Appendix E: Traffic Impact Study

Final

Traffic Impact Study
for the
September Ranch Subdivision

In Monterey County

October 5, 2004

Final

Traffic Impact Study for the September Ranch Subdivision

In Monterey County

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INTRODUCTION

Introduction

This report presents the results of TJKM's traffic impact analysis of the proposed September Ranch Subdivision, to be located on Carmel Valley Road in Monterey County. The purpose of this traffic study is to evaluate the potential traffic impacts, identify short-term and long-term roadway and circulation needs, determine potential mitigation measures, and identify any critical traffic issues that should be addressed in the on-going planning process.

Project Description

The proposed project consists of 95 single-family detached homes and 15 inclusionary (affordable) housing units on a vacant lot. The project site is located on the north side of Carmel Valley Road, across street from Brookdale Drive in Carmel Valley (see Figure 1). The project will have one access road, called September Ranch Road, which will connect and form the fourth (north) leg at the existing Carmel Valley Road/Brookdale Drive intersection. There is an existing driveway located in the vicinity of the proposed Equestrian Center; upon the completion of the project, this driveway will serve as an emergency vehicle access (EVA). Figure 2 shows the proposed project site plan.

Study Intersections

The study focused on evaluating conditions at ten study intersections that may potentially be impacted by the proposed project (see Figure 1):

1. Highway 1/Carpenter Street
2. Highway 1/Ocean Avenue/Carmel Hills Drive
3. Highway 1/Carmel Valley Road
4. Highway 1/Rio Road
5. Carmel Valley Road/Carmel Rancho Boulevard/Carmel Knolls Drive
6. Carmel Valley Road/Rancho San Carlos Road
7. Carmel Valley Road/Brookdale Drive/Project Driveway
8. Carmel Valley Road/Dorris Drive
9. Carmel Valley Road/Laureles Grade
10. Highway 68/Laureles Grade

Four analysis scenarios were evaluated as part of this study:

- *Existing Conditions* - Current traffic volumes and roadway conditions

- *Existing plus Project Conditions* - Existing turning movement volumes with the addition of the proposed project trips

- *Existing plus Project plus Approved plus Pending Conditions* - Current traffic volumes with the addition of future traffic generated by the proposed project, as well as trips generated by nearby approved and pending projects

LEGEND

- **Study Intersection**

North

Not to Scale

Monterey County
September Ranch

Vicinity Map

Figure 1

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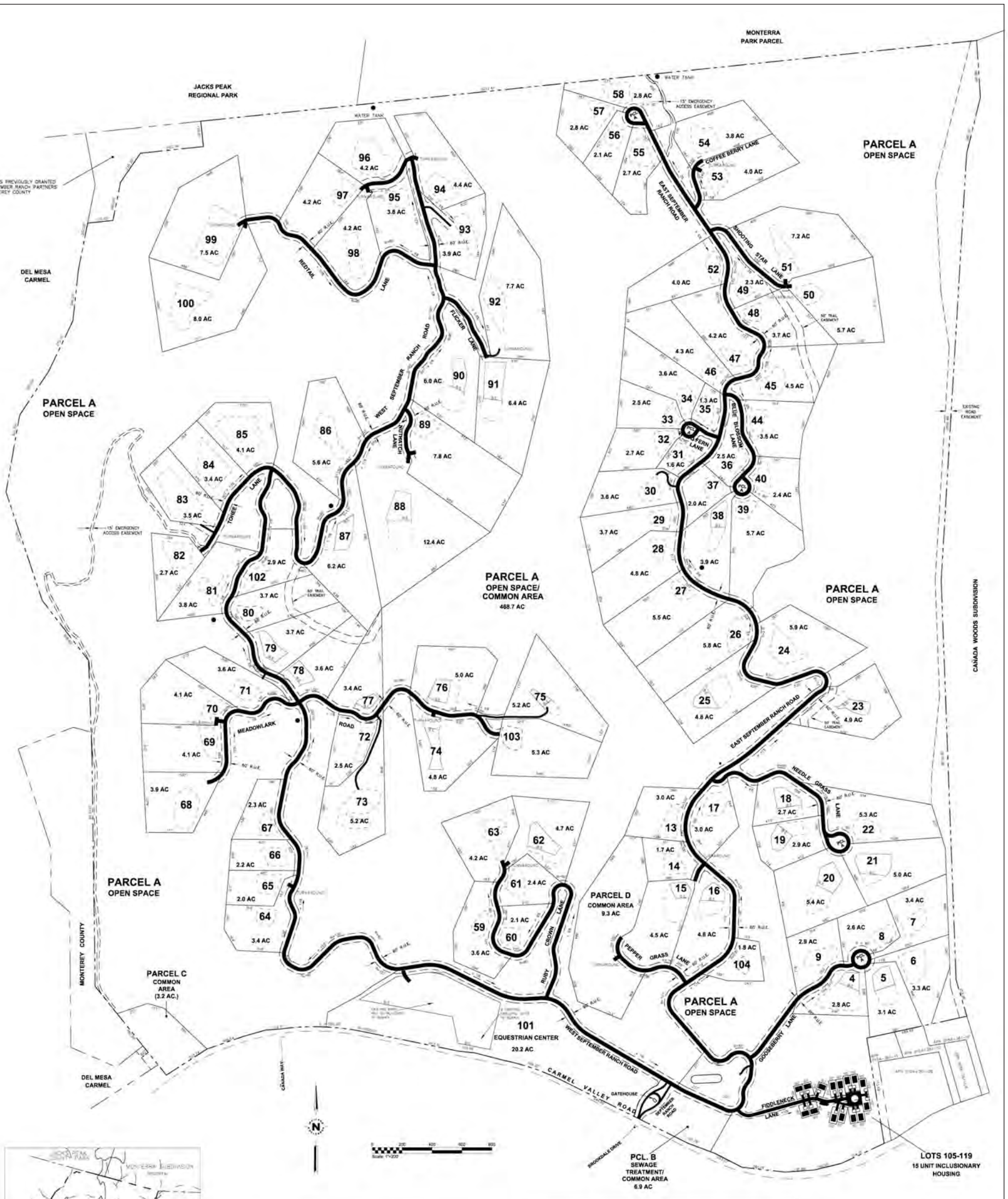

Source: Whitson Engineers

Monterey County
September Ranch

Proposed Site Plan

Figure 2

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- *Cumulative (Year 2025) Conditions* – Year 2025 buildout traffic volumes in accordance with the general plan of the Monterey County with the proposed project trips.

Summary

Under the Existing conditions, the following five study intersections currently operate at unacceptable service levels:

- Highway 1/Carpenter Street (signalized)
- Highway 1/Ocean Avenue/Carmel Hills Drive (signalized)
- Carmel Valley Road/Brookdale Drive (STOP controlled)
- Carmel Valley Road/Dorris Drive (STOP controlled)
- Carmel Valley Road/Laureles Grade (STOP controlled)

Signal modifications would mitigate the congestion problem at Highway 1/Carpenter Street. The Highway 1/Ocean Avenue/Carmel Hills Drive intersection requires widening of the eastbound and westbound approaches to include one left-turn lane, one shared left-turn/through lane, and one right-turn lane. The remaining three intersections require signalization.

Under the Existing plus Project conditions, the same five study intersections are expected to continue to operate unacceptably, and the same measures identified under Existing conditions are expected to be sufficient to mitigate operational issues at these intersections.

The intersections of Highway 1/Carpenter Street and Highway 1/Ocean Avenue/Carmel Hills Drive are expected to continue to operate unacceptably under the Existing plus Project plus Approved plus Pending and the Cumulative Year 2025 scenarios. They would require signal modifications and intersection widening as identified herein. Similarly, the intersections of Carmel Valley Road/Brookdale Drive, Carmel Valley Road/Dorris Drive, and Carmel Valley Road/Laureles Grade are expected to continue to operate unacceptably. Signalization would mitigate the operational problems at these intersections.

The operating conditions of the Highway 1/Rio Road and Highway 68/Laureles Grade intersections are expected to worsen to an unacceptable service level under Cumulative Year 2025 scenario. Recommended mitigation for these intersections is provided herein.

EXISTING CONDITIONS

Existing Roadway System

Access to the project site will be via *Carmel Valley Road*, which is a major two-lane rural highway in Carmel Valley. It extends easterly from Highway 1, providing access to various types of developments including residential, commercial, schools and golf courses. Carmel Valley Road begins at Highway One and ends at Arroyo Seco Road. The major cross streets include Highway 1, Carmel Rancho Boulevard, and Laureles Grade. The posted speed limit on Carmel Valley Road varies between 45 miles per hour (mph) and 55 mph. Class II bike lanes exist along Carmel Valley Road between Carmel Rancho Boulevard and Dorris Drive.

Highway 1 is one of the major highways in Monterey County. It runs in a north-south direction, and provides regional access to Monterey Bay and San Francisco Bay to the north, and Big Sur and San Luis Obispo to the south. Traffic conditions on Highway 1 in Carmel Valley are often congested with long delays during the peak hours.

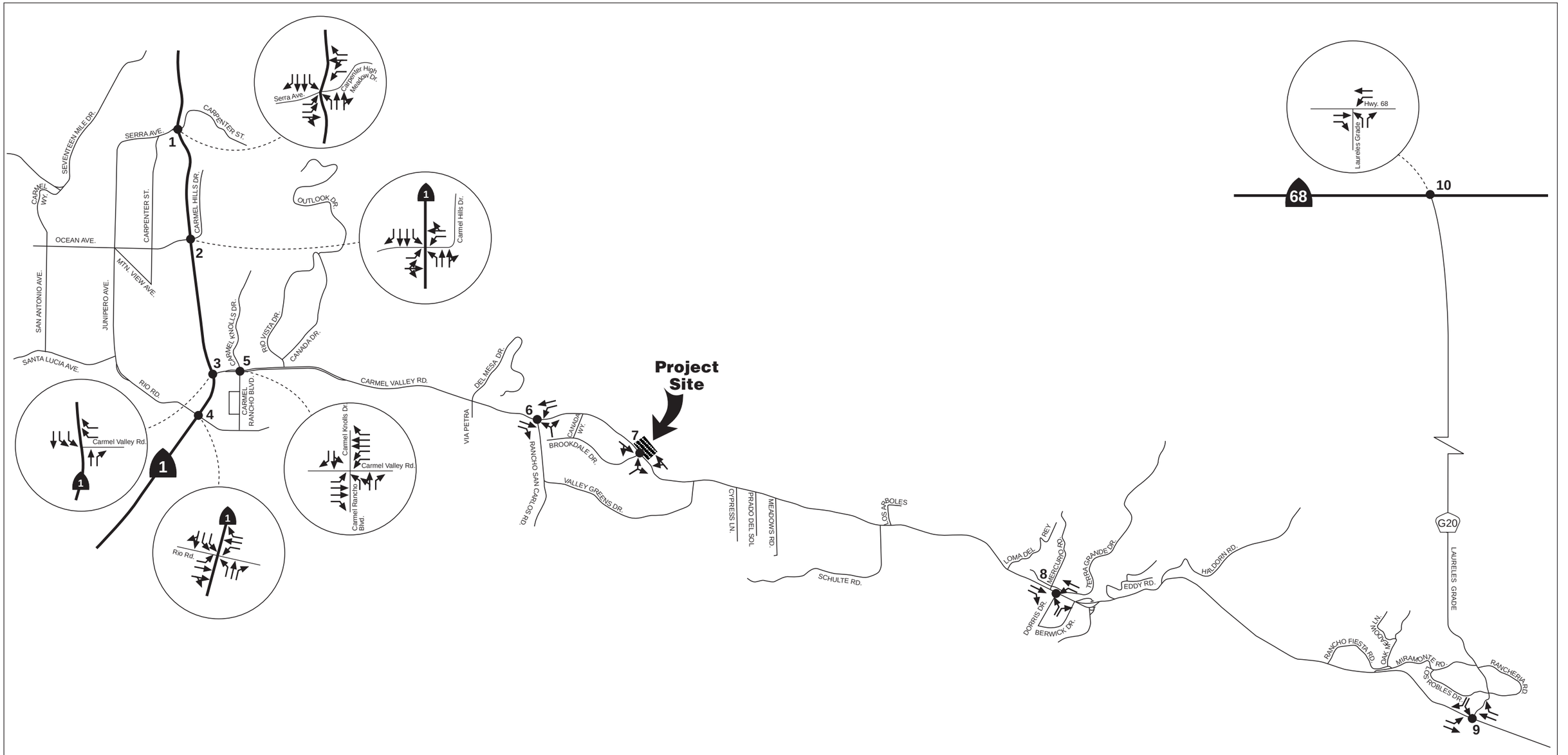
Carmel Rancho Boulevard is a four-lane north-south arterial that provides access to the major commercial/service area located south of Carmel Valley Road.

Laureles Grade is a two-lane rural highway in Monterey County. It runs in the north-south direction, and connects Carmel Valley Road to Highway 68, which runs through the City of Salinas.

The study focused on the following ten intersections:

1. Highway 1/Carpenter Street
2. Highway 1/Ocean Avenue/Carmel Hills Drive
3. Highway 1/Carmel Valley Road
4. Highway 1/Rio Road
5. Carmel Valley Road/Carmel Rancho Boulevard/Carmel Knolls Drive
6. Carmel Valley Road/Rancho San Carlos Road
7. Carmel Valley Road/Brookdale Drive/Project Driveway
8. Carmel Valley Road/Dorris Drive
9. Carmel Valley Road/Laureles Grade
10. Highway 68/Laureles Grade

Figure 3 illustrates the existing lane geometry of the ten study intersections. All four study intersections located on Highway 1 as well as the intersections of Carmel Valley Road/Carmel Rancho Boulevard, Carmel Valley Road/Rancho San Carlos Road and Highway 68/Laureles Grade are controlled by traffic signals. The remaining three intersections on Carmel Valley Road are STOP-controlled on the minor approach.



LEGEND

- **Study Intersection**

North

Not to Scale

Monterey County
September Ranch

Lane Configurations at Study Intersections

Figure 3

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Level of Service Analysis Methodology

Level of service is a qualitative measure that describes operational conditions as they relate to the traffic stream and perceptions by motorists and passengers. The level of service generally describes these conditions in terms of such factors as speed and travel time, delays, freedom to maneuver, traffic interruptions, comfort, convenience and safety. The operational levels of service (LOS) are given letter designations from "A" to "F," with "A" representing the best operating conditions (free-flow) and "F" the worst (severely congested).

Signalized Intersections

The operating condition at the signalized study intersections were evaluated using the 2000 Highway Capacity Manual Operations Method as incorporated into the standard traffic engineering software package TRAFFIX. Peak hour intersection conditions are reported as average delay per vehicle with corresponding levels of service for the intersection as a whole. LOS "A" indicates free flow conditions with little or no delay, while LOS "F" indicates jammed conditions with excessive delay and long back-ups. The methodology is described in detail in Appendix A.

Unsignalized Intersections

The operating conditions at the study intersections with the minor approaches STOP controlled were evaluated using the 2000 Highway Capacity Manual (HCM) Unsignalized Method, also contained in the standard software package TRAFFIX. Peak hour intersection conditions are reported as delay per vehicle with corresponding LOS for each of its minor movements. The methods rank level of service on an "A" through "F" scale similar to that used for signalized intersections, and also uses average delay in seconds as its measure of effectiveness. The methodologies for unsignalized intersections are also presented in Appendix A.

Impact Criteria

All four intersections on Highway 1 and the intersection of Highway 68/Laureles Grade are under Caltrans jurisdiction. The other five study intersections, all located on Carmel Valley Road, belong to Monterey County. Both Caltrans and the County consider a peak hour LOS "C" to be the limit of acceptable service for the intersections under its jurisdiction. Therefore, the study intersections that fall below LOS C are considered impacted and should be considered for mitigation.

Results of Level of Service Analysis (Existing)

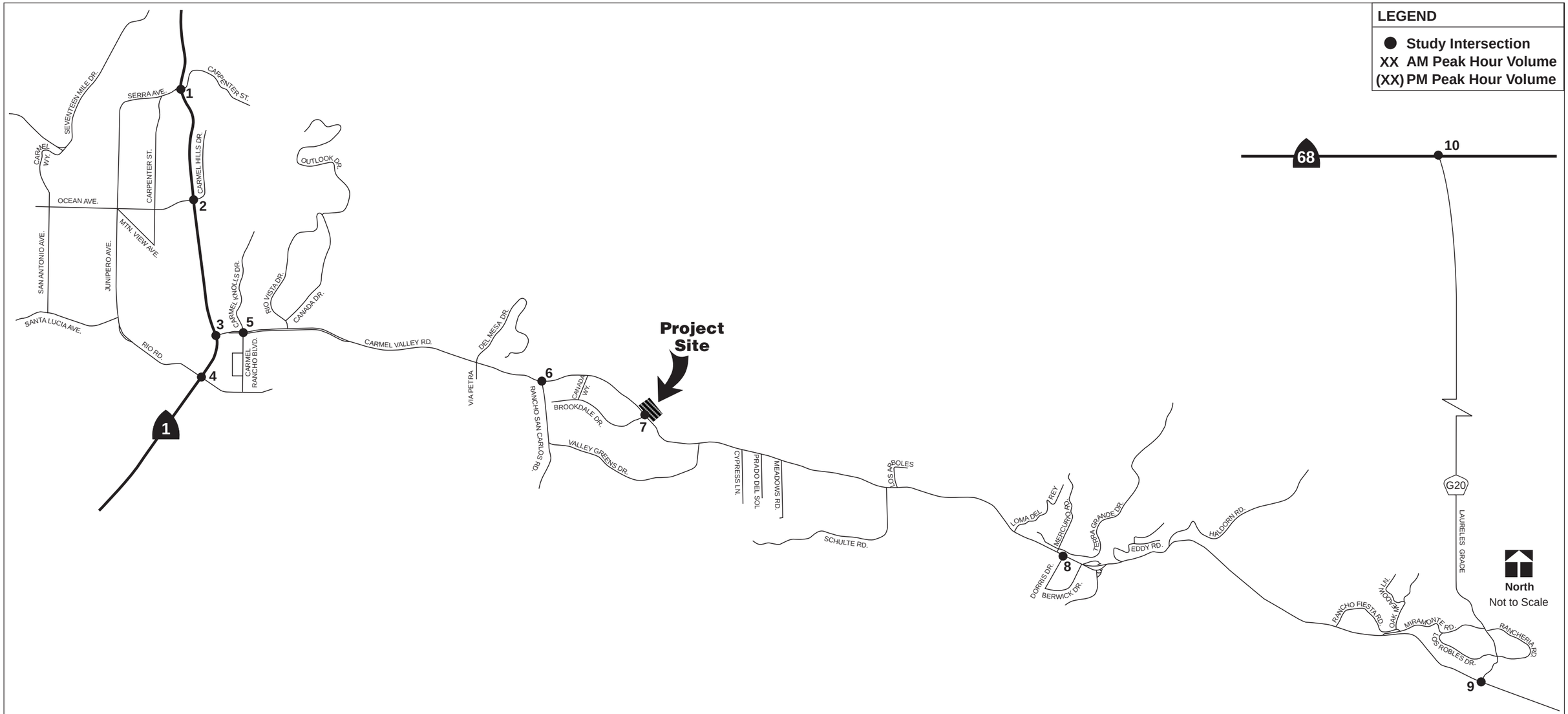
Turning movement counts at all study intersections were collected in early December of 2002, except for Highway 68/Laureles Grade, which was counted in June of 2003. The detailed turning count data are provided in Appendix B. Figure 4 illustrates the existing peak hour turning movement volumes at the study intersections. The intersection lane geometry is previously shown in Figure 3. Table I summarizes the results of the intersection analysis under Existing Conditions. The detailed LOS calculations are contained in Appendix C.

TABLE I: EXISTING LEVELS OF SERVICE

Intersection		Control	A.M. Peak		P.M. Peak	
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1	Highway 1/Carpenter St	Signal	22.9	C	**39.6**	**D**
	- Utilizing 'overlap' for SB and WB RT	Signal	16.8	B	33.4	C
2	Highway 1/Ocean Ave/Carmel Hills Dr	Signal	24.3	C	**79.5**	**E**
	- Widening EB and WB approaches	Signal	17.6	B	33.1	C
3	Highway 1/Carmel Valley Rd	Signal	10.3	B	26.6	C
4	Highway 1/Rio Rd	Signal	22.0	C	24.4	C
5	Carmel Valley Rd/Carmel Rancho Blvd	Signal	15.0	B	22.5	C
6	Carmel Valley Rd/Rancho San Carlos Rd	Signal	11.5	B	9.6	A
7	Carmel Valley Rd/Brookdale Dr	1-Way STOP	- (**57.5**)	- (**F**)	- (**43.0**)	- (**E**)
	- Installing a traffic signal	Signal	4.9	A	5.6	A
8	Carmel Valley Rd/Dorris Dr	1-Way STOP	- (**92.3**)	- (**F**)	- (**62.4**)	- (**F**)
	- Installing a traffic signal	Signal	7.8	A	8.0	A
9	Carmel Valley Rd/Laureles Grade	1-Way STOP	- (**41.4**)	- (**E**)	- (**36.4**)	- (**E**)
	- Installing a traffic signal	Signal	10.8	B	12.5	B
10	Highway 68/Laurelres Grade	Signal	20.2	C	17.4	B

Notes:
1. Analysis is performed using the software TRAFFIX based on the 2000 Highway Capacity Manual methodologies.
2. Delay and Level of Service (LOS) are for the worst approach when the intersection is controlled by one/two way stop control (*i.e.*, intersections #7,8 and 9).
3. Delay and Level of Service (LOS) are the average for all approaches when intersection is controlled by an all-way stop or traffic signals.

Under Existing conditions, Highway 1/Carmel Valley Road (Intersection 3), Highway 1/Rio Road (Int. 4), Carmel Valley Road/Carmel Rancho Boulevard (Int. 5), Carmel Valley Road/Rancho San Carlos Road (Int. 6), and Highway 68/Laurelres Grade (Int. 10) all operate acceptably. The following five intersections operate at unacceptable service levels.



Intersection #1 State Route 1/Carpenter	Intersection #2 State Route 1/Ocean	Intersection #3 State Route 1/Carmel Valley	Intersection #4 State Route 1/Rio	Intersection #5 Carmel Rancho/Carmel Vly.	Intersection #6 Rancho San Carlos/Carmel Vly.	Intersection #7 Brookdale/Carmel Vly.	Intersection #8 Dorris/Carmel Vly.	Intersection #9 Laureles Grade/Carmel Vly.	Intersection #10 State Route 68/Laureles Grade
738 (664) 1,442 (1,598) 21 (30) 83 (53) 25 (11) 40 (24) 419 (690) 10 (8) 11 (37) 51 (39) 1,424 (2,158) 18 (32)	190 (229) 1,241 (1,258) 24 (12) 36 (116) 51 (84) 113 (170) 250 (511) 50 (35) 107 (186) 153 (167) 1,025 (1,762) 111 (64)	554 (589) 894 (1,151) 906 (1,266) 361 (657) 44 (41)	104 (68) 130 (151) 335 (315) 115 (471) 284 (518) 106 (166) 177 (140) 279 (441) 37 (37) 41 (93) 111 (201) 69 (55)	40 (6) 12 (18) 24 (16) 11 (9) 766 (854) 426 (519) 23 (20) 683 (798) 221 (387) 108 (421) 7 (24) 273 (525)	939 (539) 49 (31) 632 (1,122) 93 (138) 116 (89) 9 (31)	1,002 (586) 3 (3) 631 (1,150) 3 (7) 7 (5) 5 (4)	686 (436) 56 (61) 416 (610) 139 (257) 98 (105) 30 (47)	120 (105) 104 (125) 229 (130) 562 (328) 91 (159) 324 (342)	1,160 (717) 242 (21) 606 (1,101) 137 (140) 226 (152) 205 (258)

Monterey County
September Ranch

Existing Turning Movement Volumes

Figure
4

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The intersection of Highway 1/Carpenter Street (Int. 1) currently operates at LOS D during the p.m. peak hour. The recommended mitigation for this intersection includes the utilization of the 'overlap phasing' to have southbound right-turns on Highway 1 go at the same time as the eastbound Carpenter Street left-turns, and the utilization of 'overlap phasing' to have westbound right-turns on Carpenter Street go at the same time as the southbound Highway 1 left-turns. With this mitigation, the intersection operating condition is expected to improve to an acceptable level.

The intersection of Highway 1/Ocean Avenue/Carmel Hills Drive (Int. 2) currently operates unacceptably at LOS E during the p.m. peak hour. Widening the eastbound Ocean Avenue and westbound approaches to have one exclusive left-turn lane (Exists EB & WB), one shared left-turn/through lane, and one exclusive right-turn lane is expected to improve the intersection operating condition to an acceptable level. Note that the peak traffic conditions at this intersection are related to school traffic, and therefore occur between 2:15 and 3:30 p.m.

The Brookdale approach Drive (STOP controlled) to Carmel Valley Road (Int. 7) currently operates unacceptably during both the a.m. and the p.m. peak hours. Installation of a traffic signal would mitigate the operational LOS issues at this location. However, this intersection does not meet the Caltrans' peak hour signal warrant because of the extremely low volumes on Brookdale Drive (see Appendix G). As part of the Carmel Valley Road Improvements, the County plans to install left-turn channelization on the westbound approach at this intersection. Given the small amount of Westbound Left-turns, this improvement would do little to improve the LOS.

The Northbound Dorris Drive approach to Carmel Valley Road (Int. 8) currently operates at LOS "F" during both a.m. and the p.m. peak hours. This intersection is expected to operate acceptably with signalization. Existing traffic volumes at this intersection currently meet the Caltrans' peak hour signal warrant.

The Southbound Laureles Grade approach to Carmel Valley Road (Int. 9) currently operates unacceptably during both a.m. and the p.m. peak hours. Installing a traffic signal would improve the operating condition to an acceptable level "B" during both peak hours. This intersection also meets the Caltrans' peak hour signal warrant under existing traffic conditions. The signal warrant analysis is presented in Appendix G.

The County of Monterey, at the request of the Transportation Agency for Monterey County (TAMC) and Caltrans, currently collects two traffic impact fees for Highway 1 improvements. One fee is for short-term improvements, based on the number of PM peak trips using Highway 1 just north of Carmel Valley Road. The other fee is for long-term capacity improvement on Highway 1, and is based on the number of additional project-related daily trips on Highway 1.

The Carmel Valley Master Plan (CVMP) traffic impacts fees are different, and do not relate to Highway 1. The CVMP fees fund improvements on County roads, according to the adopted list of improvements.

EXISTING PLUS PROPOSED PROJECT

This Scenario is similar to the Existing Conditions, but with the addition of traffic from the proposed September Ranch Subdivision.

Project Trip Generation

The proposed development consists of a total of 110 new single-family (SF) detached homes. The project trip generation was estimated based on trip rates provided in *Trip Generation*, 6th Edition, published by the Institute of Transportation Engineers (ITE) in 1997. The proposed project is expected to generate approximately 1,053 daily trips, with 83 trips occurring during the a.m. peak hour and 111 trips during the p.m. peak hour. The trip generation estimates are shown in Table II.

TABLE II: PROJECT TRIP GENERATION

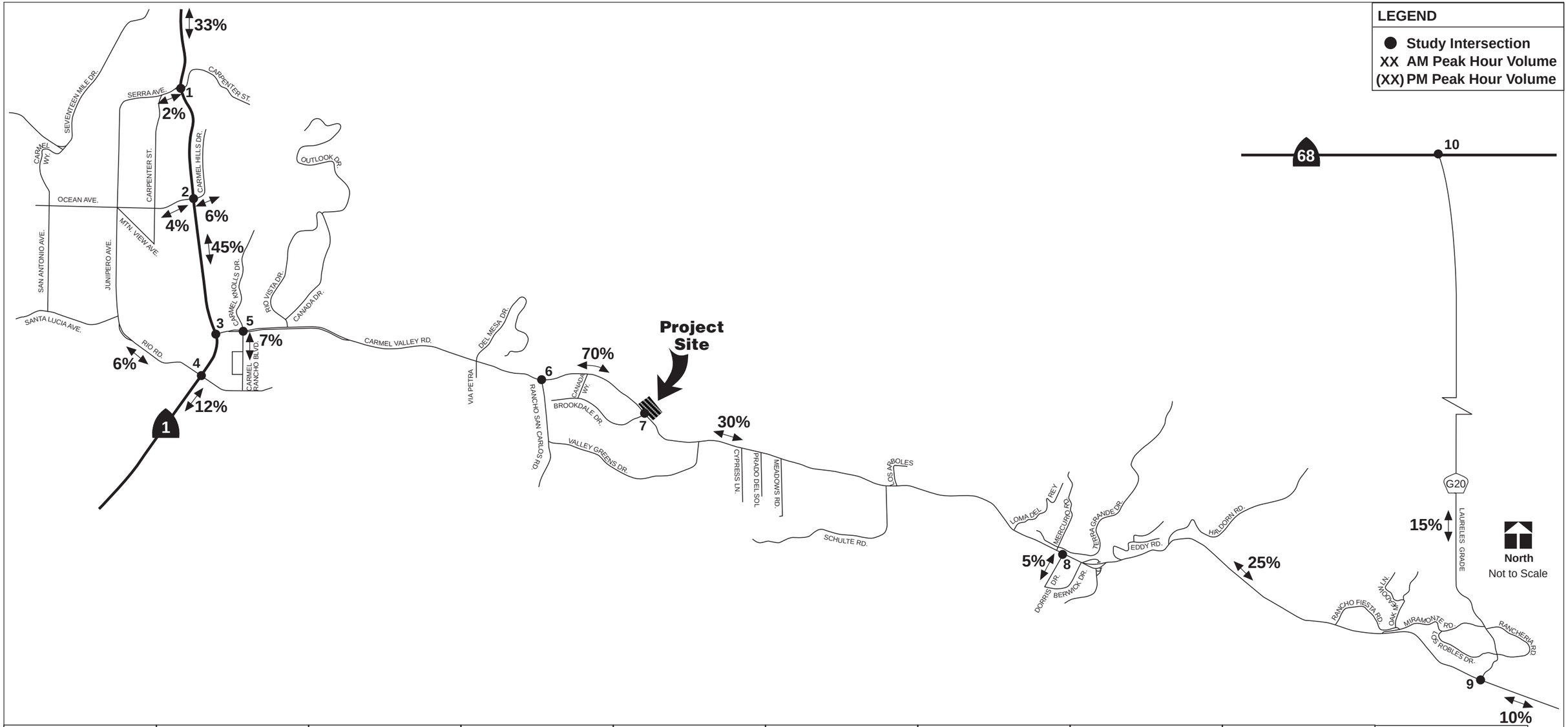
Use	Size	Daily		A.M. Peak Hour					P.M. Peak Hour				
		Rate	Trips	Rate	%In:Out	In	Out	Total	Rate	%In:Out	In	Out	Total
SF Homes	110 Units	9.57	1,053	0.75	25:75	21	62	83	1.01	64:36	71	40	111

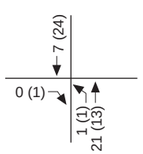
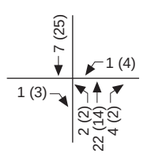
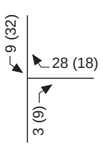
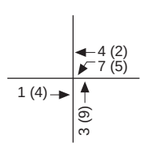
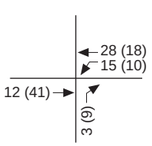
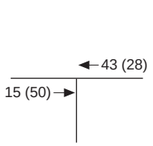
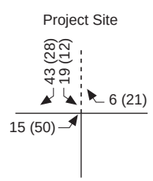
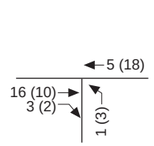
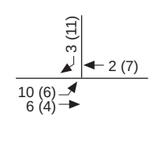
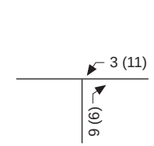
Source: ITE *Trip Generation Manual*, 6th Edition.

Project Trip Distribution

The trip distribution assumptions for the September Ranch Subdivision were developed based on existing travel patterns, knowledge of the study area and the input from County staff. Traffic is expected to travel to and from the site according to the distribution assumptions described below. Distribution and assignment of project-generated trips are also shown on Figure 5.

- 33% will travel to/from the north via Highway 1
- 15% will travel to/from the north via Laureles Grade
- 12% will travel to/from the south via Highway 1
- 10% will travel to/from the east via Carmel Valley Road
- 7% will travel to/from the service/commercial development on Carmel Rancho Boulevard
- 6% will travel to/from Carmel High School
- 6% will travel to/from the west via Rio Road
- 5% will travel to/from the service/commercial development on Dorris Drive
- 4% will travel to/from the west via Ocean Avenue
- 2% will travel to/from the west via Carpenter Street



Intersection #1 State Route 1/Carpenter	Intersection #2 State Route 1/Ocean	Intersection #3 State Route 1/Carmel Valley	Intersection #4 State Route 1/Rio	Intersection #5 Carmel Rancho/Carmel Vly.	Intersection #6 Rancho San Carlos/Carmel Vly.	Intersection #7 Brookdale/Carmel Vly.	Intersection #8 Dorris/Carmel Vly.	Intersection #9 Laureles Grade/Carmel Vly.	Intersection #10 State Route 68/Laureles Grade
									

Monterey County
September Ranch

Proposed Project Trip Distribution and Assignment

Figure
5

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Results of Level of Service Analysis (Existing + Project)

Project traffic was added to the Existing volumes to obtain the expected turning movement volumes for the Existing plus Project scenario. See Figure 6 for the forecasted Existing plus Project peak hour turning volumes. The LOS analysis results are summarized in Table III. Detailed calculation sheets are contained in Appendix D.

Under the Existing plus Project scenario, the same five intersections as Existing conditions are expected to operate at below standard LOS. It should be noted that the operating conditions at these intersections are expected to improve to an acceptable level with the same mitigation identified under the Existing conditions.

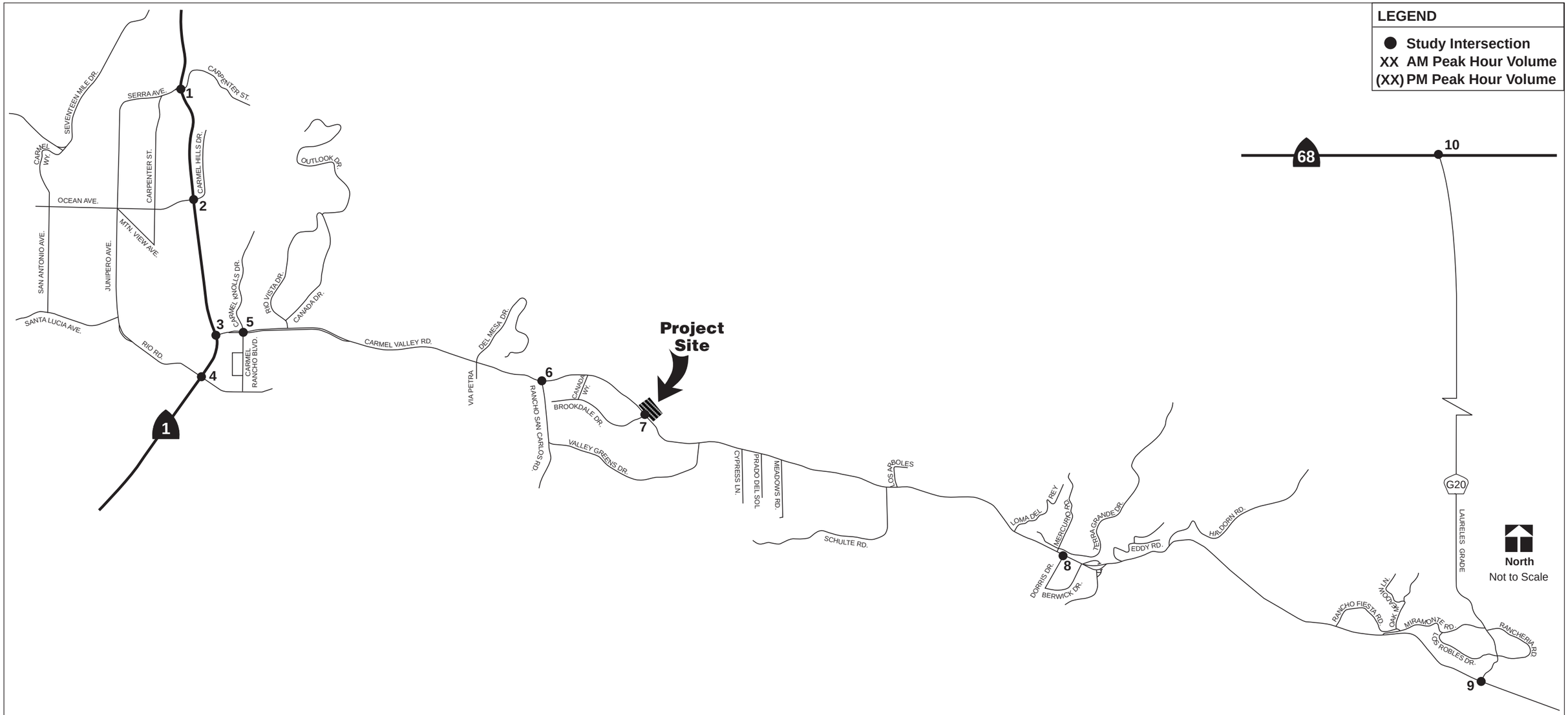
TABLE III: EXISTING + PROJECT LEVELS OF SERVICE

Intersection		Control	*A.M. Peak*		*P.M. Peak*	
			Delay (sec/veh)	*LOS*	*Delay (sec/veh)*	*LOS*
1	Highway 1/Carpenter St	Signal	23.0	C	**40.2**	**D**
	- Utilizing 'overlap' for SB and WB RT	Signal	17.0	B	34.0	C
2	Highway 1/Ocean Ave/Carmel Hills Dr	Signal	24.6	C	**81.9**	**F**
	- Widening EB and WB approaches	Signal	17.7	B	34.0	C
3	Highway 1/Carmel Valley Rd	Signal	10.5	B	26.9	C
4	Highway 1/Rio Rd	Signal	22.1	C	24.7	C
5	Carmel Valley Rd/Carmel Rancho Blvd	Signal	15.0	B	23.0	C
6	Carmel Valley Rd/Rancho San Carlos Rd	Signal	12.7	B	10.6	B
7	Carmel Valley Rd/Brookdale Dr	1-Way STOP	- (**120+**)	- (**F**)	- (**80.8**)	- (**F**)
	- Installing a traffic signal	Signal	12.7	B	12.1	B
8	Carmel Valley Rd/Dorris Dr	1-Way STOP	- (**103.7**)	- (**F**)	- (**74.2**)	- (**F**)
	- Installing a traffic signal	Signal	7.9	A	8.1	A
9	Carmel Valley Rd/Laureles Grade	1-Way STOP	- (**45.8**)	- (**E**)	- (**38.4**)	- (**E**)
	- Installing a traffic signal	Signal	11.1	B	12.7	B
10	Highway 68/Laurelres Grade	Signal	20.4	C	18.6	B

The intersection of Highway 1/Carpenter Street (Int. 1) is expected to operate unacceptably at LOS D during the p.m. peak hour. The recommended mitigation for this intersection includes the utilization of 'overlap phasing' to have westbound right-turns on Carpenter Street go at the same time as the southbound Highway 1 left-turns, and to have southbound right-turns on Highway 1 go simultaneously with the eastbound Carpenter Street left-turns (same mitigation as for Existing conditions).

LEGEND

- ● Study Intersection
- XX AM Peak Hour Volume
- (XX) PM Peak Hour Volume



Intersection #1 State Route 1/Carpenter	Intersection #2 State Route 1/Ocean	Intersection #3 State Route 1/Carmel Valley	Intersection #4 State Route 1/Rio	Intersection #5 Carmel Rancho/Carmel Vly.	Intersection #6 Rancho San Carlos/Carmel Vly.	Intersection #7 Brookdale/Carmel Vly.	Intersection #8 Dorris/Carmel Vly.	Intersection #9 Laureles Grade/Carmel Vly.	Intersection #10 State Route 68/Laureles Grade
738 (664) 1,449 (1,622) 21 (30) 83 (53) 25 (11) 40 (24) 419 (690) 10 (8) 11 (38) 52 (40) 1,445 (2,171) 18 (32)	190 (229) 1,248 (1,283) 24 (12) 36 (116) 51 (84) 114 (174) 250 (511) 50 (35) 108 (189) 155 (169) 1,047 (1,776) 115 (66)	554 (589) 903 (1,183) 934 (1,284) 361 (657) 47 (50)	104 (68) 130 (151) 335 (315) 115 (471) 288 (520) 113 (171) 177 (140) 280 (445) 37 (37) 41 (93) 114 (210) 69 (55)	40 (6) 12 (18) 24 (16) 11 (9) 794 (872) 441 (529) 23 (20) 695 (839) 221 (387) 108 (421) 7 (24) 276 (534)	982 (567) 49 (31) 647 (1,172) 93 (138) 116 (89) 9 (31)	43 (28) 19 (12) 6 (21) 1,002 (586) 3 (3) 15 (50) 631 (1,150) 3 (7) 7 (5) 5 (4)	691 (454) 56 (61) 432 (620) 142 (259) 99 (108) 30 (47)	123 (116) 104 (125) 229 (130) 564 (335) 101 (165) 330 (346)	1,160 (717) 245 (32) 606 (1,101) 137 (140) 226 (152) 214 (264)

Monterey County
September Ranch

Existing + Proposed Project Turning Movement Volumes

Figure
6

TJKM

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The intersection of Highway 1/Ocean Avenue/Carmel Hills Drive (Int. 2) is expected to continue to operate unacceptably. Widening the eastbound and westbound approaches to have one exclusive left-turn lane, one shared left-turn/through lane, and one exclusive right-turn lane (same mitigation as for Existing scenario) is expected to improve the intersection operating condition to an acceptable level. The project applicant should pay for its fair share of traffic impact fee to TAMC to help improve these two intersections(Intersection 1 and 2) along Highway 1.

The Carmel Valley Road/Brookdale Drive intersection (Int. 7) will become a four-legged intersection under Existing plus Project conditions. Its minor approaches are expected to operate unacceptably during both peak hours. With installation of a traffic signal, the intersection is expected to operate acceptably. However, the intersection is not expected to meet All-way Stop control nor signal warrants under this scenario. See Appendix G for the signal warrant analysis. As previously mentioned, the County plans to install left-turn channelization on the westbound approach at this intersection; however, the LOS analysis indicates that the intersection minor approach is still expected to operate unacceptably with left-turn channelization alone.

The minor approaches on Carmel Valley Road/Dorris Drive (Int. 8) and Carmel Valley Road/Laureles Grade (Int. 9) are expected to continue to operate unacceptably during both a.m. and the p.m. peak hours. Installing traffic signals (same mitigation as for Existing conditions) would mitigate the operational LOS issues at these locations. Both intersections are expected to meet the Caltran's peak hour signal warrant. The project applicant should pay its fair share of CVTIF to help improve (i.e., signalize) these two intersections along Carmel Valley Road.

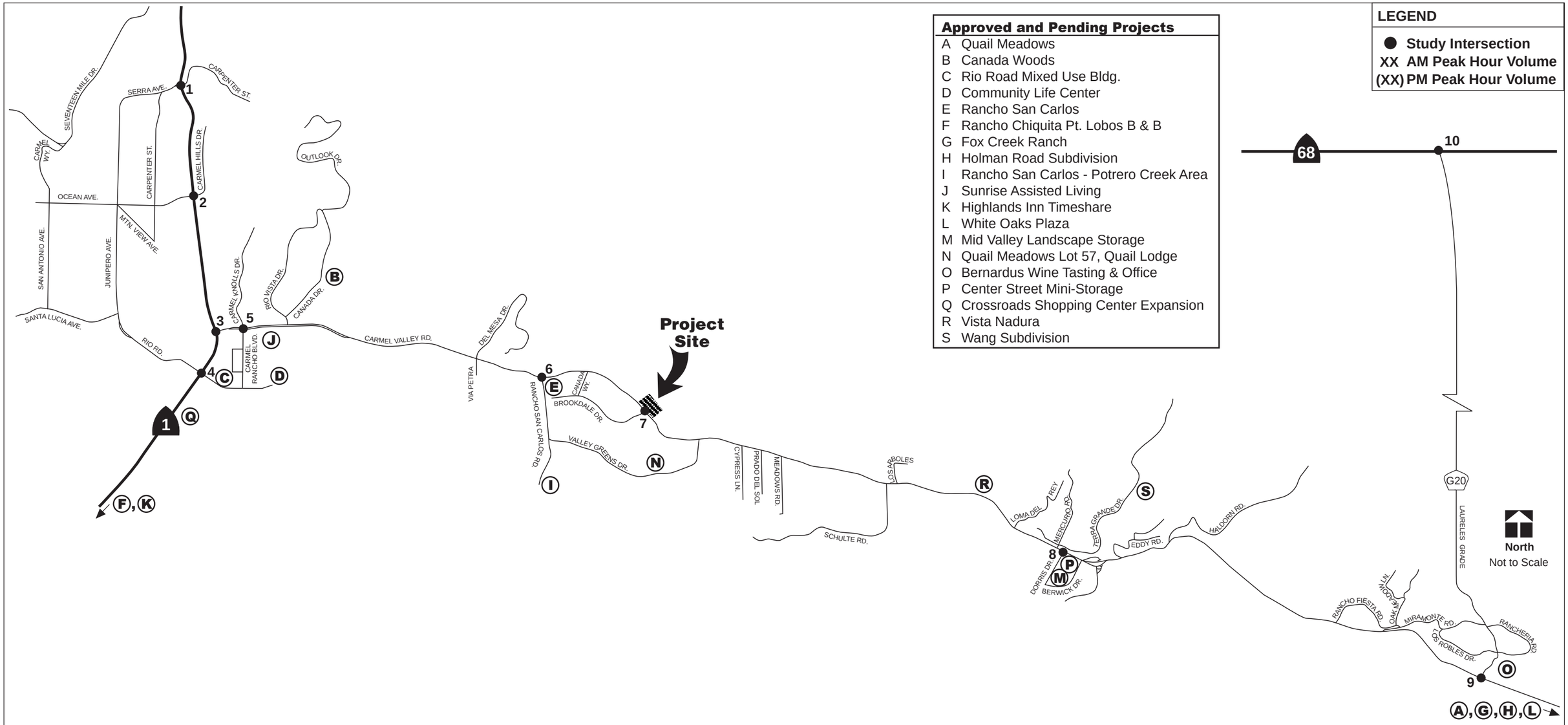
EXISTING+APPROVED+PENDING+PROPOSED PROJECT CONDITIONS

Methodology

The peak hour turning movement volumes for this scenario were developed based on information of approved and pending/planned projects in the vicinity of the project site. Based on consultation with County staff, there are 19 approved and pending projects as listed in Table IV. The locations of these projects are shown on Figure 7.

Trip generation rates were obtained from the previous completed traffic study of corresponding projects. These projects are expected to generate a total of 8,727 daily trips, 537 a.m. peak hour trips, and 905 p.m. peak hour trips in the study area. The trip generation estimations of the projects are presented in Table IV.

The trips generated by the approved and pending projects were distributed and assigned to the street network based on existing traffic patterns, previous traffic studies and from discussions with County staff. Table V summarizes the combined trip distributions of approved and pending projects under this scenario.



Intersection #1 State Route 1/Carpenter	Intersection #2 State Route 1/Ocean	Intersection #3 State Route 1/Carmel Valley	Intersection #4 State Route 1/Rio	Intersection #5 Carmel Rancho/Carmel Vly.	Intersection #6 Rancho San Carlos/Carmel Vly.	Intersection #7 Brookdale/Carmel Vly.	Intersection #8 Dorris/Carmel Vly.	Intersection #9 Laureles Grade/Carmel Vly.	Intersection #10 State Route 68/Laureles Grade
65 (146) 3 (7) 5 (5) 91 (109)	68 (153) 3 (7) 9 (19) 11 (14) 96 (114) 5 (5)	1 (1) 79 (178) 111 (133) 1 (1) 12 (34)	1 (1) 27 (38) 23 (48) 38 (60) 14 (35) 25 (39)	95 (76) 108 (115) 54 (154) 37 (59) 16 (56) 35 (111)	59 (96) 18 (61) 42 (99) 42 (143) 124 (80) 53 (34)	77 (157) 95 (133)	59 (129) 1 (2) 77 (104) 18 (20) 12 (28) 1 (2)	43 (94) 6 (14) 5 (11) 17 (38) 56 (72) 22 (36)	50 (107) 62 (83)

Monterey County
September Ranch

Approved + Pending Projects Trip Generation and Assignment

Figure
7

TJKM

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Table IV: Trip Generation of Approved/Pending Projects

APPROVED AND PENDING PROJECTS	SIZE	Daily Trip Rate	Daily Trips	AM PEAK Trip Rate	AM PEAK In:Out Split	AM PEAK In Trips	AM PEAK Out Trips	AM PEAK Total Trips	PM PEAK Trip Rate	PM PEAK In:Out Split	PM PEAK In Trips	PM PEAK Out Trips	PM PEAK Total Trips
A. Quail Meadows[2]	mixed use		463			10	4	14			16	14	30
B. Canada Woods													
- Single Family Units	44 sfu	9.57	421	0.75	25:75	8	25	33	1.01	64:36	28	16	44
- Home Improvement Center	18 Ksf	35.05	631	1.48	54:46	15	12	27	2.87	47:53	24	28	52
C. Rio Road Mixed Use Building[3]													
- Office	12 Ksf	23.5	282	13%	89:11	33	4	37	14%	17:83	7	32	39
- Senior Condos	28 d.u.	5.9	165	7%	17:83	2	10	12	9%	66:34	10	5	15
D. Community Life Center[4]	30 Ksf		677			32	0	32			60	25	85
E. Rancho San Carlos[5]	286 sfu	9.57	2,737	0.75	25:75	54	161	215	1.01	64:36	185	104	289
F. Rancho Chiquita Pt. Lobos Bed&Breakfast[6]	10 rooms	10.19	102			3	4	7			3	3	6
G. Fox Creek Ranch	10 sfu	9.57	96	0.75	25:75	2	6	8	1.01	64:36	6	4	10
H. Holman Road Subdivision	3 sfu	9.57	29	0.75	25:75	0	2	2	1.01	64:36	2	1	3
I. Rancho San Carlos - Potrero Creek Area[7]	29 sfu	9.57	278	0.75	25:75	6	16	22	1.01	64:36	19	10	29
J. Sunrise Assisted Living[8]	64 units	1.73	112			6	7	13			8	6	14
K. Highlands Inn Timeshare[9]	conversion					0	0	0			0	0	0
L. White Oaks Plaza[10]	5,667 sq.ft.		272			6	2	8			11	11	22
M. Mid Valley Landscape Storage[11]			14			2	0	2			0	2	2
N. Quail Meadow Lot 57, Quail Lodge[12]	mixed use		0			0	0	0			0	0	0
O. Bernardus Wine Tasting & Office[13]			NA			NA	NA	NA			4	1	5
P. Center Street Mini-Storage[14]	267 units	0.28	75	0.02	50:50	3	2	5	0.03	50:50	4	4	8
Q. Crossroads Shopping Center Expansion			2,163			50	33	83			110	120	230
R. Vista Nadura	18 sfu	9.57	172	0.75	25:75	4	10	14	1.01	64:36	12	6	18
S. Wang Subdivision[15]	4 sfu	9.57	38	0.75	25:75	1	2	3	1.01	64:36	3	1	4
PROJECT TOTAL			8,727			237	300	537			512	393	905

Notes:

1. Trip Generation from *Quail Meadows Study*, Higgins Associates, 2001
2. Rio Road Mixed Use Trip Generation obtained from *Rio Road Mixed Use Development Traffic Analysis Report*, Higgins Associates, May 13, 1996
3. Community Life Center trip generation obtained from *Community Life Center Traffic Study Update*, Higgins Associates, August 31, 1998
4. Rancho San Carlos is under construction.
5. Rancho Chiquita Pt. Lobos B&B trip generation obtained from *Rancho Chiquita Pt. Lobos Bed & Breakfast Traffic Study*, Higgins Associates, November 25, 1997.
6. Trip generation is based on Single Family Use from *Trip Generation*, 6th Edition, Institute of Transportation Engineers, 1997.
7. Sunrise Assisted Living trip generation is based on *Sunrise Assisted Living Project Traffic and Parking Evaluation*, Higgins Associates, October 10, 2002. With mitigation measures, no peak hour trip will be generated from this project.
8. The conversion of Highlands Hotels to Highlands Inn Timeshare will not generate any new trips, based on Higgins Associates study in 1997.
9. From *Traffic Impact Analysis for White Oaks Plaza Expansion*, Higgins Associates, May 2, 2001.
10. Based on *Mid Valley Landscape Storage Traffic Analysis*, Higgins Associates, May 15, 2001.
11. From *Traffic Analysis for Quail Meadows Lot 57, Quail Lodge Expansion Modification*, Higgins Associates, May 15, 2001.
12. From *Bernardus Wine Tasting & Office Relocation Traffic Analysis Report*, Higgins Associates, September 21, 1999.
13. Trip Generation is based on Mini Warehouse Use (code 151) from *Trip Generation*, 6th Edition, Institute of Transportation Engineers, 1997.
14. From *Traffic Analysis for Wang Minor Subdivision*, Higgins Associates, November 2002

TABLE V: COMBINED TRIP DISTRIBUTIONS OF APPROVED/PENDING PROJECTS

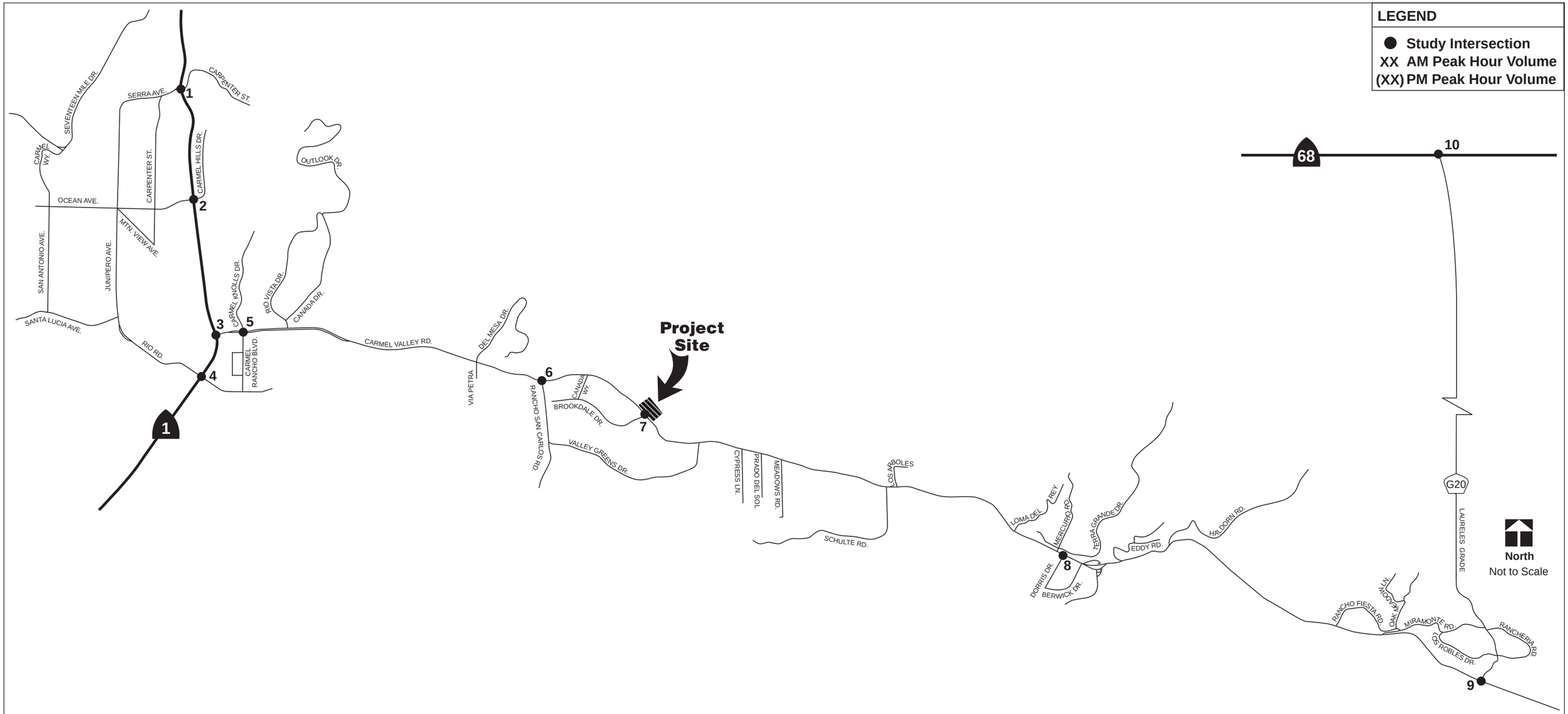
LOCATION	% of Assigned Trips in the AM Peak Hour	% of Assigned Trips in the PM Peak Hour
Highway 1 to the north towards Monterey	30%	29%
Carpenter Street west of Hwy 1	2%	1%
Ocean Street west of Hwy 1	4%	4%
Carmel High School	2%	1%
Rio Road west of Hwy 1	9%	9%
Highway 1 to the south towards Big Sur	14%	15%
Service and Commercial Developments in the vicinity of Carmel Rancho Boulevard	9%	9%
Service and Commercial developments in the vicinity of Dorris Drive Developments	5%	5%
Carmel Valley Road east of Laurels Grade	6%	7%
Laureles Grade to the north towards Salinas	19%	20%
TOTAL	100%	100%

Results of Level of Service Analysis (Existing + Project + Approved + Pending)

The approved and pending traffic (Figure 7) was added to the existing plus project turning volumes (Figure 6) to obtain the expected volumes for the scenario (shown on Figure 8). The intersection LOS analysis results are presented in Table VI. The detailed calculation sheets depicting cumulative traffic operations are contained in Appendix E.

TABLE VI: EXISTING + PROPOSED PROJECT + APPROVED + PENDING LEVELS OF SERVICE

Intersection		*Control*	*A.M. Peak*		*P.M. Peak*	
			Delay (sec/veh)	***LOS***	***Delay (sec/veh)***	***LOS***
1	Highway 1/Carpenter St	Signal	23.6	C	**45.4**	**D**
	- Utilizing 'overlap' for SB and WB RT, Modifying WB to have 1LT, 1TH, 1RT, Utilizing 'protected + permitted' on EB LT	Signal	16.3	B	32.1	C
2	Highway 1/Ocean Ave/Carmel Hills Dr	Signal	27.1	C	**98.3**	**F**
	- widening EB and WB approaches, installing a NB TH Lane	Signal	17.9	B	33.5	C
3	Highway 1/Carmel Valley Rd	Signal	10.9	B	31.0	C
4	Highway 1/Rio Rd	Signal	22.9	C	26.3	C
5	Carmel Valley Rd/Carmel Rancho Blvd	Signal	15.3	B	32.2	C
6	Carmel Valley Rd/Rancho San Carlos Rd	Signal	28.9	C	26.9	C
7	Carmel Valley Rd/Brookdale Dr	1-Way STOP	- (**120+**)	- (**F**)	- (**120+**)	- (**F**)
	- Installing a traffic signal	Signal	14.6	B	13.6	B
8	Carmel Valley Rd/Dorris Dr	1-Way STOP	- (**120+**)	- (**F**)	- (**120+**)	- (**F**)
	- Installing a traffic signal	Signal	8.4	A	9.4	A
9	Carmel Valley Rd/Laureles Grade	1-Way STOP	- (**97.0**)	- (**F**)	- (**100.4**)	- (**F**)
	- Installing a traffic signal	Signal	14.3	B	15.8	B
10	Highway 68/Laureles Grade	Signal	24.4	C	**35.5**	**D**
	- Utilizing 'overlap' for NB RT	Signal	18.1	B	23.9	C



Intersection #1 State Route 1/Carpenter	Intersection #2 State Route 1/Ocean	Intersection #3 State Route 1/Carmel Valley	Intersection #4 State Route 1/Rio	Intersection #5 Carmel Rancho/Carmel Vly.	Intersection #6 Rancho San Carlos/Carmel Vly.	Intersection #7 Brookdale/Carmel Vly.	Intersection #8 Dorris/Carmel Vly.	Intersection #9 Laureles Grade/Carmel Vly.	Intersection #10 State Route 68/Laureles Grade
738 (664) 1,514 (1,767) 21 (30) → 83 (53) 25 (11) 40 (24) 419 (690) 10 (8) 15 (46) → 57 (45) 1,535 (2,280) 18 (32) ← 1,535 (2,280) 18 (32)	190 (229) 1,317 (1,436) 24 (12) → 36 (116) 51 (84) 117 (182) 250 (511) 50 (35) 116 (208) → 167 (183) 1,142 (1,890) 120 (71) ← 1,142 (1,890) 120 (71)	555 (590) 982 (1,361) → 1,045 (1,417) 362 (658) 59 (84)	104 (68) 131 (152) 335 (315) → 115 (471) 315 (558) 151 (231) 177 (140) 303 (493) 37 (37) → 41 (93) 127 (245) 94 (94)	40 (6) 12 (18) 24 (16) → 11 (9) 889 (948) 549 (644) 23 (20) 749 (993) 258 (446) → 124 (477) 7 (24) 311 (645)	1,042 (663) 67 (92) → 688 (1,270) 135 (281) → 240 (169) 62 (65)	43 (28) 19 (12) → 6 (21) 1,079 (743) 3 (3) 15 (50) 726 (1,283) 3 (7) → 7 (5) 5 (4)	750 (583) 57 (63) → 509 (724) 160 (279) → 111 (136) 31 (49)	166 (210) 110 (139) → 234 (141) 581 (373) 157 (237) 353 (382) →	1,160 (717) 295 (139) → 606 (1,101) 137 (140) → 226 (152) 276 (347)

Monterey County
September Ranch

Existing + Project + Approved + Pending Turning Movement Volumes

Figure 8

TJKM

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Under the Existing plus Proposed Project plus Approved plus Pending traffic conditions, four study intersections are expected to continue to operate acceptably. The following six study intersections (Same five intersections as Existing Conditions with the addition of Highway 68/Laureles Grade) are expected to operate unacceptably during the peak hours.

The intersection of Highway 1/Carpenter Street (Int. 1) is expected to continue to operate unacceptably during the p.m. peak hour. The recommended mitigation for this intersection includes 1) the utilization of the 'overlap phasing' to have westbound right-turns on Carpenter Street go at the same time as the southbound Highway 1 left-turns, 2) the utilization of 'overlap phasing' to have southbound right-turns on Highway 1 go simultaneously with the eastbound Carpenter Street left-turns, 3) modification of the westbound Carpenter Street approach convert the existing through/left-lane to only a through lane, 4) utilization of 'protected' phasing for the left-turn movement on the westbound Carpenter Street approach, and 5) utilization of 'protected+permitted' phasing for the left-turn movement on the eastbound Carpenter Street approach. With this mitigation, the intersection is expected to operate acceptably.

The intersection of Highway 1/Ocean Avenue/Carmel Hills Drive (Int. 2) is expected to continue to operate unacceptably. Widening the eastbound and westbound approaches to have one exclusive left-turn lane, one shared left-turn/through lane, and one exclusive right-turn lane, in conjunction with adding an exclusive through lane on northbound Highway 1 approach are expected to improve the intersection operating condition to an acceptable level. However, the California Coastal Act Section 30254 prohibits the widening of Highway 1 in the vicinity of the project area.

The Carmel Valley Road/Brookdale Drive intersection (Int. 7) is expected to operate unacceptably during both peak hours. With installation of a traffic signal (same mitigation as for Existing plus Project condition), the intersection is expected to operate acceptably. However, the intersection is not expected to meet the all-way STOP control nor signal warrants under this scenario. See Appendix G for the signal warrant analysis. As previously mentioned, the County has planned to install left-turn channelization on the westbound approach at this intersection; however, the LOS analysis indicates that the intersection minor approach is still expected to operate unacceptably with left-turn channelization alone.

The minor approach of Carmel Valley Road/Dorris Drive (Int. 8) and Carmel Valley Road/Laureles Grade (Int. 9) is expected to continue to operate unacceptably during both a.m. and the p.m. peak hours. Installing traffic signals (same mitigation as for Existing conditions) would mitigate the operational LOS issues at these locations. Both intersections are expected to meet the Caltran's peak hour signal warrant.

The intersection of Highway 68/Laureles Grade (Int. 10) is expected to operate unacceptably at LOS D during the p.m. peak hour. Utilizing 'overlap' phasing to have northbound right-turns on Laureles Grade go simultaneously with the westbound Highway 68 left-turns, is expected to mitigate the congestion problems at this location. However, the mitigation for Highway 68/Laureles Grade should be consistent with the operational improvements provided in the Highway 68 Action Plan for the intersection. Also, the traffic impact fee for funding the improvements in the Highway 68 Corridor was established to be $9,750 per lot or PM peak trip (in 1995 dollars-Pasadera).

CUMULATIVE CONDITIONS

Methodology

This scenario evaluates traffic conditions of the build-out of the area planned by the Year 2025 in accordance with the Monterey County general plan. The cumulative a.m. and p.m. peak hour volumes were forecasted and provided by Association of Monterey Bay Governments (AMBAG) staff. Figure 9 illustrates the forecasted peak hour turning movement volumes for the cumulative Year 2025 conditions.

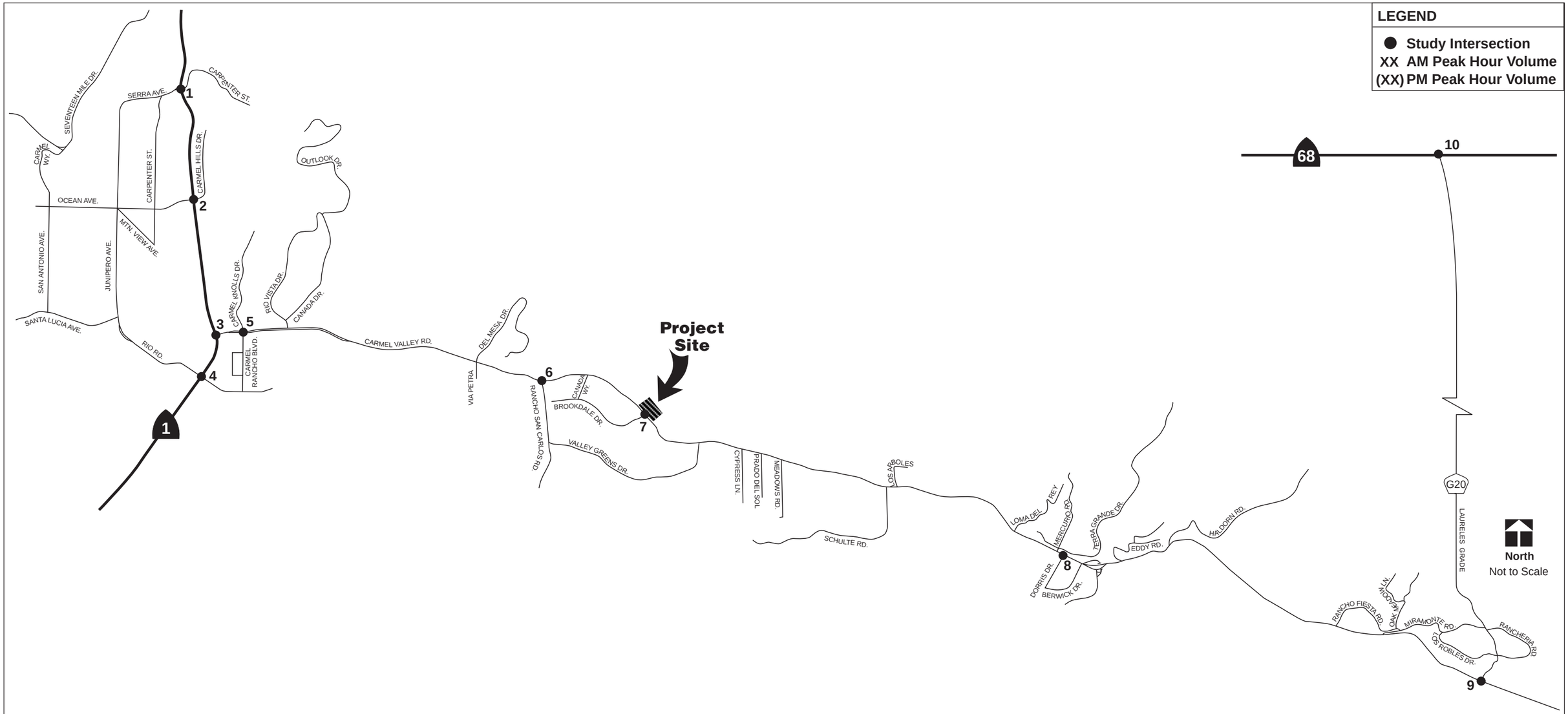
Results of Level of Service Analysis (Cumulative)

Table VII summarizes the intersection LOS analysis results. The detailed calculation sheets depicting cumulative traffic operations are contained in Appendix F. Under this scenario, the intersections of Carmel Valley Road/Brookdale Drive/Project Driveway (Int. 7), Carmel Valley Road/Dorris Drive (Int. 8), and Carmel Valley Road/Laureles Grade (Int. 9) were assumed to be signalized.

Under the Cumulative Year 2025 conditions, the intersections of Carmel Valley Road/Carmel Rancho Boulevard/Carmel Knolls Drive (Int. 5) and Carmel Valley Road/Rancho San Carlos Road (Int. 6) are expected to continue to operate at acceptable levels of service. The intersections of Carmel Valley Road/Brookdale Drive/Project Driveway (Int. 7), Carmel Valley Road/Dorris Drive (Int. 8) and Carmel Valley Road/Laureles Grade (Int. 9) are also expected to operate acceptably, with signalization. The following five intersections are expected to operate unacceptably under the Year 2025 scenario.

The intersection of Highway 1/Carpenter Street (Int. 1) is expected to continue to operate unacceptably during the p.m. peak hour. The recommended mitigation for this intersection includes 1) the utilization of the 'overlap phasing' to have westbound right-turns on Carpenter Street go at the same time as the southbound Highway 1 left-turns, 2) the utilization of 'overlap phasing' to have southbound right-turns on Highway 1 go simultaneously with the eastbound Carpenter Street left-turns, 3) modification of the westbound Carpenter Street approach convert the existing through/left-lane to only a through lane, 4) utilization of 'protected' phasing for the left-turn movement on the westbound Carpenter Street approach, 5) utilization of 'protected+permitted' phasing for the left-turn movement on the eastbound Carpenter Street approach and 6) adding an additional through lane on northbound Highway 1 approach. With these measures, the intersection is expected to operate acceptably. However, the California Coastal Act Section 30254 prohibits the widening of Highway 1 in the vicinity of the project area.

The intersection of Highway 1/Ocean Avenue/Carmel Hills Drive (Int. 2) is expected to continue to operate unacceptably. The recommended mitigation for this intersection includes 1) widening the westbound approach to have one exclusive left-turn lane, one shared left-turn/through lane, and one exclusive right-turn lane, 2) widening the eastbound approach to have two exclusive left-turn lanes, one through lane, and one exclusive right-turn lane, 3) adding a third exclusive through lane on southbound Highway 1 approach, 4) utilizing 'overlap phasing' to have southbound right-turns on Highway 1 go simultaneously with the eastbound Ocean Avenue left-turns, and 5) utilizing 'overlap phasing' to have westbound right-turns on Ocean Avenue go simultaneously with the southbound Highway 1 left-turns. The intersection is expected to operate acceptably with the recommended mitigation. However, as mentioned earlier, the California Coastal Act Section 30254 prohibits the widening of Highway 1 in the vicinity of the project area.



Intersection #1 State Route 1/Carpenter	Intersection #2 State Route 1/Ocean	Intersection #3 State Route 1/Carmel Valley	Intersection #4 State Route 1/Rio	Intersection #5 Carmel Rancho/Carmel Vly.	Intersection #6 Rancho San Carlos/Carmel Vly.	Intersection #7 Brookdale/Carmel Vly.	Intersection #8 Dorris/Carmel Vly.	Intersection #9 Laureles Grade/Carmel Vly.	Intersection #10 State Route 68/Laureles Grade
329 (659) 1,979 (2,877) 21 (41) 83 (53) 25 (11) 40 (24) 441 (563) 10 (5) 14 (33) 52 (31) 2,049 (2,683) 18 (32)	684 (471) 1,357 (2,319) 24 (12) 36 (116) 51 (84) 114 (174) 376 (734) 84 9247) 40 (215) 181 (149) 1,592 (1,725) 115 (66)	852 (1,291) 991 (1,292) 1,073 (1,435) 827 (1,188) 62 (93)	107 (131) 582 (738) 335 (419) 171 (471) 319 (560) 160 (236) 195 (165) 304 (497) 43 (42) 41 (147) 477 (896) 33 (94)	40 (39) 12 (18) 24 (31) 48 (16) 928 (966) 565 (654) 74 (179) 761 (1,226) 258 (446) 124 (477) 7 (24) 314 (654)	1,085 (691) 72 (92) 683 (1,320) 135 (281) 240 (169) 62 (65)	43 (28) 19 (12) 6 (21) 1,079 (743) 3 (3) 15 (50) 726 (1,283) 3 (7) 7 (5) 5 (4)	755 (601) 57 (63) 525 (734) 163 (281) 112 (140) 32 (49)	169 (221) 121 (261) 234 (203) 583 (380) 166 (243) 359 (386)	1,213 (1,030) 298 (228) 606 (1,258) 137 (475) 275 (152) 265 (414)

Monterey County
September Ranch

Cumulative Turning Movement Volumes

Figure 9

TJKM

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TABLE VII: CUMULATIVE LEVELS OF SERVICE

Intersection		Control	A.M. Peak		P.M. Peak	
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1	Highway 1/Carpenter St	Signal	20.6	C	**53.5**	**D**
	- Utilizing 'overlap' for SB and WB RT, Modifying WB to have 1LT, 1TH, 1RT, Utilizing 'protected + permitted' on EB LT	Signal	14.0	B	29.1	C
2	Highway 1/Ocean Ave/Carmel Hills Dr	Signal	31.7	C	**120+**	**F**
	- Widening EB and WB approaches, Installing a SB TH Lane, Utilizing 'overlap' for SB and WB RT	Signal	15.8	B	28.7	C
3	Highway 1/Carmel Valley Rd	Signal	17.9	B	**77.1**	**E**
	- Modifying NB RT to a Shared TH/RT	Signal	11.1	B	18.0	B
4	Highway 1/Rio Rd	Signal	28.3	C	**87.9**	**F**
	- Widening SB approach to have 2LT, 2TH and 1RT, Modifying NB to have 1LT, 1TH and 1TH/RT, and Utilizing 'overlap' for WB RT	Signal	21.0	C	34.7	C
5	Carmel Valley Rd/Carmel Rancho Blvd	Signal	14.2	B	30.8	C
6	Carmel Valley Rd/Rancho San Carlos Rd	Signal	14.0	B	22.2	C
7	Carmel Valley Rd/Brookdale Dr	Signal	8.8	A	10.0	A
8	Carmel Valley Rd/Dorris Dr	Signal	7.2	A	8.3	A
9	Carmel Valley Rd/Laureles Grade	Signal	13.1	B	16.0	B
10	Highway 68/Laureles Grade	Signal	27.6	C	**67.0**	**E**
	- Utilizing 'overlap' for NB RT, Modifying EB RT to a Shared TH/RT	Signal	21.1	C	18.4	B

The intersection of Highway 1/Carmel Valley Road (Int. 3) is expected to continue to operate unacceptably at LOS D during the p.m. peak hour. Modification of the northbound Highway 1 approach to have one through lane and one shared through/right-turn lane is expected to improve the intersection operating condition to an acceptable level. There current exist two lanes on the northbound receiving approach.

The intersection of Highway 1/Rio Road (Int. 4) is expected to operate unacceptably during the p.m. peak hour. The recommended mitigation includes 1) modifying the northbound Highway 1 approach to include one left-turn lane, one exclusive through lane, and one shared through/right-turn lane, 2) widening the southbound Highway 1 to have two left-turn lanes, two exclusive through lanes and one right-turn lane, and 3) utilizing 'overlap phasing' to have westbound right-turns on Rio Road go simultaneously with the southbound Highway 1 left-turns is expected to mitigate the congestion problems at this location.

The project applicant should pay its fair share to the TAMC Highway 1 Improvement Fee program for mitigation of the above four study intersections.

The intersection of Highway 68/Laureles Grade (Int. 10) is expected to operate at LOS E during the p.m. peak hour. The recommended mitigation for this location includes 1) utilizing 'overlap' phasing to have northbound right-turns on Laureles Grade go simultaneously with the westbound Highway 68 left-turns, and 2) modifying the eastbound Highway 68 approach to include one through lane and one shared through/right-turn lane in conjunction with adding a lane on the eastbound receiving approach. With the recommended mitigation, the intersection is expected to operate acceptably. However, the mitigation for Highway 68/Laureles Grade should be consistent with the operational improvements provided in the Highway 68 Action Plan for the intersection.

Recommended Lane Geometry for Carmel Valley Road/Brookdale Drive/Project Driveway

The project access road, September Ranch Road will connect and form the fourth (north) leg at the Carmel Valley Road/Brookdale Drive intersection. The intersection is expected to operate unacceptably under Cumulative conditions with the current lane geometry and control. Signalization would improve the intersection operating conditions to acceptable levels. However, the intersection does not meet the Caltrans' peak hour signal warrant under the Existing or any of the future scenarios analyzed. The intersection does not meet the Caltrans' all-way STOP warrant either.

Turning warrants were analyzed to determine whether or not an exclusive right-turn lane or left-turn lane is required on Carmel Valley Road at Brookdale Road/project driveway. The detailed warrant analysis sheet are contained in Appendix H.

According to the County's left-turn warrant analysis, a left-turn channelization is required for both eastbound and westbound Carmel Valley Road approaches under the existing conditions and all future scenarios analyzed. The right-turn warrant analysis shows that the intersection requires a taper to accommodate future westbound right-turns from Carmel Valley Road onto the project access road beginning from the existing plus project scenario. No right-turn taper is required on eastbound Carmel Valley Road.

Sight Distance

September Ranch Road, the project access road, will connect with Carmel Valley Road at Brookdale Drive, forming a four-legged intersection. Carmel Valley Road is posted with a 50-mph speed limit. The standard stopping sight distance, recommended by the Caltrans Highway Design Manual (HDM), for a roadway with a design speed of 55 mph (assumed 5 mph higher than the posted speed limit) is 500 feet. Table 405.1A of the HDM recommends 630 feet for corner sight distance, based on the "7-1/2 Second Criteria".

From the proposed location of September Ranch Road, an outbound driver would have a sight distance of approximately 375 feet looking to his right (or looking west), which does not meet the Caltrans standard for being able to see a six inch object on the Broadway. The sight distance is restricted by the small vertical curve on Carmel Valley Road. However, given that many vehicles are approximately 3 feet tall, much higher than 6 inches, drivers on Carmel Valley Road and drivers on September Ranch Road should be able to see each other from 600 feet away. A standard intersection ahead warning sign should be installed on Carmel Valley Road in advance of September Ranch to alert drivers on Eastbound Carmel Valley Road. Installing a traffic signal would be another option to mitigate sight distance problem. The sight distance looking to the left (or looking east) is approximately 760 feet, which exceeds the required limit for stopping and corner sight distance.

ROADWAY SEGMENT ANALYSIS

Roadway segment analysis was conducted to determine the number of through lanes that may be needed to have Carmel Valley Road operate at acceptable levels of service for all study scenarios. The analysis focused on the p.m. peak traffic conditions on the following four segments of Carmel Valley Road:

1) Robinson Canyon Road – Schulte Road
2) Schulte Road – Rancho San Carlos Road
3) Rancho San Carlos Road – Carmel Rancho Boulevard
4) Carmel Rancho Boulevard – Highway 1

Monterey County staff provided the existing (Year 2002) average daily traffic on these four segments. The analysis assumed that the p.m. peak hour volumes were approximately 10 percent of the daily traffic volumes. Forecasted Year 2025 p.m. peak volumes were derived from the information contained in the AMBAG model. The existing and forecasted p.m. volumes on for both directions the study segments are summarized below:

1. Carmel Valley Road, Robinson Canyon Road – Schulte Road,
   Existing p.m. volumes - 1,460 vph
   Existing plus Project p.m. volumes - 1,538 vph
   Existing plus Project plus Approved plus Pending p.m. volumes - 1,828 vph
   Cumulative Year 2025 p.m. volumes - 1,990 vph

2. Carmel Valley Road, Schulte Road – Rancho San Carlos Road,
   Existing p.m. volumes - 1,630 vph
   Existing plus Project p.m. volumes - 1,708 vph
   Existing plus Project plus Approved plus Pending p.m. volumes - 1,998 vph
   Cumulative Year 2025 ADT- 2,170 vph

3. Carmel Valley Road, Rancho San Carlos Road – Carmel Rancho Boulevard,
   Existing p.m. volumes - 2,430 vph
   Existing plus Project p.m. volumes - 2,508 vph
   Existing plus Project plus Approved plus Pending p.m. volumes - 2,926 vph
   Cumulative Year 2025 p.m. volumes - 3,190 vph

4. Carmel Valley Road, Carmel Rancho Boulevard – Highway 1,
   Existing p.m. volumes - 2,410 vph
   Existing plus Project p.m. volumes - 2,469 vph
   Existing plus Project plus Approved plus Pending p.m. volumes - 2,814 vph
   Cumulative Year 2025 p.m. volumes - 3,080 vph

Carmel Valley Road is a two-lane rural highway. The information about the LOS methodology for a two-lane highway (one-lane in each direction) segments can be found in the Transportation Research Board's 2000 *Highway Capacity Manual* (HCM). The HCM suggested a capacity of 3,400 vehicles per hour for both directions combined.

As shown, the existing and forecasted volumes on the four study segments are expected to be within the two-lane highway capacity. Therefore, Carmel Valley Road should be able to accommodate future traffic in the area. However, the Carmel Valley Master Plan (as of 1995) lists three long-term passing lane improvements along Carmel Valley Road at the following locations:

- In front of September Ranch
- Opposite of Garland Ranch Regional Park, which is east of Robinson Canyon Road
- Near Laureles Grade Road, which is east of Garland Ranch Regional Park

SUMMARY OF MITIGATION

Existing Conditions

The following improvements are required for existing conditions:

1. Utilizing 'overlap phasing' for westbound right-turns and southbound right-turns at the intersection of Highway 1/Carpenter Street (Int. 1).
2. Widening the eastbound and westbound approaches of the Highway 1/Ocean Avenue/Carmel Hills Drive (Int. 2) to have one exclusive left-turn lane, one shared left-turn/through lane, and one exclusive right-turn lane on each approach;
3. Signalizing the Carmel Valley Road/Dorris Drive intersection (Int. 8);
4. Signalizing the Carmel Valley Road/Laureles Grade intersection (Int. 9).

Proposed September Ranch Mitigation Measures

1. The project will be responsible for contributing towards planned long-term improvements to Highway 1. The contribution will be calculated based on the expected daily project trips on Highway 1 north of Carmel Valley Road. This contribution will be the projects fair share to improve the intersections along Highway 1, including Highway 1/Carpenter Street (Int. 1), Highway 1/Ocean Avenue/Carmel Hills Drive (Int. 2), Highway 1/Carmel Valley Road (Int. 3), and Highway 1/Rio Road (Int. 4).
2. The project will be responsible for installing the fourth (north) leg of September Ranch Road (the project access road) at the existing stop controlled T-intersection of Carmel Valley Road/Brookdale Drive (Int. 7). The project will also be responsible for signalizing this intersection and any signal coordination costs associated with this signalization. .
3. Lane improvement at Carmel Valley Road/Brookdale Drive/September Ranch Road; installing a right-turn taper on westbound Carmel Valley Road, and installing a left-turn lane for both the eastbound and westbound Carmel Valley Road approaches.
4. Installing an intersection ahead warning sign on eastbound Carmel Valley Road in advance of September Ranch Road to alert drivers on Carmel Valley Road.
5. The County will determine the project's Carmel Valley Traffic Impact Fee (CVTIF). The funding may be used to improve Carmel Valley Road/Dorris Drive (Int. 8) and Carmel Valley Road/Laureles Grade (Int. 9).
6. The project will be responsible for its fair share contribution towards the cost of installing a traffic signal at the Rio Road/Carmel Rancho Boulevard intersection[1]. The fee will be calculated based on the amount of the project p.m. trips that are expected to use the intersection.
7. The project should provide a fair share contribution towards cumulative impact mitigations as described in the following Cumulative Mitigation Measures section.

[1] This intersection is not part of the present traffic study; however, the County staff identified signalization as a mitigation measures for this location.

Cumulative (Year 2025) Mitigation Measures

1. Signal modification and widening of the Highway 68/Laureles Grade intersection; to utilize 'overlap phasing' to have northbound right-turns on Laureles Grade go simultaneously with the westbound Highway 68 left-turns, and to modify the eastbound Highway 68 approach to include one through lane and one shared through/right-turn lane. However, the mitigation for Highway 68/Laureles Grade should be consistent with the operational improvements provided in the Highway 68 Action Plan for the intersection.

STUDY REFERENCES

TJKM Personnel

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Heba El-Guendy, Associate Project Manager
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Geri Foley, Graphic Designer
Lily Moore, Office Supervisor

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Enrique Saavedra, Monterey County Public Works Department
Neal Thompson, Monterey County Public Works Department
Alana Knaftar, County Planning of Building Inspection

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Highway Capacity Manual, Transportation Research Board, 2000
Highway Design Manual, Caltrans
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Trip Generation, Sixth Edition, Institute of Transportation Engineers, 1997
Traffic Impact Study for Wang Minor Subdivision, Higgins Associates, November, 2002
Traffic and Parking Evaluation for Sunrise Assisted Living Project, Higgins Associates, 2002

APPENDIX A – LEVEL OF SERVICE METHODOLOGY

I. INTRODUCTION

SCOPE OF THE METHODOLOGY

Background and underlying concepts for this chapter are in Chapter 10

This chapter contains a methodology for analyzing the capacity and level of service (LOS) of signalized intersections. The analysis must consider a wide variety of prevailing conditions, including the amount and distribution of traffic movements, traffic composition, geometric characteristics, and details of intersection signalization. The methodology focuses on the determination of LOS for known or projected conditions.

The methodology addresses the capacity, LOS, and other performance measures for lane groups and intersection approaches and the LOS for the intersection as a whole. Capacity is evaluated in terms of the ratio of demand flow rate to capacity (v/c ratio), whereas LOS is evaluated on the basis of control delay per vehicle (in seconds per vehicle). Control delay is the portion of the total delay attributed to traffic signal operation for signalized intersections. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Appendix A presents a method for observing intersection control delay in the field. Exhibit 10-9 provides definitions of the basic terms used in this chapter.

A lane group is indicated in formulas by the subscript i

Each lane group is analyzed separately. Equations in this chapter use the subscript i to indicate each lane group. The capacity of the intersection as a whole is not addressed because both the design and the signalization of intersections focus on the accommodation of traffic movement on approaches to the intersection.

See Chapter 10 for description of quick estimation method

The capacity analysis methodology for signalized intersections is based on known or projected signalization plans. Two procedures are available to assist the analyst in establishing signalization plans. The first is the quick estimation method, which produces estimates of the cycle length and green times that can be considered to constitute a reasonable and effective signal timing plan. The quick estimation method requires minimal field data and relies instead on default values for the required traffic and control parameters. It is described and documented in Chapter 10.

A more detailed procedure is provided in Appendix B of this chapter for estimating the timing plan at both pretimed and traffic-actuated signals. The procedure for pretimed signals provides the basis for the design of signal timing plans that equalize the degree of saturation on the critical approaches for each phase of the signal sequence. This procedure does not, however, provide for optimal operation.

The methodology in this chapter is based in part on the results of a National Cooperative Highway Research Program (NCHRP) study (*1, 2*). Critical movement capacity analysis techniques have been developed in the United States (*3–5*), Australia (*6*), Great Britain (*7*), and Sweden (*8*). Background for delay estimation procedures was developed in Great Britain (*7*), Australia (*9, 10*), and the United States (*11*). Updates to the original methodology were developed subsequently (*12–24*).

LIMITATIONS TO THE METHODOLOGY

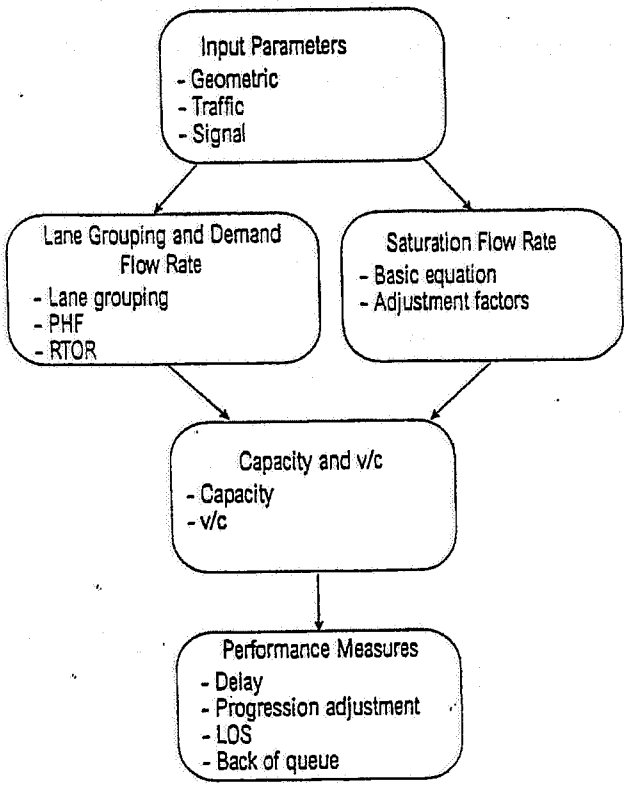
The methodology does not take into account the potential impact of downstream congestion on intersection operation. Nor does the methodology detect and adjust for the impacts of turn-pocket overflows on through traffic and intersection operation.

II. METHODOLOGY

Exhibit 16-1 shows the input and the basic computation order for the method. The primary output of the method is level of service (LOS). This methodology covers a wide range of operational configurations, including combinations of phase plans, lane

utilization, and left-turn treatment alternatives. It is important to note that some of these configurations may be considered unacceptable by some operating agencies from a traffic safety point of view. The safety aspect of signalized intersections cannot be ignored, and the provision in this chapter of a capacity and LOS analysis methodology for a specific operational configuration does not imply an endorsement of the suitability for application of such a configuration.

EXHIBIT 16-1. SIGNALIZED INTERSECTION METHODOLOGY



LOS

The average control delay per vehicle is estimated for each lane group and aggregated for each approach and for the intersection as a whole. LOS is directly related to the control delay value. The criteria are listed in Exhibit 16-2.

LOS criteria

EXHIBIT 16-2. LOS CRITERIA FOR SIGNALIZED INTERSECTIONS

LOS	Control Delay per Vehicle (s/veh)
A	≤ 10
B	> 10–20
C	> 20–35
D	> 35–55
E	> 55–80
F	> 80

PART A. TWO-WAY STOP-CONTROLLED INTERSECTIONS

I. INTRODUCTION - PART A

In this section a methodology for analyzing capacity and level of service of two-way stop-controlled (TWSC) intersections is presented.

II. METHODOLOGY - PART A

Both theoretical and empirical approaches have been used to arrive at a methodology

Capacity analysis at TWSC intersections depends on a clear description and understanding of the interaction of drivers on the minor or stop-controlled approach with drivers on the major street. Both gap acceptance and empirical models have been developed to describe this interaction. Procedures described in this chapter rely on a gap acceptance model developed and refined in Germany (*1*). The concepts from this model are described in Chapter 10. Exhibit 17-1 illustrates input to and the basic computation order of the method described in this chapter.

LEVEL-OF-SERVICE CRITERIA

LOS is not defined for the overall intersection

Level of service (LOS) for a TWSC intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS is not defined for the intersection as a whole. LOS criteria are given in Exhibit 17-2.

LOS thresholds differ from those for signalized intersections to reflect different driver expectations

The LOS criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections primarily because different transportation facilities create different driver perceptions. The expectation is that a signalized intersection is designed to carry higher traffic volumes and experience greater delay than an unsignalized intersection.

EXHIBIT 17-1. TWSC UNSIGNALIZED INTERSECTION METHODOLOGY

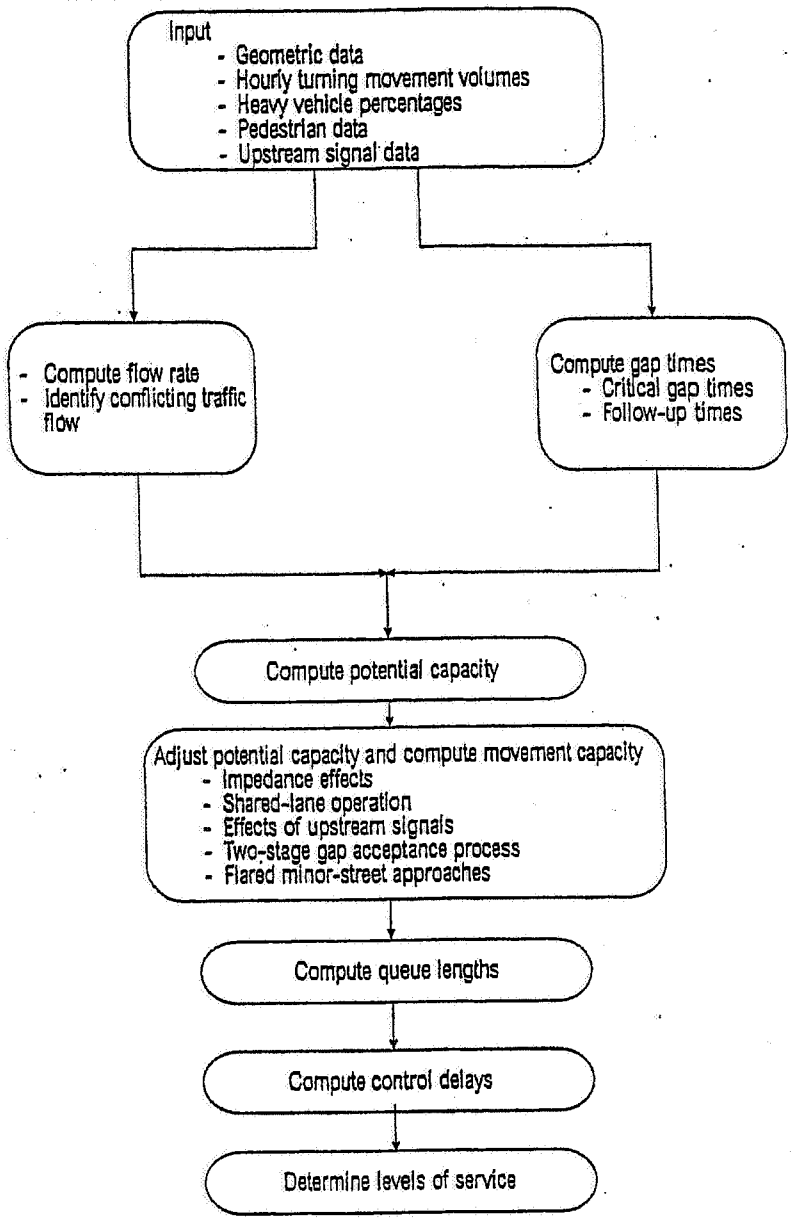


EXHIBIT 17-2. LEVEL-OF-SERVICE CRITERIA FOR TWSC INTERSECTIONS

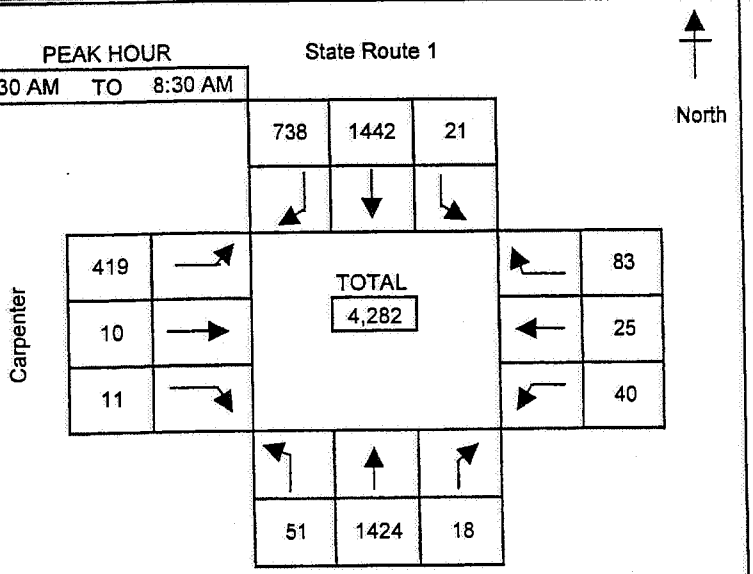
Level of Service	Average Control Delay (s/veh)
A	0–10
B	> 10–15
C	> 15–25
D	> 25–35
E	> 35–50
F	> 50

APPENDIX B – EXISTING TRAFFIC COUNTS

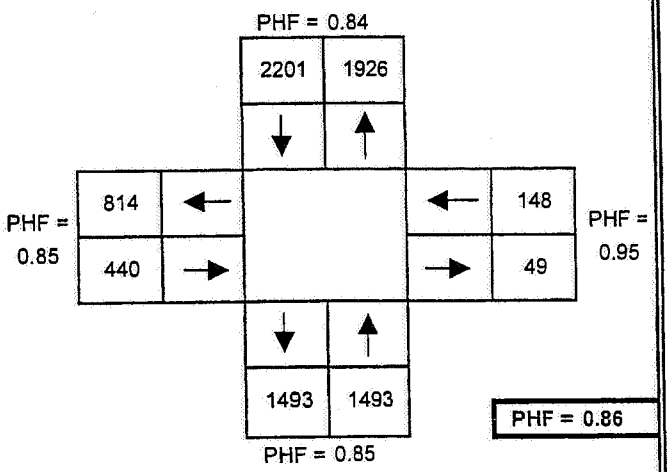
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	State Route 1		Survey Time:	7:00AM	To 9:00AM
E-W Approach:	Carpenter		City:	Carmel Valley	Weather:

PEAK HOUR 7:30 AM TO 8:30 AM



Arrival / Departure Volumes



Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
7:00 AM	7:15 AM	52	2	1	2	203	4	10	6	5	8	215	71		579
7:15 AM	7:30 AM	129	5	4	9	477	7	17	13	13	12	448	167		1,301
7:30 AM	7:45 AM	222	9	6	22	832	12	29	23	30	18	830	339		2,372
7:45 AM	8:00 AM	334	10	8	42	1,246	18	38	31	52	23	1,253	564		3,619
8:00 AM	8:15 AM	457	12	13	53	1,614	22	46	36	76	26	1,586	750		4,691
8:15 AM	8:30 AM	548	15	15	60	1,901	25	57	38	96	33	1,890	905		5,583
8:30 AM	8:45 AM	628	17	20	64	2,211	30	64	39	114	38	2,191	1,046		6,462
8:45 AM	9:00 AM	705	20	24	69	2,507	32	72	42	137	42	2,569	1,202		7,421
TOTAL BY PERIOD															
7:00 AM	7:15 AM	52	2	1	2	203	4	10	6	5	8	215	71		579
7:15 AM	7:30 AM	77	3	3	7	274	3	7	7	8	4	233	96		722
7:30 AM	7:45 AM	93	4	2	13	355	5	12	10	17	6	382	172		1,071
7:45 AM	8:00 AM	112	1	2	20	414	6	9	8	22	5	423	225		1,247
8:00 AM	8:15 AM	123	2	5	11	368	4	8	5	24	3	333	186		1,072
8:15 AM	8:30 AM	91	3	2	7	287	3	11	2	20	7	304	155		892
8:30 AM	8:45 AM	80	2	5	4	310	5	7	1	18	5	301	141		879
8:45 AM	9:00 AM	77	3	4	5	296	2	8	3	23	4	378	156		959
HOURLY TOTALS															
7:00 AM	8:00 AM	334	10	8	42	1246	18	38	31	52	23	1,253	564		3,619
7:15 AM	8:15 AM	405	10	12	51	1411	18	36	30	71	18	1,371	679		4,112
7:30 AM	8:30 AM	419	10	11	51	1424	18	40	25	83	21	1,442	738		4,282
7:45 AM	8:45 AM	406	8	14	42	1379	18	35	16	84	20	1,361	707		4,090
8:00 AM	9:00 AM	371	10	16	27	1261	14	34	11	85	19	1,316	638		3,802
Lane Configuration			0.85			0.85			0.95			0.84			Overall
Peak Hour Factor		0.85	0.63	0.55	0.64	0.86	0.75	0.83	0.63	0.86	0.75	0.85	0.82		0.86

TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	State Route 1		Survey Time:	2:00PM To	4:00PM
E-W Approach:	Carpenter		City: Carmel Valley	Weather:	

PEAK HOUR 2:15 PM TO 3:15 PM

State Route 1

North

Carpenter

690	664	1598	30	53
8				11
37		TOTAL 5,344		24
	39	2158	32	

Arrival / Departure Volumes

PHF = 0.87

	2292	2901		
PHF = 0.84	714			88	PHF = 0.76
	735			70	
		1659	2229	

PHF = 0.97

PHF = 0.96

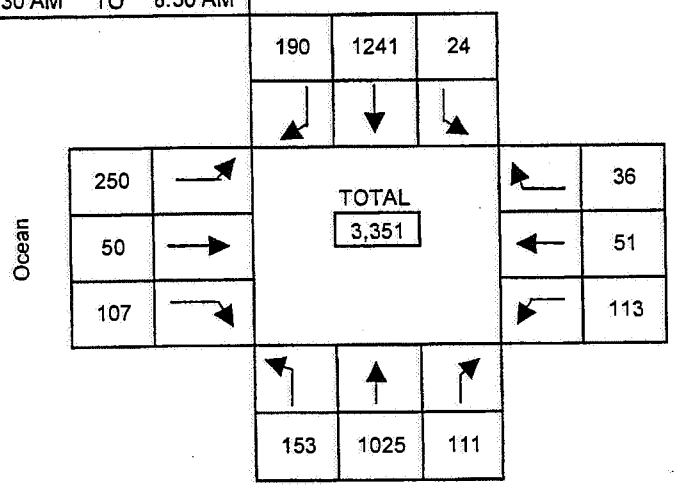
Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
2:00 PM	2:15 PM	126	2	10	8	441	10	6	1	15	10	376	164		1,169
2:15 PM	2:30 PM	259	3	23	15	962	18	10	1	27	18	829	360		2,525
2:30 PM	2:45 PM	409	7	34	30	1,476	29	17	2	37	25	1,247	531		3,844
2:45 PM	3:00 PM	601	10	42	39	2,032	36	25	5	51	31	1,659	686		5,217
3:00 PM	3:15 PM	816	10	47	47	2,599	42	30	12	68	40	1,974	828		6,513
3:15 PM	3:30 PM	988	12	50	53	3,185	52	33	14	79	47	2,273	990		7,776
3:30 PM	3:45 PM	1,138	13	55	63	3,662	65	35	16	88	59	2,599	1,145		8,938
3:45 PM	4:00 PM	1,279	15	66	68	4,143	73	35	16	100	67	2,898	1,282		10,042
TOTAL BY PERIOD															
2:00 PM	2:15 PM	126	2	10	8	441	10	6	1	15	10	376	164		1,169
2:15 PM	2:30 PM	133	1	13	7	521	8	4	0	12	8	453	196		1,356
2:30 PM	2:45 PM	150	4	11	15	514	11	7	1	10	7	418	171		1,319
2:45 PM	3:00 PM	192	3	8	9	556	7	8	3	14	6	412	155		1,373
3:00 PM	3:15 PM	215	0	5	8	567	6	5	7	17	9	315	142		1,296
3:15 PM	3:30 PM	172	2	3	6	586	10	3	2	11	7	299	162		1,263
3:30 PM	3:45 PM	150	1	5	10	477	13	2	2	9	12	326	155		1,162
3:45 PM	4:00 PM	141	2	11	5	481	8	0	0	12	8	299	137		1,104
HOURLY TOTALS															
2:00 PM	3:00 PM	601	10	42	39	2032	36	25	5	51	31	1,659	686		5,217
2:15 PM	3:15 PM	690	8	37	39	2158	32	24	11	53	30	1,598	664		5,344
2:30 PM	3:30 PM	729	9	27	38	2223	34	23	13	52	29	1,444	630		5,251
2:45 PM	3:45 PM	729	6	21	33	2186	36	18	14	51	34	1,352	614		5,094
3:00 PM	4:00 PM	678	5	24	29	2111	37	10	11	49	36	1,239	596		4,825
Lane Configuration			0.84			0.96			0.76			0.87			Overall
Peak Hour Factor		0.80	0.50	0.71	0.65	0.95	0.73	0.75	0.39	0.78	0.83	0.88	0.85		0.97

TJKM Intersection Turning Movement Summary

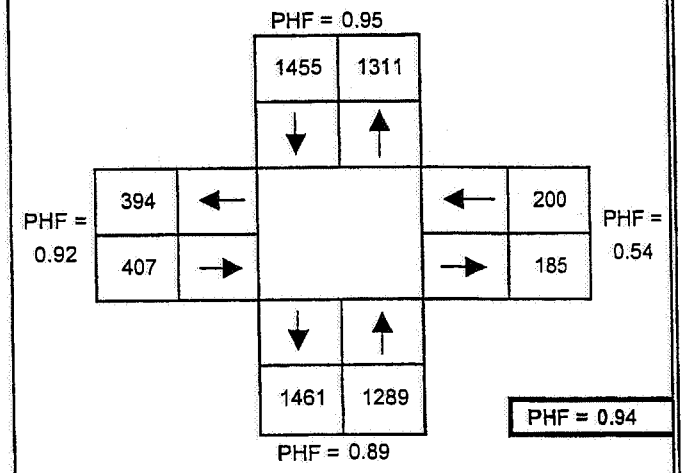
Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	State Route 1		Survey Time:	7:00AM	To 9:00AM
E-W Approach:	Ocean		City: Carmel Valley		Weather:

PEAK HOUR 7:30 AM TO 8:30 AM

State Route 1



Arrival / Departure Volumes



Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
7:00 AM	7:15 AM	36	1	2	7	215	5	5	2	0	7	186	28		494
7:15 AM	7:30 AM	78	9	12	26	439	23	23	10	3	16	399	62		1,100
7:30 AM	7:45 AM	128	34	30	56	655	85	75	28	25	31	670	107		1,924
7:45 AM	8:00 AM	188	52	63	102	895	126	116	51	37	39	986	160		2,815
8:00 AM	8:15 AM	263	56	89	139	1,219	129	128	57	38	39	1,323	204		3,684
8:15 AM	8:30 AM	328	59	119	179	1,464	134	136	61	39	40	1,640	252		4,451
8:30 AM	8:45 AM	388	62	144	214	1,673	138	141	63	39	40	1,935	295		5,132
8:45 AM	9:00 AM	443	67	168	250	1,901	140	145	64	41	41	2,276	341		5,877
TOTAL BY PERIOD															
7:00 AM	7:15 AM	36	1	2	7	215	5	5	2	0	7	186	28		494
7:15 AM	7:30 AM	42	8	10	19	224	18	18	8	3	9	213	34		606
7:30 AM	7:45 AM	50	25	18	30	216	62	52	18	22	15	271	45		824
7:45 AM	8:00 AM	60	18	33	46	240	41	41	23	12	8	316	53		891
8:00 AM	8:15 AM	75	4	26	37	324	3	12	6	1	0	337	44		869
8:15 AM	8:30 AM	65	3	30	40	245	5	8	4	1	1	317	48		767
8:30 AM	8:45 AM	60	3	25	35	209	4	5	2	0	0	295	43		681
8:45 AM	9:00 AM	55	5	24	36	228	2	4	1	2	1	341	46		745
HOURLY TOTALS															
7:00 AM	8:00 AM	188	52	63	102	895	126	116	51	37	39	986	160		2,815
7:15 AM	8:15 AM	227	55	87	132	1004	124	123	55	38	32	1,137	176		3,190
7:30 AM	8:30 AM	250	50	107	153	1025	111	113	51	36	24	1,241	190		3,351
7:45 AM	8:45 AM	260	28	114	158	1018	53	66	35	14	9	1,265	188		3,208
8:00 AM	9:00 AM	255	15	105	148	1006	14	29	13	4	2	1,290	181		3,062

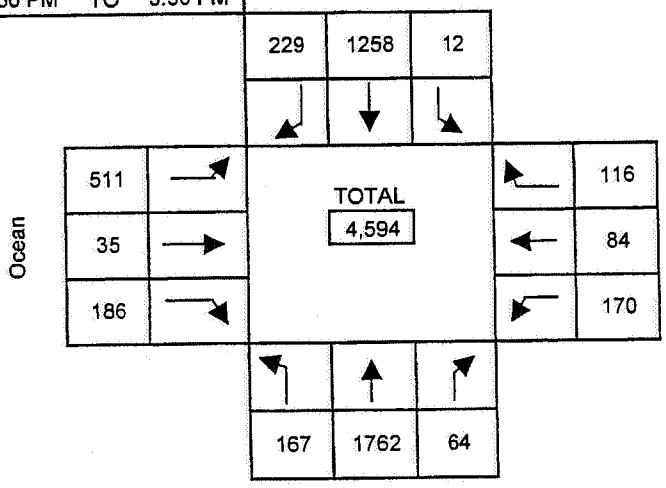
Lane Configuration		0.92			0.89			0.54			0.95				Overall
Peak Hour Factor	0.83	0.50	0.81	0.83	0.79	0.45	0.54	0.55	0.41	0.40	0.92	0.90			0.94

TJKM Intersection Turning Movement Summary

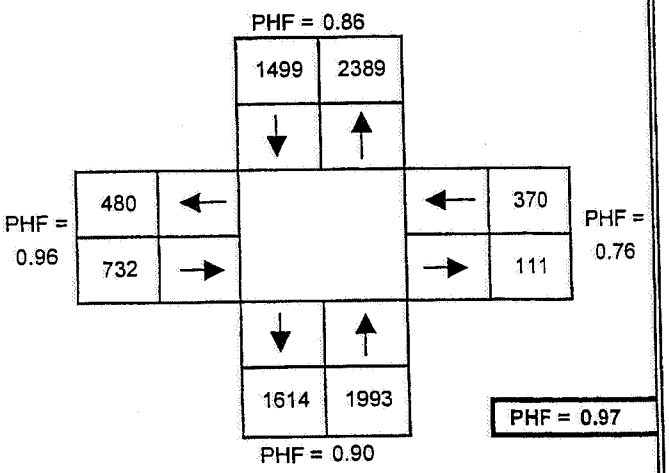
Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	State Route 1		Survey Time:	2:00PM	To 4:00PM
E-W Approach:	Ocean		City:	Carmel Valley	Weather:

PEAK HOUR
2:30 PM TO 3:30 PM

State Route 1



Arrival / Departure Volumes



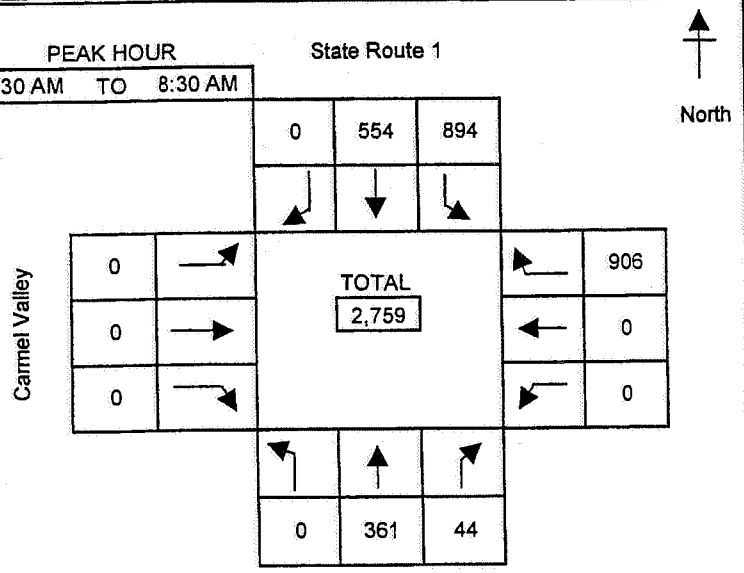
Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
2:00 PM	2:15 PM	92	3	35	22	357	3	10	4	5	0	345	42		918
2:15 PM	2:30 PM	194	5	81	48	782	8	25	10	11	0	766	102		2,032
2:30 PM	2:45 PM	307	19	143	83	1,214	15	53	21	25	2	1,128	175		3,185
2:45 PM	3:00 PM	432	26	191	135	1,602	41	99	54	68	10	1,474	236		4,368
3:00 PM	3:15 PM	575	34	231	177	2,045	58	154	78	101	12	1,744	286		5,495
3:15 PM	3:30 PM	705	40	267	215	2,544	72	195	94	127	12	2,024	331		6,626
3:30 PM	3:45 PM	807	45	300	245	2,904	80	229	103	139	13	2,303	368		7,536
3:45 PM	4:00 PM	893	54	325	271	3,274	85	251	110	147	18	2,585	403		8,416
TOTAL BY PERIOD															
2:00 PM	2:15 PM	92	3	35	22	357	3	10	4	5	0	345	42		918
2:15 PM	2:30 PM	102	2	46	26	425	5	15	6	6	0	421	60		1,114
2:30 PM	2:45 PM	113	14	62	35	432	7	28	11	14	2	362	73		1,153
2:45 PM	3:00 PM	125	7	48	52	388	26	46	33	43	8	346	61		1,183
3:00 PM	3:15 PM	143	8	40	42	443	17	55	24	33	2	270	50		1,127
3:15 PM	3:30 PM	130	6	36	38	499	14	41	16	26	0	280	45		1,131
3:30 PM	3:45 PM	102	5	33	30	360	8	34	9	12	1	279	37		910
3:45 PM	4:00 PM	86	9	25	26	370	5	22	7	8	5	282	35		880
HOURLY TOTALS															
2:00 PM	3:00 PM	432	26	191	135	1602	41	99	54	68	10	1,474	236		4,368
2:15 PM	3:15 PM	483	31	196	155	1688	55	144	74	96	12	1,399	244		4,577
2:30 PM	3:30 PM	511	35	186	167	1762	64	170	84	116	12	1,258	229		4,594
2:45 PM	3:45 PM	500	26	157	162	1690	65	176	82	114	11	1,175	193		4,351
3:00 PM	4:00 PM	461	28	134	136	1672	44	152	56	79	8	1,111	167		4,048
Lane Configuration			0.96			0.90			0.76			0.86			Overall
Peak Hour Factor		0.89	0.63	0.75	0.80	0.88	0.62	0.77	0.64	0.67	0.38	0.87	0.78		0.97

TJKM Intersection Turning Movement Summary

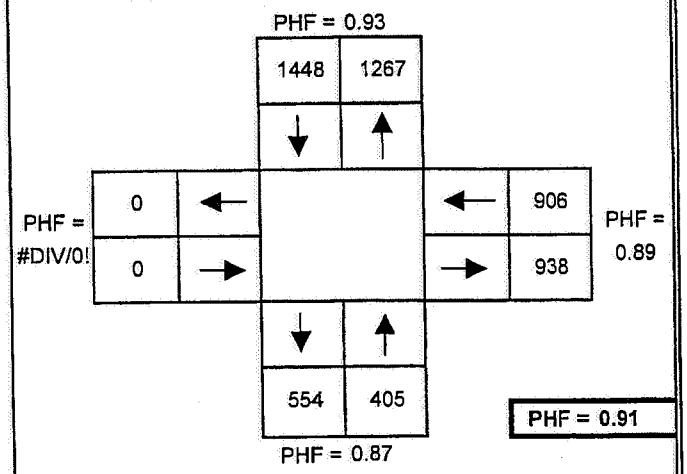
Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	State Route 1		Survey Time:	7:00AM To	9:00AM
E-W Approach:	Carmel Valley		City: Carmel Valley	Weather:	

PEAK HOUR
7:30 AM TO 8:30 AM

State Route 1



Arrival / Departure Volumes



Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
7:00 AM	7:15 AM				0	60	4	0	0	174	139	50	0		427
7:15 AM	7:30 AM				0	151	12	0	0	376	305	135	0		979
7:30 AM	7:45 AM				0	233	18	0	0	596	517	250	0		1,614
7:45 AM	8:00 AM				0	337	31	0	0	850	780	378	0		2,376
8:00 AM	8:15 AM				0	434	48	0	0	1,082	1,004	545	0		3,113
8:15 AM	8:30 AM				0	512	56	0	0	1,282	1,199	689	0		3,738
8:30 AM	8:45 AM				0	594	62	0	0	1,458	1,416	810	0		4,340
8:45 AM	9:00 AM				0	660	72	0	0	1,641	1,644	937	0		4,954
TOTAL BY PERIOD															
7:00 AM	7:15 AM	0	0	0	0	60	4	0	0	174	139	50	0		427
7:15 AM	7:30 AM	0	0	0	0	91	8	0	0	202	166	85	0		552
7:30 AM	7:45 AM	0	0	0	0	82	6	0	0	220	212	115	0		635
7:45 AM	8:00 AM	0	0	0	0	104	13	0	0	254	263	128	0		762
8:00 AM	8:15 AM	0	0	0	0	97	17	0	0	232	224	167	0		737
8:15 AM	8:30 AM	0	0	0	0	78	8	0	0	200	195	144	0		625
8:30 AM	8:45 AM	0	0	0	0	82	6	0	0	176	217	121	0		602
8:45 AM	9:00 AM	0	0	0	0	66	10	0	0	183	228	127	0		614
HOURLY TOTALS															
7:00 AM	8:00 AM	0	0	0	0	337	31	0	0	850	780	378	0		2,376
7:15 AM	8:15 AM	0	0	0	0	374	44	0	0	908	865	495	0		2,686
7:30 AM	8:30 AM	0	0	0	0	361	44	0	0	906	894	554	0		2,759
7:45 AM	8:45 AM	0	0	0	0	361	44	0	0	862	899	560	0		2,726
8:00 AM	9:00 AM	0	0	0	0	323	41	0	0	791	864	559	0		2,578

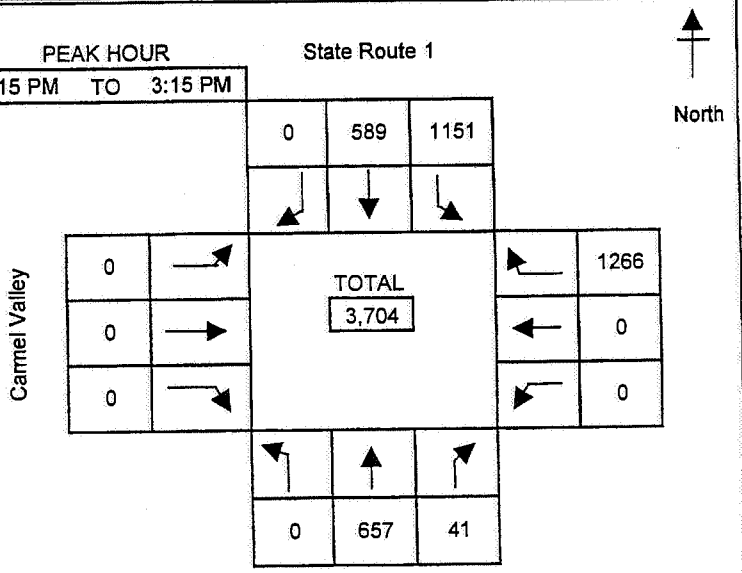
Lane Configuration		#DIV/0!			0.87			0.89			0.93			Overall
Peak Hour Factor	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.87	0.65	#DIV/0!	#DIV/0!	0.89	0.85	0.83	#DIV/0!		0.91

TJKM Intersection Turning Movement Summary

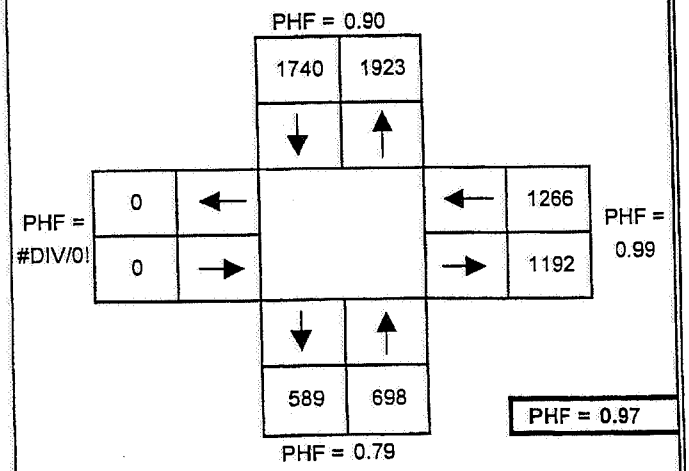
Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	State Route 1		Survey Time:	2:00PM	To 4:00PM
E-W Approach:	Carmel Valley		City: Carmel Valley		Weather:

PEAK HOUR 2:15 PM TO 3:15 PM

State Route 1



Arrival / Departure Volumes



Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
2:00 PM	2:15 PM				0	123	7	0	0	263	297	101	0		791
2:15 PM	2:30 PM				0	263	16	0	0	584	638	241	0		1,742
2:30 PM	2:45 PM				0	404	26	0	0	902	924	387	0		2,643
2:45 PM	3:00 PM				0	568	40	0	0	1,218	1,230	539	0		3,595
3:00 PM	3:15 PM				0	780	48	0	0	1,529	1,448	690	0		4,495
3:15 PM	3:30 PM				0	943	63	0	0	1,878	1,664	810	0		5,358
3:30 PM	3:45 PM				0	1,126	73	0	0	2,108	1,904	918	0		6,129
3:45 PM	4:00 PM				0	1,322	79	0	0	2,315	2,123	1,056	0		6,895
TOTAL BY PERIOD															
2:00 PM	2:15 PM	0	0	0	0	123	7	0	0	263	297	101	0		791
2:15 PM	2:30 PM	0	0	0	0	140	9	0	0	321	341	140	0		951
2:30 PM	2:45 PM	0	0	0	0	141	10	0	0	318	286	146	0		901
2:45 PM	3:00 PM	0	0	0	0	164	14	0	0	316	306	152	0		952
3:00 PM	3:15 PM	0	0	0	0	212	8	0	0	311	218	151	0		900
3:15 PM	3:30 PM	0	0	0	0	163	15	0	0	349	216	120	0		863
3:30 PM	3:45 PM	0	0	0	0	183	10	0	0	230	240	108	0		771
3:45 PM	4:00 PM	0	0	0	0	196	6	0	0	207	219	138	0		766
HOURLY TOTALS															
2:00 PM	3:00 PM	0	0	0	0	568	40	0	0	1218	1,230	539	0		3,595
2:15 PM	3:15 PM	0	0	0	0	657	41	0	0	1266	1,151	589	0		3,704
2:30 PM	3:30 PM	0	0	0	0	680	47	0	0	1294	1,026	569	0		3,616
2:45 PM	3:45 PM	0	0	0	0	722	47	0	0	1206	980	531	0		3,486
3:00 PM	4:00 PM	0	0	0	0	754	39	0	0	1097	893	517	0		3,300

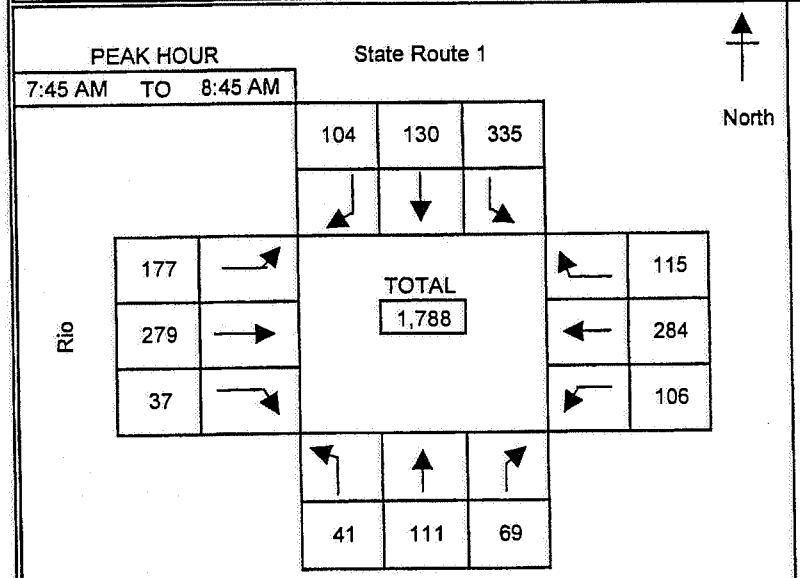
Lane Configuration		#DIV/0!			0.79			0.99			0.90				Overall
Peak Hour Factor	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.77	0.73	#DIV/0!	#DIV/0!	0.99	0.84	0.97	#DIV/0!			0.97

TJKM Intersection Turning Movement Summary

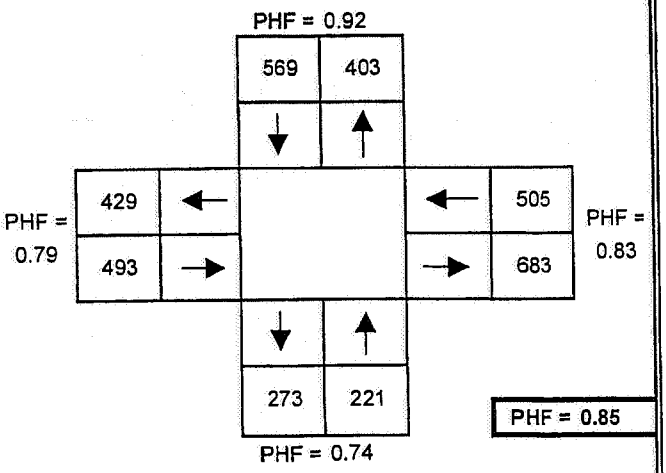
Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	State Route 1		Survey Time:	7:00AM	To 9:00AM
E-W Approach:	Rio		City:	Carmel Valley	Weather:

PEAK HOUR 7:45 AM TO 8:45 AM

State Route 1



Arrival / Departure Volumes



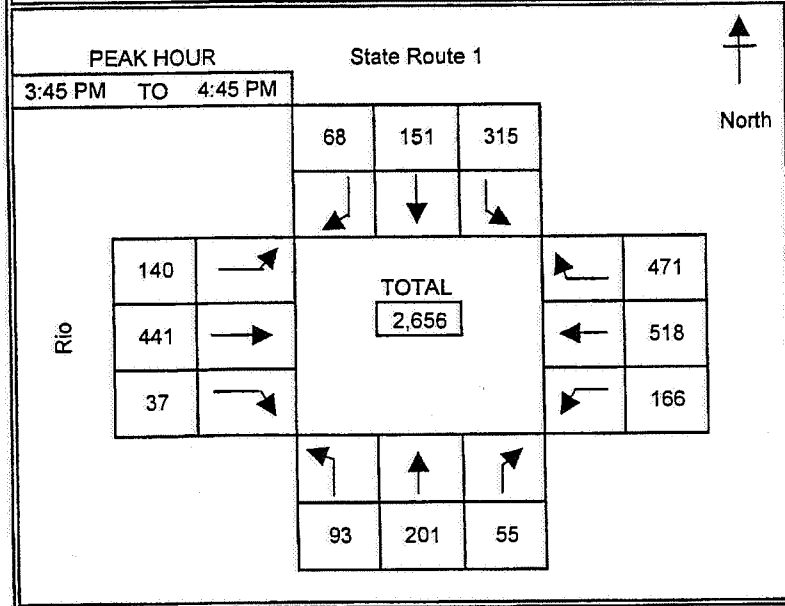
Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
7:00 AM	7:15 AM	12	18	3	6	25	10	11	7	24	22	28	5		171
7:15 AM	7:30 AM	39	43	8	17	60	35	37	29	59	67	53	12		459
7:30 AM	7:45 AM	79	88	15	32	89	66	57	69	90	132	83	30		830
7:45 AM	8:00 AM	130	154	25	40	116	84	76	131	118	210	110	65		1,259
8:00 AM	8:15 AM	192	236	38	49	147	104	111	216	150	303	142	94		1,782
8:15 AM	8:30 AM	226	306	46	60	172	121	139	288	176	389	179	116		2,218
8:30 AM	8:45 AM	256	367	52	73	200	135	163	353	205	467	213	134		2,618
8:45 AM	9:00 AM	283	421	59	83	224	146	185	410	229	542	254	149		2,985
TOTAL BY PERIOD															
7:00 AM	7:15 AM	12	18	3	6	25	10	11	7	24	22	28	5		171
7:15 AM	7:30 AM	27	25	5	11	35	25	26	22	35	45	25	7		288
7:30 AM	7:45 AM	40	45	7	15	29	31	20	40	31	65	30	18		371
7:45 AM	8:00 AM	51	66	10	8	27	18	19	62	28	78	27	35		429
8:00 AM	8:15 AM	62	82	13	9	31	20	35	85	32	93	32	29		523
8:15 AM	8:30 AM	34	70	8	11	25	17	28	72	26	86	37	22		436
8:30 AM	8:45 AM	30	61	6	13	28	14	24	65	29	78	34	18		400
8:45 AM	9:00 AM	27	54	7	10	24	11	22	57	24	75	41	15		367
HOURLY TOTALS															
7:00 AM	8:00 AM	130	154	25	40	116	84	76	131	118	210	110	65		1,259
7:15 AM	8:15 AM	180	218	35	43	122	94	100	209	126	281	114	89		1,611
7:30 AM	8:30 AM	187	263	38	43	112	86	102	259	117	322	126	104		1,759
7:45 AM	8:45 AM	177	279	37	41	111	69	106	284	115	335	130	104		1,788
8:00 AM	9:00 AM	153	267	34	43	108	62	109	279	111	332	144	84		1,726

Lane Configuration		0.79			0.74			0.83			0.92			Overall
Peak Hour Factor	0.71	0.85	0.71	0.79	0.90	0.86	0.76	0.84	0.90	0.90	0.88	0.74		0.85

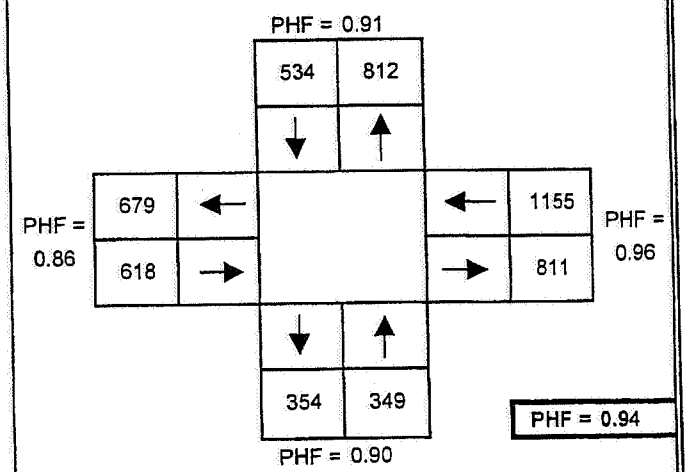
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY:	Wednesday
N-S Approach:	State Route 1		Survey Time:	3:30PM	To	5:30PM
E-W Approach:	Rio		City:	Carmel Valley	Weather:	

PEAK HOUR 3:45 PM TO 4:45 PM



Arrival / Departure Volumes



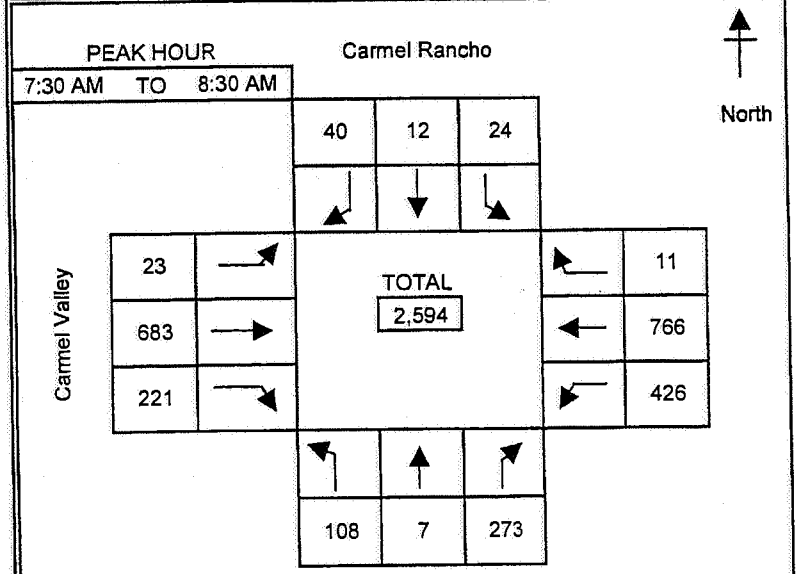
Time Period From	To	Eastbound Left	Eastbound Thru	Eastbound Right	Northbound Left	Northbound Thru	Northbound Right	Westbound Left	Westbound Thru	Westbound Right	Southbound Left	Southbound Thru	Southbound Right		Total
SURVEY DATA															
3:30 PM ---	3:45 PM														0
3:45 PM ---	4:00 PM														0
4:00 PM ---	4:15 PM														0
4:15 PM ---	4:30 PM														0
4:30 PM ---	4:45 PM														0
4:45 PM ---	5:00 PM														0
5:00 PM ---	5:15 PM														0
5:15 PM ---	5:30 PM														0
TOTAL BY PERIOD															
3:30 PM ---	3:45 PM	35	105	10	18	55	10	53	122	90	66	42	18		624
3:45 PM ---	4:00 PM	31	112	13	22	60	6	48	141	112	75	36	12		668
4:00 PM ---	4:15 PM	38	132	9	28	52	17	41	133	122	80	35	20		707
4:15 PM ---	4:30 PM	40	105	8	25	46	12	37	116	107	88	44	14		642
4:30 PM ---	4:45 PM	31	92	7	18	43	20	40	128	130	72	36	22		639
4:45 PM ---	5:00 PM	30	86	4	20	42	25	35	142	120	55	39	24		622
5:00 PM ---	5:15 PM	26	75	5	16	38	19	29	125	101	48	42	19		543
5:15 PM ---	5:30 PM	25	82	8	21	35	22	27	106	83	53	34	18		514
HOURLY TOTALS															
3:30 PM ---	4:30 PM	144	454	40	93	213	45	179	512	431	309	157	64		2,641
3:45 PM ---	4:45 PM	140	441	37	93	201	55	166	518	471	315	151	68		2,656
4:00 PM ---	5:00 PM	139	415	28	91	183	74	153	519	479	295	154	80		2,610
4:15 PM ---	5:15 PM	127	358	24	79	169	76	141	511	458	263	161	79		2,446
4:30 PM ---	5:30 PM	112	335	24	75	158	86	131	501	434	228	151	83		2,318
Lane Configuration			0.86			0.90			0.96			0.91			Overall
Peak Hour Factor		0.88	0.84	0.71	0.83	0.84	0.69	0.86	0.92	0.91	0.89	0.86	0.77		0.94

TJKM Intersection Turning Movement Summary

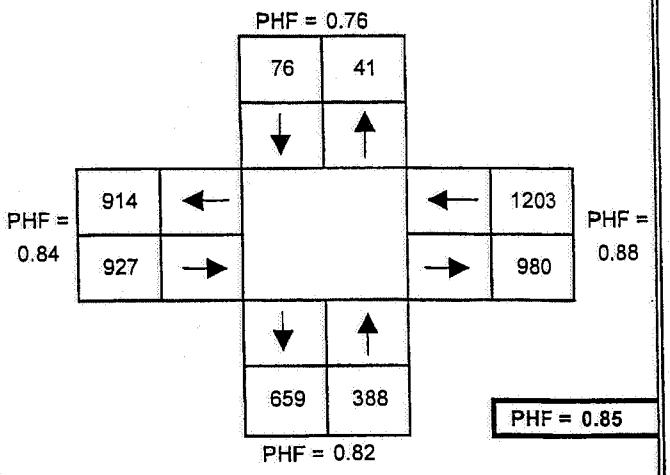
Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	Carmel Rancho		Survey Time:	7:00AM	To 9:00AM
E-W Approach:	Carmel Valley		City:	Carmel Valley	Weather:

PEAK HOUR 7:30 AM TO 8:30 AM

Carmel Rancho



Arrival / Departure Volumes



Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
7:00 AM	7:15 AM	2	104	32	17	0	18	59	158	0	2	4	3		399
7:15 AM	7:30 AM	6	240	75	28	1	47	134	327	1	5	6	9		879
7:30 AM	7:45 AM	11	403	126	44	3	100	236	541	3	12	9	17		1,505
7:45 AM	8:00 AM	14	633	170	69	5	192	369	748	5	22	10	31		2,268
8:00 AM	8:15 AM	21	810	229	104	5	267	471	932	10	27	15	39		2,930
8:15 AM	8:30 AM	29	923	296	136	8	320	560	1,093	12	29	18	49		3,473
8:30 AM	8:45 AM	36	1,078	370	176	11	376	643	1,224	13	33	18	57		4,035
8:45 AM	9:00 AM	41	1,229	455	205	13	426	735	1,362	15	38	22	69		4,610
TOTAL BY PERIOD															
7:00 AM	7:15 AM	2	104	32	17	0	18	59	158	0	2	4	3		399
7:15 AM	7:30 AM	4	136	43	11	1	29	75	169	1	3	2	6		480
7:30 AM	7:45 AM	5	163	51	16	2	53	102	214	2	7	3	8		626
7:45 AM	8:00 AM	3	230	44	25	2	92	133	207	2	10	1	14		763
8:00 AM	8:15 AM	7	177	59	35	0	75	102	184	5	5	5	8		662
8:15 AM	8:30 AM	8	113	67	32	3	53	89	161	2	2	3	10		543
8:30 AM	8:45 AM	7	155	74	40	3	56	83	131	1	4	0	8		562
8:45 AM	9:00 AM	5	151	85	29	2	50	92	138	2	5	4	12		575
HOURLY TOTALS															
7:00 AM	8:00 AM	14	633	170	69	5	192	369	748	5	22	10	31		2,268
7:15 AM	8:15 AM	19	706	197	87	5	249	412	774	10	25	11	36		2,531
7:30 AM	8:30 AM	23	683	221	108	7	273	426	766	11	24	12	40		2,594
7:45 AM	8:45 AM	25	675	244	132	8	276	407	683	10	21	9	40		2,530
8:00 AM	9:00 AM	27	596	285	136	8	234	366	614	10	16	12	38		2,342
Lane Configuration			0.84			0.82			0.88			0.76			Overall
Peak Hour Factor		0.72	0.74	0.82	0.77	0.58	0.74	0.80	0.89	0.55	0.60	0.60	0.71		0.85

TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	Carmel Rancho		Survey Time:	2:00PM	To 4:00PM
E-W Approach:	Carmel Valley		City:	Carmel Valley	Weather:

PEAK HOUR 2:15 PM TO 3:15 PM

Carmel Rancho

North

Carmel Valley

20	TOTAL 3,597	9
798		854
387		519

6	18	16
421	24	525

Arrival / Departure Volumes

PHF = 0.67

40	53	
1281		1382
1205		1339
924	970	

PHF = 0.82

PHF = 0.91

PHF = 0.95

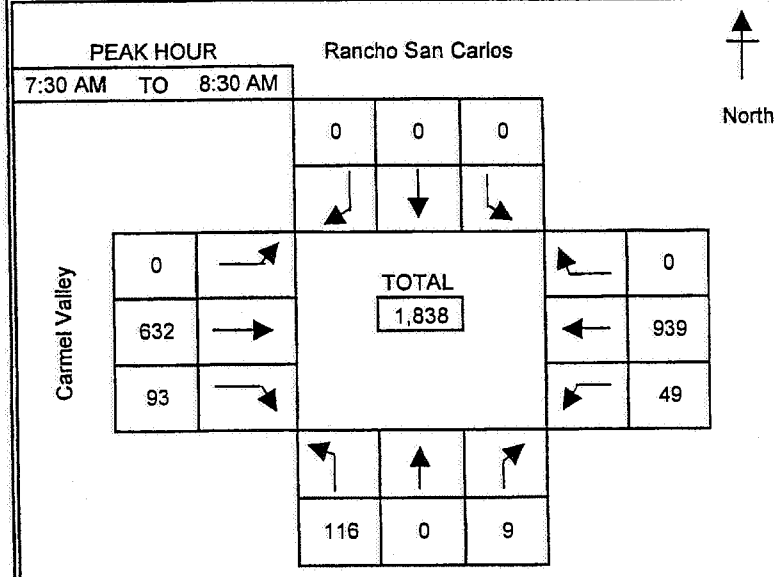
PHF = 0.95

Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
2:00 PM	2:15 PM	5	206	85	91	4	98	121	160	4	4	2	2		782
2:15 PM	2:30 PM	13	453	197	197	7	218	239	390	5	7	5	2		1,733
2:30 PM	2:45 PM	15	649	293	283	12	373	381	623	10	12	12	3		2,666
2:45 PM	3:00 PM	21	851	387	387	18	517	514	817	13	14	14	5		3,558
3:00 PM	3:15 PM	25	1,004	472	512	28	623	640	1,014	13	20	20	8		4,379
3:15 PM	3:30 PM	36	1,125	574	616	33	740	745	1,237	16	22	25	8		5,177
3:30 PM	3:45 PM	43	1,274	667	711	37	845	885	1,384	20	27	28	10		5,931
3:45 PM	4:00 PM	49	1,394	753	811	41	974	1,001	1,485	22	27	35	12		6,604
TOTAL BY PERIOD															
2:00 PM	2:15 PM	5	206	85	91	4	98	121	160	4	4	2	2		782
2:15 PM	2:30 PM	8	247	112	106	3	120	118	230	1	3	3	0		951
2:30 PM	2:45 PM	2	196	96	86	5	155	142	233	5	5	7	1		933
2:45 PM	3:00 PM	6	202	94	104	6	144	133	194	3	2	2	2		892
3:00 PM	3:15 PM	4	153	85	125	10	106	126	197	0	6	6	3		821
3:15 PM	3:30 PM	11	121	102	104	5	117	105	223	3	2	5	0		798
3:30 PM	3:45 PM	7	149	93	95	4	105	140	147	4	5	3	2		754
3:45 PM	4:00 PM	6	120	86	100	4	129	116	101	2	0	7	2		673
HOURLY TOTALS															
2:00 PM	3:00 PM	21	851	387	387	18	517	514	817	13	14	14	5		3,558
2:15 PM	3:15 PM	20	798	387	421	24	525	519	854	9	16	18	6		3,597
2:30 PM	3:30 PM	23	672	377	419	26	522	506	847	11	15	20	6		3,444
2:45 PM	3:45 PM	28	625	374	428	25	472	504	761	10	15	16	7		3,265
3:00 PM	4:00 PM	28	543	366	424	23	457	487	668	9	13	21	7		3,046
Lane Configuration			0.82			0.95			0.91			0.67			Overall
Peak Hour Factor		0.63	0.81	0.86	0.84	0.60	0.85	0.91	0.92	0.45	0.67	0.64	0.50		0.95

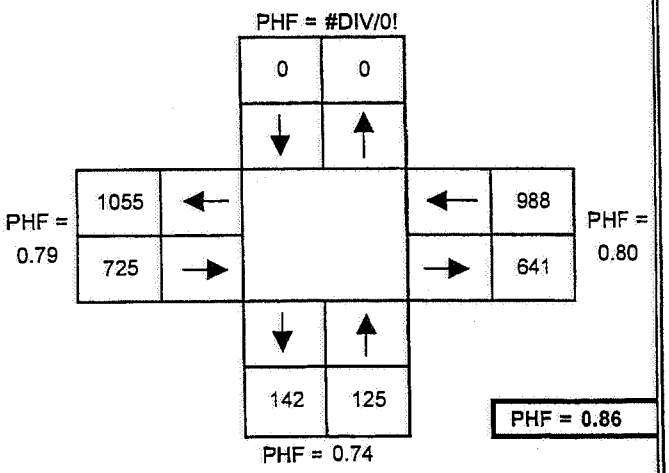
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	Rancho San Carlos		Survey Time:	7:00AM	To 9:00AM
E-W Approach:	Carmel Valley		City:	Carmel Valley	Weather:

PEAK HOUR
7:30 AM TO 8:30 AM



Arrival / Departure Volumes



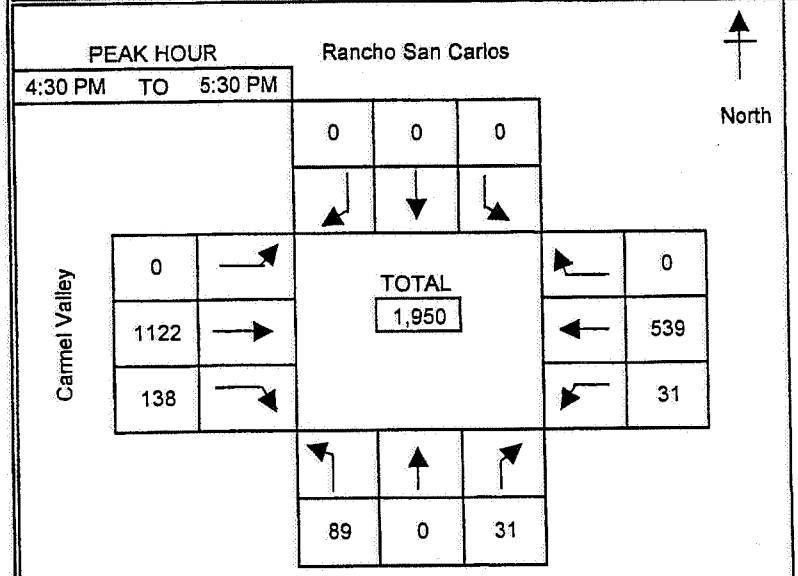
Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
7:00 AM	7:15 AM	0	75	20	2	0	0	8	93	0					198
7:15 AM	7:30 AM	0	168	35	12	0	1	19	286	0					521
7:30 AM	7:45 AM	0	285	46	37	0	3	31	583	0					985
7:45 AM	8:00 AM	0	489	72	75	0	7	46	829	0					1,518
8:00 AM	8:15 AM	0	655	97	103	0	10	56	1,034	0					1,955
8:15 AM	8:30 AM	0	800	128	128	0	10	68	1,225	0					2,359
8:30 AM	8:45 AM	0	929	170	149	0	12	76	1,381	0					2,717
8:45 AM	9:00 AM	0	1,039	225	173	0	15	85	1,519	0					3,056
TOTAL BY PERIOD															
7:00 AM	7:15 AM	0	75	20	2	0	0	8	93	0	0	0	0		198
7:15 AM	7:30 AM	0	93	15	10	0	1	11	193	0	0	0	0		323
7:30 AM	7:45 AM	0	117	11	25	0	2	12	297	0	0	0	0		464
7:45 AM	8:00 AM	0	204	26	38	0	4	15	246	0	0	0	0		533
8:00 AM	8:15 AM	0	166	25	28	0	3	10	205	0	0	0	0		437
8:15 AM	8:30 AM	0	145	31	25	0	0	12	191	0	0	0	0		404
8:30 AM	8:45 AM	0	129	42	21	0	2	8	156	0	0	0	0		358
8:45 AM	9:00 AM	0	110	55	24	0	3	9	138	0	0	0	0		339
HOURLY TOTALS															
7:00 AM	8:00 AM	0	489	72	75	0	7	46	829	0	0	0	0		1,518
7:15 AM	8:15 AM	0	580	77	101	0	10	48	941	0	0	0	0		1,757
7:30 AM	8:30 AM	0	632	93	116	0	9	49	939	0	0	0	0		1,838
7:45 AM	8:45 AM	0	644	124	112	0	9	45	798	0	0	0	0		1,732
8:00 AM	9:00 AM	0	550	153	98	0	8	39	690	0	0	0	0		1,538

Lane Configuration		0.79			0.74			0.80			#DIV/0!			Overall
Peak Hour Factor	#DIV/0!	0.77	0.75	0.76	#DIV/0!	0.56	0.82	0.79	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0.86

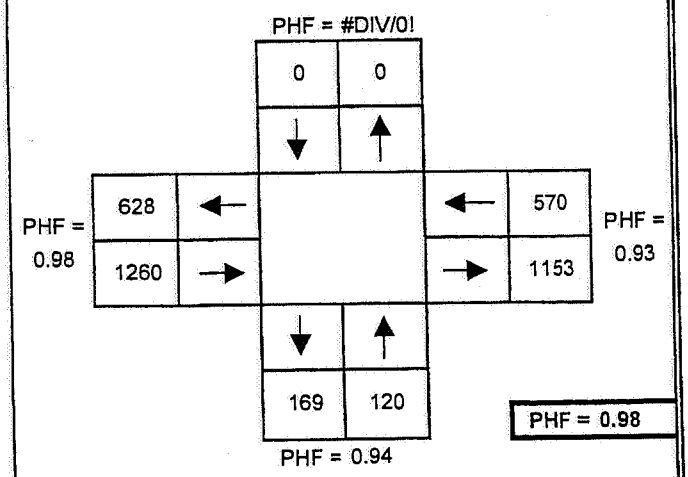
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	Rancho San Carlos		Survey Time:	4:00PM To	6:00PM
E-W Approach:	Carmel Valley		City:	Carmel Valley	Weather:

PEAK HOUR
4:30 PM TO 5:30 PM



Arrival / Departure Volumes



Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
4:00 PM ---	4:15 PM														0
4:15 PM ---	4:30 PM														0
4:30 PM ---	4:45 PM														0
4:45 PM ---	5:00 PM														0
5:00 PM ---	5:15 PM														0
5:15 PM ---	5:30 PM														0
5:30 PM ---	5:45 PM														0
5:45 PM ---	6:00 PM														0
TOTAL BY PERIOD															
4:00 PM ---	4:15 PM	0	186	28	40	0	12	3	144	0	0	0	0		413
4:15 PM ---	4:30 PM	0	241	31	32	0	8	5	155	0	0	0	0		472
4:30 PM ---	4:45 PM	0	275	42	25	0	7	10	138	0	0	0	0		497
4:45 PM ---	5:00 PM	0	285	35	22	0	10	6	122	0	0	0	0		480
5:00 PM ---	5:15 PM	0	269	32	18	0	6	8	146	0	0	0	0		479
5:15 PM ---	5:30 PM	0	293	29	24	0	8	7	133	0	0	0	0		494
5:30 PM ---	5:45 PM	0	280	35	20	0	5	4	150	0	0	0	0		494
5:45 PM ---	6:00 PM	0	255	31	15	0	4	5	128	0	0	0	0		438
HOURLY TOTALS															
4:00 PM ---	5:00 PM	0	987	136	119	0	37	24	559	0	0	0	0		1,862
4:15 PM ---	5:15 PM	0	1070	140	97	0	31	29	561	0	0	0	0		1,928
4:30 PM ---	5:30 PM	0	1122	138	89	0	31	31	539	0	0	0	0		1,950
4:45 PM ---	5:45 PM	0	1127	131	84	0	29	25	551	0	0	0	0		1,947
5:00 PM ---	6:00 PM	0	1097	127	77	0	23	24	557	0	0	0	0		1,905
Lane Configuration			0.98			0.94			0.93			#DIV/0!			Overall
Peak Hour Factor		#DIV/0!	0.96	0.82	0.89	#DIV/0!	0.78	0.78	0.92	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0.98

TJKM Intersection Turning Movement Summary

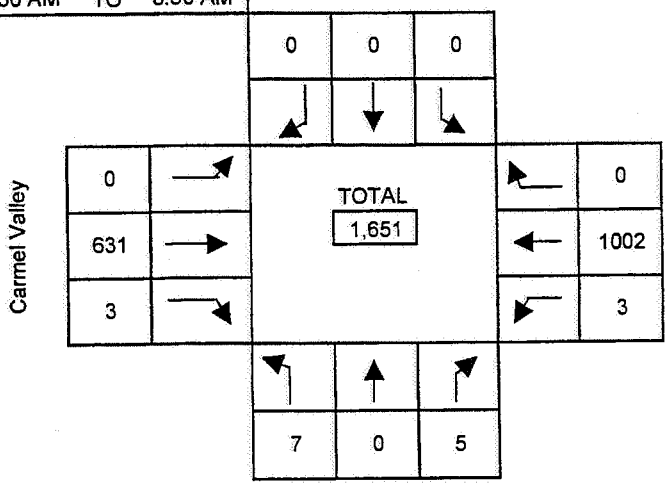
Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	Brookdale		Survey Time:	7:00AM	To 9:00AM
E-W Approach:	Carmel Valley		City:	Carmel Valley	Weather:

PEAK HOUR
7:30 AM TO 8:30 AM

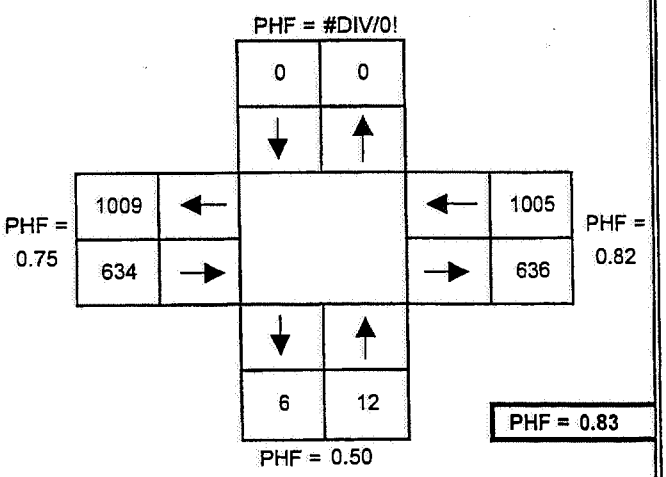
Brookdale

North

Carmel Valley



Arrival / Departure Volumes



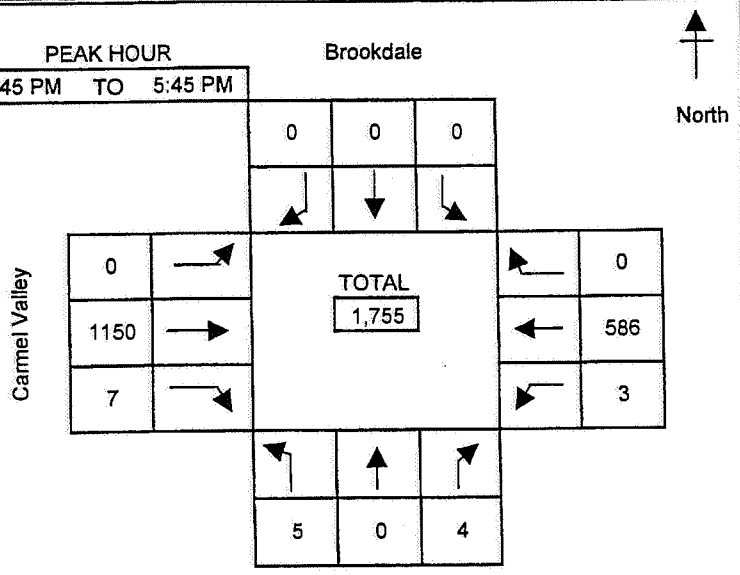
Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
7:00 AM	7:15 AM	0	78	0	0	0	0	0	101	0					179
7:15 AM	7:30 AM	0	177	0	0	0	1	0	309	0					487
7:30 AM	7:45 AM	0	290	1	2	0	5	0	615	0					913
7:45 AM	8:00 AM	0	499	3	2	0	5	2	899	0					1,410
8:00 AM	8:15 AM	0	667	3	3	0	5	3	1,116	0					1,797
8:15 AM	8:30 AM	0	808	3	7	0	6	3	1,311	0					2,138
8:30 AM	8:45 AM	0	937	4	7	0	8	4	1,478	0					2,438
8:45 AM	9:00 AM	0	1,053	4	10	0	8	5	1,612	0					2,692
TOTAL BY PERIOD															
7:00 AM	7:15 AM	0	78	0	0	0	0	0	101	0	0	0	0		179
7:15 AM	7:30 AM	0	99	0	0	0	1	0	208	0	0	0	0		308
7:30 AM	7:45 AM	0	113	1	2	0	4	0	306	0	0	0	0		426
7:45 AM	8:00 AM	0	209	2	0	0	0	2	284	0	0	0	0		497
8:00 AM	8:15 AM	0	168	0	1	0	0	1	217	0	0	0	0		387
8:15 AM	8:30 AM	0	141	0	4	0	1	0	195	0	0	0	0		341
8:30 AM	8:45 AM	0	129	1	0	0	2	1	167	0	0	0	0		300
8:45 AM	9:00 AM	0	116	0	3	0	0	1	134	0	0	0	0		254
HOURLY TOTALS															
7:00 AM	8:00 AM	0	499	3	2	0	5	2	899	0	0	0	0		1,410
7:15 AM	8:15 AM	0	589	3	3	0	5	3	1015	0	0	0	0		1,618
7:30 AM	8:30 AM	0	631	3	7	0	5	3	1002	0	0	0	0		1,651
7:45 AM	8:45 AM	0	647	3	5	0	3	4	863	0	0	0	0		1,525
8:00 AM	9:00 AM	0	554	1	8	0	3	3	713	0	0	0	0		1,282

Lane Configuration		0.75			0.50			0.82			#DIV/0!			Overall
Peak Hour Factor	#DIV/0!	0.75	0.38	0.44	#DIV/0!	0.31	0.38	0.82	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0.83

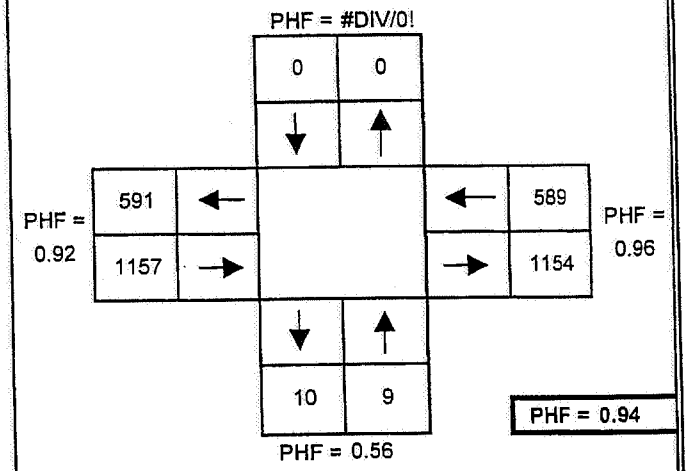
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	Brookdale		Survey Time:	4:00PM	To 6:00PM
E-W Approach:	Carmel Valley		City:	Carmel Valley	Weather:

PEAK HOUR
4:45 PM TO 5:45 PM



Arrival / Departure Volumes



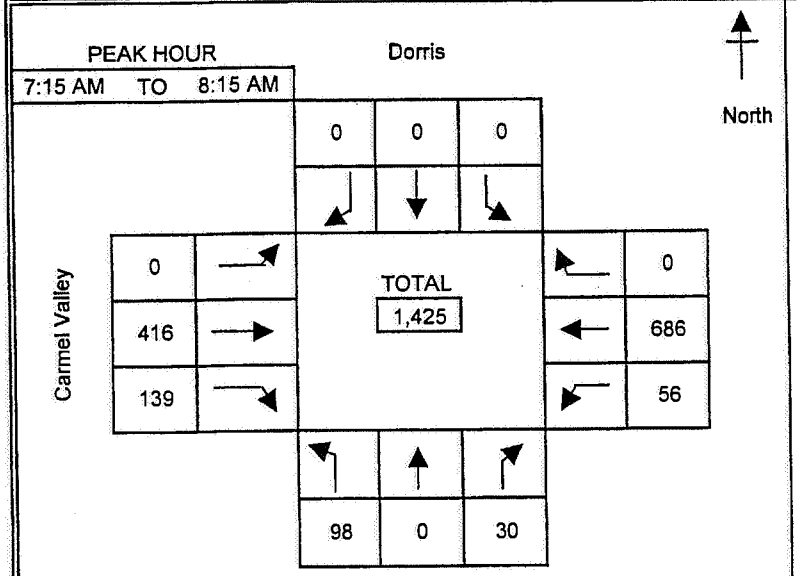
Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
4:00 PM	4:15 PM														0
4:15 PM	4:30 PM														0
4:30 PM	4:45 PM														0
4:45 PM	5:00 PM														0
5:00 PM	5:15 PM														0
5:15 PM	5:30 PM														0
5:30 PM	5:45 PM														0
5:45 PM	6:00 PM														0
TOTAL BY PERIOD															
4:00 PM	4:15 PM	0	207	3	3	0	1	2	153	0	0	0	0		369
4:15 PM	4:30 PM	0	230	2	2	0	0	0	161	0	0	0	0		395
4:30 PM	4:45 PM	0	299	1	0	0	3	1	129	0	0	0	0		433
4:45 PM	5:00 PM	0	295	3	1	0	1	0	143	0	0	0	0		443
5:00 PM	5:15 PM	0	253	3	2	0	1	2	139	0	0	0	0		400
5:15 PM	5:30 PM	0	315	1	0	0	0	0	153	0	0	0	0		469
5:30 PM	5:45 PM	0	287	0	2	0	2	1	151	0	0	0	0		443
5:45 PM	6:00 PM	0	244	2	1	0	1	1	121	0	0	0	0		370
HOURLY TOTALS															
4:00 PM	5:00 PM	0	1031	9	6	0	5	3	586	0	0	0	0		1,640
4:15 PM	5:15 PM	0	1077	9	5	0	5	3	572	0	0	0	0		1,671
4:30 PM	5:30 PM	0	1162	8	3	0	5	3	564	0	0	0	0		1,745
4:45 PM	5:45 PM	0	1150	7	5	0	4	3	586	0	0	0	0		1,755
5:00 PM	6:00 PM	0	1099	6	5	0	4	4	564	0	0	0	0		1,682

Lane Configuration		0.92			0.56			0.96			#DIV/0!			Overall
Peak Hour Factor	#DIV/0!	0.91	0.58	0.63	#DIV/0!	0.50	0.38	0.96	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0.94

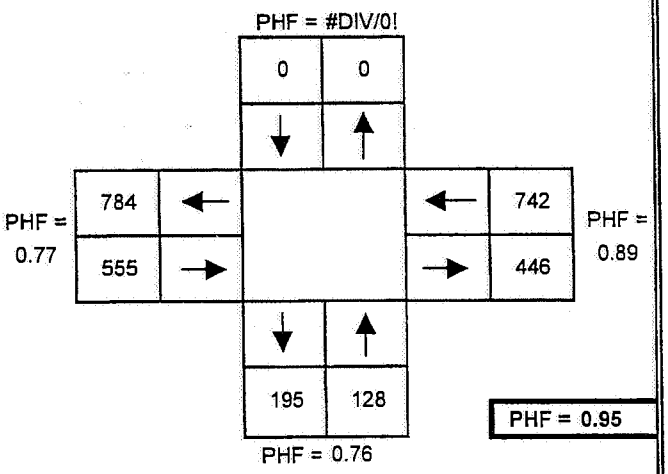
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	Dorris		Survey Time:	7:00AM	To 9:00AM
E-W Approach:	Carmel Valley		City:	Carmel Valley	Weather:

PEAK HOUR
7:15 AM TO 8:15 AM



Arrival / Departure Volumes



PHF = 0.95

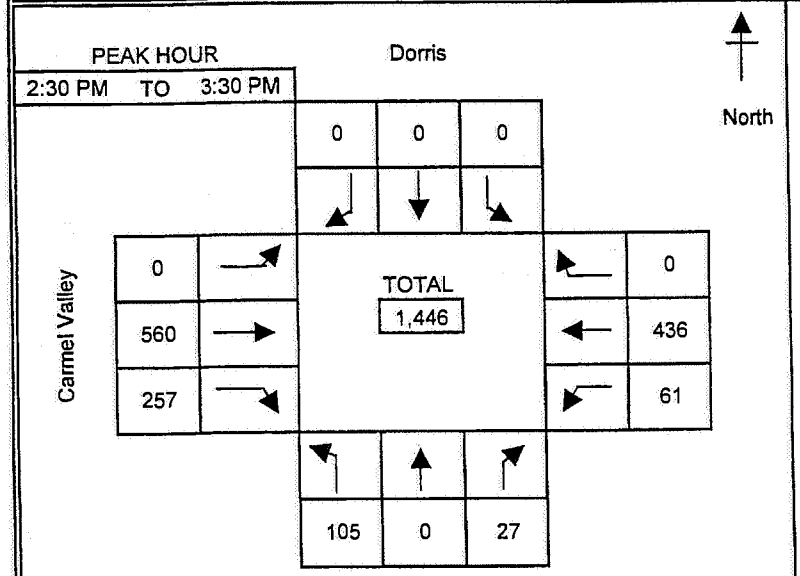
Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
7:00 AM	7:15 AM	0	55	14	15	0	2	20	155	0					261
7:15 AM	7:30 AM	0	131	36	37	0	5	37	327	0					573
7:30 AM	7:45 AM	0	219	71	71	0	13	52	520	0					946
7:45 AM	8:00 AM	0	325	119	91	0	20	62	695	0					1,312
8:00 AM	8:15 AM	0	471	153	113	0	32	76	841	0					1,686
8:15 AM	8:30 AM	0	593	180	131	0	41	88	963	0					1,996
8:30 AM	8:45 AM	0	678	202	147	0	46	97	1,080	0					2,250
8:45 AM	9:00 AM	0	740	226	162	0	49	108	1,185	0					2,470
TOTAL BY PERIOD															
7:00 AM	7:15 AM	0	55	14	15	0	2	20	155	0	0	0	0		261
7:15 AM	7:30 AM	0	76	22	22	0	3	17	172	0	0	0	0		312
7:30 AM	7:45 AM	0	88	35	34	0	8	15	193	0	0	0	0		373
7:45 AM	8:00 AM	0	106	48	20	0	7	10	175	0	0	0	0		366
8:00 AM	8:15 AM	0	146	34	22	0	12	14	146	0	0	0	0		374
8:15 AM	8:30 AM	0	122	27	18	0	9	12	122	0	0	0	0		310
8:30 AM	8:45 AM	0	85	22	16	0	5	9	117	0	0	0	0		254
8:45 AM	9:00 AM	0	62	24	15	0	3	11	105	0	0	0	0		220
HOURLY TOTALS															
7:00 AM	8:00 AM	0	325	119	91	0	20	62	695	0	0	0	0		1,312
7:15 AM	8:15 AM	0	416	139	98	0	30	56	686	0	0	0	0		1,425
7:30 AM	8:30 AM	0	462	144	94	0	36	51	636	0	0	0	0		1,423
7:45 AM	8:45 AM	0	459	131	76	0	33	45	560	0	0	0	0		1,304
8:00 AM	9:00 AM	0	415	107	71	0	29	46	490	0	0	0	0		1,158

Lane Configuration		0.77			0.76			0.89			#DIV/0!			Overall
Peak Hour Factor	#DIV/0!	0.71	0.72	0.72	#DIV/0!	0.63	0.82	0.89	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0.95

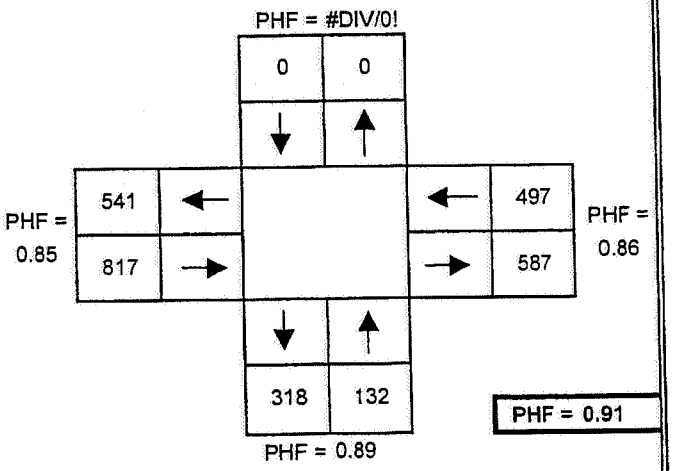
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	Dorris		Survey Time:	2:00PM To	4:00PM
E-W Approach:	Carmel Valley		City: Carmel Valley	Weather:	

PEAK HOUR 2:30 PM TO 3:30 PM



Arrival / Departure Volumes



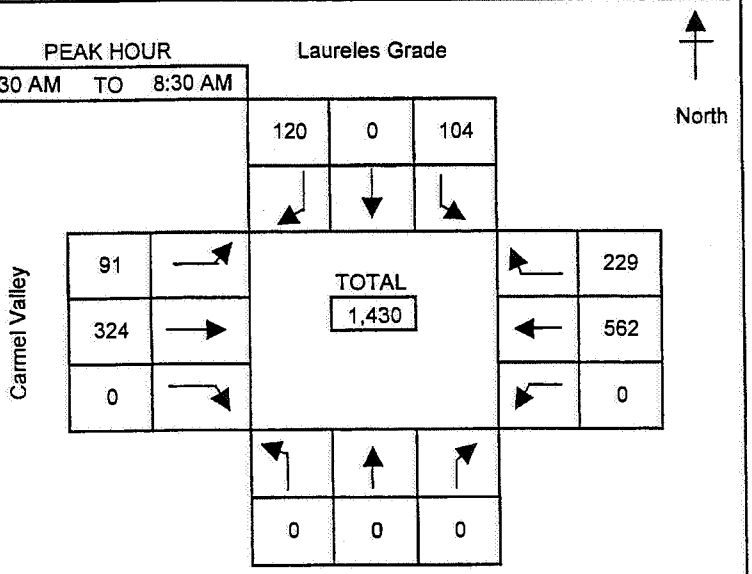
Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
2:00 PM	2:15 PM	0	106	43	18	0	5	13	75	0					260
2:15 PM	2:30 PM	0	228	95	38	0	12	24	167	0					564
2:30 PM	2:45 PM	0	360	162	63	0	18	42	250	0					895
2:45 PM	3:00 PM	0	525	237	94	0	22	64	352	0					1,294
3:00 PM	3:15 PM	0	669	297	121	0	32	77	483	0					1,679
3:15 PM	3:30 PM	0	788	352	143	0	39	85	603	0					2,010
3:30 PM	3:45 PM	0	918	403	161	0	47	94	708	0					2,331
3:45 PM	4:00 PM	0	1,043	463	186	0	59	106	800	0					2,657
TOTAL BY PERIOD															
2:00 PM	2:15 PM	0	106	43	18	0	5	13	75	0	0	0	0		260
2:15 PM	2:30 PM	0	122	52	20	0	7	11	92	0	0	0	0		304
2:30 PM	2:45 PM	0	132	67	25	0	6	18	83	0	0	0	0		331
2:45 PM	3:00 PM	0	165	75	31	0	4	22	102	0	0	0	0		399
3:00 PM	3:15 PM	0	144	60	27	0	10	13	131	0	0	0	0		385
3:15 PM	3:30 PM	0	119	55	22	0	7	8	120	0	0	0	0		331
3:30 PM	3:45 PM	0	130	51	18	0	8	9	105	0	0	0	0		321
3:45 PM	4:00 PM	0	125	60	25	0	12	12	92	0	0	0	0		326
HOURLY TOTALS															
2:00 PM	3:00 PM	0	525	237	94	0	22	64	352	0	0	0	0		1,294
2:15 PM	3:15 PM	0	563	254	103	0	27	64	408	0	0	0	0		1,419
2:30 PM	3:30 PM	0	560	257	105	0	27	61	436	0	0	0	0		1,446
2:45 PM	3:45 PM	0	558	241	98	0	29	52	458	0	0	0	0		1,436
3:00 PM	4:00 PM	0	518	226	92	0	37	42	448	0	0	0	0		1,363

Lane Configuration		0.85			0.89			0.86			#DIV/0!			Overall
Peak Hour Factor	#DIV/0!	0.85	0.86	0.85	#DIV/0!	0.68	0.69	0.83	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0.91

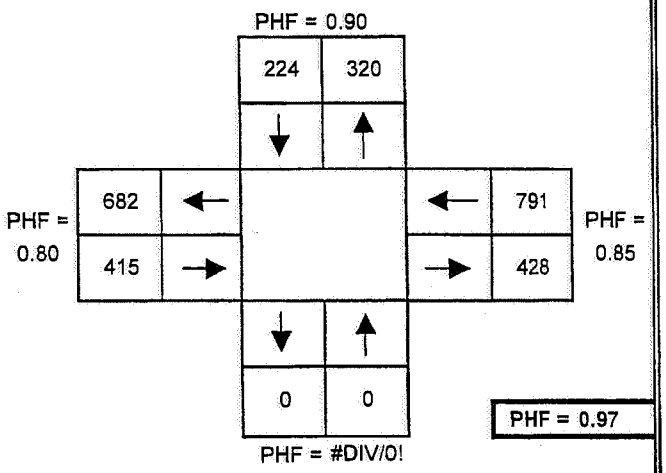
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	Laureles Grade		Survey Time:	7:00AM	To 9:00AM
E-W Approach:	Carmel Valley		City:	Carmel Valley	Weather:

PEAK HOUR
7:30 AM TO 8:30 AM



Arrival / Departure Volumes



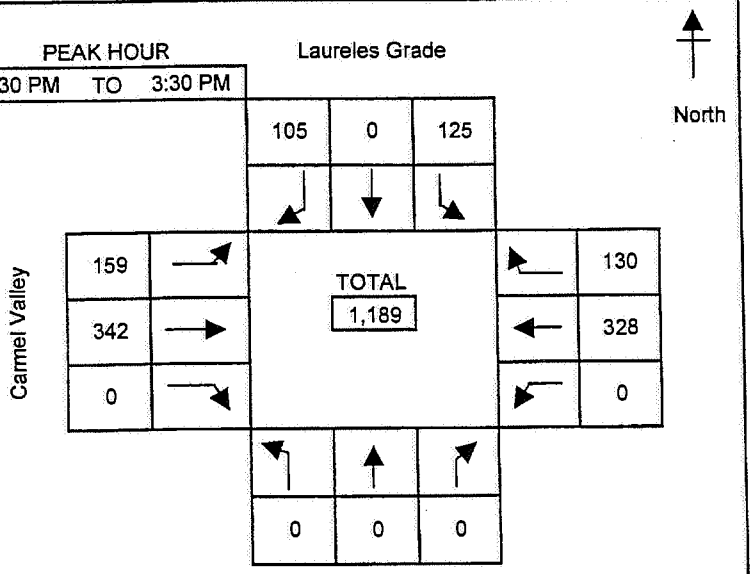
Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
7:00 AM	7:15 AM	16	25	0				0	80	42	25	0	32		220
7:15 AM	7:30 AM	35	53	0				0	212	93	53	0	67		513
7:30 AM	7:45 AM	55	96	0				0	382	155	75	0	107		870
7:45 AM	8:00 AM	79	167	0				0	519	227	96	0	138		1,226
8:00 AM	8:15 AM	106	267	0				0	649	282	124	0	165		1,593
8:15 AM	8:30 AM	126	377	0				0	774	322	157	0	187		1,943
8:30 AM	8:45 AM	144	469	0				0	875	358	185	0	205		2,236
8:45 AM	9:00 AM	163	549	0				0	974	393	215	0	221		2,515
TOTAL BY PERIOD															
7:00 AM	7:15 AM	16	25	0	0	0	0	0	80	42	25	0	32		220
7:15 AM	7:30 AM	19	28	0	0	0	0	0	132	51	28	0	35		293
7:30 AM	7:45 AM	20	43	0	0	0	0	0	170	62	22	0	40		357
7:45 AM	8:00 AM	24	71	0	0	0	0	0	137	72	21	0	31		356
8:00 AM	8:15 AM	27	100	0	0	0	0	0	130	55	28	0	27		367
8:15 AM	8:30 AM	20	110	0	0	0	0	0	125	40	33	0	22		350
8:30 AM	8:45 AM	18	92	0	0	0	0	0	101	36	28	0	18		293
8:45 AM	9:00 AM	19	80	0	0	0	0	0	99	35	30	0	16		279
HOURLY TOTALS															
7:00 AM	8:00 AM	79	167	0	0	0	0	0	519	227	96	0	138		1,226
7:15 AM	8:15 AM	90	242	0	0	0	0	0	569	240	99	0	133		1,373
7:30 AM	8:30 AM	91	324	0	0	0	0	0	562	229	104	0	120		1,430
7:45 AM	8:45 AM	89	373	0	0	0	0	0	493	203	110	0	98		1,366
8:00 AM	9:00 AM	84	382	0	0	0	0	0	455	166	119	0	83		1,289

Lane Configuration		0.80			#DIV/0!			0.85			0.90			Overall
Peak Hour Factor	0.84	0.74	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.83	0.80	0.79	#DIV/0!	0.75		0.97

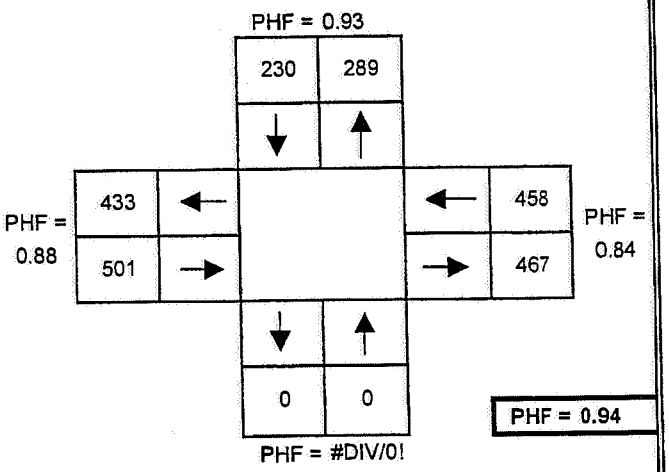
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Survey Date:	12/18/2002	DAY: Wednesday
N-S Approach:	Laureles Grade		Survey Time:	2:00PM To	4:00PM
E-W Approach:	Carmel Valley		City: Carmel Valley	Weather:	

PEAK HOUR
2:30 PM TO 3:30 PM



Arrival / Departure Volumes



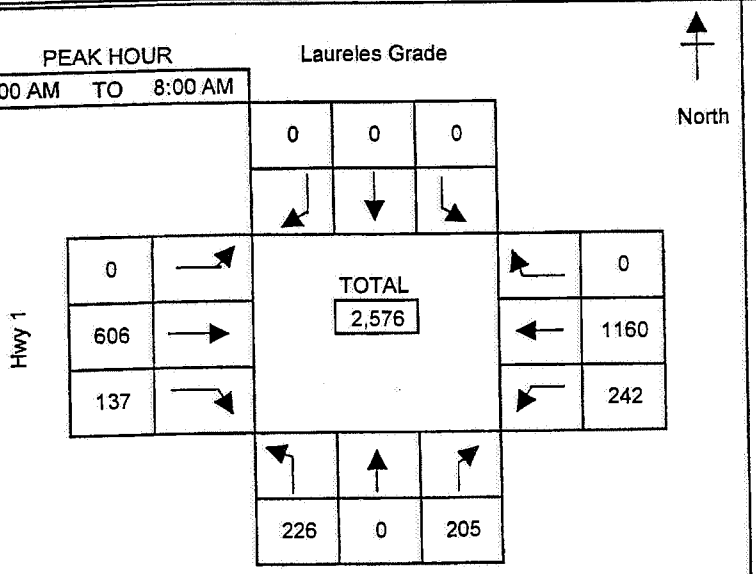
PHF = 0.94

Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
2:00 PM	2:15 PM	28	62	0				0	79	28	21	0	34		252
2:15 PM	2:30 PM	54	130	0				0	192	53	46	0	72		547
2:30 PM	2:45 PM	90	212	0				0	297	84	80	0	100		863
2:45 PM	3:00 PM	121	281	0				0	380	110	110	0	124		1,126
3:00 PM	3:15 PM	166	378	0				0	450	141	143	0	146		1,424
3:15 PM	3:30 PM	213	472	0				0	520	183	171	0	177		1,736
3:30 PM	3:45 PM	249	547	0				0	582	243	197	0	202		2,020
3:45 PM	4:00 PM	283	627	0				0	648	295	227	0	230		2,310
TOTAL BY PERIOD															
2:00 PM	2:15 PM	28	62	0	0	0	0	0	79	28	21	0	34		252
2:15 PM	2:30 PM	26	68	0	0	0	0	0	113	25	25	0	38		295
2:30 PM	2:45 PM	36	82	0	0	0	0	0	105	31	34	0	28		316
2:45 PM	3:00 PM	31	69	0	0	0	0	0	83	26	30	0	24		263
3:00 PM	3:15 PM	45	97	0	0	0	0	0	70	31	33	0	22		298
3:15 PM	3:30 PM	47	94	0	0	0	0	0	70	42	28	0	31		312
3:30 PM	3:45 PM	36	75	0	0	0	0	0	62	60	26	0	25		284
3:45 PM	4:00 PM	34	80	0	0	0	0	0	66	52	30	0	28		290
HOURLY TOTALS															
2:00 PM	3:00 PM	121	281	0	0	0	0	0	380	110	110	0	124		1,126
2:15 PM	3:15 PM	138	316	0	0	0	0	0	371	113	122	0	112		1,172
2:30 PM	3:30 PM	159	342	0	0	0	0	0	328	130	125	0	105		1,189
2:45 PM	3:45 PM	159	335	0	0	0	0	0	285	159	117	0	102		1,157
3:00 PM	4:00 PM	162	346	0	0	0	0	0	268	185	117	0	106		1,184
Lane Configuration			0.88			#DIV/0!			0.84			0.93			Overall
Peak Hour Factor		0.85	0.88	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.78	0.77	0.92	#DIV/0!	0.85		0.94

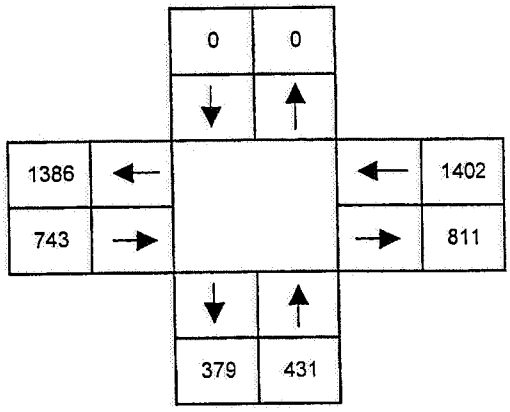
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Speed Limit	Survey Date:	6/26/2003	DAY:	Thursday
N-S Approach:	Laureles Grade	Sign	40	Survey Time:	7:00 AM	To	9:00 AM
E-W Approach:	Hwy 1		55	City:	Caramel	Recorder:	vg

PEAK HOUR
7:00 AM TO 8:00 AM



Arrival / Departure Volumes

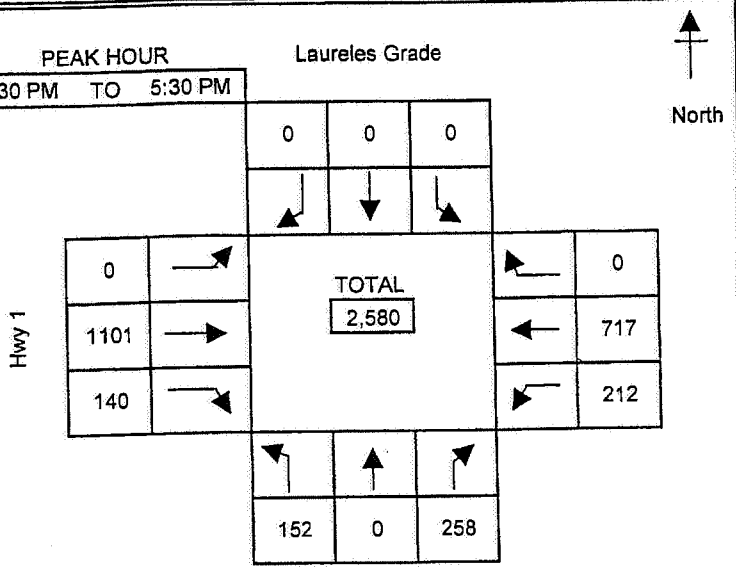


Time Period From	To	Eastbound Left	Thru	Right	Northbound Left	Thru	Right	Westbound Left	Thru	Right	Southbound Left	Thru	Right		Total
SURVEY DATA															
7:00 AM ---	7:15 AM														0
7:15 AM ---	7:30 AM														0
7:30 AM ---	7:45 AM														0
7:45 AM ---	8:00 AM														0
8:00 AM ---	8:15 AM														0
8:15 AM ---	8:30 AM														0
8:30 AM ---	8:45 AM														0
8:45 AM ---	9:00 AM														0
TOTAL BY PERIOD															
7:00 AM ---	7:15 AM	0	135	32	45	0	39	62	295	0	0	0	0		608
7:15 AM ---	7:30 AM	0	166	26	69	0	60	60	320	0	0	0	0		701
7:30 AM ---	7:45 AM	0	186	35	73	0	60	65	317	0	0	0	0		736
7:45 AM ---	8:00 AM	0	119	44	39	0	46	55	228	0	0	0	0		531
8:00 AM ---	8:15 AM	0	175	30	42	0	48	43	268	0	0	0	0		606
8:15 AM ---	8:30 AM	0	150	30	50	0	35	41	276	0	0	0	0		582
8:30 AM ---	8:45 AM	0	184	29	71	0	35	33	251	0	0	0	0		603
8:45 AM ---	9:00 AM	0	129	32	31	0	31	42	186	0	0	0	0		451
HOURLY TOTALS															
7:00 AM ---	8:00 AM	0	606	137	226	0	205	242	1160	0	0	0	0		2,576
7:15 AM ---	8:15 AM	0	646	135	223	0	214	223	1133	0	0	0	0		2,574
7:30 AM ---	8:30 AM	0	630	139	204	0	189	204	1089	0	0	0	0		2,455
7:45 AM ---	8:45 AM	0	628	133	202	0	164	172	1023	0	0	0	0		2,322
8:00 AM ---	9:00 AM	0	638	121	194	0	149	159	981	0	0	0	0		2,242
Lane Configuration															Overall
Peak Hour Factor		#DIV/0!	0.81	0.78	0.77	#DIV/0!	0.85	0.93	0.91	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0.88

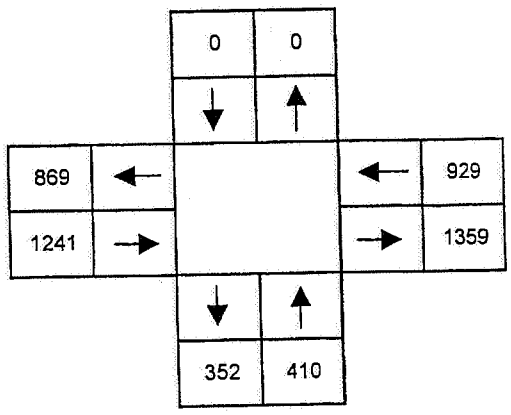
TJKM Intersection Turning Movement Summary

Project:	151-016	Control	Speed Limit	Survey Date:	6/26/2003	DAY:	Thursday
N-S Approach:	Laureles Grade	Sign	40	Survey Time:	4:00 PM	To	6:00 PM
E-W Approach:	Hwy 1		55	City:	Caramel	Recorder:	vg

PEAK HOUR 4:30 PM TO 5:30 PM



Arrival / Departure Volumes



Time Period From	To	Eastbound Left	Eastbound Thru	Eastbound Right	Northbound Left	Northbound Thru	Northbound Right	Westbound Left	Westbound Thru	Westbound Right	Southbound Left	Southbound Thru	Southbound Right		Total
SURVEY DATA															
4:00 PM	4:15 PM														0
4:15 PM	4:30 PM														0
4:30 PM	4:45 PM														0
4:45 PM	5:00 PM														0
5:00 PM	5:15 PM														0
5:15 PM	5:30 PM														0
5:30 PM	5:45 PM														0
5:45 PM	6:00 PM														0
TOTAL BY PERIOD															
4:00 PM	4:15 PM	0	208	43	39	0	88	45	182	0	0	0	0		605
4:15 PM	4:30 PM	0	210	18	40	0	63	41	162	0	0	0	0		534
4:30 PM	4:45 PM	0	250	36	55	0	65	44	194	0	0	0	0		644
4:45 PM	5:00 PM	0	221	34	43	0	94	67	184	0	0	0	0		643
5:00 PM	5:15 PM	0	312	38	24	0	50	45	174	0	0	0	0		643
5:15 PM	5:30 PM	0	318	32	30	0	49	56	165	0	0	0	0		650
5:30 PM	5:45 PM	0	283	28	24	0	63	41	163	0	0	0	0		602
5:45 PM	6:00 PM	0	216	21	18	0	23	45	143	0	0	0	0		466
HOURLY TOTALS															
4:00 PM	5:00 PM	0	889	131	177	0	310	197	722	0	0	0	0		2,426
4:15 PM	5:15 PM	0	993	126	162	0	272	197	714	0	0	0	0		2,464
4:30 PM	5:30 PM	0	1101	140	152	0	258	212	717	0	0	0	0		2,580
4:45 PM	5:45 PM	0	1134	132	121	0	256	209	686	0	0	0	0		2,538
5:00 PM	6:00 PM	0	1129	119	96	0	185	187	645	0	0	0	0		2,361
Lane Configuration															Overall
Peak Hour Factor		#DIV/0!	0.87	0.92	0.69	#DIV/0!	0.69	0.79	0.92	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0.99

APPENDIX C – LEVEL OF SERVICE WORKSHEETS: EXISTING CONDITIONS

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec):	100	Critical Vol./Cap. (X):	0.873
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.9
Optimal Cycle:	98	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 2	0 1		2 0	0 1	0	1 1	0 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	51	1424	18	21	1442	738	419	10	11	40	25	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	1424	18	21	1442	738	419	10	11	40	25	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.84	0.84	0.84	0.85	0.85	0.85	0.95	0.95	0.95
PHF Volume:	60	1675	21	25	1717	879	493	12	13	42	26	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1675	21	25	1717	879	493	12	13	42	26	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	60	1675	21	25	1717	879	493	12	13	42	26	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.92	0.92	0.97	0.97	0.85
Lanes:	1.00	1.98	0.02	1.00	2.00	1.00	2.00	0.48	0.52	1.23	0.77	1.00
Final Sat.:	1805	3745	47	1805	3800	1615	3610	833	917	2268	1418	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.45	0.45	0.01	0.45	0.54	0.14	0.01	0.01	0.02	0.02	0.05
Crit Moves:	****					****	****					****
Green/Cycle:	0.04	0.64	0.64	0.02	0.62	0.62	0.16	0.16	0.16	0.06	0.06	0.06
Volume/Cap:	0.87	0.70	0.70	0.70	0.72	0.87	0.87	0.09	0.09	0.30	0.30	0.87
Uniform Del:	47.9	11.6	11.6	48.7	12.9	15.5	41.2	36.1	36.1	44.8	44.8	46.5
IncremntDel:	66.2	0.9	0.9	46.2	1.1	8.5	14.0	0.1	0.1	0.7	0.7	51.6
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
Delay/Veh:	114.1	12.5	12.5	94.9	14.1	24.0	55.2	36.2	36.2	45.6	45.6	98.1
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:	114.1	12.5	12.5	94.9	14.1	24.0	55.2	36.2	36.2	45.6	45.6	98.1
DesignQueue:	3	38	0	1	41	21	24	1	1	2	1	5

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec): 120 Critical Vol./Cap. (X): 0.990
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 39.6
Optimal Cycle: 180 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:	Protected			Protected			Split Phase			Split Phase		
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	2 0	1	2 0	0 1	0	1 1	0 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	39	2158	32	30	1598	664	690	8	37	24	11	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:	39	2158	32	30	1598	664	690	8	37	24	11	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.87	0.87	0.87	0.84	0.84	0.84	0.76	0.76	0.76
PHF Volume:	41	2248	33	34	1837	763	821	10	44	32	14	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	2248	33	34	1837	763	821	10	44	32	14	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	2248	33	34	1837	763	821	10	44	32	14	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.88	0.88	0.97	0.97	0.85
Lanes:	1.00	1.97	0.03	1.00	2.00	1.00	2.00	0.18	0.82	1.37	0.63	1.00
Final Sat.:	1805	3737	55	1805	3800	1615	3610	296	1370	2520	1155	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.60	0.60	0.02	0.48	0.47	0.23	0.03	0.03	0.01	0.01	0.04
Crit Moves:		****		****			****					****
Green/Cycle:	0.03	0.61	0.61	0.02	0.60	0.60	0.23	0.23	0.23	0.04	0.04	0.04
Volume/Cap:	0.81	0.99	0.99	0.99	0.81	0.79	0.99	0.14	0.14	0.29	0.29	0.99
Uniform Del:	58.0	23.2	23.2	58.8	18.7	18.3	46.1	36.8	36.8	55.6	55.6	57.4
IncremntDel:	60.9	16.5	16.5	148.5	2.2	4.4	28.8	0.2	0.2	1.0	1.0	103.8
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
Delay/Veh:	118.9	39.7	39.7	207.3	20.9	22.7	74.9	36.9	36.9	56.6	56.6	161.1
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:	118.9	39.7	39.7	207.3	20.9	22.7	74.9	36.9	36.9	56.6	56.6	161.1
DesignQueue:	3	70	1	2	56	23	45	0	2	2	1	4

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec): 70 Critical Vol./Cap. (X): 0.799
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 16.8
Optimal Cycle: 67 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	2 0	0	1 0	1 1	0	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	51	1424	18	21	1442	738	419	10	11	40	25	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	1424	18	21	1442	738	419	10	11	40	25	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.84	0.84	0.84	0.85	0.85	0.85	0.95	0.95	0.95
PHF Volume:	60	1675	21	25	1717	879	493	12	13	42	26	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1675	21	25	1717	879	493	12	13	42	26	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	60	1675	21	25	1717	879	493	12	13	42	26	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.92	0.92	0.97	0.97	0.85
Lanes:	1.00	1.98	0.02	1.00	2.00	1.00	2.00	0.48	0.52	1.23	0.77	1.00
Final Sat.:	1805	3745	47	1805	3800	1615	3610	833	917	2268	1418	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.45	0.45	0.01	0.45	0.54	0.14	0.01	0.01	0.02	0.02	0.05
Crit Moves:	****				****		****					****
Green/Cycle:	0.04	0.59	0.59	0.02	0.57	0.74	0.17	0.17	0.17	0.05	0.05	0.07
Volume/Cap:	0.80	0.76	0.76	0.76	0.80	0.74	0.80	0.08	0.08	0.37	0.37	0.79
Uniform Del:	33.3	10.7	10.7	34.2	12.0	5.3	27.9	24.4	24.4	32.2	32.2	32.1
IncremntDel:	43.5	1.6	1.6	66.6	2.2	2.5	7.3	0.1	0.1	1.2	1.2	30.4
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:	76.8	12.3	12.3	100.8	14.2	7.8	35.1	24.5	24.5	33.4	33.4	62.5
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:	76.8	12.3	12.3	100.8	14.2	7.8	35.1	24.5	24.5	33.4	33.4	62.5
DesignQueue:	2	30	0	1	33	10	16	0	0	2	1	3

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec):	120	Critical Vol./Cap. (X):	0.969
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	33.4
Optimal Cycle:	178	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	2 0	0	1 0	1	1 0	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	39	2158	32	30	1598	664	690	8	37	24	11	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:	39	2158	32	30	1598	664	690	8	37	24	11	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.87	0.87	0.87	0.84	0.84	0.84	0.76	0.76	0.76
PHF Volume:	41	2248	33	34	1837	763	821	10	44	32	14	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	2248	33	34	1837	763	821	10	44	32	14	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	2248	33	34	1837	763	821	10	44	32	14	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.88	0.88	0.97	0.97	0.85
Lanes:	1.00	1.97	0.03	1.00	2.00	1.00	2.00	0.18	0.82	1.37	0.63	1.00
Final Sat.:	1805	3737	55	1805	3800	1615	3610	296	1370	2520	1155	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.60	0.60	0.02	0.48	0.47	0.23	0.03	0.03	0.01	0.01	0.04
Crit Moves:		****		****			****					****
Green/Cycle:	0.03	0.62	0.62	0.02	0.61	0.85	0.23	0.23	0.23	0.02	0.02	0.04
Volume/Cap:	0.79	0.97	0.97	0.97	0.79	0.56	0.97	0.14	0.14	0.50	0.50	0.97
Uniform Del:	57.9	21.7	21.7	58.8	17.5	2.7	45.5	36.3	36.3	57.8	57.8	57.2
IncremntDel:	55.3	12.2	12.2	138.1	1.9	0.5	23.5	0.2	0.2	4.5	4.5	95.1
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:	113.2	33.8	33.8	196.8	19.4	3.2	69.0	36.5	36.5	62.3	62.3	152.4
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:	113.2	33.8	33.8	196.8	19.4	3.2	69.0	36.5	36.5	62.3	62.3	152.4
DesignQueue:	3	68	1	2	54	9	44	0	2	2	1	4

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec): 70 Critical Vol./Cap. (X): 0.828
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.3
Optimal Cycle: 73 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	153	1025	111	24	1241	190	250	50	107	113	51	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	1025	111	24	1241	190	250	50	107	113	51	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.95	0.95	0.95	0.92	0.92	0.92	0.65	0.65	0.65
PHF Volume:	172	1152	125	25	1306	200	272	54	116	174	78	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	1152	125	25	1306	200	272	54	116	174	78	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	172	1152	125	25	1306	200	272	54	116	174	78	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.95	0.90	0.90	0.95	0.94	0.94
Lanes:	1.00	1.80	0.20	1.00	2.00	1.00	1.00	0.32	0.68	1.00	0.59	0.41
Final Sat.:	1805	3377	366	1805	3800	1615	1805	543	1163	1805	1045	737
Capacity Analysis Module:												
Vol/Sat:	0.10	0.34	0.34	0.01	0.34	0.12	0.15	0.10	0.10	0.10	0.08	0.08
Crit Moves:	****				****		****			****		
Green/Cycle:	0.12	0.51	0.51	0.02	0.42	0.42	0.18	0.18	0.18	0.12	0.12	0.12
Volume/Cap:	0.83	0.67	0.67	0.67	0.83	0.30	0.83	0.55	0.55	0.83	0.65	0.65
Uniform Del:	30.3	12.8	12.8	34.0	18.2	13.7	27.6	26.0	26.0	30.2	29.5	29.5
IncremntDel:	23.2	0.9	0.9	37.8	3.8	0.3	15.9	2.1	2.1	23.0	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
Delay/Veh:	53.5	13.7	13.7	71.8	22.0	13.9	43.4	28.1	28.1	53.3	36.4	36.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.5	13.7	13.7	71.8	22.0	13.9	43.4	28.1	28.1	53.3	36.4	36.4
DesignQueue:	6	24	3	1	33	5	9	2	4	6	3	2

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

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Intersection #2 Highway 1/Ocean Avenue

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Cycle (sec): 120 Critical Vol./Cap. (X): 1.101
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 79.5
Optimal Cycle: 180 Level Of Service: E

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
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	2	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	167	1762	64	12	1258	229	511	35	186	170	84	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	167	1762	64	12	1258	229	511	35	186	170	84	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96	0.76	0.76	0.76
PHF Volume:	186	1958	71	14	1463	266	532	36	194	224	111	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	1958	71	14	1463	266	532	36	194	224	111	153
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	186	1958	71	14	1463	266	532	36	194	224	111	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.87	0.87	0.95	0.91	0.91
Lanes:	1.00	1.93	0.07	1.00	2.00	1.00	1.00	0.16	0.84	1.00	0.42	0.58
Final Sat.:	1805	3648	133	1805	3800	1615	1805	263	1398	1805	729	1006
Capacity Analysis Module:												
Vol/Sat:	0.10	0.54	0.54	0.01	0.38	0.16	0.29	0.14	0.14	0.12	0.15	0.15
Crit Moves:		****		****			****				****	
Green/Cycle:	0.10	0.49	0.49	0.01	0.39	0.39	0.27	0.27	0.27	0.14	0.14	0.14
Volume/Cap:	0.99	1.10	1.10	1.10	0.99	0.42	1.10	0.52	0.52	0.90	1.10	1.10
Uniform Del:	53.7	30.8	30.8	59.6	36.3	26.7	43.9	37.3	37.3	50.9	51.7	51.7
IncremntDel:	61.5	54.4	54.4	289.0	20.1	0.5	71.3	1.1	1.1	31.9	87.9	87.9
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
Delay/Veh:	115.2	85.1	85.1	348.6	56.4	27.2	115.3	38.4	38.4	82.8	140	139.6
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:	115.2	85.1	85.1	348.6	56.4	27.2	115.3	38.4	38.4	82.8	140	139.6
DesignQueue:	11	78	3	1	66	11	28	2	10	13	7	9

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec):	60	Critical Vol./Cap. (X):	0.746
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.6
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
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	2 0	1	1 1	0 0	1	1 1	0 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	153	1025	111	24	1241	190	250	50	107	113	51	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	1025	111	24	1241	190	250	50	107	113	51	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.95	0.95	0.95	0.92	0.92	0.92	0.65	0.65	0.65
PHF Volume:	172	1152	125	25	1306	200	272	54	116	174	78	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	1152	125	25	1306	200	272	54	116	174	78	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	172	1152	125	25	1306	200	272	54	116	174	78	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.96	0.96	0.85	0.97	0.97	0.85
Lanes:	1.00	1.80	0.20	1.00	2.00	1.00	1.67	0.33	1.00	1.38	0.62	1.00
Final Sat.:	1805	3377	366	1805	3800	1615	3040	608	1615	2532	1143	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.34	0.34	0.01	0.34	0.12	0.09	0.09	0.07	0.07	0.07	0.03
Crit Moves:	****				****		****			****		
Green/Cycle:	0.13	0.57	0.57	0.02	0.46	0.46	0.12	0.12	0.12	0.09	0.09	0.09
Volume/Cap:	0.75	0.60	0.60	0.60	0.75	0.27	0.75	0.75	0.60	0.75	0.75	0.37
Uniform Del:	25.2	8.6	8.6	29.0	13.3	10.0	25.5	25.5	25.0	26.6	26.6	25.6
IncremntDel:	12.5	0.5	0.5	22.4	1.8	0.2	6.9	6.9	5.2	8.8	8.8	1.6
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
Delay/Veh:	37.8	9.1	9.1	51.5	15.1	10.2	32.4	32.4	30.3	35.4	35.4	27.2
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:	37.8	9.1	9.1	51.5	15.1	10.2	32.4	32.4	30.3	35.4	35.4	27.2
DesignQueue:	5	18	2	1	26	4	8	2	3	5	2	2

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec): 80 Critical Vol./Cap. (X): 0.936
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.1
Optimal Cycle: 112 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 1	1	0	1	0 2	0	1	1	1 0	0	1	1	1 0	0	1
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour																
Base Vol:	167	1762	64		12	1258	229		511	35	186		170	84	116	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	167	1762	64		12	1258	229		511	35	186		170	84	116	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.86	0.86	0.86		0.96	0.96	0.96		0.76	0.76	0.76	
PHF Volume:	186	1958	71		14	1463	266		532	36	194		224	111	153	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	186	1958	71		14	1463	266		532	36	194		224	111	153	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	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.:	186	1958	71		14	1463	266		532	36	194		224	111	153	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		0.95	1.00	0.85		0.96	0.96	0.85		0.97	0.97	0.85	
Lanes:	1.00	1.93	0.07		1.00	2.00	1.00		1.87	0.13	1.00		1.34	0.66	1.00	
Final Sat.:	1805	3648	133		1805	3800	1615		3396	233	1615		2462	1216	1615	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.54	0.54		0.01	0.38	0.16		0.16	0.16	0.12		0.09	0.09	0.09	
Crit Moves:		****			****					****					****	
Green/Cycle:	0.12	0.57	0.57		0.01	0.46	0.46		0.17	0.17	0.17		0.10	0.10	0.10	
Volume/Cap:	0.84	0.94	0.94		0.94	0.84	0.36		0.94	0.94	0.72		0.90	0.90	0.94	
Uniform Del:	34.3	15.7	15.7		39.6	19.0	14.0		32.9	32.9	31.5		35.6	35.6	35.7	
IncremntDel:	23.7	8.4	8.4		199.7	3.8	0.3		22.0	22.0	8.9		23.9	23.9	51.8	
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	
Delay/Veh:	58.0	24.1	24.1		239.4	22.8	14.3		54.9	54.9	40.4		59.4	59.4	87.5	
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:	58.0	24.1	24.1		239.4	22.8	14.3		54.9	54.9	40.4		59.4	59.4	87.5	
DesignQueue:	7	43	2		1	39	7		21	1	7		9	5	6	

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

Intersection #3 Highway 1/Carmel Valley Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.593
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 31 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	2 0	1 0	0	0 0	0 0	0	0 0	0 0	2
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	0	361	44	894	554	0	0	0	0	0	0	906
Growth Adj:	1.00	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	361	44	894	554	0	0	0	0	0	0	906
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.93	0.93	0.93	1.00	1.00	1.00	0.89	0.89	0.89
PHF Volume:	0	415	51	961	596	0	0	0	0	0	0	1018
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	415	51	961	596	0	0	0	0	0	0	1018
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	415	51	961	596	0	0	0	0	0	0	1018
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	1.00	1.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Final Sat.:	0	1900	1615	3610	1900	0	0	0	0	0	0	3230
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.03	0.27	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.32
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.37	0.37	0.45	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.53
Volume/Cap:	0.00	0.59	0.09	0.59	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.59
Uniform Del:	0.0	15.3	12.4	12.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	9.6
IncremntDel:	0.0	1.4	0.1	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Delay/Veh:	0.0	16.7	12.4	13.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	10.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.7	12.4	13.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	10.2
DesignQueue:	0	9	1	19	4	0	0	0	0	0	0	17

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

Intersection #3 Highway 1/Carmel Valley Road

Cycle (sec): 90 Critical Vol./Cap. (X): 0.893
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 26.6
Optimal Cycle: 87 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	0 1	2	0 1	0 0	0 0	0	0 0	0 0	0	2
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	0	657	41	1151	589	0	0	0	0	0	0	1266
Growth Adj:	1.00	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	657	41	1151	589	0	0	0	0	0	0	1266
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.90	0.90	0.90	1.00	1.00	1.00	0.99	0.99	0.99
PHF Volume:	0	832	52	1279	654	0	0	0	0	0	0	1279
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	832	52	1279	654	0	0	0	0	0	0	1279
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	832	52	1279	654	0	0	0	0	0	0	1279
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	1.00	1.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Final Sat.:	0	1900	1615	3610	1900	0	0	0	0	0	0	3230
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.03	0.35	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.49	0.49	0.40	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.44
Volume/Cap:	0.00	0.89	0.07	0.89	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.89
Uniform Del:	0.0	20.8	12.1	25.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	23.1
IncremntDel:	0.0	10.9	0.0	7.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	7.5
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Delay/Veh:	0.0	31.7	12.1	32.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	31.7	12.1	32.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6
DesignQueue:	0	24	1	42	4	0	0	0	0	0	0	39

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

Intersection #4 Highway 1/Rio Road

Cycle (sec):	60	Critical Vol./Cap. (X):	0.605
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.0
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	2 0	0 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 7:45-8:45 AM Peak Hour												
Base Vol:	41	111	69	335	130	104	177	279	37	106	284	115
Growth Adj:	1.00	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	111	69	335	130	104	177	279	37	106	284	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.74	0.74	0.74	0.92	0.92	0.92	0.79	0.79	0.79	0.83	0.83	0.83
PHF Volume:	55	150	93	364	141	113	224	353	47	128	342	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	150	93	364	141	113	224	353	47	128	342	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	150	93	364	141	113	224	353	47	128	342	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.93	0.93	0.95	0.98	0.98	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	2.00	0.56	0.44	1.00	1.77	0.23	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	3610	985	788	1805	3295	437	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.06	0.10	0.14	0.14	0.12	0.11	0.11	0.07	0.18	0.09
Crit Moves:		****		****			****				****	
Green/Cycle:	0.05	0.13	0.13	0.17	0.24	0.24	0.21	0.30	0.30	0.20	0.30	0.30
Volume/Cap:	0.59	0.61	0.44	0.61	0.59	0.59	0.61	0.35	0.35	0.35	0.61	0.29
Uniform Del:	27.8	24.6	24.1	23.2	20.0	20.0	21.6	16.3	16.3	20.7	18.0	16.2
IncremntDel:	9.2	4.2	1.5	1.8	2.1	2.1	2.8	0.2	0.2	0.6	1.9	0.3
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
Delay/Veh:	37.0	28.8	25.6	24.9	22.1	22.1	24.5	16.5	16.5	21.3	19.9	16.5
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:	37.0	28.8	25.6	24.9	22.1	22.1	24.5	16.5	16.5	21.3	19.9	16.5
DesignQueue:	2	4	3	10	4	3	6	8	1	3	8	3

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

Intersection #4 Highway 1/Rio Road

Cycle (sec):	60	Critical Vol./Cap. (X):	0.759
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	24.4
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	2 0	0 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 3:45-4:45 PM Peak Hour												
Base Vol:	93	201	55	315	151	68	140	441	37	166	518	471
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	93	201	55	315	151	68	140	441	37	166	518	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.91	0.91	0.91	0.86	0.86	0.86	0.96	0.96	0.96
PHF Volume:	103	223	61	346	166	75	163	513	43	173	540	491
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	223	61	346	166	75	163	513	43	173	540	491
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	103	223	61	346	166	75	163	513	43	173	540	491
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.95	0.95	0.95	0.99	0.99	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	2.00	0.69	0.31	1.00	1.85	0.15	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	3610	1248	562	1805	3464	291	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.04	0.10	0.13	0.13	0.09	0.15	0.15	0.10	0.28	0.30
Crit Moves:		****		****			****					****
Green/Cycle:	0.08	0.15	0.15	0.13	0.20	0.20	0.12	0.32	0.32	0.20	0.40	0.40
Volume/Cap:	0.68	0.76	0.24	0.76	0.68	0.68	0.76	0.47	0.47	0.47	0.71	0.76
Uniform Del:	26.7	24.3	22.3	25.3	22.3	22.3	25.6	16.5	16.5	21.0	15.1	15.5
IncremntDel:	11.5	10.9	0.5	7.3	5.1	5.1	14.5	0.3	0.3	1.0	3.1	5.2
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:	38.1	35.2	22.8	32.6	27.5	27.5	40.1	16.8	16.8	22.0	18.2	20.7
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:	38.1	35.2	22.8	32.6	27.5	27.5	40.1	16.8	16.8	22.0	18.2	20.7
DesignQueue:	3	6	2	10	5	2	5	12	1	5	12	11

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

Intersection #5 Carmel Valley Road/Carmel Rancho Boulevard

Cycle (sec):	60	Critical Vol./Cap. (X):	0.566
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	15.0
Optimal Cycle:	42	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			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	0	1 0	0 1	1	0 2	0 1	2	0 2	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	108	7	273	24	12	40	23	683	221	426	766	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:	108	7	273	24	12	40	23	683	221	426	766	11
User Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82 0.82		0.82	0.76	0.76	0.76	0.84	0.84	0.84	0.88	0.88	0.88
PHF Volume:	132	9	333	32	16	53	27	813	263	484	870	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	9	333	32	16	53	27	813	263	484	870	13
PCE Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	132	9	333	32	16	53	27	813	263	484	870	13
Saturation Flow Module:												
Sat/Lane:	1900 1900		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.96 0.96		0.85	0.97	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.88 0.12		1.00	0.67	0.33	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3408	221	1615	1226	613	1615	1805	3800	1615	3610	3800	1615
Capacity Analysis Module:												
Vol/Sat:	0.04 0.04		0.21	0.03	0.03	0.03	0.02	0.21	0.16	0.13	0.23	0.01
Crit Moves:			****			****		****		****		
Green/Cycle:	0.13 0.13		0.36	0.06	0.06	0.06	0.04	0.38	0.38	0.24	0.58	0.58
Volume/Cap:	0.30 0.30		0.57	0.45	0.45	0.57	0.40	0.57	0.43	0.57	0.40	0.01
Uniform Del:	23.8 23.8		15.3	27.3	27.3	27.5	28.2	14.8	13.9	20.2	7.0	5.4
IncremntDel:	0.4	0.4	1.3	3.0	3.0	7.9	3.7	0.5	0.5	0.9	0.1	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
Delay/Veh:	24.1 24.1		16.6	30.3	30.3	35.4	31.9	15.3	14.3	21.1	7.1	5.4
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:	24.1 24.1		16.6	30.3	30.3	35.4	31.9	15.3	14.3	21.1	7.1	5.4
DesignQueue:	4	0	7	1	0	2	1	18	6	13	13	0

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

Intersection #5 Carmel Valley Road/Carmel Rancho Boulevard

Cycle (sec):	70	Critical Vol./Cap. (X):	0.799
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.5
Optimal Cycle:	67	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	0 1	0	0 1	1 0	2	0 1	2 0	2	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	421	24	525	16	18	6	20	798	387	519	854	9
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	421	24	525	16	18	6	20	798	387	519	854	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:	0.95 0.95		0.95	0.67 0.67		0.67	0.82 0.82		0.82	0.91 0.91		0.91
PHF Volume:	443	25	553	24	27	9	24	973	472	570	938	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	443	25	553	24	27	9	24	973	472	570	938	10
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	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.:	443	25	553	24	27	9	24	973	472	570	938	10
Saturation Flow Module:												
Sat/Lane:	1900 1900		1900	1900 1900		1900	1900 1900		1900	1900 1900		1900
Adjustment:	0.96 0.96		0.85	0.98 0.98		0.85	0.95 1.00		0.85	0.95 1.00		0.85
Lanes:	1.89 0.11		1.00	0.47 0.53		1.00	1.00 2.00		1.00	2.00 2.00		1.00
Final Sat.:	3433	196	1615	874	983	1615	1805 3800		1615	3610 3800		1615
Capacity Analysis Module:												
Vol/Sat:	0.13 0.13		0.34	0.03 0.03		0.01	0.01 0.26		0.29	0.16 0.25		0.01
Crit Moves:			****		****				****	****		
Green/Cycle:	0.23 0.23		0.43	0.03 0.03		0.03	0.03 0.37		0.37	0.20 0.53		0.53
Volume/Cap:	0.56 0.56		0.80	0.80 0.80		0.16	0.46 0.70		0.80	0.80 0.46		0.01
Uniform Del:	23.8 23.8		17.4	33.6 33.6		32.8	33.4 18.9		19.9	26.7 10.1		7.6
IncremntDel:	0.9 0.9		6.5	49.3 49.3		1.4	6.3 1.6		7.6	6.3 0.2		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
Delay/Veh:	24.6 24.6		23.9	82.9 82.9		34.2	39.7 20.5		27.4	33.1 10.2		7.6
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:	24.6 24.6		23.9	82.9 82.9		34.2	39.7 20.5		27.4	33.1 10.2		7.6
DesignQueue:	14	1	13	1	1	0	1	26	12	19	18	0

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

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Intersection #6 Carmel Valley Road/Rancho San Carlos Road

****

Cycle (sec): 60 Critical Vol./Cap. (X): 0.829
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 11.5
Optimal Cycle: 63 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						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	0	1		0	0	0	0	0		0	0	1	0	1		1	0	1	0	0	
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour																								
Base Vol:	116		0		9		0		0		0		0		632		93		49		939		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:	116		0		9		0		0		0		0		632		93		49		939		0	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.74		0.74		0.74		1.00		1.00		1.00		0.79		0.79		0.79		0.80		0.80		0.80	
PHF Volume:	157		0		12		0		0		0		0		800		118		61		1174		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	157		0		12		0		0		0		0		800		118		61		1174		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.:	157		0		12		0		0		0		0		800		118		61		1174		0	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.95		1.00		0.85		1.00		1.00		1.00		1.00		1.00		0.85		0.95		1.00		1.00	
Lanes:	1.00		0.00		1.00		0.00		0.00		0.00		0.00		1.00		1.00		1.00		1.00		0.00	
Final Sat.:	1805		0		1615		0		0		0		0		1900		1615		1805		1900		0	
Capacity Analysis Module:																								
Vol/Sat:	0.09		0.00		0.01		0.00		0.00		0.00		0.00		0.42		0.07		0.03		0.62		0.00	
Crit Moves:	****												****								****			
Green/Cycle:	0.10		0.00		0.10		0.00		0.00		0.00		0.00		0.69		0.69		0.06		0.75		0.00	
Volume/Cap:	0.83		0.00		0.07		0.00		0.00		0.00		0.00		0.61		0.11		0.61		0.83		0.00	
Uniform Del:	26.3		0.0		24.2		0.0		0.0		0.0		0.0		5.0		3.1		27.7		5.1		0.0	
IncremntDel:	25.2		0.0		0.2		0.0		0.0		0.0		0.0		0.9		0.0		10.5		4.2		0.0	
Delay Adj:	1.00		0.00		1.00		0.00		0.00		0.00		0.00		1.00		1.00		1.00		1.00		0.00	
Delay/Veh:	51.6		0.0		24.4		0.0		0.0		0.0		0.0		5.8		3.2		38.2		9.3		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:	51.6		0.0		24.4		0.0		0.0		0.0		0.0		5.8		3.2		38.2		9.3		0.0	
DesignQueue:	5		0		0		0		0		0		0		9		1		2		12		0	

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

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Intersection #6 Carmel Valley Road/Rancho San Carlos Road

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Cycle (sec): 60 Critical Vol./Cap. (X): 0.792
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 9.6
Optimal Cycle: 57 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			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	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module: >> Count Date: 18 Dec 2002 << 4:30-5:30 PM Peak Hour												
Base Vol:	89	0	31	0	0	0	0	1122	138	31	539	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:	89	0	31	0	0	0	0	1122	138	31	539	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	1.00	1.00	1.00	0.98	0.98	0.98	0.93	0.93	0.93
PHF Volume:	95	0	33	0	0	0	0	1145	141	33	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	0	33	0	0	0	0	1145	141	33	580	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.:	95	0	33	0	0	0	0	1145	141	33	580	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.02	0.00	0.00	0.00	0.00	0.60	0.09	0.02	0.31	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.76	0.76	0.02	0.78	0.00
Volume/Cap:	0.79	0.00	0.31	0.00	0.00	0.00	0.00	0.79	0.11	0.79	0.39	0.00
Uniform Del:	27.6	0.0	26.7	0.0	0.0	0.0	0.0	4.3	1.9	29.2	2.0	0.0
IncremntDel:	29.3	0.0	1.6	0.0	0.0	0.0	0.0	3.1	0.0	64.6	0.2	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	56.9	0.0	28.3	0.0	0.0	0.0	0.0	7.4	1.9	93.8	2.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.9	0.0	28.3	0.0	0.0	0.0	0.0	7.4	1.9	93.8	2.2	0.0
DesignQueue:	3	0	1	0	0	0	0	11	1	1	5	0

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

Intersection #7 Carmel Valley Road/Brookdale Drive

Average Delay (sec/veh): 0.7 Worst Case 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			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: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	7	0	5	0	0	0	0	631	3	3	1002	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:	7	0	5	0	0	0	0	631	3	3	1002	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.50	0.50	0.50	1.00	1.00	1.00	0.75	0.75	0.75	0.82	0.82	0.82
PHF Volume:	14	0	10	0	0	0	0	841	4	4	1222	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	14	0	10	0	0	0	0	841	4	4	1222	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:	2073	xxxx	843	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	845	xxxx	xxxxx
Potent Cap.:	60	xxxx	367	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	800	xxxx	xxxxx
Move Cap.:	60	xxxx	367	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	800	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	92	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	57.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx
Shared LOS:	*	F	*	*	*	*	*	*	*	A	*	*
ApproachDel:		57.5		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		F		*			*			*		

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

Intersection #7 Carmel Valley Road/Brookdale Drive

Average Delay (sec/veh): 0.4 Worst Case 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			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: >> Count Date: 18 Dec 2002 << 4:45-5:45 PM Peak Hour												
Base Vol:	5	0	4	0	0	0	0	1150	7	3	586	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:	5	0	4	0	0	0	0	1150	7	3	586	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.56	0.56	0.56	1.00	1.00	1.00	0.92	0.92	0.92	0.96	0.96	0.96
PHF Volume:	9	0	7	0	0	0	0	1250	8	3	610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	9	0	7	0	0	0	0	1250	8	3	610	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:	1870	xxxx	1254	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1258	xxxx	xxxxx
Potent Cap.:	80	xxxx	212	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	560	xxxx	xxxxx
Move Cap.:	80	xxxx	212	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	560	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	111	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	43.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.5	xxxx	xxxxx
Shared LOS:	*	E	*	*	*	*	*	*	*	B	*	*
ApproachDel:		43.0			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		E			*			*			*	

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

Intersection #7 Carmel Valley Road/Brookdale Drive

Cycle (sec):	60	Critical Vol./Cap. (X):	0.773
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	4.9
Optimal Cycle:	54	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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	0 0	0	0 0	0 1	0	1 0	1 0	0
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	7	0	5	0	0	0	0	631	3	3	1002	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:	7	0	5	0	0	0	0	631	3	3	1002	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.50	0.50	0.50	1.00	1.00	1.00	0.75	0.75	0.75	0.82	0.82	0.82
PHF Volume:	14	0	10	0	0	0	0	841	4	4	1222	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	0	10	0	0	0	0	841	4	4	1222	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	0	10	0	0	0	0	841	4	4	1222	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Lanes:	0.58	0.00	0.42	0.00	0.00	0.00	0.00	0.99	0.01	1.00	1.00	0.00
Final Sat.:	1017	0	726	0	0	0	0	1889	9	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.45	0.45	0.00	0.64	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.83	0.83	0.00	0.83	0.00
Volume/Cap:	0.77	0.00	0.77	0.00	0.00	0.00	0.00	0.54	0.54	0.54	0.77	0.00
Uniform Del:	29.3	0.0	29.3	0.0	0.0	0.0	0.0	1.6	1.6	29.8	2.4	0.0
IncremntDel:	73.6	0.0	73.6	0.0	0.0	0.0	0.0	0.4	0.4	65.5	2.4	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	102.9	0.0	102.9	0.0	0.0	0.0	0.0	2.0	2.0	95.4	4.8	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:	102.9	0.0	102.9	0.0	0.0	0.0	0.0	2.0	2.0	95.4	4.8	0.0
DesignQueue:	0	0	0	0	0	0	0	5	0	0	8	0

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

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Intersection #7 Carmel Valley Road/Brookdale Drive

****

Cycle (sec): 60 Critical Vol./Cap. (X): 0.792
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 5.6
Optimal Cycle: 57 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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	0 1	0	1 0	1 0	0
Volume Module: >> Count Date: 18 Dec 2002 << 4:45-5:45 PM Peak Hour												
Base Vol:	5	0	4	0	0	0	0	1150	7	3	586	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:	5	0	4	0	0	0	0	1150	7	3	586	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.56	0.56	0.56	1.00	1.00	1.00	0.92	0.92	0.92	0.96	0.96	0.96
PHF Volume:	9	0	7	0	0	0	0	1250	8	3	610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	0	7	0	0	0	0	1250	8	3	610	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.:	9	0	7	0	0	0	0	1250	8	3	610	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Lanes:	0.56	0.00	0.44	0.00	0.00	0.00	0.00	0.99	0.01	1.00	1.00	0.00
Final Sat.:	965	0	772	0	0	0	0	1887	11	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.66	0.66	0.00	0.32	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.84	0.84	0.00	0.84	0.00
Volume/Cap:	0.79	0.00	0.79	0.00	0.00	0.00	0.00	0.79	0.79	0.79	0.38	0.00
Uniform Del:	29.6	0.0	29.6	0.0	0.0	0.0	0.0	2.4	2.4	29.9	1.2	0.0
IncremntDel:	106.1	0.0	106.1	0.0	0.0	0.0	0.0	2.8	2.8	286.6	0.2	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	135.7	0.0	135.7	0.0	0.0	0.0	0.0	5.2	5.2	316.6	1.3	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:	135.7	0.0	135.7	0.0	0.0	0.0	0.0	5.2	5.2	316.6	1.3	0.0
DesignQueue:	0	0	0	0	0	0	0	8	0	0	4	0

****

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

Intersection #8 Carmel Valley Road/Dorris Drive

Average Delay (sec/veh): 9.4 Worst Case 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						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	1	0	1		1	0	1	0	0	
Volume Module: >> Count Date: 18 Dec 2002 << 7:15-8:15 AM Peak Hour																								
Base Vol:	98		0		30		0		0		0		0		416		139		56		686		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:	98		0		30		0		0		0		0		416		139		56		686		0	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.76		0.76		0.76		1.00		1.00		1.00		0.77		0.77		0.77		0.89		0.89		0.89	
PHF Volume:	129		0		39		0		0		0		0		540		181		63		771		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	129		0		39		0		0		0		0		540		181		63		771		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:	1437	xxxx			540		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx						721	xxxx	xxxxx			
Potent Cap.:	148	xxxx			546		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx						890	xxxx	xxxxx			
Move Cap.:	140	xxxx			546		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx						890	xxxx	xxxxx			
Level Of Service Module:																								
Stopped Del:	116.9	xxxx			12.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								9.4	xxxx	xxxxx			
LOS by Move:	F	*			B	*	*	*	*	*	*								A	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			*	*	*			*	*	*		
ApproachDel:	92.3					xxxxxx					xxxxxx					xxxxxx									
ApproachLOS:	F					*					*					*									

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

Intersection #8 Carmel Valley Road/Dorris Drive

Average Delay (sec/veh): 6.5 Worst Case 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					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour																				
Base Vol:	105	0	47			0	0	0			0	610	257			61	436			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:	105	0	47			0	0	0			0	610	257			61	436			0
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
PHF Adj:	0.89	0.89	0.89			1.00	1.00	1.00			0.85	0.85	0.85			0.86	0.86			0.86
PHF Volume:	118	0	53			0	0	0			0	718	302			71	507			0
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0			0
Final Vol.:	118	0	53			0	0	0			0	718	302			71	507			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:	1366	xxxx				718	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				1020	xxxx	xxxxx		
Potent Cap.:	164	xxxx				433	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				688	xxxx	xxxxx		
Move Cap.:	151	xxxx				433	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				688	xxxx	xxxxx		
Level Of Service Module:																				
Stopped Del:	83.8	xxxx				14.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				10.8	xxxx	xxxxx		
LOS by Move:	F	*				B	*	*	*	*	*	*				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	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			*	*	*		
ApproachDel:	62.4					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	F					*					*					*				

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

Intersection #8 Carmel Valley Road/Dorris Drive

Cycle (sec):	60	Critical Vol./Cap. (X):	0.561
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	7.8
Optimal Cycle:	36	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			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	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module: >> Count Date: 18 Dec 2002 << 7:15-8:15 AM Peak Hour												
Base Vol:	98	0	30	0	0	0	0	416	139	56	686	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:	98	0	30	0	0	0	0	416	139	56	686	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.76	0.76	0.76	1.00	1.00	1.00	0.77	0.77	0.77	0.89	0.89	0.89
PHF Volume:	129	0	39	0	0	0	0	540	181	63	771	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	0	39	0	0	0	0	540	181	63	771	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.:	129	0	39	0	0	0	0	540	181	63	771	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.02	0.00	0.00	0.00	0.00	0.28	0.11	0.03	0.41	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.64	0.64	0.08	0.72	0.00
Volume/Cap:	0.56	0.00	0.19	0.00	0.00	0.00	0.00	0.44	0.17	0.44	0.56	0.00
Uniform Del:	24.6	0.0	23.4	0.0	0.0	0.0	0.0	5.3	4.3	26.4	3.9	0.0
IncremntDel:	3.1	0.0	0.5	0.0	0.0	0.0	0.0	0.3	0.1	2.2	0.5	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	27.7	0.0	23.9	0.0	0.0	0.0	0.0	5.6	4.4	28.6	4.4	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:	27.7	0.0	23.9	0.0	0.0	0.0	0.0	5.6	4.4	28.6	4.4	0.0
DesignQueue:	4	0	1	0	0	0	0	7	2	2	8	0

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

Intersection #8 Carmel Valley Road/Dorris Drive

Cycle (sec): 60 Critical Vol./Cap. (X): 0.567
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 8.0
Optimal Cycle: 36 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			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	0	1	0	0	0	0	0	0	1	0	1	1	0	1	0	0
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	105	0	47	0	0	0	0	610	257	61	436	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:	105	0	47	0	0	0	0	610	257	61	436	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	1.00	1.00	1.00	0.85	0.85	0.85	0.86	0.86	0.86
PHF Volume:	118	0	53	0	0	0	0	718	302	71	507	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	0	53	0	0	0	0	718	302	71	507	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.:	118	0	53	0	0	0	0	718	302	71	507	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.03	0.00	0.00	0.00	0.00	0.38	0.19	0.04	0.27	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.12	0.00	0.12	0.00	0.00	0.00	0.00	0.67	0.67	0.07	0.73	0.00
Volume/Cap:	0.57	0.00	0.28	0.00	0.00	0.00	0.00	0.57	0.28	0.57	0.36	0.00
Uniform Del:	25.1	0.0	24.3	0.0	0.0	0.0	0.0	5.4	4.1	27.1	2.9	0.0
IncremntDel:	3.7	0.0	0.8	0.0	0.0	0.0	0.0	0.6	0.1	6.0	0.2	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	28.8	0.0	25.1	0.0	0.0	0.0	0.0	6.0	4.3	33.1	3.0	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:	28.8	0.0	25.1	0.0	0.0	0.0	0.0	6.0	4.3	33.1	3.0	0.0
DesignQueue:	4	0	2	0	0	0	0	9	4	2	5	0

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

Intersection #9 Carmel Valley Road/Laureles Grade

Average Delay (sec/veh): 6.8 Worst Case 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			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: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	0	0	0	104	0	120	91	324	0	0	562	229
Growth Adj:	1.00	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	104	0	120	91	324	0	0	562	229
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.90	0.90	0.90	0.80	0.80	0.80	0.85	0.85	0.85
PHF Volume:	0	0	0	116	0	133	114	405	0	0	661	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	116	0	133	114	405	0	0	661	269
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	1294	xxxx	661	931	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	181	xxxx	466	743	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	160	xxxx	466	743	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	71.0	xxxx	15.8	10.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	C	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	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			41.4			xxxxxx			xxxxxx		
ApproachLOS:	*			E			*			*		

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

Intersection #9 Carmel Valley Road/Laureles Grade

Average Delay (sec/veh): 7.8 Worst Case 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			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: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	0	0	0	125	0	105	159	342	0	0	328	130
Growth Adj:	1.00	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	125	0	105	159	342	0	0	328	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.93	0.93	0.93	0.88	0.88	0.88	0.84	0.84	0.84
PHF Volume:	0	0	0	134	0	113	181	389	0	0	390	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	134	0	113	181	389	0	0	390	155
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	1140	xxxx	390	545	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	224	xxxx	662	1034	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	194	xxxx	662	1034	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	57.2	xxxx	11.5	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	B	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
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			36.4			xxxxxx			xxxxxx		
ApproachLOS:	*			E			*			*		

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

Intersection #9 Carmel Valley Road/Laureles Grade

Cycle (sec):	60	Critical Vol./Cap. (X):	0.581
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	10.8
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1	0 0	0 1	1	0 1	0 0	0	0 1	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	0	0	0	104	0	120	91	324	0	0	562	229
Growth Adj:	1.00	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	104	0	120	91	324	0	0	562	229
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.90	0.90	0.90	0.80	0.80	0.80	0.85	0.85	0.85
PHF Volume:	0	0	0	116	0	133	114	405	0	0	661	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	116	0	133	114	405	0	0	661	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.:	0	0	0	116	0	133	114	405	0	0	661	269
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.08	0.06	0.21	0.00	0.00	0.35	0.17
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.14	0.00	0.14	0.11	0.71	0.00	0.00	0.60	0.60
Volume/Cap:	0.00	0.00	0.00	0.45	0.00	0.58	0.58	0.30	0.00	0.00	0.58	0.28
Uniform Del:	0.0	0.0	0.0	23.6	0.0	24.1	25.4	3.3	0.0	0.0	7.4	5.8
IncremntDel:	0.0	0.0	0.0	1.3	0.0	3.7	4.3	0.1	0.0	0.0	0.8	0.2
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	24.8	0.0	27.8	29.8	3.4	0.0	0.0	8.1	5.9
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:	0.0	0.0	0.0	24.8	0.0	27.8	29.8	3.4	0.0	0.0	8.1	5.9
DesignQueue:	0	0	0	3	0	4	3	4	0	0	10	4

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

Intersection #9 Carmel Valley Road/Laureles Grade

Cycle (sec):	60	Critical Vol./Cap. (X):	0.447
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	12.5
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	1	0 0	0 0	1	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	0	0	0	125	0	105	159	342	0	0	328	130
Growth Adj:	1.00	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	125	0	105	159	342	0	0	328	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.93	0.93	0.93	0.88	0.88	0.88	0.84	0.84	0.84
PHF Volume:	0	0	0	134	0	113	181	389	0	0	390	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	134	0	113	181	389	0	0	390	155
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	134	0	113	181	389	0	0	390	155
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.07	0.10	0.20	0.00	0.00	0.21	0.10
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.17	0.00	0.17	0.22	0.68	0.00	0.00	0.46	0.46
Volume/Cap:	0.00	0.00	0.00	0.45	0.00	0.42	0.45	0.30	0.00	0.00	0.45	0.21
Uniform Del:	0.0	0.0	0.0	22.5	0.0	22.4	20.1	3.8	0.0	0.0	11.0	9.7
IncremntDel:	0.0	0.0	0.0	1.1	0.0	1.1	0.8	0.1	0.0	0.0	0.4	0.1
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	23.6	0.0	23.5	20.9	3.9	0.0	0.0	11.4	9.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.6	0.0	23.5	20.9	3.9	0.0	0.0	11.4	9.8
DesignQueue:	0	0	0	4	0	3	5	4	0	0	7	3

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

Intersection #10 Highway 68/Laureles Grade

Cycle (sec): 70 Critical Vol./Cap. (X): 0.846
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.2
Optimal Cycle: 71 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	1	0 0	0 0	0	0 0	1 0	1	1 0	1 0	0
Volume Module:												
Base Vol:	226	0	205	0	0	0	0	606	137	242	1160	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:	226	0	205	0	0	0	0	606	137	242	1160	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:	226	0	205	0	0	0	0	606	137	242	1160	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	226	0	205	0	0	0	0	606	137	242	1160	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.:	226	0	205	0	0	0	0	606	137	242	1160	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.32	0.08	0.13	0.61	0.00
Crit Moves:			****				****				****	
Green/Cycle:	0.15	0.00	0.15	0.00	0.00	0.00	0.00	0.51	0.51	0.21	0.72	0.00
Volume/Cap:	0.83	0.00	0.85	0.00	0.00	0.00	0.00	0.63	0.17	0.63	0.85	0.00
Uniform Del:	28.9	0.0	29.0	0.0	0.0	0.0	0.0	12.4	9.3	25.0	7.0	0.0
IncremntDel:	19.6	0.0	23.1	0.0	0.0	0.0	0.0	1.3	0.1	3.3	5.1	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	48.5	0.0	52.1	0.0	0.0	0.0	0.0	13.8	9.4	28.3	12.1	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:	48.5	0.0	52.1	0.0	0.0	0.0	0.0	13.8	9.4	28.3	12.1	0.0
DesignQueue:	8	0	7	0	0	0	0	13	3	8	15	0

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

Intersection #10 Highway 68/Laureles Grade

Cycle (sec): 70 Critical Vol./Cap. (X): 0.862
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 17.4
Optimal Cycle: 75 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			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	0	1	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0
Volume Module:														
Base Vol:	152	0	258	0	0	0	0	1101	140		21	717	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:	152	0	258	0	0	0	0	1101	140		21	717	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:	152	0	258	0	0	0	0	1101	140		21	717	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
Reduced Vol:	152	0	258	0	0	0	0	1101	140		21	717	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.:	152	0	258	0	0	0	0	1101	140		21	717	0	
Saturation Flow Module:														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85		0.95	1.00	1.00	
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00		1.00	1.00	0.00	
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615		1805	1900	0	
Capacity Analysis Module:														
Vol/Sat:	0.08	0.00	0.16	0.00	0.00	0.00	0.00	0.58	0.09		0.01	0.38	0.00	
Crit Moves:			****					****			****			
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.67	0.67		0.01	0.69	0.00	
Volume/Cap:	0.45	0.00	0.86	0.00	0.00	0.00	0.00	0.86	0.13		0.86	0.55	0.00	
Uniform Del:	25.4	0.0	27.6	0.0	0.0	0.0	0.0	8.9	4.1		34.5	5.5	0.0	
IncremntDel:	1.0	0.0	21.6	0.0	0.0	0.0	0.0	6.2	0.1		121.4	0.5	0.0	
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00		1.00	1.00	0.00	
Delay/Veh:	26.3	0.0	49.3	0.0	0.0	0.0	0.0	15.1	4.2		155.9	6.0	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:	26.3	0.0	49.3	0.0	0.0	0.0	0.0	15.1	4.2		155.9	6.0	0.0	
DesignQueue:	5	0	8	0	0	0	0	17	2		1	10	0	

APPENDIX D – LEVEL OF SERVICE WORKSHEETS: EXISTING + PROJECT CONDITIONS

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.873
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 23.0
Optimal Cycle: 99 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	2 0	0	1 0	1	1	0 0 1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	51	1424	18	21	1442	738	419	10	11	40	25	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	1424	18	21	1442	738	419	10	11	40	25	83
Added Vol:	1	20	0	0	7	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	1444	18	21	1449	738	419	10	11	40	25	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.84	0.84	0.84	0.85	0.85	0.85	0.95	0.95	0.95
PHF Volume:	61	1699	21	25	1725	879	493	12	13	42	26	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1699	21	25	1725	879	493	12	13	42	26	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	61	1699	21	25	1725	879	493	12	13	42	26	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.92	0.92	0.97	0.97	0.85
Lanes:	1.00	1.98	0.02	1.00	2.00	1.00	2.00	0.48	0.52	1.23	0.77	1.00
Final Sat.:	1805	3746	47	1805	3800	1615	3610	833	917	2268	1418	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.45	0.45	0.01	0.45	0.54	0.14	0.01	0.01	0.02	0.02	0.05
Crit Moves:	****					****	****					****
Green/Cycle:	0.04	0.64	0.64	0.02	0.62	0.62	0.16	0.16	0.16	0.06	0.06	0.06
Volume/Cap:	0.87	0.71	0.71	0.71	0.73	0.87	0.87	0.09	0.09	0.30	0.30	0.87
Uniform Del:	47.8	11.7	11.7	48.7	13.0	15.6	41.2	36.1	36.1	44.8	44.8	46.5
IncremntDel:	65.7	1.0	1.0	49.0	1.2	8.6	14.1	0.1	0.1	0.7	0.7	51.8
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
Delay/Veh:	113.5	12.7	12.7	97.7	14.2	24.1	55.3	36.2	36.2	45.6	45.6	98.3
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:	113.5	12.7	12.7	97.7	14.2	24.1	55.3	36.2	36.2	45.6	45.6	98.3
DesignQueue:	3	38	0	1	41	21	24	1	1	2	1	5

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec):	120	Critical Vol./Cap. (X):	0.994
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	40.2
Optimal Cycle:	180	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:	Protected			Protected			Split Phase			Split Phase		
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	2 0	1	2 0	0 1	0	1 1	0 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	39	2158	32	30	1598	664	690	8	37	24	11	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:	39	2158	32	30	1598	664	690	8	37	24	11	53
Added Vol:	1	13	0	0	23	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	2171	32	30	1621	664	690	8	38	24	11	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.87	0.87	0.87	0.84	0.84	0.84	0.76	0.76	0.76
PHF Volume:	42	2261	33	34	1863	763	821	10	45	32	14	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	2261	33	34	1863	763	821	10	45	32	14	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	42	2261	33	34	1863	763	821	10	45	32	14	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.88	0.88	0.97	0.97	0.85
Lanes:	1.00	1.97	0.03	1.00	2.00	1.00	2.00	0.17	0.83	1.37	0.63	1.00
Final Sat.:	1805	3737	55	1805	3800	1615	3610	289	1375	2520	1155	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.61	0.61	0.02	0.49	0.47	0.23	0.03	0.03	0.01	0.01	0.04
Crit Moves:		****		****			****					****
Green/Cycle:	0.03	0.61	0.61	0.02	0.60	0.60	0.23	0.23	0.23	0.04	0.04	0.04
Volume/Cap:	0.82	0.99	0.99	0.99	0.82	0.79	0.99	0.14	0.14	0.29	0.29	0.99
Uniform Del:	58.0	23.3	23.3	58.8	18.9	18.2	46.2	36.9	36.9	55.6	55.6	57.4
IncremntDel:	63.4	17.4	17.4	150.5	2.4	4.4	29.8	0.2	0.2	1.0	1.0	105.4
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:	121.4	40.7	40.7	209.3	21.3	22.6	76.0	37.1	37.1	56.6	56.6	162.8
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:	121.4	40.7	40.7	209.3	21.3	22.6	76.0	37.1	37.1	56.6	56.6	162.8
DesignQueue:	3	70	1	2	57	23	45	0	2	2	1	4

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec):	70	Critical Vol./Cap. (X):	0.802
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.0
Optimal Cycle:	68	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	2 0	0	1 0	1 1	0	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	51	1424	18	21	1442	738	419	10	11	40	25	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	1424	18	21	1442	738	419	10	11	40	25	83
Added Vol:	1	20	0	0	7	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	1444	18	21	1449	738	419	10	11	40	25	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.84	0.84	0.84	0.85	0.85	0.85	0.95	0.95	0.95
PHF Volume:	61	1699	21	25	1725	879	493	12	13	42	26	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1699	21	25	1725	879	493	12	13	42	26	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	61	1699	21	25	1725	879	493	12	13	42	26	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.92	0.92	0.97	0.97	0.85
Lanes:	1.00	1.98	0.02	1.00	2.00	1.00	2.00	0.48	0.52	1.23	0.77	1.00
Final Sat.:	1805	3746	47	1805	3800	1615	3610	833	917	2268	1418	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.45	0.45	0.01	0.45	0.54	0.14	0.01	0.01	0.02	0.02	0.05
Crit Moves:	****				****		****					****
Green/Cycle:	0.04	0.59	0.59	0.02	0.57	0.74	0.17	0.17	0.17	0.05	0.05	0.07
Volume/Cap:	0.80	0.77	0.77	0.77	0.80	0.74	0.80	0.08	0.08	0.37	0.37	0.79
Uniform Del:	33.2	10.8	10.8	34.2	12.1	5.3	27.9	24.4	24.4	32.2	32.2	32.1
IncremntDel:	43.8	1.7	1.7	69.9	2.3	2.5	7.5	0.1	0.1	1.3	1.3	31.4
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:	77.1	12.4	12.4	104.1	14.3	7.8	35.4	24.6	24.6	33.4	33.4	63.6
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:	77.1	12.4	12.4	104.1	14.3	7.8	35.4	24.6	24.6	33.4	33.4	63.6
DesignQueue:	2	31	0	1	33	10	16	0	0	2	1	3

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec):	120	Critical Vol./Cap. (X):	0.973
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	34.0
Optimal Cycle:	180	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	2 0	0	1 0	1	1 0	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	39	2158	32	30	1598	664	690	8	37	24	11	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:	39	2158	32	30	1598	664	690	8	37	24	11	53
Added Vol:	1	13	0	0	23	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	2171	32	30	1621	664	690	8	38	24	11	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.87	0.87	0.87	0.84	0.84	0.84	0.76	0.76	0.76
PHF Volume:	42	2261	33	34	1863	763	821	10	45	32	14	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	2261	33	34	1863	763	821	10	45	32	14	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	42	2261	33	34	1863	763	821	10	45	32	14	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.88	0.88	0.97	0.97	0.85
Lanes:	1.00	1.97	0.03	1.00	2.00	1.00	2.00	0.17	0.83	1.37	0.63	1.00
Final Sat.:	1805	3737	55	1805	3800	1615	3610	289	1375	2520	1155	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.61	0.61	0.02	0.49	0.47	0.23	0.03	0.03	0.01	0.01	0.04
Crit Moves:		****			****			****				****
Green/Cycle:	0.03	0.62	0.62	0.02	0.61	0.85	0.23	0.23	0.23	0.02	0.02	0.04
Volume/Cap:	0.80	0.97	0.97	0.97	0.80	0.56	0.97	0.14	0.14	0.51	0.51	0.97
Uniform Del:	57.9	21.7	21.7	58.8	17.7	2.7	45.6	36.4	36.4	57.8	57.8	57.3
IncremntDel:	57.5	12.8	12.8	140.0	2.1	0.5	24.5	0.2	0.2	4.6	4.6	96.7
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
Delay/Veh:	115.5	34.6	34.6	198.8	19.7	3.2	70.1	36.6	36.6	62.4	62.4	154.0
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:	115.5	34.6	34.6	198.8	19.7	3.2	70.1	36.6	36.6	62.4	62.4	154.0
DesignQueue:	3	68	1	2	55	9	44	0	2	2	1	4

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec): 70 Critical Vol./Cap. (X): 0.833
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.6
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	153	1025	111	24	1241	190	250	50	107	113	51	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	1025	111	24	1241	190	250	50	107	113	51	36
Added Vol:	2	22	4	0	7	0	0	0	1	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	1047	115	24	1248	190	250	50	108	114	51	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.95	0.95	0.95	0.92	0.92	0.92	0.65	0.65	0.65
PHF Volume:	174	1176	129	25	1314	200	272	54	117	175	78	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	1176	129	25	1314	200	272	54	117	175	78	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	174	1176	129	25	1314	200	272	54	117	175	78	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.95	0.90	0.90	0.95	0.94	0.94
Lanes:	1.00	1.80	0.20	1.00	2.00	1.00	1.00	0.32	0.68	1.00	0.59	0.41
Final Sat.:	1805	3373	370	1805	3800	1615	1805	539	1165	1805	1045	737
Capacity Analysis Module:												
Vol/Sat:	0.10	0.35	0.35	0.01	0.35	0.12	0.15	0.10	0.10	0.10	0.08	0.08
Crit Moves:	****				****		****			****		
Green/Cycle:	0.12	0.51	0.51	0.02	0.42	0.42	0.18	0.18	0.18	0.12	0.12	0.12
Volume/Cap:	0.83	0.68	0.68	0.68	0.83	0.30	0.83	0.56	0.56	0.83	0.64	0.64
Uniform Del:	30.3	12.9	12.9	34.1	18.3	13.7	27.7	26.1	26.1	30.2	29.5	29.5
IncremntDel:	23.8	1.0	1.0	41.7	3.9	0.3	16.5	2.3	2.3	23.7	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
Delay/Veh:	54.1	13.9	13.9	75.7	22.2	13.9	44.1	28.4	28.4	53.9	36.3	36.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.1	13.9	13.9	75.7	22.2	13.9	44.1	28.4	28.4	53.9	36.3	36.3
DesignQueue:	6	25	3	1	33	5	9	2	4	6	3	2

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec):	120	Critical Vol./Cap. (X):	1.106
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	81.9
Optimal Cycle:	180	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:	Protected			Protected			Split Phase			Split Phase		
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	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	167	1762	64	12	1258	229	511	35	186	170	84	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	167	1762	64	12	1258	229	511	35	186	170	84	116
Added Vol:	2	14	2	0	25	0	0	0	3	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	1776	66	12	1283	229	511	35	189	174	84	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96	0.76	0.76	0.76
PHF Volume:	188	1973	73	14	1492	266	532	36	197	229	111	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	1973	73	14	1492	266	532	36	197	229	111	153
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	188	1973	73	14	1492	266	532	36	197	229	111	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.87	0.87	0.95	0.91	0.91
Lanes:	1.00	1.93	0.07	1.00	2.00	1.00	1.00	0.16	0.84	1.00	0.42	0.58
Final Sat.:	1805	3646	135	1805	3800	1615	1805	259	1400	1805	729	1006
Capacity Analysis Module:												
Vol/Sat:	0.10	0.54	0.54	0.01	0.39	0.16	0.29	0.14	0.14	0.13	0.15	0.15
Crit Moves:		****		****			****				****	
Green/Cycle:	0.10	0.49	0.49	0.01	0.39	0.39	0.27	0.27	0.27	0.14	0.14	0.14
Volume/Cap:	1.00	1.11	1.11	1.11	1.00	0.42	1.11	0.53	0.53	0.92	1.11	1.11
Uniform Del:	53.8	30.6	30.6	59.6	36.5	26.5	44.0	37.6	37.6	51.2	51.8	51.8
IncremntDel:	65.9	56.4	56.4	291.5	23.5	0.5	73.2	1.2	1.2	37.4	89.8	89.8
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
Delay/Veh:	119.6	87.0	87.0	351.1	59.9	27.0	117.2	38.8	38.8	88.6	142	141.5
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:	119.6	87.0	87.0	351.1	59.9	27.0	117.2	38.8	38.8	88.6	142	141.5
DesignQueue:	12	78	3	1	67	11	28	2	10	14	7	9

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec):	60	Critical Vol./Cap. (X):	0.751
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.7
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
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	2	0 1	1 1	0	0 1	1 1	0	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	153	1025	111	24	1241	190	250	50	107	113	51	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	1025	111	24	1241	190	250	50	107	113	51	36
Added Vol:	2	22	4	0	7	0	0	0	1	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	1047	115	24	1248	190	250	50	108	114	51	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.95	0.95	0.95	0.92	0.92	0.92	0.65	0.65	0.65
PHF Volume:	174	1176	129	25	1314	200	272	54	117	175	78	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	1176	129	25	1314	200	272	54	117	175	78	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	174	1176	129	25	1314	200	272	54	117	175	78	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.96	0.96	0.85	0.97	0.97	0.85
Lanes:	1.00	1.80	0.20	1.00	2.00	1.00	1.67	0.33	1.00	1.38	0.62	1.00
Final Sat.:	1805	3373	370	1805	3800	1615	3040	608	1615	2539	1136	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.35	0.35	0.01	0.35	0.12	0.09	0.09	0.07	0.07	0.07	0.03
Crit Moves:	****				****		****			****		
Green/Cycle:	0.13	0.57	0.57	0.02	0.46	0.46	0.12	0.12	0.12	0.09	0.09	0.09
Volume/Cap:	0.75	0.62	0.62	0.62	0.75	0.27	0.75	0.75	0.61	0.75	0.75	0.37
Uniform Del:	25.2	8.7	8.7	29.1	13.3	10.0	25.6	25.6	25.1	26.6	26.6	25.6
IncremntDel:	12.8	0.6	0.6	25.0	1.9	0.2	7.2	7.2	5.6	9.1	9.1	1.6
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
Delay/Veh:	38.0	9.2	9.2	54.0	15.2	10.2	32.7	32.7	30.8	35.6	35.6	27.2
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:	38.0	9.2	9.2	54.0	15.2	10.2	32.7	32.7	30.8	35.6	35.6	27.2
DesignQueue:	5	19	2	1	26	4	8	2	4	5	2	2

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

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Intersection #2 Highway 1/Ocean Avenue

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Cycle (sec): 80 Critical Vol./Cap. (X): 0.941
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 114 Level Of Service: C

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
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	2	0 1	1 1	0	0 1	1 1	0	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	167	1762	64	12	1258	229	511	35	186	170	84	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	167	1762	64	12	1258	229	511	35	186	170	84	116
Added Vol:	2	14	2	0	25	0	0	0	3	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	1776	66	12	1283	229	511	35	189	174	84	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96	0.76	0.76	0.76
PHF Volume:	188	1973	73	14	1492	266	532	36	197	229	111	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	1973	73	14	1492	266	532	36	197	229	111	153
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	188	1973	73	14	1492	266	532	36	197	229	111	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.96	0.96	0.85	0.97	0.97	0.85
Lanes:	1.00	1.93	0.07	1.00	2.00	1.00	1.87	0.13	1.00	1.35	0.65	1.00
Final Sat.:	1805	3646	135	1805	3800	1615	3396	233	1615	2478	1196	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.54	0.54	0.01	0.39	0.16	0.16	0.16	0.12	0.09	0.09	0.09
Crit Moves:		****		****				****				****
Green/Cycle:	0.12	0.57	0.57	0.01	0.46	0.46	0.17	0.17	0.17	0.10	0.10	0.10
Volume/Cap:	0.85	0.94	0.94	0.94	0.85	0.36	0.94	0.94	0.73	0.92	0.92	0.94
Uniform Del:	34.4	15.8	15.8	39.7	19.1	13.9	33.0	33.0	31.6	35.7	35.7	35.8
IncremntDel:	25.8	9.0	9.0	203.2	4.2	0.3	23.1	23.1	9.9	27.7	27.7	53.4
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:	60.2	24.8	24.8	242.8	23.4	14.2	56.1	56.1	41.6	63.4	63.4	89.2
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:	60.2	24.8	24.8	242.8	23.4	14.2	56.1	56.1	41.6	63.4	63.4	89.2
DesignQueue:	8	43	2	1	40	7	21	1	7	9	5	6

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

Intersection #3 Highway 1/Carmel Valley Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.604
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.5
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:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1 0 1	2	0	1 0 0	0	0	0 0 0	0	0	0 0 2
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	0	361	44	894	554	0	0	0	0	0	0	906
Growth Adj:	1.00	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	361	44	894	554	0	0	0	0	0	0	906
Added Vol:	0	0	3	9	0	0	0	0	0	0	0	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	361	47	903	554	0	0	0	0	0	0	934
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.93	0.93	0.93	1.00	1.00	1.00	0.89	0.89	0.89
PHF Volume:	0	415	54	971	596	0	0	0	0	0	0	1049
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	415	54	971	596	0	0	0	0	0	0	1049
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	415	54	971	596	0	0	0	0	0	0	1049
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	1.00	1.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Final Sat.:	0	1900	1615	3610	1900	0	0	0	0	0	0	3230
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.03	0.27	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.32
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.36	0.36	0.45	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.54
Volume/Cap:	0.00	0.60	0.09	0.60	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.60
Uniform Del:	0.0	15.6	12.6	12.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	9.5
IncremntDel:	0.0	1.5	0.1	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Delay/Veh:	0.0	17.2	12.7	13.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0	10.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	17.2	12.7	13.3	1.8	0.0	0.0	0.0	0.0	0.0	0.0	10.1
DesignQueue:	0	9	1	19	4	0	0	0	0	0	0	17

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

Intersection #3 Highway 1/Carmel Valley Road

Cycle (sec): 90 Critical Vol./Cap. (X): 0.899
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 26.9
Optimal Cycle: 90 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	0 1	2 0	1	0 0	0 0	0	0 0	0 0	0	0 2
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	0	657	41	1151	589	0	0	0	0	0	0	1266
Growth Adj:	1.00	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	657	41	1151	589	0	0	0	0	0	0	1266
Added Vol:	0	0	9	32	0	0	0	0	0	0	0	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	657	50	1183	589	0	0	0	0	0	0	1284
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.90	0.90	0.90	1.00	1.00	1.00	0.99	0.99	0.99
PHF Volume:	0	832	63	1314	654	0	0	0	0	0	0	1297
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	832	63	1314	654	0	0	0	0	0	0	1297
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	832	63	1314	654	0	0	0	0	0	0	1297
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	1.00	1.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Final Sat.:	0	1900	1615	3610	1900	0	0	0	0	0	0	3230
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.04	0.36	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.49	0.49	0.40	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.45
Volume/Cap:	0.00	0.90	0.08	0.90	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.90
Uniform Del:	0.0	21.1	12.3	25.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	23.0
IncremntDel:	0.0	11.6	0.0	7.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	7.9
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Delay/Veh:	0.0	32.7	12.4	32.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0
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	32.7	12.4	32.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0
DesignQueue:	0	24	2	43	4	0	0	0	0	0	0	39

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

Intersection #4 Highway 1/Rio Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.611
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 22.1
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:	Protected			Protected			Protected			Protected		
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	2 0	0 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 7:45-8:45 AM Peak Hour												
Base Vol:	41	111	69	335	130	104	177	279	37	106	284	115
Growth Adj:	1.00	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	111	69	335	130	104	177	279	37	106	284	115
Added Vol:	0	3	0	0	0	0	0	1	0	7	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	114	69	335	130	104	177	280	37	113	288	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.74	0.74	0.74	0.92	0.92	0.92	0.79	0.79	0.79	0.83	0.83	0.83
PHF Volume:	55	154	93	364	141	113	224	354	47	136	347	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	154	93	364	141	113	224	354	47	136	347	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	154	93	364	141	113	224	354	47	136	347	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.93	0.93	0.95	0.98	0.98	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	2.00	0.56	0.44	1.00	1.77	0.23	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	3610	985	788	1805	3296	436	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.06	0.10	0.14	0.14	0.12	0.11	0.11	0.08	0.18	0.09
Crit Moves:		****		****			****				****	
Green/Cycle:	0.05	0.13	0.13	0.17	0.25	0.25	0.20	0.30	0.30	0.21	0.30	0.30
Volume/Cap:	0.58	0.61	0.43	0.61	0.58	0.58	0.61	0.36	0.36	0.36	0.61	0.29
Uniform Del:	27.8	24.6	23.9	23.3	19.9	19.9	21.7	16.7	16.7	20.4	18.0	16.1
IncremntDel:	9.1	4.3	1.4	1.9	2.1	2.1	3.0	0.2	0.2	0.6	2.0	0.3
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
Delay/Veh:	36.9	28.9	25.4	25.1	22.0	22.0	24.8	16.9	16.9	21.0	20.0	16.5
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:	36.9	28.9	25.4	25.1	22.0	22.0	24.8	16.9	16.9	21.0	20.0	16.5
DesignQueue:	2	5	3	10	4	3	6	9	1	4	9	3

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

Intersection #4 Highway 1/Rio Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.766
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 24.7
Optimal Cycle: 59 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	2 0	0 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 3:45-4:45 PM Peak Hour												
Base Vol:	93	201	55	315	151	68	140	441	37	166	518	471
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	93	201	55	315	151	68	140	441	37	166	518	471
Added Vol:	0	9	0	0	0	0	0	4	0	5	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	210	55	315	151	68	140	445	37	171	520	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.91	0.91	0.91	0.86	0.86	0.86	0.96	0.96	0.96
PHF Volume:	103	233	61	346	166	75	163	517	43	178	542	491
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	233	61	346	166	75	163	517	43	178	542	491
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	103	233	61	346	166	75	163	517	43	178	542	491
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.95	0.95	0.95	0.99	0.99	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	2.00	0.69	0.31	1.00	1.85	0.15	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	3610	1248	562	1805	3466	288	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.04	0.10	0.13	0.13	0.09	0.15	0.15	0.10	0.29	0.30
Crit Moves:		****		****			****					****
Green/Cycle:	0.09	0.16	0.16	0.13	0.20	0.20	0.12	0.31	0.31	0.20	0.40	0.40
Volume/Cap:	0.67	0.77	0.24	0.77	0.67	0.67	0.77	0.48	0.48	0.48	0.72	0.77
Uniform Del:	26.6	24.1	22.0	25.4	22.2	22.2	25.7	16.8	16.8	21.1	15.3	15.7
IncremntDel:	10.5	11.1	0.5	7.7	4.7	4.7	15.3	0.3	0.3	1.0	3.4	5.5
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
Delay/Veh:	37.1	35.2	22.5	33.1	26.8	26.8	41.0	17.1	17.1	22.0	18.6	21.2
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:	37.1	35.2	22.5	33.1	26.8	26.8	41.0	17.1	17.1	22.0	18.6	21.2
DesignQueue:	3	7	2	10	5	2	5	12	1	5	12	11

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

Intersection #5 Carmel Valley Road/Carmel Rancho Boulevard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.573
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: 42 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						Protected						Protected					
Rights:			Ovl						Include						Include						Include			
Min. Green:	0		0		0		0		0		0		0		0		0		0		0		0	
Lanes:	1	1	0	0	1		0	1	0	0	1		1	0	2	0	1		2	0	2	0	1	
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour																								
Base Vol:	108		7		273		24		12		40		23		683		221		426		766		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:	108		7		273		24		12		40		23		683		221		426		766		11	
Added Vol:	0		0		3		0		0		0		0		12		0		16		28		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	108		7		276		24		12		40		23		695		221		442		794		11	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	0.82	0.82			0.82		0.76	0.76			0.76		0.84	0.84			0.84		0.88	0.88			0.88	
PHF Volume:	132		9		337		32		16		53		27		827		263		502		902		13	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	132		9		337		32		16		53		27		827		263		502		902		13	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Final Vol.:	132		9		337		32		16		53		27		827		263		502		902		13	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	0.96	0.96			0.85		0.97	0.97			0.85		0.95	1.00			0.85		0.95	1.00			0.85	
Lanes:	1.88	0.12			1.00		0.67	0.33			1.00		1.00	2.00			1.00		2.00	2.00			1.00	
Final Sat.:	3408		221		1615		1226		613		1615		1805		3800		1615		3610		3800		1615	
Capacity Analysis Module:																								
Vol/Sat:	0.04	0.04			0.21		0.03	0.03			0.03		0.02	0.22			0.16		0.14	0.24			0.01	
Crit Moves:					****						****				****				****					
Green/Cycle:	0.12	0.12			0.36		0.06	0.06			0.06		0.04	0.38			0.38		0.24	0.58			0.58	
Volume/Cap:	0.32	0.32			0.57		0.45	0.45			0.57		0.41	0.57			0.43		0.57	0.41			0.01	
Uniform Del:	24.1	24.1			15.4		27.4	27.4			27.6		28.2	14.8			13.8		20.0	6.8			5.2	
IncremntDel:	0.4	0.4			1.4		3.1	3.1			8.5		4.0	0.6			0.5		0.9	0.1			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	
Delay/Veh:	24.5	24.5			16.7		30.5	30.5			36.1		32.2	15.3			14.3		20.9	6.9			5.2	
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:	24.5	24.5			16.7		30.5	30.5			36.1		32.2	15.3			14.3		20.9	6.9			5.2	
DesignQueue:	4		0		7		1		0		2		1		18		6		13		13		0	

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

Intersection #5 Carmel Valley Road/Carmel Rancho Boulevard

Cycle (sec):	70	Critical Vol./Cap. (X):	0.806
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	23.0
Optimal Cycle:	69	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	0 1	0	0 1	1 0	2	0 1	2 0	2	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	421	24	525	16	18	6	20	798	387	519	854	9
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	421	24	525	16	18	6	20	798	387	519	854	9
Added Vol:	0	0	9	0	0	0	0	40	0	10	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	421	24	534	16	18	6	20	838	387	529	872	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:	0.95 0.95		0.95	0.67 0.67		0.67	0.82 0.82		0.82	0.91 0.91		0.91
PHF Volume:	443	25	562	24	27	9	24	1022	472	581	958	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	443	25	562	24	27	9	24	1022	472	581	958	10
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	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.:	443	25	562	24	27	9	24	1022	472	581	958	10
Saturation Flow Module:												
Sat/Lane:	1900 1900		1900	1900 1900		1900	1900 1900		1900	1900 1900		1900
Adjustment:	0.96 0.96		0.85	0.98 0.98		0.85	0.95 1.00		0.85	0.95 1.00		0.85
Lanes:	1.89 0.11		1.00	0.47 0.53		1.00	1.00 2.00		1.00	2.00 2.00		1.00
Final Sat.:	3433	196	1615	874	983	1615	1805 3800		1615	3610 3800		1615
Capacity Analysis Module:												
Vol/Sat:	0.13 0.13		0.35	0.03 0.03		0.01	0.01 0.27		0.29	0.16 0.25		0.01
Crit Moves:			****		****				****	****		
Green/Cycle:	0.23 0.23		0.43	0.03 0.03		0.03	0.03 0.36		0.36	0.20 0.53		0.53
Volume/Cap:	0.56 0.56		0.81	0.81 0.81		0.16	0.47 0.74		0.81	0.81 0.47		0.01
Uniform Del:	23.7 23.7		17.3	33.6 33.6		32.8	33.5 19.4		20.1	26.7 10.2		7.6
IncremntDel:	0.8	0.8	6.8	51.4 51.4		1.4	6.7	2.2	8.0	6.6	0.2	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
Delay/Veh:	24.5 24.5		24.2	85.0 85.0		34.3	40.2 21.6		28.1	33.3 10.3		7.7
User DelAdj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
AdjDel/Veh:	24.5 24.5		24.2	85.0 85.0		34.3	40.2 21.6		28.1	33.3 10.3		7.7
DesignQueue:	14	1	13	1	1	0	1	27	13	19	19	0

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

Intersection #6 Carmel Valley Road/Rancho San Carlos Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.862
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 12.7
Optimal Cycle: 70 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			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	0	1	0	0	0	0	0	1	0	0	1	0	1	1	0	1	0	0
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	116	0	9	0	0	0	0	632	93	49	939	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:	116	0	9	0	0	0	0	632	93	49	939	0
Added Vol:	0	0	0	0	0	0	0	15	0	0	43	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	0	9	0	0	0	0	647	93	49	982	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.74	0.74	0.74	1.00	1.00	1.00	0.79	0.79	0.79	0.80	0.80	0.80
PHF Volume:	157	0	12	0	0	0	0	819	118	61	1228	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	0	12	0	0	0	0	819	118	61	1228	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.:	157	0	12	0	0	0	0	819	118	61	1228	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.01	0.00	0.00	0.00	0.00	0.43	0.07	0.03	0.65	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.69	0.69	0.05	0.75	0.00
Volume/Cap:	0.86	0.00	0.07	0.00	0.00	0.00	0.00	0.62	0.10	0.62	0.86	0.00
Uniform Del:	26.6	0.0	24.4	0.0	0.0	0.0	0.0	4.9	3.0	27.8	5.3	0.0
IncremntDel:	31.9	0.0	0.2	0.0	0.0	0.0	0.0	0.9	0.0	11.5	5.7	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	58.5	0.0	24.6	0.0	0.0	0.0	0.0	5.8	3.1	39.3	11.0	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:	58.5	0.0	24.6	0.0	0.0	0.0	0.0	5.8	3.1	39.3	11.0	0.0
DesignQueue:	5	0	0	0	0	0	0	9	1	2	12	0

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

Intersection #6 Carmel Valley Road/Rancho San Carlos Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.824
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 10.6
Optimal Cycle: 62 Level Of Service: B

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Split Phase			Split Phase			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	0 1	0	0 0	0 0 0	0	0 1	0 1				1	0 1	0 0			
Volume Module: >> Count Date: 18 Dec 2002 << 4:30-5:30 PM Peak Hour																		
Base Vol:	89	0	31	0	0	0	0	1122	138				31	539	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:	89	0	31	0	0	0	0	1122	138				31	539	0			
Added Vol:	0	0	0	0	0	0	0	50	0				0	28	0			
PasserByVol:	0	0	0	0	0	0	0	0	0				0	0	0			
Initial Fut:	89	0	31	0	0	0	0	1172	138				31	567	0			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.94	0.94	0.94	1.00	1.00	1.00	0.98	0.98	0.98				0.93	0.93	0.93			
PHF Volume:	95	0	33	0	0	0	0	1196	141				33	610	0			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
Reduced Vol:	95	0	33	0	0	0	0	1196	141				33	610	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.:	95	0	33	0	0	0	0	1196	141				33	610	0			
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900				1900	1900	1900			
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85				0.95	1.00	1.00			
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00				1.00	1.00	0.00			
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615				1805	1900	0			
Capacity Analysis Module:																		
Vol/Sat:	0.05	0.00	0.02	0.00	0.00	0.00	0.00	0.63	0.09				0.02	0.32	0.00			
Crit Moves:	****							****					****					
Green/Cycle:	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.76	0.76				0.02	0.79	0.00			
Volume/Cap:	0.82	0.00	0.32	0.00	0.00	0.00	0.00	0.82	0.11				0.82	0.41	0.00			
Uniform Del:	27.8	0.0	26.9	0.0	0.0	0.0	0.0	4.5	1.8				29.2	2.0	0.0			
IncremntDel:	36.2	0.0	1.8	0.0	0.0	0.0	0.0	4.0	0.0				76.2	0.2	0.0			
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00				1.00	1.00	0.00			
Delay/Veh:	63.9	0.0	28.7	0.0	0.0	0.0	0.0	8.5	1.9				105.4	2.2	0.0			
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
AdjDel/Veh:	63.9	0.0	28.7	0.0	0.0	0.0	0.0	8.5	1.9				105.4	2.2	0.0			
DesignQueue:	3	0	1	0	0	0	0	11	1				1	5	0			

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

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Intersection #7 Carmel Valley Road/Brookdale Drive

****

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: F

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0		
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	7	0	5	0	0	0	0	631	3	3	1002	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:	7	0	5	0	0	0	0	631	3	3	1002	0
Added Vol:	0	0	0	19	0	43	15	0	0	0	0	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	0	5	19	0	43	15	631	3	3	1002	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:	0.50	0.50	0.50	1.00	1.00	1.00	0.75	0.75	0.75	0.82	0.82	0.82
PHF Volume:	14	0	10	19	0	43	20	841	4	4	1222	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	14	0	10	19	0	43	20	841	4	4	1222	7
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	2138	xxxx	843	2121	xxxx	1226	1229	xxxx	xxxxx	845	xxxx	xxxxx
Potent Cap.:	36	xxxx	367	37	xxxx	220	574	xxxx	xxxxx	800	xxxx	xxxxx
Move Cap.:	28	xxxx	367	35	xxxx	220	574	xxxx	xxxxx	800	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.5	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	46	xxxxx	xxxx	84	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	150	xxxxx	xxxxx	122	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	F	*	*	F	*	*	*	*	*	*	*
ApproachDel:	150.1			122.4			xxxxxx			xxxxxx		
ApproachLOS:	F			F			*			*		

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

Intersection #7 Carmel Valley Road/Brookdale Drive

Average Delay (sec/veh): 1.9 Worst Case 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						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		0	0	1!	0	0		0	0	1!	0	0	
Volume Module: >> Count Date: 18 Dec 2002 << 4:45-5:45 PM Peak Hour																								
Base Vol:	5		0		4		0		0		0		0		1150		7		3		586		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:	5		0		4		0		0		0		0		1150		7		3		586		0	
Added Vol:	0		0		0		12		0		28		50		0		0		0		0		21	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	5		0		4		12		0		28		50		1150		7		3		586		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:	0.56		0.56		0.56		1.00		1.00		1.00		0.92		0.92		0.92		0.96		0.96		0.96	
PHF Volume:	9		0		7		12		0		28		54		1250		8		3		610		22	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	9		0		7		12		0		28		54		1250		8		3		610		22	
Critical Gap Module:																								
Critical Gp:	7.1	xxxx		6.2			7.1	xxxx		6.2			4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx		3.3			3.5	xxxx		3.3			2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	2004	xxxx		1254			1994	xxxx		621			632	xxxx	xxxxx				1258	xxxx	xxxxx			
Potent Cap.:	45	xxxx		212			46	xxxx		491			960	xxxx	xxxxx				560	xxxx	xxxxx			
Move Cap.:	40	xxxx		212			42	xxxx		491			960	xxxx	xxxxx				560	xxxx	xxxxx			
Level Of Service Module:																								
Stopped Del:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			9.0	xxxx	xxxxx				11.5	xxxx	xxxxx			
LOS by Move:	*	*		*			*	*		*			A	*	*				B	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		63	xxxxx			xxxx		117	xxxxx			xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx		80.8	xxxxx			xxxxx		51.2	xxxxx			xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*		F	*			*		F	*			*	*	*				*	*	*			
ApproachDel:			80.8						51.2						xxxxxx						xxxxxx			
ApproachLOS:			F						F						*						*			

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

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Intersection #7 Carmel Valley Road/Brookdale Drive

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Cycle (sec):	80	Critical Vol./Cap. (X):	0.834
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	12.7
Optimal Cycle:	78	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			Protected			Protected		
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	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	7	0	5	0	0	0	0	631	3	3	1002	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:	7	0	5	0	0	0	0	631	3	3	1002	0
Added Vol:	0	0	0	19	0	43	15	0	0	0	0	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	0	5	19	0	43	15	631	3	3	1002	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:	0.50	0.50	0.50	1.00	1.00	1.00	0.75	0.75	0.75	0.82	0.82	0.82
PHF Volume:	14	0	10	19	0	43	20	841	4	4	1222	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	0	10	19	0	43	20	841	4	4	1222	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	0	10	19	0	43	20	841	4	4	1222	7
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.89	1.00	0.89	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.58	0.00	0.42	0.31	0.00	0.69	1.00	0.99	0.01	1.00	0.99	0.01
Final Sat.:	1017	0	726	520	0	1176	1805	1889	9	1805	1887	11
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.04	0.00	0.04	0.01	0.45	0.45	0.00	0.65	0.65
Crit Moves:	****					****	****				****	
Green/Cycle:	0.02	0.00	0.02	0.04	0.00	0.04	0.01	0.79	0.79	0.00	0.78	0.78
Volume/Cap:	0.83	0.00	0.83	0.83	0.00	0.83	0.83	0.57	0.57	0.57	0.83	0.83
Uniform Del:	39.2	0.0	39.2	38.0	0.0	38.0	39.4	3.3	3.3	39.8	5.7	5.7
IncremntDel:	99.2	0.0	99.2	52.5	0.0	52.5	111.3	0.5	0.5	83.3	4.3	4.3
Delay Adj:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	138.5	0.0	138.5	90.5	0.0	90.5	150.7	3.8	3.8	123.1	9.9	9.9
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:	138.5	0.0	138.5	90.5	0.0	90.5	150.7	3.8	3.8	123.1	9.9	9.9
DesignQueue:	1	0	0	1	0	2	1	9	0	0	15	0

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

Intersection #7 Carmel Valley Road/Brookdale Drive

Cycle (sec):	70	Critical Vol./Cap. (X):	0.841
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	12.1
Optimal Cycle:	75	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			Protected			Protected		
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
Volume Module: >> Count Date: 18 Dec 2002 << 4:45-5:45 PM Peak Hour												
Base Vol:	5	0	4	0	0	0	0	1150	7	3	586	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:	5	0	4	0	0	0	0	1150	7	3	586	0
Added Vol:	0	0	0	12	0	28	50	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	4	12	0	28	50	1150	7	3	586	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:	0.56	0.56	0.56	1.00	1.00	1.00	0.92	0.92	0.92	0.96	0.96	0.96
PHF Volume:	9	0	7	12	0	28	54	1250	8	3	610	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	0	7	12	0	28	54	1250	8	3	610	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	0	7	12	0	28	54	1250	8	3	610	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	0.89	1.00	0.89	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.56	0.00	0.44	0.30	0.00	0.70	1.00	0.99	0.01	1.00	0.97	0.03
Final Sat.:	965	0	772	509	0	1187	1805	1887	11	1805	1825	65
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.02	0.00	0.02	0.03	0.66	0.66	0.00	0.33	0.33
Crit Moves:	****			****				****		****		
Green/Cycle:	0.01	0.00	0.01	0.03	0.00	0.03	0.07	0.79	0.79	0.00	0.72	0.72
Volume/Cap:	0.84	0.00	0.84	0.84	0.00	0.84	0.46	0.84	0.84	0.84	0.46	0.46
Uniform Del:	34.6	0.0	34.6	33.9	0.0	33.9	31.5	4.7	4.7	34.9	4.0	4.0
IncremntDel:	131.3	0.0	131.3	73.7	0.0	73.7	2.9	4.5	4.5	336.0	0.2	0.2
Delay Adj:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	165.9	0.0	165.9	107.6	0.0	107.6	34.4	9.2	9.2	371.0	4.2	4.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	165.9	0.0	165.9	107.6	0.0	107.6	34.4	9.2	9.2	371.0	4.2	4.2
DesignQueue:	0	0	0	0	0	1	2	13	0	0	7	0

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

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Intersection #8 Carmel Valley Road/Dorris Drive

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Average Delay (sec/veh): 10.4 Worst Case Level Of Service: F

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Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	1	0	1		1	0	1	0	0	
Volume Module: >> Count Date: 18 Dec 2002 << 7:15-8:15 AM Peak Hour																								
Base Vol:	98		0		30		0		0		0		0		416		139		56		686		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:	98		0		30		0		0		0		0		416		139		56		686		0	
Added Vol:	1		0		0		0		0		0		0		16		3		0		5		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	99		0		30		0		0		0		0		432		142		56		691		0	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.76		0.76		0.76		1.00		1.00		1.00		0.77		0.77		0.77		0.89		0.89		0.89	
PHF Volume:	130		0		39		0		0		0		0		561		184		63		776		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	130		0		39		0		0		0		0		561		184		63		776		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:	1463	xxxx			561		xxxx	xxxx			xxxxx		xxxx	xxxx			xxxxx		745	xxxx			xxxxx	
Potent Cap.:	143	xxxx			531		xxxx	xxxx			xxxxx		xxxx	xxxx			xxxxx		872	xxxx			xxxxx	
Move Cap.:	135	xxxx			531		xxxx	xxxx			xxxxx		xxxx	xxxx			xxxxx		872	xxxx			xxxxx	
Level Of Service Module:																								
Stopped Del:	131.4	xxxx			12.3		xxxxx	xxxx			xxxxx		xxxxx	xxxx			xxxxx		9.5	xxxx			xxxxx	
LOS by Move:	F	*			B		*	*			*		*	*			*		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		
Shrd StpDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*			*	*		*			*	*		*			*	*		*		
ApproachDel:		103.7						xxxxxx						xxxxxx						xxxxxx				
ApproachLOS:		F						*						*						*				

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

Intersection #8 Carmel Valley Road/Dorris Drive

Average Delay (sec/veh): 7.6 Worst Case 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					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour																				
Base Vol:	105	0	47			0	0	0			0	610	257			61	436			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:	105	0	47			0	0	0			0	610	257			61	436			0
Added Vol:	4	0	0			0	0	0			0	10	2			0	18			0
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0			0
Initial Fut:	109	0	47			0	0	0			0	620	259			61	454			0
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00
PHF Adj:	0.89	0.89	0.89			1.00	1.00	1.00			0.85	0.85	0.85			0.86	0.86			0.86
PHF Volume:	122	0	53			0	0	0			0	729	305			71	528			0
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0			0
Final Vol.:	122	0	53			0	0	0			0	729	305			71	528			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:	1399	xxxx		729	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				1034	xxxx	xxxxx				
Potent Cap.:	156	xxxx		426	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				680	xxxx	xxxxx				
Move Cap.:	144	xxxx		426	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				680	xxxx	xxxxx				
Level Of Service Module:																				
Stopped Del:	99.9	xxxx		14.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				10.9	xxxx	xxxxx				
LOS by Move:	F	*		B	*	*	*	*	*	*				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	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			*	*	*		
ApproachDel:		74.2					xxxxxx					xxxxxx					xxxxxx			
ApproachLOS:		F					*					*					*			

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

****

Intersection #8 Carmel Valley Road/Dorris Drive

****

Cycle (sec): 60 Critical Vol./Cap. (X): 0.566
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 36 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:	Protected			Protected			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	0 1	0	0 0	0 0	0	0 1	0 1	1 0	1 0	0
Volume Module: >> Count Date: 18 Dec 2002 << 7:15-8:15 AM Peak Hour												
Base Vol:	98	0	30	0	0	0	0	416	139	56	686	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:	98	0	30	0	0	0	0	416	139	56	686	0
Added Vol:	1	0	0	0	0	0	0	16	3	0	5	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	0	30	0	0	0	0	432	142	56	691	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.76	0.76	0.76	1.00	1.00	1.00	0.77	0.77	0.77	0.89	0.89	0.89
PHF Volume:	130	0	39	0	0	0	0	561	184	63	776	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	0	39	0	0	0	0	561	184	63	776	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.:	130	0	39	0	0	0	0	561	184	63	776	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.02	0.00	0.00	0.00	0.00	0.30	0.11	0.03	0.41	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.65	0.65	0.08	0.72	0.00
Volume/Cap:	0.57	0.00	0.19	0.00	0.00	0.00	0.00	0.46	0.18	0.46	0.57	0.00
Uniform Del:	24.6	0.0	23.4	0.0	0.0	0.0	0.0	5.3	4.2	26.5	3.9	0.0
IncremntDel:	3.3	0.0	0.5	0.0	0.0	0.0	0.0	0.3	0.1	2.4	0.6	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	27.9	0.0	23.9	0.0	0.0	0.0	0.0	5.6	4.3	28.9	4.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.9	0.0	23.9	0.0	0.0	0.0	0.0	5.6	4.3	28.9	4.5	0.0
DesignQueue:	4	0	1	0	0	0	0	7	2	2	8	0

****

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

Intersection #8 Carmel Valley Road/Dorris Drive

Cycle (sec):	60	Critical Vol./Cap. (X):	0.578
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	8.1
Optimal Cycle:	37	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:	Protected			Protected			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	0	1	0	0	0	0	0	1	0	1	0	1	1	0	1	0	0
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	105	0	47	0	0	0	0	610	257	61	436	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:	105	0	47	0	0	0	0	610	257	61	436	0
Added Vol:	4	0	0	0	0	0	0	10	2	0	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	109	0	47	0	0	0	0	620	259	61	454	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	1.00	1.00	1.00	0.85	0.85	0.85	0.86	0.86	0.86
PHF Volume:	122	0	53	0	0	0	0	729	305	71	528	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	0	53	0	0	0	0	729	305	71	528	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.:	122	0	53	0	0	0	0	729	305	71	528	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.03	0.00	0.00	0.00	0.00	0.38	0.19	0.04	0.28	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.12	0.00	0.12	0.00	0.00	0.00	0.00	0.66	0.66	0.07	0.73	0.00
Volume/Cap:	0.58	0.00	0.28	0.00	0.00	0.00	0.00	0.58	0.28	0.58	0.38	0.00
Uniform Del:	25.1	0.0	24.2	0.0	0.0	0.0	0.0	5.5	4.2	27.1	3.0	0.0
IncremntDel:	3.9	0.0	0.8	0.0	0.0	0.0	0.0	0.7	0.1	6.7	0.2	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	29.0	0.0	25.0	0.0	0.0	0.0	0.0	6.1	4.3	33.8	3.1	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:	29.0	0.0	25.0	0.0	0.0	0.0	0.0	6.1	4.3	33.8	3.1	0.0
DesignQueue:	4	0	2	0	0	0	0	9	4	2	5	0

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

Intersection #9 Carmel Valley Road/Laureles Grade

Average Delay (sec/veh): 7.5 Worst Case 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			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: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	0	0	0	104	0	120	91	324	0	0	562	229
Growth Adj:	1.00	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	104	0	120	91	324	0	0	562	229
Added Vol:	0	0	0	0	0	3	9	6	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	104	0	123	100	330	0	0	564	229
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.90	0.90	0.90	0.80	0.80	0.80	0.85	0.85	0.85
PHF Volume:	0	0	0	116	0	137	125	413	0	0	664	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	116	0	137	125	413	0	0	664	269
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	1326	xxxx	664	933	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	173	xxxx	464	742	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	151	xxxx	464	742	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	81.1	xxxx	16.0	10.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	C	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	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			45.8			xxxxxx			xxxxxx		
ApproachLOS:	*			E			*			*		

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

Intersection #9 Carmel Valley Road/Laureles Grade

Average Delay (sec/veh): 8.4 Worst Case 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			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: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	0	0	0	125	0	105	159	342	0	0	328	130
Growth Adj:	1.00	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	125	0	105	159	342	0	0	328	130
Added Vol:	0	0	0	0	0	11	6	4	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	125	0	116	165	346	0	0	335	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.93	0.93	0.93	0.88	0.88	0.88	0.84	0.84	0.84
PHF Volume:	0	0	0	134	0	125	188	393	0	0	399	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	134	0	125	188	393	0	0	399	155
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	1167	xxxx	399	554	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	216	xxxx	655	1027	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	186	xxxx	655	1027	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	63.1	xxxx	11.8	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	B	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
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			38.4			xxxxxx			xxxxxx		
ApproachLOS:	*			E			*			*		

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

Intersection #9 Carmel Valley Road/Laureles Grade

Cycle (sec): 60 Critical Vol./Cap. (X): 0.592
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 11.1
Optimal Cycle: 37 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1	0	0 0 1	1	0 1	0 0	0	0 1	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	0	0	0	104	0	120	91	324	0	0	562	229
Growth Adj:	1.00	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	104	0	120	91	324	0	0	562	229
Added Vol:	0	0	0	0	0	3	9	6	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	104	0	123	100	330	0	0	564	229
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.90	0.90	0.90	0.80	0.80	0.80	0.85	0.85	0.85
PHF Volume:	0	0	0	116	0	137	125	413	0	0	664	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	116	0	137	125	413	0	0	664	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.:	0	0	0	116	0	137	125	413	0	0	664	269
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.08	0.07	0.22	0.00	0.00	0.35	0.17
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.14	0.00	0.14	0.12	0.71	0.00	0.00	0.59	0.59
Volume/Cap:	0.00	0.00	0.00	0.45	0.00	0.59	0.59	0.31	0.00	0.00	0.59	0.28
Uniform Del:	0.0	0.0	0.0	23.5	0.0	24.1	25.1	3.3	0.0	0.0	7.7	6.1
IncremntDel:	0.0	0.0	0.0	1.2	0.0	4.1	4.4	0.1	0.0	0.0	0.9	0.2
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	24.8	0.0	28.1	29.6	3.4	0.0	0.0	8.6	6.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	24.8	0.0	28.1	29.6	3.4	0.0	0.0	8.6	6.2
DesignQueue:	0	0	0	3	0	4	4	4	0	0	10	4

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

Intersection #9 Carmel Valley Road/Laureles Grade

Cycle (sec):	60	Critical Vol./Cap. (X):	0.460
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	12.7
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1	0	0 0 1	1	0	1 0 0	0	0	1 0 1
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	0	0	0	125	0	105	159	342	0	0	328	130
Growth Adj:	1.00	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	125	0	105	159	342	0	0	328	130
Added Vol:	0	0	0	0	0	11	6	4	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	125	0	116	165	346	0	0	335	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.93	0.93	0.93	0.88	0.88	0.88	0.84	0.84	0.84
PHF Volume:	0	0	0	134	0	125	188	393	0	0	399	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	134	0	125	188	393	0	0	399	155
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	134	0	125	188	393	0	0	399	155
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.08	0.10	0.21	0.00	0.00	0.21	0.10
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.17	0.00	0.17	0.23	0.68	0.00	0.00	0.46	0.46
Volume/Cap:	0.00	0.00	0.00	0.44	0.00	0.46	0.46	0.30	0.00	0.00	0.46	0.21
Uniform Del:	0.0	0.0	0.0	22.4	0.0	22.5	20.1	3.8	0.0	0.0	11.2	9.8
IncremntDel:	0.0	0.0	0.0	1.0	0.0	1.2	0.8	0.1	0.0	0.0	0.4	0.1
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	23.5	0.0	23.7	20.9	4.0	0.0	0.0	11.6	10.0
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	0.0	23.7	20.9	4.0	0.0	0.0	11.6	10.0
DesignQueue:	0	0	0	4	0	4	5	4	0	0	8	3

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

Intersection #10 Highway 68/Laureles Grade

Cycle (sec): 70 Critical Vol./Cap. (X): 0.853
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.4
Optimal Cycle: 72 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	1	0	0	0	0	0	0	1	0	1	1	0	1	0	0
Volume Module:												
Base Vol:	226	0	205	0	0	0	0	606	137	242	1160	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:	226	0	205	0	0	0	0	606	137	242	1160	0
Added Vol:	0	0	9	0	0	0	0	0	0	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	226	0	214	0	0	0	0	606	137	245	1160	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:	226	0	214	0	0	0	0	606	137	245	1160	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	226	0	214	0	0	0	0	606	137	245	1160	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.:	226	0	214	0	0	0	0	606	137	245	1160	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.32	0.08	0.14	0.61	0.00
Crit Moves:			****				****				****	
Green/Cycle:	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.50	0.50	0.21	0.72	0.00
Volume/Cap:	0.81	0.00	0.85	0.00	0.00	0.00	0.00	0.64	0.17	0.64	0.85	0.00
Uniform Del:	28.5	0.0	28.8	0.0	0.0	0.0	0.0	12.7	9.5	25.0	7.2	0.0
IncremntDel:	15.6	0.0	23.4	0.0	0.0	0.0	0.0	1.4	0.1	3.5	5.4	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	44.1	0.0	52.2	0.0	0.0	0.0	0.0	14.1	9.6	28.5	12.7	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:	44.1	0.0	52.2	0.0	0.0	0.0	0.0	14.1	9.6	28.5	12.7	0.0
DesignQueue:	8	0	7	0	0	0	0	13	3	8	15	0

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

Intersection #10 Highway 68/Laureles Grade

Cycle (sec): 70 Critical Vol./Cap. (X): 0.873
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 18.6
Optimal Cycle: 78 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			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	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	152	0	258	0	0	0	0	1101	140	21	717	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:	152	0	258	0	0	0	0	1101	140	21	717	0
Added Vol:	0	0	6	0	0	0	0	0	0	11	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	0	264	0	0	0	0	1101	140	32	717	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:	152	0	264	0	0	0	0	1101	140	32	717	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	0	264	0	0	0	0	1101	140	32	717	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.:	152	0	264	0	0	0	0	1101	140	32	717	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.16	0.00	0.00	0.00	0.00	0.58	0.09	0.02	0.38	0.00
Crit Moves:			****					****		****		
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.66	0.66	0.02	0.68	0.00
Volume/Cap:	0.45	0.00	0.87	0.00	0.00	0.00	0.00	0.87	0.13	0.87	0.55	0.00
Uniform Del:	25.2	0.0	27.6	0.0	0.0	0.0	0.0	9.4	4.3	34.2	5.6	0.0
IncremntDel:	1.0	0.0	23.2	0.0	0.0	0.0	0.0	7.0	0.1	98.6	0.5	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	26.2	0.0	50.8	0.0	0.0	0.0	0.0	16.4	4.4	132.8	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:	26.2	0.0	50.8	0.0	0.0	0.0	0.0	16.4	4.4	132.8	6.1	0.0
DesignQueue:	5	0	9	0	0	0	0	17	2	1	10	0

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APPENDIX E – LEVEL OF SERVICE WORKSHEETS: EXISTING + PROJECT + APPROVED + PENDING

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

****

Intersection #1 Highway 1/Carpenter Street

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.877
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 23.6
Optimal Cycle: 100 Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 2	0 1		2 0	0 1	0	1 1	0 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	51	1424	18	21	1442	738	419	10	11	40	25	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	1424	18	21	1442	738	419	10	11	40	25	83
Added Vol:	6	111	0	0	72	0	0	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	1535	18	21	1514	738	419	10	15	40	25	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.84	0.84	0.84	0.85	0.85	0.85	0.95	0.95	0.95
PHF Volume:	67	1806	21	25	1802	879	493	12	18	42	26	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	1806	21	25	1802	879	493	12	18	42	26	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	67	1806	21	25	1802	879	493	12	18	42	26	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.91	0.91	0.97	0.97	0.85
Lanes:	1.00	1.98	0.02	1.00	2.00	1.00	2.00	0.40	0.60	1.23	0.77	1.00
Final Sat.:	1805	3748	44	1805	3800	1615	3610	692	1037	2268	1418	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.48	0.48	0.01	0.47	0.54	0.14	0.02	0.02	0.02	0.02	0.05
Crit Moves:	****					****	****					****
Green/Cycle:	0.04	0.64	0.64	0.02	0.62	0.62	0.16	0.16	0.16	0.06	0.06	0.06
Volume/Cap:	0.88	0.75	0.75	0.75	0.76	0.88	0.88	0.11	0.11	0.30	0.30	0.88
Uniform Del:	47.6	12.2	12.2	48.8	13.7	15.8	41.3	36.3	36.3	44.9	44.9	46.5
IncremntDel:	63.0	1.3	1.3	62.5	1.5	8.9	14.5	0.2	0.2	0.7	0.7	52.9
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
Delay/Veh:	110.7	13.5	13.5	111.4	15.3	24.7	55.8	36.4	36.4	45.6	45.6	99.5
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:	110.7	13.5	13.5	111.4	15.3	24.7	55.8	36.4	36.4	45.6	45.6	99.5
DesignQueue:	4	41	0	1	43	21	24	1	1	2	1	5

****

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec): 120 Critical Vol./Cap. (X): 1.028
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 45.4
Optimal Cycle: 180 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:	Protected			Protected			Split Phase			Split Phase		
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	2 0	1	2 0	0 1	0	1 1	0 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	39	2158	32	30	1598	664	690	8	37	24	11	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:	39	2158	32	30	1598	664	690	8	37	24	11	53
Added Vol:	6	122	0	0	169	0	0	0	9	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	2280	32	30	1767	664	690	8	46	24	11	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.87	0.87	0.87	0.84	0.84	0.84	0.76	0.76	0.76
PHF Volume:	47	2375	33	34	2031	763	821	10	55	32	14	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	2375	33	34	2031	763	821	10	55	32	14	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	47	2375	33	34	2031	763	821	10	55	32	14	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.87	0.87	0.97	0.97	0.85
Lanes:	1.00	1.97	0.03	1.00	2.00	1.00	2.00	0.15	0.85	1.37	0.63	1.00
Final Sat.:	1805	3740	52	1805	3800	1615	3610	245	1411	2520	1155	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.64	0.64	0.02	0.53	0.47	0.23	0.04	0.04	0.01	0.01	0.04
Crit Moves:		****		****			****					****
Green/Cycle:	0.03	0.62	0.62	0.02	0.61	0.61	0.22	0.22	0.22	0.04	0.04	0.04
Volume/Cap:	0.88	1.03	1.03	1.03	0.88	0.78	1.03	0.18	0.18	0.30	0.30	1.03
Uniform Del:	58.0	22.9	22.9	58.9	19.9	17.6	46.7	37.8	37.8	55.8	55.8	57.5
IncremntDel:	80.6	26.1	26.1	163.8	4.3	4.0	39.1	0.2	0.2	1.1	1.1	117.1
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:	138.6	49.0	49.0	222.7	24.2	21.6	85.8	38.1	38.1	56.8	56.8	174.6
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:	138.6	49.0	49.0	222.7	24.2	21.6	85.8	38.1	38.1	56.8	56.8	174.6
DesignQueue:	3	73	1	2	62	22	45	0	3	2	1	4

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

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Intersection #1 Highway 1/Carpenter Street

****

Cycle (sec):	70	Critical Vol./Cap. (X):	0.799
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	16.3
Optimal Cycle:	73	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Protected		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	2 0	0	1 0	1 0	1	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	51	1424	18	21	1442	738	419	10	11	40	25	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	1424	18	21	1442	738	419	10	11	40	25	83
Added Vol:	6	111	0	0	72	0	0	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	1535	18	21	1514	738	419	10	15	40	25	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.84	0.84	0.84	0.85	0.85	0.85	0.95	0.95	0.95
PHF Volume:	67	1806	21	25	1802	879	493	12	18	42	26	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	1806	21	25	1802	879	493	12	18	42	26	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	67	1806	21	25	1802	879	493	12	18	42	26	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.80	0.91	0.91	0.95	1.00	0.85
Lanes:	1.00	1.98	0.02	1.00	2.00	1.00	2.00	0.40	0.60	1.00	1.00	1.00
Final Sat.:	1805	3748	44	1805	3800	1615	3055	692	1037	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.48	0.48	0.01	0.47	0.54	0.16	0.02	0.02	0.02	0.01	0.05
Crit Moves:	****				****		****					****
Green/Cycle:	0.04	0.60	0.60	0.02	0.57	0.74	0.30	0.09	0.09	0.12	0.05	0.07
Volume/Cap:	0.83	0.80	0.80	0.80	0.83	0.74	0.54	0.19	0.19	0.19	0.29	0.82
Uniform Del:	33.2	10.9	10.9	34.3	12.3	5.4	20.0	29.5	29.5	27.6	32.1	32.3
IncremntDel:	48.7	2.2	2.2	84.0	2.9	2.5	0.7	0.6	0.6	0.4	1.7	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
Delay/Veh:	81.8	13.1	13.1	118.3	15.1	7.9	20.7	30.1	30.1	28.0	33.8	70.7
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:	81.8	13.1	13.1	118.3	15.1	7.9	20.7	30.1	30.1	28.0	33.8	70.7
DesignQueue:	3	32	0	1	34	10	17	0	1	1	1	3

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec):	120	Critical Vol./Cap. (X):	0.987
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	32.1
Optimal Cycle:	180	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			Prot+Permit			Protected		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	2 0	1	2 0	0 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	39	2158	32	30	1598	664	690	8	37	24	11	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:	39	2158	32	30	1598	664	690	8	37	24	11	53
Added Vol:	6	122	0	0	169	0	0	0	9	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	2280	32	30	1767	664	690	8	46	24	11	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.87	0.87	0.87	0.84	0.84	0.84	0.76	0.76	0.76
PHF Volume:	47	2375	33	34	2031	763	821	10	55	32	14	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	2375	33	34	2031	763	821	10	55	32	14	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	47	2375	33	34	2031	763	821	10	55	32	14	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.78	0.87	0.87	0.95	1.00	0.85
Lanes:	1.00	1.97	0.03	1.00	2.00	1.00	2.00	0.15	0.85	1.00	1.00	1.00
Final Sat.:	1805	3740	52	1805	3800	1615	2945	245	1411	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.64	0.64	0.02	0.53	0.47	0.28	0.04	0.04	0.02	0.01	0.04
Crit Moves:		****		****			****					****
Green/Cycle:	0.03	0.63	0.63	0.02	0.62	0.85	0.42	0.17	0.17	0.08	0.02	0.04
Volume/Cap:	0.86	1.01	1.01	1.01	0.86	0.56	0.66	0.23	0.23	0.23	0.32	1.01
Uniform Del:	57.9	22.1	22.1	58.9	18.6	2.7	25.8	42.8	42.8	51.9	57.6	57.4
IncremntDel:	73.8	20.0	20.0	155.7	3.5	0.5	1.3	0.4	0.4	0.8	4.0	109.9
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
Delay/Veh:	131.7	42.1	42.1	214.6	22.2	3.2	27.1	43.2	43.2	52.8	61.6	167.3
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:	131.7	42.1	42.1	214.6	22.2	3.2	27.1	43.2	43.2	52.8	61.6	167.3
DesignQueue:	3	70	1	2	60	9	45	1	3	2	1	4

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

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Intersection #2 Highway 1/Ocean Avenue

****

Cycle (sec): 80 Critical Vol./Cap. (X): 0.846
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.1
Optimal Cycle: 81 Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	153	1025	111	24	1241	190	250	50	107	113	51	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	1025	111	24	1241	190	250	50	107	113	51	36
Added Vol:	14	117	9	0	76	0	0	0	9	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	167	1142	120	24	1317	190	250	50	116	117	51	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.95	0.95	0.95	0.92	0.92	0.92	0.65	0.65	0.65
PHF Volume:	188	1283	135	25	1386	200	272	54	126	180	78	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	1283	135	25	1386	200	272	54	126	180	78	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	188	1283	135	25	1386	200	272	54	126	180	78	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.95	0.90	0.90	0.95	0.94	0.94
Lanes:	1.00	1.81	0.19	1.00	2.00	1.00	1.00	0.30	0.70	1.00	0.59	0.41
Final Sat.:	1805	3391	356	1805	3800	1615	1805	512	1188	1805	1045	737
Capacity Analysis Module:												
Vol/Sat:	0.10	0.38	0.38	0.01	0.36	0.12	0.15	0.11	0.11	0.10	0.08	0.08
Crit Moves:	****				****		****			****		
Green/Cycle:	0.12	0.53	0.53	0.02	0.43	0.43	0.18	0.18	0.18	0.12	0.12	0.12
Volume/Cap:	0.85	0.71	0.71	0.71	0.85	0.29	0.85	0.60	0.60	0.85	0.64	0.64
Uniform Del:	34.3	14.0	14.0	39.0	20.4	14.8	31.8	30.2	30.2	34.6	33.7	33.7
IncremntDel:	24.7	1.2	1.2	49.1	4.3	0.2	18.3	3.2	3.2	25.6	6.4	6.4
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:	59.1	15.1	15.1	88.1	24.7	15.0	50.2	33.5	33.5	60.1	40.0	40.0
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:	59.1	15.1	15.1	88.1	24.7	15.0	50.2	33.5	33.5	60.1	40.0	40.0
DesignQueue:	8	29	3	1	39	5	10	2	5	7	3	2

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

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Intersection #2 Highway 1/Ocean Avenue

****

Cycle (sec): 120 Critical Vol./Cap. (X): 1.145
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 98.3
Optimal Cycle: 180 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:	Protected			Protected			Split Phase			Split Phase		
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	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	167	1762	64	12	1258	229	511	35	186	170	84	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	167	1762	64	12	1258	229	511	35	186	170	84	116
Added Vol:	16	128	7	0	178	0	0	0	22	12	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	183	1890	71	12	1436	229	511	35	208	182	84	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96	0.76	0.76	0.76
PHF Volume:	203	2100	79	14	1670	266	532	36	217	239	111	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	203	2100	79	14	1670	266	532	36	217	239	111	153
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	203	2100	79	14	1670	266	532	36	217	239	111	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.87	0.87	0.95	0.91	0.91
Lanes:	1.00	1.93	0.07	1.00	2.00	1.00	1.00	0.14	0.86	1.00	0.42	0.58
Final Sat.:	1805	3644	137	1805	3800	1615	1805	239	1418	1805	729	1006
Capacity Analysis Module:												
Vol/Sat:	0.11	0.58	0.58	0.01	0.44	0.16	0.29	0.15	0.15	0.13	0.15	0.15
Crit Moves:		****		****			****				****	
Green/Cycle:	0.10	0.50	0.50	0.01	0.41	0.41	0.26	0.26	0.26	0.13	0.13	0.13
Volume/Cap:	1.08	1.15	1.15	1.15	1.08	0.41	1.15	0.59	0.59	1.00	1.15	1.15
Uniform Del:	53.8	29.8	29.8	59.6	35.6	25.4	44.5	39.0	39.0	52.1	52.1	52.1
IncremntDel:	89.4	72.1	72.1	310.5	48.8	0.4	88.0	2.2	2.2	58.6	104	104.1
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:	143.1	102	101.9	370.1	84.4	25.8	132.5	41.3	41.3	110.6	156	156.1
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:	143.1	102	101.9	370.1	84.4	25.8	132.5	41.3	41.3	110.6	156	156.1
DesignQueue:	12	82	3	1	75	11	28	2	11	14	7	9

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

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Intersection #2 Highway 1/Ocean Avenue

****

Cycle (sec): 60 Critical Vol./Cap. (X): 0.786
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 17.9
Optimal Cycle: 61 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	0 1	1 1	0	0 1	1 1	0	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	153	1025	111	24	1241	190	250	50	107	113	51	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	1025	111	24	1241	190	250	50	107	113	51	36
Added Vol:	14	117	9	0	76	0	0	0	9	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	167	1142	120	24	1317	190	250	50	116	117	51	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.95	0.95	0.95	0.92	0.92	0.92	0.65	0.65	0.65
PHF Volume:	188	1283	135	25	1386	200	272	54	126	180	78	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	1283	135	25	1386	200	272	54	126	180	78	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	188	1283	135	25	1386	200	272	54	126	180	78	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.96	0.96	0.85	0.97	0.97	0.85
Lanes:	1.00	2.71	0.29	1.00	2.00	1.00	1.67	0.33	1.00	1.39	0.61	1.00
Final Sat.:	1805	5086	534	1805	3800	1615	3040	608	1615	2556	1114	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.25	0.25	0.01	0.36	0.12	0.09	0.09	0.08	0.07	0.07	0.03
Crit Moves:	****				****		****			****		
Green/Cycle:	0.13	0.57	0.57	0.03	0.46	0.46	0.11	0.11	0.11	0.09	0.09	0.09
Volume/Cap:	0.79	0.45	0.45	0.45	0.79	0.27	0.79	0.79	0.69	0.79	0.79	0.38
Uniform Del:	25.2	7.6	7.6	28.5	13.6	9.8	25.9	25.9	25.6	26.7	26.7	25.7
IncremntDel:	15.7	0.1	0.1	5.5	2.4	0.2	9.6	9.6	10.3	11.8	11.8	1.7
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
Delay/Veh:	40.9	7.7	7.7	34.1	16.0	10.0	35.4	35.4	35.9	38.5	38.5	27.4
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:	40.9	7.7	7.7	34.1	16.0	10.0	35.4	35.4	35.9	38.5	38.5	27.4
DesignQueue:	6	20	2	1	27	4	8	2	4	6	2	2

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec): 100 Critical Vol./Cap. (X): 0.914
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.5
Optimal Cycle: 116 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	0 1	1 1	0	0 1	1 1	0	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	167	1762	64	12	1258	229	511	35	186	170	84	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	167	1762	64	12	1258	229	511	35	186	170	84	116
Added Vol:	16	128	7	0	178	0	0	0	22	12	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	183	1890	71	12	1436	229	511	35	208	182	84	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.86	0.86	0.86	0.96	0.96	0.96	0.76	0.76	0.76
PHF Volume:	203	2100	79	14	1670	266	532	36	217	239	111	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	203	2100	79	14	1670	266	532	36	217	239	111	153
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	203	2100	79	14	1670	266	532	36	217	239	111	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.96	0.96	0.85	0.97	0.97	0.85
Lanes:	1.00	2.89	0.11	1.00	2.00	1.00	1.87	0.13	1.00	1.37	0.63	1.00
Final Sat.:	1805	5466	205	1805	3800	1615	3396	233	1615	2514	1160	1615
Capacity Analysis Module:												
Vol/Sat:	0.11	0.38	0.38	0.01	0.44	0.16	0.16	0.16	0.13	0.10	0.10	0.09
Crit Moves:	****				****			****			****	
Green/Cycle:	0.12	0.59	0.59	0.01	0.48	0.48	0.17	0.17	0.17	0.10	0.10	0.10
Volume/Cap:	0.91	0.65	0.65	0.65	0.91	0.34	0.91	0.91	0.78	0.91	0.91	0.91
Uniform Del:	43.3	13.5	13.5	49.2	24.0	16.1	40.7	40.7	39.6	44.3	44.3	44.3
IncremntDel:	37.5	0.5	0.5	53.0	7.5	0.3	18.0	18.0	13.4	25.8	25.8	43.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	80.8	13.9	13.9	102.2	31.6	16.4	58.7	58.7	53.1	70.1	70.1	87.7
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:	80.8	13.9	13.9	102.2	31.6	16.4	58.7	58.7	53.1	70.1	70.1	87.7
DesignQueue:	10	53	2	1	54	8	26	2	10	12	6	8

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

Intersection #3 Highway 1/Carmel Valley Road

Cycle (sec):	60	Critical Vol./Cap. (X):	0.647
Loss Time (sec):	6 (Y+R = 4 sec)	Average Delay (sec/veh):	10.9
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:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	0 1	2 0	1	0 0	0 0	0	0 0	0 0	0	0 2
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	0	361	44	894	554	0	0	0	0	0	0	906
Growth Adj:	1.00	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	361	44	894	554	0	0	0	0	0	0	906
Added Vol:	0	1	15	88	1	0	0	0	0	0	0	139
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	362	59	982	555	0	0	0	0	0	0	1045
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.93	0.93	0.93	1.00	1.00	1.00	0.89	0.89	0.89
PHF Volume:	0	416	68	1056	597	0	0	0	0	0	0	1174
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	416	68	1056	597	0	0	0	0	0	0	1174
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	416	68	1056	597	0	0	0	0	0	0	1174
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	1.00	1.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Final Sat.:	0	1900	1615	3610	1900	0	0	0	0	0	0	3230
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.04	0.29	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.34	0.34	0.45	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.56
Volume/Cap:	0.00	0.65	0.12	0.65	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.65
Uniform Del:	0.0	16.8	13.7	12.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	9.1
IncremntDel:	0.0	2.3	0.1	0.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Delay/Veh:	0.0	19.1	13.8	13.7	2.1	0.0	0.0	0.0	0.0	0.0	0.0	9.9
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:	0.0	19.1	13.8	13.7	2.1	0.0	0.0	0.0	0.0	0.0	0.0	9.9
DesignQueue:	0	10	2	21	5	0	0	0	0	0	0	19

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

Intersection #3 Highway 1/Carmel Valley Road

Cycle (sec): 90 Critical Vol./Cap. (X): 0.944
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 31.0
Optimal Cycle: 122 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	0 1	2 0	1	0 0	0 0	0	0 0	0 0	0	0 2
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour												
Base Vol:	0	657	41	1151	589	0	0	0	0	0	0	1266
Growth Adj:	1.00	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	657	41	1151	589	0	0	0	0	0	0	1266
Added Vol:	0	1	43	210	1	0	0	0	0	0	0	151
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	658	84	1361	590	0	0	0	0	0	0	1417
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.90	0.90	0.90	1.00	1.00	1.00	0.99	0.99	0.99
PHF Volume:	0	833	106	1512	656	0	0	0	0	0	0	1431
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	833	106	1512	656	0	0	0	0	0	0	1431
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	833	106	1512	656	0	0	0	0	0	0	1431
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	1.00	1.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Final Sat.:	0	1900	1615	3610	1900	0	0	0	0	0	0	3230
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.07	0.42	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.44
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.46	0.46	0.44	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.47
Volume/Cap:	0.00	0.94	0.14	0.94	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.94
Uniform Del:	0.0	23.0	13.8	24.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	22.8
IncremntDel:	0.0	18.3	0.1	11.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	12.3
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Delay/Veh:	0.0	41.3	13.9	35.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	35.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	41.3	13.9	35.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	35.1
DesignQueue:	0	25	3	47	3	0	0	0	0	0	0	42

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

Intersection #4 Highway 1/Rio Road

Cycle (sec):	60	Critical Vol./Cap. (X):	0.644
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	22.9
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	2 0	0 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Dec 2002 << 7:45-8:45 AM Peak Hour												
Base Vol:	41	111	69	335	130	104	177	279	37	106	284	115
Growth Adj:	1.00	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	111	69	335	130	104	177	279	37	106	284	115
Added Vol:	0	16	25	0	1	0	0	24	0	45	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	127	94	335	131	104	177	303	37	151	315	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.74	0.74	0.74	0.92	0.92	0.92	0.79	0.79	0.79	0.83	0.83	0.83
PHF Volume:	55	172	127	364	142	113	224	384	47	182	380	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	172	127	364	142	113	224	384	47	182	380	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	172	127	364	142	113	224	384	47	182	380	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.93	0.93	0.95	0.98	0.98	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	2.00	0.56	0.44	1.00	1.78	0.22	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	3610	989	785	1805	3332	407	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.08	0.10	0.14	0.14	0.12	0.12	0.12	0.10	0.20	0.09
Crit Moves:		****		****			****				****	
Green/Cycle:	0.05	0.14	0.14	0.16	0.24	0.24	0.19	0.27	0.27	0.23	0.31	0.31
Volume/Cap:	0.59	0.64	0.56	0.64	0.59	0.59	0.64	0.43	0.43	0.43	0.64	0.28
Uniform Del:	27.8	24.4	24.1	23.7	20.0	20.0	22.3	18.2	18.2	19.5	17.8	15.6
IncremntDel:	9.4	5.3	3.2	2.5	2.1	2.1	4.1	0.3	0.3	0.7	2.4	0.3
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
Delay/Veh:	37.2	29.7	27.2	26.3	22.1	22.1	26.4	18.5	18.5	20.2	20.3	15.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.2	29.7	27.2	26.3	22.1	22.1	26.4	18.5	18.5	20.2	20.3	15.9
DesignQueue:	2	5	4	11	4	3	6	10	1	5	9	3

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

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Intersection #4 Highway 1/Rio Road

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Cycle (sec): 60 Critical Vol./Cap. (X): 0.794
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.3
Optimal Cycle: 63 Level Of Service: C

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
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	2 0	0 1	0	1 0	1	1 0	1 0	1	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 3:45-4:45 PM Peak Hour												
Base Vol:	93	201	55	315	151	68	140	441	37	166	518	471
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	93	201	55	315	151	68	140	441	37	166	518	471
Added Vol:	0	44	39	0	1	0	0	52	0	65	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	245	94	315	152	68	140	493	37	231	558	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.91	0.91	0.91	0.86	0.86	0.86	0.96	0.96	0.96
PHF Volume:	103	272	104	346	167	75	163	573	43	241	581	491
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	272	104	346	167	75	163	573	43	241	581	491
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	103	272	104	346	167	75	163	573	43	241	581	491
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.95	0.95	0.95	0.99	0.99	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	2.00	0.69	0.31	1.00	1.86	0.14	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	3610	1252	560	1805	3499	263	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.06	0.10	0.13	0.13	0.09	0.16	0.16	0.13	0.31	0.30
Crit Moves:		****		****			****				****	
Green/Cycle:	0.09	0.18	0.18	0.12	0.21	0.21	0.11	0.28	0.28	0.22	0.39	0.39
Volume/Cap:	0.63	0.79	0.36	0.79	0.63	0.63	0.79	0.60	0.60	0.60	0.79	0.79
Uniform Del:	26.3	23.5	21.5	25.7	21.6	21.6	25.9	18.9	18.9	20.9	16.3	16.3
IncremntDel:	7.9	12.0	0.8	9.7	3.4	3.4	18.9	1.0	1.0	2.4	6.0	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
Delay/Veh:	34.2	35.6	22.3	35.3	25.0	25.0	44.8	19.8	19.8	23.3	22.3	23.0
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:	34.2	35.6	22.3	35.3	25.0	25.0	44.8	19.8	19.8	23.3	22.3	23.0
DesignQueue:	3	8	3	10	5	2	5	14	1	6	13	11

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

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Intersection #5 Carmel Valley Road/Carmel Rancho Boulevard

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Cycle (sec): 60 Critical Vol./Cap. (X): 0.628
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 15.3
Optimal Cycle: 46 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			Protected						Protected					
Rights:		Ovl			Include			Include						Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	0	1	1	0	2	0	1	2	0	2	0	1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour																		
Base Vol:	108	7	273	24	12	40	23	683	221	426	766	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:	108	7	273	24	12	40	23	683	221	426	766	11						
Added Vol:	16	0	38	0	0	0	0	66	37	123	123	0						
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0						
Initial Fut:	124	7	311	24	12	40	23	749	258	549	889	11						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	0.82	0.82	0.82	0.76	0.76	0.76	0.84	0.84	0.84	0.88	0.88	0.88						
PHF Volume:	151	9	379	32	16	53	27	892	307	624	1010	13						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
Reduced Vol:	151	9	379	32	16	53	27	892	307	624	1010	13						
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Final Vol.:	151	9	379	32	16	53	27	892	307	624	1010	13						
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900						
Adjustment:	0.96	0.96	0.85	0.97	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85						
Lanes:	1.89	0.11	1.00	0.67	0.33	1.00	1.00	2.00	1.00	2.00	2.00	1.00						
Final Sat.:	3435	194	1615	1226	613	1615	1805	3800	1615	3610	3800	1615						
Capacity Analysis Module:																		
Vol/Sat:	0.04	0.04	0.23	0.03	0.03	0.03	0.02	0.23	0.19	0.17	0.27	0.01						
Crit Moves:			****			****		****		****								
Green/Cycle:	0.10	0.10	0.37	0.05	0.05	0.05	0.04	0.37	0.37	0.28	0.61	0.61						
Volume/Cap:	0.45	0.45	0.63	0.50	0.50	0.63	0.43	0.63	0.51	0.63	0.43	0.01						
Uniform Del:	25.5	25.5	15.4	27.7	27.7	27.9	28.4	15.4	14.5	19.0	6.1	4.5						
IncremntDel:	0.9	0.9	2.1	4.0	4.0	14.1	4.7	0.9	0.7	1.3	0.1	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						
Delay/Veh:	26.4	26.4	17.5	31.7	31.7	42.0	33.1	16.3	15.2	20.3	6.2	4.5						
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:	26.4	26.4	17.5	31.7	31.7	42.0	33.1	16.3	15.2	20.3	6.2	4.5						
DesignQueue:	5	0	8	1	1	2	1	20	7	16	14	0						

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

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Intersection #5 Carmel Valley Road/Carmel Rancho Boulevard

****

Cycle (sec): 80 Critical Vol./Cap. (X): 0.923
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.2
Optimal Cycle: 106 Level Of Service: C

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Split Phase					Split Phase					Protected					Protected				
Rights:		Ovl					Include					Include					Include			
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	1	1	0	0	1	0	1	0	0	1	1	0	2	0	1	2	0	2	0	1
Volume Module: >> Count Date: 18 Dec 2002 << 2:15-3:15 PM Peak Hour																				
Base Vol:	421		24		525	16		18		6	20		798		387	519		854		9
Growth Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	421		24		525	16		18		6	20		798		387	519		854		9
Added Vol:	56		0		120	0		0		0	0		195		59	125		94		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	477		24		645	16		18		6	20		993		446	644		948		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:	0.95		0.95		0.95	0.67		0.67		0.67	0.82		0.82		0.82	0.91		0.91		0.91
PHF Volume:	502		25		679	24		27		9	24		1211		544	708		1042		10
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	502		25		679	24		27		9	24		1211		544	708		1042		10
PCE Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	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.:	502		25		679	24		27		9	24		1211		544	708		1042		10
Saturation Flow Module:																				
Sat/Lane:	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	0.96		0.96		0.85	0.98		0.98		0.85	0.95		1.00		0.85	0.95		1.00		0.85
Lanes:	1.90		0.10		1.00	0.47		0.53		1.00	1.00		2.00		1.00	2.00		2.00		1.00
Final Sat.:	3455		174		1615	874		983		1615	1805		3800		1615	3610		3800		1615
Capacity Analysis Module:																				
Vol/Sat:	0.15		0.15		0.42	0.03		0.03		0.01	0.01		0.32		0.34	0.20		0.27		0.01
Crit Moves:					****			****							****	****				
Green/Cycle:	0.24		0.24		0.46	0.03		0.03		0.03	0.03		0.36		0.36	0.21		0.55		0.55
Volume/Cap:	0.60		0.60		0.92	0.92		0.92		0.19	0.50		0.87		0.92	0.92		0.50		0.01
Uniform Del:	26.8		26.8		20.5	38.7		38.7		37.9	38.4		23.7		24.3	30.9		11.2		8.1
IncremntDel:	1.1		1.1		17.2	93.2		93.2		1.9	7.8		6.4		20.3	16.7		0.2		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
Delay/Veh:	27.9		27.9		37.6	131.9		132		39.8	46.1		30.1		44.6	47.5		11.3		8.1
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:	27.9		27.9		37.6	131.9		132		39.8	46.1		30.1		44.6	47.5		11.3		8.1
DesignQueue:	18		1		18	1		1		0	1		37		17	26		22		0

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

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Intersection #6 Carmel Valley Road/Rancho San Carlos Road

****

Cycle (sec): 120 Critical Vol./Cap. (X): 0.935
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 28.9
Optimal Cycle: 138 Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	116	0	9	0	0	0	0	632	93	49	939	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:	116	0	9	0	0	0	0	632	93	49	939	0
Added Vol:	124	0	53	0	0	0	0	56	42	18	103	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	240	0	62	0	0	0	0	688	135	67	1042	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.74	0.74	0.74	1.00	1.00	1.00	0.79	0.79	0.79	0.80	0.80	0.80
PHF Volume:	324	0	84	0	0	0	0	871	171	84	1303	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	324	0	84	0	0	0	0	871	171	84	1303	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.:	324	0	84	0	0	0	0	871	171	84	1303	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.18	0.00	0.05	0.00	0.00	0.00	0.00	0.46	0.11	0.05	0.69	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.67	0.67	0.07	0.73	0.00
Volume/Cap:	0.94	0.00	0.27	0.00	0.00	0.00	0.00	0.69	0.16	0.69	0.94	0.00
Uniform Del:	47.7	0.0	41.3	0.0	0.0	0.0	0.0	12.4	7.5	54.7	13.6	0.0
IncremntDel:	32.0	0.0	0.5	0.0	0.0	0.0	0.0	1.6	0.1	15.4	11.9	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	79.8	0.0	41.8	0.0	0.0	0.0	0.0	14.0	7.6	70.1	25.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.8	0.0	41.8	0.0	0.0	0.0	0.0	14.0	7.6	70.1	25.5	0.0
DesignQueue:	18	0	5	0	0	0	0	22	4	5	28	0

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

Intersection #6 Carmel Valley Road/Rancho San Carlos Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.984
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 26.9
Optimal Cycle: 114 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module: >> Count Date: 18 Dec 2002 << 4:30-5:30 PM Peak Hour												
Base Vol:	89	0	31	0	0	0	0	1122	138	31	539	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:	89	0	31	0	0	0	0	1122	138	31	539	0
Added Vol:	80	0	34	0	0	0	0	148	143	61	124	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	0	65	0	0	0	0	1270	281	92	663	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	1.00	1.00	1.00	0.98	0.98	0.98	0.93	0.93	0.93
PHF Volume:	180	0	69	0	0	0	0	1296	287	99	713	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	0	69	0	0	0	0	1296	287	99	713	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	0	69	0	0	0	0	1296	287	99	713	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.04	0.00	0.00	0.00	0.00	0.68	0.18	0.05	0.38	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.69	0.69	0.06	0.75	0.00
Volume/Cap:	0.98	0.00	0.42	0.00	0.00	0.00	0.00	0.98	0.26	0.98	0.50	0.00
Uniform Del:	26.9	0.0	25.3	0.0	0.0	0.0	0.0	8.9	3.4	28.3	3.0	0.0
IncremntDel:	61.7	0.0	1.8	0.0	0.0	0.0	0.0	21.0	0.1	84.4	0.3	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	88.6	0.0	27.1	0.0	0.0	0.0	0.0	29.9	3.6	112.7	3.3	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:	88.6	0.0	27.1	0.0	0.0	0.0	0.0	29.9	3.6	112.7	3.3	0.0
DesignQueue:	6	0	2	0	0	0	0	16	3	3	7	0

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

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Intersection #7 Carmel Valley Road/Brookdale Drive

****

Average Delay (sec/veh): 8.8 Worst Case 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			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0			0 0 1! 0 0		
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	7	0	5	0	0	0	0	631	3	3	1002	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:	7	0	5	0	0	0	0	631	3	3	1002	0
Added Vol:	0	0	0	19	0	43	15	95	0	0	77	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	0	5	19	0	43	15	726	3	3	1079	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:	0.50	0.50	0.50	1.00	1.00	1.00	0.75	0.75	0.75	0.82	0.82	0.82
PHF Volume:	14	0	10	19	0	43	20	968	4	4	1316	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	14	0	10	19	0	43	20	968	4	4	1316	7
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	2358	xxxx	970	2342	xxxx	1320	1323	xxxx	xxxxx	972	xxxx	xxxxx
Potent Cap.:	25	xxxx	310	26	xxxx	194	529	xxxx	xxxxx	717	xxxx	xxxxx
Move Cap.:	19	xxxx	310	24	xxxx	194	529	xxxx	xxxxx	717	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.1	xxxx	xxxxx	10.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	31	xxxxx	xxxx	61	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	278	xxxxx	xxxxx	229	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	F	*	*	F	*	*	*	*	*	*	*
ApproachDel:	278.2			229.4			xxxxxx			xxxxxx		
ApproachLOS:	F			F			*			*		

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

Intersection #7 Carmel Valley Road/Brookdale Drive

Average Delay (sec/veh): 3.1 Worst Case 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				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 1!	0	0	0	0 1!	0	0	0	0 1!	0	0	0	0 1!	0	0
Volume Module: >> Count Date: 18 Dec 2002 << 4:45-5:45 PM Peak Hour																
Base Vol:	5	0	4		0	0	0		0	1150	7		3	586	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:	5	0	4		0	0	0		0	1150	7		3	586	0	
Added Vol:	0	0	0		12	0	28		50	133	0		0	157	21	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	5	0	4		12	0	28		50	1283	7		3	743	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:	0.56	0.56	0.56		1.00	1.00	1.00		0.92	0.92	0.92		0.96	0.96	0.96	
PHF Volume:	9	0	7		12	0	28		54	1395	8		3	774	22	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	9	0	7		12	0	28		54	1395	8		3	774	22	
Critical Gap Module:																
Critical Gp:	7.1	xxxx	6.2		7.1	xxxx	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	xxxx	3.3		3.5	xxxx	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	2312	xxxx	1398		2302	xxxx	785		796	xxxx	xxxxx		1402	xxxx	xxxxx	
Potent Cap.:	27	xxxx	174		28	xxxx	396		835	xxxx	xxxxx		493	xxxx	xxxxx	
Move Cap.:	24	xxxx	174		25	xxxx	396		835	xxxx	xxxxx		493	xxxx	xxxxx	
Level Of Service Module:																
Stopped Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		9.6	xxxx	xxxxx		12.3	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		B	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	39	xxxxx		xxxx	72	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	154	xxxxx		xxxxx	104	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	F	*		*	F	*		*	*	*		*	*	*	
ApproachDel:		153.8				104.0				xxxxxx				xxxxxx		
ApproachLOS:		F				F				*				*		

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

Intersection #7 Carmel Valley Road/Brookdale Drive

Cycle (sec): 90 Critical Vol./Cap. (X): 0.875
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 14.6
Optimal Cycle: 94 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			Protected				Protected			
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	1 0	0 1	0		1 0	0 1	0	
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour														
Base Vol:	7	0	5	0	0	0	0	631	3		3	1002	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:	7	0	5	0	0	0	0	631	3		3	1002	0	
Added Vol:	0	0	0	19	0	43	15	95	0		0	77	6	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	7	0	5	19	0	43	15	726	3		3	1079	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:	0.50	0.50	0.50	1.00	1.00	1.00	0.75	0.75	0.75		0.82	0.82	0.82	
PHF Volume:	14	0	10	19	0	43	20	968	4		4	1316	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
Reduced Vol:	14	0	10	19	0	43	20	968	4		4	1316	7	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	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	0	10	19	0	43	20	968	4		4	1316	7	
Saturation Flow Module:														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900		1900	1900	1900	
Adjustment:	0.92	1.00	0.92	0.89	1.00	0.89	0.95	1.00	1.00		0.95	1.00	1.00	
Lanes:	0.58	0.00	0.42	0.31	0.00	0.69	1.00	0.99	0.01		1.00	0.99	0.01	
Final Sat.:	1017	0	726	520	0	1176	1805	1890	8		1805	1888	10	
Capacity Analysis Module:														
Vol/Sat:	0.01	0.00	0.01	0.04	0.00	0.04	0.01	0.51	0.51		0.00	0.70	0.70	
Crit Moves:	****					****	****					****		
Green/Cycle:	0.02	0.00	0.02	0.04	0.00	0.04	0.01	0.81	0.81		0.00	0.80	0.80	
Volume/Cap:	0.88	0.00	0.88	0.88	0.00	0.88	0.88	0.64	0.64		0.64	0.88	0.88	
Uniform Del:	44.2	0.0	44.2	42.9	0.0	42.9	44.4	3.5	3.5		44.8	6.2	6.2	
IncremntDel:	118.5	0.0	118.5	65.7	0.0	65.7	132.0	0.9	0.9		131.9	6.0	6.0	
Delay Adj:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	162.7	0.0	162.7	108.6	0.0	108.6	176.3	4.4	4.4		176.7	12.2	12.2	
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:	162.7	0.0	162.7	108.6	0.0	108.6	176.3	4.4	4.4		176.7	12.2	12.2	
DesignQueue:	1	0	0	1	0	2	1	11	0		0	16	0	

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

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Intersection #7 Carmel Valley Road/Brookdale Drive

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Cycle (sec): 100 Critical Vol./Cap. (X): 0.879
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 13.6
Optimal Cycle: 101 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			Protected			Protected		
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	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 18 Dec 2002 << 4:45-5:45 PM Peak Hour												
Base Vol:	5	0	4	0	0	0	0	1150	7	3	586	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:	5	0	4	0	0	0	0	1150	7	3	586	0
Added Vol:	0	0	0	12	0	28	50	133	0	0	157	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	4	12	0	28	50	1283	7	3	743	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:	0.56	0.56	0.56	1.00	1.00	1.00	0.92	0.92	0.92	0.96	0.96	0.96
PHF Volume:	9	0	7	12	0	28	54	1395	8	3	774	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	0	7	12	0	28	54	1395	8	3	774	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	0	7	12	0	28	54	1395	8	3	774	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	0.89	1.00	0.89	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.56	0.00	0.44	0.30	0.00	0.70	1.00	0.99	0.01	1.00	0.97	0.03
Final Sat.:	965	0	772	509	0	1187	1805	1888	10	1805	1840	52
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.02	0.00	0.02	0.03	0.74	0.74	0.00	0.42	0.42
Crit Moves:	****			****				****		****		
Green/Cycle:	0.01	0.00	0.01	0.03	0.00	0.03	0.06	0.84	0.84	0.00	0.79	0.79
Volume/Cap:	0.88	0.00	0.88	0.88	0.00	0.88	0.53	0.88	0.88	0.88	0.53	0.53
Uniform Del:	49.4	0.0	49.4	48.5	0.0	48.5	45.9	4.9	4.9	49.9	3.9	3.9
IncremntDel:	151.9	0.0	151.9	88.2	0.0	88.2	5.5	5.9	5.9	375.3	0.4	0.4
Delay Adj:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	201.3	0.0	201.3	136.7	0.0	136.7	51.4	10.8	10.8	425.2	4.3	4.3
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:	201.3	0.0	201.3	136.7	0.0	136.7	51.4	10.8	10.8	425.2	4.3	4.3
DesignQueue:	0	0	0	1	0	2	3	15	0	0	10	0

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

Intersection #8 Carmel Valley Road/Dorris Drive

Average Delay (sec/veh): 22.5 Worst Case 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					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0
Volume Module: >> Count Date: 18 Dec 2002 << 7:15-8:15 AM Peak Hour																				
Base Vol:	98	0	30			0	0	0			0	416	139			56	686	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:	98	0	30			0	0	0			0	416	139			56	686	0		
Added Vol:	13	0	1			0	0	0			0	93	21			1	64	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	111	0	31			0	0	0			0	509	160			57	750	0		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.76	0.76	0.76			1.00	1.00	1.00			0.77	0.77	0.77			0.89	0.89	0.89		
PHF Volume:	146	0	41			0	0	0			0	661	208			64	843	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	146	0	41			0	0	0			0	661	208			64	843	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:	1632	xxxx	661	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		869	xxxx	xxxxx							
Potent Cap.:	113	xxxx	466	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		784	xxxx	xxxxx							
Move Cap.:	106	xxxx	466	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		784	xxxx	xxxxx							
Level Of Service Module:																				
Stopped Del:	293.8	xxxx	13.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		10.0	xxxx	xxxxx							
LOS by Move:	F	*	B	*	*	*	*	*	*		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							
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*	*	*	*	*	*	*	*	*		*	*	*							
ApproachDel:	232.6			xxxxxx			xxxxxx				xxxxxx									
ApproachLOS:	F			*			*				*									

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

Intersection #8 Carmel Valley Road/Dorris Drive

Average Delay (sec/veh): 28.5 Worst Case 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			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 1 0 1			1 0 1 0 0		
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	105	0	47	0	0	0	0	610	257	61	436	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:	105	0	47	0	0	0	0	610	257	61	436	0
Added Vol:	31	0	2	0	0	0	0	114	22	2	147	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	136	0	49	0	0	0	0	724	279	63	583	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	1.00	1.00	1.00	0.85	0.85	0.85	0.86	0.86	0.86
PHF Volume:	153	0	55	0	0	0	0	852	328	73	678	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	153	0	55	0	0	0	0	852	328	73	678	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:	1676	xxxx	852	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1180	xxxx	xxxxx
Potent Cap.:	106	xxxx	362	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	599	xxxx	xxxxx
Move Cap.:	96	xxxx	362	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	599	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	387.0	xxxx	16.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.8	xxxx	xxxxx
LOS by Move:	F	*	C	*	*	*	*	*	*	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	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	288.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

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

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Intersection #8 Carmel Valley Road/Dorris Drive

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Cycle (sec): 60 Critical Vol./Cap. (X): 0.617
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: 39 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:	Protected			Protected			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	0 1	0	0 0	0 0	0	0 1	0 1	1 0	1 0	0
Volume Module: >> Count Date: 18 Dec 2002 << 7:15-8:15 AM Peak Hour												
Base Vol:	98	0	30	0	0	0	0	416	139	56	686	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:	98	0	30	0	0	0	0	416	139	56	686	0
Added Vol:	13	0	1	0	0	0	0	93	21	1	64	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	0	31	0	0	0	0	509	160	57	750	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.76	0.76	0.76	1.00	1.00	1.00	0.77	0.77	0.77	0.89	0.89	0.89
PHF Volume:	146	0	41	0	0	0	0	661	208	64	843	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	0	41	0	0	0	0	661	208	64	843	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.:	146	0	41	0	0	0	0	661	208	64	843	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.03	0.00	0.00	0.00	0.00	0.35	0.13	0.04	0.44	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.65	0.65	0.07	0.72	0.00
Volume/Cap:	0.62	0.00	0.19	0.00	0.00	0.00	0.00	0.53	0.20	0.53	0.62	0.00
Uniform Del:	24.6	0.0	23.2	0.0	0.0	0.0	0.0	5.6	4.2	27.1	4.3	0.0
IncremntDel:	4.9	0.0	0.4	0.0	0.0	0.0	0.0	0.5	0.1	4.6	0.9	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	29.5	0.0	23.7	0.0	0.0	0.0	0.0	6.0	4.3	31.7	5.1	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:	29.5	0.0	23.7	0.0	0.0	0.0	0.0	6.0	4.3	31.7	5.1	0.0
DesignQueue:	4	0	1	0	0	0	0	8	2	2	9	0

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

Intersection #8 Carmel Valley Road/Dorris Drive

Cycle (sec):	60	Critical Vol./Cap. (X):	0.675
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	9.4
Optimal Cycle:	44	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:	Protected			Protected			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	0	1	0	0	0	0	0	0	0
	0	1	0	1	0	0	0	1	0	1	1	0
	1	0	1	0	0		1	0	1	0	0	
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	105	0	47	0	0	0	0	610	257	61	436	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:	105	0	47	0	0	0	0	610	257	61	436	0
Added Vol:	31	0	2	0	0	0	0	114	22	2	147	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	136	0	49	0	0	0	0	724	279	63	583	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	1.00	1.00	1.00	0.85	0.85	0.85	0.86	0.86	0.86
PHF Volume:	153	0	55	0	0	0	0	852	328	73	678	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	0	55	0	0	0	0	852	328	73	678	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.:	153	0	55	0	0	0	0	852	328	73	678	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.03	0.00	0.00	0.00	0.00	0.45	0.20	0.04	0.36	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.66	0.66	0.06	0.72	0.00
Volume/Cap:	0.67	0.00	0.27	0.00	0.00	0.00	0.00	0.67	0.31	0.67	0.49	0.00
Uniform Del:	25.1	0.0	23.8	0.0	0.0	0.0	0.0	6.1	4.2	27.6	3.5	0.0
IncremntDel:	7.8	0.0	0.7	0.0	0.0	0.0	0.0	1.5	0.2	15.5	0.3	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	32.9	0.0	24.5	0.0	0.0	0.0	0.0	7.6	4.4	43.2	3.8	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:	32.9	0.0	24.5	0.0	0.0	0.0	0.0	7.6	4.4	43.2	3.8	0.0
DesignQueue:	5	0	2	0	0	0	0	11	4	2	7	0

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

Intersection #9 Carmel Valley Road/Laureles Grade

Average Delay (sec/veh): 16.9 Worst Case 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			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: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	0	0	0	104	0	120	91	324	0	0	562	229
Growth Adj:	1.00	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	104	0	120	91	324	0	0	562	229
Added Vol:	0	0	0	6	0	46	66	29	0	0	19	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	110	0	166	157	353	0	0	581	234
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.90	0.90	0.90	0.80	0.80	0.80	0.85	0.85	0.85
PHF Volume:	0	0	0	122	0	184	196	441	0	0	684	275
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	122	0	184	196	441	0	0	684	275
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	1517	xxxx	684	959	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	133	xxxx	452	726	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	105	xxxx	452	726	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	215.8	xxxx	18.3	11.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	C	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	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			97.0			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

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

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Intersection #9 Carmel Valley Road/Laureles Grade

****

Average Delay (sec/veh): 23.9 Worst Case Level Of Service: F

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Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0	0	0	1	0	1
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour																				
Base Vol:	0	0	0			125	0	105			159	342	0			0	328	130		
Growth Adj:	1.00	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			125	0	105			159	342	0			0	328	130		
Added Vol:	0	0	0			14	0	105			78	40	0			0	45	11		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	0	0			139	0	210			237	382	0			0	373	141		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00			0.93	0.93	0.93			0.88	0.88	0.88			0.84	0.84	0.84		
PHF Volume:	0	0	0			149	0	226			269	434	0			0	444	168		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	0	0	0			149	0	226			269	434	0			0	444	168		
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			1417	xxxx	444			612	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx			153	xxxx	618			977	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx			120	xxxx	618			977	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Level Of Service Module:																				
Stopped Del:	xxxxx	xxxx	xxxxx			230.6	xxxx	14.1			10.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*			F	*	B			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	xxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			*	*	*		
ApproachDel:	xxxxxx					100.4					xxxxxx					xxxxxx				
ApproachLOS:	*					F					*					*				

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

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Intersection #9 Carmel Valley Road/Laureles Grade

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Cycle (sec): 60 Critical Vol./Cap. (X): 0.686
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.3
Optimal Cycle: 45 Level Of Service: B

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
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	1 0	0	0 1	1 0	1	0 0	0 0	1	0 1
Volume Module: >> Count Date: 18 Dec 2002 << 7:30-8:30 AM Peak Hour												
Base Vol:	0	0	0	104	0	120	91	324	0	0	562	229
Growth Adj:	1.00	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	104	0	120	91	324	0	0	562	229
Added Vol:	0	0	0	6	0	46	66	29	0	0	19	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	110	0	166	157	353	0	0	581	234
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.90	0.90	0.90	0.80	0.80	0.80	0.85	0.85	0.85
PHF Volume:	0	0	0	122	0	184	196	441	0	0	684	275
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	122	0	184	196	441	0	0	684	275
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	122	0	184	196	441	0	0	684	275
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.11	0.11	0.23	0.00	0.00	0.36	0.17
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.17	0.00	0.17	0.16	0.68	0.00	0.00	0.52	0.52
Volume/Cap:	0.00	0.00	0.00	0.41	0.00	0.69	0.69	0.34	0.00	0.00	0.69	0.32
Uniform Del:	0.0	0.0	0.0	22.3	0.0	23.5	23.8	3.9	0.0	0.0	10.6	8.2
IncremntDel:	0.0	0.0	0.0	0.9	0.0	7.2	6.8	0.2	0.0	0.0	2.0	0.2
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	23.2	0.0	30.7	30.6	4.1	0.0	0.0	12.6	8.4
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	0.0	0.0	23.2	0.0	30.7	30.6	4.1	0.0	0.0	12	5
DesignQueue:	0	0	0	3	0	5	6	5	0	0	12	5

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

Intersection #9 Carmel Valley Road/Laureles Grade

Cycle (sec):	60	Critical Vol./Cap. (X):	0.615
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	15.8
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1	0	0 0 1	1	0	1 0 0	0	0	1 0 1
Volume Module: >> Count Date: 18 Dec 2002 << 2:30-3:30 PM Peak Hour												
Base Vol:	0	0	0	125	0	105	159	342	0	0	328	130
Growth Adj:	1.00	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	125	0	105	159	342	0	0	328	130
Added Vol:	0	0	0	14	0	105	78	40	0	0	45	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	139	0	210	237	382	0	0	373	141
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.93	0.93	0.93	0.88	0.88	0.88	0.84	0.84	0.84
PHF Volume:	0	0	0	149	0	226	269	434	0	0	444	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	149	0	226	269	434	0	0	444	168
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	149	0	226	269	434	0	0	444	168
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.14	0.15	0.23	0.00	0.00	0.23	0.10
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.23	0.00	0.23	0.24	0.62	0.00	0.00	0.38	0.38
Volume/Cap:	0.00	0.00	0.00	0.36	0.00	0.61	0.61	0.37	0.00	0.00	0.61	0.27
Uniform Del:	0.0	0.0	0.0	19.5	0.0	20.8	20.2	5.5	0.0	0.0	15.0	12.9
IncremntDel:	0.0	0.0	0.0	0.6	0.0	3.1	2.6	0.2	0.0	0.0	1.6	0.2
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	20.1	0.0	23.9	22.8	5.7	0.0	0.0	16.6	13.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	20.1	0.0	23.9	22.8	5.7	0.0	0.0	16.6	13.1
DesignQueue:	0	0	0	4	0	6	7	6	0	0	10	4

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

Intersection #10 Highway 68/Laureles Grade

Cycle (sec): 80 Critical Vol./Cap. (X): 0.880
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 24.4
Optimal Cycle: 85 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	226	0	205	0	0	0	0	606	137	242	1160	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:	226	0	205	0	0	0	0	606	137	242	1160	0
Added Vol:	0	0	71	0	0	0	0	0	0	53	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	226	0	276	0	0	0	0	606	137	295	1160	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:	226	0	276	0	0	0	0	606	137	295	1160	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	226	0	276	0	0	0	0	606	137	295	1160	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.:	226	0	276	0	0	0	0	606	137	295	1160	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.17	0.00	0.00	0.00	0.00	0.32	0.08	0.16	0.61	0.00
Crit Moves:			****				****				****	
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.46	0.46	0.23	0.69	0.00
Volume/Cap:	0.65	0.00	0.88	0.00	0.00	0.00	0.00	0.70	0.19	0.70	0.88	0.00
Uniform Del:	29.7	0.0	31.3	0.0	0.0	0.0	0.0	17.2	12.8	28.0	9.7	0.0
IncremntDel:	4.1	0.0	23.7	0.0	0.0	0.0	0.0	2.5	0.1	5.0	7.2	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	33.8	0.0	55.1	0.0	0.0	0.0	0.0	19.7	12.9	33.0	16.8	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:	33.8	0.0	55.1	0.0	0.0	0.0	0.0	19.7	12.9	33.0	16.8	0.0
DesignQueue:	8	0	10	0	0	0	0	16	3	10	19	0

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

Intersection #10 Highway 68/Laureles Grade

Cycle (sec):	90	Critical Vol./Cap. (X):	0.968
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	35.5
Optimal Cycle:	145	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:	Split Phase			Split Phase			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 0	1	0 0	0 0	0	0 0	1 0	1	1 0	1 0	0
Volume Module:												
Base Vol:	152	0	258	0	0	0	0	1101	140	21	717	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:	152	0	258	0	0	0	0	1101	140	21	717	0
Added Vol:	0	0	89	0	0	0	0	0	0	118	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	0	347	0	0	0	0	1101	140	139	717	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:	152	0	347	0	0	0	0	1101	140	139	717	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	0	347	0	0	0	0	1101	140	139	717	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.:	152	0	347	0	0	0	0	1101	140	139	717	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.21	0.00	0.00	0.00	0.00	0.58	0.09	0.08	0.38	0.00
Crit Moves:			****					****		****		
Green/Cycle:	0.22	0.00	0.22	0.00	0.00	0.00	0.00	0.60	0.60	0.08	0.68	0.00
Volume/Cap:	0.38	0.00	0.97	0.00	0.00	0.00	0.00	0.97	0.14	0.97	0.56	0.00
Uniform Del:	29.7	0.0	34.7	0.0	0.0	0.0	0.0	17.2	7.9	41.3	7.5	0.0
IncremntDel:	0.6	0.0	39.0	0.0	0.0	0.0	0.0	19.4	0.1	65.2	0.5	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	30.4	0.0	73.7	0.0	0.0	0.0	0.0	36.6	8.0	106.5	8.0	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:	30.4	0.0	73.7	0.0	0.0	0.0	0.0	36.6	8.0	106.5	8.0	0.0
DesignQueue:	6	0	14	0	0	0	0	26	3	7	13	0

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

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Intersection #10 Highway 68/Laureles Grade

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Cycle (sec): 70 Critical Vol./Cap. (X): 0.844
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 18.1
Optimal Cycle: 70 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			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	226	0	205	0	0	0	0	606	137	242	1160	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:	226	0	205	0	0	0	0	606	137	242	1160	0
Added Vol:	0	0	71	0	0	0	0	0	0	53	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	226	0	276	0	0	0	0	606	137	295	1160	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:	226	0	276	0	0	0	0	606	137	295	1160	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	226	0	276	0	0	0	0	606	137	295	1160	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.:	226	0	276	0	0	0	0	606	137	295	1160	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.17	0.00	0.00	0.00	0.00	0.32	0.08	0.16	0.61	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.15	0.00	0.39	0.00	0.00	0.00	0.00	0.48	0.48	0.25	0.72	0.00
Volume/Cap:	0.84	0.00	0.43	0.00	0.00	0.00	0.00	0.67	0.18	0.67	0.84	0.00
Uniform Del:	29.0	0.0	15.5	0.0	0.0	0.0	0.0	14.0	10.4	23.8	6.9	0.0
IncremntDel:	21.1	0.0	0.5	0.0	0.0	0.0	0.0	1.9	0.1	3.9	5.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	50.1	0.0	16.0	0.0	0.0	0.0	0.0	15.9	10.5	27.7	11.9	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:	50.1	0.0	16.0	0.0	0.0	0.0	0.0	15.9	10.5	27.7	11.9	0.0
DesignQueue:	8	0	7	0	0	0	0	13	3	9	15	0

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

Intersection #10 Highway 68/Laureles Grade

Cycle (sec): 90 Critical Vol./Cap. (X): 0.883
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 23.9
Optimal Cycle: 90 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0
Volume Module:												
Base Vol:	152	0	258	0	0	0	0	1101	140	21	717	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:	152	0	258	0	0	0	0	1101	140	21	717	0
Added Vol:	0	0	89	0	0	0	0	0	0	118	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	0	347	0	0	0	0	1101	140	139	717	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:	152	0	347	0	0	0	0	1101	140	139	717	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	0	347	0	0	0	0	1101	140	139	717	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.:	152	0	347	0	0	0	0	1101	140	139	717	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.21	0.00	0.00	0.00	0.00	0.58	0.09	0.08	0.38	0.00
Crit Moves:			****					****		****		
Green/Cycle:	0.16	0.00	0.24	0.00	0.00	0.00	0.00	0.66	0.66	0.09	0.74	0.00
Volume/Cap:	0.54	0.00	0.88	0.00	0.00	0.00	0.00	0.88	0.13	0.88	0.51	0.00
Uniform Del:	35.0	0.0	32.8	0.0	0.0	0.0	0.0	12.6	5.8	40.6	4.7	0.0
IncremntDel:	2.1	0.0	20.2	0.0	0.0	0.0	0.0	7.7	0.1	39.8	0.3	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	37.1	0.0	53.0	0.0	0.0	0.0	0.0	20.3	5.9	80.4	5.0	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:	37.1	0.0	53.0	0.0	0.0	0.0	0.0	20.3	5.9	80.4	5.0	0.0
DesignQueue:	7	0	14	0	0	0	0	22	2	6	10	0

APPENDIX F – LEVEL OF SERVICE WORKSHEETS: CUMULATIVE (YEAR 2025) CONDITIONS

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec):	75	Critical Vol./Cap. (X):	0.861
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.6
Optimal Cycle:OPTIMIZED		Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
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	2	0 1	2 0	0	1 0	1	1	0 0 1
Volume Module:												
Base Vol:	51	2029	18	21	1972	329	441	10	14	40	25	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	2029	18	21	1972	329	441	10	14	40	25	83
Added Vol:	1	20	0	0	7	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	2049	18	21	1979	329	441	10	14	40	25	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	2049	18	21	1979	329	441	10	14	40	25	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	2049	18	21	1979	329	441	10	14	40	25	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	52	2049	18	21	1979	329	441	10	14	40	25	83
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.91	0.91	0.97	0.97	0.85
Lanes:	1.00	1.98	0.02	1.00	2.00	1.00	2.00	0.42	0.58	1.23	0.77	1.00
Final Sat.:	1805	3763	33	1805	3800	1615	3610	723	1012	2268	1418	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.54	0.54	0.01	0.52	0.20	0.12	0.01	0.01	0.02	0.02	0.05
Crit Moves:	****				****		****					****
Green/Cycle:	0.03	0.63	0.63	0.01	0.60	0.60	0.14	0.14	0.14	0.06	0.06	0.06
Volume/Cap:	0.86	0.87	0.87	0.87	0.86	0.34	0.86	0.10	0.10	0.30	0.30	0.86
Uniform Del:	36.1	11.6	11.6	36.9	12.2	7.4	31.5	28.0	28.0	33.8	33.8	35.0
IncremntDel:	68.5	3.8	3.8	126.2	3.6	0.2	13.8	0.2	0.2	0.8	0.8	50.0
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:	104.5	15.4	15.4	163.1	15.8	7.6	45.3	28.2	28.2	34.5	34.5	84.9
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:	104.5	15.4	15.4	163.1	15.8	7.6	45.3	28.2	28.2	34.5	34.5	84.9
DesignQueue:	2	37	0	1	38	6	16	0	1	2	1	3

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec): 120 Critical Vol./Cap. (X): 1.070
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 53.5
Optimal Cycle:OPTIMIZED 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:	Protected			Protected			Split Phase			Split Phase		
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	2 0	1	2 0	0 1	0	1 1	0 0	1
Volume Module:												
Base Vol:	30	2670	32	41	2854	659	563	5	32	24	11	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:	30	2670	32	41	2854	659	563	5	32	24	11	53
Added Vol:	1	13	0	0	23	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	2683	32	41	2877	659	563	5	33	24	11	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:	31	2683	32	41	2877	659	563	5	33	24	11	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	2683	32	41	2877	659	563	5	33	24	11	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.:	31	2683	32	41	2877	659	563	5	33	24	11	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	0.87	0.87	0.97	0.97	0.85
Lanes:	1.00	1.98	0.02	1.00	2.00	1.00	2.00	0.13	0.87	1.37	0.63	1.00
Final Sat.:	1805	3748	45	1805	3800	1615	3610	217	1436	2520	1155	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.72	0.72	0.02	0.76	0.41	0.16	0.02	0.02	0.01	0.01	0.03
Crit Moves:	****				****		****					****
Green/Cycle:	0.02	0.70	0.70	0.02	0.71	0.71	0.15	0.15	0.15	0.03	0.03	0.03
Volume/Cap:	1.07	1.02	1.02	1.02	1.07	0.58	1.07	0.16	0.16	0.31	0.31	1.07
Uniform Del:	59.0	17.9	17.9	58.7	17.5	8.7	51.3	44.8	44.8	56.9	56.9	58.2
IncremntDel:	189.4	22.9	22.9	148.2	39.7	0.7	59.3	0.3	0.3	1.6	1.6	149.0
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:	248.5	40.8	40.8	206.9	57.2	9.4	110.6	45.1	45.1	58.5	58.5	207.1
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:	248.5	40.8	40.8	206.9	57.2	9.4	110.6	45.1	45.1	58.5	58.5	207.1
DesignQueue:	2	66	1	3	70	14	33	0	2	2	1	3

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec): 65 Critical Vol./Cap. (X): 0.840
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 14.0
Optimal Cycle:OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Protected		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 1	0	1 0	2 0	1	2 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	51	2029	18	21	1972	329	441	10	14	40	25	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	2029	18	21	1972	329	441	10	14	40	25	83
Added Vol:	1	20	0	0	7	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	2049	18	21	1979	329	441	10	14	40	25	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	2049	18	21	1979	329	441	10	14	40	25	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	2049	18	21	1979	329	441	10	14	40	25	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	52	2049	18	21	1979	329	441	10	14	40	25	83
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.85	0.91	0.91	0.95	1.00	0.85
Lanes:	1.00	2.97	0.03	1.00	2.00	1.00	2.00	0.42	0.58	1.00	1.00	1.00
Final Sat.:	1805	5645	50	1805	3800	1615	3244	723	1012	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.36	0.36	0.01	0.52	0.20	0.14	0.01	0.01	0.02	0.01	0.05
Crit Moves:	****				****		****					****
Green/Cycle:	0.03	0.61	0.61	0.02	0.60	0.74	0.26	0.07	0.07	0.11	0.05	0.07
Volume/Cap:	0.87	0.59	0.59	0.59	0.87	0.28	0.53	0.19	0.19	0.19	0.29	0.79
Uniform Del:	31.3	7.7	7.7	31.6	11.0	2.8	20.4	28.4	28.4	26.1	30.0	29.9
IncremntDel:	72.7	0.3	0.3	24.5	4.0	0.1	0.6	0.8	0.8	0.5	1.8	31.9
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
Delay/Veh:	103.9	8.0	8.0	56.1	15.1	3.0	21.1	29.2	29.2	26.5	31.8	61.8
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:	103.9	8.0	8.0	56.1	15.1	3.0	21.1	29.2	29.2	26.5	31.8	61.8
DesignQueue:	2	32	0	1	33	3	14	0	0	1	1	3

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

Intersection #1 Highway 1/Carpenter Street

Cycle (sec): 120 Critical Vol./Cap. (X): 1.038
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.1
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Protected		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	0 1	2 0	0	1 0	1 0	1	0 1
Volume Module:												
Base Vol:	30	2670	32	41	2854	659	563	5	32	24	11	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:	30	2670	32	41	2854	659	563	5	32	24	11	53
Added Vol:	1	13	0	0	23	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	2683	32	41	2877	659	563	5	33	24	11	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:	31	2683	32	41	2877	659	563	5	33	24	11	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	2683	32	41	2877	659	563	5	33	24	11	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.:	31	2683	32	41	2877	659	563	5	33	24	11	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.78	0.87	0.87	0.95	1.00	0.85
Lanes:	1.00	2.96	0.04	1.00	2.00	1.00	2.00	0.13	0.87	1.00	1.00	1.00
Final Sat.:	1805	5622	67	1805	3800	1615	2980	217	1436	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.48	0.48	0.02	0.76	0.41	0.19	0.02	0.02	0.01	0.01	0.03
Crit Moves:	****				****		****				****	
Green/Cycle:	0.02	0.71	0.71	0.03	0.73	0.88	0.27	0.10	0.10	0.06	0.01	0.04
Volume/Cap:	1.04	0.67	0.67	0.67	1.04	0.46	0.69	0.23	0.23	0.23	1.04	0.83
Uniform Del:	59.0	9.6	9.6	57.3	16.3	1.5	36.7	49.9	49.9	54.1	59.7	57.2
IncremntDel:	177.4	0.4	0.4	25.4	28.6	0.2	2.5	0.7	0.7	1.2	291	58.3
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
Delay/Veh:	236.4	10.1	10.1	82.8	45.0	1.8	39.2	50.6	50.6	55.2	351	115.6
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:	236.4	10.1	10.1	82.8	45.0	1.8	39.2	50.6	50.6	55.2	351	115.6
DesignQueue:	2	59	1	3	65	6	33	0	2	2	1	3

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec): 80 Critical Vol./Cap. (X): 0.936
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.7
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	1	0	1	1	0		1	0	2	0	1		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	179	1570	111				24	1350	684				376	84	39				113	51	36			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	179	1570	111				24	1350	684				376	84	39				113	51	36			
Added Vol:	2	22	4				0	7	0				0	0	1				1	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	181	1592	115				24	1357	684				376	84	40				114	51	36			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	181	1592	115				24	1357	684				376	84	40				114	51	36			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	181	1592	115				24	1357	684				376	84	40				114	51	36			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	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.:	181	1592	115				24	1357	684				376	84	40				114	51	36			
Saturation Flow Module:																								
Sat/Lane:	1900	1900	1900				1900	1900	1900				1900	1900	1900				1900	1900	1900			
Adjustment:	0.95	0.99	0.99				0.95	1.00	0.85				0.95	0.95	0.95				0.95	0.94	0.94			
Lanes:	1.00	1.87	0.13				1.00	2.00	1.00				1.00	0.68	0.32				1.00	0.59	0.41			
Final Sat.:	1805	3509	253				1805	3800	1615				1805	1225	583				1805	1045	737			
Capacity Analysis Module:																								
Vol/Sat:	0.10	0.45	0.45				0.01	0.36	0.42				0.21	0.07	0.07				0.06	0.05	0.05			
Crit Moves:	****								****				****						****					
Green/Cycle:	0.11	0.54	0.54				0.02	0.45	0.45				0.22	0.22	0.22				0.07	0.07	0.07			
Volume/Cap:	0.94	0.83	0.83				0.83	0.79	0.94				0.94	0.31	0.31				0.94	0.72	0.72			
Uniform Del:	35.4	15.2	15.2				39.3	18.6	20.8				30.5	26.0	26.0				37.1	36.6	36.6			
IncremntDel:	46.5	3.1	3.1				99.3	2.5	19.3				29.1	0.4	0.4				61.6	19.4	19.4			
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:	82.0	18.4	18.4				138.5	21.2	40.1				59.6	26.4	26.4				98.7	55.9	55.9			
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:	82.0	18.4	18.4				138.5	21.2	40.1				59.6	26.4	26.4				98.7	55.9	55.9			
DesignQueue:	7	37	3				1	36	18				14	3	1				5	2	2			

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec): 120 Critical Vol./Cap. (X): 1.350
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 131.7
Optimal Cycle:OPTIMIZED 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:	Protected			Protected			Split Phase			Split Phase		
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	2 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	147	1711	64	12	2294	471	734	247	212	170	84	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	147	1711	64	12	2294	471	734	247	212	170	84	116
Added Vol:	2	14	2	0	25	0	0	0	3	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	149	1725	66	12	2319	471	734	247	215	174	84	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	1725	66	12	2319	471	734	247	215	174	84	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	1725	66	12	2319	471	734	247	215	174	84	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	149	1725	66	12	2319	471	734	247	215	174	84	116
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.95	0.93	0.93	0.95	0.91	0.91
Lanes:	1.00	1.93	0.07	1.00	2.00	1.00	1.00	0.53	0.47	1.00	0.42	0.58
Final Sat.:	1805	3638	139	1805	3800	1615	1805	945	822	1805	729	1006
Capacity Analysis Module:												
Vol/Sat:	0.08	0.47	0.47	0.01	0.61	0.29	0.41	0.26	0.26	0.10	0.12	0.12
Crit Moves:	****				****		****				****	
Green/Cycle:	0.06	0.51	0.51	0.01	0.45	0.45	0.30	0.30	0.30	0.09	0.09	0.09
Volume/Cap:	1.35	0.94	0.94	0.94	1.35	0.65	1.35	0.87	0.87	1.13	1.35	1.35
Uniform Del:	56.3	27.8	27.8	59.5	32.9	25.4	41.9	39.7	39.7	54.9	54.9	54.9
IncremntDel:	205.6	9.4	9.4	216.9	161	2.0	169.3	14.1	14.1	111.2	195	195.2
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:	261.9	37.2	37.2	276.5	194	27.4	211.2	53.8	53.8	166.0	250	250.1
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:	261.9	37.2	37.2	276.5	194	27.4	211.2	53.8	53.8	166.0	250	250.1
DesignQueue:	10	65	3	1	101	18	38	12	11	11	5	7

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec):	60	Critical Vol./Cap. (X):	0.770
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	15.8
Optimal Cycle:OPTIMIZED		Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	3 0	1	2 0	1 0	1	1 1	0 0	1
Volume Module:												
Base Vol:	179	1570	111	24	1350	684	376	84	39	113	51	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	179	1570	111	24	1350	684	376	84	39	113	51	36
Added Vol:	2	22	4	0	7	0	0	0	1	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	181	1592	115	24	1357	684	376	84	40	114	51	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	1592	115	24	1357	684	376	84	40	114	51	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	1592	115	24	1357	684	376	84	40	114	51	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	181	1592	115	24	1357	684	376	84	40	114	51	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.95	1.00	0.85	0.97	0.97	0.85
Lanes:	1.00	1.87	0.13	1.00	3.00	1.00	2.00	1.00	1.00	1.38	0.62	1.00
Final Sat.:	1805	3509	253	1805	5700	1615	3610	1900	1615	2539	1136	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.45	0.45	0.01	0.24	0.42	0.10	0.04	0.02	0.04	0.04	0.02
Crit Moves:		****		****			****				****	
Green/Cycle:	0.14	0.59	0.59	0.02	0.46	0.60	0.14	0.14	0.14	0.06	0.06	0.08
Volume/Cap:	0.69	0.77	0.77	0.77	0.52	0.71	0.77	0.33	0.18	0.77	0.77	0.29
Uniform Del:	24.4	9.3	9.3	29.4	11.4	8.5	25.0	23.5	23.0	27.9	27.9	26.2
IncremntDel:	7.7	1.7	1.7	72.6	0.2	2.5	7.4	0.7	0.4	15.6	15.6	1.4
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:	32.1	11.0	11.0	101.9	11.6	10.9	32.4	24.2	23.4	43.5	43.5	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:	32.1	11.0	11.0	101.9	11.6	10.9	32.4	24.2	23.4	43.5	43.5	27.6
DesignQueue:	5	25	2	1	26	10	11	2	1	4	2	1

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

Intersection #2 Highway 1/Ocean Avenue

Cycle (sec): 75 Critical Vol./Cap. (X): 0.908
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.7
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	3	0 1	2 0	1	0 1	1	1	0 0 1
Volume Module:												
Base Vol:	147	1711	64	12	2294	471	734	247	212	170	84	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	147	1711	64	12	2294	471	734	247	212	170	84	116
Added Vol:	2	14	2	0	25	0	0	0	3	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	149	1725	66	12	2319	471	734	247	215	174	84	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	1725	66	12	2319	471	734	247	215	174	84	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	1725	66	12	2319	471	734	247	215	174	84	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	149	1725	66	12	2319	471	734	247	215	174	84	116
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.95	1.00	0.85	0.97	0.97	0.85
Lanes:	1.00	1.93	0.07	1.00	3.00	1.00	2.00	1.00	1.00	1.35	0.65	1.00
Final Sat.:	1805	3638	139	1805	5700	1615	3610	1900	1615	2478	1196	1615
Capacity Analysis Module:												
Vol/Sat:	0.08	0.47	0.47	0.01	0.41	0.29	0.20	0.13	0.13	0.07	0.07	0.07
Crit Moves:	****				****		****			****		
Green/Cycle:	0.09	0.53	0.53	0.01	0.45	0.67	0.22	0.22	0.22	0.08	0.08	0.08
Volume/Cap:	0.91	0.89	0.89	0.89	0.91	0.43	0.91	0.58	0.59	0.91	0.91	0.85
Uniform Del:	33.8	15.7	15.7	37.2	19.3	5.7	28.4	26.0	26.1	34.3	34.3	33.8
IncremntDel:	44.6	5.5	5.5	188.1	5.3	0.3	14.0	2.0	2.7	30.7	30.7	36.2
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:	78.3	21.2	21.2	225.3	24.5	6.0	42.4	28.0	28.7	65.0	65.0	70.0
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:	78.3	21.2	21.2	225.3	24.5	6.0	42.4	28.0	28.7	65.0	65.0	70.0
DesignQueue:	6	38	1	0	60	7	25	8	7	7	3	4

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

Intersection #3 Highway 1/Carmel Valley Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.853
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.9
Optimal Cycle:OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	0 1	2 0	1	0 0	0 0	0	0 0 0	0 0	0	0 2
Volume Module:												
Base Vol:	0	827	59	982	852	0	0	0	0	0	0	1045
Growth Adj:	1.00	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	827	59	982	852	0	0	0	0	0	0	1045
Added Vol:	0	0	3	9	0	0	0	0	0	0	0	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	827	62	991	852	0	0	0	0	0	0	1073
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	827	62	991	852	0	0	0	0	0	0	1073
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	827	62	991	852	0	0	0	0	0	0	1073
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	827	62	991	852	0	0	0	0	0	0	1073
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	1.00	1.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Final Sat.:	0	1900	1615	3610	1900	0	0	0	0	0	0	3230
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.04	0.27	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.33
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.51	0.51	0.32	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.39
Volume/Cap:	0.00	0.85	0.08	0.85	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.85
Uniform Del:	0.0	12.7	7.5	19.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	16.7
IncremntDel:	0.0	7.4	0.0	6.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	5.8
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Delay/Veh:	0.0	20.1	7.5	25.3	1.9	0.0	0.0	0.0	0.0	0.0	0.0	22.6
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:	0.0	20.1	7.5	25.3	1.9	0.0	0.0	0.0	0.0	0.0	0.0	22.6
DesignQueue:	0	15	1	24	5	0	0	0	0	0	0	24

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

Intersection #3 Highway 1/Carmel Valley Road

Cycle (sec): 105 Critical Vol./Cap. (X): 1.134
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 77.1
Optimal Cycle:OPTIMIZED 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:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	0 1	2 0	1	0 0	0 0	0	0 0	0 0	0	0 2
Volume Module:												
Base Vol:	0	1188	84	1260	1291	0	0	0	0	0	0	1417
Growth Adj:	1.00	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	1188	84	1260	1291	0	0	0	0	0	0	1417
Added Vol:	0	0	9	32	0	0	0	0	0	0	0	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1188	93	1292	1291	0	0	0	0	0	0	1435
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	1188	93	1292	1291	0	0	0	0	0	0	1435
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1188	93	1292	1291	0	0	0	0	0	0	1435
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	1188	93	1292	1291	0	0	0	0	0	0	1435
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	1.00	1.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Final Sat.:	0	1900	1615	3610	1900	0	0	0	0	0	0	3230
Capacity Analysis Module:												
Vol/Sat:	0.00	0.63	0.06	0.36	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.44
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.55	0.55	0.32	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.39
Volume/Cap:	0.00	1.13	0.10	1.13	0.78	0.00	0.00	0.00	0.00	0.00	0.00	1.13
Uniform Del:	0.0	23.6	11.2	35.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	31.9
IncremntDel:	0.0	72.6	0.1	71.7	2.5	0.0	0.0	0.0	0.0	0.0	0.0	70.7
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Delay/Veh:	0.0	96.1	11.3	107.6	5.5	0.0	0.0	0.0	0.0	0.0	0.0	102.7
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:	0.0	96.1	11.3	107.6	5.5	0.0	0.0	0.0	0.0	0.0	0.0	102.7
DesignQueue:	0	37	2	57	12	0	0	0	0	0	0	57

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

Intersection #3 Highway 1/Carmel Valley Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.632
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.1
Optimal Cycle:OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:		Include						Include						Include						Ovl				
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	0	0	1	1	0		2	0	1	0	0		0	0	0	0	0		0	0	0	0	2	
Volume Module:																								
Base Vol:	0	827		59			982		852		0		0		0		0		0		0		1045	
Growth Adj:	1.00	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	827		59			982		852		0		0		0		0		0		0		1045	
Added Vol:	0	0		3			9		0		0		0		0		0		0		0		28	
PasserByVol:	0	0		0			0		0		0		0		0		0		0		0		0	
Initial Fut:	0	827		62			991		852		0		0		0		0		0		0		1073	
User Adj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	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	827		62			991		852		0		0		0		0		0		0		1073	
Reduct Vol:	0	0		0			0		0		0		0		0		0		0		0		0	
Reduced Vol:	0	827		62			991		852		0		0		0		0		0		0		1073	
PCE Adj:	1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	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	827		62			991		852		0		0		0		0		0		0		1073	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900			1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	1.00	0.99		0.99			0.95		1.00		1.00		1.00		1.00		1.00		1.00		1.00		0.85	
Lanes:	0.00	1.86		0.14			2.00		1.00		0.00		0.00		0.00		0.00		0.00		0.00		2.00	
Final Sat.:	0	3500		262			3610		1900		0		0		0		0		0		0		3230	
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.24		0.24			0.27		0.45		0.00		0.00		0.00		0.00		0.00		0.00		0.33	
Crit Moves:		****					****																****	
Green/Cycle:	0.00	0.37		0.37			0.43		0.81		0.00		0.00		0.00		0.00		0.00		0.00		0.53	
Volume/Cap:	0.00	0.63		0.63			0.63		0.55		0.00		0.00		0.00		0.00		0.00		0.00		0.63	
Uniform Del:	0.0	15.4		15.4			13.2		2.0		0.0		0.0		0.0		0.0		0.0		0.0		10.1	
IncremntDel:	0.0	0.9		0.9			0.8		0.4		0.0		0.0		0.0		0.0		0.0		0.0		0.8	
Delay Adj:	0.00	1.00		1.00			1.00		1.00		0.00		0.00		0.00		0.00		0.00		0.00		1.00	
Delay/Veh:	0.0	16.3		16.3			14.1		2.4		0.0		0.0		0.0		0.0		0.0		0.0		10.9	
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:	0.0	16.3		16.3			14.1		2.4		0.0		0.0		0.0		0.0		0.0		0.0		10.9	
DesignQueue:	0	18		1			20		6		0		0		0		0		0		0		18	

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

Intersection #3 Highway 1/Carmel Valley Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.872
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 18.0
Optimal Cycle:OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	2 0	1	0 0	0 0	0	0 0	0 0	0	2
Volume Module:												
Base Vol:	0	1188	84	1260	1291	0	0	0	0	0	0	1417
Growth Adj:	1.00	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	1188	84	1260	1291	0	0	0	0	0	0	1417
Added Vol:	0	0	9	32	0	0	0	0	0	0	0	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1188	93	1292	1291	0	0	0	0	0	0	1435
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	1188	93	1292	1291	0	0	0	0	0	0	1435
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1188	93	1292	1291	0	0	0	0	0	0	1435
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	1188	93	1292	1291	0	0	0	0	0	0	1435
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.99	0.99	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	1.85	0.15	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Final Sat.:	0	3485	273	3610	1900	0	0	0	0	0	0	3230
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.34	0.36	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.44
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.39	0.39	0.41	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.51
Volume/Cap:	0.00	0.87	0.87	0.87	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.87
Uniform Del:	0.0	16.9	16.9	16.2	3.7	0.0	0.0	0.0	0.0	0.0	0.0	13.0
IncremntDel:	0.0	6.0	6.0	6.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	5.4
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Delay/Veh:	0.0	22.9	22.9	22.2	8.4	0.0	0.0	0.0	0.0	0.0	0.0	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:	0.0	22.9	22.9	22.2	8.4	0.0	0.0	0.0	0.0	0.0	0.0	18.4
DesignQueue:	0	26	2	28	10	0	0	0	0	0	0	26

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

Intersection #4 Highway 1/Rio Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.837
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.3
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	2 0	0 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	41	474	33	335	582	107	195	303	43	153	315	171
Growth Adj:	1.00	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	474	33	335	582	107	195	303	43	153	315	171
Added Vol:	0	3	0	0	0	0	0	1	0	7	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	477	33	335	582	107	195	304	43	160	319	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	477	33	335	582	107	195	304	43	160	319	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	477	33	335	582	107	195	304	43	160	319	171
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	477	33	335	582	107	195	304	43	160	319	171
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.98	0.98	0.95	0.98	0.98	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	2.00	0.84	0.16	1.00	1.75	0.25	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	3610	1568	288	1805	3266	462	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.25	0.02	0.09	0.37	0.37	0.11	0.09	0.09	0.09	0.17	0.11
Crit Moves:	****				****		****				****	
Green/Cycle:	0.03	0.34	0.34	0.13	0.44	0.44	0.13	0.17	0.17	0.16	0.20	0.20
Volume/Cap:	0.84	0.73	0.06	0.73	0.84	0.84	0.84	0.55	0.55	0.55	0.84	0.53
Uniform Del:	29.1	17.3	13.2	25.2	14.8	14.8	25.5	22.9	22.9	23.2	23.0	21.4
IncremntDel:	71.0	4.2	0.0	5.9	7.5	7.5	22.5	1.1	1.1	2.3	14.9	1.6
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
Delay/Veh:	100.1	21.5	13.2	31.1	22.3	22.3	48.0	23.9	23.9	25.5	38.0	23.1
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:	100.1	21.5	13.2	31.1	22.3	22.3	48.0	23.9	23.9	25.5	38.0	23.1
DesignQueue:	1	11	1	10	12	2	6	9	1	5	9	5

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

Intersection #4 Highway 1/Rio Road

Cycle (sec): 110 Critical Vol./Cap. (X): 1.093
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 87.9
Optimal Cycle:OPTIMIZED 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:	Protected			Protected			Protected			Protected		
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	2	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
Volume Module:												
Base Vol:	147	887	94	419	738	131	165	493	42	231	558	471
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	147	887	94	419	738	131	165	493	42	231	558	471
Added Vol:	0	9	0	0	0	0	0	4	0	5	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	147	896	94	419	738	131	165	497	42	236	560	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	147	896	94	419	738	131	165	497	42	236	560	471
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	896	94	419	738	131	165	497	42	236	560	471
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	147	896	94	419	738	131	165	497	42	236	560	471
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.98	0.98	0.95	0.99	0.99	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	2.00	0.85	0.15	1.00	1.84	0.16	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	3610	1576	280	1805	3462	293	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.08	0.47	0.06	0.12	0.47	0.47	0.09	0.14	0.14	0.13	0.29	0.29
Crit Moves:		****		****			****				****	
Green/Cycle:	0.08	0.43	0.43	0.11	0.46	0.46	0.08	0.18	0.18	0.17	0.27	0.27
Volume/Cap:	1.02	1.09	0.13	1.09	1.02	1.02	1.09	0.78	0.78	0.78	1.09	1.08
Uniform Del:	50.6	31.3	18.9	49.2	29.8	29.8	50.4	42.7	42.7	43.8	40.2	40.2
IncremntDel:	81.0	59.9	0.1	73.4	36.6	36.6	100.3	5.5	5.5	11.9	67.5	66.8
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
Delay/Veh:	131.7	91.2	19.0	122.5	66.4	66.4	150.7	48.2	48.2	55.7	108	107.0
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:	131.7	91.2	19.0	122.5	66.4	66.4	150.7	48.2	48.2	55.7	108	107.0
DesignQueue:	8	36	3	24	28	5	9	26	2	12	27	22

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

Intersection #4 Highway 1/Rio Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.630
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 21.0
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	2	0 2	0 1	1	0 1	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	41	474	33	335	582	107	195	303	43	153	315	171
Growth Adj:	1.00	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	474	33	335	582	107	195	303	43	153	315	171
Added Vol:	0	3	0	0	0	0	0	1	0	7	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	477	33	335	582	107	195	304	43	160	319	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	477	33	335	582	107	195	304	43	160	319	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	477	33	335	582	107	195	304	43	160	319	171
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	477	33	335	582	107	195	304	43	160	319	171
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.95	0.98	0.98	0.95	1.00	0.85
Lanes:	1.00	1.87	0.13	2.00	2.00	1.00	1.00	1.75	0.25	1.00	1.00	1.00
Final Sat.:	1805	3519	243	3610	3800	1615	1805	3266	462	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.14	0.14	0.09	0.15	0.07	0.11	0.09	0.09	0.09	0.17	0.11
Crit Moves:		****		****			****				****	
Green/Cycle:	0.05	0.22	0.22	0.15	0.32	0.32	0.17	0.22	0.22	0.21	0.27	0.41
Volume/Cap:	0.49	0.63	0.63	0.63	0.49	0.21	0.63	0.42	0.42	0.42	0.63	0.26
Uniform Del:	27.9	21.4	21.4	24.0	16.6	15.1	23.1	19.9	19.9	20.4	19.4	11.5
IncremntDel:	4.3	1.6	1.6	2.4	0.3	0.2	4.1	0.3	0.3	0.7	2.6	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:	32.2	23.0	23.0	26.5	16.9	15.3	27.2	20.2	20.2	21.1	22.0	11.7
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:	32.2	23.0	23.0	26.5	16.9	15.3	27.2	20.2	20.2	21.1	22.0	11.7
DesignQueue:	1	13	1	10	14	2	6	8	1	4	8	3

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

Intersection #4 Highway 1/Rio Road

Cycle (sec): 70 Critical Vol./Cap. (X): 0.925
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.7
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	2	0 2	0 1	1	0 1	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	147	887	94	419	738	131	165	493	42	231	558	471
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	147	887	94	419	738	131	165	493	42	231	558	471
Added Vol:	0	9	0	0	0	0	0	4	0	5	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	147	896	94	419	738	131	165	497	42	236	560	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	147	896	94	419	738	131	165	497	42	236	560	471
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	896	94	419	738	131	165	497	42	236	560	471
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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.:	147	896	94	419	738	131	165	497	42	236	560	471
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.95	0.99	0.99	0.95	1.00	0.85
Lanes:	1.00	1.81	0.19	2.00	2.00	1.00	1.00	1.84	0.16	1.00	1.00	1.00
Final Sat.:	1805	3391	356	3610	3800	1615	1805	3462	293	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.26	0.12	0.19	0.08	0.09	0.14	0.14	0.13	0.29	0.29
Crit Moves:		****		****			****				****	
Green/Cycle:	0.12	0.29	0.29	0.13	0.29	0.29	0.10	0.22	0.22	0.20	0.32	0.44
Volume/Cap:	0.67	0.93	0.93	0.93	0.67	0.28	0.93	0.66	0.66	0.66	0.93	0.66
Uniform Del:	29.4	24.3	24.3	30.3	21.9	19.2	31.3	25.0	25.0	25.8	23.0	15.3
IncremntDel:	7.8	13.1	13.1	24.8	1.6	0.3	46.2	2.0	2.0	4.4	20.2	2.2
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:	37.2	37.4	37.4	55.1	23.5	19.5	77.5	26.9	26.9	30.2	43.2	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:	37.2	37.4	37.4	55.1	23.5	19.5	77.5	26.9	26.9	30.2	43.2	17.5
DesignQueue:	5	27	3	15	21	4	6	16	1	8	16	11

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

Intersection #5 Carmel Valley Road/Carmel Rancho Boulevard

Cycle (sec): 60 Critical Vol./Cap. (X): 0.524
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 14.2
Optimal Cycle:OPTIMIZED Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:			Ovl						Include						Include						Include			
Min. Green:	0		0		0		0		0		0		0		0		0		0		0		0	
Lanes:	1	1	0	0	1		0	1	0	0	1		1	0	2	0	1		2	0	2	0	1	
Volume Module:																								
Base Vol:	124		7		311		24		12		40		74		749		258		549		900		48	
Growth Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
Initial Bse:	124		7		311		24		12		40		74		749		258		549		900		48	
Added Vol:	0		0		3		0		0		0		0		12		0		16		28		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	124		7		314		24		12		40		74		761		258		565		928		48	
User Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
PHF Volume:	124		7		314		24		12		40		74		761		258		565		928		48	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	124		7		314		24		12		40		74		761		258		565		928		48	
PCE Adj:	1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00		1.00	1.00			1.00	
MLF Adj:	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.:	124		7		314		24		12		40		74		761		258		565		928		48	
Saturation Flow Module:																								
Sat/Lane:	1900	1900			1900		1900	1900			1900		1900	1900			1900		1900	1900			1900	
Adjustment:	0.96	0.96			0.85		0.97	0.97			0.85		0.95	1.00			0.85		0.95	1.00			0.85	
Lanes:	1.89	0.11			1.00		0.67	0.33			1.00		1.00	2.00			1.00		2.00	2.00			1.00	
Final Sat.:	3435		194		1615		1226		613		1615		1805		3800		1615		3610		3800		1615	
Capacity Analysis Module:																								
Vol/Sat:	0.04	0.04			0.19		0.02	0.02			0.02		0.04		0.20		0.16		0.16		0.24		0.03	
Crit Moves:					****						****				****				****					
Green/Cycle:	0.07	0.07			0.37		0.05	0.05			0.05		0.10		0.38		0.38		0.30		0.58		0.58	
Volume/Cap:	0.50	0.50			0.52		0.41	0.41			0.52		0.42		0.52		0.42		0.52		0.42		0.05	
Uniform Del:	26.8	26.8			14.7		27.8	27.8			27.9		25.5		14.3		13.6		17.5		6.9		5.4	
IncremntDel:	1.5	1.5			0.9		3.2	3.2			6.5		1.6		0.4		0.5		0.5		0.1		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	
Delay/Veh:	28.3	28.3			15.6		31.0	31.0			34.5		27.1		14.7		14.1		18.0		7.0		5.4	
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:	28.3	28.3			15.6		31.0	31.0			34.5		27.1		14.7		14.1		18.0		7.0		5.4	
DesignQueue:	4		0		7		1		0		1		2		17		6		14		14		1	

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

Intersection #5 Carmel Valley Road/Carmel Rancho Boulevard

Cycle (sec): 70 Critical Vol./Cap. (X): 0.910
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.8
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 1	0	0 1	0 1	0	0 1	1 0	2	0 1	2 0	2	0 1
Volume Module:												
Base Vol:	477	24	645	31	18	39	179 1186		446	644	948	16
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	477	24	645	31	18	39	179 1186		446	644	948	16
Added Vol:	0	0	9	0	0	0	0	40	0	10	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	477	24	654	31	18	39	179 1226		446	654	966	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:	477	24	654	31	18	39	179 1226		446	654	966	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	477	24	654	31	18	39	179 1226		446	654	966	16
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Final Vol.:	477	24	654	31	18	39	179 1226		446	654	966	16
Saturation Flow Module:												
Sat/Lane:	1900 1900		1900	1900 1900		1900	1900 1900		1900	1900 1900		1900
Adjustment:	0.96 0.96		0.85	0.97 0.97		0.85	0.95 1.00		0.85	0.95 1.00		0.85
Lanes:	1.90 0.10		1.00	0.63 0.37		1.00	1.00 2.00		1.00	2.00 2.00		1.00
Final Sat.:	3455	174	1615	1165	676	1615	1805 3800		1615	3610 3800		1615
Capacity Analysis Module:												
Vol/Sat:	0.14 0.14		0.40	0.03 0.03		0.02	0.10 0.32		0.28	0.18 0.25		0.01
Crit Moves:			****	****				****		****		
Green/Cycle:	0.25 0.25		0.44	0.03 0.03		0.03	0.16 0.35		0.35	0.20 0.40		0.40
Volume/Cap:	0.56 0.56		0.91	0.91 0.91		0.83	0.64 0.91		0.78	0.91 0.64		0.02
Uniform Del:	23.1 23.1		18.1	33.9 33.9		33.8	27.7 21.5		20.2	27.4 17.0		12.8
IncremntDel:	0.8	0.8	15.7	90.0 90.0		69.2	4.9	9.4	6.8	15.7	0.9	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
Delay/Veh:	23.9 23.9		33.8	123.9	124	103.0	32.6 30.9		26.9	43.1 17.9		12.8
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:	23.9 23.9		33.8	123.9	124	103.0	32.6 30.9		26.9	43.1 17.9		12.8
DesignQueue:	14	1	16	1	1	1	6	34	12	21	24	0

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

Intersection #6 Carmel Valley Road/Rancho San Carlos Road

Cycle (sec): 60 Critical Vol./Cap. (X): 0.828
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.0
Optimal Cycle:OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	1	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0
Volume Module:												
Base Vol:	240	0	62	0	0	0	0	668	135	72	1042	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:	240	0	62	0	0	0	0	668	135	72	1042	0
Added Vol:	0	0	0	0	0	0	0	15	0	0	43	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	240	0	62	0	0	0	0	683	135	72	1085	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:	240	0	62	0	0	0	0	683	135	72	1085	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	0	62	0	0	0	0	683	135	72	1085	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.:	240	0	62	0	0	0	0	683	135	72	1085	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.04	0.00	0.00	0.00	0.00	0.36	0.08	0.04	0.57	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.62	0.62	0.07	0.69	0.00
Volume/Cap:	0.83	0.00	0.24	0.00	0.00	0.00	0.00	0.58	0.13	0.58	0.83	0.00
Uniform Del:	24.4	0.0	22.0	0.0	0.0	0.0	0.0	6.7	4.7	27.1	6.7	0.0
IncremntDel:	17.7	0.0	0.5	0.0	0.0	0.0	0.0	0.7	0.1	6.7	4.5	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	42.1	0.0	22.5	0.0	0.0	0.0	0.0	7.5	4.8	33.8	11.3	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:	42.1	0.0	22.5	0.0	0.0	0.0	0.0	7.5	4.8	33.8	11.3	0.0
DesignQueue:	7	0	2	0	0	0	0	10	2	2	13	0

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

Intersection #6 Carmel Valley Road/Rancho San Carlos Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.922
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.2
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	T	R	L	T	R	L	T	R				L	T	R			
Control:	Split Phase			Split Phase			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	0	1	0	0	0	0	0	0	0	0	1	0	1	1	0
Volume Module:																		
Base Vol:	169	0	65	0	0	0	0	1270	281				92	663	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:	169	0	65	0	0	0	0	1270	281				92	663	0			
Added Vol:	0	0	0	0	0	0	0	50	0				0	28	0			
PasserByVol:	0	0	0	0	0	0	0	0	0				0	0	0			
Initial Fut:	169	0	65	0	0	0	0	1320	281				92	691	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:	169	0	65	0	0	0	0	1320	281				92	691	0			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
Reduced Vol:	169	0	65	0	0	0	0	1320	281				92	691	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.:	169	0	65	0	0	0	0	1320	281				92	691	0			
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900				1900	1900	1900			
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85				0.95	1.00	1.00			
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00				1.00	1.00	0.00			
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615				1805	1900	0			
Capacity Analysis Module:																		
Vol/Sat:	0.09	0.00	0.04	0.00	0.00	0.00	0.00	0.69	0.17				0.05	0.36	0.00			
Crit Moves:	****							****					****					
Green/Cycle:	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.75	0.75				0.06	0.81	0.00			
Volume/Cap:	0.92	0.00	0.40	0.00	0.00	0.00	0.00	0.92	0.23				0.92	0.45	0.00			
Uniform Del:	44.5	0.0	42.1	0.0	0.0	0.0	0.0	10.0	3.7				47.0	2.9	0.0			
IncremntDel:	44.8	0.0	1.6	0.0	0.0	0.0	0.0	10.1	0.1				65.4	0.2	0.0			
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00				1.00	1.00	0.00			
Delay/Veh:	89.3	0.0	43.6	0.0	0.0	0.0	0.0	20.1	3.8				112.4	3.1	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:	89.3	0.0	43.6	0.0	0.0	0.0	0.0	20.1	3.8				112.4	3.1	0.0			
DesignQueue:	9	0	3	0	0	0	0	22	4				5	8	0			

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

Intersection #7 Carmel Valley Road/Brookdale Drive

Cycle (sec): 105 Critical Vol./Cap. (X): 0.704
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 8.8
Optimal Cycle:OPTIMIZED 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			Protected			Protected		
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	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	7	0	5	0	0	0	0	726	3	3	1079	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:	7	0	5	0	0	0	0	726	3	3	1079	0
Added Vol:	0	0	0	19	0	43	15	0	0	0	0	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	0	5	19	0	43	15	726	3	3	1079	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:	7	0	5	19	0	43	15	726	3	3	1079	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	0	5	19	0	43	15	726	3	3	1079	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	0	5	19	0	43	15	726	3	3	1079	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.89	1.00	0.89	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.58	0.00	0.42	0.31	0.00	0.69	1.00	0.99	0.01	1.00	0.99	0.01
Final Sat.:	1017	0	726	520	0	1176	1805	1890	8	1805	1888	10
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.04	0.00	0.04	0.01	0.38	0.38	0.00	0.57	0.57
Crit Moves:	****					****	****				****	
Green/Cycle:	0.01	0.00	0.01	0.05	0.00	0.05	0.01	0.82	0.82	0.00	0.81	0.81
Volume/Cap:	0.70	0.00	0.70	0.70	0.00	0.70	0.70	0.47	0.47	0.47	0.70	0.70
Uniform Del:	51.8	0.0	51.8	49.0	0.0	49.0	51.7	2.7	2.7	52.2	4.3	4.3
IncremntDel:	83.9	0.0	83.9	22.6	0.0	22.6	71.3	0.2	0.2	45.7	1.5	1.5
Delay Adj:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	135.8	0.0	135.8	71.6	0.0	71.6	123.0	3.0	3.0	97.9	5.8	5.8
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:	135.8	0.0	135.8	71.6	0.0	71.6	123.0	3.0	3.0	97.9	5.8	5.8
DesignQueue:	0	0	0	1	0	2	1	8	0	0	14	0

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

Intersection #7 Carmel Valley Road/Brookdale Drive

Cycle (sec): 120 Critical Vol./Cap. (X): 0.789
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 10.0
Optimal Cycle:OPTIMIZED 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			Protected			Protected		
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	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	5	0	4	0	0	0	0	1283	7	3	743	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:	5	0	4	0	0	0	0	1283	7	3	743	0
Added Vol:	0	0	0	12	0	28	50	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	4	12	0	28	50	1283	7	3	743	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:	5	0	4	12	0	28	50	1283	7	3	743	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	0	4	12	0	28	50	1283	7	3	743	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.:	5	0	4	12	0	28	50	1283	7	3	743	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	0.89	1.00	0.89	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.56	0.00	0.44	0.30	0.00	0.70	1.00	0.99	0.01	1.00	0.97	0.03
Final Sat.:	965	0	772	509	0	1187	1805	1888	10	1805	1840	52
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.02	0.00	0.02	0.03	0.68	0.68	0.00	0.40	0.40
Crit Moves:	****			****				****		****		
Green/Cycle:	0.01	0.00	0.01	0.03	0.00	0.03	0.06	0.86	0.86	0.00	0.81	0.81
Volume/Cap:	0.79	0.00	0.79	0.79	0.00	0.79	0.50	0.79	0.79	0.79	0.50	0.50
Uniform Del:	59.5	0.0	59.5	57.8	0.0	57.8	55.1	3.6	3.6	59.8	3.7	3.7
IncremntDel:	151.2	0.0	151.2	55.6	0.0	55.6	3.9	2.7	2.7	290.1	0.3	0.3
Delay Adj:	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	210.7	0.0	210.7	113.5	0.0	113.5	58.9	6.3	6.3	349.9	4.0	4.0
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:	210.7	0.0	210.7	113.5	0.0	113.5	58.9	6.3	6.3	349.9	4.0	4.0
DesignQueue:	0	0	0	1	0	2	3	14	0	0	11	0

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

Intersection #8 Carmel Valley Road/Dorris Drive

Cycle (sec): 60 Critical Vol./Cap. (X): 0.540
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 7.2
Optimal Cycle:OPTIMIZED 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:	Protected			Protected			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	0	1	0	0	0	0	0	1	0	1	0	1	1	0	1	0	0
Volume Module:												
Base Vol:	111	0	32	0	0	0	0	509	160	57	750	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:	111	0	32	0	0	0	0	509	160	57	750	0
Added Vol:	1	0	0	0	0	0	0	16	3	0	5	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	112	0	32	0	0	0	0	525	163	57	755	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:	112	0	32	0	0	0	0	525	163	57	755	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	0	32	0	0	0	0	525	163	57	755	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.:	112	0	32	0	0	0	0	525	163	57	755	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.02	0.00	0.00	0.00	0.00	0.28	0.10	0.03	0.40	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.11	0.00	0.11	0.00	0.00	0.00	0.00	0.66	0.66	0.08	0.74	0.00
Volume/Cap:	0.54	0.00	0.17	0.00	0.00	0.00	0.00	0.42	0.15	0.42	0.54	0.00
Uniform Del:	25.1	0.0	24.0	0.0	0.0	0.0	0.0	4.8	3.9	26.5	3.5	0.0
IncremntDel:	2.9	0.0	0.4	0.0	0.0	0.0	0.0	0.2	0.1	2.1	0.4	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	27.9	0.0	24.4	0.0	0.0	0.0	0.0	5.0	3.9	28.6	3.9	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:	27.9	0.0	24.4	0.0	0.0	0.0	0.0	5.0	3.9	28.6	3.9	0.0
DesignQueue:	3	0	1	0	0	0	0	6	2	2	7	0

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

Intersection #8 Carmel Valley Road/Dorris Drive

Cycle (sec): 60 Critical Vol./Cap. (X): 0.587
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 8.3
Optimal Cycle:OPTIMIZED 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:	Protected			Protected			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	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	136	0	49	0	0	0	0	724	279	63	583	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:	136	0	49	0	0	0	0	724	279	63	583	0
Added Vol:	4	0	0	0	0	0	0	10	2	0	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	0	49	0	0	0	0	734	281	63	601	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	0	49	0	0	0	0	734	281	63	601	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	0	49	0	0	0	0	734	281	63	601	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	0	49	0	0	0	0	734	281	63	601	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.03	0.00	0.00	0.00	0.00	0.39	0.17	0.03	0.32	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.66	0.66	0.06	0.72	0.00
Volume/Cap:	0.59	0.00	0.23	0.00	0.00	0.00	0.00	0.59	0.26	0.59	0.44	0.00
Uniform Del:	24.5	0.0	23.3	0.0	0.0	0.0	0.0	5.7	4.2	27.5	3.5	0.0
IncremntDel:	3.8	0.0	0.6	0.0	0.0	0.0	0.0	0.7	0.1	8.2	0.2	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	28.3	0.0	23.9	0.0	0.0	0.0	0.0	6.4	4.4	35.7	3.7	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:	28.3	0.0	23.9	0.0	0.0	0.0	0.0	6.4	4.4	35.7	3.7	0.0
DesignQueue:	4	0	1	0	0	0	0	9	3	2	6	0

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

Intersection #9 Carmel Valley Road/Laureles Grade

Cycle (sec): 60 Critical Vol./Cap. (X): 0.592
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 13.1
Optimal Cycle:OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
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	1 0	0 0	1	1 0	1 0	0	0 0	1 0	1
Volume Module:												
Base Vol:	0	0	0	121	0	166	157	353	0	0	581	234
Growth Adj:	1.00	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	121	0	166	157	353	0	0	581	234
Added Vol:	0	0	0	0	0	3	9	6	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	121	0	169	166	359	0	0	583	234
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	121	0	169	166	359	0	0	583	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	121	0	169	166	359	0	0	583	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	121	0	169	166	359	0	0	583	234
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.10	0.09	0.19	0.00	0.00	0.31	0.14
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.18	0.00	0.18	0.16	0.67	0.00	0.00	0.52	0.52
Volume/Cap:	0.00	0.00	0.00	0.38	0.00	0.59	0.59	0.28	0.00	0.00	0.59	0.28
Uniform Del:	0.0	0.0	0.0	21.8	0.0	22.7	23.6	3.9	0.0	0.0	10.1	8.1
IncremntDel:	0.0	0.0	0.0	0.8	0.0	3.3	3.4	0.1	0.0	0.0	1.0	0.2
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	22.6	0.0	26.0	26.9	4.1	0.0	0.0	11.0	8.3
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:	0.0	0.0	0.0	22.6	0.0	26.0	26.9	4.1	0.0	0.0	11.0	8.3
DesignQueue:	0	0	0	3	0	5	5	4	0	0	10	4

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

Intersection #9 Carmel Valley Road/Laureles Grade

Cycle (sec): 60 Critical Vol./Cap. (X): 0.564
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 16.0
Optimal Cycle:OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
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	261	0	210	237	382	0	0	373	203
Growth Adj:	1.00	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	261	0	210	237	382	0	0	373	203
Added Vol:	0	0	0	0	0	11	6	4	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	261	0	221	243	386	0	0	380	203
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	261	0	221	243	386	0	0	380	203
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	261	0	221	243	386	0	0	380	203
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	261	0	221	243	386	0	0	380	203
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1805	0	1615	1805	1900	0	0	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.00	0.14	0.13	0.20	0.00	0.00	0.20	0.13
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.26	0.00	0.26	0.24	0.59	0.00	0.00	0.35	0.35
Volume/Cap:	0.00	0.00	0.00	0.56	0.00	0.53	0.56	0.34	0.00	0.00	0.56	0.35
Uniform Del:	0.0	0.0	0.0	19.4	0.0	19.2	20.1	6.2	0.0	0.0	15.6	14.3
IncremntDel:	0.0	0.0	0.0	1.6	0.0	1.4	1.7	0.2	0.0	0.0	1.1	0.4
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	21.0	0.0	20.6	21.8	6.4	0.0	0.0	16.7	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:	0.0	0.0	0.0	21.0	0.0	20.6	21.8	6.4	0.0	0.0	16.7	14.7
DesignQueue:	0	0	0	7	0	6	6	6	0	0	9	4

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

Intersection #10 Highway 68/Laureles Grade

Cycle (sec): 75 Critical Vol./Cap. (X): 0.926
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 27.6
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	1	0	0	0	0	0	1	0	1	0	1	1	0	1	0	0
Volume Module:												
Base Vol:	275	0	276	0	0	0	0	606	137	295	1213	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:	275	0	276	0	0	0	0	606	137	295	1213	0
Added Vol:	0	0	9	0	0	0	0	0	0	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	275	0	285	0	0	0	0	606	137	298	1213	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:	275	0	285	0	0	0	0	606	137	298	1213	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	275	0	285	0	0	0	0	606	137	298	1213	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.:	275	0	285	0	0	0	0	606	137	298	1213	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.00	0.18	0.00	0.00	0.00	0.00	0.32	0.08	0.17	0.64	0.00
Crit Moves:			****				****				****	
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.45	0.45	0.24	0.69	0.00
Volume/Cap:	0.80	0.00	0.93	0.00	0.00	0.00	0.00	0.70	0.19	0.70	0.93	0.00
Uniform Del:	29.0	0.0	29.8	0.0	0.0	0.0	0.0	16.4	12.2	26.3	10.0	0.0
IncremntDel:	12.5	0.0	32.6	0.0	0.0	0.0	0.0	2.6	0.1	5.2	11.3	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	41.4	0.0	62.4	0.0	0.0	0.0	0.0	19.0	12.3	31.5	21.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.4	0.0	62.4	0.0	0.0	0.0	0.0	19.0	12.3	31.5	21.3	0.0
DesignQueue:	10	0	10	0	0	0	0	15	3	10	19	0

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

Intersection #10 Highway 68/Laureles Grade

Cycle (sec): 115 Critical Vol./Cap. (X): 1.133
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 67.0
Optimal Cycle:OPTIMIZED 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:	Split Phase			Split Phase			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	0 1	0	0 0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	152	0	408	0	0	0	0	1258	475	217	1030	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:	152	0	408	0	0	0	0	1258	475	217	1030	0
Added Vol:	0	0	6	0	0	0	0	0	0	11	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	0	414	0	0	0	0	1258	475	228	1030	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:	152	0	414	0	0	0	0	1258	475	228	1030	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	0	414	0	0	0	0	1258	475	228	1030	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.:	152	0	414	0	0	0	0	1258	475	228	1030	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.26	0.00	0.00	0.00	0.00	0.66	0.29	0.13	0.54	0.00
Crit Moves:			****					****		****		
Green/Cycle:	0.23	0.00	0.23	0.00	0.00	0.00	0.00	0.58	0.58	0.11	0.70	0.00
Volume/Cap:	0.37	0.00	1.13	0.00	0.00	0.00	0.00	1.13	0.50	1.13	0.78	0.00
Uniform Del:	37.6	0.0	44.5	0.0	0.0	0.0	0.0	23.9	14.1	51.1	11.6	0.0
IncremntDel:	0.6	0.0	88.5	0.0	0.0	0.0	0.0	71.6	0.4	104.0	3.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	38.2	0.0	133.0	0.0	0.0	0.0	0.0	95.5	14.5	155.1	14.7	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:	38.2	0.0	133.0	0.0	0.0	0.0	0.0	95.5	14.5	155.1	14.7	0.0
DesignQueue:	8	0	22	0	0	0	0	41	14	13	23	0

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

Intersection #10 Highway 68/Laureles Grade

Cycle (sec): 70 Critical Vol./Cap. (X): 0.907
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.1
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	0	1	0	0	0	0	0	0	1	1	0	1	0	1	0	0
Volume Module:												
Base Vol:	275	0	276	0	0	0	0	606	137	295	1213	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:	275	0	276	0	0	0	0	606	137	295	1213	0
Added Vol:	0	0	9	0	0	0	0	0	0	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	275	0	285	0	0	0	0	606	137	298	1213	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:	275	0	285	0	0	0	0	606	137	298	1213	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	275	0	285	0	0	0	0	606	137	298	1213	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.:	275	0	285	0	0	0	0	606	137	298	1213	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	0.97	0.97	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.63	0.37	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	3013	681	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.00	0.18	0.00	0.00	0.00	0.00	0.20	0.20	0.17	0.64	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.17	0.00	0.49	0.00	0.00	0.00	0.00	0.39	0.39	0.32	0.70	0.00
Volume/Cap:	0.91	0.00	0.36	0.00	0.00	0.00	0.00	0.52	0.52	0.52	0.91	0.00
Uniform Del:	28.6	0.0	11.3	0.0	0.0	0.0	0.0	16.5	16.5	19.5	8.5	0.0
IncremntDel:	29.2	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.9	9.2	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	57.8	0.0	11.6	0.0	0.0	0.0	0.0	16.8	16.8	20.4	17.7	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:	57.8	0.0	11.6	0.0	0.0	0.0	0.0	16.8	16.8	20.4	17.7	0.0
DesignQueue:	9	0	6	0	0	0	0	15	3	8	17	0

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

Intersection #10 Highway 68/Laureles Grade

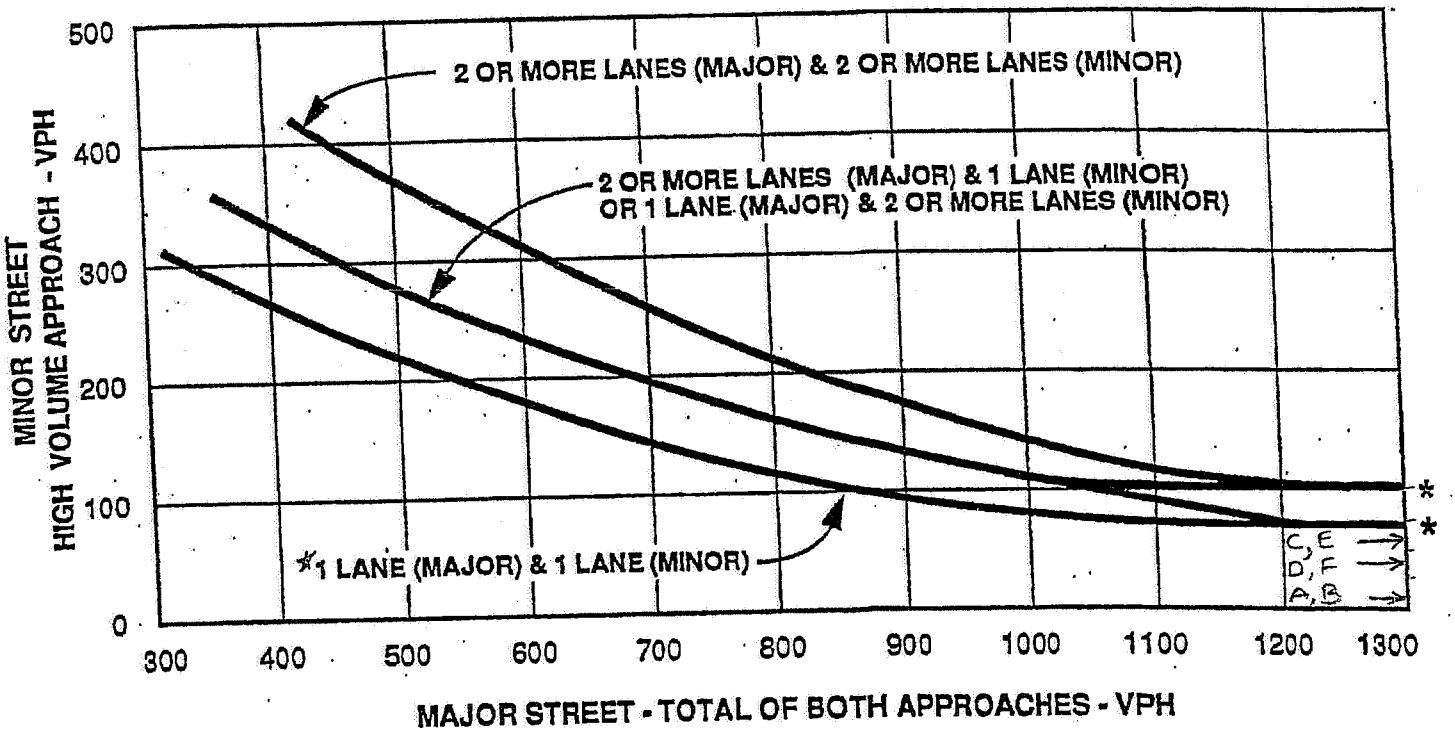
Cycle (sec): 60 Critical Vol./Cap. (X): 0.861
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 18.4
Optimal Cycle:OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 1	1 0	1	0 1	0 0
Volume Module:												
Base Vol:	152	0	408	0	0	0	0	1258	475	217	1030	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:	152	0	408	0	0	0	0	1258	475	217	1030	0
Added Vol:	0	0	6	0	0	0	0	0	0	11	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	0	414	0	0	0	0	1258	475	228	1030	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:	152	0	414	0	0	0	0	1258	475	228	1030	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	0	414	0	0	0	0	1258	475	228	1030	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.:	152	0	414	0	0	0	0	1258	475	228	1030	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	0.96	0.96	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.45	0.55	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	2645	999	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.26	0.00	0.00	0.00	0.00	0.48	0.48	0.13	0.54	0.00
Crit Moves:			****					****		****		
Green/Cycle:	0.15	0.00	0.30	0.00	0.00	0.00	0.00	0.55	0.55	0.15	0.70	0.00
Volume/Cap:	0.56	0.00	0.86	0.00	0.00	0.00	0.00	0.86	0.86	0.86	0.78	0.00
Uniform Del:	23.6	0.0	19.9	0.0	0.0	0.0	0.0	11.5	11.5	25.0	5.9	0.0
IncremntDel:	2.6	0.0	14.6	0.0	0.0	0.0	0.0	4.0	4.0	23.7	2.9	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	26.2	0.0	34.5	0.0	0.0	0.0	0.0	15.5	15.5	48.7	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:	26.2	0.0	34.5	0.0	0.0	0.0	0.0	15.5	15.5	48.7	8.9	0.0
DesignQueue:	4	0	10	0	0	0	0	21	8	7	12	0

APPENDIX G – SIGNAL WARRANT ANALYSIS

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

Intersection #7 - Carmel Valley Road / Brookdale Drive



A - EXISTING - AM PEAK

B - EXISTING - PM PEAK

C - EXISTING + PROJECT - AM

D - EXISTING + PROJECT - PM

E - CUMULATIVE - AM

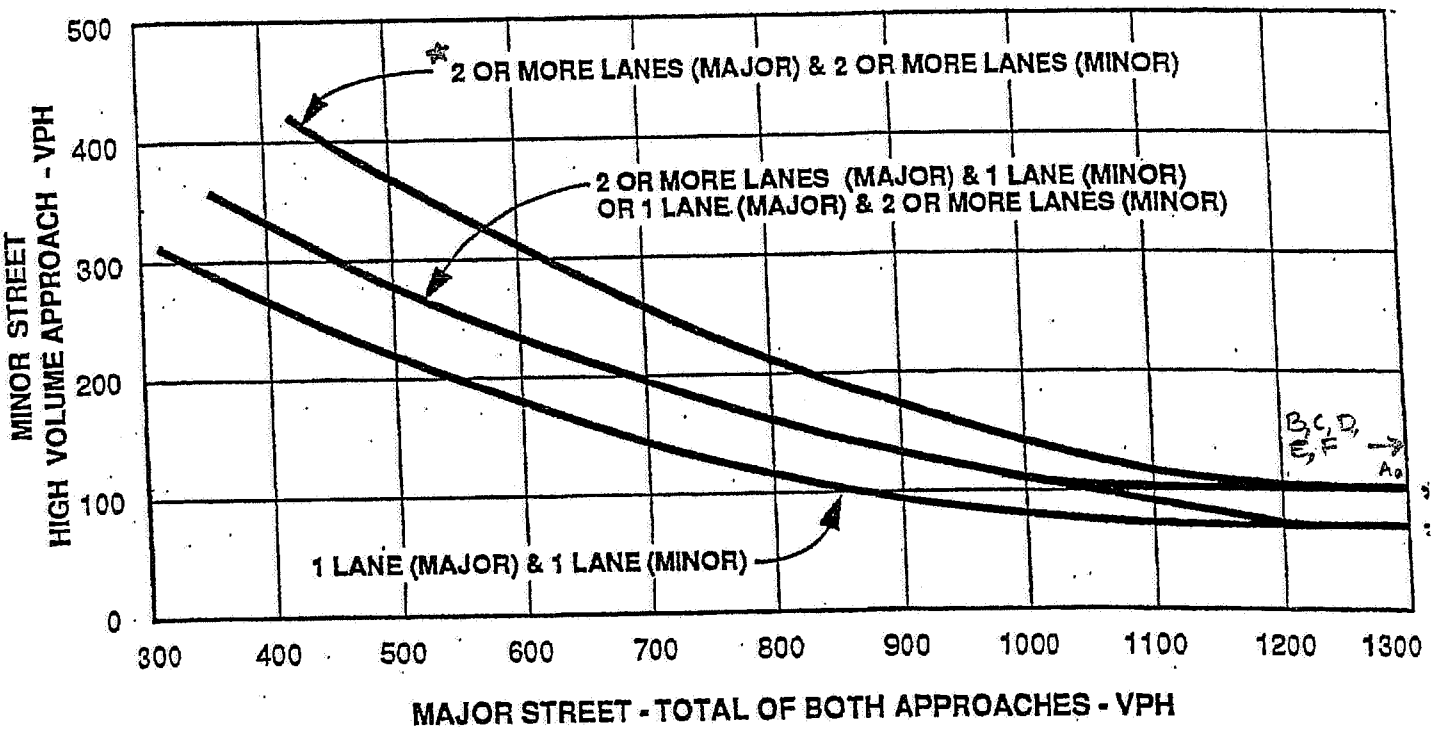
F - CUMULATIVE - PM

* NOTE:
100 VPH
APPROAC
THRESHC

FOR A MINOR STREET
PPLIES AS THE LOWER
ING WITH ONE LANE.

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

Intersection #8 - Carmel Valley Road/Dorris Drive

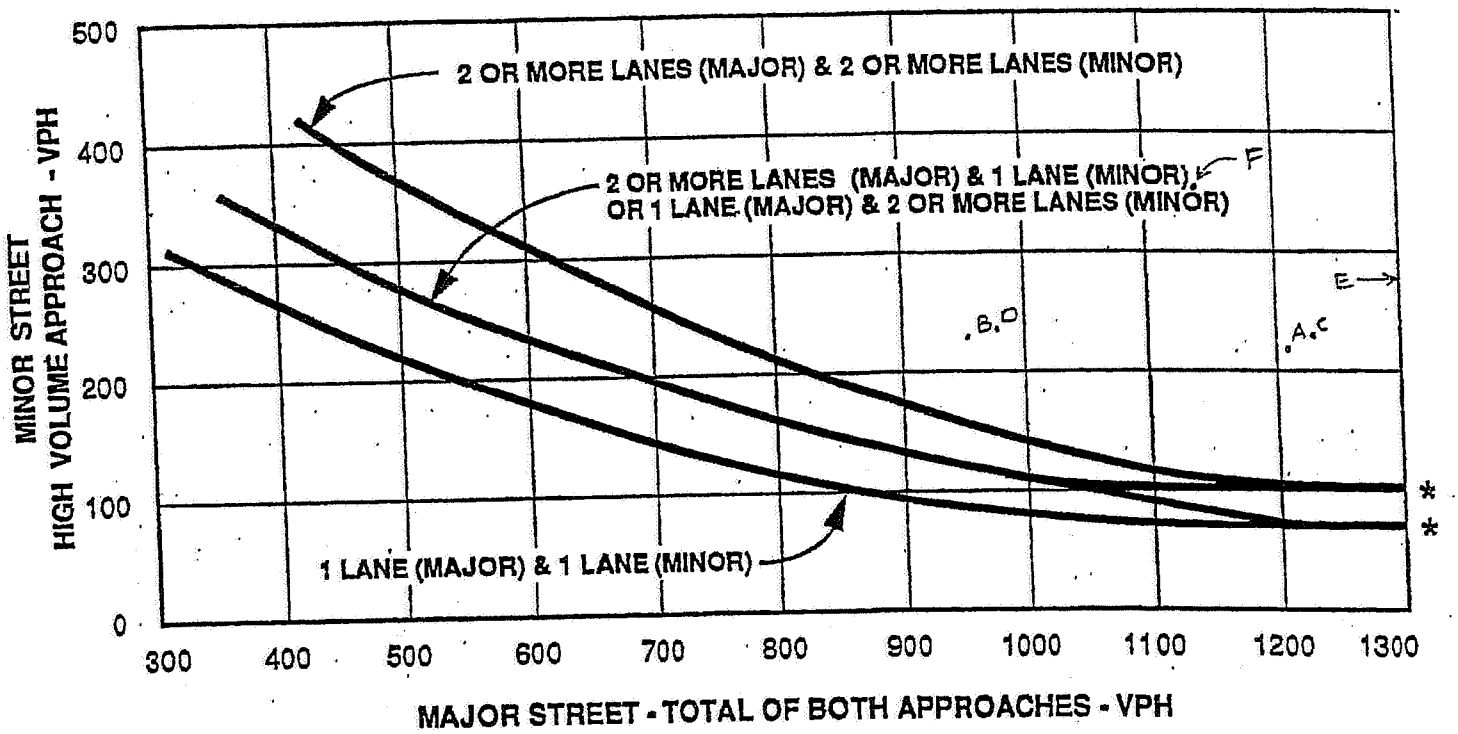


* NOTE:

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 APPROACHING WITH ONE LANE.

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

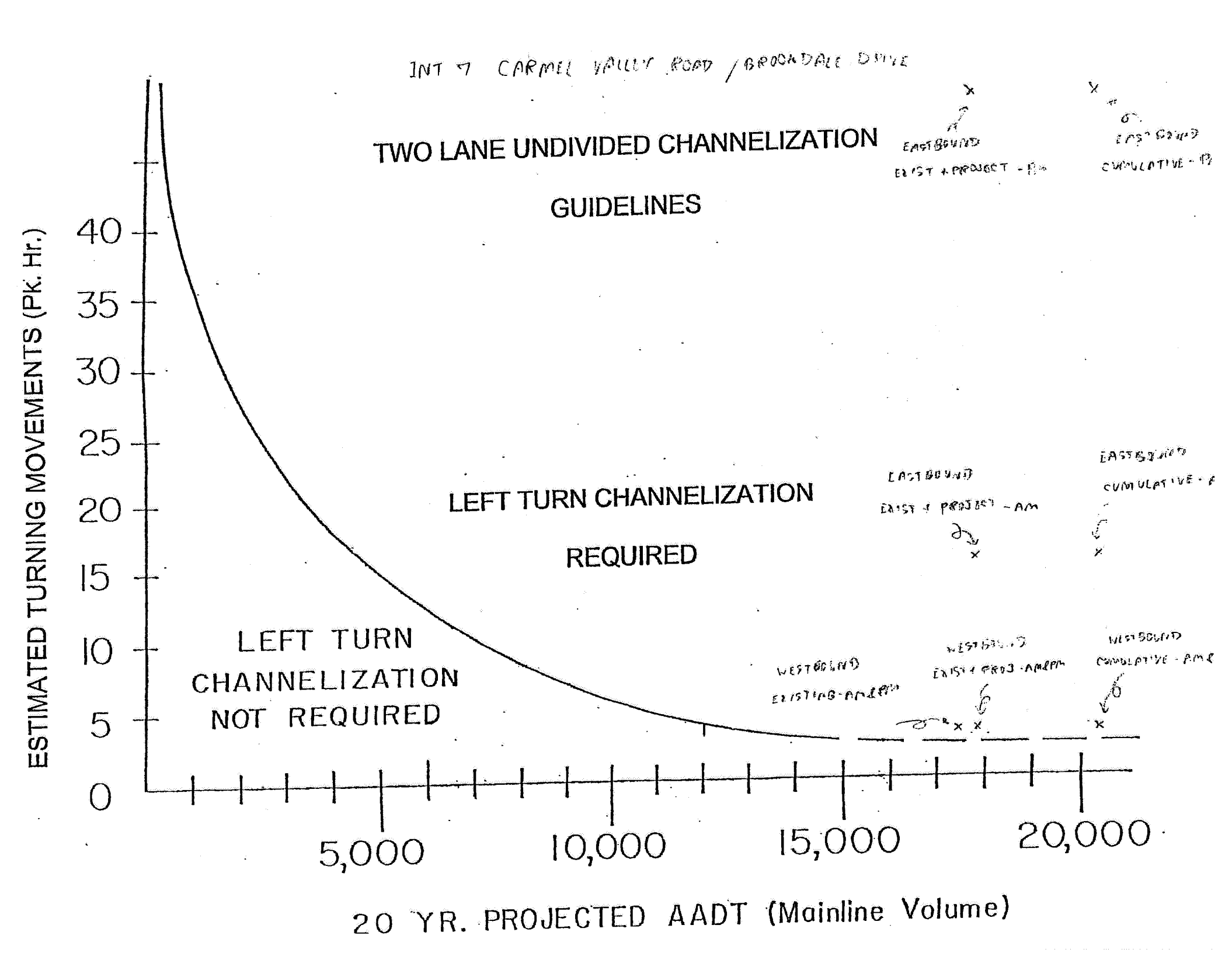
Intersection #9- Carmel Valley Road / Laureles Grade



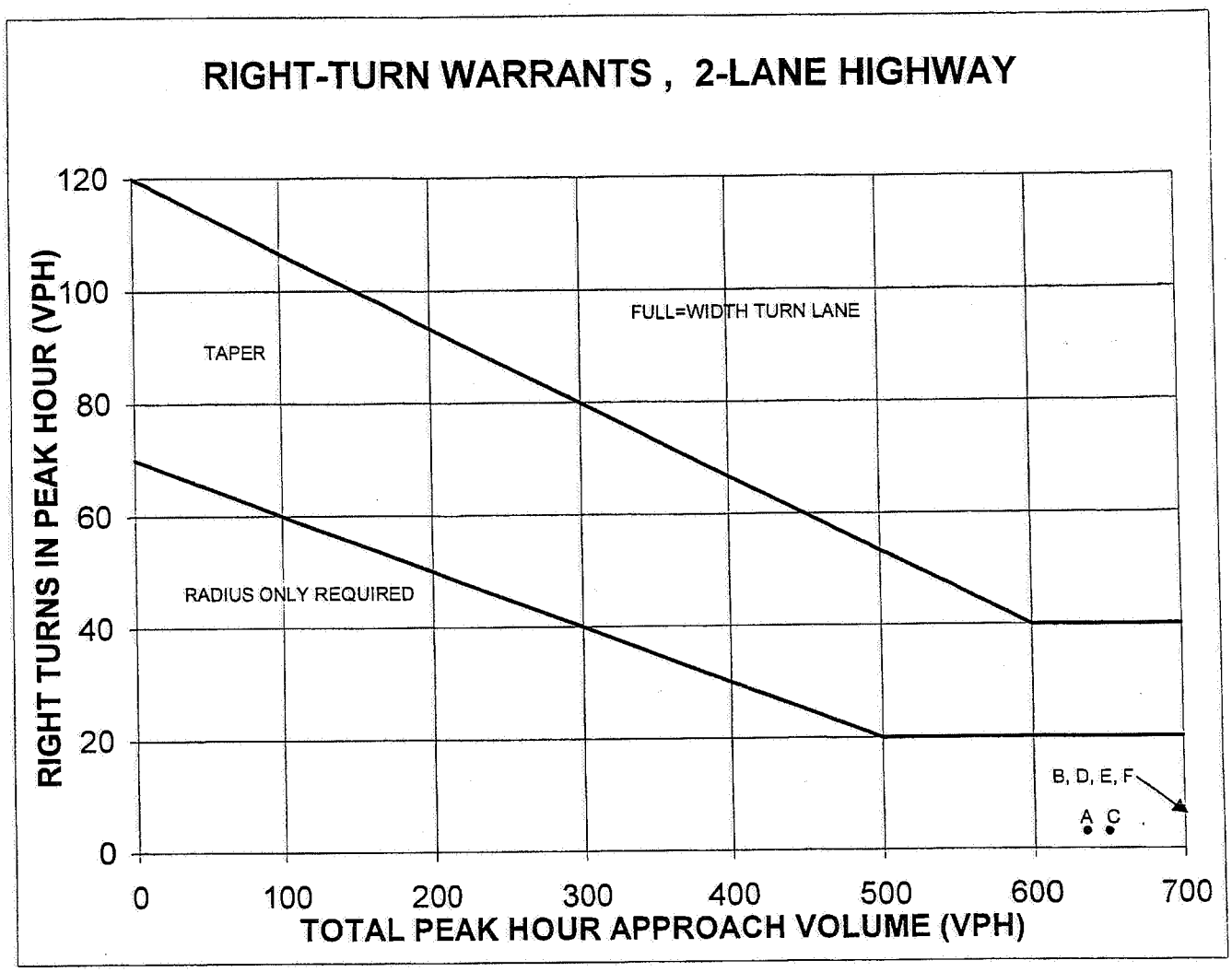
* NOTE:

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 APPROACHING WITH ONE LANE.

APPENDIX H – TURNING WARRANT ANALYSIS


INT 7 CARMEL VALLEY ROAD / BROOKDALE DRIVE
TWO LANE UNDIVIDED CHANNELIZATION
GUIDELINES
LEFT TURN CHANNELIZATION
REQUIRED
LEFT TURN
CHANNELIZATION
NOT REQUIRED
EASTBOUND
EXIST + PROJECT - PM
EASTBOUND
CUMULATIVE - PM
EASTBOUND
EXIST + PROJECT - AM
EASTBOUND
CUMULATIVE - AM
WESTBOUND
EXISTING - AM&PM
WESTBOUND
EXIST + PROJ - AM&PM
WESTBOUND
CUMULATIVE - AM&PM
ESTIMATED TURNING MOVEMENTS (Pk. Hr.)
0
5
10
15
20
25
30
35
40
5,000
10,000
15,000
20,000
20 YR. PROJECTED AADT (Mainline Volume)

Intersection #7 - Carmel Valley Road/Brookdale Drive
Eastbound Approach



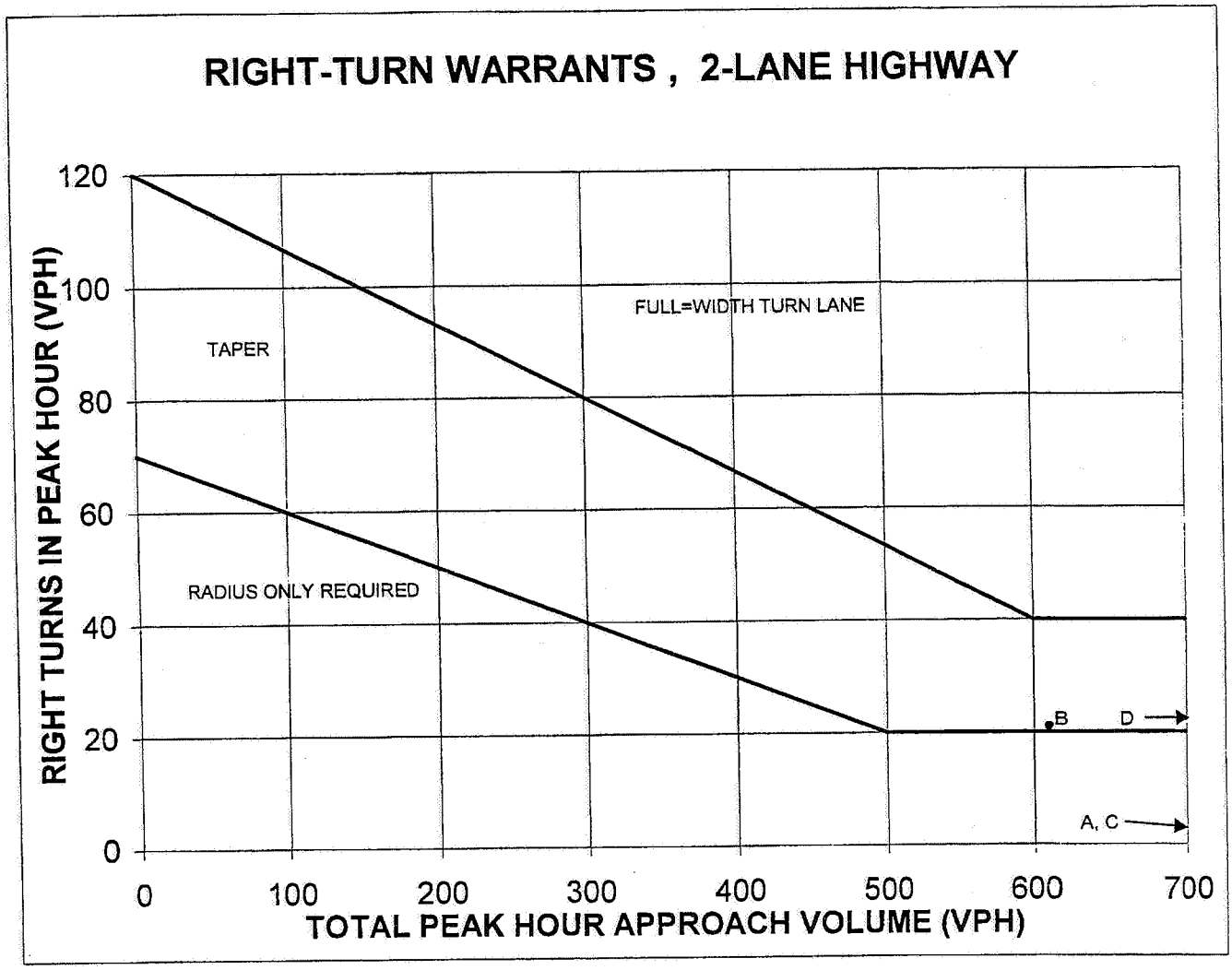
	Scenario	Total	Right-Turning	Warrant Met?
A	Existing - AM	634	3	No
B	Existing - PM	1157	7	No
C	Ex+Project AM	649	3	No
D	Ex+Project PM	1207	7	No
E	Cumulative AM	744	3	No
F	Cumulative PM	1340	7	No

Source: Transportation Research Board, "Intersection Channelization Guide", NCHRP Report 287, November, 1985, p. 64.

Note: For posted speeds at or under 45 mph, peak hour right turns greater than 40 vph, and total peak hour approach less than 300 vph, adjust right turn volumes.

Adjust peak hour right turns = peak hour right turns - 20.

Intersection #7 - Carmel Valley Road/Brookdale Drive
Westbound Approach



	Scenario	Total	Right-Turning	Warrant Met?
A	Ex+Project AM	1011	6	No
B	Ex+Project PM	610	21	Taper
C	Cumulative AM	1088	6	No
D	Cumulative PM	767	21	Taper

Source: Transportation Research Board, "Intersection Channelization Guide", NCHRP Report 287, November, 1985, p. 64.

Note: For posted speeds at or under 45 mph, peak hour right turns greater than 40 vph, and total peak hour approach less than 300 vph, adjust right turn volumes.

Adjust peak hour right turns = peak hour right turns - 20.

Right-Turn Lane Requirement
on Westbound Carmel Valley Road at Brookdale