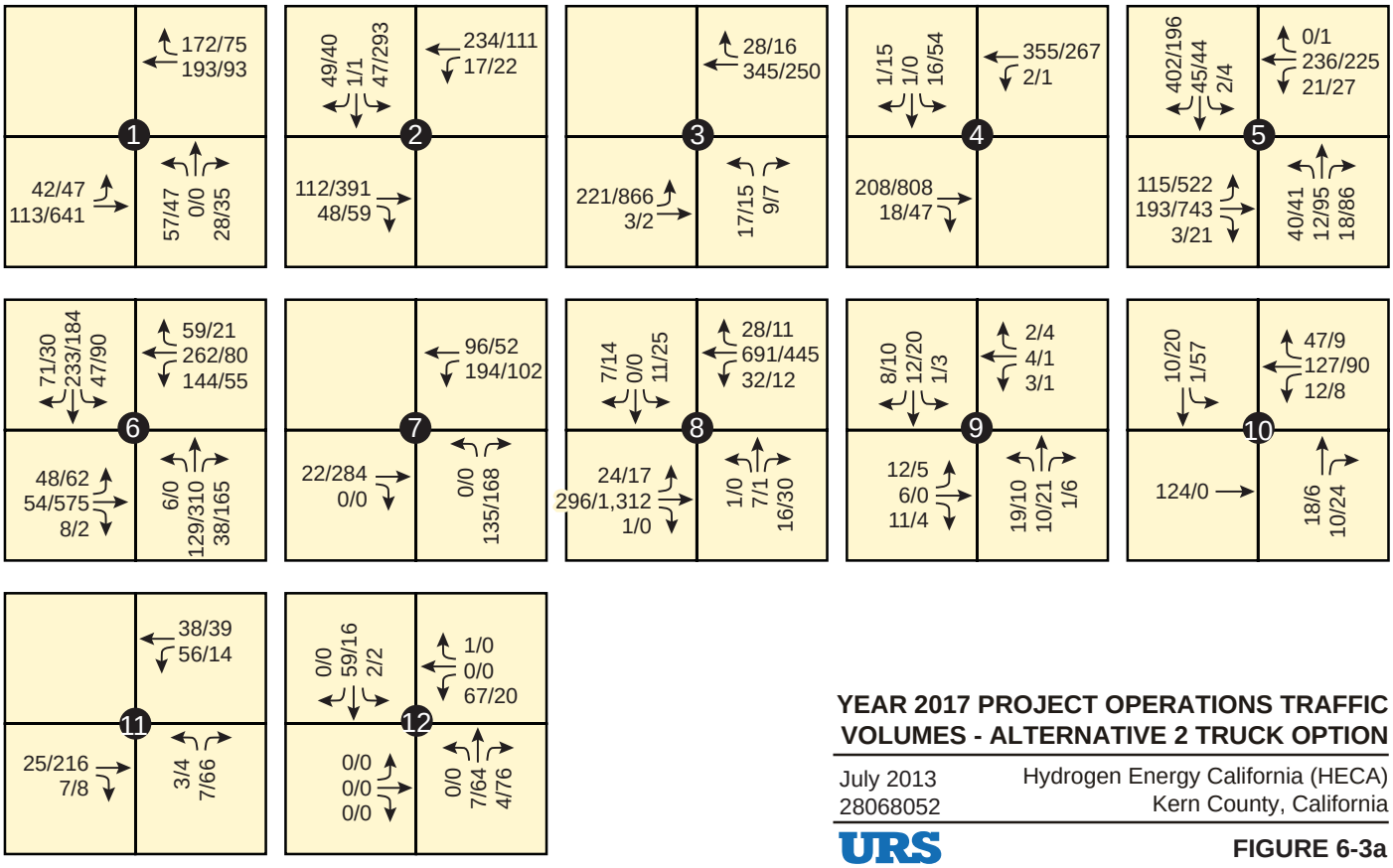
Notes:

[1] Assumed to be signalized as part of Project Construction Mitigation.

a.m./p.m. = morning/evening
I-5 = Interstate 5
NB/SB = northbound/southbound
sec/veh = seconds per vehicle
SR = State Route



NOTE: Intersection # 7 has been analyzed as a T-intersection. The north leg has minimum/negligible traffic volumes.



YEAR 2017 PROJECT OPERATIONS TRAFFIC VOLUMES - ALTERNATIVE 2 TRUCK OPTION

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FIGURE 6-3a

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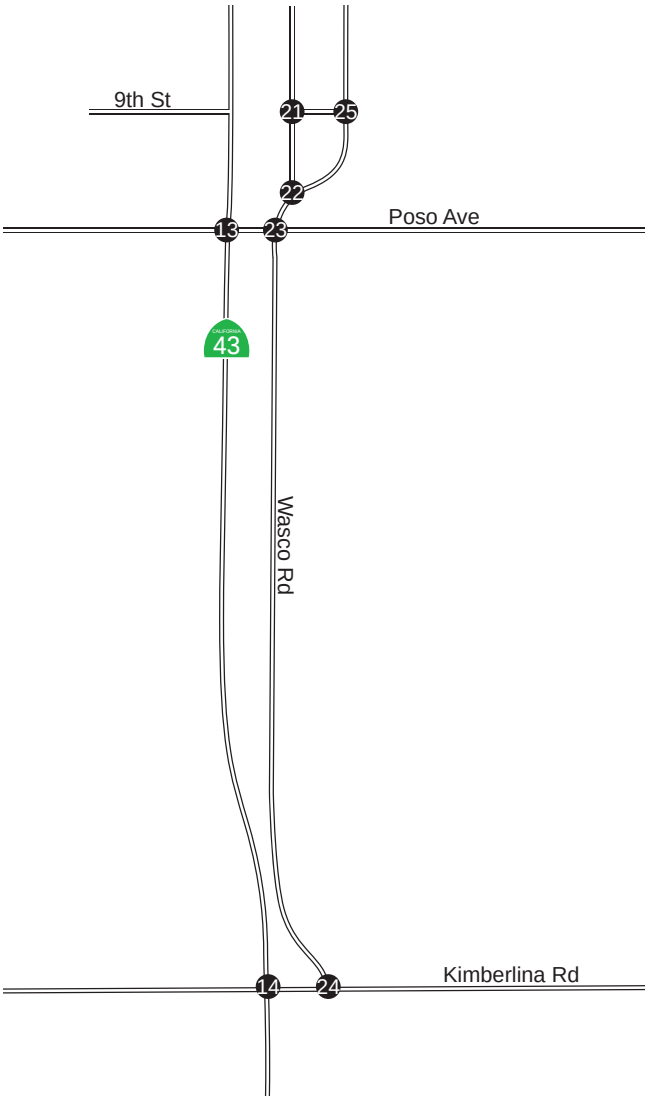

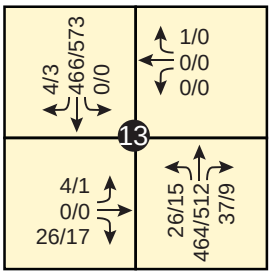

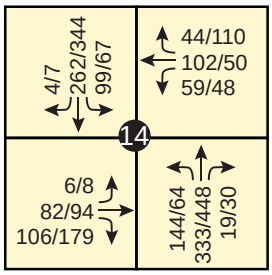

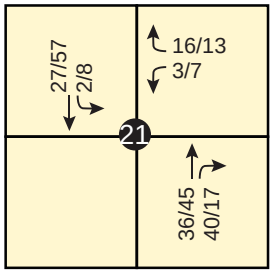

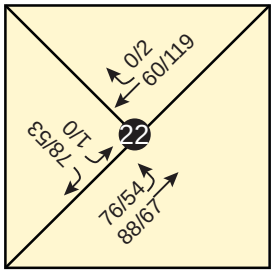

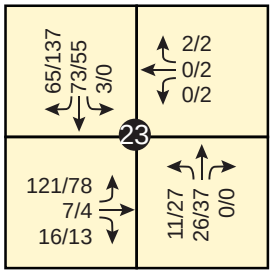

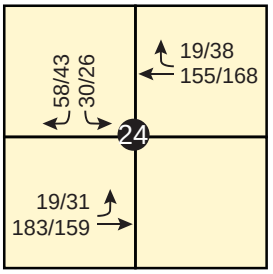

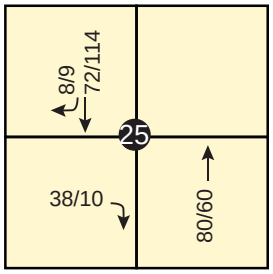

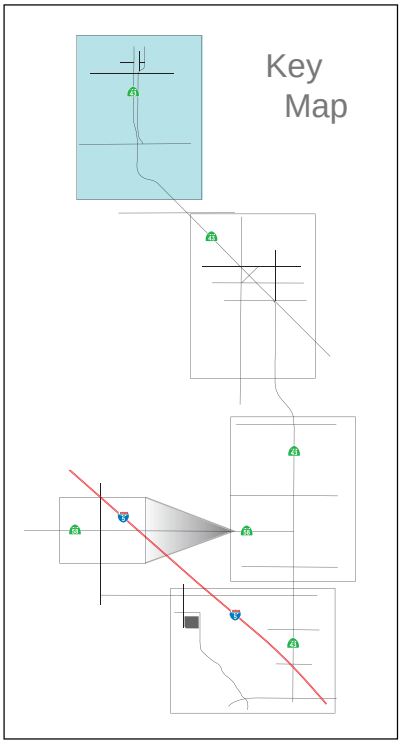

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YEAR 2017 PROJECT OPERATIONS TRAFFIC VOLUMES - ALTERNATIVE 2 TRUCK OPTION

April 2013
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FIGURE 6-3b

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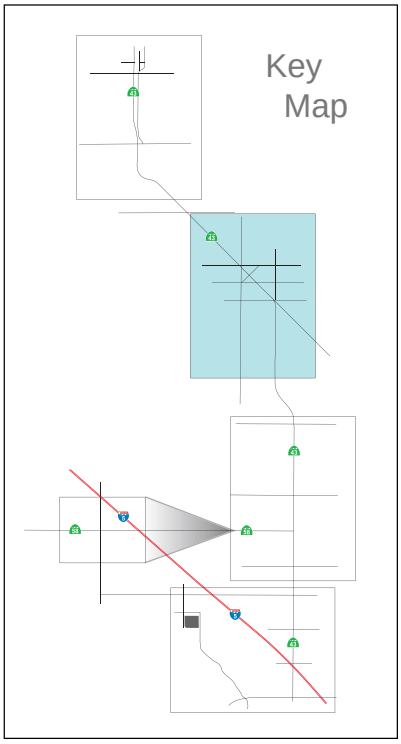

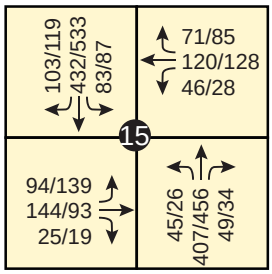

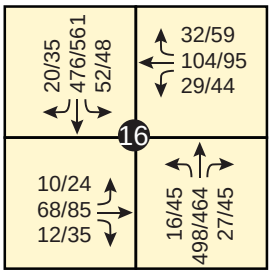

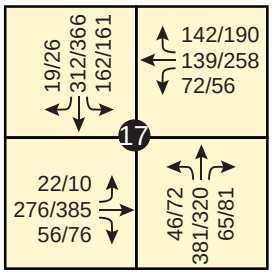

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YEAR 2017 PROJECT OPERATIONS TRAFFIC VOLUMES - ALTERNATIVE 2 TRUCK OPTION

April 2013
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Hydrogen Energy California (HECA)
Kern County, California

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FIGURE 6-3c

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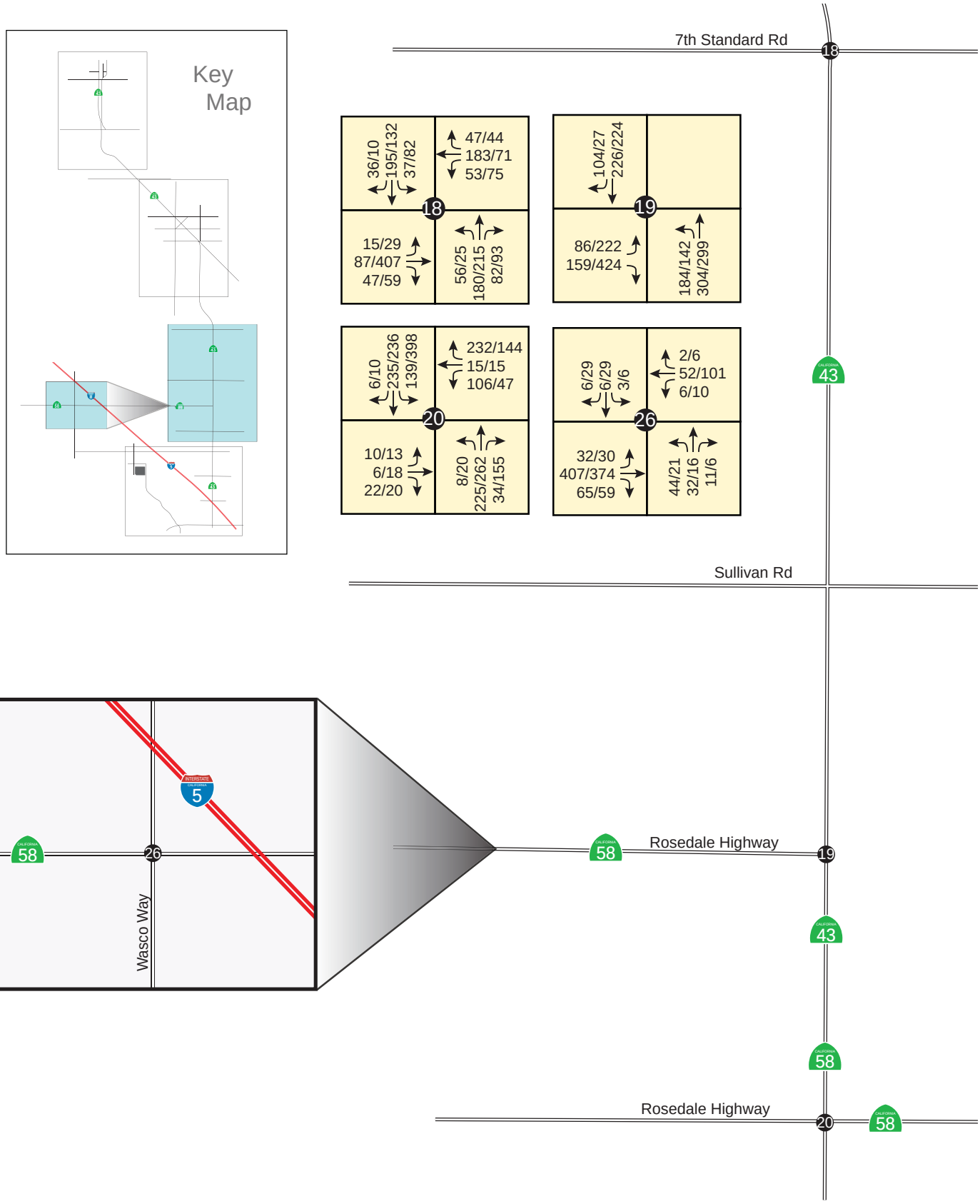

YEAR 2017 PROJECT OPERATIONS TRAFFIC VOLUMES - ALTERNATIVE 2 TRUCK OPTION

April 2013
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Hydrogen Energy California (HECA)
Kern County, California

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FIGURE 6-3d

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As shown in Table 6-5, Peak-Hour Intersection LOS – Year 2017 Project Operations Conditions – Alternative 2, all study intersections are forecast to operate at LOS D or better, with the exception of SR 43/Stockdale Highway and SR 119/Tupman Road, which are both forecast to operate at LOS F during the p.m. peak hour without mitigation. Therefore, without mitigation, the intersection of SR 43/Stockdale Highway will be impacted by Project operations traffic during the p.m. peak hour. The intersection of SR 119/Tupman Road is currently at LOS F during the p.m. peak hour regardless of the Project, and is not impacted further by Project implementation.

6.3.2 Year 2017 Project Operations Roadway Segment Analysis – Alternative 2 Truck Option

Table 6-6, Peak-Hour Roadway Segment LOS – Year 2017 Project Operations Conditions – Alternative 2 (updated in this July 2013 Traffic Study), summarizes the results of the roadway segment LOS analysis at the twelve study roadway segments. The roadway segment LOS presented in Table 6-6 is the basis for which Alternative 2 Project operations roadway segment traffic impacts were evaluated. The LOS calculation worksheets are provided in Appendix B, LOS Calculation Worksheets.

Table 6-6
Peak-Hour Roadway Segment LOS –
Year 2017 Project Operations Conditions – Alternative 2

Roadway Segment	a.m. Peak Hour		p.m. Peak Hour	
	V/C	LOS	V/C	LOS
1. SR 43 between Stockdale Highway and SR 58	0.23	B	0.23	B
2. Stockdale Highway between I-5 and SR 43	0.20	B	0.38	D
3. Stockdale Highway between Morris Road and I-5	0.16	B	0.21	B
4. Wasco Way between Stockdale Hwy and Brite Road	0.08	A	0.09	A
5. Dairy Road between Stockdale Hwy and Adohr Road	0.04	A	0.04	A
6. Morris Road between Stockdale Hwy and Station Rd	0.08	A	0.07	A
7. Station Road between Tupman Road and Morris Road	0.08	A	0.07	A
8. Tupman Road between SR 119 and Grace Road	0.01	A	0.01	A
9. SR 119 between Tupman Road and SR 43	0.32	C	0.41	D
10. SR 119 between Tupman Road and Access Road	0.32	C	0.41	D
11. Wasco Ave between Poso Ave and Kimberlina Ave	0.07	A	0.08	A
12. SR 58 between Wasco Way and I-5	0.20	B	0.24	B

Notes:

a.m./p.m. = morning/evening
I-5 = Interstate 5
LOS = level of service
V/C = volume-to-capacity ratio
SR = State Route

As shown in Table 6-6, all study roadways are forecast to operate at LOS D or better. No study roadway segments will be significantly impacted in terms of roadway capacity and LOS during Alternative 2 Truck Option Project operations.

7.0 TRAFFIC INDEX ANALYSIS

Roads Department staff will prepare a TI analysis to assess the structural capacity of roadways that will be used by Project trucks. This section summarizes the Project traffic data developed for use in the TI analysis.

The previous TI traffic data initially submitted to Roads Department on February 25, 2013, were based on the assumption that Morris Road would be used as the primary access to the Project Site. This analysis has been updated to include access at Dairy Road, which also will be used during Project construction and operations. Therefore, the TI traffic data have been updated and are presented below.

Table 7-1 summarizes the existing baseline AADT and truck percentile at the TI analysis locations. Station Road and Morris Road are shown to be the least-travelled roadways. Stockdale Highway has the highest AADT and lowest truck percentile–in particular, the segment near the Project Site and west of I-5. Wasco Avenue has the highest truck percentile, which is expected due to its location near the city of Wasco, and because it is a parallel roadway to SR 43.

Table 7-1
Roadway Segment ADT Volume for Traffic Index Analysis
Existing Traffic Volume

Roadway	Segment	Cross-Section	Existing AADT	Truck Percent
Wasco Avenue	Between Poso Avenue and Kimberlina Road	2-Lane	1,370	13
Stockdale Highway	Between Enos Lane (SR 43) and I-5	2-Lane	4,241	4
Stockdale Highway	Between I-5 and Morris Road	2-Lane	1,857	5
Stockdale Highway	Between Dairy Road and Wasco Way	2-Lane	1,721	5
Wasco Way	Between Brite Road and Stockdale Highway	2-Lane	1,721	5
Morris Road	Between Stockdale Highway and Station Road	2-Lane	263	5
Station Road	Between Morris Road and Tupman Road	2-Lane	205	7
Dairy Road	Between Stockdale Highway and Adohr Road	2-Lane	177	5
Adohr Road	Between Tupman Road and Dairy Road	2-Lane	258	5
Tupman Road	Between Adohr Road and Station Road	2-Lane	121	5

Notes:

AADT = Annual Average Daily Traffic
ADT = Average Daily Traffic
I-5 = Interstate 5
SR = State Route

Vehicle Class 5 not included in Truck Percent Calculations (assumed farm pickup trucks)

Table 7-2 (updated in this July 2013 Traffic Study) summarizes the 2016 baseline AADT traffic volume during peak Project construction, and provides a breakdown of Project construction–added trips by truck and light vehicles.

Table 7-2
Roadway Segment ADT Volume for Traffic Index Analysis
Year 2016 Project Construction

Roadway	Segment	Cross-Section	2016 Baseline AADT	Truck Percent	Project Added ADT	
					Trucks	Light Vehicles
Wasco Avenue	Between Poso Avenue and Kimberlina Road	2-Lane	1,480	13	0	0
Stockdale Highway	Between Enos Lane (SR 43) and I-5	2-Lane	4,580	4	6	1,354
Stockdale Highway	Between I-5 and Morris Road	2-Lane	2,006	5	100	1,600
Stockdale Highway	Between Dairy Road and Wasco Way	2-Lane	1,859	5	320	616
Wasco Way	Between Brite Road and Stockdale Highway	2-Lane	1,859	5	320	616
Morris Road	Between Stockdale Highway and Station Road	2-Lane	284	5	0	544
Station Road	Between Morris Road and Tupman Road	2-Lane	221	7	0	544
Dairy Road	Between Stockdale Highway and Adohr Road	2-Lane	191	5	420	1,672
Adohr Road	Between Tupman Road and Dairy Road	2-Lane	279	5	50	1,000
Tupman Road	Between Adohr Road and Station Road	2-Lane	131	5	0	1,232

Notes:

AADT = Annual Average Daily Traffic
ADT = Average Daily Traffic
I-5 = Interstate 5
SR = State Route

Vehicle Class 5 not included in Truck Percent Calculations (assumed farm pickup trucks)

Table 7-3 (updated in this July 2013 Traffic Study) summarizes the 2017 baseline AADT traffic volume during Project operations, and provides a breakdown of Project operation–added trips by truck and light vehicles under Project Alternative 1 (Train Option). Under this alternative, the Project operations trip generation assumes that coal will be transported via train along a dedicated rail spur line.

Table 7-3
Roadway Segment ADT Volume for Traffic Index Analysis
Year 2017 Project Operations – Alternative 1

Roadway	Segment	Cross-Section	2017 Baseline AADT	Truck Percent	Project Added ADT	
					Trucks	Light Vehicles
Wasco Avenue	Between Poso Avenue and Kimberlina Road	2-Lane	1,507	13	0	0
Stockdale Highway	Between Enos Lane (SR 43) and I-5	2-Lane	4,665	4	11	248
Stockdale Highway	Between I-5 and Morris Road	2-Lane	2,043	5	328	278
Stockdale Highway	Between Dairy Road and Wasco Way	2-Lane	1,893	5	0	0
Wasco Way	Between Brite Road and Stockdale Highway	2-Lane	1,893	5	0	0
Morris Road	Between Stockdale Highway and Station Road	2-Lane	289	5	300	138
Station Road	Between Morris Road and Tupman Road	2-Lane	226	7	300	138
Dairy Road	Between Stockdale Highway and Adohr Road	2-Lane	195	5	28	138
Adohr Road	Between Tupman Road and Dairy Road	2-Lane	284	5	0	162
Tupman Road	Between Adohr Road and Station Road	2-Lane	133	5	0	160

Notes:

AADT = Annual Average Daily Traffic
ADT = Average Daily Traffic
I-5 = Interstate 5
SR = State Route

Vehicle Class 5 not included in Truck Percent Calculations (assumed farm pickup trucks)

Table 7-4 (updated in this July 2013 Traffic Study) summarizes the 2017 baseline AADT traffic volume during Project operations, and provides a breakdown of Project operation–added trips by truck and light vehicles under Project Alternative 2 (Truck Option). Under this alternative, the Project operations trip generation assumes that coal will be transported via trucks from a transloading facility in Wasco.

Table 7-4
Roadway Segment ADT Volume for Traffic Index Analysis
Year 2017 Project Operations – Alternative 2

Roadway	Segment	Cross-Section	2017 Baseline AADT	Truck Percent	Project Added ADT	
					Trucks	Light Vehicles
Wasco Avenue	Between Poso Avenue and Kimberlina Road	2-Lane	1,507	13	184	0
Stockdale Highway	Between Enos Lane (SR 43) and I-5	2-Lane	4,665	4	397	248
Stockdale Highway	Between I-5 and Morris Road	2-Lane	2,043	5	1,072	278
Stockdale Highway	Between Dairy Road and Wasco Way	2-Lane	1,893	5	0	0
Wasco Way	Between Brite Road and Stockdale Highway	2-Lane	1,893	5	0	0
Morris Road	Between Stockdale Highway and Station Road	2-Lane	289	5	1,044	138
Station Road	Between Morris Road and Tupman Road	2-Lane	226	7	1,044	138
Dairy Road	Between Stockdale Highway and Adohr Road	2-Lane	195	5	28	138
Adohr Road	Between Tupman Road and Dairy Road	2-Lane	284	5	0	162
Tupman Road	Between Adohr Road and Station Road	2-Lane	133	5	0	160

Notes:

AADT = Annual Average Daily Traffic
ADT = Average Daily Traffic
I-5 = Interstate 5
SR = State Route

Vehicle Class 5 not included in Truck Percent Calculations (assumed farm pickup trucks)

8.0 AUTOTURN ANALYSIS

8.1 PROJECT CONSTRUCTION AND OPERATIONS AUTOTURN ANALYSIS

During both Project construction and operations, a variety of vehicles will transport materials and equipment along local roadways. Large trucks that require a wide turning radius may be used. To evaluate the adequacy of the existing roadways to handle these trucks, the Roads Department requires an AutoTurn analysis.

A sampling of vehicles to be used during Project construction and operations is anticipated to include, but is not limited to the following:

- Kenworth W900 Double Belly Dump Truck
- Peterbilt 379 Flatbed Trailer with I-Beam
- Peterbilt Pneumatic Dry Bulk Trailer
- Kenworth Big Rig with Crane
- Kenworth W900 Frameless Dump Truck
- Kenworth W900 with Front Loader
- Peterbilt 379 Side Dump Truck
- Peterbilt 379 Belly Dump Truck
- Peterbilt 379 Double Dump Truck
- Kenworth W900 Construction Lowboy Truck

Based on this list of vehicles, the AutoTurn analysis was conducted assuming a WB-65 truck type as representative of the typical vehicle that will regularly access the Project Site. During Project construction, some large-dimension vehicles are anticipated to deliver specialty and custom-fabricated Project components, and will be handled by specialty logistics handlers. These large-dimension deliveries will be infrequent, one-time occurrences during Project construction.

Six key access point locations to and from the Project Site were included in the analysis. Table 8-1 summarizes each location and the turn movements simulated in the AutoTurn analysis.

The AutoTurn analysis layouts shows the wheel and body tracking of the vehicle template negotiating turns at the intersection are provided in Appendix C.

The results from the preliminary AutoTurn analysis will be used in the development of the intersection improvements. The preliminary analysis resulted in the following findings:

- **Dairy Road/Adohr Road.** Reconstruct the intersection to accommodate the turning radius needed by large trucks to make the turns. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site.

- **Morris Road/Stockdale Highway.** Reconstruct the intersection to accommodate the turning radius needed by large trucks to make the turns. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site.

Table 8-1
Project Construction and Operations AutoTurn Analysis Summary

Intersection	AutoTurn Analysis Movements
Dairy Road/Adohr Road	Turning Southbound Left
	Turning Westbound Right
	Turning Southbound Right
Tupman Road/Adohr Road	Turning Eastbound Right
	Turning Northbound Left
Tupman Road/Station Road	Turning Westbound Left
	Turning Southbound Left
	Turning North Right
	Turning Westbound Right
Morris Road/Station Road	Turning Eastbound Left
	Turning Southbound Left
Morris Road/Stockdale Highway	Turning Northbound Left
	Turning Westbound Left
	Turning Eastbound Right
	Turning Northbound Right
Dairy Road/Stockdale Highway	Turning Northbound Left
	Turning Eastbound Right
	Turning Westbound Left
	Turning North Right

- **Tupman Road/Adohr Road.** Reconstruct the intersection to accommodate the turning radius needed by large trucks to make the turns. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site.

- **Tupman Road/Station Road.** Reconstruct the intersection to accommodate the turning radius needed by large trucks to make the turns. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site.

- **Morris Road/Station Road.** Reconstruct the intersection to accommodate the turning radius needed by large trucks to make the turns. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site.

9.0 CALTRANS COORDINATION AND REQUESTED ANALYSIS

This new section of this July 2013 Traffic Study presents a summary of the Caltrans coordination efforts conducted by URS and HECA in parallel with the preparation of the HECA Project Traffic Study for Kern County Roads Department. In the previous June 2013 Traffic Study submitted to the Roads Department, proposed mitigation included signalization of the SR 119/ Tupman Road intersection to reduce construction traffic impacts during the p.m. peak hour. However, Caltrans expressed concern regarding this previously proposed mitigation because of potential queuing issues along SR 119. Based on meetings with Caltrans on March 5, 2013, May 30, 2013, and June 27, 2013, URS evaluated alternatives to this proposed signal, including redistribution of construction traffic and signalization of I-5 Southbound Ramps/Stockdale Highway.

This section provides the results of Synchro modeling and queuing analysis of signalizing the SR 119/Tupman Road intersection to evaluate Caltrans' previous concerns regarding queuing along SR 119. This section also summarizes the modeling results of redistributing construction traffic and signalizing the I-5 Southbound Ramps/Stockdale Highway as an alternative to the SR 119 signalization.

As shown below, the Synchro analysis resulted in the following conclusions and findings:

- Both the Tupman Road/SR 119 and the I-5 Southbound Ramps/Stockdale Highway proposed traffic signalization are viable traffic mitigation solutions that effectively address Project construction needs in the short term, as well as Project operations needs in the long term.

- Due to the current and projected higher future baseline volume on SR 119 compared to Stockdale Highway, the proposed Tupman Road/SR 119 intersection signal would experience slightly longer east-west queues compared to the proposed I-5 Southbound Ramps/Stockdale Highway signal.

- The results of the evaluation of the traffic signal proposal for the I-5 Southbound Ramps at Stockdale Highway indicate that signalization of the ramp intersection would not cause queue spillback at the southbound I-5 freeway mainline.

Based on Caltrans' concerns regarding queuing on SR 119 as a result of installing a traffic signal at SR 119/Tupman Road, the preferred mitigation proposed herein is a traffic signal at the I-5 Southbound Ramps/Stockdale Highway.

SR 119 and Tupman Road Synchro Analysis Results

A Synchro modeling and queuing analysis was conducted at the intersection of SR 119/Tupman Road. For this analysis, a traffic signal at SR 119/Tupman Road is assumed to be installed and operational. With the intersection signalized, the eastbound and westbound traffic on SR 119 would need to stop at red signal indications to allow north-south Tupman Road traffic to safely traverse the intersection under their green signal indication. For analysis purposes, a signal cycle length of 90 seconds was used in the evaluation. This analysis assumes the construction traffic has not been redistributed.

The result of the Synchro queuing analysis indicates that with the proposed traffic signal, queuing would be experienced for eastbound and westbound traffic on SR 119, as well as for north-south traffic on Tupman Road. The results of the Synchro LOS and queuing analysis showing the primary intersection queues, delay, and LOS are summarized in Tables 9-1 and 9-2 for the 2016 Project Construction and Projects Operation scenarios, respectively.

Table 9-1
2016 Project Construction Synchro Analysis Results at SR 119/Tupman Road

		a.m. Peak Hour				p.m. Peak Hour			
Intersection	**Control**	**Delay**	**LOS**	**Tupman Queue (feet) (SB)**	**SR 119 Queue (feet) (WB)**	**Delay**	**LOS**	**Tupman Queue (feet) (SB)**	**SR 119 Queue (feet) (EB)**
Tupman/SR 119	Signal	4.8	A	10	60	81.4	F	500	1,170

Notes:

LOS = level of service
EB/WB = eastbound/westbound
NB/SB = northbound/southbound
SR = State Route

As shown in Table 9-1, the intersection signalization would improve from unsignalized LOS F construction conditions (with 195 seconds delay) to signalized LOS F conditions (with 81.4 seconds delay) during the p.m. peak hour.

Table 9-2
2017 Project Operation (Alternative 1 – Rail Option, and Alternative 2 – No Rail Option) Synchro Analysis at SR 119/Tupman Road

		a.m. Peak Hour				p.m. Peak Hour			
Intersection	**Control**	**Delay**	**LOS**	**Tupman Queue (feet) (SB)**	**SR-119 Queue (feet) (WB)**	**Delay**	**LOS**	**Tupman Queue (feet) (SB)**	**SR-119 Queue (feet) (EB)**
Tupman/SR 119	Signal	5.0	A	10	50	25.4	C	120	1,140

Notes:

Both the Alternative 1 – Rail and Alternative 2 – No Rail options have the same amount of operational worker traffic added at Tupman Road/SR 119.

LOS = level of service
EB/WB = eastbound/westbound
NB/SB = northbound/southbound
SR = State Route

As shown in Table 9-2, the LOS and delay summary under signalized Project operations conditions indicate improvements compared to unsignalized intersection operating conditions. However, the introduction of the traffic signal resulted in vehicle queues up to 1,200 feet (approximately 48 vehicles) in the eastbound direction during the p.m. hour during both Project construction and operations scenarios.

Based on the findings of the queuing analysis, a traffic signal at SR 119/Tupman Road is not preferred; therefore, reassignment of construction worker traffic to Stockdale Highway rather than Tupman Road and SR 119 towards Bakersfield was evaluated (see Section 9.1).

9.1 UPDATED TRIP ASSIGNMENT USING STOCKDALE HIGHWAY

In response to Caltrans' staff recommendation to explore alternative mitigations to the SR 119/ Tupman Road signal proposal, project construction worker traffic that was initially modeled to use Tupman Road and SR 119 towards Bakersfield in the June 2013 Traffic Study was reassigned to use Stockdale Highway to head east towards Bakersfield in this July 2013 Traffic Study.

The updated Stockdale Highway construction worker routing described above is the key assumption and basis of revising the previous June 2013 Traffic Study. Based on this update, modeling results indicate traffic impacts at Dairy Road/Stockdale Highway, I-5 Southbound Ramps/Stockdale Highway, and SR 43/Stockdale Highway; the previous construction traffic impact at SR 119/Tupman has been eliminated.

The Dairy Road/Stockdale Highway p.m. construction impact will be mitigated with a northbound right-turn lane addition, as described in Mitigation Measure TRA-2. The I-5 Southbound Ramps/Stockdale Highway and SR 43/Stockdale Highway construction impacts will be mitigated by traffic signalization, as described in Mitigation Measure TRA-2.

9.2 SYNCHRO ANALYSIS ALONG STOCKDALE AT I-5 RAMPS AND SR 43

With the proposed traffic signal mitigation at I-5 Southbound Ramps/Stockdale Highway, Caltrans had requested a Synchro analysis and evaluation to determine potential effects of the proposed I-5 Southbound Ramps signal on operations at the adjacent I-5 Northbound Ramps, which are currently unsignalized and not impacted by the Project.

Although located almost 5 miles to the east, the Caltrans intersection at SR 43/Stockdale Highway was similarly evaluated with Synchro as an isolated intersection, and is included in the summary tables.

Table 9-3 summarizes the results of the Synchro analysis under 2016 Baseline No Project conditions. The study intersections are forecast to operate at LOS C or better—with the exception of SR 43/Stockdale Highway, which is forecast to operate at LOS F during the p.m. peak hour.

Table 9-4 summarizes the results of the Synchro analysis under 2016 Project Construction conditions. I-5 Southbound Ramps/Stockdale Highway and SR 43/Stockdale Highway are both forecast to operate at LOS E/F, resulting in significant traffic impacts at these two intersections. The intersection of I-5 Northbound Ramps/Stockdale Highway is forecast to operate at LOS B (a.m.) and LOS D (p.m.), and therefore will not be impacted by Project construction traffic.

Table 9-3
2016 Baseline No Project Synchro Analysis Results

Intersection	Control	a.m. Peak Hour				p.m. Peak Hour			
		Delay	LOS	N/S Queue (feet)	E/W Queue (feet)	Delay	LOS	N/S Queue (feet)	E/W Queue (feet)
I-5 Southbound Ramps/Stockdale Highway	One-way Stop	9.5	A	25 (SB)[1]	N/A	22.3	C	100 (SB)	N/A
I-5 Northbound Ramps/Stockdale Highway	One-way Stop	8.9	A	25 (NB)[1]	N/A	12.5	B	25 (NB) [1]	N/A
SR 43/Stockdale Highway	Four-way Stop	14.8	B	N/A	N/A	71.4	F	N/A	N/A

Notes:

Queues rounded to the nearest 5 feet.

[1] Queue <25 feet, minimum of 25 feet shown.

LOS = level of service
E/W = east/west
I-5 = Interstate 5
N/A = not applicable
NB/SB = northbound/southbound
N/S = north/south
SR = State Route

Table 9-4
2016 Project Construction Synchro Analysis Results
(No Mitigation)

Intersection	Control	a.m. Peak Hour				p.m. Peak Hour			
		Delay	LOS	N/S Queue (feet)	E/W Queue (feet)	Delay	LOS	N/S Queue (feet)	E/W Queue (feet)
I-5 Southbound Ramps/Stockdale Highway	One-way Stop	12.3	B	25 (SB)[1]	N/A	491.6	F	600 (SB)	N/A
I-5 Northbound Ramps/Stockdale Highway	One-way Stop	12.7	B	25 (NB)[1]	N/A	27.8	D	25 (NB)[1]	N/A
SR 43/Stockdale Highway	Four-way Stop	47.3	E	N/A	N/A	460.6	F	N/A	N/A

Notes:

Queues rounded to the nearest 5 feet.

[1] Queue <25 feet, minimum of 25 feet shown.

LOS = level of service
E/W = east/west
I-5 = Interstate 5
N/A = not applicable
NB/SB = northbound/southbound
N/S = north/south
SR = State Route

Table 9-5 summarizes the results of the Synchro analysis under 2016 Project Construction conditions with mitigation (signalization of I-5 Southbound Ramps/Stockdale Highway and SR 43/Stockdale Highway). With signalization of these two study intersections, the intersection LOS at I-5 Southbound Ramps/Stockdale Highway will improve from LOS F to LOS C during the p.m. peak hour. Similarly the intersection LOS at SR 43/Stockdale Highway will improve from LOS F to LOS B during the p.m. peak hour.

Table 9-5
2016 Project Construction Synchro Analysis Results
(With Mitigation)

Intersection	Control	a.m. Peak Hour				p.m. Peak Hour			
		Delay	LOS	N/S Queue (feet)	E/W Queue (feet)	Delay	LOS	N/S Queue (feet)	E/W Queue (feet)
I-5 Southbound Ramps/Stockdale Highway	Signal	14.7	B	25 (SB)	170 (WB)	24.2	C	220 (SB)	640 (EB)
I-5 Northbound Ramps/Stockdale Highway[2]	One-way Stop	12.7	B	25 (NB)[1]	N/A	27.8	D	25 (NB)[1]	N/A
SR 43/Stockdale Highway	Signal	6.8	A	80 (SB)	60 (WB)	13.6	B	260 (NB)	245 (EB)

Notes:

Queues rounded to the nearest 5 feet.

[1] Queue <25 feet, minimum of 25 feet shown.
[2] No mitigation applied.

LOS = level of service
E/W = east/west
EB/WB = eastbound/westbound
I-5 = Interstate 5
N/A = not applicable
NB/SB = northbound/southbound
N/S = north/south
SR = State Route

Figures 9-1 and 9-2 show the proposed traffic signal layout concept at I-5 Southbound Ramps/ Stockdale Highway and at SR 43/Stockdale Highway, respectively.

Table 9-6 summarizes the results of the Synchro analysis under 2017 Baseline No Project conditions. Similar to 2016 Baseline conditions, the two I-5 ramp study intersections are forecast to operate at LOS C or better, while the intersection of SR 43/Stockdale Highway is forecast to operate at LOS F during the p.m. peak hour.

Table 9-7 summarizes the results of the Synchro analysis under 2017 Project Alternative 1 Operations conditions without mitigation. Two of the three study intersections, I-5 Southbound Ramps/Stockdale Highway and SR 43/Stockdale Highway, are forecast to operate at LOS F during the p.m. peak hour, resulting in significant traffic impacts at these two intersections. The intersection of I-5 Northbound Ramps/Stockdale Highway is forecast to operate at LOS A (a.m.) and LOS C (p.m.), and therefore will not be impacted by Alternative 1 Project operation traffic.

Table 9-6
2017 Baseline No Project Synchro Analysis Results

Intersection	Control	a.m. Peak Hour				p.m. Peak Hour			
		Delay	LOS	N/S Queue (feet)	E/W Queue (feet)	Delay	LOS	N/S Queue (feet)	E/W Queue (feet)
I-5 Southbound Ramps/Stockdale Highway	One-way Stop	9.5	A	25 (SB)[1]	N/A	23.1	C	110(SB)	N/A
I-5 Northbound Ramps/Stockdale Highway	One-way Stop	8.9	A	25 (NB)[1]	N/A	12.6	B	25 (NB)[1]	N/A
SR 43/Stockdale Highway	Four-way Stop	15.2	C	N/A	N/A	78.1	F	N/A	N/A

Notes:

Queues rounded to the nearest 5 feet.

[1] Queue <25 feet, minimum of 25 feet shown.

LOS = level of service
E/W = east/west
I-5 = Interstate 5
N/A = not applicable
NB/SB = northbound/southbound
N/S = north/south
SR = State Route

Table 9-7
2017 Project Operation Synchro Analysis Results
Alternative 1 Train Option (No Mitigation)

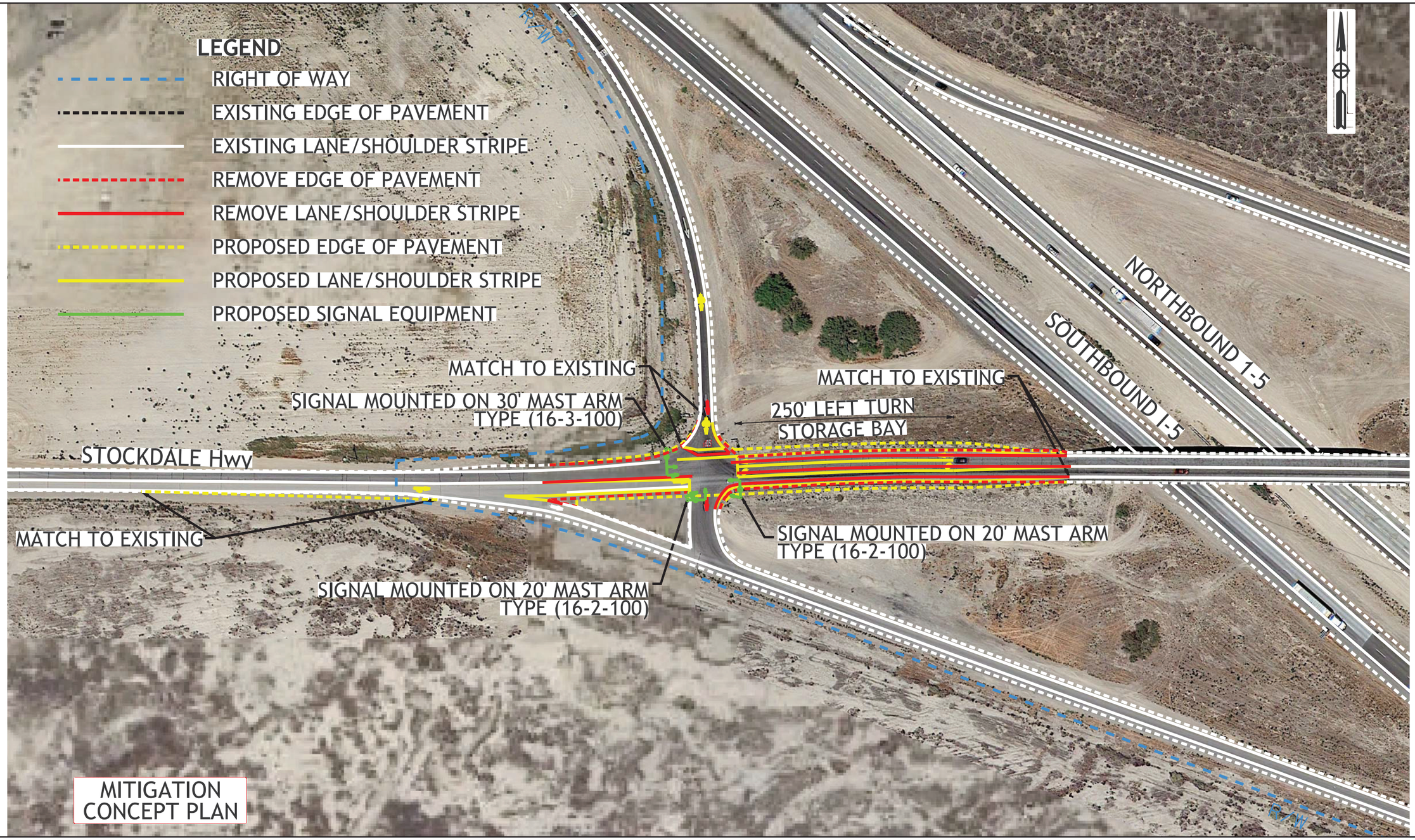
Intersection	Control	a.m. Peak Hour				p.m. Peak Hour			
		Delay	LOS	N/S Queue (feet)	E/W Queue (feet)	Delay	LOS	N/S Queue (feet)	E/W Queue (feet)
I-5 Southbound Ramps/Stockdale Highway	One-way Stop	10.3	B	25 (SB)[1]	N/A	50.1	F	210(SB)	N/A
I-5 Northbound Ramps/Stockdale Highway	One-way Stop	9.9	A	25 (NB)[1]	N/A	16.2	C	25 (NB)[1]	N/A
SR 43/Stockdale Highway	Four-way Stop	20.8	C	N/A	N/A	126.3	F	N/A	N/A

Notes:

Queues rounded to the nearest 5 feet.

[1] Queue <25 feet, minimum of 25 feet shown.

LOS = level of service
E/W = east/west
I-5 = Interstate 5
N/A = not applicable
NB/SB = northbound/southbound
N/S = north/south
SR = State Route



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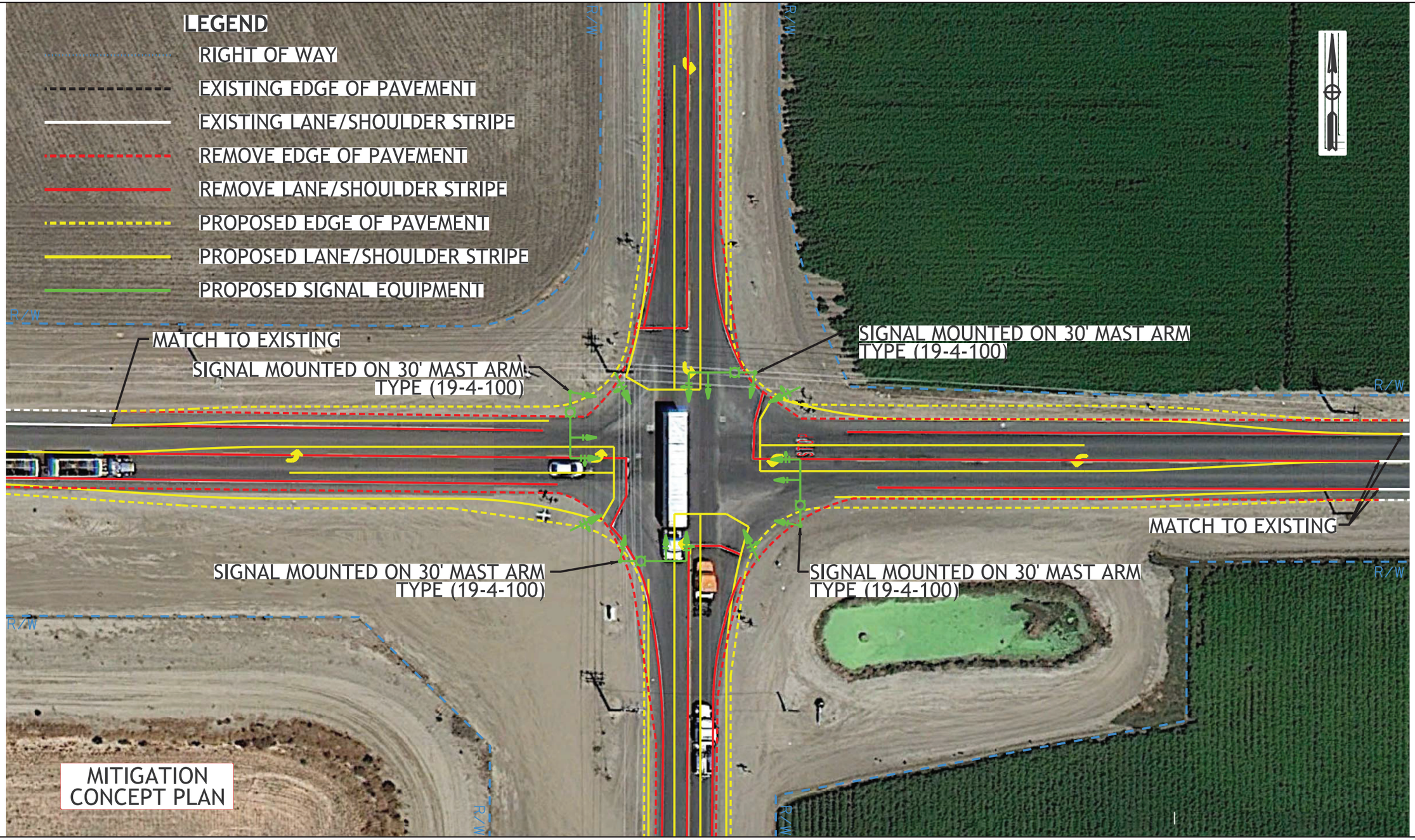
PROPOSED IMPROVEMENTS
1-5 SOUTH BOUND RAMPS/STOCKDALE HIGHWAY

July 2013
28068052

Hydrogen Energy California (HECA)
Kern County, California

URS

FIGURE 9-1



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PROPOSED IMPROVEMENTS
SR-43/STOCKDALE HIGHWAY

July 2013
28068052

Hydrogen Energy California (HECA)
Kern County, California

URS

FIGURE 9-2

Table 9-8 summarizes the results of the Synchro analysis under 2017 Project Alternative 2 Operations conditions without mitigation. Two of the three study intersections, I-5 Southbound Ramps/Stockdale Highway and SR 43/Stockdale Highway, are both forecast to operate at LOS F during the p.m. peak hour, resulting in significant traffic impacts at these two intersections. The intersection of I-5 Northbound Ramps/Stockdale Highway is forecast to operate at LOS B (a.m.) and LOS C (p.m.), and therefore will not be impacted by Alternative 2 project operation traffic.

Table 9-8
2017 Project Operation Synchro Analysis Results at I-5 Ramps/Stockdale Highway
Alternative 2 Truck Option (No Mitigation)

Intersection	Control	a.m. Peak Hour				p.m. Peak Hour			
		Delay	LOS	N/S Queue (feet)	E/W Queue (feet)	Delay	LOS	N/S Queue (feet)	E/W Queue (feet)
I-5 Southbound Ramps/Stockdale Highway	One-way Stop	11.1	B	25 (SB)[1]	N/A	73.5	F	280 (SB)	N/A
I-5 Northbound Ramps/Stockdale Highway	One-way Stop	11.5	B	25 (NB)[1]	N/A	19.0	C	25 (NB)[1]	N/A
SR 43/Stockdale Highway	Four-way Stop	24.8	C	N/A	N/A	134.4	F	N/A	N/A

Notes:

Queues rounded to the nearest 5 feet.

[1] Queue <25 feet, minimum of 25 feet shown.

LOS = level of service
E/W = east/west
I-5 = Interstate 5
N/A = not applicable
NB/SB = northbound/southbound
N/S = north/south
SR = State Route

Table 9-9 summarizes the results of the Synchro analysis under 2017 Project Alternative 1 Operations conditions with mitigation. With the implementation of traffic signal mitigations at the two impacted study intersections, the intersection LOS at I-5 Southbound Ramps/Stockdale Highway will improve from LOS F to LOS B during the p.m. peak hour. Similarly, the intersection LOS at SR 43/Stockdale Highway will improve from LOS F to LOS A during the p.m. peak hour.

Table 9-10 summarizes the results of the Synchro analysis under 2017 Project Alternative 2 Operations conditions with mitigation. With mitigation, the LOS will be improved at two intersections, as summarized below:

- I-5 Southbound Ramps/Stockdale Highway will improve from LOS F to LOS B during the p.m. peak hour; and
- SR 43/Stockdale Highway will improve from LOS F to LOS A during the p.m. peak hour.

Table 9-9
2017 Project Operation Synchro Analysis Results at I-5 Ramps/Stockdale Highway
Alternative 1 Train Option (With Mitigation)

Intersection	Control	a.m. Peak Hour				p.m. Peak Hour			
		Delay	LOS	N/S Queue (feet)	E/W Queue (feet)	Delay	LOS	N/S Queue (feet)	E/W Queue (feet)
I-5 Southbound Ramps/Stockdale Highway	Signal	13.4	A	25 (SB)[1]	75 (WB)	13.6	B	145 (SB)	200 (EB)
I-5 Northbound Ramps/Stockdale Highway[2]	One-way Stop	9.9	A	25 (NB)[1]	N/A	16.2	C	25 (NB)[1]	N/A
SR 43/Stockdale Highway	Signal	6.7	A	80(SB)	50 (WB)	9.1	A	170 (NB)	120 (EB)

Notes:

Queues rounded to the nearest 5 feet.

[1] Queue <25 feet, minimum of 25 feet shown.
[2] No mitigation applied.

LOS = level of service
E/W = east/west
EB/WB = eastbound/westbound
I-5 = Interstate 5
N/A = not applicable
NB/SB = northbound/southbound
N/S = north/south
SR = State Route

Table 9-10
2017 Project Operation Synchro Analysis Results at I-5 Ramps/Stockdale Highway
Alternative 2 Truck Option (With Mitigation)

Intersection	Control	a.m. Peak Hour				p.m. Peak Hour			
		Delay	LOS	N/S Queue (feet)	E/W Queue (feet)	Delay	LOS	N/S Queue (feet)	E/W Queue (feet)
I-5 Southbound Ramps/Stockdale Highway	Signal	12.3	B	25 (SB)[1]	100 (WB)	13.3	B	150 (SB)	210 (EB)
I-5 Northbound Ramps/Stockdale Highway[2]	One-way Stop	11.5	B	25 (NB)[1]	N/A	19.0	C	25 (NB)[1]	N/A
SR 43/Stockdale Highway	Signal	6.9	A	90 (SB)	55 (WB)	9.1	A	170 (NB)	120 (EB)

Notes:

Queues rounded to the nearest 5 feet.

[1] Queue <25 feet, minimum of 25 feet shown.
[2] No mitigation applied.

LOS = level of service
E/W = east/west
EB/WB = eastbound/westbound
I-5 = Interstate 5
N/A = not applicable
NB/SB = northbound/southbound
N/S = north/south
SR = State Route

10.0 MITIGATION

This section provides a summary of mitigation measures proposed for Project construction and operations. As requested by the Roads Department, a summary table of all the proposed mitigation measures is provided in Table 10-1, Summary Table of Mitigation Measures.

10.1 PROJECT CONSTRUCTION MITIGATIONS

During Project construction, the following locations would potentially require mitigation:

- Local roadways would potentially be subjected to heavy loads. The necessary roadway improvements will be determined based on the results of the TI analysis to be conducted by Roads Department staff. The TI analysis will need to incorporate the updated TI data presented in Section 8 of this technical memorandum.

- Vehicles requiring wide turning radius will use local roadways. The necessary roadway improvements will be determined using information from the preliminary AutoTurn analysis provided in Section 8 of this technical memorandum. The results of preliminary AutoTurn analysis should not be interpreted as a final layout. Roads Department will provide the necessary approvals and design oversight in the development of the final geometric layouts at the affected intersections.

- Without mitigation, I-5 Southbound Ramp/Stockdale Highway will be significantly impacted during the p.m. peak hour during 2016 peak Project construction (LOS B without Project construction becomes LOS F with Project construction). This intersection is under Caltrans' jurisdiction, and any improvements—including the proposed traffic signalization—will need to be coordinated with Caltrans.

- Without mitigation, SR 43/Stockdale Highway will be significantly impacted during the p.m. peak hour during 2016 peak Project construction (LOS E without Project construction becomes LOS F with Project construction). This intersection is under Caltrans' jurisdiction, and any improvements—including the proposed traffic signalization—will need to be coordinated with future and ongoing major investment projects in the area, including the Centennial Corridor Project, as suggested by Caltrans.

- Without mitigation, Dairy Road/Stockdale Highway will be significantly impacted during the p.m. peak hour during 2016 peak Project construction (LOS A without Project construction becomes LOS F with Project construction).

The following mitigation measures are proposed to address the above-listed improvements and other specific Project-related activities during construction.

TRA-1 Roadway Improvements. The Project Applicant will coordinate with Kern County to identify and construct roadway improvements, if needed, to support construction traffic to ensure that roadway impacts are less than significant.

The results of the TI analysis will be used in the development of the roadway improvement mitigations.

Table 10-1
Summary Table of Mitigation Measures

Impact Number	Impact Location	Level of Significance		Mitigation Measure	Level of Significance After Mitigation
		2016 Construction	2017 Operations		
1	Various roadways shown in Table 7-1	Significant	Significant[1]	TRA-1: Design and upgrade roadway pavement thickness (To be determined by TI Analysis from the County)	Less than Significant
2	Intersection at SR 43/ Stockdale Highway	Significant	Significant[1]	TRA-2: Install Traffic Signal and associated improvements	Less than Significant
3	Intersection at I-5 SB Ramp/ Stockdale Highway	Significant	Significant[1]	TRA-2: Install Traffic Signal and associated improvements	Less than Significant
4	Intersection at Dairy Road/ Stockdale Highway	Significant	Significant[1]	TRA-2: Lane and turning radius improvements	Less than Significant
5	Intersection at Dairy Road/ Adohr Road	Significant	Significant[1]	TRA-2: Turning radius improvement	Less than Significant
6	Intersection at Morris Road/ Stockdale Highway	Significant	Significant[1]	TRA-2: Lane and turning radius improvements	Less than Significant
7	Intersection at Tupman Road/Adohr Road	Significant	Significant[1]	TRA-2: Turning radius improvement	Less than Significant
8	Intersection at Tupman Road/Station Road	Significant	Significant[1]	TRA-2: Turning radius improvement	Less than Significant
9	Intersection Geometric Impact at Morris Road/ Station Road	Significant	Significant[1]	TRA-2: Turning radius improvement	Less than Significant
10	As needed at various project access roadways	Potentially Significant	NA	TRA-3: Provide proper signs and traffic control measures as needed	Less than Significant
11	As needed at various project access roadways	Potentially Significant	NA	TRA-4: Schedule lane or road closures during off-peak hours	Less than Significant
12	As needed at various project access roadways	Potentially Significant	NA	TRA-5: Limit construction traffic on designated access roads only	Less than Significant
13	As needed at various project access roadways	Potentially Significant	NA	TRA-6: Encourage carpooling as part of Transportation Demand Management	Less than Significant
14	As needed at various project access roadways	NA	Potentially Significant	TRA-7: Limit operations traffic on designated access roads only	Less than Significant

Notes:

[1] Will continue to be significant if not mitigated prior/during construction phase.

NA = not applicable
SR = State Route

TRA-1 Roadway Improvements
TRA-2 Intersection Improvements
TRA-3 Traffic Control Measures
TRA-4 Lane Closures
TRA-5 Limit Construction Traffic
TRA-6 Implement Transportation Demand Management (TDM)
TRA-7 Minimize Operations Traffic

TRA-2 Intersection Improvements. The Project Applicant will coordinate with Kern County and Caltrans to identify and construct intersection improvements needed to support construction traffic so that intersection impacts are reduced to less-than-significant levels. Additionally, information from the preliminary AutoTurn analysis included in Appendix C will be used in the development of the intersection improvements.

The following intersections will require improvements:

- **Intersection of SR 43 (Enos Lane) and Stockdale Highway.** Signalization of the current 4-way-stop intersection would improve p.m. peak-hour LOS F conditions to LOS B conditions during Project construction, thereby mitigating a significant Project construction traffic impact. A traffic signal warrant analysis was conducted to determine the need for a traffic signal. The result of the analysis shows that signalization is warranted. The peak-hour traffic-signal warrant sheet is included in Appendix D, Traffic Warrant Analysis.

- **Intersection of I-5 Southbound Ramps and Stockdale Highway.** Signalization of the current 1-way-stop intersection would improve p.m. peak-hour LOS F conditions to LOS B conditions during Project construction, thereby mitigating a significant Project construction traffic impact. A traffic-signal warrant analysis was conducted to determine the need for a traffic signal. The result of the analysis shows that signalization is warranted. The peak-hour traffic-signal warrant sheet is included in Appendix D, Traffic Warrant Analysis.

- **Dairy Road and Stockdale Highway.** Construct a separate left-turn lane on the westbound approach of Stockdale Highway, and construct a separate right-turn lane on the northbound approach of Dairy Road. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site. Additionally, a proposed separate right-turn lane improvement on the northbound approach will mitigate the construction traffic impact at this intersection, and improve p.m. construction LOS F conditions to LOS C conditions.

- **Dairy Road/Adohr Road.** Reconstruct the intersection to accommodate the turning radius needed by large trucks to make the turns. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site.

- **Morris Road/Stockdale Highway.** Construct a separate left-turn lane on the westbound approach of Stockdale Highway, and construct a separate right-turn lane on the northbound approach of Dairy Road. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site.

- **Tupman Road/Adohr Road.** Reconstruct the intersection to accommodate the turning radius needed by large trucks to make the turns. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site.

- **Tupman Road/Station Road.** Reconstruct the intersection to accommodate the turning radius needed by large trucks to make the turns. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site.

- **Morris Road/Station Road.** Reconstruct the intersection to accommodate the turning radius needed by large trucks to make the turns. This improvement will facilitate the safe and efficient movement of construction and operations vehicles to and from the Project Site.

TRA-3 Traffic Control Measures. Use proper signs and traffic control measures in accordance with Caltrans and County requirements. All traffic signs, equipment, and control measures shall conform to the provisions specified in the Manual of Uniform Traffic Control Device, California Edition.

TRA-4 Lane Closures. Schedule potential traffic lane or road closures during off-peak hours whenever possible.

TRA-5 Limit Construction Traffic. Limit vehicular traffic to designated access roads, construction laydown, and worker parking areas, and the Project construction site.

TRA-6 Implement Transportation Demand Management Measures (TDM). Encourage worker carpooling to minimize drive-alone worker trips. Provide incentives and develop a reward system to increase voluntary participation of various TDM measures.

10.1.1 Level of Significance after Mitigation

With the application of the mitigation measures described above, the impacted study intersections' LOS and operational performance will improve, reducing impacts to less-than-significant levels.

10.2 PROJECT OPERATIONS MITIGATIONS

Project construction mitigation measures TRA-1 and TRA-2 will continue to be in place for the life of the project, and therefore also apply to Project operations. The following additional mitigation measure is proposed to address Project-related activities during operation.

TRA-7 Minimize Operations Traffic. Limit vehicular traffic to designated access roads. Encourage worker carpooling to minimize drive-alone worker trips.

10.2.1 Level of Significance after Mitigation

The study intersections are not significantly impacted based on the traffic impact threshold of significance; therefore, no additional mitigation is required to reduce impacts to less-than-significant levels. However, mitigation is proposed, as described above, to present a proactive approach to minimize operational traffic.

11.0 CONCLUSIONS

The construction and operation of the HECA Project, along with background traffic growth, will collectively contribute to increases in traffic to the surrounding roadway circulation system both in the short term (i.e., Year 2016 Project Construction scenario) and in the long term (i.e., Year 2017 Project Operation scenario) when the Project becomes fully operational.

Based on the results of the analyses presented in this technical memorandum, HECA proposes to provide funding for the two traffic signals at SR 43/Stockdale Highway and I-5 Southbound Ramp/Stockdale Highway and associated improvements. These mitigations will be coordinated with the County and Caltrans, who have operational and maintenance jurisdiction for these facilities. Implementation of the proposed traffic signal mitigation measures will improve Project construction conditions to acceptable LOS C or better conditions, thereby mitigating the two intersection traffic impacts to less-than-significant levels. The Project construction impact at Dairy Road/Stockdale Highway during the p.m. peak hour will be mitigated as part of the intersection geometric improvements described in Mitigation Measure TRA-2. Specifically, the addition of an exclusive northbound right-turn lane will mitigate the intersection traffic impact to a less-than-significant level.

Results of the roadway segment analyses conclude that there are no roadway traffic impacts in terms of LOS or roadway capacity. The Roads Department, however, has raised a concern about the anticipated future vehicular weights and recurring roadway loadings that will contribute to the premature wear and tear of the local roadways that serve the Project. HECA understands that the roadway structural improvements, if any, will largely be based on the TI analysis to be conducted by Roads Department staff. The TI analysis is not yet finalized, and will need to be evaluated using the updated Project traffic data provided in Section 8 of this technical memorandum. Additionally, there may be a need to improve the turning radii of adjacent intersections providing access to the Project Site. HECA will provide funding of the needed turning radii and associated roadway improvements.

HECA looks forward to becoming a responsible and proactive member of the business community, contributing to the growth and success of Kern County and the local communities. Potential Project related traffic impacts have been thoroughly analyzed and proactively addressed to meet Kern County's traffic impact thresholds and levels of significance.

12.0 REFERENCES

URS (URS Corporation), 2008. Bigwest Refinery Environmental Impact Report Traffic Impact Analysis Report. Kern County.

Appendix A
Traffic Counts

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

I-5 SB Ramp and Stockdale Hwy , City of Bakersfield

Date: 2/22/2012

Day: Wednesday

Project #: CA12_8015_002

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Peak Hour Summary

Southbound Approach (I-5 SB Ramp)

	Lanes	0	1	0	
AM		2	1	42	0 AM
NOON		0	0	0	0 NOON
PM		1	1	262	0 PM

Eastbound Approach (Stockdale Hwy)

Lanes	AM	NOON	PM
	49	0	39
0	0	0	0
1	27	0	204
0	1	0	9

Westbound Approach

Lanes	AM	NOON	PM
0	0	0	0
1	47	0	38
0	15	0	20
	69	0	466

CONTROL: 1-Way Stop (SB)

Northbound Approach

AM	17	0	0	0 AM
NOON	0	0	0	0 NOON
PM	30	0	0	0 PM
Lanes		0	0	0 Lanes

Total Ins & Outs

	AM	NOON	PM
North Leg	45	0	
	0	0	NOON
	264	0	PM
West Leg	49	0	39
	28	0	213
East Leg	62	0	58
	69	0	466
	AM	NOON	PM
South Leg	17	0	AM
	0	0	NOON
	30	0	PM

Total Volume Per Leg

	AM	NOON	PM
North Leg	45	0	
	0		NOON
	264		PM
West Leg	77	0	252
East Leg	131	0	524
	AM	NOON	PM
South Leg	17		AM
	0		NOON
	30		PM

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

I-5 NB Ramp and Stockdale Hwy , City of Bakersfield

Date: 2/22/2012

Day: Wednesday

Project #: CA12_8015_001

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
AM	0	155	AM
NOON	0	0	NOON
PM	0	70	PM

West Leg				East Leg			
AM	NOON	PM		AM	NOON	PM	
61	0	58		211	0	122	
65	0	469		89	0	497	

	South Leg	
AM	0	29
NOON	0	0
PM	0	34

Total Volume Per Leg

	North Leg	
AM	155	AM
NOON	0	NOON
PM	70	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
126	0	527	300	0	619

	South Leg
AM	29
NOON	0
PM	34

ITM Peak Hour Summary

Prepared by:

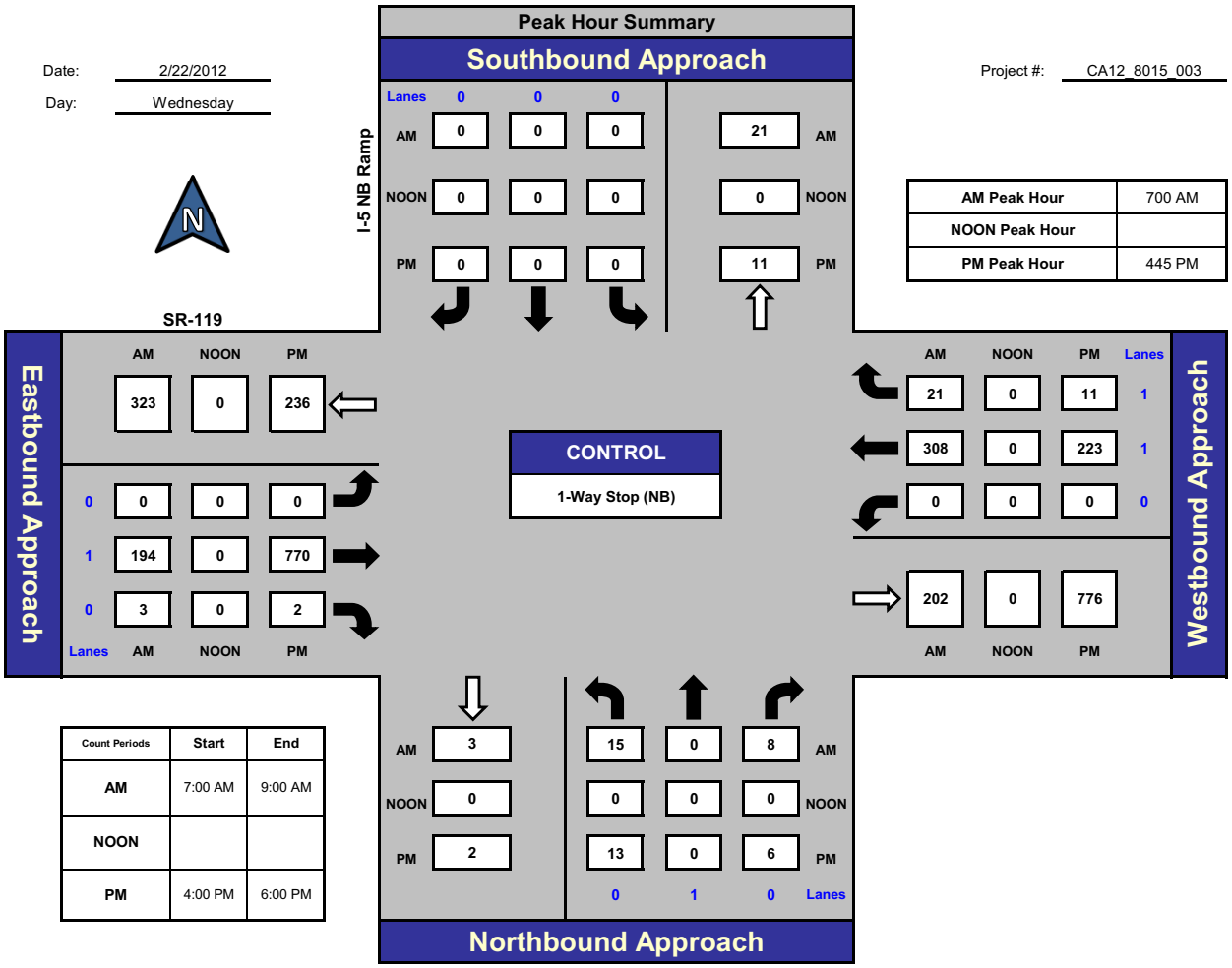
National Data & Surveying Services

I-5 NB Ramp and SR-119 , City of Bakersfield

Date: 2/22/2012

Day: Wednesday

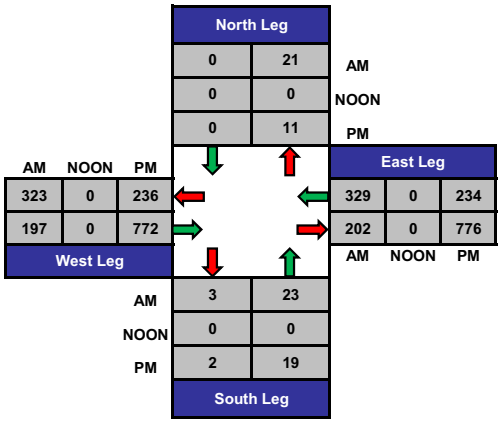
Project #: CA12_8015_003



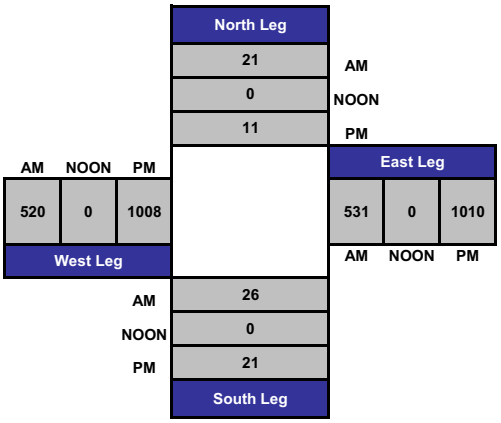
AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

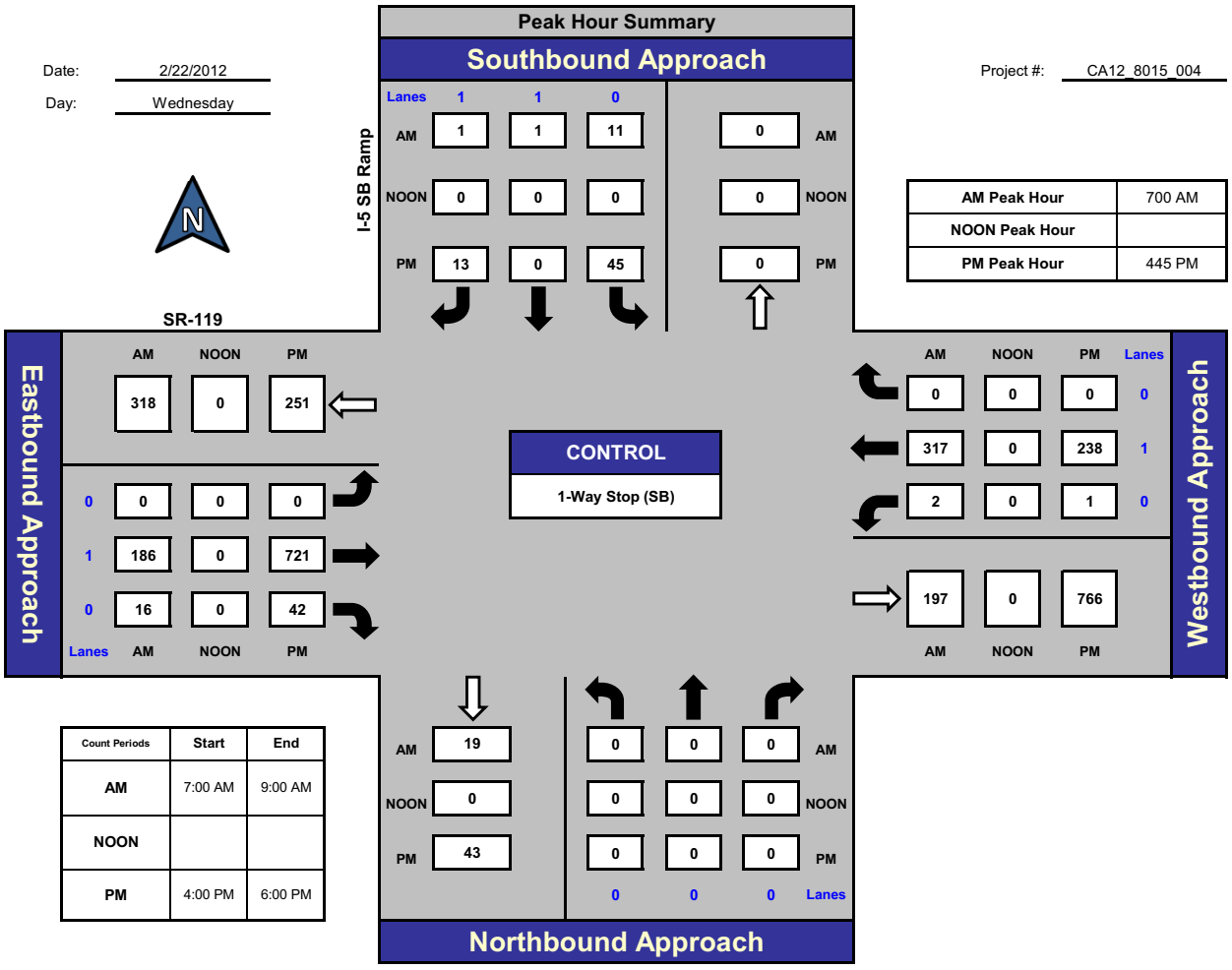
National Data & Surveying Services

I-5 SB Ramp and SR-119 , City of Bakersfield

Date: 2/22/2012

Day: Wednesday

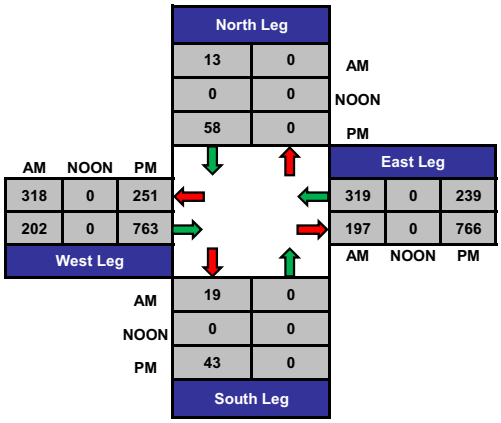
Project #: CA12_8015_004



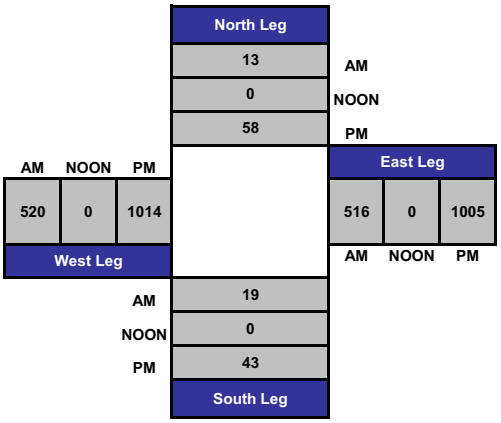
AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

SR-43 and SR-119 , City of Bakersfield

Date: 2/22/2012

Day: Wednesday

Project #: CA12_8015_005

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Peak Hour Summary

Southbound Approach

Lanes	0	1	1		
AM	359	40	2	114	AM
NOON	0	0	0	0	NOON
PM	175	39	4	552	PM

SR-43

SR-119

Eastbound Approach

Lanes	AM	NOON	PM
	686	0	413
1	103	0	466
1	172	0	663
0	3	0	19
Lanes	AM	NOON	PM

CONTROL

Signalized

Westbound Approach

AM	NOON	PM	Lanes
0	0	1	0
291	0	201	1
19	0	24	1
190	0	744	
AM	NOON	PM	

Northbound Approach

AM	62	36	11	16	AM
NOON	0	0	0	0	NOON
PM	82	37	85	77	PM
		1	1	0	Lanes

Total Ins & Outs

	North Leg		
AM	401	114	AM
NOON	0	0	NOON
PM	218	552	PM

West Leg			East Leg		
AM	NOON	PM			
686	0	413	310	0	226
278	0	1148	190	0	744
			AM	NOON	PM

	South Leg	
AM	62	63
NOON	0	0
PM	82	199

Total Volume Per Leg

North Leg		
515	AM	
0	NOON	
770	PM	

West Leg			East Leg		
AM	NOON	PM			
964	0	1561	500	0	970
			AM	NOON	PM

South Leg	
AM	125
NOON	0
PM	281

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

SR-43 and Stockdale Highway , City of Bakersfield

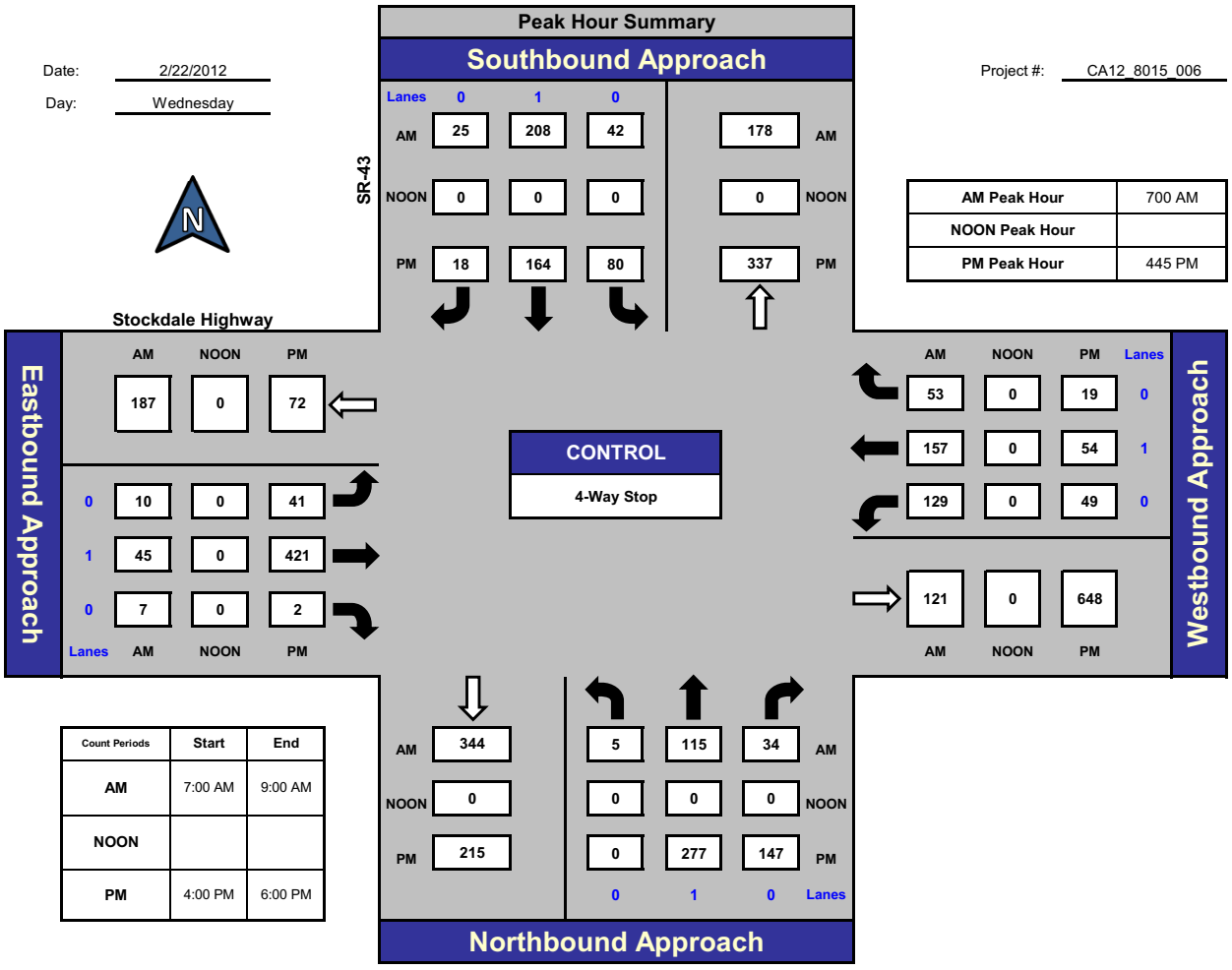
Date: 2/22/2012

Day: Wednesday

Project #: CA12_8015_006

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM



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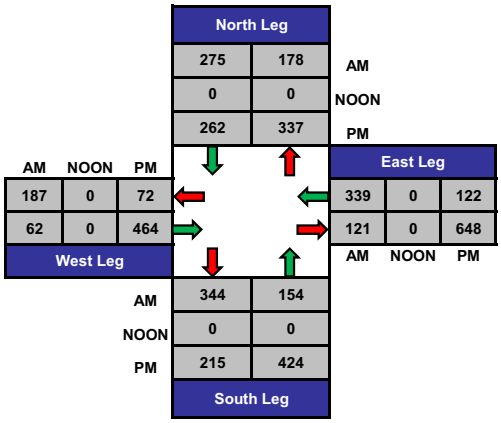
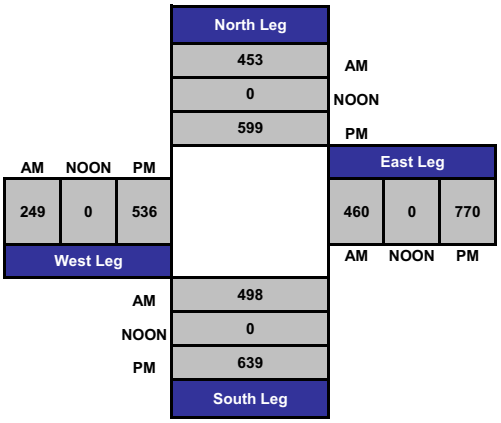


Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

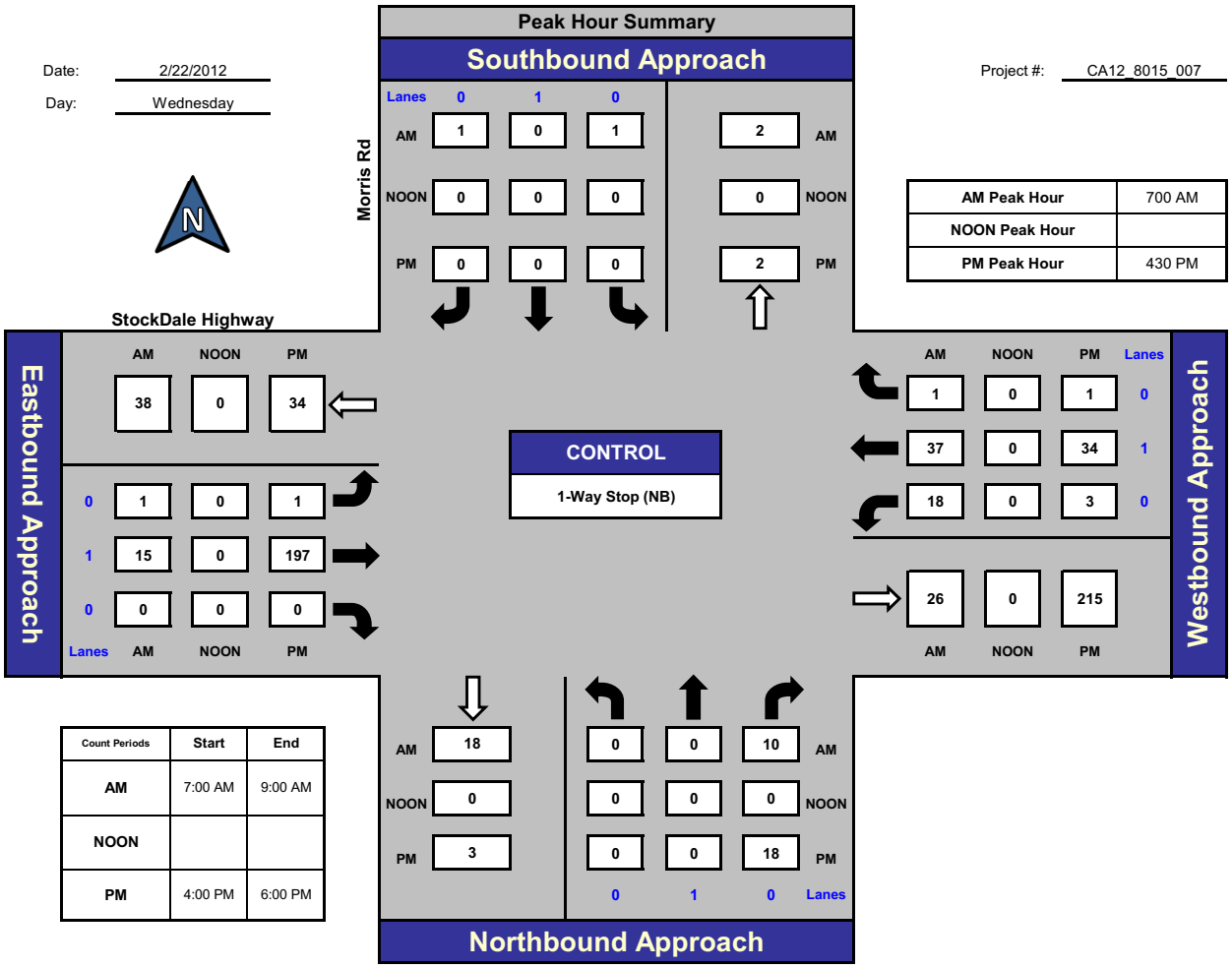
National Data & Surveying Services

Morris Rd and StockDale Highway , City of Buttonwillow

Date: 2/22/2012

Day: Wednesday

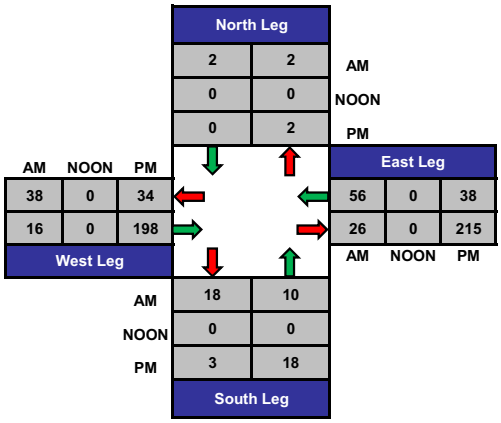
Project #: CA12_8015_007



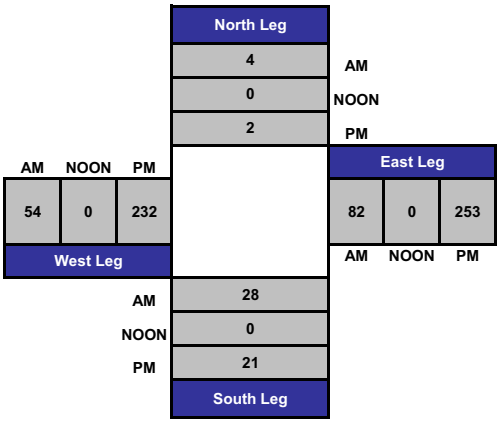
AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

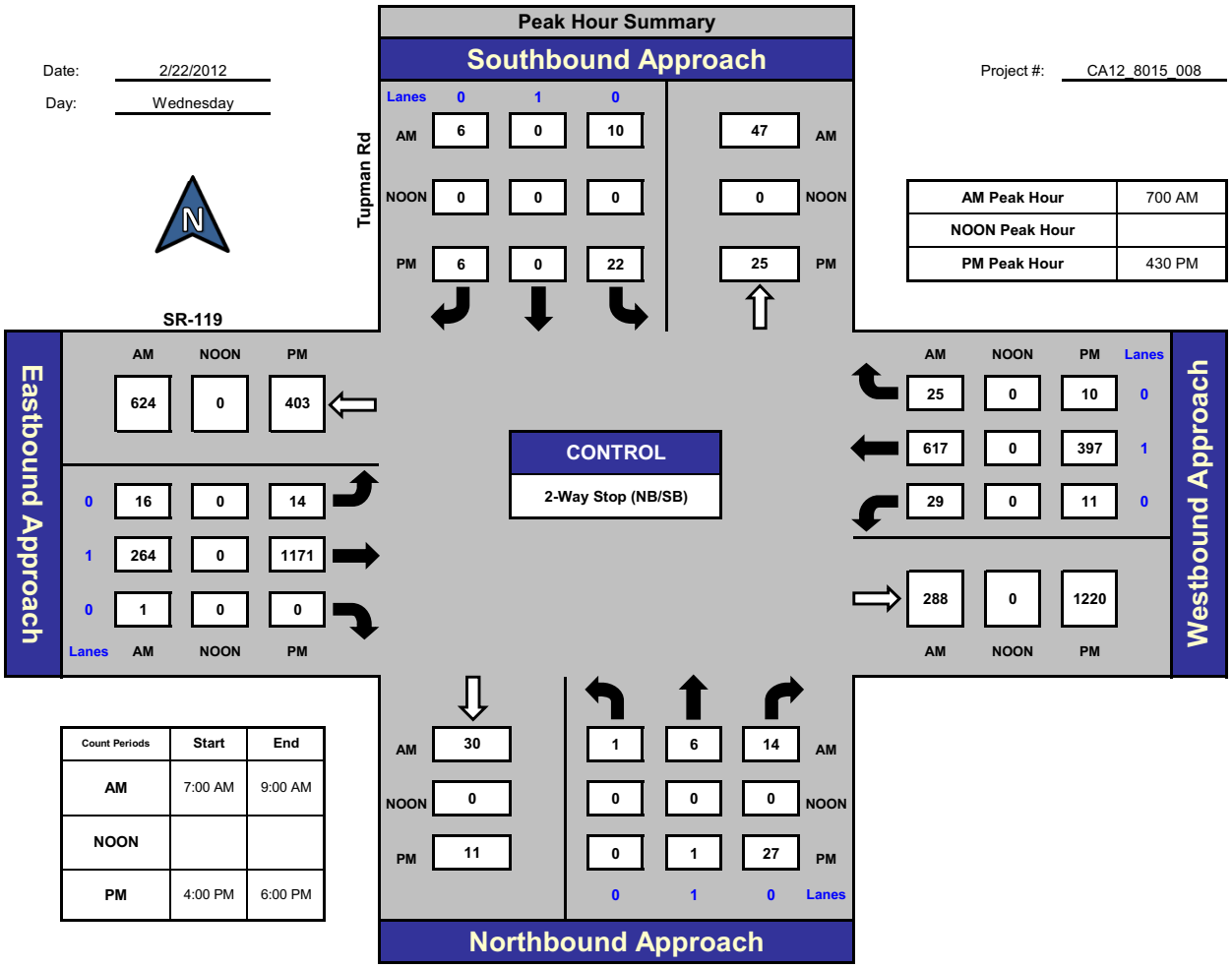
Tupman Rd and SR-119 , City of Taft

Date: 2/22/2012

Day: Wednesday

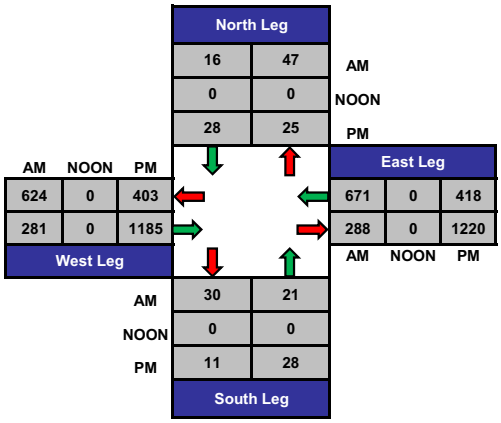
Project #: CA12_8015_008

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	430 PM

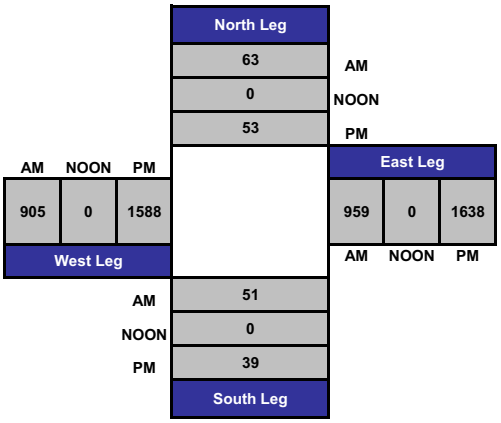


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

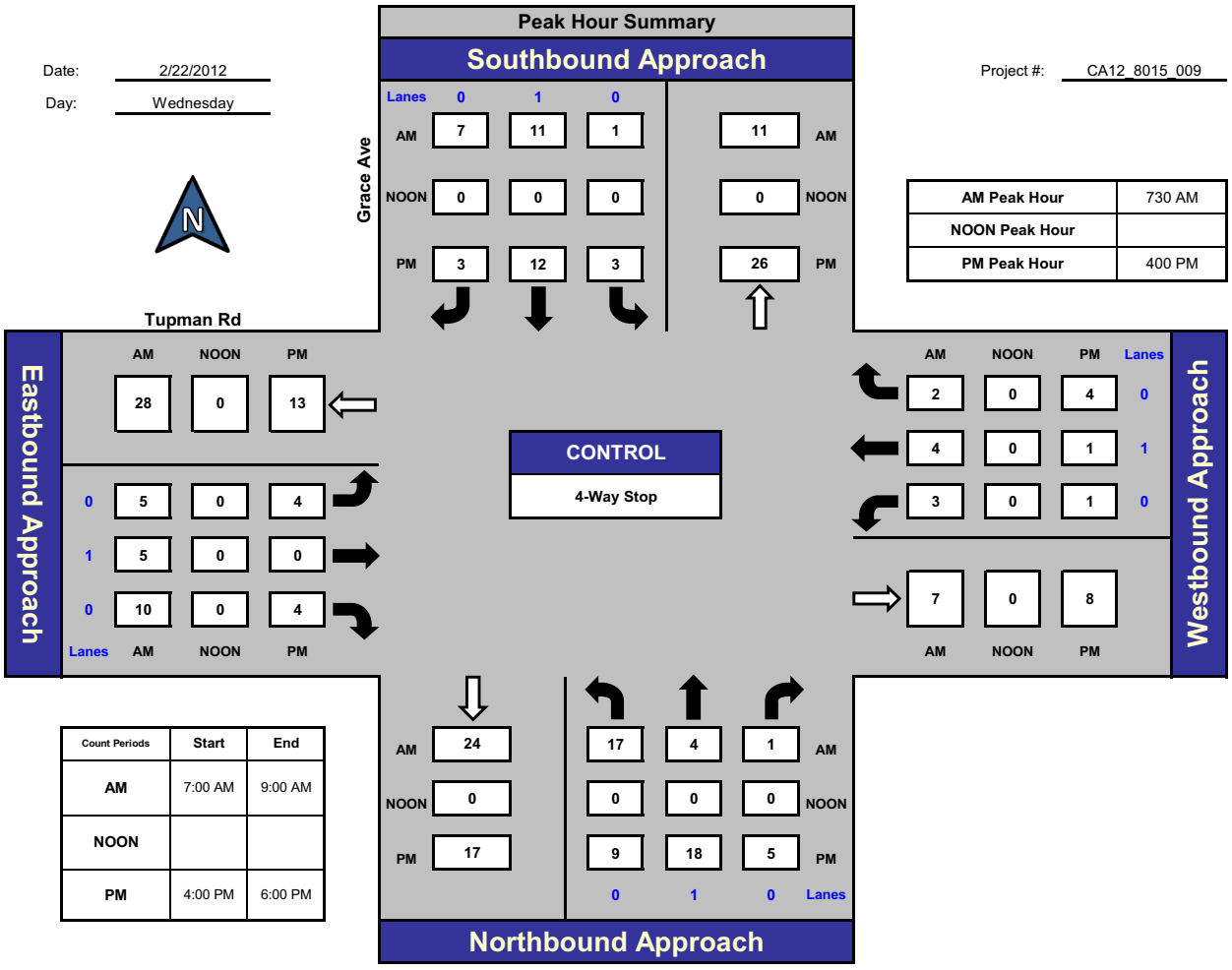
National Data & Surveying Services

Grace Ave and Tupman Rd , City of Tupman

Date: 2/22/2012

Day: Wednesday

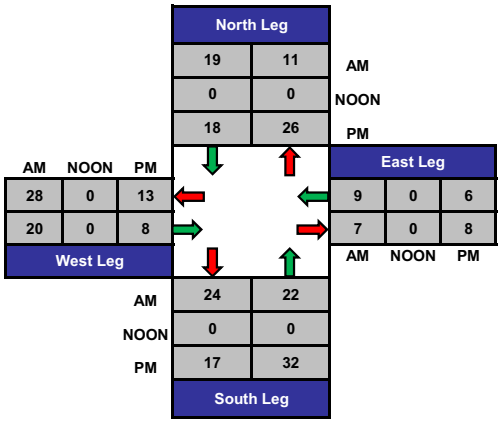
Project #: CA12_8015_009



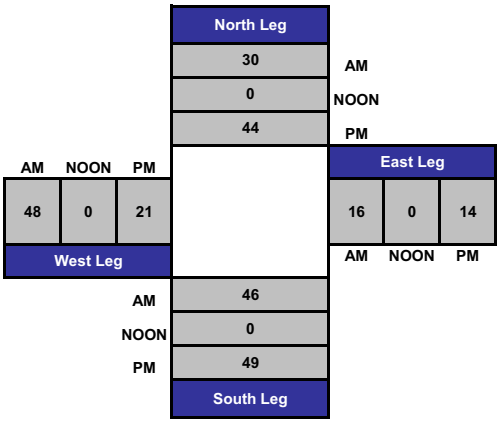
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

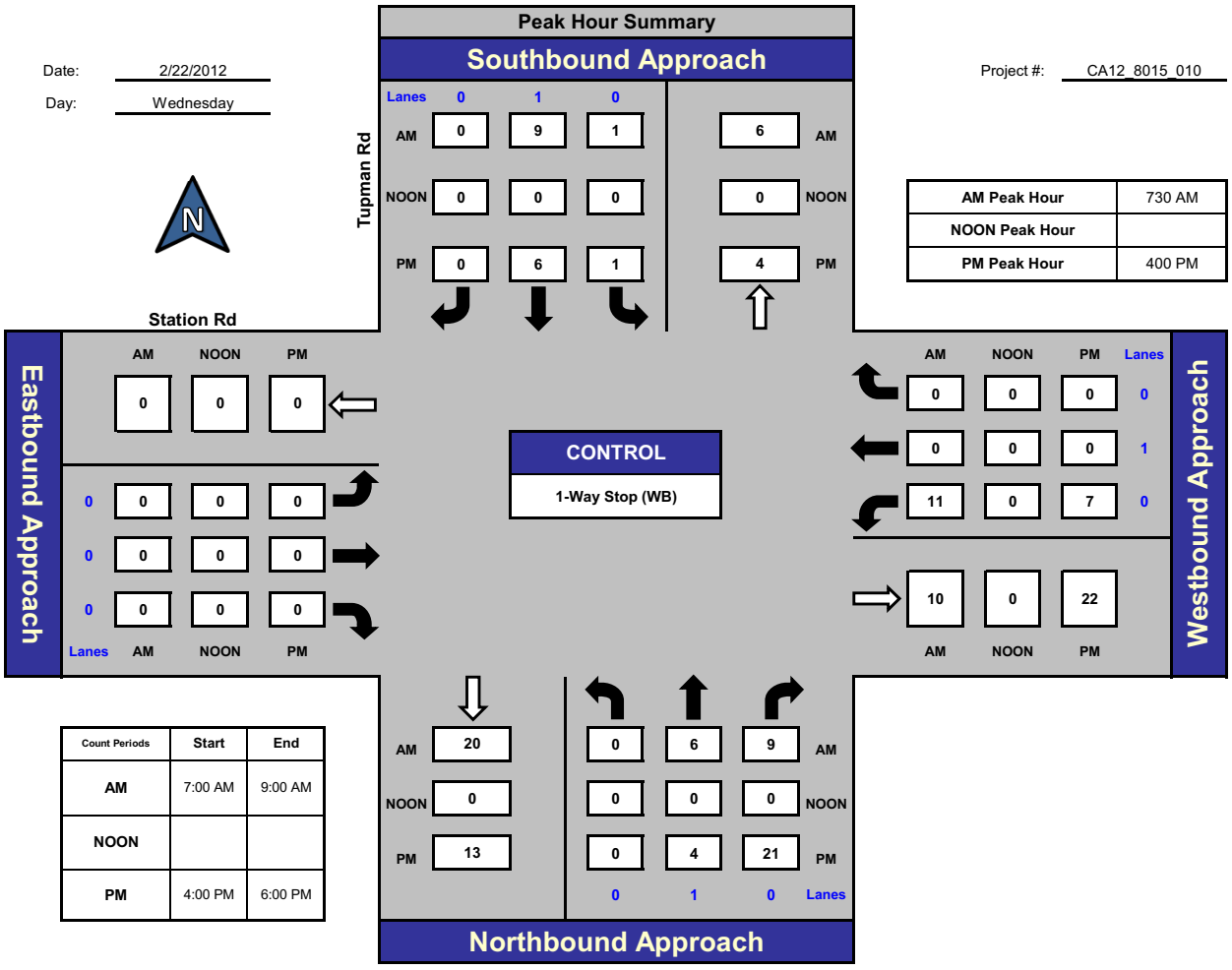
National Data & Surveying Services

Tupman Rd and Station Rd , City of Buttonwillow

Date: 2/22/2012

Day: Wednesday

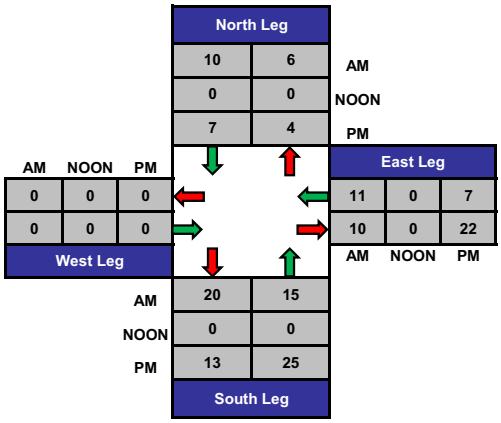
Project #: CA12_8015_010



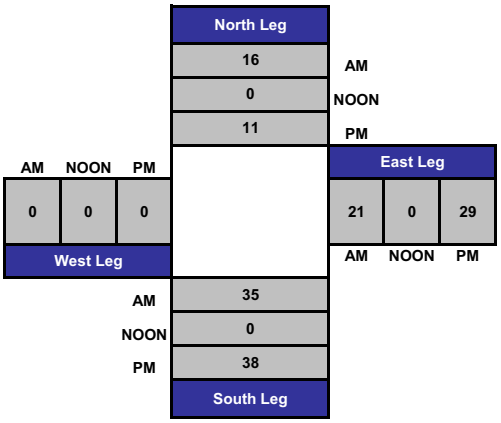
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

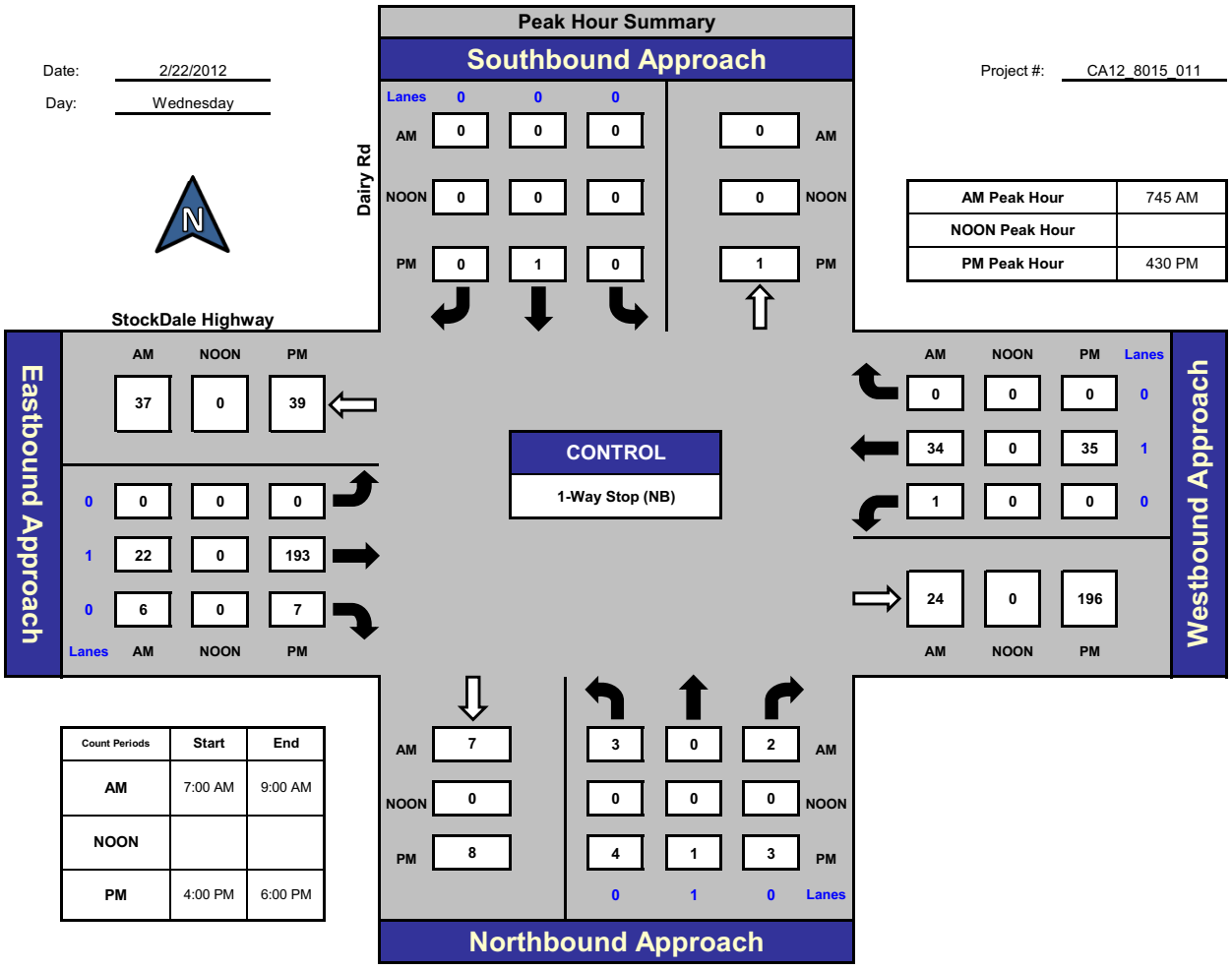
National Data & Surveying Services

Dairy Rd and StockDale Highway , City of Buttonwillow

Date: 2/22/2012

Day: Wednesday

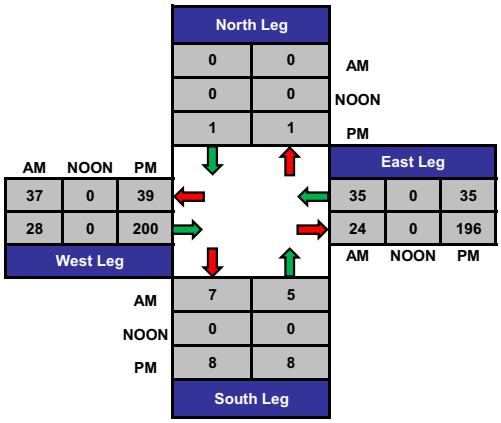
Project #: CA12_8015_011



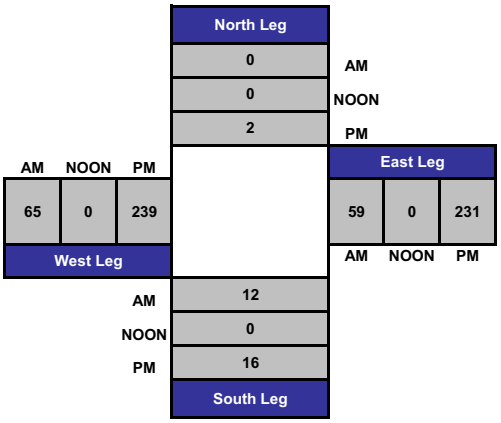
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

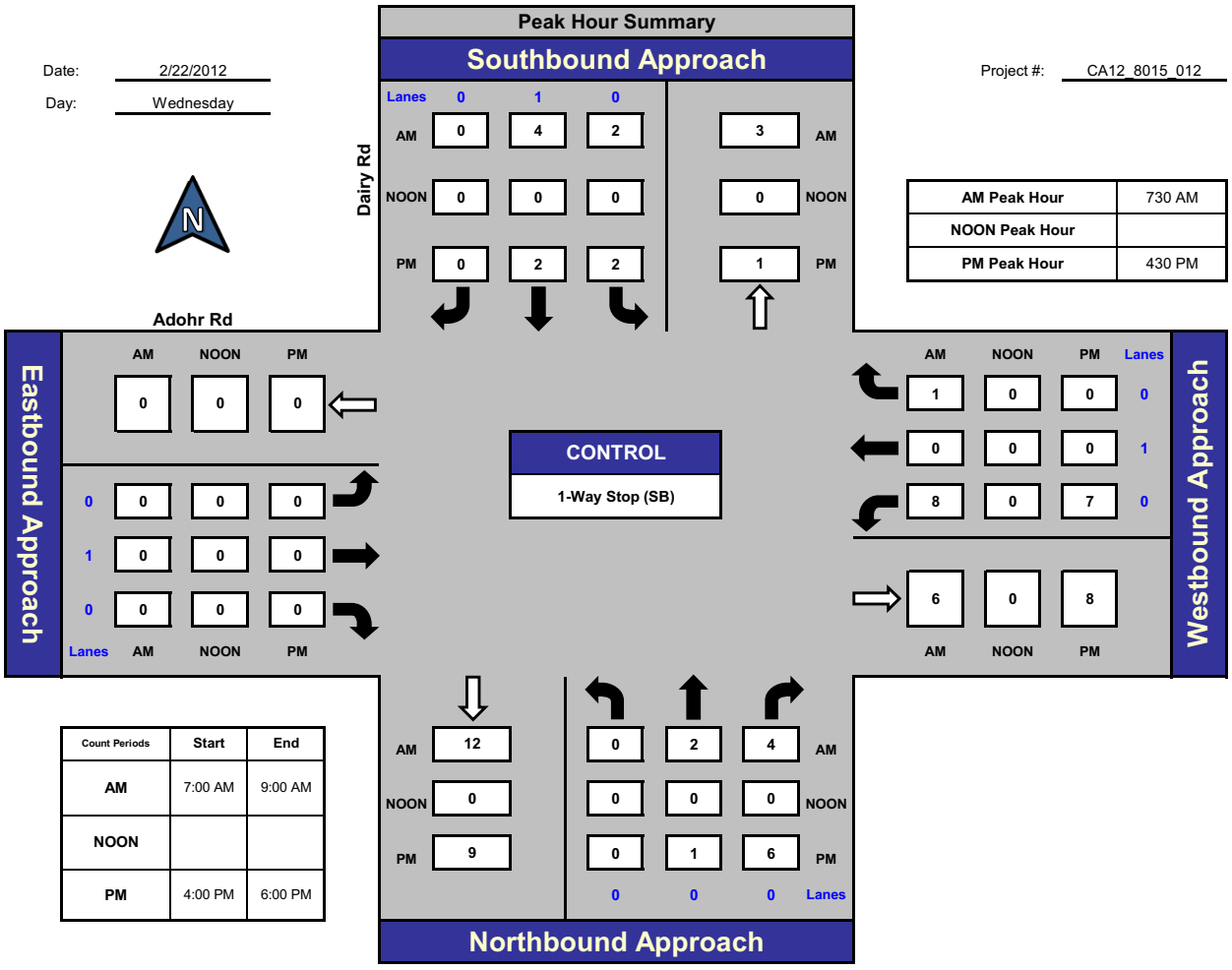
National Data & Surveying Services

Dairy Rd and Adohr Rd , City of Buttonwillow

Date: 2/22/2012

Day: Wednesday

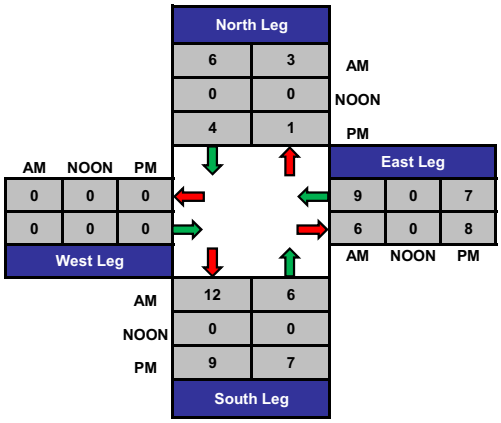
Project #: CA12_8015_012



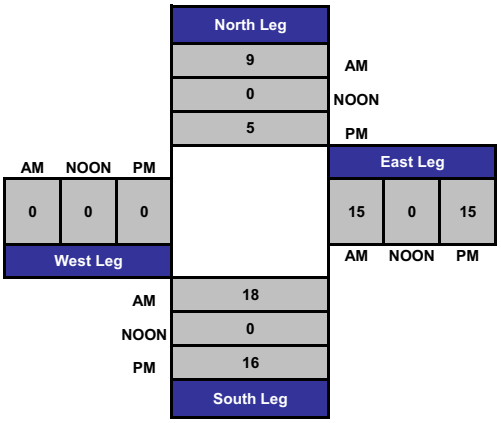
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

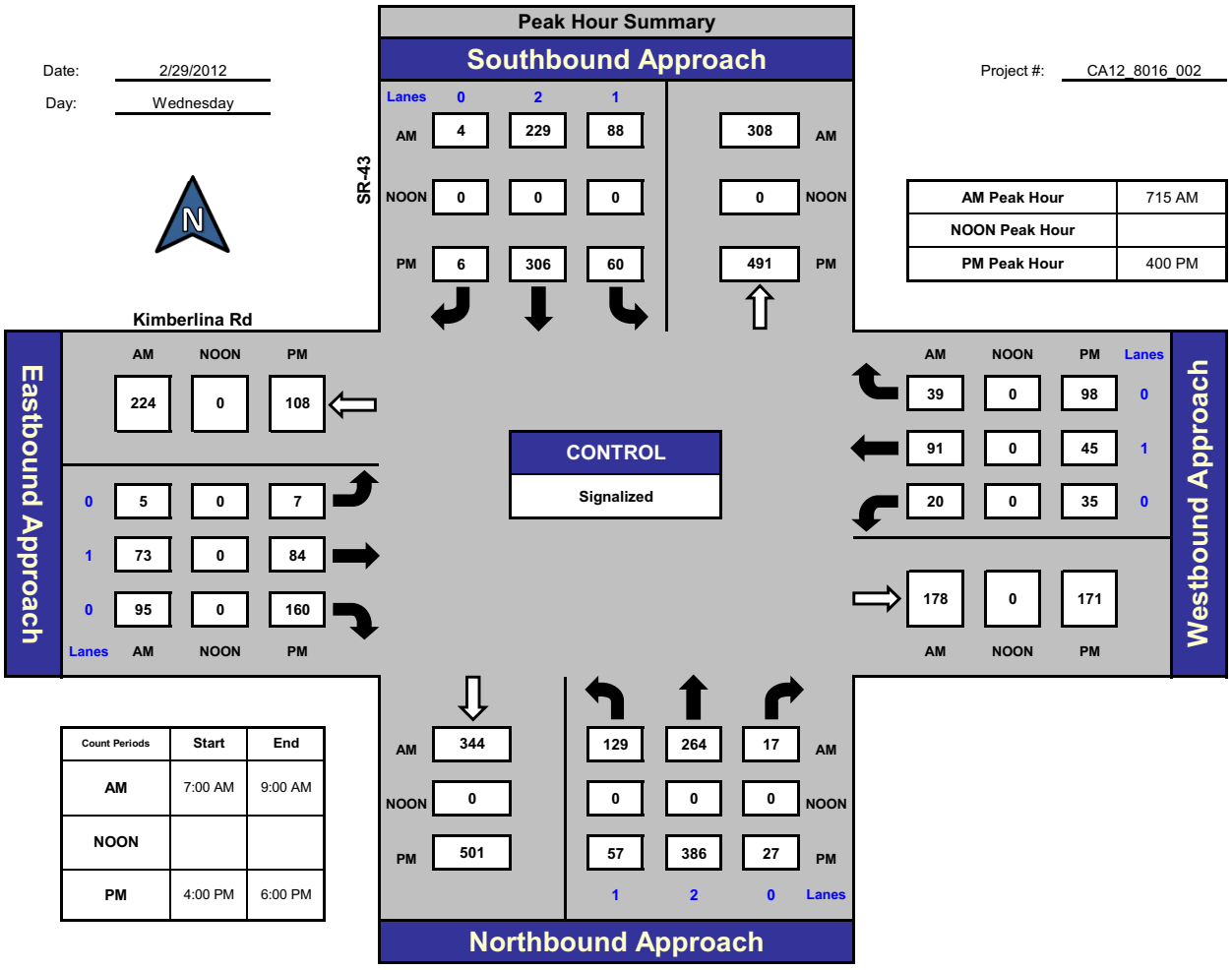
National Data & Surveying Services

SR-43 and Kimberlina Rd , City of Wasco

Date: 2/29/2012

Day: Wednesday

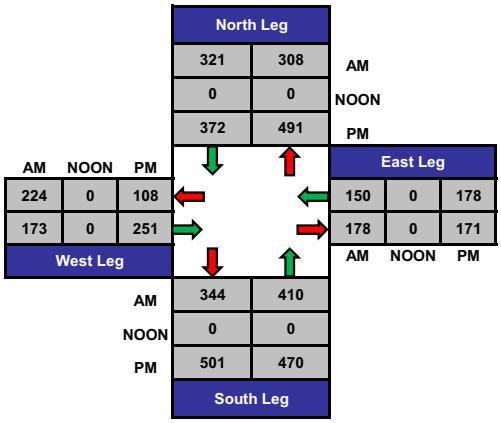
Project #: CA12_8016_002



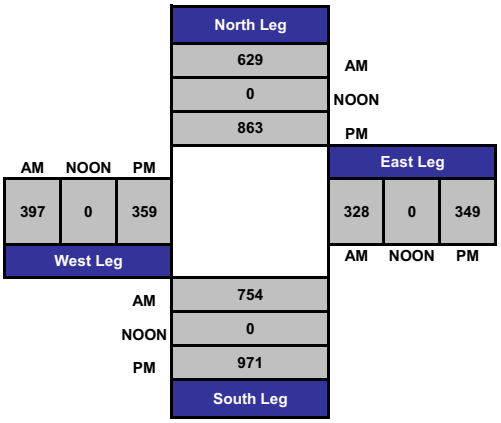
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

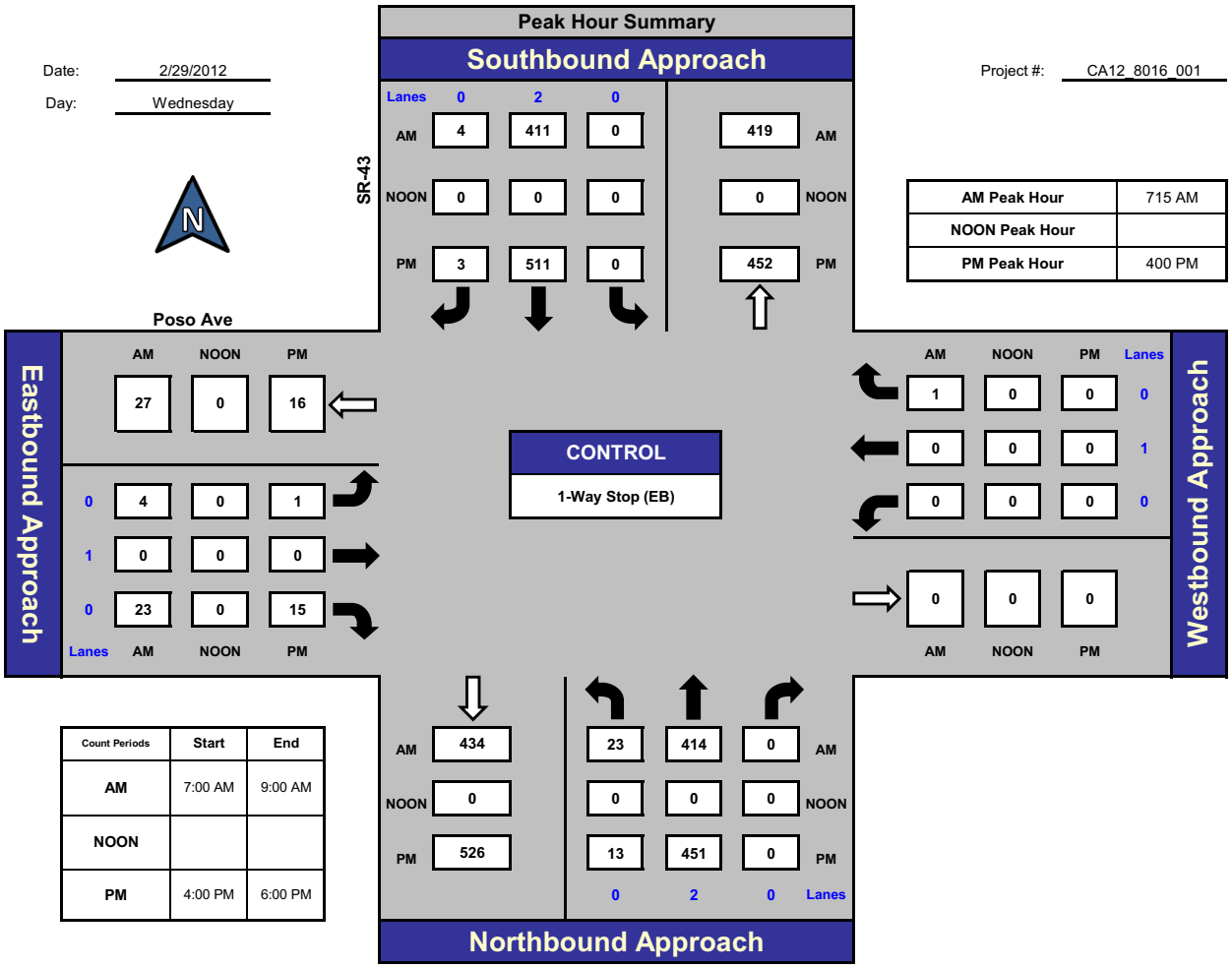
National Data & Surveying Services

SR-43 and Poso Ave , City of Shafter

Date: 2/29/2012

Day: Wednesday

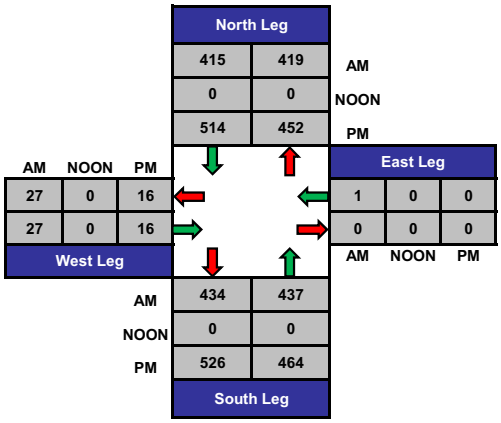
Project #: CA12_8016_001



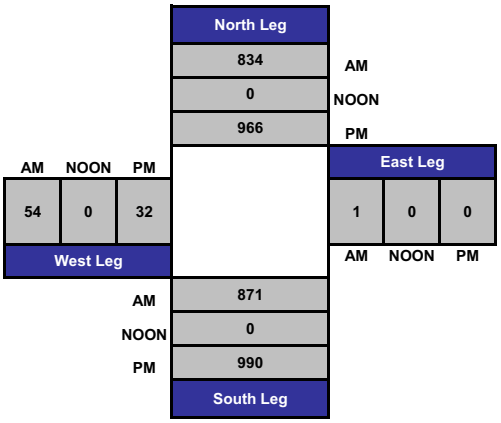
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

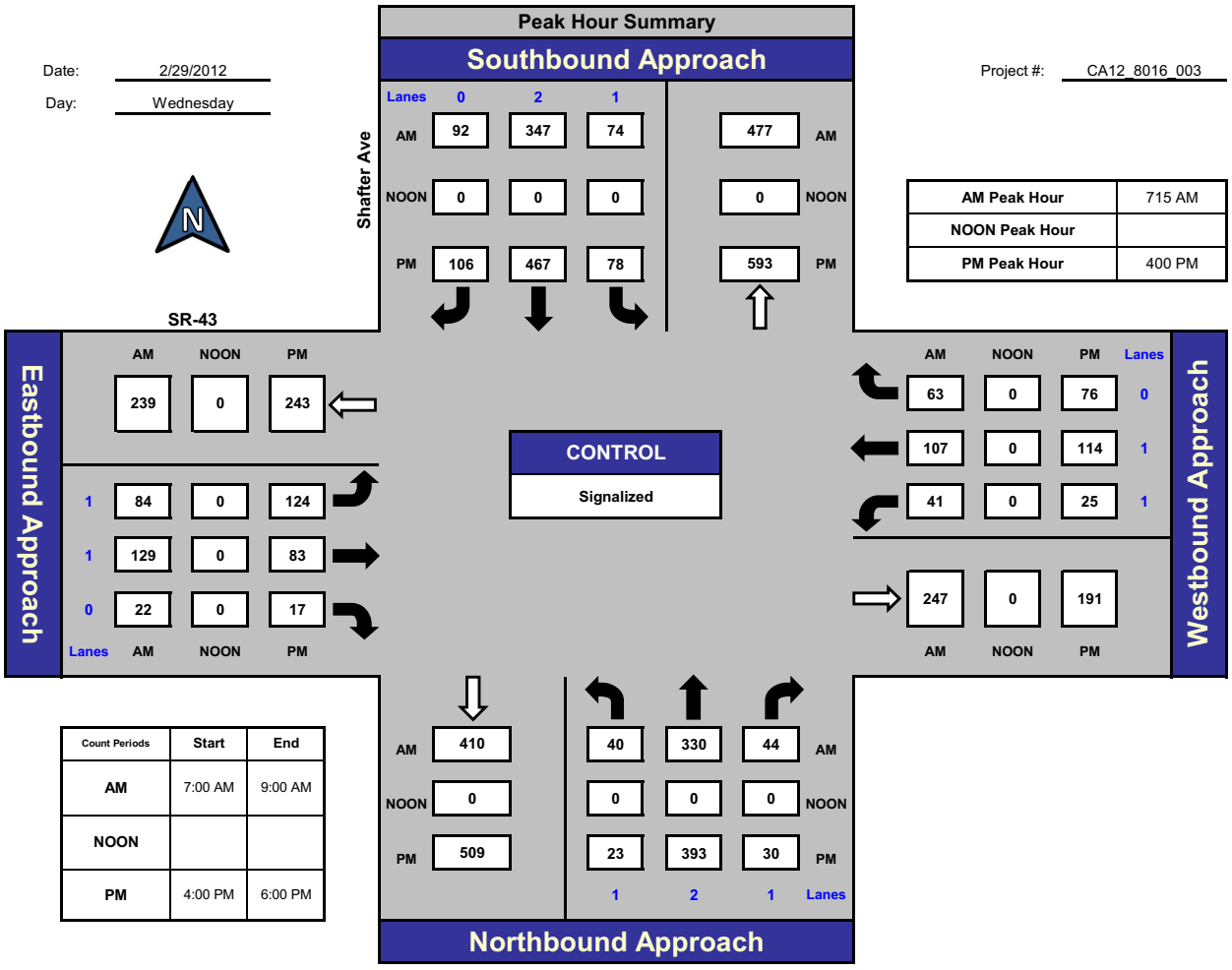
National Data & Surveying Services

Shafter Ave and SR-43 , City of Shafter

Date: 2/29/2012

Day: Wednesday

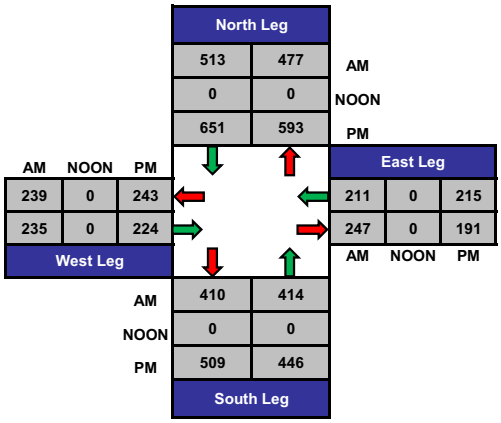
Project #: CA12_8016_003



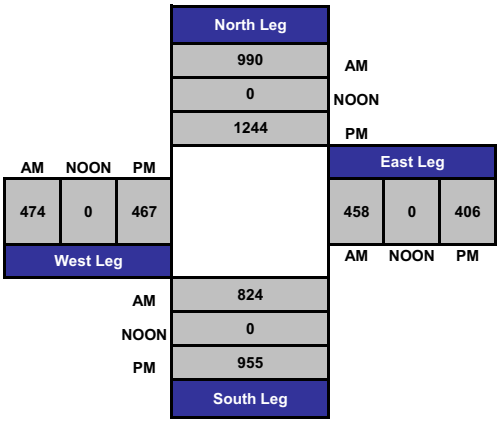
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

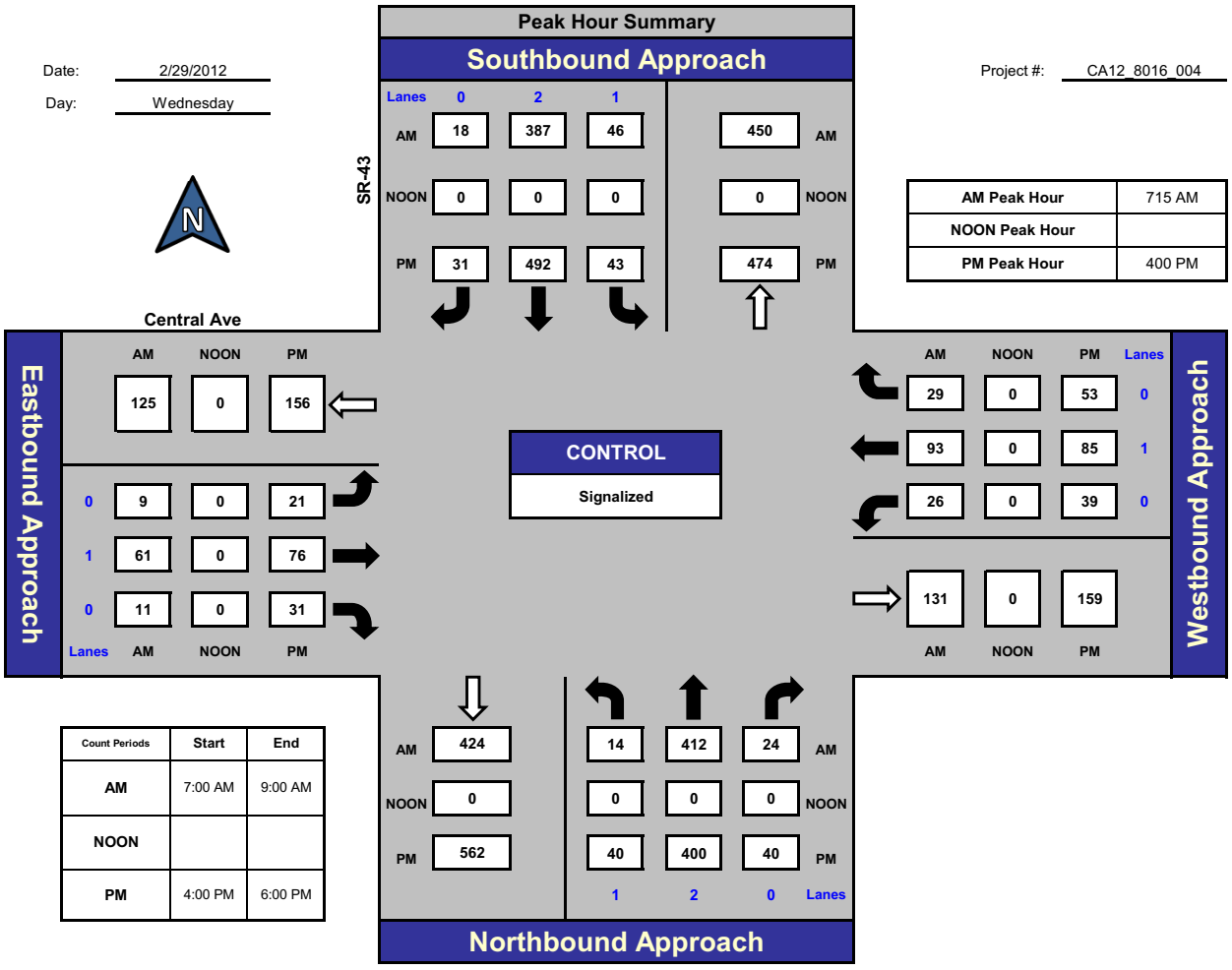
National Data & Surveying Services

SR-43 and Central Ave , City of Shafter

Date: 2/29/2012

Day: Wednesday

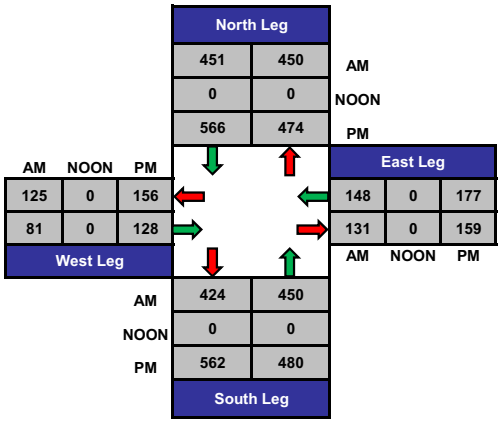
Project #: CA12_8016_004



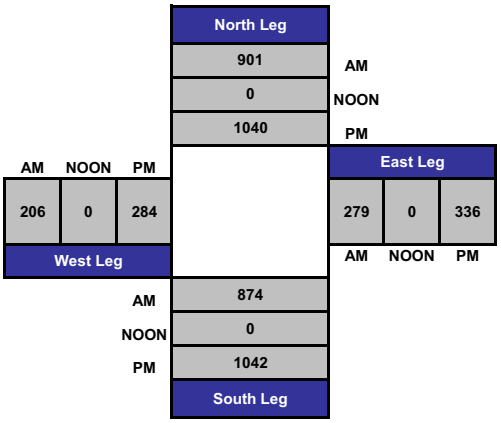
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

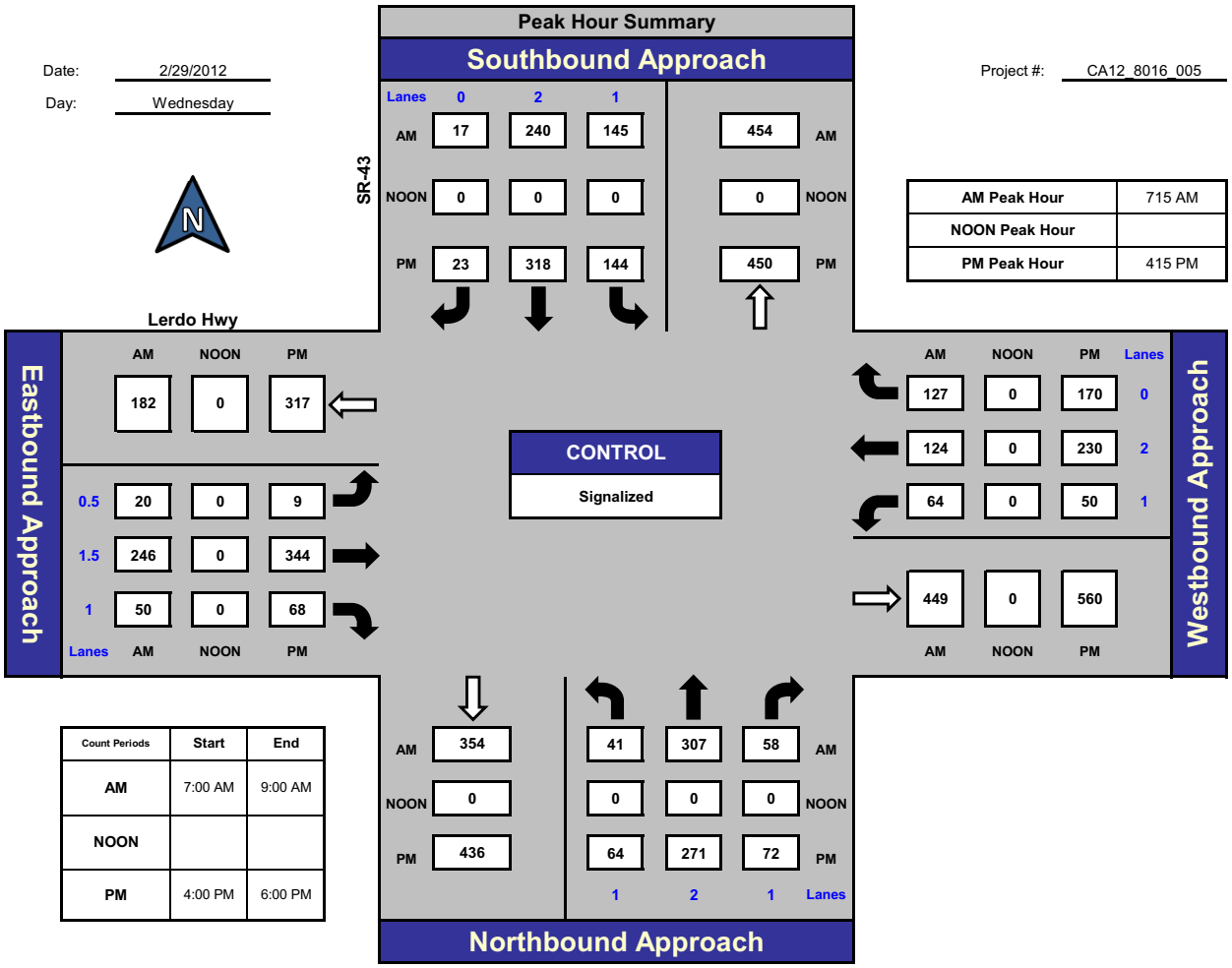
National Data & Surveying Services

SR-43 and Lerdo Hwy , City of Shafter

Date: 2/29/2012

Day: Wednesday

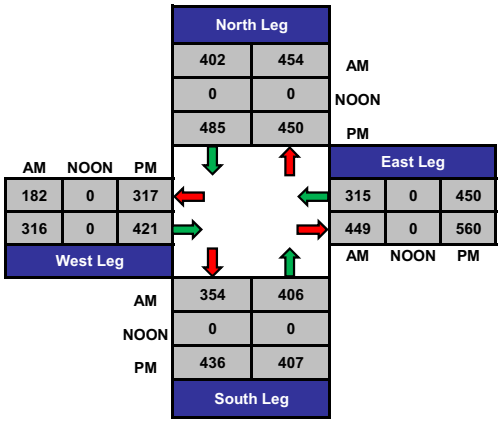
Project #: CA12_8016_005



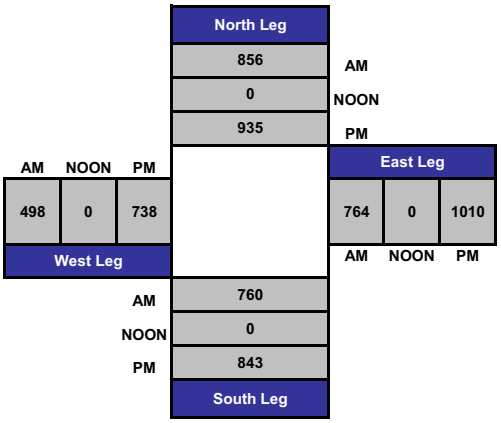
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

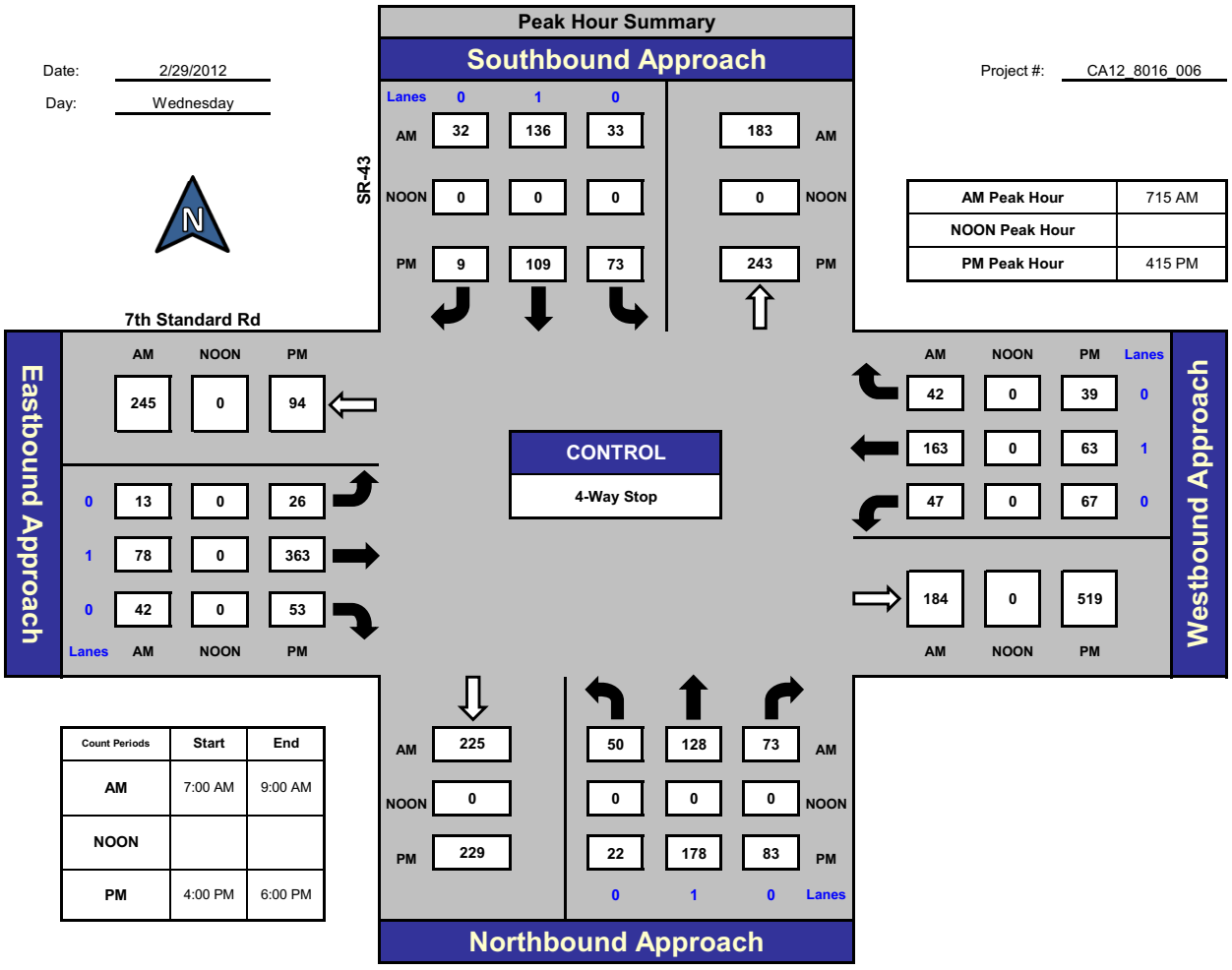
National Data & Surveying Services

SR-43 and 7th Standard Rd , City of Bakersfield

Date: 2/29/2012

Day: Wednesday

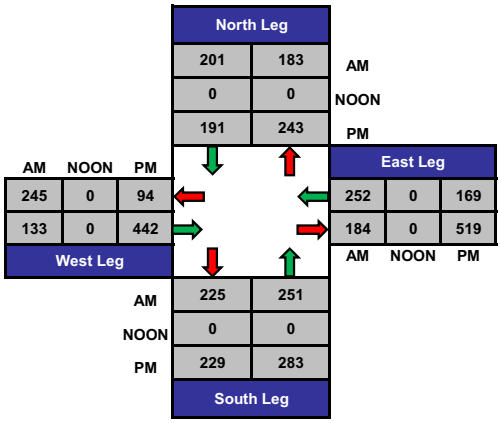
Project #: CA12_8016_006



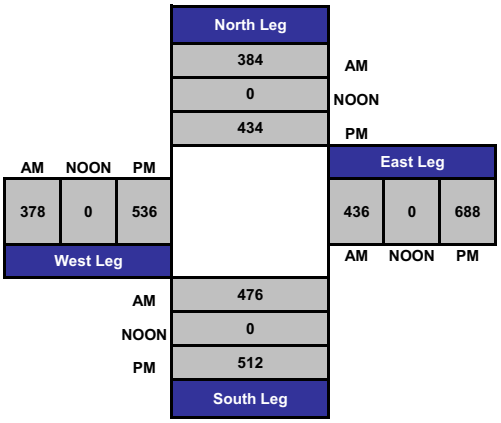
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

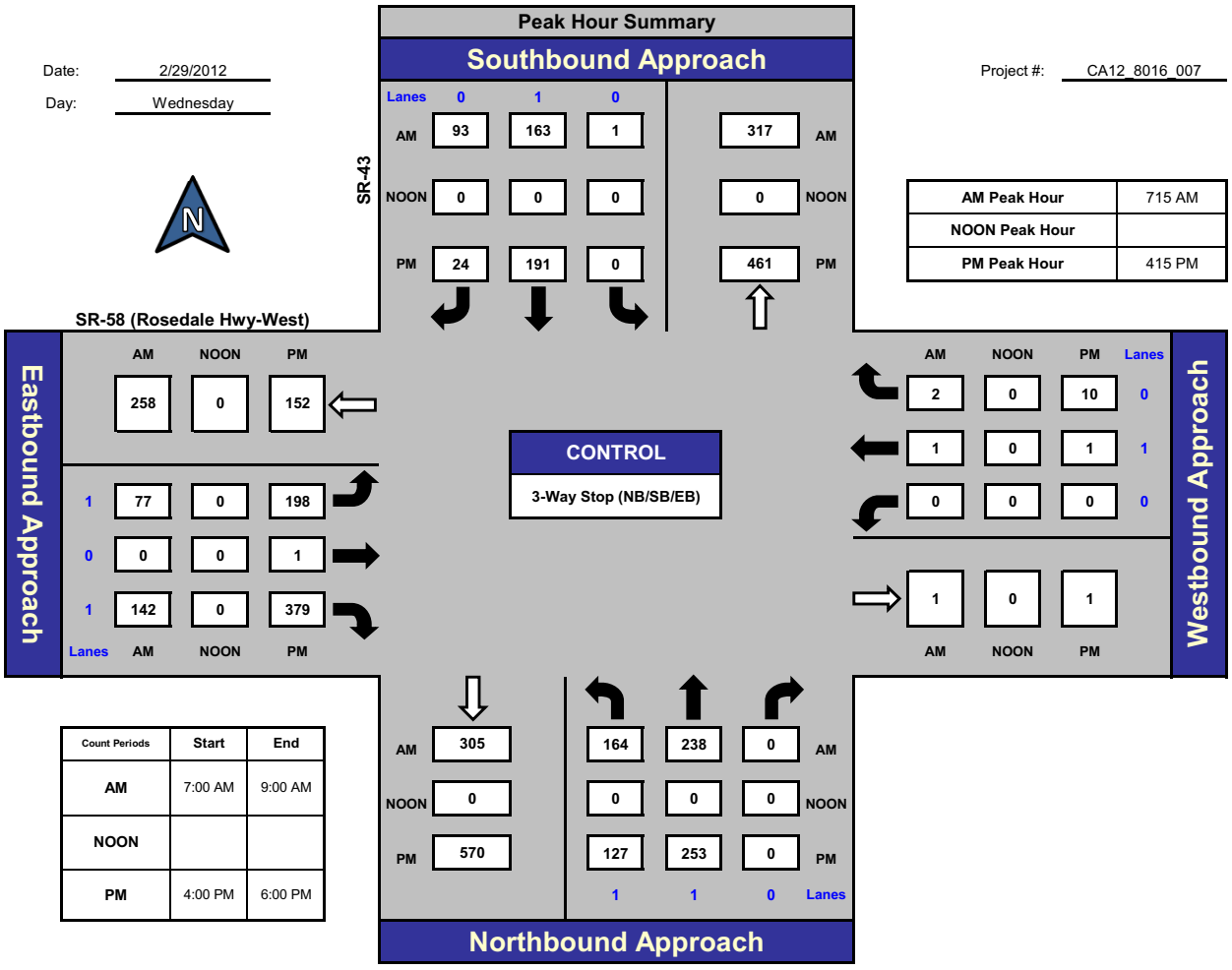
National Data & Surveying Services

SR-43 and SR-58 (Rosedale Hwy-West) , City of Bakersfield

Date: 2/29/2012

Day: Wednesday

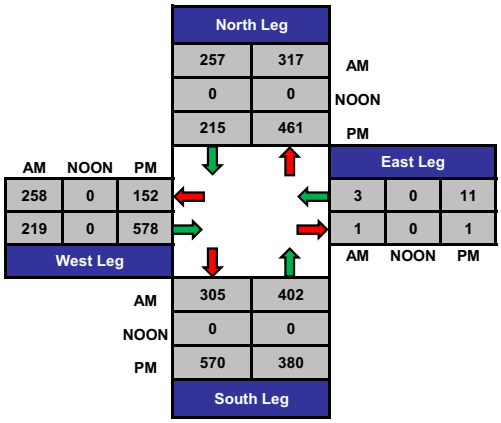
Project #: CA12_8016_007



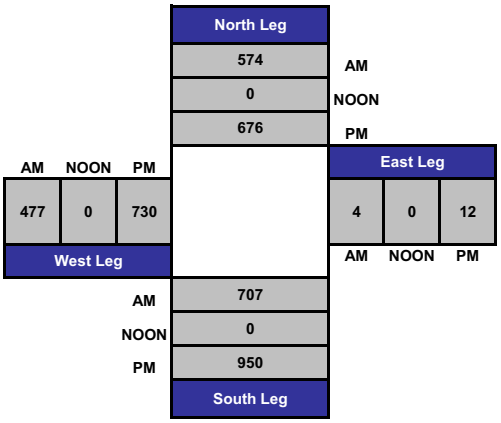
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

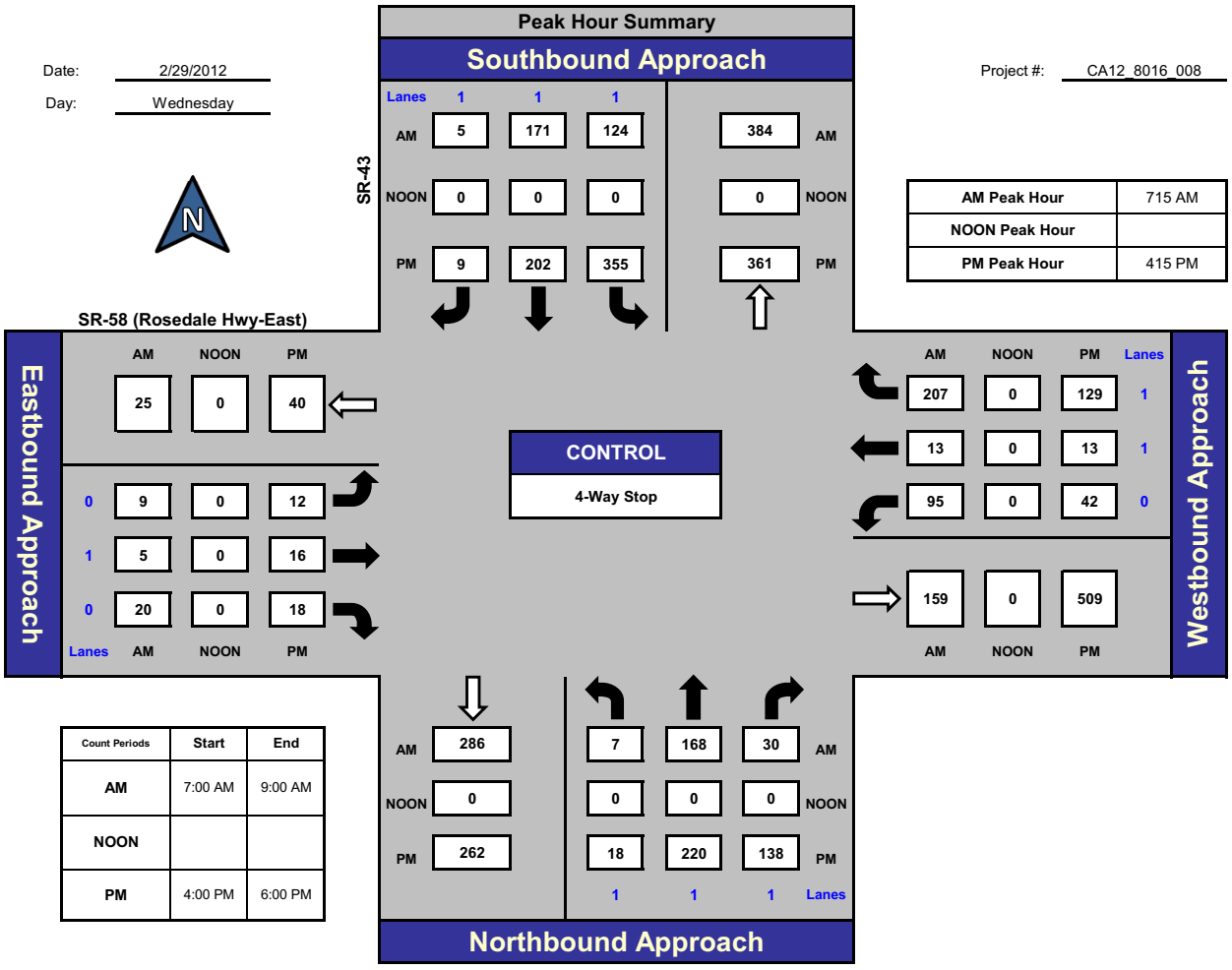
National Data & Surveying Services

SR-43 and SR-58 (Rosedale Hwy-East) , City of Bakersfield

Date: 2/29/2012

Day: Wednesday

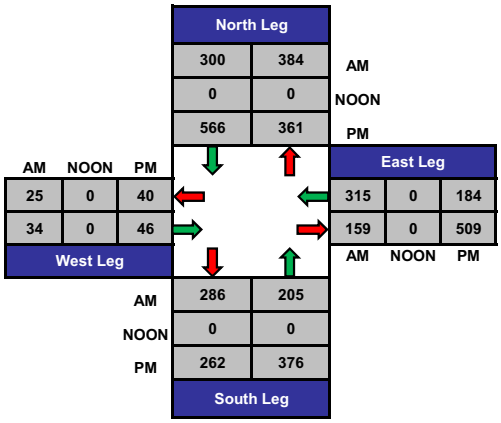
Project #: CA12_8016_008



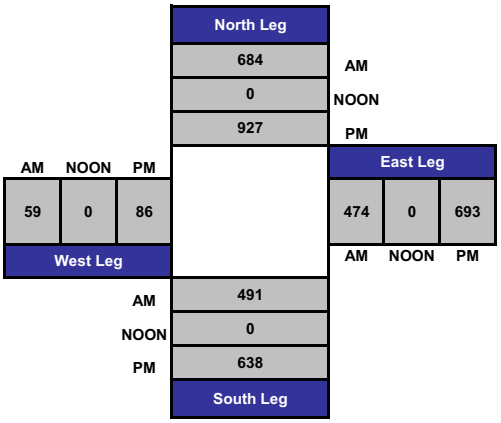
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

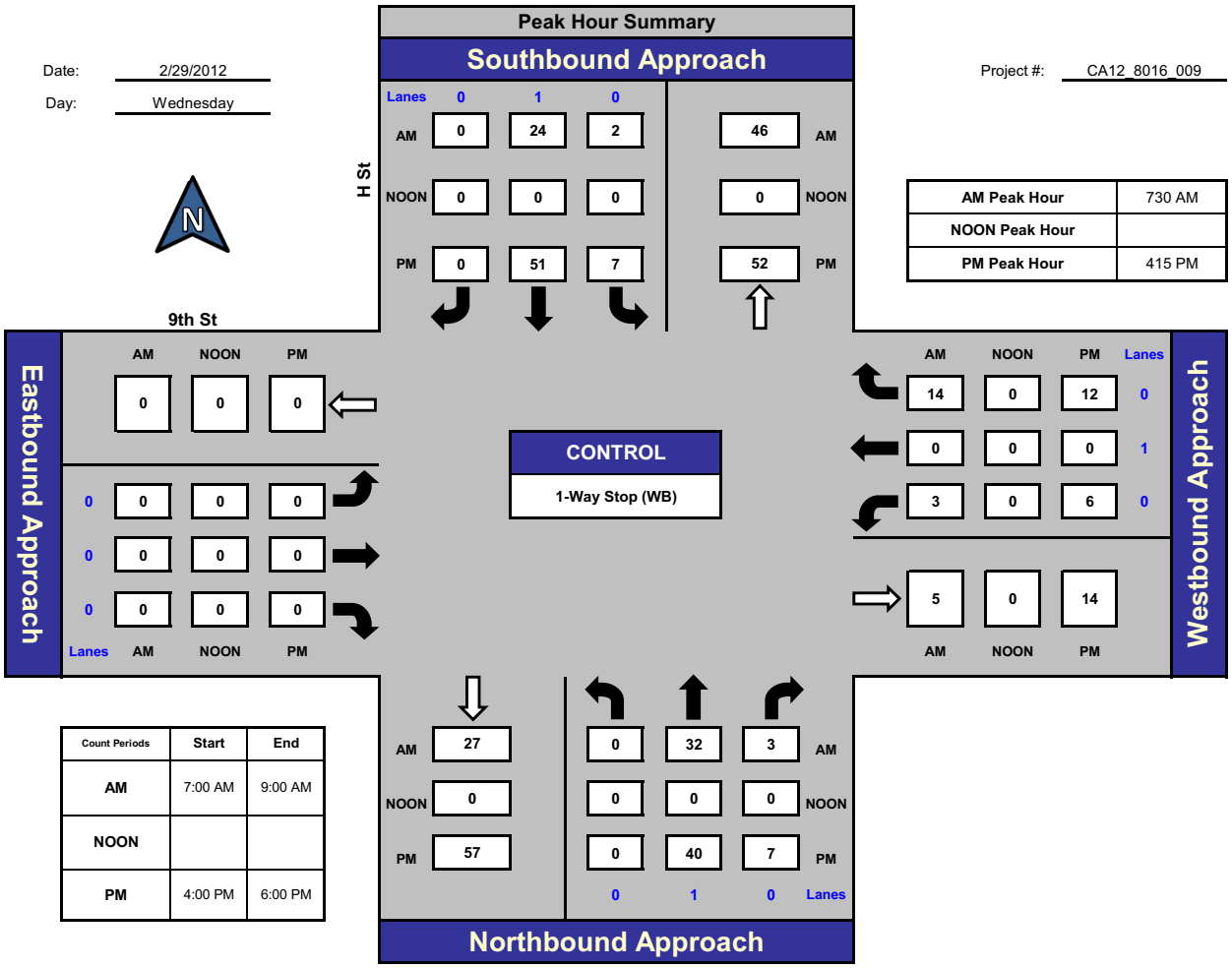
National Data & Surveying Services

H St and 9th St , City of Wasco

Date: 2/29/2012

Day: Wednesday

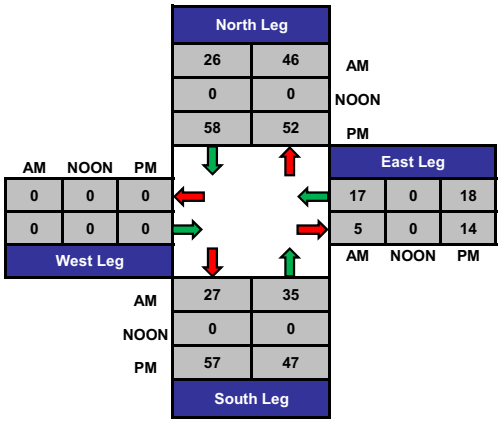
Project #: CA12_8016_009



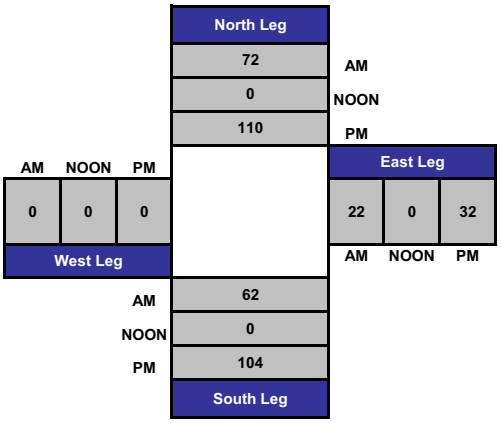
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

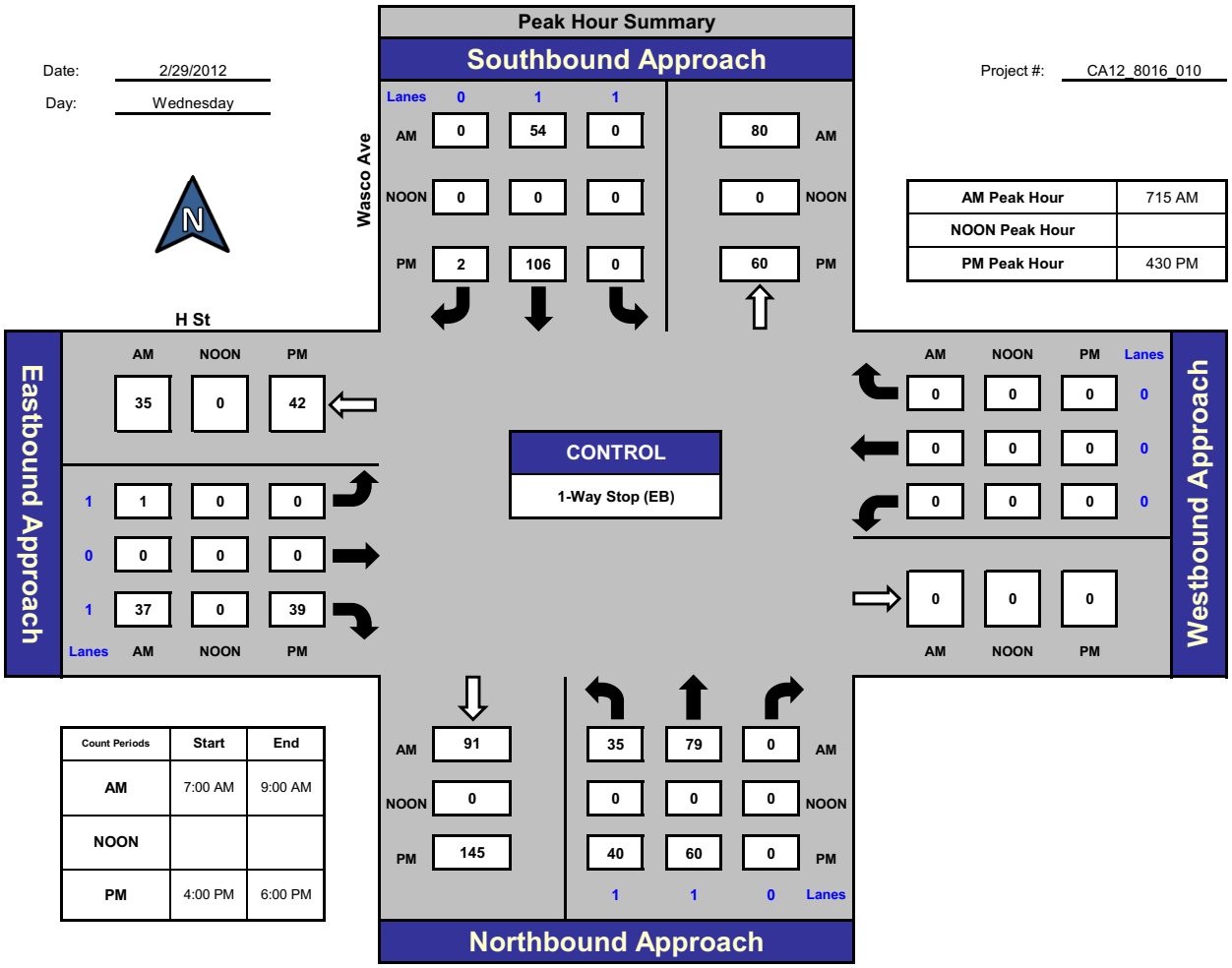
National Data & Surveying Services

Wasco Ave and H St , City of Wasco

Date: 2/29/2012

Day: Wednesday

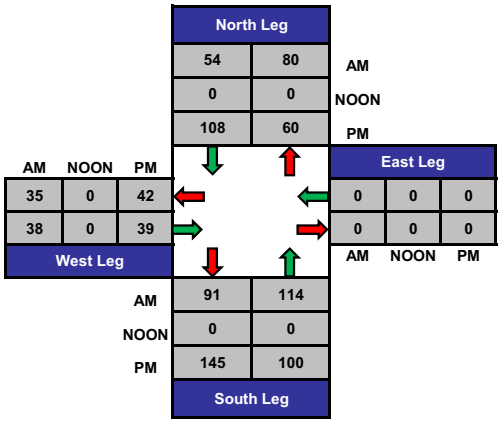
Project #: CA12_8016_010



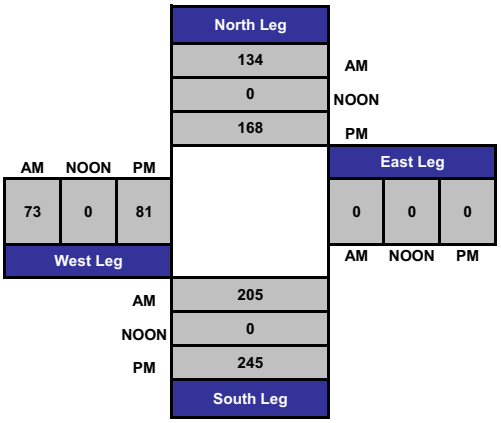
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

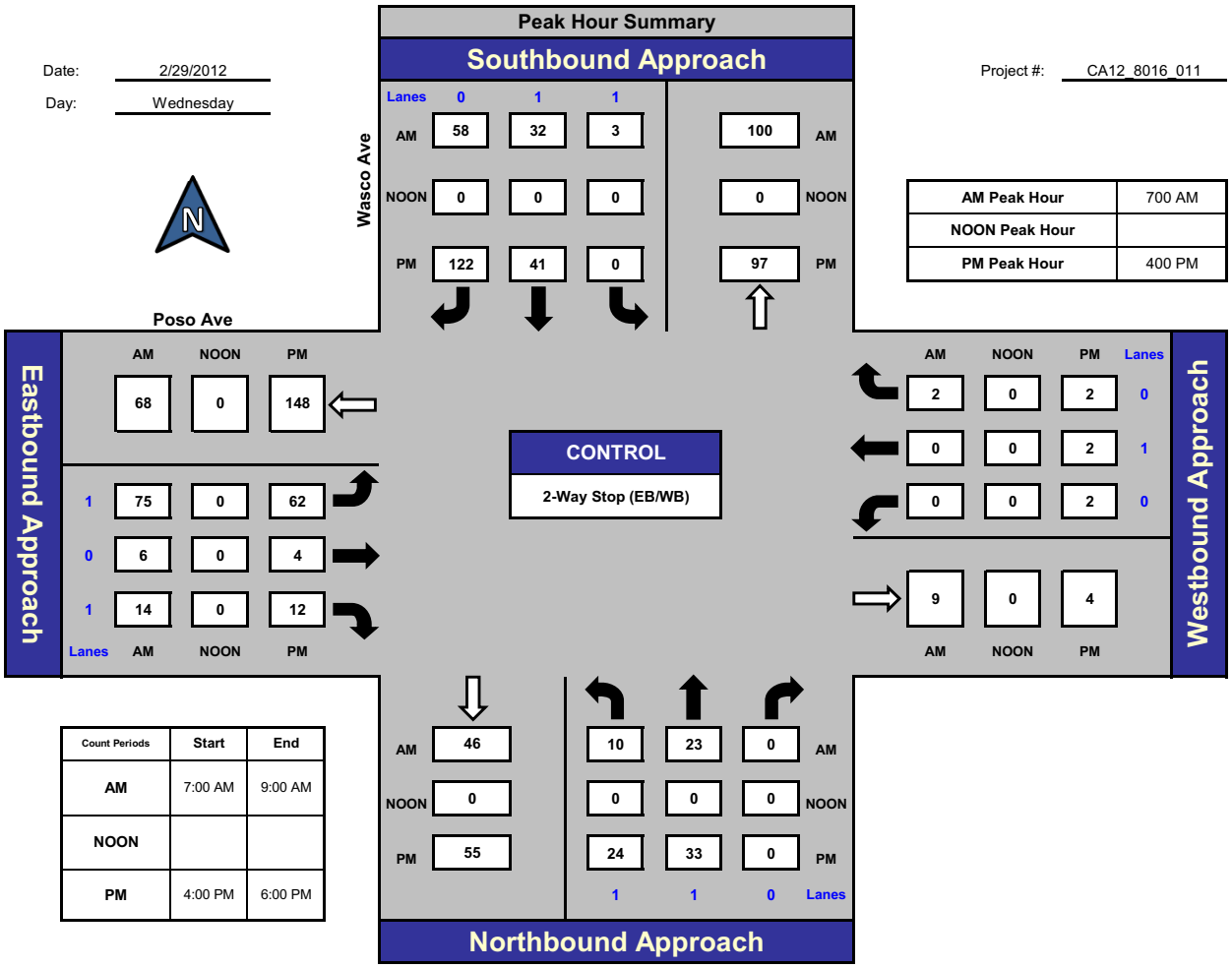
National Data & Surveying Services

Wasco Ave and Poso Ave , City of Wasco

Date: 2/29/2012

Day: Wednesday

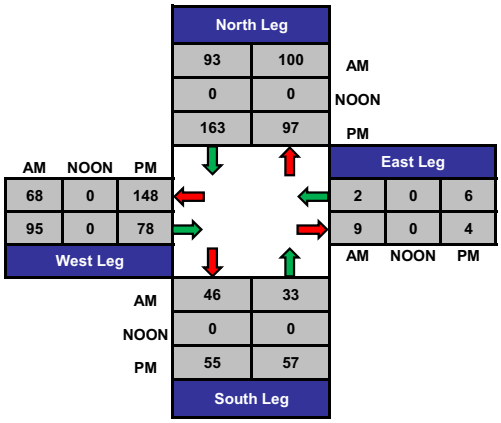
Project #: CA12_8016_011



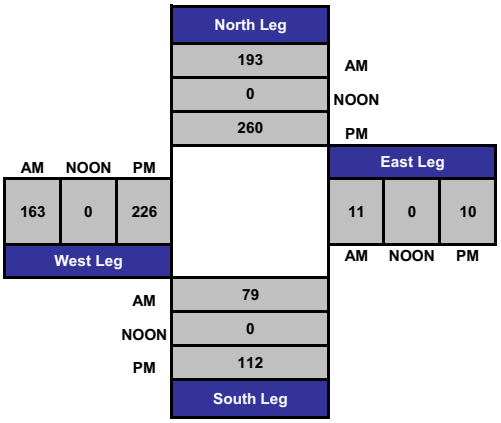
AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

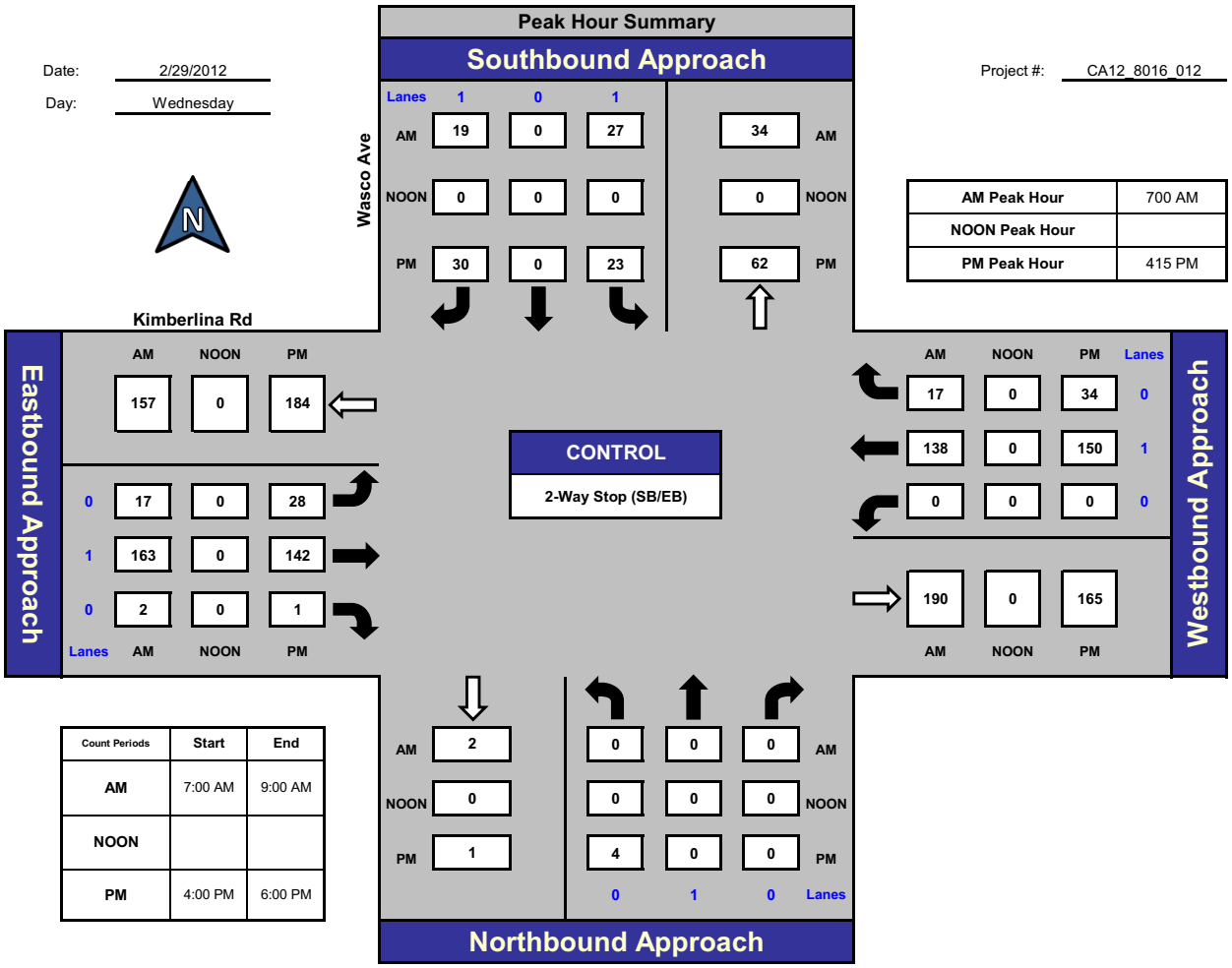
National Data & Surveying Services

Wasco Ave and Kimberlina Rd , City of Wasco

Date: 2/29/2012

Day: Wednesday

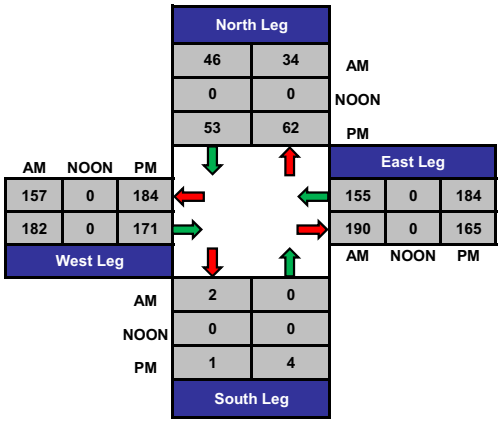
Project #: CA12_8016_012



AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



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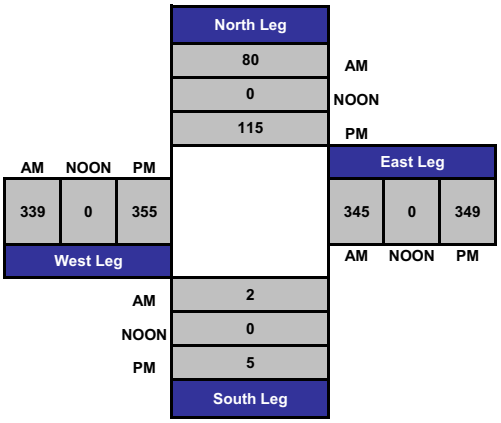


ITM Peak Hour Summary

Prepared by:

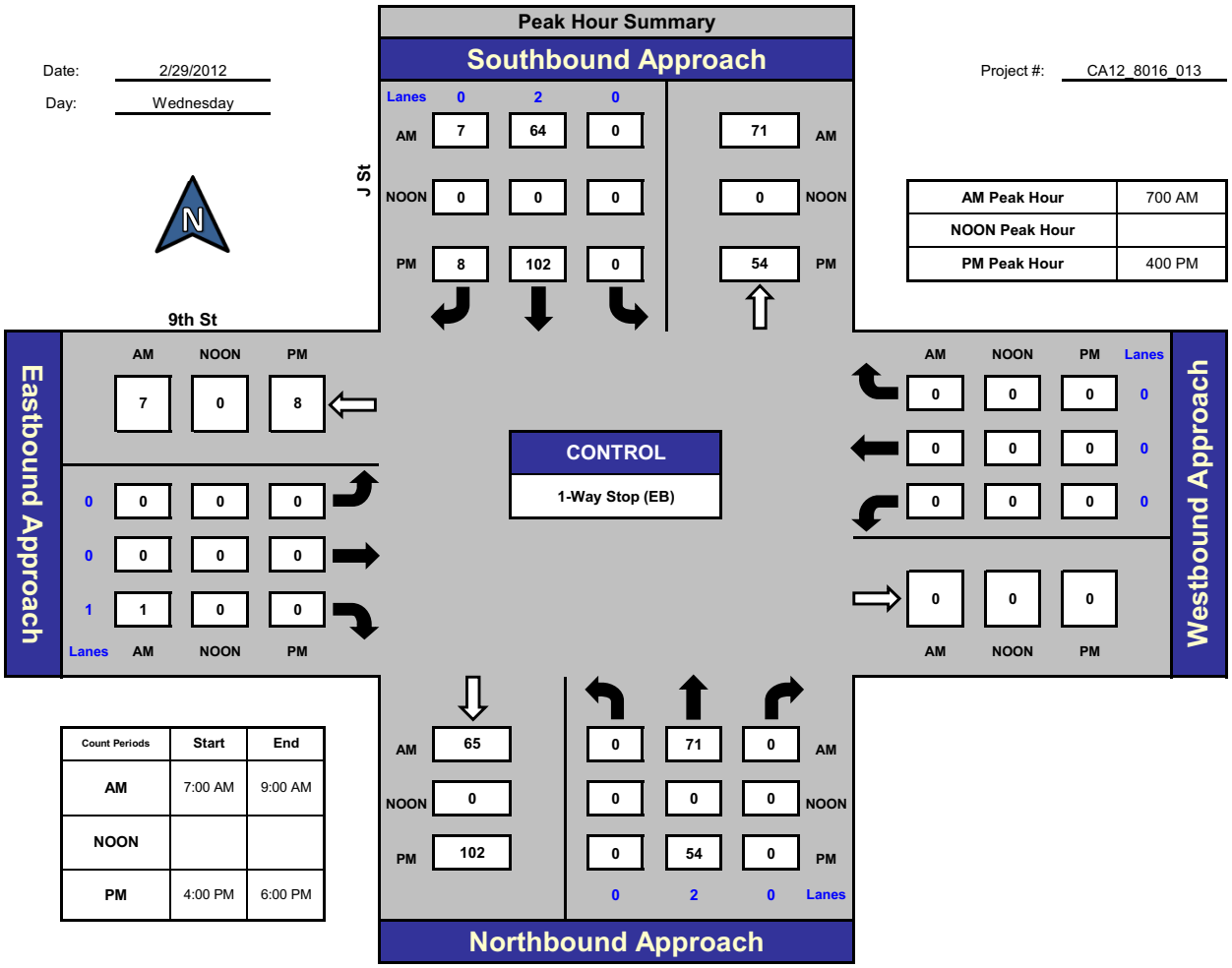
National Data & Surveying Services

J St and 9th St , City of Wasco

Date: 2/29/2012

Day: Wednesday

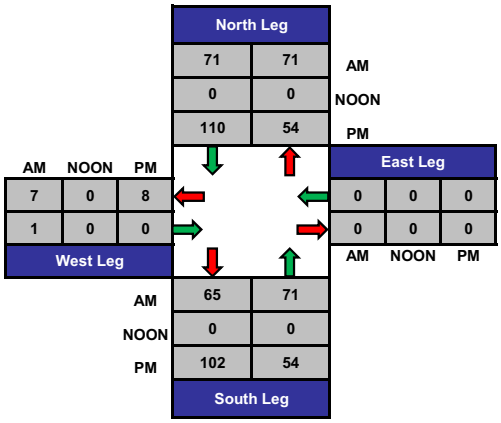
Project #: CA12_8016_013



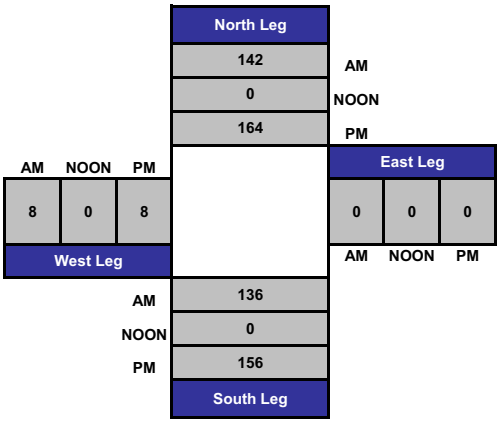
AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Appendix B
LOS Calculation Worksheets

Appendix B1
Year 2012 Existing
Roadway Segment Analysis

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.69	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	28		veh/h
Directional split	53 /	47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	42	pc/h
Highest directional split proportion (note-2)	22	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	28	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	41	pc/h
Highest directional split proportion (note-2)	22	
Base percent time-spent-following, BPTSF	3.5	%
Adj.for directional distribution and no-passing zones, fd/np	0.7	
Percent time-spent-following, PTSF	4.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	9	veh-mi
Peak-hour vehicle-miles of travel, VMT60	25	veh-mi
Peak 15-min total travel time, TT15	0.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	34		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	40	pc/h
Highest directional split proportion (note-2)	20	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	34	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	39	pc/h
Highest directional split proportion (note-2)	20	
Base percent time-spent-following, BPTSF	3.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	3.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	14	veh-mi
Peak-hour vehicle-miles of travel, VMT60	51	veh-mi
Peak 15-min total travel time, TT15	0.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	Existing (2012)
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	20	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	525	veh/h	
Directional split	77 / 23	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.962	
Two-way flow rate,(note-1) vp	620	pc/h
Highest directional split proportion (note-2)	477	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	525	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.980	
Two-way flow rate,(note-1) vp	609	pc/h
Highest directional split proportion (note-2)	469	
Base percent time-spent-following, BPTSF	41.5	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	41.5	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.19	
Peak 15-min vehicle-miles of travel, VMT15	298	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1050	veh-mi
Peak 15-min total travel time, TT15	5.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	Existing (2012)
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	26	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	497		veh/h
Directional split	89	/ 11	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.951	
Two-way flow rate,(note-1) vp	594	pc/h
Highest directional split proportion (note-2)	529	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	497	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.1	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.975	
Two-way flow rate,(note-1) vp	579	pc/h
Highest directional split proportion (note-2)	515	
Base percent time-spent-following, BPTSF	39.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.3	
Percent time-spent-following, PTSF	40.1	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.19	
Peak 15-min vehicle-miles of travel, VMT15	395	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1392	veh-mi
Peak 15-min total travel time, TT15	7.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	795	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	925	pc/h
Highest directional split proportion (note-2)	666	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	795	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	914	pc/h
Highest directional split proportion (note-2)	658	
Base percent time-spent-following, BPTSF	55.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	55.2	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.29	
Peak 15-min vehicle-miles of travel, VMT15	723	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2544	veh-mi
Peak 15-min total travel time, TT15	13.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	795	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	925	pc/h
Highest directional split proportion (note-2)	666	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	795	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	914	pc/h
Highest directional split proportion (note-2)	658	
Base percent time-spent-following, BPTSF	55.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	55.2	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.29	
Peak 15-min vehicle-miles of travel, VMT15	768	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2703	veh-mi
Peak 15-min total travel time, TT15	14.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	7	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	24		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.953	
Two-way flow rate,(note-1) vp	29	pc/h
Highest directional split proportion (note-2)	15	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	24	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	
Two-way flow rate,(note-1) vp	27	pc/h
Highest directional split proportion (note-2)	14	
Base percent time-spent-following, BPTSF	2.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	7	veh-mi
Peak-hour vehicle-miles of travel, VMT60	24	veh-mi
Peak 15-min total travel time, TT15	0.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	407		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	479	pc/h
Highest directional split proportion (note-2)	240	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	407	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	58.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	465	pc/h
Highest directional split proportion (note-2)	233	
Base percent time-spent-following, BPTSF	33.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	33.6	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.15	
Peak 15-min vehicle-miles of travel, VMT15	543	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1913	veh-mi
Peak 15-min total travel time, TT15	10.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	183	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	215	pc/h
Highest directional split proportion (note-2)	108	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	183	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	56.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	209	pc/h
Highest directional split proportion (note-2)	105	
Base percent time-spent-following, BPTSF	16.8	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	16.8	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	68	veh-mi
Peak-hour vehicle-miles of travel, VMT60	238	veh-mi
Peak 15-min total travel time, TT15	1.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.68	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	20		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	30	pc/h
Highest directional split proportion (note-2)	17	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	20	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	30	pc/h
Highest directional split proportion (note-2)	17	
Base percent time-spent-following, BPTSF	2.6	%
Adj.for directional distribution and no-passing zones, fd/np	1.3	
Percent time-spent-following, PTSF	3.9	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	24	veh-mi
Peak-hour vehicle-miles of travel, VMT60	66	veh-mi
Peak 15-min total travel time, TT15	0.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	141		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.911	
Two-way flow rate,(note-1) vp	176	pc/h
Highest directional split proportion (note-2)	88	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	141	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	162	pc/h
Highest directional split proportion (note-2)	81	
Base percent time-spent-following, BPTSF	13.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	13.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	80	veh-mi
Peak-hour vehicle-miles of travel, VMT60	282	veh-mi
Peak 15-min total travel time, TT15	2.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	174	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	205	pc/h
Highest directional split proportion (note-2)	105	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	174	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.4	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	199	pc/h
Highest directional split proportion (note-2)	101	
Base percent time-spent-following, BPTSF	16.0	%
Adj.for directional distribution and no-passing zones, fd/np	0.2	
Percent time-spent-following, PTSF	16.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.06	
Peak 15-min vehicle-miles of travel, VMT15	49	veh-mi
Peak-hour vehicle-miles of travel, VMT60	174	veh-mi
Peak 15-min total travel time, TT15	1.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.72	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	24		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	34	pc/h
Highest directional split proportion (note-2)	17	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	24	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	33	pc/h
Highest directional split proportion (note-2)	17	
Base percent time-spent-following, BPTSF	2.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.9	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	7	veh-mi
Peak-hour vehicle-miles of travel, VMT60	22	veh-mi
Peak 15-min total travel time, TT15	0.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	30		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	35	pc/h
Highest directional split proportion (note-2)	18	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	30	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	34	pc/h
Highest directional split proportion (note-2)	17	
Base percent time-spent-following, BPTSF	2.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.9	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	13	veh-mi
Peak-hour vehicle-miles of travel, VMT60	45	veh-mi
Peak 15-min total travel time, TT15	0.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	Existing (2012)
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	20	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	565	veh/h	
Directional split	62 / 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.962	
Two-way flow rate,(note-1) vp	668	pc/h
Highest directional split proportion (note-2)	414	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	565	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.6	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.980	
Two-way flow rate,(note-1) vp	655	pc/h
Highest directional split proportion (note-2)	406	
Base percent time-spent-following, BPTSF	43.8	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	43.8	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	321	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1130	veh-mi
Peak 15-min total travel time, TT15	5.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	26	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	578	veh/h	
Directional split	75 / 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.951	
Two-way flow rate,(note-1) vp	691	pc/h
Highest directional split proportion (note-2)	518	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	578	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.7	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.975	
Two-way flow rate,(note-1) vp	674	pc/h
Highest directional split proportion (note-2)	506	
Base percent time-spent-following, BPTSF	44.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	44.7	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.22	
Peak 15-min vehicle-miles of travel, VMT15	460	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1618	veh-mi
Peak 15-min total travel time, TT15	8.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1035	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1190	pc/h
Highest directional split proportion (note-2)	797	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1035	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.1	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	1190	pc/h
Highest directional split proportion (note-2)	797	
Base percent time-spent-following, BPTSF	64.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	64.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.37	
Peak 15-min vehicle-miles of travel, VMT15	941	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3312	veh-mi
Peak 15-min total travel time, TT15	17.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	Existing (2012)
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1035	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1190	pc/h
Highest directional split proportion (note-2)	797	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1035	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.1	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	1190	pc/h
Highest directional split proportion (note-2)	797	
Base percent time-spent-following, BPTSF	64.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	64.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.37	
Peak 15-min vehicle-miles of travel, VMT15	1000	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3519	veh-mi
Peak 15-min total travel time, TT15	18.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	7	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	21		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.953	
Two-way flow rate,(note-1) vp	25	pc/h
Highest directional split proportion (note-2)	13	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	21	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	
Two-way flow rate,(note-1) vp	24	pc/h
Highest directional split proportion (note-2)	12	
Base percent time-spent-following, BPTSF	2.1	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.1	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	6	veh-mi
Peak-hour vehicle-miles of travel, VMT60	21	veh-mi
Peak 15-min total travel time, TT15	0.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	851	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.990	
Two-way flow rate,(note-1) vp	977	pc/h
Highest directional split proportion (note-2)	489	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	851	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.7	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	972	pc/h
Highest directional split proportion (note-2)	486	
Base percent time-spent-following, BPTSF	57.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	57.4	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.31	
Peak 15-min vehicle-miles of travel, VMT15	1136	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4000	veh-mi
Peak 15-min total travel time, TT15	21.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	343		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	403	pc/h
Highest directional split proportion (note-2)	202	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	343	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	57.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	392	pc/h
Highest directional split proportion (note-2)	196	
Base percent time-spent-following, BPTSF	29.1	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	29.1	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.13	
Peak 15-min vehicle-miles of travel, VMT15	127	veh-mi
Peak-hour vehicle-miles of travel, VMT60	446	veh-mi
Peak 15-min total travel time, TT15	2.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.67	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	19		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	29	pc/h
Highest directional split proportion (note-2)	15	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	19	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	28	pc/h
Highest directional split proportion (note-2)	14	
Base percent time-spent-following, BPTSF	2.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	23	veh-mi
Peak-hour vehicle-miles of travel, VMT60	63	veh-mi
Peak 15-min total travel time, TT15	0.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	191		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.911	
Two-way flow rate,(note-1) vp	238	pc/h
Highest directional split proportion (note-2)	119	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	191	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.6	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	220	pc/h
Highest directional split proportion (note-2)	110	
Base percent time-spent-following, BPTSF	17.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	17.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	109	veh-mi
Peak-hour vehicle-miles of travel, VMT60	382	veh-mi
Peak 15-min total travel time, TT15	3.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	Existing 2012
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	219	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	258	pc/h
Highest directional split proportion (note-2)	132	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	219	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	250	pc/h
Highest directional split proportion (note-2)	128	
Base percent time-spent-following, BPTSF	19.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.1	
Percent time-spent-following, PTSF	19.9	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	62	veh-mi
Peak-hour vehicle-miles of travel, VMT60	219	veh-mi
Peak 15-min total travel time, TT15	1.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Appendix B2
Year 2016 No Project
Roadway Segment Analysis

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.69	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	30		veh/h
Directional split	53	/ 47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	45	pc/h
Highest directional split proportion (note-2)	24	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	30	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0*	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	44	pc/h
Highest directional split proportion (note-2)	23	
Base percent time-spent-following, BPTSF	3.8	%
Adj.for directional distribution and no-passing zones, fd/np	0.7	
Percent time-spent-following, PTSF	4.5	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	10	veh-mi
Peak-hour vehicle-miles of travel, VMT60	27	veh-mi
Peak 15-min total travel time, TT15	0.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

* These items have been entered or edited to override calculated value

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	37		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	44	pc/h
Highest directional split proportion (note-2)	22	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	37	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	42	pc/h
Highest directional split proportion (note-2)	21	
Base percent time-spent-following, BPTSF	3.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	3.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	16	veh-mi
Peak-hour vehicle-miles of travel, VMT60	56	veh-mi
Peak 15-min total travel time, TT15	0.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	Base (2016)
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	20	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	567		veh/h
Directional split	77	/ 23	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.962	
Two-way flow rate,(note-1) vp	670	pc/h
Highest directional split proportion (note-2)	516	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	567	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.6	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.980	
Two-way flow rate,(note-1) vp	657	pc/h
Highest directional split proportion (note-2)	506	
Base percent time-spent-following, BPTSF	43.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	43.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	322	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1134	veh-mi
Peak 15-min total travel time, TT15	5.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	26	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	537		veh/h
Directional split	89	/ 11	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.951	
Two-way flow rate,(note-1) vp	642	pc/h
Highest directional split proportion (note-2)	571	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	537	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.4	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.975	
Two-way flow rate,(note-1) vp	626	pc/h
Highest directional split proportion (note-2)	557	
Base percent time-spent-following, BPTSF	42.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	42.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	427	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1504	veh-mi
Peak 15-min total travel time, TT15	7.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	858	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	998	pc/h
Highest directional split proportion (note-2)	719	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	858	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	987	pc/h
Highest directional split proportion (note-2)	711	
Base percent time-spent-following, BPTSF	58.0	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	58.0	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.31	
Peak 15-min vehicle-miles of travel, VMT15	780	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2746	veh-mi
Peak 15-min total travel time, TT15	14.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	858	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	998	pc/h
Highest directional split proportion (note-2)	719	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	858	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	987	pc/h
Highest directional split proportion (note-2)	711	
Base percent time-spent-following, BPTSF	58.0	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	58.0	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.31	
Peak 15-min vehicle-miles of travel, VMT15	829	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2917	veh-mi
Peak 15-min total travel time, TT15	15.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	7	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	26		veh/h	
Directional split	50	/ 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.953	
Two-way flow rate,(note-1) vp	31	pc/h
Highest directional split proportion (note-2)	16	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	26	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	
Two-way flow rate,(note-1) vp	30	pc/h
Highest directional split proportion (note-2)	15	
Base percent time-spent-following, BPTSF	2.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	7	veh-mi
Peak-hour vehicle-miles of travel, VMT60	26	veh-mi
Peak 15-min total travel time, TT15	0.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	440		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	517	pc/h
Highest directional split proportion (note-2)	259	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	440	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	58.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	503	pc/h
Highest directional split proportion (note-2)	252	
Base percent time-spent-following, BPTSF	35.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	35.7	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	587	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2068	veh-mi
Peak 15-min total travel time, TT15	10.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	198	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	233	pc/h
Highest directional split proportion (note-2)	117	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	198	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	56.6	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	226	pc/h
Highest directional split proportion (note-2)	113	
Base percent time-spent-following, BPTSF	18.0	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	18.0	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	73	veh-mi
Peak-hour vehicle-miles of travel, VMT60	257	veh-mi
Peak 15-min total travel time, TT15	1.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.68	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	22	veh/h	
Directional split	55 / 45	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	33	pc/h
Highest directional split proportion (note-2)	18	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	22	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	33	pc/h
Highest directional split proportion (note-2)	18	
Base percent time-spent-following, BPTSF	2.9	%
Adj.for directional distribution and no-passing zones, fd/np	1.3	
Percent time-spent-following, PTSF	4.1	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	27	veh-mi
Peak-hour vehicle-miles of travel, VMT60	73	veh-mi
Peak 15-min total travel time, TT15	0.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	152	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.911	
Two-way flow rate,(note-1) vp	190	pc/h
Highest directional split proportion (note-2)	95	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	152	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	175	pc/h
Highest directional split proportion (note-2)	88	
Base percent time-spent-following, BPTSF	14.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	14.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.06	
Peak 15-min vehicle-miles of travel, VMT15	86	veh-mi
Peak-hour vehicle-miles of travel, VMT60	304	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

HCS+: Two-Lane Highways Release 5.21

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	188	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	221	pc/h
Highest directional split proportion (note-2)	113	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	188	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	215	pc/h
Highest directional split proportion (note-2)	110	
Base percent time-spent-following, BPTSF	17.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.2	
Percent time-spent-following, PTSF	17.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	53	veh-mi
Peak-hour vehicle-miles of travel, VMT60	188	veh-mi
Peak 15-min total travel time, TT15	1.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.72	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	26		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	37	pc/h
Highest directional split proportion (note-2)	19	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	26	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	36	pc/h
Highest directional split proportion (note-2)	18	
Base percent time-spent-following, BPTSF	3.1	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	3.1	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	8	veh-mi
Peak-hour vehicle-miles of travel, VMT60	23	veh-mi
Peak 15-min total travel time, TT15	0.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	32		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	38	pc/h
Highest directional split proportion (note-2)	19	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	32	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	37	pc/h
Highest directional split proportion (note-2)	19	
Base percent time-spent-following, BPTSF	3.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	3.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	14	veh-mi
Peak-hour vehicle-miles of travel, VMT60	48	veh-mi
Peak 15-min total travel time, TT15	0.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	20	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	610	veh/h	
Directional split	62 / 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.962	
Two-way flow rate,(note-1) vp	721	pc/h
Highest directional split proportion (note-2)	447	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	610	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.980	
Two-way flow rate,(note-1) vp	707	pc/h
Highest directional split proportion (note-2)	438	
Base percent time-spent-following, BPTSF	46.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	46.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.23	
Peak 15-min vehicle-miles of travel, VMT15	347	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1220	veh-mi
Peak 15-min total travel time, TT15	6.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	26	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	624	veh/h	
Directional split	75 / 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.951	
Two-way flow rate,(note-1) vp	746	pc/h
Highest directional split proportion (note-2)	560	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	624	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	60.1	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.975	
Two-way flow rate,(note-1) vp	728	pc/h
Highest directional split proportion (note-2)	546	
Base percent time-spent-following, BPTSF	47.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	47.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.23	
Peak 15-min vehicle-miles of travel, VMT15	496	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1747	veh-mi
Peak 15-min total travel time, TT15	9.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1117	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1285	pc/h
Highest directional split proportion (note-2)	861	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1117	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1269	pc/h
Highest directional split proportion (note-2)	850	
Base percent time-spent-following, BPTSF	67.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	67.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.40	
Peak 15-min vehicle-miles of travel, VMT15	1015	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3574	veh-mi
Peak 15-min total travel time, TT15	18.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
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Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1117	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1285	pc/h
Highest directional split proportion (note-2)	861	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1117	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1269	pc/h
Highest directional split proportion (note-2)	850	
Base percent time-spent-following, BPTSF	67.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	67.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.40	
Peak 15-min vehicle-miles of travel, VMT15	1079	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3798	veh-mi
Peak 15-min total travel time, TT15	20.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	7	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	23		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.953	
Two-way flow rate,(note-1) vp	27	pc/h
Highest directional split proportion (note-2)	14	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	23	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	
Two-way flow rate,(note-1) vp	26	pc/h
Highest directional split proportion (note-2)	13	
Base percent time-spent-following, BPTSF	2.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	7	veh-mi
Peak-hour vehicle-miles of travel, VMT60	23	veh-mi
Peak 15-min total travel time, TT15	0.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	919	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.990	
Two-way flow rate,(note-1) vp	1055	pc/h
Highest directional split proportion (note-2)	528	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	919	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	62.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	1050	pc/h
Highest directional split proportion (note-2)	525	
Base percent time-spent-following, BPTSF	60.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	60.3	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.33	
Peak 15-min vehicle-miles of travel, VMT15	1227	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4319	veh-mi
Peak 15-min total travel time, TT15	22.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	370		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	435	pc/h
Highest directional split proportion (note-2)	218	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	370	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	58.0	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	423	pc/h
Highest directional split proportion (note-2)	212	
Base percent time-spent-following, BPTSF	31.1	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	31.1	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.14	
Peak 15-min vehicle-miles of travel, VMT15	137	veh-mi
Peak-hour vehicle-miles of travel, VMT60	481	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.67	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	21		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	32	pc/h
Highest directional split proportion (note-2)	16	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	21	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	31	pc/h
Highest directional split proportion (note-2)	16	
Base percent time-spent-following, BPTSF	2.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.7	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	26	veh-mi
Peak-hour vehicle-miles of travel, VMT60	69	veh-mi
Peak 15-min total travel time, TT15	0.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	206		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.911	
Two-way flow rate,(note-1) vp	257	pc/h
Highest directional split proportion (note-2)	129	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	206	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	237	pc/h
Highest directional split proportion (note-2)	119	
Base percent time-spent-following, BPTSF	18.8	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	18.8	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	117	veh-mi
Peak-hour vehicle-miles of travel, VMT60	412	veh-mi
Peak 15-min total travel time, TT15	3.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	237	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	279	pc/h
Highest directional split proportion (note-2)	142	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	237	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	271	pc/h
Highest directional split proportion (note-2)	138	
Base percent time-spent-following, BPTSF	21.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.1	
Percent time-spent-following, PTSF	21.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	67	veh-mi
Peak-hour vehicle-miles of travel, VMT60	237	veh-mi
Peak 15-min total travel time, TT15	1.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Appendix B3
Year 2016 Project Construction
Roadway Segment Analysis

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	20	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	567	veh/h	
Directional split	77 / 23	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.962	
Two-way flow rate,(note-1) vp	670	pc/h
Highest directional split proportion (note-2)	516	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	567	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.6	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.980	
Two-way flow rate,(note-1) vp	657	pc/h
Highest directional split proportion (note-2)	506	
Base percent time-spent-following, BPTSF	43.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	43.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	322	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1134	veh-mi
Peak 15-min total travel time, TT15	5.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	3	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	668		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.994	
Two-way flow rate,(note-1) vp	764	pc/h
Highest directional split proportion (note-2)	382	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	440	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	58.4	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	52.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.997	
Two-way flow rate,(note-1) vp	761	pc/h
Highest directional split proportion (note-2)	381	
Base percent time-spent-following, BPTSF	48.8	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	48.8	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.24	
Peak 15-min vehicle-miles of travel, VMT15	892	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3140	veh-mi
Peak 15-min total travel time, TT15	17.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	515	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	599	pc/h
Highest directional split proportion (note-2)	300	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	198	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	56.6	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	51.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	592	pc/h
Highest directional split proportion (note-2)	296	
Base percent time-spent-following, BPTSF	40.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	40.6	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.19	
Peak 15-min vehicle-miles of travel, VMT15	190	veh-mi
Peak-hour vehicle-miles of travel, VMT60	669	veh-mi
Peak 15-min total travel time, TT15	3.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	188	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	221	pc/h
Highest directional split proportion (note-2)	113	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	188	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	215	pc/h
Highest directional split proportion (note-2)	110	
Base percent time-spent-following, BPTSF	17.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.2	
Percent time-spent-following, PTSF	17.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	53	veh-mi
Peak-hour vehicle-miles of travel, VMT60	188	veh-mi
Peak 15-min total travel time, TT15	1.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.69	
Lane width	12.0	ft	% Trucks and buses	21	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	391		veh/h
Directional split	53 /	47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.960	
Two-way flow rate,(note-1) vp	590	pc/h
Highest directional split proportion (note-2)	313	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	30	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0*	mi/h
Average travel speed, ATS	30.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.979	
Two-way flow rate,(note-1) vp	579	pc/h
Highest directional split proportion (note-2)	307	
Base percent time-spent-following, BPTSF	39.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	39.9	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.18	
Peak 15-min vehicle-miles of travel, VMT15	127	veh-mi
Peak-hour vehicle-miles of travel, VMT60	352	veh-mi
Peak 15-min total travel time, TT15	4.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

* These items have been entered or edited to override calculated value

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	1	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	128	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.993	
Two-way flow rate,(note-1) vp	146	pc/h
Highest directional split proportion (note-2)	73	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	37	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.999	
Two-way flow rate,(note-1) vp	146	pc/h
Highest directional split proportion (note-2)	73	
Base percent time-spent-following, BPTSF	12.0	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	12.0	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	55	veh-mi
Peak-hour vehicle-miles of travel, VMT60	192	veh-mi
Peak 15-min total travel time, TT15	1.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	116	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.986	
Two-way flow rate,(note-1) vp	134	pc/h
Highest directional split proportion (note-2)	67	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	26	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.998	
Two-way flow rate,(note-1) vp	132	pc/h
Highest directional split proportion (note-2)	66	
Base percent time-spent-following, BPTSF	11.0	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	11.0	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.04	
Peak 15-min vehicle-miles of travel, VMT15	33	veh-mi
Peak-hour vehicle-miles of travel, VMT60	116	veh-mi
Peak 15-min total travel time, TT15	1.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.68	
Lane width	12.0	ft	% Trucks and buses	3	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	43		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.979	
Two-way flow rate,(note-1) vp	65	pc/h
Highest directional split proportion (note-2)	36	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	22	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.997	
Two-way flow rate,(note-1) vp	63	pc/h
Highest directional split proportion (note-2)	35	
Base percent time-spent-following, BPTSF	5.4	%
Adj.for directional distribution and no-passing zones, fd/np	1.2	
Percent time-spent-following, PTSF	6.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.02	
Peak 15-min vehicle-miles of travel, VMT15	52	veh-mi
Peak-hour vehicle-miles of travel, VMT60	142	veh-mi
Peak 15-min total travel time, TT15	1.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	858	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	998	pc/h
Highest directional split proportion (note-2)	719	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	858	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	987	pc/h
Highest directional split proportion (note-2)	711	
Base percent time-spent-following, BPTSF	58.0	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	58.0	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.31	
Peak 15-min vehicle-miles of travel, VMT15	829	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2917	veh-mi
Peak 15-min total travel time, TT15	15.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	879	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	1023	pc/h
Highest directional split proportion (note-2)	737	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	858	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	1011	pc/h
Highest directional split proportion (note-2)	728	
Base percent time-spent-following, BPTSF	58.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	58.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.32	
Peak 15-min vehicle-miles of travel, VMT15	799	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2813	veh-mi
Peak 15-min total travel time, TT15	14.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	152	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.911	
Two-way flow rate,(note-1) vp	190	pc/h
Highest directional split proportion (note-2)	95	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	152	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	175	pc/h
Highest directional split proportion (note-2)	88	
Base percent time-spent-following, BPTSF	14.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	14.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.06	
Peak 15-min vehicle-miles of travel, VMT15	86	veh-mi
Peak-hour vehicle-miles of travel, VMT60	304	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	22	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	640		veh/h
Directional split	89	/ 11	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.958	
Two-way flow rate,(note-1) vp	759	pc/h
Highest directional split proportion (note-2)	676	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	537	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.4	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.978	
Two-way flow rate,(note-1) vp	743	pc/h
Highest directional split proportion (note-2)	661	
Base percent time-spent-following, BPTSF	48.0	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	48.0	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.24	
Peak 15-min vehicle-miles of travel, VMT15	509	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1792	veh-mi
Peak 15-min total travel time, TT15	9.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	20	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	610	veh/h	
Directional split	62 / 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.962	
Two-way flow rate,(note-1) vp	721	pc/h
Highest directional split proportion (note-2)	447	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	610	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.980	
Two-way flow rate,(note-1) vp	707	pc/h
Highest directional split proportion (note-2)	438	
Base percent time-spent-following, BPTSF	46.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	46.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.23	
Peak 15-min vehicle-miles of travel, VMT15	347	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1220	veh-mi
Peak 15-min total travel time, TT15	6.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	3	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1596	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.997	
Two-way flow rate,(note-1) vp	1819	pc/h
Highest directional split proportion (note-2)	910	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	919	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	62.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	48.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1814	pc/h
Highest directional split proportion (note-2)	907	
Base percent time-spent-following, BPTSF	79.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	79.7	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.57	
Peak 15-min vehicle-miles of travel, VMT15	2131	veh-mi
Peak-hour vehicle-miles of travel, VMT60	7501	veh-mi
Peak 15-min total travel time, TT15	44.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	2	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1170	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.998	
Two-way flow rate,(note-1) vp	1332	pc/h
Highest directional split proportion (note-2)	666	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	370	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	57.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	47.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1330	pc/h
Highest directional split proportion (note-2)	665	
Base percent time-spent-following, BPTSF	68.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	68.9	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.42	
Peak 15-min vehicle-miles of travel, VMT15	432	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1521	veh-mi
Peak 15-min total travel time, TT15	9.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	237	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	279	pc/h
Highest directional split proportion (note-2)	142	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	237	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	271	pc/h
Highest directional split proportion (note-2)	138	
Base percent time-spent-following, BPTSF	21.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.1	
Percent time-spent-following, PTSF	21.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	67	veh-mi
Peak-hour vehicle-miles of travel, VMT60	237	veh-mi
Peak 15-min total travel time, TT15	1.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.72	
Lane width	12.0	ft	% Trucks and buses	0	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	862	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	1.000	
Two-way flow rate,(note-1) vp	1197	pc/h
Highest directional split proportion (note-2)	599	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	26	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	25.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1197	pc/h
Highest directional split proportion (note-2)	599	
Base percent time-spent-following, BPTSF	65.1	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	65.1	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.37	
Peak 15-min vehicle-miles of travel, VMT15	269	veh-mi
Peak-hour vehicle-miles of travel, VMT60	776	veh-mi
Peak 15-min total travel time, TT15	10.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	1	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	304		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.993	
Two-way flow rate,(note-1) vp	348	pc/h
Highest directional split proportion (note-2)	174	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	32	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	32.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.999	
Two-way flow rate,(note-1) vp	346	pc/h
Highest directional split proportion (note-2)	173	
Base percent time-spent-following, BPTSF	26.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	26.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	130	veh-mi
Peak-hour vehicle-miles of travel, VMT60	456	veh-mi
Peak 15-min total travel time, TT15	4.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	1	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	295		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.993	
Two-way flow rate,(note-1) vp	338	pc/h
Highest directional split proportion (note-2)	169	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	23	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	32.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.999	
Two-way flow rate,(note-1) vp	336	pc/h
Highest directional split proportion (note-2)	168	
Base percent time-spent-following, BPTSF	25.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	25.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.11	
Peak 15-min vehicle-miles of travel, VMT15	84	veh-mi
Peak-hour vehicle-miles of travel, VMT60	295	veh-mi
Peak 15-min total travel time, TT15	2.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.67	
Lane width	12.0	ft	% Trucks and buses	1	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	83		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.993	
Two-way flow rate,(note-1) vp	125	pc/h
Highest directional split proportion (note-2)	63	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	21	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.999	
Two-way flow rate,(note-1) vp	124	pc/h
Highest directional split proportion (note-2)	62	
Base percent time-spent-following, BPTSF	10.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	10.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.04	
Peak 15-min vehicle-miles of travel, VMT15	102	veh-mi
Peak-hour vehicle-miles of travel, VMT60	274	veh-mi
Peak 15-min total travel time, TT15	3.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1117	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1285	pc/h
Highest directional split proportion (note-2)	861	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1117	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1269	pc/h
Highest directional split proportion (note-2)	850	
Base percent time-spent-following, BPTSF	67.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	67.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.40	
Peak 15-min vehicle-miles of travel, VMT15	1079	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3798	veh-mi
Peak 15-min total travel time, TT15	20.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	11	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1179	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.989	
Two-way flow rate,(note-1) vp	1355	pc/h
Highest directional split proportion (note-2)	908	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1117	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1340	pc/h
Highest directional split proportion (note-2)	898	
Base percent time-spent-following, BPTSF	69.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	69.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.42	
Peak 15-min vehicle-miles of travel, VMT15	1072	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3773	veh-mi
Peak 15-min total travel time, TT15	20.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	206	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.911	
Two-way flow rate,(note-1) vp	257	pc/h
Highest directional split proportion (note-2)	129	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	206	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	237	pc/h
Highest directional split proportion (note-2)	119	
Base percent time-spent-following, BPTSF	18.8	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	18.8	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	117	veh-mi
Peak-hour vehicle-miles of travel, VMT60	412	veh-mi
Peak 15-min total travel time, TT15	3.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	17	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	932	veh/h	
Directional split	75 / 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.967	
Two-way flow rate,(note-1) vp	1095	pc/h
Highest directional split proportion (note-2)	821	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	624	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	60.0	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	51.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.983	
Two-way flow rate,(note-1) vp	1077	pc/h
Highest directional split proportion (note-2)	808	
Base percent time-spent-following, BPTSF	61.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	61.2	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.34	
Peak 15-min vehicle-miles of travel, VMT15	741	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2610	veh-mi
Peak 15-min total travel time, TT15	14.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Appendix B4
Year 2017 No Project
Roadway Segment Analysis

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.69	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	31		veh/h
Directional split	53 /	47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	46	pc/h
Highest directional split proportion (note-2)	24	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	31	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	45	pc/h
Highest directional split proportion (note-2)	24	
Base percent time-spent-following, BPTSF	3.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.7	
Percent time-spent-following, PTSF	4.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	10	veh-mi
Peak-hour vehicle-miles of travel, VMT60	28	veh-mi
Peak 15-min total travel time, TT15	0.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	37		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	44	pc/h
Highest directional split proportion (note-2)	22	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	37	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	42	pc/h
Highest directional split proportion (note-2)	21	
Base percent time-spent-following, BPTSF	3.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	3.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	16	veh-mi
Peak-hour vehicle-miles of travel, VMT60	56	veh-mi
Peak 15-min total travel time, TT15	0.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	20	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	578	veh/h	
Directional split	77 / 23	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.962	
Two-way flow rate,(note-1) vp	683	pc/h
Highest directional split proportion (note-2)	526	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	578	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.7	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.980	
Two-way flow rate,(note-1) vp	670	pc/h
Highest directional split proportion (note-2)	516	
Base percent time-spent-following, BPTSF	44.5	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	44.5	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	328	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1156	veh-mi
Peak 15-min total travel time, TT15	6.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	26	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	547	veh/h	
Directional split	89 / 11	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.951	
Two-way flow rate,(note-1) vp	654	pc/h
Highest directional split proportion (note-2)	582	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	547	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.975	
Two-way flow rate,(note-1) vp	638	pc/h
Highest directional split proportion (note-2)	568	
Base percent time-spent-following, BPTSF	42.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	42.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	435	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1532	veh-mi
Peak 15-min total travel time, TT15	8.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	874	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	1017	pc/h
Highest directional split proportion (note-2)	732	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	874	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	1005	pc/h
Highest directional split proportion (note-2)	724	
Base percent time-spent-following, BPTSF	58.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	58.7	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.32	
Peak 15-min vehicle-miles of travel, VMT15	795	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2797	veh-mi
Peak 15-min total travel time, TT15	14.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	Base 2016
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	874	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	1017	pc/h
Highest directional split proportion (note-2)	732	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	874	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	1005	pc/h
Highest directional split proportion (note-2)	724	
Base percent time-spent-following, BPTSF	58.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	58.7	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.32	
Peak 15-min vehicle-miles of travel, VMT15	844	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2972	veh-mi
Peak 15-min total travel time, TT15	15.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	7	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	26		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.953	
Two-way flow rate,(note-1) vp	31	pc/h
Highest directional split proportion (note-2)	16	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	26	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	
Two-way flow rate,(note-1) vp	30	pc/h
Highest directional split proportion (note-2)	15	
Base percent time-spent-following, BPTSF	2.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	7	veh-mi
Peak-hour vehicle-miles of travel, VMT60	26	veh-mi
Peak 15-min total travel time, TT15	0.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	448		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	527	pc/h
Highest directional split proportion (note-2)	264	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	448	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	58.6	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	512	pc/h
Highest directional split proportion (note-2)	256	
Base percent time-spent-following, BPTSF	36.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	36.2	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	598	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2106	veh-mi
Peak 15-min total travel time, TT15	11.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	201		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	236	pc/h
Highest directional split proportion (note-2)	118	pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, SFM	55	mi/h
Observed volume, Vf	201	veh/h

Estimated Free-Flow Speed:

Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	56.6	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	230	pc/h
Highest directional split proportion (note-2)	115	
Base percent time-spent-following, BPTSF	18.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	18.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	74	veh-mi
Peak-hour vehicle-miles of travel, VMT60	261	veh-mi
Peak 15-min total travel time, TT15	1.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.68	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	22		veh/h
Directional split	55	/ 45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	33	pc/h
Highest directional split proportion (note-2)	18	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	22	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	33	pc/h
Highest directional split proportion (note-2)	18	
Base percent time-spent-following, BPTSF	2.9	%
Adj.for directional distribution and no-passing zones, fd/np	1.3	
Percent time-spent-following, PTSF	4.1	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	27	veh-mi
Peak-hour vehicle-miles of travel, VMT60	73	veh-mi
Peak 15-min total travel time, TT15	0.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	155	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.911	
Two-way flow rate,(note-1) vp	193	pc/h
Highest directional split proportion (note-2)	97	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	155	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	179	pc/h
Highest directional split proportion (note-2)	90	
Base percent time-spent-following, BPTSF	14.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	14.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.06	
Peak 15-min vehicle-miles of travel, VMT15	88	veh-mi
Peak-hour vehicle-miles of travel, VMT60	310	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	191	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	225	pc/h
Highest directional split proportion (note-2)	115	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	191	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	218	pc/h
Highest directional split proportion (note-2)	111	
Base percent time-spent-following, BPTSF	17.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.2	
Percent time-spent-following, PTSF	17.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	54	veh-mi
Peak-hour vehicle-miles of travel, VMT60	191	veh-mi
Peak 15-min total travel time, TT15	1.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.72	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	26		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	37	pc/h
Highest directional split proportion (note-2)	19	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	26	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	36	pc/h
Highest directional split proportion (note-2)	18	
Base percent time-spent-following, BPTSF	3.1	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	3.1	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	8	veh-mi
Peak-hour vehicle-miles of travel, VMT60	23	veh-mi
Peak 15-min total travel time, TT15	0.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	33	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	39	pc/h
Highest directional split proportion (note-2)	20	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	33	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	38	pc/h
Highest directional split proportion (note-2)	19	
Base percent time-spent-following, BPTSF	3.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	3.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	14	veh-mi
Peak-hour vehicle-miles of travel, VMT60	50	veh-mi
Peak 15-min total travel time, TT15	0.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	20	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	621	veh/h	
Directional split	62 / 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.962	
Two-way flow rate,(note-1) vp	734	pc/h
Highest directional split proportion (note-2)	455	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	621	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	60.0	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.980	
Two-way flow rate,(note-1) vp	720	pc/h
Highest directional split proportion (note-2)	446	
Base percent time-spent-following, BPTSF	46.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	46.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.23	
Peak 15-min vehicle-miles of travel, VMT15	353	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1242	veh-mi
Peak 15-min total travel time, TT15	6.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	26	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	636	veh/h	
Directional split	75 / 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.951	
Two-way flow rate,(note-1) vp	760	pc/h
Highest directional split proportion (note-2)	570	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	636	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	60.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.975	
Two-way flow rate,(note-1) vp	742	pc/h
Highest directional split proportion (note-2)	557	
Base percent time-spent-following, BPTSF	47.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	47.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.24	
Peak 15-min vehicle-miles of travel, VMT15	506	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1781	veh-mi
Peak 15-min total travel time, TT15	9.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1138	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1309	pc/h
Highest directional split proportion (note-2)	877	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1138	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1293	pc/h
Highest directional split proportion (note-2)	866	
Base percent time-spent-following, BPTSF	67.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	67.9	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.41	
Peak 15-min vehicle-miles of travel, VMT15	1035	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3642	veh-mi
Peak 15-min total travel time, TT15	19.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1138	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1309	pc/h
Highest directional split proportion (note-2)	877	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1138	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1293	pc/h
Highest directional split proportion (note-2)	866	
Base percent time-spent-following, BPTSF	67.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	67.9	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.41	
Peak 15-min vehicle-miles of travel, VMT15	1099	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3869	veh-mi
Peak 15-min total travel time, TT15	20.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	7	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	23		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.953	
Two-way flow rate,(note-1) vp	27	pc/h
Highest directional split proportion (note-2)	14	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	23	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	35.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.993	
Two-way flow rate,(note-1) vp	26	pc/h
Highest directional split proportion (note-2)	13	
Base percent time-spent-following, BPTSF	2.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	7	veh-mi
Peak-hour vehicle-miles of travel, VMT60	23	veh-mi
Peak 15-min total travel time, TT15	0.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	936	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.990	
Two-way flow rate,(note-1) vp	1074	pc/h
Highest directional split proportion (note-2)	537	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	936	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	62.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	1069	pc/h
Highest directional split proportion (note-2)	535	
Base percent time-spent-following, BPTSF	60.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	60.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.34	
Peak 15-min vehicle-miles of travel, VMT15	1250	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4399	veh-mi
Peak 15-min total travel time, TT15	23.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	377		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	443	pc/h
Highest directional split proportion (note-2)	222	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	377	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	58.0	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	431	pc/h
Highest directional split proportion (note-2)	216	
Base percent time-spent-following, BPTSF	31.5	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	31.5	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.14	
Peak 15-min vehicle-miles of travel, VMT15	139	veh-mi
Peak-hour vehicle-miles of travel, VMT60	490	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.67	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	21		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	32	pc/h
Highest directional split proportion (note-2)	16	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	21	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	31	pc/h
Highest directional split proportion (note-2)	16	
Base percent time-spent-following, BPTSF	2.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	2.7	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	26	veh-mi
Peak-hour vehicle-miles of travel, VMT60	69	veh-mi
Peak 15-min total travel time, TT15	0.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	210		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.911	
Two-way flow rate,(note-1) vp	262	pc/h
Highest directional split proportion (note-2)	131	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	210	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	242	pc/h
Highest directional split proportion (note-2)	121	
Base percent time-spent-following, BPTSF	19.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	19.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	119	veh-mi
Peak-hour vehicle-miles of travel, VMT60	420	veh-mi
Peak 15-min total travel time, TT15	3.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	4/2/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	Base 2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	241	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	283	pc/h
Highest directional split proportion (note-2)	144	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	241	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	275	pc/h
Highest directional split proportion (note-2)	140	
Base percent time-spent-following, BPTSF	21.5	%
Adj.for directional distribution and no-passing zones, fd/np	0.1	
Percent time-spent-following, PTSF	21.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	68	veh-mi
Peak-hour vehicle-miles of travel, VMT60	241	veh-mi
Peak 15-min total travel time, TT15	2.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Appendix B5
Year 2017 Project Operations – Alternative 1
Roadway Segment Analysis

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA Alt 1

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	23	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	608	veh/h	
Directional split	77 / 23	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.956	
Two-way flow rate,(note-1) vp	723	pc/h
Highest directional split proportion (note-2)	557	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	578	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.7	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.978	
Two-way flow rate,(note-1) vp	707	pc/h
Highest directional split proportion (note-2)	544	
Base percent time-spent-following, BPTSF	46.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	46.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.23	
Peak 15-min vehicle-miles of travel, VMT15	345	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1216	veh-mi
Peak 15-min total travel time, TT15	6.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	4	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	537	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.992	
Two-way flow rate,(note-1) vp	615	pc/h
Highest directional split proportion (note-2)	308	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	448	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	58.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.996	
Two-way flow rate,(note-1) vp	613	pc/h
Highest directional split proportion (note-2)	307	
Base percent time-spent-following, BPTSF	41.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	41.7	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.19	
Peak 15-min vehicle-miles of travel, VMT15	717	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2524	veh-mi
Peak 15-min total travel time, TT15	13.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	331		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.923	
Two-way flow rate,(note-1) vp	408	pc/h
Highest directional split proportion (note-2)	204	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	201	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	56.7	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	381	pc/h
Highest directional split proportion (note-2)	191	
Base percent time-spent-following, BPTSF	28.5	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	28.5	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.13	
Peak 15-min vehicle-miles of travel, VMT15	122	veh-mi
Peak-hour vehicle-miles of travel, VMT60	430	veh-mi
Peak 15-min total travel time, TT15	2.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	197	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	232	pc/h
Highest directional split proportion (note-2)	118	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	191	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	225	pc/h
Highest directional split proportion (note-2)	115	
Base percent time-spent-following, BPTSF	17.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.1	
Percent time-spent-following, PTSF	18.1	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	56	veh-mi
Peak-hour vehicle-miles of travel, VMT60	197	veh-mi
Peak 15-min total travel time, TT15	1.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	
Analysis Time Period	AM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA Alt 1

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.69	
Lane width	12.0	ft	% Trucks and buses	6	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	84		veh/h
Directional split	53 /	47	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.960	
Two-way flow rate,(note-1) vp	127	pc/h
Highest directional split proportion (note-2)	67	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	31	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.994	
Two-way flow rate,(note-1) vp	122	pc/h
Highest directional split proportion (note-2)	65	
Base percent time-spent-following, BPTSF	10.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.6	
Percent time-spent-following, PTSF	10.8	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.04	
Peak 15-min vehicle-miles of travel, VMT15	27	veh-mi
Peak-hour vehicle-miles of travel, VMT60	76	veh-mi
Peak 15-min total travel time, TT15	0.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA Alt 1

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	50	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	170	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.741	
Two-way flow rate,(note-1) vp	261	pc/h
Highest directional split proportion (note-2)	131	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	37	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.4	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	33.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.952	
Two-way flow rate,(note-1) vp	203	pc/h
Highest directional split proportion (note-2)	102	
Base percent time-spent-following, BPTSF	16.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	16.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	72	veh-mi
Peak-hour vehicle-miles of travel, VMT60	255	veh-mi
Peak 15-min total travel time, TT15	2.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	28	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	103		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.836	
Two-way flow rate,(note-1) vp	140	pc/h
Highest directional split proportion (note-2)	70	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	26	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.973	
Two-way flow rate,(note-1) vp	120	pc/h
Highest directional split proportion (note-2)	60	
Base percent time-spent-following, BPTSF	10.0	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	10.0	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.04	
Peak 15-min vehicle-miles of travel, VMT15	29	veh-mi
Peak-hour vehicle-miles of travel, VMT60	103	veh-mi
Peak 15-min total travel time, TT15	0.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.68	
Lane width	12.0	ft	% Trucks and buses	4	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	28		veh/h
Directional split	55 /	45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.973	
Two-way flow rate,(note-1) vp	42	pc/h
Highest directional split proportion (note-2)	23	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	22	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.996	
Two-way flow rate,(note-1) vp	41	pc/h
Highest directional split proportion (note-2)	23	
Base percent time-spent-following, BPTSF	3.5	%
Adj.for directional distribution and no-passing zones, fd/np	1.2	
Percent time-spent-following, PTSF	4.8	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	34	veh-mi
Peak-hour vehicle-miles of travel, VMT60	92	veh-mi
Peak 15-min total travel time, TT15	1.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	874	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	1017	pc/h
Highest directional split proportion (note-2)	732	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	874	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	1005	pc/h
Highest directional split proportion (note-2)	724	
Base percent time-spent-following, BPTSF	58.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	58.7	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.32	
Peak 15-min vehicle-miles of travel, VMT15	844	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2972	veh-mi
Peak 15-min total travel time, TT15	15.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	880	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	1024	pc/h
Highest directional split proportion (note-2)	737	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	874	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	1012	pc/h
Highest directional split proportion (note-2)	729	
Base percent time-spent-following, BPTSF	58.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	58.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.32	
Peak 15-min vehicle-miles of travel, VMT15	800	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2816	veh-mi
Peak 15-min total travel time, TT15	14.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	155	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.911	
Two-way flow rate,(note-1) vp	193	pc/h
Highest directional split proportion (note-2)	97	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	155	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	179	pc/h
Highest directional split proportion (note-2)	90	
Base percent time-spent-following, BPTSF	14.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	14.6	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.06	
Peak 15-min vehicle-miles of travel, VMT15	88	veh-mi
Peak-hour vehicle-miles of travel, VMT60	310	veh-mi
Peak 15-min total travel time, TT15	2.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	
Analysis Time Period	AM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	26	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	547		veh/h
Directional split	89	/ 11	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.951	
Two-way flow rate,(note-1) vp	654	pc/h
Highest directional split proportion (note-2)	582	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	547	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.975	
Two-way flow rate,(note-1) vp	638	pc/h
Highest directional split proportion (note-2)	568	
Base percent time-spent-following, BPTSF	42.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	42.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	435	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1532	veh-mi
Peak 15-min total travel time, TT15	8.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA Alt 1

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	20	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	629	veh/h	
Directional split	62 / 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.962	
Two-way flow rate,(note-1) vp	743	pc/h
Highest directional split proportion (note-2)	461	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	621	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	60.0	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.980	
Two-way flow rate,(note-1) vp	729	pc/h
Highest directional split proportion (note-2)	452	
Base percent time-spent-following, BPTSF	47.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	47.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.23	
Peak 15-min vehicle-miles of travel, VMT15	357	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1258	veh-mi
Peak 15-min total travel time, TT15	6.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1061	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.995	
Two-way flow rate,(note-1) vp	1212	pc/h
Highest directional split proportion (note-2)	606	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	936	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	62.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	52.9	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1206	pc/h
Highest directional split proportion (note-2)	603	
Base percent time-spent-following, BPTSF	65.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	65.4	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.38	
Peak 15-min vehicle-miles of travel, VMT15	1417	veh-mi
Peak-hour vehicle-miles of travel, VMT60	4987	veh-mi
Peak 15-min total travel time, TT15	26.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	9	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	545	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.982	
Two-way flow rate,(note-1) vp	630	pc/h
Highest directional split proportion (note-2)	315	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	377	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	58.0	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.991	
Two-way flow rate,(note-1) vp	625	pc/h
Highest directional split proportion (note-2)	313	
Base percent time-spent-following, BPTSF	42.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	42.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	201	veh-mi
Peak-hour vehicle-miles of travel, VMT60	708	veh-mi
Peak 15-min total travel time, TT15	3.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	249	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	293	pc/h
Highest directional split proportion (note-2)	149	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	241	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	284	pc/h
Highest directional split proportion (note-2)	145	
Base percent time-spent-following, BPTSF	22.1	%
Adj.for directional distribution and no-passing zones, fd/np	0.1	
Percent time-spent-following, PTSF	22.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	71	veh-mi
Peak-hour vehicle-miles of travel, VMT60	249	veh-mi
Peak 15-min total travel time, TT15	2.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA Alt 1

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.72	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	99		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.966	
Two-way flow rate,(note-1) vp	142	pc/h
Highest directional split proportion (note-2)	71	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	26	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.995	
Two-way flow rate,(note-1) vp	138	pc/h
Highest directional split proportion (note-2)	69	
Base percent time-spent-following, BPTSF	11.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	11.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.04	
Peak 15-min vehicle-miles of travel, VMT15	31	veh-mi
Peak-hour vehicle-miles of travel, VMT60	89	veh-mi
Peak 15-min total travel time, TT15	0.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA Alt 1

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	22	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	129	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.867	
Two-way flow rate,(note-1) vp	169	pc/h
Highest directional split proportion (note-2)	85	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	33	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.978	
Two-way flow rate,(note-1) vp	150	pc/h
Highest directional split proportion (note-2)	75	
Base percent time-spent-following, BPTSF	12.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	12.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	55	veh-mi
Peak-hour vehicle-miles of travel, VMT60	194	veh-mi
Peak 15-min total travel time, TT15	1.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	24	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	119	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.856	
Two-way flow rate,(note-1) vp	158	pc/h
Highest directional split proportion (note-2)	79	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	23	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.977	
Two-way flow rate,(note-1) vp	138	pc/h
Highest directional split proportion (note-2)	69	
Base percent time-spent-following, BPTSF	11.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	11.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.05	
Peak 15-min vehicle-miles of travel, VMT15	34	veh-mi
Peak-hour vehicle-miles of travel, VMT60	119	veh-mi
Peak 15-min total travel time, TT15	1.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.67	
Lane width	12.0	ft	% Trucks and buses	4	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	29		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.973	
Two-way flow rate,(note-1) vp	44	pc/h
Highest directional split proportion (note-2)	22	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	21	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.996	
Two-way flow rate,(note-1) vp	43	pc/h
Highest directional split proportion (note-2)	22	
Base percent time-spent-following, BPTSF	3.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	3.7	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	36	veh-mi
Peak-hour vehicle-miles of travel, VMT60	96	veh-mi
Peak 15-min total travel time, TT15	1.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1138	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1309	pc/h
Highest directional split proportion (note-2)	877	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1138	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1293	pc/h
Highest directional split proportion (note-2)	866	
Base percent time-spent-following, BPTSF	67.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	67.9	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.41	
Peak 15-min vehicle-miles of travel, VMT15	1099	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3869	veh-mi
Peak 15-min total travel time, TT15	20.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1146	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1318	pc/h
Highest directional split proportion (note-2)	883	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1138	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1302	pc/h
Highest directional split proportion (note-2)	872	
Base percent time-spent-following, BPTSF	68.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	68.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.41	
Peak 15-min vehicle-miles of travel, VMT15	1042	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3667	veh-mi
Peak 15-min total travel time, TT15	19.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	210	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.911	
Two-way flow rate,(note-1) vp	262	pc/h
Highest directional split proportion (note-2)	131	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	210	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	242	pc/h
Highest directional split proportion (note-2)	121	
Base percent time-spent-following, BPTSF	19.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	19.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	119	veh-mi
Peak-hour vehicle-miles of travel, VMT60	420	veh-mi
Peak 15-min total travel time, TT15	3.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	26	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	636	veh/h	
Directional split	75 / 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.951	
Two-way flow rate,(note-1) vp	760	pc/h
Highest directional split proportion (note-2)	570	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	636	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	60.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.975	
Two-way flow rate,(note-1) vp	742	pc/h
Highest directional split proportion (note-2)	557	
Base percent time-spent-following, BPTSF	47.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	47.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.24	
Peak 15-min vehicle-miles of travel, VMT15	506	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1781	veh-mi
Peak 15-min total travel time, TT15	9.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Appendix B6
Year 2017 Project Operations – Alternative 2
Roadway Segment Analysis

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	23	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	608	veh/h	
Directional split	77 / 23	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.956	
Two-way flow rate,(note-1) vp	723	pc/h
Highest directional split proportion (note-2)	557	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	578	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.7	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.978	
Two-way flow rate,(note-1) vp	707	pc/h
Highest directional split proportion (note-2)	544	
Base percent time-spent-following, BPTSF	46.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	46.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.23	
Peak 15-min vehicle-miles of travel, VMT15	345	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1216	veh-mi
Peak 15-min total travel time, TT15	6.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	9	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	564		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.982	
Two-way flow rate,(note-1) vp	652	pc/h
Highest directional split proportion (note-2)	326	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	448	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	58.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.991	
Two-way flow rate,(note-1) vp	647	pc/h
Highest directional split proportion (note-2)	324	
Base percent time-spent-following, BPTSF	43.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	43.4	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	753	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2651	veh-mi
Peak 15-min total travel time, TT15	14.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	25	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	387	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.851	
Two-way flow rate,(note-1) vp	517	pc/h
Highest directional split proportion (note-2)	259	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	201	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	56.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	52.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.976	
Two-way flow rate,(note-1) vp	451	pc/h
Highest directional split proportion (note-2)	226	
Base percent time-spent-following, BPTSF	32.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	32.7	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.16	
Peak 15-min vehicle-miles of travel, VMT15	143	veh-mi
Peak-hour vehicle-miles of travel, VMT60	503	veh-mi
Peak 15-min total travel time, TT15	2.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	10	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	210	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.935	
Two-way flow rate,(note-1) vp	255	pc/h
Highest directional split proportion (note-2)	130	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	191	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.6	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.990	
Two-way flow rate,(note-1) vp	241	pc/h
Highest directional split proportion (note-2)	123	
Base percent time-spent-following, BPTSF	19.1	%
Adj.for directional distribution and no-passing zones, fd/np	0.1	
Percent time-spent-following, PTSF	19.2	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	60	veh-mi
Peak-hour vehicle-miles of travel, VMT60	210	veh-mi
Peak 15-min total travel time, TT15	1.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.69	
Lane width	12.0	ft	% Trucks and buses	6	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V 84 veh/h
Directional split 53 / 47 %

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.960	
Two-way flow rate,(note-1) vp	127	pc/h
Highest directional split proportion (note-2)	67	pc/h

Free-Flow Speed from Field Measurement:

Field measured speed, SFM	35	mi/h
Observed volume, Vf	31	veh/h

Estimated Free-Flow Speed:

Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.994	
Two-way flow rate,(note-1) vp	122	pc/h
Highest directional split proportion (note-2)	65	
Base percent time-spent-following, BPTSF	10.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.6	
Percent time-spent-following, PTSF	10.8	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.04	
Peak 15-min vehicle-miles of travel, VMT15	27	veh-mi
Peak-hour vehicle-miles of travel, VMT60	76	veh-mi
Peak 15-min total travel time, TT15	0.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	50	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	170		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.741	
Two-way flow rate,(note-1) vp	261	pc/h
Highest directional split proportion (note-2)	131	pc/h

Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	37	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.4	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	33.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.952	
Two-way flow rate,(note-1) vp	203	pc/h
Highest directional split proportion (note-2)	102	
Base percent time-spent-following, BPTSF	16.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	16.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	72	veh-mi
Peak-hour vehicle-miles of travel, VMT60	255	veh-mi
Peak 15-min total travel time, TT15	2.2	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	53	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	159	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.729	
Two-way flow rate,(note-1) vp	248	pc/h
Highest directional split proportion (note-2)	124	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	26	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	33.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.950	
Two-way flow rate,(note-1) vp	190	pc/h
Highest directional split proportion (note-2)	95	
Base percent time-spent-following, BPTSF	15.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	15.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	45	veh-mi
Peak-hour vehicle-miles of travel, VMT60	159	veh-mi
Peak 15-min total travel time, TT15	1.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.68	
Lane width	12.0	ft	% Trucks and buses	4	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	28		veh/h
Directional split	55 /	45	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.973	
Two-way flow rate,(note-1) vp	42	pc/h
Highest directional split proportion (note-2)	23	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	22	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.996	
Two-way flow rate,(note-1) vp	41	pc/h
Highest directional split proportion (note-2)	23	
Base percent time-spent-following, BPTSF	3.5	%
Adj.for directional distribution and no-passing zones, fd/np	1.2	
Percent time-spent-following, PTSF	4.8	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	34	veh-mi
Peak-hour vehicle-miles of travel, VMT60	92	veh-mi
Peak 15-min total travel time, TT15	1.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	874	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	1017	pc/h
Highest directional split proportion (note-2)	732	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	874	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	1005	pc/h
Highest directional split proportion (note-2)	724	
Base percent time-spent-following, BPTSF	58.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	58.7	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.32	
Peak 15-min vehicle-miles of travel, VMT15	844	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2972	veh-mi
Peak 15-min total travel time, TT15	15.6	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	880	veh/h	
Directional split	72 / 28	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.977	
Two-way flow rate,(note-1) vp	1024	pc/h
Highest directional split proportion (note-2)	737	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	874	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	61.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.0	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.988	
Two-way flow rate,(note-1) vp	1012	pc/h
Highest directional split proportion (note-2)	729	
Base percent time-spent-following, BPTSF	58.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	58.9	%

Level of Service and Other Performance Measures

Level of service, LOS	C	
Volume to capacity ratio, v/c	0.32	
Peak 15-min vehicle-miles of travel, VMT15	800	veh-mi
Peak-hour vehicle-miles of travel, VMT60	2816	veh-mi
Peak 15-min total travel time, TT15	14.8	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	20	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	167	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.877	
Two-way flow rate,(note-1) vp	216	pc/h
Highest directional split proportion (note-2)	108	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	155	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.4	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.980	
Two-way flow rate,(note-1) vp	194	pc/h
Highest directional split proportion (note-2)	97	
Base percent time-spent-following, BPTSF	15.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	15.7	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	95	veh-mi
Peak-hour vehicle-miles of travel, VMT60	334	veh-mi
Peak 15-min total travel time, TT15	2.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	AM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	26	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	547		veh/h
Directional split	89	/ 11	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.951	
Two-way flow rate,(note-1) vp	654	pc/h
Highest directional split proportion (note-2)	582	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	547	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	59.5	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.4	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.975	
Two-way flow rate,(note-1) vp	638	pc/h
Highest directional split proportion (note-2)	568	
Base percent time-spent-following, BPTSF	42.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	42.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.20	
Peak 15-min vehicle-miles of travel, VMT15	435	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1532	veh-mi
Peak 15-min total travel time, TT15	8.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-43
From/To	Stockdale/SR-58
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	21	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	635	veh/h	
Directional split	62 / 38	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.960	
Two-way flow rate,(note-1) vp	752	pc/h
Highest directional split proportion (note-2)	466	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	621	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	60.0	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.2	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.979	
Two-way flow rate,(note-1) vp	737	pc/h
Highest directional split proportion (note-2)	457	
Base percent time-spent-following, BPTSF	47.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	47.7	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.23	
Peak 15-min vehicle-miles of travel, VMT15	361	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1270	veh-mi
Peak 15-min total travel time, TT15	6.7	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	I-5/SR-43
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	5	%
Segment length	4.7	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1069	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.995	
Two-way flow rate,(note-1) vp	1221	pc/h
Highest directional split proportion (note-2)	611	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	936	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	62.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	52.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1215	pc/h
Highest directional split proportion (note-2)	608	
Base percent time-spent-following, BPTSF	65.6	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	65.6	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.38	
Peak 15-min vehicle-miles of travel, VMT15	1427	veh-mi
Peak-hour vehicle-miles of travel, VMT60	5024	veh-mi
Peak 15-min total travel time, TT15	27.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Stockdale
From/To	Morris/I-5
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	14	%
Segment length	1.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	577		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.973	
Two-way flow rate,(note-1) vp	674	pc/h
Highest directional split proportion (note-2)	337	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	377	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	58.0	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	52.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.986	
Two-way flow rate,(note-1) vp	665	pc/h
Highest directional split proportion (note-2)	333	
Base percent time-spent-following, BPTSF	44.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	44.3	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.21	
Peak 15-min vehicle-miles of travel, VMT15	213	veh-mi
Peak-hour vehicle-miles of travel, VMT60	750	veh-mi
Peak 15-min total travel time, TT15	4.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Stockdale/Brite
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	6	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	252	veh/h	
Directional split	51 / 49	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.960	
Two-way flow rate,(note-1) vp	298	pc/h
Highest directional split proportion (note-2)	152	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	241	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.6	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.994	
Two-way flow rate,(note-1) vp	288	pc/h
Highest directional split proportion (note-2)	147	
Base percent time-spent-following, BPTSF	22.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.1	
Percent time-spent-following, PTSF	22.5	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.09	
Peak 15-min vehicle-miles of travel, VMT15	72	veh-mi
Peak-hour vehicle-miles of travel, VMT60	252	veh-mi
Peak 15-min total travel time, TT15	2.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Dairy
From/To	Stockdale/Adohr
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.72	
Lane width	12.0	ft	% Trucks and buses	4	%
Segment length	0.9	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	98		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.973	
Two-way flow rate,(note-1) vp	140	pc/h
Highest directional split proportion (note-2)	70	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	26	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.1	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.996	
Two-way flow rate,(note-1) vp	137	pc/h
Highest directional split proportion (note-2)	69	
Base percent time-spent-following, BPTSF	11.3	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	11.3	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.04	
Peak 15-min vehicle-miles of travel, VMT15	31	veh-mi
Peak-hour vehicle-miles of travel, VMT60	88	veh-mi
Peak 15-min total travel time, TT15	0.9	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Morris
From/To	Stockdale/Station
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	38	%
Segment length	1.5	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	161	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.790	
Two-way flow rate,(note-1) vp	232	pc/h
Highest directional split proportion (note-2)	116	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	33	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.3	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	33.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.963	
Two-way flow rate,(note-1) vp	190	pc/h
Highest directional split proportion (note-2)	95	
Base percent time-spent-following, BPTSF	15.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	15.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	69	veh-mi
Peak-hour vehicle-miles of travel, VMT60	242	veh-mi
Peak 15-min total travel time, TT15	2.1	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Station
From/To	Tupman/Morris
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	40	%
Segment length	1.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	151	veh/h	
Directional split	50 / 50	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.781	
Two-way flow rate,(note-1) vp	220	pc/h
Highest directional split proportion (note-2)	110	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	23	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	33.5	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.962	
Two-way flow rate,(note-1) vp	178	pc/h
Highest directional split proportion (note-2)	89	
Base percent time-spent-following, BPTSF	14.5	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	14.5	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.07	
Peak 15-min vehicle-miles of travel, VMT15	43	veh-mi
Peak-hour vehicle-miles of travel, VMT60	151	veh-mi
Peak 15-min total travel time, TT15	1.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Tupman
From/To	SR-119/Grace
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.67	
Lane width	12.0	ft	% Trucks and buses	4	%
Segment length	3.3	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	29		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.973	
Two-way flow rate,(note-1) vp	44	pc/h
Highest directional split proportion (note-2)	22	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	21	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	35.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.996	
Two-way flow rate,(note-1) vp	43	pc/h
Highest directional split proportion (note-2)	22	
Base percent time-spent-following, BPTSF	3.7	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	3.7	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.01	
Peak 15-min vehicle-miles of travel, VMT15	36	veh-mi
Peak-hour vehicle-miles of travel, VMT60	96	veh-mi
Peak 15-min total travel time, TT15	1.0	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/SR-43
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.4	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1138	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1309	pc/h
Highest directional split proportion (note-2)	877	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1138	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.8	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1293	pc/h
Highest directional split proportion (note-2)	866	
Base percent time-spent-following, BPTSF	67.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	67.9	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.41	
Peak 15-min vehicle-miles of travel, VMT15	1099	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3869	veh-mi
Peak 15-min total travel time, TT15	20.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-119
From/To	Tupman/Access Rd
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	12	%
Segment length	3.2	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	1146	veh/h	
Directional split	67 / 33	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.988	
Two-way flow rate,(note-1) vp	1318	pc/h
Highest directional split proportion (note-2)	883	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	1138	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	63.9	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	53.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.0	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	1.000	
Two-way flow rate,(note-1) vp	1302	pc/h
Highest directional split proportion (note-2)	872	
Base percent time-spent-following, BPTSF	68.2	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	68.2	%

Level of Service and Other Performance Measures

Level of service, LOS	D	
Volume to capacity ratio, v/c	0.41	
Peak 15-min vehicle-miles of travel, VMT15	1042	veh-mi
Peak-hour vehicle-miles of travel, VMT60	3667	veh-mi
Peak 15-min total travel time, TT15	19.4	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	Wasco
From/To	Poso/Kimberlina
Jurisdiction	Kern County
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 2				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	15	%
Segment length	2.0	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	213		veh/h
Directional split	50	/ 50	%

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.7	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.905	
Two-way flow rate,(note-1) vp	267	pc/h
Highest directional split proportion (note-2)	134	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	35	mi/h
Observed volume, Vf	210	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	36.8	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	34.7	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.985	
Two-way flow rate,(note-1) vp	246	pc/h
Highest directional split proportion (note-2)	123	
Base percent time-spent-following, BPTSF	19.4	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	19.4	%

Level of Service and Other Performance Measures

Level of service, LOS	A	
Volume to capacity ratio, v/c	0.08	
Peak 15-min vehicle-miles of travel, VMT15	121	veh-mi
Peak-hour vehicle-miles of travel, VMT60	426	veh-mi
Peak 15-min total travel time, TT15	3.5	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Phone: Fax:
E-Mail:

Two-Way Two-Lane Highway Segment Analysis

Analyst	ACE
Agency/Co.	
Date Performed	7/10/2013
Analysis Time Period	PM
Highway	SR-58
From/To	Wasco/I-5
Jurisdiction	Caltrans 6
Analysis Year	2017
Description	HECA

Input Data

Highway class	Class 1				
Shoulder width	6.0	ft	Peak-hour factor, PHF	0.88	
Lane width	12.0	ft	% Trucks and buses	26	%
Segment length	2.8	mi	% Recreational vehicles	0	%
Terrain type	Level		% No-passing zones	0	%
Grade: Length		mi	Access points/mi	8	/mi
Up/down		%			

Two-way hourly volume, V	636	veh/h	
Directional split	75 / 25	%	

Average Travel Speed

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.2	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor,	0.951	
Two-way flow rate,(note-1) vp	760	pc/h
Highest directional split proportion (note-2)	570	pc/h
Free-Flow Speed from Field Measurement:		
Field measured speed, SFM	55	mi/h
Observed volume, Vf	636	veh/h
Estimated Free-Flow Speed:		
Base free-flow speed, BFFS	-	mi/h
Adj. for lane and shoulder width, fLS	-	mi/h
Adj. for access points, fA	-	mi/h
Free-flow speed, FFS	60.2	mi/h
Adjustment for no-passing zones, fnp	0.0	mi/h
Average travel speed, ATS	54.3	mi/h

Percent Time-Spent-Following

Grade adjustment factor, fG	1.00	
PCE for trucks, ET	1.1	
PCE for RVs, ER	1.0	
Heavy-vehicle adjustment factor, fHV	0.975	
Two-way flow rate,(note-1) vp	742	pc/h
Highest directional split proportion (note-2)	557	
Base percent time-spent-following, BPTSF	47.9	%
Adj.for directional distribution and no-passing zones, fd/np	0.0	
Percent time-spent-following, PTSF	47.9	%

Level of Service and Other Performance Measures

Level of service, LOS	B	
Volume to capacity ratio, v/c	0.24	
Peak 15-min vehicle-miles of travel, VMT15	506	veh-mi
Peak-hour vehicle-miles of travel, VMT60	1781	veh-mi
Peak 15-min total travel time, TT15	9.3	veh-h

Notes:
1. If vp >= 3200 pc/h, terminate analysis-the LOS is F.
2. If highest directional split vp >= 1700 pc/h, terminate analysis-the LOS is F.

Appendix B7
Year 2012 Existing
Intersection Analysis

Construction Fill Truck ADT

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in	
# 1 I-5 NB Ramp / Stockdale Hwy	A	8.8	0.000	A	8.8	0.000	+ 0.000	D/V
# 2 I-5 SB Ramp / Stockdale Hwy	A	9.2	0.000	A	9.2	0.000	+ 0.000	D/V
# 3 I-5 NB Ramp / SR 119	B	11.2	0.000	B	11.2	0.000	+ 0.000	D/V
# 4 I-5 SB Ramp / SR 119	B	12.0	0.000	B	12.0	0.000	+ 0.000	D/V
# 5 SR 119 / SR 43	C	25.3	0.515	C	25.3	0.515	+ 0.000	D/V
# 6 Stockdale Hwy/SR 43	B	11.3	0.497	B	11.3	0.497	+ 0.000	V/C
# 7 Stockdale Hwy / Morris Rd	A	8.8	0.000	A	8.8	0.000	+ 0.000	D/V
# 8 Tupman Rd / SR 119	C	19.3	0.000	C	19.3	0.000	+ 0.000	D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.025	A	7.0	0.025	+ 0.000	V/C
# 10 Station Rd/Tupman Rd	A	8.6	0.000	A	8.6	0.000	+ 0.000	D/V
# 11 Stockdale/Dairy	A	8.7	0.000	A	8.7	0.000	+ 0.000	D/V
# 12 Dairy/Adohr	A	9.0	0.000	A	9.0	0.000	+ 0.000	D/V
# 13 SR-43/Poso Ave	B	10.6	0.325	B	10.6	0.325	+ 0.000	V/C
# 14 SR-43/Kimberlina Rd	C	23.8	0.235	C	23.8	0.235	+ 0.000	D/V
# 15 SR-43/Shafter Ave	B	12.8	0.220	B	12.8	0.220	+ 0.000	D/V
# 16 Sr-43/Central Ave	A	9.0	0.168	A	9.0	0.168	+ 0.000	D/V
# 17 SR-43/Lerdo Hwy	C	22.1	0.294	C	22.1	0.294	+ 0.000	D/V
# 18 SR-43/7th Standard Rd	B	11.5	0.420	B	11.5	0.420	+ 0.000	V/C
# 19 SR-43/SR-58 (Rosedal Highway W	B	10.6	0.375	B	10.6	0.375	+ 0.000	V/C
# 20 SR-43/SR-58 (Rosedal Highway E	B	10.7	0.315	B	10.7	0.315	+ 0.000	V/C
# 21 H St/9th St	A	8.5	0.000	A	8.5	0.000	+ 0.000	D/V
# 22 H St/Wasco Ave	A	8.7	0.000	A	8.7	0.000	+ 0.000	D/V
# 23 Wasco Ave/Poso Ave	B	10.2	0.000	B	10.2	0.000	+ 0.000	D/V
# 24 Wasco Ave/Kimberlina Rd	B	10.2	0.000	B	10.2	0.000	+ 0.000	D/V

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Construction Fill Truck ADT

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 25 J St/9th St	A	8.5	0.000	A	8.5	0.000	+ 0.000 D/V
# 70 Wasco Way/SR-58	B	13.5	0.000	B	13.5	0.000	+ 0.000 D/V

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Construction Fill Truck ADT

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[8.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	0	0	0		0	1	0	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	4	0	25				0	0	0				1	64	0				0	57	154			
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	0	25				0	0	0				1	64	0				0	57	154			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	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 Volume:	4	0	25				0	0	0				1	64	0				0	57	154			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	4	0	25				0	0	0				1	64	0				0	57	154			
Critical Gap Module:																								
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	200	xxxx	64	xxxx	xxxx	xxxxx	211	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Potent Cap.:	793	xxxx	1006	xxxx	xxxx	xxxxx	1372	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Move Cap.:	793	xxxx	1006	xxxx	xxxx	xxxxx	1372	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Volume/Cap:	0.01	xxxx	0.02	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx												
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		970	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx											
Shrd StpDel:	xxxxx		8.8	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx											
Shared LOS:	*		A	*	*	*	*	A	*	*	*	*	*											
ApproachDel:	8.8			xxxxxx			xxxxxx			xxxxxx														
ApproachLOS:	A			*			*			*														

Construction Fill Truck ADT

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: A[9.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	42	1	2	0	27	1	15	47	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	42	1	2	0	27	1	15	47	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:	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 Volume:	0	0	0	42	1	2	0	27	1	15	47	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	42	1	2	0	27	1	15	47	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	104	105	47	xxxx	xxxx	xxxxx	28	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	898	789	1028	xxxx	xxxx	xxxxx	1599	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	892	781	1028	xxxx	xxxx	xxxxx	1599	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.05	0.00	0.00	xxxx	xxxx	xxxx	0.01	xxxx	xxxx

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	894	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	9.2	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			9.2			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

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Construction Fill Truck ADT

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	15	0	8	0	0	0	0	194	3	0	308	21
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	0	8	0	0	0	0	194	3	0	308	21
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:	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 Volume:	15	0	8	0	0	0	0	194	3	0	308	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	15	0	8	0	0	0	0	194	3	0	308	21
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	514	xxxx	196	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	524	xxxx	851	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	524	xxxx	851	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT
Shared Cap.:	xxxx	605	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	11.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	11.2			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Construction Fill Truck ADT

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 0.3 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:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 1 0 0 1			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	11	1	1	0	186	16	2	317	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	11	1	1	0	186	16	2	317	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:	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 Volume:	0	0	0	11	1	1	0	186	16	2	317	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	11	1	1	0	186	16	2	317	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	515	523	317	xxxx	xxxx	xxxxx	202	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	523	462	728	xxxx	xxxx	xxxxx	1382	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	523	461	728	xxxx	xxxx	xxxxx	1382	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.0	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	517	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	12.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			12.0			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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Construction Fill Truck ADT

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

Intersection #5 SR 119 / SR 43

Cycle (sec):	100	Critical Vol./Cap. (X):	0.515
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	25.3
Optimal Cycle:	42	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:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	36	11	16	2	40	359	103	172	3	19	291	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:	36	11	16	2	40	359	103	172	3	19	291	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:	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 Volume:	36	11	16	2	40	359	103	172	3	19	291	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	11	16	2	40	359	103	172	3	19	291	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 Vol.:	36	11	16	2	40	359	103	172	3	19	291	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.40	0.91	0.91	0.75	0.87	0.87	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.41	0.59	1.00	0.10	0.90	1.00	0.98	0.02	1.00	1.00	0.00
Final Sat.:	766	705	1026	1417	165	1479	1805	1862	32	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.02	0.00	0.24	0.24	0.06	0.09	0.09	0.01	0.15	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.47	0.47	0.47	0.47	0.47	0.47	0.11	0.37	0.37	0.04	0.30	0.00
Volume/Cap:	0.10	0.03	0.03	0.00	0.51	0.51	0.51	0.25	0.25	0.25	0.51	0.00
Delay/Veh:	14.8	14.2	14.2	14.0	19.0	19.0	44.2	22.3	22.3	48.2	30.0	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:	14.8	14.2	14.2	14.0	19.0	19.0	44.2	22.3	22.3	48.2	30.0	0.0
HCM2kAvg:	1	0	0	0	9	9	4	4	3	1	8	0

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Construction Fill Truck ADT

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.497
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
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 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	115	34	42	208	25	10	45	7	129	157	53
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	115	34	42	208	25	10	45	7	129	157	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	5	115	34	42	208	25	10	45	7	129	157	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	115	34	42	208	25	10	45	7	129	157	53
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 Vol.:	5	115	34	42	208	25	10	45	7	129	157	53
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:	0.03	0.75	0.22	0.15	0.76	0.09	0.16	0.73	0.11	0.38	0.46	0.16
Final Sat.:	21	481	142	102	504	61	96	433	67	259	316	107
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.24	0.41	0.41	0.41	0.10	0.10	0.10	0.50	0.50	0.50
Crit Moves:	****				****		****				****	
Delay/Veh:	9.7	9.7	9.7	11.4	11.4	11.4	9.0	9.0	9.0	12.5	12.5	12.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.7	9.7	9.7	11.4	11.4	11.4	9.0	9.0	9.0	12.5	12.5	12.5
LOS by Move:	A	A	A	B	B	B	A	A	A	B	B	B
ApproachDel:	9.7			11.4			9.0			12.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.7			11.4			9.0			12.5		
LOS by Appr:	A			B			A			B		

Construction Fill Truck ADT

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: A[8.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	1		0	0	1!	0	0		0	1	0	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	0	10				1	0	1				1	15	0				18	37	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	0	10				1	0	1				1	15	0				18	37	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:	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 Volume:	0	0	10				1	0	1				1	15	0				18	37	1			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	10				1	0	1				1	15	0				18	37	1			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	6.2				7.1	xxxx	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3				3.5	xxxx	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	15				96	xxxx	38				38	xxxx	xxxxx				15	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	1070				892	xxxx	1040				1585	xxxx	xxxxx				1616	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	1070				876	xxxx	1040				1585	xxxx	xxxxx				1616	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.01				0.00	xxxx	0.00				0.00	xxxx	xxxx				0.01	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	0.0				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	8.4				xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				7.3	xxxx	xxxxx			
LOS by Move:	*	*	A				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	951	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	0.0	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	8.8	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				A	*	A				*	*	*				*	*	*			
ApproachDel:	8.4						8.8						xxxxxx						xxxxxx					
ApproachLOS:	A						A						*						*					

Construction Fill Truck ADT

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[19.3]

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 1! 0 0			1 0 0 1 0			1 0 0 1 0		
Volume Module:												
Base Vol:	1	6	14	10	0	6	16	264	1	29	617	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:	1	6	14	10	0	6	16	264	1	29	617	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:	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 Volume:	1	6	14	10	0	6	16	264	1	29	617	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	6	14	10	0	6	16	264	1	29	617	25
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	987	997	265	994	xxxx	630	642	xxxx	xxxxx	265	xxxx	xxxxx
Potent Cap.:	228	246	779	226	xxxx	486	952	xxxx	xxxxx	1311	xxxx	xxxxx
Move Cap.:	219	237	779	211	xxxx	486	952	xxxx	xxxxx	1311	xxxx	xxxxx
Volume/Cap:	0.00	0.03	0.02	0.05	xxxx	0.01	0.02	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx	7.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	439	xxxxx	xxxx	268	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	13.6	xxxxx	xxxxx	19.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	C	*	*	*	*	*	*	*
ApproachDel:		13.6			19.3			xxxxxx			xxxxxx	
ApproachLOS:		B			C			*			*	

Construction Fill Truck ADT

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.025
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	17	4	1	1	11	7	5	5	10	3	4	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	4	1	1	11	7	5	5	10	3	4	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	17	4	1	1	11	7	5	5	10	3	4	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	4	1	1	11	7	5	5	10	3	4	2
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 Vol.:	17	4	1	1	11	7	5	5	10	3	4	2
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:	0.77	0.18	0.05	0.05	0.58	0.37	0.25	0.25	0.50	0.33	0.45	0.22
Final Sat.:	673	158	40	50	549	349	238	238	476	302	402	201
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Crit Moves:	****			****				****			****	
Delay/Veh:	7.2	7.2	7.2	6.8	6.8	6.8	6.8	6.8	6.8	7.0	7.0	7.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.2	7.2	7.2	6.8	6.8	6.8	6.8	6.8	6.8	7.0	7.0	7.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	7.2			6.8			6.8			7.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.2			6.8			6.8			7.0		
LOS by Appr:	A			A			A			A		

Construction Fill Truck ADT

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: A[8.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 0	1	0		0	1 0	0	0	0	0	1!	0 0	1	0	0	0 0
Volume Module:																
Base Vol:	0	6	9		1	9	0		0	0	0		11	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	6	9		1	9	0		0	0	0		11	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:	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 Volume:	0	6	9		1	9	0		0	0	0		11	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	6	9		1	9	0		0	0	0		11	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		6.4	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.5	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		15	xxxx	xxxxx		xxxx	xxxx	xxxxx		22	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		1616	xxxx	xxxxx		xxxx	xxxx	xxxxx		1000	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		1616	xxxx	xxxxx		xxxx	xxxx	xxxxx		1000	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.00	xxxx	xxxx		xxxx	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		7.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.6	xxxx	xxxxx	
LOS by Move:	*	*	*		A	*	*		*	*	*		A	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		7.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		A	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				8.6			
ApproachLOS:	*				*				*				A			

Construction Fill Truck ADT

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[8.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0 0	0	0	0	0 0	0	0	0	1 0	0	1	0	0 0
Volume Module:																
Base Vol:	3	0	2	0	0	0	0	0	22	6	1	34	0			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	3	0	2	0	0	0	0	0	22	6	1	34	0			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	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 Volume:	3	0	2	0	0	0	0	0	22	6	1	34	0			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0			
Final Vol.:	3	0	2	0	0	0	0	0	22	6	1	34	0			
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	61	xxxx	25	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	28	xxxx	xxxxx				
Potent Cap.:	950	xxxx	1057	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1599	xxxx	xxxxx				
Move Cap.:	950	xxxx	1057	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1599	xxxx	xxxxx				
Volume/Cap:	0.00	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	990	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				
Shrd StpDel:	xxxxx	8.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx				
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*				
ApproachDel:		8.7			xxxxxx			xxxxxx			xxxxxx					
ApproachLOS:		A			*			*			*					

Construction Fill Truck ADT

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 4.4 Worst Case Level Of Service: A[9.0]

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	1	0	0	1	0	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	2	4	2	4	0	0	0	0	8	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	2	4	2	4	0	0	0	0	8	0	1								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	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 Volume:	0	2	4	2	4	0	0	0	0	8	0	1								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	0	2	4	2	4	0	0	0	0	8	0	1								
Critical Gap Module:																				
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	17	0	20	17	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx								
Potent Cap.:	xxxx	881	0	999	882	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx								
Move Cap.:	xxxx	881	0	997	882	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx								
Volume/Cap:	xxxx	0.00	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx								
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx								
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	2643	917	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	xxxx	6.4	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	A	A	*	*	*	*	*	*	*	*								
ApproachDel:	6.4			9.0			xxxxxx			xxxxxx										
ApproachLOS:	A			A			*			*										

Construction Fill Truck ADT

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

Intersection #13 SR-43/Poso Ave

Cycle (sec):	100	Critical Vol./Cap. (X):	0.325
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	10.6
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:	1 0 1	1 0		1 0 1	1 0		1 0 1	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	23	414	0	0	411	4	4	0	23	0	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:	23	414	0	0	411	4	4	0	23	0	0	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	23	414	0	0	411	4	4	0	23	0	0	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	414	0	0	411	4	4	0	23	0	0	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
Final Vol.:	23	414	0	0	411	4	4	0	23	0	0	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:	1.00	2.00	0.00	1.00	1.98	0.02	1.00	1.00	1.00	0.00	1.00	1.00
Final Sat.:	587	1287	0	0	1266	12	463	0	547	0	0	573
Capacity Analysis Module:												
Vol/Sat:	0.04	0.32	xxxx	xxxx	0.32	0.32	0.01	xxxx	0.04	xxxx	xxxx	0.00
Crit Moves:		****			****				****			****
Delay/Veh:	8.9	10.6	0.0	0.0	10.7	10.7	9.9	0.0	8.9	0.0	0.0	8.4
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:	8.9	10.6	0.0	0.0	10.7	10.7	9.9	0.0	8.9	0.0	0.0	8.4
LOS by Move:	A	B	*	*	B	B	A	*	A	*	*	A
ApproachDel:	10.5			10.7			9.0			8.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.5			10.7			9.0			8.4		
LOS by Appr:	B			B			A			A		

Construction Fill Truck ADT

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

Intersection #14 SR-43/Kimberlina Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.235
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 23.8
Optimal Cycle: 24 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1 0	1	1	0	1 0	1	1	0	0 0	1!	0	0	0 0	1!	0	0
Volume Module:																
Base Vol:	129	264	17		88	229	4		5	73	95		20	91	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:	129	264	17		88	229	4		5	73	95		20	91	39	
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:	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 Volume:	129	264	17		88	229	4		5	73	95		20	91	39	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	129	264	17		88	229	4		5	73	95		20	91	39	
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 Vol.:	129	264	17		88	229	4		5	73	95		20	91	39	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.94	0.94		0.95	0.95	0.95		0.92	0.92	0.92		0.93	0.93	0.93	
Lanes:	1.00	1.88	0.12		1.00	1.97	0.03		0.03	0.42	0.55		0.13	0.61	0.26	
Final Sat.:	1805	3361	216		1805	3537	62		51	739	961		235	1068	458	
Capacity Analysis Module:																
Vol/Sat:	0.07	0.08	0.08		0.05	0.06	0.06		0.10	0.10	0.10		0.09	0.09	0.09	
Crit Moves:	****					****				****						
Green/Cycle:	0.30	0.36	0.36		0.22	0.28	0.28		0.42	0.42	0.42		0.42	0.42	0.42	
Volume/Cap:	0.24	0.22	0.22		0.22	0.24	0.24		0.24	0.24	0.24		0.20	0.20	0.20	
Delay/Veh:	26.3	22.5	22.5		32.1	28.2	28.2		18.8	18.8	18.8		18.5	18.5	18.5	
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:	26.3	22.5	22.5		32.1	28.2	28.2		18.8	18.8	18.8		18.5	18.5	18.5	
HCM2kAvg:	3	3	3		2	3	3		3	3	3		3	3	3	

Construction Fill Truck ADT

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

Intersection #15 SR-43/Shafter Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.220
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.8
Optimal Cycle: 18 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 1 1 0			1 0 0 1 0			1 0 0 1 0		
Volume Module:												
Base Vol:	40	330	44	74	347	92	84	129	22	41	107	63
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:	40	330	44	74	347	92	84	129	22	41	107	63
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:	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 Volume:	40	330	44	74	347	92	84	129	22	41	107	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	330	44	74	347	92	84	129	22	41	107	63
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 Vol.:	40	330	44	74	347	92	84	129	22	41	107	63
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.44	0.95	0.85	0.51	0.92	0.92	0.55	0.98	0.98	0.58	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	1.58	0.42	1.00	0.85	0.15	1.00	0.63	0.37
Final Sat.:	834	3610	1615	960	2765	733	1053	1587	271	1094	1129	665
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.03	0.08	0.13	0.13	0.08	0.08	0.08	0.04	0.09	0.09
Crit Moves:					****						****	
Green/Cycle:	0.57	0.57	0.57	0.57	0.57	0.57	0.43	0.43	0.43	0.43	0.43	0.43
Volume/Cap:	0.08	0.16	0.05	0.14	0.22	0.22	0.19	0.19	0.19	0.09	0.22	0.22
Delay/Veh:	9.8	10.2	9.5	10.1	10.6	10.6	17.8	17.8	17.8	16.9	18.1	18.1
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:	9.8	10.2	9.5	10.1	10.6	10.6	17.8	17.8	17.8	16.9	18.1	18.1
HCM2kAvg:	1	2	1	2	3	3	3	3	3	1	3	3

Construction Fill Truck ADT

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

Intersection #16 Sr-43/Central Ave

Cycle (sec):	100	Critical Vol./Cap. (X):	0.168
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	9.0
Optimal Cycle:	17	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:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	1 0
Volume Module:												
Base Vol:	14	412	24	46	387	18	9	61	11	26	93	29
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	14	412	24	46	387	18	9	61	11	26	93	29
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:	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 Volume:	14	412	24	46	387	18	9	61	11	26	93	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	412	24	46	387	18	9	61	11	26	93	29
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 Vol.:	14	412	24	46	387	18	9	61	11	26	93	29
Saturation Flow Module:												
Sat/Lane:	1900 1900	1900		1900 1900	1900		1900 1900	1900		1900 1900	1900	
Adjustment:	0.49 0.94	0.94		0.47 0.94	0.94		0.96 0.96	0.96		0.84 0.84	0.84	
Lanes:	1.00 1.89	0.11		1.00 1.91	0.09		0.11 0.75	0.14		0.35 1.26	0.39	
Final Sat.:	923 3384	197		889 3425	159		202 1369	247		560 2002	624	
Capacity Analysis Module:												
Vol/Sat:	0.02 0.12	0.12		0.05 0.11	0.11		0.04 0.04	0.04		0.05 0.05	0.05	
Crit Moves:	****									****		
Green/Cycle:	0.72 0.72	0.72		0.72 0.72	0.72		0.28 0.28	0.28		0.28 0.28	0.28	
Volume/Cap:	0.02 0.17	0.17		0.07 0.16	0.16		0.16 0.16	0.16		0.17 0.17	0.17	
Delay/Veh:	3.9	4.4	4.4	4.1	4.3	4.3	27.6	27.6	27.6	27.6	27.6	27.6
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	3.9	4.4	4.4	4.1	4.3	4.3	27.6	27.6	27.6	27.6	27.6	27.6
HCM2kAvg:	0	2	2	1	2	2	2	2	2	2	2	2

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Construction Fill Truck ADT

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

Intersection #17 SR-43/Lerdo Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.294
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 22.1
Optimal Cycle: 26 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	1	0 1	0 1	0	1 0
Volume Module:												
Base Vol:	41	307	58	145	240	17	20	246	50	64	124	127
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	307	58	145	240	17	20	246	50	64	124	127
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:	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 Volume:	41	307	58	145	240	17	20	246	50	64	124	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	307	58	145	240	17	20	246	50	64	124	127
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 Vol.:	41	307	58	145	240	17	20	246	50	64	124	127
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.88	0.88	0.85	0.75	0.75	0.75
Lanes:	1.00	1.68	0.32	1.00	1.87	0.13	0.15	1.85	1.00	0.41	0.79	0.80
Final Sat.:	1805	2963	560	1805	3337	236	250	3078	1615	583	1129	1156
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.10	0.08	0.07	0.07	0.08	0.08	0.03	0.11	0.11	0.11
Crit Moves:		****		****							****	
Green/Cycle:	0.15	0.35	0.35	0.27	0.48	0.48	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.15	0.29	0.29	0.29	0.15	0.15	0.21	0.21	0.08	0.29	0.29	0.29
Delay/Veh:	37.2	23.5	23.5	29.0	14.8	14.8	21.4	21.4	20.3	22.2	22.2	22.2
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:	37.2	23.5	23.5	29.0	14.8	14.8	21.4	21.4	20.3	22.2	22.2	22.2
HCM2kAvg:	1	4	4	4	2	2	3	3	1	4	4	4

Construction Fill Truck ADT

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

Intersection #18 SR-43/7th Standard Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.420
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	11.5
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	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	50	128	73	33	136	32	13	78	42	47	163	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:	50	128	73	33	136	32	13	78	42	47	163	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:	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 Volume:	50	128	73	33	136	32	13	78	42	47	163	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	128	73	33	136	32	13	78	42	47	163	42
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 Vol.:	50	128	73	33	136	32	13	78	42	47	163	42
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.51	0.29	0.20	0.80	1.00	0.10	0.59	0.31	0.22	0.78	1.00
Final Sat.:	119	305	174	111	456	646	55	328	176	127	439	646
Capacity Analysis Module:												
Vol/Sat:	0.42	0.42	0.42	0.30	0.30	0.05	0.24	0.24	0.24	0.37	0.37	0.06
Crit Moves:	****				****		****				****	
Delay/Veh:	12.6	12.6	12.6	11.1	11.1	8.2	10.7	10.7	10.7	12.0	12.0	8.3
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:	12.6	12.6	12.6	11.1	11.1	8.2	10.7	10.7	10.7	12.0	12.0	8.3
LOS by Move:	B	B	B	B	B	A	B	B	B	B	B	A
ApproachDel:	12.6			10.6			10.7			11.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.6			10.6			10.7			11.4		
LOS by Appr:	B			B			B			B		

Construction Fill Truck ADT

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

Intersection #19 SR-43/SR-58 (Rosedal Highway West)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.375
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.6
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:	1 0	1 0	0		0 0	0 1	0		1 0	0 0	1		0 0	0 0	0	
Volume Module:																
Base Vol:	164	238	0		0	163	93		77	0	142		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:	164	238	0		0	163	93		77	0	142		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:	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 Volume:	164	238	0		0	163	93		77	0	142		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	164	238	0		0	163	93		77	0	142		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 Vol.:	164	238	0		0	163	93		77	0	142		0	0	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:	1.00	1.00	0.00		0.00	0.64	0.36		1.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	602	658	0		0	435	248		525	0	636		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.27	0.36	xxxx		xxxx	0.37	0.37		0.15	xxxx	0.22		xxxx	xxxx	xxxx	
Crit Moves:		****					****				****					
Delay/Veh:	10.7	11.0	0.0		0.0	11.1	11.1		10.3	0.0	9.4		0.0	0.0	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:	10.7	11.0	0.0		0.0	11.1	11.1		10.3	0.0	9.4		0.0	0.0	0.0	
LOS by Move:	B	B	*		*	B	B		B	*	A		*	*	*	
ApproachDel:	10.8				11.1				9.7				xxxxxx			
Delay Adj:	1.00				1.00				1.00				xxxxx			
ApprAdjDel:	10.8				11.1				9.7				xxxxxx			
LOS by Appr:	B				B				A				*			

Construction Fill Truck ADT

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

Intersection #20 SR-43/SR-58 (Rosedal Highway East)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.315
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.7
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:	1 0	1 0	1	1 0	1 0	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	7	168	30	124	171	5	9	5	20	95	13	207
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	168	30	124	171	5	9	5	20	95	13	207
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:	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 Volume:	7	168	30	124	171	5	9	5	20	95	13	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	168	30	124	171	5	9	5	20	95	13	207
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 Vol.:	7	168	30	124	171	5	9	5	20	95	13	207
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	0.26	0.15	0.59	0.88	0.12	1.00
Final Sat.:	509	552	613	531	574	642	146	81	323	477	65	657
Capacity Analysis Module:												
Vol/Sat:	0.01	0.30	0.05	0.23	0.30	0.01	0.06	0.06	0.06	0.20	0.20	0.31
Crit Moves:		****			****			****				****
Delay/Veh:	9.5	11.4	8.5	11.1	11.1	8.1	9.4	9.4	9.4	10.6	10.6	10.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.5	11.4	8.5	11.1	11.1	8.1	9.4	9.4	9.4	10.6	10.6	10.2
LOS by Move:	A	B	A	B	B	A	A	A	A	B	B	B
ApproachDel:		10.9			11.0			9.4			10.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.9			11.0			9.4			10.3	
LOS by Appr:		B			B			A			B	

Construction Fill Truck ADT

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

Intersection #21 H St/9th St

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: A[8.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0		32		3		2		24		0		0		0		0		3		0		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	1.00	1.00		1.00		1.00
Initial Bse:	0		32		3		2		24		0		0		0		0		3		0		14	
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Volume:	0		32		3		2		24		0		0		0		0		3		0		14	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	0		32		3		2		24		0		0		0		0		3		0		14	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.4	xxxx				6.2
FollowUpTim:	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5	xxxx				3.3
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				35	xxxx	xxxxx		xxxx	xxxx	xxxxx						62	xxxx				34
Potent Cap.:	xxxx	xxxx	xxxxx				1589	xxxx	xxxxx		xxxx	xxxx	xxxxx						950	xxxx				1046
Move Cap.:	xxxx	xxxx	xxxxx				1589	xxxx	xxxxx		xxxx	xxxx	xxxxx						949	xxxx				1046
Volume/Cap:	xxxx	xxxx		xxxx			0.00	xxxx		xxxx		xxxx	xxxx						0.00	xxxx				0.01
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx				0.0
Stopped Del:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx							8.8	xxxx				8.5
LOS by Move:	*		*		*		A		*		*		*		*		*		A		*			A
Movement:	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				0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx									
Shrd StpDel:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*		*		*		A		*		*		*		*		*		*		*			*
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						8.5					
ApproachLOS:	*						*						*						A					

Construction Fill Truck ADT

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

Intersection #22 H St/Wasco Ave

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: A[8.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		1	0	0	0	1		1	0	1	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0	0	0				1	0	37				35	79	0				0	54	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				1	0	37				35	79	0				0	54	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:	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 Volume:	0	0	0				1	0	37				35	79	0				0	54	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				1	0	37				35	79	0				0	54	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				203	xxxx	54				54	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				790	xxxx	1019				1564	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				777	xxxx	1019				1564	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.00	xxxx	0.04				0.02	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.0	xxxx	0.1				0.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				9.6	xxxx	8.7				7.4	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				A	*	A				A	*	*				*	*	*			
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						8.7						xxxxxx						xxxxxx					
ApproachLOS:	*						A						*						*					

Construction Fill Truck ADT

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

Intersection #23 Wasco Ave/Poso Ave

Average Delay (sec/veh): 6.9 Worst Case Level Of Service: B[10.2]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	1
Volume Module:																				
Base Vol:	10	23	0			3	32	58			75	6	14			0	0			2
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
Initial Bse:	10	23	0			3	32	58			75	6	14			0	0			2
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
PHF Adj:	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 Volume:	10	23	0			3	32	58			75	6	14			0	0			2
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0			0
Final Vol.:	10	23	0			3	32	58			75	6	14			0	0			2
Critical Gap Module:																				
Critical Gp:	7.1	6.5	xxxxx			7.1	6.5	6.2			4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx			3.5	4.0	3.3			2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	172	158	xxxxx			175	170	0			2	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	796	738	xxxxx			793	727	0			1634	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	740	702	xxxxx			745	692	0			1634	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	0.03	xxxx			0.00	0.05	0.00			0.05	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx			0.0	xxxx	xxxxx			0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	9.9	xxxx	xxxxx			9.9	xxxx	xxxxx			7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*			A	*	*			A	*	*	*	*	*				
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	702			xxxx	xxxx	1946			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	0.1			xxxxx	xxxx	0.1			0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	10.3			xxxxx	xxxx	6.9			7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	B			*	*	A			A	*	*	*	*	*				
ApproachDel:	10.2					7.0					xxxxxx					xxxxxx				
ApproachLOS:	B					A					*					*				

Construction Fill Truck ADT

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

Intersection #24 Wasco Ave/Kimberlina Rd

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[10.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	0				27	0		19			17	163	0				0	138		17		
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				27	0		19			17	163	0				0	138		17		
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:	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 Volume:	0	0	0				27	0		19			17	163	0				0	138		17		
Reduct Vol:	0	0	0				0	0		0			0	0	0				0	0		0		
Final Vol.:	0	0	0				27	0		19			17	163	0				0	138		17		
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx		6.2			4.1	xxxx	xxxxx				xxxxx	xxxx		xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx		3.3			2.2	xxxx	xxxxx				xxxxx	xxxx		xxxxx		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				344	xxxx		147			155	xxxx	xxxxx				xxxx	xxxx		xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx				657	xxxx		906			1438	xxxx	xxxxx				xxxx	xxxx		xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx				651	xxxx		906			1438	xxxx	xxxxx				xxxx	xxxx		xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx				0.04	xxxx		0.02			0.01	xxxx	xxxx				xxxx	xxxx		xxxx		
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*							A	*	*	*	*	*						
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx			737	xxxxx					xxxx	xxxx	xxxxx	xxxx			xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx			0.2	xxxxx					0.0	xxxx	xxxxx	xxxxx			xxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx			10.2	xxxxx					7.5	xxxx	xxxxx	xxxxx			xxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	*			B	*					A	*	*	*			*	*	*			
ApproachDel:	xxxxxx						10.2						xxxxxx						xxxxxx					
ApproachLOS:	*						B						*						*					

Construction Fill Truck ADT

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

Intersection #25 J St/9th St

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[8.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	2	0	0		0	0	1	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	71		0		0	0	64		7		0	0		1		0	0		0				
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00				
Initial Bse:	0	71		0		0	0	64		7		0	0		1		0	0		0				
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00				
PHF Adj:	1.00	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 Volume:	0	71		0		0	0	64		7		0	0		1		0	0		0				
Reduct Vol:	0	0		0		0	0	0		0		0	0		0		0	0		0				
Final Vol.:	0	71		0		0	0	64		7		0	0		1		0	0		0				
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxx		6.9		xxxxx	xxxx		xxxxx				
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxx		3.3		xxxxx	xxxx		xxxxx				
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx		xxxx	xxxx		36		xxxx	xxxx		xxxxx				
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx		xxxx	xxxx		1036		xxxx	xxxx		xxxxx				
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx		xxxx	xxxx		1036		xxxx	xxxx		xxxxx				
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx		0.00		xxxx	xxxx		xxxx				
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxx		0.0		xxxxx	xxxx		xxxxx				
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxx		8.5		xxxxx	xxxx		xxxxx				
LOS by Move:	*	*		*		*	*	*		*		*	*		A		*	*		*				
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx				
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				
Shared LOS:	*	*		*		*	*	*		*		*	*		*		*	*		*				
ApproachDel:	xxxxxx					xxxxxx						8.5					xxxxxx							
ApproachLOS:	*					*						A					*							

Construction Fill Truck ADT

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

Intersection #70 Wasco Way/SR-58

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: B[13.5]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1! 0	0	0	0 1! 0	0	0	1	0	0	1		0	1	0	0	1	
Volume Module:																		
Base Vol:	39	29	10	3	5	5	29	363	58				5	46	2			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	39	29	10	3	5	5	29	363	58				5	46	2			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	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 Volume:	39	29	10	3	5	5	29	363	58				5	46	2			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
Final Vol.:	39	29	10	3	5	5	29	363	58				5	46	2			
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:																		
Cnflict Vol:	483	479	363	526	535	46	48	xxxx	xxxxx				421	xxxx	xxxxx			
Potent Cap.:	497	489	686	466	454	1029	1572	xxxx	xxxxx				1149	xxxx	xxxxx			
Move Cap.:	482	478	686	430	444	1029	1572	xxxx	xxxxx				1149	xxxx	xxxxx			
Volume/Cap:	0.08	0.06	0.01	0.01	0.01	0.00	0.02	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																		
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx				8.1	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	A	*	*				A	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				LT -	LTR -	RT			
Shared Cap.:	xxxx	499	xxxxx	xxxx	563	xxxxx	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	0.1	xxxxx	0.1	xxxx	xxxxx				0.0	xxxx	xxxxx			
Shrd StpDel:	xxxxx	13.5	xxxxx	xxxxx	11.5	xxxxx	7.3	xxxx	xxxxx				8.1	xxxx	xxxxx			
Shared LOS:	*	B	*	*	B	*	A	*	*				A	*	*			
ApproachDel:	13.5			11.5			xxxxxx						xxxxxx					
ApproachLOS:	B			B			*						*					

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in	
# 1 I-5 NB Ramp / Stockdale Hwy	B	11.5	0.000	B	11.5	0.000	+ 0.000	D/V
# 2 I-5 SB Ramp / Stockdale Hwy	B	13.2	0.000	B	13.2	0.000	+ 0.000	D/V
# 3 I-5 NB Ramp / SR 119	C	17.7	0.000	C	17.7	0.000	+ 0.000	D/V
# 4 I-5 SB Ramp / SR 119	C	18.0	0.000	C	18.0	0.000	+ 0.000	D/V
# 5 SR 119 / SR 43	C	23.0	0.560	C	23.0	0.560	+ 0.000	D/V
# 6 Stockdale Hwy/SR 43	C	22.8	0.823	C	22.8	0.823	+ 0.000	V/C
# 7 Stockdale Hwy / Morris Rd	A	9.3	0.000	A	9.3	0.000	+ 0.000	D/V
# 8 Tupman Rd / SR 119	F	65.4	0.000	F	65.4	0.000	+ 0.000	D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.035	A	7.0	0.035	+ 0.000	V/C
# 10 Station Rd/Tupman Rd	A	8.6	0.000	A	8.6	0.000	+ 0.000	D/V
# 11 Stockdale/Dairy	A	9.7	0.000	A	9.7	0.000	+ 0.000	D/V
# 12 Dairy/Adohr	A	8.8	0.000	A	8.8	0.000	+ 0.000	D/V
# 13 SR-43/Poso Ave	B	11.5	0.403	B	11.5	0.403	+ 0.000	V/C
# 14 SR-43/Kimberlina Rd	C	20.9	0.294	C	20.9	0.294	+ 0.000	D/V
# 15 SR-43/Shafter Ave	B	12.8	0.286	B	12.8	0.286	+ 0.000	D/V
# 16 Sr-43/Central Ave	B	10.4	0.220	B	10.4	0.220	+ 0.000	D/V
# 17 SR-43/Lerdo Hwy	C	21.6	0.328	C	21.6	0.328	+ 0.000	D/V
# 18 SR-43/7th Standard Rd	C	19.9	0.792	C	19.9	0.792	+ 0.000	V/C
# 19 SR-43/SR-58 (Rosedal Highway W	B	13.6	0.583	B	13.6	0.583	+ 0.000	V/C
# 20 SR-43/SR-58 (Rosedal Highway E	B	14.7	0.671	B	14.7	0.671	+ 0.000	V/C
# 21 H St/9th St	A	8.7	0.000	A	8.7	0.000	+ 0.000	D/V
# 22 H St/Wasco Ave	A	8.9	0.000	A	8.9	0.000	+ 0.000	D/V
# 23 Wasco Ave/Poso Ave	B	10.6	0.000	B	10.6	0.000	+ 0.000	D/V
# 24 Wasco Ave/Kimberlina Rd	B	10.2	0.000	B	10.2	0.000	+ 0.000	D/V
# 25 J St/9th St	A	8.6	0.000	A	8.6	0.000	+ 0.000	D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 70 Wasco Way/SR-58	B	13.5	0.000	B	13.5	0.000	+ 0.000 D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[11.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1!	0	0	0	0 0	0	0	0	1 0	0	0	0	0 1	0	1
Volume Module:																
Base Vol:	3	0	31	0	0	0	3	466	0	0	55	67				
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	0	31	0	0	0	3	466	0	0	55	67				
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:	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 Volume:	3	0	31	0	0	0	3	466	0	0	55	67				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	3	0	31	0	0	0	3	466	0	0	55	67				
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	561	xxxx	466	xxxx	xxxx	xxxxx	122	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	493	xxxx	601	xxxx	xxxx	xxxxx	1478	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	492	xxxx	601	xxxx	xxxx	xxxxx	1478	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	0.05	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	589	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	11.5	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	B	*	*	*	*	A	*	*	*	*	*				
ApproachDel:	11.5			xxxxxx			xxxxxx			xxxxxx						
ApproachLOS:	B			*			*			*						

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 6.8 Worst Case Level Of Service: B[13.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	262	1	1	0	204	9	20	38	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	262	1	1	0	204	9	20	38	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:	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 Volume:	0	0	0	262	1	1	0	204	9	20	38	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	262	1	1	0	204	9	20	38	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	287	291	38	xxxx	xxxx	xxxxx	213	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	708	623	1040	xxxx	xxxx	xxxxx	1369	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	700	614	1040	xxxx	xxxx	xxxxx	1369	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.37	0.00	0.00	xxxx	xxxx	xxxx	0.01	xxxx	xxxx

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	701	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.8	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	13.2	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			13.2			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[17.7]

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	0	0 0 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	13	0	6	0	0	0	0	770	2	0	223	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:	13	0	6	0	0	0	0	770	2	0	223	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:	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 Volume:	13	0	6	0	0	0	0	770	2	0	223	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	13	0	6	0	0	0	0	770	2	0	223	11
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	999	xxxx	771	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	272	xxxx	403	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	272	xxxx	403	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.05	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT
Shared Cap.:	xxxx	303	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	17.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	17.7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[18.0]

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		0	1	0	0	1		0	0	1	0	1		0	1	0	0	0	
Volume Module:																								
Base Vol:	0	0	0				45	0	13				0	721	42				1	238	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				45	0	13				0	721	42				1	238	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:	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 Volume:	0	0	0				45	0	13				0	721	42				1	238	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				45	0	13				0	721	42				1	238	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				982	xxxx	238				xxxx	xxxx	xxxxx				763	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				279	xxxx	806				xxxx	xxxx	xxxxx				859	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				278	xxxx	806				xxxx	xxxx	xxxxx				859	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.16	xxxx	0.02				xxxx	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.0	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx									
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		9.5	xxxxx	xxxx	xxxxx			9.2	xxxx	xxxxx									
LOS by Move:	*	*	*	*	*		A	*	*	*			A	*	*									
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				278	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				0.6	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				20.4	xxxx	xxxxx				xxxxx	xxxx	xxxxx				9.2	xxxx	xxxxx			
Shared LOS:	*	*	*				C	*	*				*	*	*				A	*	*			
ApproachDel:	xxxxxx						18.0						xxxxxx						xxxxxx					
ApproachLOS:	*						C						*						*					

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

Intersection #5 SR 119 / SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.560
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 23.0
Optimal Cycle: 45 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:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	37	85	77	4	39	175	466	663	19	24	201	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:	37	85	77	4	39	175	466	663	19	24	201	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:	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 Volume:	37	85	77	4	39	175	466	663	19	24	201	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	85	77	4	39	175	466	663	19	24	201	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
Final Vol.:	37	85	77	4	39	175	466	663	19	24	201	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.45	0.93	0.93	0.55	0.88	0.88	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.52	0.48	1.00	0.18	0.82	1.00	0.97	0.03	1.00	0.99	0.01
Final Sat.:	846	926	839	1037	304	1363	1805	1840	53	1805	1889	9
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.09	0.00	0.13	0.13	0.26	0.36	0.36	0.01	0.11	0.11
Crit Moves:					****		****				****	
Green/Cycle:	0.23	0.23	0.23	0.23	0.23	0.23	0.46	0.63	0.63	0.02	0.19	0.19
Volume/Cap:	0.19	0.40	0.40	0.02	0.56	0.56	0.56	0.57	0.57	0.57	0.56	0.56
Uniform Del:	31.1	32.7	32.7	29.8	34.1	34.1	19.6	10.8	10.8	48.4	36.7	36.7
IncremntDel:	0.5	0.7	0.7	0.0	1.9	1.9	0.9	0.7	0.7	18.0	2.0	2.0
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
Delay/Veh:	31.5	33.4	33.4	29.8	36.0	36.0	20.5	11.5	11.5	66.3	38.7	38.7
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:	31.5	33.4	33.4	29.8	36.0	36.0	20.5	11.5	11.5	66.3	38.7	38.7
HCM2kAvg:	2	5	4	0	7	6	11	12	12	2	6	4

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec):	100	Critical Vol./Cap. (X):	0.823
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	22.8
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	0 1	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	277	147	80	164	18	41	421	2	49	54	19
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	277	147	80	164	18	41	421	2	49	54	19
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:	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 Volume:	0	277	147	80	164	18	41	421	2	49	54	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	277	147	80	164	18	41	421	2	49	54	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
Final Vol.:	0	277	147	80	164	18	41	421	2	49	54	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:	0.00	0.65	0.35	0.30	0.63	0.07	0.09	0.90	0.01	0.40	0.44	0.16
Final Sat.:	0	372	197	153	314	34	50	511	2	176	193	68
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.75	0.75	0.52	0.52	0.52	0.82	0.82	0.82	0.28	0.28	0.28
Crit Moves:		****			****			****			****	
Delay/Veh:	0.0	23.0	23.0	15.6	15.6	15.6	29.6	29.6	29.6	12.2	12.2	12.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	23.0	23.0	15.6	15.6	15.6	29.6	29.6	29.6	12.2	12.2	12.2
LOS by Move:	*	C	C	C	C	C	D	D	D	B	B	B
ApproachDel:		23.0			15.6			29.6			12.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		23.0			15.6			29.6			12.2	
LOS by Appr:		C			C			D			B	

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[9.3]

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	0	0	1		0	0	1!	0	0		0	1	0	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	0	18				0	0	0				1	197	0				3	34	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	0	18				0	0	0				1	197	0				3	34	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:	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 Volume:	0	0	18				0	0	0				1	197	0				3	34	1			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	18				0	0	0				1	197	0				3	34	1			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	197				xxxx	xxxx	xxxxx				35	xxxx	xxxxx				197	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	849				xxxx	xxxx	xxxxx				1589	xxxx	xxxxx				1388	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	849				xxxx	xxxx	xxxxx				1589	xxxx	xxxxx				1388	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.02				xxxx	xxxx	xxxx				0.00	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	0.1				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	9.3				xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				7.6	xxxx	xxxxx			
LOS by Move:	*	*	A				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx		0	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				A	*	*				*	*	*			
ApproachDel:	9.3						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	A						*						*						*					

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: F[65.4]

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	1	0		0	0	1!	0	0		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	0	1	27				22	0	6				14	1171	0				11	397	10			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	1	27				22	0	6				14	1171	0				11	397	10			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	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 Volume:	0	1	27				22	0	6				14	1171	0				11	397	10			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	1	27				22	0	6				14	1171	0				11	397	10			
Critical Gap Module:																								
Critical Gp:	xxxxx	6.5	6.2				7.1	xxxx	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	4.0	3.3				3.5	xxxx	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	1628	1171				1637	xxxx	402				407	xxxx	xxxxx				1171	xxxx	xxxxx			
Potent Cap.:	xxxx	103	237				81	xxxx	653				1163	xxxx	xxxxx				604	xxxx	xxxxx			
Move Cap.:	xxxx	100	237				70	xxxx	653				1163	xxxx	xxxxx				604	xxxx	xxxxx			
Volume/Cap:	xxxx	0.01	0.11				0.31	xxxx	0.01				0.01	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.1	xxxx	xxxxx				11.1	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				B	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	226				xxxx	87	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	0.4				xxxxx	1.2	xxxxx				xxxxx	xxxxx	xxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	23.2				xxxxx	65.4	xxxxx				xxxxx	xxxxx	xxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	C				*	F	*				*	*	*				*	*	*			
ApproachDel:	23.2						65.4						xxxxxx						xxxxxx					
ApproachLOS:	C						F						*						*					

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.035
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	18	5	3	12	3	4	0	4	1	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:	9	18	5	3	12	3	4	0	4	1	1	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:	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 Volume:	9	18	5	3	12	3	4	0	4	1	1	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	18	5	3	12	3	4	0	4	1	1	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 Vol.:	9	18	5	3	12	3	4	0	4	1	1	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:	0.28	0.56	0.16	0.17	0.66	0.17	0.50	0.00	0.50	0.17	0.17	0.66
Final Sat.:	258	517	144	154	615	154	468	0	468	163	163	650
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.02	0.02	0.02	0.01	xxxx	0.01	0.01	0.01	0.01
Crit Moves:		****		****			****			****		
Delay/Veh:	7.0	7.0	7.0	7.0	7.0	7.0	6.8	0.0	6.8	6.7	6.7	6.7
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:	7.0	7.0	7.0	7.0	7.0	7.0	6.8	0.0	6.8	6.7	6.7	6.7
LOS by Move:	A	A	A	A	A	A	A	*	A	A	A	A
ApproachDel:		7.0			7.0			6.8			6.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.0			7.0			6.8			6.7	
LOS by Appr:		A			A			A			A	

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: A[8.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 1! 0 0			1 0 0 0 0		
Volume Module:												
Base Vol:	0	4	21	1	6	0	0	0	0	7	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	4	21	1	6	0	0	0	0	7	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:	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 Volume:	0	4	21	1	6	0	0	0	0	7	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	4	21	1	6	0	0	0	0	7	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	25	xxxx	xxxxx	xxxx	xxxx	xxxxx	23	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1603	xxxx	xxxxx	xxxx	xxxx	xxxxx	999	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1603	xxxx	xxxxx	xxxx	xxxx	xxxxx	999	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.6		
ApproachLOS:	*			*			*			A		

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: A[9.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 0 1	0	0
Volume Module:												
Base Vol:	4	1	3	0	0	0	0	193	7	0	35	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:	4	1	3	0	0	0	0	193	7	0	35	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:	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 Volume:	4	1	3	0	0	0	0	193	7	0	35	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	1	3	0	0	0	0	193	7	0	35	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	232	232	197	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	761	672	850	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	761	672	850	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx	779	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	9.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	*	*	*
ApproachDel:		9.7		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		A		*			*			*		

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: A[8.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	1!	0	0		1	0	0	0	0	
Volume Module:																								
Base Vol:	0		1		6		2		2		0		0		0		0		7		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		1		6		2		2		0		0		0		0		7		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:	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 Volume:	0		1		6		2		2		0		0		0		0		7		0		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	0		1		6		2		2		0		0		0		0		7		0		0	
Critical Gap Module:																								
Critical Gp:	xxxxx		6.5		6.2		7.1		6.5	xxxxx	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	xxxxx		4.0		3.3		3.5		4.0	xxxxx	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																								
Cnflict Vol:	xxxx		14		0		18		14	xxxxx	xxxx	xxxx	xxxxx		0	xxxx	xxxxx							
Potent Cap.:	xxxx		884		0		1002		884	xxxxx	xxxx	xxxx	xxxxx		0	xxxx	xxxxx							
Move Cap.:	xxxx		884		0		1001		884	xxxxx	xxxx	xxxx	xxxxx		0	xxxx	xxxxx							
Volume/Cap:	xxxx		0.00		0.00		0.00		0.00	xxxx	xxxx	xxxx	xxxx		0.00	xxxx	xxxx							
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx											
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx											
LOS by Move:	*	*	*	*	*	*	*	*	*		A	*	*											
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		6191			939	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx		0.0			0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx		5.6			8.8	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*		A			A	*	*				*	*	*				*	*	*			
ApproachDel:			5.6					8.8						xxxxxx						xxxxxx				
ApproachLOS:			A					A						*						*				

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

Intersection #13 SR-43/Poso Ave

Cycle (sec):	100	Critical Vol./Cap. (X):	0.403
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	11.5
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:	1 0 1	1 0		1 0 1	1 0		1 0 1	0 1		0 1 0	0 1	
Volume Module:												
Base Vol:	13	451	0	0	511	3	1	0	15	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:	13	451	0	0	511	3	1	0	15	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:	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 Volume:	13	451	0	0	511	3	1	0	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	451	0	0	511	3	1	0	15	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 Vol.:	13	451	0	0	511	3	1	0	15	0	0	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:	1.00	2.00	0.00	1.00	1.99	0.01	1.00	1.00	1.00	0.00	1.00	1.00
Final Sat.:	571	1250	0	0	1267	7	444	0	521	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.36	xxxx	xxxx	0.40	0.40	0.00	xxxx	0.03	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	9.0	11.3	0.0	0.0	11.8	11.8	10.1	0.0	9.1	0.0	0.0	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:	9.0	11.3	0.0	0.0	11.8	11.8	10.1	0.0	9.1	0.0	0.0	0.0
LOS by Move:	A	B	*	*	B	B	B	*	A	*	*	*
ApproachDel:	11.3			11.8			9.2			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	11.3			11.8			9.2			xxxxxx		
LOS by Appr:	B			B			A			*		

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

Intersection #14 SR-43/Kimberlina Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.294
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 20.9
Optimal Cycle: 26 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	57	386	27	60	306	6	7	84	160	35	45	98
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	386	27	60	306	6	7	84	160	35	45	98
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:	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 Volume:	57	386	27	60	306	6	7	84	160	35	45	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	386	27	60	306	6	7	84	160	35	45	98
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 Vol.:	57	386	27	60	306	6	7	84	160	35	45	98
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.85	0.85	0.85
Lanes:	1.00	1.87	0.13	1.00	1.96	0.04	0.03	0.33	0.64	0.20	0.25	0.55
Final Sat.:	1805	3340	234	1805	3530	69	48	578	1100	317	408	888
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.12	0.03	0.09	0.09	0.15	0.15	0.15	0.11	0.11	0.11
Crit Moves:		****		****				****				
Green/Cycle:	0.14	0.39	0.39	0.11	0.37	0.37	0.49	0.49	0.49	0.49	0.49	0.49
Volume/Cap:	0.23	0.29	0.29	0.29	0.23	0.23	0.29	0.29	0.29	0.22	0.22	0.22
Uniform Del:	38.6	20.8	20.8	40.7	21.7	21.7	15.0	15.0	15.0	14.4	14.4	14.4
IncremntDel:	0.5	0.1	0.1	0.8	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1
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
Delay/Veh:	39.1	21.0	21.0	41.5	21.8	21.8	15.2	15.2	15.2	14.5	14.5	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:	39.1	21.0	21.0	41.5	21.8	21.8	15.2	15.2	15.2	14.5	14.5	14.5
HCM2kAvg:	2	4	4	2	3	3	4	5	5	3	3	3

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

Intersection #15 SR-43/Shafter Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.286
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.8
Optimal Cycle: 20 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	23	393	30	78	467	106	124	83	17	25	114	76
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:	23	393	30	78	467	106	124	83	17	25	114	76
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:	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 Volume:	23	393	30	78	467	106	124	83	17	25	114	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	393	30	78	467	106	124	83	17	25	114	76
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 Vol.:	23	393	30	78	467	106	124	83	17	25	114	76
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.37	0.95	0.85	0.47	0.92	0.92	0.53	0.98	0.98	0.64	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	1.63	0.37	1.00	0.83	0.17	1.00	0.60	0.40
Final Sat.:	699	3610	1615	889	2860	649	1011	1538	315	1208	1072	714
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.02	0.09	0.16	0.16	0.12	0.05	0.05	0.02	0.11	0.11
Crit Moves:					****		****					
Green/Cycle:	0.57	0.57	0.57	0.57	0.57	0.57	0.43	0.43	0.43	0.43	0.43	0.43
Volume/Cap:	0.06	0.19	0.03	0.15	0.29	0.29	0.29	0.13	0.13	0.05	0.25	0.25
Uniform Del:	9.5	10.3	9.4	10.1	11.0	11.0	18.6	17.2	17.2	16.6	18.2	18.2
IncremntDel:	0.1	0.0	0.0	0.1	0.1	0.1	0.4	0.1	0.1	0.0	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	9.6	10.4	9.4	10.2	11.1	11.1	18.9	17.3	17.3	16.7	18.4	18.4
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:	9.6	10.4	9.4	10.2	11.1	11.1	18.9	17.3	17.3	16.7	18.4	18.4
HCM2kAvg:	1	3	0	2	4	4	5	2	2	1	4	4

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

Intersection #16 Sr-43/Central Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.220
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 18 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	1 0
Volume Module:												
Base Vol:	40	400	40	43	492	31	21	76	31	39	85	53
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:	40	400	40	43	492	31	21	76	31	39	85	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	40	400	40	43	492	31	21	76	31	39	85	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	400	40	43	492	31	21	76	31	39	85	53
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 Vol.:	40	400	40	43	492	31	21	76	31	39	85	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.41	0.94	0.94	0.46	0.94	0.94	0.92	0.92	0.92	0.80	0.80	0.80
Lanes:	1.00	1.82	0.18	1.00	1.88	0.12	0.16	0.60	0.24	0.44	0.96	0.60
Final Sat.:	785	3236	324	868	3365	212	286	1036	423	671	1462	912
Capacity Analysis Module:												
Vol/Sat:	0.05	0.12	0.12	0.05	0.15	0.15	0.07	0.07	0.07	0.06	0.06	0.06
Crit Moves:					****			****				
Green/Cycle:	0.67	0.67	0.67	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.08	0.19	0.19	0.07	0.22	0.22	0.22	0.22	0.22	0.17	0.17	0.17
Uniform Del:	5.9	6.4	6.4	5.9	6.5	6.5	23.9	23.9	23.9	23.5	23.5	23.5
IncremntDel:	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.2	0.1	0.1	0.1
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
Delay/Veh:	5.9	6.4	6.4	5.9	6.6	6.6	24.1	24.1	24.1	23.6	23.6	23.6
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:	5.9	6.4	6.4	5.9	6.6	6.6	24.1	24.1	24.1	23.6	23.6	23.6
HCM2kAvg:	1	3	3	1	3	3	3	3	3	2	2	2

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

Intersection #17 SR-43/Lerdo Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.328
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.6
Optimal Cycle: 28 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	1 1	0	1	0	1 0	1	0
Volume Module:																
Base Vol:	64	271	72		144	318	23		9	344	68		50	230	170	
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:	64	271	72		144	318	23		9	344	68		50	230	170	
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:	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 Volume:	64	271	72		144	318	23		9	344	68		50	230	170	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	64	271	72		144	318	23		9	344	68		50	230	170	
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 Vol.:	64	271	72		144	318	23		9	344	68		50	230	170	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.92	0.92		0.95	0.94	0.94		0.90	0.90	0.85		0.79	0.79	0.79	
Lanes:	1.00	1.58	0.42		1.00	1.87	0.13		0.05	1.95	1.00		0.22	1.02	0.76	
Final Sat.:	1805	2764	734		1805	3333	241		87	3324	1615		333	1531	1132	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.10	0.10		0.08	0.10	0.10		0.10	0.10	0.04		0.15	0.15	0.15	
Crit Moves:		****				****								****		
Green/Cycle:	0.15	0.30	0.30		0.24	0.40	0.40		0.46	0.46	0.46		0.46	0.46	0.46	
Volume/Cap:	0.24	0.33	0.33		0.33	0.24	0.24		0.23	0.23	0.09		0.33	0.33	0.33	
Uniform Del:	37.7	27.2	27.2		31.1	20.2	20.2		16.4	16.4	15.3		17.3	17.3	17.3	
IncremntDel:	0.5	0.2	0.2		0.4	0.1	0.1		0.1	0.1	0.1		0.1	0.1	0.1	
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	
Delay/Veh:	38.2	27.4	27.4		31.6	20.3	20.3		16.5	16.5	15.4		17.4	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:	38.2	27.4	27.4		31.6	20.3	20.3		16.5	16.5	15.4		17.4	17.4	17.4	
HCM2kAvg:	2	4	4		4	3	4		3	3	1		5	5	5	

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

Intersection #18 SR-43/7th Standard Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.792
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	19.9
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 1	0 0	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	22	178	83	73	109	9	26	363	53	67	63	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:	22	178	83	73	109	9	26	363	53	67	63	39
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:	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 Volume:	22	178	83	73	109	9	26	363	53	67	63	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	178	83	73	109	9	26	363	53	67	63	39
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 Vol.:	22	178	83	73	109	9	26	363	53	67	63	39
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:	0.08	0.63	0.29	0.40	0.60	1.00	0.06	0.82	0.12	0.52	0.48	1.00
Final Sat.:	40	323	150	187	280	529	33	459	67	241	227	535
Capacity Analysis Module:												
Vol/Sat:	0.55	0.55	0.55	0.39	0.39	0.02	0.79	0.79	0.79	0.28	0.28	0.07
Crit Moves:			****		****			****			****	
Delay/Veh:	16.7	16.7	16.7	13.8	13.8	9.0	27.9	27.9	27.9	12.2	12.2	9.3
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:	16.7	16.7	16.7	13.8	13.8	9.0	27.9	27.9	27.9	12.2	12.2	9.3
LOS by Move:	C	C	C	B	B	A	D	D	D	B	B	A
ApproachDel:	16.7			13.6			27.9			11.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	16.7			13.6			27.9			11.5		
LOS by Appr:	C			B			D			B		

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

Intersection #19 SR-43/SR-58 (Rosedal Highway West)

Cycle (sec):	100	Critical Vol./Cap. (X):	0.583
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	13.6
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:	1 0	1 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	127	253	0	0	191	24	198	0	379	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:	127	253	0	0	191	24	198	0	379	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:	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 Volume:	127	253	0	0	191	24	198	0	379	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	253	0	0	191	24	198	0	379	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 Vol.:	127	253	0	0	191	24	198	0	379	0	0	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:	1.00	1.00	0.00	0.00	0.89	0.11	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	513	554	0	0	503	63	534	0	650	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.25	0.46	xxxx	xxxx	0.38	0.38	0.37	xxxx	0.58	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	11.6	13.9	0.0	0.0	12.7	12.7	13.0	0.0	15.0	0.0	0.0	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:	11.6	13.9	0.0	0.0	12.7	12.7	13.0	0.0	15.0	0.0	0.0	0.0
LOS by Move:	B	B	*	*	B	B	B	*	B	*	*	*
ApproachDel:	13.1			12.7			14.3			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	13.1			12.7			14.3			xxxxxx		
LOS by Appr:	B			B			B			*		

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

Intersection #20 SR-43/SR-58 (Rosedal Highway East)

Cycle (sec):	100	Critical Vol./Cap. (X):	0.671
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	14.7
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:	1 0 1	0	1	1 0 1	0	1	0 0 1!	0	0	0 1 0	0	1
Volume Module:												
Base Vol:	18	220	138	355	202	9	12	16	18	42	13	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	220	138	355	202	9	12	16	18	42	13	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	18	220	138	355	202	9	12	16	18	42	13	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	220	138	355	202	9	12	16	18	42	13	129
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 Vol.:	18	220	138	355	202	9	12	16	18	42	13	129
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	0.26	0.35	0.39	0.76	0.24	1.00
Final Sat.:	485	526	583	529	567	631	125	166	187	356	110	544
Capacity Analysis Module:												
Vol/Sat:	0.04	0.42	0.24	0.67	0.36	0.01	0.10	0.10	0.10	0.12	0.12	0.24
Crit Moves:		****		****				****				****
Delay/Veh:	10.1	13.7	10.3	21.5	12.2	8.3	10.6	10.6	10.6	10.9	10.9	10.7
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:	10.1	13.7	10.3	21.5	12.2	8.3	10.6	10.6	10.6	10.9	10.9	10.7
LOS by Move:	B	B	B	C	B	A	B	B	B	B	B	B
ApproachDel:	12.3			17.9			10.6			10.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.3			17.9			10.6			10.7		
LOS by Appr:	B			C			B			B		

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

Intersection #21 H St/9th St

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: A[8.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	40	7	7	51	0	0	0	0	6	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	40	7	7	51	0	0	0	0	6	0	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:	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 Volume:	0	40	7	7	51	0	0	0	0	6	0	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	40	7	7	51	0	0	0	0	6	0	12
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	47	xxxx	xxxxx	xxxx	xxxx	xxxxx	109	xxxx	43
Potent Cap.:	xxxx	xxxx	xxxxx	1573	xxxx	xxxxx	xxxx	xxxx	xxxxx	894	xxxx	1032
Move Cap.:	xxxx	xxxx	xxxxx	1573	xxxx	xxxxx	xxxx	xxxx	xxxxx	891	xxxx	1032
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	0.01
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	0.0
Stopped Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	8.5
LOS by Move:	*	*	*	A	*	*	*	*	*	A	*	A
Movement:	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	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.7		
ApproachLOS:	*			*			*			A		

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

Intersection #22 H St/Wasco Ave

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: A[8.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		1	0	0	0	1		1	0	1	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0	0	0	0	0		39		40	60	0		0		106	2								
Growth Adj:	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00								
Initial Bse:	0	0	0	0	0		39		40	60	0		0		106	2								
User Adj:	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00								
PHF Adj:	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 Volume:	0	0	0	0	0		39		40	60	0		0		106	2								
Reduct Vol:	0	0	0	0	0		0		0	0	0		0		0	0								
Final Vol.:	0	0	0	0	0		39		40	60	0		0		106	2								
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		6.2		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx		106		108	xxxx	xxxxx	xxxx	xxxx	xxxxx										
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx		954		1495	xxxx	xxxxx	xxxx	xxxx	xxxxx										
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx		954		1495	xxxx	xxxxx	xxxx	xxxx	xxxxx										
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx		0.04		0.03	xxxx	xxxx	xxxx	xxxx	xxxx										
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.1		0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		8.9		7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
LOS by Move:	*	*	*	*	*		A		A	*	*	*	*	*										
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*												
ApproachDel:	xxxxxx			8.9			xxxxxx			xxxxxx														
ApproachLOS:	*			A			*			*														

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

Intersection #23 Wasco Ave/Poso Ave

Average Delay (sec/veh): 8.6 Worst Case Level Of Service: B[10.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	1	0		1	0	0	1	0		0	1	0	0	1		0	0	1!	0	0	
Volume Module:																								
Base Vol:	24	33	0				0	41	122				62	4	12				2	2	2			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	24	33	0				0	41	122				62	4	12				2	2	2			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	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 Volume:	24	33	0				0	41	122				62	4	12				2	2	2			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	24	33	0				0	41	122				62	4	12				2	2	2			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	xxxxx	xxxxx			6.5	6.2					4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	xxxxx	xxxxx			4.0	3.3					2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	217	136	xxxxx	xxxx			147	3					4	xxxx	xxxxx				16	xxxx	xxxxx			
Potent Cap.:	744	759	xxxxx	xxxx			748	1087					1631	xxxx	xxxxx				1615	xxxx	xxxxx			
Move Cap.:	612	728	xxxxx	xxxx			718	1087					1631	xxxx	xxxxx				1615	xxxx	xxxxx			
Volume/Cap:	0.04	0.05	xxxx	xxxx			0.06	0.11					0.04	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.1	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	11.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							7.3	xxxx	xxxxx				7.2	xxxx	xxxxx			
LOS by Move:	B	*	*	*	*	*							A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	728				xxxx	xxxx	962				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	0.1				xxxxx	xxxx	0.6				0.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	10.2				xxxxx	xxxx	9.5				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	B				*	*	A				A	*	*				*	*	*			
ApproachDel:	10.6						9.5						xxxxxx						xxxxxx					
ApproachLOS:	B						A						*						*					

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

Intersection #24 Wasco Ave/Kimberlina Rd

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: B[10.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	0				23	0	30				28	142	0				0	150	34			
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	30				28	142	0				0	150	34			
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:	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 Volume:	0	0	0				23	0	30				28	142	0				0	150	34			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				23	0	30				28	142	0				0	150	34			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				365	xxxx	167				184	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Potent Cap.:	xxxx	xxxx	xxxxx				639	xxxx	882				1403	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Move Cap.:	xxxx	xxxx	xxxxx				629	xxxx	882				1403	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	xxxx	xxxx	xxxx				0.04	xxxx	0.03				0.02	xxxx	xxxx	xxxx	xxxx	xxxx						
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*							A	*	*	*	*	*						
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	751	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.2	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*												
ApproachDel:	xxxxxx			10.2			xxxxxx			xxxxxx														
ApproachLOS:	*			B			*			*														

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

Intersection #25 J St/9th St

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[8.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	2	0	0		0	0	1	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	54		0		0	102		8			0	0		1			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	54		0		0	102		8			0	0		1			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:	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 Volume:	0	54		0		0	102		8			0	0		1			0	0		0			
Reduct Vol:	0	0		0		0	0		0			0	0		0			0	0		0			
Final Vol.:	0	54		0		0	102		8			0	0		1			0	0		0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			xxxx	xxxxx		xxxx			6.9	xxxxx		xxxx			xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			xxxx	xxxxx		xxxx			3.3	xxxxx		xxxx			xxxxx
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx			xxxx	xxxx		55			xxxx	xxxx		xxxxx			
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx			xxxx	xxxx		1007			xxxx	xxxx		xxxxx			
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx			xxxx	xxxx		1007			xxxx	xxxx		xxxxx			
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx			xxxx	xxxx		0.00			xxxx	xxxx		xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			xxxx	xxxxx		xxxx			0.0	xxxxx		xxxx			xxxxx
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			xxxx	xxxxx		xxxx			8.6	xxxxx		xxxx			xxxxx
LOS by Move:	*	*		*		*	*		*			*	*		*			A	*		*			*
Movement:	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	xxxxx		xxxx			xxxxx	xxxxx		xxxx			xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			xxxxx	xxxxx		xxxx			xxxxx	xxxxx		xxxx			xxxxx
Shared LOS:	*	*		*		*	*		*			*	*		*			*	*		*			*
ApproachDel:	xxxxxx					xxxxxx							8.6						xxxxxx					
ApproachLOS:	*					*							A						*					

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

Intersection #70 Wasco Way/SR-58

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: B[13.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		0	1	0	0	1		0	1	0	0	1	
Volume Module:																								
Base Vol:	19	14		5			5	26		26			27	334		53			9	90		5		
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:	19	14		5			5	26		26			27	334		53			9	90		5		
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:	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 Volume:	19	14		5			5	26		26			27	334		53			9	90		5		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Final Vol.:	19	14		5			5	26		26			27	334		53			9	90		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:																								
Cnflict Vol:	525	501		334			532	549		90			95	xxxx	xxxxx				387	xxxx	xxxxx			
Potent Cap.:	467	475		712			461	446		973			1512	xxxx	xxxxx				1183	xxxx	xxxxx			
Move Cap.:	425	463		712			439	435		973			1512	xxxx	xxxxx				1183	xxxx	xxxxx			
Volume/Cap:	0.04	0.03		0.01			0.01	0.06		0.03			0.02	xxxx	xxxx				0.01	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			0.1	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			7.4	xxxx	xxxxx				8.1	xxxx	xxxxx			
LOS by Move:	*	*		*			*	*		*			A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	464		xxxxx			xxxx	582		xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	0.3		xxxxx			xxxxx	0.3		xxxxx			0.1	xxxx	xxxxx				0.0	xxxx	xxxxx			
Shrd StpDel:	xxxxx	13.5		xxxxx			xxxxx	11.9		xxxxx			7.4	xxxx	xxxxx				8.1	xxxx	xxxxx			
Shared LOS:	*	B		*			*	B		*			A	*	*				A	*	*			
ApproachDel:	13.5						11.9						xxxxxx						xxxxxx					
ApproachLOS:	B						B						*						*					

Appendix B8
Year 2016 No Project
Intersection Analysis

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in	
# 1 I-5 NB Ramp / Stockdale Hwy	A	8.9	0.000	A	8.9	0.000	+ 0.000	D/V
# 2 I-5 SB Ramp / Stockdale Hwy	A	9.3	0.000	A	9.3	0.000	+ 0.000	D/V
# 3 I-5 NB Ramp / SR 119	B	11.6	0.000	B	11.6	0.000	+ 0.000	D/V
# 4 I-5 SB Ramp / SR 119	B	12.5	0.000	B	12.5	0.000	+ 0.000	D/V
# 5 SR 119 / SR 43	C	26.2	0.566	C	26.2	0.566	+ 0.000	D/V
# 6 Stockdale Hwy/SR 43	B	12.5	0.563	B	12.5	0.563	+ 0.000	V/C
# 7 Stockdale Hwy / Morris Rd	A	8.8	0.000	A	8.8	0.000	+ 0.000	D/V
# 8 Tupman Rd / SR 119	C	21.9	0.000	C	21.9	0.000	+ 0.000	D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.028	A	7.0	0.028	+ 0.000	V/C
# 10 Station Rd/Tupman Rd	A	8.7	0.000	A	8.7	0.000	+ 0.000	D/V
# 11 Stockdale/Dairy	A	8.7	0.000	A	8.7	0.000	+ 0.000	D/V
# 12 Dairy/Adohr	A	9.0	0.000	A	9.0	0.000	+ 0.000	D/V
# 13 SR-43/Poso Ave	B	11.2	0.364	B	11.2	0.364	+ 0.000	V/C
# 14 SR-43/Kimberlina Rd	C	24.1	0.259	C	24.1	0.259	+ 0.000	D/V
# 15 SR-43/Shafter Ave	B	12.9	0.242	B	12.9	0.242	+ 0.000	D/V
# 16 Sr-43/Central Ave	A	9.1	0.185	A	9.1	0.185	+ 0.000	D/V
# 17 SR-43/Lerdo Hwy	C	22.3	0.325	C	22.3	0.325	+ 0.000	D/V
# 18 SR-43/7th Standard Rd	B	12.4	0.478	B	12.4	0.478	+ 0.000	V/C
# 19 SR-43/SR-58 (Rosedal Highway W	B	11.3	0.421	B	11.3	0.421	+ 0.000	V/C
# 20 SR-43/SR-58 (Rosedal Highway E	B	11.3	0.356	B	11.3	0.356	+ 0.000	V/C
# 21 H St/9th St	A	8.6	0.000	A	8.6	0.000	+ 0.000	D/V
# 22 H St/Wasco Ave	A	8.7	0.000	A	8.7	0.000	+ 0.000	D/V
# 23 Wasco Ave/Poso Ave	B	10.4	0.000	B	10.4	0.000	+ 0.000	D/V
# 24 Wasco Ave/Kimberlina Rd	B	10.5	0.000	B	10.5	0.000	+ 0.000	D/V
# 25 J St/9th St	A	8.5	0.000	A	8.5	0.000	+ 0.000	D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 70 Wasco Way/SR-58	B	14.5	0.000	B	14.5	0.000	+ 0.000 D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[8.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1!	0	0	0	0 0	0	0	0	1 0	0	0	0	0 1	0	1
Volume Module:																
Base Vol:	4	0	25	0	0	0	0	0	1	64	0	0	0	57	0	154
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	4	0	28	0	0	0	0	0	1	70	0	0	0	63	0	169
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	0	28	0	0	0	0	0	1	70	0	0	0	63	0	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	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 Volume:	4	0	28	0	0	0	0	0	1	70	0	0	0	63	0	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	0	28	0	0	0	0	0	1	70	0	0	0	63	0	169
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	220	xxxx	70	xxxx	xxxx	xxxxx	232	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	773	xxxx	998	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	772	xxxx	998	xxxx	xxxx	xxxxx	1347	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	0.03	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	959	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	8.9	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	A	*	*	*	*	A	*	*	*	*	*				
ApproachDel:		8.9		xxxxxx			xxxxxx			xxxxxx						
ApproachLOS:		A		*			*			*						

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: A[9.3]

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	0	0	0		0	0	1!	0	0		0	0	1	0	1		0	1	0	0	0	
Volume Module:																								
Base Vol:	0	0	0				42	1	2				0	27	1				15	47	0			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	0	0	0				46	1	2				0	30	1				17	52	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				46	1	2				0	30	1				17	52	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:	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 Volume:	0	0	0				46	1	2				0	30	1				17	52	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				46	1	2				0	30	1				17	52	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	6.5	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	4.0	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				115	116	52				xxxx	xxxx	xxxxx				31	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				886	778	1022				xxxx	xxxx	xxxxx				1595	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				879	770	1022				xxxx	xxxx	xxxxx				1595	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.05	0.00	0.00				xxxx	xxxx	xxxx				0.01	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										7.3	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	*	*	*										A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	882	xxxxx	xxxx	xxxx	xxxxx										xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx										0.0	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	9.3	xxxxx	xxxxx	xxxx	xxxxx										7.3	xxxx	xxxxx			
Shared LOS:	*	*	*	*	A	*	*	*	*										A	*	*			
ApproachDel:	xxxxxx			9.3			xxxxxx												xxxxxx					
ApproachLOS:	*			A			*												*					

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	15	0	8	0	0	0	0	194	3	0	308	21
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	17	0	9	0	0	0	0	213	3	0	339	23
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:	17	0	9	0	0	0	0	213	3	0	339	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:	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 Volume:	17	0	9	0	0	0	0	213	3	0	339	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	17	0	9	0	0	0	0	213	3	0	339	23
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	565	xxxx	215	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	489	xxxx	830	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	489	xxxx	830	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	571	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	11.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	11.6			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[12.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 1 0 0 1			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	11	1	1	0	186	16	2	317	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	12	1	1	0	205	18	2	349	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	12	1	1	0	205	18	2	349	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:	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 Volume:	0	0	0	12	1	1	0	205	18	2	349	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	12	1	1	0	205	18	2	349	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	567	575	349	xxxx	xxxx	xxxxx	222	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	489	431	699	xxxx	xxxx	xxxxx	1359	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	488	430	699	xxxx	xxxx	xxxxx	1359	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	483	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	12.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			12.5			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

Intersection #5 SR 119 / SR 43

Cycle (sec):	100	Critical Vol./Cap. (X):	0.566
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	26.2
Optimal Cycle:	45	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:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	36	11	16	2	40	359	103	172	3	19	291	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	40	12	18	2	44	395	113	189	3	21	320	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	12	18	2	44	395	113	189	3	21	320	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:	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 Volume:	40	12	18	2	44	395	113	189	3	21	320	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	12	18	2	44	395	113	189	3	21	320	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 Vol.:	40	12	18	2	44	395	113	189	3	21	320	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.37	0.91	0.91	0.74	0.87	0.87	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.41	0.59	1.00	0.10	0.90	1.00	0.98	0.02	1.00	1.00	0.00
Final Sat.:	695	705	1026	1412	165	1479	1805	1862	32	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.02	0.02	0.00	0.27	0.27	0.06	0.10	0.10	0.01	0.17	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.47	0.47	0.47	0.47	0.47	0.47	0.11	0.37	0.37	0.04	0.30	0.00
Volume/Cap:	0.12	0.04	0.04	0.00	0.57	0.57	0.57	0.28	0.28	0.28	0.57	0.00
Uniform Del:	14.8	14.2	14.2	14.0	19.0	19.0	42.2	22.3	22.3	46.4	29.7	0.0
IncremntDel:	0.2	0.0	0.0	0.0	1.0	1.0	3.8	0.2	0.2	2.0	1.3	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	0.00
Delay/Veh:	15.0	14.2	14.2	14.0	20.0	20.0	45.9	22.5	22.5	48.4	31.0	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:	15.0	14.2	14.2	14.0	20.0	20.0	45.9	22.5	22.5	48.4	31.0	0.0
HCM2kAvg:	2	0	0	0	10	10	4	4	4	1	9	0

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.563
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.5
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 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	115	34	42	208	25	10	45	7	129	157	53
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	6	127	37	46	229	28	11	50	8	142	173	58
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	127	37	46	229	28	11	50	8	142	173	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	6	127	37	46	229	28	11	50	8	142	173	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	127	37	46	229	28	11	50	8	142	173	58
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 Vol.:	6	127	37	46	229	28	11	50	8	142	173	58
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:	0.03	0.75	0.22	0.15	0.76	0.09	0.16	0.73	0.11	0.38	0.46	0.16
Final Sat.:	20	461	136	99	488	59	91	410	64	252	307	104
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.27	0.47	0.47	0.47	0.12	0.12	0.12	0.56	0.56	0.56
Crit Moves:			****		****				****			****
Delay/Veh:	10.2	10.2	10.2	12.5	12.5	12.5	9.3	9.3	9.3	14.1	14.1	14.1
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:	10.2	10.2	10.2	12.5	12.5	12.5	9.3	9.3	9.3	14.1	14.1	14.1
LOS by Move:	B	B	B	B	B	B	A	A	A	B	B	B
ApproachDel:	10.2			12.5			9.3			14.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.2			12.5			9.3			14.1		
LOS by Appr:	B			B			A			B		

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: A[8.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	1		0	0	1!	0	0		0	1	0	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	0	10				1	0	1				1	15	0				18	37	1			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	0	0	11				1	0	1				1	17	0				20	41	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:	0	0	11				1	0	1				1	17	0				20	41	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:	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 Volume:	0	0	11				1	0	1				1	17	0				20	41	1			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	11				1	0	1				1	17	0				20	41	1			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	6.2				7.1	xxxx	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3				3.5	xxxx	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	17				105	xxxx	41				42	xxxx	xxxxx				17	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	1068				880	xxxx	1035				1580	xxxx	xxxxx				1614	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	1068				862	xxxx	1035				1580	xxxx	xxxxx				1614	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.01				0.00	xxxx	0.00				0.00	xxxx	xxxx				0.01	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	0.0				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	8.4				xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				7.3	xxxx	xxxxx			
LOS by Move:	*	*	A				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	941	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	0.0	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	8.8	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	A	*				A	*	*				*	*	*			
ApproachDel:		8.4						8.8						xxxxxx						xxxxxx				
ApproachLOS:		A						A						*						*				

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[21.9]

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	1!	0	0	0	0	1!	0	0	1	0	0	1	0	1	0	0	1	0
Volume Module:																				
Base Vol:	1	6	14	10	0	6	16	264	1	29	617	25								
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10								
Initial Bse:	1	7	15	11	0	7	18	290	1	32	679	28								
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:	1	7	15	11	0	7	18	290	1	32	679	28								
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:	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 Volume:	1	7	15	11	0	7	18	290	1	32	679	28								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	1	7	15	11	0	7	18	290	1	32	679	28								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1086	1096	291	1093	xxxx	692	706	xxxx	xxxxx	292	xxxx	xxxxx								
Potent Cap.:	196	215	753	193	xxxx	447	901	xxxx	xxxxx	1282	xxxx	xxxxx								
Move Cap.:	186	206	753	179	xxxx	447	901	xxxx	xxxxx	1282	xxxx	xxxxx								
Volume/Cap:	0.01	0.03	0.02	0.06	xxxx	0.01	0.02	xxxx	xxxx	0.02	xxxx	xxxx								
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	7.9	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		395	xxxxx		xxxx		230	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.2	xxxxx		xxxxx		0.2	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx		14.7	xxxxx		xxxxx		21.9	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		B	*		*		C	*		*	*	*			*	*	*		
ApproachDel:			14.7					21.9			xxxxxx					xxxxxx				
ApproachLOS:			B					C			*					*				

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.028
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	17	4	1	1	11	7	5	5	10	3	4	2
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	19	4	1	1	12	8	6	6	11	3	4	2
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:	19	4	1	1	12	8	6	6	11	3	4	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	19	4	1	1	12	8	6	6	11	3	4	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	4	1	1	12	8	6	6	11	3	4	2
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 Vol.:	19	4	1	1	12	8	6	6	11	3	4	2
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:	0.77	0.18	0.05	0.05	0.58	0.37	0.25	0.25	0.50	0.33	0.45	0.22
Final Sat.:	672	158	40	50	547	348	237	237	475	301	401	201
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Crit Moves:	****			****			****			****		
Delay/Veh:	7.2	7.2	7.2	6.9	6.9	6.9	6.8	6.8	6.8	7.0	7.0	7.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.2	7.2	7.2	6.9	6.9	6.9	6.8	6.8	6.8	7.0	7.0	7.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	7.2			6.9			6.8			7.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.2			6.9			6.8			7.0		
LOS by Appr:	A			A			A			A		

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: A[8.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 0 1 0				0 1 0 0 0				0 0 1! 0 0				1 0 0 0 0			
Volume Module:																
Base Vol:	0	6	9		1	9	0		0	0	0		11	0	0	
Growth Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
Initial Bse:	0	7	10		1	10	0		0	0	0		12	0	0	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	7	10		1	10	0		0	0	0		12	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:	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 Volume:	0	7	10		1	10	0		0	0	0		12	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	7	10		1	10	0		0	0	0		12	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		6.4	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.5	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		17	xxxx	xxxxx		xxxx	xxxx	xxxxx		24	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		1614	xxxx	xxxxx		xxxx	xxxx	xxxxx		998	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		1614	xxxx	xxxxx		xxxx	xxxx	xxxxx		997	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.00	xxxx	xxxx		xxxx	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		7.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.7	xxxx	xxxxx	
LOS by Move:	*	*	*		A	*	*		*	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		7.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		A	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				8.7			
ApproachLOS:	*				*				*				A			

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[8.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1!	0	0	0	0 0	0	0	0	0 0	0 1	0	0	1	0 0	0
Volume Module:																
Base Vol:	3	0	2	0	0	0	0	22	6	1	34	0				
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10				
Initial Bse:	3	0	2	0	0	0	0	24	7	1	37	0				
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	3	0	2	0	0	0	0	24	7	1	37	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:	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 Volume:	3	0	2	0	0	0	0	24	7	1	37	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	3	0	2	0	0	0	0	24	7	1	37	0				
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	67	xxxx	28	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	31	xxxx	xxxxx				
Potent Cap.:	943	xxxx	1054	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1595	xxxx	xxxxx				
Move Cap.:	943	xxxx	1054	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1595	xxxx	xxxxx				
Volume/Cap:	0.00	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	984	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				
Shrd StpDel:	xxxxx	8.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx				
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*				
ApproachDel:		8.7			xxxxxx			xxxxxx			xxxxxx					
ApproachLOS:		A			*			*			*					

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 4.4 Worst Case Level Of Service: A[9.0]

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	1	0	0	1 0	0	0	0	0 0	1! 0	0	0	0 0	1! 0	0
Volume Module:																
Base Vol:	0	2	4		2	4	0		0	0	0		8	0	1	
Growth Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
Initial Bse:	0	2	4		2	4	0		0	0	0		9	0	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:	0	2	4		2	4	0		0	0	0		9	0	1	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	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 Volume:	0	2	4		2	4	0		0	0	0		9	0	1	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	2	4		2	4	0		0	0	0		9	0	1	
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2		7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx			4.1	xxxx	xxxxx	
FollowUpTim:	xxxxx	4.0	3.3		3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx			2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	19	0		21	18	xxxxx	xxxx	xxxx	xxxxx			0	xxxx	xxxxx	
Potent Cap.:	xxxx	879	0		996	880	xxxxx	xxxx	xxxx	xxxxx			0	xxxx	xxxxx	
Move Cap.:	xxxx	879	0		994	880	xxxxx	xxxx	xxxx	xxxxx			0	xxxx	xxxxx	
Volume/Cap:	xxxx	0.00	0.00		0.00	0.01	xxxx	xxxx	xxxx	xxxx			0.00	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*	*	*	*			A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	2638		915	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	0.0		0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	6.4		9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	A		A	*	*	*	*	*			*	*	*	
ApproachDel:	6.4				9.0			xxxxxx					xxxxxx			
ApproachLOS:	A				A			*					*			

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

Intersection #13 SR-43/Poso Ave

Cycle (sec):	100	Critical Vol./Cap. (X):	0.364				
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	11.2				
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:	1 0	1	1	0	1 0	1	1	0	1 0	1	0	1	0 1	0	0	1
Volume Module:																
Base Vol:	23	414	0		0	411	4		4	0	23		0	0	1	
Growth Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
Initial Bse:	25	455	0		0	452	4		4	0	25		0	0	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:	25	455	0		0	452	4		4	0	25		0	0	1	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	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 Volume:	25	455	0		0	452	4		4	0	25		0	0	1	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	25	455	0		0	452	4		4	0	25		0	0	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	
Final Vol.:	25	455	0		0	452	4		4	0	25		0	0	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:	1.00	2.00	0.00		1.00	1.98	0.02		1.00	1.00	1.00		0.00	1.00	1.00	
Final Sat.:	577	1260	0		0	1241	12		449	0	529		0	0	555	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.36	xxxx		xxxx	0.36	0.36		0.01	xxxx	0.05		xxxx	xxxx	0.00	
Crit Moves:		****				****					****				****	
Delay/Veh:	9.0	11.3	0.0		0.0	11.4	11.3		10.1	0.0	9.1		0.0	0.0	8.6	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	9.0	11.3	0.0		0.0	11.4	11.3		10.1	0.0	9.1		0.0	0.0	8.6	
LOS by Move:	A	B	*		*	B	B		B	*	A		*	*	A	
ApproachDel:		11.1				11.4				9.3				8.6		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		11.1				11.4				9.3				8.6		
LOS by Appr:		B				B				A				A		

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

Intersection #14 SR-43/Kimberlina Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.259
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 24.1
Optimal Cycle: 25 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1 0	1	1	0	1 0	1	1	0	0 0	1!	0	0	0 0	1!	0	0
Volume Module:																
Base Vol:	129	264	17		88	229	4		5	73	95		20	91	39	
Growth Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
Initial Bse:	142	290	19		97	252	4		6	80	105		22	100	43	
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:	142	290	19		97	252	4		6	80	105		22	100	43	
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:	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 Volume:	142	290	19		97	252	4		6	80	105		22	100	43	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	142	290	19		97	252	4		6	80	105		22	100	43	
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 Vol.:	142	290	19		97	252	4		6	80	104		22	100	43	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.94	0.94		0.95	0.95	0.95		0.92	0.92	0.92		0.92	0.92	0.92	
Lanes:	1.00	1.88	0.12		1.00	1.97	0.03		0.03	0.42	0.55		0.13	0.61	0.26	
Final Sat.:	1805	3361	216		1805	3537	62		51	738	960		234	1064	456	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.09	0.09		0.05	0.07	0.07		0.11	0.11	0.11		0.09	0.09	0.09	
Crit Moves:	****					****				****						
Green/Cycle:	0.30	0.36	0.36		0.22	0.28	0.28		0.42	0.42	0.42		0.42	0.42	0.42	
Volume/Cap:	0.26	0.24	0.24		0.24	0.26	0.26		0.26	0.26	0.26		0.22	0.22	0.22	
Uniform Del:	26.3	22.6	22.6		32.0	28.3	28.3		18.8	18.8	18.8		18.5	18.5	18.5	
IncremntDel:	0.3	0.1	0.1		0.3	0.1	0.1		0.2	0.2	0.2		0.2	0.2	0.2	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	26.5	22.7	22.7		32.3	28.4	28.4		19.0	19.0	19.0		18.7	18.7	18.7	
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:	26.5	22.7	22.7		32.3	28.4	28.4		19.0	19.0	19.0		18.7	18.7	18.7	
HCM2kAvg:	3	3	3		3	3	4		4	4	4		3	3	3	

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

Intersection #15 SR-43/Shafter Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.242
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.9
Optimal Cycle: 19 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						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	1	0	2	0	1		1	0	1	1	0		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	40	330	44				74	347	92				84	129	22				41	107	63			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	44	363	48				81	382	101				92	142	24				45	118	69			
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:	44	363	48				81	382	101				92	142	24				45	118	69			
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:	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 Volume:	44	363	48				81	382	101				92	142	24				45	118	69			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	44	363	48				81	382	101				92	142	24				45	118	69			
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 Vol.:	44	363	48				81	382	101				92	142	24				45	118	69			
Saturation Flow Module:																								
Sat/Lane:	1900	1900	1900				1900	1900	1900				1900	1900	1900				1900	1900	1900			
Adjustment:	0.41	0.95	0.85				0.49	0.92	0.92				0.54	0.98	0.98				0.56	0.94	0.94			
Lanes:	1.00	2.00	1.00				1.00	1.58	0.42				1.00	0.85	0.15				1.00	0.63	0.37			
Final Sat.:	787	3610	1615				923	2765	733				1018	1587	271				1062	1129	665			
Capacity Analysis Module:																								
Vol/Sat:	0.06	0.10	0.03				0.09	0.14	0.14				0.09	0.09	0.09				0.04	0.10	0.10			
Crit Moves:								****												****				
Green/Cycle:	0.57	0.57	0.57				0.57	0.57	0.57				0.43	0.43	0.43				0.43	0.43	0.43			
Volume/Cap:	0.10	0.18	0.05				0.15	0.24	0.24				0.21	0.21	0.21				0.10	0.24	0.24			
Uniform Del:	9.8	10.3	9.5				10.2	10.7	10.7				17.8	17.8	17.8				16.9	18.1	18.1			
IncremntDel:	0.1	0.0	0.0				0.1	0.1	0.1				0.2	0.1	0.1				0.1	0.2	0.2			
Delay Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Delay/Veh:	9.9	10.3	9.6				10.3	10.8	10.8				18.1	18.0	18.0				17.0	18.3	18.3			
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:	9.9	10.3	9.6				10.3	10.8	10.8				18.1	18.0	18.0				17.0	18.3	18.3			
HCM2kAvg:	1	3	1				2	4	4				3	3	3				1	4	4			

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

Intersection #16 Sr-43/Central Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.185
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.1
Optimal Cycle: 18 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:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	1 0
Volume Module:												
Base Vol:	14	412	24	46	387	18	9	61	11	26	93	29
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	15	453	26	51	426	20	10	67	12	29	102	32
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:	15	453	26	51	426	20	10	67	12	29	102	32
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:	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 Volume:	15	453	26	51	426	20	10	67	12	29	102	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	453	26	51	426	20	10	67	12	29	102	32
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 Vol.:	15	453	26	51	426	20	10	67	12	29	102	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.46	0.94	0.94	0.44	0.94	0.94	0.95	0.95	0.95	0.84	0.84	0.84
Lanes:	1.00	1.89	0.11	1.00	1.91	0.09	0.11	0.75	0.14	0.35	1.26	0.39
Final Sat.:	880	3384	197	844	3425	159	202	1366	246	559	1998	623
Capacity Analysis Module:												
Vol/Sat:	0.02	0.13	0.13	0.06	0.12	0.12	0.05	0.05	0.05	0.05	0.05	0.05
Crit Moves:		****									****	
Green/Cycle:	0.72	0.72	0.72	0.72	0.72	0.72	0.28	0.28	0.28	0.28	0.28	0.28
Volume/Cap:	0.02	0.19	0.19	0.08	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19
Uniform Del:	3.9	4.4	4.4	4.1	4.4	4.4	27.5	27.5	27.5	27.6	27.6	27.6
IncremntDel:	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.2	0.1	0.1	0.1
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
Delay/Veh:	3.9	4.5	4.5	4.1	4.4	4.4	27.7	27.7	27.7	27.7	27.7	27.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	3.9	4.5	4.5	4.1	4.4	4.4	27.7	27.7	27.7	27.7	27.7	27.7
HCM2kAvg:	0	2	2	1	2	2	2	2	2	2	2	2

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

Intersection #17 SR-43/Lerdo Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.325
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 22.3
Optimal Cycle: 28 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 1 1	0 1		0 1 0	1 0	
Volume Module:												
Base Vol:	41	307	58	145	240	17	20	246	50	64	124	127
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	45	338	64	160	264	19	22	271	55	70	136	140
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:	45	338	64	160	264	19	22	271	55	70	136	140
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:	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 Volume:	45	338	64	160	264	19	22	271	55	70	136	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	338	64	160	264	19	22	271	55	70	136	140
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 Vol.:	45	338	64	160	264	19	22	271	55	70	136	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.87	0.87	0.85	0.75	0.75	0.75
Lanes:	1.00	1.68	0.32	1.00	1.87	0.13	0.15	1.85	1.00	0.41	0.79	0.80
Final Sat.:	1805	2963	560	1805	3337	236	249	3065	1615	576	1115	1142
Capacity Analysis Module:												
Vol/Sat:	0.02	0.11	0.11	0.09	0.08	0.08	0.09	0.09	0.03	0.12	0.12	0.12
Crit Moves:		****		****							****	
Green/Cycle:	0.15	0.35	0.35	0.27	0.47	0.47	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.17	0.32	0.32	0.32	0.17	0.17	0.23	0.23	0.09	0.32	0.32	0.32
Uniform Del:	37.1	23.8	23.8	29.0	15.0	15.0	21.3	21.3	20.1	22.1	22.1	22.1
IncremntDel:	0.3	0.2	0.2	0.4	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	37.4	23.9	23.9	29.4	15.1	15.1	21.4	21.4	20.2	22.3	22.3	22.3
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:	37.4	23.9	23.9	29.4	15.1	15.1	21.4	21.4	20.2	22.3	22.3	22.3
HCM2kAvg:	1	5	5	4	2	2	3	3	1	5	5	5

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

Intersection #18 SR-43/7th Standard Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.478
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	12.4
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	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	50	128	73	33	136	32	13	78	42	47	163	42
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	55	141	80	36	150	35	14	86	46	52	179	46
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:	55	141	80	36	150	35	14	86	46	52	179	46
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:	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 Volume:	55	141	80	36	150	35	14	86	46	52	179	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	141	80	36	150	35	14	86	46	52	179	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
Final Vol.:	55	141	80	36	150	35	14	86	46	52	179	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.51	0.29	0.20	0.80	1.00	0.10	0.59	0.31	0.22	0.78	1.00
Final Sat.:	115	295	168	107	440	621	52	314	169	123	425	623
Capacity Analysis Module:												
Vol/Sat:	0.48	0.48	0.48	0.34	0.34	0.06	0.27	0.27	0.27	0.42	0.42	0.07
Crit Moves:	****			****			****				****	
Delay/Veh:	13.9	13.9	13.9	11.9	11.9	8.4	11.3	11.3	11.3	13.1	13.1	8.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.9	13.9	13.9	11.9	11.9	8.4	11.3	11.3	11.3	13.1	13.1	8.6
LOS by Move:	B	B	B	B	B	A	B	B	B	B	B	A
ApproachDel:	13.9			11.3			11.3			12.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.9			11.3			11.3			12.3		
LOS by Appr:	B			B			B			B		

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

Intersection #19 SR-43/SR-58 (Rosedal Highway West)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.421
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
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:	1 0 1	0 0		0 0 0	1 0		1 0 0	0 1		0 0 0	0 0	
Volume Module:												
Base Vol:	164	238	0	0	163	93	77	0	142	0	0	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	180	262	0	0	179	102	85	0	156	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	180	262	0	0	179	102	85	0	156	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:	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 Volume:	180	262	0	0	179	102	85	0	156	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	262	0	0	179	102	85	0	156	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 Vol.:	180	262	0	0	179	102	85	0	156	0	0	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:	1.00	1.00	0.00	0.00	0.64	0.36	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	591	644	0	0	426	243	514	0	619	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.31	0.41	xxxx	xxxx	0.42	0.42	0.16	xxxx	0.25	xxxx	xxxx	xxxx
Crit Moves:		****				****			****			
Delay/Veh:	11.2	11.7	0.0	0.0	11.9	11.9	10.6	0.0	9.9	0.0	0.0	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:	11.2	11.7	0.0	0.0	11.9	11.9	10.6	0.0	9.9	0.0	0.0	0.0
LOS by Move:	B	B	*	*	B	B	B	*	A	*	*	*
ApproachDel:	11.5			11.9			10.1			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	11.5			11.9			10.1			xxxxxx		
LOS by Appr:	B			B			B			*		

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

Intersection #20 SR-43/SR-58 (Rosedal Highway East)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.356
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
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:	1 0 1	0	1	1 0 1	0	1	0 0 1!	0	0	0 1 0	0	1
Volume Module:												
Base Vol:	7	168	30	124	171	5	9	5	20	95	13	207
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	8	185	33	136	188	6	10	6	22	105	14	228
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:	8	185	33	136	188	6	10	6	22	105	14	228
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:	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 Volume:	8	185	33	136	188	6	10	6	22	105	14	228
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	185	33	136	188	6	10	6	22	105	14	228
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 Vol.:	8	185	33	136	188	6	10	6	22	104	14	228
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	0.26	0.15	0.59	0.88	0.12	1.00
Final Sat.:	494	535	592	517	558	620	140	78	310	466	64	639
Capacity Analysis Module:												
Vol/Sat:	0.02	0.35	0.06	0.26	0.34	0.01	0.07	0.07	0.07	0.22	0.22	0.36
Crit Moves:		****			****			****				****
Delay/Veh:	9.7	12.3	8.7	11.7	11.8	8.2	9.7	9.7	9.7	11.0	11.0	10.8
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:	9.7	12.3	8.7	11.7	11.8	8.2	9.7	9.7	9.7	11.0	11.0	10.8
LOS by Move:	A	B	A	B	B	A	A	A	A	B	B	B
ApproachDel:		11.7			11.7			9.7			10.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.7			11.7			9.7			10.9	
LOS by Appr:		B			B			A			B	

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

Intersection #21 H St/9th St

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: A[8.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	32	3	2	24	0	0	0	0	3	0	14
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	35	3	2	26	0	0	0	0	3	0	15
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	35	3	2	26	0	0	0	0	3	0	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	0	35	3	2	26	0	0	0	0	3	0	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	35	3	2	26	0	0	0	0	3	0	15
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	39	xxxx	xxxxx	xxxx	xxxx	xxxxx	68	xxxx	37
Potent Cap.:	xxxx	xxxx	xxxxx	1585	xxxx	xxxxx	xxxx	xxxx	xxxxx	942	xxxx	1041
Move Cap.:	xxxx	xxxx	xxxxx	1585	xxxx	xxxxx	xxxx	xxxx	xxxxx	941	xxxx	1041
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	0.01
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	0.0
Stopped Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	8.5
LOS by Move:	*	*	*	A	*	*	*	*	*	A	*	A
Movement:	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	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.6		
ApproachLOS:	*			*			*			A		

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

Intersection #22 H St/Wasco Ave

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: A[8.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		1	0	0	0	1		1	0	1	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0	0	0				1	0	37				35	79	0				0	54	0			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	0	0	0				1	0	41				39	87	0				0	59	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				1	0	41				39	87	0				0	59	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:	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 Volume:	0	0	0				1	0	41				39	87	0				0	59	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				1	0	41				39	87	0				0	59	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				223	xxxx	59				59	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				769	xxxx	1012				1557	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				755	xxxx	1012				1557	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.00	xxxx	0.04				0.02	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.0	xxxx	0.1				0.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				9.8	xxxx	8.7				7.4	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				A	*	A				A	*	*				*	*	*			
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						8.7						xxxxxx						xxxxxx					
ApproachLOS:	*						A						*						*					

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

Intersection #23 Wasco Ave/Poso Ave

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: B[10.4]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	1
Volume Module:																				
Base Vol:	10	23	0			3	32	58			75	6	14			0	0	2		
Growth Adj:	1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10		
Initial Bse:	11	25	0			3	35	64			83	7	15			0	0	2		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	11	25	0			3	35	64			83	7	15			0	0	2		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	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 Volume:	11	25	0			3	35	64			83	7	15			0	0	2		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	11	25	0			3	35	64			83	7	15			0	0	2		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	xxxxx			7.1	6.5	6.2			4.1	xxxx	xxxxx			xxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	xxxxx			3.5	4.0	3.3			2.2	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	189	174	xxxxx			192	187	0			2	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Potent Cap.:	775	723	xxxxx			772	711	0			1633	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Move Cap.:	715	685	xxxxx			720	673	0			1633	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Volume/Cap:	0.02	0.04	xxxx			0.00	0.05	0.00			0.05	xxxx	xxxx			xxxx	xxxx	xxxx		
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx			0.0	xxxx	xxxxx			0.2	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Stopped Del:	10.1	xxxx	xxxxx			10.0	xxxx	xxxxx			7.3	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
LOS by Move:	B	*	*			B	*	*			A	*	*			*	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	685			xxxx	xxxx	1894			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	0.1			xxxxx	xxxx	0.2			0.2	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	10.5			xxxxx	xxxx	7.0			7.3	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	B			*	*	A			A	*	*			*	*	*		
ApproachDel:	10.4					7.1					xxxxxx					xxxxxx				
ApproachLOS:	B					A					*					*				

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

Intersection #24 Wasco Ave/Kimberlina Rd

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0				0 0 0 1 0			
Volume Module:														
Base Vol:	0	0	0	27	0	19	17	163	0	0	138	17		
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10		
Initial Bse:	0	0	0	30	0	21	19	179	0	0	152	19		
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	0	0	0	30	0	21	19	179	0	0	152	19		
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:	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 Volume:	0	0	0	30	0	21	19	179	0	0	152	19		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Final Vol.:	0	0	0	30	0	21	19	179	0	0	152	19		
Critical Gap Module:														
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:														
Cnflict Vol:	xxxx	xxxx	xxxxx	378	xxxx	161	171	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx	628	xxxx	889	1419	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx	621	xxxx	889	1419	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:														
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*		
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	710	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.5	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*		
ApproachDel:	xxxxxx			10.5			xxxxxx			xxxxxx				
ApproachLOS:	*			B			*			*				

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

Intersection #25 J St/9th St

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[8.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	2	0	0		0	0	1	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	71		0		0	0	64		7		0	0		1		0	0		0				
Growth Adj:	1.10	1.10		1.10		1.10	1.10	1.10		1.10		1.10	1.10		1.10		1.10	1.10		1.10				
Initial Bse:	0	78		0		0	0	70		8		0	0		1		0	0		0				
Added Vol:	0	0		0		0	0	0		0		0	0		0		0	0		0				
PasserByVol:	0	0		0		0	0	0		0		0	0		0		0	0		0				
Initial Fut:	0	78		0		0	0	70		8		0	0		1		0	0		0				
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00				
PHF Adj:	1.00	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 Volume:	0	78		0		0	0	70		8		0	0		1		0	0		0				
Reduct Vol:	0	0		0		0	0	0		0		0	0		0		0	0		0				
Final Vol.:	0	78		0		0	0	70		8		0	0		1		0	0		0				
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx		6.9	xxxxx		xxxx		xxxxx		
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx		3.3	xxxxx		xxxx		xxxxx		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxx		39	xxxx		xxxx		xxxxx		
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxx		1030	xxxx		xxxx		xxxxx		
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxx		1030	xxxx		xxxx		xxxxx		
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		0.00	xxxx		xxxx		xxxx		
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx		0.0	xxxxx		xxxx		xxxxx		
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx		8.5	xxxxx		xxxx		xxxxx		
LOS by Move:	*	*		*		*	*	*		*		*	*		*		A	*		*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx				
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxxx		xxxxx	xxxxx		xxxxx				
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxxx		xxxxx	xxxxx		xxxxx				
Shared LOS:	*	*		*		*	*	*		*		*	*		*		*	*		*				
ApproachDel:	xxxxxx			xxxxxx			8.5			xxxxxx														
ApproachLOS:	*			*			A			*														

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

Intersection #70 Wasco Way/SR-58

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: B[14.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	0 1	0	1	0 1	0	1
Volume Module:												
Base Vol:	39	29	10	3	5	5	29	363	58	5	46	2
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	43	32	11	3	6	6	32	399	64	6	51	2
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:	43	32	11	3	6	6	32	399	64	6	51	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	43	32	11	3	6	6	32	399	64	6	51	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	43	32	11	3	6	6	32	399	64	6	51	2
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:												
Cnflict Vol:	531	527	399	578	589	51	53	xxxx	xxxxx	463	xxxx	xxxxx
Potent Cap.:	462	459	655	430	424	1023	1566	xxxx	xxxxx	1109	xxxx	xxxxx
Move Cap.:	446	447	655	392	413	1023	1566	xxxx	xxxxx	1109	xxxx	xxxxx
Volume/Cap:	0.10	0.07	0.02	0.01	0.01	0.01	0.02	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	466	xxxxx	xxxx	527	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	0.1	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	14.5	xxxxx	xxxxx	12.0	xxxxx	7.3	xxxx	xxxxx	8.3	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	A	*	*
ApproachDel:	14.5			12.0			xxxxxx			xxxxxx		
ApproachLOS:	B			B			*			*		

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in	
# 1 I-5 NB Ramp / Stockdale Hwy	B	12.0	0.000	B	12.0	0.000	+ 0.000	D/V
# 2 I-5 SB Ramp / Stockdale Hwy	B	14.3	0.000	B	14.3	0.000	+ 0.000	D/V
# 3 I-5 NB Ramp / SR 119	C	19.7	0.000	C	19.7	0.000	+ 0.000	D/V
# 4 I-5 SB Ramp / SR 119	C	20.4	0.000	C	20.4	0.000	+ 0.000	D/V
# 5 SR 119 / SR 43	C	24.2	0.628	C	24.2	0.628	+ 0.000	D/V
# 6 Stockdale Hwy/SR 43	E	36.4	0.953	E	36.4	0.953	+ 0.000	V/C
# 7 Stockdale Hwy / Morris Rd	A	9.5	0.000	A	9.5	0.000	+ 0.000	D/V
# 8 Tupman Rd / SR 119	F	105.5	0.000	F	105.5	0.000	+ 0.000	D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.038	A	7.0	0.038	+ 0.000	V/C
# 10 Station Rd/Tupman Rd	A	8.6	0.000	A	8.6	0.000	+ 0.000	D/V
# 11 Stockdale/Dairy	A	9.8	0.000	A	9.8	0.000	+ 0.000	D/V
# 12 Dairy/Adohr	A	8.9	0.000	A	8.9	0.000	+ 0.000	D/V
# 13 SR-43/Poso Ave	B	12.4	0.453	B	12.4	0.453	+ 0.000	V/C
# 14 SR-43/Kimberlina Rd	C	21.2	0.324	C	21.2	0.324	+ 0.000	D/V
# 15 SR-43/Shafter Ave	B	13.2	0.319	B	13.2	0.319	+ 0.000	D/V
# 16 Sr-43/Central Ave	B	10.5	0.242	B	10.5	0.242	+ 0.000	D/V
# 17 SR-43/Lerdo Hwy	C	21.8	0.363	C	21.8	0.363	+ 0.000	D/V
# 18 SR-43/7th Standard Rd	D	27.5	0.905	D	27.5	0.905	+ 0.000	V/C
# 19 SR-43/SR-58 (Rosedal Highway W	C	15.4	0.658	C	15.4	0.658	+ 0.000	V/C
# 20 SR-43/SR-58 (Rosedal Highway E	C	17.2	0.759	C	17.2	0.759	+ 0.000	V/C
# 21 H St/9th St	A	8.7	0.000	A	8.7	0.000	+ 0.000	D/V
# 22 H St/Wasco Ave	A	9.0	0.000	A	9.0	0.000	+ 0.000	D/V
# 23 Wasco Ave/Poso Ave	B	10.8	0.000	B	10.8	0.000	+ 0.000	D/V
# 24 Wasco Ave/Kimberlina Rd	B	10.4	0.000	B	10.4	0.000	+ 0.000	D/V
# 25 J St/9th St	A	8.6	0.000	A	8.6	0.000	+ 0.000	D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 70 Wasco Way/SR-58	B	14.3	0.000	B	14.3	0.000	+ 0.000 D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 0.7 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:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1!	0	0	0	0 0	0	0	0	1 0	0	0	0	0 1	0	1
Volume Module:																
Base Vol:	3	0	31	0	0	0	3	466	0	0	55	67				
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10				
Initial Bse:	3	0	34	0	0	0	3	513	0	0	61	74				
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:	3	0	34	0	0	0	3	513	0	0	61	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:	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 Volume:	3	0	34	0	0	0	3	513	0	0	61	74				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	3	0	34	0	0	0	3	513	0	0	61	74				
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	617	xxxx	513	xxxx	xxxx	xxxxx	134	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	457	xxxx	566	xxxx	xxxx	xxxxx	1463	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	456	xxxx	566	xxxx	xxxx	xxxxx	1463	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	0.06	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	554	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	12.0	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	B	*	*	*	*	A	*	*	*	*	*				
ApproachDel:	12.0			xxxxxx			xxxxxx			xxxxxx						
ApproachLOS:	B			*			*			*						

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 7.4 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	0	0	0		0	0	1!	0	0		0	0	1	0	1		0	1	0	0	0	
Volume Module:																								
Base Vol:	0	0	0				262	1	1				0	204	9				20	38	0			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	0	0	0				288	1	1				0	224	10				22	42	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				288	1	1				0	224	10				22	42	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:	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 Volume:	0	0	0				288	1	1				0	224	10				22	42	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				288	1	1				0	224	10				22	42	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	6.5	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	4.0	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				315	320	42				xxxx	xxxx	xxxxx				234	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				682	600	1035				xxxx	xxxx	xxxxx				1345	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				673	590	1035				xxxx	xxxx	xxxxx				1345	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.43	0.00	0.00				xxxx	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										7.7	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	*	*	*										A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	674	xxxxx	xxxx	xxxx	xxxxx										xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	2.2	xxxxx	xxxxx	xxxx	xxxxx										0.0	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	14.3	xxxxx	xxxxx	xxxx	xxxxx										7.7	xxxx	xxxxx			
Shared LOS:	*	*	*	*	B	*	*	*	*										A	*	*			
ApproachDel:	xxxxxx			14.3			xxxxxx												xxxxxx					
ApproachLOS:	*			B			*												*					

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.7]

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	0	0 0 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	13	0	6	0	0	0	0	770	2	0	223	11
Growth Adj:	1.10 1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	14	0	7	0	0	0	0	847	2	0	245	12
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:	14	0	7	0	0	0	0	847	2	0	245	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	1.00
PHF Adj:	1.00 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 Volume:	14	0	7	0	0	0	0	847	2	0	245	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	14	0	7	0	0	0	0	847	2	0	245	12
Critical Gap Module:												
Critical Gp:	6.4 xxxx		6.2	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
FollowUpTim:	3.5 xxxx		3.3	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	1099 xxxx		848	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
Potent Cap.:	237 xxxx		364	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
Move Cap.:	237 xxxx		364	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
Volume/Cap:	0.06 xxxx		0.02	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		xxxx
Level Of Service Module:												
Queue:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Stopped Del:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR	-	RT	LT - LTR	-	RT	LT - LTR	-	RT	LT - LTR	-	RT
Shared Cap.:	xxxx	267	xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shrd StpDel:	xxxxx	19.7	xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	19.7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.4]

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 1 0 0 1			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	45	0	13	0	721	42	1	238	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	50	0	14	0	793	46	1	262	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	50	0	14	0	793	46	1	262	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:	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 Volume:	0	0	0	50	0	14	0	793	46	1	262	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	50	0	14	0	793	46	1	262	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1080	xxxx	262	xxxx	xxxx	xxxxx	839	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	244	xxxx	782	xxxx	xxxx	xxxxx	804	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	243	xxxx	782	xxxx	xxxx	xxxxx	804	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.20	xxxx	0.02	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	243	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	23.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
Shared LOS:	*	*	*	C	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			20.4			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

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

Intersection #5 SR 119 / SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.628
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.2
Optimal Cycle: 51 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:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	37	85	77	4	39	175	466	663	19	24	201	1
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	41	94	85	4	43	193	513	729	21	26	221	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:	41	94	85	4	43	193	513	729	21	26	221	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:	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 Volume:	41	94	85	4	43	193	513	729	21	26	221	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	94	85	4	43	193	513	729	21	26	221	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
Final Vol.:	41	94	85	4	43	193	513	729	21	26	221	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.40	0.93	0.93	0.51	0.88	0.88	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.52	0.48	1.00	0.18	0.82	1.00	0.97	0.03	1.00	0.99	0.01
Final Sat.:	760	926	839	971	304	1363	1805	1840	53	1805	1889	9
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.10	0.00	0.14	0.14	0.28	0.40	0.40	0.01	0.12	0.12
Crit Moves:					****			****		****		
Green/Cycle:	0.23	0.23	0.23	0.23	0.23	0.23	0.46	0.63	0.63	0.02	0.19	0.19
Volume/Cap:	0.24	0.45	0.45	0.02	0.63	0.63	0.61	0.63	0.63	0.63	0.61	0.61
Uniform Del:	31.7	33.4	33.4	30.2	35.0	35.0	20.1	11.2	11.2	48.4	37.0	37.0
IncremntDel:	0.7	0.8	0.8	0.0	3.4	3.4	1.3	1.1	1.1	26.4	3.1	3.1
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
Delay/Veh:	32.4	34.2	34.2	30.2	38.3	38.3	21.4	12.3	12.3	74.8	40.1	40.1
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:	32.4	34.2	34.2	30.2	38.3	38.3	21.4	12.3	12.3	74.8	40.1	40.1
HCM2kAvg:	3	5	5	0	8	7	13	14	13	2	7	4

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec):	100	Critical Vol./Cap. (X):	0.953
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	36.4
Optimal Cycle:	0	Level Of Service:	E

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
Lanes:	0	0	0	1 0	0	0	1!	0 0	0	0	1!	0 0	0	0	1!	0 0
Volume Module:																
Base Vol:	0	277	147		80	164	18		41	421	2		49	54	19	
Growth Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
Initial Bse:	0	305	162		88	180	20		45	463	2		54	59	21	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	305	162		88	180	20		45	463	2		54	59	21	
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:	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 Volume:	0	305	162		88	180	20		45	463	2		54	59	21	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	305	162		88	180	20		45	463	2		54	59	21	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	0	305	162		88	180	20		45	463	2		54	59	21	
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:	0.00	0.65	0.35		0.30	0.63	0.07		0.09	0.90	0.01		0.40	0.44	0.16	
Final Sat.:	0	349	185		145	298	33		47	486	2		170	187	66	
Capacity Analysis Module:																
Vol/Sat:	xxxx	0.87	0.87		0.61	0.61	0.61		0.95	0.95	0.95		0.32	0.32	0.32	
Crit Moves:		****				****			****					****		
Delay/Veh:	0.0	36.5	36.5		19.5	19.5	19.5		51.9	51.9	51.9		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:	0.0	36.5	36.5		19.5	19.5	19.5		51.9	51.9	51.9		13.8	13.8	13.8	
LOS by Move:	*	E	E		C	C	C		F	F	F		B	B	B	
ApproachDel:		36.5				19.5				51.9				13.8		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		36.5				19.5				51.9				13.8		
LOS by Appr:		E				C				F				B		

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[9.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 1 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	0	18	0	0	0	1	197	0	3	34	1
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	20	0	0	0	1	217	0	3	37	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:	0	0	20	0	0	0	1	217	0	3	37	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:	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 Volume:	0	0	20	0	0	0	1	217	0	3	37	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	20	0	0	0	1	217	0	3	37	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	217	xxxx	xxxx	xxxxx	39	xxxx	xxxxx	217	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	828	xxxx	xxxx	xxxxx	1585	xxxx	xxxxx	1365	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	828	xxxx	xxxx	xxxxx	1585	xxxx	xxxxx	1365	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	9.5	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	7.6	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	A	*	*	A	*	*
Movement:	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	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	9.5			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: F[105.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 0	1	0		0 0	1!	0 0		1 0	0	1	0	1 0	0	1	0
Volume Module:																
Base Vol:	0	1	27		22	0	6		14	1171	0		11	397	10	
Growth Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
Initial Bse:	0	1	30		24	0	7		15	1288	0		12	437	11	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	1	30		24	0	7		15	1288	0		12	437	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:	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 Volume:	0	1	30		24	0	7		15	1288	0		12	437	11	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	1	30		24	0	7		15	1288	0		12	437	11	
Critical Gap Module:																
Critical Gp:	xxxxx	6.5	6.2		7.1	xxxx	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	xxxxx	4.0	3.3		3.5	xxxx	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	1791	1288		1801	xxxx	442		448	xxxx	xxxxx		1288	xxxx	xxxxx	
Potent Cap.:	xxxx	82	202		63	xxxx	620		1123	xxxx	xxxxx		545	xxxx	xxxxx	
Move Cap.:	xxxx	79	202		51	xxxx	620		1123	xxxx	xxxxx		545	xxxx	xxxxx	
Volume/Cap:	xxxx	0.01	0.15		0.47	xxxx	0.01		0.01	xxxx	xxxx		0.02	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.1	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.2	xxxx	xxxxx		11.8	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		B	*	*	
Movement:	LT	LTR	RT		LT	LTR	RT		LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	xxxx	192		xxxx	64	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	0.6		xxxxx	1.9	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	27.4		xxxxx	105	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	D		*	F	*		*	*	*		*	*	*	
ApproachDel:	27.4				105.5				xxxxxx				xxxxxx			
ApproachLOS:	D				F				*				*			

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.038
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	18	5	3	12	3	4	0	4	1	1	4
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	10	20	6	3	13	3	4	0	4	1	1	4
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:	10	20	6	3	13	3	4	0	4	1	1	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:	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 Volume:	10	20	6	3	13	3	4	0	4	1	1	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	20	6	3	13	3	4	0	4	1	1	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 Vol.:	10	20	6	3	13	3	4	0	4	1	1	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:	0.28	0.56	0.16	0.17	0.66	0.17	0.50	0.00	0.50	0.17	0.17	0.66
Final Sat.:	258	516	143	153	613	153	465	0	465	162	162	648
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.02	0.02	0.02	0.01	xxxx	0.01	0.01	0.01	0.01
Crit Moves:		****			****			****			****	
Delay/Veh:	7.1	7.1	7.1	7.0	7.0	7.0	6.9	0.0	6.9	6.7	6.7	6.7
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:	7.1	7.1	7.1	7.0	7.0	7.0	6.9	0.0	6.9	6.7	6.7	6.7
LOS by Move:	A	A	A	A	A	A	A	*	A	A	A	A
ApproachDel:		7.1			7.0			6.9			6.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.1			7.0			6.9			6.7	
LOS by Appr:		A			A			A			A	

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: A[8.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	1!	0	0		1	0	0	0	0	
Volume Module:																								
Base Vol:	0	4	21				1	6	0				0	0	0				7	0	0			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	0	4	23				1	7	0				0	0	0				8	0	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	4	23				1	7	0				0	0	0				8	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:	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 Volume:	0	4	23				1	7	0				0	0	0				8	0	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	4	23				1	7	0				0	0	0				8	0	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx				6.4	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx				3.5	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				28	xxxx	xxxxx				xxxx	xxxx	xxxxx				25	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				1599	xxxx	xxxxx				xxxx	xxxx	xxxxx				996	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				1599	xxxx	xxxxx				xxxx	xxxx	xxxxx				996	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.00	xxxx	xxxx				xxxx	xxxx	xxxx				0.01	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.6	xxxx	xxxxx			
LOS by Move:	*	*	*				A	*	*				*	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx		0	xxxxx			xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				A	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						8.6					
ApproachLOS:	*						*						*						A					

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: A[9.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 0 1	0	0
Volume Module:												
Base Vol:	4	1	3	0	0	0	0	193	7	0	35	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	4	1	3	0	0	0	0	212	8	0	39	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	1	3	0	0	0	0	212	8	0	39	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:	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 Volume:	4	1	3	0	0	0	0	212	8	0	39	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	1	3	0	0	0	0	212	8	0	39	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	255	255	216	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	738	652	829	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	738	652	829	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT
Shared Cap.:	xxxx	757	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	9.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	*	*	*
ApproachDel:		9.8		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		A		*			*			*		

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: A[8.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	1!	0	0		1	0	0	0	0	
Volume Module:																								
Base Vol:	0	1	6				2	2	0				0	0	0				7	0	0			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	0	1	7				2	2	0				0	0	0				8	0	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	1	7				2	2	0				0	0	0				8	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:	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 Volume:	0	1	7				2	2	0				0	0	0				8	0	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	1	7				2	2	0				0	0	0				8	0	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	6.5	6.2				7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx							4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	4.0	3.3				3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx							2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	15	0				19	15	xxxxx	xxxx	xxxx	xxxxx							0	xxxx	xxxxx			
Potent Cap.:	xxxx	883	0				1000	883	xxxxx	xxxx	xxxx	xxxxx							0	xxxx	xxxxx			
Move Cap.:	xxxx	883	0				999	883	xxxxx	xxxx	xxxx	xxxxx							0	xxxx	xxxxx			
Volume/Cap:	xxxx	0.00	0.00				0.00	0.00	xxxx	xxxx	xxxx	xxxx							0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx	xxxx	xxxxx								0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx	xxxx	xxxxx								0.0	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*	*	*								A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	6180				937	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	0.0				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	5.6				8.9	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	A				A	*	*				*	*	*				*	*	*			
ApproachDel:	5.6						8.9						xxxxxx						xxxxxx					
ApproachLOS:	A						A						*						*					

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

Intersection #13 SR-43/Poso Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.453
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.4
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:	1 0	1	1	0	1 0	1	1	0	1 0	1	0	1	0 1	0	0	1
Volume Module:																
Base Vol:	13	451	0		0	511	3		1	0	15		0	0	0	
Growth Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
Initial Bse:	14	496	0		0	562	3		1	0	17		0	0	0	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	14	496	0		0	562	3		1	0	17		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:	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 Volume:	14	496	0		0	562	3		1	0	17		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	14	496	0		0	562	3		1	0	17		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 Vol.:	14	496	0		0	562	3		1	0	17		0	0	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:	1.00	2.00	0.00		1.00	1.99	0.01		1.00	1.00	1.00		0.00	1.00	1.00	
Final Sat.:	559	1225	0		0	1242	7		430	0	503		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.40	xxxx		xxxx	0.45	0.45		0.00	xxxx	0.03		xxxx	xxxx	xxxx	
Crit Moves:		****				****					****					
Delay/Veh:	9.1	12.1	0.0		0.0	12.8	12.8		10.4	0.0	9.4		0.0	0.0	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:	9.1	12.1	0.0		0.0	12.8	12.8		10.4	0.0	9.4		0.0	0.0	0.0	
LOS by Move:	A	B	*		*	B	B		B	*	A		*	*	*	
ApproachDel:		12.1				12.8				9.4				xxxxxx		
Delay Adj:		1.00				1.00				1.00				xxxxx		
ApprAdjDel:		12.1				12.8				9.4				xxxxxx		
LOS by Appr:		B				B				A				*		

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

Intersection #14 SR-43/Kimberlina Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.324
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.2
Optimal Cycle: 27 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	57	386	27	60	306	6	7	84	160	35	45	98
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	63	425	30	66	337	7	8	92	176	39	50	108
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:	63	425	30	66	337	7	8	92	176	39	50	108
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:	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 Volume:	63	425	30	66	337	7	8	92	176	39	50	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	425	30	66	337	7	8	92	176	39	50	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	63	425	30	66	337	7	8	92	176	39	50	108
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.84	0.84	0.84
Lanes:	1.00	1.87	0.13	1.00	1.96	0.04	0.03	0.33	0.64	0.20	0.25	0.55
Final Sat.:	1805	3340	234	1805	3530	69	48	578	1100	315	405	881
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.04	0.10	0.10	0.16	0.16	0.16	0.12	0.12	0.12
Crit Moves:		****			****			****				
Green/Cycle:	0.14	0.39	0.39	0.11	0.37	0.37	0.49	0.49	0.49	0.49	0.49	0.49
Volume/Cap:	0.26	0.32	0.32	0.32	0.26	0.26	0.32	0.32	0.32	0.25	0.25	0.25
Uniform Del:	38.8	21.1	21.1	40.8	21.9	21.9	15.2	15.2	15.2	14.6	14.6	14.6
IncremntDel:	0.6	0.1	0.1	0.9	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	39.3	21.3	21.3	41.8	22.0	22.0	15.4	15.4	15.4	14.7	14.7	14.7
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:	39.3	21.3	21.3	41.8	22.0	22.0	15.4	15.4	15.4	14.7	14.7	14.7
HCM2kAvg:	2	5	5	2	4	4	5	5	5	4	4	4

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

Intersection #15 SR-43/Shafter Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.319
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.2
Optimal Cycle: 21 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	23	393	30	78	467	106	124	83	17	25	114	76
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	25	432	33	86	514	117	136	91	19	28	125	84
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:	25	432	33	86	514	117	136	91	19	28	125	84
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:	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 Volume:	25	432	33	86	514	117	136	91	19	28	125	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	432	33	86	514	117	136	91	19	28	125	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	25	432	33	86	514	117	136	91	19	28	125	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.34	0.95	0.85	0.44	0.92	0.92	0.52	0.98	0.98	0.63	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	1.63	0.37	1.00	0.83	0.17	1.00	0.60	0.40
Final Sat.:	638	3610	1615	840	2860	649	979	1538	315	1188	1072	714
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.02	0.10	0.18	0.18	0.14	0.06	0.06	0.02	0.12	0.12
Crit Moves:					****		****					
Green/Cycle:	0.56	0.56	0.56	0.56	0.56	0.56	0.44	0.44	0.44	0.44	0.44	0.44
Volume/Cap:	0.07	0.21	0.04	0.18	0.32	0.32	0.32	0.14	0.14	0.05	0.27	0.27
Uniform Del:	9.9	10.8	9.7	10.6	11.6	11.6	18.4	16.9	16.9	16.2	18.0	18.0
IncremntDel:	0.1	0.1	0.0	0.2	0.1	0.1	0.4	0.1	0.1	0.0	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	10.0	10.9	9.8	10.8	11.7	11.7	18.9	16.9	16.9	16.3	18.1	18.1
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:	10.0	10.9	9.8	10.8	11.7	11.7	18.9	16.9	16.9	16.3	18.1	18.1
HCM2kAvg:	1	3	0	3	5	5	5	2	2	1	4	4

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

Intersection #16 Sr-43/Central Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.242
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 19 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	1 0
Volume Module:												
Base Vol:	40	400	40	43	492	31	21	76	31	39	85	53
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	44	440	44	47	541	34	23	84	34	43	94	58
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:	44	440	44	47	541	34	23	84	34	43	94	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	44	440	44	47	541	34	23	84	34	43	94	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	440	44	47	541	34	23	84	34	43	94	58
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 Vol.:	44	440	44	47	541	34	23	84	34	43	94	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.39	0.94	0.94	0.43	0.94	0.94	0.91	0.91	0.91	0.80	0.80	0.80
Lanes:	1.00	1.82	0.18	1.00	1.88	0.12	0.16	0.60	0.24	0.44	0.96	0.60
Final Sat.:	737	3236	324	823	3365	212	285	1032	421	668	1455	907
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.06	0.16	0.16	0.08	0.08	0.08	0.06	0.06	0.06
Crit Moves:					****			****				
Green/Cycle:	0.67	0.67	0.67	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.09	0.20	0.20	0.09	0.24	0.24	0.24	0.24	0.24	0.19	0.19	0.19
Uniform Del:	6.0	6.5	6.5	6.0	6.7	6.7	24.1	24.1	24.1	23.6	23.6	23.6
IncremntDel:	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1
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
Delay/Veh:	6.0	6.5	6.5	6.0	6.7	6.7	24.3	24.3	24.3	23.7	23.7	23.7
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:	6.0	6.5	6.5	6.0	6.7	6.7	24.3	24.3	24.3	23.7	23.7	23.7
HCM2kAvg:	1	3	3	1	4	3	3	3	3	2	2	2

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

Intersection #17 SR-43/Lerdo Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.363
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.8
Optimal Cycle: 29 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	1	0	1	1	0		1	0	1	1	0		0	1	1	0	1		0	1	0	1	0	
Volume Module:																								
Base Vol:	64	271		72			144	318		23			9	344		68			50	230		170		
Growth Adj:	1.10	1.10		1.10			1.10	1.10		1.10			1.10	1.10		1.10			1.10	1.10		1.10		
Initial Bse:	70	298		79			158	350		25			10	378		75			55	253		187		
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:	70	298		79			158	350		25			10	378		75			55	253		187		
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	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 Volume:	70	298		79			158	350		25			10	378		75			55	253		187		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Reduced Vol:	70	298		79			158	350		25			10	378		75			55	253		187		
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 Vol.:	70	298		79			158	350		25			10	378		75			55	253		187		
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900			1900	1900		1900			1900	1900		1900			1900	1900		1900		
Adjustment:	0.95	0.92		0.92			0.95	0.94		0.94			0.90	0.90		0.85			0.78	0.78		0.78		
Lanes:	1.00	1.58		0.42			1.00	1.87		0.13			0.05	1.95		1.00			0.22	1.02		0.76		
Final Sat.:	1805	2764		734			1805	3333		241			87	3321		1615			329	1515		1120		
Capacity Analysis Module:																								
Vol/Sat:	0.04	0.11		0.11			0.09	0.10		0.10			0.11	0.11		0.05			0.17	0.17		0.17		
Crit Moves:		****						****												****				
Green/Cycle:	0.15	0.30		0.30			0.24	0.39		0.39			0.46	0.46		0.46			0.46	0.46		0.46		
Volume/Cap:	0.27	0.36		0.36			0.36	0.27		0.27			0.25	0.25		0.10			0.36	0.36		0.36		
Uniform Del:	37.9	27.7		27.7			31.5	20.6		20.6			16.4	16.4		15.3			17.5	17.5		17.5		
IncremntDel:	0.5	0.2		0.2			0.5	0.1		0.1			0.1	0.1		0.1			0.2	0.2		0.2		
Delay Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Delay/Veh:	38.5	27.9		27.9			32.0	20.7		20.7			16.5	16.5		15.3			17.6	17.6		17.6		
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:	38.5	27.9		27.9			32.0	20.7		20.7			16.5	16.5		15.3			17.6	17.6		17.6		
HCM2kAvg:	2	5		5			4	4		4			4	4		1			6	6		6		

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

Intersection #18 SR-43/7th Standard Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.905
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	27.5
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:	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	22	178	83	73	109	9	26	363	53	67	63	39
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	24	196	91	80	120	10	29	399	58	74	69	43
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:	24	196	91	80	120	10	29	399	58	74	69	43
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:	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 Volume:	24	196	91	80	120	10	29	399	58	74	69	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	196	91	80	120	10	29	399	58	74	69	43
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 Vol.:	24	196	91	80	120	10	29	399	58	74	69	43
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:	0.08	0.63	0.29	0.40	0.60	1.00	0.06	0.82	0.12	0.52	0.48	1.00
Final Sat.:	38	307	143	180	269	506	32	441	64	230	216	507
Capacity Analysis Module:												
Vol/Sat:	0.64	0.64	0.64	0.45	0.45	0.02	0.90	0.90	0.90	0.32	0.32	0.08
Crit Moves:		****			****			****			****	
Delay/Veh:	20.4	20.4	20.4	15.6	15.6	9.5	43.0	43.0	43.0	13.4	13.4	9.8
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:	20.4	20.4	20.4	15.6	15.6	9.5	43.0	43.0	43.0	13.4	13.4	9.8
LOS by Move:	C	C	C	C	C	A	E	E	E	B	B	A
ApproachDel:	20.4			15.3			43.0			12.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	20.4			15.3			43.0			12.5		
LOS by Appr:	C			C			E			B		

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

Intersection #19 SR-43/SR-58 (Rosedal Highway West)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.658
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.4
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:	1 0	1 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	127	253	0	0	191	24	198	0	379	0	0	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	140	278	0	0	210	26	218	0	417	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	278	0	0	210	26	218	0	417	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:	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 Volume:	140	278	0	0	210	26	218	0	417	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	278	0	0	210	26	218	0	417	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 Vol.:	140	278	0	0	210	26	218	0	417	0	0	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:	1.00	1.00	0.00	0.00	0.89	0.11	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	499	539	0	0	489	62	522	0	633	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.28	0.52	xxxx	xxxx	0.43	0.43	0.42	xxxx	0.66	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	12.3	15.6	0.0	0.0	13.8	13.8	14.1	0.0	17.9	0.0	0.0	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:	12.3	15.6	0.0	0.0	13.8	13.8	14.1	0.0	17.9	0.0	0.0	0.0
LOS by Move:	B	C	*	*	B	B	B	*	C	*	*	*
ApproachDel:	14.5			13.8			16.6			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	14.5			13.8			16.6			xxxxxx		
LOS by Appr:	B			B			C			*		

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

Intersection #20 SR-43/SR-58 (Rosedal Highway East)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.759
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 17.2
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:	1 0 1	0	1	1 0 1	0	1	0 0 1!	0	0	0 1 0	0	1
Volume Module:												
Base Vol:	18	220	138	355	202	9	12	16	18	42	13	129
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	20	242	152	391	222	10	13	18	20	46	14	142
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:	20	242	152	391	222	10	13	18	20	46	14	142
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:	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 Volume:	20	242	152	391	222	10	13	18	20	46	14	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	242	152	391	222	10	13	18	20	46	14	142
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 Vol.:	20	242	152	391	222	10	13	18	20	46	14	142
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	0.26	0.35	0.39	0.76	0.24	1.00
Final Sat.:	469	509	560	515	549	608	120	160	180	345	107	525
Capacity Analysis Module:												
Vol/Sat:	0.04	0.48	0.27	0.76	0.40	0.02	0.11	0.11	0.11	0.13	0.13	0.27
Crit Moves:		****		****				****				****
Delay/Veh:	10.4	15.3	11.0	27.5	13.3	8.5	11.0	11.0	11.0	11.3	11.3	11.3
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:	10.4	15.3	11.0	27.5	13.3	8.5	11.0	11.0	11.0	11.3	11.3	11.3
LOS by Move:	B	C	B	D	B	A	B	B	B	B	B	B
ApproachDel:		13.5			22.1			11.0			11.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		13.5			22.1			11.0			11.3	
LOS by Appr:		B			C			B			B	

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

Intersection #21 H St/9th St

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: A[8.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0	40		7			7	51		0			0	0		0			6	0		12		
Growth Adj:	1.10	1.10		1.10			1.10	1.10		1.10			1.10	1.10		1.10			1.10	1.10		1.10		
Initial Bse:	0	44		8			8	56		0			0	0		0			7	0		13		
Added Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
PasserByVol:	0	0		0			0	0		0			0	0		0			0	0		0		
Initial Fut:	0	44		8			8	56		0			0	0		0			7	0		13		
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:	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 Volume:	0	44		8			8	56		0			0	0		0			7	0		13		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Final Vol.:	0	44		8			8	56		0			0	0		0			7	0		13		
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			4.1	xxxx		xxxxx			xxxxx	xxxx		xxxxx			6.4	xxxx		6.2		
FollowUpTim:	xxxxx	xxxx		xxxxx			2.2	xxxx		xxxxx			xxxxx	xxxx		xxxxx			3.5	xxxx		3.3		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			52	xxxx		xxxxx			xxxx	xxxx		xxxxx			119	xxxx		48		
Potent Cap.:	xxxx	xxxx		xxxxx			1567	xxxx		xxxxx			xxxx	xxxx		xxxxx			881	xxxx		1027		
Move Cap.:	xxxx	xxxx		xxxxx			1567	xxxx		xxxxx			xxxx	xxxx		xxxxx			878	xxxx		1027		
Volume/Cap:	xxxx	xxxx		xxxx			0.00	xxxx		xxxx			xxxx	xxxx		xxxx			0.01	xxxx		0.01		
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx			0.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx			0.0	xxxx		0.0		
Stopped Del:	xxxxx	xxxx		xxxxx			7.3	xxxx		xxxxx			xxxxx	xxxx		xxxxx			9.1	xxxx		8.6		
LOS by Move:	*	*		*			A	*		*			*	*		*			A	*		A		
Movement:	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			0.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd StpDel:	xxxxx	xxxx		xxxxx			7.3	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*			A	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						8.7					
ApproachLOS:	*						*						*						A					

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

Intersection #22 H St/Wasco Ave

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: A[9.0]

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	1		1	0	1	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0	0	0	0	0		39	40	60	0	0		106	2										
Growth Adj:	1.10	1.10	1.10	1.10	1.10		1.10	1.10	1.10	1.10	1.10		1.10	1.10										
Initial Bse:	0	0	0	0	0		43	44	66	0	0		117	2										
Added Vol:	0	0	0	0	0		0	0	0	0	0		0	0										
PasserByVol:	0	0	0	0	0		0	0	0	0	0		0	0										
Initial Fut:	0	0	0	0	0		43	44	66	0	0		117	2										
User Adj:	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00										
PHF Adj:	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 Volume:	0	0	0	0	0		43	44	66	0	0		117	2										
Reduct Vol:	0	0	0	0	0		0	0	0	0	0		0	0										
Final Vol.:	0	0	0	0	0		43	44	66	0	0		117	2										
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx											
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx											
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx		117	119	xxxx	xxxxx	xxxx	xxxx	xxxxx											
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx		941	1482	xxxx	xxxxx	xxxx	xxxx	xxxxx											
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx		941	1482	xxxx	xxxxx	xxxx	xxxx	xxxxx											
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx		0.05	0.03	xxxx	xxxx	xxxx	xxxx	xxxx											
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.1	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx											
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		9.0	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx											
LOS by Move:	*	*	*	*	*		A	A	*	*	*	*	*											
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*												
ApproachDel:	xxxxxx			9.0			xxxxxx			xxxxxx														
ApproachLOS:	*			A			*			*														

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

Intersection #23 Wasco Ave/Poso Ave

Average Delay (sec/veh): 8.7 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:	1	0	0	1	0		1	0	0	1	0		0	1	0	0	1		0	0	1!	0	0	
Volume Module:																								
Base Vol:	24	33	0				0	41	122				62	4	12				2	2	2			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	26	36	0				0	45	134				68	4	13				2	2	2			
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:	26	36	0				0	45	134				68	4	13				2	2	2			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	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 Volume:	26	36	0				0	45	134				68	4	13				2	2	2			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	26	36	0				0	45	134				68	4	13				2	2	2			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	xxxxx	xxxxx			6.5	6.2					4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	xxxxx	xxxxx			4.0	3.3					2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	238	150	xxxxx	xxxx			162	3					4	xxxx	xxxxx				18	xxxx	xxxxx			
Potent Cap.:	720	746	xxxxx	xxxx			734	1086					1630	xxxx	xxxxx				1613	xxxx	xxxxx			
Move Cap.:	580	712	xxxxx	xxxx			701	1086					1630	xxxx	xxxxx				1613	xxxx	xxxxx			
Volume/Cap:	0.05	0.05	xxxx	xxxx			0.06	0.12					0.04	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				0.0	xxxx	xxxxx									
Stopped Del:	11.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx				7.2	xxxx	xxxxx									
LOS by Move:	B	*	*	*	*	*	A	*	*				A	*	*									
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	712	xxxx	xxxx	955	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	xxxx	0.2	xxxxx	xxxx	0.7	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd StpDel:	xxxxx	xxxx	10.3	xxxxx	xxxx	9.6	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	B	*	*	A	A	*	*	*	*	*												
ApproachDel:	10.8			9.6			xxxxxx			xxxxxx														
ApproachLOS:	B			A			*			*														

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

Intersection #24 Wasco Ave/Kimberlina Rd

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: B[10.4]

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	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0		0		0		23		0		30		28		142		0		0		150		34	
Growth Adj:	1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10	
Initial Bse:	0		0		0		25		0		33		31		156		0		0		165		37	
Added Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	0		0		0		25		0		33		31		156		0		0		165		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:	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 Volume:	0		0		0		25		0		33		31		156		0		0		165		37	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	0		0		0		25		0		33		31		156		0		0		165		37	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx		6.2			4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx		3.3			2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				402	xxxx		184			202	xxxx	xxxxx		xxxx	xxxx	xxxxx					
Potent Cap.:	xxxx	xxxx	xxxxx				608	xxxx		864			1382	xxxx	xxxxx		xxxx	xxxx	xxxxx					
Move Cap.:	xxxx	xxxx	xxxxx				598	xxxx		864			1382	xxxx	xxxxx		xxxx	xxxx	xxxxx					
Volume/Cap:	xxxx	xxxx	xxxx				0.04	xxxx		0.04			0.02	xxxx	xxxx		xxxx	xxxx	xxxx					
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*		*		*		*		*		*		A		*		*		*		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx		724	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx			0.3	xxxxx					0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx			10.4	xxxxx					7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*		*		*		*		B		*		A		*		*		*		*		*	
ApproachDel:	xxxxxx						10.4						xxxxxx						xxxxxx					
ApproachLOS:	*						B						*						*					

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

Intersection #25 J St/9th St

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[8.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	2	0	0		0	0	1	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	54	0				0	102	8				0	0	1				0	0	0			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	0	59	0				0	112	9				0	0	1				0	0	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	59	0				0	112	9				0	0	1				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:	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 Volume:	0	59	0				0	112	9				0	0	1				0	0	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	59	0				0	112	9				0	0	1				0	0	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxx				6.9		xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxx				3.3		xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx			61		xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx			999		xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx			999		xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx			0.00		xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxx				0.0		xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxx				8.6		xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				*				A		*	*	*			
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						8.6						xxxxxx					
ApproachLOS:	*						*						A						*					

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

Intersection #70 Wasco Way/SR-58

Average Delay (sec/veh): 2.5 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	1!	0	0	0	1	0	0	1	0	1	0	0	1
Volume Module:																				
Base Vol:	19	14	5			5	26	26			27	334	53			9	90	5		
Growth Adj:	1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10		
Initial Bse:	21	15	6			6	29	29			30	367	58			10	99	6		
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:	21	15	6			6	29	29			30	367	58			10	99	6		
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:	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 Volume:	21	15	6			6	29	29			30	367	58			10	99	6		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	21	15	6			6	29	29			30	367	58			10	99	6		
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:																				
Cnflict Vol:	577	551	367			585	604	99			105	xxxx	xxxxx			426	xxxx	xxxxx		
Potent Cap.:	431	445	682			425	415	962			1500	xxxx	xxxxx			1144	xxxx	xxxxx		
Move Cap.:	387	432	682			401	403	962			1500	xxxx	xxxxx			1144	xxxx	xxxxx		
Volume/Cap:	0.05	0.04	0.01			0.01	0.07	0.03			0.02	xxxx	xxxx			0.01	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			0.1	xxxx	xxxxx			0.0	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			7.4	xxxx	xxxxx			8.2	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		428	xxxxx		xxxx		548	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.3	xxxxx		xxxxx		0.4	xxxxx		0.1	xxxx	xxxxx			0.0	xxxx	xxxxx		
Shrd StpDel:	xxxxx		14.3	xxxxx		xxxxx		12.4	xxxxx		7.4	xxxx	xxxxx			8.2	xxxx	xxxxx		
Shared LOS:	*		B	*		*		B	*		A	*	*			A	*	*		
ApproachDel:			14.3					12.4				xxxxxx					xxxxxx			
ApproachLOS:			B					B				*					*			

Appendix B9
Year 2016 Project Construction
Intersection Analysis

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 I-5 NB Ramp / Stockdale Hwy	A	8.9	0.000	B	12.7	0.000	+ 3.844 D/V
# 2 I-5 SB Ramp / Stockdale Hwy	A	9.3	0.000	B	12.0	0.000	+ 2.681 D/V
# 3 I-5 NB Ramp / SR 119	B	11.6	0.000	B	11.6	0.000	+ 0.051 D/V
# 4 I-5 SB Ramp / SR 119	B	12.5	0.000	B	12.6	0.000	+ 0.085 D/V
# 5 SR 119 / SR 43	C	26.2	0.566	C	26.2	0.566	+ 0.000 D/V
# 6 Stockdale Hwy/SR 43	B	12.5	0.563	D	26.5	0.912	+ 0.349 V/C
# 7 Stockdale Hwy / Morris Rd	A	8.8	0.000	B	12.2	0.000	+ 3.343 D/V
# 8 Tupman Rd / SR 119	C	21.9	0.000	C	23.2	0.000	+ 1.336 D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.028	A	7.2	0.052	+ 0.024 V/C
# 10 Station Rd/Tupman Rd	A	8.7	0.000	A	9.3	0.000	+ 0.683 D/V
# 11 Stockdale/Dairy	A	8.7	0.000	B	12.9	0.000	+ 4.191 D/V
# 12 Dairy/Adohr	A	9.0	0.000	B	14.4	0.000	+ 5.466 D/V
# 13 SR-43/Poso Ave	B	11.2	0.364	B	11.2	0.364	+ 0.000 V/C
# 14 SR-43/Kimberlina Rd	C	24.1	0.259	C	24.1	0.259	+ 0.000 D/V
# 15 SR-43/Shafter Ave	B	12.9	0.242	B	12.9	0.242	+ 0.000 D/V
# 16 Sr-43/Central Ave	A	9.1	0.185	A	9.1	0.185	+ 0.000 D/V
# 17 SR-43/Lerdo Hwy	C	22.3	0.325	C	22.3	0.325	+ 0.000 D/V
# 18 SR-43/7th Standard Rd	B	12.4	0.478	B	12.4	0.478	+ 0.000 V/C
# 19 SR-43/SR-58 (Rosedal Highway W	B	11.3	0.421	B	11.6	0.425	+ 0.004 V/C
# 20 SR-43/SR-58 (Rosedal Highway E	B	11.3	0.356	B	11.7	0.421	+ 0.064 V/C
# 21 H St/9th St	A	8.6	0.000	A	8.6	0.000	+ 0.000 D/V
# 22 H St/Wasco Ave	A	8.7	0.000	A	8.7	0.000	+ 0.000 D/V
# 23 Wasco Ave/Poso Ave	B	10.4	0.000	B	10.4	0.000	+ 0.000 D/V
# 24 Wasco Ave/Kimberlina Rd	B	10.5	0.000	B	10.5	0.000	+ 0.000 D/V
# 25 J St/9th St	A	8.5	0.000	A	8.5	0.000	+ 0.000 D/V

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Intersection	Base LOS	Del/ Veh	V/ C	Future LOS	Del/ Veh	V/ C	Change in
# 26 Wasco Way/SR-58	B	14.5	0.000	C	20.0	0.000	+ 5.541 D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: B[12.7]

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	0		0	1	0	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	4	0	25				0	0	0				1	64	0				0	57	154			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	4	0	28				0	0	0				1	70	0				0	63	169			
Added Vol:	79	0	0				0	0	0				34	4	0				0	229	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	83	0	28				0	0	0				35	74	0				0	292	169			
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:	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 Volume:	83	0	28				0	0	0				35	74	0				0	292	169			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	83	0	28				0	0	0				35	74	0				0	292	169			
Critical Gap Module:																								
Critical Gp:	6.4	xxxx	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	521	xxxx	74				xxxx	xxxx	xxxxx				461	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	519	xxxx	993				xxxx	xxxx	xxxxx				1111	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap.:	506	xxxx	993				xxxx	xxxx	xxxxx				1111	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.16	xxxx	0.03				xxxx	xxxx	xxxx				0.03	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				*	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		576	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.7	xxxxx			xxxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx		12.7	xxxxx			xxxxx	xxxx	xxxxx				8.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		B	*			*	*	*				A	*	*				*	*	*			
ApproachDel:			12.7					xxxxxx						xxxxxx						xxxxxx				
ApproachLOS:			B					*						*						*				

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 2.0 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:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	42	1	2	0	27	1	15	47	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	46	1	2	0	30	1	17	52	0
Added Vol:	0	0	0	0	0	34	0	38	38	0	308	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	46	1	36	0	68	39	17	360	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:	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 Volume:	0	0	0	46	1	36	0	68	39	17	360	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	46	1	36	0	68	39	17	360	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	480	500	360	xxxx	xxxx	xxxxx	107	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	548	476	689	xxxx	xxxx	xxxxx	1497	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	544	471	689	xxxx	xxxx	xxxxx	1497	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.08	0.00	0.05	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	597	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	12.0	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			12.0			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	15	0	8	0	0	0	0	194	3	0	308	21
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	17	0	9	0	0	0	0	213	3	0	339	23
Added Vol:	0	0	0	0	0	0	0	4	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	0	9	0	0	0	0	217	3	0	339	27
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:	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 Volume:	17	0	9	0	0	0	0	217	3	0	339	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	17	0	9	0	0	0	0	217	3	0	339	27
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	571	xxxx	219	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	485	xxxx	826	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	485	xxxx	826	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT
Shared Cap.:	xxxx	567	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	11.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		11.6		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 1 0 0 1			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	11	1	1	0	186	16	2	317	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	12	1	1	0	205	18	2	349	0
Added Vol:	0	0	0	4	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	16	1	1	0	205	18	2	349	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:	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 Volume:	0	0	0	16	1	1	0	205	18	2	349	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	16	1	1	0	205	18	2	349	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	567	575	349	xxxx	xxxx	xxxxx	222	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	489	431	699	xxxx	xxxx	xxxxx	1359	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	488	430	699	xxxx	xxxx	xxxxx	1359	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.03	0.00	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	484	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	12.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			12.6			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

Intersection #5 SR 119 / SR 43

Cycle (sec):	100						Critical Vol./Cap. (X):						0.566					
Loss Time (sec):	12 (Y+R = 4 sec)						Average Delay (sec/veh):						26.2					
Optimal Cycle:	45						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:	Permitted					Permitted					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0
Volume Module:																				
Base Vol:	36	11	16			2	40	359			103	172	3			19	291	0		
Growth Adj:	1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10		
Initial Bse:	40	12	18			2	44	395			113	189	3			21	320	0		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	40	12	18			2	44	395			113	189	3			21	320	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:	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 Volume:	40	12	18			2	44	395			113	189	3			21	320	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	40	12	18			2	44	395			113	189	3			21	320	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 Vol.:	40	12	18			2	44	395			113	189	3			21	320	0		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.37	0.91	0.91			0.74	0.87	0.87			0.95	1.00	1.00			0.95	1.00	1.00		
Lanes:	1.00	0.41	0.59			1.00	0.10	0.90			1.00	0.98	0.02			1.00	1.00	0.00		
Final Sat.:	695	705	1026			1412	165	1479			1805	1862	32			1805	1900	0		
Capacity Analysis Module:																				
Vol/Sat:	0.06	0.02	0.02			0.00	0.27	0.27			0.06	0.10	0.10			0.01	0.17	0.00		
Crit Moves:							****				****						****			
Green/Cycle:	0.47	0.47	0.47			0.47	0.47	0.47			0.11	0.37	0.37			0.04	0.30	0.00		
Volume/Cap:	0.12	0.04	0.04			0.00	0.57	0.57			0.57	0.28	0.28			0.28	0.57	0.00		
Uniform Del:	14.8	14.2	14.2			14.0	19.0	19.0			42.2	22.3	22.3			46.4	29.7	0.0		
IncremntDel:	0.2	0.0	0.0			0.0	1.0	1.0			3.8	0.2	0.2			2.0	1.3	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	0.00		
Delay/Veh:	15.0	14.2	14.2			14.0	20.0	20.0			45.9	22.5	22.5			48.4	31.0	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:	15.0	14.2	14.2			14.0	20.0	20.0			45.9	22.5	22.5			48.4	31.0	0.0		
HCM2kAvg:	2	0	0			0	10	10			4	4	4			1	9	0		

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.912
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 26.5
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:	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	115	34	42	208	25	10	45	7	129	157	53
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	6	127	37	46	229	28	11	50	8	142	173	58
Added Vol:	0	0	0	0	0	0	0	4	0	0	229	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	127	37	46	229	28	11	54	8	142	402	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	6	127	37	46	229	28	11	54	8	142	402	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	127	37	46	229	28	11	54	8	142	402	58
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 Vol.:	6	127	37	46	229	28	11	53	8	142	402	58
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:	0.03	0.75	0.22	0.15	0.76	0.09	0.15	0.74	0.11	0.23	0.67	0.10
Final Sat.:	18	408	121	87	431	52	79	386	56	156	441	64
Capacity Analysis Module:												
Vol/Sat:	0.31	0.31	0.31	0.53	0.53	0.53	0.14	0.14	0.14	0.91	0.91	0.91
Crit Moves:		****			****		****				****	
Delay/Veh:	11.7	11.7	11.7	15.1	15.1	15.1	10.2	10.2	10.2	38.4	38.4	38.4
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:	11.7	11.7	11.7	15.1	15.1	15.1	10.2	10.2	10.2	38.4	38.4	38.4
LOS by Move:	B	B	B	C	C	C	B	B	B	E	E	E
ApproachDel:	11.7			15.1			10.2			38.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.7			15.1			10.2			38.4		
LOS by Appr:	B			C			B			E		

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: B[12.2]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	1!	0	0	0	1	0	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	0	10			1	0	1			1	15	0			18	37	1		
Growth Adj:	1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10		
Initial Bse:	0	0	11			1	0	1			1	17	0			20	41	1		
Added Vol:	0	0	0			0	0	0			0	75	0			91	251	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	0	11			1	0	1			1	92	0			111	292	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:	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 Volume:	0	0	11			1	0	1			1	92	0			111	292	1		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	0	0	11			1	0	1			1	92	0			111	292	1		
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.2			7.1	xxxx	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	3.3			3.5	xxxx	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	92			613	xxxx	292			293	xxxx	xxxxx			92	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	971			408	xxxx	752			1280	xxxx	xxxxx			1516	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	971			379	xxxx	752			1280	xxxx	xxxxx			1516	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	0.01			0.00	xxxx	0.00			0.00	xxxx	xxxx			0.07	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx	0.0			xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.2	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	8.7			xxxxx	xxxx	xxxxx			7.8	xxxx	xxxxx			7.6	xxxx	xxxxx		
LOS by Move:	*	*	A			*	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	504	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	0.0	xxxxx			0.0	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	12.2	xxxxx			7.8	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	B	*			A	*	*			*	*	*		
ApproachDel:	8.7					12.2					xxxxxx					xxxxxx				
ApproachLOS:	A					B					*					*				

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[23.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	1	6	14	10	0	6	16	264	1	29	617	25
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	1	7	15	11	0	7	18	290	1	32	679	28
Added Vol:	0	0	0	0	0	0	21	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	7	15	11	0	7	39	290	1	32	679	28
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:	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 Volume:	1	7	15	11	0	7	39	290	1	32	679	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	7	15	11	0	7	39	290	1	32	679	28
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1128	1138	291	1135	xxxx	692	706	xxxx	xxxxx	292	xxxx	xxxxx
Potent Cap.:	183	203	753	181	xxxx	447	901	xxxx	xxxxx	1282	xxxx	xxxxx
Move Cap.:	171	190	753	164	xxxx	447	901	xxxx	xxxxx	1282	xxxx	xxxxx
Volume/Cap:	0.01	0.03	0.02	0.07	xxxx	0.01	0.04	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	375	xxxxx	xxxx	215	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	15.2	xxxxx	xxxxx	23.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:		15.2			23.2			xxxxxx			xxxxxx	
ApproachLOS:		C			C			*			*	

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.052
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.2
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	17	4	1	1	11	7	5	5	10	3	4	2
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	19	4	1	1	12	8	6	6	11	3	4	2
Added Vol:	0	21	0	0	0	0	21	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	25	1	1	12	8	27	6	11	3	4	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	19	25	1	1	12	8	27	6	11	3	4	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	25	1	1	12	8	27	6	11	3	4	2
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 Vol.:	19	25	1	1	12	8	27	6	11	3	4	2
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:	0.41	0.57	0.02	0.05	0.58	0.37	0.62	0.13	0.25	0.33	0.45	0.22
Final Sat.:	359	488	21	49	534	340	544	113	226	294	392	196
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.02	0.02	0.02	0.05	0.05	0.05	0.01	0.01	0.01
Crit Moves:	****			****			****			****		
Delay/Veh:	7.3	7.3	7.3	6.9	6.9	6.9	7.2	7.2	7.2	7.1	7.1	7.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.3	7.3	7.3	6.9	6.9	6.9	7.2	7.2	7.2	7.1	7.1	7.1
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	7.3			6.9			7.2			7.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.3			6.9			7.2			7.1		
LOS by Appr:	A			A			A			A		

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 5.6 Worst Case Level Of Service: A[9.3]

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	0	1!	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0		6		9		1		9		0		0		0		0		11		0		0	
Growth Adj:	1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10		1.10	
Initial Bse:	0		7		10		1		10		0		0		0		0		12		0		0	
Added Vol:	0		41		0		0		0		0		0		0		0		0		38		52	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	0		48		10		1		10		0		0		0		0		12		38		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:	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 Volume:	0		48		10		1		10		0		0		0		0		12		38		52	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	0		48		10		1		10		0		0		0		0		12		38		52	
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:																								
Cnflict Vol:	xxxx		xxxx		xxxxx		58		xxxx		xxxxx		xxxx		xxxx		xxxxx		65		65		53	
Potent Cap.:	xxxx		xxxx		xxxxx		1560		xxxx		xxxxx		xxxx		xxxx		xxxxx		946		830		1021	
Move Cap.:	xxxx		xxxx		xxxxx		1560		xxxx		xxxxx		xxxx		xxxx		xxxxx		946		829		1021	
Volume/Cap:	xxxx		xxxx		xxxx		0.00		xxxx		xxxx		xxxx		xxxx		xxxx		0.01		0.05		0.05	
Level Of Service Module:																								
Queue:	xxxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Stopped Del:	xxxxx		xxxx		xxxxx		7.3		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	
Shared Cap.:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		0		xxxxx		xxxx		932		xxxxx	
SharedQueue:	xxxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		0.4		xxxxx	
Shrd StpDel:	xxxxx		xxxx		xxxxx		7.3		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		9.3		xxxxx	
Shared LOS:	*		*		*		A		*		*		*		*		*		*		A		*	
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						9.3					
ApproachLOS:	*						*						*						A					

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 6.2 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 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 1 0	0	0
Volume Module:												
Base Vol:	3	0	2	0	0	0	0	22	6	1	34	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	3	0	2	0	0	0	0	24	7	1	37	0
Added Vol:	48	0	75	0	0	0	0	0	151	251	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	51	0	77	0	0	0	0	24	158	252	37	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:	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 Volume:	51	0	77	0	0	0	0	24	158	252	37	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	51	0	77	0	0	0	0	24	158	252	37	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	645	xxxx	103	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	182	xxxx	xxxxx
Potent Cap.:	440	xxxx	957	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1406	xxxx	xxxxx
Move Cap.:	369	xxxx	957	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1406	xxxx	xxxxx
Volume/Cap:	0.14	xxxx	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.18	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	585	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx
Shrd StpDel:	xxxxx	12.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	A	*	*
ApproachDel:		12.9			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		B			*			*			*	

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 11.8 Worst Case Level Of Service: B[14.4]

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	1	0		0	1	0	0	0		0	0	1!	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	2	4	2	4	0	0	0	0	8	0	1												
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10												
Initial Bse:	0	2	4	2	4	0	0	0	0	9	0	1												
Added Vol:	0	86	0	177	225	0	0	0	0	27	0	38												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0												
Initial Fut:	0	88	4	179	229	0	0	0	0	36	0	39												
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:	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 Volume:	0	88	4	179	229	0	0	0	0	36	0	39												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
Final Vol.:	0	88	4	179	229	0	0	0	0	36	0	39												
Critical Gap Module:																								
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	xxxx	111	0	137	91	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx												
Potent Cap.:	xxxx	783	0	838	803	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx												
Move Cap.:	xxxx	783	0	766	803	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx												
Volume/Cap:	xxxx	0.11	0.00	0.23	0.29	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx												
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	822	786	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	xxxx	0.4	3.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd StpDel:	xxxxx	xxxx	9.9	14.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	A	B	*	*	*	*	*	*	*	*												
ApproachDel:	9.9			14.4			xxxxxx			xxxxxx														
ApproachLOS:	A			B			*			*														

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

Intersection #13 SR-43/Poso Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.364
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.2
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:	1	0 1	1	0	1	0 1	1	0	1	0 1	0	1	0	1 0	0	1
Volume Module:																
Base Vol:	23	414	0		0	411	4		4	0	23		0	0	1	
Growth Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
Initial Bse:	25	455	0		0	452	4		4	0	25		0	0	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:	25	455	0		0	452	4		4	0	25		0	0	1	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	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 Volume:	25	455	0		0	452	4		4	0	25		0	0	1	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	25	455	0		0	452	4		4	0	25		0	0	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	
Final Vol.:	25	455	0		0	452	4		4	0	25		0	0	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:	1.00	2.00	0.00		1.00	1.98	0.02		1.00	1.00	1.00		0.00	1.00	1.00	
Final Sat.:	577	1260	0		0	1241	12		449	0	529		0	0	555	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.36	xxxx	xxxx	0.36	0.36	0.01	xxxx	0.05	xxxx	xxxx	0.00				
Crit Moves:		****			****				****			****				
Delay/Veh:	9.0	11.3	0.0	0.0	11.4	11.3	10.1	0.0	9.1	0.0	0.0	8.6				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	9.0	11.3	0.0	0.0	11.4	11.3	10.1	0.0	9.1	0.0	0.0	8.6				
LOS by Move:	A	B	*	*	B	B	B	*	A	*	*	A				
ApproachDel:		11.1			11.4			9.3			8.6					
Delay Adj:		1.00			1.00			1.00			1.00					
ApprAdjDel:		11.1			11.4			9.3			8.6					
LOS by Appr:		B			B			A			A					

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

Intersection #14 SR-43/Kimberlina Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.259
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	24.1
Optimal Cycle:	25	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	129	264	17	88	229	4	5	73	95	20	91	39
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	142	290	19	97	252	4	6	80	105	22	100	43
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:	142	290	19	97	252	4	6	80	105	22	100	43
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:	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 Volume:	142	290	19	97	252	4	6	80	105	22	100	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	142	290	19	97	252	4	6	80	105	22	100	43
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 Vol.:	142	290	19	97	252	4	6	80	104	22	100	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	1.88	0.12	1.00	1.97	0.03	0.03	0.42	0.55	0.13	0.61	0.26
Final Sat.:	1805	3361	216	1805	3537	62	51	738	960	234	1064	456
Capacity Analysis Module:												
Vol/Sat:	0.08	0.09	0.09	0.05	0.07	0.07	0.11	0.11	0.11	0.09	0.09	0.09
Crit Moves:	****				****			****				
Green/Cycle:	0.30	0.36	0.36	0.22	0.28	0.28	0.42	0.42	0.42	0.42	0.42	0.42
Volume/Cap:	0.26	0.24	0.24	0.24	0.26	0.26	0.26	0.26	0.26	0.22	0.22	0.22
Uniform Del:	26.3	22.6	22.6	32.0	28.3	28.3	18.8	18.8	18.8	18.5	18.5	18.5
IncremntDel:	0.3	0.1	0.1	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	26.5	22.7	22.7	32.3	28.4	28.4	19.0	19.0	19.0	18.7	18.7	18.7
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:	26.5	22.7	22.7	32.3	28.4	28.4	19.0	19.0	19.0	18.7	18.7	18.7
HCM2kAvg:	3	3	3	3	3	4	4	4	4	3	3	3

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

Intersection #15 SR-43/Shafter Ave

Cycle (sec):	100	Critical Vol./Cap. (X):	0.242
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	12.9
Optimal Cycle:	19	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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	40	330	44	74	347	92	84	129	22	41	107	63
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	44	363	48	81	382	101	92	142	24	45	118	69
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:	44	363	48	81	382	101	92	142	24	45	118	69
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:	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 Volume:	44	363	48	81	382	101	92	142	24	45	118	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	363	48	81	382	101	92	142	24	45	118	69
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 Vol.:	44	363	48	81	382	101	92	142	24	45	118	69
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.41	0.95	0.85	0.49	0.92	0.92	0.54	0.98	0.98	0.56	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	1.58	0.42	1.00	0.85	0.15	1.00	0.63	0.37
Final Sat.:	787	3610	1615	923	2765	733	1018	1587	271	1062	1129	665
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.03	0.09	0.14	0.14	0.09	0.09	0.09	0.04	0.10	0.10
Crit Moves:					****						****	
Green/Cycle:	0.57	0.57	0.57	0.57	0.57	0.57	0.43	0.43	0.43	0.43	0.43	0.43
Volume/Cap:	0.10	0.18	0.05	0.15	0.24	0.24	0.21	0.21	0.21	0.10	0.24	0.24
Uniform Del:	9.8	10.3	9.5	10.2	10.7	10.7	17.8	17.8	17.8	16.9	18.1	18.1
IncremntDel:	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	9.9	10.3	9.6	10.3	10.8	10.8	18.1	18.0	18.0	17.0	18.3	18.3
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:	9.9	10.3	9.6	10.3	10.8	10.8	18.1	18.0	18.0	17.0	18.3	18.3
HCM2kAvg:	1	3	1	2	4	4	3	3	3	1	4	4

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

Intersection #16 Sr-43/Central Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.185
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.1
Optimal Cycle: 18 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:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	1 0
Volume Module:												
Base Vol:	14	412	24	46	387	18	9	61	11	26	93	29
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	15	453	26	51	426	20	10	67	12	29	102	32
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:	15	453	26	51	426	20	10	67	12	29	102	32
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:	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 Volume:	15	453	26	51	426	20	10	67	12	29	102	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	453	26	51	426	20	10	67	12	29	102	32
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 Vol.:	15	453	26	51	426	20	10	67	12	29	102	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.46	0.94	0.94	0.44	0.94	0.94	0.95	0.95	0.95	0.84	0.84	0.84
Lanes:	1.00	1.89	0.11	1.00	1.91	0.09	0.11	0.75	0.14	0.35	1.26	0.39
Final Sat.:	880	3384	197	844	3425	159	202	1366	246	559	1998	623
Capacity Analysis Module:												
Vol/Sat:	0.02	0.13	0.13	0.06	0.12	0.12	0.05	0.05	0.05	0.05	0.05	0.05
Crit Moves:		****									****	
Green/Cycle:	0.72	0.72	0.72	0.72	0.72	0.72	0.28	0.28	0.28	0.28	0.28	0.28
Volume/Cap:	0.02	0.19	0.19	0.08	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19
Uniform Del:	3.9	4.4	4.4	4.1	4.4	4.4	27.5	27.5	27.5	27.6	27.6	27.6
IncremntDel:	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.2	0.1	0.1	0.1
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
Delay/Veh:	3.9	4.5	4.5	4.1	4.4	4.4	27.7	27.7	27.7	27.7	27.7	27.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	3.9	4.5	4.5	4.1	4.4	4.4	27.7	27.7	27.7	27.7	27.7	27.7
HCM2kAvg:	0	2	2	1	2	2	2	2	2	2	2	2

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

Intersection #17 SR-43/Lerdo Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.325
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 22.3
Optimal Cycle: 28 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	1 1	0	1	0	1	0	
Volume Module:																
Base Vol:	41	307	58		145	240	17		20	246	50		64	124	127	
Growth Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
Initial Bse:	45	338	64		160	264	19		22	271	55		70	136	140	
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:	45	338	64		160	264	19		22	271	55		70	136	140	
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:	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 Volume:	45	338	64		160	264	19		22	271	55		70	136	140	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	45	338	64		160	264	19		22	271	55		70	136	140	
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 Vol.:	45	338	64		160	264	19		22	271	55		70	136	140	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.93	0.93		0.95	0.94	0.94		0.87	0.87	0.85		0.75	0.75	0.75	
Lanes:	1.00	1.68	0.32		1.00	1.87	0.13		0.15	1.85	1.00		0.41	0.79	0.80	
Final Sat.:	1805	2963	560		1805	3337	236		249	3065	1615		576	1115	1142	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.11	0.11		0.09	0.08	0.08		0.09	0.09	0.03		0.12	0.12	0.12	
Crit Moves:		****			****									****		
Green/Cycle:	0.15	0.35	0.35		0.27	0.47	0.47		0.38	0.38	0.38		0.38	0.38	0.38	
Volume/Cap:	0.17	0.32	0.32		0.32	0.17	0.17		0.23	0.23	0.09		0.32	0.32	0.32	
Uniform Del:	37.1	23.8	23.8		29.0	15.0	15.0		21.3	21.3	20.1		22.1	22.1	22.1	
IncremntDel:	0.3	0.2	0.2		0.4	0.0	0.0		0.1	0.1	0.1		0.2	0.2	0.2	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	37.4	23.9	23.9		29.4	15.1	15.1		21.4	21.4	20.2		22.3	22.3	22.3	
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:	37.4	23.9	23.9		29.4	15.1	15.1		21.4	21.4	20.2		22.3	22.3	22.3	
HCM2kAvg:	1	5	5		4	2	2		3	3	1		5	5	5	

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

Intersection #18 SR-43/7th Standard Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.478
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	12.4
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	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	50	128	73	33	136	32	13	78	42	47	163	42
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	55	141	80	36	150	35	14	86	46	52	179	46
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:	55	141	80	36	150	35	14	86	46	52	179	46
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:	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 Volume:	55	141	80	36	150	35	14	86	46	52	179	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	141	80	36	150	35	14	86	46	52	179	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
Final Vol.:	55	141	80	36	150	35	14	86	46	52	179	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.51	0.29	0.20	0.80	1.00	0.10	0.59	0.31	0.22	0.78	1.00
Final Sat.:	115	295	168	107	440	621	52	314	169	123	425	623
Capacity Analysis Module:												
Vol/Sat:	0.48	0.48	0.48	0.34	0.34	0.06	0.27	0.27	0.27	0.42	0.42	0.07
Crit Moves:		****			****		****				****	
Delay/Veh:	13.9	13.9	13.9	11.9	11.9	8.4	11.3	11.3	11.3	13.1	13.1	8.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.9	13.9	13.9	11.9	11.9	8.4	11.3	11.3	11.3	13.1	13.1	8.6
LOS by Move:	B	B	B	B	B	A	B	B	B	B	B	A
ApproachDel:	13.9			11.3			11.3			12.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.9			11.3			11.3			12.3		
LOS by Appr:	B			B			B			B		

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

Intersection #19 SR-43/SR-58 (Rosedal Highway West)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.425
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.6
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:	1 0	1 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	164	238	0	0	163	93	77	0	142	0	0	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	180	262	0	0	179	102	85	0	156	0	0	0
Added Vol:	41	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:	221	262	0	0	179	102	85	0	156	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:	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 Volume:	221	262	0	0	179	102	85	0	156	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	262	0	0	179	102	85	0	156	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 Vol.:	221	262	0	0	179	102	85	0	156	0	0	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:	1.00	1.00	0.00	0.00	0.64	0.36	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	591	644	0	0	422	241	508	0	611	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.37	0.41	xxxx	xxxx	0.43	0.43	0.17	xxxx	0.26	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	12.1	11.8	0.0	0.0	12.0	12.0	10.7	0.0	10.0	0.0	0.0	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:	12.1	11.8	0.0	0.0	12.0	12.0	10.7	0.0	10.0	0.0	0.0	0.0
LOS by Move:	B	B	*	*	B	B	B	*	B	*	*	*
ApproachDel:		11.9			12.0			10.2			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		11.9			12.0			10.2			xxxxxx	
LOS by Appr:		B			B			B			*	

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

Intersection #20 SR-43/SR-58 (Rosedal Highway East)

Cycle (sec):	100	Critical Vol./Cap. (X):	0.421
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	11.7
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:	1 0 1	0 1		1 0 1	0 1		0 0 1!	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	7	168	30	124	171	5	9	5	20	95	13	207
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	8	185	33	136	188	6	10	6	22	105	14	228
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	41
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	185	33	136	188	6	10	6	22	105	14	269
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:	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 Volume:	8	185	33	136	188	6	10	6	22	105	14	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	185	33	136	188	6	10	6	22	105	14	269
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 Vol.:	8	185	33	136	188	6	10	6	22	104	14	269
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	0.26	0.15	0.59	0.88	0.12	1.00
Final Sat.:	484	524	578	507	547	606	137	76	305	465	64	639
Capacity Analysis Module:												
Vol/Sat:	0.02	0.35	0.06	0.27	0.34	0.01	0.07	0.07	0.07	0.22	0.22	0.42
Crit Moves:		****			****			****				****
Delay/Veh:	9.9	12.5	8.9	11.9	12.1	8.4	9.8	9.8	9.8	11.1	11.1	11.7
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:	9.9	12.5	8.9	11.9	12.1	8.4	9.8	9.8	9.8	11.1	11.1	11.7
LOS by Move:	A	B	A	B	B	A	A	A	A	B	B	B
ApproachDel:		11.9			11.9			9.8			11.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.9			11.9			9.8			11.5	
LOS by Appr:		B			B			A			B	

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

Intersection #21 H St/9th St

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: A[8.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	32	3	2	24	0	0	0	0	3	0	14
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	35	3	2	26	0	0	0	0	3	0	15
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	35	3	2	26	0	0	0	0	3	0	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	0	35	3	2	26	0	0	0	0	3	0	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	35	3	2	26	0	0	0	0	3	0	15
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	39	xxxx	xxxxx	xxxx	xxxx	xxxxx	68	xxxx	37
Potent Cap.:	xxxx	xxxx	xxxxx	1585	xxxx	xxxxx	xxxx	xxxx	xxxxx	942	xxxx	1041
Move Cap.:	xxxx	xxxx	xxxxx	1585	xxxx	xxxxx	xxxx	xxxx	xxxxx	941	xxxx	1041
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	0.01
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	0.0
Stopped Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	8.5
LOS by Move:	*	*	*	A	*	*	*	*	*	A	*	A
Movement:	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	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.6		
ApproachLOS:	*			*			*			A		

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

Intersection #22 H St/Wasco Ave

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: A[8.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	1	0	37	35	79	0	0	54	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	1	0	41	39	87	0	0	59	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	1	0	41	39	87	0	0	59	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:	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 Volume:	0	0	0	1	0	41	39	87	0	0	59	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	1	0	41	39	87	0	0	59	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	223	xxxx	59	59	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	769	xxxx	1012	1557	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	755	xxxx	1012	1557	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	0.04	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	0.1	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	9.8	xxxx	8.7	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	A	A	*	*	*	*	*
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			8.7			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

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

Intersection #23 Wasco Ave/Poso Ave

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: B[10.4]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	1
Volume Module:																				
Base Vol:	10	23	0			3	32	58			75	6	14			0	0	2		
Growth Adj:	1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10		
Initial Bse:	11	25	0			3	35	64			83	7	15			0	0	2		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	11	25	0			3	35	64			83	7	15			0	0	2		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	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 Volume:	11	25	0			3	35	64			83	7	15			0	0	2		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	11	25	0			3	35	64			83	7	15			0	0	2		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	xxxxx			7.1	6.5	6.2			4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx			3.5	4.0	3.3			2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	189	174	xxxxx			192	187	0			2	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	775	723	xxxxx			772	711	0			1633	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	715	685	xxxxx			720	673	0			1633	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.02	0.04	xxxx			0.00	0.05	0.00			0.05	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx			0.0	xxxx	xxxxx			0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	10.1	xxxx	xxxxx			10.0	xxxx	xxxxx			7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	B	*	*			B	*	*			A	*	*	*	*	*				
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	685			xxxx	xxxx	1894			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	0.1			xxxxx	xxxx	0.2			0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	10.5			xxxxx	xxxx	7.0			7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	B			*	*	A			A	*	*	*	*	*				
ApproachDel:	10.4					7.1					xxxxxx					xxxxxx				
ApproachLOS:	B					A					*					*				

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

Intersection #24 Wasco Ave/Kimberlina Rd

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	27	0	19	17	163	0	0	138	17
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	30	0	21	19	179	0	0	152	19
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	30	0	21	19	179	0	0	152	19
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:	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 Volume:	0	0	0	30	0	21	19	179	0	0	152	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	30	0	21	19	179	0	0	152	19
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	378	xxxx	161	171	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	628	xxxx	889	1419	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	621	xxxx	889	1419	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	710	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.5	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.5			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

Intersection #25 J St/9th St

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[8.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	0	0	0 0 1	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	71	0	0	64	7	0	0	1	0	0	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	78	0	0	70	8	0	0	1	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	78	0	0	70	8	0	0	1	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:	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 Volume:	0	78	0	0	70	8	0	0	1	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	78	0	0	70	8	0	0	1	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	39	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1030	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1030	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.5	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.5			xxxxxx		
ApproachLOS:	*			*			A			*		

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

Intersection #26 Wasco Way/SR-58

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: C[20.0]

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 1!	0	0	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	39	29	10	3	5	5	29	363	58	5	46	2
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	43	32	11	3	6	6	32	399	64	6	51	2
Added Vol:	0	0	0	0	0	0	0	0	0	103	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	32	11	3	6	6	32	399	64	109	51	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	43	32	11	3	6	6	32	399	64	109	51	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	43	32	11	3	6	6	32	399	64	109	51	2
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:												
Cnflict Vol:	737	733	399	784	795	51	53	xxxx	xxxxx	463	xxxx	xxxxx
Potent Cap.:	337	350	655	313	323	1023	1566	xxxx	xxxxx	1109	xxxx	xxxxx
Move Cap.:	299	307	655	257	283	1023	1566	xxxx	xxxxx	1109	xxxx	xxxxx
Volume/Cap:	0.14	0.10	0.02	0.01	0.02	0.01	0.02	xxxx	xxxx	0.10	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.3	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	8.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	325	xxxxx	xxxx	380	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.0	xxxxx	xxxxx	0.1	xxxxx	0.1	xxxx	xxxxx	0.3	xxxx	xxxxx
Shrd StpDel:	xxxxx	20.0	xxxxx	xxxxx	14.8	xxxxx	7.3	xxxx	xxxxx	8.6	xxxx	xxxxx
Shared LOS:	*	C	*	*	B	*	A	*	*	A	*	*
ApproachDel:		20.0			14.8		xxxxxx			xxxxxx		
ApproachLOS:		C			B		*			*		

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 I-5 NB Ramp / Stockdale Hwy	B	12.0	0.000	C	24.1	0.000	+12.146 D/V
# 2 I-5 SB Ramp / Stockdale Hwy	B	14.3	0.000	F	230.0	0.000	+215.707 D/V
# 3 I-5 NB Ramp / SR 119	C	19.7	0.000	C	19.7	0.000	+ 0.000 D/V
# 4 I-5 SB Ramp / SR 119	C	20.4	0.000	C	20.4	0.000	+ 0.000 D/V
# 5 SR 119 / SR 43	C	24.2	0.628	C	24.2	0.628	+ 0.000 D/V
# 6 Stockdale Hwy/SR 43	E	36.4	0.953	F	337.5	2.214	+ 1.261 V/C
# 7 Stockdale Hwy / Morris Rd	A	9.5	0.000	D	31.3	0.000	+21.879 D/V
# 8 Tupman Rd / SR 119	F	105.5	0.000	F	55.0	0.000	-50.419 D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.038	A	7.3	0.148	+ 0.110 V/C
# 10 Station Rd/Tupman Rd	A	8.6	0.000	C	16.1	0.000	+ 7.441 D/V
# 11 Stockdale/Dairy	A	9.8	0.000	F	73.3	0.000	+63.515 D/V
# 12 Dairy/Adohr	A	8.9	0.000	D	30.4	0.000	+21.543 D/V
# 13 SR-43/Poso Ave	B	12.4	0.453	B	12.4	0.453	+ 0.000 V/C
# 14 SR-43/Kimberlina Rd	C	21.2	0.324	C	21.2	0.324	+ 0.000 D/V
# 15 SR-43/Shafter Ave	B	13.2	0.319	B	13.2	0.319	+ 0.000 D/V
# 16 Sr-43/Central Ave	B	10.5	0.242	B	10.5	0.242	+ 0.000 D/V
# 17 SR-43/Lerdo Hwy	C	21.8	0.363	C	21.8	0.363	+ 0.000 D/V
# 18 SR-43/7th Standard Rd	D	27.5	0.905	D	27.5	0.905	+ 0.000 V/C
# 19 SR-43/SR-58 (Rosedal Highway W	C	15.4	0.658	C	21.3	0.853	+ 0.194 V/C
# 20 SR-43/SR-58 (Rosedal Highway E	C	17.2	0.759	D	32.2	0.997	+ 0.239 V/C
# 21 H St/9th St	A	8.7	0.000	A	8.7	0.000	+ 0.000 D/V
# 22 H St/Wasco Ave	A	9.0	0.000	A	9.0	0.000	+ 0.000 D/V
# 23 Wasco Ave/Poso Ave	B	10.8	0.000	B	10.8	0.000	+ 0.000 D/V
# 24 Wasco Ave/Kimberlina Rd	B	10.4	0.000	B	10.4	0.000	+ 0.000 D/V
# 25 J St/9th St	A	8.6	0.000	A	8.6	0.000	+ 0.000 D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 26 Wasco Way/SR-58	B	14.3	0.000	C	17.3	0.000	+ 2.984 D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[24.1]

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 1 0	0	0	0 0 1	0	1
Volume Module:												
Base Vol:	3	0	31	0	0	0	3	466	0	0	55	67
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	3	0	34	0	0	0	3	513	0	0	61	74
Added Vol:	0	0	0	0	0	0	0	677	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	0	34	0	0	0	3	1190	0	0	61	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:	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 Volume:	3	0	34	0	0	0	3	1190	0	0	61	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	0	34	0	0	0	3	1190	0	0	61	74
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1294	xxxx	1190	xxxx	xxxx	xxxxx	134	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	181	xxxx	231	xxxx	xxxx	xxxxx	1463	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	181	xxxx	231	xxxx	xxxx	xxxxx	1463	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	0.15	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	225	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	24.1	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	A	*	*	*	*	*
ApproachDel:		24.1		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 45.0 Worst Case Level Of Service: F[230.0]

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			0 0 1! 0 0			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	262	1	1	0	204	9	20	38	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	288	1	1	0	224	10	22	42	0
Added Vol:	0	0	0	0	0	0	0	677	123	0	0	0
PasserByVol:	0	0	0	0	0	0	0	100	0	0	0	0
Initial Fut:	0	0	0	288	1	1	0	1001	133	22	42	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:	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 Volume:	0	0	0	288	1	1	0	1001	133	22	42	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	288	1	1	0	1001	133	22	42	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1154	1220	42	xxxx	xxxx	xxxxx	1134	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	220	182	1035	xxxx	xxxx	xxxxx	623	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	214	175	1035	xxxx	xxxx	xxxxx	623	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	1.35	0.01	0.00	xxxx	xxxx	xxxx	0.04	xxxx	xxxx

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	215	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	16.2	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	230	xxxxx	xxxxx	xxxx	xxxxx	11.0	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	B	*	*
ApproachDel:	xxxxxx			230.0			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.7]

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	0	0 0 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	13	0	6	0	0	0	0	770	2	0	223	11
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	14	0	7	0	0	0	0	847	2	0	245	12
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:	14	0	7	0	0	0	0	847	2	0	245	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:	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 Volume:	14	0	7	0	0	0	0	847	2	0	245	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	14	0	7	0	0	0	0	847	2	0	245	12
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1099	xxxx	848	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	237	xxxx	364	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	237	xxxx	364	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	267	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	19.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		19.7		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[20.4]

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 1 0 0 1			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	45	0	13	0	721	42	1	238	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	50	0	14	0	793	46	1	262	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	50	0	14	0	793	46	1	262	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:	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 Volume:	0	0	0	50	0	14	0	793	46	1	262	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	50	0	14	0	793	46	1	262	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1080	xxxx	262	xxxx	xxxx	xxxxx	839	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	244	xxxx	782	xxxx	xxxx	xxxxx	804	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	243	xxxx	782	xxxx	xxxx	xxxxx	804	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.20	xxxx	0.02	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	243	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	23.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
Shared LOS:	*	*	*	C	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			20.4			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

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

Intersection #5 SR 119 / SR 43

Cycle (sec):	100	Critical Vol./Cap. (X):	0.628
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	24.2
Optimal Cycle:	51	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:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	37	85	77	4	39	175	466	663	19	24	201	1
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	41	94	85	4	43	193	513	729	21	26	221	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:	41	94	85	4	43	193	513	729	21	26	221	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:	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 Volume:	41	94	85	4	43	193	513	729	21	26	221	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	94	85	4	43	193	513	729	21	26	221	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
Final Vol.:	41	94	85	4	43	193	513	729	21	26	221	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.40	0.93	0.93	0.51	0.88	0.88	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.52	0.48	1.00	0.18	0.82	1.00	0.97	0.03	1.00	0.99	0.01
Final Sat.:	760	926	839	971	304	1363	1805	1840	53	1805	1889	9
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.10	0.00	0.14	0.14	0.28	0.40	0.40	0.01	0.12	0.12
Crit Moves:					****			****		****		
Green/Cycle:	0.23	0.23	0.23	0.23	0.23	0.23	0.46	0.63	0.63	0.02	0.19	0.19
Volume/Cap:	0.24	0.45	0.45	0.02	0.63	0.63	0.61	0.63	0.63	0.63	0.61	0.61
Uniform Del:	31.7	33.4	33.4	30.2	35.0	35.0	20.1	11.2	11.2	48.4	37.0	37.0
IncremntDel:	0.7	0.8	0.8	0.0	3.4	3.4	1.3	1.1	1.1	26.4	3.1	3.1
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
Delay/Veh:	32.4	34.2	34.2	30.2	38.3	38.3	21.4	12.3	12.3	74.8	40.1	40.1
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:	32.4	34.2	34.2	30.2	38.3	38.3	21.4	12.3	12.3	74.8	40.1	40.1
HCM2kAvg:	3	5	5	0	8	7	13	14	13	2	7	4

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 2.214
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 337.5
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	277	147	80	164	18	41	421	2	49	54	19
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	305	162	88	180	20	45	463	2	54	59	21
Added Vol:	0	0	0	0	0	0	0	677	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	305	162	88	180	20	45	1140	2	54	59	21
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:	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 Volume:	0	305	162	88	180	20	45	1140	2	54	59	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	305	162	88	180	20	45	1140	2	54	59	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	305	162	88	180	20	45	1140	2	54	59	21
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:	0.00	0.65	0.35	0.30	0.63	0.07	0.03	0.96	0.01	0.40	0.44	0.16
Final Sat.:	0	348	185	145	298	33	20	515	1	170	187	66
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.88	0.88	0.61	0.61	0.61	2.21	2.21	2.21	0.32	0.32	0.32
Crit Moves:			****		****			****			****	
Delay/Veh:	0.0	39.5	39.5	20.3	20.3	20.3	568.1	568	568.1	14.1	14.1	14.1
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:	0.0	39.5	39.5	20.3	20.3	20.3	568.1	568	568.1	14.1	14.1	14.1
LOS by Move:	*	E	E	C	C	C	F	F	F	B	B	B
ApproachDel:		39.5			20.3			568.1			14.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		39.5			20.3			568.1			14.1	
LOS by Appr:		E			C			F			B	

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 8.5 Worst Case Level Of Service: D[31.3]

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	0	0	1		0	0	1!	0	0		0	1	0	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	0	18				0	0	0				1	197	0				3	34	1			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	0	0	20				0	0	0				1	217	0				3	37	1			
Added Vol:	0	0	272				0	0	0				0	528	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	292				0	0	0				1	745	0				3	37	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:	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 Volume:	0	0	292				0	0	0				1	745	0				3	37	1			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	292				0	0	0				1	745	0				3	37	1			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	745				xxxx	xxxx	xxxxx				39	xxxx	xxxxx				745	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	417				xxxx	xxxx	xxxxx				1585	xxxx	xxxxx				872	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	417				xxxx	xxxx	xxxxx				1585	xxxx	xxxxx				872	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.70				xxxx	xxxx	xxxx				0.00	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	5.2				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	31.3				xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				9.1	xxxx	xxxxx			
LOS by Move:	*	*	D				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx		0	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				A	*	*				*	*	*			
ApproachDel:	31.3						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	D						*						*						*					

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: F[55.0]

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	1	0		0	0	1!	0	0		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	0		1		27		22		0		6		14	1171		0			11	397			10	
Growth Adj:	1.10	1.10		1.10		1.10	1.10	1.10		1.10		1.10	1.10	1.10		1.10		1.10	1.10	1.10		1.10		1.10
Initial Bse:	0		1		30		24		0		7		15	1288		0			12	437			11	
Added Vol:	0		0		0		0		0		62		0	0		0			0	0			0	
PasserByVol:	0		0		0		0		0		0		0	0		0			0	0			0	
Initial Fut:	0		1		30		24		0		69		15	1288		0			12	437			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	1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Volume:	0		1		30		24		0		69		15	1288		0			12	437			11	
Reduct Vol:	0		0		0		0		0		0		0	0		0			0	0			0	
Final Vol.:	0		1		30		24		0		69		15	1288		0			12	437			11	
Critical Gap Module:																								
Critical Gp:	xxxxx		6.5		6.2		7.1	xxxx		6.2			4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx		4.0		3.3		3.5	xxxx		3.3			2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx		1791		1288		1801	xxxx		442			448	xxxx	xxxxx				1288	xxxx	xxxxx			
Potent Cap.:	xxxx		82		202		63	xxxx		620			1123	xxxx	xxxxx				545	xxxx	xxxxx			
Move Cap.:	xxxx		79		202		51	xxxx		620			1123	xxxx	xxxxx				545	xxxx	xxxxx			
Volume/Cap:	xxxx	0.01		0.15		0.47	xxxx		0.11				0.01	xxxx		xxxx			0.02	xxxx		xxxx		
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx				8.2	xxxx	xxxxx				11.8	xxxx	xxxxx			
LOS by Move:	*	*		*		*	*		*				A	*		*			B	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		192			xxxx		159	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx		0.6			xxxxx		3.1	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx		27.4			xxxxx		55.0	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*		D			*		F	*			*	*		*			*	*		*		
ApproachDel:		27.4						55.0						xxxxxx						xxxxxx				
ApproachLOS:		D						F						*						*				

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.148
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.3
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 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	18	5	3	12	3	4	0	4	1	1	4
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	10	20	6	3	13	3	4	0	4	1	1	4
Added Vol:	0	0	0	0	62	62	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	20	6	3	75	65	4	0	4	1	1	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:	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 Volume:	10	20	6	3	75	65	4	0	4	1	1	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	20	6	3	75	65	4	0	4	1	1	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 Vol.:	10	20	6	3	75	65	4	0	4	1	1	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:	0.28	0.56	0.16	0.02	0.53	0.45	0.50	0.00	0.50	0.17	0.17	0.66
Final Sat.:	250	500	139	22	507	440	427	0	427	148	148	592
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.15	0.15	0.15	0.01	xxxx	0.01	0.01	0.01	0.01
Crit Moves:		****			****		****			****		
Delay/Veh:	7.2	7.2	7.2	7.3	7.3	7.3	7.1	0.0	7.1	6.9	6.9	6.9
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:	7.2	7.2	7.2	7.3	7.3	7.3	7.1	0.0	7.1	6.9	6.9	6.9
LOS by Move:	A	A	A	A	A	A	A	*	A	A	A	A
ApproachDel:		7.2			7.3			7.1			6.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.2			7.3			7.1			6.9	
LOS by Appr:		A			A			A			A	

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: C[16.1]

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 1 0 0			1 0 0 0 0		
Volume Module:												
Base Vol:	0	4	21	1	6	0	0	0	0	7	0	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	4	23	1	7	0	0	0	0	8	0	0
Added Vol:	0	0	0	157	123	0	0	115	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	4	23	158	130	0	0	115	0	8	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:	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 Volume:	0	4	23	158	130	0	0	115	0	8	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	4	23	158	130	0	0	115	0	8	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	xxxxx	7.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	xxxxx	3.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	28	xxxx	xxxxx	xxxx	473	xxxxx	519	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1599	xxxx	xxxxx	xxxx	492	xxxxx	470	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1599	xxxx	xxxxx	xxxx	439	xxxxx	346	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.10	xxxx	xxxx	xxxx	0.26	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	1.0	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	16.1	xxxxx	15.7	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	C	*	C	*	*
Movement:	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	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.1			15.7		
ApproachLOS:	*			*			C			C		

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 56.1 Worst Case Level Of Service: F[73.3]

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	0 0 0	1	0	0 0 1	0	0
Volume Module:												
Base Vol:	4	1	3	0	0	0	0	193	7	0	35	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	4	1	3	0	0	0	0	212	8	0	39	0
Added Vol:	308	0	528	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	312	1	531	0	0	0	0	212	8	0	39	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:	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 Volume:	312	1	531	0	0	0	0	212	8	0	39	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	312	1	531	0	0	0	0	212	8	0	39	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	255	255	216	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	738	652	829	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	738	652	829	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.42	0.00	0.64	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT
Shared Cap.:	xxxx	793	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	21.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	73.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	F	*	*	*	*	*	*	*	*	*	*
ApproachDel:		73.3		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		F		*			*			*		

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 16.5 Worst Case Level Of Service: D[30.4]

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	1	0	0	1	0	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	1	6			2	2	0			0	0	0			7	0	0		
Growth Adj:	1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10			1.10	1.10	1.10		
Initial Bse:	0	1	7			2	2	0			0	0	0			8	0	0		
Added Vol:	0	418	82			0	0	0			0	0	0			0	0	418		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	419	89			2	2	0			0	0	0			8	0	418		
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:	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 Volume:	0	419	89			2	2	0			0	0	0			8	0	418		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	0	419	89			2	2	0			0	0	0			8	0	418		
Critical Gap Module:																				
Critical Gp:	xxxxx	6.5	6.2			7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx					4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	4.0	3.3			3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx					2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	433	0			478	224	xxxxx	xxxx	xxxx	xxxxx					0	xxxx	xxxxx		
Potent Cap.:	xxxx	519	0			501	678	xxxxx	xxxx	xxxx	xxxxx					0	xxxx	xxxxx		
Move Cap.:	xxxx	519	0			164	678	xxxxx	xxxx	xxxx	xxxxx					0	xxxx	xxxxx		
Volume/Cap:	xxxx	0.81	0.00			0.01	0.00	xxxx	xxxx	xxxx	xxxx					0.00	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*	*	*	*							A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	628			264	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	8.2			0.1	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	30.4			18.9	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	D			C	*	*			*	*	*			*	*	*		
ApproachDel:		30.4					18.9					xxxxxx					xxxxxx			
ApproachLOS:		D					C					*					*			

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

Intersection #13 SR-43/Poso Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.453
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.4
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:	1	0 1	1	0	1	0 1	1	0	1	0 1	0	1	0	1 0	0	1
Volume Module:																
Base Vol:	13	451	0		0	511	3		1	0	15		0	0	0	
Growth Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.10	1.10	
Initial Bse:	14	496	0		0	562	3		1	0	17		0	0	0	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	14	496	0		0	562	3		1	0	17		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:	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 Volume:	14	496	0		0	562	3		1	0	17		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	14	496	0		0	562	3		1	0	17		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 Vol.:	14	496	0		0	562	3		1	0	17		0	0	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:	1.00	2.00	0.00		1.00	1.99	0.01		1.00	1.00	1.00		0.00	1.00	1.00	
Final Sat.:	559	1225	0		0	1242	7		430	0	503		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.40	xxxx	xxxx	0.45	0.45	0.00	xxxx	0.03	xxxx	xxxx	xxxx				
Crit Moves:		****			****				****							
Delay/Veh:	9.1	12.1	0.0	0.0	12.8	12.8	10.4	0.0	9.4	0.0	0.0	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:	9.1	12.1	0.0	0.0	12.8	12.8	10.4	0.0	9.4	0.0	0.0	0.0				
LOS by Move:	A	B	*	*	B	B	B	*	A	*	*	*				
ApproachDel:	12.1				12.8			9.4			xxxxxx					
Delay Adj:	1.00				1.00			1.00			xxxxx					
ApprAdjDel:	12.1				12.8			9.4			xxxxxx					
LOS by Appr:	B				B			A			*					

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

Intersection #14 SR-43/Kimberlina Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.324
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	21.2
Optimal Cycle:	27	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	57	386	27	60	306	6	7	84	160	35	45	98
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	63	425	30	66	337	7	8	92	176	39	50	108
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:	63	425	30	66	337	7	8	92	176	39	50	108
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:	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 Volume:	63	425	30	66	337	7	8	92	176	39	50	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	425	30	66	337	7	8	92	176	39	50	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	63	425	30	66	337	7	8	92	176	39	50	108
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.84	0.84	0.84
Lanes:	1.00	1.87	0.13	1.00	1.96	0.04	0.03	0.33	0.64	0.20	0.25	0.55
Final Sat.:	1805	3340	234	1805	3530	69	48	578	1100	315	405	881
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.04	0.10	0.10	0.16	0.16	0.16	0.12	0.12	0.12
Crit Moves:		****		****				****				
Green/Cycle:	0.14	0.39	0.39	0.11	0.37	0.37	0.49	0.49	0.49	0.49	0.49	0.49
Volume/Cap:	0.26	0.32	0.32	0.32	0.26	0.26	0.32	0.32	0.32	0.25	0.25	0.25
Uniform Del:	38.8	21.1	21.1	40.8	21.9	21.9	15.2	15.2	15.2	14.6	14.6	14.6
IncremntDel:	0.6	0.1	0.1	0.9	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	39.3	21.3	21.3	41.8	22.0	22.0	15.4	15.4	15.4	14.7	14.7	14.7
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:	39.3	21.3	21.3	41.8	22.0	22.0	15.4	15.4	15.4	14.7	14.7	14.7
HCM2kAvg:	2	5	5	2	4	4	5	5	5	4	4	4

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

Intersection #15 SR-43/Shafter Ave

Cycle (sec):	100	Critical Vol./Cap. (X):	0.319
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	13.2
Optimal Cycle:	21	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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	23	393	30	78	467	106	124	83	17	25	114	76
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	25	432	33	86	514	117	136	91	19	28	125	84
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:	25	432	33	86	514	117	136	91	19	28	125	84
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:	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 Volume:	25	432	33	86	514	117	136	91	19	28	125	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	432	33	86	514	117	136	91	19	28	125	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	25	432	33	86	514	117	136	91	19	28	125	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.34	0.95	0.85	0.44	0.92	0.92	0.52	0.98	0.98	0.63	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	1.63	0.37	1.00	0.83	0.17	1.00	0.60	0.40
Final Sat.:	638	3610	1615	840	2860	649	979	1538	315	1188	1072	714
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.02	0.10	0.18	0.18	0.14	0.06	0.06	0.02	0.12	0.12
Crit Moves:					****		****					
Green/Cycle:	0.56	0.56	0.56	0.56	0.56	0.56	0.44	0.44	0.44	0.44	0.44	0.44
Volume/Cap:	0.07	0.21	0.04	0.18	0.32	0.32	0.32	0.14	0.14	0.05	0.27	0.27
Uniform Del:	9.9	10.8	9.7	10.6	11.6	11.6	18.4	16.9	16.9	16.2	18.0	18.0
IncremntDel:	0.1	0.1	0.0	0.2	0.1	0.1	0.4	0.1	0.1	0.0	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	10.0	10.9	9.8	10.8	11.7	11.7	18.9	16.9	16.9	16.3	18.1	18.1
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:	10.0	10.9	9.8	10.8	11.7	11.7	18.9	16.9	16.9	16.3	18.1	18.1
HCM2kAvg:	1	3	0	3	5	5	5	2	2	1	4	4

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

Intersection #16 Sr-43/Central Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.242
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 19 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	1 0
Volume Module:												
Base Vol:	40	400	40	43	492	31	21	76	31	39	85	53
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	44	440	44	47	541	34	23	84	34	43	94	58
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:	44	440	44	47	541	34	23	84	34	43	94	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	44	440	44	47	541	34	23	84	34	43	94	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	440	44	47	541	34	23	84	34	43	94	58
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 Vol.:	44	440	44	47	541	34	23	84	34	43	94	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.39	0.94	0.94	0.43	0.94	0.94	0.91	0.91	0.91	0.80	0.80	0.80
Lanes:	1.00	1.82	0.18	1.00	1.88	0.12	0.16	0.60	0.24	0.44	0.96	0.60
Final Sat.:	737	3236	324	823	3365	212	285	1032	421	668	1455	907
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.06	0.16	0.16	0.08	0.08	0.08	0.06	0.06	0.06
Crit Moves:					****			****				
Green/Cycle:	0.67	0.67	0.67	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.09	0.20	0.20	0.09	0.24	0.24	0.24	0.24	0.24	0.19	0.19	0.19
Uniform Del:	6.0	6.5	6.5	6.0	6.7	6.7	24.1	24.1	24.1	23.6	23.6	23.6
IncremntDel:	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1
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
Delay/Veh:	6.0	6.5	6.5	6.0	6.7	6.7	24.3	24.3	24.3	23.7	23.7	23.7
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:	6.0	6.5	6.5	6.0	6.7	6.7	24.3	24.3	24.3	23.7	23.7	23.7
HCM2kAvg:	1	3	3	1	4	3	3	3	3	2	2	2

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

Intersection #17 SR-43/Lerdo Hwy

Cycle (sec):	100	Critical Vol./Cap. (X):	0.363
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	21.8
Optimal Cycle:	29	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	1	0 1	0 1	0	1 0
Volume Module:												
Base Vol:	64	271	72	144	318	23	9	344	68	50	230	170
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	70	298	79	158	350	25	10	378	75	55	253	187
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:	70	298	79	158	350	25	10	378	75	55	253	187
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	70	298	79	158	350	25	10	378	75	55	253	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	298	79	158	350	25	10	378	75	55	253	187
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 Vol.:	70	298	79	158	350	25	10	378	75	55	253	187
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.92	0.92	0.95	0.94	0.94	0.90	0.90	0.85	0.78	0.78	0.78
Lanes:	1.00	1.58	0.42	1.00	1.87	0.13	0.05	1.95	1.00	0.22	1.02	0.76
Final Sat.:	1805	2764	734	1805	3333	241	87	3321	1615	329	1515	1120
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.09	0.10	0.10	0.11	0.11	0.05	0.17	0.17	0.17
Crit Moves:		****		****							****	
Green/Cycle:	0.15	0.30	0.30	0.24	0.39	0.39	0.46	0.46	0.46	0.46	0.46	0.46
Volume/Cap:	0.27	0.36	0.36	0.36	0.27	0.27	0.25	0.25	0.10	0.36	0.36	0.36
Uniform Del:	37.9	27.7	27.7	31.5	20.6	20.6	16.4	16.4	15.3	17.5	17.5	17.5
IncremntDel:	0.5	0.2	0.2	0.5	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	38.5	27.9	27.9	32.0	20.7	20.7	16.5	16.5	15.3	17.6	17.6	17.6
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:	38.5	27.9	27.9	32.0	20.7	20.7	16.5	16.5	15.3	17.6	17.6	17.6
HCM2kAvg:	2	5	5	4	4	4	4	4	1	6	6	6

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

Intersection #18 SR-43/7th Standard Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.905
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	27.5
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:	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	22	178	83	73	109	9	26	363	53	67	63	39
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	24	196	91	80	120	10	29	399	58	74	69	43
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:	24	196	91	80	120	10	29	399	58	74	69	43
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:	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 Volume:	24	196	91	80	120	10	29	399	58	74	69	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	196	91	80	120	10	29	399	58	74	69	43
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 Vol.:	24	196	91	80	120	10	29	399	58	74	69	43
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:	0.08	0.63	0.29	0.40	0.60	1.00	0.06	0.82	0.12	0.52	0.48	1.00
Final Sat.:	38	307	143	180	269	506	32	441	64	230	216	507
Capacity Analysis Module:												
Vol/Sat:	0.64	0.64	0.64	0.45	0.45	0.02	0.90	0.90	0.90	0.32	0.32	0.08
Crit Moves:		****			****			****			****	
Delay/Veh:	20.4	20.4	20.4	15.6	15.6	9.5	43.0	43.0	43.0	13.4	13.4	9.8
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:	20.4	20.4	20.4	15.6	15.6	9.5	43.0	43.0	43.0	13.4	13.4	9.8
LOS by Move:	C	C	C	C	C	A	E	E	E	B	B	A
ApproachDel:		20.4			15.3			43.0			12.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		20.4			15.3			43.0			12.5	
LOS by Appr:		C			C			E			B	

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

Intersection #19 SR-43/SR-58 (Rosedal Highway West)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.853
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.3
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:	1 0	1 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	127	253	0	0	191	24	198	0	379	0	0	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	140	278	0	0	210	26	218	0	417	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	123	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	278	0	0	210	26	218	0	540	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:	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 Volume:	140	278	0	0	210	26	218	0	540	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	278	0	0	210	26	218	0	540	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 Vol.:	140	278	0	0	210	26	218	0	540	0	0	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:	1.00	1.00	0.00	0.00	0.89	0.11	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	478	515	0	0	470	59	521	0	633	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.29	0.54	xxxx	xxxx	0.45	0.45	0.42	xxxx	0.85	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	12.9	16.9	0.0	0.0	14.6	14.6	14.2	0.0	31.5	0.0	0.0	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:	12.9	16.9	0.0	0.0	14.6	14.6	14.2	0.0	31.5	0.0	0.0	0.0
LOS by Move:	B	C	*	*	B	B	B	*	D	*	*	*
ApproachDel:	15.5			14.6			26.5			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	15.5			14.6			26.5			xxxxxx		
LOS by Appr:	C			B			D			*		

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

Intersection #20 SR-43/SR-58 (Rosedal Highway East)

Cycle (sec):	100	Critical Vol./Cap. (X):	0.997
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	32.2
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	1 0 1	0	1	0 0 1!	0	0	0 1	0	0 1
Volume Module:												
Base Vol:	18	220	138	355	202	9	12	16	18	42	13	129
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	20	242	152	391	222	10	13	18	20	46	14	142
Added Vol:	0	0	0	123	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	242	152	514	222	10	13	18	20	46	14	142
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:	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 Volume:	20	242	152	514	222	10	13	18	20	46	14	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	242	152	514	222	10	13	18	20	46	14	142
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 Vol.:	20	242	152	514	222	10	13	18	20	46	14	142
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	0.26	0.35	0.39	0.76	0.24	1.00
Final Sat.:	459	493	545	515	546	604	120	159	179	342	106	519
Capacity Analysis Module:												
Vol/Sat:	0.04	0.49	0.28	1.00	0.41	0.02	0.11	0.11	0.11	0.14	0.14	0.27
Crit Moves:		****		****				****				****
Delay/Veh:	10.7	16.4	11.6	65.1	13.5	8.6	11.4	11.4	11.4	11.7	11.7	11.9
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:	10.7	16.4	11.6	65.1	13.5	8.6	11.4	11.4	11.4	11.7	11.7	11.9
LOS by Move:	B	C	B	F	B	A	B	B	B	B	B	B
ApproachDel:		14.4			49.0			11.4			11.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		14.4			49.0			11.4			11.8	
LOS by Appr:		B			E			B			B	

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

Intersection #21 H St/9th St

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: A[8.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	40	7	7	51	0	0	0	0	6	0	12
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	44	8	8	56	0	0	0	0	7	0	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	44	8	8	56	0	0	0	0	7	0	13
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:	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 Volume:	0	44	8	8	56	0	0	0	0	7	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	44	8	8	56	0	0	0	0	7	0	13
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	52	xxxx	xxxxx	xxxx	xxxx	xxxxx	119	xxxx	48
Potent Cap.:	xxxx	xxxx	xxxxx	1567	xxxx	xxxxx	xxxx	xxxx	xxxxx	881	xxxx	1027
Move Cap.:	xxxx	xxxx	xxxxx	1567	xxxx	xxxxx	xxxx	xxxx	xxxxx	878	xxxx	1027
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	0.01
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	0.0
Stopped Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	8.6
LOS by Move:	*	*	*	A	*	*	*	*	*	A	*	A
Movement:	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	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.7		
ApproachLOS:	*			*			*			A		

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

Intersection #22 H St/Wasco Ave

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: A[9.0]

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	1		1	0	1	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0	0	0	0	0		39	40	60	0	0		106	2										
Growth Adj:	1.10	1.10	1.10	1.10	1.10		1.10	1.10	1.10	1.10	1.10		1.10	1.10										
Initial Bse:	0	0	0	0	0		43	44	66	0	0		117	2										
Added Vol:	0	0	0	0	0		0	0	0	0	0		0	0										
PasserByVol:	0	0	0	0	0		0	0	0	0	0		0	0										
Initial Fut:	0	0	0	0	0		43	44	66	0	0		117	2										
User Adj:	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00										
PHF Adj:	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 Volume:	0	0	0	0	0		43	44	66	0	0		117	2										
Reduct Vol:	0	0	0	0	0		0	0	0	0	0		0	0										
Final Vol.:	0	0	0	0	0		43	44	66	0	0		117	2										
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx											
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx											
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx		117	119	xxxx	xxxxx	xxxx	xxxx	xxxxx											
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx		941	1482	xxxx	xxxxx	xxxx	xxxx	xxxxx											
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx		941	1482	xxxx	xxxxx	xxxx	xxxx	xxxxx											
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx		0.05	0.03	xxxx	xxxx	xxxx	xxxx	xxxx											
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.1	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx											
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		9.0	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx											
LOS by Move:	*	*	*	*	*		A	A	*	*	*	*	*											
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*												
ApproachDel:	xxxxxx			9.0			xxxxxx			xxxxxx														
ApproachLOS:	*			A			*			*														

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

Intersection #23 Wasco Ave/Poso Ave

Average Delay (sec/veh): 8.7 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:	1	0	0	1	0		1	0	0	1	0		0	1	0	0	1		0	0	1!	0	0	
Volume Module:																								
Base Vol:	24	33	0				0	41	122				62	4	12				2	2	2			
Growth Adj:	1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10				1.10	1.10	1.10			
Initial Bse:	26	36	0				0	45	134				68	4	13				2	2	2			
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:	26	36	0				0	45	134				68	4	13				2	2	2			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	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 Volume:	26	36	0				0	45	134				68	4	13				2	2	2			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	26	36	0				0	45	134				68	4	13				2	2	2			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	xxxxx	xxxxx			6.5	6.2					4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	xxxxx	xxxxx			4.0	3.3					2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	238	150	xxxxx	xxxx			162	3					4	xxxx	xxxxx				18	xxxx	xxxxx			
Potent Cap.:	720	746	xxxxx	xxxx			734	1086					1630	xxxx	xxxxx				1613	xxxx	xxxxx			
Move Cap.:	580	712	xxxxx	xxxx			701	1086					1630	xxxx	xxxxx				1613	xxxx	xxxxx			
Volume/Cap:	0.05	0.05	xxxx	xxxx			0.06	0.12					0.04	xxxx	xxxx				0.00	xxxx	xxxx			

Level Of Service Module:																								
Queue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		0.1	xxxx	xxxxx			0.0	xxxx	xxxxx									
Stopped Del:	11.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx		7.3	xxxx	xxxxx			7.2	xxxx	xxxxx									
LOS by Move:	B	*	*	*	*	*		A	*	*			A	*	*									
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	712	xxxx	xxxx	955		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	0.2	xxxxx	xxxx	0.7		0.1	xxxx	xxxxx			xxxxx	xxxx	xxxxx									
Shrd StpDel:	xxxxx	xxxx	10.3	xxxxx	xxxx	9.6		7.3	xxxx	xxxxx			xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	B	*	*	A		A	*	*			*	*	*									
ApproachDel:	10.8			9.6			xxxxxx			xxxxxx													
ApproachLOS:	B			A			*			*														

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

Intersection #24 Wasco Ave/Kimberlina Rd

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: B[10.4]

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 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	23	0	30	28	142	0	0	150	34
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	25	0	33	31	156	0	0	165	37
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	25	0	33	31	156	0	0	165	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:	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 Volume:	0	0	0	25	0	33	31	156	0	0	165	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	25	0	33	31	156	0	0	165	37
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	402	xxxx	184	202	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	608	xxxx	864	1382	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	598	xxxx	864	1382	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	0.04	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	724	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.4	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.4			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

Intersection #25 J St/9th St

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[8.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	0	0	0 0 1	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	54	0	0	102	8	0	0	1	0	0	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	59	0	0	112	9	0	0	1	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	59	0	0	112	9	0	0	1	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:	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 Volume:	0	59	0	0	112	9	0	0	1	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	59	0	0	112	9	0	0	1	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	61	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	999	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	999	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.6	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.6			xxxxxx		
ApproachLOS:	*			*			A			*		

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

Intersection #26 Wasco Way/SR-58

Average Delay (sec/veh): 7.4 Worst Case Level Of Service: C[17.3]

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 1!	0	0	0 1	0	1	0 1	0	1
Volume Module:												
Base Vol:	19	14	5	5	26	26	27	334	53	9	90	5
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	21	15	6	6	29	29	30	367	58	10	99	6
Added Vol:	0	0	308	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	15	314	6	29	29	30	367	58	10	99	6
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:	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 Volume:	21	15	314	6	29	29	30	367	58	10	99	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	21	15	314	6	29	29	30	367	58	10	99	6
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:												
Cnflict Vol:	577	551	367	739	604	99	105	xxxx	xxxxx	426	xxxx	xxxxx
Potent Cap.:	431	445	682	336	415	962	1500	xxxx	xxxxx	1144	xxxx	xxxxx
Move Cap.:	387	432	682	173	403	962	1500	xxxx	xxxxx	1144	xxxx	xxxxx
Volume/Cap:	0.05	0.04	0.46	0.03	0.07	0.03	0.02	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	637	xxxxx	xxxx	473	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	3.3	xxxxx	xxxxx	0.5	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	17.3	xxxxx	xxxxx	13.8	xxxxx	7.4	xxxx	xxxxx	8.2	xxxx	xxxxx
Shared LOS:	*	C	*	*	B	*	A	*	*	A	*	*
ApproachDel:		17.3			13.8		xxxxxx			xxxxxx		
ApproachLOS:		C			B		*			*		

Appendix B10
Year 2016 Project Construction
Intersection Analysis
Mitigated

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.239
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.1
Optimal Cycle: 24 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:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	0 0	1! 0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	42	1	2	0	27	1	15	47	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	46	1	2	0	30	1	17	52	0
Added Vol:	0	0	0	0	0	34	0	38	38	0	308	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	46	1	36	0	68	39	17	360	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:	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 Volume:	0	0	0	46	1	36	0	68	39	17	360	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	46	1	36	0	68	39	17	360	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 Vol.:	0	0	0	46	1	36	0	68	39	17	360	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.89	0.89	0.89	1.00	1.00	0.85	0.71	1.00	1.00
Lanes:	0.00	0.00	0.00	0.56	0.01	0.43	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	931	22	729	0	1900	1615	1341	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.05	0.05	0.00	0.04	0.02	0.01	0.19	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.21	0.21	0.21	0.00	0.79	0.79	0.79	0.79	0.00
Volume/Cap:	0.00	0.00	0.00	0.24	0.24	0.24	0.00	0.04	0.03	0.02	0.24	0.00
Uniform Del:	0.0	0.0	0.0	33.0	33.0	33.0	0.0	2.2	2.2	2.2	2.7	0.0
IncremntDel:	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.1	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	33.4	33.4	33.4	0.0	2.2	2.2	2.2	2.7	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	0.0	0.0	33.4	33.4	33.4	0.0	2.2	2.2	2.2	2.7	0.0
HCM2kAvg:	0	0	0	2	3	2	0	0	0	0	3	0

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.680
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.6
Optimal Cycle: 58 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	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	0 0	1! 0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	262	1	1	0	204	9	20	38	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	0	288	1	1	0	224	10	22	42	0
Added Vol:	0	0	0	0	0	0	0	677	123	0	0	0
PasserByVol:	0	0	0	0	0	0	0	100	0	0	0	0
Initial Fut:	0	0	0	288	1	1	0	1001	133	22	42	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:	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 Volume:	0	0	0	288	1	1	0	1001	133	22	42	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	288	1	1	0	1001	133	22	42	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 Vol.:	0	0	0	288	1	1	0	1001	133	22	42	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85	0.19	1.00	1.00
Lanes:	0.00	0.00	0.00	0.98	0.01	0.01	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1882	7	7	0	1900	1615	367	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.15	0.15	0.00	0.53	0.08	0.06	0.02	0.00
Crit Moves:					****			****				
Green/Cycle:	0.00	0.00	0.00	0.23	0.23	0.23	0.00	0.77	0.77	0.77	0.77	0.00
Volume/Cap:	0.00	0.00	0.00	0.68	0.68	0.68	0.00	0.68	0.11	0.08	0.03	0.00
Uniform Del:	0.0	0.0	0.0	35.4	35.4	35.4	0.0	5.4	2.8	2.7	2.6	0.0
IncremntDel:	0.0	0.0	0.0	4.4	4.4	4.4	0.0	1.3	0.0	0.1	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	39.9	39.9	39.9	0.0	6.7	2.8	2.8	2.6	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	0.0	0.0	39.9	39.9	39.9	0.0	6.7	2.8	2.8	2.6	0.0
HCM2kAvg:	0	0	0	9	4	4	0	15	1	1	0	0

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.267
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.3
Optimal Cycle: 20 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	5	115	34	42	208	25	10	45	7	129	157	53
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	6	127	37	46	229	28	11	50	8	142	173	58
Added Vol:	0	0	0	0	0	0	0	4	0	0	229	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	127	37	46	229	28	11	54	8	142	402	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	6	127	37	46	229	28	11	54	8	142	402	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	127	37	46	229	28	11	54	8	142	402	58
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 Vol.:	6	127	37	46	229	28	11	53	8	142	402	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.50	0.97	0.97	0.59	0.98	0.98	0.40	0.93	0.93	0.70	0.93	0.93
Lanes:	1.00	0.77	0.23	1.00	0.89	0.11	1.00	1.75	0.25	1.00	1.75	0.25
Final Sat.:	950	1417	419	1112	1669	201	768	3096	446	1336	3093	449
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.04	0.14	0.14	0.01	0.02	0.02	0.11	0.13	0.13
Crit Moves:					****						****	
Green/Cycle:	0.51	0.51	0.51	0.51	0.51	0.51	0.49	0.49	0.49	0.49	0.49	0.49
Volume/Cap:	0.01	0.17	0.17	0.08	0.27	0.27	0.03	0.04	0.04	0.22	0.27	0.27
Uniform Del:	11.9	13.0	13.0	12.3	13.7	13.7	13.4	13.4	13.4	14.7	15.2	15.2
IncremntDel:	0.0	0.1	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.2	0.1	0.1
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
Delay/Veh:	11.9	13.1	13.1	12.4	13.9	13.9	13.4	13.4	13.4	14.9	15.2	15.2
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:	11.9	13.1	13.1	12.4	13.9	13.9	13.4	13.4	13.4	14.9	15.2	15.2
HCM2kAvg:	0	3	3	1	4	4	0	0	0	3	4	4

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.575
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.6
Optimal Cycle: 34 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	0	277	147	80	164	18	41	421	2	49	54	19
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	305	162	88	180	20	45	463	2	54	59	21
Added Vol:	0	0	0	0	0	0	0	677	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	305	162	88	180	20	45	1140	2	54	59	21
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:	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 Volume:	0	305	162	88	180	20	45	1140	2	54	59	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	305	162	88	180	20	45	1140	2	54	59	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	305	162	88	180	20	45	1140	2	54	59	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.95	0.28	0.99	0.99	0.69	0.95	0.95	0.15	0.91	0.91
Lanes:	1.00	0.65	0.35	1.00	0.90	0.10	1.00	1.99	0.01	1.00	1.48	0.52
Final Sat.:	1900	1177	624	536	1686	185	1305	3603	7	279	2566	903
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.16	0.11	0.11	0.03	0.32	0.32	0.19	0.02	0.02
Crit Moves:		****						****				
Green/Cycle:	0.00	0.45	0.45	0.45	0.45	0.45	0.55	0.55	0.55	0.55	0.55	0.55
Volume/Cap:	0.00	0.58	0.58	0.36	0.24	0.24	0.06	0.58	0.58	0.35	0.04	0.04
Uniform Del:	0.0	20.4	20.4	18.1	16.9	16.9	10.5	14.8	14.8	12.5	10.4	10.4
IncremntDel:	0.0	1.0	1.0	0.9	0.1	0.1	0.0	0.4	0.4	1.4	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	0.0	21.4	21.4	19.0	17.1	17.1	10.5	15.2	15.2	13.9	10.4	10.4
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	21.4	21.4	19.0	17.1	17.1	10.5	15.2	15.2	13.9	10.4	10.4
HCM2kAvg:	0	11	11	6	4	4	1	12	5	6	1	1

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 6.0 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:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0 1	0 0	0	0 0	0 0	0	1 0	0 1	0	0 0
Volume Module:												
Base Vol:	3	0	2	0	0	0	0	22	6	1	34	0
Growth Adj:	1.10 1.10	1.10		1.10 1.10	1.10		1.10 1.10	1.10		1.10 1.10	1.10	
Initial Bse:	3	0	2	0	0	0	0	24	7	1	37	0
Added Vol:	48	0	75	0	0	0	0	0	151	251	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	51	0	77	0	0	0	0	24	158	252	37	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:	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 Volume:	51	0	77	0	0	0	0	24	158	252	37	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	51	0	77	0	0	0	0	24	158	252	37	0
Critical Gap Module:												
Critical Gp:	6.4 xxxx		6.2	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	4.1 xxxx		xxxxx
FollowUpTim:	3.5 xxxx		3.3	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	2.2 xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	645 xxxx		103	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	182 xxxx		xxxxx
Potent Cap.:	440 xxxx		957	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	1406 xxxx		xxxxx
Move Cap.:	369 xxxx		957	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	1406 xxxx		xxxxx
Volume/Cap:	0.14 xxxx		0.08	xxxx xxxx		xxxx	xxxx xxxx		xxxx	0.18 xxxx		xxxx
Level Of Service Module:												
Queue:	xxxxx xxxx		0.3	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	0.7 xxxx		xxxxx
Stopped Del:	xxxxx xxxx		9.1	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	8.1 xxxx		xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	369 xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	
SharedQueue:	0.5 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		0.7 xxxx	xxxxx	
Shrd StpDel:	16.3 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		8.1 xxxx	xxxxx	
Shared LOS:	C	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	12.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 11.9 Worst Case Level Of Service: C[15.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	1	0 0	0 0	0	0 0	0 1	0	0 0	1 0	0
Volume Module:												
Base Vol:	4	1	3	0	0	0	0	193	7	0	35	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	4	1	3	0	0	0	0	212	8	0	39	0
Added Vol:	308	0	528	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	312	1	531	0	0	0	0	212	8	0	39	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:	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 Volume:	312	1	531	0	0	0	0	212	8	0	39	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	312	1	531	0	0	0	0	212	8	0	39	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	255	255	216	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	738	652	829	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	738	652	829	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.42	0.00	0.64	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	4.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	16.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	738	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	13.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.5			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Appendix B11
Year 2017 No Project
Intersection Analysis

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in	
# 1 I-5 NB Ramp / Stockdale Hwy	A	8.9	0.000	A	8.9	0.000	+ 0.000	D/V
# 2 I-5 SB Ramp / Stockdale Hwy	A	9.3	0.000	A	9.3	0.000	+ 0.000	D/V
# 3 I-5 NB Ramp / SR 119	B	11.7	0.000	B	11.7	0.000	+ 0.000	D/V
# 4 I-5 SB Ramp / SR 119	B	12.6	0.000	B	12.6	0.000	+ 0.000	D/V
# 5 SR 119 / SR 43	C	26.4	0.577	C	26.4	0.577	+ 0.000	D/V
# 6 Stockdale Hwy/SR 43	B	12.8	0.577	B	12.8	0.577	+ 0.000	V/C
# 7 Stockdale Hwy / Morris Rd	A	8.8	0.000	A	8.8	0.000	+ 0.000	D/V
# 8 Tupman Rd / SR 119	C	22.5	0.000	C	22.5	0.000	+ 0.000	D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.028	A	7.0	0.028	+ 0.000	V/C
# 10 Station Rd/Tupman Rd	A	8.7	0.000	A	8.7	0.000	+ 0.000	D/V
# 11 Stockdale/Dairy	A	8.7	0.000	A	8.7	0.000	+ 0.000	D/V
# 12 Dairy/Adohr	A	9.0	0.000	A	9.0	0.000	+ 0.000	D/V
# 13 SR-43/Poso Ave	B	11.3	0.372	B	11.3	0.372	+ 0.000	V/C
# 14 SR-43/Kimberlina Rd	C	24.1	0.263	C	24.1	0.263	+ 0.000	D/V
# 15 SR-43/Shafter Ave	B	13.0	0.247	B	13.0	0.247	+ 0.000	D/V
# 16 Sr-43/Central Ave	A	9.1	0.189	A	9.1	0.189	+ 0.000	D/V
# 17 SR-43/Lerdo Hwy	C	22.4	0.331	C	22.4	0.331	+ 0.000	D/V
# 18 SR-43/7th Standard Rd	B	12.6	0.489	B	12.6	0.489	+ 0.000	V/C
# 19 SR-43/SR-58 (Rosedal Highway W	B	11.4	0.431	B	11.4	0.431	+ 0.000	V/C
# 20 SR-43/SR-58 (Rosedal Highway E	B	11.5	0.365	B	11.5	0.365	+ 0.000	V/C
# 21 H St/9th St	A	8.6	0.000	A	8.6	0.000	+ 0.000	D/V
# 22 H St/Wasco Ave	A	8.7	0.000	A	8.7	0.000	+ 0.000	D/V
# 23 Wasco Ave/Poso Ave	B	10.4	0.000	B	10.4	0.000	+ 0.000	D/V
# 24 Wasco Ave/Kimberlina Rd	B	10.5	0.000	B	10.5	0.000	+ 0.000	D/V
# 25 J St/9th St	A	8.5	0.000	A	8.5	0.000	+ 0.000	D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 70 Wasco Way/SR-58	B	14.7	0.000	B	14.7	0.000	+ 0.000 D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[8.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1!	0	0	0	0 0	0	0	0	1 0	0	0	0	0 1	0	1
Volume Module:																
Base Vol:	4	0	25		0	0	0		1	64	0		0	57	154	
Growth Adj:	1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12	
Initial Bse:	4	0	28		0	0	0		1	72	0		0	64	172	
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:	4	0	28		0	0	0		1	72	0		0	64	172	
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:	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 Volume:	4	0	28		0	0	0		1	72	0		0	64	172	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	4	0	28		0	0	0		1	72	0		0	64	172	
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2		xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	xxxx	3.3		xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	224	xxxx	72		xxxx	xxxx	xxxxx		236	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	769	xxxx	996		xxxx	xxxx	xxxxx		1343	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	768	xxxx	996		xxxx	xxxx	xxxxx		1343	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.01	xxxx	0.03		xxxx	xxxx	xxxx		0.00	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		7.7	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	957	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	8.9	xxxxx		xxxxx	xxxx	xxxxx		7.7	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	A	*		*	*	*		A	*	*		*	*	*	
ApproachDel:		8.9			xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:		A			*				*				*			

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 3.9 Worst Case Level Of Service: A[9.3]

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	0	0	0		0	0	1!	0	0		0	0	1	0	1		0	1	0	0	0	
Volume Module:																								
Base Vol:	0	0	0				42	1	2				0	27	1				15	47	0			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	0	0				47	1	2				0	30	1				17	53	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				47	1	2				0	30	1				17	53	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:	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 Volume:	0	0	0				47	1	2				0	30	1				17	53	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				47	1	2				0	30	1				17	53	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	6.5	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	4.0	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				117	118	53				xxxx	xxxx	xxxxx				31	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				884	776	1021				xxxx	xxxx	xxxxx				1594	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				877	768	1021				xxxx	xxxx	xxxxx				1594	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.05	0.00	0.00				xxxx	xxxx	xxxx				0.01	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										7.3	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	*	*	*										A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	879	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx										0.0	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	9.3	xxxxx	xxxxx	xxxx	xxxxx										7.3	xxxx	xxxxx			
Shared LOS:	*	*	*	*	A	*	*	*	*										A	*	*			
ApproachDel:	xxxxxx			9.3			xxxxxx												xxxxxx					
ApproachLOS:	*			A			*												*					

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	15	0	8	0	0	0	0	194	3	0	308	21
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	17	0	9	0	0	0	0	217	3	0	345	24
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:	17	0	9	0	0	0	0	217	3	0	345	24
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:	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 Volume:	17	0	9	0	0	0	0	217	3	0	345	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	17	0	9	0	0	0	0	217	3	0	345	24
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	576	xxxx	219	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	483	xxxx	826	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	483	xxxx	826	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT
Shared Cap.:	xxxx	564	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	11.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	11.7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[12.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 1 0 0 1			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	11	1	1	0	186	16	2	317	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	12	1	1	0	208	18	2	355	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	12	1	1	0	208	18	2	355	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:	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 Volume:	0	0	0	12	1	1	0	208	18	2	355	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	12	1	1	0	208	18	2	355	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	577	586	355	xxxx	xxxx	xxxxx	226	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	482	425	693	xxxx	xxxx	xxxxx	1354	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	481	425	693	xxxx	xxxx	xxxxx	1354	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.03	0.00	0.00	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	476	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	12.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			12.6			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

Intersection #5 SR 119 / SR 43

Cycle (sec):	100	Critical Vol./Cap. (X):	0.577
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	26.4
Optimal Cycle:	46	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:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	36	11	16	2	40	359	103	172	3	19	291	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	40	12	18	2	45	402	115	193	3	21	326	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	12	18	2	45	402	115	193	3	21	326	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:	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 Volume:	40	12	18	2	45	402	115	193	3	21	326	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	12	18	2	45	402	115	193	3	21	326	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 Vol.:	40	12	18	2	45	402	115	193	3	21	326	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.36	0.91	0.91	0.74	0.87	0.87	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.41	0.59	1.00	0.10	0.90	1.00	0.98	0.02	1.00	1.00	0.00
Final Sat.:	680	705	1026	1412	165	1479	1805	1862	32	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.02	0.02	0.00	0.27	0.27	0.06	0.10	0.10	0.01	0.17	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.47	0.47	0.47	0.47	0.47	0.47	0.11	0.37	0.37	0.04	0.30	0.00
Volume/Cap:	0.13	0.04	0.04	0.00	0.58	0.58	0.58	0.28	0.28	0.28	0.58	0.00
Uniform Del:	14.8	14.2	14.2	14.0	19.2	19.2	42.2	22.4	22.4	46.5	29.8	0.0
IncremntDel:	0.2	0.0	0.0	0.0	1.1	1.1	4.1	0.2	0.2	2.1	1.5	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	0.00
Delay/Veh:	15.0	14.2	14.2	14.0	20.2	20.2	46.3	22.6	22.6	48.5	31.3	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:	15.0	14.2	14.2	14.0	20.2	20.2	46.3	22.6	22.6	48.5	31.3	0.0
HCM2kAvg:	2	0	0	0	10	10	4	4	4	1	9	0

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.577
Loss Time (sec): 0 (Y+R = 4 sec) 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 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	5	115	34	42	208	25	10	45	7	129	157	53
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	6	129	38	47	233	28	11	50	8	144	176	59
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	129	38	47	233	28	11	50	8	144	176	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:	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 Volume:	6	129	38	47	233	28	11	50	8	144	176	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	129	38	47	233	28	11	50	8	144	176	59
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 Vol.:	6	129	38	47	233	28	11	50	8	144	176	59
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:	0.03	0.75	0.22	0.15	0.76	0.09	0.16	0.73	0.11	0.38	0.46	0.16
Final Sat.:	20	457	135	98	485	58	90	406	63	250	305	103
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.28	0.48	0.48	0.48	0.12	0.12	0.12	0.58	0.58	0.58
Crit Moves:		****			****		****					****
Delay/Veh:	10.3	10.3	10.3	12.7	12.7	12.7	9.4	9.4	9.4	14.5	14.5	14.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.3	10.3	10.3	12.7	12.7	12.7	9.4	9.4	9.4	14.5	14.5	14.5
LOS by Move:	B	B	B	B	B	B	A	A	A	B	B	B
ApproachDel:	10.3			12.7			9.4			14.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.3			12.7			9.4			14.5		
LOS by Appr:	B			B			A			B		

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 1! 0 0			0 1 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	0	10	1	0	1	1	15	0	18	37	1
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	11	1	0	1	1	17	0	20	41	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:	0	0	11	1	0	1	1	17	0	20	41	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:	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 Volume:	0	0	11	1	0	1	1	17	0	20	41	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	11	1	0	1	1	17	0	20	41	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	17	107	xxxx	42	43	xxxx	xxxxx	17	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	1068	877	xxxx	1034	1579	xxxx	xxxxx	1614	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	1068	859	xxxx	1034	1579	xxxx	xxxxx	1614	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	0.00	xxxx	0.00	0.00	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	8.4	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	7.3	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	939	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	8.8	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:		8.4			8.8		xxxxxx			xxxxxx		
ApproachLOS:		A			A		*			*		

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[22.5]

Approach:	North Bound				South Bound				East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	0	1	0	1	0	0	1	0
Volume Module:																				
Base Vol:	1	6	14	10	0	6	16	264	1	29	617	25								
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12								
Initial Bse:	1	7	16	11	0	7	18	296	1	32	691	28								
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:	1	7	16	11	0	7	18	296	1	32	691	28								
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:	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 Volume:	1	7	16	11	0	7	18	296	1	32	691	28								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	1	7	16	11	0	7	18	296	1	32	691	28								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	1105	1116	296	1113	xxxx	705	719	xxxx	xxxxx	297	xxxx	xxxxx								
Potent Cap.:	190	209	748	187	xxxx	440	892	xxxx	xxxxx	1276	xxxx	xxxxx								
Move Cap.:	180	200	748	173	xxxx	440	892	xxxx	xxxxx	1276	xxxx	xxxxx								
Volume/Cap:	0.01	0.03	0.02	0.06	xxxx	0.02	0.02	xxxx	xxxx	0.03	xxxx	xxxx								
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx								
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	7.9	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		387	xxxxx		xxxx		224	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.2	xxxxx		xxxxx		0.3	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx		14.9	xxxxx		xxxxx		22.5	xxxxx		xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		B	*		*		C	*		*	*	*			*	*	*		
ApproachDel:	14.9					22.5					xxxxxx					xxxxxx				
ApproachLOS:	B					C					*					*				

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.028
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	17	4	1	1	11	7	5	5	10	3	4	2
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	19	4	1	1	12	8	6	6	11	3	4	2
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:	19	4	1	1	12	8	6	6	11	3	4	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	19	4	1	1	12	8	6	6	11	3	4	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	4	1	1	12	8	6	6	11	3	4	2
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 Vol.:	19	4	1	1	12	8	6	6	11	3	4	2
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:	0.77	0.18	0.05	0.05	0.58	0.37	0.25	0.25	0.50	0.33	0.45	0.22
Final Sat.:	672	158	40	50	547	348	237	237	474	301	401	200
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Crit Moves:	****			****			****			****		
Delay/Veh:	7.2	7.2	7.2	6.9	6.9	6.9	6.8	6.8	6.8	7.0	7.0	7.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.2	7.2	7.2	6.9	6.9	6.9	6.8	6.8	6.8	7.0	7.0	7.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	7.2			6.9			6.8			7.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.2			6.9			6.8			7.0		
LOS by Appr:	A			A			A			A		

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: A[8.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 0 1 0				0 1 0 0 0				0 0 1! 0 0				1 0 0 0 0			
Volume Module:																
Base Vol:	0	6	9		1	9	0		0	0	0		11	0	0	
Growth Adj:	1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12	
Initial Bse:	0	7	10		1	10	0		0	0	0		12	0	0	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	7	10		1	10	0		0	0	0		12	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:	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 Volume:	0	7	10		1	10	0		0	0	0		12	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	7	10		1	10	0		0	0	0		12	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		6.4	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.5	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		17	xxxx	xxxxx		xxxx	xxxx	xxxxx		24	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		1614	xxxx	xxxxx		xxxx	xxxx	xxxxx		997	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		1614	xxxx	xxxxx		xxxx	xxxx	xxxxx		997	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.00	xxxx	xxxx		xxxx	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	
Stopped Del:	xxxxx	xxxx	xxxxx		7.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		8.7	xxxx	xxxxx	
LOS by Move:	*	*	*		A	*	*		*	*	*		A	*	*	
Movement:	LT	LTR	RT		LT	LTR	RT		LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx		0	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		7.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		A	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				8.7			
ApproachLOS:	*				*				*				A			

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[8.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	0	0	0		0	0	0	1	0		0	1	0	0	0	
Volume Module:																								
Base Vol:	3	0	2				0	0	0				0	22	6				1	34	0			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	3	0	2				0	0	0				0	25	7				1	38	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	3	0	2				0	0	0				0	25	7				1	38	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:	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 Volume:	3	0	2				0	0	0				0	25	7				1	38	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	3	0	2				0	0	0				0	25	7				1	38	0			
Critical Gap Module:																								
Critical Gp:	6.4	xxxx	6.2				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx	3.3				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	68	xxxx	28				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				31	xxxx	xxxxx			
Potent Cap.:	942	xxxx	1053				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				1594	xxxx	xxxxx			
Move Cap.:	941	xxxx	1053				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				1594	xxxx	xxxxx			
Volume/Cap:	0.00	xxxx	0.00				xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				*	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		983	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx		0.0	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx			
Shrd StpDel:	xxxxx		8.7	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx			
Shared LOS:	*		A	*			*	*	*				*	*	*				A	*	*			
ApproachDel:	8.7			xxxxxx						xxxxxx						xxxxxx								
ApproachLOS:	A			*						*						*								

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 4.4 Worst Case Level Of Service: A[9.0]

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	1	0		0	1	0	0	0		0	0	1!	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	2	4	2	4	0	0	0	0	8	0	1												
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12												
Initial Bse:	0	2	4	2	4	0	0	0	0	9	0	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:	0	2	4	2	4	0	0	0	0	9	0	1												
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
PHF Adj:	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 Volume:	0	2	4	2	4	0	0	0	0	9	0	1												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0												
Final Vol.:	0	2	4	2	4	0	0	0	0	9	0	1												
Critical Gap Module:																								
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx												
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx												
Capacity Module:																								
Cnflict Vol:	xxxx	19	0	22	18	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx												
Potent Cap.:	xxxx	879	0	996	879	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx												
Move Cap.:	xxxx	879	0	994	879	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx												
Volume/Cap:	xxxx	0.00	0.00	0.00	0.01	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx												
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx												
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	2636	915	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd StpDel:	xxxxx	xxxx	6.4	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	A	A	*	*	*	*	*	*	*	*												
ApproachDel:	6.4			9.0			xxxxxx			xxxxxx														
ApproachLOS:	A			A			*			*														

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

Intersection #13 SR-43/Poso Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.372
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.3
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:	1 0	1	1	0	1 0	1	1	0	1 0	1	0	1	0 1	0	0	1
Volume Module:																
Base Vol:	23	414	0		0	411	4		4	0	23		0	0	1	
Growth Adj:	1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12	
Initial Bse:	26	464	0		0	460	4		4	0	26		0	0	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:	26	464	0		0	460	4		4	0	26		0	0	1	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	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 Volume:	26	464	0		0	460	4		4	0	26		0	0	1	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	26	464	0		0	460	4		4	0	26		0	0	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	
Final Vol.:	26	464	0		0	460	4		4	0	26		0	0	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:	1.00	2.00	0.00		1.00	1.98	0.02		1.00	1.00	1.00		0.00	1.00	1.00	
Final Sat.:	575	1256	0		0	1237	12		446	0	525		0	0	551	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.37	xxxx		xxxx	0.37	0.37		0.01	xxxx	0.05		xxxx	xxxx	0.00	
Crit Moves:		****				****					****				****	
Delay/Veh:	9.1	11.4	0.0		0.0	11.5	11.5		10.2	0.0	9.2		0.0	0.0	8.7	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	9.1	11.4	0.0		0.0	11.5	11.5		10.2	0.0	9.2		0.0	0.0	8.7	
LOS by Move:	A	B	*		*	B	B		B	*	A		*	*	A	
ApproachDel:		11.3				11.5				9.3				8.7		
Delay Adj:		1.00				1.00				1.00				1.00		
ApprAdjDel:		11.3				11.5				9.3				8.7		
LOS by Appr:		B				B				A				A		

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

Intersection #14 SR-43/Kimberlina Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.263
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 24.1
Optimal Cycle: 25 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1 0	1	1	0	1 0	1	1	0	0 0	1!	0	0	0 0	1!	0	0
Volume Module:																
Base Vol:	129	264	17		88	229	4		5	73	95		20	91	39	
Growth Adj:	1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12	
Initial Bse:	144	296	19		99	256	4		6	82	106		22	102	44	
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:	144	296	19		99	256	4		6	82	106		22	102	44	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	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 Volume:	144	296	19		99	256	4		6	82	106		22	102	44	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	144	296	19		99	256	4		6	82	106		22	102	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	
Final Vol.:	144	296	19		99	256	4		6	82	106		22	102	44	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.94	0.94		0.95	0.95	0.95		0.92	0.92	0.92		0.92	0.92	0.92	
Lanes:	1.00	1.88	0.12		1.00	1.97	0.03		0.03	0.42	0.55		0.13	0.61	0.26	
Final Sat.:	1805	3361	216		1805	3537	62		51	738	960		234	1063	456	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.09	0.09		0.05	0.07	0.07		0.11	0.11	0.11		0.10	0.10	0.10	
Crit Moves:	****					****				****						
Green/Cycle:	0.30	0.36	0.36		0.22	0.28	0.28		0.42	0.42	0.42		0.42	0.42	0.42	
Volume/Cap:	0.26	0.25	0.25		0.25	0.26	0.26		0.26	0.26	0.26		0.23	0.23	0.23	
Uniform Del:	26.3	22.6	22.6		32.0	28.3	28.3		18.9	18.9	18.9		18.6	18.6	18.6	
IncremntDel:	0.3	0.1	0.1		0.3	0.1	0.1		0.2	0.2	0.2		0.2	0.2	0.2	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	26.6	22.7	22.7		32.3	28.5	28.5		19.1	19.1	19.1		18.7	18.7	18.7	
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:	26.6	22.7	22.7		32.3	28.5	28.5		19.1	19.1	19.1		18.7	18.7	18.7	
HCM2kAvg:	4	3	3		3	3	4		4	4	4		4	3	3	

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

Intersection #15 SR-43/Shafter Ave

Cycle (sec):	100	Critical Vol./Cap. (X):	0.247
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	13.0
Optimal Cycle:	19	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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	40	330	44	74	347	92	84	129	22	41	107	63
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	45	370	49	83	389	103	94	144	25	46	120	71
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:	45	370	49	83	389	103	94	144	25	46	120	71
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:	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 Volume:	45	370	49	83	389	103	94	144	25	46	120	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	370	49	83	389	103	94	144	25	46	120	71
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 Vol.:	45	370	49	83	389	103	94	144	25	46	120	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.41	0.95	0.85	0.48	0.92	0.92	0.53	0.98	0.98	0.56	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	1.58	0.42	1.00	0.85	0.15	1.00	0.63	0.37
Final Sat.:	777	3610	1615	916	2765	733	1011	1587	271	1055	1129	665
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.03	0.09	0.14	0.14	0.09	0.09	0.09	0.04	0.11	0.11
Crit Moves:					****						****	
Green/Cycle:	0.57	0.57	0.57	0.57	0.57	0.57	0.43	0.43	0.43	0.43	0.43	0.43
Volume/Cap:	0.10	0.18	0.05	0.16	0.25	0.25	0.22	0.21	0.21	0.10	0.25	0.25
Uniform Del:	9.8	10.3	9.5	10.2	10.8	10.8	17.9	17.9	17.9	17.0	18.2	18.2
IncremntDel:	0.1	0.0	0.0	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	9.9	10.4	9.6	10.3	10.8	10.8	18.1	18.0	18.0	17.1	18.3	18.3
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:	9.9	10.4	9.6	10.3	10.8	10.8	18.1	18.0	18.0	17.1	18.3	18.3
HCM2kAvg:	2	3	1	2	4	4	3	3	3	1	4	4

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

Intersection #16 Sr-43/Central Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.189
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.1
Optimal Cycle: 18 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:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	1 0
Volume Module:												
Base Vol:	14	412	24	46	387	18	9	61	11	26	93	29
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	16	461	27	52	433	20	10	68	12	29	104	32
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:	16	461	27	52	433	20	10	68	12	29	104	32
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:	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 Volume:	16	461	27	52	433	20	10	68	12	29	104	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	461	27	52	433	20	10	68	12	29	104	32
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 Vol.:	16	461	27	52	433	20	10	68	12	29	104	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.46	0.94	0.94	0.44	0.94	0.94	0.95	0.95	0.95	0.84	0.84	0.84
Lanes:	1.00	1.89	0.11	1.00	1.91	0.09	0.11	0.75	0.14	0.35	1.26	0.39
Final Sat.:	870	3384	197	836	3425	159	202	1366	246	558	1996	622
Capacity Analysis Module:												
Vol/Sat:	0.02	0.14	0.14	0.06	0.13	0.13	0.05	0.05	0.05	0.05	0.05	0.05
Crit Moves:		****									****	
Green/Cycle:	0.72	0.72	0.72	0.72	0.72	0.72	0.28	0.28	0.28	0.28	0.28	0.28
Volume/Cap:	0.02	0.19	0.19	0.09	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19
Uniform Del:	3.9	4.4	4.4	4.1	4.4	4.4	27.5	27.5	27.5	27.6	27.6	27.6
IncremntDel:	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.2	0.1	0.1	0.1
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
Delay/Veh:	3.9	4.5	4.5	4.1	4.4	4.4	27.7	27.7	27.7	27.7	27.7	27.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	3.9	4.5	4.5	4.1	4.4	4.4	27.7	27.7	27.7	27.7	27.7	27.7
HCM2kAvg:	0	2	2	1	2	2	2	2	2	2	2	2

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

Intersection #17 SR-43/Lerdo Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.331
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 22.4
Optimal Cycle: 28 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	1 0	1	1	0	1 0	1	1	0	0 1	1	0	1	0 1	0	1	0
Volume Module:																
Base Vol:	41	307		58	145	240		17	20	246		50	64	124		127
Growth Adj:	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12		1.12
Initial Bse:	46	344		65	162	269		19	22	276		56	72	139		142
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:	46	344		65	162	269		19	22	276		56	72	139		142
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:	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 Volume:	46	344		65	162	269		19	22	276		56	72	139		142
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	46	344		65	162	269		19	22	276		56	72	139		142
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 Vol.:	46	344		65	162	269		19	22	276		56	72	139		142
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	0.93		0.93	0.95	0.94		0.94	0.87	0.87		0.85	0.74	0.74		0.74
Lanes:	1.00	1.68		0.32	1.00	1.87		0.13	0.15	1.85		1.00	0.40	0.79		0.81
Final Sat.:	1805	2963		560	1805	3337		236	249	3065		1615	574	1113		1140
Capacity Analysis Module:																
Vol/Sat:	0.03	0.12		0.12	0.09	0.08		0.08	0.09	0.09		0.03	0.12	0.12		0.12
Crit Moves:		****			****									****		
Green/Cycle:	0.15	0.35		0.35	0.27	0.47		0.47	0.38	0.38		0.38	0.38	0.38		0.38
Volume/Cap:	0.17	0.33		0.33	0.33	0.17		0.17	0.24	0.24		0.09	0.33	0.33		0.33
Uniform Del:	37.1	23.8		23.8	29.1	15.1		15.1	21.3	21.3		20.1	22.2	22.2		22.2
IncremntDel:	0.3	0.2		0.2	0.4	0.0		0.0	0.1	0.1		0.1	0.2	0.2		0.2
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Delay/Veh:	37.4	24.0		24.0	29.5	15.1		15.1	21.4	21.4		20.2	22.3	22.3		22.3
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:	37.4	24.0		24.0	29.5	15.1		15.1	21.4	21.4		20.2	22.3	22.3		22.3
HCM2kAvg:	1	5		5	4	2		3	3	3		1	5	5		5

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

Intersection #18 SR-43/7th Standard Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.489
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	12.6
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	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	50	128	73	33	136	32	13	78	42	47	163	42
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	56	143	82	37	152	36	15	87	47	53	183	47
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:	56	143	82	37	152	36	15	87	47	53	183	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	56	143	82	37	152	36	15	87	47	53	183	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	143	82	37	152	36	15	87	47	53	183	47
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 Vol.:	56	143	82	37	152	36	15	87	47	53	183	47
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.51	0.29	0.20	0.80	1.00	0.10	0.59	0.31	0.22	0.78	1.00
Final Sat.:	114	293	167	106	437	616	52	311	167	122	422	618
Capacity Analysis Module:												
Vol/Sat:	0.49	0.49	0.49	0.35	0.35	0.06	0.28	0.28	0.28	0.43	0.43	0.08
Crit Moves:		****			****			****			****	
Delay/Veh:	14.2	14.2	14.2	12.0	12.0	8.5	11.5	11.5	11.5	13.3	13.3	8.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.2	14.2	14.2	12.0	12.0	8.5	11.5	11.5	11.5	13.3	13.3	8.6
LOS by Move:	B	B	B	B	B	A	B	B	B	B	B	A
ApproachDel:	14.2			11.5			11.5			12.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	14.2			11.5			11.5			12.5		
LOS by Appr:	B			B			B			B		

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

Intersection #19 SR-43/SR-58 (Rosedal Highway West)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.431
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.4
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:	1 0	1 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	164	238	0	0	163	93	77	0	142	0	0	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	184	267	0	0	183	104	86	0	159	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	267	0	0	183	104	86	0	159	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:	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 Volume:	184	267	0	0	183	104	86	0	159	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	267	0	0	183	104	86	0	159	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 Vol.:	184	267	0	0	183	104	86	0	159	0	0	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:	1.00	1.00	0.00	0.00	0.64	0.36	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	589	642	0	0	424	242	512	0	616	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.31	0.42	xxxx	xxxx	0.43	0.43	0.17	xxxx	0.26	xxxx	xxxx	xxxx
Crit Moves:		****				****			****			
Delay/Veh:	11.3	11.9	0.0	0.0	12.1	12.1	10.7	0.0	10.0	0.0	0.0	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:	11.3	11.9	0.0	0.0	12.1	12.1	10.7	0.0	10.0	0.0	0.0	0.0
LOS by Move:	B	B	*	*	B	B	B	*	A	*	*	*
ApproachDel:	11.7			12.1			10.2			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	11.7			12.1			10.2			xxxxxx		
LOS by Appr:	B			B			B			*		

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

Intersection #20 SR-43/SR-58 (Rosedal Highway East)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.365
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.5
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:	1 0	1 0	1	1 0	1 0	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	7	168	30	124	171	5	9	5	20	95	13	207
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	8	188	34	139	192	6	10	6	22	106	15	232
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:	8	188	34	139	192	6	10	6	22	106	15	232
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:	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 Volume:	8	188	34	139	192	6	10	6	22	106	15	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	188	34	139	192	6	10	6	22	106	15	232
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 Vol.:	8	188	34	139	192	6	10	6	22	106	15	232
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	0.26	0.15	0.59	0.88	0.12	1.00
Final Sat.:	491	532	587	514	555	616	138	77	308	464	63	634
Capacity Analysis Module:												
Vol/Sat:	0.02	0.35	0.06	0.27	0.35	0.01	0.07	0.07	0.07	0.23	0.23	0.37
Crit Moves:		****			****			****				****
Delay/Veh:	9.8	12.4	8.8	11.8	12.0	8.3	9.8	9.8	9.8	11.1	11.1	11.0
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:	9.8	12.4	8.8	11.8	12.0	8.3	9.8	9.8	9.8	11.1	11.1	11.0
LOS by Move:	A	B	A	B	B	A	A	A	A	B	B	B
ApproachDel:		11.8			11.9			9.8			11.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.8			11.9			9.8			11.0	
LOS by Appr:		B			B			A			B	

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

Intersection #21 H St/9th St

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: A[8.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0	32	3				2	24	0				0	0	0				3	0	14			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	36	3				2	27	0				0	0	0				3	0	16			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	36	3				2	27	0				0	0	0				3	0	16			
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:	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 Volume:	0	36	3				2	27	0				0	0	0				3	0	16			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	36	3				2	27	0				0	0	0				3	0	16			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx				6.4	xxxx	6.2			
FollowUpTim:	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx				3.5	xxxx	3.3			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				39	xxxx	xxxxx				xxxx	xxxx	xxxxx				69	xxxx	38			
Potent Cap.:	xxxx	xxxx	xxxxx				1584	xxxx	xxxxx				xxxx	xxxx	xxxxx				941	xxxx	1040			
Move Cap.:	xxxx	xxxx	xxxxx				1584	xxxx	xxxxx				xxxx	xxxx	xxxxx				940	xxxx	1040			
Volume/Cap:	xxxx	xxxx	xxxx				0.00	xxxx	xxxx				xxxx	xxxx	xxxx				0.00	xxxx	0.02			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	0.0			
Stopped Del:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.8	xxxx	8.5			
LOS by Move:	*	*	*				A	*	*				*	*	*				A	*	A			
Movement:	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				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				A	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						8.6					
ApproachLOS:	*						*						*						A					

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

Intersection #22 H St/Wasco Ave

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: A[8.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		1	0	0	0	1		1	0	1	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0	0	0				1	0	37				35	79	0				0	54	0			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	0	0				1	0	41				39	88	0				0	60	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				1	0	41				39	88	0				0	60	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:	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 Volume:	0	0	0				1	0	41				39	88	0				0	60	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				1	0	41				39	88	0				0	60	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				227	xxxx	60				60	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Potent Cap.:	xxxx	xxxx	xxxxx				765	xxxx	1010				1556	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Move Cap.:	xxxx	xxxx	xxxxx				751	xxxx	1010				1556	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Volume/Cap:	xxxx	xxxx	xxxx				0.00	xxxx	0.04				0.03	xxxx	xxxx	xxxx	xxxx	xxxx						
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.0	xxxx	0.1				0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx				9.8	xxxx	8.7				7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*				A	*	A				A	*	*	*	*	*						
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						8.7						xxxxxx						xxxxxx					
ApproachLOS:	*						A						*						*					

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

Intersection #23 Wasco Ave/Poso Ave

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: B[10.4]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	1
Volume Module:																				
Base Vol:	10	23	0			3	32	58			75	6	14			0	0	2		
Growth Adj:	1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12		
Initial Bse:	11	26	0			3	36	65			84	7	16			0	0	2		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	11	26	0			3	36	65			84	7	16			0	0	2		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	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 Volume:	11	26	0			3	36	65			84	7	16			0	0	2		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	11	26	0			3	36	65			84	7	16			0	0	2		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	xxxxx			7.1	6.5	6.2			4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx			3.5	4.0	3.3			2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	193	177	xxxxx			195	190	0			2	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	771	720	xxxxx			768	708	0			1633	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	710	681	xxxxx			715	670	0			1633	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.02	0.04	xxxx			0.00	0.05	0.00			0.05	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																				
Queue:	0.0	xxxx	xxxxx			0.0	xxxx	xxxxx			0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	10.2	xxxx	xxxxx			10.1	xxxx	xxxxx			7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	B	*	*			B	*	*			A	*	*	*	*	*				
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	681			xxxx	xxxx	1884			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	0.1			xxxxx	xxxx	0.2			0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	10.5			xxxxx	xxxx	7.0			7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	B			*	*	A			A	*	*	*	*	*				
ApproachDel:	10.4					7.1					xxxxxx			xxxxxx						
ApproachLOS:	B					A					*			*						

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

Intersection #24 Wasco Ave/Kimberlina Rd

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[10.5]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0				0 0 0 1 0			
Volume Module:														
Base Vol:	0	0	0	27	0	19	17	163	0	0	138	17		
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12		
Initial Bse:	0	0	0	30	0	21	19	183	0	0	155	19		
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	0	0	0	30	0	21	19	183	0	0	155	19		
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:	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 Volume:	0	0	0	30	0	21	19	183	0	0	155	19		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Final Vol.:	0	0	0	30	0	21	19	183	0	0	155	19		
Critical Gap Module:														
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:														
Cnflict Vol:	xxxx	xxxx	xxxxx	385	xxxx	164	174	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx	622	xxxx	886	1415	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx	616	xxxx	886	1415	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx		

Level Of Service Module:														
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*		
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	704	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.5	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*		
ApproachDel:	xxxxxx			10.5			xxxxxx			xxxxxx				
ApproachLOS:	*			B			*			*				

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

Intersection #25 J St/9th St

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[8.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	0	0	0 0 1	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	71	0	0	64	7	0	0	1	0	0	0
Growth Adj:	1.12 1.12	1.12	1.12	1.12 1.12	1.12	1.12	1.12 1.12	1.12	1.12	1.12 1.12	1.12	1.12
Initial Bse:	0	80	0	0	72	8	0	0	1	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	80	0	0	72	8	0	0	1	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00
PHF Adj:	1.00 1.00	1.00	1.00	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 Volume:	0	80	0	0	72	8	0	0	1	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	80	0	0	72	8	0	0	1	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxx xxxx	xxxx	6.9	xxxxx xxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxx xxxx	xxxx	3.3	xxxxx xxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx xxxx	xxxxx	xxxx	xxxx xxxx	xxxx	40	xxxx xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxx	xxxxx	xxxx	xxxx xxxx	xxxx	1029	xxxx xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxx	xxxxx	xxxx	xxxx xxxx	xxxx	1029	xxxx xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx xxxx	xxxx	xxxx	xxxx xxxx	xxxx	0.00	xxxx xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxx xxxx	xxxx	0.0	xxxxx xxxx	xxxx	xxxxx
Stopped Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxx xxxx	xxxx	8.5	xxxxx xxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	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 StpDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.5			xxxxxx		
ApproachLOS:	*			*			A			*		

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

Intersection #70 Wasco Way/SR-58

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: B[14.7]

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 1!	0	0	0 1	0	1	0 1	0	1
Volume Module:												
Base Vol:	39	29	10	3	5	5	29	363	58	5	46	2
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	44	32	11	3	6	6	32	407	65	6	52	2
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:	44	32	11	3	6	6	32	407	65	6	52	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	44	32	11	3	6	6	32	407	65	6	52	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	44	32	11	3	6	6	32	407	65	6	52	2
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:												
Cnflict Vol:	541	536	407	589	599	52	54	xxxx	xxxxx	472	xxxx	xxxxx
Potent Cap.:	455	454	649	423	418	1022	1565	xxxx	xxxxx	1101	xxxx	xxxxx
Move Cap.:	439	442	649	385	407	1022	1565	xxxx	xxxxx	1101	xxxx	xxxxx
Volume/Cap:	0.10	0.07	0.02	0.01	0.01	0.01	0.02	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	459	xxxxx	xxxx	520	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	0.1	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	14.7	xxxxx	xxxxx	12.1	xxxxx	7.3	xxxx	xxxxx	8.3	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	A	*	*
ApproachDel:		14.7			12.1		xxxxxx			xxxxxx		
ApproachLOS:		B			B		*			*		

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in	
# 1 I-5 NB Ramp / Stockdale Hwy	B	12.1	0.000	B	12.1	0.000	+ 0.000	D/V
# 2 I-5 SB Ramp / Stockdale Hwy	B	14.6	0.000	B	14.6	0.000	+ 0.000	D/V
# 3 I-5 NB Ramp / SR 119	C	20.1	0.000	C	20.1	0.000	+ 0.000	D/V
# 4 I-5 SB Ramp / SR 119	C	21.0	0.000	C	21.0	0.000	+ 0.000	D/V
# 5 SR 119 / SR 43	C	24.5	0.639	C	24.5	0.639	+ 0.000	D/V
# 6 Stockdale Hwy/SR 43	E	40.9	0.979	E	40.9	0.979	+ 0.000	V/C
# 7 Stockdale Hwy / Morris Rd	A	9.5	0.000	A	9.5	0.000	+ 0.000	D/V
# 8 Tupman Rd / SR 119	F	117.7	0.000	F	117.7	0.000	+ 0.000	D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.039	A	7.0	0.039	+ 0.000	V/C
# 10 Station Rd/Tupman Rd	A	8.6	0.000	A	8.6	0.000	+ 0.000	D/V
# 11 Stockdale/Dairy	A	9.8	0.000	A	9.8	0.000	+ 0.000	D/V
# 12 Dairy/Adohr	A	8.9	0.000	A	8.9	0.000	+ 0.000	D/V
# 13 SR-43/Poso Ave	B	12.6	0.463	B	12.6	0.463	+ 0.000	V/C
# 14 SR-43/Kimberlina Rd	C	21.2	0.330	C	21.2	0.330	+ 0.000	D/V
# 15 SR-43/Shafter Ave	B	13.3	0.326	B	13.3	0.326	+ 0.000	D/V
# 16 Sr-43/Central Ave	B	10.5	0.246	B	10.5	0.246	+ 0.000	D/V
# 17 SR-43/Lerdo Hwy	C	21.9	0.369	C	21.9	0.369	+ 0.000	D/V
# 18 SR-43/7th Standard Rd	D	29.7	0.930	D	29.7	0.930	+ 0.000	V/C
# 19 SR-43/SR-58 (Rosedal Highway W	C	15.8	0.674	C	15.8	0.674	+ 0.000	V/C
# 20 SR-43/SR-58 (Rosedal Highway E	C	17.9	0.777	C	17.9	0.777	+ 0.000	V/C
# 21 H St/9th St	A	8.8	0.000	A	8.8	0.000	+ 0.000	D/V
# 22 H St/Wasco Ave	A	9.0	0.000	A	9.0	0.000	+ 0.000	D/V
# 23 Wasco Ave/Poso Ave	B	10.9	0.000	B	10.9	0.000	+ 0.000	D/V
# 24 Wasco Ave/Kimberlina Rd	B	10.5	0.000	B	10.5	0.000	+ 0.000	D/V
# 25 J St/9th St	A	8.6	0.000	A	8.6	0.000	+ 0.000	D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 70 Wasco Way/SR-58	B	14.5	0.000	B	14.5	0.000	+ 0.000 D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[12.1]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1
Volume Module:																				
Base Vol:	3	0	31	0	0	0	3	466	0	0	55	67								
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12								
Initial Bse:	3	0	35	0	0	0	3	522	0	0	62	75								
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:	3	0	35	0	0	0	3	522	0	0	62	75								
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:	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 Volume:	3	0	35	0	0	0	3	522	0	0	62	75								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	3	0	35	0	0	0	3	522	0	0	62	75								
Critical Gap Module:																				
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	628	xxxx	522	xxxx	xxxx	xxxxx	137	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	450	xxxx	559	xxxx	xxxx	xxxxx	1460	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	449	xxxx	559	xxxx	xxxx	xxxxx	1460	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	0.01	xxxx	0.06	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		547	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.2	xxxxx		xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx		12.1	xxxxx		xxxxx	xxxx	xxxxx			7.5	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		B	*		*	*	*			A	*	*			*	*	*		
ApproachDel:	12.1			xxxxxx			xxxxxx				xxxxxx									
ApproachLOS:	B			*			*				*									

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 7.5 Worst Case Level Of Service: B[14.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	0	1	0	1		0	1	0	0	0	
Volume Module:																								
Base Vol:	0	0	0				262	1	1				0	204	9				20	38	0			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	0	0				293	1	1				0	228	10				22	43	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				293	1	1				0	228	10				22	43	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:	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 Volume:	0	0	0				293	1	1				0	228	10				22	43	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				293	1	1				0	228	10				22	43	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	6.5	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	4.0	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				321	326	43				xxxx	xxxx	xxxxx				239	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				677	596	1034				xxxx	xxxx	xxxxx				1340	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				668	586	1034				xxxx	xxxx	xxxxx				1340	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.44	0.00	0.00				xxxx	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										0.1	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										7.7	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	*	*	*										A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	669	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	2.3	xxxxx	xxxxx	xxxx	xxxxx										0.1	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	14.6	xxxxx	xxxxx	xxxx	xxxxx										7.7	xxxx	xxxxx			
Shared LOS:	*	*	*	*	B	*	*	*	*										A	*	*			
ApproachDel:	xxxxxx			14.6			xxxxxx												xxxxxx					
ApproachLOS:	*			B			*												*					

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[20.1]

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 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	13	0	6	0	0	0	0	770	2	0	223	11
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	15	0	7	0	0	0	0	862	2	0	250	12
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:	15	0	7	0	0	0	0	862	2	0	250	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:	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 Volume:	15	0	7	0	0	0	0	862	2	0	250	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	15	0	7	0	0	0	0	862	2	0	250	12
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1119	xxxx	864	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	231	xxxx	357	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	231	xxxx	357	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT
Shared Cap.:	xxxx	260	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	20.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	20.1			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[21.0]

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			0 1 0 0 1			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	45	0	13	0	721	42	1	238	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	50	0	15	0	808	47	1	267	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	50	0	15	0	808	47	1	267	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:	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 Volume:	0	0	0	50	0	15	0	808	47	1	267	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	50	0	15	0	808	47	1	267	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1100	xxxx	267	xxxx	xxxx	xxxxx	855	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	237	xxxx	777	xxxx	xxxx	xxxxx	794	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	237	xxxx	777	xxxx	xxxx	xxxxx	794	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.21	xxxx	0.02	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	237	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	24.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
Shared LOS:	*	*	*	C	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			21.0			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

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

Intersection #5 SR 119 / SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.639
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.5
Optimal Cycle: 52 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:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	37	85	77	4	39	175	466	663	19	24	201	1
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	41	95	86	4	44	196	522	743	21	27	225	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:	41	95	86	4	44	196	522	743	21	27	225	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:	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 Volume:	41	95	86	4	44	196	522	743	21	27	225	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	95	86	4	44	196	522	743	21	27	225	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
Final Vol.:	41	95	86	4	44	196	522	743	21	27	225	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.39	0.93	0.93	0.51	0.88	0.88	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.52	0.48	1.00	0.18	0.82	1.00	0.97	0.03	1.00	0.99	0.01
Final Sat.:	741	926	839	960	304	1363	1805	1840	53	1805	1889	9
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.10	0.00	0.14	0.14	0.29	0.40	0.40	0.01	0.12	0.12
Crit Moves:					****			****		****		
Green/Cycle:	0.23	0.23	0.23	0.23	0.23	0.23	0.46	0.63	0.63	0.02	0.19	0.19
Volume/Cap:	0.25	0.46	0.46	0.02	0.64	0.64	0.62	0.64	0.64	0.64	0.62	0.62
Uniform Del:	31.8	33.5	33.5	30.2	35.1	35.1	20.2	11.4	11.4	48.4	37.1	37.1
IncremntDel:	0.8	0.8	0.8	0.0	3.7	3.7	1.5	1.2	1.2	28.5	3.4	3.4
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
Delay/Veh:	32.6	34.3	34.3	30.2	38.7	38.7	21.7	12.5	12.5	76.9	40.5	40.5
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:	32.6	34.3	34.3	30.2	38.7	38.7	21.7	12.5	12.5	76.9	40.5	40.5
HCM2kAvg:	3	5	5	0	8	8	13	15	14	2	7	4

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec):	100	Critical Vol./Cap. (X):	0.979
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	40.9
Optimal Cycle:	0	Level Of Service:	E

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 0 1	0		0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0	
Volume Module:												
Base Vol:	0	277	147	80	164	18	41	421	2	49	54	19
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	310	165	90	184	20	46	472	2	55	60	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	310	165	90	184	20	46	472	2	55	60	21
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:	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 Volume:	0	310	165	90	184	20	46	472	2	55	60	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	310	165	90	184	20	46	472	2	55	60	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	310	165	90	184	20	46	472	2	55	60	21
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:	0.00	0.65	0.35	0.30	0.63	0.07	0.09	0.90	0.01	0.40	0.44	0.16
Final Sat.:	0	346	184	144	296	32	47	482	2	170	187	66
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.90	0.90	0.62	0.62	0.62	0.98	0.98	0.98	0.32	0.32	0.32
Crit Moves:			****		****			****			****	
Delay/Veh:	0.0	41.1	41.1	20.6	20.6	20.6	59.2	59.2	59.2	14.2	14.2	14.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	41.1	41.1	20.6	20.6	20.6	59.2	59.2	59.2	14.2	14.2	14.2
LOS by Move:	*	E	E	C	C	C	F	F	F	B	B	B
ApproachDel:		41.1			20.6			59.2			14.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		41.1			20.6			59.2			14.2	
LOS by Appr:		E			C			F			B	

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[9.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 1 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	0	18	0	0	0	1	197	0	3	34	1
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	20	0	0	0	1	221	0	3	38	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:	0	0	20	0	0	0	1	221	0	3	38	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:	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 Volume:	0	0	20	0	0	0	1	221	0	3	38	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	20	0	0	0	1	221	0	3	38	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	221	xxxx	xxxx	xxxxx	39	xxxx	xxxxx	221	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	824	xxxx	xxxx	xxxxx	1584	xxxx	xxxxx	1361	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	824	xxxx	xxxx	xxxxx	1584	xxxx	xxxxx	1361	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	9.5	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	A	*	*	A	*	*
Movement:	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	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	9.5			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: F[117.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	0	1!	0	0		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	0	1	27				22	0	6				14	1171	0				11	397	10			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	1	30				25	0	7				16	1312	0				12	445	11			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	1	30				25	0	7				16	1312	0				12	445	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:	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 Volume:	0	1	30				25	0	7				16	1312	0				12	445	11			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	1	30				25	0	7				16	1312	0				12	445	11			
Critical Gap Module:																								
Critical Gp:	xxxxx	6.5	6.2				7.1	xxxx	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	4.0	3.3				3.5	xxxx	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	1823	1312				1833	xxxx	450				456	xxxx	xxxxx				1312	xxxx	xxxxx			
Potent Cap.:	xxxx	78	196				59	xxxx	613				1116	xxxx	xxxxx				534	xxxx	xxxxx			
Move Cap.:	xxxx	75	196				48	xxxx	613				1116	xxxx	xxxxx				534	xxxx	xxxxx			
Volume/Cap:	xxxx	0.01	0.15				0.51	xxxx	0.01				0.01	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.3	xxxx	xxxxx				11.9	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				A	*	*				B	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	185				xxxx	60	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	0.6				xxxxx	2.1	xxxxx				xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	28.3				xxxxx	118	xxxxx				xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	D				*	F	*				*	*	*				*	*	*			
ApproachDel:	28.3						117.7						xxxxxx						xxxxxx					
ApproachLOS:	D						F						*						*					

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.039
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	18	5	3	12	3	4	0	4	1	1	4
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	10	20	6	3	13	3	4	0	4	1	1	4
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:	10	20	6	3	13	3	4	0	4	1	1	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:	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 Volume:	10	20	6	3	13	3	4	0	4	1	1	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	20	6	3	13	3	4	0	4	1	1	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 Vol.:	10	20	6	3	13	3	4	0	4	1	1	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:	0.28	0.56	0.16	0.17	0.66	0.17	0.50	0.00	0.50	0.17	0.17	0.66
Final Sat.:	258	516	143	153	613	153	465	0	465	162	162	647
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.02	0.02	0.02	0.01	xxxx	0.01	0.01	0.01	0.01
Crit Moves:		****			****			****			****	
Delay/Veh:	7.1	7.1	7.1	7.0	7.0	7.0	6.9	0.0	6.9	6.7	6.7	6.7
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:	7.1	7.1	7.1	7.0	7.0	7.0	6.9	0.0	6.9	6.7	6.7	6.7
LOS by Move:	A	A	A	A	A	A	A	*	A	A	A	A
ApproachDel:		7.1			7.0			6.9			6.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.1			7.0			6.9			6.7	
LOS by Appr:		A			A			A			A	

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: A[8.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	1!	0	0		1	0	0	0	0	
Volume Module:																								
Base Vol:	0	4	21				1	6	0				0	0	0				7	0	0			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	4	24				1	7	0				0	0	0				8	0	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	4	24				1	7	0				0	0	0				8	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:	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 Volume:	0	4	24				1	7	0				0	0	0				8	0	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	4	24				1	7	0				0	0	0				8	0	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx				6.4	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx				3.5	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				28	xxxx	xxxxx				xxxx	xxxx	xxxxx				25	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				1599	xxxx	xxxxx				xxxx	xxxx	xxxxx				996	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				1599	xxxx	xxxxx				xxxx	xxxx	xxxxx				995	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.00	xxxx	xxxx				xxxx	xxxx	xxxx				0.01	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx				8.6	xxxx	xxxxx			
LOS by Move:	*	*	*				A	*	*				*	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx		0	xxxxx			xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				A	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						8.6					
ApproachLOS:	*						*						*						A					

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: A[9.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 0 0	0 0		0 0 0	1 0		0 0 1	0 0	
Volume Module:												
Base Vol:	4	1	3	0	0	0	0	193	7	0	35	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	4	1	3	0	0	0	0	216	8	0	39	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	1	3	0	0	0	0	216	8	0	39	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:	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 Volume:	4	1	3	0	0	0	0	216	8	0	39	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	1	3	0	0	0	0	216	8	0	39	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	259	259	220	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	734	649	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	734	649	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx	753	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	9.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	*	*	*
ApproachDel:		9.8		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		A		*			*			*		

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: A[8.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	1!	0	0		1	0	0	0	0	
Volume Module:																								
Base Vol:	0	1	6				2	2	0				0	0	0				7	0	0			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	1	7				2	2	0				0	0	0				8	0	0			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	1	7				2	2	0				0	0	0				8	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:	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 Volume:	0	1	7				2	2	0				0	0	0				8	0	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	1	7				2	2	0				0	0	0				8	0	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	6.5	6.2				7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx							4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	4.0	3.3				3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx							2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	16	0				20	16	xxxxx	xxxx	xxxx	xxxxx							0	xxxx	xxxxx			
Potent Cap.:	xxxx	883	0				999	883	xxxxx	xxxx	xxxx	xxxxx							0	xxxx	xxxxx			
Move Cap.:	xxxx	883	0				998	883	xxxxx	xxxx	xxxx	xxxxx							0	xxxx	xxxxx			
Volume/Cap:	xxxx	0.00	0.00				0.00	0.00	xxxx	xxxx	xxxx	xxxx							0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx	xxxx	xxxxx								0.0	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx	xxxx	xxxxx								0.0	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*	*	*								A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	6178				937	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	0.0				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	5.6				8.9	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	A				A	*	*				*	*	*				*	*	*			
ApproachDel:	5.6						8.9						xxxxxx						xxxxxx					
ApproachLOS:	A						A						*						*					

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

Intersection #13 SR-43/Poso Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.463
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.6
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:	1 0	1	1	0	1 0	1	1	0	1 0	1	0	1	0 1	0	0	1
Volume Module:																
Base Vol:	13	451	0		0	511	3		1	0	15		0	0	0	
Growth Adj:	1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12	
Initial Bse:	15	505	0		0	572	3		1	0	17		0	0	0	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	15	505	0		0	572	3		1	0	17		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:	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 Volume:	15	505	0		0	572	3		1	0	17		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	15	505	0		0	572	3		1	0	17		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 Vol.:	15	505	0		0	572	3		1	0	17		0	0	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:	1.00	2.00	0.00		1.00	1.99	0.01		1.00	1.00	1.00		0.00	1.00	1.00	
Final Sat.:	557	1220	0		0	1237	7		427	0	499		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.41	xxxx		xxxx	0.46	0.46		0.00	xxxx	0.03		xxxx	xxxx	xxxx	
Crit Moves:		****				****					****					
Delay/Veh:	9.1	12.3	0.0		0.0	13.0	13.0		10.4	0.0	9.4		0.0	0.0	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:	9.1	12.3	0.0		0.0	13.0	13.0		10.4	0.0	9.4		0.0	0.0	0.0	
LOS by Move:	A	B	*		*	B	B		B	*	A		*	*	*	
ApproachDel:		12.2				13.0				9.5				xxxxxx		
Delay Adj:		1.00				1.00				1.00				xxxxx		
ApprAdjDel:		12.2				13.0				9.5				xxxxxx		
LOS by Appr:		B				B				A				*		

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

Intersection #14 SR-43/Kimberlina Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.330
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.2
Optimal Cycle: 28 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	57	386	27	60	306	6	7	84	160	35	45	98
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	64	432	30	67	343	7	8	94	179	39	50	110
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:	64	432	30	67	343	7	8	94	179	39	50	110
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:	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 Volume:	64	432	30	67	343	7	8	94	179	39	50	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	432	30	67	343	7	8	94	179	39	50	110
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 Vol.:	64	432	30	67	343	7	8	94	179	39	50	110
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.84	0.84	0.84
Lanes:	1.00	1.87	0.13	1.00	1.96	0.04	0.03	0.33	0.64	0.20	0.25	0.55
Final Sat.:	1805	3340	234	1805	3530	69	48	577	1099	314	404	881
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.13	0.04	0.10	0.10	0.16	0.16	0.16	0.12	0.12	0.12
Crit Moves:		****		****				****				
Green/Cycle:	0.13	0.39	0.39	0.11	0.37	0.37	0.49	0.49	0.49	0.49	0.49	0.49
Volume/Cap:	0.26	0.33	0.33	0.33	0.26	0.26	0.33	0.33	0.33	0.25	0.25	0.25
Uniform Del:	38.8	21.2	21.2	40.9	21.9	21.9	15.3	15.3	15.3	14.6	14.6	14.6
IncremntDel:	0.6	0.1	0.1	1.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	39.4	21.3	21.3	41.8	22.0	22.0	15.5	15.5	15.5	14.8	14.8	14.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.4	21.3	21.3	41.8	22.0	22.0	15.5	15.5	15.5	14.8	14.8	14.8
HCM2kAvg:	2	5	5	2	4	4	5	5	5	4	4	4

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

Intersection #15 SR-43/Shafter Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.326
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.3
Optimal Cycle: 21 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	23	393	30	78	467	106	124	83	17	25	114	76
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	26	440	34	87	523	119	139	93	19	28	128	85
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:	26	440	34	87	523	119	139	93	19	28	128	85
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:	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 Volume:	26	440	34	87	523	119	139	93	19	28	128	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	440	34	87	523	119	139	93	19	28	128	85
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 Vol.:	26	440	34	87	523	119	139	93	19	28	128	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.33	0.95	0.85	0.44	0.92	0.92	0.51	0.98	0.98	0.62	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	1.63	0.37	1.00	0.83	0.17	1.00	0.60	0.40
Final Sat.:	625	3610	1615	830	2860	649	971	1538	315	1184	1072	714
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.02	0.11	0.18	0.18	0.14	0.06	0.06	0.02	0.12	0.12
Crit Moves:					****		****					
Green/Cycle:	0.56	0.56	0.56	0.56	0.56	0.56	0.44	0.44	0.44	0.44	0.44	0.44
Volume/Cap:	0.07	0.22	0.04	0.19	0.33	0.33	0.33	0.14	0.14	0.05	0.27	0.27
Uniform Del:	10.0	11.0	9.8	10.8	11.8	11.8	18.4	16.8	16.8	16.1	17.9	17.9
IncremntDel:	0.1	0.1	0.0	0.2	0.1	0.1	0.4	0.1	0.1	0.0	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	10.1	11.0	9.9	11.0	11.9	11.9	18.8	16.8	16.8	16.2	18.1	18.1
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:	10.1	11.0	9.9	11.0	11.9	11.9	18.8	16.8	16.8	16.2	18.1	18.1
HCM2kAvg:	1	3	0	3	5	5	5	2	2	1	4	4

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

Intersection #16 Sr-43/Central Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.246
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 19 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	1 0
Volume Module:												
Base Vol:	40	400	40	43	492	31	21	76	31	39	85	53
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	45	448	45	48	551	35	24	85	35	44	95	59
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:	45	448	45	48	551	35	24	85	35	44	95	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:	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 Volume:	45	448	45	48	551	35	24	85	35	44	95	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	448	45	48	551	35	24	85	35	44	95	59
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 Vol.:	45	448	45	48	551	35	24	85	35	44	95	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.38	0.94	0.94	0.43	0.94	0.94	0.91	0.91	0.91	0.80	0.80	0.80
Lanes:	1.00	1.82	0.18	1.00	1.88	0.12	0.16	0.60	0.24	0.44	0.96	0.60
Final Sat.:	726	3236	324	813	3365	212	285	1031	420	667	1454	906
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.06	0.16	0.16	0.08	0.08	0.08	0.07	0.07	0.07
Crit Moves:					****			****				
Green/Cycle:	0.66	0.66	0.66	0.66	0.66	0.66	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.09	0.21	0.21	0.09	0.25	0.25	0.25	0.25	0.25	0.20	0.20	0.20
Uniform Del:	6.0	6.5	6.5	6.0	6.7	6.7	24.1	24.1	24.1	23.6	23.6	23.6
IncremntDel:	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1
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
Delay/Veh:	6.1	6.6	6.6	6.0	6.8	6.8	24.3	24.3	24.3	23.7	23.7	23.7
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:	6.1	6.6	6.6	6.0	6.8	6.8	24.3	24.3	24.3	23.7	23.7	23.7
HCM2kAvg:	1	3	3	1	4	4	3	3	3	2	2	2

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

Intersection #17 SR-43/Lerdo Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.369
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.9
Optimal Cycle: 29 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	1	0 1	0 1	0	1 0
Volume Module:												
Base Vol:	64	271	72	144	318	23	9	344	68	50	230	170
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	72	304	81	161	356	26	10	385	76	56	258	190
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:	72	304	81	161	356	26	10	385	76	56	258	190
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:	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 Volume:	72	304	81	161	356	26	10	385	76	56	258	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	304	81	161	356	26	10	385	76	56	258	190
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 Vol.:	72	304	81	161	356	26	10	385	76	56	258	190
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.92	0.92	0.95	0.94	0.94	0.90	0.90	0.85	0.78	0.78	0.78
Lanes:	1.00	1.58	0.42	1.00	1.87	0.13	0.05	1.95	1.00	0.22	1.02	0.76
Final Sat.:	1805	2764	734	1805	3333	241	87	3321	1615	329	1514	1119
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.09	0.11	0.11	0.12	0.12	0.05	0.17	0.17	0.17
Crit Moves:		****		****							****	
Green/Cycle:	0.15	0.30	0.30	0.24	0.39	0.39	0.46	0.46	0.46	0.46	0.46	0.46
Volume/Cap:	0.27	0.37	0.37	0.37	0.27	0.27	0.25	0.25	0.10	0.37	0.37	0.37
Uniform Del:	38.0	27.7	27.7	31.6	20.6	20.6	16.4	16.4	15.3	17.5	17.5	17.5
IncremntDel:	0.6	0.2	0.2	0.5	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	38.5	28.0	28.0	32.1	20.7	20.7	16.5	16.5	15.3	17.7	17.7	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:	38.5	28.0	28.0	32.1	20.7	20.7	16.5	16.5	15.3	17.7	17.7	17.7
HCM2kAvg:	2	5	5	5	4	4	4	4	1	6	6	6

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

Intersection #18 SR-43/7th Standard Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.930
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	29.7
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:	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	22	178	83	73	109	9	26	363	53	67	63	39
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	25	199	93	82	122	10	29	407	59	75	71	44
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:	25	199	93	82	122	10	29	407	59	75	71	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	25	199	93	82	122	10	29	407	59	75	71	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	199	93	82	122	10	29	407	59	75	71	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
Final Vol.:	25	199	93	82	122	10	29	407	59	75	71	44
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:	0.08	0.63	0.29	0.40	0.60	1.00	0.06	0.82	0.12	0.52	0.48	1.00
Final Sat.:	38	306	143	180	268	504	31	437	64	229	215	503
Capacity Analysis Module:												
Vol/Sat:	0.65	0.65	0.65	0.45	0.45	0.02	0.93	0.93	0.93	0.33	0.33	0.09
Crit Moves:	****			****			****			****		
Delay/Veh:	21.3	21.3	21.3	16.0	16.0	9.6	47.7	47.7	47.7	13.6	13.6	9.9
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:	21.3	21.3	21.3	16.0	16.0	9.6	47.7	47.7	47.7	13.6	13.6	9.9
LOS by Move:	C	C	C	C	C	A	E	E	E	B	B	A
ApproachDel:	21.3			15.7			47.7			12.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	21.3			15.7			47.7			12.8		
LOS by Appr:	C			C			E			B		

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

Intersection #19 SR-43/SR-58 (Rosedal Highway West)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.674
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.8
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:	1 0 1	0 0		0 0 0	1 0		1 0 0	0 1		0 0 0	0 0	
Volume Module:												
Base Vol:	127	253	0	0	191	24	198	0	379	0	0	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	142	283	0	0	214	27	222	0	424	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	142	283	0	0	214	27	222	0	424	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:	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 Volume:	142	283	0	0	214	27	222	0	424	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	142	283	0	0	214	27	222	0	424	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 Vol.:	142	283	0	0	214	27	222	0	424	0	0	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:	1.00	1.00	0.00	0.00	0.89	0.11	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	496	536	0	0	487	61	520	0	630	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.29	0.53	xxxx	xxxx	0.44	0.44	0.43	xxxx	0.67	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	12.4	16.0	0.0	0.0	14.1	14.1	14.3	0.0	18.6	0.0	0.0	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:	12.4	16.0	0.0	0.0	14.1	14.1	14.3	0.0	18.6	0.0	0.0	0.0
LOS by Move:	B	C	*	*	B	B	B	*	C	*	*	*
ApproachDel:	14.8			14.1			17.1			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	14.8			14.1			17.1			xxxxxx		
LOS by Appr:	B			B			C			*		

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

Intersection #20 SR-43/SR-58 (Rosedal Highway East)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.777
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 17.9
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:	1 0 1	0	1	1 0 1	0	1	0 0 1!	0	0	0 1 0	0	1
Volume Module:												
Base Vol:	18	220	138	355	202	9	12	16	18	42	13	129
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	20	246	155	398	226	10	13	18	20	47	15	144
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:	20	246	155	398	226	10	13	18	20	47	15	144
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:	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 Volume:	20	246	155	398	226	10	13	18	20	47	15	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	246	155	398	226	10	13	18	20	47	15	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	246	155	398	226	10	13	18	20	47	15	144
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	0.26	0.35	0.39	0.76	0.24	1.00
Final Sat.:	466	505	555	512	546	602	119	159	179	343	106	523
Capacity Analysis Module:												
Vol/Sat:	0.04	0.49	0.28	0.78	0.41	0.02	0.11	0.11	0.11	0.14	0.14	0.28
Crit Moves:		****		****				****				****
Delay/Veh:	10.4	15.7	11.2	29.1	13.5	8.6	11.1	11.1	11.1	11.4	11.4	11.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.4	15.7	11.2	29.1	13.5	8.6	11.1	11.1	11.1	11.4	11.4	11.5
LOS by Move:	B	C	B	D	B	A	B	B	B	B	B	B
ApproachDel:		13.8			23.2			11.1			11.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		13.8			23.2			11.1			11.4	
LOS by Appr:		B			C			B			B	

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

Intersection #21 H St/9th St

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: A[8.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:			Include						Include						Include						Include			
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0	40		7			7	51		0			0	0		0			6	0		12		
Growth Adj:	1.12	1.12		1.12			1.12	1.12		1.12			1.12	1.12		1.12			1.12	1.12		1.12		
Initial Bse:	0	45		8			8	57		0			0	0		0			7	0		13		
Added Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
PasserByVol:	0	0		0			0	0		0			0	0		0			0	0		0		
Initial Fut:	0	45		8			8	57		0			0	0		0			7	0		13		
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:	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 Volume:	0	45		8			8	57		0			0	0		0			7	0		13		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Final Vol.:	0	45		8			8	57		0			0	0		0			7	0		13		
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.4	xxxx		6.2		
FollowUpTim:	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5	xxxx		3.3		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				53	xxxx	xxxxx		xxxx	xxxx	xxxxx						122	xxxx		49		
Potent Cap.:	xxxx	xxxx	xxxxx				1566	xxxx	xxxxx		xxxx	xxxx	xxxxx						879	xxxx		1026		
Move Cap.:	xxxx	xxxx	xxxxx				1566	xxxx	xxxxx		xxxx	xxxx	xxxxx						875	xxxx		1026		
Volume/Cap:	xxxx	xxxx	xxxx				0.01	xxxx	xxxx		xxxx	xxxx	xxxx						0.01	xxxx		0.01		
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx						0.0	xxxx		0.0		
Stopped Del:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx		xxxxx	xxxx	xxxxx						9.1	xxxx		8.6		
LOS by Move:	*	*	*				A	*	*		*	*	*						A	*		A		
Movement:	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				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				A	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						8.8					
ApproachLOS:	*						*						*						A					

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

Intersection #22 H St/Wasco Ave

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: A[9.0]

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	1	1	0	1	0	0	0	0	1	0	1
Volume Module:																				
Base Vol:	0	0	0	0	0	39	40	60	0	0	106	2								
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12								
Initial Bse:	0	0	0	0	0	44	45	67	0	0	119	2								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	0	0	0	44	45	67	0	0	119	2								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	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 Volume:	0	0	0	0	0	44	45	67	0	0	119	2								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	0	0	0	0	0	44	45	67	0	0	119	2								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	119	121	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	938	1479	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	938	1479	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.03	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.0	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	A	A	*	*	*	*	*								

Movement:	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 StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:	xxxxxx			9.0			xxxxxx			xxxxxx										
ApproachLOS:	*			A			*			*										

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

Intersection #23 Wasco Ave/Poso Ave

Average Delay (sec/veh): 8.8 Worst Case Level Of Service: B[10.9]

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:	1	0	0	1	0		1	0	0	1	0		0	1	0	0	1		0	0	1!	0	0	
Volume Module:																								
Base Vol:	24	33	0				0	41	122				62	4	12				2	2	2			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	27	37	0				0	46	137				69	4	13				2	2	2			
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:	27	37	0				0	46	137				69	4	13				2	2	2			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	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 Volume:	27	37	0				0	46	137				69	4	13				2	2	2			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	27	37	0				0	46	137				69	4	13				2	2	2			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	xxxxx	xxxxx			6.5	6.2					4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	xxxxx	xxxxx			4.0	3.3					2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	242	152	xxxxx	xxxx			165	3					4	xxxx	xxxxx				18	xxxx	xxxxx			
Potent Cap.:	716	743	xxxxx	xxxx			732	1086					1630	xxxx	xxxxx				1612	xxxx	xxxxx			
Move Cap.:	574	709	xxxxx	xxxx			698	1086					1630	xxxx	xxxxx				1612	xxxx	xxxxx			
Volume/Cap:	0.05	0.05	xxxx	xxxx			0.07	0.13					0.04	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx				0.0	xxxx	xxxxx									
Stopped Del:	11.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx				7.2	xxxx	xxxxx									
LOS by Move:	B	*	*	*	*	*	A	*	*				A	*	*									
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT							
Shared Cap.:	xxxx	xxxx	709	xxxx	xxxx	953	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	xxxx	0.2	xxxxx	xxxx	0.7	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd StpDel:	xxxxx	xxxx	10.4	xxxxx	xxxx	9.7	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	B	*	*	A	A	*	*	*	*	*												
ApproachDel:	10.9			9.7			xxxxxx			xxxxxx														
ApproachLOS:	B			A			*			*														

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

Intersection #24 Wasco Ave/Kimberlina Rd

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: B[10.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		0	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	0				23	0	30				28	142	0				0	150	34			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	0	0				26	0	34				31	159	0				0	168	38			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				26	0	34				31	159	0				0	168	38			
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:	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 Volume:	0	0	0				26	0	34				31	159	0				0	168	38			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				26	0	34				31	159	0				0	168	38			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				409	xxxx	187				206	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				603	xxxx	860				1377	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				592	xxxx	860				1377	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.04	xxxx	0.04				0.02	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*							A	*	*	*	*	*						
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	719	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.5	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*												
ApproachDel:	xxxxxx			10.5			xxxxxx			xxxxxx														
ApproachLOS:	*			B			*			*														

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

Intersection #25 J St/9th St

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A[8.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	2	0	0		0	0	1	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	54		0		0	102		8		0		0		1		0		0		0			
Growth Adj:	1.12	1.12		1.12		1.12	1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12			
Initial Bse:	0	60		0		0	114		9		0		0		1		0		0		0			
Added Vol:	0	0		0		0	0		0		0		0		0		0		0		0			
PasserByVol:	0	0		0		0	0		0		0		0		0		0		0		0			
Initial Fut:	0	60		0		0	114		9		0		0		1		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:	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 Volume:	0	60		0		0	114		9		0		0		1		0		0		0			
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0		0			
Final Vol.:	0	60		0		0	114		9		0		0		1		0		0		0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx		xxxxx		xxxxx		xxxx		6.9		xxxxx		xxxx		xxxxx	
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx		xxxxx		xxxxx		xxxx		3.3		xxxxx		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxx		62		xxxx		xxxx		xxxxx	
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxx		997		xxxx		xxxx		xxxxx	
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxx		997		xxxx		xxxx		xxxxx	
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx		xxxx		xxxx		0.00		xxxx		xxxx		xxxx	
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx		xxxxx		xxxxx		xxxx		0.0		xxxxx		xxxx		xxxxx	
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx		xxxxx		xxxxx		xxxx		8.6		xxxxx		xxxx		xxxxx	
LOS by Move:	*	*		*		*	*		*		*		*		*		A		*		*		*	
Movement:	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	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx			
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx			
Shared LOS:	*	*		*		*	*		*		*		*		*		*		*		*			
ApproachDel:	xxxxxx					xxxxxx							8.6						xxxxxx					
ApproachLOS:	*					*							A						*					

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

Intersection #70 Wasco Way/SR-58

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: B[14.5]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1!	0	0	0 1!	0	0	1	0	0	1		0	1	0	0	1	
Volume Module:																		
Base Vol:	19	14	5	5	26	26	27	334	53		9		90	5				
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12		1.12		1.12	1.12				
Initial Bse:	21	16	6	6	29	29	30	374	59		10		101	6				
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:	21	16	6	6	29	29	30	374	59		10		101	6				
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:	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 Volume:	21	16	6	6	29	29	30	374	59		10		101	6				
Reduct Vol:	0	0	0	0	0	0	0	0	0		0		0	0				
Final Vol.:	21	16	6	6	29	29	30	374	59		10		101	6				
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:																		
Cnflict Vol:	587	561	374	596	615	101	106	xxxx	xxxxx		433	xxxx	xxxxx					
Potent Cap.:	424	439	677	418	409	960	1497	xxxx	xxxxx		1137	xxxx	xxxxx					
Move Cap.:	379	426	677	394	397	960	1497	xxxx	xxxxx		1137	xxxx	xxxxx					
Volume/Cap:	0.06	0.04	0.01	0.01	0.07	0.03	0.02	xxxx	xxxx		0.01	xxxx	xxxx					
Level Of Service Module:																		
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.0	xxxx	xxxxx					
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx		8.2	xxxx	xxxxx					
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT					
Shared Cap.:	xxxx	421	xxxxx	xxxx	542	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.4	xxxxx	0.1	xxxx	xxxxx		0.0	xxxx	xxxxx					
Shrd StpDel:	xxxxx	14.5	xxxxx	xxxxx	12.5	xxxxx	7.5	xxxx	xxxxx		8.2	xxxx	xxxxx					
Shared LOS:	*	B	*	*	B	*	A	*	*		A	*	*					
ApproachDel:	14.5			12.5			xxxxxx				xxxxxx							
ApproachLOS:	B			B			*				*							

Appendix B12
Year 2017 Project Operations – Alternative 1
Intersection Analysis

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in	
# 1 I-5 NB Ramp / Stockdale Hwy	A	8.9	0.000	B	10.1	0.000	+ 1.232	D/V
# 2 I-5 SB Ramp / Stockdale Hwy	A	9.3	0.000	B	10.2	0.000	+ 0.859	D/V
# 3 I-5 NB Ramp / SR 119	B	11.7	0.000	B	11.7	0.000	+ 0.013	D/V
# 4 I-5 SB Ramp / SR 119	B	12.6	0.000	B	12.6	0.000	+ 0.023	D/V
# 5 SR 119 / SR 43	C	26.4	0.577	C	26.4	0.577	+ 0.000	D/V
# 6 Stockdale Hwy/SR 43	B	12.8	0.577	C	15.5	0.707	+ 0.130	V/C
# 7 Stockdale Hwy / Morris Rd	A	8.8	0.000	B	10.3	0.000	+ 1.418	D/V
# 8 Tupman Rd / SR 119	C	22.5	0.000	C	22.9	0.000	+ 0.385	D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.028	A	7.0	0.035	+ 0.007	V/C
# 10 Station Rd/Tupman Rd	A	8.7	0.000	A	9.4	0.000	+ 0.758	D/V
# 11 Stockdale/Dairy	A	8.7	0.000	A	8.8	0.000	+ 0.132	D/V
# 12 Dairy/Adohr	A	9.0	0.000	B	10.1	0.000	+ 1.172	D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 1.6 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 1 0	0	0	0 0 1	0	1
Volume Module:												
Base Vol:	4	0	25	0	0	0	1	64	0	0	57	154
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	4	0	28	0	0	0	1	72	0	0	64	172
Added Vol:	29	0	0	0	0	0	20	1	0	0	89	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	0	28	0	0	0	21	73	0	0	153	172
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:	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 Volume:	33	0	28	0	0	0	21	73	0	0	153	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	33	0	28	0	0	0	21	73	0	0	153	172
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	354	xxxx	73	xxxx	xxxx	xxxxx	325	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	648	xxxx	995	xxxx	xxxx	xxxxx	1246	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	639	xxxx	995	xxxx	xxxx	xxxxx	1246	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.05	xxxx	0.03	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	764	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	10.1	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	A	*	*	*	*	*
ApproachDel:	10.1			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: B[10.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	42	1	2	0	27	1	15	47	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	47	1	2	0	30	1	17	53	0
Added Vol:	0	0	0	0	0	26	0	22	24	0	118	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	47	1	28	0	52	25	17	171	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:	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 Volume:	0	0	0	47	1	28	0	52	25	17	171	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	47	1	28	0	52	25	17	171	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	269	282	171	xxxx	xxxx	xxxxx	77	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	725	630	878	xxxx	xxxx	xxxxx	1534	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	718	623	878	xxxx	xxxx	xxxxx	1534	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.07	0.00	0.03	xxxx	xxxx	xxxx	0.01	xxxx	xxxx

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	768	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.2	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			10.2			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	15	0	8	0	0	0	0	194	3	0	308	21
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	17	0	9	0	0	0	0	217	3	0	345	24
Added Vol:	0	0	0	0	0	0	0	1	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	0	9	0	0	0	0	218	3	0	345	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:	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 Volume:	17	0	9	0	0	0	0	218	3	0	345	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	17	0	9	0	0	0	0	218	3	0	345	25
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	577	xxxx	220	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	482	xxxx	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	482	xxxx	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	563	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	11.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		11.7		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	1	0	0	1		0	0	1	0	1		0	1	0	0	0	
Volume Module:																								
Base Vol:	0	0	0				11	1	1				0	186	16				2	317	0			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	0	0				12	1	1				0	208	18				2	355	0			
Added Vol:	0	0	0				1	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				13	1	1				0	208	18				2	355	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:	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 Volume:	0	0	0				13	1	1				0	208	18				2	355	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				13	1	1				0	208	18				2	355	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	6.5	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	4.0	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				577	586	355				xxxx	xxxx	xxxxx				226	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				482	425	693				xxxx	xxxx	xxxxx				1354	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				481	425	693				xxxx	xxxx	xxxxx				1354	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.03	0.00	0.00				xxxx	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.0	xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx									
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		10.2	xxxxx	xxxx	xxxxx			7.7	xxxx	xxxxx									
LOS by Move:	*	*	*	*	*		B	*	*	*			A	*	*									
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				476	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				0.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				12.8	xxxx	xxxxx				xxxxx	xxxx	xxxxx				7.7	xxxx	xxxxx			
Shared LOS:	*	*	*				B	*	*				*	*	*				A	*	*			
ApproachDel:	xxxxxx						12.6						xxxxxx						xxxxxx					
ApproachLOS:	*						B						*						*					

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

Intersection #5 SR 119 / SR 43

Cycle (sec):	100	Critical Vol./Cap. (X):	0.577
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	26.4
Optimal Cycle:	46	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:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	36	11	16	2	40	359	103	172	3	19	291	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	40	12	18	2	45	402	115	193	3	21	326	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	12	18	2	45	402	115	193	3	21	326	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:	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 Volume:	40	12	18	2	45	402	115	193	3	21	326	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	12	18	2	45	402	115	193	3	21	326	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 Vol.:	40	12	18	2	45	402	115	193	3	21	326	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.36	0.91	0.91	0.74	0.87	0.87	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.41	0.59	1.00	0.10	0.90	1.00	0.98	0.02	1.00	1.00	0.00
Final Sat.:	680	705	1026	1412	165	1479	1805	1862	32	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.02	0.02	0.00	0.27	0.27	0.06	0.10	0.10	0.01	0.17	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.47	0.47	0.47	0.47	0.47	0.47	0.11	0.37	0.37	0.04	0.30	0.00
Volume/Cap:	0.13	0.04	0.04	0.00	0.58	0.58	0.58	0.28	0.28	0.28	0.58	0.00
Uniform Del:	14.8	14.2	14.2	14.0	19.2	19.2	42.2	22.4	22.4	46.5	29.8	0.0
IncremntDel:	0.2	0.0	0.0	0.0	1.1	1.1	4.1	0.2	0.2	2.1	1.5	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	0.00
Delay/Veh:	15.0	14.2	14.2	14.0	20.2	20.2	46.3	22.6	22.6	48.5	31.3	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:	15.0	14.2	14.2	14.0	20.2	20.2	46.3	22.6	22.6	48.5	31.3	0.0
HCM2kAvg:	2	0	0	0	10	10	4	4	4	1	9	0

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec):	100	Critical Vol./Cap. (X):	0.707
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	15.5
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:	5	115	34	42	208	25	10	45	7	129	157	53
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	6	129	38	47	233	28	11	50	8	144	176	59
Added Vol:	0	0	0	0	0	6	0	1	0	0	84	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	129	38	47	233	34	11	51	8	144	260	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:	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 Volume:	6	129	38	47	233	34	11	51	8	144	260	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	129	38	47	233	34	11	51	8	144	260	59
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 Vol.:	6	129	38	47	233	34	11	51	8	144	260	59
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:	0.03	0.75	0.22	0.15	0.74	0.11	0.16	0.73	0.11	0.31	0.56	0.13
Final Sat.:	19	428	127	91	452	66	84	387	59	204	367	84
Capacity Analysis Module:												
Vol/Sat:	0.30	0.30	0.30	0.52	0.52	0.52	0.13	0.13	0.13	0.71	0.71	0.71
Crit Moves:		****			****			****			****	
Delay/Veh:	10.9	10.9	10.9	13.8	13.8	13.8	9.7	9.7	9.7	19.2	19.2	19.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.9	10.9	10.9	13.8	13.8	13.8	9.7	9.7	9.7	19.2	19.2	19.2
LOS by Move:	B	B	B	B	B	B	A	A	A	C	C	C
ApproachDel:	10.9			13.8			9.7			19.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.9			13.8			9.7			19.2		
LOS by Appr:	B			B			A			C		

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 4.5 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	0	0	0	1		0	0	1!	0	0		0	1	0	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	0	10				1	0	1				1	15	0				18	37	1			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	0	11				1	0	1				1	17	0				20	41	1			
Added Vol:	0	0	40				0	0	0				0	5	0				90	55	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	51				1	0	1				1	22	0				110	96	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:	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 Volume:	0	0	51				1	0	1				1	22	0				110	96	1			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	51				1	0	1				1	22	0				110	96	1			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	6.2				7.1	xxxx	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3				3.5	xxxx	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	22				367	xxxx	97				98	xxxx	xxxxx				22	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	1061				593	xxxx	965				1508	xxxx	xxxxx				1607	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	1061				533	xxxx	965				1508	xxxx	xxxxx				1607	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.05				0.00	xxxx	0.00				0.00	xxxx	xxxx				0.07	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	0.2				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.2	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	8.6				xxxxx	xxxx	xxxxx				7.4	xxxx	xxxxx				7.4	xxxx	xxxxx			
LOS by Move:	*	*	A				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	686	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	0.0	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	10.3	xxxxx				7.4	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	B	*				A	*	*				*	*	*			
ApproachDel:		8.6						10.3						xxxxxx						xxxxxx				
ApproachLOS:		A						B						*						*				

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[22.9]

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 1!	0	0	0 0 1!	0	0	1 0 0	1	0	1 0 0	1	0
Volume Module:												
Base Vol:	1	6	14	10	0	6	16	264	1	29	617	25
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	1	7	16	11	0	7	18	296	1	32	691	28
Added Vol:	0	0	0	0	0	0	6	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	7	16	11	0	7	24	296	1	32	691	28
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:	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 Volume:	1	7	16	11	0	7	24	296	1	32	691	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	7	16	11	0	7	24	296	1	32	691	28
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1117	1128	296	1125	xxxx	705	719	xxxx	xxxxx	297	xxxx	xxxxx
Potent Cap.:	186	206	748	184	xxxx	440	892	xxxx	xxxxx	1276	xxxx	xxxxx
Move Cap.:	176	195	748	168	xxxx	440	892	xxxx	xxxxx	1276	xxxx	xxxxx
Volume/Cap:	0.01	0.03	0.02	0.07	xxxx	0.02	0.03	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR	-	RT	LT - LTR	-	RT	LT - LTR	-	RT	LT - LTR	-	RT
Shared Cap.:	xxxx	381	xxxxx	xxxx	219	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	15.1	xxxxx	xxxxx	22.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:	15.1			22.9			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.035
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	17	4	1	1	11	7	5	5	10	3	4	2
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	19	4	1	1	12	8	6	6	11	3	4	2
Added Vol:	0	6	0	0	0	0	6	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	10	1	1	12	8	12	6	11	3	4	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	19	10	1	1	12	8	12	6	11	3	4	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	10	1	1	12	8	12	6	11	3	4	2
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 Vol.:	19	10	1	1	12	8	12	6	11	3	4	2
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:	0.62	0.34	0.04	0.05	0.58	0.37	0.41	0.20	0.39	0.33	0.45	0.22
Final Sat.:	541	298	32	49	543	346	376	181	363	299	398	199
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.02	0.02	0.02	0.03	0.03	0.03	0.01	0.01	0.01
Crit Moves:		****			****			****			****	
Delay/Veh:	7.2	7.2	7.2	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.2	7.2	7.2	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.2			6.9			7.0			7.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.2			6.9			7.0			7.0	
LOS by Appr:		A			A			A			A	

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 7.3 Worst Case Level Of Service: A[9.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	1	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0		6		9		1		9		0		0		0		0		11		0		0	
Growth Adj:	1.12	1.12		1.12		1.12	1.12		1.12		1.12	1.12	1.12		1.12		1.12	1.12	1.12		1.12		1.12	1.12
Initial Bse:	0		7		10		1		10		0		0		0		0		12		0		0	
Added Vol:	0		11		0		0		0		0		0		40		0		0		43		47	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	0		18		10		1		10		0		0		40		0		12		43		47	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00
PHF Volume:	0		18		10		1		10		0		0		40		0		12		43		47	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	0		18		10		1		10		0		0		40		0		12		43		47	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx	xxxxx			6.5	xxxxx					7.1		6.5		6.2	
FollowUpTim:	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx	xxxxx			4.0	xxxxx					3.5		4.0		3.3	
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				28	xxxx	xxxxx		xxxx		40	xxxxx					55		35		23	
Potent Cap.:	xxxx	xxxx	xxxxx				1599	xxxx	xxxxx		xxxx		856	xxxxx					948		861		1060	
Move Cap.:	xxxx	xxxx	xxxxx				1599	xxxx	xxxxx		xxxx		855	xxxxx					913		861		1060	
Volume/Cap:	xxxx	xxxx		xxxx			0.00	xxxx		xxxx			xxxx	0.05		xxxx			0.01		0.05		0.04	
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx	xxxxx			0.1	xxxxx	xxxxx	xxxx	xxxxx							
Stopped Del:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx	xxxxx			9.4	xxxxx	xxxxx	xxxx	xxxxx							
LOS by Move:	*		*		*		A		*		*		A		*		*							
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx		949		xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx	xxxxx			xxxx	xxxx	xxxxx				0.4		xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx	xxxxx			xxxx	xxxx	xxxxx				9.3		xxxxx			
Shared LOS:	*		*		*		A		*		*		*		*		*		A		*			
ApproachDel:	xxxxxx						xxxxxx						9.4						9.3					
ApproachLOS:	*						*						A						A					

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 3.7 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 1 0	0	0
Volume Module:												
Base Vol:	3	0	2	0	0	0	0	22	6	1	34	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	3	0	2	0	0	0	0	25	7	1	38	0
Added Vol:	0	0	5	0	0	0	0	0	0	55	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	0	7	0	0	0	0	25	7	56	38	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:	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 Volume:	3	0	7	0	0	0	0	25	7	56	38	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	0	7	0	0	0	0	25	7	56	38	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	178	xxxx	28	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	31	xxxx	xxxxx
Potent Cap.:	816	xxxx	1053	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1594	xxxx	xxxxx
Move Cap.:	793	xxxx	1053	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1594	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	954	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd StpDel:	xxxxx	8.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:		8.8		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		A		*			*			*		

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 5.1 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	0	1	0	0	1	0	0	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	2	4			2	4	0			0	0	0			8	0	1		
Growth Adj:	1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12		
Initial Bse:	0	2	4			2	4	0			0	0	0			9	0	1		
Added Vol:	0	5	0			0	55	0			0	0	0			58	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	7	4			2	59	0			0	0	0			67	0	1		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	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 Volume:	0	7	4			2	59	0			0	0	0			67	0	1		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	0	7	4			2	59	0			0	0	0			67	0	1		
Critical Gap Module:																				
Critical Gp:	xxxxx	6.5	6.2			7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx					4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	4.0	3.3			3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx					2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	135	0			140	134	xxxxx	xxxx	xxxx	xxxxx					0	xxxx	xxxxx		
Potent Cap.:	xxxx	759	0			834	760	xxxxx	xxxx	xxxx	xxxxx					0	xxxx	xxxxx		
Move Cap.:	xxxx	759	0			828	760	xxxxx	xxxx	xxxx	xxxxx					0	xxxx	xxxxx		
Volume/Cap:	xxxx	0.01	0.00			0.00	0.08	xxxx	xxxx	xxxx	xxxx					0.00	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*	*	*	*							A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	1229			762	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	0.0			0.3	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	8.0			10.1	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	A			B	*	*			*	*	*			*	*	*		
ApproachDel:	8.0					10.1					xxxxxx					xxxxxx				
ApproachLOS:	A					B					*					*				

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 I-5 NB Ramp / Stockdale Hwy	B	12.1	0.000	C	15.3	0.000	+ 3.236 D/V
# 2 I-5 SB Ramp / Stockdale Hwy	B	14.6	0.000	D	27.2	0.000	+12.664 D/V
# 3 I-5 NB Ramp / SR 119	C	20.1	0.000	C	20.1	0.000	+ 0.031 D/V
# 4 I-5 SB Ramp / SR 119	C	21.0	0.000	C	21.1	0.000	+ 0.129 D/V
# 5 SR 119 / SR 43	C	24.5	0.639	C	24.5	0.639	+ 0.000 D/V
# 6 Stockdale Hwy/SR 43	E	40.9	0.979	F	72.5	1.201	+ 0.222 V/C
# 7 Stockdale Hwy / Morris Rd	A	9.5	0.000	B	10.6	0.000	+ 1.145 D/V
# 8 Tupman Rd / SR 119	F	117.7	0.000	F	102.7	0.000	-15.035 D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.039	A	7.0	0.040	+ 0.001 V/C
# 10 Station Rd/Tupman Rd	A	8.6	0.000	B	10.4	0.000	+ 1.790 D/V
# 11 Stockdale/Dairy	A	9.8	0.000	A	9.9	0.000	+ 0.033 D/V
# 12 Dairy/Adohr	A	8.9	0.000	A	9.3	0.000	+ 0.461 D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: C[15.3]

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	0	1 0	0	0	0 0	1	0	1		
Volume Module:																
Base Vol:	3	0	31	0	0	0	3	466	0	0	55	67				
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12				
Initial Bse:	3	0	35	0	0	0	3	522	0	0	62	75				
Added Vol:	25	0	0	0	0	0	27	107	0	0	19	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	28	0	35	0	0	0	30	629	0	0	81	75				
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:	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 Volume:	28	0	35	0	0	0	30	629	0	0	81	75				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Final Vol.:	28	0	35	0	0	0	30	629	0	0	81	75				
Critical Gap Module:																
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	808	xxxx	629	xxxx	xxxx	xxxxx	156	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	353	xxxx	486	xxxx	xxxx	xxxxx	1437	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	347	xxxx	486	xxxx	xxxx	xxxxx	1437	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.08	xxxx	0.07	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR -	RT			
Shared Cap.:	xxxx	412	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	15.3	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	C	*	*	*	*	A	*	*	*	*	*				
ApproachDel:	15.3			xxxxxx			xxxxxx			xxxxxx						
ApproachLOS:	C			*			*			*						

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 9.5 Worst Case Level Of Service: D[27.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	262	1	1	0	204	9	20	38	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	293	1	1	0	228	10	22	43	0
Added Vol:	0	0	0	0	0	21	0	134	30	0	44	0
PasserByVol:	0	0	0	0	0	0	0	100	0	0	0	0
Initial Fut:	0	0	0	293	1	22	0	462	40	22	87	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:	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 Volume:	0	0	0	293	1	22	0	462	40	22	87	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	293	1	22	0	462	40	22	87	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	614	634	87	xxxx	xxxx	xxxxx	503	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	459	399	978	xxxx	xxxx	xxxxx	1072	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	451	391	978	xxxx	xxxx	xxxxx	1072	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.65	0.00	0.02	xxxx	xxxx	xxxx	0.02	xxxx	xxxx

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	469	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	5.0	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	27.2	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			27.2			xxxxxx			xxxxxx		
ApproachLOS:	*			D			*			*		

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[20.1]

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 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	13	0	6	0	0	0	0	770	2	0	223	11
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	15	0	7	0	0	0	0	862	2	0	250	12
Added Vol:	0	0	0	0	0	0	0	1	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	0	7	0	0	0	0	863	2	0	250	13
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:	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 Volume:	15	0	7	0	0	0	0	863	2	0	250	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	15	0	7	0	0	0	0	863	2	0	250	13
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1121	xxxx	865	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	230	xxxx	356	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	230	xxxx	356	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	259	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	20.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		20.1		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[21.1]

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 0 0 0			0 1 0 0 1			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	45	0	13	0	721	42	1	238	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	50	0	15	0	808	47	1	267	0
Added Vol:	0	0	0	1	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	51	0	15	0	808	47	1	267	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:	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 Volume:	0	0	0	51	0	15	0	808	47	1	267	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	51	0	15	0	808	47	1	267	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1100	xxxx	267	xxxx	xxxx	xxxxx	855	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	237	xxxx	777	xxxx	xxxx	xxxxx	794	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	237	xxxx	777	xxxx	xxxx	xxxxx	794	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.22	xxxx	0.02	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	237	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	24.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
Shared LOS:	*	*	*	C	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			21.1			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

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

Intersection #5 SR 119 / SR 43

Cycle (sec):	100					Critical Vol./Cap. (X):						0.639				
Loss Time (sec):	12 (Y+R = 4 sec)					Average Delay (sec/veh):						24.5				
Optimal Cycle:	52					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:	Permitted					Permitted					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0
Volume Module:																				
Base Vol:	37	85	77			4	39	175			466	663	19			24	201	1		
Growth Adj:	1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12		
Initial Bse:	41	95	86			4	44	196			522	743	21			27	225	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:	41	95	86			4	44	196			522	743	21			27	225	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:	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 Volume:	41	95	86			4	44	196			522	743	21			27	225	1		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	41	95	86			4	44	196			522	743	21			27	225	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		
Final Vol.:	41	95	86			4	44	196			522	743	21			27	225	1		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.39	0.93	0.93			0.51	0.88	0.88			0.95	1.00	1.00			0.95	1.00	1.00		
Lanes:	1.00	0.52	0.48			1.00	0.18	0.82			1.00	0.97	0.03			1.00	0.99	0.01		
Final Sat.:	741	926	839			960	304	1363			1805	1840	53			1805	1889	9		
Capacity Analysis Module:																				
Vol/Sat:	0.06	0.10	0.10			0.00	0.14	0.14			0.29	0.40	0.40			0.01	0.12	0.12		
Crit Moves:							****					****				****				
Green/Cycle:	0.23	0.23	0.23			0.23	0.23	0.23			0.46	0.63	0.63			0.02	0.19	0.19		
Volume/Cap:	0.25	0.46	0.46			0.02	0.64	0.64			0.62	0.64	0.64			0.64	0.62	0.62		
Uniform Del:	31.8	33.5	33.5			30.2	35.1	35.1			20.2	11.4	11.4			48.4	37.1	37.1		
IncremntDel:	0.8	0.8	0.8			0.0	3.7	3.7			1.5	1.2	1.2			28.5	3.4	3.4		
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		
Delay/Veh:	32.6	34.3	34.3			30.2	38.7	38.7			21.7	12.5	12.5			76.9	40.5	40.5		
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:	32.6	34.3	34.3			30.2	38.7	38.7			21.7	12.5	12.5			76.9	40.5	40.5		
HCM2kAvg:	3	5	5			0	8	8			13	15	14			2	7	4		

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec):	100	Critical Vol./Cap. (X):	1.201
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	72.5
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	277	147	80	164	18	41	421	2	49	54	19
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	310	165	90	184	20	46	472	2	55	60	21
Added Vol:	0	0	0	0	0	1	7	100	0	0	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	310	165	90	184	21	53	572	2	55	78	21
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:	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 Volume:	0	310	165	90	184	21	53	572	2	55	78	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	310	165	90	184	21	53	572	2	55	78	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	310	165	90	184	21	53	572	2	55	78	21
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:	0.00	0.65	0.35	0.30	0.63	0.07	0.08	0.91	0.01	0.35	0.51	0.14
Final Sat.:	0	342	181	141	290	33	44	476	2	150	214	58
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.91	0.91	0.63	0.63	0.63	1.20	1.20	1.20	0.37	0.37	0.37
Crit Moves:		****			****			****			****	
Delay/Veh:	0.0	45.0	45.0	21.7	21.7	21.7	131.2	131	131.2	15.2	15.2	15.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	45.0	45.0	21.7	21.7	21.7	131.2	131	131.2	15.2	15.2	15.2
LOS by Move:	*	E	E	C	C	C	F	F	F	C	C	C
ApproachDel:		45.0			21.7			131.2			15.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		45.0			21.7			131.2			15.2	
LOS by Appr:		E			C			F			C	

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: B[10.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	1		0	0	1!	0	0		0	1	0	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	0	18				0	0	0				1	197	0				3	34	1			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	0	20				0	0	0				1	221	0				3	38	1			
Added Vol:	0	0	99				0	0	0				0	64	0				50	15	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	119				0	0	0				1	285	0				53	53	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:	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 Volume:	0	0	119				0	0	0				1	285	0				53	53	1			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	119				0	0	0				1	285	0				53	53	1			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	6.2				xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3				xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	285				xxxx	xxxx	xxxxx				54	xxxx	xxxxx				285	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	759				xxxx	xxxx	xxxxx				1564	xxxx	xxxxx				1289	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	759				xxxx	xxxx	xxxxx				1564	xxxx	xxxxx				1289	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.16				xxxx	xxxx	xxxx				0.00	xxxx	xxxx				0.04	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	0.6				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	10.6				xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				7.9	xxxx	xxxxx			
LOS by Move:	*	*	B				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx		0	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				A	*	*				*	*	*			
ApproachDel:	10.6						xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:	B						*						*						*					

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: F[102.7]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1!	0	0	1	0	0	1	0	1	0	0	1	0
Volume Module:																				
Base Vol:	0	1	27			22	0	6			14	1171	0			11	397	10		
Growth Adj:	1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12		
Initial Bse:	0	1	30			25	0	7			16	1312	0			12	445	11		
Added Vol:	0	0	0			0	0	7			1	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	1	30			25	0	14			17	1312	0			12	445	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:	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 Volume:	0	1	30			25	0	14			17	1312	0			12	445	11		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	0	1	30			25	0	14			17	1312	0			12	445	11		
Critical Gap Module:																				
Critical Gp:	xxxxx	6.5	6.2			7.1	xxxx	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	4.0	3.3			3.5	xxxx	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	1825	1312			1835	xxxx	450			456	xxxx	xxxxx			1312	xxxx	xxxxx		
Potent Cap.:	xxxx	78	196			59	xxxx	613			1116	xxxx	xxxxx			534	xxxx	xxxxx		
Move Cap.:	xxxx	75	196			48	xxxx	613			1116	xxxx	xxxxx			534	xxxx	xxxxx		
Volume/Cap:	xxxx	0.01	0.15			0.51	xxxx	0.02			0.01	xxxx	xxxx			0.02	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.3	xxxx	xxxxx			11.9	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			B	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	185			xxxx	72	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	0.6			xxxxx	2.2	xxxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	28.4			xxxxx	103	xxxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	D			*	F	*			*	*	*			*	*	*		
ApproachDel:	28.4					102.7					xxxxxx					xxxxxx				
ApproachLOS:	D					F					*					*				

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.040
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	18	5	3	12	3	4	0	4	1	1	4
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	10	20	6	3	13	3	4	0	4	1	1	4
Added Vol:	0	1	0	0	7	7	1	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	21	6	3	20	10	5	0	4	1	1	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:	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 Volume:	10	21	6	3	20	10	5	0	4	1	1	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	21	6	3	20	10	5	0	4	1	1	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 Vol.:	10	21	6	3	20	10	5	0	4	1	1	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:	0.27	0.58	0.15	0.10	0.60	0.30	0.55	0.00	0.45	0.17	0.17	0.66
Final Sat.:	250	524	139	93	563	286	501	0	409	160	160	640
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.04	0.04	0.04	0.01	xxxx	0.01	0.01	0.01	0.01
Crit Moves:	****				****					****	****	
Delay/Veh:	7.1	7.1	7.1	6.9	6.9	6.9	6.9	0.0	6.9	6.7	6.7	6.7
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:	7.1	7.1	7.1	6.9	6.9	6.9	6.9	0.0	6.9	6.7	6.7	6.7
LOS by Move:	A	A	A	A	A	A	A	*	A	A	A	A
ApproachDel:	7.1			6.9			6.9			6.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.1			6.9			6.9			6.7		
LOS by Appr:	A			A			A			A		

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 7.0 Worst Case Level Of Service: B[10.4]

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 0 1 0			0 1 0 0 0			0 0 1 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	4	21	1	6	0	0	0	0	7	0	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	4	24	1	7	0	0	0	0	8	0	0
Added Vol:	0	2	0	56	13	0	0	43	0	0	41	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	6	24	57	20	0	0	43	0	8	41	9
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:	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 Volume:	0	6	24	57	20	0	0	43	0	8	41	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	6	24	57	20	0	0	43	0	8	41	9
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	xxxxx	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	30	xxxx	xxxxx	xxxx	164	xxxxx	174	152	18
Potent Cap.:	xxxx	xxxx	xxxxx	1596	xxxx	xxxxx	xxxx	732	xxxxx	794	743	1066
Move Cap.:	xxxx	xxxx	xxxxx	1596	xxxx	xxxxx	xxxx	705	xxxxx	735	716	1066
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	0.06	xxxx	0.01	0.06	0.01
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	10.4	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	B	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	757	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.1	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			10.4			10.1		
ApproachLOS:	*			*			B			B		

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

Intersection #11 Stockdale/Dairy

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:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 1 0	0	0
Volume Module:												
Base Vol:	4	1	3	0	0	0	0	193	7	0	35	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	4	1	3	0	0	0	0	216	8	0	39	0
Added Vol:	0	0	64	0	0	0	0	0	0	15	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	1	67	0	0	0	0	216	8	15	39	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:	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 Volume:	4	1	67	0	0	0	0	216	8	15	39	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	1	67	0	0	0	0	216	8	15	39	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	289	289	220	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	224	xxxx	xxxxx
Potent Cap.:	706	624	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Move Cap.:	700	617	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT
Shared Cap.:	xxxx	812	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	9.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:		9.9		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		A		*			*			*		

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 6.6 Worst Case Level Of Service: A[9.3]

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	0	1	0	0	1	0	0	0	0	0	1!	0	0	1	0	0	0	0
Volume Module:																				
Base Vol:	0	1	6			2	2	0			0	0	0			7	0	0		
Growth Adj:	1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12		
Initial Bse:	0	1	7			2	2	0			0	0	0			8	0	0		
Added Vol:	0	64	69			0	15	0			0	0	0			12	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	65	76			2	17	0			0	0	0			20	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:	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 Volume:	0	65	76			2	17	0			0	0	0			20	0	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	0	65	76			2	17	0			0	0	0			20	0	0		
Critical Gap Module:																				
Critical Gp:	xxxxx	6.5	6.2			7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx					4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	4.0	3.3			3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx					2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	40	0			110	40	xxxxx	xxxx	xxxx	xxxxx					0	xxxx	xxxxx		
Potent Cap.:	xxxx	856	0			873	856	xxxxx	xxxx	xxxx	xxxxx					0	xxxx	xxxxx		
Move Cap.:	xxxx	856	0			822	856	xxxxx	xxxx	xxxx	xxxxx					0	xxxx	xxxxx		
Volume/Cap:	xxxx	0.08	0.00			0.00	0.02	xxxx	xxxx	xxxx	xxxx					0.00	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.0	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*	*	*	*							A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	1852			852	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	0.2			0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	7.1			9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	A			A	*	*	*	*	*	*	*	*						
ApproachDel:	7.1					9.3			xxxxxx				xxxxxx							
ApproachLOS:	A					A			*				*							

Appendix B13
Year 2017 Project Operations – Alternative 1
Intersection Analysis
Mitigated

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.134
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.9
Optimal Cycle: 21 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:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	0 0	1! 0	0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	42	1	2	0	27	1	15	47	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	47	1	2	0	30	1	17	53	0
Added Vol:	0	0	0	0	0	26	0	22	24	0	118	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	47	1	28	0	52	25	17	171	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:	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 Volume:	0	0	0	47	1	28	0	52	25	17	171	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	47	1	28	0	52	25	17	171	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 Vol.:	0	0	0	47	1	28	0	52	25	17	171	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	0.90	0.90	1.00	1.00	0.85	0.72	1.00	1.00
Lanes:	0.00	0.00	0.00	0.62	0.01	0.37	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1056	25	634	0	1900	1615	1359	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.04	0.04	0.00	0.03	0.02	0.01	0.09	0.00
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.33	0.33	0.33	0.00	0.67	0.67	0.67	0.67	0.00
Volume/Cap:	0.00	0.00	0.00	0.13	0.13	0.13	0.00	0.04	0.02	0.02	0.13	0.00
Uniform Del:	0.0	0.0	0.0	23.4	23.4	23.4	0.0	5.7	5.6	5.6	6.0	0.0
IncremntDel:	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	23.5	23.5	23.5	0.0	5.7	5.6	5.6	6.1	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	0.0	0.0	23.5	23.5	23.5	0.0	5.7	5.6	5.6	6.1	0.0
HCM2kAvg:	0	0	0	2	2	2	0	1	0	0	2	0

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.413
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.4
Optimal Cycle: 32 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	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	0 0	1!	0 0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	262	1	1	0	204	9	20	38	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	293	1	1	0	228	10	22	43	0
Added Vol:	0	0	0	0	0	21	0	134	30	0	44	0
PasserByVol:	0	0	0	0	0	0	0	100	0	0	0	0
Initial Fut:	0	0	0	293	1	22	0	462	40	22	87	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:	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 Volume:	0	0	0	293	1	22	0	462	40	22	87	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	293	1	22	0	462	40	22	87	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 Vol.:	0	0	0	293	1	22	0	462	40	22	87	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	0.85	0.38	1.00	1.00
Lanes:	0.00	0.00	0.00	0.92	0.01	0.07	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1729	7	130	0	1900	1615	713	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.17	0.17	0.00	0.24	0.02	0.03	0.05	0.00
Crit Moves:						****		****				
Green/Cycle:	0.00	0.00	0.00	0.41	0.41	0.41	0.00	0.59	0.59	0.59	0.59	0.00
Volume/Cap:	0.00	0.00	0.00	0.41	0.41	0.41	0.00	0.41	0.04	0.05	0.08	0.00
Uniform Del:	0.0	0.0	0.0	20.9	20.9	20.9	0.0	11.2	8.7	8.7	8.8	0.0
IncremntDel:	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.2	0.0	0.1	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	21.3	21.3	21.3	0.0	11.4	8.7	8.8	8.9	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	0.0	0.0	21.3	21.3	21.3	0.0	11.4	8.7	8.8	8.9	0.0
HCM2kAvg:	0	0	0	7	3	7	0	8	1	1	1	0

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.252
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.4
Optimal Cycle: 19 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	5	115	34	42	208	25	10	45	7	129	157	53
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	6	129	38	47	233	28	11	50	8	144	176	59
Added Vol:	0	0	0	0	0	6	0	1	0	0	84	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	129	38	47	233	34	11	51	8	144	260	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:	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 Volume:	6	129	38	47	233	34	11	51	8	144	260	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	129	38	47	233	34	11	51	8	144	260	59
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 Vol.:	6	129	38	47	233	34	11	51	8	144	260	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.51	0.97	0.97	0.60	0.98	0.98	0.48	0.93	0.93	0.70	0.92	0.92
Lanes:	1.00	0.77	0.23	1.00	0.87	0.13	1.00	1.74	0.26	1.00	1.63	0.37
Final Sat.:	971	1417	419	1131	1627	237	910	3070	468	1332	2856	653
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.04	0.14	0.14	0.01	0.02	0.02	0.11	0.09	0.09
Crit Moves:					****					****		
Green/Cycle:	0.57	0.57	0.57	0.57	0.57	0.57	0.43	0.43	0.43	0.43	0.43	0.43
Volume/Cap:	0.01	0.16	0.16	0.07	0.25	0.25	0.03	0.04	0.04	0.25	0.21	0.21
Uniform Del:	9.3	10.2	10.2	9.7	10.8	10.8	16.4	16.5	16.5	18.2	17.8	17.8
IncremntDel:	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.1	0.1
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
Delay/Veh:	9.3	10.3	10.3	9.7	11.0	11.0	16.4	16.5	16.5	18.4	17.9	17.9
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:	9.3	10.3	10.3	9.7	11.0	11.0	16.4	16.5	16.5	18.4	17.9	17.9
HCM2kAvg:	0	2	2	1	4	4	0	1	1	4	3	3

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.423
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.0
Optimal Cycle: 25 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	0	277	147	80	164	18	41	421	2	49	54	19
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	310	165	90	184	20	46	472	2	55	60	21
Added Vol:	0	0	0	0	0	1	7	100	0	0	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	310	165	90	184	21	53	572	2	55	78	21
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:	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 Volume:	0	310	165	90	184	21	53	572	2	55	78	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	310	165	90	184	21	53	572	2	55	78	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	310	165	90	184	21	53	572	2	55	78	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.95	0.38	0.99	0.99	0.65	0.95	0.95	0.29	0.92	0.92
Lanes:	1.00	0.65	0.35	1.00	0.90	0.10	1.00	1.99	0.01	1.00	1.57	0.43
Final Sat.:	1900	1177	624	726	1678	193	1239	3592	14	547	2749	745
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.12	0.11	0.11	0.04	0.16	0.16	0.10	0.03	0.03
Crit Moves:		****						****				
Green/Cycle:	0.00	0.62	0.62	0.62	0.62	0.62	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.00	0.42	0.42	0.20	0.18	0.18	0.11	0.42	0.42	0.27	0.08	0.08
Uniform Del:	0.0	9.6	9.6	8.1	8.0	8.0	20.3	23.1	23.1	21.6	20.0	20.0
IncremntDel:	0.0	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.7	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	0.0	9.9	9.9	8.3	8.0	8.0	20.4	23.3	23.3	22.3	20.0	20.0
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	9.9	9.9	8.3	8.0	8.0	20.4	23.3	23.3	22.3	20.0	20.0
HCM2kAvg:	0	8	7	3	3	3	2	7	5	4	1	1

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 3.7 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	1	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	3	0	2	0	0	0	0	22	6	1	34	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	3	0	2	0	0	0	0	25	7	1	38	0
Added Vol:	0	0	5	0	0	0	0	0	0	55	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	0	7	0	0	0	0	25	7	56	38	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:	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 Volume:	3	0	7	0	0	0	0	25	7	56	38	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	0	7	0	0	0	0	25	7	56	38	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	178	xxxx	28	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	31	xxxx	xxxxx
Potent Cap.:	816	xxxx	1053	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1594	xxxx	xxxxx
Move Cap.:	793	xxxx	1053	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1594	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	0.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	8.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	793	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd StpDel:	9.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	8.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: A[9.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0 1	0 0	0	0 0	0 0	0	1 0	0 1	0	0 0
Volume Module:												
Base Vol:	4	1	3	0	0	0	0	193	7	0	35	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	4	1	3	0	0	0	0	216	8	0	39	0
Added Vol:	0	0	64	0	0	0	0	0	0	15	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	1	67	0	0	0	0	216	8	15	39	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:	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 Volume:	4	1	67	0	0	0	0	216	8	15	39	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	1	67	0	0	0	0	216	8	15	39	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	289	289	220	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	224	xxxx	xxxxx
Potent Cap.:	706	624	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Move Cap.:	700	617	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	0.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	9.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	681	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	9.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Appendix B14
Year 2017 Project Operations – Alternative 2
Intersection Analysis

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 I-5 NB Ramp / Stockdale Hwy	A	8.9	0.000	B	11.7	0.000	+ 2.779 D/V
# 2 I-5 SB Ramp / Stockdale Hwy	A	9.3	0.000	B	11.1	0.000	+ 1.730 D/V
# 3 I-5 NB Ramp / SR 119	B	11.7	0.000	B	11.7	0.000	+ 0.052 D/V
# 4 I-5 SB Ramp / SR 119	B	12.6	0.000	B	12.7	0.000	+ 0.087 D/V
# 5 SR 119 / SR 43	C	26.4	0.577	C	26.4	0.577	+ 0.000 D/V
# 6 Stockdale Hwy/SR 43	B	12.8	0.577	C	17.0	0.740	+ 0.163 V/C
# 7 Stockdale Hwy / Morris Rd	A	8.8	0.000	B	12.2	0.000	+ 3.401 D/V
# 8 Tupman Rd / SR 119	C	22.5	0.000	C	22.9	0.000	+ 0.385 D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.028	A	7.0	0.035	+ 0.007 V/C
# 10 Station Rd/Tupman Rd	A	8.7	0.000	B	10.1	0.000	+ 1.397 D/V
# 11 Stockdale/Dairy	A	8.7	0.000	A	8.8	0.000	+ 0.132 D/V
# 12 Dairy/Adohr	A	9.0	0.000	B	10.1	0.000	+ 1.172 D/V
# 13 SR-43/Poso Ave	B	11.3	0.372	B	11.6	0.397	+ 0.024 V/C
# 14 SR-43/Kimberlina Rd	C	24.1	0.263	C	24.1	0.280	+ 0.032 D/V
# 15 SR-43/Shafter Ave	B	13.0	0.247	B	12.7	0.259	-0.293 D/V
# 16 Sr-43/Central Ave	A	9.1	0.189	A	8.8	0.199	-0.384 D/V
# 17 SR-43/Lerdo Hwy	C	22.4	0.331	C	22.1	0.341	-0.244 D/V
# 18 SR-43/7th Standard Rd	B	12.6	0.489	B	13.9	0.566	+ 0.077 V/C
# 19 SR-43/SR-58 (Rosedal Highway W	B	11.4	0.431	B	12.3	0.502	+ 0.071 V/C
# 20 SR-43/SR-58 (Rosedal Highway E	B	11.5	0.365	B	12.4	0.431	+ 0.066 V/C
# 21 H St/9th St	A	8.6	0.000	A	8.7	0.000	+ 0.086 D/V
# 22 H St/Wasco Ave	A	8.7	0.000	A	8.9	0.000	+ 0.140 D/V
# 23 Wasco Ave/Poso Ave	B	10.4	0.000	B	11.3	0.000	+ 0.900 D/V
# 24 Wasco Ave/Kimberlina Rd	B	10.5	0.000	B	10.3	0.000	-0.234 D/V
# 25 J St/9th St	A	8.5	0.000	A	8.6	0.000	+ 0.131 D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 26 Wasco Way/SR-58	B	14.7	0.000	B	14.7	0.000	+ 0.000 D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[11.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 1 0	0	0	0 0 1	0	1
Volume Module:												
Base Vol:	4	0	25	0	0	0	1	64	0	0	57	154
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	4	0	28	0	0	0	1	72	0	0	64	172
Added Vol:	53	0	0	0	0	0	41	41	0	0	129	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	0	28	0	0	0	42	113	0	0	193	172
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:	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 Volume:	57	0	28	0	0	0	42	113	0	0	193	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	57	0	28	0	0	0	42	113	0	0	193	172
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	476	xxxx	113	xxxx	xxxx	xxxxx	365	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	551	xxxx	946	xxxx	xxxx	xxxxx	1204	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	536	xxxx	946	xxxx	xxxx	xxxxx	1204	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.11	xxxx	0.03	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	625	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	11.7	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	A	*	*	*	*	*
ApproachDel:		11.7		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: B[11.1]

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 0 0 0			0 0 1! 0 0			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	42	1	2	0	27	1	15	47	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	47	1	2	0	30	1	17	53	0
Added Vol:	0	0	0	0	0	47	0	82	47	0	181	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	47	1	49	0	112	48	17	234	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:	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 Volume:	0	0	0	47	1	49	0	112	48	17	234	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	47	1	49	0	112	48	17	234	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	404	428	234	xxxx	xxxx	xxxxx	160	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	607	522	810	xxxx	xxxx	xxxxx	1431	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	601	516	810	xxxx	xxxx	xxxxx	1431	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.08	0.00	0.06	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	690	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	11.1	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			11.1			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	15	0	8	0	0	0	0	194	3	0	308	21
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	17	0	9	0	0	0	0	217	3	0	345	24
Added Vol:	0	0	0	0	0	0	0	4	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	0	9	0	0	0	0	221	3	0	345	28
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:	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 Volume:	17	0	9	0	0	0	0	221	3	0	345	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	17	0	9	0	0	0	0	221	3	0	345	28
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	582	xxxx	223	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	479	xxxx	822	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	479	xxxx	822	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.04	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT
Shared Cap.:	xxxx	560	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	11.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		11.7		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	1	0	0	1		0	0	1	0	1		0	1	0	0	0	
Volume Module:																								
Base Vol:	0	0	0				11		1		1		0	186		16			2	317		0		
Growth Adj:	1.12	1.12	1.12				1.12		1.12		1.12		1.12	1.12		1.12			1.12	1.12		1.12		
Initial Bse:	0	0	0				12		1		1		0	208		18			2	355		0		
Added Vol:	0	0	0				4		0		0		0	0		0			0	0		0		
PasserByVol:	0	0	0				0		0		0		0	0		0			0	0		0		
Initial Fut:	0	0	0				16		1		1		0	208		18			2	355		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:	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 Volume:	0	0	0				16		1		1		0	208		18			2	355		0		
Reduct Vol:	0	0	0				0		0		0		0	0		0			0	0		0		
Final Vol.:	0	0	0				16		1		1		0	208		18			2	355		0		
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4		6.5		6.2		xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5		4.0		3.3		xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				577		586		355		xxxx	xxxx	xxxxx				226	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				482		425		693		xxxx	xxxx	xxxxx				1354	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				481		425		693		xxxx	xxxx	xxxxx				1354	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.03		0.00		0.00		xxxx	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.0		xxxxx	xxxx	xxxxx		0.0	xxxx	xxxxx									
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		10.2		xxxxx	xxxx	xxxxx		7.7	xxxx	xxxxx									
LOS by Move:	*	*	*	*	*		B		*	*	*		A	*	*									
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				477		xxxx	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				0.1		xxxx	xxxxx			xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				12.8		xxxx	xxxxx			xxxxx	xxxx	xxxxx				7.7	xxxx	xxxxx			
Shared LOS:	*	*	*				B		*	*			*	*	*				A	*	*			
ApproachDel:	xxxxxx						12.7						xxxxxx						xxxxxx					
ApproachLOS:	*						B						*						*					

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

Intersection #5 SR 119 / SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.577
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.4
Optimal Cycle: 46 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:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 0	1 0		1 0 0	1 0	
Volume Module:												
Base Vol:	36	11	16	2	40	359	103	172	3	19	291	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	40	12	18	2	45	402	115	193	3	21	326	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	12	18	2	45	402	115	193	3	21	326	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:	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 Volume:	40	12	18	2	45	402	115	193	3	21	326	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	12	18	2	45	402	115	193	3	21	326	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 Vol.:	40	12	18	2	45	402	115	193	3	21	326	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.36	0.91	0.91	0.74	0.87	0.87	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.41	0.59	1.00	0.10	0.90	1.00	0.98	0.02	1.00	1.00	0.00
Final Sat.:	680	705	1026	1412	165	1479	1805	1862	32	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.02	0.02	0.00	0.27	0.27	0.06	0.10	0.10	0.01	0.17	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.47	0.47	0.47	0.47	0.47	0.47	0.11	0.37	0.37	0.04	0.30	0.00
Volume/Cap:	0.13	0.04	0.04	0.00	0.58	0.58	0.58	0.28	0.28	0.28	0.58	0.00
Uniform Del:	14.8	14.2	14.2	14.0	19.2	19.2	42.2	22.4	22.4	46.5	29.8	0.0
IncremntDel:	0.2	0.0	0.0	0.0	1.1	1.1	4.1	0.2	0.2	2.1	1.5	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	0.00
Delay/Veh:	15.0	14.2	14.2	14.0	20.2	20.2	46.3	22.6	22.6	48.5	31.3	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:	15.0	14.2	14.2	14.0	20.2	20.2	46.3	22.6	22.6	48.5	31.3	0.0
HCM2kAvg:	2	0	0	0	10	10	4	4	4	1	9	0

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.740
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 17.0
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:	5	115	34	42	208	25	10	45	7	129	157	53
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	6	129	38	47	233	28	11	50	8	144	176	59
Added Vol:	0	0	0	0	0	43	37	4	0	0	86	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	129	38	47	233	71	48	54	8	144	262	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:	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 Volume:	6	129	38	47	233	71	48	54	8	144	262	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	129	38	47	233	71	48	54	8	144	262	59
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 Vol.:	6	129	38	47	233	71	48	54	8	144	262	59
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:	0.03	0.75	0.22	0.13	0.67	0.20	0.44	0.49	0.07	0.31	0.56	0.13
Final Sat.:	17	402	119	80	395	121	221	250	36	195	354	80
Capacity Analysis Module:												
Vol/Sat:	0.32	0.32	0.32	0.59	0.59	0.59	0.22	0.22	0.22	0.74	0.74	0.74
Crit Moves:		****			****			****			****	
Delay/Veh:	11.4	11.4	11.4	15.7	15.7	15.7	10.7	10.7	10.7	21.5	21.5	21.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.4	11.4	11.4	15.7	15.7	15.7	10.7	10.7	10.7	21.5	21.5	21.5
LOS by Move:	B	B	B	C	C	C	B	B	B	C	C	C
ApproachDel:	11.4			15.7			10.7			21.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.4			15.7			10.7			21.5		
LOS by Appr:	B			C			B			C		

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 6.0 Worst Case Level Of Service: B[12.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	1		0	0	1!	0	0		0	1	0	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	0	10				1	0	1				1	15	0				18	37	1			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	0	11				1	0	1				1	17	0				20	41	1			
Added Vol:	0	0	124				0	0	0				0	5	0				174	55	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	135				1	0	1				1	22	0				194	96	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:	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 Volume:	0	0	135				1	0	1				1	22	0				194	96	1			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	135				1	0	1				1	22	0				194	96	1			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	6.2				7.1	xxxx	6.2				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3				3.5	xxxx	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	22				577	xxxx	97				98	xxxx	xxxxx				22	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	1061				431	xxxx	965				1508	xxxx	xxxxx				1607	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	1061				337	xxxx	965				1508	xxxx	xxxxx				1607	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.13				0.00	xxxx	0.00				0.00	xxxx	xxxx				0.12	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	0.4				xxxxx	xxxx	xxxxx				0.0	xxxx	xxxxx				0.4	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	8.9				xxxxx	xxxx	xxxxx				7.4	xxxx	xxxxx				7.5	xxxx	xxxxx			
LOS by Move:	*	*	A				*	*	*				A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	499	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	0.0	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx				xxxxx	12.2	xxxxx				7.4	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	B	*				A	*	*				*	*	*			
ApproachDel:	8.9						12.2						xxxxxx						xxxxxx					
ApproachLOS:	A						B						*						*					

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[22.9]

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 1!	0	0	0 0 1!	0	0	1 0 0	1	0	1 0 0	1	0
Volume Module:												
Base Vol:	1	6	14	10	0	6	16	264	1	29	617	25
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	1	7	16	11	0	7	18	296	1	32	691	28
Added Vol:	0	0	0	0	0	0	6	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	7	16	11	0	7	24	296	1	32	691	28
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:	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 Volume:	1	7	16	11	0	7	24	296	1	32	691	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	1	7	16	11	0	7	24	296	1	32	691	28
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1117	1128	296	1125	xxxx	705	719	xxxx	xxxxx	297	xxxx	xxxxx
Potent Cap.:	186	206	748	184	xxxx	440	892	xxxx	xxxxx	1276	xxxx	xxxxx
Move Cap.:	176	195	748	168	xxxx	440	892	xxxx	xxxxx	1276	xxxx	xxxxx
Volume/Cap:	0.01	0.03	0.02	0.07	xxxx	0.02	0.03	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	381	xxxxx	xxxx	219	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	15.1	xxxxx	xxxxx	22.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	C	*	*	*	*	*	*	*
ApproachDel:	15.1			22.9			xxxxxx			xxxxxx		
ApproachLOS:	C			C			*			*		

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.035
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	17	4	1	1	11	7	5	5	10	3	4	2
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	19	4	1	1	12	8	6	6	11	3	4	2
Added Vol:	0	6	0	0	0	0	6	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	10	1	1	12	8	12	6	11	3	4	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	19	10	1	1	12	8	12	6	11	3	4	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	10	1	1	12	8	12	6	11	3	4	2
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 Vol.:	19	10	1	1	12	8	12	6	11	3	4	2
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:	0.62	0.34	0.04	0.05	0.58	0.37	0.41	0.20	0.39	0.33	0.45	0.22
Final Sat.:	541	298	32	49	543	346	376	181	363	299	398	199
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.02	0.02	0.02	0.03	0.03	0.03	0.01	0.01	0.01
Crit Moves:		****			****			****			****	
Delay/Veh:	7.2	7.2	7.2	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.2	7.2	7.2	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.2			6.9			7.0			7.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.2			6.9			7.0			7.0	
LOS by Appr:		A			A			A			A	

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 8.9 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:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	1	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0		6		9		1		9		0		0		0		0		11		0		0	
Growth Adj:	1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12	
Initial Bse:	0		7		10		1		10		0		0		0		0		12		0		0	
Added Vol:	0		11		0		0		0		0		0		124		0		0		127		47	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	0		18		10		1		10		0		0		124		0		12		127		47	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	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 Volume:	0		18		10		1		10		0		0		124		0		12		127		47	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	0		18		10		1		10		0		0		124		0		12		127		47	
Critical Gap Module:																								
Critical Gp:	xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx		xxxxx		6.5		xxxxx		7.1		6.5		6.2	
FollowUpTim:	xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx		xxxxx		4.0		xxxxx		3.5		4.0		3.3	
Capacity Module:																								
Cnflict Vol:	xxxx		xxxx		xxxxx		28		xxxx		xxxxx		xxxx		40		xxxxx		97		35		23	
Potent Cap.:	xxxx		xxxx		xxxxx		1599		xxxx		xxxxx		xxxx		856		xxxxx		890		861		1060	
Move Cap.:	xxxx		xxxx		xxxxx		1599		xxxx		xxxxx		xxxx		855		xxxxx		791		861		1060	
Volume/Cap:	xxxx		xxxx		xxxx		0.00		xxxx		xxxx		xxxx		0.14		xxxx		0.02		0.15		0.04	
Level Of Service Module:																								
Queue:	xxxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		xxxxx		0.5		xxxxx		xxxxx		xxxx		xxxxx	
Stopped Del:	xxxxx		xxxx		xxxxx		7.3		xxxx		xxxxx		xxxxx		9.9		xxxxx		xxxxx		xxxx		xxxxx	
LOS by Move:	*		*		*		A		*		*		*		A		*		*		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		898		xxxxx	
SharedQueue:	xxxxx		xxxx		xxxxx		0.0		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		0.8		xxxxx	
Shrd StpDel:	xxxxx		xxxx		xxxxx		7.3		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		10.1		xxxxx	
Shared LOS:	*		*		*		A		*		*		*		*		*		*		B		*	
ApproachDel:	xxxxxx						xxxxxx						9.9						10.1					
ApproachLOS:	*						*						A						B					

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 3.7 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 1 0	0	0
Volume Module:												
Base Vol:	3	0	2	0	0	0	0	22	6	1	34	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	3	0	2	0	0	0	0	25	7	1	38	0
Added Vol:	0	0	5	0	0	0	0	0	0	55	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	0	7	0	0	0	0	25	7	56	38	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:	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 Volume:	3	0	7	0	0	0	0	25	7	56	38	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	0	7	0	0	0	0	25	7	56	38	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	178	xxxx	28	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	31	xxxx	xxxxx
Potent Cap.:	816	xxxx	1053	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1594	xxxx	xxxxx
Move Cap.:	793	xxxx	1053	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1594	xxxx	xxxxx
Volume/Cap:	0.00	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	954	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd StpDel:	xxxxx	8.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:		8.8		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		A		*			*			*		

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 5.1 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 0 1 0			0 1 0 0 0			0 0 1! 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	2	4	2	4	0	0	0	0	8	0	1
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	2	4	2	4	0	0	0	0	9	0	1
Added Vol:	0	5	0	0	55	0	0	0	0	58	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	7	4	2	59	0	0	0	0	67	0	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	0	7	4	2	59	0	0	0	0	67	0	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	7	4	2	59	0	0	0	0	67	0	1
Critical Gap Module:												
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	135	0	140	134	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx
Potent Cap.:	xxxx	759	0	834	760	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx
Move Cap.:	xxxx	759	0	828	760	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx
Volume/Cap:	xxxx	0.01	0.00	0.00	0.08	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	1229	762	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	0.0	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	8.0	10.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	A	B	*	*	*	*	*	*	*	*
ApproachDel:		8.0			10.1			xxxxxx			xxxxxx	
ApproachLOS:		A			B			*			*	

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

Intersection #13 SR-43/Poso Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.397
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.6
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:	1	0 1	1	0	1	0 1	1	0	1	0 1	0	1	0	1 0	0	1
Volume Module:																
Base Vol:	23	414	0		0	411	4		4	0	23		0	0	1	
Growth Adj:	1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12	
Initial Bse:	26	464	0		0	460	4		4	0	26		0	0	1	
Added Vol:	0	0	37		0	6	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	26	464	37		0	466	4		4	0	26		0	0	1	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	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 Volume:	26	464	37		0	466	4		4	0	26		0	0	1	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	26	464	37		0	466	4		4	0	26		0	0	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	
Final Vol.:	26	464	37		0	466	4		4	0	26		0	0	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:	1.00	1.85	0.15		1.00	1.98	0.02		1.00	1.00	1.00		0.00	1.00	1.00	
Final Sat.:	572	1169	94		0	1223	12		441	0	517		0	0	545	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.40	0.39	xxxx	0.38	0.38	0.01	xxxx	0.05	xxxx	xxxx	0.00				
Crit Moves:		****			****				****			****				
Delay/Veh:	9.1	11.7	11.6	0.0	11.7	11.7	10.3	0.0	9.3	0.0	0.0	8.7				
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	9.1	11.7	11.6	0.0	11.7	11.7	10.3	0.0	9.3	0.0	0.0	8.7				
LOS by Move:	A	B	B	*	B	B	B	*	A	*	*	A				
ApproachDel:		11.6			11.7			9.4			8.7					
Delay Adj:		1.00			1.00			1.00			1.00					
ApprAdjDel:		11.6			11.7			9.4			8.7					
LOS by Appr:		B			B			A			A					

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

Intersection #14 SR-43/Kimberlina Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.280
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 24.1
Optimal Cycle: 26 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	129	264	17	88	229	4	5	73	95	20	91	39
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	144	296	19	99	256	4	6	82	106	22	102	44
Added Vol:	0	37	0	0	6	0	0	0	0	37	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	333	19	99	262	4	6	82	106	59	102	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	144	333	19	99	262	4	6	82	106	59	102	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	333	19	99	262	4	6	82	106	59	102	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
Final Vol.:	144	333	19	99	262	4	6	82	106	59	102	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.95	0.95	0.92	0.92	0.92	0.85	0.85	0.85
Lanes:	1.00	1.89	0.11	1.00	1.97	0.03	0.03	0.42	0.55	0.29	0.50	0.21
Final Sat.:	1805	3387	194	1805	3539	60	51	738	960	470	807	346
Capacity Analysis Module:												
Vol/Sat:	0.08	0.10	0.10	0.05	0.07	0.07	0.11	0.11	0.11	0.13	0.13	0.13
Crit Moves:	****				****						****	
Green/Cycle:	0.29	0.35	0.35	0.20	0.26	0.26	0.45	0.45	0.45	0.45	0.45	0.45
Volume/Cap:	0.28	0.28	0.28	0.28	0.28	0.28	0.25	0.25	0.25	0.28	0.28	0.28
Uniform Del:	27.8	23.2	23.2	34.1	29.2	29.2	17.0	17.0	17.0	17.3	17.3	17.3
IncremntDel:	0.3	0.1	0.1	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	28.1	23.3	23.3	34.6	29.4	29.4	17.2	17.2	17.2	17.5	17.5	17.5
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:	28.1	23.3	23.3	34.6	29.4	29.4	17.2	17.2	17.2	17.5	17.5	17.5
HCM2kAvg:	4	4	4	3	3	4	4	4	4	4	4	5

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

Intersection #15 SR-43/Shafter Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.259
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.7
Optimal Cycle: 19 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	40	330	44	74	347	92	84	129	22	41	107	63
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	45	370	49	83	389	103	94	144	25	46	120	71
Added Vol:	0	37	0	0	43	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	407	49	83	432	103	94	144	25	46	120	71
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:	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 Volume:	45	407	49	83	432	103	94	144	25	46	120	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	407	49	83	432	103	94	144	25	46	120	71
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 Vol.:	45	407	49	83	432	103	94	144	25	46	120	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.39	0.95	0.85	0.46	0.92	0.92	0.52	0.98	0.98	0.55	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	1.61	0.39	1.00	0.85	0.15	1.00	0.63	0.37
Final Sat.:	743	3610	1615	880	2830	676	996	1587	271	1041	1129	665
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.03	0.09	0.15	0.15	0.09	0.09	0.09	0.04	0.11	0.11
Crit Moves:					****						****	
Green/Cycle:	0.59	0.59	0.59	0.59	0.59	0.59	0.41	0.41	0.41	0.41	0.41	0.41
Volume/Cap:	0.10	0.19	0.05	0.16	0.26	0.26	0.23	0.22	0.22	0.11	0.26	0.26
Uniform Del:	9.0	9.5	8.7	9.3	9.9	9.9	19.2	19.1	19.1	18.2	19.4	19.4
IncremntDel:	0.1	0.0	0.0	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	9.1	9.5	8.7	9.4	10.0	10.0	19.5	19.3	19.3	18.3	19.6	19.6
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:	9.1	9.5	8.7	9.4	10.0	10.0	19.5	19.3	19.3	18.3	19.6	19.6
HCM2kAvg:	2	3	1	2	4	4	4	3	3	2	4	4

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

Intersection #16 Sr-43/Central Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.199
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.8
Optimal Cycle: 18 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:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	1 0
Volume Module:												
Base Vol:	14	412	24	46	387	18	9	61	11	26	93	29
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	16	461	27	52	433	20	10	68	12	29	104	32
Added Vol:	0	37	0	0	43	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	498	27	52	476	20	10	68	12	29	104	32
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:	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 Volume:	16	498	27	52	476	20	10	68	12	29	104	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	498	27	52	476	20	10	68	12	29	104	32
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 Vol.:	16	498	27	52	476	20	10	68	12	29	104	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.44	0.94	0.94	0.42	0.94	0.94	0.95	0.95	0.95	0.84	0.84	0.84
Lanes:	1.00	1.90	0.10	1.00	1.92	0.08	0.11	0.75	0.14	0.35	1.26	0.39
Final Sat.:	832	3398	183	806	3443	146	202	1366	246	558	1996	622
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.15	0.06	0.14	0.14	0.05	0.05	0.05	0.05	0.05	0.05
Crit Moves:		****									****	
Green/Cycle:	0.74	0.74	0.74	0.74	0.74	0.74	0.26	0.26	0.26	0.26	0.26	0.26
Volume/Cap:	0.03	0.20	0.20	0.09	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20
Uniform Del:	3.5	4.0	4.0	3.7	4.0	4.0	28.6	28.6	28.6	28.7	28.7	28.7
IncremntDel:	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.2	0.1	0.1	0.1
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
Delay/Veh:	3.5	4.1	4.1	3.7	4.0	4.0	28.8	28.8	28.8	28.8	28.8	28.8
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:	3.5	4.1	4.1	3.7	4.0	4.0	28.8	28.8	28.8	28.8	28.8	28.8
HCM2kAvg:	0	2	3	1	2	2	2	2	2	2	2	2

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

Intersection #17 SR-43/Lerdo Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.341
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 22.1
Optimal Cycle: 28 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	1	0 1	0 1	0	1 0
Volume Module:												
Base Vol:	41	307	58	145	240	17	20	246	50	64	124	127
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	46	344	65	162	269	19	22	276	56	72	139	142
Added Vol:	0	37	0	0	43	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	381	65	162	312	19	22	276	56	72	139	142
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:	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 Volume:	46	381	65	162	312	19	22	276	56	72	139	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	381	65	162	312	19	22	276	56	72	139	142
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 Vol.:	46	381	65	162	312	19	22	276	56	72	139	142
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.87	0.87	0.85	0.74	0.74	0.74
Lanes:	1.00	1.71	0.29	1.00	1.88	0.12	0.15	1.85	1.00	0.40	0.79	0.81
Final Sat.:	1805	3016	514	1805	3372	206	249	3061	1615	574	1113	1140
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.09	0.09	0.09	0.09	0.09	0.03	0.12	0.12	0.12
Crit Moves:		****		****							****	
Green/Cycle:	0.14	0.37	0.37	0.26	0.50	0.50	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.19	0.34	0.34	0.34	0.19	0.19	0.25	0.25	0.09	0.34	0.34	0.34
Uniform Del:	38.2	22.7	22.7	29.8	13.9	13.9	22.1	22.1	20.8	23.0	23.0	23.0
IncremntDel:	0.4	0.2	0.2	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	38.6	22.9	22.9	30.2	14.0	14.0	22.2	22.2	20.9	23.2	23.2	23.2
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:	38.6	22.9	22.9	30.2	14.0	14.0	22.2	22.2	20.9	23.2	23.2	23.2
HCM2kAvg:	1	5	5	4	3	3	3	3	1	5	5	5

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

Intersection #18 SR-43/7th Standard Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.566
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.9
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	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	50	128	73	33	136	32	13	78	42	47	163	42
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	56	143	82	37	152	36	15	87	47	53	183	47
Added Vol:	0	37	0	0	43	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	180	82	37	195	36	15	87	47	53	183	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	56	180	82	37	195	36	15	87	47	53	183	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	180	82	37	195	36	15	87	47	53	183	47
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 Vol.:	56	180	82	37	195	36	15	87	47	53	183	47
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.57	0.26	0.16	0.84	1.00	0.10	0.59	0.31	0.22	0.78	1.00
Final Sat.:	99	319	144	85	451	605	49	293	158	116	403	587
Capacity Analysis Module:												
Vol/Sat:	0.57	0.57	0.57	0.43	0.43	0.06	0.30	0.30	0.30	0.45	0.45	0.08
Crit Moves:		****			****		****				****	
Delay/Veh:	16.3	16.3	16.3	13.5	13.5	8.6	12.1	12.1	12.1	14.1	14.1	8.9
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:	16.3	16.3	16.3	13.5	13.5	8.6	12.1	12.1	12.1	14.1	14.1	8.9
LOS by Move:	C	C	C	B	B	A	B	B	B	B	B	A
ApproachDel:	16.3			12.8			12.1			13.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	16.3			12.8			12.1			13.2		
LOS by Appr:	C			B			B			B		

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

Intersection #19 SR-43/SR-58 (Rosedal Highway West)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.502
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.3
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:	1 0	1 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	164	238	0	0	163	93	77	0	142	0	0	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	184	267	0	0	183	104	86	0	159	0	0	0
Added Vol:	0	37	0	0	43	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	304	0	0	226	104	86	0	159	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:	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 Volume:	184	304	0	0	226	104	86	0	159	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	304	0	0	226	104	86	0	159	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 Vol.:	184	304	0	0	226	104	86	0	159	0	0	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:	1.00	1.00	0.00	0.00	0.68	0.32	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	583	635	0	0	449	207	499	0	597	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.32	0.48	xxxx	xxxx	0.50	0.50	0.17	xxxx	0.27	xxxx	xxxx	xxxx
Crit Moves:		****				****			****			
Delay/Veh:	11.5	13.1	0.0	0.0	13.5	13.5	10.9	0.0	10.2	0.0	0.0	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:	11.5	13.1	0.0	0.0	13.5	13.5	10.9	0.0	10.2	0.0	0.0	0.0
LOS by Move:	B	B	*	*	B	B	B	*	B	*	*	*
ApproachDel:	12.5			13.5			10.5			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	12.5			13.5			10.5			xxxxxx		
LOS by Appr:	B			B			B			*		

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

Intersection #20 SR-43/SR-58 (Rosedal Highway East)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.431
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.4
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:	1 0 1	0 1		1 0 1	0 1		0 0 1!	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	7	168	30	124	171	5	9	5	20	95	13	207
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	8	188	34	139	192	6	10	6	22	106	15	232
Added Vol:	0	37	0	0	43	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	225	34	139	235	6	10	6	22	106	15	232
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:	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 Volume:	8	225	34	139	235	6	10	6	22	106	15	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	225	34	139	235	6	10	6	22	106	15	232
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 Vol.:	8	225	34	139	235	6	10	6	22	106	15	232
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	0.26	0.15	0.59	0.88	0.12	1.00
Final Sat.:	482	522	575	505	545	602	132	73	293	448	61	609
Capacity Analysis Module:												
Vol/Sat:	0.02	0.43	0.06	0.28	0.43	0.01	0.08	0.08	0.08	0.24	0.24	0.38
Crit Moves:		****			****			****				****
Delay/Veh:	9.9	13.9	9.0	12.1	13.6	8.4	10.1	10.1	10.1	11.5	11.5	11.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.9	13.9	9.0	12.1	13.6	8.4	10.1	10.1	10.1	11.5	11.5	11.5
LOS by Move:	A	B	A	B	B	A	B	B	B	B	B	B
ApproachDel:		13.2			12.9			10.1			11.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		13.2			12.9			10.1			11.5	
LOS by Appr:		B			B			B			B	

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

Intersection #21 H St/9th St

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: A[8.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	1	0		0	1	0	0	0		0	0	0	0	0		1	0	0	0	1	
Volume Module:																								
Base Vol:	0	32		3			2	24		0			0	0		0			3	0		14		
Growth Adj:	1.12	1.12		1.12			1.12	1.12		1.12			1.12	1.12		1.12			1.12	1.12		1.12		
Initial Bse:	0	36		3			2	27		0			0	0		0			3	0		16		
Added Vol:	0	0		37			0	0		0			0	0		0			0	0		0		
PasserByVol:	0	0		0			0	0		0			0	0		0			0	0		0		
Initial Fut:	0	36		40			2	27		0			0	0		0			3	0		16		
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:	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 Volume:	0	36		40			2	27		0			0	0		0			3	0		16		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Final Vol.:	0	36		40			2	27		0			0	0		0			3	0		16		
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			4.1	xxxx		xxxxx			xxxxx	xxxx		xxxxx			6.4	xxxx		6.2		
FollowUpTim:	xxxxx	xxxx		xxxxx			2.2	xxxx		xxxxx			xxxxx	xxxx		xxxxx			3.5	xxxx		3.3		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			76	xxxx		xxxxx			xxxx	xxxx		xxxxx			87	xxxx		56		
Potent Cap.:	xxxx	xxxx		xxxxx			1536	xxxx		xxxxx			xxxx	xxxx		xxxxx			919	xxxx		1016		
Move Cap.:	xxxx	xxxx		xxxxx			1536	xxxx		xxxxx			xxxx	xxxx		xxxxx			917	xxxx		1016		
Volume/Cap:	xxxx	xxxx		xxxx			0.00	xxxx		xxxx			xxxx	xxxx		xxxx			0.00	xxxx		0.02		
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx			0.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx			0.0	xxxx		0.0		
Stopped Del:	xxxxx	xxxx		xxxxx			7.3	xxxx		xxxxx			xxxxx	xxxx		xxxxx			8.9	xxxx		8.6		
LOS by Move:	*	*		*			A	*		*			*	*		*			A	*		A		
Movement:	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			0.0	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd StpDel:	xxxxx	xxxx		xxxxx			7.3	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*			A	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						8.7					
ApproachLOS:	*						*						*						A					

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

Intersection #22 H St/Wasco Ave

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: A[8.9]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		1	0	0	0	1		1	0	1	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0	0	0				1	0	37				35	79	0				0	54	0			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	0	0				1	0	41				39	88	0				0	60	0			
Added Vol:	0	0	0				0	0	37				37	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				1	0	78				76	88	0				0	60	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:	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 Volume:	0	0	0				1	0	78				76	88	0				0	60	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				1	0	78				76	88	0				0	60	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				301	xxxx	60				60	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				694	xxxx	1010				1556	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				668	xxxx	1010				1556	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.00	xxxx	0.08				0.05	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.0	xxxx	0.3				0.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				10.4	xxxx	8.9				7.4	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				B	*	A				A	*	*				*	*	*			
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						8.9						xxxxxx						xxxxxx					
ApproachLOS:	*						A						*						*					

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

Intersection #23 Wasco Ave/Poso Ave

Average Delay (sec/veh): 7.8 Worst Case Level Of Service: B[11.3]

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:	1	0	0	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	1
Volume Module:																				
Base Vol:	10	23	0			3	32	58			75	6	14			0	0	2		
Growth Adj:	1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12		
Initial Bse:	11	26	0			3	36	65			84	7	16			0	0	2		
Added Vol:	0	0	0			0	37	0			37	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	11	26	0			3	73	65			121	7	16			0	0	2		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	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 Volume:	11	26	0			3	73	65			121	7	16			0	0	2		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	11	26	0			3	73	65			121	7	16			0	0	2		
Critical Gap Module:																				
Critical Gp:	7.1	6.5	xxxxx			7.1	6.5	6.2			4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	xxxxx			3.5	4.0	3.3			2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																				
Cnflict Vol:	285	251	xxxxx			269	264	0			2	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	671	656	xxxxx			687	644	0			1633	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	572	603	xxxxx			625	593	0			1633	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.02	0.04	xxxx			0.01	0.12	0.00			0.07	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																				
Queue:	0.1	xxxx	xxxxx			0.0	xxxx	xxxxx			0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Stopped Del:	11.4	xxxx	xxxxx			10.8	xxxx	xxxxx			7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	B	*	*			B	*	*			A	*	*	*	*	*				
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	603			xxxx	xxxx	1122			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	0.1			xxxxx	xxxx	0.4			0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd StpDel:	xxxxx	xxxx	11.2			xxxxx	xxxx	8.7			7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	B			*	*	A			A	*	*	*	*	*				
ApproachDel:	11.3					8.7					xxxxxx			xxxxxx						
ApproachLOS:	B					A					*			*						

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

Intersection #24 Wasco Ave/Kimberlina Rd

Average Delay (sec/veh): 2.3 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 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	27	0	19	17	163	0	0	138	17
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	30	0	21	19	183	0	0	155	19
Added Vol:	0	0	0	0	0	37	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	30	0	58	19	183	0	0	155	19
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:	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 Volume:	0	0	0	30	0	58	19	183	0	0	155	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	30	0	58	19	183	0	0	155	19
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	385	xxxx	164	174	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	622	xxxx	886	1415	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	616	xxxx	886	1415	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	0.07	0.01	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	770	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.3	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.3			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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

Intersection #25 J St/9th St

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: A[8.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	2	0	0		0	0	1	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	71	0				0	64	7				0	0	1				0	0	0			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	80	0				0	72	8				0	0	1				0	0	0			
Added Vol:	0	0	0				0	0	0				0	0	37				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	80	0				0	72	8				0	0	38				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:	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 Volume:	0	80	0				0	72	8				0	0	38				0	0	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	80	0				0	72	8				0	0	38				0	0	0			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	6.9				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	3.3				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	40				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	1029				xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	1029				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx				xxxx	xxxx	0.04				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	0.1				xxxxx	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	8.6				xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	*				*	*	A				*	*	*			
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						xxxxxx						8.6						xxxxxx					
ApproachLOS:	*						*						A						*					

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

Intersection #26 Wasco Way/SR-58

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: B[14.7]

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 1!	0	0	0 1	0	1	0 1	0	1
Volume Module:												
Base Vol:	39	29	10	3	5	5	29	363	58	5	46	2
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	44	32	11	3	6	6	32	407	65	6	52	2
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:	44	32	11	3	6	6	32	407	65	6	52	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	44	32	11	3	6	6	32	407	65	6	52	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	44	32	11	3	6	6	32	407	65	6	52	2
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:												
Cnflict Vol:	541	536	407	589	599	52	54	xxxx	xxxxx	472	xxxx	xxxxx
Potent Cap.:	455	454	649	423	418	1022	1565	xxxx	xxxxx	1101	xxxx	xxxxx
Move Cap.:	439	442	649	385	407	1022	1565	xxxx	xxxxx	1101	xxxx	xxxxx
Volume/Cap:	0.10	0.07	0.02	0.01	0.01	0.01	0.02	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT
Shared Cap.:	xxxx	459	xxxxx	xxxx	520	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	0.1	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	14.7	xxxxx	xxxxx	12.1	xxxxx	7.3	xxxx	xxxxx	8.3	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	A	*	*
ApproachDel:		14.7			12.1		xxxxxx			xxxxxx		
ApproachLOS:		B			B		*			*		

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 I-5 NB Ramp / Stockdale Hwy	B	12.1	0.000	C	17.5	0.000	+ 5.387 D/V
# 2 I-5 SB Ramp / Stockdale Hwy	B	14.6	0.000	D	34.7	0.000	+20.080 D/V
# 3 I-5 NB Ramp / SR 119	C	20.1	0.000	C	20.2	0.000	+ 0.125 D/V
# 4 I-5 SB Ramp / SR 119	C	21.0	0.000	C	21.5	0.000	+ 0.515 D/V
# 5 SR 119 / SR 43	C	24.5	0.639	C	24.5	0.639	+ 0.000 D/V
# 6 Stockdale Hwy/SR 43	E	40.9	0.979	F	78.2	1.234	+ 0.254 V/C
# 7 Stockdale Hwy / Morris Rd	A	9.5	0.000	B	11.1	0.000	+ 1.598 D/V
# 8 Tupman Rd / SR 119	F	117.7	0.000	F	102.7	0.000	-15.035 D/V
# 9 Tupman Rd/Grace Ave	A	7.0	0.039	A	7.0	0.040	+ 0.001 V/C
# 10 Station Rd/Tupman Rd	A	8.6	0.000	B	10.9	0.000	+ 2.223 D/V
# 11 Stockdale/Dairy	A	9.8	0.000	A	9.9	0.000	+ 0.026 D/V
# 12 Dairy/Adohr	A	8.9	0.000	A	9.3	0.000	+ 0.456 D/V
# 13 SR-43/Poso Ave	B	12.6	0.463	B	12.7	0.466	+ 0.004 V/C
# 14 SR-43/Kimberlina Rd	C	21.2	0.330	C	21.1	0.334	-0.111 D/V
# 15 SR-43/Shafter Ave	B	13.3	0.326	B	13.2	0.329	-0.055 D/V
# 16 Sr-43/Central Ave	B	10.5	0.246	B	10.4	0.249	-0.099 D/V
# 17 SR-43/Lerdo Hwy	C	21.9	0.369	C	21.9	0.374	+ 0.057 D/V
# 18 SR-43/7th Standard Rd	D	29.7	0.930	D	31.8	0.945	+ 0.015 V/C
# 19 SR-43/SR-58 (Rosedal Highway W	C	15.8	0.674	C	16.3	0.681	+ 0.007 V/C
# 20 SR-43/SR-58 (Rosedal Highway E	C	17.9	0.777	C	18.3	0.782	+ 0.005 V/C
# 21 H St/9th St	A	8.8	0.000	A	8.8	0.000	+ 0.022 D/V
# 22 H St/Wasco Ave	A	9.0	0.000	A	9.1	0.000	+ 0.041 D/V
# 23 Wasco Ave/Poso Ave	B	10.9	0.000	B	11.1	0.000	+ 0.249 D/V
# 24 Wasco Ave/Kimberlina Rd	B	10.5	0.000	B	10.4	0.000	-0.057 D/V
# 25 J St/9th St	A	8.6	0.000	A	8.6	0.000	+ 0.033 D/V

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Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 26 Wasco Way/SR-58	B	14.5	0.000	B	14.5	0.000	+ 0.000 D/V

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

Intersection #1 I-5 NB Ramp / Stockdale Hwy

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: C[17.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 1 0	0	0	0 0 1	0	1
Volume Module:												
Base Vol:	3	0	31	0	0	0	3	466	0	0	55	67
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	3	0	35	0	0	0	3	522	0	0	62	75
Added Vol:	44	0	0	0	0	0	44	119	0	0	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	0	35	0	0	0	47	641	0	0	93	75
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:	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 Volume:	47	0	35	0	0	0	47	641	0	0	93	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	47	0	35	0	0	0	47	641	0	0	93	75
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	866	xxxx	641	xxxx	xxxx	xxxxx	168	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	326	xxxx	478	xxxx	xxxx	xxxxx	1422	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	318	xxxx	478	xxxx	xxxx	xxxxx	1422	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.15	xxxx	0.07	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	370	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	17.5	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	A	*	*	*	*	*
ApproachDel:		17.5			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		C			*			*			*	

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Average Delay (sec/veh): 11.5 Worst Case Level Of Service: D[34.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	262	1	1	0	204	9	20	38	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	293	1	1	0	228	10	22	43	0
Added Vol:	0	0	0	0	0	39	0	163	49	0	74	0
PasserByVol:	0	0	0	0	0	0	0	100	0	0	0	0
Initial Fut:	0	0	0	293	1	40	0	491	59	22	117	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:	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 Volume:	0	0	0	293	1	40	0	491	59	22	117	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	293	1	40	0	491	59	22	117	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	682	712	117	xxxx	xxxx	xxxxx	551	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	418	360	941	xxxx	xxxx	xxxxx	1029	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	411	352	941	xxxx	xxxx	xxxxx	1029	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.71	0.00	0.04	xxxx	xxxx	xxxx	0.02	xxxx	xxxx

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	441	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	6.4	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	34.7	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			34.7			xxxxxx			xxxxxx		
ApproachLOS:	*			D			*			*		

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

Intersection #3 I-5 NB Ramp / SR 119

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[20.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 0 1	0	1
Volume Module:												
Base Vol:	13	0	6	0	0	0	0	770	2	0	223	11
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	15	0	7	0	0	0	0	862	2	0	250	12
Added Vol:	0	0	0	0	0	0	0	4	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	0	7	0	0	0	0	866	2	0	250	16
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:	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 Volume:	15	0	7	0	0	0	0	866	2	0	250	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	15	0	7	0	0	0	0	866	2	0	250	16
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1125	xxxx	868	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	229	xxxx	355	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	229	xxxx	355	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT
Shared Cap.:	xxxx	258	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	20.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		20.2		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

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

Intersection #4 I-5 SB Ramp / SR 119

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[21.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 1 0 0 1			0 0 1 0 1			0 1 0 0 0		
Volume Module:												
Base Vol:	0	0	0	45	0	13	0	721	42	1	238	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	50	0	15	0	808	47	1	267	0
Added Vol:	0	0	0	4	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	54	0	15	0	808	47	1	267	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:	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 Volume:	0	0	0	54	0	15	0	808	47	1	267	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	54	0	15	0	808	47	1	267	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1100	xxxx	267	xxxx	xxxx	xxxxx	855	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	237	xxxx	777	xxxx	xxxx	xxxxx	794	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	237	xxxx	777	xxxx	xxxx	xxxxx	794	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.23	xxxx	0.02	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	237	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	24.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
Shared LOS:	*	*	*	C	*	*	*	*	*	A	*	*
ApproachDel:	xxxxxx			21.5			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

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

Intersection #5 SR 119 / SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.639
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.5
Optimal Cycle: 52 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:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	37	85	77	4	39	175	466	663	19	24	201	1
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	41	95	86	4	44	196	522	743	21	27	225	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:	41	95	86	4	44	196	522	743	21	27	225	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:	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 Volume:	41	95	86	4	44	196	522	743	21	27	225	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	95	86	4	44	196	522	743	21	27	225	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
Final Vol.:	41	95	86	4	44	196	522	743	21	27	225	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.39	0.93	0.93	0.51	0.88	0.88	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	0.52	0.48	1.00	0.18	0.82	1.00	0.97	0.03	1.00	0.99	0.01
Final Sat.:	741	926	839	960	304	1363	1805	1840	53	1805	1889	9
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.10	0.00	0.14	0.14	0.29	0.40	0.40	0.01	0.12	0.12
Crit Moves:					****			****		****		
Green/Cycle:	0.23	0.23	0.23	0.23	0.23	0.23	0.46	0.63	0.63	0.02	0.19	0.19
Volume/Cap:	0.25	0.46	0.46	0.02	0.64	0.64	0.62	0.64	0.64	0.64	0.62	0.62
Uniform Del:	31.8	33.5	33.5	30.2	35.1	35.1	20.2	11.4	11.4	48.4	37.1	37.1
IncremntDel:	0.8	0.8	0.8	0.0	3.7	3.7	1.5	1.2	1.2	28.5	3.4	3.4
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
Delay/Veh:	32.6	34.3	34.3	30.2	38.7	38.7	21.7	12.5	12.5	76.9	40.5	40.5
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:	32.6	34.3	34.3	30.2	38.7	38.7	21.7	12.5	12.5	76.9	40.5	40.5
HCM2kAvg:	3	5	5	0	8	8	13	15	14	2	7	4

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 1.234
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 78.2
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	277	147	80	164	18	41	421	2	49	54	19
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	310	165	90	184	20	46	472	2	55	60	21
Added Vol:	0	0	0	0	0	10	16	103	0	0	20	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	310	165	90	184	30	62	575	2	55	80	21
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:	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 Volume:	0	310	165	90	184	30	62	575	2	55	80	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	310	165	90	184	30	62	575	2	55	80	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	310	165	90	184	30	62	575	2	55	80	21
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:	0.00	0.65	0.35	0.29	0.61	0.10	0.09	0.90	0.01	0.35	0.51	0.14
Final Sat.:	0	340	180	137	282	46	50	466	2	147	215	57
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.91	0.91	0.65	0.65	0.65	1.23	1.23	1.23	0.37	0.37	0.37
Crit Moves:		****			****			****			****	
Delay/Veh:	0.0	46.1	46.1	22.6	22.6	22.6	144.0	144	144.0	15.4	15.4	15.4
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:	0.0	46.1	46.1	22.6	22.6	22.6	144.0	144	144.0	15.4	15.4	15.4
LOS by Move:	*	E	E	C	C	C	F	F	F	C	C	C
ApproachDel:		46.1			22.6			144.0			15.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		46.1			22.6			144.0			15.4	
LOS by Appr:		E			C			F			C	

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

Intersection #7 Stockdale Hwy / Morris Rd

Average Delay (sec/veh): 4.4 Worst Case Level Of Service: B[11.1]

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 0 0 1			0 0 1! 0 0			0 1 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	0	18	0	0	0	1	197	0	3	34	1
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	20	0	0	0	1	221	0	3	38	1
Added Vol:	0	0	148	0	0	0	0	63	0	99	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	168	0	0	0	1	284	0	102	52	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:	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 Volume:	0	0	168	0	0	0	1	284	0	102	52	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	168	0	0	0	1	284	0	102	52	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	284	xxxx	xxxx	xxxxx	53	xxxx	xxxxx	284	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	760	xxxx	xxxx	xxxxx	1565	xxxx	xxxxx	1290	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	760	xxxx	xxxx	xxxxx	1565	xxxx	xxxxx	1290	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.22	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.08	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	0.8	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.3	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	11.1	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	8.0	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	11.1			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

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

Intersection #8 Tupman Rd / SR 119

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: F[102.7]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	1	0	0	0	1!	0	0	1	0	0	1	0	1	0	0	1	0
Volume Module:																				
Base Vol:	0	1	27			22	0	6			14	1171	0			11	397	10		
Growth Adj:	1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12			1.12	1.12	1.12		
Initial Bse:	0	1	30			25	0	7			16	1312	0			12	445	11		
Added Vol:	0	0	0			0	0	7			1	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	1	30			25	0	14			17	1312	0			12	445	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:	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 Volume:	0	1	30			25	0	14			17	1312	0			12	445	11		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	0	1	30			25	0	14			17	1312	0			12	445	11		
Critical Gap Module:																				
Critical Gp:	xxxxx	6.5	6.2			7.1	xxxx	6.2			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	4.0	3.3			3.5	xxxx	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	1825	1312			1835	xxxx	450			456	xxxx	xxxxx			1312	xxxx	xxxxx		
Potent Cap.:	xxxx	78	196			59	xxxx	613			1116	xxxx	xxxxx			534	xxxx	xxxxx		
Move Cap.:	xxxx	75	196			48	xxxx	613			1116	xxxx	xxxxx			534	xxxx	xxxxx		
Volume/Cap:	xxxx	0.01	0.15			0.51	xxxx	0.02			0.01	xxxx	xxxx			0.02	xxxx	xxxx		
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Stopped Del:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			8.3	xxxx	xxxxx			11.9	xxxx	xxxxx		
LOS by Move:	*	*	*			*	*	*			A	*	*			B	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	185			xxxx	72	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	0.6			xxxxx	2.2	xxxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	28.4			xxxxx	103	xxxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	D			*	F	*			*	*	*			*	*	*		
ApproachDel:	28.4					102.7					xxxxxx					xxxxxx				
ApproachLOS:	D					F					*					*				

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

Intersection #9 Tupman Rd/Grace Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.040
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 7.0
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	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	18	5	3	12	3	4	0	4	1	1	4
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	10	20	6	3	13	3	4	0	4	1	1	4
Added Vol:	0	1	0	0	7	7	1	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	21	6	3	20	10	5	0	4	1	1	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:	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 Volume:	10	21	6	3	20	10	5	0	4	1	1	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	21	6	3	20	10	5	0	4	1	1	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 Vol.:	10	21	6	3	20	10	5	0	4	1	1	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:	0.27	0.58	0.15	0.10	0.60	0.30	0.55	0.00	0.45	0.17	0.17	0.66
Final Sat.:	250	524	139	93	563	286	501	0	409	160	160	640
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.04	0.04	0.04	0.01	xxxx	0.01	0.01	0.01	0.01
Crit Moves:	****				****					****	****	
Delay/Veh:	7.1	7.1	7.1	6.9	6.9	6.9	6.9	0.0	6.9	6.7	6.7	6.7
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:	7.1	7.1	7.1	6.9	6.9	6.9	6.9	0.0	6.9	6.7	6.7	6.7
LOS by Move:	A	A	A	A	A	A	A	*	A	A	A	A
ApproachDel:	7.1			6.9			6.9			6.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	7.1			6.9			6.9			6.7		
LOS by Appr:	A			A			A			A		

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

Intersection #10 Station Rd/Tupman Rd

Average Delay (sec/veh): 8.4 Worst Case Level Of Service: B[10.9]

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	0	1	0		0	1	0	0	0		0	0	1	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	0	4	21				1	6	0				0	0	0				7	0	0			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	4	24				1	7	0				0	0	0				8	0	0			
Added Vol:	0	2	0				56	13	0				0	92	0				0	90	9			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	6	24				57	20	0				0	92	0				8	90	9			
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:	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 Volume:	0	6	24				57	20	0				0	92	0				8	90	9			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	6	24				57	20	0				0	92	0				8	90	9			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx	xxxxx			6.5	xxxxx					7.1	6.5	6.2			
FollowUpTim:	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx	xxxxx			4.0	xxxxx					3.5	4.0	3.3			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				30	xxxx	xxxxx		xxxx		164	xxxxx					198	152	18			
Potent Cap.:	xxxx	xxxx	xxxxx				1596	xxxx	xxxxx		xxxx		732	xxxxx					765	743	1066			
Move Cap.:	xxxx	xxxx	xxxxx				1596	xxxx	xxxxx		xxxx		705	xxxxx					669	716	1066			
Volume/Cap:	xxxx	xxxx	xxxx				0.04	xxxx	xxxx		xxxx		0.13	xxxx					0.01	0.13	0.01			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx				0.1	xxxx	xxxxx	xxxxx			0.4	xxxxx	xxxxx	xxxx	xxxxx							
Stopped Del:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx	xxxxx			10.9	xxxxx	xxxxx	xxxx	xxxxx							
LOS by Move:	*	*	*				A	*	*	*			B	*	*	*	*							
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	732	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				0.1	xxxx	xxxxx	xxxxx			xxxx	xxxxx	xxxxx				0.5	xxxxx				
Shrd StpDel:	xxxxx	xxxx	xxxxx				7.3	xxxx	xxxxx	xxxxx			xxxx	xxxxx	xxxxx				10.8	xxxxx				
Shared LOS:	*	*	*				A	*	*	*			*	*	*				B	*				
ApproachDel:	xxxxxx						xxxxxx						10.9						10.8					
ApproachLOS:	*						*						B						B					

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: A[9.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	0 1 0	0	0
Volume Module:												
Base Vol:	4	1	3	0	0	0	0	193	7	0	35	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	4	1	3	0	0	0	0	216	8	0	39	0
Added Vol:	0	0	63	0	0	0	0	0	0	14	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	1	66	0	0	0	0	216	8	14	39	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:	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 Volume:	4	1	66	0	0	0	0	216	8	14	39	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	1	66	0	0	0	0	216	8	14	39	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	287	287	220	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	224	xxxx	xxxxx
Potent Cap.:	707	626	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Move Cap.:	702	619	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	812	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	9.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	A	*	*
ApproachDel:		9.9		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		A		*			*			*		

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

Intersection #12 Dairy/Adohr

Average Delay (sec/veh): 6.5 Worst Case Level Of Service: A[9.3]

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	0	1	0		0	1	0	0	0		0	0	1!	0	0		1	0	0	0	0	
Volume Module:																								
Base Vol:	0		1		6		2		2		0		0		0		0		7		0		0	
Growth Adj:	1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12	
Initial Bse:	0		1		7		2		2		0		0		0		0		8		0		0	
Added Vol:	0		63		69		0		14		0		0		0		0		12		0		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	0		64		76		2		16		0		0		0		0		20		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:	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 Volume:	0		64		76		2		16		0		0		0		0		20		0		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	0		64		76		2		16		0		0		0		0		20		0		0	
Critical Gap Module:																								
Critical Gp:	xxxxx		6.5		6.2		7.1		6.5		xxxxx		xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	xxxxx		4.0		3.3		3.5		4.0		xxxxx		xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	xxxx		40		0		110		40		xxxxx		xxxx		xxxx		xxxxx		0		xxxx		xxxxx	
Potent Cap.:	xxxx		856		0		874		856		xxxxx		xxxx		xxxx		xxxxx		0		xxxx		xxxxx	
Move Cap.:	xxxx		856		0		824		856		xxxxx		xxxx		xxxx		xxxxx		0		xxxx		xxxxx	
Volume/Cap:	xxxx		0.07		0.00		0.00		0.02		xxxx		xxxx		xxxx		xxxx		0.00		xxxx		xxxx	
Level Of Service Module:																								
Queue:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		0.0		xxxx		xxxxx	
Stopped Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		0.0		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		*		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		xxxx		1868		852		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		xxxx		0.2		0.1		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd StpDel:	xxxxx		xxxx		7.1		9.3		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		*		A		A		*		*		*		*		*		*		*		*	
ApproachDel:			7.1						9.3						xxxxxx						xxxxxx			
ApproachLOS:			A						A						*						*			

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

Intersection #13 SR-43/Poso Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.466
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 12.7
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:	1 0 1	1 0		1 0 1	1 0		1 0 1	0 1		0 1	0 0	1
Volume Module:												
Base Vol:	13	451	0	0	511	3	1	0	15	0	0	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	15	505	0	0	572	3	1	0	17	0	0	0
Added Vol:	0	7	9	0	1	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	512	9	0	573	3	1	0	17	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:	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 Volume:	15	512	9	0	573	3	1	0	17	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	512	9	0	573	3	1	0	17	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 Vol.:	15	512	9	0	573	3	1	0	17	0	0	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:	1.00	1.97	0.03	1.00	1.99	0.01	1.00	1.00	1.00	0.00	1.00	1.00
Final Sat.:	557	1201	21	0	1229	7	425	0	496	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.43	0.43	xxxx	0.47	0.47	0.00	xxxx	0.03	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	9.1	12.5	12.5	0.0	13.1	13.1	10.5	0.0	9.4	0.0	0.0	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:	9.1	12.5	12.5	0.0	13.1	13.1	10.5	0.0	9.4	0.0	0.0	0.0
LOS by Move:	A	B	B	*	B	B	B	*	A	*	*	*
ApproachDel:		12.4			13.1			9.5			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		12.4			13.1			9.5			xxxxxx	
LOS by Appr:		B			B			A			*	

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

Intersection #14 SR-43/Kimberlina Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.334
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	21.1
Optimal Cycle:	28	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	57	386	27	60	306	6	7	84	160	35	45	98
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	64	432	30	67	343	7	8	94	179	39	50	110
Added Vol:	0	16	0	0	1	0	0	0	0	9	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	448	30	67	344	7	8	94	179	48	50	110
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:	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 Volume:	64	448	30	67	344	7	8	94	179	48	50	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	448	30	67	344	7	8	94	179	48	50	110
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 Vol.:	64	448	30	67	344	7	8	94	179	48	50	110
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.82	0.82	0.82
Lanes:	1.00	1.87	0.13	1.00	1.96	0.04	0.03	0.33	0.64	0.23	0.24	0.53
Final Sat.:	1805	3351	226	1805	3530	69	48	577	1099	363	379	826
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.13	0.04	0.10	0.10	0.16	0.16	0.16	0.13	0.13	0.13
Crit Moves:		****		****				****				
Green/Cycle:	0.14	0.40	0.40	0.11	0.38	0.38	0.49	0.49	0.49	0.49	0.49	0.49
Volume/Cap:	0.26	0.33	0.33	0.33	0.26	0.26	0.33	0.33	0.33	0.27	0.27	0.27
Uniform Del:	38.7	20.7	20.7	41.0	21.6	21.6	15.7	15.7	15.7	15.1	15.1	15.1
IncremntDel:	0.6	0.1	0.1	1.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	39.2	20.9	20.9	42.0	21.7	21.7	15.9	15.9	15.9	15.3	15.3	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:	39.2	20.9	20.9	42.0	21.7	21.7	15.9	15.9	15.9	15.3	15.3	15.3
HCM2kAvg:	2	5	5	2	4	4	5	5	5	4	4	4

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

Intersection #15 SR-43/Shafter Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.329
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 13.2
Optimal Cycle: 21 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 1	1	0	1 0 0	1	0	1 0 0	1	0
Volume Module:												
Base Vol:	23	393	30	78	467	106	124	83	17	25	114	76
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	26	440	34	87	523	119	139	93	19	28	128	85
Added Vol:	0	16	0	0	10	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	456	34	87	533	119	139	93	19	28	128	85
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:	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 Volume:	26	456	34	87	533	119	139	93	19	28	128	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	456	34	87	533	119	139	93	19	28	128	85
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 Vol.:	26	456	34	87	533	119	139	93	19	28	128	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.33	0.95	0.85	0.43	0.92	0.92	0.51	0.98	0.98	0.62	0.94	0.94
Lanes:	1.00	2.00	1.00	1.00	1.64	0.36	1.00	0.83	0.17	1.00	0.60	0.40
Final Sat.:	618	3610	1615	813	2873	640	969	1538	315	1184	1072	714
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.02	0.11	0.19	0.19	0.14	0.06	0.06	0.02	0.12	0.12
Crit Moves:					****		****					
Green/Cycle:	0.56	0.56	0.56	0.56	0.56	0.56	0.44	0.44	0.44	0.44	0.44	0.44
Volume/Cap:	0.07	0.22	0.04	0.19	0.33	0.33	0.33	0.14	0.14	0.05	0.27	0.27
Uniform Del:	9.9	10.9	9.7	10.6	11.7	11.7	18.6	16.9	16.9	16.3	18.1	18.1
IncremntDel:	0.1	0.1	0.0	0.2	0.1	0.1	0.5	0.1	0.1	0.0	0.2	0.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	10.0	10.9	9.7	10.8	11.8	11.8	19.0	17.0	17.0	16.3	18.3	18.3
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:	10.0	10.9	9.7	10.8	11.8	11.8	19.0	17.0	17.0	16.3	18.3	18.3
HCM2kAvg:	1	3	0	3	5	5	5	2	2	1	4	4

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

Intersection #16 Sr-43/Central Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 0.249
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 19 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	1 0
Volume Module:												
Base Vol:	40	400	40	43	492	31	21	76	31	39	85	53
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	45	448	45	48	551	35	24	85	35	44	95	59
Added Vol:	0	16	0	0	10	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	464	45	48	561	35	24	85	35	44	95	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:	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 Volume:	45	464	45	48	561	35	24	85	35	44	95	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	464	45	48	561	35	24	85	35	44	95	59
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 Vol.:	45	464	45	48	561	35	24	85	35	44	95	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.38	0.94	0.94	0.42	0.94	0.94	0.91	0.91	0.91	0.80	0.80	0.80
Lanes:	1.00	1.82	0.18	1.00	1.88	0.12	0.16	0.60	0.24	0.44	0.96	0.60
Final Sat.:	718	3249	314	800	3369	208	285	1031	420	667	1454	906
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.06	0.17	0.17	0.08	0.08	0.08	0.07	0.07	0.07
Crit Moves:					****			****				
Green/Cycle:	0.67	0.67	0.67	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.09	0.21	0.21	0.09	0.25	0.25	0.25	0.25	0.25	0.20	0.20	0.20
Uniform Del:	5.9	6.4	6.4	5.8	6.6	6.6	24.4	24.4	24.4	23.9	23.9	23.9
IncremntDel:	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1
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
Delay/Veh:	5.9	6.5	6.5	5.9	6.6	6.6	24.6	24.6	24.6	24.0	24.0	24.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.9	6.5	6.5	5.9	6.6	6.6	24.6	24.6	24.6	24.0	24.0	24.0
HCM2kAvg:	1	3	3	1	4	4	3	3	3	2	2	2

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

Intersection #17 SR-43/Lerdo Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.374
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 21.9
Optimal Cycle: 30 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Lanes:	1	0 1	1	0	1	0 1	1	0	0	1 1	0	1	0	1 0	1	0
Volume Module:																
Base Vol:	64	271		72	144	318		23	9	344		68	50	230		170
Growth Adj:	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12		1.12	1.12	1.12		1.12
Initial Bse:	72	304		81	161	356		26	10	385		76	56	258		190
Added Vol:	0	16		0	0	10		0	0	0		0	0	0		0
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	72	320		81	161	366		26	10	385		76	56	258		190
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:	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 Volume:	72	320		81	161	366		26	10	385		76	56	258		190
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	72	320		81	161	366		26	10	385		76	56	258		190
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 Vol.:	72	320		81	161	366		26	10	385		76	56	258		190
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	0.92		0.92	0.95	0.94		0.94	0.90	0.90		0.85	0.78	0.78		0.78
Lanes:	1.00	1.60		0.40	1.00	1.87		0.13	0.05	1.95		1.00	0.22	1.02		0.76
Final Sat.:	1805	2796		706	1805	3339		235	87	3321		1615	329	1514		1119
Capacity Analysis Module:																
Vol/Sat:	0.04	0.11		0.11	0.09	0.11		0.11	0.12	0.12		0.05	0.17	0.17		0.17
Crit Moves:		****			****									****		
Green/Cycle:	0.14	0.31		0.31	0.24	0.40		0.40	0.46	0.46		0.46	0.46	0.46		0.46
Volume/Cap:	0.27	0.37		0.37	0.37	0.27		0.27	0.25	0.25		0.10	0.37	0.37		0.37
Uniform Del:	38.1	27.2		27.2	31.8	20.2		20.2	16.8	16.8		15.6	17.9	17.9		17.9
IncremntDel:	0.6	0.2		0.2	0.5	0.1		0.1	0.1	0.1		0.1	0.2	0.2		0.2
Delay Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Delay/Veh:	38.6	27.4		27.4	32.3	20.3		20.3	16.9	16.9		15.6	18.1	18.1		18.1
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	38.6	27.4		27.4	32.3	20.3		20.3	16.9	16.9		15.6	18.1	18.1		18.1
HCM2kAvg:	2	5		5	5	4		4	4	4		1	6	6		6

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

Intersection #18 SR-43/7th Standard Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.945
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	31.8
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:	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	22	178	83	73	109	9	26	363	53	67	63	39
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	25	199	93	82	122	10	29	407	59	75	71	44
Added Vol:	0	16	0	0	10	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	215	93	82	132	10	29	407	59	75	71	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	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 Volume:	25	215	93	82	132	10	29	407	59	75	71	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	215	93	82	132	10	29	407	59	75	71	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
Final Vol.:	25	215	93	82	132	10	29	407	59	75	71	44
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:	0.07	0.65	0.28	0.38	0.62	1.00	0.06	0.82	0.12	0.52	0.48	1.00
Final Sat.:	36	313	135	170	275	500	31	430	63	225	211	493
Capacity Analysis Module:												
Vol/Sat:	0.69	0.69	0.69	0.48	0.48	0.02	0.94	0.94	0.94	0.33	0.33	0.09
Crit Moves:		****			****			****			****	
Delay/Veh:	23.5	23.5	23.5	16.8	16.8	9.7	51.6	51.6	51.6	14.0	14.0	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:	23.5	23.5	23.5	16.8	16.8	9.7	51.6	51.6	51.6	14.0	14.0	10.1
LOS by Move:	C	C	C	C	C	A	F	F	F	B	B	B
ApproachDel:		23.5			16.5			51.6			13.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		23.5			16.5			51.6			13.1	
LOS by Appr:		C			C			F			B	

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

Intersection #19 SR-43/SR-58 (Rosedal Highway West)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.681
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.3
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:	1 0	1 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	127	253	0	0	191	24	198	0	379	0	0	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	142	283	0	0	214	27	222	0	424	0	0	0
Added Vol:	0	16	0	0	10	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	142	299	0	0	224	27	222	0	424	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:	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 Volume:	142	299	0	0	224	27	222	0	424	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	142	299	0	0	224	27	222	0	424	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 Vol.:	142	299	0	0	224	27	222	0	424	0	0	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:	1.00	1.00	0.00	0.00	0.89	0.11	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	496	535	0	0	487	58	515	0	623	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.29	0.56	xxxx	xxxx	0.46	0.46	0.43	xxxx	0.68	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	12.5	16.9	0.0	0.0	14.6	14.6	14.5	0.0	19.1	0.0	0.0	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:	12.5	16.9	0.0	0.0	14.6	14.6	14.5	0.0	19.1	0.0	0.0	0.0
LOS by Move:	B	C	*	*	B	B	B	*	C	*	*	*
ApproachDel:		15.5			14.6			17.5			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		15.5			14.6			17.5			xxxxxx	
LOS by Appr:		C			B			C			*	

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

Intersection #20 SR-43/SR-58 (Rosedal Highway East)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.782
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 18.3
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:	1 0 1	0	1	1 0 1	0	1	0 0 1!	0	0	0 1 0	0	1
Volume Module:												
Base Vol:	18	220	138	355	202	9	12	16	18	42	13	129
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	20	246	155	398	226	10	13	18	20	47	15	144
Added Vol:	0	16	0	0	10	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	262	155	398	236	10	13	18	20	47	15	144
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:	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 Volume:	20	262	155	398	236	10	13	18	20	47	15	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	262	155	398	236	10	13	18	20	47	15	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	20	262	155	398	236	10	13	18	20	47	15	144
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	0.26	0.35	0.39	0.76	0.24	1.00
Final Sat.:	464	504	553	508	542	597	118	158	177	341	106	518
Capacity Analysis Module:												
Vol/Sat:	0.04	0.52	0.28	0.78	0.44	0.02	0.11	0.11	0.11	0.14	0.14	0.28
Crit Moves:		****		****				****				****
Delay/Veh:	10.5	16.6	11.2	29.7	14.0	8.6	11.2	11.2	11.2	11.5	11.5	11.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.5	16.6	11.2	29.7	14.0	8.6	11.2	11.2	11.2	11.5	11.5	11.6
LOS by Move:	B	C	B	D	B	A	B	B	B	B	B	B
ApproachDel:		14.4			23.6			11.2			11.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		14.4			23.6			11.2			11.5	
LOS by Appr:		B			C			B			B	

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

Intersection #21 H St/9th St

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	40	7	7	51	0	0	0	0	6	0	12
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	45	8	8	57	0	0	0	0	7	0	13
Added Vol:	0	0	9	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	45	17	8	57	0	0	0	0	7	0	13
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:	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 Volume:	0	45	17	8	57	0	0	0	0	7	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	45	17	8	57	0	0	0	0	7	0	13
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	62	xxxx	xxxxx	xxxx	xxxx	xxxxx	126	xxxx	53
Potent Cap.:	xxxx	xxxx	xxxxx	1554	xxxx	xxxxx	xxxx	xxxx	xxxxx	874	xxxx	1020
Move Cap.:	xxxx	xxxx	xxxxx	1554	xxxx	xxxxx	xxxx	xxxx	xxxxx	870	xxxx	1020
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	0.01
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	0.0
Stopped Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	8.6
LOS by Move:	*	*	*	A	*	*	*	*	*	A	*	A
Movement:	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	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.8		
ApproachLOS:	*			*			*			A		

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

Intersection #22 H St/Wasco Ave

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: A[9.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		1	0	0	0	1		1	0	1	0	0		0	0	1	0	1	
Volume Module:																								
Base Vol:	0	0	0	0	0		39		40	60	0		0	106	2									
Growth Adj:	1.12	1.12	1.12	1.12	1.12		1.12		1.12	1.12	1.12		1.12	1.12	1.12									
Initial Bse:	0	0	0	0	0		44		45	67	0		0	119	2									
Added Vol:	0	0	0	0	0		9		9	0	0		0	0	0									
PasserByVol:	0	0	0	0	0		0		0	0	0		0	0	0									
Initial Fut:	0	0	0	0	0		53		54	67	0		0	119	2									
User Adj:	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	1.00	1.00									
PHF Adj:	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 Volume:	0	0	0	0	0		53		54	67	0		0	119	2									
Reduct Vol:	0	0	0	0	0		0		0	0	0		0	0	0									
Final Vol.:	0	0	0	0	0		53		54	67	0		0	119	2									
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		6.2		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx		119		121	xxxx	xxxxx	xxxx	xxxx	xxxxx										
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx		938		1479	xxxx	xxxxx	xxxx	xxxx	xxxxx										
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx		938		1479	xxxx	xxxxx	xxxx	xxxx	xxxxx										
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx		0.06		0.04	xxxx	xxxx	xxxx	xxxx	xxxx										
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		0.2		0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx		9.1		7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx										
LOS by Move:	*	*	*	*	*		A		A	*	*	*	*	*										
Movement:	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 StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*												
ApproachDel:	xxxxxx			9.1			xxxxxx			xxxxxx														
ApproachLOS:	*			A			*			*														

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

Intersection #23 Wasco Ave/Poso Ave

Average Delay (sec/veh): 8.9 Worst Case Level Of Service: B[11.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	1	0		1	0	0	1	0		0	1	0	0	1		0	0	1!	0	0	
Volume Module:																								
Base Vol:	24	33	0				0	41	122				62	4	12				2	2	2			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	27	37	0				0	46	137				69	4	13				2	2	2			
Added Vol:	0	0	0				0	9	0				9	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	27	37	0				0	55	137				78	4	13				2	2	2			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	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 Volume:	27	37	0				0	55	137				78	4	13				2	2	2			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	27	37	0				0	55	137				78	4	13				2	2	2			
Critical Gap Module:																								
Critical Gp:	7.1	6.5	xxxxx	xxxxx			6.5	6.2					4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	xxxxx	xxxxx			4.0	3.3					2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	265	170	xxxxx	xxxx			183	3					4	xxxx	xxxxx				18	xxxx	xxxxx			
Potent Cap.:	692	726	xxxxx	xxxx			715	1086					1630	xxxx	xxxxx				1612	xxxx	xxxxx			
Move Cap.:	545	689	xxxxx	xxxx			678	1086					1630	xxxx	xxxxx				1612	xxxx	xxxxx			
Volume/Cap:	0.05	0.05	xxxx	xxxx			0.08	0.13					0.05	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																								
Queue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.2	xxxx	xxxxx				0.0	xxxx	xxxxx			
Stopped Del:	11.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx							7.3	xxxx	xxxxx				7.2	xxxx	xxxxx			
LOS by Move:	B	*	*	*	*	*							A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	689	xxxx	xxxx	926							xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	0.2	xxxxx	xxxx	0.8							0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	10.5	xxxxx	xxxx	9.9							7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	B	*	*	A							A	*	*	*	*	*						
ApproachDel:	11.1			9.9									xxxxxx			xxxxxx								
ApproachLOS:	B			A									*			*								

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

Intersection #24 Wasco Ave/Kimberlina Rd

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: B[10.4]

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	1	0	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0	0	0				23	0	30				28	142	0				0	150	34			
Growth Adj:	1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12				1.12	1.12	1.12			
Initial Bse:	0	0	0				26	0	34				31	159	0				0	168	38			
Added Vol:	0	0	0				0	0	9				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				26	0	43				31	159	0				0	168	38			
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:	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 Volume:	0	0	0				26	0	43				31	159	0				0	168	38			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Final Vol.:	0	0	0				26	0	43				31	159	0				0	168	38			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx	6.2				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx	3.3				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				409	xxxx	187				206	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	xxxxx				603	xxxx	860				1377	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	xxxxx				592	xxxx	860				1377	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.04	xxxx	0.05				0.02	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*							A	*	*	*	*	*						
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	735	xxxxx							xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx							0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.4	xxxxx							7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	B	*							A	*	*	*	*	*						
ApproachDel:	xxxxxx			10.4									xxxxxx			xxxxxx								
ApproachLOS:	*			B									*			*								

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

Intersection #25 J St/9th St

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: A[8.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	2	0	0		0	0	1	1	0		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	54		0			0	102		8			0	0		1			0	0		0		
Growth Adj:	1.12	1.12		1.12			1.12	1.12		1.12			1.12	1.12		1.12			1.12	1.12		1.12		
Initial Bse:	0	60		0			0	114		9			0	0		1			0	0		0		
Added Vol:	0	0		0			0	0		0			0	0		9			0	0		0		
PasserByVol:	0	0		0			0	0		0			0	0		0			0	0		0		
Initial Fut:	0	60		0			0	114		9			0	0		10			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:	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 Volume:	0	60		0			0	114		9			0	0		10			0	0		0		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Final Vol.:	0	60		0			0	114		9			0	0		10			0	0		0		
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		6.9			xxxxx	xxxx		xxxxx		
FollowUpTim:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		3.3			xxxxx	xxxx		xxxxx		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		62			xxxx	xxxx		xxxxx		
Potent Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		997			xxxx	xxxx		xxxxx		
Move Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		997			xxxx	xxxx		xxxxx		
Volume/Cap:	xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx		0.01			xxxx	xxxx		xxxx		
Level Of Service Module:																								
Queue:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		0.0			xxxxx	xxxx		xxxxx		
Stopped Del:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		8.6			xxxxx	xxxx		xxxxx		
LOS by Move:	*	*		*			*	*		*			*	*		A			*	*		*		
Movement:	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 StpDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*			*	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx			xxxxxx			8.6			xxxxxx														
ApproachLOS:	*			*			A			*														

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

Intersection #26 Wasco Way/SR-58

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: B[14.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	19	14	5	5	26	26	27	334	53	9	90	5
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	21	16	6	6	29	29	30	374	59	10	101	6
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:	21	16	6	6	29	29	30	374	59	10	101	6
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:	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 Volume:	21	16	6	6	29	29	30	374	59	10	101	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	21	16	6	6	29	29	30	374	59	10	101	6
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:												
Cnflict Vol:	587	561	374	596	615	101	106	xxxx	xxxxx	433	xxxx	xxxxx
Potent Cap.:	424	439	677	418	409	960	1497	xxxx	xxxxx	1137	xxxx	xxxxx
Move Cap.:	379	426	677	394	397	960	1497	xxxx	xxxxx	1137	xxxx	xxxxx
Volume/Cap:	0.06	0.04	0.01	0.01	0.07	0.03	0.02	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	421	xxxxx	xxxx	542	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.4	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	xxxxx	14.5	xxxxx	xxxxx	12.5	xxxxx	7.5	xxxx	xxxxx	8.2	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	A	*	*
ApproachDel:		14.5			12.5		xxxxxx			xxxxxx		
ApproachLOS:		B			B		*			*		

Appendix B15
Year 2017 Project Operations – Alternative 2
Intersection Analysis
Mitigated

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.182
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.4
Optimal Cycle: 23 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:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	0 0	1!	0 0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	42	1	2	0	27	1	15	47	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	47	1	2	0	30	1	17	53	0
Added Vol:	0	0	0	0	0	47	0	82	47	0	181	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	47	1	49	0	112	48	17	234	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:	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 Volume:	0	0	0	47	1	49	0	112	48	17	234	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	47	1	49	0	112	48	17	234	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 Vol.:	0	0	0	47	1	49	0	112	48	17	234	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	0.85	0.66	1.00	1.00
Lanes:	0.00	0.00	0.00	0.48	0.01	0.51	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	797	19	834	0	1900	1615	1254	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.06	0.06	0.00	0.06	0.03	0.01	0.12	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.32	0.32	0.32	0.00	0.68	0.68	0.68	0.68	0.00
Volume/Cap:	0.00	0.00	0.00	0.18	0.18	0.18	0.00	0.09	0.04	0.02	0.18	0.00
Uniform Del:	0.0	0.0	0.0	24.3	24.3	24.3	0.0	5.6	5.4	5.3	6.0	0.0
IncremntDel:	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	24.4	24.4	24.4	0.0	5.6	5.4	5.3	6.1	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	0.0	0.0	24.4	24.4	24.4	0.0	5.6	5.4	5.3	6.1	0.0
HCM2kAvg:	0	0	0	2	3	2	0	1	0	0	3	0

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

Intersection #2 I-5 SB Ramp / Stockdale Hwy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.441
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.4
Optimal Cycle: 33 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	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	0 0	1!	0 0	0 0	1	0 1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	262	1	1	0	204	9	20	38	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	0	0	293	1	1	0	228	10	22	43	0
Added Vol:	0	0	0	0	0	39	0	163	49	0	74	0
PasserByVol:	0	0	0	0	0	0	0	100	0	0	0	0
Initial Fut:	0	0	0	293	1	40	0	491	59	22	117	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:	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 Volume:	0	0	0	293	1	40	0	491	59	22	117	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	293	1	40	0	491	59	22	117	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 Vol.:	0	0	0	293	1	40	0	491	59	22	117	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	0.85	0.35	1.00	1.00
Lanes:	0.00	0.00	0.00	0.87	0.01	0.12	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	0	0	0	1613	6	221	0	1900	1615	673	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.18	0.18	0.00	0.26	0.04	0.03	0.06	0.00
Crit Moves:					****			****				
Green/Cycle:	0.00	0.00	0.00	0.41	0.41	0.41	0.00	0.59	0.59	0.59	0.59	0.00
Volume/Cap:	0.00	0.00	0.00	0.44	0.44	0.44	0.00	0.44	0.06	0.06	0.10	0.00
Uniform Del:	0.0	0.0	0.0	21.1	21.1	21.1	0.0	11.5	8.8	8.8	9.1	0.0
IncremntDel:	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.3	0.0	0.1	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	21.5	21.5	21.5	0.0	11.8	8.9	8.9	9.1	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	0.0	0.0	21.5	21.5	21.5	0.0	11.8	8.9	8.9	9.1	0.0
HCM2kAvg:	0	0	0	8	3	8	0	8	1	1	2	0

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.275
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.9
Optimal Cycle: 20 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	5	115	34	42	208	25	10	45	7	129	157	53
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	6	129	38	47	233	28	11	50	8	144	176	59
Added Vol:	0	0	0	0	0	43	37	4	0	0	86	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	129	38	47	233	71	48	54	8	144	262	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:	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 Volume:	6	129	38	47	233	71	48	54	8	144	262	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	129	38	47	233	71	48	54	8	144	262	59
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 Vol.:	6	129	38	47	233	71	48	54	8	144	262	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.49	0.97	0.97	0.60	0.97	0.97	0.47	0.93	0.93	0.70	0.92	0.92
Lanes:	1.00	0.77	0.23	1.00	0.77	0.23	1.00	1.75	0.25	1.00	1.63	0.37
Final Sat.:	937	1417	419	1144	1405	428	887	3095	446	1322	2860	648
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.04	0.17	0.17	0.05	0.02	0.02	0.11	0.09	0.09
Crit Moves:					****					****		
Green/Cycle:	0.60	0.60	0.60	0.60	0.60	0.60	0.40	0.40	0.40	0.40	0.40	0.40
Volume/Cap:	0.01	0.15	0.15	0.07	0.28	0.28	0.14	0.04	0.04	0.28	0.23	0.23
Uniform Del:	7.9	8.7	8.7	8.2	9.5	9.5	19.2	18.5	18.5	20.4	20.0	20.0
IncremntDel:	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.0	0.0	0.3	0.1	0.1
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
Delay/Veh:	7.9	8.7	8.7	8.3	9.6	9.6	19.4	18.5	18.5	20.7	20.1	20.1
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:	7.9	8.7	8.7	8.3	9.6	9.6	19.4	18.5	18.5	20.7	20.1	20.1
HCM2kAvg:	0	2	2	1	4	4	2	1	1	4	3	3

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

Intersection #6 Stockdale Hwy/SR 43

Cycle (sec): 100 Critical Vol./Cap. (X): 0.424
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.0
Optimal Cycle: 25 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			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	0	277	147	80	164	18	41	421	2	49	54	19
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	0	310	165	90	184	20	46	472	2	55	60	21
Added Vol:	0	0	0	0	0	10	16	103	0	0	20	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	310	165	90	184	30	62	575	2	55	80	21
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:	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 Volume:	0	310	165	90	184	30	62	575	2	55	80	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	310	165	90	184	30	62	575	2	55	80	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	310	165	90	184	30	62	575	2	55	80	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.95	0.38	0.98	0.98	0.65	0.95	0.95	0.29	0.92	0.92
Lanes:	1.00	0.65	0.35	1.00	0.86	0.14	1.00	1.99	0.01	1.00	1.58	0.42
Final Sat.:	1900	1177	624	726	1598	262	1235	3592	14	545	2767	732
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.12	0.11	0.11	0.05	0.16	0.16	0.10	0.03	0.03
Crit Moves:		****						****				
Green/Cycle:	0.00	0.62	0.62	0.62	0.62	0.62	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.00	0.42	0.42	0.20	0.18	0.18	0.13	0.42	0.42	0.27	0.08	0.08
Uniform Del:	0.0	9.7	9.7	8.1	8.1	8.1	20.4	23.1	23.1	21.5	20.0	20.0
IncremntDel:	0.0	0.3	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.7	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	0.0	9.9	9.9	8.3	8.1	8.1	20.5	23.3	23.3	22.2	20.0	20.0
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	9.9	9.9	8.3	8.1	8.1	20.5	23.3	23.3	22.2	20.0	20.0
HCM2kAvg:	0	8	7	3	3	3	2	7	5	4	1	1

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

Intersection #11 Stockdale/Dairy

Average Delay (sec/veh): 3.7 Worst Case Level Of Service: A[8.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0 1	0 0	0	0 0	0 0	0	1 0	0 1	0	0 0
Volume Module:												
Base Vol:	3	0	2	0	0	0	0	22	6	1	34	0
Growth Adj:	1.12 1.12	1.12		1.12 1.12	1.12		1.12 1.12	1.12		1.12 1.12	1.12	
Initial Bse:	3	0	2	0	0	0	0	25	7	1	38	0
Added Vol:	0	0	5	0	0	0	0	0	0	55	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	0	7	0	0	0	0	25	7	56	38	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:	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 Volume:	3	0	7	0	0	0	0	25	7	56	38	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	0	7	0	0	0	0	25	7	56	38	0
Critical Gap Module:												
Critical Gp:	6.4 xxxx		6.2	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	4.1 xxxx		xxxxx
FollowUpTim:	3.5 xxxx		3.3	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	2.2 xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	178 xxxx		28	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	31 xxxx		xxxxx
Potent Cap.:	816 xxxx		1053	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	1594 xxxx		xxxxx
Move Cap.:	793 xxxx		1053	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	1594 xxxx		xxxxx
Volume/Cap:	0.00 xxxx		0.01	xxxx xxxx		xxxx	xxxx xxxx		xxxx	0.04 xxxx		xxxx
Level Of Service Module:												
Queue:	xxxxx xxxx		0.0	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	0.1 xxxx		xxxxx
Stopped Del:	xxxxx xxxx		8.4	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	7.3 xxxx		xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT
Shared Cap.:	793 xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
SharedQueue:	0.0 xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	0.1 xxxx		xxxxx
Shrd StpDel:	9.6 xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	7.3 xxxx		xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	8.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

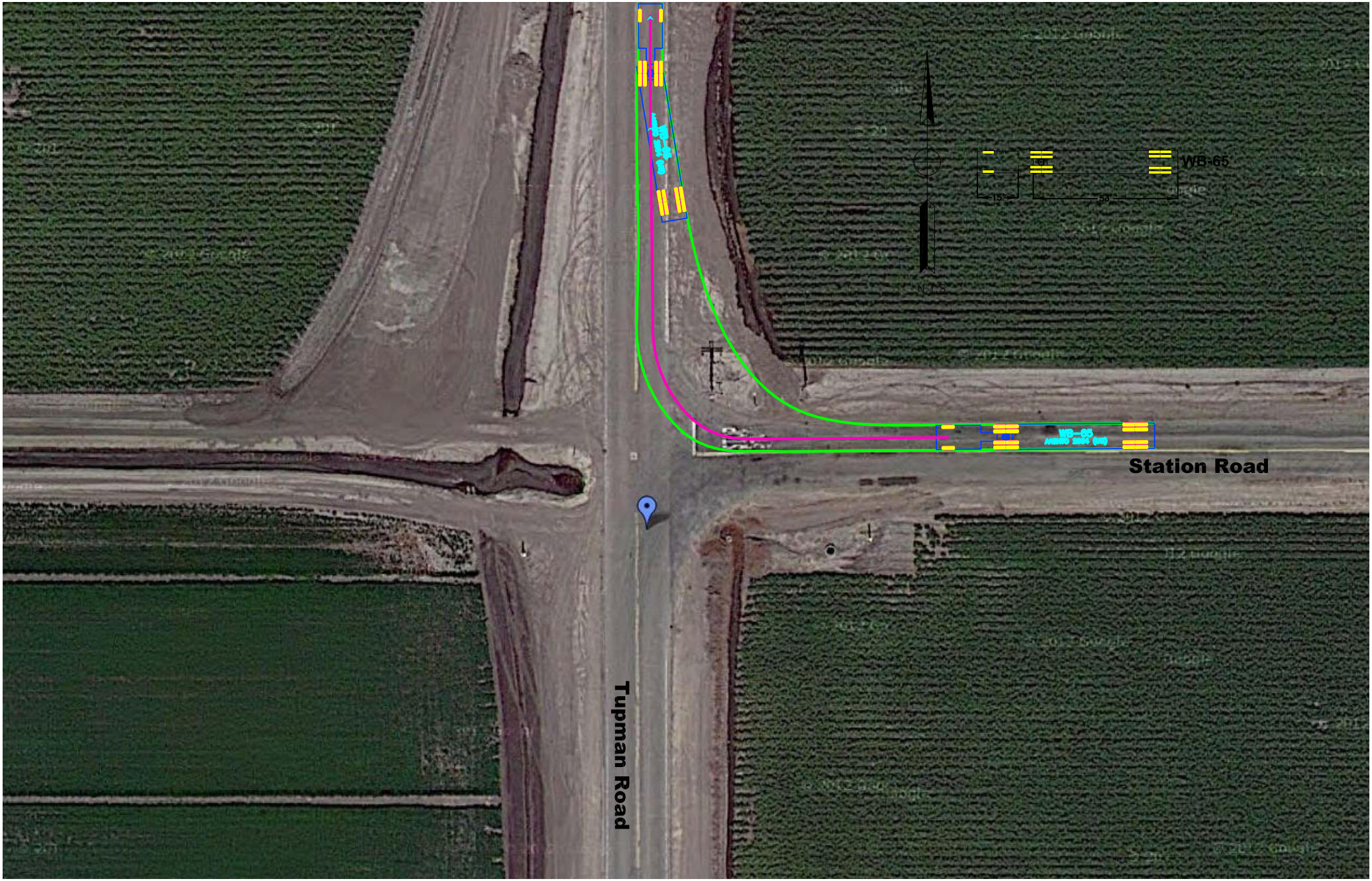
Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

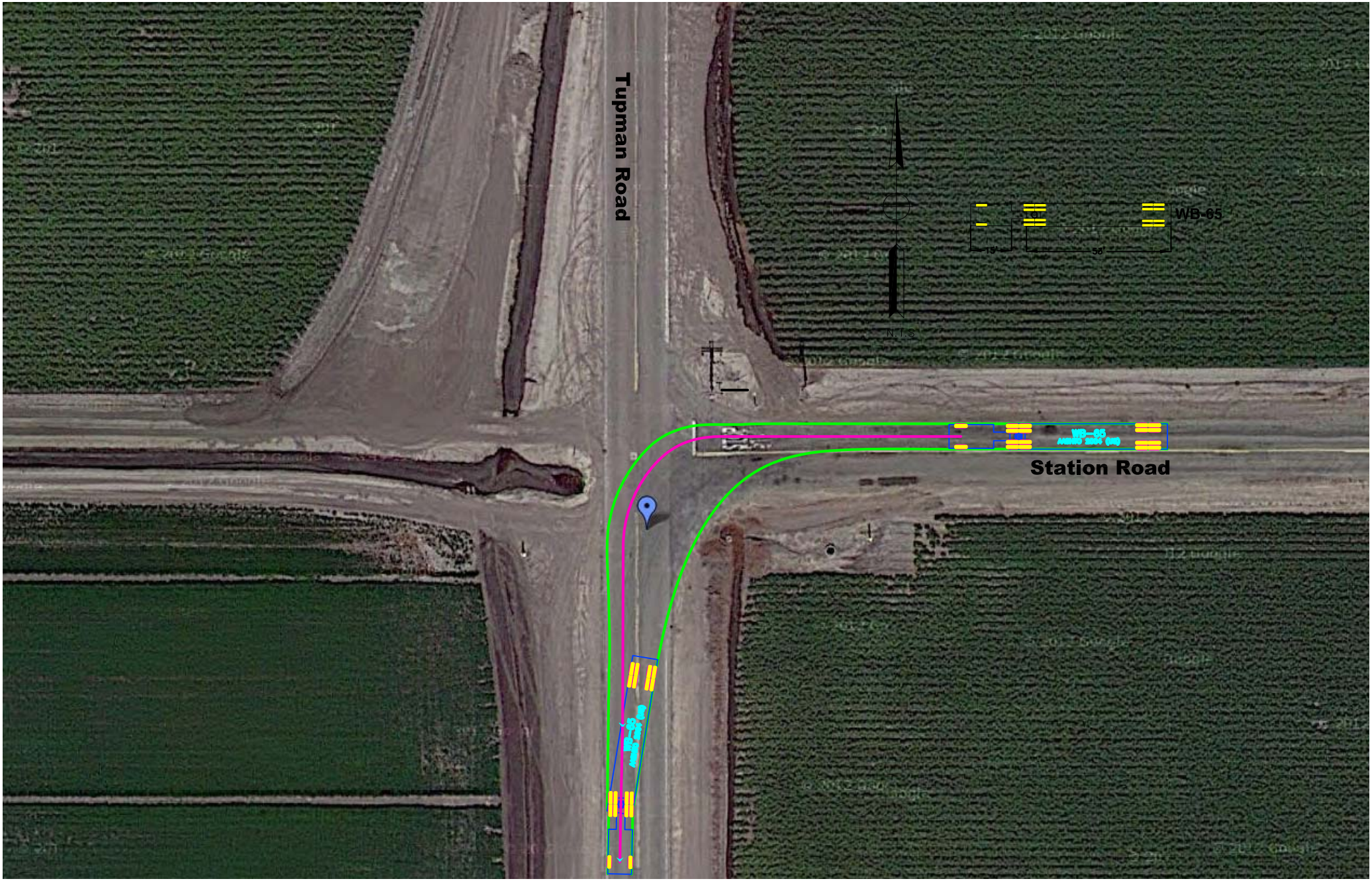
Intersection #11 Stockdale/Dairy

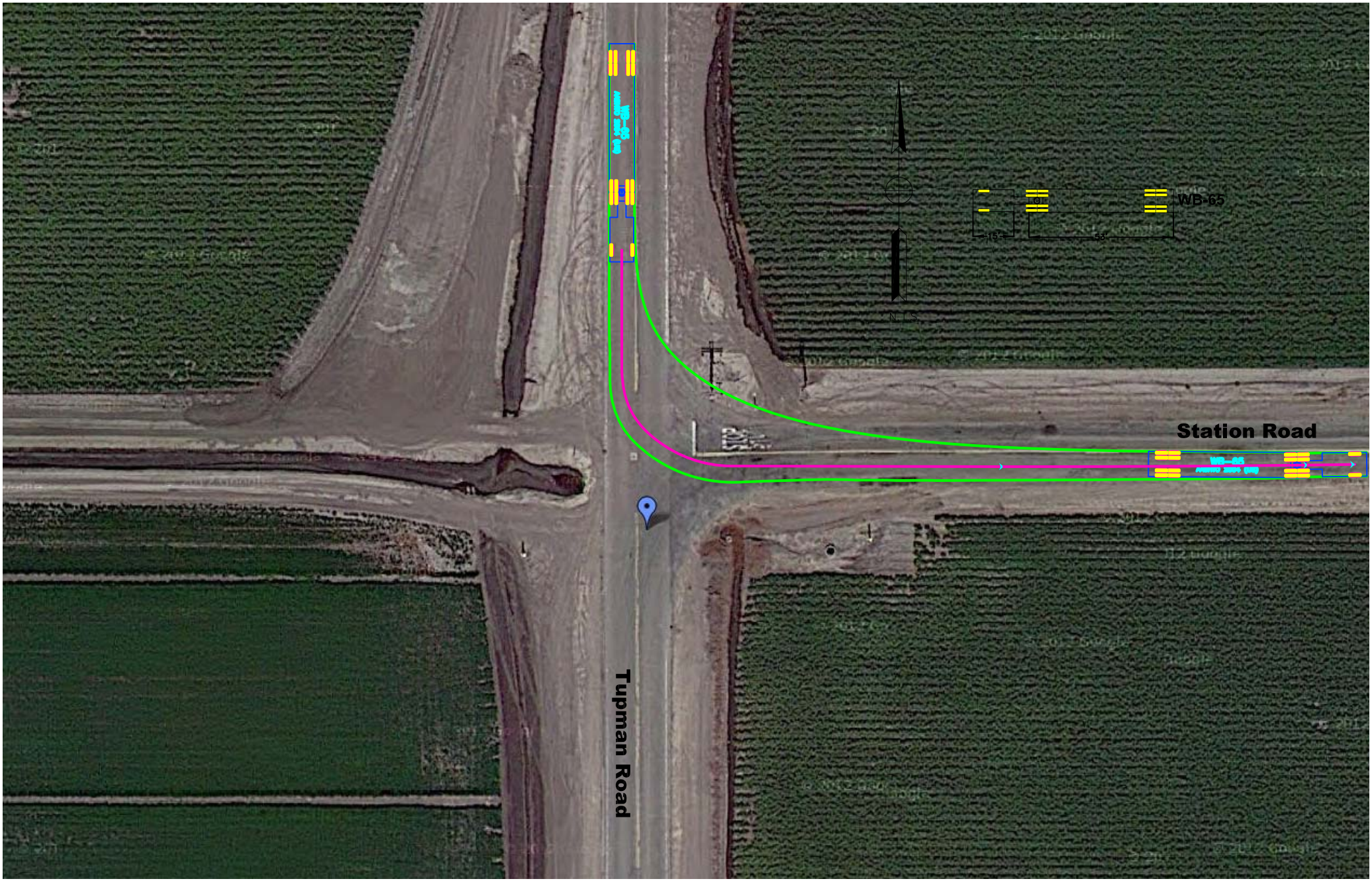
Average Delay (sec/veh): 2.3 Worst Case Level Of Service: A[9.8]

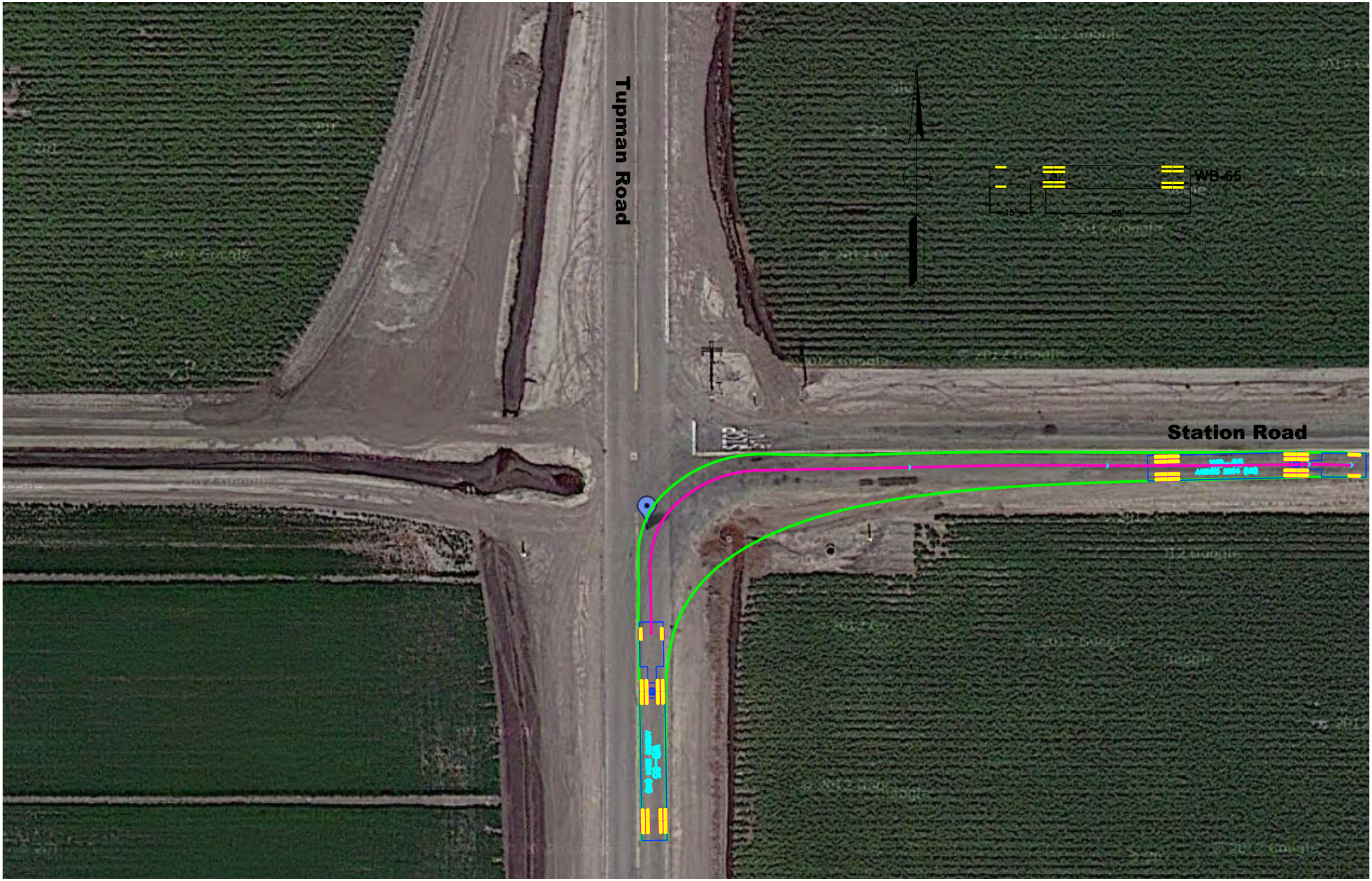
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	1	0 0	0 0	0	0 0	0 1	0	0 1	0 0	0
Volume Module:												
Base Vol:	4	1	3	0	0	0	0	193	7	0	35	0
Growth Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Initial Bse:	4	1	3	0	0	0	0	216	8	0	39	0
Added Vol:	0	0	63	0	0	0	0	0	0	14	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	1	66	0	0	0	0	216	8	14	39	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:	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 Volume:	4	1	66	0	0	0	0	216	8	14	39	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	1	66	0	0	0	0	216	8	14	39	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	287	287	220	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	224	xxxx	xxxxx
Potent Cap.:	707	626	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Move Cap.:	702	619	825	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1357	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.08	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	0.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	684	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd StpDel:	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	A	*	*
ApproachDel:	9.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

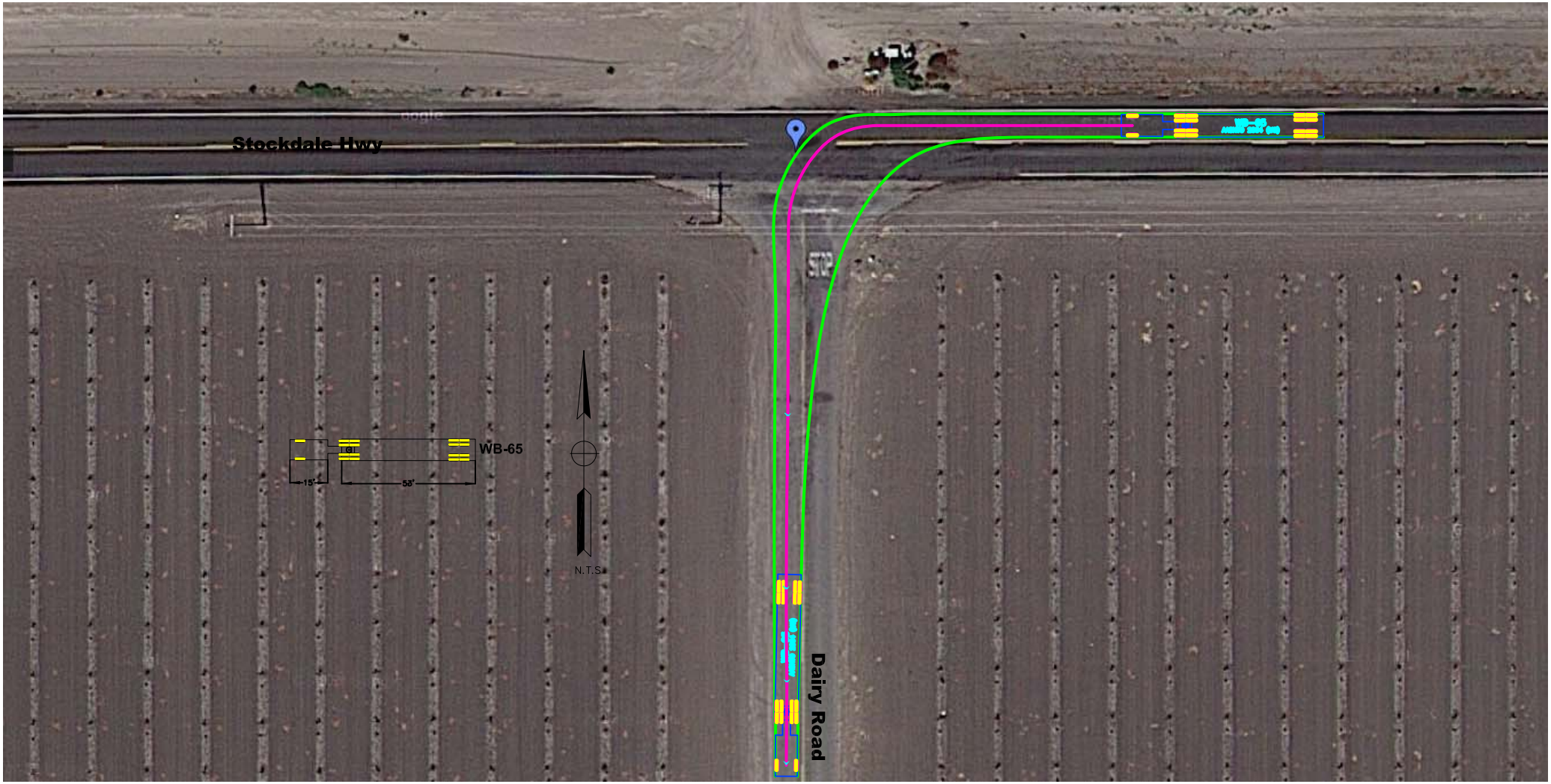
Appendix C
AutoTurn Analysis Layouts

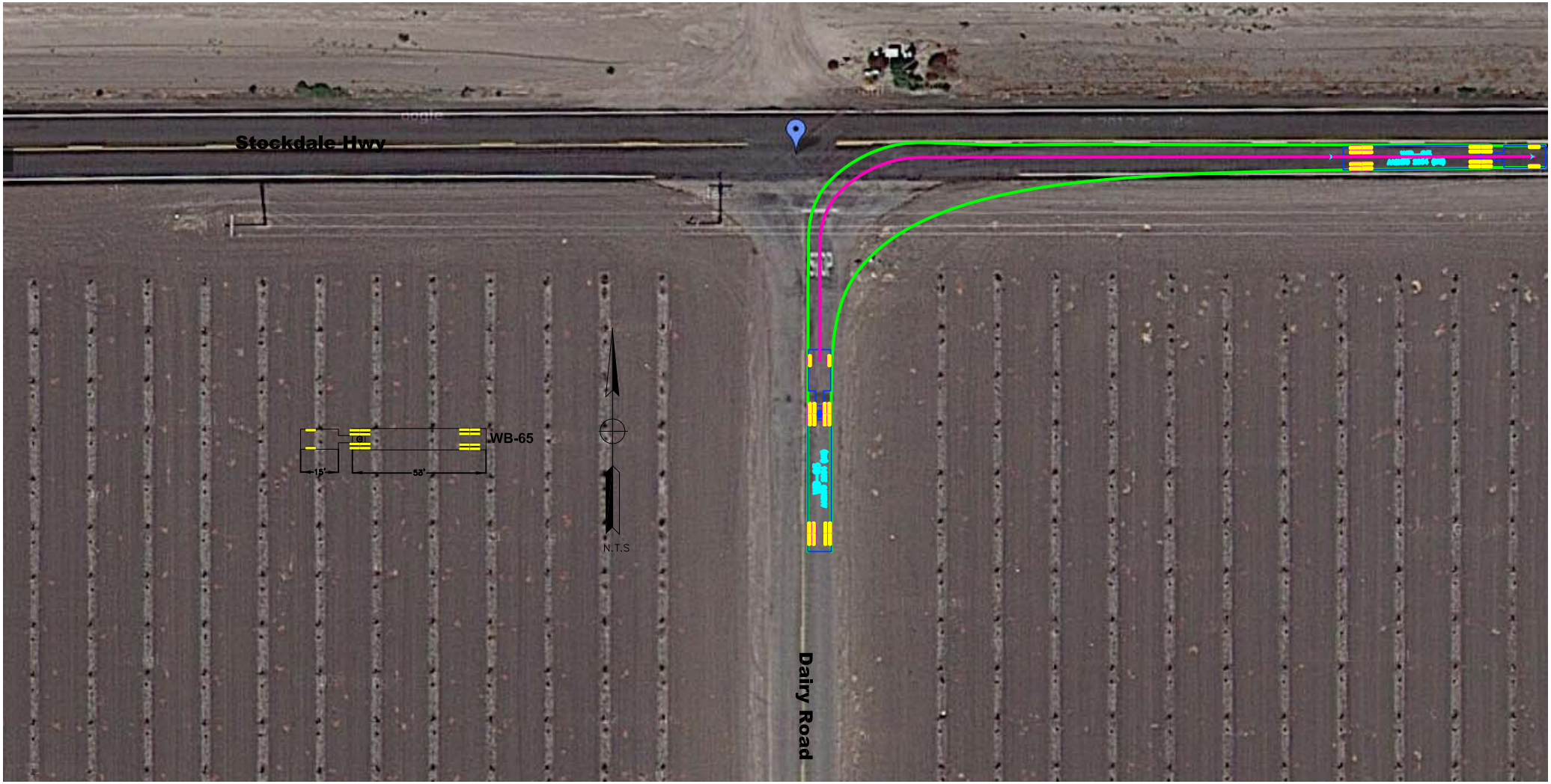

WB-65
15'
53'
Station Road
Tupman Road

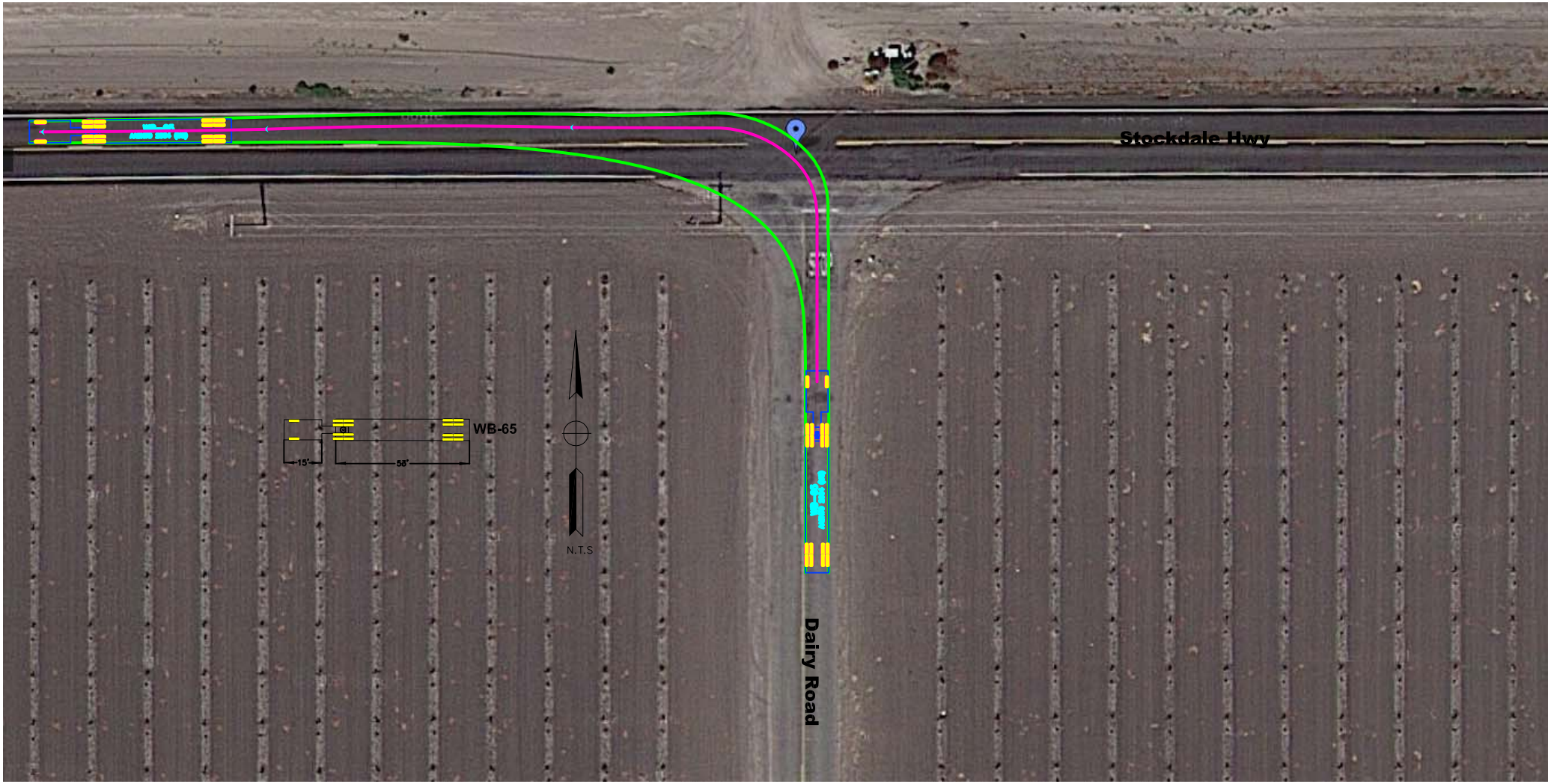

Tupman Road
Station Road
WB-65
13'
53'
N.T.S.

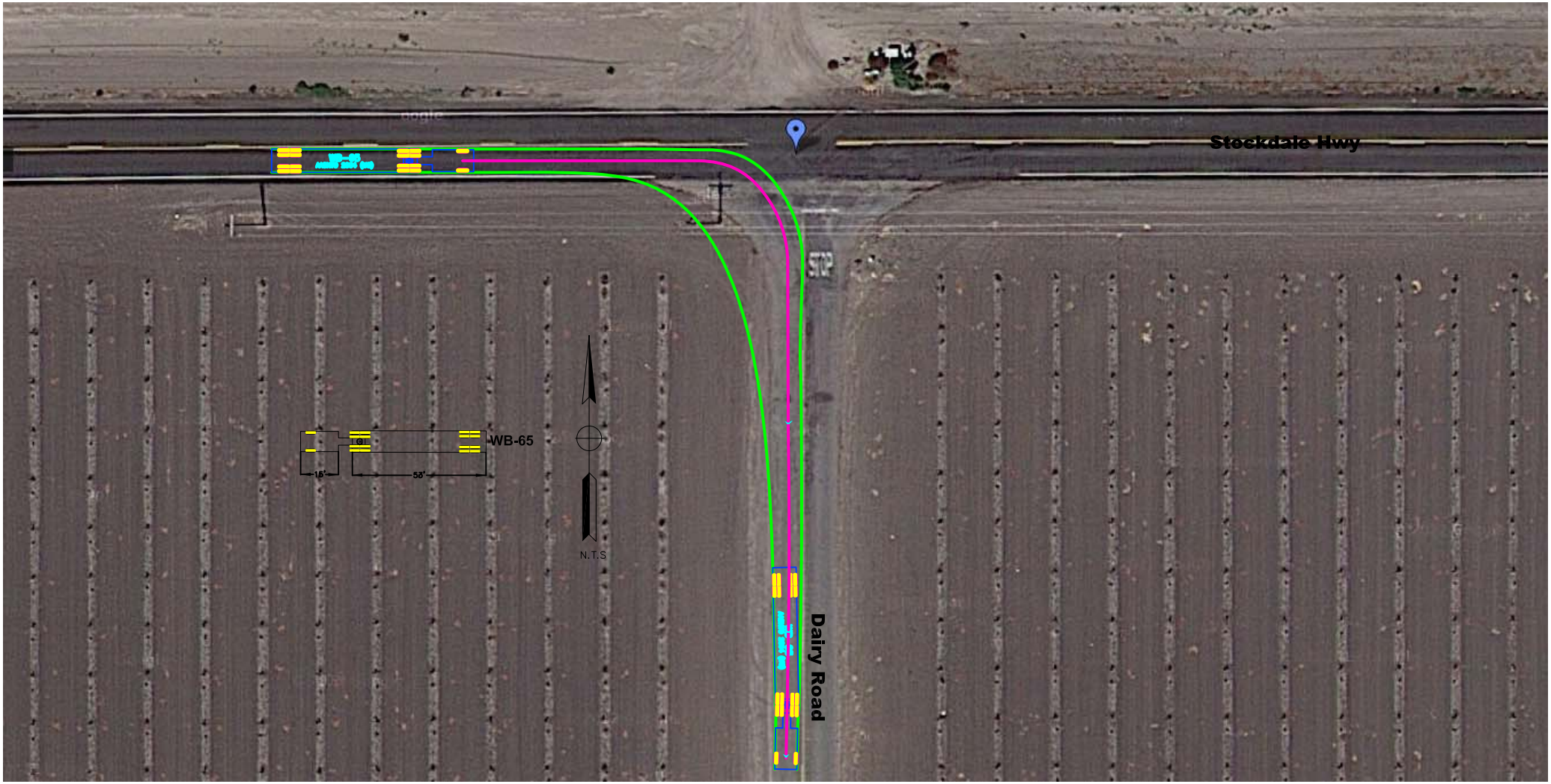

WB-65
15'
53'
N.T.S.
Station Road
Tupman Road

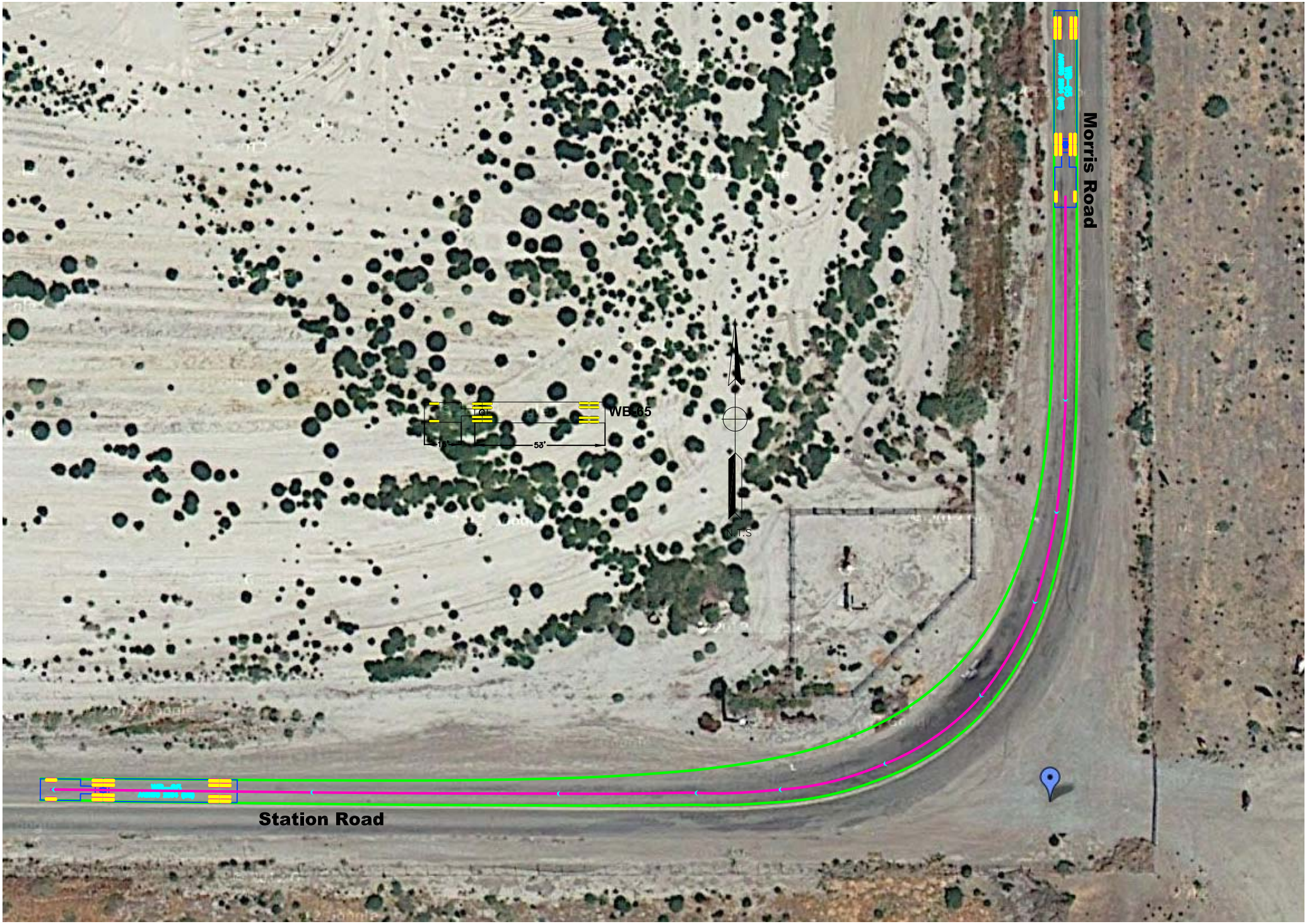

Tupman Road
Station Road
WB-65
15'
55'
N.T.S.

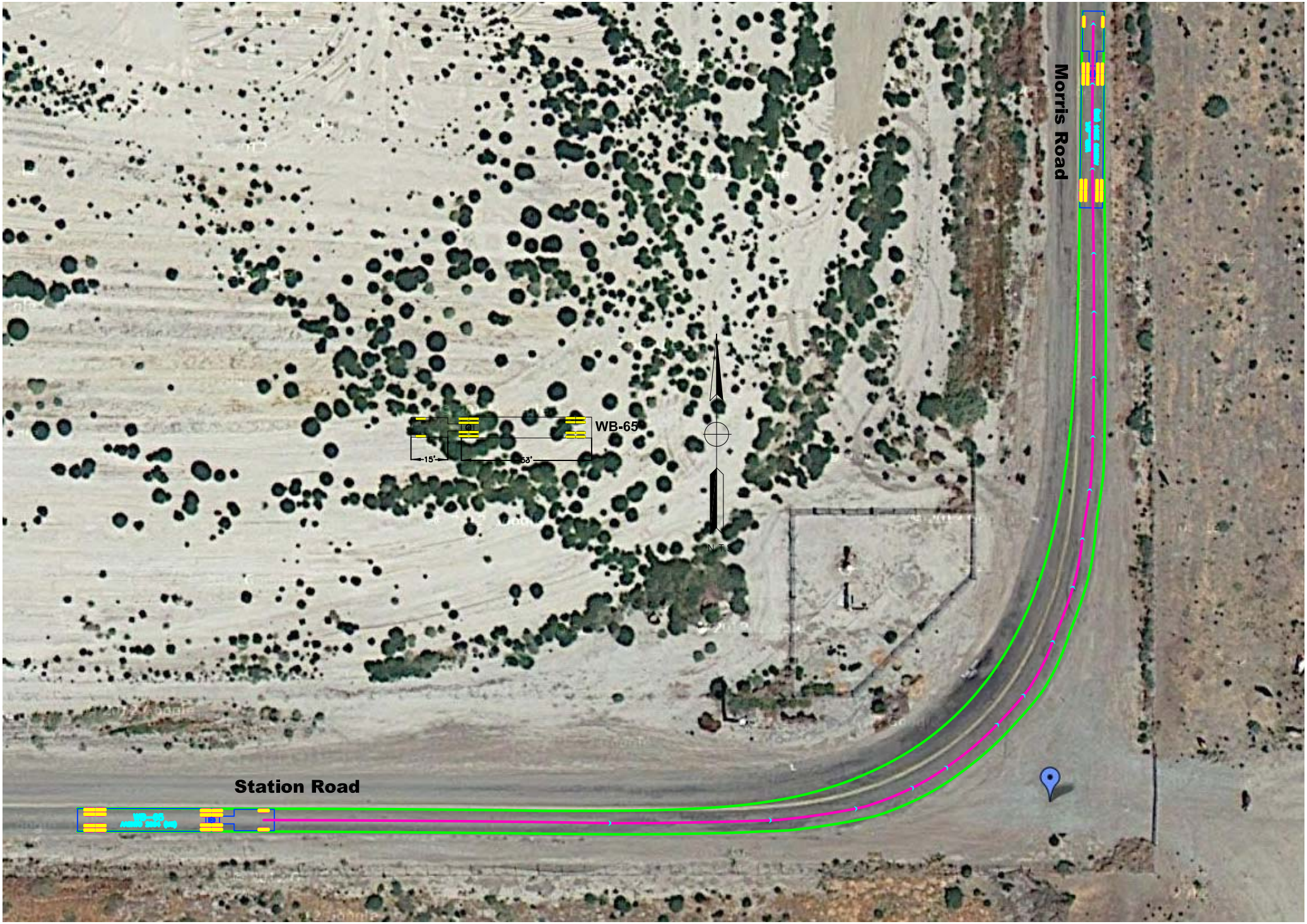

Stockdale Hwy
Dairy Road
WB-65
15'
55'
N.T.S.

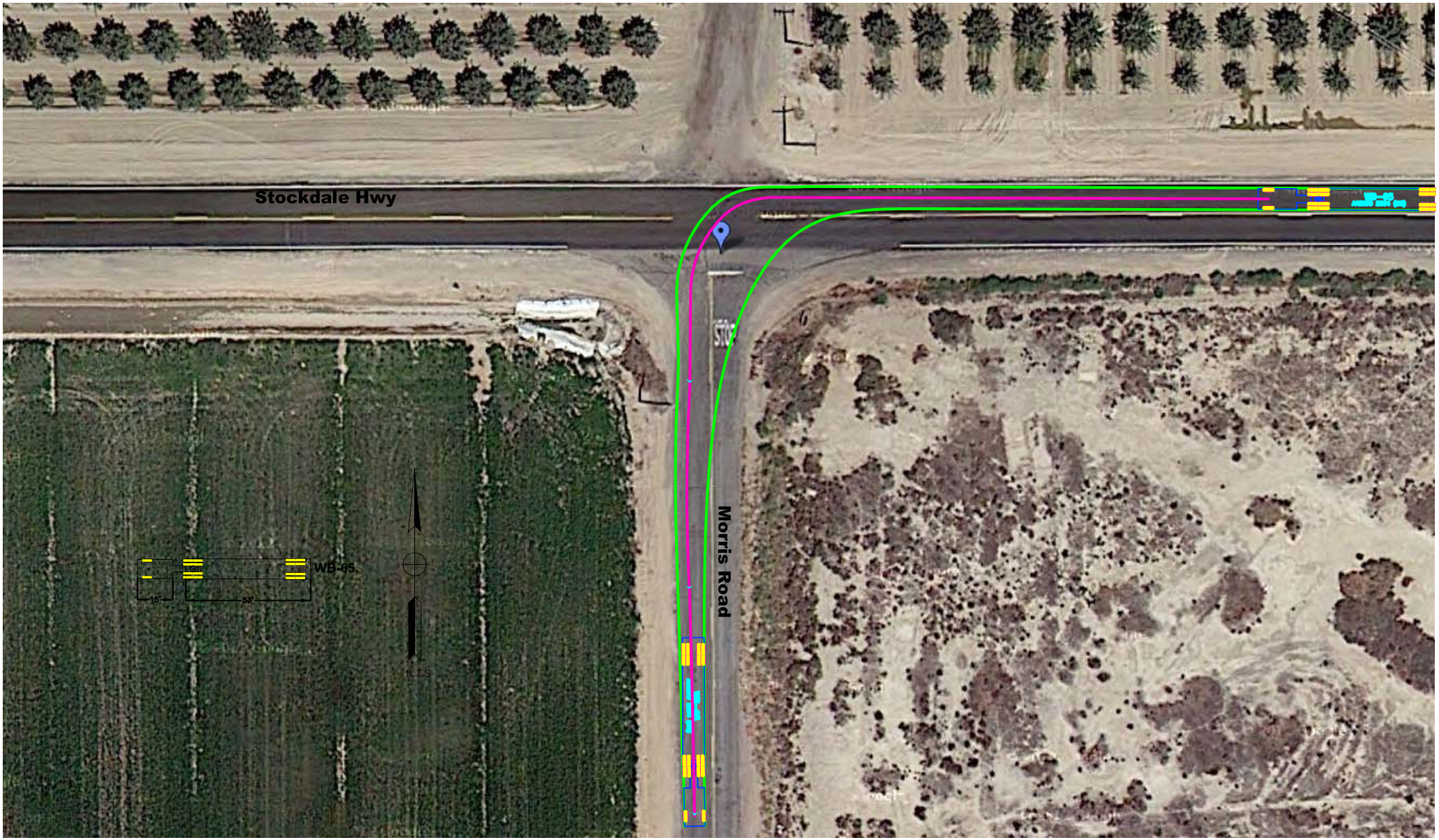

Stockdale Hwy
Dairy Road
WB-65
15'
53'
N.T.S

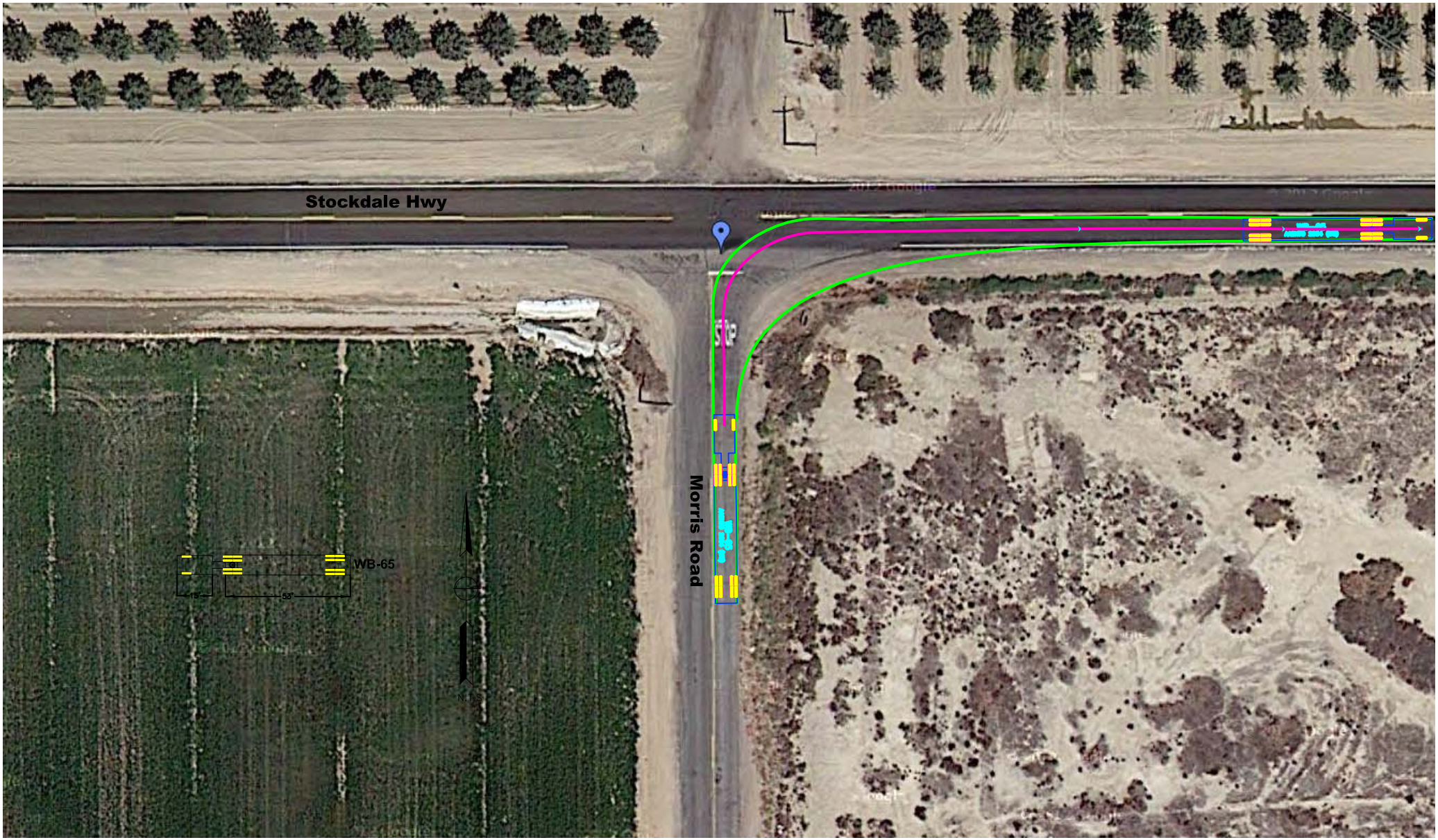

Stockdale Hwy
Dairy Road
WB-65
15'
58'
N.T.S

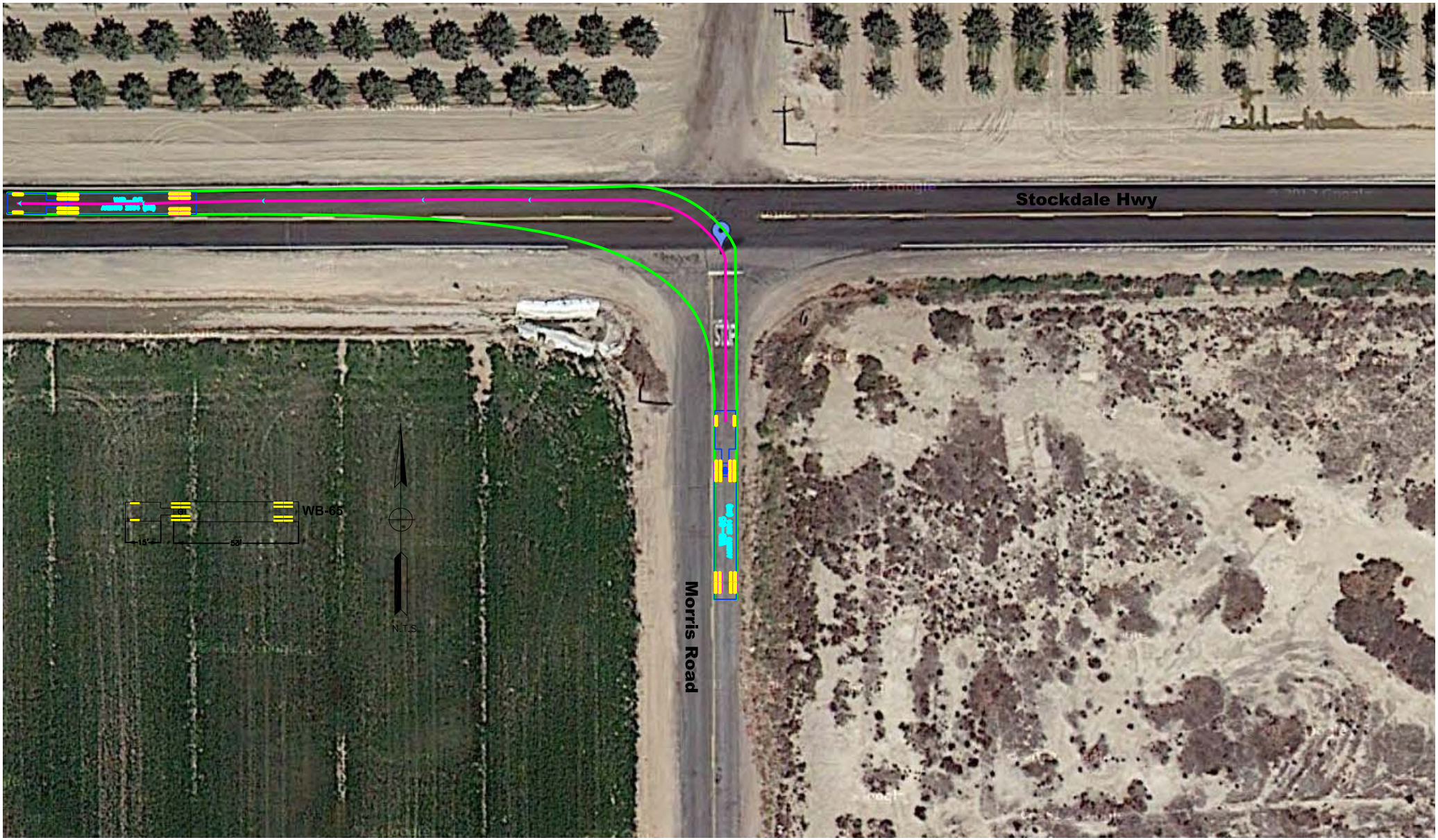

Stockdale Hwy
STOP
Dairy Road
WB-65
15'
55'
N.T.S

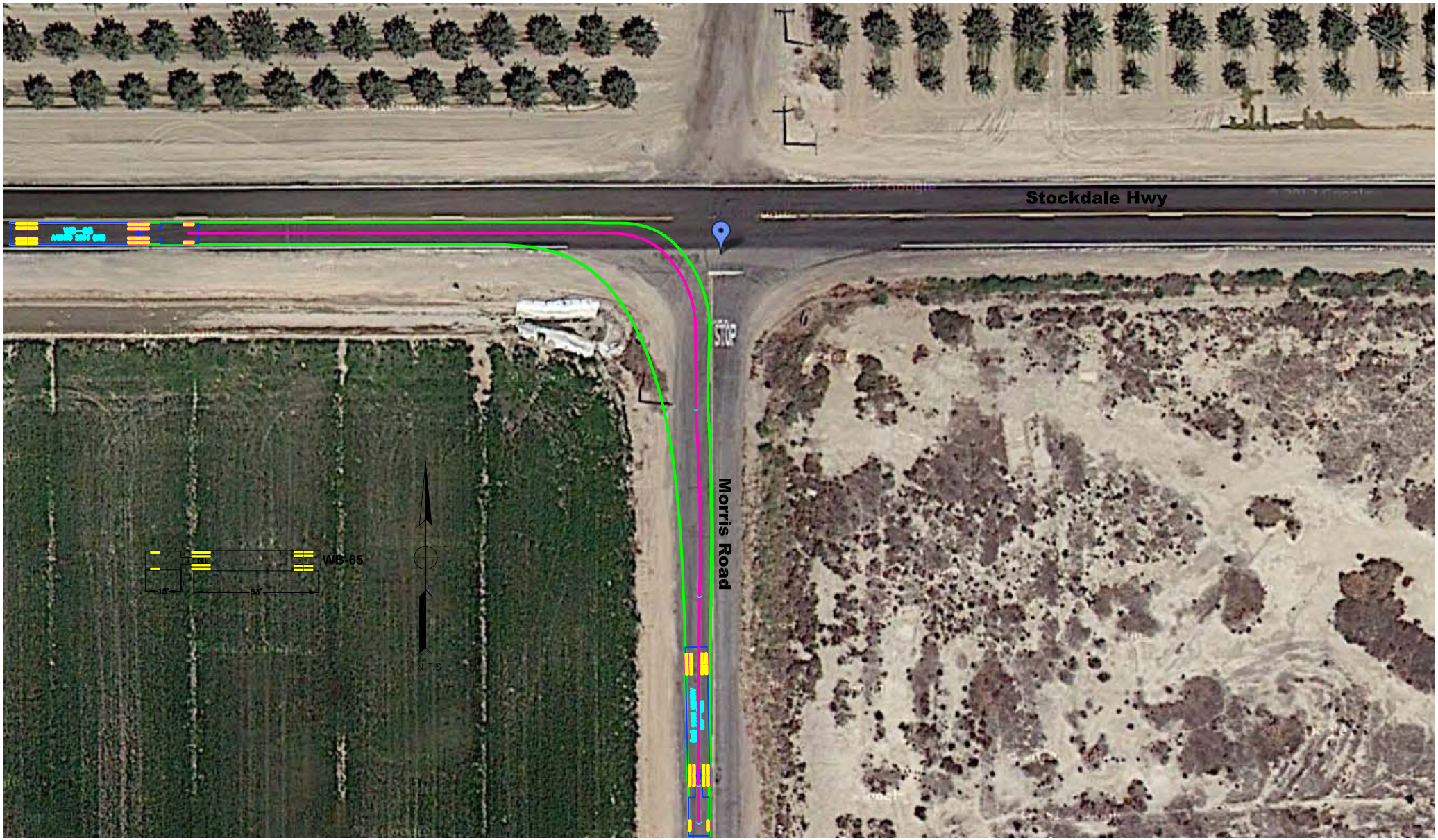

Morris Road
WB-85
Station Road

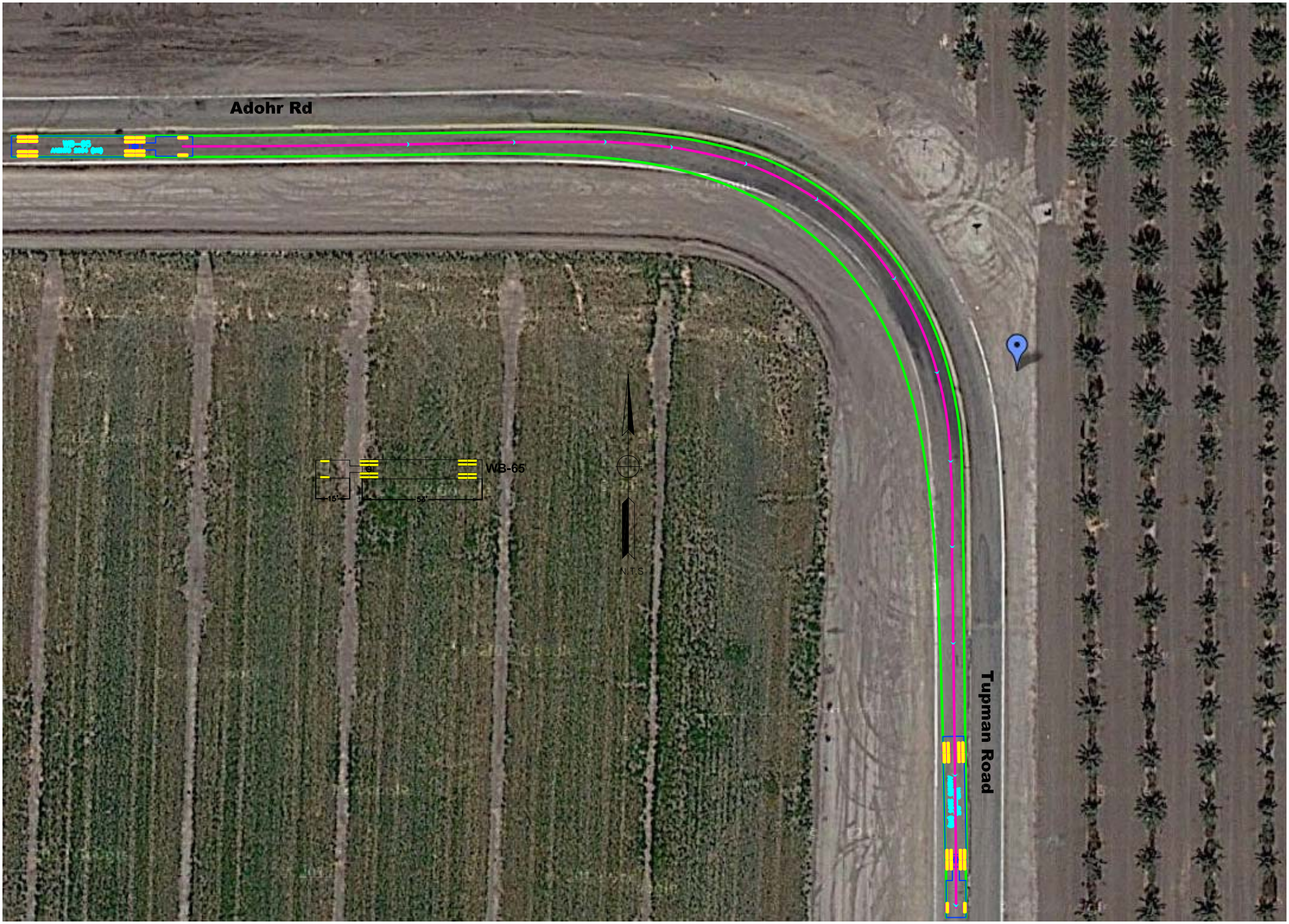

Morris Road
WB-65
15'
53'
N
Station Road

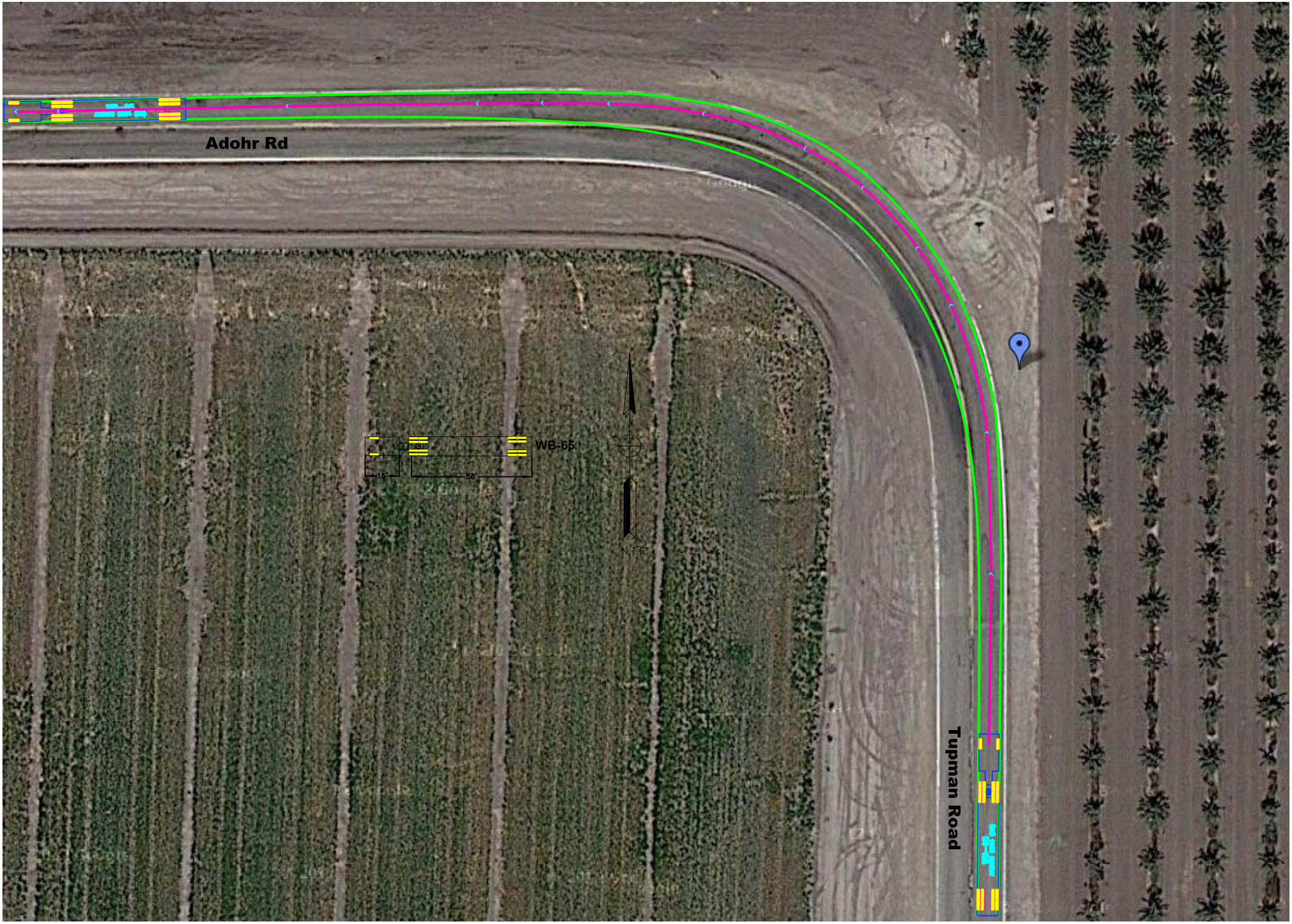

Stockdale Hwy
Morris Road
WB-65
15'
58'
N.T.S

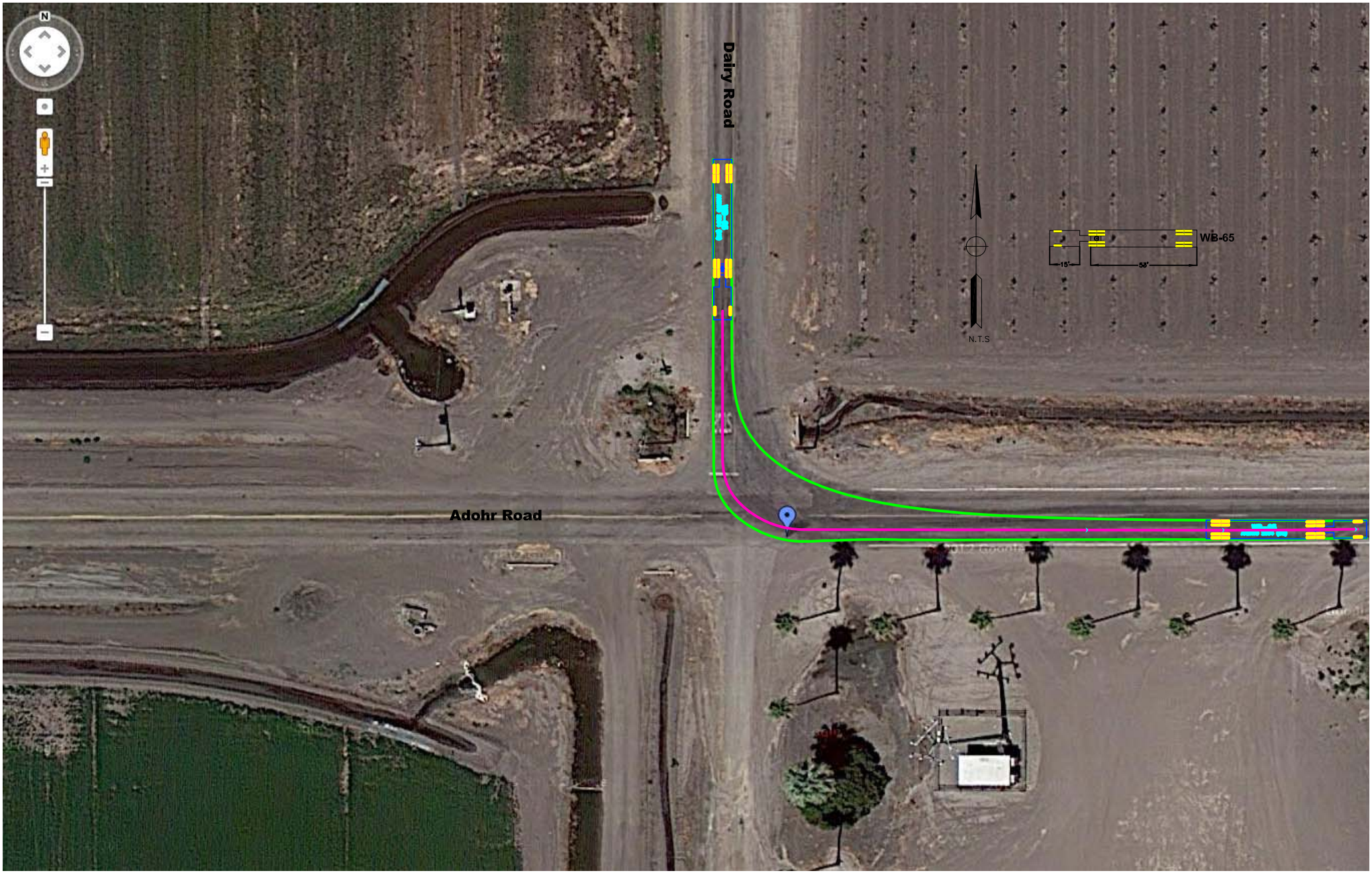

Stockdale Hwy
Morris Road
WB-65
15'
53'
N
S

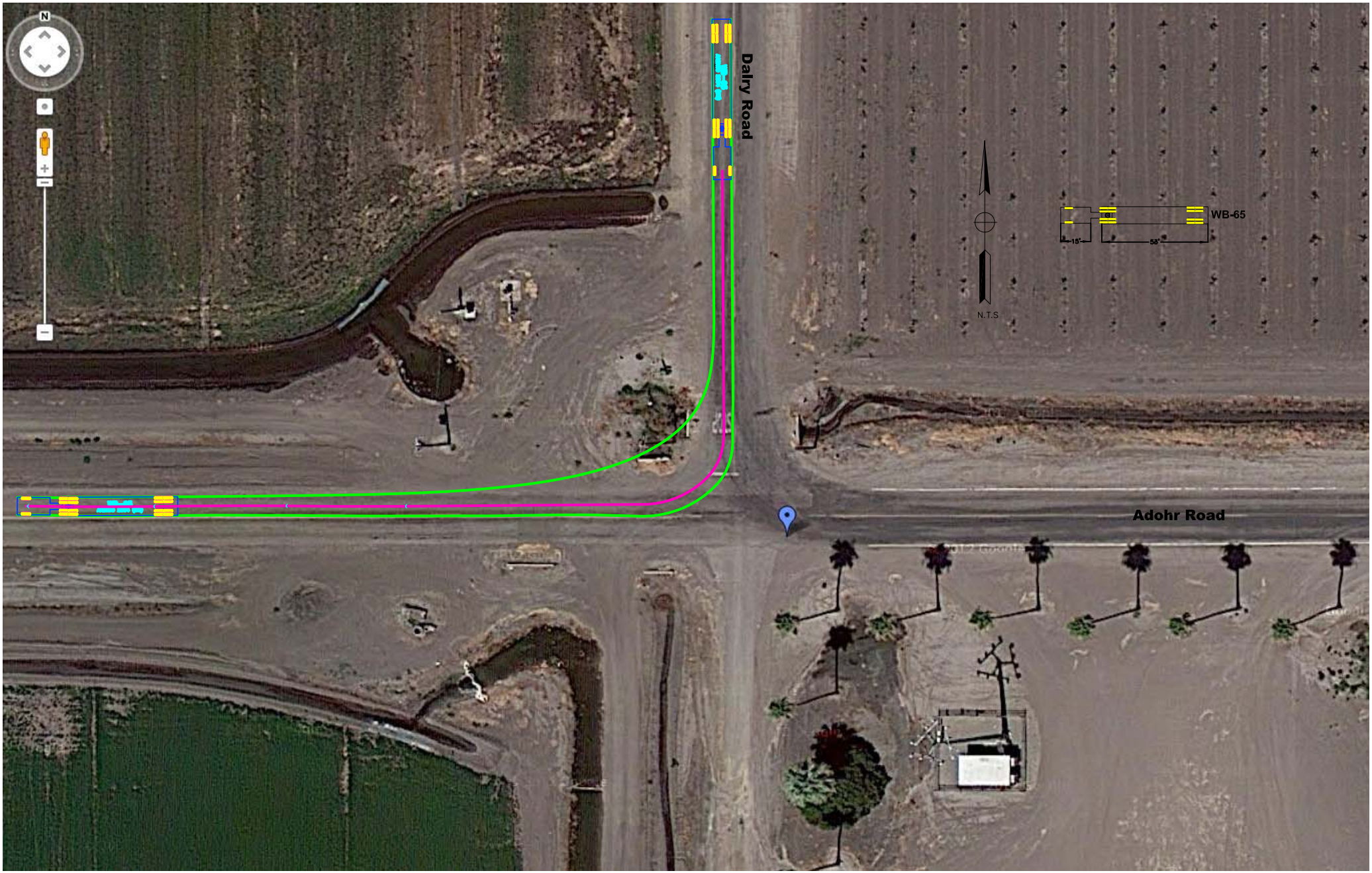

Stockdale Hwy
Morris Road
WB-65
15'
53'
N.T.S.

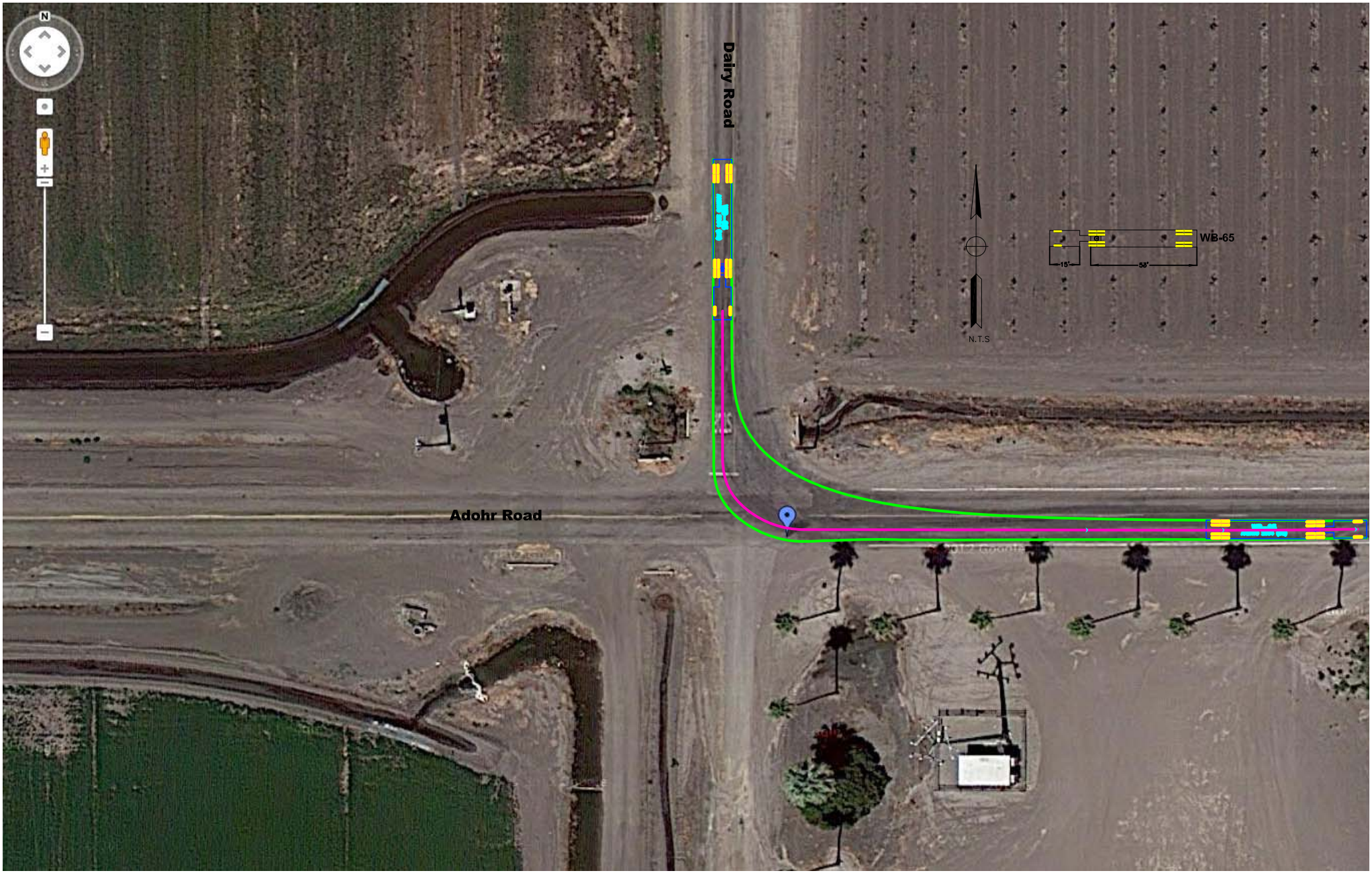

Stockdale Hwy
STOP
Morris Road
WB-65
15'
53'
N.T.S

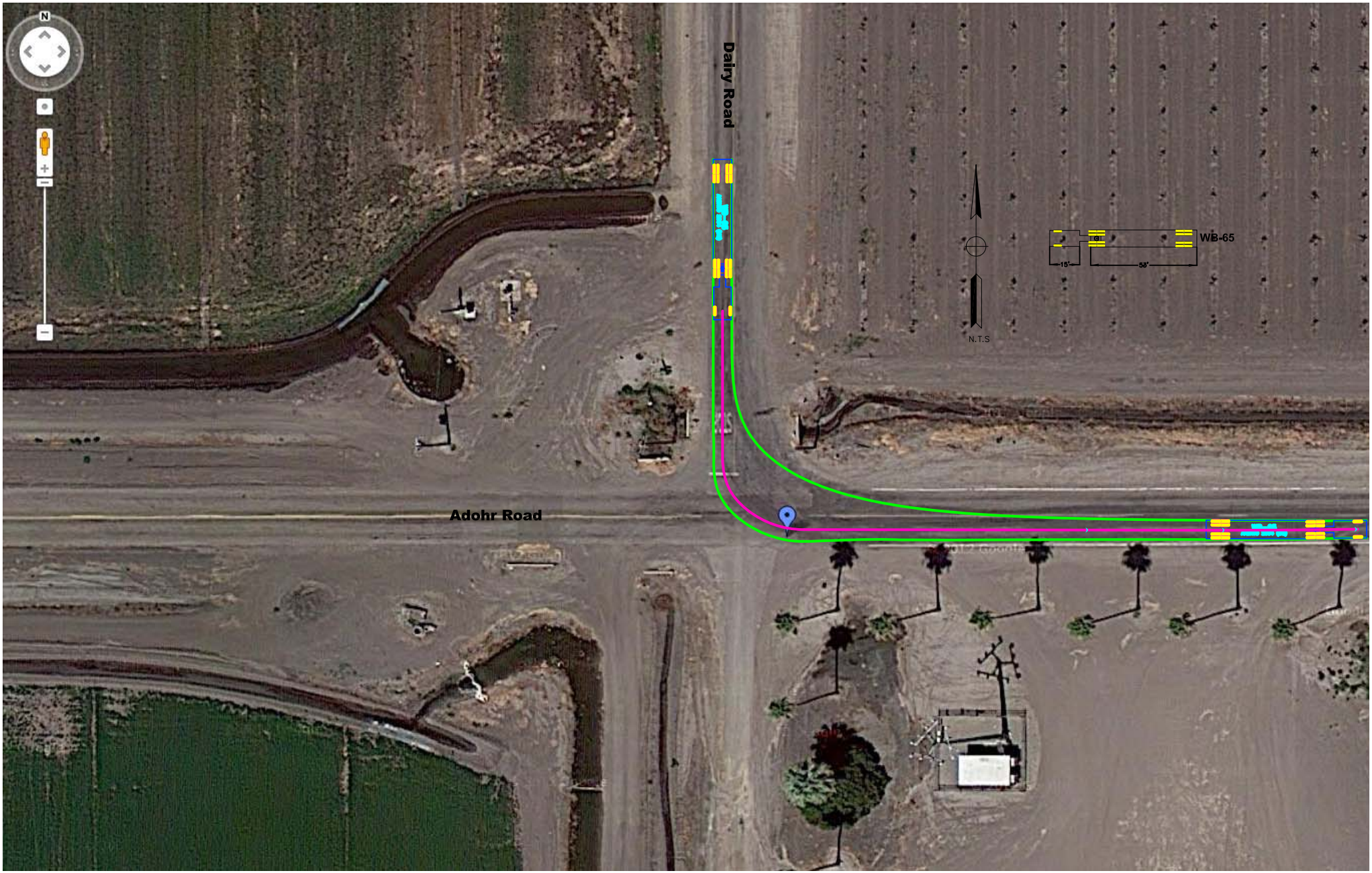

Adohr Rd
WB-65
15'
53'
N.T.S.
Tupman Road


Adohr Rd
WB-65
15'
55'
N.T.S.
Tupman Road


Dairy Road
Adohr Road
N.T.S
WB-65
15'
53'


Dalry Road
Adohr Road
N.T.S
WB-65
15'
53'


Dairy Road
Adohr Road
N.T.S
WB-65
15'
53'


Dairy Road
Adohr Road
N.T.S
WB-65
15'
53'

Appendix D
Traffic Signal Warrant Analysis

Peak Hour Signal Warrant

Major Street Name: **Stockdale Highway**

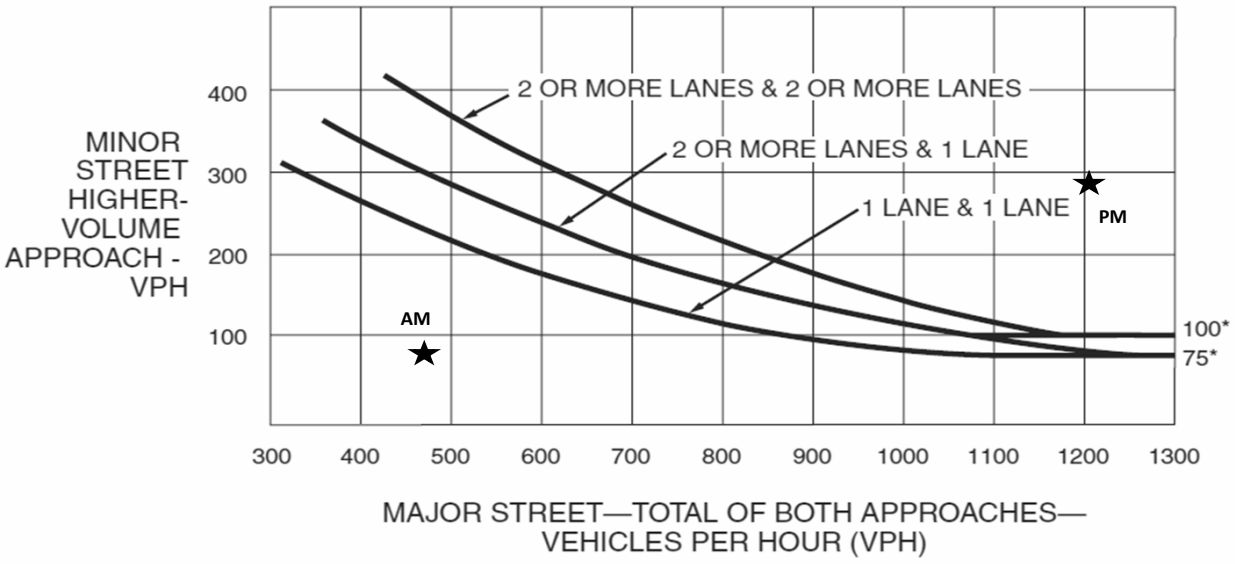
Minor Street Name: **I-5 SB Ramps**

Analysis Year 2016
Scenario Base+ Project Construction Traffic Condition

	Speed (mph)	Approach Lanes		AM Peak Hour Volume	PM Peak Hour Volume
		One	Two or More		
Major Street (Volume-Both Appproaches)	55	x		484	1198
Minor Street (Volume-Highest Volume Approach)	35	x		83	290
Meet Peak Hour Signal Warrant?				**No**	**Yes**

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



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

Peak Hour Signal Warrant

Major Street Name: **Stockdale Highway**

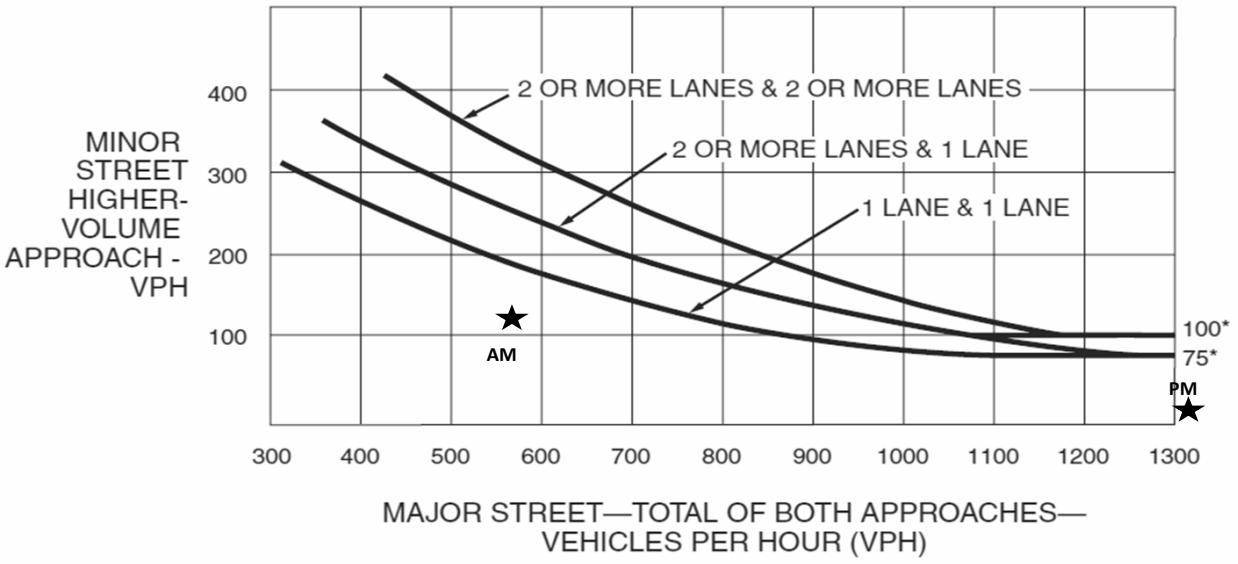
Minor Street Name: **I-5 NB Ramps**

Analysis Year 2016
Scenario Base+ Project Construction Traffic Condition

	Speed (mph)	Approach Lanes		AM Peak Hour Volume	PM Peak Hour Volume
		One	Two or More		
Major Street (Volume-Both Appproaches)	55	x		570	1328
Minor Street (Volume-Highest Volume Approach)	35	x		111	37
Meet Peak Hour Signal Warrant?				**No**	**No**

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



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

Peak Hour Signal Warrant

Major Street Name: **Stockdale Highway**

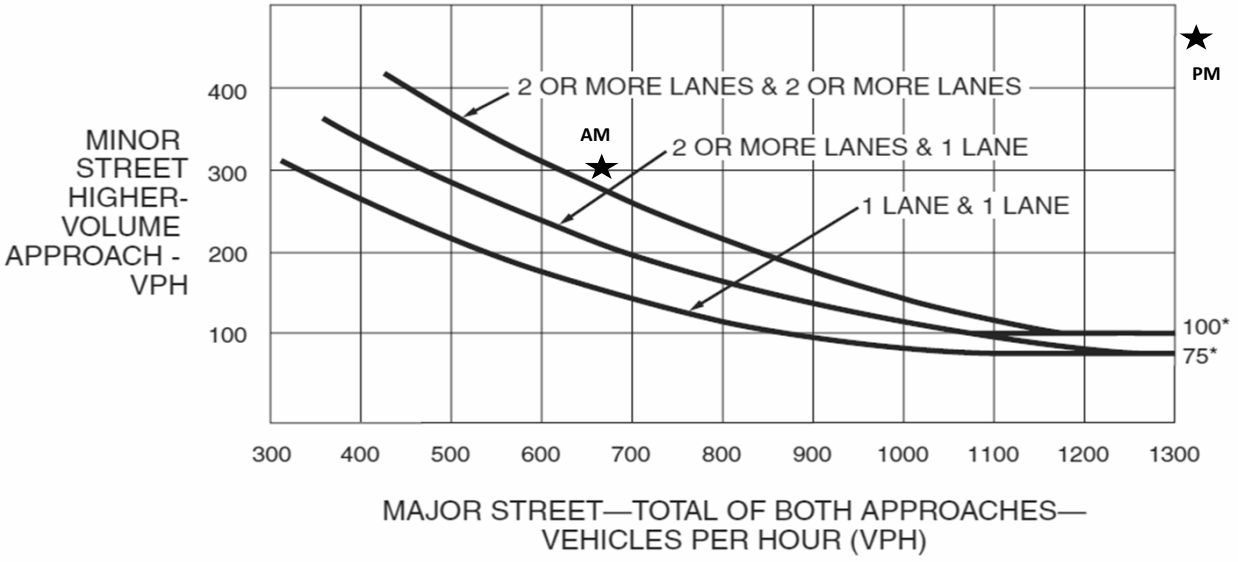
Minor Street Name: **SR-43**

Analysis Year 2016
Scenario Base+ Project Construction Traffic Condition

	Speed (mph)	Approach Lanes		AM Peak Hour Volume	PM Peak Hour Volume
		One	Two or More		
Major Street (Volume-Both Appproaches)	55	x		674	1321
Minor Street (Volume-Highest Volume Approach)	55	x		303	467
Meet Peak Hour Signal Warrant?				**Yes**	**Yes**

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



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

Peak Hour Signal Warrant

Major Street Name: **Stockdale Highway**

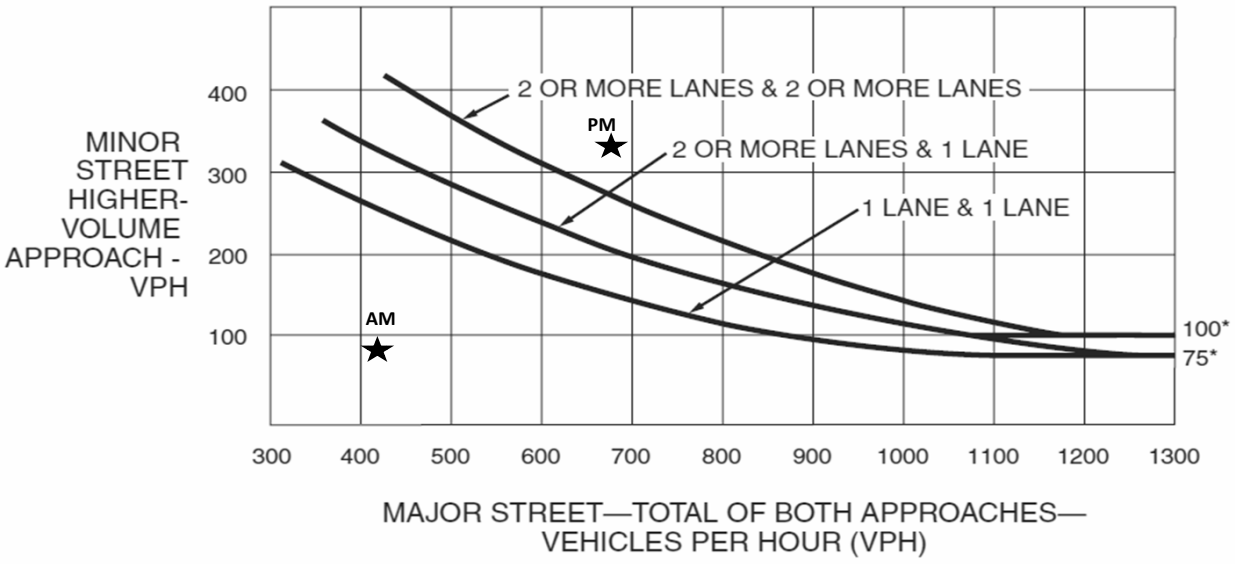
Minor Street Name: **I-5 SB Ramps**

Analysis Year 2017
Scenario Base+ Project No Rail Traffic Condition

	Speed (mph)	Approach Lanes		AM Peak Hour Volume	PM Peak Hour Volume
		One	Two or More		
Major Street (Volume-Both Appproaches)	55	x		411	689
Minor Street (Volume-Highest Volume Approach)	35	x		97	334
Meet Peak Hour Signal Warrant?				**No**	**Yes**

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



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

Peak Hour Signal Warrant

Major Street Name: **Stockdale Highway**

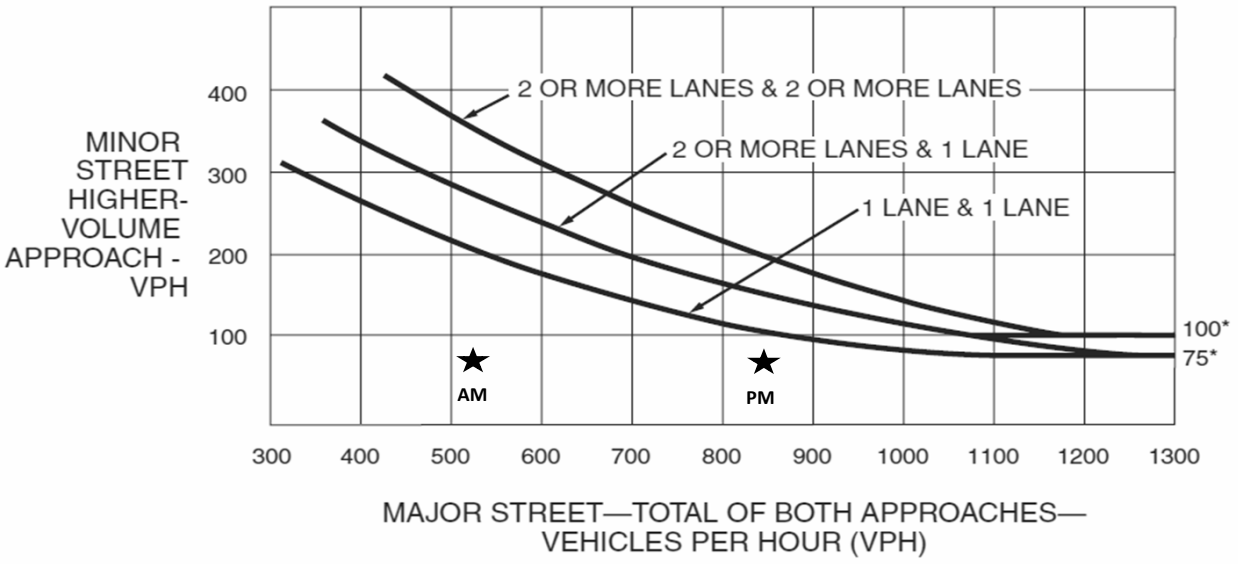
Minor Street Name: **I-5 NB Ramps**

Analysis Year 2017
Scenario Base+ Project No Rail Traffic Condition

	Speed (mph)	Approach Lanes		AM Peak Hour Volume	PM Peak Hour Volume
		One	Two or More		
Major Street (Volume-Both Appproaches)	55	x		520	856
Minor Street (Volume-Highest Volume Approach)	35	x		85	82
Meet Peak Hour Signal Warrant?				**No**	**No**

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



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

Peak Hour Signal Warrant

Major Street Name: **Stockdale Highway**

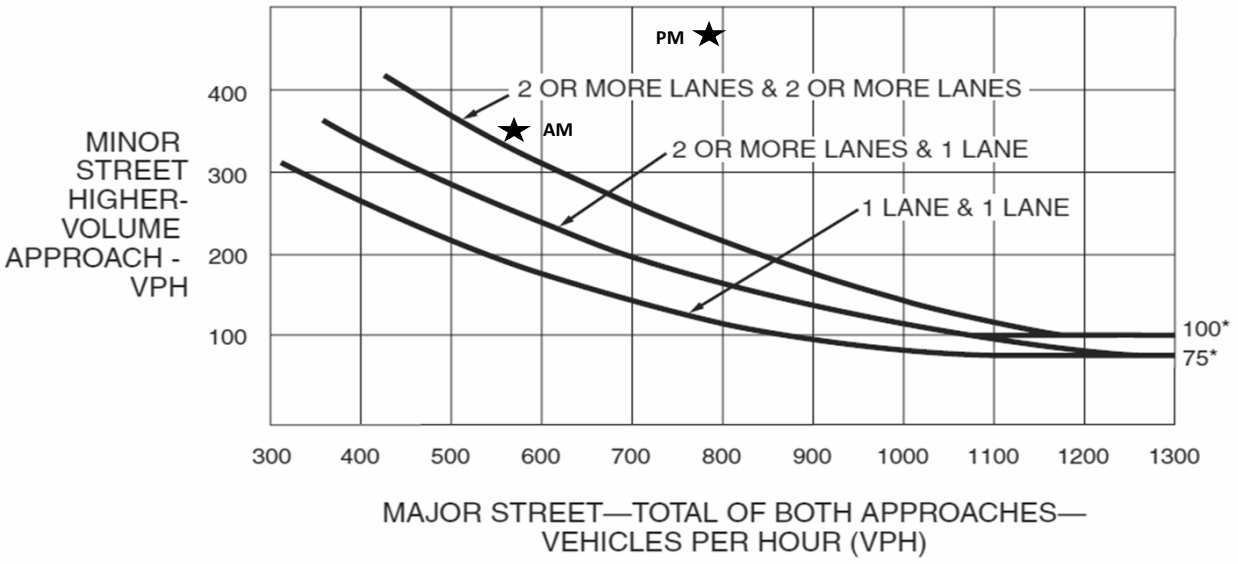
Minor Street Name: **SR-43**

Analysis Year 2017
Scenario Base+ Project No Rail Traffic Condition

	Speed (mph)	Approach Lanes		AM Peak Hour Volume	PM Peak Hour Volume
		One	Two or More		
Major Street (Volume-Both Appproaches)	55	x		575	795
Minor Street (Volume-Highest Volume Approach)	55	x		351	475
Meet Peak Hour Signal Warrant?				**Yes**	**Yes**

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



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

Peak Hour Signal Warrant

Major Street Name: **Stockdale Highway**

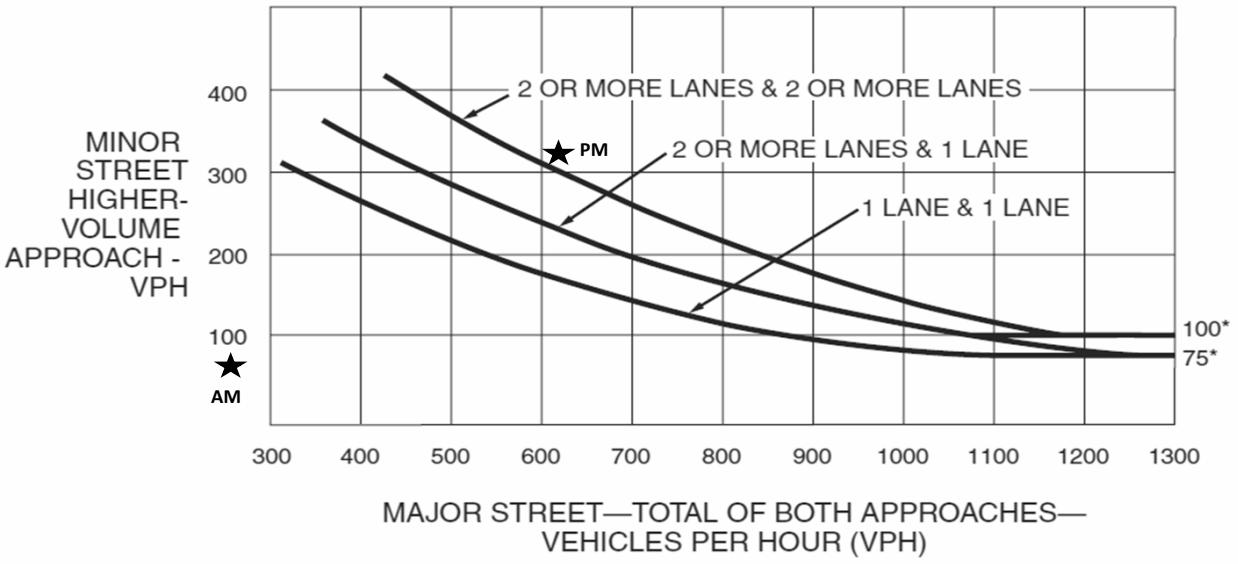
Minor Street Name: **I-5 SB Ramps**

Analysis Year 2017
Scenario Base+ Project Rail Traffic Condition

	Speed (mph)	Approach Lanes		AM Peak Hour Volume	PM Peak Hour Volume
		One	Two or More		
Major Street (Volume-Both Appproaches)	55	x		265	611
Minor Street (Volume-Highest Volume Approach)	35	x		76	316
Meet Peak Hour Signal Warrant?				**No**	**Yes**

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



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

Peak Hour Signal Warrant

Major Street Name: **Stockdale Highway**

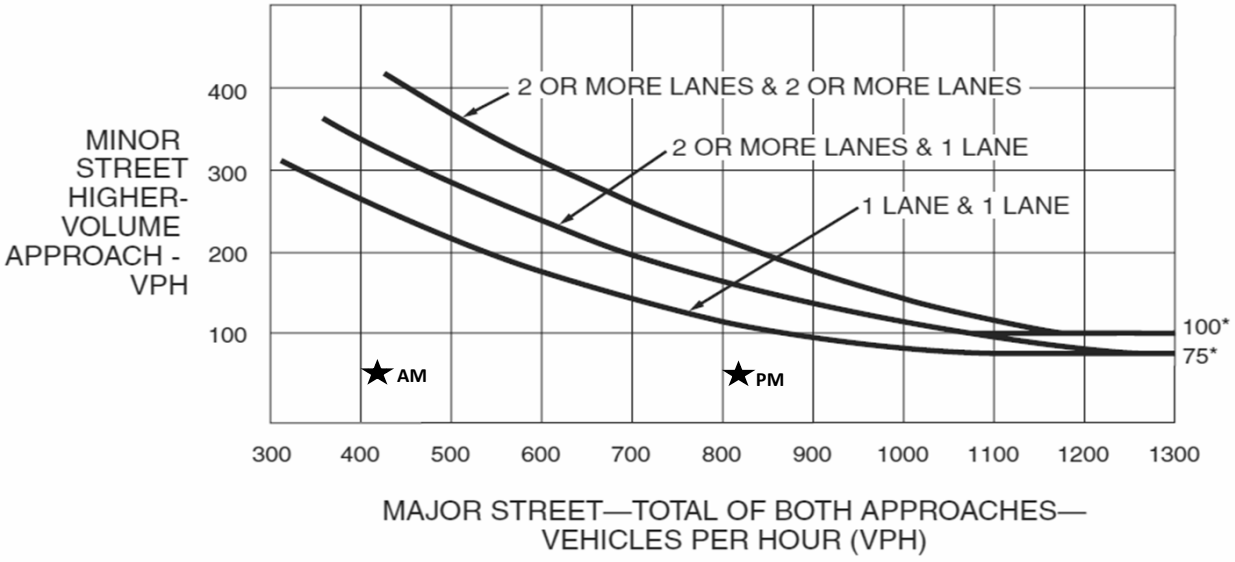
Minor Street Name: **I-5 NB Ramps**

Analysis Year 2017
Scenario Base+ Project Rail Traffic Condition

	Speed (mph)	Approach Lanes		AM Peak Hour Volume	PM Peak Hour Volume
		One	Two or More		
Major Street (Volume-Both Appproaches)	55	x		419	815
Minor Street (Volume-Highest Volume Approach)	35	x		61	63
Meet Peak Hour Signal Warrant?				**No**	**No**

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



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

Peak Hour Signal Warrant

Major Street Name: **Stockdale Highway**

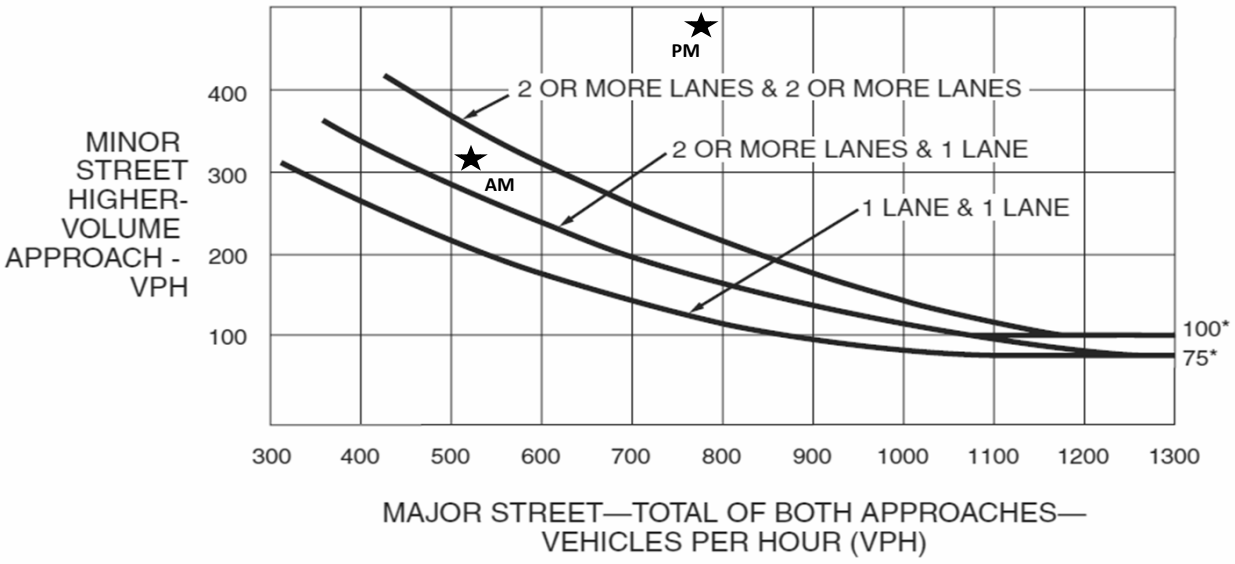
Minor Street Name: **SR-43**

Analysis Year 2017
Scenario Base+ Project Rail Traffic Condition

	Speed (mph)	Approach Lanes		AM Peak Hour Volume	PM Peak Hour Volume
		One	Two or More		
Major Street (Volume-Both Appproaches)	55	x		533	781
Minor Street (Volume-Highest Volume Approach)	55	x		314	475
Meet Peak Hour Signal Warrant?				**Yes**	**Yes**

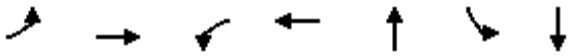
Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



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

Appendix E
Synchro Analysis Worksheets

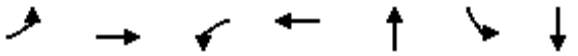


Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	42	316	35	902	25	12	8
v/c Ratio	0.16	0.34	0.07	0.52	0.07	0.04	0.02
Control Delay	5.1	5.2	3.8	5.3	7.8	10.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.1	5.2	3.8	5.3	7.8	10.8	0.0
Queue Length 50th (ft)	2	20	2	30	1	1	0
Queue Length 95th (ft)	10	45	8	55	12	9	0
Internal Link Dist (ft)		515		605	302		283
Turn Bay Length (ft)	200		250			250	
Base Capacity (vph)	546	1863	1060	3444	990	806	1015
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.17	0.03	0.26	0.03	0.01	0.01

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	290	1	32	679	151	1	7	15	11	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.97			0.91		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1770	1862		1770	3443			1698		1770	1583	
Flt Permitted	0.29	1.00		0.57	1.00			0.99		0.74	1.00	
Satd. Flow (perm)	547	1862		1059	3443			1683		1380	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	315	1	35	738	164	1	8	16	12	0	8
RTOR Reduction (vph)	0	0	0	0	40	0	0	13	0	0	6	0
Lane Group Flow (vph)	42	316	0	35	862	0	0	12	0	12	2	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	13.8	13.8		13.8	13.8			5.9		5.9	5.9	
Effective Green, g (s)	13.8	13.8		13.8	13.8			5.9		5.9	5.9	
Actuated g/C Ratio	0.50	0.50		0.50	0.50			0.21		0.21	0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	272	927		527	1715			358		293	337	
v/s Ratio Prot		0.17			c0.25						0.00	
v/s Ratio Perm	0.08			0.03				0.01		c0.01		
v/c Ratio	0.15	0.34		0.07	0.50			0.03		0.04	0.01	
Uniform Delay, d1	3.8	4.2		3.6	4.7			8.6		8.7	8.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.2		0.1	0.2			0.0		0.1	0.0	
Delay (s)	4.0	4.4		3.7	4.9			8.7		8.7	8.6	
Level of Service	A	A		A	A			A		A	A	
Approach Delay (s)		4.4			4.8			8.7			8.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	4.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	27.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	16	1400	13	487	34	427	75
v/c Ratio	0.03	1.11	0.16	0.20	0.08	1.34	0.11
Control Delay	4.9	78.5	10.3	5.6	10.6	203.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.9	78.5	10.3	5.6	10.6	203.0	0.3
Queue Length 50th (ft)	3	~919	2	46	0	~319	0
Queue Length 95th (ft)	9	#1170	12	65	24	#500	0
Internal Link Dist (ft)		515		605	302		283
Turn Bay Length (ft)	250		250			200	
Base Capacity (vph)	591	1262	83	2391	403	319	708
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	1.11	0.16	0.20	0.08	1.34	0.11

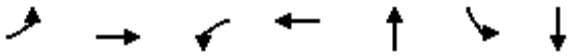
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

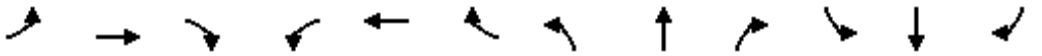
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	1288	0	12	437	11	0	1	30	393	0	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00			0.87		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863		1770	3526			1619		1770	1583	
Flt Permitted	0.47	1.00		0.07	1.00			1.00		0.73	1.00	
Satd. Flow (perm)	872	1863		122	3526			1619		1369	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	1400	0	13	475	12	0	1	33	427	0	75
RTOR Reduction (vph)	0	0	0	0	2	0	0	25	0	0	58	0
Lane Group Flow (vph)	16	1400	0	13	485	0	0	9	0	427	18	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	61.0	61.0		61.0	61.0			21.0		21.0	21.0	
Effective Green, g (s)	61.0	61.0		61.0	61.0			21.0		21.0	21.0	
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.23		0.23	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	591	1262		82	2389			377		319	369	
v/s Ratio Prot		c0.75			0.14			0.01			0.01	
v/s Ratio Perm	0.02			0.11						c0.31		
v/c Ratio	0.03	1.11		0.16	0.20			0.02		1.34	0.05	
Uniform Delay, d1	4.8	14.5		5.2	5.4			26.6		34.5	26.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.0	60.9		0.9	0.0			0.0		172.1	0.1	
Delay (s)	4.8	75.4		6.1	5.5			26.6		206.6	26.8	
Level of Service	A	E		A	A			C		F	C	
Approach Delay (s)		74.6			5.5			26.6			179.7	
Approach LOS		E			A			C			F	

Intersection Summary			
HCM 2000 Control Delay	81.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	102.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



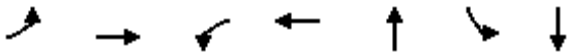
Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	26	323	35	817	26	12	8
v/c Ratio	0.09	0.37	0.07	0.49	0.07	0.04	0.02
Control Delay	4.4	5.7	3.9	5.6	7.3	10.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.4	5.7	3.9	5.6	7.3	10.2	0.0
Queue Length 50th (ft)	2	21	2	28	1	1	0
Queue Length 95th (ft)	7	47	8	51	12	9	0
Internal Link Dist (ft)		515		605	302		283
Turn Bay Length (ft)	250		250			200	
Base Capacity (vph)	622	1863	1052	3497	1038	846	1054
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.17	0.03	0.23	0.03	0.01	0.01

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	296	1	32	691	61	1	7	16	11	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.91		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1770	1862		1770	3496			1695		1770	1583	
Flt Permitted	0.33	1.00		0.57	1.00			0.99		0.74	1.00	
Satd. Flow (perm)	621	1862		1052	3496			1680		1379	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	322	1	35	751	66	1	8	17	12	0	8
RTOR Reduction (vph)	0	0	0	0	14	0	0	13	0	0	6	0
Lane Group Flow (vph)	26	323	0	35	803	0	0	13	0	12	2	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	12.5	12.5		12.5	12.5			5.9		5.9	5.9	
Effective Green, g (s)	12.5	12.5		12.5	12.5			5.9		5.9	5.9	
Actuated g/C Ratio	0.47	0.47		0.47	0.47			0.22		0.22	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	294	881		498	1655			375		308	353	
v/s Ratio Prot		0.17			c0.23						0.00	
v/s Ratio Perm	0.04			0.03				0.01		c0.01		
v/c Ratio	0.09	0.37		0.07	0.49			0.03		0.04	0.01	
Uniform Delay, d1	3.8	4.4		3.8	4.8			8.0		8.0	8.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.3		0.1	0.2			0.0		0.1	0.0	
Delay (s)	3.9	4.7		3.8	5.0			8.1		8.1	8.0	
Level of Service	A	A		A	A			A		A	A	
Approach Delay (s)		4.6			4.9			8.1			8.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	26.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	38.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

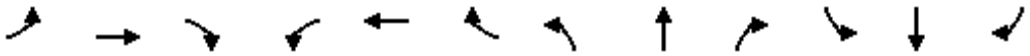


Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	20	1426	13	510	34	113	22
v/c Ratio	0.03	1.00	0.15	0.19	0.13	0.60	0.04
Control Delay	3.2	35.7	7.8	3.1	13.1	48.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.2	35.7	7.8	3.1	13.1	48.1	0.1
Queue Length 50th (ft)	2	~608	2	30	1	58	0
Queue Length 95th (ft)	8	#1140	10	53	26	112	0
Internal Link Dist (ft)		515		605	302		283
Turn Bay Length (ft)	250		250			200	
Base Capacity (vph)	663	1431	87	2701	328	254	674
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	1.00	0.15	0.19	0.10	0.44	0.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	1312	0	12	445	24	0	1	30	104	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.87		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863		1770	3512			1619		1770	1583	
Flt Permitted	0.46	1.00		0.06	1.00			1.00		0.73	1.00	
Satd. Flow (perm)	865	1863		113	3512			1619		1369	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	1426	0	13	484	26	0	1	33	113	0	22
RTOR Reduction (vph)	0	0	0	0	4	0	0	28	0	0	19	0
Lane Group Flow (vph)	20	1426	0	13	506	0	0	6	0	113	3	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	66.1	66.1		66.1	66.1			11.9		11.9	11.9	
Effective Green, g (s)	66.1	66.1		66.1	66.1			11.9		11.9	11.9	
Actuated g/C Ratio	0.77	0.77		0.77	0.77			0.14		0.14	0.14	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	664	1431		86	2699			224		189	219	
v/s Ratio Prot		c0.77			0.14			0.00			0.00	
v/s Ratio Perm	0.02			0.12						c0.08		
v/c Ratio	0.03	1.00		0.15	0.19			0.02		0.60	0.01	
Uniform Delay, d1	2.4	9.8		2.6	2.7			32.0		34.8	32.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.0	22.8		0.8	0.0			0.0		5.0	0.0	
Delay (s)	2.4	32.6		3.4	2.7			32.1		39.8	32.0	
Level of Service	A	C		A	A			C		D	C	
Approach Delay (s)		32.2			2.7			32.1			38.5	
Approach LOS		C			A			C			D	

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	70	0	0	63	169	4	0	28	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	76	0	0	68	184	4	0	30	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	68			76			147	147	76	162	147	68
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	68			76			147	147	76	162	147	68
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	97	100	100	100
cM capacity (veh/h)	1533			1523			821	744	985	778	744	995

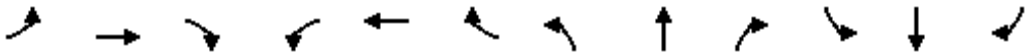
Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	77	68	184	35
Volume Left	1	0	0	4
Volume Right	0	0	184	30
cSH	1533	1700	1700	1126
Volume to Capacity	0.00	0.04	0.11	0.03
Queue Length 95th (ft)	0	0	0	2
Control Delay (s)	0.1	0.0	0.0	8.9
Lane LOS	A			A
Approach Delay (s)	0.1	0.0		8.9
Approach LOS				A

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	27.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	30	1	17	52	0	0	0	0	46	1	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	33	1	18	57	0	0	0	0	50	1	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												1
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	57			33			128	126	33	126	126	57
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	57			33			128	126	33	126	126	57
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	94	100	100
cM capacity (veh/h)	1548			1579			835	755	1041	840	755	1010

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	33	1	75	53
Volume Left	0	0	18	50
Volume Right	0	1	0	2
cSH	1700	1700	1579	874
Volume to Capacity	0.02	0.00	0.01	0.06
Queue Length 95th (ft)	0	0	1	5
Control Delay (s)	0.0	0.0	1.9	9.5
Lane LOS			A	A
Approach Delay (s)	0.0		1.9	9.5
Approach LOS				A

Intersection Summary				
Average Delay	4.0			
Intersection Capacity Utilization	20.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	513	0	0	61	74	3	0	34	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	558	0	0	66	80	3	0	37	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	66			558			630	630	558	649	630	66
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	66			558			630	630	558	649	630	66
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	93	100	100	100
cM capacity (veh/h)	1535			1013			393	398	529	356	398	997

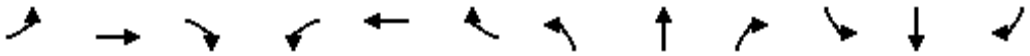
Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	561	66	80	40
Volume Left	3	0	0	3
Volume Right	0	0	80	37
cSH	1535	1700	1700	576
Volume to Capacity	0.00	0.04	0.05	0.07
Queue Length 95th (ft)	0	0	0	6
Control Delay (s)	0.1	0.0	0.0	12.5
Lane LOS	A			B
Approach Delay (s)	0.1	0.0		12.5
Approach LOS				B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	324	10	22	42	0	0	0	0	288	1	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	352	11	24	46	0	0	0	0	313	1	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												1
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	46			352			447	446	352	446	446	46
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	46			352			447	446	352	446	446	46
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	39	100	100
cM capacity (veh/h)	1562			1207			513	497	691	515	497	1024

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	352	11	70	315
Volume Left	0	0	24	313
Volume Right	0	11	0	1
cSH	1700	1700	1207	516
Volume to Capacity	0.21	0.01	0.02	0.61
Queue Length 95th (ft)	0	0	2	101
Control Delay (s)	0.0	0.0	2.9	22.3
Lane LOS			A	C
Approach Delay (s)	0.0		2.9	22.3
Approach LOS				C

Intersection Summary				
Average Delay	9.7			
Intersection Capacity Utilization	44.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	35	74	0	0	292	169	83	0	28	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	80	0	0	317	184	90	0	30	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	317			80			474	474	80	489	474	317
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	317			80			474	474	80	489	474	317
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			82	100	97	100	100	100
cM capacity (veh/h)	1243			1517			489	474	980	463	474	723

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	118	317	184	121
Volume Left	38	0	0	90
Volume Right	0	0	184	30
cSH	1243	1700	1700	654
Volume to Capacity	0.03	0.19	0.11	0.18
Queue Length 95th (ft)	2	0	0	17
Control Delay (s)	2.7	0.0	0.0	12.7
Lane LOS	A			B
Approach Delay (s)	2.7	0.0		12.7
Approach LOS				B

Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	35.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	68	39	17	360	0	0	0	0	46	1	36
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	74	42	18	391	0	0	0	0	50	1	39
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												1
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	391			74			522	502	74	502	502	391
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	391			74			522	502	74	502	502	391
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	89	100	94
cM capacity (veh/h)	1167			1526			433	466	988	475	466	657

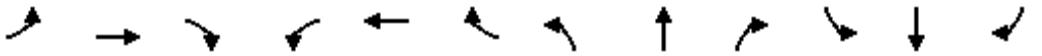
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	74	42	410	90
Volume Left	0	0	18	50
Volume Right	0	42	0	39
cSH	1700	1700	1526	839
Volume to Capacity	0.04	0.02	0.01	0.11
Queue Length 95th (ft)	0	0	1	9
Control Delay (s)	0.0	0.0	0.4	12.3
Lane LOS			A	B
Approach Delay (s)	0.0		0.4	12.3
Approach LOS				B

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	1190	0	0	61	74	3	0	34	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	1293	0	0	66	80	3	0	37	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	66			1293			1366	1366	1293	1385	1366	66
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	66			1293			1366	1366	1293	1385	1366	66
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			97	100	81	100	100	100
cM capacity (veh/h)	1535			536			124	147	199	98	147	997

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	1297	66	80	40
Volume Left	3	0	0	3
Volume Right	0	0	80	37
cSH	1535	1700	1700	216
Volume to Capacity	0.00	0.04	0.05	0.19
Queue Length 95th (ft)	0	0	0	17
Control Delay (s)	0.1	0.0	0.0	27.8
Lane LOS	A			D
Approach Delay (s)	0.1	0.0		27.8
Approach LOS				D

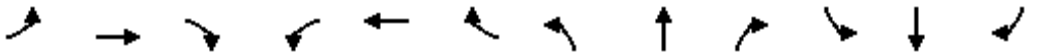
Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1001	133	22	42	0	0	0	0	288	1	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1088	145	24	46	0	0	0	0	313	1	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												1
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	46			1088			1183	1182	1088	1182	1182	46
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	46			1088			1183	1182	1088	1182	1182	46
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			96			100	100	100	0	99	100
cM capacity (veh/h)	1562			641			161	183	262	162	183	1024

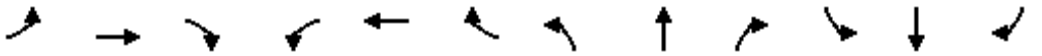
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	1088	145	70	315
Volume Left	0	0	24	313
Volume Right	0	145	0	1
cSH	1700	1700	641	163
Volume to Capacity	0.64	0.09	0.04	1.94
Queue Length 95th (ft)	0	0	3	600
Control Delay (s)	0.0	0.0	4.0	491.6
Lane LOS			A	F
Approach Delay (s)	0.0		4.0	491.6
Approach LOS				F

Intersection Summary			
Average Delay	96.0		
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		



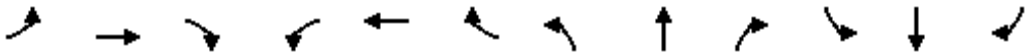
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	68	39	17	360	0	0	0	0	46	1	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	1583	1770	1863						1776	1583
Flt Permitted		1.00	1.00	0.71	1.00						0.95	1.00
Satd. Flow (perm)		1863	1583	1320	1863						1776	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	74	42	18	391	0	0	0	0	50	1	39
RTOR Reduction (vph)	0	0	29	0	0	0	0	0	0	0	0	19
Lane Group Flow (vph)	0	74	13	18	391	0	0	0	0	0	51	20
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		15.3	15.3	15.3	15.3						25.7	25.7
Effective Green, g (s)		15.3	15.3	15.3	15.3						25.7	25.7
Actuated g/C Ratio		0.31	0.31	0.31	0.31						0.52	0.52
Clearance Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		581	494	412	581						931	830
v/s Ratio Prot		0.04			c0.21						c0.03	
v/s Ratio Perm			0.01	0.01								0.01
v/c Ratio		0.13	0.03	0.04	0.67						0.05	0.02
Uniform Delay, d1		12.1	11.7	11.7	14.7						5.7	5.6
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	0.0	0.0	3.1						0.1	0.1
Delay (s)		12.2	11.7	11.8	17.7						5.8	5.7
Level of Service		B	B	B	B						A	A
Approach Delay (s)		12.0			17.5			0.0			5.8	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	49.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	28.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1001	133	22	42	0	0	0	0	288	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	1583	1770	1863						1774	1583
Flt Permitted		1.00	1.00	0.10	1.00						0.95	1.00
Satd. Flow (perm)		1863	1583	192	1863						1774	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1088	145	24	46	0	0	0	0	313	1	1
RTOR Reduction (vph)	0	0	38	0	0	0	0	0	0	0	0	1
Lane Group Flow (vph)	0	1088	107	24	46	0	0	0	0	0	314	0
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		38.8	38.8	38.8	38.8						16.1	16.1
Effective Green, g (s)		38.8	38.8	38.8	38.8						16.1	16.1
Actuated g/C Ratio		0.62	0.62	0.62	0.62						0.26	0.26
Clearance Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		1149	976	118	1149						454	405
v/s Ratio Prot		c0.58			0.02						c0.18	
v/s Ratio Perm			0.07	0.12								0.00
v/c Ratio		0.95	0.11	0.20	0.04						0.69	0.00
Uniform Delay, d1		11.1	5.0	5.3	4.7						21.2	17.4
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		15.4	0.0	0.9	0.0						8.4	0.0
Delay (s)		26.5	5.0	6.1	4.7						29.5	17.4
Level of Service		C	A	A	A						C	B
Approach Delay (s)		23.9			5.2			0.0			29.5	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	62.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	72	0	0	64	172	4	0	28	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	78	0	0	70	187	4	0	30	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	70			78			150	150	78	165	150	70
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	70			78			150	150	78	165	150	70
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	97	100	100	100
cM capacity (veh/h)	1531			1520			817	741	982	774	741	993

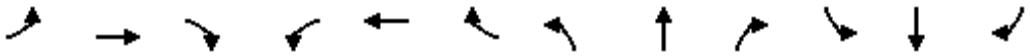
Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	79	70	187	35
Volume Left	1	0	0	4
Volume Right	0	0	187	30
cSH	1531	1700	1700	1123
Volume to Capacity	0.00	0.04	0.11	0.03
Queue Length 95th (ft)	0	0	0	2
Control Delay (s)	0.1	0.0	0.0	8.9
Lane LOS	A			A
Approach Delay (s)	0.1	0.0		8.9
Approach LOS				A

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	27.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	30	1	17	53	0	0	0	0	47	1	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	33	1	18	58	0	0	0	0	51	1	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												1
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	58			33			129	127	33	127	127	58
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	58			33			129	127	33	127	127	58
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	94	100	100
cM capacity (veh/h)	1547			1579			834	754	1041	839	754	1009

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	33	1	76	54
Volume Left	0	0	18	51
Volume Right	0	1	0	2
cSH	1700	1700	1579	872
Volume to Capacity	0.02	0.00	0.01	0.06
Queue Length 95th (ft)	0	0	1	5
Control Delay (s)	0.0	0.0	1.8	9.5
Lane LOS			A	A
Approach Delay (s)	0.0		1.8	9.5
Approach LOS				A

Intersection Summary				
Average Delay	4.0			
Intersection Capacity Utilization	20.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	522	0	0	62	75	3	0	35	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	567	0	0	67	82	3	0	38	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	67			567			641	641	567	660	641	67
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	67			567			641	641	567	660	641	67
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	93	100	100	100
cM capacity (veh/h)	1534			1005			387	392	523	348	392	996

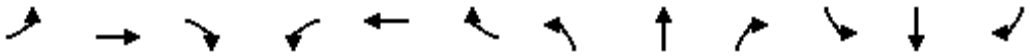
Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	571	67	82	41
Volume Left	3	0	0	3
Volume Right	0	0	82	38
cSH	1534	1700	1700	568
Volume to Capacity	0.00	0.04	0.05	0.07
Queue Length 95th (ft)	0	0	0	6
Control Delay (s)	0.1	0.0	0.0	12.6
Lane LOS	A			B
Approach Delay (s)	0.1	0.0		12.6
Approach LOS				B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	328	10	22	43	0	0	0	0	293	1	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	357	11	24	47	0	0	0	0	318	1	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												1
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	47			357			452	451	357	451	451	47
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	47			357			452	451	357	451	451	47
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	38	100	100
cM capacity (veh/h)	1561			1202			508	494	688	511	494	1023

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	357	11	71	321
Volume Left	0	0	24	318
Volume Right	0	11	0	1
cSH	1700	1700	1202	512
Volume to Capacity	0.21	0.01	0.02	0.63
Queue Length 95th (ft)	0	0	2	107
Control Delay (s)	0.0	0.0	2.8	23.1
Lane LOS			A	C
Approach Delay (s)	0.0		2.8	23.1
Approach LOS				C

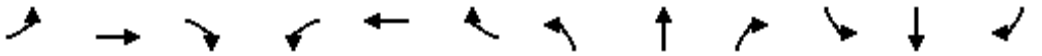
Intersection Summary			
Average Delay	10.0		
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	21	73	0	0	153	172	33	0	28	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	23	79	0	0	166	187	36	0	30	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	166			79			291	291	79	307	291	166
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	166			79			291	291	79	307	291	166
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			95	100	97	100	100	100
cM capacity (veh/h)	1412			1519			653	609	981	618	609	878

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	102	166	187	66
Volume Left	23	0	0	36
Volume Right	0	0	187	30
cSH	1412	1700	1700	1207
Volume to Capacity	0.02	0.10	0.11	0.05
Queue Length 95th (ft)	1	0	0	4
Control Delay (s)	1.8	0.0	0.0	9.9
Lane LOS	A			A
Approach Delay (s)	1.8	0.0		9.9
Approach LOS				A

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	29.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	52	25	17	171	0	0	0	0	47	1	29
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	57	27	18	186	0	0	0	0	51	1	32
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												1
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	186			57			296	279	57	279	279	186
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	186			57			296	279	57	279	279	186
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	92	100	96
cM capacity (veh/h)	1389			1548			626	621	1010	667	621	856

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	57	27	204	84
Volume Left	0	0	18	51
Volume Right	0	27	0	32
cSH	1700	1700	1548	1068
Volume to Capacity	0.03	0.02	0.01	0.08
Queue Length 95th (ft)	0	0	1	6
Control Delay (s)	0.0	0.0	0.8	10.3
Lane LOS			A	B
Approach Delay (s)	0.0		0.8	10.3
Approach LOS				B

Intersection Summary				
Average Delay	2.7			
Intersection Capacity Utilization	26.6%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	629	0	0	81	75	28	0	35	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	684	0	0	88	82	30	0	38	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	88			684			837	837	684	856	837	88
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	88			684			837	837	684	856	837	88
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			89	100	92	100	100	100
cM capacity (veh/h)	1508			909			281	296	449	250	296	970

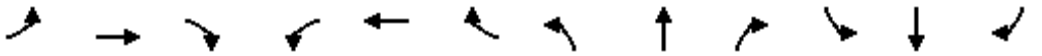
Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	716	88	82	68
Volume Left	33	0	0	30
Volume Right	0	0	82	38
cSH	1508	1700	1700	633
Volume to Capacity	0.02	0.05	0.05	0.11
Queue Length 95th (ft)	2	0	0	9
Control Delay (s)	0.6	0.0	0.0	16.2
Lane LOS	A			C
Approach Delay (s)	0.6	0.0		16.2
Approach LOS				C

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	462	40	22	87	0	0	0	0	293	1	22
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	502	43	24	95	0	0	0	0	318	1	24
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												1
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	95			502			657	645	502	645	645	95
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	95			502			657	645	502	645	645	95
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	16	100	98
cM capacity (veh/h)	1499			1062			362	382	569	379	382	962

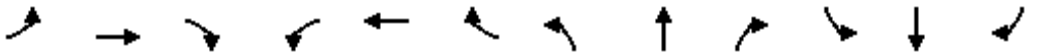
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	502	43	118	343
Volume Left	0	0	24	318
Volume Right	0	43	0	24
cSH	1700	1700	1062	398
Volume to Capacity	0.30	0.03	0.02	0.86
Queue Length 95th (ft)	0	0	2	211
Control Delay (s)	0.0	0.0	1.9	50.1
Lane LOS			A	F
Approach Delay (s)	0.0		1.9	50.1
Approach LOS				F

Intersection Summary			
Average Delay	17.3		
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		



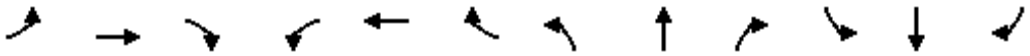
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	52	25	17	171	0	0	0	0	47	1	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	1583	1770	1863						1776	1583
Flt Permitted		1.00	1.00	0.72	1.00						0.95	1.00
Satd. Flow (perm)		1863	1583	1341	1863						1776	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	57	27	18	186	0	0	0	0	51	1	32
RTOR Reduction (vph)	0	0	22	0	0	0	0	0	0	0	0	12
Lane Group Flow (vph)	0	57	5	18	186	0	0	0	0	0	52	20
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		8.1	8.1	8.1	8.1						27.0	27.0
Effective Green, g (s)		8.1	8.1	8.1	8.1						27.0	27.0
Actuated g/C Ratio		0.19	0.19	0.19	0.19						0.63	0.63
Clearance Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		350	297	252	350						1112	991
v/s Ratio Prot		0.03			c0.10						c0.03	
v/s Ratio Perm			0.00	0.01								0.01
v/c Ratio		0.16	0.02	0.07	0.53						0.05	0.02
Uniform Delay, d1		14.7	14.3	14.4	15.8						3.1	3.0
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.2	0.0	0.1	1.6						0.1	0.0
Delay (s)		14.9	14.3	14.5	17.3						3.2	3.1
Level of Service		B	B	B	B						A	A
Approach Delay (s)		14.7			17.1			0.0			3.1	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	43.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	20.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	462	40	22	87	0	0	0	0	293	1	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	1583	1770	1863						1774	1583
Flt Permitted		1.00	1.00	0.27	1.00						0.95	1.00
Satd. Flow (perm)		1863	1583	502	1863						1774	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	502	43	24	95	0	0	0	0	318	1	24
RTOR Reduction (vph)	0	0	27	0	0	0	0	0	0	0	0	10
Lane Group Flow (vph)	0	502	16	24	95	0	0	0	0	0	319	14
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		18.5	18.5	18.5	18.5						23.3	23.3
Effective Green, g (s)		18.5	18.5	18.5	18.5						23.3	23.3
Actuated g/C Ratio		0.37	0.37	0.37	0.37						0.47	0.47
Clearance Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		692	588	186	692						830	740
v/s Ratio Prot		c0.27			0.05						c0.18	
v/s Ratio Perm			0.01	0.05								0.01
v/c Ratio		0.73	0.03	0.13	0.14						0.38	0.02
Uniform Delay, d1		13.5	9.9	10.3	10.4						8.6	7.1
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		3.8	0.0	0.3	0.1						1.3	0.0
Delay (s)		17.3	10.0	10.6	10.5						9.9	7.2
Level of Service		B	A	B	B						A	A
Approach Delay (s)		16.7			10.5			0.0			9.7	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	49.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	42	113	0	0	193	172	57	0	28	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	46	123	0	0	210	187	62	0	30	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	210			123			424	424	123	439	424	210
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	210			123			424	424	123	439	424	210
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			88	100	97	100	100	100
cM capacity (veh/h)	1361			1464			527	504	928	498	504	830

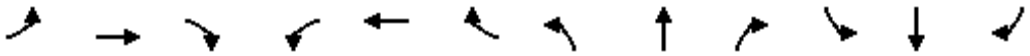
Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	168	210	187	92
Volume Left	46	0	0	62
Volume Right	0	0	187	30
cSH	1361	1700	1700	785
Volume to Capacity	0.03	0.12	0.11	0.12
Queue Length 95th (ft)	3	0	0	10
Control Delay (s)	2.3	0.0	0.0	11.5
Lane LOS	A			B
Approach Delay (s)	2.3	0.0		11.5
Approach LOS				B

Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	32.3%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	112	48	17	234	0	0	0	0	47	1	49
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	122	52	18	254	0	0	0	0	51	1	53
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												1
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	254			122			440	413	122	413	413	254
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	254			122			440	413	122	413	413	254
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	91	100	93
cM capacity (veh/h)	1311			1466			486	523	929	544	523	784

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	122	52	273	105
Volume Left	0	0	18	51
Volume Right	0	52	0	53
cSH	1700	1700	1466	1099
Volume to Capacity	0.07	0.03	0.01	0.10
Queue Length 95th (ft)	0	0	1	8
Control Delay (s)	0.0	0.0	0.6	11.1
Lane LOS			A	B
Approach Delay (s)	0.0		0.6	11.1
Approach LOS				B

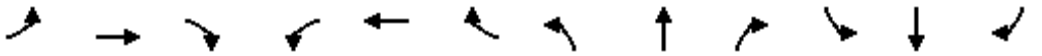
Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	29.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	47	641	0	0	93	75	47	0	35	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	51	697	0	0	101	82	51	0	38	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	101			697			900	900	697	919	900	101
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	101			697			900	900	697	919	900	101
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			80	100	91	100	100	100
cM capacity (veh/h)	1491			899			253	269	441	224	269	954

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	748	101	82	89
Volume Left	51	0	0	51
Volume Right	0	0	82	38
cSH	1491	1700	1700	441
Volume to Capacity	0.03	0.06	0.05	0.20
Queue Length 95th (ft)	3	0	0	19
Control Delay (s)	0.9	0.0	0.0	19.0
Lane LOS	A			C
Approach Delay (s)	0.9	0.0		19.0
Approach LOS				C

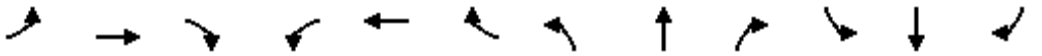
Intersection Summary				
Average Delay	2.3			
Intersection Capacity Utilization	54.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	491	59	22	117	0	0	0	0	293	1	40
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	534	64	24	127	0	0	0	0	318	1	43
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												1
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	127			534			731	709	534	709	709	127
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	127			534			731	709	534	709	709	127
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	7	100	95
cM capacity (veh/h)	1459			1034			315	351	546	343	351	923

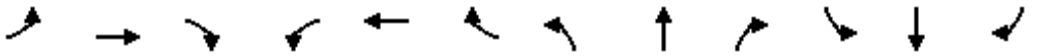
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	534	64	151	363
Volume Left	0	0	24	318
Volume Right	0	64	0	43
cSH	1700	1700	1034	374
Volume to Capacity	0.31	0.04	0.02	0.97
Queue Length 95th (ft)	0	0	2	276
Control Delay (s)	0.0	0.0	1.5	73.5
Lane LOS			A	F
Approach Delay (s)	0.0		1.5	73.5
Approach LOS				F

Intersection Summary				
Average Delay	24.2			
Intersection Capacity Utilization	48.8%	ICU Level of Service	A	
Analysis Period (min)	15			



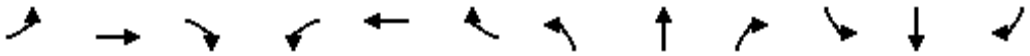
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	112	48	17	234	0	0	0	0	47	1	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	1583	1770	1863						1776	1583
Flt Permitted		1.00	1.00	0.68	1.00						0.95	1.00
Satd. Flow (perm)		1863	1583	1264	1863						1776	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	122	52	18	254	0	0	0	0	51	1	53
RTOR Reduction (vph)	0	0	39	0	0	0	0	0	0	0	0	23
Lane Group Flow (vph)	0	122	13	18	254	0	0	0	0	0	52	30
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		11.0	11.0	11.0	11.0						24.4	24.4
Effective Green, g (s)		11.0	11.0	11.0	11.0						24.4	24.4
Actuated g/C Ratio		0.25	0.25	0.25	0.25						0.56	0.56
Clearance Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		472	401	320	472						998	889
v/s Ratio Prot		0.07			c0.14						c0.03	
v/s Ratio Perm			0.01	0.01								0.02
v/c Ratio		0.26	0.03	0.06	0.54						0.05	0.03
Uniform Delay, d1		12.9	12.2	12.3	14.0						4.3	4.2
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.3	0.0	0.1	1.2						0.1	0.1
Delay (s)		13.2	12.2	12.3	15.2						4.4	4.3
Level of Service		B	B	B	B						A	A
Approach Delay (s)		12.9			15.0			0.0			4.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.20		
Actuated Cycle Length (s)	43.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	22.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	491	59	22	117	0	0	0	0	293	1	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Lane Util. Factor		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	1583	1770	1863						1774	1583
Flt Permitted		1.00	1.00	0.26	1.00						0.95	1.00
Satd. Flow (perm)		1863	1583	476	1863						1774	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	534	64	24	127	0	0	0	0	318	1	43
RTOR Reduction (vph)	0	0	39	0	0	0	0	0	0	0	0	14
Lane Group Flow (vph)	0	534	25	24	127	0	0	0	0	0	319	29
Turn Type		NA	Perm	Perm	NA					Split	NA	Perm
Protected Phases		4			8					6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		19.5	19.5	19.5	19.5						22.3	22.3
Effective Green, g (s)		19.5	19.5	19.5	19.5						22.3	22.3
Actuated g/C Ratio		0.39	0.39	0.39	0.39						0.45	0.45
Clearance Time (s)		4.0	4.0	4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		729	619	186	729						794	708
v/s Ratio Prot		c0.29			0.07						c0.18	
v/s Ratio Perm			0.02	0.05								0.02
v/c Ratio		0.73	0.04	0.13	0.17						0.40	0.04
Uniform Delay, d1		12.9	9.4	9.7	9.9						9.3	7.7
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		3.8	0.0	0.3	0.1						1.5	0.1
Delay (s)		16.7	9.4	10.0	10.0						10.8	7.8
Level of Service		B	A	B	B						B	A
Approach Delay (s)		16.0			10.0			0.0			10.4	
Approach LOS		B			B			A			B	

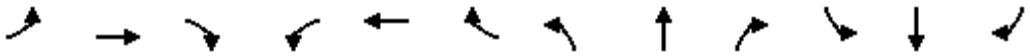
Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	49.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	11	50	8	142	173	58	6	127	37	46	229	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	54	9	154	188	63	7	138	40	50	249	30

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	75	405	185	329
Volume Left (vph)	12	154	7	50
Volume Right (vph)	9	63	40	30
Hadj (s)	0.00	0.02	-0.09	0.01
Departure Headway (s)	6.2	5.6	5.8	5.7
Degree Utilization, x	0.13	0.63	0.30	0.52
Capacity (veh/h)	483	616	550	595
Control Delay (s)	10.1	17.4	11.3	14.6
Approach Delay (s)	10.1	17.4	11.3	14.6
Approach LOS	B	C	B	B

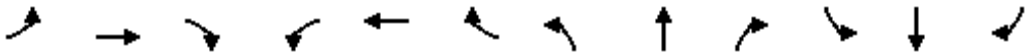
Intersection Summary				
Delay	14.8			
Level of Service	B			
Intersection Capacity Utilization	62.7%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	45	463	2	54	59	21	0	305	162	88	180	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	49	503	2	59	64	23	0	332	176	96	196	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	554	146	508	313
Volume Left (vph)	49	59	0	96
Volume Right (vph)	2	23	176	22
Hadj (s)	0.05	0.02	-0.17	0.05
Departure Headway (s)	7.4	8.8	7.2	7.9
Degree Utilization, x	1.14	0.36	1.01	0.69
Capacity (veh/h)	476	383	508	441
Control Delay (s)	111.7	16.5	70.7	26.9
Approach Delay (s)	111.7	16.5	70.7	26.9
Approach LOS	F	C	F	D

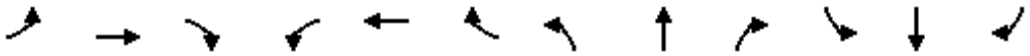
Intersection Summary			
Delay	71.4		
Level of Service	F		
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	11	53	8	142	402	58	6	127	37	46	229	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	58	9	154	437	63	7	138	40	50	249	30

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	78	654	185	329
Volume Left (vph)	12	154	7	50
Volume Right (vph)	9	63	40	30
Hadj (s)	0.00	0.02	-0.09	0.01
Departure Headway (s)	6.9	5.8	6.7	6.4
Degree Utilization, x	0.15	1.06	0.34	0.59
Capacity (veh/h)	474	615	517	546
Control Delay (s)	11.1	75.9	13.2	18.3
Approach Delay (s)	11.1	75.9	13.2	18.3
Approach LOS	B	F	B	C

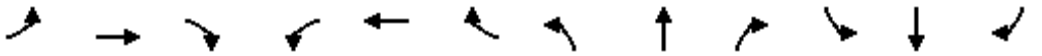
Intersection Summary			
Delay	47.3		
Level of Service	E		
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	45	1140	2	54	59	21	0	305	162	88	180	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	49	1239	2	59	64	23	0	332	176	96	196	22

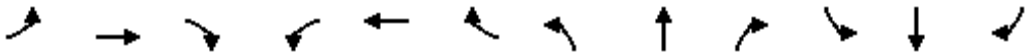
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	1290	146	508	313
Volume Left (vph)	49	59	0	96
Volume Right (vph)	2	23	176	22
Hadj (s)	0.04	0.02	-0.17	0.05
Departure Headway (s)	7.4	8.8	7.2	8.0
Degree Utilization, x	2.66	0.36	1.02	0.69
Capacity (veh/h)	497	383	508	441
Control Delay (s)	769.1	16.6	71.4	27.0
Approach Delay (s)	769.1	16.6	71.4	27.0
Approach LOS	F	C	F	D

Intersection Summary			
Delay	460.6		
Level of Service	F		
Intersection Capacity Utilization	114.6%	ICU Level of Service	H
Analysis Period (min)	15		



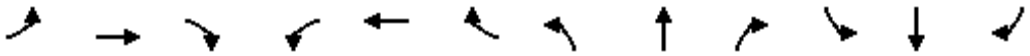
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	53	8	142	402	58	6	127	37	46	229	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3468		1770	3472		1770	1800		1770	1833	
Flt Permitted	0.47	1.00		0.71	1.00		0.59	1.00		0.64	1.00	
Satd. Flow (perm)	873	3468		1325	3472		1096	1800		1201	1833	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	58	9	154	437	63	7	138	40	50	249	30
RTOR Reduction (vph)	0	6	0	0	20	0	0	21	0	0	9	0
Lane Group Flow (vph)	12	61	0	154	480	0	7	157	0	50	270	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	10.0	10.0		10.0	10.0		9.7	9.7		9.7	9.7	
Effective Green, g (s)	10.0	10.0		10.0	10.0		9.7	9.7		9.7	9.7	
Actuated g/C Ratio	0.36	0.36		0.36	0.36		0.35	0.35		0.35	0.35	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	315	1251		478	1253		383	630		420	641	
v/s Ratio Prot		0.02			c0.14			0.09			c0.15	
v/s Ratio Perm	0.01			0.12			0.01			0.04		
v/c Ratio	0.04	0.05		0.32	0.38		0.02	0.25		0.12	0.42	
Uniform Delay, d1	5.7	5.8		6.4	6.6		5.9	6.4		6.1	6.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		0.4	0.2		0.0	0.2		0.1	0.4	
Delay (s)	5.8	5.8		6.8	6.8		5.9	6.6		6.2	7.3	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		5.8			6.8			6.6			7.1	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	27.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	1140	2	54	59	21	0	305	162	88	180	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.96			0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1770	3538		1770	3399			1766		1770	1835	
Flt Permitted	0.70	1.00		0.17	1.00			1.00		0.25	1.00	
Satd. Flow (perm)	1300	3538		309	3399			1766		470	1835	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	1239	2	59	64	23	0	332	176	96	196	22
RTOR Reduction (vph)	0	0	0	0	12	0	0	22	0	0	7	0
Lane Group Flow (vph)	49	1241	0	59	75	0	0	486	0	96	211	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	24.1	24.1		24.1	24.1			18.3		18.3	18.3	
Effective Green, g (s)	24.1	24.1		24.1	24.1			18.3		18.3	18.3	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.36		0.36	0.36	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	621	1691		147	1625			641		170	666	
v/s Ratio Prot		c0.35			0.02			c0.28			0.12	
v/s Ratio Perm	0.04			0.19						0.20		
v/c Ratio	0.08	0.73		0.40	0.05			0.76		0.56	0.32	
Uniform Delay, d1	7.1	10.6		8.5	7.0			14.1		12.9	11.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.1	1.7		1.8	0.0			5.1		4.2	0.3	
Delay (s)	7.2	12.3		10.3	7.0			19.3		17.1	11.8	
Level of Service	A	B		B	A			B		B	B	
Approach Delay (s)		12.1			8.3			19.3			13.4	
Approach LOS		B			A			B			B	

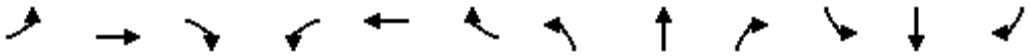
Intersection Summary			
HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	50.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	11	50	8	144	176	59	6	129	38	47	233	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	54	9	157	191	64	7	140	41	51	253	30

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	75	412	188	335
Volume Left (vph)	12	157	7	51
Volume Right (vph)	9	64	41	30
Hadj (s)	0.00	0.02	-0.09	0.01
Departure Headway (s)	6.3	5.6	5.9	5.7
Degree Utilization, x	0.13	0.64	0.31	0.53
Capacity (veh/h)	478	612	545	592
Control Delay (s)	10.2	18.0	11.5	15.0
Approach Delay (s)	10.2	18.0	11.5	15.0
Approach LOS	B	C	B	B

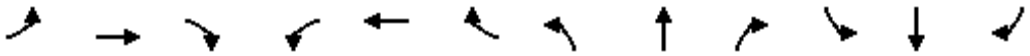
Intersection Summary				
Delay	15.2			
Level of Service	C			
Intersection Capacity Utilization	63.5%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	46	472	2	55	60	21	0	310	165	90	184	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	50	513	2	60	65	23	0	337	179	98	200	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	565	148	516	320
Volume Left (vph)	50	60	0	98
Volume Right (vph)	2	23	179	22
Hadj (s)	0.05	0.02	-0.17	0.05
Departure Headway (s)	7.5	8.8	7.2	8.0
Degree Utilization, x	1.17	0.36	1.04	0.71
Capacity (veh/h)	478	382	502	441
Control Delay (s)	122.8	16.8	77.7	28.0
Approach Delay (s)	122.8	16.8	77.7	28.0
Approach LOS	F	C	F	D

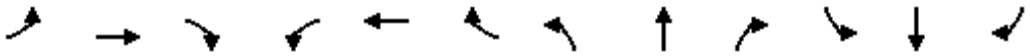
Intersection Summary			
Delay	78.1		
Level of Service	F		
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	11	51	8	144	260	59	6	129	38	47	233	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	55	9	157	283	64	7	140	41	51	253	37

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	76	503	188	341
Volume Left (vph)	12	157	7	51
Volume Right (vph)	9	64	41	37
Hadj (s)	0.00	0.02	-0.09	0.00
Departure Headway (s)	6.7	5.7	6.3	6.1
Degree Utilization, x	0.14	0.80	0.33	0.58
Capacity (veh/h)	468	610	503	555
Control Delay (s)	10.7	28.0	12.4	17.1
Approach Delay (s)	10.7	28.0	12.4	17.1
Approach LOS	B	D	B	C

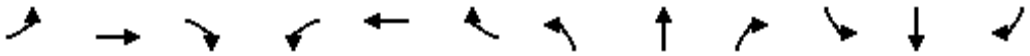
Intersection Summary				
Delay	20.8			
Level of Service	C			
Intersection Capacity Utilization	68.3%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	53	572	2	55	78	21	0	310	165	90	184	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	58	622	2	60	85	23	0	337	179	98	200	23

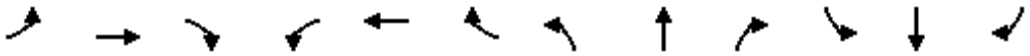
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	682	167	516	321
Volume Left (vph)	58	60	0	98
Volume Right (vph)	2	23	179	23
Hadj (s)	0.05	0.02	-0.17	0.05
Departure Headway (s)	7.6	8.9	7.4	8.1
Degree Utilization, x	1.44	0.41	1.06	0.72
Capacity (veh/h)	481	382	495	434
Control Delay (s)	230.4	17.9	84.1	29.4
Approach Delay (s)	230.4	17.9	84.1	29.4
Approach LOS	F	C	F	D

Intersection Summary			
Delay	126.3		
Level of Service	F		
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		



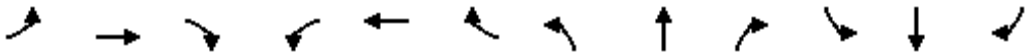
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	51	8	144	260	59	6	129	38	47	233	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3465		1770	3441		1770	1799		1770	1827	
Flt Permitted	0.54	1.00		0.71	1.00		0.58	1.00		0.64	1.00	
Satd. Flow (perm)	1012	3465		1328	3441		1085	1799		1198	1827	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	55	9	157	283	64	7	140	41	51	253	37
RTOR Reduction (vph)	0	6	0	0	36	0	0	20	0	0	10	0
Lane Group Flow (vph)	12	58	0	157	311	0	7	161	0	51	280	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.3	9.3		9.3	9.3		10.6	10.6		10.6	10.6	
Effective Green, g (s)	9.3	9.3		9.3	9.3		10.6	10.6		10.6	10.6	
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.38	0.38		0.38	0.38	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	337	1155		442	1147		412	683		455	694	
v/s Ratio Prot		0.02			0.09			0.09			c0.15	
v/s Ratio Perm	0.01			c0.12			0.01			0.04		
v/c Ratio	0.04	0.05		0.36	0.27		0.02	0.24		0.11	0.40	
Uniform Delay, d1	6.3	6.3		7.0	6.8		5.4	5.9		5.6	6.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		0.5	0.1		0.0	0.2		0.1	0.4	
Delay (s)	6.3	6.3		7.5	6.9		5.4	6.1		5.7	6.7	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		6.3			7.1			6.0			6.6	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	27.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	572	2	55	78	21	0	310	165	90	184	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.97			0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1770	3538		1770	3426			1766		1770	1834	
Flt Permitted	0.68	1.00		0.37	1.00			1.00		0.34	1.00	
Satd. Flow (perm)	1274	3538		695	3426			1766		636	1834	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	622	2	60	85	23	0	337	179	98	200	23
RTOR Reduction (vph)	0	1	0	0	15	0	0	39	0	0	9	0
Lane Group Flow (vph)	58	623	0	60	93	0	0	477	0	98	214	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	12.9	12.9		12.9	12.9			15.8		15.8	15.8	
Effective Green, g (s)	12.9	12.9		12.9	12.9			15.8		15.8	15.8	
Actuated g/C Ratio	0.35	0.35		0.35	0.35			0.43		0.43	0.43	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	447	1243		244	1204			760		273	789	
v/s Ratio Prot		c0.18			0.03			c0.27			0.12	
v/s Ratio Perm	0.05			0.09						0.15		
v/c Ratio	0.13	0.50		0.25	0.08			0.63		0.36	0.27	
Uniform Delay, d1	8.1	9.4		8.4	7.9			8.2		7.0	6.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.3		0.5	0.0			1.6		0.8	0.2	
Delay (s)	8.2	9.7		9.0	8.0			9.8		7.8	6.9	
Level of Service	A	A		A	A			A		A	A	
Approach Delay (s)		9.6			8.3			9.8			7.2	
Approach LOS		A			A			A			A	

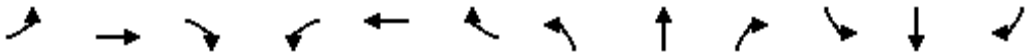
Intersection Summary			
HCM 2000 Control Delay	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	36.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	48	54	8	144	262	59	6	129	38	47	233	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	59	9	157	285	64	7	140	41	51	253	77

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	120	505	188	382
Volume Left (vph)	52	157	7	51
Volume Right (vph)	9	64	41	77
Hadj (s)	0.08	0.02	-0.09	-0.06
Departure Headway (s)	7.1	6.1	6.8	6.3
Degree Utilization, x	0.23	0.85	0.35	0.67
Capacity (veh/h)	450	577	480	528
Control Delay (s)	12.2	34.7	13.4	21.2
Approach Delay (s)	12.2	34.7	13.4	21.2
Approach LOS	B	D	B	C

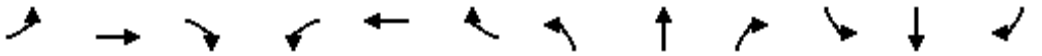
Intersection Summary				
Delay	24.8			
Level of Service	C			
Intersection Capacity Utilization	67.9%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	62	575	2	55	80	21	0	310	165	90	184	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	67	625	2	60	87	23	0	337	179	98	200	33

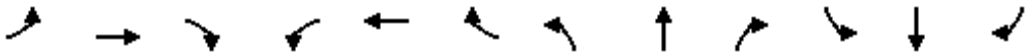
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	695	170	516	330
Volume Left (vph)	67	60	0	98
Volume Right (vph)	2	23	179	33
Hadj (s)	0.05	0.02	-0.17	0.03
Departure Headway (s)	7.7	8.9	7.4	8.1
Degree Utilization, x	1.48	0.42	1.07	0.74
Capacity (veh/h)	479	380	492	435
Control Delay (s)	247.2	18.2	86.9	31.1
Approach Delay (s)	247.2	18.2	86.9	31.1
Approach LOS	F	C	F	D

Intersection Summary				
Delay	134.4			
Level of Service	F			
Intersection Capacity Utilization	88.2%	ICU Level of Service	E	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	54	8	144	262	59	6	129	38	47	233	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3469		1770	3442		1770	1799		1770	1798	
Flt Permitted	0.54	1.00		0.71	1.00		0.56	1.00		0.64	1.00	
Satd. Flow (perm)	1011	3469		1323	3442		1046	1799		1198	1798	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	59	9	157	285	64	7	140	41	51	253	77
RTOR Reduction (vph)	0	6	0	0	36	0	0	20	0	0	21	0
Lane Group Flow (vph)	52	62	0	157	313	0	7	161	0	51	309	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.5	9.5		9.5	9.5		11.3	11.3		11.3	11.3	
Effective Green, g (s)	9.5	9.5		9.5	9.5		11.3	11.3		11.3	11.3	
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.39	0.39		0.39	0.39	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	333	1144		436	1135		410	705		470	705	
v/s Ratio Prot		0.02			0.09			0.09			c0.17	
v/s Ratio Perm	0.05			c0.12			0.01			0.04		
v/c Ratio	0.16	0.05		0.36	0.28		0.02	0.23		0.11	0.44	
Uniform Delay, d1	6.8	6.6		7.3	7.1		5.4	5.8		5.6	6.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.0		0.5	0.1		0.0	0.2		0.1	0.4	
Delay (s)	7.0	6.6		7.8	7.2		5.4	6.0		5.7	6.9	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		6.8			7.4			6.0			6.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	28.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	575	2	55	80	21	0	310	165	90	184	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.97			0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1770	3538		1770	3428			1766		1770	1823	
Flt Permitted	0.68	1.00		0.37	1.00			1.00		0.34	1.00	
Satd. Flow (perm)	1271	3538		691	3428			1766		636	1823	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	625	2	60	87	23	0	337	179	98	200	33
RTOR Reduction (vph)	0	1	0	0	15	0	0	39	0	0	12	0
Lane Group Flow (vph)	67	626	0	60	95	0	0	477	0	98	221	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	12.9	12.9		12.9	12.9			15.8		15.8	15.8	
Effective Green, g (s)	12.9	12.9		12.9	12.9			15.8		15.8	15.8	
Actuated g/C Ratio	0.35	0.35		0.35	0.35			0.43		0.43	0.43	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	446	1243		242	1204			760		273	784	
v/s Ratio Prot		c0.18			0.03			c0.27			0.12	
v/s Ratio Perm	0.05			0.09						0.15		
v/c Ratio	0.15	0.50		0.25	0.08			0.63		0.36	0.28	
Uniform Delay, d1	8.1	9.4		8.5	7.9			8.2		7.0	6.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.3		0.5	0.0			1.6		0.8	0.2	
Delay (s)	8.3	9.7		9.0	8.0			9.8		7.8	7.0	
Level of Service	A	A		A	A			A		A	A	
Approach Delay (s)		9.6			8.3			9.8			7.2	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	36.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			