
**Appendix I Vacant Land Opportunities Phase III
Traffic Study**

Draft

**CITY OF LAKE FOREST
VACANT LAND OPPORTUNITIES PHASE III**

Traffic Study

July 2005

Draft

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VACANT LAND OPPORTUNITIES PHASE III
Traffic Study**

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EXECUTIVE SUMMARY

This report presents the findings of a traffic study carried out to determine the impacts of proposed land use changes in six development areas referred to as the Vacant Land Opportunities areas in the City of Lake Forest. The six development areas are henceforth referred to in this report as the “project sites” and include Shea/Baker (Site 1), Portola Center (Site 2), Irvine Ranch Water District (IRWD) (Site 3), Baker Ranch (Site 4), Whisler/Greystone (Site 5), and Peachwood/Pacific Heritage (Site 6) properties.

Three conditions are analyzed for the project sites; Current General Plan buildout, the City of Lake Forest Preferred Plan, and a Landowners Plan. For each of these conditions, the study evaluates the potential traffic impacts of the project area land use plans (City Preferred Plan and Landowners Plan) in relation to the Current General Plan land uses. The traffic study was conducted to prepare the traffic and circulation material to be included in the overall Environmental Impact Report (EIR) for the General Plan Amendment (GPA) for the areas addressed in the study.

PROJECT CHARACTERISTICS

The locations of the project sites are illustrated in Figure ES-1. Phases I and II of the Vacant Land Opportunities work effort established a general framework for development in these areas and resulted in two land use plans. They are referred to as the “City Preferred Plan” and the “Landowners Plan.” Tables ES-1 through ES-3 summarize the buildout land use and trip generation for the project sites. The Landowners Plan has 1,202 more residential units than the City Preferred Plan but 150,000 less square feet of retail uses. While the differences are not substantial, both are analyzed here in the same level of detail. The analysis compares the proposed land use plans for these project sites with the land uses that would occur under the Current General Plan. The primary difference under the proposed land use plans compared to the Current General Plan is the substitution of 6.7 million square feet of business uses in the Current General Plan by 5,415 and 6,617 residential units in the City Preferred Plan and Landowners Plan, respectively.

The trip generation for the proposed land use plans compared to the Current General Plan are presented in the following summary. The Current General Plan generates 152,790 average daily trips

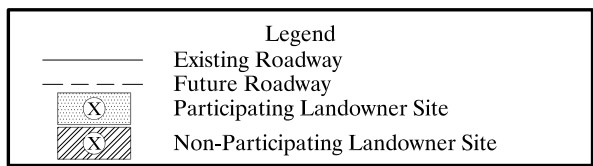
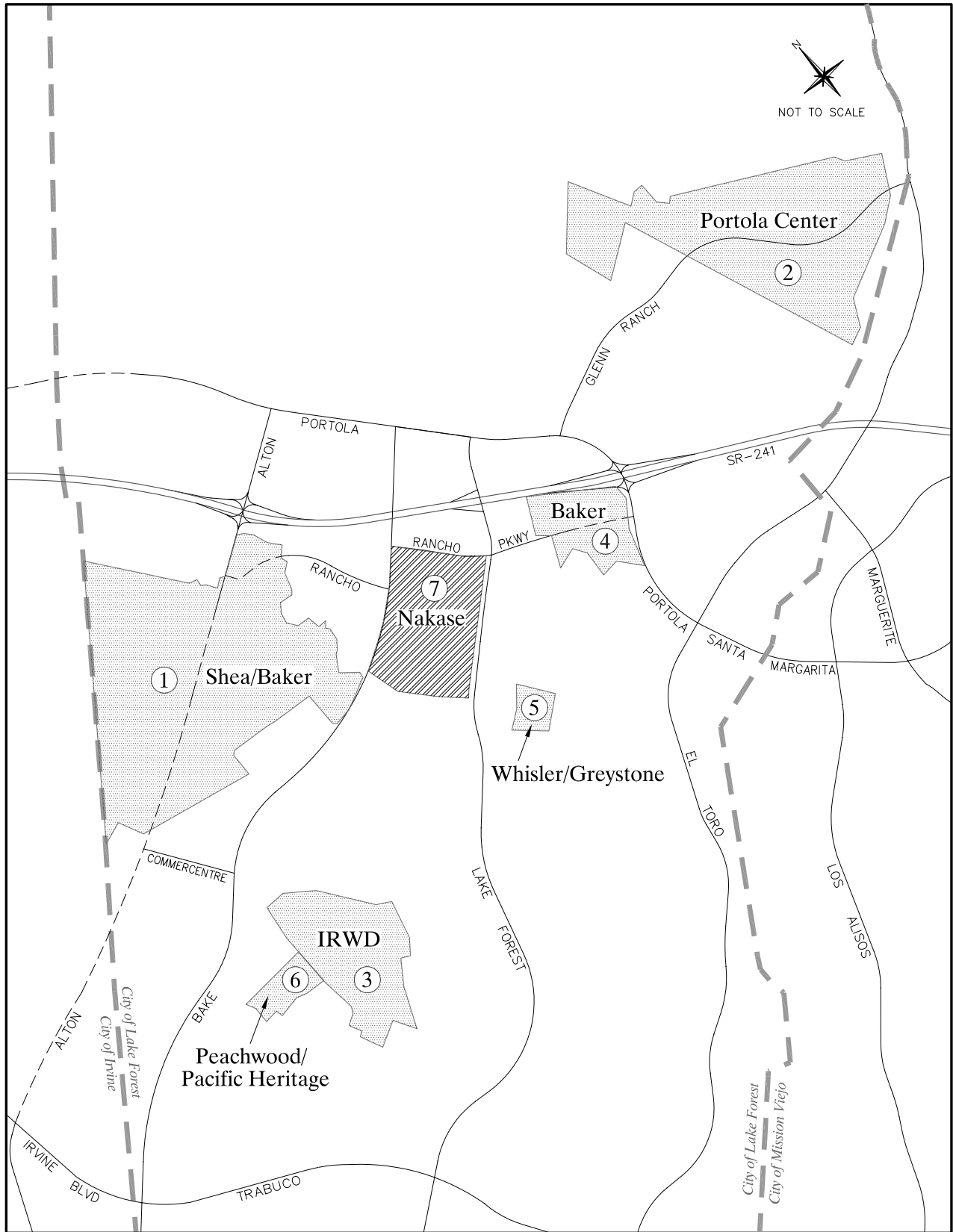


Figure ES-1
PROJECT SITES

Table ES-1
CURRENT GENERAL PLAN (PROJECT SITE AREA) LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Site 1 (Shea/Baker)								
Park	17 Acre	0	0	0	0	0	0	27
Business Park	4,026.2 TSF	4,831	926	5,757	1,208	3,986	5,194	51,375
Mini Storage	26 Acre	36	36	72	52	48	100	1,011
Site 1 (Shea/Baker) Total		4,867	962	5,829	1,260	4,034	5,294	52,413
Site 2 (Portola Center)								
Commercial (EQ)	411.27 TSF	249	159	408	711	770	1,481	17,026
Open Space	30 Acre	0	0	0	0	0	0	0
Business Park	2,395.2 TSF	2,874	551	3,425	719	2,371	3,090	30,562
Site 2 (Portola Center) Total		3,123	710	3,833	1,430	3,141	4,571	47,588
Site 3 (IRWD)								
Utility	23 Acre	36	21	57	14	17	31	573
Business Park	304.92 TSF	366	70	436	91	302	393	3,891
Light Industrial	415.91 TSF	2,591	532	3,123	665	2,354	3,019	21,544
Site 3 (IRWD) Total		2,993	623	3,616	770	2,673	3,443	26,008
Site 4 (Baker Ranch)								
Commercial (EQ)	512.91 TSF	361	230	591	1,028	1,114	2,142	24,627
Site 5 (Whisler/Greystone)								
Office (EQ)	186.33 TSF	265	36	301	49	241	290	2,154
Site 6 (Pacific Heritage)								
Open Space	17 Acre	0	0	0	0	0	0	0
Project Sites 1-6								
Commercial (EQ)	924.18 TSF	610	389	999	1,739	1,884	3,623	41,653
Office (EQ)	186.33 TSF	265	36	301	49	241	290	2,154
Open Space	47 Acre	0	0	0	0	0	0	0
Park	17 Acre	0	0	0	0	0	0	27
Mining/Utility	23 Acre	36	21	57	14	17	31	573
Business Park	6,726.3 TSF	8,071	1,547	9,618	2,018	6,659	8,677	85,828
Light Industrial	415.91 TSF	2,591	532	3,123	665	2,354	3,019	21,544
Mini Storage	26 Acre	36	36	72	52	48	100	1,011
Project Sites 1-6 Total		11,609	2,561	14,170	4,537	11,203	15,740	152,790

Table ES-2
CITY PREFERRED PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Site 1 (Shea/Baker)								
Single Family Detached	889 DU	168	498	666	569	329	898	8,508
Condominium	1426 DU	242	714	956	642	470	1,112	11,622
Apartment	500 DU	50	205	255	200	110	310	3,360
Commercial (EQ)	120 TSF	112	72	184	319	346	665	7,645
Park	26 Acre	0	0	0	1	1	2	41
Business Park	200 TSF	240	46	286	60	198	258	2,552
Site 1 (Shea/Baker) Total		812	1,535	2,347	1,791	1,454	3,245	33,728
Site 2 (Portola Center)								
Single Family Detached	525 DU	100	293	393	336	194	530	5,024
Condominium	141 DU	24	71	95	63	47	110	1,149
Apartment	466 DU	47	191	238	186	103	289	3,132
Commercial (EQ)	178.72 TSF	145	93	238	414	448	862	9,905
Park	10 Acre	0	0	0	0	0	0	16
Site 2 (Portola Center) Total		316	648	964	999	792	1,791	19,226
Site 3 (IRWD)								
Apartment	833 DU	83	342	425	333	183	516	5,598
Park	11 Acre	0	0	0	0	0	0	17
Site 3 (IRWD) Total		83	342	425	333	183	516	5,615
Site 4 (Baker Ranch)								
Condominium	475 DU	81	238	319	214	157	371	3,871
Commercial (EQ)	150 TSF	129	83	212	369	400	769	8,839
Park	4 Acre	0	0	0	0	0	0	6
Site 4 (Baker Ranch) Total		210	321	531	583	557	1,140	12,716
Site 5 (Whisler/Greystone)								
Single Family Detached	75 DU	14	42	56	48	28	76	718
Site 6 (Pacific Heritage)								
Single Family Detached	85 DU	16	48	64	54	31	85	813
Project Sites 1-6								
Single Family Detached	1,574 DU	298	881	1,179	1,007	582	1,589	15,063
Condominium	2,042 DU	347	1,023	1,370	919	674	1,593	16,642
Apartment	1,799 DU	180	738	918	719	396	1,115	12,090
Commercial (EQ)	448.72 TSF	386	248	634	1,102	1,194	2,296	26,389
Park	51 Acre	0	0	0	1	1	2	80
Business Park	200 TSF	240	46	286	60	198	258	2,552
Project Sites 1-6		1,451	2,936	4,387	3,808	3,045	6,853	72,816

Note: The City Preferred Plan also includes 6 acres of public facility uses consisting of 88,000 square feet of a community center and city hall and a 39-acre sports park on a 45-acre portion of the Nakase property (see Site 7 in Figure ES-1).

Table ES-3
LANDOWNERS PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Site 1 (Shea/Baker)								
Single Family Detached	924 DU	175	518	693	591	342	933	8,843
Condominium	1426 DU	242	714	956	642	470	1,112	11,622
Apartment	500 DU	50	205	255	200	110	310	3,360
Commercial (EQ)	120 TSF	112	72	184	319	346	665	7,645
Park	19.2 Acre	0	0	0	0	0	0	31
Business Park	200 TSF	240	46	286	60	198	258	2,552
Site 1 (Shea/Baker) Total		819	1,555	2,374	1,812	1,466	3,278	34,053
Site 2 (Portola Center)								
Single Family Detached	525 DU	100	293	393	336	194	530	5,024
Condominium	141 DU	24	71	95	63	47	110	1,149
Apartment	466 DU	47	191	238	186	103	289	3,132
Commercial (EQ)	178.72 TSF	145	93	238	414	448	862	9,905
Park	10.4 Acre	0	0	0	0	0	0	16
Site 2 (Portola Center) Total		316	648	964	999	792	1,791	19,226
Site 3 (IRWD)								
Apartment	1,000 DU	100	410	510	400	220	620	6,720
Park	10.9 Acre	0	0	0	0	0	0	17
Site 3 (IRWD) Total		100	410	510	400	220	620	6,737
Site 4 (Baker Ranch)								
Apartment	1,450 DU	146	594	740	580	320	900	9,744
Park	.9 Acre	0	0	0	0	0	0	1
Site 4 (Baker Ranch) Total		146	594	740	580	320	900	9,745
Site 5 (Whisler/Greystone)								
Single Family Detached	54 DU	10	30	40	35	20	55	517
Condominium	46 DU	8	23	31	21	15	36	375
Site 5 (Whisler/Greystone)		18	53	71	56	35	91	892
Site 6 (Pacific Heritage)								
Single Family Detached	85 DU	16	48	64	54	31	85	813
Project Sites 1-6								
Single Family Detached	1,588 DU	301	889	1,190	1,016	587	1,603	15,197
Condominium	1,613 DU	274	808	1,082	726	532	1,258	13,146
Apartment	3,416 DU	343	1,400	1,743	1,366	753	2,119	22,956
Commercial (EQ)	298.72 TSF	257	165	422	733	794	1,527	17,550
Park	41.4 Acre	0	0	0	0	0	0	65
Business Park	200 TSF	240	46	286	60	198	258	2,552
Project Sites 1-6		1,415	3,308	4,723	3,901	2,864	6,765	71,466

(ADT), 14,170 AM peak hour trips, and 15,740 PM peak hour trips. Compared to the Current General Plan, the City Preferred Plan generates less trips (72,816 ADT, 4,387 AM peak hour trips and 6,853 PM peak hour trips) resulting in decreases of 52, 69 and 56 percent in ADT, AM and PM trips, respectively. The Landowners Plan also generates less trips (71,466 ADT, 4,723 AM peak hour trips and 6,765 PM peak hour trips) compared to the General Plan resulting in decreases of 53, 67 and 57 percent in ADT, AM and PM trips, respectively.

LAND USE AND TRIP GENERATION SUMMARY							
Land Use	AM Peak Hour			PM Peak Hour			ADT
	In	Out	Total	In	Out	Total	
Current General Plan	11,609	2,561	14,170	4,537	11,203	15,740	152,790
City Preferred Plan	1,451	2,936	4,387	3,808	3,045	6,853	72,816
Difference	10,158	375	-9,783	-729	-8,158	-8,887	-79,974
Percentage Difference	-88%	15%	-69%	-16%	-73%	-56%	-52%
Landowners Plan	1,415	3,308	4,723	3,901	2,864	6,765	71,466
Difference	10,194	747	-9,447	-636	-8,339	-8,975	-81,324
Percentage Difference	-88%	29%	-67%	-14%	-74%	-57%	-53%

It should be noted that the City Preferred Plan also includes 6 acres of public facility uses consisting of 88,000 square feet of a community center and city hall and a 39-acre sports park on a 45-acre portion of the Nakase property (see Site 7 in Figure ES-1). The Nakase property is a non-participating landowner, and the public facility uses would replace approximately 683,000 square feet of business park uses in the General Plan. The trip generation summary below reveals that the minimal change in trip generation would result in minor differences in the findings and conclusions presented in this report.

Site 7 (Nakase) – General Plan								
Business Park	1,841.7 TSF	2,210	424	2,634	553	1,823	2,376	23,500
Site 7 (Nakase) – City Preferred Plan								
Government Facility	88 TSF	173	21	194	77	173	250	2,457
Business Park	1,159 TSF	1,391	267	1,658	348	1,147	1,495	14,788
Sports Park	39 Acre	0	0	0	133	160	293	2,098
Total		1,564	288	1,852	558	1,480	2,038	19,343
Total Difference Site 7 (Nakase)		-646	-136	-782	5	-343	-338	-4,157

PROJECT IMPACTS AND MITIGATION MEASURES

The traffic impacts of the proposed City Preferred Plan and Landowners Plan were analyzed by distributing project-related traffic over future long-range buildout traffic conditions. The future setting

(year 2030) is based on the existing circulation system plus improvements (committed and non-committed) that are planned to be in place and the land use and development growth that is projected by year 2030. Project impacts are identified by comparing current General Plan traffic conditions with traffic conditions under the proposed land use changes.

The study area used for the analysis is shown in Figure ES-2, and covers the City of Lake Forest and immediate surrounding roadways (referred to in this report as the extended study area). As can be seen here, it comprises all of the City of Lake Forest and parts of the Cities of Irvine, Laguna Hills, Laguna Woods and Mission Viejo. The study area was defined based on peak hour intersection criteria, and includes all major intersections where the proposed project would increase traffic by more than one percent. This significant impact criteria is consistent with guidelines used by Lake Forest and the surrounding jurisdictions in defining the area of impact for such studies. In addition, the study area was extended into Irvine in response to the City of Irvine's request.

The circulation system performance criteria applied in the analysis are based on level of service (LOS) calculation methodologies and performance standards that have been adopted by the City of Lake Forest and/or by governing jurisdictions outside the City of Lake Forest and by the OCTA as part of the CMP. The criteria include components for intersections, freeway/tollway ramps and freeway/tollway mainline segments. When analyzing individual locations on the study area circulation system, the criteria of the jurisdiction in which a given facility is located has been applied in this study. The performance criteria are also consistent with the criteria adopted by the jurisdictions that are within the project study area.

The results of the year 2030 project impact analysis are summarized in detail in Chapter 4.0 of this report. Tables ES-4 and ES-5 summarize the intersection locations that are impacted under City Preferred Plan and Landowners Plan, respectively. The summary tables include peak hour intersection capacity utilization (ICU) values and levels of service (LOSs) under Current General Plan and with-project (City Preferred Plan and Landowners Plan) conditions. The tables show that there are 10 locations under City Preferred Plan conditions and 11 locations under Landowners Plan conditions that are impacted. The mitigation measures identified to address the intersection impacts are also listed in the summary tables together with the resulting ICU values and LOSs with mitigation. The mitigation measures are designed to improve the LOS at each impacted location.

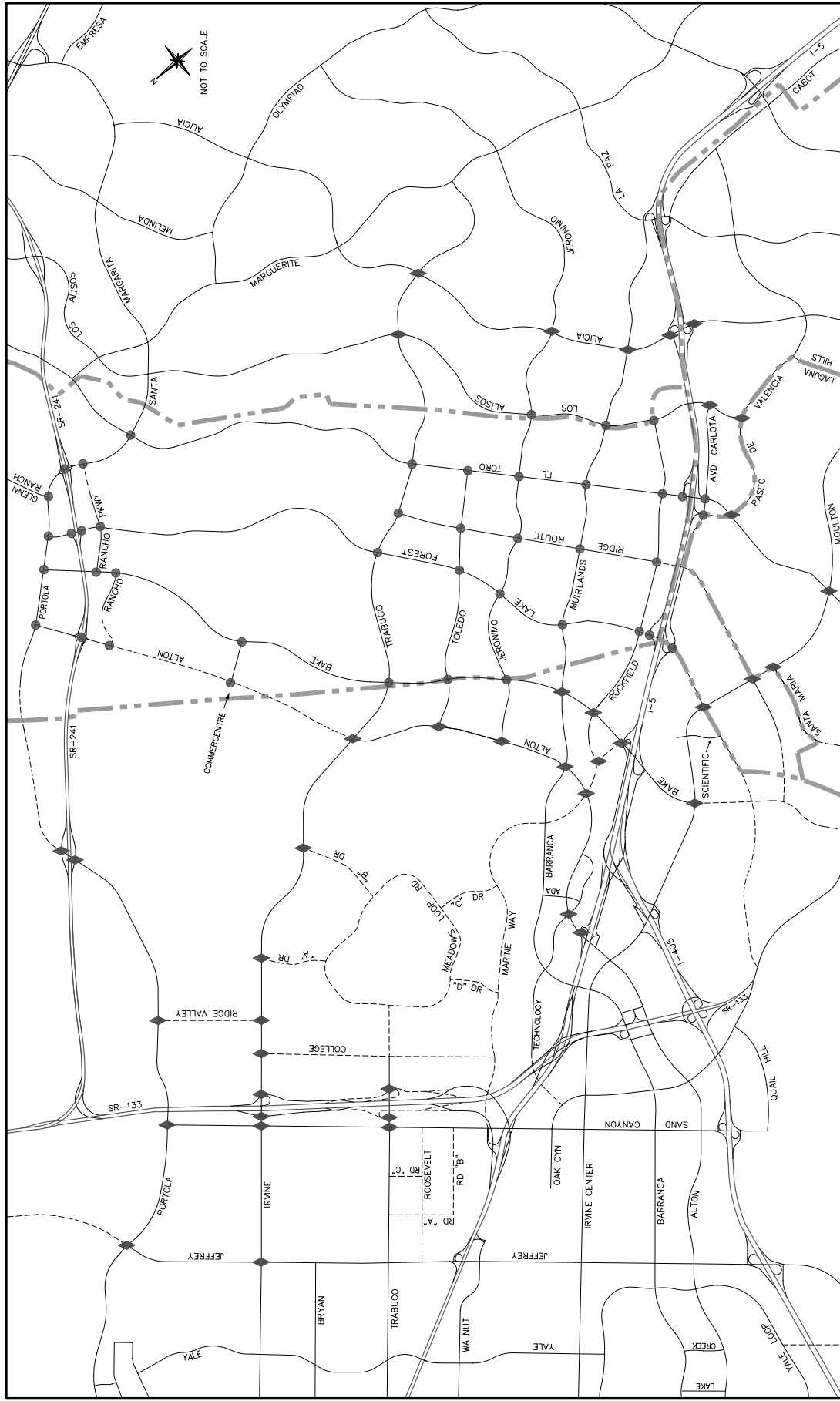


Figure ES-2
**INTERSECTION LOCATIONS ANALYZED
 WITHIN THE STUDY AREA
 AND THE EXTENDED STUDY AREA**

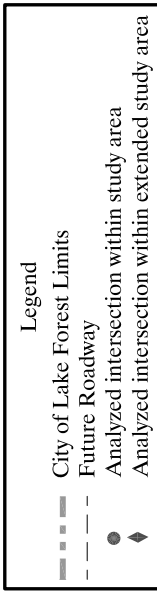


Table ES-4

SUMMARY OF IMPACTED INTERSECTIONS AND POTENTIAL MITIGATION MEASURES (CITY PREFERRED PLAN)

Intersection (NS & EW)	2030 Peak Hour ICU						Mitigation Measures	Source
	Current General Plan		City Preferred Plan					
	AM	PM	Without Mitigation		With Mitigation			
	AM	PM	AM	PM	AM	PM		
2. Bake & Portola	.72	1.03	.75	1.05	.67	.94	Add 3 rd WBT or 2 nd EBL	LFTM Program
14. Bake & Irvine/Trabuco	1.07	1.09	1.14	1.05	.88	.87	Add 2 nd NBL, convert 3 rd WBT and WBR to 4 th WBT and restripe 3 rd EBT to shared 3 rd EBT/2 nd EBR Add defacto WBR	NITM Program LFTM Program
22. Bake & Jeronimo	.94	.82	1.02	.85	.90	.85	Add 2 nd NBL	NITM Program
30. Los Alisos & Muirlands	1.03	1.08	.98	1.14	.86	.91	Add 2 nd NBL, defacto NBR, 2 nd SBL and 2 nd EBL	NITM and LFTM Programs
37. Paseo De Valencia & Carlota	.67	.98	.63	1.01	.58	.87	Restripe 2 nd SBT to shared 3 rd SBL/2 nd SBT ¹	NITM and LFTM Programs and Laguna Hills
39. El Toro & Avd Carlota	.72	1.00	.70	1.02	.62	.83	Restripe EB to 2 EBL, EBT and shared 2 nd EBT/EBR and restripe WB to shared WBL/WBT and 2 WBR with overlap	NITM and LFTM Programs and Laguna Hills
41. Alton & Towne Centre Dr	.82	1.07	.91	.77	.79	.76	Add 2 nd WBL	LFTM Program
105. Alton & Irvine	.92	.98	.89	1.02	.76	.95	Remove E/W split phasing, restripe shared 3 rd EBL/3 rd EBT to full 3 rd EBL and add 3 rd EBT and defacto EBR	LFTM Program
117. Alton & Toledo	.73	.84	.71	.92	.66	.87	Add a WB right-turn overlap	LFTM Program
125. Bake & Rockfield	.66	.89	.71	.92	.69	.89	Restripe shared 3 rd WBL/2 nd WBT to full 3 rd WBL, remove E/W split phasing and free WBR and add 2 nd WBT and defacto WBR	LFTM Program

Abbreviations:

LFTM – Lake Forest Transportation Mitigation Program

NITM – North Irvine Transportation Mitigation Program

¹ Includes construction of a third eastbound receiving lane for the third southbound left-turn lane.

Table ES-5

SUMMARY OF IMPACTED INTERSECTIONS AND POTENTIAL MITIGATION MEASURES (LANDOWNERS PLAN)

Intersection (NS & EW)	2030 Peak Hour ICU						Mitigation Measures	Source
	Current General Plan		Landowners Plan					
			Without Mitigation		With Mitigation			
AM	PM	AM	PM	AM	PM			
14. Bake & Irvine/Trabuco	1.07	1.09	1.15	1.05	.89	.87	Add 2 nd NBL, convert 3 rd WBT and WBR to 4 th WBT and restripe 3 rd EBT to shared 3 rd EBT/2 nd EBR Add defacto WBR	NITM Program LFTM Program
17. El Toro & Trabuco	.89	.99	.92	1.01	.88	.88	Add defacto NBR and defacto WBR	LFTM Program
22. Bake & Jeronimo	.94	.82	1.03	.87	.91	.87	Add 2 nd NBL	NITM Program
26. Los Alisos & Jeronimo	.91	.96	.93	.95	.87	.89	Restripe WB and remove WBR to 2 WBL, 2 WBT and add defacto WBR and 2 nd EBL	NITM and LFTM Programs
30. Los Alisos & Muirlands	1.03	1.08	.103	1.12	.89	.90	Add 2 nd NBL, defacto NBR, 2 nd SBL and 2 nd EBL	NITM and LFTM Programs
37. Paseo De Valencia & Carlota	.67	.98	.63	1.01	.58	.87	Restripe 2 nd SBT to shared 3 rd SBL/2 nd SBT ¹	NITM and LFTM Programs and Laguna Hills
39. El Toro & Avd Carlota	.72	1.00	.70	1.02	.60	.88	Restripe EB to 2 EBL, EBT and shared 2 nd EBT/EBR and restripe WB to shared WBL/WBT and 2 WBR with overlap	NITM and LFTM Programs and Laguna Hills
41. Alton & Towne Centre Dr	.82	1.07	.92	.77	.79	.76	Add 2 nd WBL	LFTM Program
105. Alton & Irvine	.92	.98	.90	1.02	.77	.95	Remove E/W split phasing, restripe shared 3 rd EBL/3 rd EBT to full 3 rd EBL and add 3 rd EBT and defacto EBR	LFTM Program
117. Alton & Toledo	.73	.84	.72	.91	.67	.86	Add a WB right-turn overlap	LFTM Program
125. Bake & Rockfield	.66	.89	.69	.92	.67	.89	Restripe shared 3 rd WBL/2 nd WBT to full 3 rd WBL, remove E/W split phasing and free WBR and add 2 nd WBT and defacto WBR	LFTM Program

Abbreviations:

LFTM – Lake Forest Transportation Mitigation Program

NITM – North Irvine Transportation Mitigation Program

¹ Includes construction of a third eastbound receiving lane for the third southbound left-turn lane.

Chapter 1.0

INTRODUCTION

This report presents the findings of a traffic study carried out for the proposed land use changes in six development areas referred to as the Vacant Land Opportunities areas in the City of Lake Forest. The six development areas are henceforth referred to in this report as the “project sites” and include Shea/Baker (Site 1), Portola Center (Site 2), Irvine Ranch Water District (IRWD) (Site 3), Baker Ranch (Site 4), Whisler/Greystone (Site 5), and Peachwood/Pacific Heritage (Site 6) properties.

Three conditions are analyzed for the project areas; Current General Plan buildout, the City of Lake Forest Preferred Plan, and a Landowners Plan. For each of these conditions, the study evaluates the potential traffic impacts of the project area land use plans (City Preferred Plan and Landowners Plan) in relation to the Current General Plan land uses. The traffic study was conducted to prepare the traffic and circulation material to be included in the overall Environmental Impact Report (EIR) for the General Plan Amendment (GPA) for the areas addressed in the study.

ANALYSIS SCOPE AND METHODOLOGY

The locations of the project areas are illustrated in Figure 1-1. Phases I and II of the Vacant Land Opportunities work effort established a general framework for development in these areas and resulted in two land use plans. They are referred to as the “City Preferred Plan” and the “Landowners Plan.” The Landowners Plan has 1,202 more residential units than the City Preferred Plan but 150,000 less square feet of retail uses. While the differences are not substantial, both are analyzed here in the same level of detail. The analysis compares the proposed land use plans for these project areas with the land uses that would occur under the Current General Plan. The primary difference under the proposed land use plans compared to the Current General Plan is the substitution of 6.7 million square feet of business park uses in the Current General Plan by 5,415 and 6,617 residential units in the City Preferred Plan and Landowners Plan, respectively.

In addition to land use proposals for the project areas the overall project includes an overlay plan which will locate a sports park, community center and city hall in an area currently occupied by a nursery. Three of five candidate sites for these public and community facilities are locations owned by

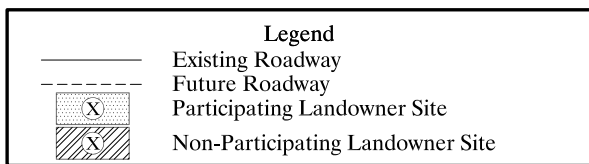
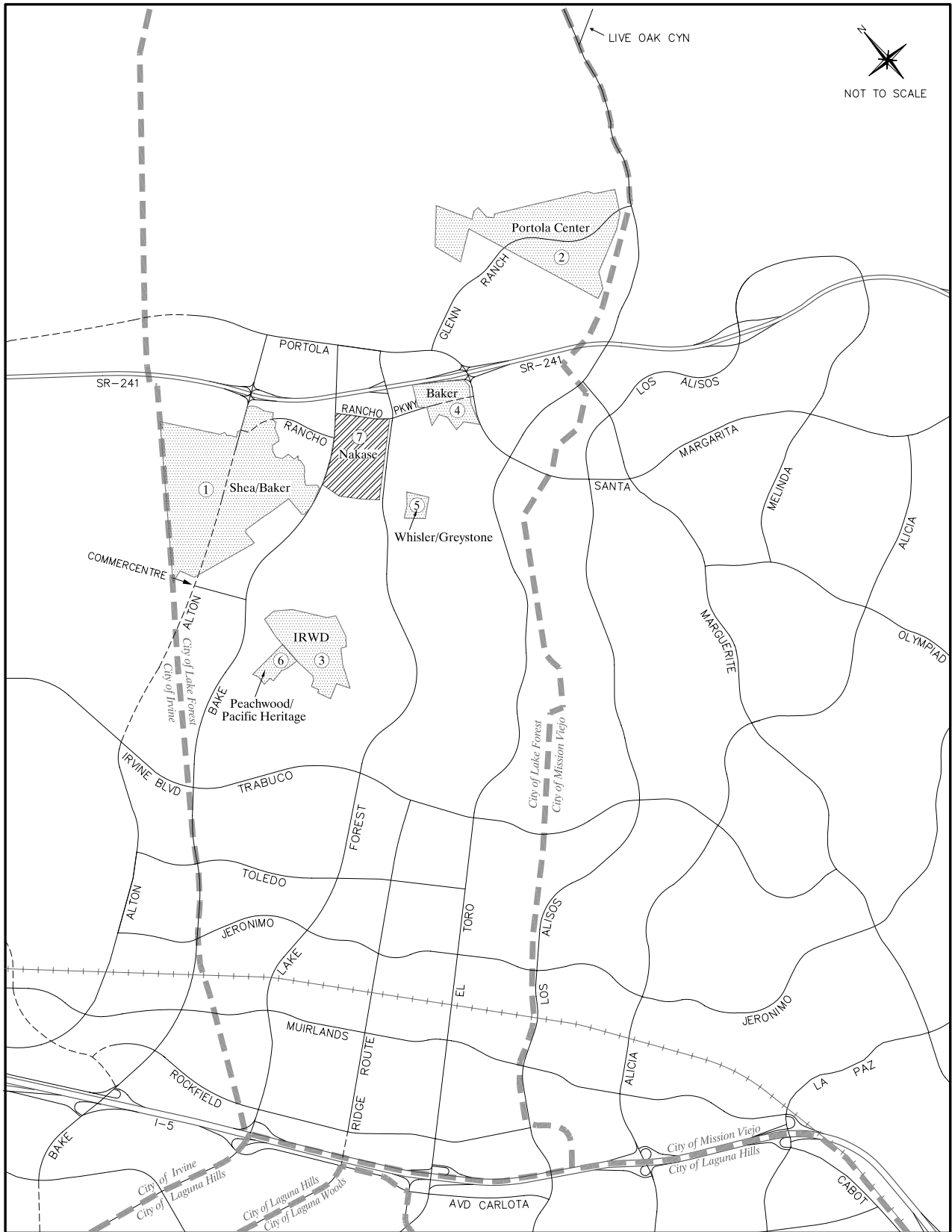


Figure 1-1
PROJECT SITES

participating landowners and two are on non-participating landowner properties. While there is a preferred site at this time, which is discussed below, the overlay plan recognizes that all five locations have the potential to provide space for such amenities. The approach taken in the traffic study has been to make a special evaluation of all locations, and make findings with respect to the traffic implications of each.

Included in the City Preferred Plan is the overlay plan consisting of 6 acres of public facility uses (88,000 square feet of a community center and city hall) and a 39-acre sports park on a 45-acre portion of the Nakase property (see Site 7 in Figure 1-1). The Nakase property is a non-participating landowner, and the public facility uses would replace approximately 683,000 square feet of business park uses in the General Plan. The trip generation summary below reveals that the minimal change in trip generation would result in minor differences in the findings and conclusions presented in this report.

Site 7 (Nakase) – General Plan								
Business Park	1,841.7 TSF	2,210	424	2,634	553	1,823	2,376	23,500
Site 7 (Nakase) – City Preferred Plan								
Government Facility	88 TSF	173	21	194	77	173	250	2,457
Business Park	1,159 TSF	1,391	267	1,658	348	1,147	1,495	14,788
Sports Park	39 Acre	0	0	0	133	160	293	2,098
Total		1,564	288	1,852	558	1,480	2,038	19,343
Total Difference Site 7 (Nakase)		-646	-136	-782	5	-343	-338	-4,157

This traffic study uses a long-range buildout time frame to compare future traffic conditions in the study area under Current General Plan land uses with conditions under the proposed land use changes. Impacts are identified according to specific criteria and mitigation measures identified as appropriate.

STUDY AREA

The study area used for the analysis is shown in Figure 1-2, and covers the City of Lake Forest and immediate surrounding roadways (referred to in this report as the extended study area). As can be seen here, it comprises all of the City of Lake Forest and parts of the Cities of Irvine, Laguna Hills, Laguna Woods and Mission Viejo. The study area was defined based on peak hour intersection criteria, and includes all major intersections where the proposed project would increase traffic by more than one percent. This significant impact criteria is consistent with guidelines used by Lake Forest and the surrounding jurisdictions in defining the area of impact for such studies. In addition, the study area was extended into Irvine in response to the City of Irvine’s request.

TRAFFIC FORECASTING METHODOLOGY

The analysis in this report identifies traffic impacts of the proposed project based on 2030 future traffic conditions in the study area. The traffic forecasts within the study area were developed using the Lake Forest Traffic Analysis Model (LFTAM) which is derived from the Orange County Transportation Analysis Model (OCTAM) maintained by the Orange County Transportation Authority (OCTA). The traffic forecasts for the extended study area are based on the City of Irvine's Irvine Transportation Analysis Model (ITAM) used for the North Irvine Transportation Mitigation (NITM) Program (see Reference 3). The LFTAM was used to find the differential between the Current General Plan and each of the land use plans. The differential was then applied to the NITM forecasts resulting in the traffic volumes for the extended study area.

The LFTAM was developed according to the Orange County sub-area traffic modeling guidelines that have been adopted by the OCTA, and the OCTA has certified the traffic model as being consistent with the OCTAM regional model.

For descriptive purposes, the modeling processes in the LFTAM can be divided into the following three general components:

1. Trip Generation
2. Trip Distribution/Mode Choice
3. Traffic Assignment

In the trip generation component of the traffic model, the amount of vehicle traffic generated by existing and future land use development is estimated. In the LFTAM, land use data is defined according to specific land use categories. The information is quantified by traffic analysis zones (TAZs) that have been defined in the City of Lake Forest as well as throughout the remainder of the study model area. For trip generation purposes, land use data is typically comprised of detailed information by acreage or floor area for non-residential uses and number of dwelling units by density classification for residential uses. As part of the modeling process, the land use data is converted to socioeconomic categories such as dwelling units, population, employment, workers per household and income. The socioeconomic categories applied in the traffic model are the same categories that are applied in the OCTAM regional model. Vehicle trip generation estimates for the LFTAM are produced using socioeconomic trip generation rates that yield similar trip generation to land use based trip generation rates.

In the trip distribution/mode choice component of the traffic model, vehicle trip generation estimates are distributed using regional travel forecast data from the OCTAM model, thereby incorporating regional trip distribution patterns into the LFTAM. The regional traffic data is obtained from the OCTAM regional model in the form of vehicle trips, and hence also incorporates mode choice relationships (i.e., vehicle occupancy, transit trips, etc.) established in the OCTAM regional model. The resulting vehicle trip patterns are converted to actual traffic volumes on the roadway system in the traffic assignment component of the LFTAM. The traffic assignment component applies procedures that are sensitive to the capacity of the circulation system network and give forecast peak hour (AM and PM) volumes as well as average daily traffic (ADT) traffic volumes on that network.

PERFORMANCE CRITERIA

Performance criteria are utilized in the analysis to identify future level of service (LOS) on the study area circulation system and also to define impacts and peak hour Intersection Capacity Utilization (ICU) values of significance. Traffic LOS is designated “A” through “F” with LOS “A” representing free flow conditions and LOS “F” representing severe traffic congestion. Table 1-1 summarizes the volume/capacity (V/C) ranges that correspond to LOS “A” through “F” for freeway/tollway segments. The V/C ranges listed for arterial roads are designated in the Orange County Congestion Management Program (CMP) as well as the General Plan for the City of Lake Forest and for the other jurisdictions within the study area in this analysis. The V/C ranges listed for freeway/tollway segments are based on the V/C and LOS relationships specified in the 2000 Highway Capacity Manual (HCM 2000) for basic freeway sections.

The overall performance criteria applied in this study are summarized in Table 1-2. The criteria include components for intersections, freeway/tollway ramps, and freeway/tollway mainline segments and are based on LOS calculation methodologies and performance standards that have been adopted by the City of Lake Forest and/or by governing jurisdictions outside the City of Lake Forest and by the OCTA as part of the CMP. When analyzing individual locations on the study area circulation system, the criteria of the jurisdiction in which a given facility is located has been applied in this study.

The intersection criteria involve the use of peak hour ICU values. The ICU ranges that correspond to LOS “A” through “F” are the same as the V/C ranges shown in Table 1-1 for arterial roads. LOS “E” (ICU not to exceed 1.00) is the performance standard specified for CMP intersections and is applied in this analysis for CMP locations outside the Cities of Lake Forest and Irvine. LOS “E” is also

Table 1-1
 VOLUME/CAPACITY RATIO LEVEL OF SERVICE RANGES

Level of Service (LOS)	----- Volume/Capacity (V/C) Ratio Range-----	
	Arterial Roads	Freeway Segments
A	0.00 – 0.60	0.00 – 0.30
B	0.61 – 0.70	0.31 – 0.50
C	0.71 – 0.80	0.51 – 0.71
D	0.81 – 0.90	0.72 – 0.89
E	0.91 – 1.00	0.90 – 1.00
F	Above 1.00	Above 1.00

Table 1-2

PERFORMANCE CRITERIA FOR LOCATIONS ANALYZED WITHIN THE STUDY AREA

I. Intersections

V/C Calculation Methodology

Level of service to be based on peak hour intersection capacity utilization (ICU) values calculated using the following assumptions:

Saturation Flow Rate: 1,700 vehicles/hour/lane

Clearance Interval: .05

Right-Turn-On-Red Utilization Factor*: .75

* “De-facto” right-turn lane is assumed in the ICU calculation if 19 feet from edge to outside of through-lane exists and parking is prohibited during peak periods.

Performance Standard

CMP intersections outside the Cities of Lake Forest and Irvine, and the intersections of Bake Parkway/I-5 northbound and southbound ramps, Alton Parkway/Irvine Boulevard, Alton Parkway/I-5 northbound ramps and Irvine Center Drive/Lake Forest Drive: Level of Service E (peak hour ICU less than or equal to 1.00).

All other intersections: Level of Service D (peak hour ICU less than or equal to .90).

Mitigation Requirement

For ICU greater than the acceptable level of service, mitigation of the project contribution is required to bring intersection back to acceptable level of service or to no-project (Current General Plan) conditions if project contribution is greater than .03 at CMP locations outside the Cities of Lake Forest and Irvine (the impact threshold specified in the CMP) and .02 or greater for all other intersections in the study area.

II. Freeway/Tollway Ramps

V/C Calculation Methodology

Level of service to be based on peak hour volume/capacity (V/C) ratios calculated using the following capacities:

Metered On-Ramps

A maximum capacity of 900 vehicles per hour (vph) for a one-lane metered on-ramp with only one mixed-flow lane at the meter.

A maximum capacity of 1,080 (20 percent greater than 900) vph for a one-lane metered on-ramp with one mixed-flow lane at the meter plus one high occupancy vehicle (HOV) preferential lane at the meter.

(continued)

Table 1-2 (cont)

PERFORMANCE CRITERIA FOR LOCATIONS ANALYZED WITHIN THE STUDY AREA

II. Freeway/Tollway Ramps (cont)

V/C Calculation Methodology (cont)

Metered On-Ramps (cont)

A maximum capacity of 1,500 vph for a one-lane metered on-ramp with two mixed-flow lanes at the meter.

A maximum capacity of 1,800 vph for a two-lane metered on-ramp with two mixed-flow lanes at the meter.

Toll Ramps (On-Ramps and Off-Ramps)

A maximum capacity of 1,500 vph for a one-lane toll ramp with one cash (stopped) lane and one FasTrak (unstopped) lane.

Non-Metered and Non-Tolled On-Ramps and Off-Ramps

A maximum capacity of 1,500 vph for a one-lane ramp.

A maximum capacity of 2,250 (50 percent greater than 1,500) vph for a two-lane on-ramp that tapers to one merge lane at or beyond the freeway mainline gore point and for a two-lane off-ramp with only one auxiliary lane.

A maximum capacity of 3,000 vph for a two-lane on-ramp that does not taper to one merge lane and for a two-lane off-ramp with two auxiliary lanes.

Performance Standard

Level of Service E (peak hour V/C less than or equal to 1.00).

Mitigation Requirement

For V/C greater than the acceptable level of service, mitigation of the project contribution is required to bring ramp back to acceptable level of service or to no-project (Current General Plan) conditions if project contribution is greater than .03 for ramps at CMP intersections outside the Cities of Lake Forest and Irvine (the impact threshold specified in the CMP) and .02 or greater for all other ramps in the study area.

III. Freeway/Tollway Mainline Segments

V/C Calculation Methodology

Level of service to be based on peak hour V/C ratios calculated using the following capacities:

2,000 vehicles per hour per lane (vphpl) for mixed-flow (general purpose) lanes.

(continued)

Table 1-2 (cont)

PERFORMANCE CRITERIA FOR LOCATIONS ANALYZED WITHIN THE STUDY AREA

II. Freeway/Tollway Mainline Segments (cont)

V/C Calculation Methodology (cont)

1,600 vphpl for a one-lane buffer-separated HOV facility.

1,750 vphpl for a two-lane buffer-separated HOV facility.

Performance Standard

Level of Service E (peak hour V/C less than or equal to 1.00).

Mitigation Requirement

For V/C greater than the acceptable level of service, mitigation of the project contribution is required to bring freeway/tollway mainline location back to acceptable level of service or to no-project (Current General Plan) conditions if project contribution is greater than .03 (the impact threshold specified in the CMP).

Abbreviations: CMP – Orange County Congestion Management Program

the performance standard adopted by the City of Irvine for the intersections of Bake Parkway/I-5 northbound and southbound ramp intersections, Alton Parkway/Irvine Boulevard, Alton Parkway/I-5 northbound ramps and Irvine Center Drive/Lake Forest Drive. LOS “D” (ICU not to exceed 0.90) is the performance standard for the remaining intersections in the study area.

The freeway/tollway ramp and freeway/tollway mainline criteria are based on peak hour V/C ratios. The freeway/tollway ramp and mainline capacities applied in this analysis are based on information contained in the Caltrans Ramp Meter Design Manual and Caltrans Highway Design Manual. LOS “E” (V/C not to exceed 1.00) has been established by the OCTA in the CMP for CMP facilities (the freeway/tollway system in the study area is included in the CMP roadway network) as the operating standard for freeway/tollway ramps and freeway/tollway mainline segments.

Tables 1-3 and 1-4 summarize the general LOS descriptions for intersections and freeways/tollways, respectively.

RELATIONSHIP TO OTHER STUDIES

Several recent studies that have been carried out in this area are of relevance to the traffic analysis presented here. These can be briefly summarized as follows:

Vacant Land Opportunities Study Traffic Analysis (Reference 1) – This analysis provided comparative traffic data for Phases I and II of the Vacant Land Opportunities Study and established a general framework for development in the six development areas (Shea/Baker, Baker Ranch, Irvine Ranch Water District (IRWD), Whisler/Greystone, Portola Center, and Peachwood/Pacific Heritage properties). This report represents Phase III of the Vacant Land Opportunities Study and provides a more comprehensive analysis of the impacts of the six development areas.

El Toro Road Traffic and Landscape Improvement Project (Reference 2) – This project by the City of Lake Forest will provide widening and related improvements to the section of El Toro Road from Muirlands Boulevard to the I-5 Freeway. Construction is currently underway to implement the improvements included in this project, which are planned to be completed by late 2005.

North Irvine Transportation Mitigation (NITM) Program Nexus Study (Reference 3) - This report summarized the results of a nexus study carried out as part of the NITM Program. The NITM

Table 1-3

LEVEL OF SERVICE DESCRIPTIONS – SIGNALIZED INTERSECTIONS

Levels of service (LOS) for signalized intersections are defined in terms of control delay as follows:

LOS	DESCRIPTION	DELAY PER VEHICLE (secs)
A	LOS “A” describes operations with low control delay, up to 10 seconds per vehicle. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.	< 10
B	LOS “B” describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than the LOS “A”, causing higher levels of delay.	10 – 20
C	LOS “C” describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.	20 – 35
D	LOS “D” describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At LOS “D”, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35 – 55
E	LOS “E” describes operations with control delay greater than 55 and up to 80 seconds per vehicle. These high delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent.	55 – 80
F	LOS “F” describes operations with control delay in excess of 80 seconds per vehicle. This level, considered unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high V/C ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.	> 80

Source: Highway Capacity Manual 2000, Transportation Research Board, National Research Council

Table 1-4

LEVEL OF SERVICE DESCRIPTIONS – FREEWAYS/TOLLWAYS

LOS	DESCRIPTION
A	LOS “A” describes free-flow operations. Free-flow speeds (FFS) prevail. Vehicles are almost completely unimpeded in their ability to maneuver with the traffic stream. The effects of incidents or point breakdowns are easily absorbed at this level.
B	LOS “B” represents reasonably free-flow, and FFS are maintained. The ability to maneuver with the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents and point breakdowns are still easily absorbed.
C	LOS “C” provides for flow with speeds at or near the FFS of the freeway/tollway. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service will be substantial. Queues may be expected to form behind any significant blockage
D	LOS “D” is the level at which speeds begin to decline slightly with increasing flows and density begins to increase somewhat more quickly. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.
E	At its highest density value, LOS “E” describes operation at capacity. Operations at this level are volatile, because there are virtually no usable gaps in the traffic stream. Vehicles are closely spaced, leaving little room to maneuver with the traffic stream at speeds that still exceed 49 miles per hour. Any disruption of the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown with extensive queuing. Maneuverability with the traffic stream is extremely limited, and the level of physical and psychological comfort afforded the driver is poor.
F	LOS “F” describes breakdowns in vehicular flow. Such conditions generally exist within queues forming behind breakdown points, and are the result of a bottleneck downstream point. LOS “F” is also used to describe conditions at the point of the breakdown or bottleneck and the queue discharge flow that occurs at speeds lower than the lowest speed for LOS “E,” as well as the operations within the queue that forms upstream. Whenever LOS “F” conditions exist, they have the potential to extend upstream for significant distances.

Source: Highway Capacity Manual 2000, Transportation Research Board, National Research Council

Program established a funding mechanism for the transportation improvement mitigation measures identified in the EIRs for three future development projects in north Irvine that are assumed in this traffic study; 1) Spectrum 8/PA40, 2) Irvine Northern Sphere Area (PAs 5B, 6, 8A, 9A and 9B), and 3) the Orange County Great Park. Post-2025 circulation system improvements in the NITM Program that are in the City of Irvine portion of the extended study area have been included in the 2030 buildout scenario of the Phase III traffic impact analysis. Improvements identified in the NITM included intersections in Lake Forest with a specified funding share of those improvements included in the NITM.

City of Irvine Planning Area 6A (PA6A) Traffic Study (Reference 4) - This report presented the findings of a traffic study carried out for a residential and commercial development in a portion of Planning Area 6 (PA6) in the City of Irvine located just northwest of the city boundary with Lake Forest. The report evaluated the potential impacts of the proposed project and provided traffic analysis data for the Vesting Tentative Tract Map (TTM) application (No. 2003-16562) for this development. The proposed PA6A project land uses and circulation are included in the Phase III traffic study as part of the background conditions.

Planning Area 9A (PA9A) Traffic Study (Reference 5) - This traffic study was carried out in support of the Vesting Tentative Tract Map No. 16339 application for development of an area bounded by SandCanyon Avenue, Trabuco Road, Jeffrey Road and Irvine Boulevard. The project is located in an unincorporated part of Orange County within the City of Irvine's Sphere of Influence. The proposed PA9A project land uses and circulation system are included in this traffic study as part of the background conditions.

Planning Area 9C (PA9C) General Plan Amendment (GPA)/Zone Change (Work Force Housing) (Reference 6) Technical Traffic Report - The Sand Canyon Work Force Housing Project located in City of Irvine PA9C in the Irvine Northern Sphere Area was studied in support of a GPA and Zone Change application for this area. The GPA/Zone Change replaced future non-residential development assumed in the previous General Plan with medium/high density residential use referred to as the PA9C Work Force Housing Proposal. The PA9C project site is bounded by Sand Canyon Avenue, the SR-133 toll road, Trabuco Road and Portola Parkway. The Sand Canyon Work Force Housing Project is assumed in the Phase III traffic study as part of the background conditions.

REFERENCES

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4. "City of Irvine Planning Area 6A Traffic Study," Austin-Foust Associates, Inc., August 2004.
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7. "City of Lake Forest Traffic Analysis Model (LFTAM) Traffic Model Description and Validation," Austin-Foust Associates, Inc., January 2005.
8. "City of Lake Forest 2005 Transportation Report," Austin-Foust Associates, Inc., March 2005.
9. "Highway Capacity Manual 2000," Transportation Research Board, National Research Council.
10. "Highway Design Manual," Caltrans, July 1995.
11. "Orange County Congestion Management Program," Orange County Transportation Authority (OCTA), September 2003.

Chapter 2.0

PROJECT DESCRIPTION

In this chapter, the traffic characteristics of the proposed project are described. The Current General Plan and proposed project land use plans are summarized, and the associated project trip generation is presented. This data is used in Chapter 4.0 of this report to analyze the impacts of the project.

PROJECT LAND USE AND TRIP GENERATION

The project sites can be seen in Figure 2-1 labeled according to the current ownership of each site. Tables 2-1 through 2-3 summarize the land use and trip generation in the project sites for buildout (2030) under Current General Plan, City Preferred Plan and Landowners Plan project conditions, respectively. Tables 2-1 through 2-3 summarize the buildout land use and trip generation for the project sites, and detailed land use and trip generation summaries for each site can be found in Appendix A.

The Landowners Plan has 1,202 more residential units than the City Preferred Plan but 150,000 less square feet of retail uses. While the differences are not substantial, both are analyzed here in the same level of detail. The primary difference under the proposed land use plans compared to the Current General Plan is the substitution of 6.7 million square feet of business park uses in the Current General Plan by 5,415 and 6,617 residential units in the City Preferred Plan and Landowners Plan, respectively.

As can be seen from the tables, the City Preferred Plan compared with the Current General Plan shows lower ADT trip generation and lower total peak hour trip generation. However, there is a change in peak hour directionality associated with residential uses replacing industrial uses resulting in higher outbound volumes in the AM peak hour and higher inbound volumes in the PM peak hour. The Landowners Plan has similar trip generation characteristics to the City Preferred Plan.

In addition to land use proposals for the project areas the overall project includes an overlay plan which will locate a sports park, community center and city hall in an area currently occupied by a nursery. Three of five candidate sites for these public and community facilities are locations owned by participating landowners and two are on non-participating landowner properties. While there is a

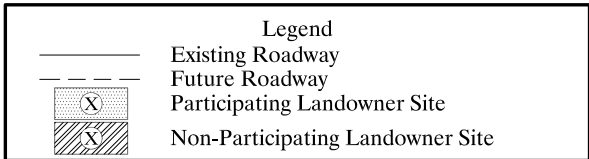
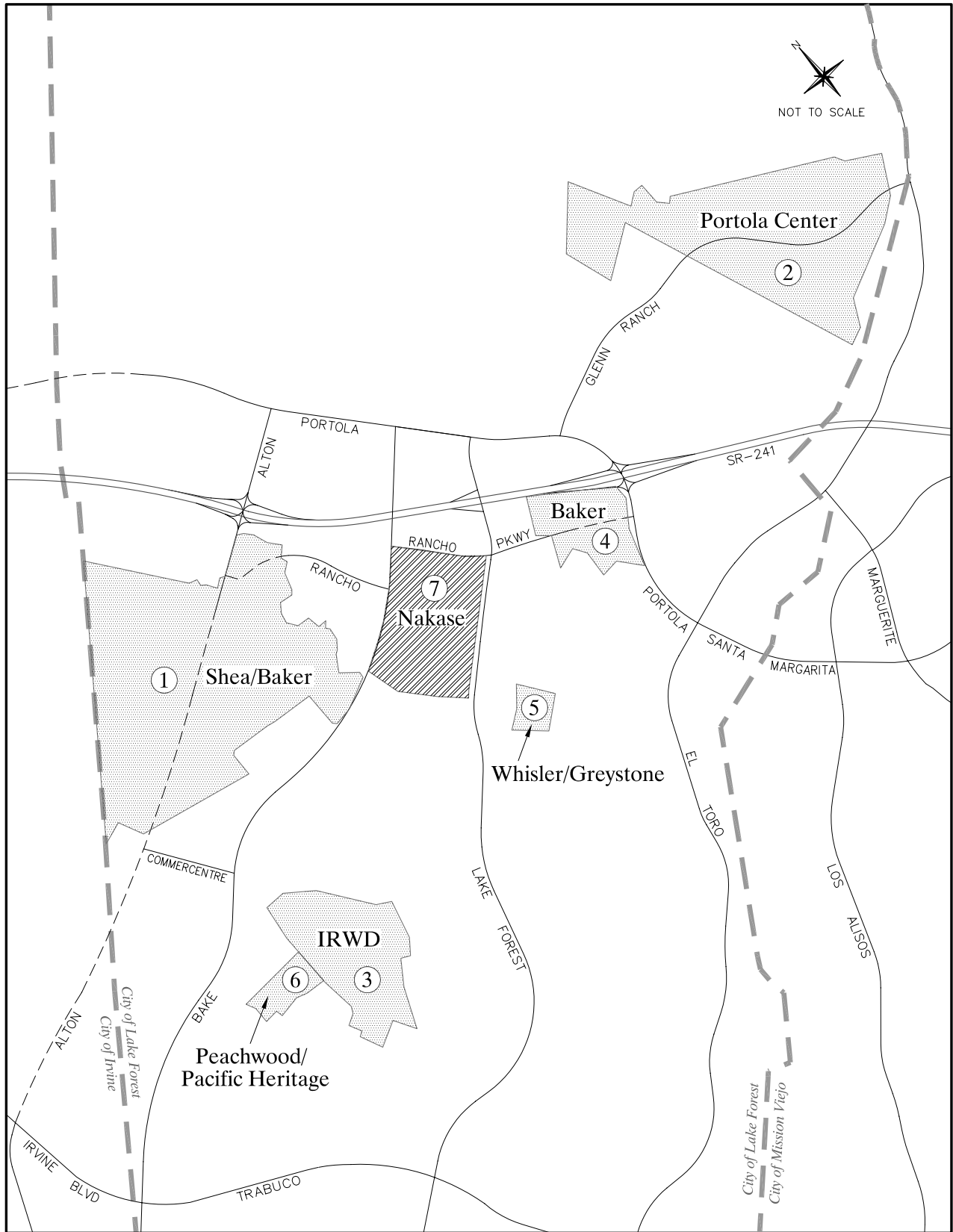


Figure 2-1
PROJECT SITES

Table 2-1

CURRENT GENERAL PLAN (PROJECT AREA) LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Commercial (EQ)	924.18 TSF	610	389	999	1,739	1,884	3,623	41,653
Office (EQ)	186.33 TSF	265	36	301	49	241	290	2,154
Open Space	47 Acre	0	0	0	0	0	0	0
Park	17 Acre	0	0	0	0	0	0	27
Mining/Utility	23 Acre	36	21	57	14	17	31	573
Business Park	6726.3 TSF	8,071	1,547	9,618	2,018	6,659	8,677	85,828
Light Industrial	415.91 TSF	2,591	532	3,123	665	2,354	3,019	21,544
Mini Storage	26 Acre	36	36	72	52	48	100	1,011
Project Sites 1-6 (using trip rates below)		11,609	2,561	14,170	4,537	11,203	15,740	152,790
Trip Rates (Land-Use Based)								
Open Space	Acre	.00	.00	.00	.00	.00	.00	.00
Park	Acre	.01	.00	.01	.02	.02	.04	1.59
Mining/Utility	Acre	1.57	0.92	2.49	0.59	.73	1.32	24.9
Business Park	TSF	1.20	.23	1.43	.30	.99	1.29	12.76
Light Industrial	TSF	6.23	1.28	7.51	1.60	5.66	7.26	51.80
Mini Storage	Acre	1.40	1.40	2.80	1.99	1.84	3.83	38.87

Notes:

- 1) The trip rates above and regression equations below have been taken from the Institute of Transportation Engineers (ITE) 7th Edition Trip Generation Manual.
- 2) The land use-based trip rates for office and commercial use are based on the following equation:

$$LN(T)=AxLN(X)+B \text{ where } X=\text{land use amount (combined TSF in the TAZ) and } T=\text{daily trips}$$

Land Use Type	Units	Coefficients		----- AM Peak Hour -----			----- PM Peak Hour -----		
		A	B	Ratio	In	Out	Ratio	In	Out
Commercial	TSF	.65	5.83	.024	61%	39%	.087	48%	52%
Office	TSF	.77	3.65	.14	88%	12%	.135	17%	83%

Abbreviations: ADT – average daily trips
 DU – Dwelling Unit
 EQ – equation-based
 TSF – thousand square feet

Table 2-2

CITY PREFERRED PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Single Family Detached	1,574 DU	298	881	1,179	1,007	582	1,589	15,063
Condominium	2,042 DU	347	1,023	1,370	919	674	1,593	16,642
Apartment	1,799 DU	180	738	918	719	396	1,115	12,090
Commercial (EQ)	448.72 TSF	386	248	634	1,102	1,194	2,296	26,389
Park	51 Acre	0	0	0	1	1	2	80
Business Park	200 TSF	240	46	286	60	198	258	2,552
Project Sites 1-6 (using trip rates below)		1,451	2,936	4,387	3,808	3,045	6,853	72,816
Trip Rates (Land-Use Based)								
Single Family Detached	DU	.19	.56	.75	.64	.37	1.01	9.57
Condominium	DU	.17	.50	.67	.45	.33	.78	8.15
Apartment	DU	.10	.41	.51	.40	.22	.62	6.72
Park	Acre	.01	.00	.01	.02	.02	.04	1.59
Business Park	TSF	1.20	.23	1.43	.30	.99	1.29	12.76

Notes:

- 1) The City Preferred Plan also includes 6 acres of public facility uses consisting of 88,000 square feet of a community center and city hall and a 39-acre sports park on a 45-acre portion of the Nakase property (see Site 7 in Figure 2-1).
- 2) The trip rates above and regression equation below have been taken from the Institute of Transportation Engineers (ITE) 7th Edition Trip Generation Manual.
- 3) The land use-based trip rates for commercial use are based on the following equation:

$$LN(T)=AxLN(X)+B \text{ where } X=\text{land use amount (combined TSF in the TAZ)} \text{ and } T=\text{daily trips}$$

Land Use Type	Units	Coefficients		----- AM Peak Hour -----			----- PM Peak Hour -----		
		A	B	Ratio	In	Out	Ratio	In	Out
Commercial	TSF	.65	5.83	.024	61%	39%	.087	48%	52%

Abbreviations: ADT – average daily trips
 DU – Dwelling Unit
 EQ – equation-based
 TSF – thousand square feet

Table 2-3

LANDOWNERS PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Single Family Detached	1,588 DU	301	889	1,190	1,016	587	1,603	15,197
Condominium	1,613 DU	274	808	1,082	726	532	1,258	13,146
Apartment	3,416 DU	343	1,400	1,743	1,366	753	2,119	22,956
Commercial (EQ)	298.72 TSF	257	165	422	733	794	1,527	17,550
Park	41.4 Acre	0	0	0	0	0	0	65
Business Park	200 TSF	240	46	286	60	198	258	2,552
Project Sites 1-6 (using trip rates below)		1,415	3,308	4,723	3,901	2,864	6,765	71,466
Trip Rates (Land-Use Based)								
Single Family Detached	DU	.19	.56	.75	.64	.37	1.01	9.57
Condominium	DU	.17	.50	.67	.45	.33	.78	8.15
Apartment	DU	.10	.41	.51	.40	.22	.62	6.72
Park	Acre	.01	.00	.01	.02	.02	.04	1.59
Business Park	TSF	1.20	.23	1.43	.30	.99	1.29	12.76

Notes:

- 1) The trip rates above and regression equation below have been taken from the Institute of Transportation Engineers (ITE) 7th Edition Trip Generation Manual.
- 2) The land use-based trip rates for commercial use are based on the following equation:

$LN(T)=AxLN(X)+B$ where X=land use amount (combined TSF in the TAZ) and T=daily trips

Land Use Type	Units	Coefficients		----- AM Peak Hour -----			----- PM Peak Hour -----		
		A	B	Ratio	In	Out	Ratio	In	Out
Commercial	TSF	.65	5.83	.024	61%	39%	.087	48%	52%

Abbreviations: ADT – average daily trips
 DU – Dwelling Unit
 EQ – equation-based
 TSF – thousand square feet

preferred site at this time, which is discussed below, the overlay plan recognizes that all five locations have the potential to provide space for such amenities. In each case, these facilities would replace other land uses that would otherwise be developed on these sites, resulting in minimal change in overall trip generation. Alternatives to the preferred site are discussed in detail in Chapter 5.0, with trip generation estimates given for each site and findings made with respect to the traffic implications of the uses being located on that site.

Included in the City Preferred Plan is the overlay plan consisting of 6 acres of public facility uses (88,000 square feet of a community center and city hall) and a 39-acre sports park on a 45-acre portion of the Nakase property (see Site 7 in Figure 1-1). The Nakase property is a non-participating landowner, and the public facility uses would replace approximately 683,000 square feet of business park uses in the General Plan. The trip generation summary below reveals that the minimal change in trip generation would result in minor differences in the findings and conclusions presented in this report.

Site 7 (Nakase) – General Plan								
Business Park	1,841.7 TSF	2,210	424	2,634	553	1,823	2,376	23,500
Site 7 (Nakase) – City Preferred Plan								
Government Facility	88 TSF	173	21	194	77	173	250	2,457
Business Park	1,159 TSF	1,391	267	1,658	348	1,147	1,495	14,788
Sports Park	39 Acre	0	0	0	133	160	293	2,098
Total		1,564	288	1,852	558	1,480	2,038	19,343
Total Difference Site 7 (Nakase)		-646	-136	-782	5	-343	-338	-4,157

Chapter 3.0

TRANSPORTATION SETTING

This chapter describes the transportation setting for the proposed project. Existing traffic conditions in the traffic analysis study area are summarized, and the future circulation system within the study area is described.

EXISTING CONDITIONS

The existing circulation system in the study area is illustrated in Figure 3-1 together with existing midblock lanes on arterial roadways and the number of existing travel lanes on freeway/tollway mainline segments. Current average daily traffic (ADT) volumes are illustrated in Figure 3-2. The arterial volumes are from 2004 counts and the volumes on I-5 and SR-241 are 2003 counts provided by Caltrans and the Transportation Corridor Agencies (TCA).

Peak hour intersection turn movement counts were collected for the City of Lake Forest intersection locations shown in Figure 3-3. It should be noted that the traffic forecasts for the extended study area are based on the City of Irvine's Irvine Transportation Analysis Model (ITAM) used for the North Irvine Transportation Mitigation (NITM) Program (see Reference 3). The existing conditions in the extended study area can be found in that document.

Intersection capacity utilization (ICU) values based on these counts are summarized in Table 3-1 and illustrated in Figures 3-4 and 3-5 for AM and PM peak hours, respectively. Actual ICU worksheets can be found in Appendix C. As can be seen here, two locations do not meet the performance criteria: Bake Parkway at Irvine Boulevard /Trabuco Road (AM ICU = .95) and El Toro Road at Avenida de la Carlota (PM ICU = .91).

Existing AM and PM peak hour ramp volumes were taken from intersection counts at each location in the study area where freeway/tollway ramps intersect the arterial system. The observed peak hour ramp volumes were applied together with the ramp capacities described in Chapter 1.0 to calculate existing AM and PM peak hour ramp V/C ratios and corresponding LOSs. The freeway ramp analysis presented here, which analyzes individual ramp locations, differs from the previous peak hour intersection

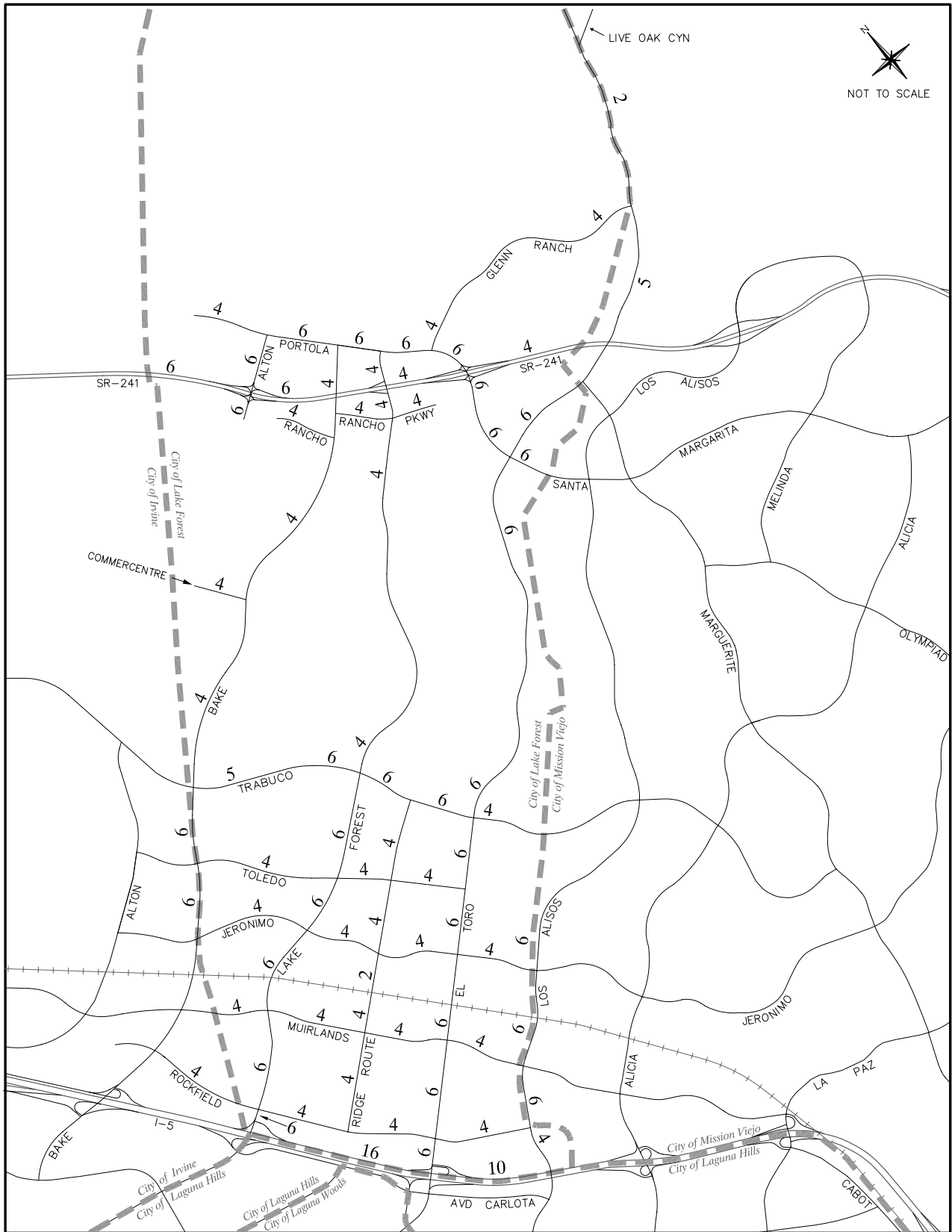


Figure 3-1
EXISTING CIRCULATION SYSTEM
WITH MIDBLOCK LANES

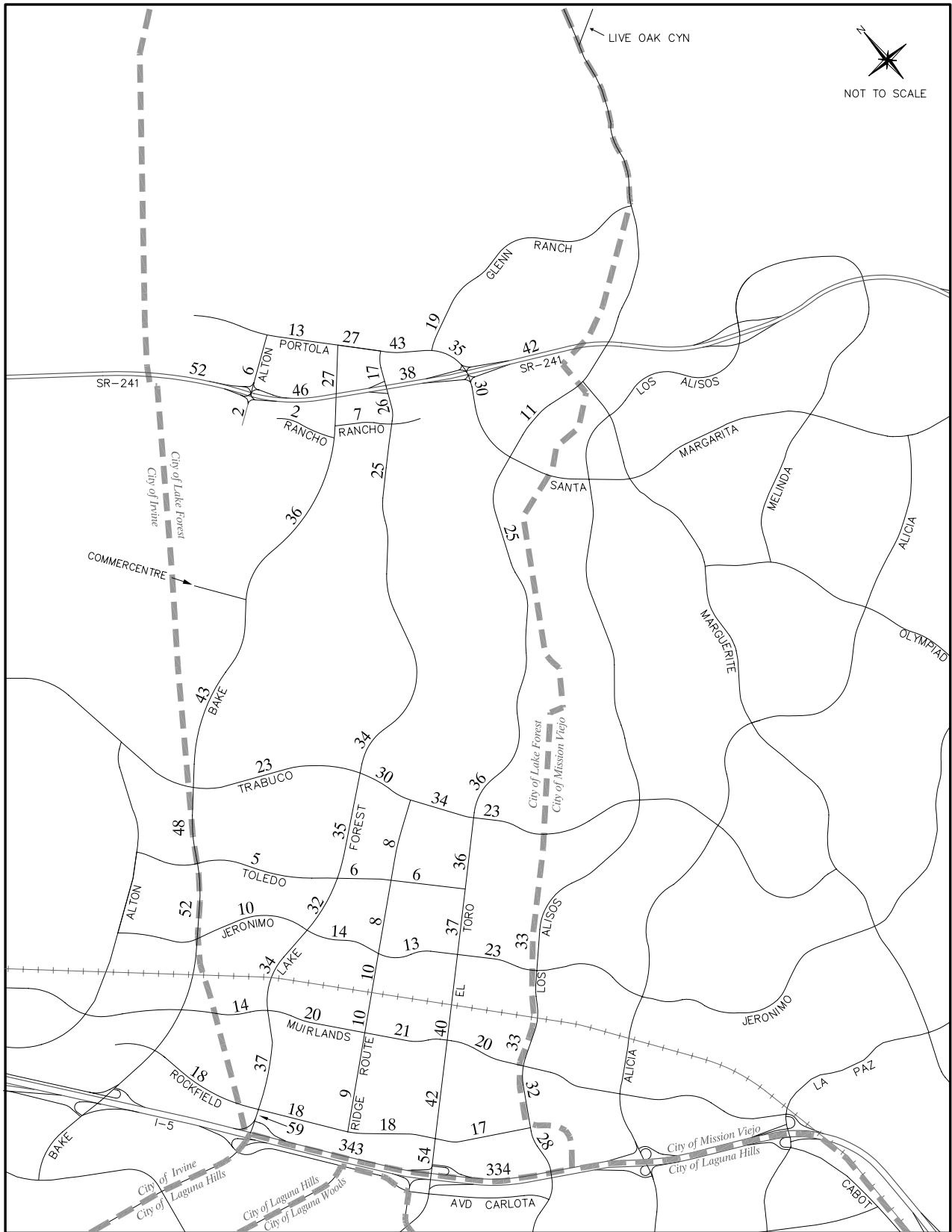


Figure 3-2
EXISTING ADT VOLUMES (000s)

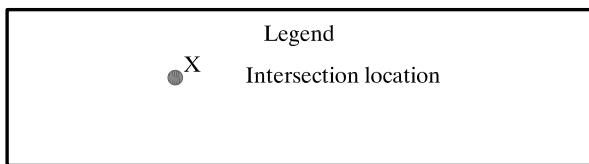


Figure 3-3
EXISTING INTERSECTION LOCATION MAP

Table 3-1
EXISTING INTERSECTION LOS SUMMARY

Loc. # North-South (NS) Road at East-West (EW) Road	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
1. Alton & Portola	.39	A	.24	A
2. Bake & Portola	.58	A	.74	C
3. Lake Forest & Portola	.48	A	.73	C
4. Glenn Ranch & Portola	.59	A	.55	A
5. Portola & SR-241 Ramps	.48	A	.59	A
6. Alton & SR-241 Ramps	.20	A	.26	A
7. Lake Forest & SR-241 NB	.35	A	.42	A
8. Lake Forest & SR-241 SB	.47	A	.48	A
9. Bake & Rancho North	.63	B	.76	C
10. Lake Forest & Rancho	.43	A	.55	A
11. Bake & Rancho South	.70	B	.68	B
12. El Toro & Portola/Santa Margarita	.58	A	.66	B
13. Bake & Commercentre	.64	B	.74	C
14. Bake & Irvine/Trabuco (a)	.95	E	.81	D
15. Lake Forest & Trabuco	.74	C	.74	C
16. Ridge Route & Trabuco	.48	A	.60	A
17. El Toro & Trabuco	.71	C	.68	B
18. Bake & Toledo	.85	D	.62	B
19. Lake Forest & Toledo	.47	A	.44	A
20. Ridge Route & Toledo	.35	A	.37	A
21. El Toro & Toledo	.47	A	.50	A
22. Bake & Jeronimo	.90	D	.75	C
23. Lake Forest & Jeronimo	.62	B	.75	C
24. Ridge Route & Jeronimo	.47	A	.57	A
25. El Toro & Jeronimo	.64	B	.66	B
26. Los Alisos & Jeronimo	.79	C	.80	C
27. Lake Forest & Muirlands	.56	A	.78	C
28. Ridge Route & Muirlands	.48	A	.66	B
29. El Toro & Muirlands	.54	A	.73	C
30. Los Alisos & Muirlands	.78	C	.90	D
31. Lake Forest & Rockfield	.62	B	.66	B
32. Ridge Route & Rockfield	.43	A	.55	A
33. El Toro & Rockfield	.62	B	.74	C
34. Los Alisos & Rockfield	.71	C	.74	C
35. Lake Forest & I-5 NB	.53	A	.61	B
36. Lake Forest & I-5/Carlota	.64	B	.78	C
37. Paseo De Valencia & Carlota	.49	A	.76	C
38. El Toro & Bridger/I-5 NB	.70	B	.74	C
39. El Toro & Avd Carlota (a)	.60	A	.91	E

Abbreviations: ICU – intersection capacity utilization NB – northbound
LOS – level of service SB – southbound

(a) This location currently operates deficiently in the AM and/or PM peak hour (i.e., the forecasted LOS is worse than the adopted LOS performance standard).

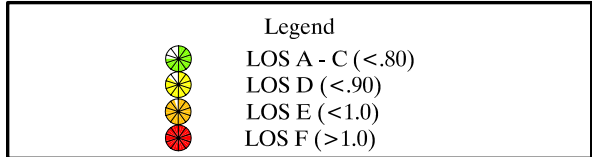


Figure 3-4
EXISTING AM PEAK HOUR ICUs AND LEVEL OF SERVICE

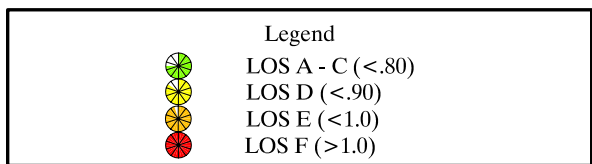


Figure 3-5
EXISTING PM PEAK HOUR ICUs AND LEVEL OF SERVICE

analysis that included ramp intersections with arterial streets. The ramp analysis involves the peak hour V/C of the ramp itself whereas the intersection analysis involves the ICU value of the ramp intersection with the arterial street. Figure 3-6 illustrates the interchange locations where freeway/tollway ramps were analyzed, and Table 3-2 summarizes existing peak hour V/C ratios for freeway/tollway ramps in the study area. The results indicate that the only ramp location in the study area currently operating worse than the LOS “E” performance standard is the I-5 southbound off-ramp at Lake Forest Drive (PM LOS = F).

To determine existing peak hour operating conditions for mainline freeway and tollway segments, peak hour traffic count data was compiled for the freeway and tollway system in the traffic analysis study area. AM and PM peak hour traffic count data was obtained from Caltrans and the TCA, and that data was supplemented with AM and PM peak hour ramp volumes taken from intersection count data at locations where freeway/tollway ramps intersect the arterial system (the freeway/tollway ramp data was used to determine mainline peak hour volumes upstream and/or downstream from the locations where Caltrans and TCA count data was available).

The observed AM and PM peak hour freeway/tollway mainline volumes were applied together with the capacities described in Chapter 1.0 for mixed-flow (general purpose) lanes and high-occupancy vehicle (HOV) lanes to calculate existing peak hour V/C ratios, by direction, for freeway/tollway mainline segments in the study area. When evaluating existing freeway/tollway conditions (i.e., based on traffic count data), the V/C and LOS criteria are applicable only in situations where the observed traffic volume occurs in stable flow. When the peak hour V/C ratio on a freeway/tollway mainline segment nears 1.0, unstable conditions can occur which may result in a breakdown in traffic flow. This breakdown in flow causes a reduction in capacity (vehicle speeds drop below the speed at which maximum capacity is available), and hence the V/C increases, causing a further reduction in speed. The result is stop-and-go conditions. At the same time, the reduction in capacity and increase in V/C causes queue build-up and the stop-and-go conditions can extend for a considerable distance upstream of the problem freeway/tollway segment. Furthermore, this occurrence, and its severity (i.e., length of queue), can vary from day to day even when day-to-day fluctuations in traffic volumes are relatively small.

Speed and travel time measurements taken by Caltrans for the freeway/tollway system give a measure of when and where such conditions occur (i.e., for the day or days on which such measurements are taken). Specific LOS values are assigned based on the measured speeds, the LOS being derived by comparing the measured speed with a minimum desirable operating speed (typically 35 mph). The travel time studies also reveal deficient freeway/tollway segments that are not in themselves a capacity problem,

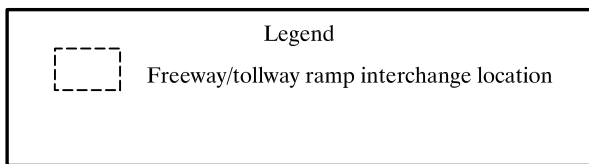
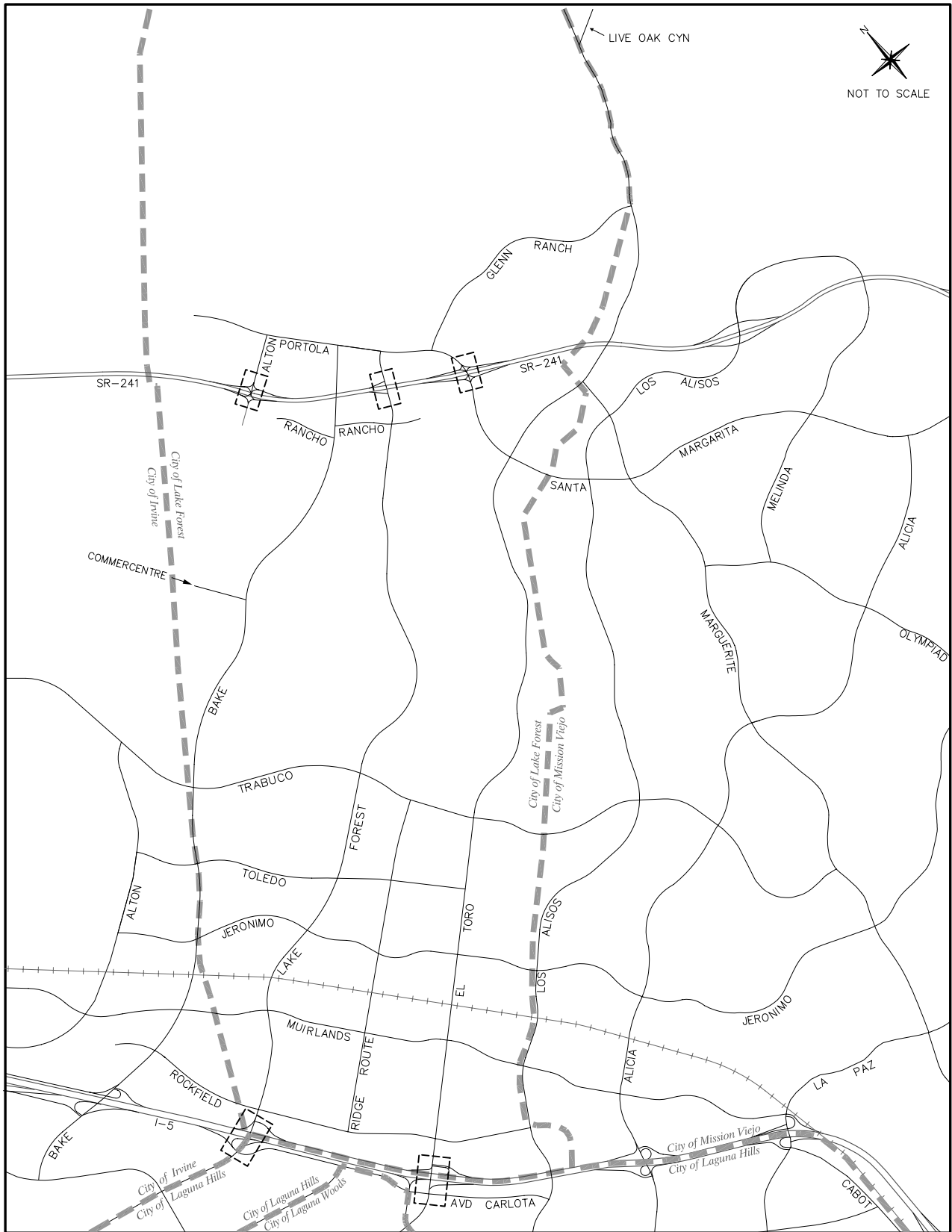


Figure 3-6

EXISTING INTERCHANGE LOCATIONS

Table 3-2

EXISTING FREEWAY/TOLLWAY RAMP LOS SUMMARY

Interchange	Ramp	Lanes	Peak Hour Capacity	AM Peak Hour			PM Peak Hour		
				Volume	V/C	LOS	Volume	V/C	LOS
I-5 at Lake Forest	SB Direct On	1	1,500	66	.04	A	926	.62	B
	SB Loop On	1	1,080	568	.53	A	821	.76	C
	NB On	2	1,800	1,136	.63	B	879	.49	A
	SB Off	2	3,000	2,068	.69	B	3,053	1.02	F
	NB Off	1	1,500	1,171	.78	C	662	.44	A
I-5 at El Toro	SB Direct On	1	1,080	47	.04	A	431	.40	A
	SB Loop On	1	1,500	649	.43	A	986	.66	B
	NB Direct On	1	1,500	1,135	.76	C	765	.51	A
	NB Loop On	1	1,080	871	.81	D	743	.69	B
	SB Off	2	2,250	1,351	.60	A	1,213	.54	A
	NB Off	1	1,500	1,051	.70	B	1,142	.76	C
SR-241 at Alton	SB On	1	1,500	154	.10	A	152	.10	A
	NB On	1	1,500	482	.32	A	283	.19	A
	SB Off	1	1,500	253	.17	A	420	.28	A
	NB Off	1	1,500	161	.11	A	129	.09	A
SR-241 at Lake Forest	NB On	2	2,250	228	.10	A	434	.19	A
	SB Off	1	1,500	468	.31	A	261	.17	A
SR-241 at Portola (East)	SB On	1	1,500	291	.19	A	932	.62	B
	NB On	2	2,250	893	.40	A	276	.12	A
	SB Off	1	1,500	245	.16	A	580	.39	A
	NB Off	2	2,250	1,661	.74	C	382	.17	A

but which are adversely affected by queue build-up from a deficient segment downstream. Hence, LOS values as determined from speed measurements may not equate to the V/C because a queue can extend back from a deficient segment to a segment with a relatively low V/C.

For these reasons, the V/C LOS is not always a true indication of the actual operating LOS on a freeway/tollway segment, particularly when a high V/C ratio on a given segment adversely affects upstream segments because of queue build-up. The upstream segment may have a relatively low V/C and thereby imply satisfactory operating conditions, but stop-and-go conditions extending back to this segment would cause it to actually be operating under congested conditions.

Table 3-3 summarizes existing AM and PM peak hour V/C ratios for freeway/tollway mainline segments in the study area. The table shows the LOSs derived from the V/C ratios together with operating LOSs determined from Caltrans field measurements as summarized in the 2003 Orange County Congestion Management Program (Orange County Transportation Authority, 2003 Edition). The existing peak hour freeway/tollway mainline segment V/C and speed/travel time survey LOS analysis results indicate that I-5 in the study area currently operates at LOS “F” (i.e., worse than the LOS “E” performance standard) in the northbound direction during the AM and in the southbound direction during the PM.

Note that future traffic volumes presented in this report represent “demand” and no attempt is made to estimate operating conditions such as discussed here (i.e., only the V/C LOS based on the future demand traffic volume is reported).

PLANNED CIRCULATION SYSTEM

The long-range buildout circulation system used in this analysis assumes the current Master Plan of Arterial Highways (MPAH) for the study area circulation system. This comprises improvements that are committed for construction (i.e., public agency capital improvement programs, state transportation improvement program, etc.) or would be constructed as part of previously entitled development, plus non-committed improvements required to complete the MPAH system.

Table 3-4 lists the improvements within the study area, subdivided into the committed and non-committed categories. The circulation system that is planned for 2030 (i.e. the MPAH) is illustrated in

Table 3-3

EXISTING FREEWAY/TOLLWAY MAINLINE PEAK HOUR LOS SUMMARY

Location	Direction	Lanes	Peak Hour Capacity	AM Peak Hour				PM Peak Hour			
				Volume	V/C	V/C LOS	Caltrans LOS (a)	Volume	V/C	V/C LOS	Caltrans LOS (a)
I-5 n/o Lake Forest	Northbound	8+2H	19,500	14,300	.73	D	F ⁰	10,350	.53	C	E
	Southbound	8+2H	19,500	10,230	.52	C	E	13,660	.70	C	F ²
I-5 n/o El Toro	Northbound	6+2H	15,500	13,520	.87	D	F ⁰	10,010	.65	C	E
	Southbound	6+2H	15,500	8,880	.57	C	E	12,210	.79	D	F ³
I-5 n/o Alicia	Northbound	4+1H	9,600	12,250	1.28	F	F ³	9,290	.97	E	E
	Southbound	4+1H	9,600	8,350	.87	D	E	12,040	1.25	F	F ³
SR-241 n/o Alton	Northbound	3	6,000	4,930	.82	D	E	1,610	.27	A	B
	Southbound	3	6,000	1,450	.24	A	B	3,570	.60	C	D
SR-241 n/o Lake Forest	Northbound	3	6,000	4,590	.77	D	D	1,440	.24	A	B
	Southbound	3	6,000	1,300	.22	A	B	3,290	.55	C	D
SR-241 n/o Portola East	Northbound	3	6,000	4,360	.73	D	D	1,010	.17	A	B
	Southbound	3	6,000	830	.14	A	B	3,030	.51	C	D
SR-241 n/o Los Alisos	Northbound	3	6,000	5,130	.86	D	D	1,110	.19	A	B
	Southbound	3	6,000	880	.15	A	B	3,380	.56	C	D

Abbreviations: H – high-occupancy vehicle lane
 LOS – level of service
 V/C – volume/capacity ratio

(a) Caltrans LOS values are from speed and travel time surveys carried out by Caltrans as summarized in the 2003 Orange County Congestion Management Program. The measured speeds in each segment reflect queue build-up from a downstream deficient segment and/or other prevailing conditions at the time the surveys were conducted. The superscript values for LOS “F” (i.e., 0, 1, 2, 3) represent different lengths of time during which congested conditions occur in the peak period.

Table 3-4

**SUMMARY OF COMMITTED AND NON-COMMITTED ROADWAY IMPROVEMENTS
IN LAKE FOREST AND IMMEDIATE VICINITY**

Roadway	Limits	Jurisdiction	Lanes		Source
			2004	2030	
COMMITTED					
Alton Pkwy	Irvine Blvd to SR-241	Irvine/ Lake Forest	--	6D	Foothill Circulation Phasing Program administered by the County and Measure M
El Toro Rd	Muirlands Blvd to I-5	Lake Forest	6D	8D	City of Lake Forest and Measure M
Rancho Pkwy	Alton Pkwy to Bake Pkwy	Lake Forest	--	4D	Shea/Baker
Rancho Pkwy	Lake Forest Dr to Portola Pkwy	Lake Forest	--	4D	Shea/Baker
SR-133	I-5 to Irvine Blvd	Caltrans/TCA	4T	6T	TCA CIP
SR-133	Irvine Blvd to SR-241	Caltrans/TCA	6T	8T	TCA CIP
SR-133	Interchange at Trabuco Rd	Irvine/ Caltrans/TCA	--	I/C	NITM Program
SR-241	SR-133 to SR-261	Caltrans/TCA	5T	6T	TCA CIP
SR-241	Lake Forest Dr to Los Alisos Blvd	Caltrans/TCA	4T	8T	TCA CIP
SR-241	Portola Pkwy (W) to Lake Forest Dr	Caltrans/TCA	6T	8T	TCA CIP
NON-COMMITTED					
El Toro Rd	Glenn Ranch Rd to Live Oak Canyon Rd	Lake Forest/ County	2U	6D	Unfunded
El Toro Rd	Marguerite Pkwy to Glenn Ranch Rd	Mission Viejo	5D	6D	Unfunded
El Toro Rd	Trabuco Rd to Muirlands Blvd	Lake Forest	6D	8D	Unfunded
Los Alisos Blvd	Rockfield Blvd to Avd Carlota	Lake Forest/ Laguna Hills	4U	6D	Unfunded
Portola Pkwy	Alton Pkwy to SR-241	County	--	4D	Unfunded
Portola Pkwy	SR-241 to Rancho Santa Margarita	Lake Forest	6D	8D	Unfunded
Ridge Route Dr	Rockfield Blvd to Avd Carlota	Lake Forest/ Laguna Hills	--	4U	Unfunded
Ridge Route Dr	Jeronimo Rd to Muirlands Blvd at the railroad crossing	Lake Forest	2U	4U	Unfunded
Trabuco Rd	Bake Pkwy to Lake Forest Dr	Lake Forest	5D	6D	Unfunded
<p>Lane abbreviations: D = Divided Roadway Lane I/C = Interchange T = Toll Road Lane U = Undivided Roadway Lane</p> <p>Other abbreviations: CIP = Capital Improvement Program NITM = North Irvine Transportation Mitigation TCA = Transportation Corridor Agencies</p>					

Figure 3-7. This figure shows the midblock travel lanes on individual arterial road and freeway/tollway mainline segments of the study area circulation system.

For study area intersections, only the committed improvements listed in Table 3-5 were assumed. This enables the impact analysis to develop mitigation measures that identify what improvements would be needed beyond those currently committed. Also, the Lake Forest Transportation Mitigation Program is designed to provide the necessary transportation improvements for the 2030 traffic demands (see discussion in Chapter 5.0 and detailed information in Reference 8).

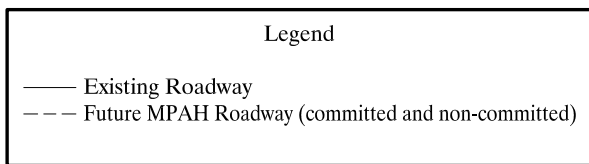


Figure 3-7
2030 CIRCULATION SYSTEM WITH MIDBLOCK LANES

Table 3-5

SUMMARY OF COMMITTED INTERSECTION LANE IMPROVEMENTS

Intersection (NS & EW)	Improvements	Source
6. Alton & SR-241 Ramps	Add 3 rd SBT and 3 rd NBT	County/Irvine/Lake Forest and Measure M
33. El Toro & Rockfield	Add 4 th SBT, WBR, 4 th NBT, defacto NBR and free EBR	Lake Forest and Measure M
38. El Toro & Bridger/I-5 NB Ramps	Add 4 th SBT and convert SBR to shared 5 th SBT/SBR	Lake Forest and Measure M
39. El Toro & Avd Carlota	Add 4 th NBT	City of Laguna Hills
40. Portola & Rancho	New intersection	Baker Ranch
41. Alton & Towne Centre Dr	New intersection	Shea/Baker
42. Alton & Commercentre	New intersection	Shea/Baker

Note: See Table B-1 in Appendix B for detailed lane geometric assumptions for the above intersections.

Chapter 4.0

IMPACT ANALYSIS

In this section, future levels of service on the study area circulation system are summarized for 2030 traffic conditions. Traffic volumes and performance evaluation results for conditions with the Current General Plan land uses are compared with corresponding conditions for the two project land use plan alternatives (City Preferred Plan and Landowners Plan). Project impacts are identified by applying the performance criteria outlined in Chapter 1.0.

TRAFFIC IMPACTS WITHIN STUDY AREA

Year 2030 average daily traffic (ADT) forecasts are illustrated in Figure 4-1 through 4-3 for the Current General Plan, the City Preferred Plan alternative, and the Landowners Plan alternative, respectively. As noted in Chapter 3.0, the roadway network used here is the current County of Orange Master Plan of Arterial Highways (MPAH) and assumes all new roadways implied by buildout of the MPAH.

Figure 4-4 illustrates the intersection locations that were analyzed based on 2030 traffic conditions, and Table 4-1 summarizes AM and PM peak hour intersection capacity utilization (ICU) values and corresponding levels of service (LOS) for Current General Plan and with-project (City Preferred Plan and Landowners Plan) conditions. The ICUs are also illustrated in Figures 4-5 through 4-10. Actual turn volumes and ICU calculation worksheets are provided in Appendix C. Based on the peak hour intersection performance criteria and impact thresholds discussed in Chapter 1.0, there are seven intersections within the study area that are significantly impacted by the City Preferred Plan and eight intersections under the Landowners Plan based on year 2030 conditions. The impacted intersections are as follows:

- 14. Bake Parkway and Irvine Boulevard/Trabuco Road
- 22. Bake Parkway and Jeronimo Road
- 30. Los Alisos Boulevard and Muirlands Boulevard
- 37. Paseo de Valencia and Avenida de la Carlota
- 37. Paseo de Valencia and Avenida de la Carlota
- 39. El Toro Road and Avenida de la Carlota

(Text continued on page 4-14)

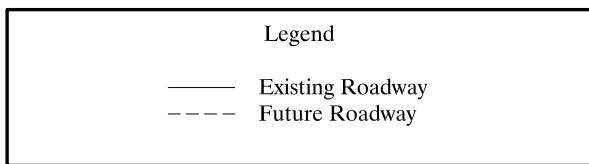


Figure 4-1
 2030 ADT VOLUMES (000s)
 - CURRENT GENERAL PLAN

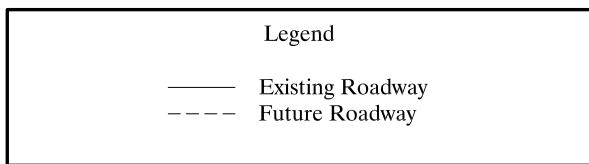


Figure 4-2
 2030 ADT VOLUMES (000s)
 - CITY PREFERRED PLAN

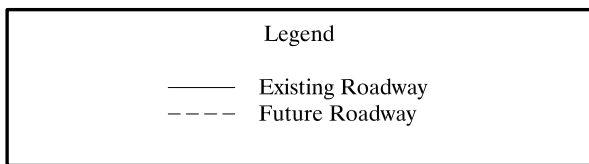
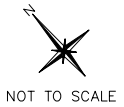
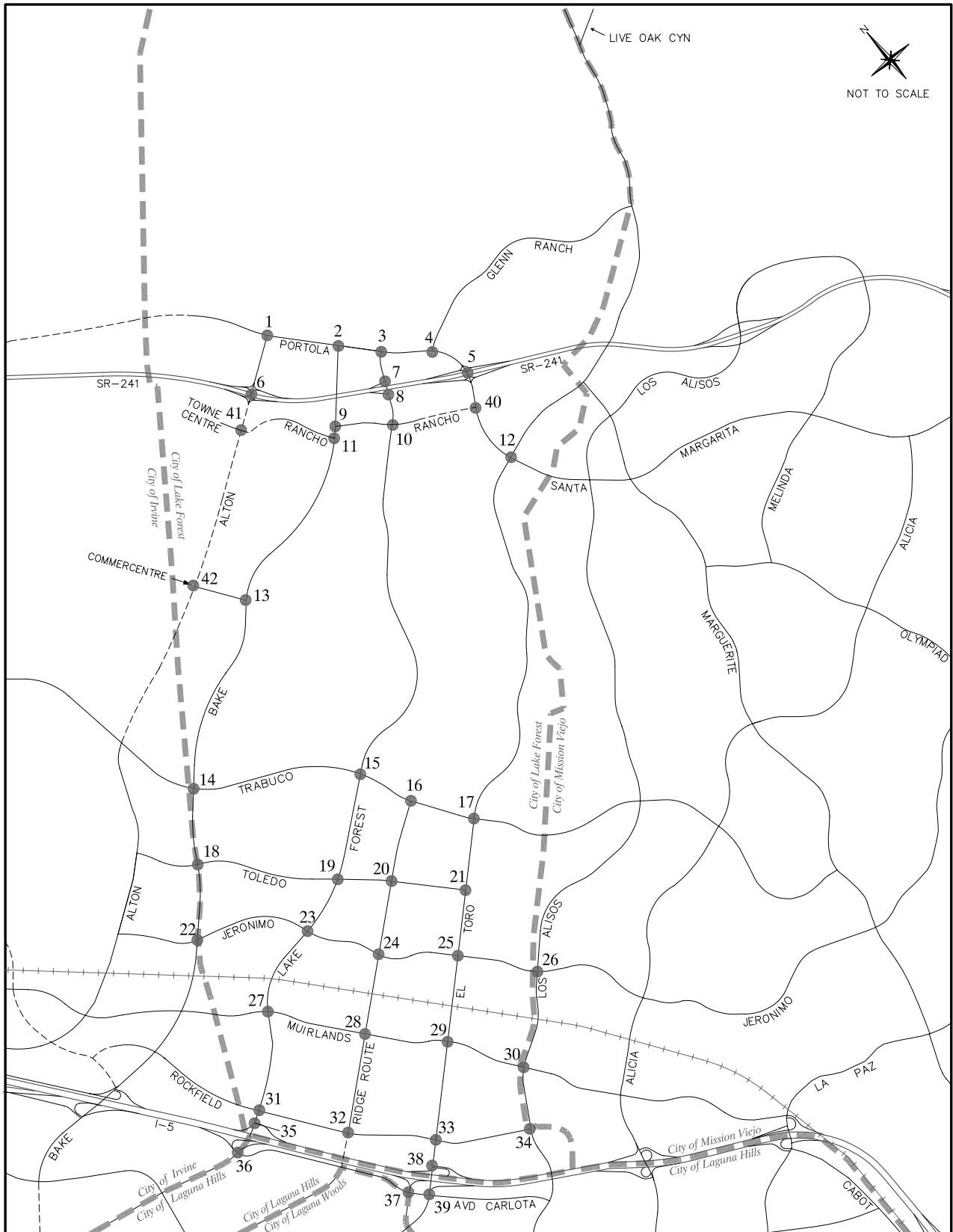


Figure 4-3
 2030 ADT VOLUMES (000s)
 - LANDOWNERS PLAN



Legend

- X Intersection location
- Future Roadway

Figure 4-4
2030 INTERSECTION LOCATION MAP

Table 4-1

2030 INTERSECTION LOS SUMMARY WITHIN STUDY AREA

Intersection	Current General Plan				City Preferred Plan				Landowners Plan			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
1. Alton & Portola	.57	A	.49	A	.52	A	.50	A	.51	A	.50	A
2. Bake & Portola (a)	.72	C	1.03	F	.75	C	1.05	F	.76	C	1.04	F
3. Lake Forest & Portola (a)	.65	B	.96	E	.64	B	.90	D	.65	B	.91	E
4. Glenn Ranch & Portola	.85	D	.78	C	.67	B	.69	B	.68	B	.69	B
5. Portola & SR-241 Ramps	.49	A	.69	B	.48	A	.64	B	.46	A	.64	B
6. Alton & SR-241 Ramps	.65	B	.65	B	.62	B	.53	A	.61	B	.52	A
7. Lake Forest & SR-241 NB	.37	A	.51	A	.32	A	.46	A	.33	A	.45	A
8. Lake Forest & SR-241 SB	.64	B	.57	A	.54	A	.50	A	.53	A	.51	A
9. Bake & Rancho North	.76	C	.90	D	.71	C	.87	D	.72	C	.87	D
10. Lake Forest & Rancho (a)	.96	E	1.32	F	.93	E	1.23	F	.95	E	1.27	F
11. Bake & Rancho South	.76	C	.83	D	.76	C	.80	C	.77	C	.81	D
12. El Toro & Portola/Santa Margarita (a)	.95	E	1.08	F	.84	D	1.00	E	.82	D	1.01	F
13. Bake & Commercentre	.62	B	.72	C	.66	B	.72	C	.68	B	.74	C
14. Bake & Irvine/Trabuco (a)	1.07	F	1.09	F	1.14	F	1.05	F	1.15	F	1.05	F
15. Lake Forest & Trabuco	.76	C	.88	D	.82	D	.87	D	.83	D	.87	D
16. Ridge Route & Trabuco	.60	A	.68	B	.57	A	.68	B	.55	A	.67	B
17. El Toro & Trabuco (a)	.89	D	.99	E	.87	D	.99	E	.92	E	1.01	F
18. Bake & Toledo	.82	D	.66	B	.89	D	.70	B	.88	D	.70	B
19. Lake Forest & Toledo	.56	A	.53	A	.61	B	.57	A	.62	B	.58	A
20. Ridge Route & Toledo	.41	A	.41	A	.42	A	.43	A	.41	A	.43	A
21. El Toro & Toledo	.57	A	.65	B	.62	B	.70	B	.63	B	.70	B
22. Bake & Jeronimo (a)	.94	E	.82	D	1.02	F	.85	D	1.03	F	.87	D
23. Lake Forest & Jeronimo	.77	C	.89	D	.75	C	.89	D	.75	C	.90	D
24. Ridge Route & Jeronimo	.51	A	.69	B	.55	A	.72	C	.55	A	.71	C
25. El Toro & Jeronimo (a)	.96	E	.94	E	.93	E	.92	E	.92	E	.93	E
26. Los Alisos & Jeronimo (a)	.91	E	.96	E	.92	E	.92	E	.93	E	.95	E
27. Lake Forest & Muirlands	.69	B	.81	D	.71	C	.82	D	.70	B	.82	D
28. Ridge Route & Muirlands	.58	A	.80	C	.58	A	.82	D	.62	B	.82	D
29. El Toro & Muirlands	.75	C	.84	D	.76	C	.85	D	.77	C	.88	D
30. Los Alisos & Muirlands (a)	1.03	F	1.08	F	.98	E	1.14	F	1.03	F	1.12	F

Table 4-1 (cont)
2030 INTERSECTION LOS SUMMARY WITHIN STUDY AREA

Intersection	Current General Plan				City Preferred Plan				Landowners Plan			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
31. Lake Forest & Rockfield	.76	C	.85	D	.80	C	.90	D	.82	D	.90	D
32. Ridge Route & Rockfield (a)	.76	C	1.19	F	.78	C	1.20	F	.78	C	1.20	F
33. El Toro & Rockfield	.58	A	.74	C	.60	A	.72	C	.60	A	.73	C
34. Los Alisos & Rockfield (a)	.91	E	.93	E	.92	E	.88	D	.91	E	.88	D
35. Lake Forest & I-5 NB	.67	B	.65	B	.66	B	.67	B	.65	B	.67	B
36. Lake Forest & I-5/Carlota (a)	.81	D	.99	E	.81	D	1.00	E	.82	D	1.00	E
37. Paseo De Valencia & Carlota (a)	.67	B	.98	E	.63	B	1.01	F	.65	B	1.00	E
38. El Toro & Bridger/I-5 NB	.65	B	.67	B	.66	B	.67	B	.65	B	.67	B
39. El Toro & Avd Carlota (a)	.72	C	1.00	E	.70	B	1.02	F	.71	C	1.03	F
40. Portola & Rancho	.69	B	.79	C	.62	B	.70	B	.55	A	.68	B
41. Alton & Towne Centre Dr (a)	.82	D	1.07	F	.91	E	.77	C	.92	E	.77	C
42. Alton & Commercentre	.53	A	.69	B	.62	B	.74	C	.63	B	.75	C

Abbreviations:

- ICU – intersection capacity utilization
- LOS – level of service
- NB – northbound
- SB – southbound

(a) This location is forecast to operate deficiently in the AM and/or PM peak hour (i.e., the forecasted LOS is worse than the adopted LOS performance standard). Shaded entries denote deficient locations under Current General Plan where ICUs are reduced with the City Preferred Plan and/or Landowners Plan, (i.e., beneficial effects of the project), and shaded entries under the City Preferred Plan and Landowners Plan denote locations where ICUs are worsened by the project (i.e., adverse project impacts).

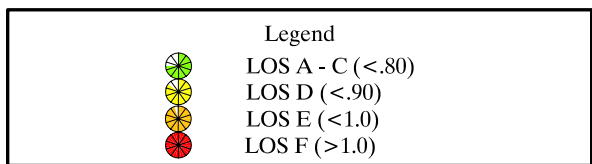
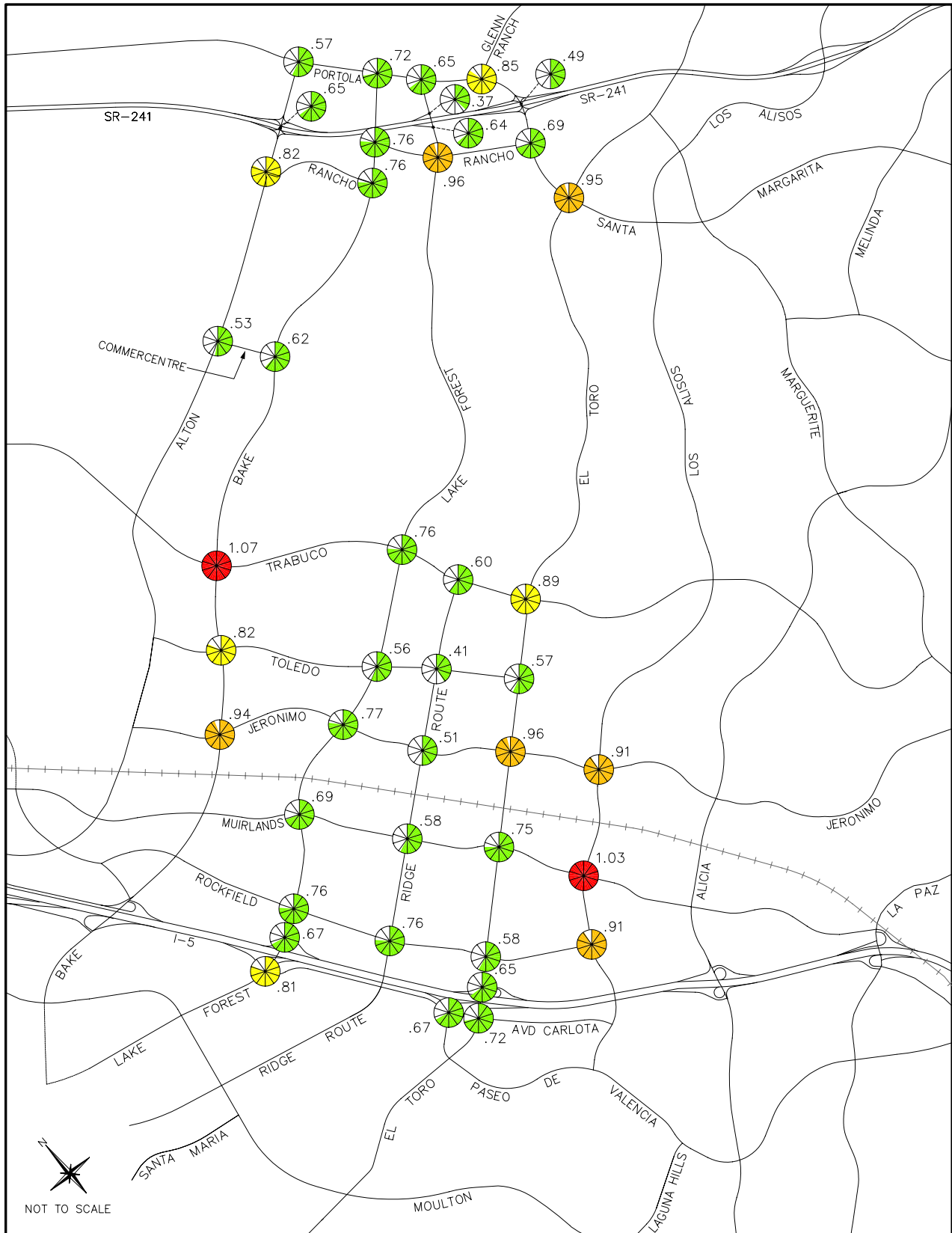


Figure 4-5
 2030 AM PEAK HOUR ICUs AND
 LEVEL OF SERVICE
 - CURRENT GENERAL PLAN

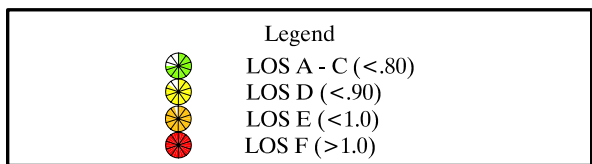
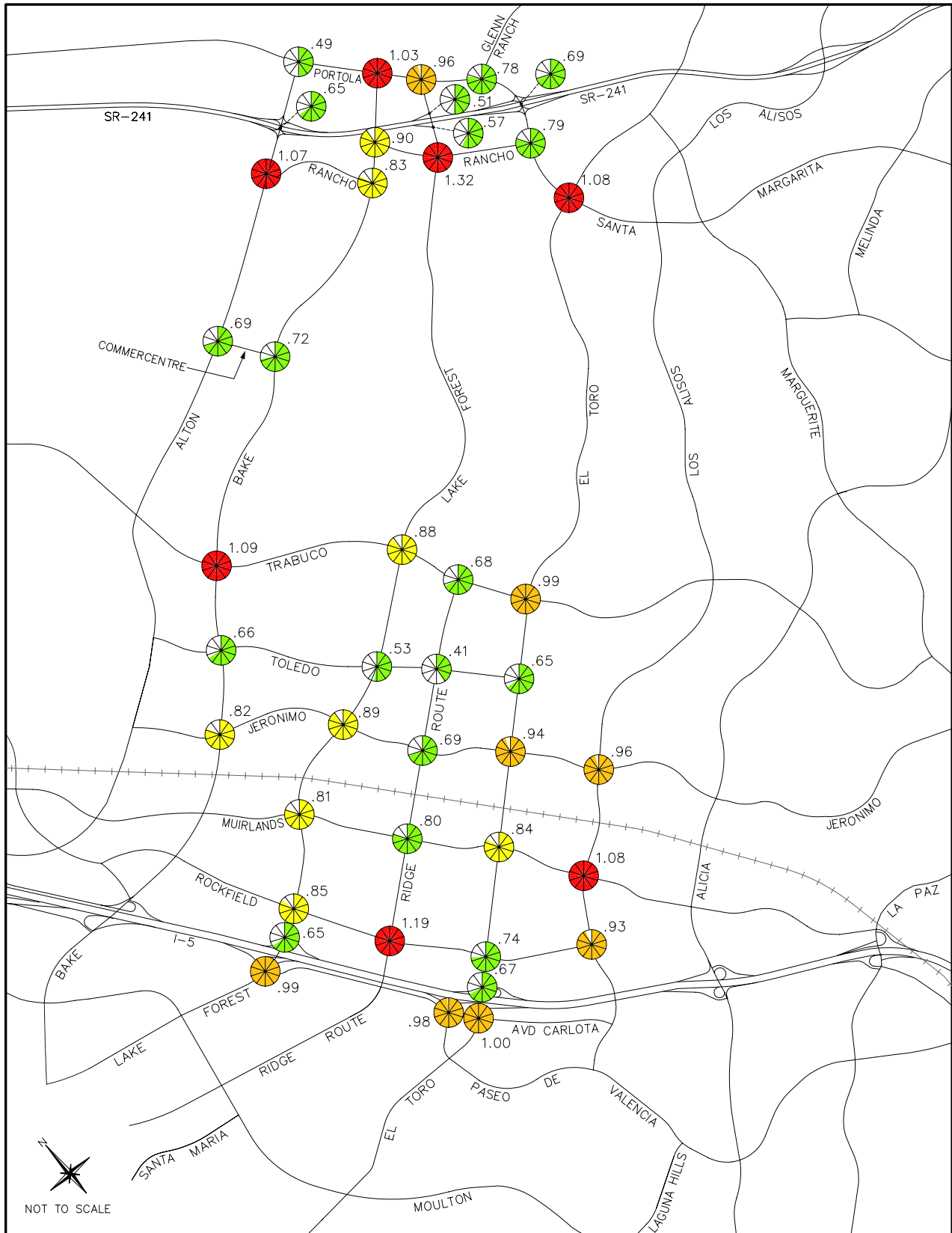


Figure 4-6
 2030 PM PEAK HOUR ICUs AND
 LEVEL OF SERVICE
 - CURRENT GENERAL PLAN

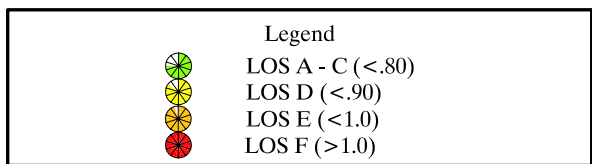
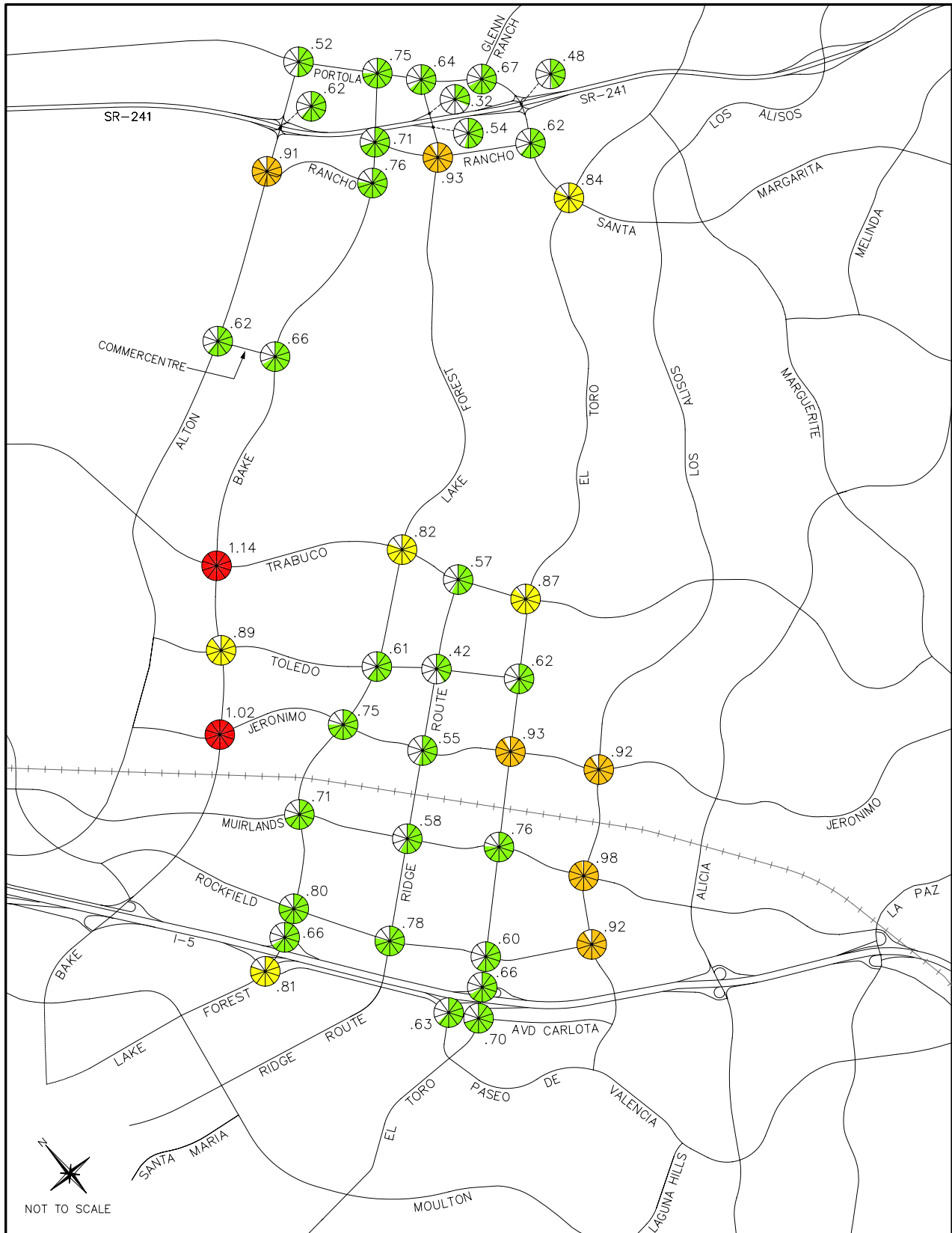


Figure 4-7
2030 AM PEAK HOUR ICUs AND
LEVEL OF SERVICE
- CITY PREFERRED PLAN

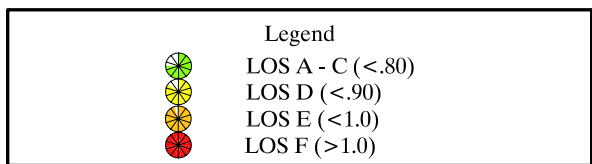
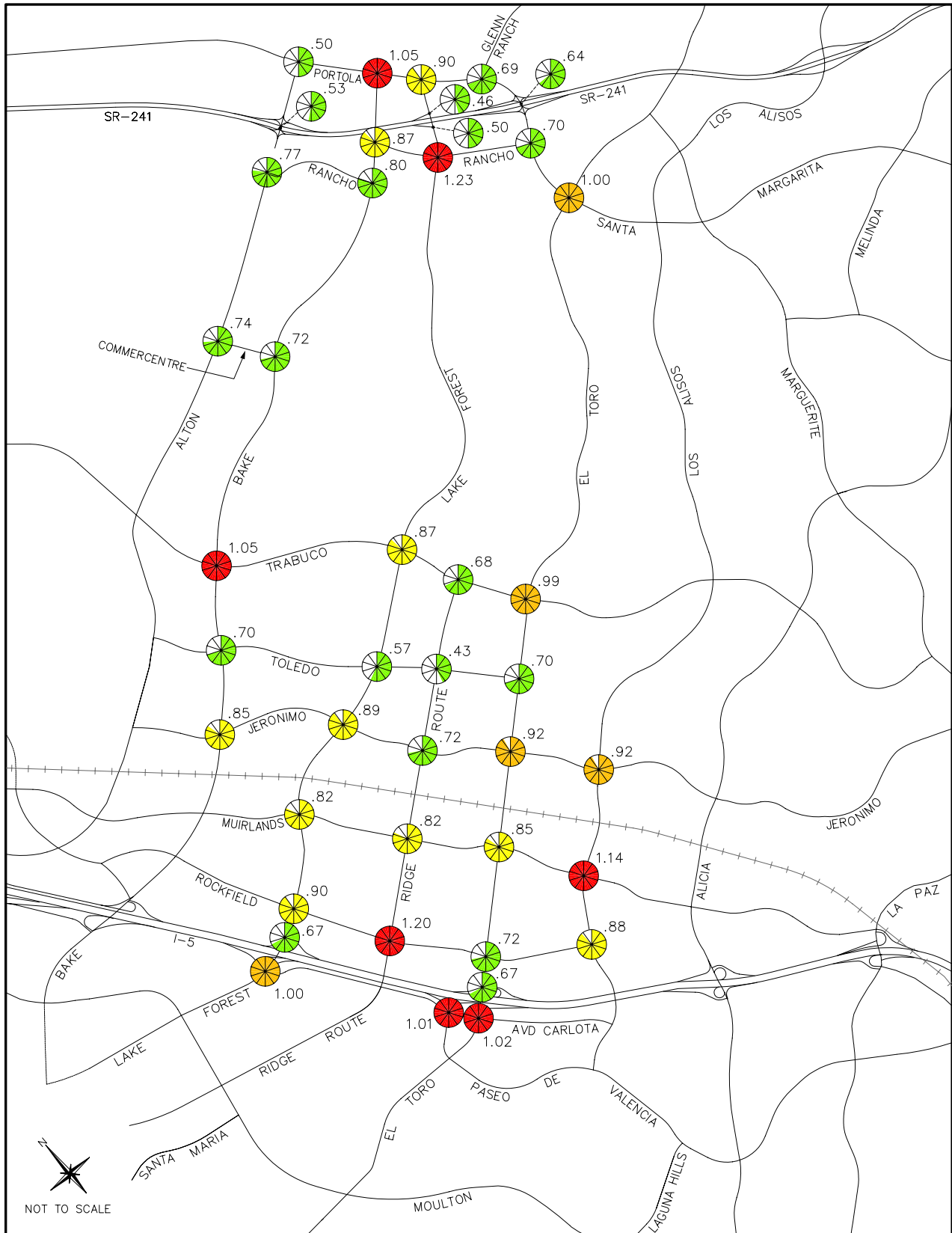


Figure 4-8
 2030 PM PEAK HOUR ICUs AND
 LEVEL OF SERVICE
 - CITY PREFERRED PLAN

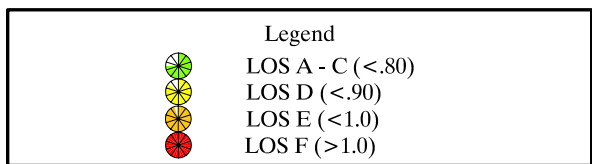
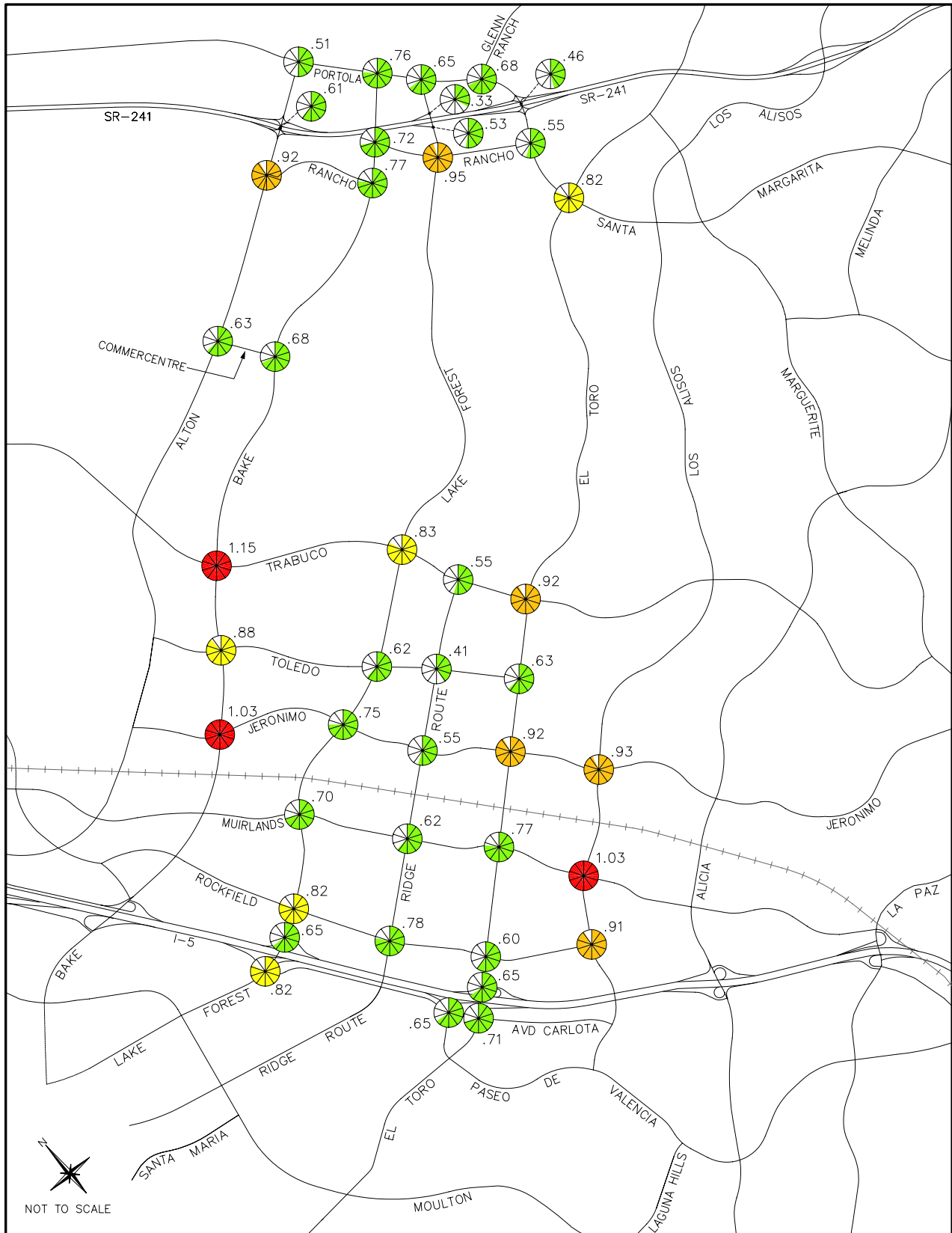


Figure 4-9
2030 AM PEAK HOUR ICUs AND
LEVEL OF SERVICE
- LANDOWNERS PLAN

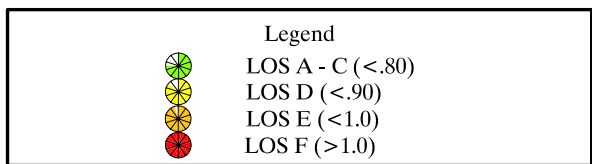
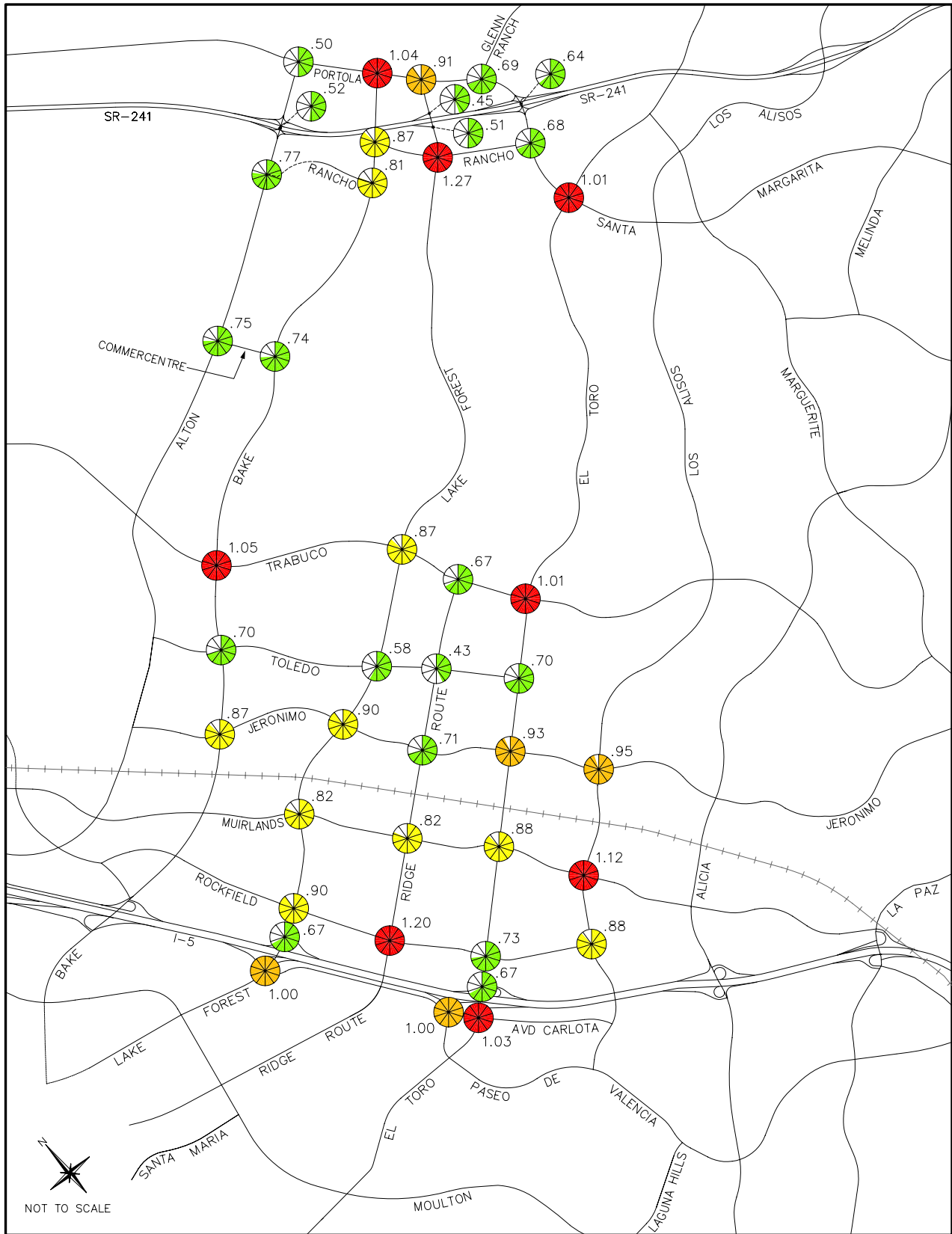


Figure 4-10
 2030 PM PEAK HOUR ICUs AND
 LEVEL OF SERVICE
 - LANDOWNERS PLAN

41. Alton Parkway and Towne Centre Drive
2. Bake Parkway and Portola Parkway (City Preferred Plan Only)
17. El Toro Road and Trabuco Road (Landowners Plan only)
26. Los Alisos Boulevard and Jeronimo Road (Landowners Plan only)

The ICU summary table and figures also indicate that the following five locations, which are deficient under the Current General Plan, have lower ICUs with the proposed project and can be considered beneficial effects of the project:

3. Lake Forest Drive and Portola Parkway
10. Lake Forest Drive and Rancho Parkway
12. El Toro Road and Portola Parkway/Santa Margarita Parkway
25. El Toro Road and Jeronimo Road
34. Los Alisos Boulevard and Rockfield Boulevard

Figure 4-11 illustrates the interchange locations where freeway ramps were analyzed based on year 2030 conditions. Year 2030 with-project AM and PM peak hour ramp volumes and V/C ratios are summarized in Tables 4-2 and 4-3 under the City Preferred Plan and Landowners Plan, respectively, together with the corresponding year 2030 Current General Plan peak hour ramp volumes and V/C ratios for comparison. Based on the peak hour ramp performance criteria and impact thresholds discussed in Chapter 1.0, no freeway ramps are forecast to be significantly impacted by the proposed project based on year 2030 conditions under the City Preferred Plan and Landowners Plan.

Year 2030 with-project AM and PM freeway mainline peak hour volumes and V/C ratios are summarized in Table 4-4 and 4-5 under the City Preferred Plan and Landowners Plan, respectively, together with the corresponding year 2030 Current General Plan peak hour mainline volumes and V/C ratios for comparison. Based on the peak hour mainline performance criteria and impact thresholds discussed in Chapter 1.0, no freeway mainline segments are forecast to be significantly impacted by the proposed project based on year 2030 conditions under the City Preferred Plan and Landowners Plan.

TRAFFIC IMPACTS WITHIN THE EXTENDED STUDY AREA

The study area was extended to immediate surrounding roadways (referred to in this report as the extended study area) based on peak hour intersection criteria, and includes all major intersections where the proposed project would increase traffic by more than one percent. This significance criteria is consistent

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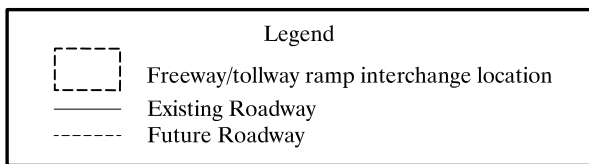
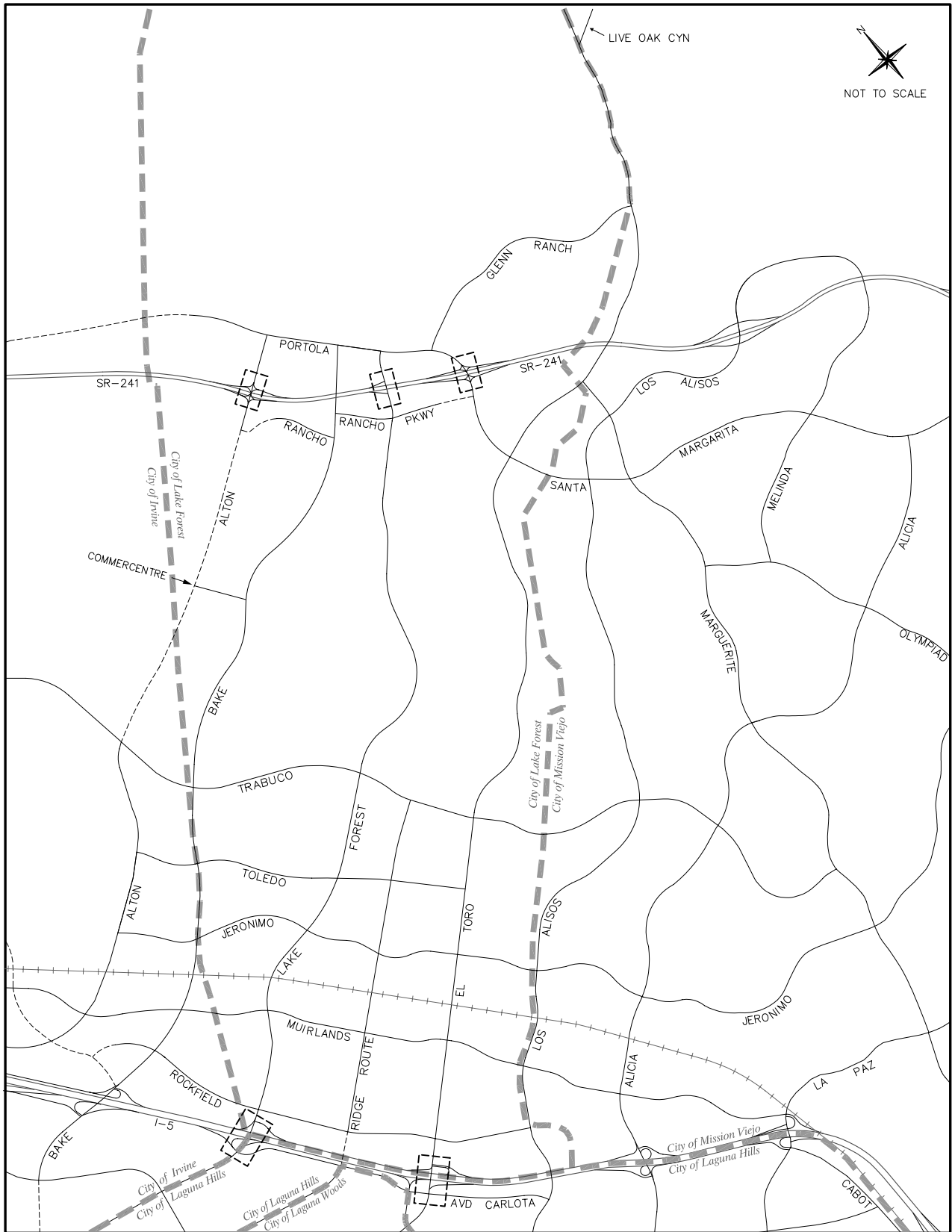


Figure 4-11
2030 INTERCHANGE LOCATIONS

Table 4-2

2030 CITY PREFERRED PLAN FREEWAY/TOLLWAY RAMP LOS SUMMARY

Interchange	Ramp	Lanes	Peak Hour Capacity	Current General Plan						City Preferred Plan					
				AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
I-5 at Lake Forest	SB Direct On	1	1,500	190	.13	A	1,310	.87	D	200	.13	A	1,300	.87	D
	SB Loop On	1	1,080	470	.44	A	570	.53	A	460	.43	A	560	.52	A
	NB On	2	1,800	1,240	.69	B	1,120	.62	B	1,310	.73	C	1,090	.61	B
	SB Off	2	3,000	2,280	.76	C	3,070	1.02	F	2,140	.71	C	3,070	1.02	F
	NB Off	1	1,500	1,530	1.02	F	710	.47	A	1,500	1.00	E	720	.48	A
I-5 at El Toro	SB Direct On	1	1,080	50	.05	A	440	.41	A	50	.05	A	420	.39	A
	SB Loop On	1	1,500	660	.44	A	1,180	.79	C	650	.43	A	1,170	.78	C
	NB Direct On	1	1,500	1,170	.78	C	1,010	.67	B	1,350	.90	D	1,020	.68	B
	NB Loop On	1	1,500	1,170	.78	C	1,170	.78	C	1,190	.79	C	1,140	.76	C
	SB Off	2	3,000	1,870	.62	B	1,870	.62	B	1,790	.60	A	1,980	.66	B
	NB Off	1	1,500	1,280	.85	D	1,140	.76	C	1,250	.83	D	1,150	.77	C
SR-241 at Alton	SB On	1	1,500	410	.27	A	1,600	1.07	F	450	.30	A	1,270	.85	D
	NB On	1	1,500	80	.05	A	590	.39	A	130	.09	A	410	.27	A
	SB Off	1	1,500	870	.58	A	150	.10	A	580	.39	A	200	.13	A
	NB Off	1	1,500	1,650	1.10	F	660	.44	A	1,340	.89	D	670	.45	A
SR-241 at Lake Forest	NB On	2	2,250	90	.04	A	820	.36	A	120	.05	A	650	.29	A
	SB Off	2	2,250	860	.38	A	300	.13	A	670	.30	A	320	.14	A
SR-241 at Portola (East)	SB On	1	1,500	340	.23	A	1,640	1.09	F	320	.21	A	1,430	.95	E
	NB On	2	2,250	710	.32	A	450	.20	A	780	.35	A	350	.16	A
	SB Off	1	1,500	520	.35	A	500	.33	A	360	.24	A	510	.34	A
	NB Off	2	2,250	2,460	1.09	F	610	.27	A	2,150	.96	E	530	.24	A

Abbreviations: LOS – level of service
 NB – northbound
 SB – southbound
 V/C – volume/capacity ratio

Table 4-3

2030 LANDOWNERS PLAN FREEWAY/TOLLWAY RAMP LOS SUMMARY

Interchange	Ramp	Lanes	Peak Hour Capacity	Current General Plan						Landowners Plan					
				AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
I-5 at Lake Forest	SB Direct On	1	1,500	190	.13	A	1,310	.87	D	200	.13	A	1,290	.86	D
	SB Loop On	1	1,080	470	.44	A	570	.53	A	470	.44	A	560	.52	A
	NB On	2	1,800	1,240	.69	B	1,120	.62	B	1,370	.76	C	1,090	.61	B
	SB Off	2	3,000	2,280	.76	C	3,070	1.02	F	2,140	.71	C	3,020	1.01	F
	NB Off	1	1,500	1,530	1.02	F	710	.47	A	1,480	.99	E	720	.48	A
I-5 at El Toro	SB Direct On	1	1,080	50	.05	A	440	.41	A	50	.05	A	410	.38	A
	SB Loop On	1	1,500	660	.44	A	1,180	.79	C	660	.44	A	1,180	.79	C
	NB Direct On	1	1,500	1,170	.78	C	1,010	.67	B	1,340	.89	D	1,020	.68	B
	NB Loop On	1	1,500	1,170	.78	C	1,170	.78	C	1,180	.79	C	1,130	.75	C
	SB Off	2	3,000	1,870	.62	B	1,870	.62	B	1,780	.59	A	2,010	.67	B
	NB Off	1	1,500	1,280	.85	D	1,140	.76	C	1,240	.83	D	1,160	.77	C
SR-241 at Alton	SB On	1	1,500	410	.27	A	1,600	1.07	F	430	.29	A	1,230	.82	D
	NB On	1	1,500	80	.05	A	590	.39	A	140	.09	A	420	.28	A
	SB Off	1	1,500	870	.58	A	150	.10	A	570	.38	A	200	.13	A
	NB Off	1	1,500	1,650	1.10	F	660	.44	A	1,320	.88	D	660	.44	A
SR-241 at Lake Forest	NB On	2	2,250	90	.04	A	820	.36	A	140	.06	A	620	.28	A
	SB Off	2	2,250	860	.38	A	300	.13	A	660	.29	A	350	.16	A
SR-241 at Portola (East)	SB On	1	1,500	340	.23	A	1,640	1.09	F	340	.23	A	1,410	.94	E
	NB On	2	2,250	710	.32	A	450	.20	A	800	.36	A	340	.15	A
	SB Off	1	1,500	520	.35	A	500	.33	A	340	.23	A	540	.36	A
	NB Off	2	2,250	2,460	1.09	F	610	.27	A	2,120	.94	E	530	.24	A

Abbreviations: LOS – level of service
 NB – northbound
 SB – southbound
 V/C – volume/capacity ratio

Table 4-4

2030 CITY PREFERRED PLAN FREEWAY/TOLLWAY MAINLINE LOS SUMMARY

Location	Direction	Lanes	Peak Hour Capacity	Current General Plan						City Preferred Plan					
				AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
I-5 n/o Lake Forest	Northbound	8+2H	19,500	18,304	.94	E	12,385	.64	C	18,808	.96	E	12,349	.63	C
	Southbound	8+2H	19,500	12,162	.62	C	16,792	.86	D	11,976	.61	C	17,106	.88	D
I-5 n/o El Toro	Northbound	6+2H	15,500	17,752	1.15	F	11,782	.76	D	18,140	1.17	F	11,786	.76	D
	Southbound	6+2H	15,500	10,127	.65	C	15,700	1.01	F	10,075	.65	C	15,992	1.03	F
I-5 n/o Alicia	Northbound	4+1H	9,600	16,265	1.69	F	10,643	1.11	F	16,405	1.71	F	10,677	1.11	F
	Southbound	4+1H	9,600	9,065	.94	E	14,912	1.55	F	9,103	.95	E	15,031	1.57	F
SR-241 n/o Alton	Northbound	4+1H	9,600	7,514	.78	D	4,118	.43	B	8,060	.84	D	3,663	.38	B
	Southbound	4+1H	9,600	3,794	.40	B	6,195	.65	C	3,079	.32	B	6,599	.69	C
SR-241 n/o Lake Forest	Northbound	4+1H	9,600	8,817	.92	E	4,210	.44	B	8,978	.94	E	3,969	.41	B
	Southbound	4+1H	9,600	3,394	.35	B	7,456	.78	D	2,998	.31	B	7,476	.78	D
SR-241 n/o Portola East	Northbound	4+1H	9,600	8,761	.91	E	3,384	.35	B	8,881	.93	E	3,324	.35	B
	Southbound	4+1H	9,600	2,508	.26	A	7,162	.75	D	2,319	.24	A	7,156	.75	D
SR-241 n/o Los Alisos	Northbound	4+1H	9,600	10,633	1.11	F	3,596	.37	B	10,392	1.08	F	3,550	.37	B
	Southbound	4+1H	9,600	2,400	.25	A	8,330	.87	D	2,348	.24	A	8,112	.85	D

Abbreviations: H – high-occupancy vehicle lane
 LOS – level of service
 V/C – volume/capacity ratio

Table 4-5

2030 LANDOWNERS PLAN FREEWAY/TOLLWAY MAINLINE LOS SUMMARY

Location	Direction	Lanes	Peak Hour Capacity	Current General Plan						Landowners Plan					
				AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
I-5 n/o Lake Forest	Northbound	8+2H	19,500	18,304	.94	E	12,385	.64	C	18,945	.97	E	12,335	.63	C
	Southbound	8+2H	19,500	12,162	.62	C	16,792	.86	D	11,966	.61	C	17,170	.88	D
I-5 n/o El Toro	Northbound	6+2H	15,500	17,752	1.15	F	11,782	.76	D	18,187	1.17	F	11,766	.76	D
	Southbound	6+2H	15,500	10,127	.65	C	15,700	1.01	F	10,076	.65	C	16,111	1.04	F
I-5 n/o Alicia	Northbound	4+1H	9,600	16,265	1.69	F	10,643	1.11	F	16,479	1.72	F	10,685	1.11	F
	Southbound	4+1H	9,600	9,065	.94	E	14,912	1.55	F	9,105	.95	E	15,116	1.57	F
SR-241 n/o Alton	Northbound	4+1H	9,600	7,514	.78	D	4,118	.43	B	8,108	.84	D	3,689	.38	B
	Southbound	4+1H	9,600	3,794	.40	B	6,195	.65	C	3,051	.32	B	6,666	.69	C
SR-241 n/o Lake Forest	Northbound	4+1H	9,600	8,817	.92	E	4,210	.44	B	9,007	.94	E	3,974	.41	B
	Southbound	4+1H	9,600	3,394	.35	B	7,456	.78	D	2,967	.31	B	7,502	.78	D
SR-241 n/o Portola East	Northbound	4+1H	9,600	8,761	.91	E	3,384	.35	B	8,888	.93	E	3,348	.35	B
	Southbound	4+1H	9,600	2,508	.26	A	7,162	.75	D	2,295	.24	A	7,150	.74	D
SR-241 n/o Los Alisos	Northbound	4+1H	9,600	10,633	1.11	F	3,596	.37	B	10,337	1.08	F	3,588	.37	B
	Southbound	4+1H	9,600	2,400	.25	A	8,330	.87	D	2,357	.25	A	8,063	.84	D

Abbreviations: H – high-occupancy vehicle lane
LOS – level of service
V/C – volume/capacity ratio

with guidelines used by Lake Forest and the surrounding jurisdictions in defining the area of impact for such studies. As mentioned in Chapter 1.0, the study area was also extended into Irvine in response to the City of Irvine's request.

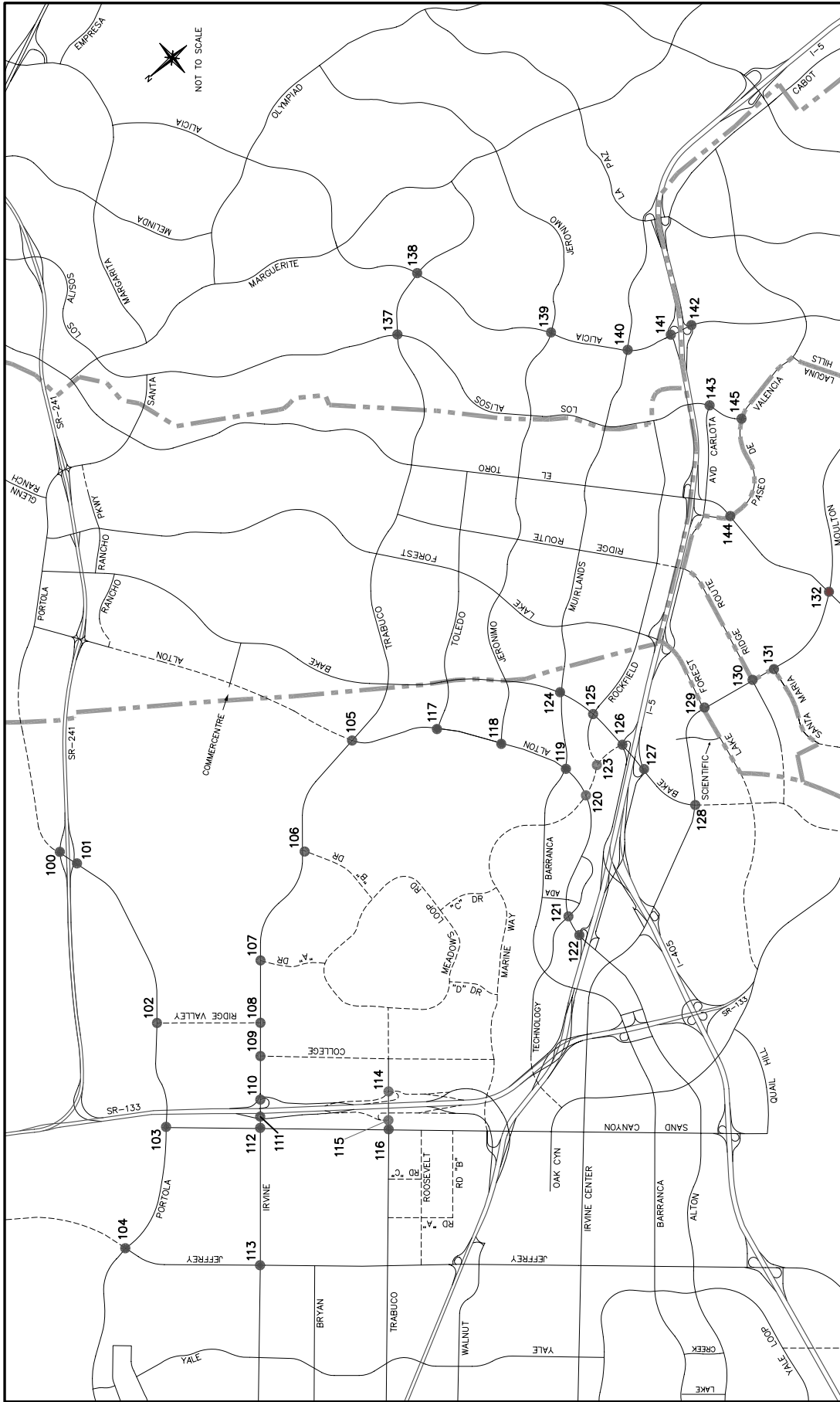
Figure 4-12 illustrates the intersection locations that were analyzed in the extended study area based on 2030 traffic conditions, and Table 4-6 summarizes AM and PM peak hour ICU values and corresponding levels of service for the Current General Plan and with-project (City Preferred Plan and Landowners Plan) conditions. Actual turn volumes and ICU calculation worksheets are provided in Appendix C. Based on the peak hour intersection performance criteria and impact thresholds discussed in Chapter 1.0, the following three intersections within the extended study area are significantly impacted by the City Preferred Plan and the Landowners Plan proposed projects based on year 2030 conditions:

- 105. Alton Parkway at Irvine Boulevard
- 117. Alton Parkway at Toledo Way
- 125. Bake Parkway at Rockfield Boulevard

MITIGATION MEASURES

A set of potential mitigation measures for the deficient intersections identified in the previous sections are summarized in Tables 4-7 and 4-8 for the City Preferred Plan and the Landowners Plan, respectively, together with the corresponding peak hour ICUs before and after mitigation. Also shown here are the potential sources of funds for implementing the improvements, including the North Irvine Transportation Mitigation (NITM) Program and the Lake Forest Transportation Mitigation (LFTM) Program. The NITM Program was discussed in Chapter 1.0 and the LFTM Program is discussed in the next chapter.

The proposed mitigation measures either bring the peak hour ICU at each intersection to an acceptable level of service or to less than the ICU under Current General Plan conditions (i.e. the improvement(s) mitigate the project impact).



Legend

- City of Lake Forest Limits
- · - Future Roadway

Figure 4-12

INTERSECTION LOCATIONS ANALYZED WITHIN THE EXTENDED STUDY AREA

Table 4-6

2030 INTERSECTION LOS SUMMARY WITHIN EXTENDED STUDY AREA

Intersection	Current General Plan				City Preferred Plan				Landowners Plan			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
100. Portola Pkwy. at SR-241 NB Ramps	.63	B	.70	B	.62	B	.74	C	.62	B	.74	C
101. Portola Pkwy. at SR-241 SB Ramps	.57	A	.47	A	.57	A	.52	A	.58	A	.52	A
102. Ridge Vly. at Portola Pkwy.	.60	A	.86	D	.57	A	.90	D	.57	A	.90	D
103. Sand Cyn. Av. at Portola Pkwy.	.76	C	.68	B	.74	C	.70	B	.74	C	.70	B
104. Jeffrey Rd. at Portola Pkwy.	.83	D	.68	B	.76	C	.62	B	.78	C	.62	B
105. Alton Pkwy. at Irvine Bl. (a)	.92	E	.98	E	.89	D	1.02	F	.90	D	1.02	F
106. B Dr. at Irvine Bl.	.83	D	.79	C	.81	D	.75	C	.79	C	.75	C
107. A Dr. at Irvine Bl.	.85	D	.85	D	.82	D	.83	D	.81	D	.83	D
108. Ridge Vly. at Irvine Bl.	.76	C	.82	D	.73	C	.81	D	.74	C	.81	D
109. College Dr. at Irvine Bl.	.78	C	.67	B	.77	C	.66	B	.77	C	.66	B
110. ETC E. Leg NB Ramps at Irvine Bl.	.88	D	.74	C	.85	D	.74	C	.85	D	.73	C
111. ETC E. Leg SB Ramps at Irvine Bl.	.84	D	.57	A	.80	C	.61	B	.79	C	.61	B
112. Sand Cyn. Av. at Irvine Bl.	.87	D	.81	D	.83	D	.78	C	.84	D	.78	C
113. Jeffrey Rd. at Irvine Bl. (b)	.83	D	.89	D	.84	D	.85	D	.83	D	.88	D
114. SR-133 NB Ramps at Trabuco Rd.	.61	B	.53	A	.59	A	.53	A	.59	A	.53	A
115. SR-133 SB Ramps at Trabuco Rd.	.56	A	.50	A	.58	A	.50	A	.59	A	.50	A
116. Sand Cyn. Av. at Trabuco Rd. (b)	.77	C	.76	C	.79	C	.77	C	.80	C	.78	C
117. Alton Pkwy. at Toledo Wy. (a)	.73	C	.84	D	.71	C	.92	E	.72	C	.91	E
118. Alton Pkwy. at Jeronimo Rd.	.63	B	.71	C	.72	C	.77	C	.74	C	.77	C
119. Alton Pkwy. at Muirlands Bl.	.77	C	.83	D	.81	D	.88	D	.82	D	.88	D
120. Marine Wy. at Alton Pkwy.	.64	B	.67	B	.71	C	.65	B	.70	B	.65	B
121. Alton Pkwy. at Technology Dr.	.83	D	.87	D	.83	D	.83	D	.82	D	.84	D
122. Alton Pkwy. at I-5 NB Ramps	1.00	E	.59	A	.96	E	.58	A	.97	E	.58	A
123. Marine Wy. at Rockfield Bl.	.51	A	.57	A	.53	A	.56	A	.53	A	.56	A
124. Bake Pkwy. at Muirlands Bl.	.73	C	.85	D	.82	D	.86	D	.81	D	.85	D
125. Bake Pkwy. at Rockfield Bl. (a)	.66	B	.89	D	.71	C	.92	E	.69	B	.92	E
126. Bake Pkwy. at I-5 NB Ramps	1.00	E	.94	E	.99	E	.93	E	1.00	E	.93	E
127. Bake Pkwy. at I-5 SB Ramps	.91	E	.89	D	.87	D	.93	E	.87	D	.93	E
128. Bake Pkwy. at Irvine Center Dr.	.43	A	.45	A	.43	A	.46	A	.43	A	.47	A

Table 4-6 (cont)
2030 INTERSECTION LOS SUMMARY WITHIN EXTENDED STUDY AREA

Intersection	Current General Plan				City Preferred Plan				Landowners Plan			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
129. Lake Forest Dr. at Irvine Center Dr.	.71	C	.81	D	.73	C	.81	D	.73	C	.80	C
130. Ridge Route at Moulton Pkwy. (a)	.56	A	1.13	F	.57	A	1.13	F	.58	A	1.12	F
131. Santa Maria Av. at Moulton Pkwy. (a)	.98	E	.99	E	.98	E	.99	E	.99	E	1.00	E
132. El Toro Rd. at Moulton Pkwy. (a)	1.17	F	1.02	F	1.17	F	1.02	F	1.18	F	1.01	F
137. Los Alisos Bl. at Trabuco Rd. (a)	.94	E	.79	C	.94	E	.78	C	.95	E	.79	C
138. Trabuco Rd. at Alicia Pkwy. (a)	.78	C	.94	E	.74	C	.94	E	.77	C	.95	E
139. Jeronimo Rd. at Alicia Pkwy.	.74	C	.77	C	.74	C	.79	C	.74	C	.78	C
140. Alicia Pkwy. at Muirlands Bl. (a)	.91	E	1.00	E	.91	E	.99	E	.92	E	1.00	E
141. I-5 NB Ramps at Alicia Pkwy.	.42	A	.72	C	.40	A	.73	C	.39	A	.73	C
142. I-5 SB Ramps at Alicia Pkwy.	.71	C	.75	C	.69	B	.76	C	.70	B	.77	C
143. Los Alisos Bl. at Avd. de la Carlota	.51	A	.75	C	.53	A	.75	C	.54	A	.73	C
144. El Toro Rd. at Paseo de Valencia	.64	B	.70	B	.62	B	.69	B	.63	B	.68	B
145. Los Alisos Bl. at Paseo de Valencia	.74	C	.80	C	.77	C	.79	C	.76	C	.79	C

Abbreviations:

- ICU – intersection capacity utilization
- LOS – level of service
- NB – northbound
- SB – southbound

(a) This location is forecast to operate deficiently in the AM and/or PM peak hour (i.e., the forecasted LOS is worse than the adopted LOS performance standard). Shaded entries denote locations where ICUs are worsened by the project (i.e., adverse project impacts).

(b) ICUs at this City of Irvine location include a .05 Advanced Transportation Management System (ATMS) credit.

Table 4-7

SUMMARY OF IMPACTED INTERSECTIONS AND POTENTIAL MITIGATION MEASURES (CITY PREFERRED PLAN)

Intersection (NS & EW)	2030 Peak Hour ICU						Mitigation Measures	Source
	Current General Plan		City Preferred Plan					
	AM	PM	Without Mitigation		With Mitigation			
	AM	PM	AM	PM	AM	PM		
2. Bake & Portola	.72	1.03	.75	1.05	.67 .63	.94 .94	Add 3 rd WBT or 2 nd EBL	LFTM Program
14. Bake & Irvine/Trabuco	1.07	1.09	1.14	1.05	.88	.87	Add 2 nd NBL, convert 3 rd WBT and WBR to 4 th WBT and restripe 3 rd EBT to shared 3 rd EBT/2 nd EBR Add defacto WBR	NITM Program LFTM Program
22. Bake & Jeronimo	.94	.82	1.02	.85	.90	.85	Add 2 nd NBL	NITM Program
30. Los Alisos & Muirlands	1.03	1.08	.98	1.14	.86	.91	Add 2 nd NBL, defacto NBR, 2 nd SBL and 2 nd EBL	NITM and LFTM Programs
37. Paseo De Valencia & Carlota	.67	.98	.63	1.01	.58	.87	Restripe 2 nd SBT to shared 3 rd SBL/2 nd SBT ¹	NITM and LFTM Programs and Laguna Hills
39. El Toro & Avd Carlota	.72	1.00	.70	1.02	.62	.83	Restripe EB to 2 EBL, EBT and shared 2 nd EBT/EBR and restripe WB to shared WBL/WBT and 2 WBR with overlap	NITM and LFTM Programs and Laguna Hills
41. Alton & Towne Centre Dr	.82	1.07	.91	.77	.79	.76	Add 2 nd WBL	LFTM Program
105. Alton & Irvine	.92	.98	.89	1.02	.76	.95	Remove E/W split phasing, restripe shared 3 rd EBL/3 rd EBT to full 3 rd EBL and add 3 rd EBT and defacto EBR	LFTM Program
117. Alton & Toledo	.73	.84	.71	.92	.66	.87	Add a WB right-turn overlap	LFTM Program
125. Bake & Rockfield	.66	.89	.71	.92	.69	.89	Restripe shared 3 rd WBL/2 nd WBT to full 3 rd WBL, remove E/W split phasing and free WBR and add 2 nd WBT and defacto WBR	LFTM Program

Abbreviations:

LFTM – Lake Forest Transportation Mitigation Program

NITM – North Irvine Transportation Mitigation Program

¹ Includes construction of a third eastbound receiving lane for the third southbound left-turn lane.

Table 4-8

SUMMARY OF IMPACTED INTERSECTIONS AND POTENTIAL MITIGATION MEASURES (LANDOWNERS PLAN)

Intersection (NS & EW)	2030 Peak Hour ICU						Mitigation Measures	Source
	Current General Plan		Landowners Plan					
	AM	PM	Without Mitigation		With Mitigation			
AM	PM	AM	PM	AM	PM			
14. Bake & Irvine/Trabuco	1.07	1.09	1.15	1.05	.89	.87	Add 2 nd NBL, convert 3 rd WBT and WBR to 4 th WBT and restripe 3 rd EBT to shared 3 rd EBT/2 nd EBR Add defacto WBR	NITM Program LFTM Program
17. El Toro & Trabuco	.89	.99	.92	1.01	.88	.88	Add defacto NBR and defacto WBR	LFTM Program
22. Bake & Jeronimo	.94	.82	1.03	.87	.91	.87	Add 2 nd NBL	NITM Program
26. Los Alisos & Jeronimo	.91	.96	.93	.95	.87	.89	Restripe WB and remove WBR to 2 WBL, 2 WBT and add defacto WBR and 2 nd EBL	NITM and LFTM Programs
30. Los Alisos & Muirlands	1.03	1.08	.103	1.12	.89	.90	Add 2 nd NBL, defacto NBR, 2 nd SBL and 2 nd EBL	NITM and LFTM Programs
37. Paseo De Valencia & Carlota	.67	.98	.63	1.01	.58	.87	Restripe 2 nd SBT to shared 3 rd SBL/2 nd SBT ¹	NITM and LFTM Programs and Laguna Hills
39. El Toro & Avd Carlota	.72	1.00	.70	1.02	.60	.88	Restripe EB to 2 EBL, EBT and shared 2 nd EBT/EBR and restripe WB to shared WBL/WBT and 2 WBR with overlap	NITM and LFTM Programs and Laguna Hills
41. Alton & Towne Centre Dr	.82	1.07	.92	.77	.79	.76	Add 2 nd WBL	LFTM Program
105. Alton & Irvine	.92	.98	.90	1.02	.77	.95	Remove E/W split phasing, restripe shared 3 rd EBL/3 rd EBT to full 3 rd EBL and add 3 rd EBT and defacto EBR	LFTM Program
117. Alton & Toledo	.73	.84	.72	.91	.67	.86	Add a WB right-turn overlap	LFTM Program
125. Bake & Rockfield	.66	.89	.69	.92	.67	.89	Restripe shared 3 rd WBL/2 nd WBT to full 3 rd WBL, remove E/W split phasing and free WBR and add 2 nd WBT and defacto WBR	LFTM Program

Abbreviations:

LFTM – Lake Forest Transportation Mitigation Program

NITM – North Irvine Transportation Mitigation Program

¹ Includes construction of a third eastbound receiving lane for the third southbound left-turn lane.

Chapter 5.0

SPECIAL ISSUES

This chapter discusses several special issues that were evaluated as part of this traffic study. They include the Lake Forest Transportation Mitigation (LFTM) Program and issues related to the Master Plan of Arterial Highways (MPAH), the Public Facilities and Park Overlay Plan, and an analysis of existing-plus-project conditions.

LFTM PROGRAM

The LFTM Program provides a citywide set of transportation improvements designed to serve 2030 traffic demands. A detailed discussion can be found in the LFTM Program traffic report (see Reference 8 in Chapter 1.0) and a summary of the program is provided here for informational purposes.

As noted in Chapter 3.0, the MPAH system assumed in this traffic analysis includes new roadway and roadway improvements in the City of Lake Forest that are not currently committed (i.e., funded). They are the extension of Portola Parkway from just west of Alton Parkway to SR-241, the extension of Ridge Route Drive from just west of Rockfield Boulevard to Avenida de la Carlota, and the widening and grade separation of Ridge Route Drive at the railroad crossing between Jeronimo Road and Muirlands Boulevard. The time frame for implementing these unfunded improvements is currently unknown, and also future MPAH amendments could affect the implementation of some or all of the improvements mentioned here. Accordingly, the LFTM Program addresses a future scenario that did not include these new roadway links in the LFTM implementation time frame. The intent was to ensure adequate levels of service without these links so that a fully funded implementation program could be established that addresses the 2030 traffic demands in the City of Lake Forest.

Tables 5-1 and 5-2 summarize the LFTM Program improvements for the City Preferred Plan and Landowners Plan, respectively. The LFTM Program in conjunction with fair share contributions from the North Irvine Transportation Mitigation (NITM) Program will provide full funding for the improvements identified in the City of Lake Forest. In addition, the LFTM Program provides fair share contributions to three intersections in the City of Irvine that are impacted by the land use change in the Vacant Lands Opportunities Areas.

Table 5-1
SUMMARY OF 2030 DEFICIENT INTERSECTIONS AND POTENTIAL IMPROVEMENTS
- LAKE FOREST TRANSPORTATION MITIGATION (LFTM) PROGRAM (CITY PREFERRED PLAN)

Intersection (NS & EW)	2030 Peak Hour ICU				Improvements	Source
	Without Improvements		With Improvements			
	AM	PM	AM	PM		
2. Bake & Portola ¹	.75 (.72)	1.05 (1.03)	.67 .63	.94 .94	Add 3 rd WBT or 2 nd EBL	LFTM Program
10. Lake Forest & Rancho	.95	1.22	.67	.88	Restripe WB and remove WBR to show 2 WBL, 2 WBT and add defacto WBR and 2 nd EBT	LFTM Program
12. El Toro & Portola/Santa Marg.	.82	.99	.70	.85	Add 2 nd NBL	LFTM Program
14. Bake & Irvine/Trabuco	1.18	1.03	.91	.86	Add 2 nd NBL, convert 3 rd WBT and WBR to 4 th WBT and restripe 3 rd EBT to shared 3 rd EBT/2 nd EBR Add defacto WBR	NITM Program LFTM Program
17. El Toro & Trabuco	.83	.92	.79	.79	Add defacto NBR and defacto WBR	LFTM Program
22. Bake & Jeronimo	1.02	.89	.90	.89	Add 2 nd NBL	NITM Program
23. Lake Forest & Jeronimo	.78	.92	.75	.90	Add defacto EBR	NITM and LFTM Programs
26. Los Alisos & Jeronimo	.94	.96	.90	.89	Restripe WB and remove WBR to 2 WBL, 2 WBT and add defacto WBR and 2 nd EBL	NITM and LFTM Programs
30. Los Alisos & Muirlands	1.02	1.17	.89	.90	Add 2 nd NBL, defacto NBR, 2 nd SBL and 2 nd EBL	NITM and LFTM Programs
31. Lake Forest & Rockfield	.81	.92	.81	.88	Restripe 2 nd WBT to shared 3 rd WBL/2 nd WBT	NITM and LFTM Programs
34. Los Alisos & Rockfield	.94	.91	.74	.83	Add SBR	NITM and LFTM Programs
36. Lake Forest & I-5/Carlota	.80	1.07	.75	.94	Restripe shared 3 rd EBL/2 nd EBT to 3 rd EBL, add 2 nd WBL and right-turn overlap for WBR Add 2 nd EBT	NITM Program LFTM Program
37. Paseo De Valencia & Carlota	.64	.99	.60	.89	Restripe 2 nd SBT to shared 3 rd SBL/2 nd SBT ³	NITM and LFTM Programs and Laguna Hills
39. El Toro & Avd Carlota	.88	1.13	.82	.85	Restripe EB to 2 EBL, EBT and shared 2 nd EBT/EBR and restripe WB to shared WBL/WBT and 2 WBR with overlap	NITM and LFTM Programs and Laguna Hills
41. Alton & Towne Centre Dr	.93	.83	.82	.80	Add 2 nd WBL	LFTM Program

Table 5-1 (cont)

SUMMARY OF 2030 DEFICIENT INTERSECTIONS AND POTENTIAL IMPROVEMENTS
 - LAKE FOREST TRANSPORTATION MITIGATION (LFTM) PROGRAM (CITY PREFERRED PLAN)

Intersection (NS & EW)	2030 Peak Hour ICU				Improvements	Source
	Without Improvements		With Improvements			
	AM	PM	AM	PM		
105. Alton & Irvine ²	.89 (.92)	1.02 (.98)	.76	.95	Remove E/W split phasing, restripe shared 3 rd EBL/3 rd EBT to full 3 rd EBL and add 3 rd EBT and defacto EBR	LFTM Program
117. Alton & Toledo ²	.71 (.73)	.92 (.84)	.66	.87	Add a WB right-turn overlap	LFTM Program
125. Bake & Rockfield ²	.71 (.66)	.92 (.89)	.69	.89	Restripe shared 3 rd WBL/2 nd WBT to full 3 rd WBL, remove E/W split phasing and free WBR and add 2 nd WBT and defacto WBR	LFTM Program

¹ Although this location is not forecast to operate deficiently under the baseline (committed) scenario analyzed in the LFTM report, it has been identified as not meeting the performance criteria in the traffic impact analysis for the Vacant Land Opportunities project and therefore is impacted by the Vacant Land Opportunities project. To show that the improvements mitigate project impacts (see performance criteria in Table 1-2), the ICUs for Current General Plan conditions are also presented in parentheses (all ICUs presented for this location are taken from Chapter 4.0 of this report).

² This is a City of Irvine location identified in the Phase III traffic impact analysis as being impacted by the Vacant Land Opportunities project, and the improvements included in the LFTM Program at this location are included to address the impact of the Vacant Land Opportunities project. To show that the improvements mitigate project impacts, the ICUs for Current General Plan conditions are also presented in parentheses (all ICUs presented for this location are taken from the Chapter 4.0 of this report).

³ Includes construction of a third eastbound receiving lane for the third southbound left-turn lane.

Abbreviations:

ICU – Intersection Capacity Utilization

LFTM – Lake Forest Transportation Mitigation Program

NITM – North Irvine Transportation Mitigation Program

Table 5-2
SUMMARY OF 2030 DEFICIENT INTERSECTIONS AND POTENTIAL IMPROVEMENTS
- LAKE FOREST TRANSPORTATION MITIGATION (LFTM) PROGRAM (LANDOWNERS PLAN)

Intersection (NS & EW)	2030 Peak Hour ICU				Improvements	Source
	Without Improvements		With Improvements			
	AM	PM	AM	PM		
3. Lake Forest & Portola	.62	.92	.56	.81	Add 2 nd SBL	LFTM Program
10. Lake Forest & Rancho	.97	1.25	.70	.90	Restripe WB and remove WBR to show 2 WBL, 2 WBT and add defacto WBR and 2 nd EBT	LFTM Program
12. El Toro & Portola/Santa Marg.	.78	1.00	.68	.85	Add 2 nd NBL	LFTM Program
14. Bake & Irvine/Trabuco	1.17	1.02	.92	.85	Add 2 nd NBL, convert 3 rd WBT and WBR to 4 th WBT and restripe 3 rd EBT to shared 3 rd EBT/2 nd EBR Add defacto WBR	NITM Program LFTM Program
17. El Toro & Trabuco	.84	.94	.79	.81	Add defacto NBR and defacto WBR	LFTM Program
22. Bake & Jeronimo	1.03	.88	.87	.88	Add 2 nd NBL Add defacto WBR	NITM Program LFTM Program
23. Lake Forest & Jeronimo	.80	.92	.77	.90	Add defacto EBR	LFTM Program
25. El Toro & Jeronimo	.92	.83	.79	.78	Add 2 nd SBL	NITM and LFTM Programs
26. Los Alisos & Jeronimo	.95	.97	.90	.89	Restripe WB and remove WBR to 2 WBL, 2 WBT and add defacto WBR and 2 nd EBL	NITM and LFTM Programs
30. Los Alisos & Muirlands	1.05	1.18	.86	.89	Add 2 nd NBL, defacto NBR, 2 nd SBL, 2 nd EBL Add defacto WBR	NITM and LFTM Programs LFTM Program
31. Lake Forest & Rockfield	.82	.91	.82	.86	Restripe 2 nd WBT to shared 3 rd WBL/2 nd WBT	NITM and LFTM Programs
34. Los Alisos & Rockfield	.92	.92	.73	.84	Add SBR	NITM and LFTM Programs
36. Lake Forest & I-5/Carlota	.81	1.08	.75	.95	Restripe shared 3 rd EBL/2 nd EBT to 3 rd EBL, add 2 nd WBL and right-turn overlap for WBR Add 2 nd EBT	NITM Program LFTM Program

Table 5-2 (cont)

SUMMARY OF 2030 DEFICIENT INTERSECTIONS AND POTENTIAL IMPROVEMENTS
 - LAKE FOREST TRANSPORTATION MITIGATION (LFTM) PROGRAM (LANDOWNERS PLAN)

Intersection (NS & EW)	2030 Peak Hour ICU				Improvements	Source
	Without Improvements		With Improvements			
	AM	PM	AM	PM		
37. Paseo De Valencia & Carlota	.65	.98	.61	.89	Restripe 2 nd SBT to shared 3 rd SBL/2 nd SBT ²	NITM and LFTM Programs and Laguna Hills
39. El Toro & Avd Carlota	.89	1.12	.83	.86	Restripe EB to 2 EBL, EBT and shared 2 nd EBT/EBR and restripe WB to shared WBL/WBT and 2 WBR with overlap	NITM and LFTM Programs and Laguna Hills
41. Alton & Towne Centre Dr	.94	.83	.82	.80	Add 2 nd WBL	LFTM Program
105. Alton & Irvine ¹	.90 (.92)	1.02 (.98)	.77	.95	Remove E/W split phasing, restripe shared 3 rd EBL/3 rd EBT to full 3 rd EBL and add 3 rd EBT and defacto EBR	LFTM Program
117. Alton & Toledo ¹	.72 (.73)	.91 (.84)	.67	.86	Add a WB right-turn overlap	LFTM Program
125. Bake & Rockfield ¹	.69 (.66)	.92 (.89)	.67	.89	Restripe shared 3 rd WBL/2 nd WBT to full 3 rd WBL, remove E/W split phasing and free WBR and add 2 nd WBT and defacto WBR	LFTM Program

¹This is a City of Irvine location identified in the Phase III traffic impact analysis as being impacted by the Vacant Land Opportunities project, and the improvements included in the LFTM Program at this location are included to address the impact of the Vacant Land Opportunities project. To show that the improvements mitigate project impacts, the ICUs for Current General Plan conditions are also presented in parentheses (all ICUs presented for this location are taken from the Chapter 4.0 of this report).

²Includes construction of a third eastbound receiving lane for the third southbound left-turn lane.

Abbreviations:

ICU – Intersection Capacity Utilization

LFTM – Lake Forest Transportation Mitigation Program

NITM – North Irvine Transportation Mitigation Program

OVERLAY PLAN

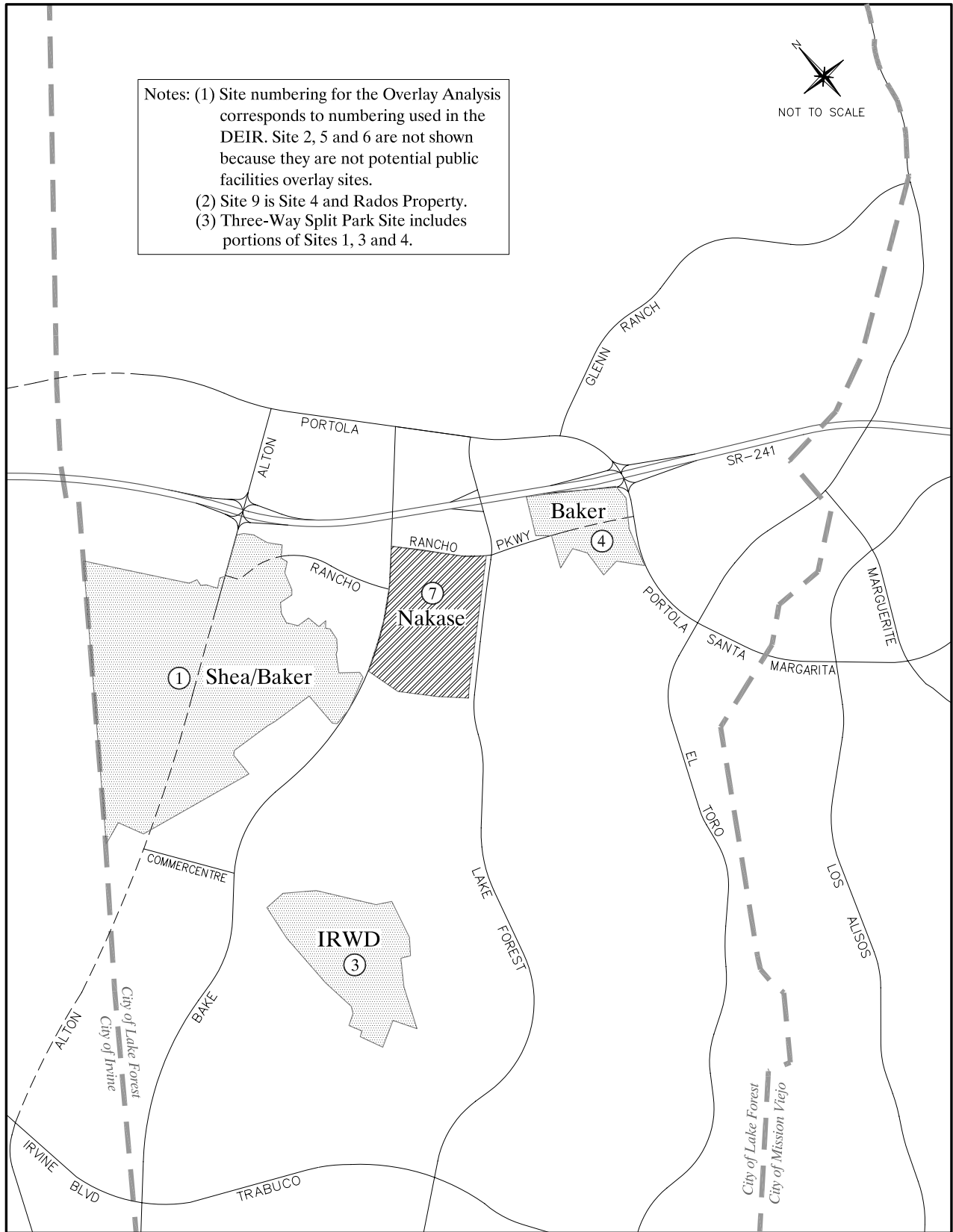
For each alternative the City Preferred Plan (referred also as the proposed project here) development on Sites 1 through 6 would occur in the project area as presented in Chapter 2.0 with the exceptions as noted for each overlay plan site alternative below. There are three sites (see Figure 5-1) being considered for development of public facilities and community facilities (i.e., sports park, community center and city hall) in three of the participating landowners' land areas (Shea/Baker, Baker Ranch and the Irvine Ranch Water District (IRWD)) and two non-participating landowners' land areas (Nakase and Rados). One overlay plan alternative that is evaluated involves combining the sites of three participating landowners (Shea/Baker, IRWD and Baker).

The traffic analysis material presented in this report assumed the public facility uses on a 45-acre portion of the Nakase property (Site 7), a non-participating landowner, under the proposed project. The public facility use will be eliminated from the Nakase site and replace an equivalent area of other uses assumed in the analysis, resulting in a net change in trip generation, with the difference generally being small in relation to the total trip generation of the area being considered for the other overlay analyses.

Table 5-3 summarizes the land use and trip generation comparison. For each participating landowner site including the three-way split park site alternative, and for Nakase, a non-participating landowner site, the proposed project is compared with the equivalent trip generation for the overlay plan. For Rados, a non-participating landowner site, the comparison is for the Current General Plan land uses (as assumed in the traffic study) against the overlay plan.

Site 1 (Shea/Baker) – The proposed project development on Sites 1 through 6 would occur in the project area with the exception that 408 residential units on 45 acres of Site 1 would be eliminated in order to accommodate the three community facilities which consist of a 44,000 square foot community center, a 44,000 square foot city hall and a 39-acre sports park.

The proposed community facilities would occur in a portion of the site that, under the proposed project, would include a total of 795 homes. The traffic generated in this site under the proposed project would be 6,935 average daily traffic (ADT). By comparison, this alternative would include a total of 387 residential units with the community facilities noted above and generate 8,046 ADT. Therefore, this alternative would generate 1,111 more daily trips than the proposed project. Table 5-3 compares the proposed project with this site alternative. This alternative would result in an approximately one percent



Notes: (1) Site numbering for the Overlay Analysis corresponds to numbering used in the DEIR. Site 2, 5 and 6 are not shown because they are not potential public facilities overlay sites.
 (2) Site 9 is Site 4 and Rados Property.
 (3) Three-Way Split Park Site includes portions of Sites 1, 3 and 4.

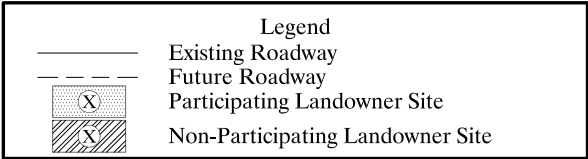


Figure 5-1
 OVERLAY PLAN SITES

Table 5-3
OVERLAY PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Site 1 (Shea/Baker) – City Preferred Plan								
Single Family Detached	321 DU	61	180	241	205	119	324	3,072
Condominium	474 DU	81	237	318	213	156	369	3,863
Total (using vehicle trip rates below)		142	417	559	418	275	693	6,935
Site 1 (Shea/Baker) – Overlay Plan								
Single Family Detached	237 DU	45	133	178	152	88	240	2,268
Condominium	150 DU	26	75	101	68	50	118	1,223
Government Facility	88 TSF	173	21	194	77	173	250	2,457
Sports Park	39 Acre	0	0	0	133	160	293	2,098
Total (using vehicle trip rates below)		244	229	473	430	471	901	8,046
Total Difference Site 1 (Shea)		102	-188	-86	12	196	208	1,111
Site 4 (Baker Ranch) – City Preferred Plan								
Condominium	475 DU	81	238	319	214	157	371	3,871
Commercial (EQ)	150 TSF	129	83	212	369	400	769	8,839
Park	5 Acre	0	0	0	0	0	0	8
Business Park	254 TSF	305	58	363	76	251	327	3,241
Total (using vehicle trip rates below)		515	379	894	659	808	1,467	15,959
Site 4 (Baker Ranch) – Overlay Plan								
Commercial (EQ)	150 TSF	129	83	212	369	400	769	8,839
Government Facility	88 TSF	173	21	194	77	173	250	2,457
Business Park	254 TSF	305	58	363	76	251	327	3,241
Sports Park	39 Acre	0	0	0	133	160	293	2,098
Total (using vehicle trip rates below)		607	162	769	655	984	1,639	16,635
Total Difference Site 4 (Baker Ranch)		92	-217	-125	-4	176	172	676
Site 7 (Nakase) – General Plan								
Business Park	1,841.7 TSF	2,210	424	2,634	553	1,823	2,376	23,500
Site 7 (Nakase) – City Preferred Plan								
Government Facility	88 TSF	173	21	194	77	173	250	2,457
Business Park	1,159 TSF	1,391	267	1,658	348	1,147	1,495	14,788
Sports Park	39 Acre	0	0	0	133	160	293	2,098
Total (using vehicle trip rates below)		1,564	288	1,852	558	1,480	2,038	19,343
Site 7 (Nakase) – Overlay Plan								
Single Family Detached	450 DU	86	252	338	288	167	455	4,307
Government Facility	88 TSF	173	21	194	77	173	250	2,457
Sports Park	39 Acre	0	0	0	133	160	293	2,098
Total (using vehicle trip rates below)		259	273	532	498	500	998	8,862
Total Difference Site 7 (Nakase)		-1,305	-15	-1,320	-60	-980	-1,040	-10,481

Table 5-3 (cont)
 OVERLAY PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Site 9 (Baker-Rados) – City Preferred Plan								
Condominium	475 DU	81	238	319	214	157	371	3,871
Commercial (EQ)	150 TSF	129	83	212	369	400	769	8,839
Park	5 Acre	0	0	0	0	0	0	8
Business Park	890.97 TSF	1,069	205	1,274	267	882	1,149	11,369
Total (using vehicle trip rates below)		1,279	526	1,805	850	1,439	2,289	24,087
Site 9 (Baker-Rados) – Overlay Plan								
Commercial (EQ)	150 TSF	129	83	212	369	400	769	8,839
Government Facility	88 TSF	173	21	194	77	173	250	2,457
Business Park	690.97 TSF	829	159	988	207	684	891	8,817
Sports Park	39 Acre	0	0	0	132	160	292	2,098
Total (using vehicle trip rates below)		1,131	263	1,394	785	1,417	2,202	22,211
Total Difference Site 9 (Baker-Rados)		-148	-263	-411	-65	-22	-87	-1,876
Three-Way Park Split Sites 1, 3 and 4 – City Preferred Plan								
Condominium	475 DU	81	238	319	214	157	371	3,871
Commercial (EQ)	150 TSF	129	83	212	369	400	769	8,839
Total (using vehicle trip rates below)		210	321	531	583	557	1,140	12,710
Three-Way Park Split Sites 1, 3 and 4 – Overlay Plan								
Condominium	225 DU	38	113	151	101	74	175	1,834
Commercial (EQ)	150 TSF	129	83	212	369	400	769	8,839
Government Facility	88 TSF	173	21	194	77	173	250	2,457
Sports Park	39 Acre	0	0	0	133	160	293	2,098
Total (using vehicle trip rates below)		340	217	557	680	807	1,487	15,228
Total Difference Three-Way Park Split		-130	104	-26	-97	-250	-347	-2,518

Table 5-3 (cont)
 OVERLAY PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Vehicle Trip Rates (Land-Use Based)								
Single Family Detached	DU	.19	.56	.75	.64	.37	1.01	9.57
Condominium	DU	.17	.50	.67	.45	.33	.78	8.15
Apartment	DU	.10	.41	.51	.40	.22	.62	6.72
Warehouse	TSF	.37	.08	.45	.12	.35	.47	4.96
Research and Development	TSF	1.03	.21	1.24	.16	.92	1.08	8.11
Church	TSF	.39	.33	.72	.34	.32	.66	9.11
Government Facility	TSF	1.97	.24	2.21	.88	1.97	2.85	27.92
Park	Acre	.01	.00	.01	.02	.02	.04	1.59
Business Park	TSF	1.20	.23	1.43	.30	.99	1.29	12.76
Sports Park	Acre	.01	0	.01	3.4	4.1	7.5	53.8

Notes:

1) The trip rates above and regression equations below have been taken from the Institute of Transportation Engineers (ITE) 7th Edition Trip Generation Manual.

2) The land use-based trip rates for office and commercial use are based on the following equation:

$$LN(T)=AxLN(X)+B \text{ where } X=\text{land use amount (combined TSF in the TAZ)} \text{ and } T=\text{daily trips}$$

Land Use Type	Units	Coefficients		----- AM Peak Hour -----			----- PM Peak Hour -----		
		A	B	Ratio	In	Out	Ratio	In	Out
Commercial	TSF	.65	5.83	.024	61%	39%	.087	48%	52%
Office	TSF	.77	3.65	.14	88%	12%	.135	17%	83%

Abbreviations:

- ADT – average daily trips
- EQ – equation-based
- TSF – thousand square feet

difference in total trip generation as compared to the proposed project. Therefore, the impacts of this alternative would be similar to those of the proposed project.

Site 4 (Baker Ranch) - A 39-acre sports park and 6 acres for a government facility (combined city hall and community center uses) replace the 475 single family attached units (condominiums) planned for this area in the City Preferred Plan. As can be seen in Table 5-3, the differences in the findings and conclusions presented in Chapter 4.0 of this report would be minor due to minimal change in trip generation (approximately one percent of the total trip generation for the City Preferred Plan land use alternative).

Site 7 (Nakase) – This site is a Vacant Land Opportunities non-participating landowner. The proposed project includes a 39-acre sports park and 6 acres for a government facility (combined city hall and community center uses) that replace a portion of a future Business Park on the Nakase property. With this replacement, approximately 63 percent of the Business Park would be built out. With the overlay plan a 39-acre sports park and 6 acres for a government facility (combined city hall and community center uses) and 450 single family detached units would replace around 1.84 million square feet of business park uses. While the overlay plan results in significantly less trips than the City Preferred Plan buildout trips, there would be a change in peak hour directionality associated with residential uses replacing industrial uses (see Table 5-3). Hence, subsequent analysis would be required if this site was chosen for the overlay plan.

Site 9 (Baker Ranch-Rados) - A 39-acre sports park and 6 acres for a government facility (combined city hall and community center uses) replace the 475 single family attached units (condominiums) planned for this area in the City Preferred Plan land use alternative and would also replace 200,000 square feet of business park uses on the Rados site under the General Plan. As can be seen in Table 5-3, the differences in the findings and conclusions presented in this report would be minor due to minimal reduction in trip generation.

Three-Way Park Split (Sites 1, 3 and 4) - This alternative includes three Vacant Land Opportunities participating landowner sites. The proposed project development on Sites 1 through 6 would occur in the project area with the exception that 250 residential units in a portion of Site 4 would be eliminated in order to accommodate three community facilities consisting of a 44,000 square foot community center, a 44,000 square foot city hall, a 39-acre sports park.

The proposed sports parks would occur in portions of Sites 1 and 4 and the proposed community facilities would occur in a portion of Site 3 that, under the proposed project, would include a total of 475 homes and 150,000 square feet of retail. The traffic generated in this site under the proposed project would be 12,710 average daily traffic (ADT). By comparison, this overlay plan site alternative would include a reduced number of homes for a total of 225 residential units with the sports parks, community facilities and commercial use noted above and generate 15,228 ADT. Therefore, this alternative would generate 2,518 more daily trips than the proposed project. Table 5-3 compares the proposed project with this site alternative. The overlay plan results in minor differences compared to the City Preferred Plan buildout trips. Therefore the findings and conclusions presented in this report would not be significantly changed due to the minimal increase in trip generation.

EXISTING-PLUS-PROJECT TRAFFIC ANALYSIS

The purpose of the existing-plus-project analysis is to comply with the California Environmental Quality Act (CEQA), which provides that the baseline for assessing environmental impacts is generally the existing conditions at the time that the environmental document for the project is prepared. The information presented in this section shows the traffic volumes obtained by adding traffic from the proposed project (City Preferred Plan) to existing traffic, irrespective of the proposed project's buildout timeframe. Any comparative traffic analysis of full buildout of the proposed project versus existing traffic conditions would be hypothetical because of the actual buildout time frame of the project (eight to ten years). Hence the information provided here is intended to satisfy the CEQA requirements by showing the volume comparison arising from this hypothetical scenario.

Traffic Forecasts

The ADT forecasts were prepared for a scenario in which traffic generated by the proposed project is added to the existing present-day traffic conditions that were summarized in Chapter 3.0 (see Figure 5-2). The Lake Forest Traffic Analysis Model (LFTAM) was used to determine the effect of the difference between the existing traffic model conditions and the City Preferred Plan on existing traffic conditions in the study area and to distribute the traffic associated with the City Preferred Plan onto the existing circulation system

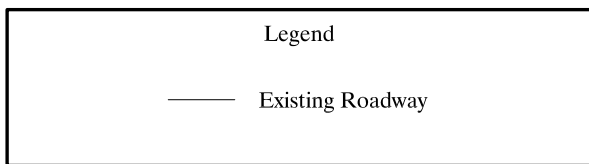
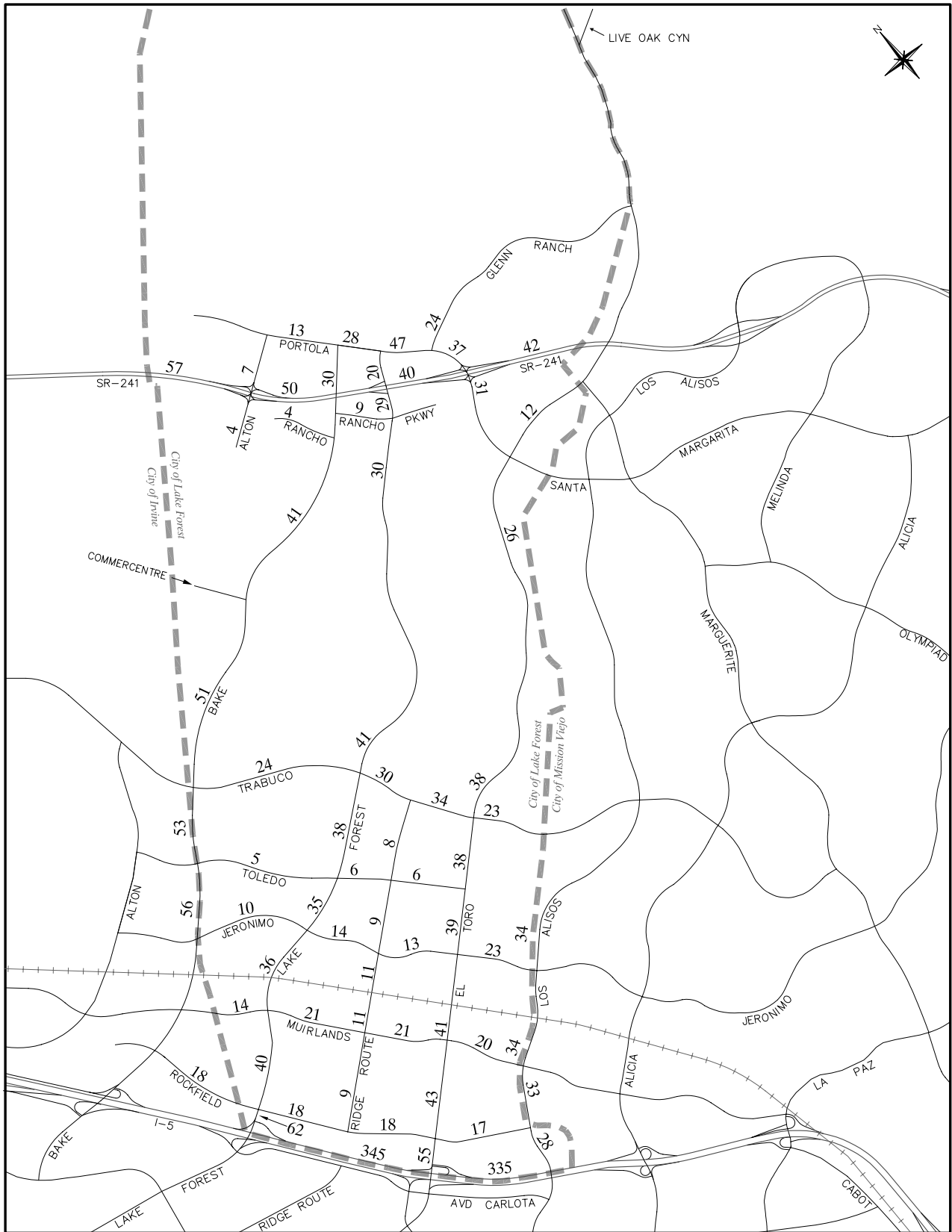


Figure 5-2
EXISTING-PLUS-PROJECT
ADT VOLUMES (000s)

Evaluation Context

As noted above, this evaluation of impacts is hypothetical because the City Preferred Plan is not a near-term construction project. Occupancy of any of the project sites is not anticipated to commence in 2005, and buildout of the site is anticipated to occur over eight to ten years. Therefore, the traffic generated by the proposed project would not be placed on the existing, present day roadway system and existing traffic conditions but would occur with phased improvements as part of project buildout. Also, the existing-plus-project scenario does not account for future population and development growth in the City of Lake Forest and surrounding areas. These population and development growth projections will add traffic to the existing roadway system, with or without the proposed project, and must be accounted for in the evaluation of the potential traffic impacts of the proposed project. In addition the circulation system is projected to change over time, with or without the proposed project, and these circulation system changes include new roadways and the improvement of existing roadways through established programs such as the Foothill Corridor Phasing Plan (FCPP), the NITM Program in nearby City of Irvine, and the proposed LFTM Program. For these reasons, the existing-plus-project scenario is informational in nature and has not been analyzed in the same manner as the actual project scenarios (i.e., in an interim year and long-range context).

Overall, when comparing the ADT volumes of the City Preferred Plan (Figure 4-2) versus the existing-plus-project scenario (Figure 5-2), the ADT volumes under existing-plus-project conditions are lower than the 2030 buildout volumes presented in Chapter 4.0 for most of the City's arterial street system. The locations where the ADT volumes are higher than buildout can be found along Bake Parkway between Jeronimo Road to SR-241, Lake Forest Drive just north of Trabuco Road and between Rancho Parkway and Portola Parkway, Portola Parkway between Glenn Ranch Road and SR-241, Ridge Route Drive between Muirlands Boulevard and the railroad and between Jeronimo Road and Toledo Way.

The most significant differences in ADT volumes as compared to the City Preferred Plan 2030 buildout scenario occur along Bake Parkway with ADTs which differ by more than 20 percent. In the future, Bake Parkway is expected to have less traffic with the extension of Alton Parkway. Therefore the completion of Alton Parkway extension will address the existing-plus-project impacts along Bake Parkway and some of the other roadway segments. Due to the similarities between the ADTs of the City Preferred Plan and the existing-plus-project scenario, it is anticipated that any adverse impacts occurring in these areas would be addressed by the improvements identified in the LFTM program and could be mitigated to less than significant levels.

Appendix A

Land Use Trip Rates and Land Use And Trip Generation By Site

This appendix summarizes the land use and corresponding trip generation assumptions for each of the following participating landowner's project site in the City of Lake Forest: Shea/Baker (Site 1), Portola Center (Site 2), Irvine Ranch Water District (IRWD) (Site 3), Baker Ranch (Site 4), Whisler/Greystone (Site 5), and Peachwood/Pacific Heritage (Site 6).

Figure A-1 illustrates the Lake Forest Traffic Analysis Model (LFTAM) traffic analysis zone (TAZ) system, and Table A-1 summarizes the average daily traffic (ADT) and peak hour trip generation rates being used in LFTAM for the project areas. The ADT and peak hour trip rates are from the Seventh Edition of the Institute of Transportation Engineers' Trip Generation Manual. Tables A-2 through A-4 summarize the land use and trip generation assumed in each of the project TAZs for the Current General Plan, the City Preferred Plan land use alternative, and the Landowners Plan land use alternative.

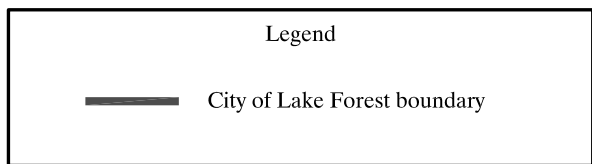
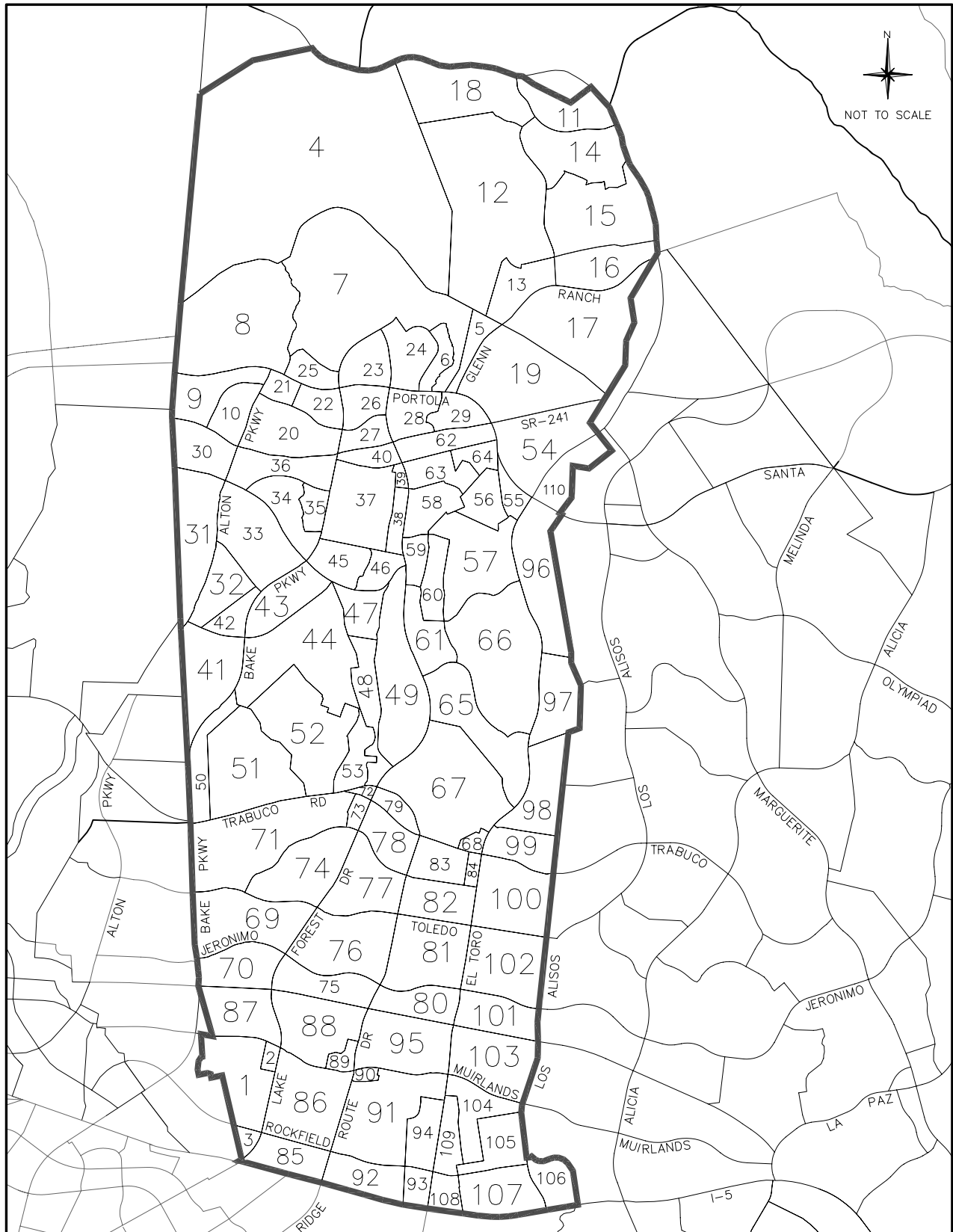


Figure A-1

**LAKE FOREST TRAFFIC ANALYSIS MODEL
(LFTAM) ZONE SYSTEM
- CITY OF LAKE FOREST**

Table A-1

LFTAM ADT AND PEAK HOUR LAND USE TRIP RATE SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Single Family Detached	DU	.19	.56	.75	.64	.37	1.01	9.57
Condominium	DU	.17	.50	.67	.45	.33	.78	8.15
Apartment	DU	.10	.41	.51	.40	.22	.62	6.72
Open Space	Acre	.00	.00	.00	.00	.00	.00	.00
Park	Acre	.01	.00	.01	.02	.02	.04	1.59
Mining/Utility	Acre	1.57	0.92	2.49	0.59	.73	1.32	24.9
Business Park	TSF	1.20	.23	1.43	.30	.99	1.29	12.76
Light Industrial	TSF	6.23	1.28	7.51	1.60	5.66	7.26	51.80
Mini Storage	Acre	1.40	1.40	2.80	1.99	1.84	3.83	38.87

Notes:

- 1) The trip rates above and regression equations below have been taken from the Institute of Transportation Engineers (ITE) 7th Edition Trip Generation Manual.
- 2) The land use-based trip rates for office and commercial use are based on the following equation:

$$LN(T)=AxLN(X)+B \text{ where } X=\text{land use amount (combined TSF in the TAZ)} \text{ and } T=\text{daily trips}$$

Land Use Type	Units	Coefficients		----- AM Peak Hour -----			----- PM Peak Hour -----		
		A	B	Pk/ADT Ratio	In	Out	Pk/ADT Ratio	In	Out
Commercial	TSF	.65	5.83	.024	61%	39%	.087	48%	52%
Office	TSF	.77	3.65	.14	88%	12%	.135	17%	83%

Abbreviations: ADT – average daily trips
 DU – Dwelling Unit
 EQ – equation-based
 LFTAM – Lake Forest Traffic Analysis Model
 TSF – thousand square feet

Table A-2
CURRENT GENERAL PLAN (PROJECT SITE AREA) LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Site 1 (Shea/Baker)								
Zone 31								
Park	17 Acre	0	0	0	0	0	0	27
Business Park	1,129 TSF	1,355	260	1,615	339	1,118	1,457	14,406
Sub-Total		1,355	260	1,615	339	1,118	1,457	14,433
Zone 32								
Business Park	203.99 TSF	245	47	292	61	202	263	2,603
Mini Storage	26 Acre	36	36	72	52	48	100	1,011
Sub-Total		281	83	364	113	250	363	3,614
Zone 33								
Business Park	1,823.6 TSF	2,188	419	2,607	547	1,805	2,352	23,269
Zone 34								
Business Park	530.24 TSF	636	122	758	159	525	684	6,766
Zone 36								
Business Park	339.41 TSF	407	78	485	102	336	438	4,331
Total Site 1 (Shea/Baker)								
Park	17 Acre	0	0	0	0	0	0	27
Business Park	4,026.2 TSF	4,831	926	5,757	1,208	3,986	5,194	51,375
Mini Storage	26 Acre	36	36	72	52	48	100	1,011
Total Site 1 (Shea/Baker)		4,867	962	5,829	1,260	4,034	5,294	52,413
Site 2 (Portola Center)								
Zone 13								
Business Park	1,057 TSF	1,268	243	1,511	317	1,046	1,363	13,487
Zone 16								
Commercial (EQ)	411.27 TSF	249	159	408	711	770	1,481	17,026
Business Park	539.33 TSF	647	124	771	162	534	696	6,882
Sub-Total		896	283	1,179	873	1,304	2,177	23,908
Zone 17								
Open Space	30 Acre	0	0	0	0	0	0	0
Business Park	798.86 TSF	959	184	1,143	240	791	1,031	10,193
Sub-Total		959	184	1,143	240	791	1,031	10,193
Total Site 2 (Portola Center)								
Commercial (EQ)	411.27 TSF	249	159	408	711	770	1,481	17,026
Open Space	30 Acre	0	0	0	0	0	0	0
Business Park	2,395.2 TSF	2,874	551	3,425	719	2,371	3,090	30,562
Total Site 2 (Portola Center)		3,123	710	3,833	1,430	3,141	4,571	47,588

Table A-2 (cont)

CURRENT GENERAL PLAN (PROJECT SITE AREA) LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Total Site 3 (IRWD)								
Zone 44								
Utility	23 Acre	36	21	57	14	17	31	573
Business Park	304.92 TSF	366	70	436	91	302	393	3,891
Light Industrial	415.91 TSF	2,591	532	3,123	665	2,354	3,019	21,544
Total Site 3 (IRWD)		2,993	623	3,616	770	2,673	3,443	26,008
Site 4 (Baker Ranch)								
Zone 62								
Commercial (EQ)	159.47 TSF	135	86	221	384	416	800	9,198
Zone 64								
Commercial (EQ)	353.44 TSF	226	144	370	644	698	1,342	15,429
Total Site 4 (Baker Ranch)								
Commercial (EQ)	512.91 TSF	361	230	591	1,028	1,114	2,142	24,627
Total Site 5 (Whisler/Greystone)								
Zone 60								
Office (EQ)	186.33 TSF	265	36	301	49	241	290	2,154
Total Site 6 (Pacific Heritage)								
Zone 52								
Open Space	17 Acre	0	0	0	0	0	0	0
Total Project Sites 1-6								
Commercial (EQ)	924.18 TSF	610	389	999	1,739	1,884	3,623	41,653
Office (EQ)	186.33 TSF	265	36	301	49	241	290	2,154
Open Space	47 Acre	0	0	0	0	0	0	0
Park	17 Acre	0	0	0	0	0	0	27
Mining/Utility	23 Acre	36	21	57	14	17	31	573
Business Park	6726.3 TSF	8,071	1,547	9,618	2,018	6,659	8,677	85,828
Light Industrial	415.91 TSF	2,591	532	3,123	665	2,354	3,019	21,544
Mini Storage	26 Acre	36	36	72	52	48	100	1,011
Total Project Sites 1-6		11,609	2,561	14,170	4,537	11,203	15,740	152,790

Table A-3
CITY PREFERRED PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Site 1 (Shea/Baker)								
Zone 31								
Single Family Detached	338 DU	64	189	253	216	125	341	3,235
Condominium	448 DU	76	224	300	202	148	350	3,651
Sub-Total		140	413	553	418	273	691	6,886
Zone 32								
Single Family Detached	76 DU	14	43	57	49	28	77	727
Condominium	365 DU	62	183	245	164	120	284	2,975
Park	26 Acre	0	0	0	1	1	2	41
Sub-Total		76	226	302	214	149	363	3,743
Zone 33								
Single Family Detached	359 DU	68	201	269	230	133	363	3,436
Condominium	437 DU	74	219	293	197	144	341	3,562
Sub-Total		142	420	562	427	277	704	6,998
Zone 34								
Single Family Detached	116 DU	22	65	87	74	43	117	1,110
Condominium	176 DU	30	88	118	79	58	137	1,434
Sub-Total		52	153	205	153	101	254	2,544
Zone 36								
Apartment	500 DU	50	205	255	200	110	310	3,360
Commercial (EQ)	120 TSF	112	72	184	319	346	665	7,645
Business Park	200 TSF	240	46	286	60	198	258	2,552
Sub-Total		402	323	725	579	654	1,233	13,557
Total Site 1 (Shea/Baker)								
Single Family Detached	889 DU	168	498	666	569	329	898	8,508
Condominium	1426 DU	242	714	956	642	470	1,112	11,622
Apartment	500 DU	50	205	255	200	110	310	3,360
Commercial (EQ)	120 TSF	112	72	184	319	346	665	7,645
Park	26 Acre	0	0	0	1	1	2	41
Business Park	200 TSF	240	46	286	60	198	258	2,552
Total Site 1 (Shea/Baker)		812	1,535	2,347	1,791	1,454	3,245	33,728
Site 2 (Portola Center)								
Zone 13								
Single Family Detached	93 DU	18	52	70	60	34	94	890
Zone 16								
Single Family Detached	199 DU	38	111	149	127	74	201	1,904
Park	5 Acre	0	0	0	0	0	0	8
Sub-Total		38	111	149	127	74	201	1,912

Table A-3 (cont)
CITY PREFERRED PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Zone 17								
Single Family Detached	233 DU	44	130	174	149	86	235	2,230
Condominium	141 DU	24	71	95	63	47	110	1,149
Apartment	466 DU	47	191	238	186	103	289	3,132
Commercial (EQ)	178.72 TSF	145	93	238	414	448	862	9,905
Park	5 Acre	0	0	0	0	0	0	8
Sub-Total		260	485	745	812	684	1,496	16,424
Total Site 2 (Portola Center)								
Single Family Detached	525 DU	100	293	393	336	194	530	5,024
Condominium	141 DU	24	71	95	63	47	110	1,149
Apartment	466 DU	47	191	238	186	103	289	3,132
Commercial (EQ)	178.72 TSF	145	93	238	414	448	862	9,905
Park	10 Acre	0	0	0	0	0	0	16
Total Site 2 (Portola Center)		316	648	964	999	792	1,791	19,226
Total Site 3 (IRWD)								
Zone 44								
Apartment	833 DU	83	342	425	333	183	516	5,598
Park	11 Acre	0	0	0	0	0	0	17
Total Site 3 (IRWD)		83	342	425	333	183	516	5,615
Site 4 (Baker Ranch)								
Zone 62								
Condominium	475 DU	81	238	319	214	157	371	3,871
Commercial (EQ)	150 TSF	129	83	212	369	400	769	8,839
Park	4 Acre	0	0	0	0	0	0	6
Sub-Total		210	321	531	583	557	1,140	12,716
Zone 64								
No land uses for this zone								
Total Site 4 (Baker Ranch)								
Condominium	475 DU	81	238	319	214	157	371	3,871
Commercial (EQ)	150 TSF	129	83	212	369	400	769	8,839
Park	4 Acre	0	0	0	0	0	0	6
Total Site 4 (Baker Ranch)		210	321	531	583	557	1,140	12,716
Total Site 5 (Whisler/Greystone)								
Zone 60								
Single Family Detached	75 DU	14	42	56	48	28	76	718
Total Site 6 (Pacific Heritage)								
Zone 52								
Single Family Detached	85 DU	16	48	64	54	31	85	813

Table A-3 (cont)
 CITY PREFERRED PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Total Project Sites 1-6								
Single Family Detached	1,574 DU	298	881	1,179	1,007	582	1,589	15,063
Condominium	2,042 DU	347	1,023	1,370	919	674	1,593	16,642
Apartment	1,799 DU	180	738	918	719	396	1,115	12,090
Commercial (EQ)	448.72 TSF	386	248	634	1,102	1,194	2,296	26,389
Park	51 Acre	0	0	0	1	1	2	80
Business Park	200 TSF	240	46	286	60	198	258	2,552
Total Project Sites 1-6		1,451	2,936	4,387	3,808	3,045	6,853	72,816

Table A-4
LANDOWNERS PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Site 1 (Shea/Baker)								
Zone 31								
Single Family Detached	338 DU	64	189	253	216	125	341	3,235
Condominium	448 DU	76	224	300	202	148	350	3,651
Sub-Total		140	413	553	418	273	691	6,886
Zone 32								
Single Family Detached	76 DU	14	43	57	49	28	77	727
Condominium	365 DU	62	183	245	164	120	284	2,975
Park	19.2 Acre	0	0	0	0	0	0	31
Sub-Total		76	226	302	213	148	361	3,733
Zone 33								
Single Family Detached	394 DU	75	221	296	252	146	398	3,771
Condominium	437 DU	74	219	293	197	144	341	3,562
Sub-Total		149	440	589	449	290	739	7,333
Zone 34								
Single Family Detached	116 DU	22	65	87	74	43	117	1,110
Condominium	176 DU	30	88	118	79	58	137	1,434
Sub-Total		52	153	205	153	101	254	2,544
Zone 36								
Apartment	500 DU	50	205	255	200	110	310	3,360
Commercial (EQ)	120 TSF	112	72	184	319	346	665	7,645
Business Park	200 TSF	240	46	286	60	198	258	2,552
Sub-Total		402	323	725	579	654	1,233	13,557
Total Site 1 (Shea/Baker)								
Single Family Detached	924 DU	175	518	693	591	342	933	8,843
Condominium	1426 DU	242	714	956	642	470	1,112	11,622
Apartment	500 DU	50	205	255	200	110	310	3,360
Commercial (EQ)	120 TSF	112	72	184	319	346	665	7,645
Park	19.2 Acre	0	0	0	0	0	0	31
Business Park	200 TSF	240	46	286	60	198	258	2,552
Total Site 1 (Shea/Baker)		819	1,555	2,374	1,812	1,466	3,278	34,053
Site 2 (Portola Center)								
Zone 13								
Single Family Detached	93 DU	18	52	70	60	34	94	890
Zone 16								
Single Family Detached	199 DU	38	111	149	127	74	201	1,904
Park	5.2 Acre	0	0	0	0	0	0	8
Sub-Total		38	111	149	127	74	201	1,912

Table A-4 (cont)
 LANDOWNERS PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Zone 17								
Single Family Detached	233 DU	44	130	174	149	86	235	2,230
Condominium	141 DU	24	71	95	63	47	110	1,149
Apartment	466 DU	47	191	238	186	103	289	3,132
Commercial (EQ)	178.72 TSF	145	93	238	414	448	862	9,905
Park	5.2 Acre	0	0	0	0	0	0	8
Sub-Total		260	485	745	812	684	1,496	16,424
Total Site 2 (Portola Center)								
Single Family Detached	525 DU	100	293	393	336	194	530	5,024
Condominium	141 DU	24	71	95	63	47	110	1,149
Apartment	466 DU	47	191	238	186	103	289	3,132
Commercial (EQ)	178.72 TSF	145	93	238	414	448	862	9,905
Park	10.4 Acre	0	0	0	0	0	0	16
Total Site 2 (Portola Center)		316	648	964	999	792	1,791	19,226
Total Site 3 (IRWD)								
Zone 44								
Apartment	1,000 DU	100	410	510	400	220	620	6,720
Park	10.9 Acre	0	0	0	0	0	0	17
Total Site 3 (IRWD)		100	410	510	400	220	620	6,737
Site 4 (Baker Ranch)								
Zone 62								
Apartment	725 DU	73	297	370	290	160	450	4,872
Park	.9 Acre	0	0	0	0	0	0	1
Sub-Total		73	297	370	290	160	450	4,873
Zone 64								
Apartment	725 DU	73	297	370	290	160	450	4,872
Total Site 4 (Baker Ranch)								
Apartment	1,450 DU	146	594	740	580	320	900	9,744
Park	.9 Acre	0	0	0	0	0	0	1
Total Site 4 (Baker Ranch)		146	594	740	580	320	900	9,745
Total Site 5 (Whisler/Greystone)								
Zone 60								
Single Family Detached	54 DU	10	30	40	35	20	55	517
Condominium	46 DU	8	23	31	21	15	36	375
Total Site 5 (Whisler/Greystone)		18	53	71	56	35	91	892
Total Site 6 (Pacific Heritage)								
Zone 52								
Single Family Detached	85 DU	16	48	64	54	31	85	813

Table A-4 (cont)
 LANDOWNERS PLAN LAND USE AND TRIP GENERATION SUMMARY

Land Use	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Total Project Sites 1-6								
Single Family Detached	1,588 DU	301	889	1,190	1,016	587	1,603	15,197
Condominium	1,613 DU	274	808	1,082	726	532	1,258	13,146
Apartment	3,416 DU	343	1,400	1,743	1,366	753	2,119	22,956
Commercial (EQ)	298.72 TSF	257	165	422	733	794	1,527	17,550
Park	41.4 Acre	0	0	0	0	0	0	65
Business Park	200 TSF	240	46	286	60	198	258	2,552
Total Project Sites 1-6		1,415	3,308	4,723	3,901	2,864	6,765	71,466

Appendix B

Intersection Lane Geometrics

Figure B-1 illustrates the intersections that were analyzed in this study. Table B-1 summarizes the locations in the study area with committed intersection lane improvements that are assumed built by year 2010. Tables B-2 and B-3 summarize the lane geometric configurations for all the intersections that were analyzed within the study area and extended study area.

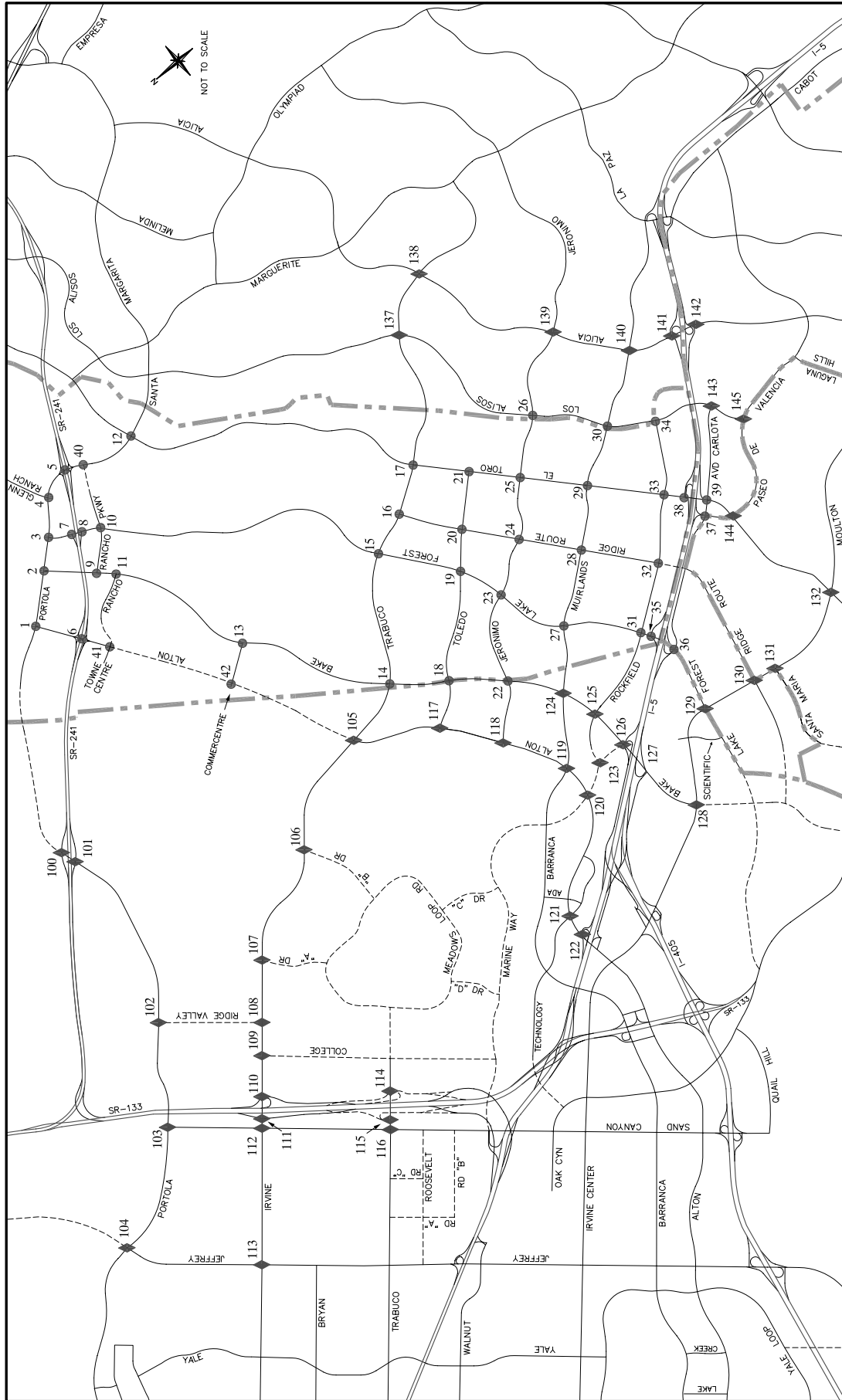


Figure B-1
2030 INTERSECTION LOCATION MAP

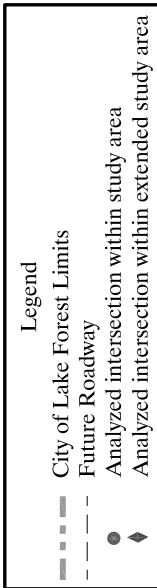


Table B-1
COMMITTED INTERSECTION LANE IMPROVEMENTS WITHIN STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												Source
		Southbound			Westbound			Northbound			Eastbound			
		L	T	R	L	T	R	L	T	R	L	T	R	
6	Alton & SR-241 Ramps													
	Existing Conditions	1	2	f	2	0	f	1	2	f	2	0	f	
	Committed Improvements		3						3					County/Irvine/Lake Forest
	2030 Buildout Conditions	1	3	f	2	0	f	1	3	f	2	0	f	
33	El Toro & Rockfield													
	Existing Conditions	2	3	0	2	2	0	2	3	0	2	2	0	
	Committed Improvements		4				1		4	d			f	City of Lake Forest
	2030 Buildout Conditions	2	4	0	2	2	1	2	4	d	2	2	f	
38	El Toro & Bridger/I-5 NB Ramps													
	Existing Conditions	0	3	1	1.5	0	1.5	1	2.5	1.5	1	1	1>	
	Committed Improvements		5	0										City of Lake Forest
	2030 Buildout Conditions	0	5	0	1.5	0	1.5	1	2.5	1.5	1	1	1>	
39	El Toro & Avd Carlota													
	Existing Conditions	2	3	1>	-1	-1	-1>	0	3	d	-1.5	-1.5	-1	
	Committed Improvements								4					City of Laguna Hills
	2030 Buildout Conditions	2	3	1>	-1	-1	-1>	0	4	d	-1.5	-1.5	-1	
40	Portola & Rancho													
	Existing Conditions													
	Committed Improvements	0	4	d	0	0	0	2	4	0	1.5	0	1.5	Baker Ranch
	2030 Buildout Conditions	0	4	d	0	0	0	2	4	0	1.5	0	1.5	
41	Alton & Towne Centre Dr													
	Existing Conditions													
	Committed Improvements	2	3	1	1	1	0	2	3	1	1	1	1	Shea/Baker
	2030 Buildout Conditions	2	3	1	1	1	0	2	3	1	1	1	1	
42	Alton & Commercentre													
	Existing Conditions													
	Committed Improvements	1	3	0	1.5	0	1.5	0	3	d	0	0	0	Shea/Baker
	2030 Buildout Conditions	1	3	0	1.5	0	1.5	0	3	d	0	0	0	

Lane entry notations: d = de-facto right-turn lane (curb lane 19 feet or wider)
 f = free right-turn lane
 Negative lane entries denote split phasing.
 Right-turn lane entry followed by ">" denotes a right-turn overlap signal phase.

Table B-2
INTERSECTION LANE GEOMETRICS WITHIN STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												Source
		Southbound			Westbound			Northbound			Eastbound			
		L	T	R	L	T	R	L	T	R	L	T	R	
1	Alton & Portola													
	Existing/2030 Conditions	1	2	d	2	3	f	1	2	f	2	2	f	
2	Bake & Portola													
	Existing/2030 Conditions	1	2	d	2	2	d	1	1.5	1.5	1	3	d	
3	Lake Forest & Portola													
	Existing/2030 Conditions	1	2	d	2	3	d	1	2	d	2	3	d	
4	Glenn Ranch & Portola													
	Existing/2030 Conditions	2	2	f	2	3	1>	1	2	0	2	3	1	
5	Portola & SR-241 Ramps													
	Existing/2030 Conditions	2	2	f	2	0	f	2	3	f	1	0	f	
6	Alton & SR-241 Ramps													
	Existing Conditions	1	2	f	2	0	f	1	2	f	2	0	f	
	Committed Improvements		3						3					County/Irvine/Lake Forest
	2030 Buildout Conditions	1	3	f	2	0	f	1	3	f	2	0	f	
7	Lake Forest & SR-241 NB Ramp													
	Existing/2030 Conditions	0	2	1	0	0	0	2	2	0	0	0	0	
8	Lake Forest & SR-241 SB Ramp													
	Existing/2030 Conditions	0	2	0	0	0	0	0	2	0	2	0	1	
9	Bake & Rancho North													
	Existing/2030 Conditions	1	2	0	2	0	2	0	2	d	0	0	0	
10	Lake Forest & Rancho													
	Existing/2030 Conditions	1	2	d	1	2	1	1	2	d	1	1	1	
11	Bake & Rancho South													
	Existing/2030 Conditions	0	2	1	0	0	0	1	2	0	2	0	1	
12	El Toro & Portola/Santa Margarita													
	Existing/2030 Conditions	1	3	1	2	4	d	1	3	f	2	3	1	
13	Bake & Commercentre													
	Existing/2030 Conditions	1	2	d	2	1	0	1	2	d	1	2	0	
14	Bake & Irvine/Trabuco													
	Existing/2030 Conditions	2	3	1	2	3	1	1	2	1	2	3	1	

Table B-2 (continued)
 INTERSECTION LANE GEOMETRICS WITHIN STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												Source
		Southbound			Westbound			Northbound			Eastbound			
		L	T	R	L	T	R	L	T	R	L	T	R	
15	Lake Forest & Trabuco													
	Existing/2030 Conditions	2	3	0	2	3	1	2	3	1	2	3	1	
16	Ridge Route & Trabuco													
	Existing/2030 Conditions	0	0	0	1	3	0	1	0	1	0	3	d	
17	El Toro & Trabuco													
	Existing/2030 Conditions	2	3	1>	2	3	0	2	3	0	2	3	0	
18	Bake & Toledo													
	Existing/2030 Conditions	1	3	d	1	2	0	1	3	d	2	2	1	
19	Lake Forest & Toledo													
	Existing/2030 Conditions	1	3	d	1	2	0	1	3	d	1	2	0	
20	Ridge Route & Toledo													
	Existing/2030 Conditions	1	2	0	1	2	0	1	2	0	1	2	0	
21	El Toro & Toledo													
	Existing/2030 Conditions	1	3	d	0	-1	0	1	3	d	-1.5	-0.5	-1	
22	Bake & Jeronimo													
	Existing/2030 Conditions	1	3	d	1	2	0	1	3	d	2	2	1	
23	Lake Forest & Jeronimo													
	Existing/2030 Conditions	1	3	1	1	2	0	1	3	1	1	2	0	
24	Ridge Route & Jeronimo													
	Existing/2030 Conditions	1	2	d	1	2	0	1	2	d	1	2	0	
25	El Toro & Jeronimo													
	Existing/2030 Conditions	1	3	d	2	2	1	1	3	1>	1	2	0	
26	Los Alisos & Jeronimo													
	Existing/2030 Conditions	1	3	d	1	2	1	1	3	d	1	2	d	
27	Lake Forest & Muirlands													
	Existing/2030 Conditions	2	3	1	2	2	1	2	3	1	2	2	1>	
28	Ridge Route & Muirlands													
	Existing/2030 Conditions	1	2	0	1	2	1	1	2	d	1	2	1	
29	El Toro & Muirlands													
	Existing/2030 Conditions	2	3	1	2	2	1	2	3	1	2	2	1	

Table B-2 (continued)
 INTERSECTION LANE GEOMETRICS WITHIN STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												Source
		Southbound			Westbound			Northbound			Eastbound			
		L	T	R	L	T	R	L	T	R	L	T	R	
30	Los Alisos & Muirlands													
	Existing/2030 Conditions	1	3	d	1	2	0	1	3	0	1	2	0	
31	Lake Forest & Rockfield													
	Existing/2030 Conditions	2	4	0	2	2	1	2	3	1	2	2	2	
32	Ridge Route & Rockfield													
	Existing/2030 Conditions	-0.5	-1.5	0	1	2	0	-0.5	-1.5	0	1	2	0	
33	El Toro & Rockfield													
	Existing Conditions	2	3	0	2	2	0	2	3	0	2	2	0	
	Committed Improvements		4				1		4	d			f	City of Lake Forest
	2030 Buildout Conditions	2	4	0	2	2	1	2	4	d	2	2	f	
34	Los Alisos & Rockfield/Fordview													
	Existing/2030 Conditions	1	2	0	0	-1	-d	1	2	0	-1.5	-0.5	-1	
35	Lake Forest & I-5 NB Ramps													
	Existing/2030 Conditions	0	3	f	2	0	2	0	3	0	0	0	0	
36	Lake Forest & Avd Carlota/I-5 SB													
	Existing/2030 Conditions	2	3	f	-1	0	-2	0	4	0	-2.5	-1.5	-1	
37	Paseo de Valencia at Avd Carlota													
	Existing/2030 Conditions	-2	-2	0	1	2	1	-2	-2	0	2	2	1	
38	El Toro & Bridger/I-5 NB Ramps													
	Existing Conditions	0	3	1	1.5	0	1.5	1	2.5	1.5	1	1	1>	
	Committed Improvements		5	0										City of Lake Forest
	2030 Buildout Conditions	0	5	0	1.5	0	1.5	1	2.5	1.5	1	1	1>	
39	El Toro & Avd Carlota													
	Existing Conditions	2	3	1>	-1	-1	-1>	0	3	d	-1.5	-1.5	-1	
	Committed Improvements								4					City of Laguna Hills
	2030 Buildout Conditions	2	3	1>	-1	-1	-1>	0	4	d	-1.5	-1.5	-1	
40	Portola & Rancho													
	Existing Conditions													
	Committed Improvements	0	4	d	0	0	0	2	4	0	1.5	0	1.5	Baker Ranch
	2030 Buildout Conditions	0	4	d	0	0	0	2	4	0	1.5	0	1.5	

Table B-2 (continued)
 INTERSECTION LANE GEOMETRICS WITHIN STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												Source
		Southbound			Westbound			Northbound			Eastbound			
		L	T	R	L	T	R	L	T	R	L	T	R	
41	Alton & Towne Centre Dr													
	Existing Conditions													
	Committed Improvements	2	3	1	1	1	0	2	3	1	1	1	1	Shea/Baker
	2030 Buildout Conditions	2	3	1	1	1	0	2	3	1	1	1	1	
42	Alton & Commercentre													
	Existing Conditions													
	Committed Improvements	1	3	0	1.5	0	1.5	0	3	d	0	0	0	Shea/Baker
	2030 Buildout Conditions	1	3	0	1.5	0	1.5	0	3	d	0	0	0	

Lane entry notations: d = de-facto right-turn lane (curb lane 19 feet or wider)
 f = free right-turn lane
 Negative lane entries denote split phasing.
 Right-turn lane entry followed by ">" denotes a right-turn overlap signal phase.

Table B-3
INTERSECTION LANE GEOMETRICS IN EXTENDED STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												ATMS	Source	
		Southbound			Westbound			Northbound			Eastbound					
		L	T	R	L	T	R	L	T	R	L	T	R			
100	Portola & SR-241 NB Ramps															
	Existing Conditions	0	1	0	1.5	0	0.5	0	1	0	0	0	0			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements		2	1				1	2							Unfunded General Plan Imp.
	Final 2030 Buildout Conditions	0	2	1	1.5	0	0.5	1	2	0	0	0	0			
101	Portola & SR-241 SB Ramps															
	Existing Conditions	1	2	0	0	0	0	0	1	1	0.5	0	1.5			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements								1.5	1.5						Unfunded General Plan Imp.
	Final 2030 Buildout Conditions	1	2	0	0	0	0	0	1.5	1.5	0.5	0	1.5			
102	Ridge Valley & Portola															
	Existing Conditions															
	2010 Improvements	1	2	0	1	2	0	2	1	1	1	2	1			
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	1	2	0	1	2	0	2	1	1	1	2	1			
103	Sand Canyon & Portola															
	Existing Conditions	0	0	0	2	2	0	2	0	2	0	2	f			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	0	0	0	2	2	0	2	0	2	0	2	f			
104	Jeffrey & Portola															
	Existing Conditions	1	1	f	2	2	1	2	1	f	1	2	1>			
	2010 Improvements															
	2025 Improvements					3	d					3				Northern Sphere
	Buildout Improvements	2	3	0					2	1	2					Northern Sphere
	Final 2030 Buildout Conditions	2	3	0	2	3	d	2	2	1	2	3	1>			

Table B-3 (continued)
 INTERSECTION LANE GEOMETRICS IN EXTENDED STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												ATMS	Source
		Southbound			Westbound			Northbound			Eastbound				
		L	T	R	L	T	R	L	T	R	L	T	R		
105	Alton & Irvine														
	Existing Conditions	0	0	0	2	3	0	2	0	f	0	3	1		
	2010 Improvements	2	3	f			1		3		2			County/Irvine/Lake Forest	
	2025 Improvements				-2	-3	-1				-2.5	-2.5	-1	NITM Program	
	Buildout Improvements														
	Final 2030 Buildout Conditions	2	3	f	-2	-3	-1	2	3	f	-2.5	-2.5	-1		
106	B Dr & Irvine														
	Existing Conditions														
	2010 Improvements	0	0	0	1	3	0	1	0	1	0	3	1	Orange County Great Park	
	2025 Improvements														
	Buildout Improvements														
	Final 2030 Buildout Conditions	0	0	0	1	3	0	1	0	1	0	3	1		
107	A Dr & Irvine														
	Existing Conditions														
	2010 Improvements	0	0	0	2	3	0	2	0	1	0	3	1	Orange County Great Park	
	2025 Improvements														
	Buildout Improvements														
	Final 2030 Buildout Conditions	0	0	0	2	3	0	2	0	1	0	3	1		
108	Ridge Valley & Irvine														
	Existing Conditions														
	2010 Improvements	2	0	1	0	3	1	0	0	0	1	3	0	Orange County Great Park	
	2025 Improvements														
	Buildout Improvements										2			NITM Program	
	Final 2030 Buildout Conditions	2	0	1	0	3	1	0	0	0	2	3	0		
109	College & Irvine														
	Existing Conditions														
	2010 Improvements	0	0	0	2	3	0	1.5	0	1.5	0	3	1	Orange County Great Park	
	2025 Improvements														
	Buildout Improvements														
	Final 2030 Buildout Conditions	0	0	0	2	3	0	1.5	0	1.5	0	3	1		

Table B-3 (continued)
 INTERSECTION LANE GEOMETRICS IN EXTENDED STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												ATMS	Source	
		Southbound			Westbound			Northbound			Eastbound					
		L	T	R	L	T	R	L	T	R	L	T	R			
110	SR-133 NB Ramps & Irvine															
	Existing Conditions	0	0	0	0	3	0	1	0	1	0	3	f			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	0	0	0	0	3	0	1	0	1	0	3	f			
111	SR-133 SB Ramps & Irvine															
	Existing Conditions	2	0	1	1	3	0	0	0	0	0	3	d			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	0	1	1	3	0	0	0	0	0	3	d			
112	Sand Canyon & Irvine															
	Existing Conditions	2	2	1	2	3	1	2	2	1	2	3	1			
	2010 Improvements															
	2025 Improvements		3	d					3			4			Northern Sphere	
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	3	d	2	3	1	2	3	1	2	4	1			
113	Jeffrey & Irvine															
	Existing Conditions	2	3	1	2	2	1	2	3	1	1	2	1			
	2010 Improvements													X	Paid (Northwood)	
	2025 Improvements					3	d				2	3	d		Northern Sphere	
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	3	1	2	3	d	2	3	1	2	3	d	X		
114	SR-133 NB Ramps & Trabuco															
	Existing Conditions															
	2010 Improvements															
	2025 Improvements	0	0	0	0	2	f	1.5	0	1.5	0	2	f		NITM Program	
	Buildout Improvements															
	Final 2030 Buildout Conditions	0	0	0	0	2	f	1.5	0	1.5	0	2	f			

Table B-3 (continued)
 INTERSECTION LANE GEOMETRICS IN EXTENDED STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												ATMS	Source	
		Southbound			Westbound			Northbound			Eastbound					
		L	T	R	L	T	R	L	T	R	L	T	R			
115	SR-133 SB Ramps & Trabuco															
	Existing Conditions															
	2010 Improvements															
	2025 Improvements	1.5	0	1.5	0	2	f	0	0	0	0	2	f		NITM Program	
	Buildout Improvements															
	Final 2030 Buildout Conditions	1.5	0	1.5	0	2	f	0	0	0	0	2	f			
116	Sand Canyon & Trabuco															
	Existing Conditions	1	2	0	1	2	0	1	2	1	1	1	1			
	2010 Improvements	2	3	1	2	3	d	2	3	f	2	3	f		Northern Sphere/PA40	
	2025 Improvements													X	PA9C (2025 only)	
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	3	1	2	3	d	2	3	f	2	3	f			
117	Alton & Toledo															
	Existing Conditions	1	3	0	1	1	1	1	3	f	1	1	0			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	1	3	0	1	1	1	1	3	f	1	1	0			
118	Alton & Jeronimo															
	Existing Conditions	2	3	0	2	1	1	1	3	f	1	1	f			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	3	0	2	1	1	1	3	f	1	1	f			
119	Alton & Barranca/Muirlands															
	Existing Conditions	2	3	f	2	2	0	1	3	f	2	2	0			
	2010 Improvements															
	2025 Improvements				-2	-2					-2.5	-1.5			NITM Program	
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	3	f	-2	-2	0	1	3	f	-2.5	-1.5	0			

Table B-3 (continued)
INTERSECTION LANE GEOMETRICS IN EXTENDED STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												ATMS	Source	
		Southbound			Westbound			Northbound			Eastbound					
		L	T	R	L	T	R	L	T	R	L	T	R			
120	Marine & Alton															
	Existing Conditions															
	2010 Improvements	1	2	1	1	3	1	1	2	1	1	3	1			Orange County Great Park
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	1	2	1	1	3	1	1	2	1	1	3	1			
121	Alton & Technology															
	Existing Conditions	1	4	1	2	2	0	2	3	1	1	2	2>			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements				-2.5	-1.5					-1.5	-1.5	-2>			NITM Program
	Final 2030 Buildout Conditions	1	4	1	-2.5	-1.5	0	2	3	1	-1.5	-1.5	-2>			
122	Alton & I-5 NB Ramps															
	Existing Conditions	0	3	f	1.5	0	1.5	0	3	f	0	0	0			
	2010 Improvements															
	2025 Improvements				2.5		0.5									NITM Program
	Buildout Improvements															
	Final 2030 Buildout Conditions	0	3	f	2.5	0	0.5	0	3	f	0	0	0			
123	Marine & Rockfield															
	Existing Conditions															
	2010 Improvements	1	2	0	1.5	0	1.5	0	2	1	0	0	0			Orange County Great Park
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	1	2	0	1.5	0	1.5	0	2	1	0	0	0			
124	Bake & Muirlands															
	Existing Conditions	2	4	f	2	2	f	2	4	d	2	2	f			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	4	f	2	2	f	2	4	d	2	2	f			

Table B-3 (continued)
 INTERSECTION LANE GEOMETRICS IN EXTENDED STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												ATMS	Source	
		Southbound			Westbound			Northbound			Eastbound					
		L	T	R	L	T	R	L	T	R	L	T	R			
125	Bake & Rockfield															
	Existing Conditions	2	4	1	2	2	f	2	4	f	1	2	f			
	2010 Improvements															
	2025 Improvements				-2.5	-1.5					-1	-2				NITM Program
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	4	1	-2.5	-1.5	f	2	4	f	-1	-2	f			
126	Bake & Marine/I-5 NB Ramps															
	Existing Conditions	0	3	f	1.5	0	1.5	0	3	f	0	0	0			
	2010 Improvements			0 ¹	1	2	2	1			2		1			Orange County Great Park
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	0	3	0 ¹	1	2	2	1	3	f	2	0	1			
127	Bake & I-5 SB Ramps															
	Existing Conditions	0	3	f	0	0	0	0	3	f	2.5	0	1.5			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	0	3	f	0	0	0	0	3	f	2.5	0	1.5			
128	Bake & Irvine Center															
	Existing Conditions	2	1	1	1	3	d	1	1	0	2	2	d			
	2010 Improvements		3						3	d		3				TIC/PA34
	2025 Improvements				2	4		2								County (Aliso Creek deletion) PA34
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	3	1	2	4	d	2	3	d	2	3	d			
129	Lake Forest & Irvine Center															
	Existing Conditions	2	3	f	2	3	0	2	3	1	2	3	d			
	2010 Improvements						1									City of Laguna Hills
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	3	f	2	3	1	2	3	1	2	3	d			

Table B-3 (continued)
 INTERSECTION LANE GEOMETRICS IN EXTENDED STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												ATMS	Source	
		Southbound			Westbound			Northbound			Eastbound					
		L	T	R	L	T	R	L	T	R	L	T	R			
130	Ridge Route & Moulton															
	Existing Conditions	1	2	1	1	3	1	1	2	1	1	3	0			
	2010 Improvements	2			2	4		2			2		1		County	
	2025 Improvements															
	Buildout Improvements								1.5	1.5			4	0	NITM Program	
	Final 2030 Buildout Conditions	2	2	1	2	4	1	2	1.5	1.5	2	4	0		Unfunded General Plan Imp.	
131	Santa Maria & Moulton															
	Existing Conditions	0	0	0	1	3	0	1.5	0	1.5	0	3	0			
	2010 Improvements												1>		County (Aliso Creek deletion)	
	2025 Improvements					4						4	0		NITM Program	
	Buildout Improvements															
	Final 2030 Buildout Conditions	0	0	0	1	4	0	1.5	0	1.5	0	4	0			
132	El Toro & Moulton															
	Existing Conditions	1	3	d	2	3	d	1	3	d	2	3	1>			
	2010 Improvements	2		1			1	2		1					County	
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	3	1	2	3	1	2	3	1	2	3	1>			
137	Los Alisos & Trabuco															
	Existing Conditions	1	3	0	1	2	d	1	3	d	1	2	d			
	2010 Improvements															
	2025 Improvements							2		0					NITM Program	
	Buildout Improvements															
	Final 2030 Buildout Conditions	1	3	0	1	2	d	2	3	0	1	2	d			
138	Trabuco & Alicia															
	Existing Conditions	1	2	d	1	3	d	1	2	d	1	3	d			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	1	2	d	1	3	d	1	2	d	1	3	d			

Table B-3 (continued)
 INTERSECTION LANE GEOMETRICS IN EXTENDED STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												ATMS	Source
		Southbound			Westbound			Northbound			Eastbound				
		L	T	R	L	T	R	L	T	R	L	T	R		
139	Jeronimo & Alicia														
	Existing Conditions	2	2	1	2	3	1	2	2	1	2	3	1		
	2010 Improvements														
	2025 Improvements														
	Buildout Improvements														
	Final 2030 Buildout Conditions	2	2	1	2	3	1	2	2	1	2	3	1		
140	Alicia & Muirlands														
	Existing Conditions	1	3	1	1	2	1	2	3	1	1	2	1>		
	2010 Improvements	2			2									NITM Program	
	2025 Improvements		4	0							2			NITM Program	
	Buildout Improvements														
	Final 2030 Buildout Conditions	2	4	0	2	2	1	2	3	1	2	2	1>		
141	I-5 NB Ramps & Alicia														
	Existing Conditions	0	0	0	0	3	f	1.5	0	1.5	0	3	f		
	2010 Improvements														
	2025 Improvements														
	Buildout Improvements														
	Final 2030 Buildout Conditions	0	0	0	0	3	f	1.5	0	1.5	0	3	f		
142	I-5 SB Ramps & Alicia														
	Existing Conditions	1.5	0	1.5	0	3	f	0	0	0	0	3	f		
	2010 Improvements														
	2025 Improvements	2.5												County (Aliso Creek deletion)	
	Buildout Improvements														
	Final 2030 Buildout Conditions	2.5	0	1.5	0	3	f	0	0	0	0	3	f		
143	Los Alisos & Avd Carlota														
	Existing Conditions	1	2	1>	0	-1	-d	2	3	0	-1.5	-0.5	-1		
	2010 Improvements														
	2025 Improvements														
	Buildout Improvements		3	d										Unfunded General Plan Imp.	
	Final 2030 Buildout Conditions	1	3	d	0	-1	-d	2	3	0	-1.5	-0.5	-1		

Table B-3 (continued)
 INTERSECTION LANE GEOMETRICS IN EXTENDED STUDY AREA

Loc. #	Intersection (NS & EW)	Intersection Approach Lanes												ATMS	Source	
		Southbound			Westbound			Northbound			Eastbound					
		L	T	R	L	T	R	L	T	R	L	T	R			
144	El Toro & Paseo de Valencia															
	Existing Conditions	2	3	0	2	1	1	1	3	d	1	2	0			
	2010 Improvements					2		2		1			1			City of Laguna Hills
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	2	3	0	2	2	1	2	3	1	1	2	1			
145	Los Alisos & Paseo de Valencia															
	Existing Conditions	3	0	1>	0	2	2>	0	0	0	2	2	0			
	2010 Improvements															
	2025 Improvements															
	Buildout Improvements															
	Final 2030 Buildout Conditions	3	0	1>	0	2	2>	0	0	0	2	2	0			

Appendix C

Intersection Capacity Utilization (ICU) Worksheets

This appendix summarizes information pertaining to the intersection analysis sections of the study.

ICU Calculation Methodology

The ICU calculation procedure is based on a critical movement methodology that shows the amount of capacity utilized by each critical movement at an intersection. A capacity of 1,700 vehicles per hour per lane is assumed together with a .05 clearance interval. A “de-facto” right-turn lane is used in the ICU calculation for cases where a curb lane is wide enough to separately serve both through and right-turn traffic (typically with a width of 19 feet or more from curb to outside of through-lane with parking prohibited during peak periods). Such lanes are treated the same as striped right-turn lanes during the ICU calculations, but they are denoted on the ICU calculation worksheets using the letter “d” in place of a numerical entry for right-turn lanes.

The methodology also incorporates a check for right-turn capacity utilization. Both right-turn-on-green (RTOG) and right-turn-on-red (RTOR) capacity availability are calculated and checked against the total right-turn capacity need. If insufficient capacity is available, then an adjustment is made to the total capacity utilization value. The following example shows how this adjustment is made.

Example for Northbound Right

1. Right-Turn-On-Green (RTOG)

If NBT is critical move, then:

$$\text{RTOG} = \text{V/C (NBT)}$$

Otherwise,

$$\text{RTOG} = \text{V/C (NBL)} + \text{V/C (SBT)} - \text{V/C (SBL)}$$

2. Right-Turn-On-Red (RTOR)

If WBL is critical move, then:

$$\text{RTOR} = \text{V/C (WBL)}$$

Otherwise,

$$\text{RTOR} = \text{V/C (EBL)} + \text{V/C (WBT)} - \text{V/C (EBT)}$$

3. Right-Turn Overlap Adjustment

If the northbound right is assumed to overlap with the adjacent westbound left, adjustments to the RTOG and RTOR values are made as follows:

$$\begin{aligned} \text{RTOG} &= \text{RTOG} + \text{V/C (WBL)} \\ \text{RTOR} &= \text{RTOR} - \text{V/C (WBL)} \end{aligned}$$

4. Total Right-Turn Capacity (RTC) Availability For NBR

$$\begin{aligned} \text{RTC} &= \text{RTOG} + \text{factor} \times \text{RTOR} \\ \text{Where factor} &= \text{RTOR saturation flow factor (0\% for County intersections,} \\ &75\% \text{ for intersections in all other jurisdictions within the study area)} \end{aligned}$$

Right-turn adjustment is then as follows: Additional ICU = V/C (NBR) – RTC

A zero or negative value indicates that adequate capacity is available and no adjustment is necessary. A positive value indicates that the available RTOR and RTOG capacity does not adequately accommodate the right-turn V/C, therefore the right-turn is essentially considered to be a critical movement. In such cases, the right-turn adjustment is noted on the ICU worksheet and it is included in the total capacity utilization value. When it is determined that a right-turn adjustment is required for more than one right-turn movement, the word “multi” is printed on the worksheet instead of an actual right-turn movement reference, and the right-turn adjustments are cumulatively added to the total capacity utilization value. In such cases, further operational evaluation is typically carried out to determine if under actual operational conditions, the critical right-turns would operate simultaneously, and therefore a right-turn adjustment credit should be applied.

Shared Lane V/C Methodology

For intersection approaches where shared usage of a lane is permitted by more than one turn movement (e.g., left/through, through/right, left/through/right), the individual turn volumes are evaluated to determine whether dedication of the shared lane is warranted to any one given turn movement. The following example demonstrates how this evaluation is carried out:

Example for Shared Left/Through Lane

1. Average Lane Volume (ALV)

$$\text{ALV} = \frac{\text{Left-Turn Volume} + \text{Through Volume}}{\text{Total Left} + \text{Through Approach Lanes (including shared lane)}}$$

2. ALV for Each Approach

$$\text{ALV (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Lanes (including shared lane)}}$$

$$\text{ALV (Through)} = \frac{\text{Through Volume}}{\text{Through Approach Lanes (including shared lane)}}$$

3. Lane Dedication is Warranted

If ALV (Left) is greater than ALV then full dedication of the shared lane to the left-turn approach is warranted. Left-turn and through V/C ratios for this case are calculated as follows:

$$\text{V/C (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Capacity (including shared lane)}}$$

$$\text{V/C (Through)} = \frac{\text{Through Volume}}{\text{Through Approach Capacity (excluding shared lane)}}$$

Similarly, if ALV (Through) is greater than ALV then full dedication to the through approach is warranted, and left-turn and through V/C ratios are calculated as follows:

$$\text{V/C (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Capacity (excluding shared lane)}}$$

$$\text{V/C (Through)} = \frac{\text{Through Volume}}{\text{Through Approach Capacity (including shared lane)}}$$

4. Lane Dedication is not Warranted

If ALV (Left) and ALV (Through) are both less than ALV, the left/through lane is assumed to be truly shared and each left, left/through or through approach lane carries an evenly distributed volume of traffic equal to ALV. A combined left/through V/C ratio is calculated as follows:

$$\text{V/C (Left/Through)} = \frac{\text{Left-Turn Volume} + \text{Through Volume}}{\text{Total Left} + \text{Through Approach Capacity (including shared lane)}}$$

This V/C (Left/Through) ratio is assigned as the V/C (Through) ratio for the critical movement analysis and ICU summary listing.

If split phasing has not been designated for this approach, the relative proportion of V/C (Through) that is attributed to the left-turn volume is estimated as follows:

If approach has more than one left-turn (including shared lane), then:

$$\text{V/C (Left)} = \text{V/C (Through)}$$

If approach has only one left-turn lane (shared lane), then:

$$V/C \text{ (Left)} = \frac{\text{Left-Turn Volume}}{\text{Single Approach Lane Capacity}}$$

If this left-turn movement is determined to be a critical movement, the V/C (Left) value is posted in brackets on the ICU summary printout.

These same steps are carried out for shared through/right lanes. If full dedication of a shared through/right lane to the right-turn movement is warranted, the right-turn V/C value calculated in step three is checked against the RTOR and RTOG capacity. When an approach contains more than one shared lane (e.g., left/through and through/right), steps one and two listed above are carried out for the three turn movements combined. Step four is carried out if dedication is not warranted for either of the shared lanes. If dedication of one of the shared lanes is warranted to one movement or another, step three is carried out for the two movements involved, and then steps one through four are repeated for the two movements involved in the other shared lane.

Figure C-1 illustrates the intersections that were analyzed in this study. This is followed by AM and PM peak hour intersection capacity utilization (ICU) worksheets for existing and future traffic conditions. The ICU data set is presented according to intersection number and contains the following scenarios in the order shown:

- Existing Count (2004) - (Within Study Area Only)
- 2030 Current General Plan (GP)
- 2030 City Preferred Plan
- 2030 City Preferred Plan with Mitigation
- 2030 City Preferred Plan with Alternative Mitigation
- 2030 Landowners Plan
- 2030 Landowners Plan with Mitigation
- 2030 Landowners Plan with Alternative Mitigation

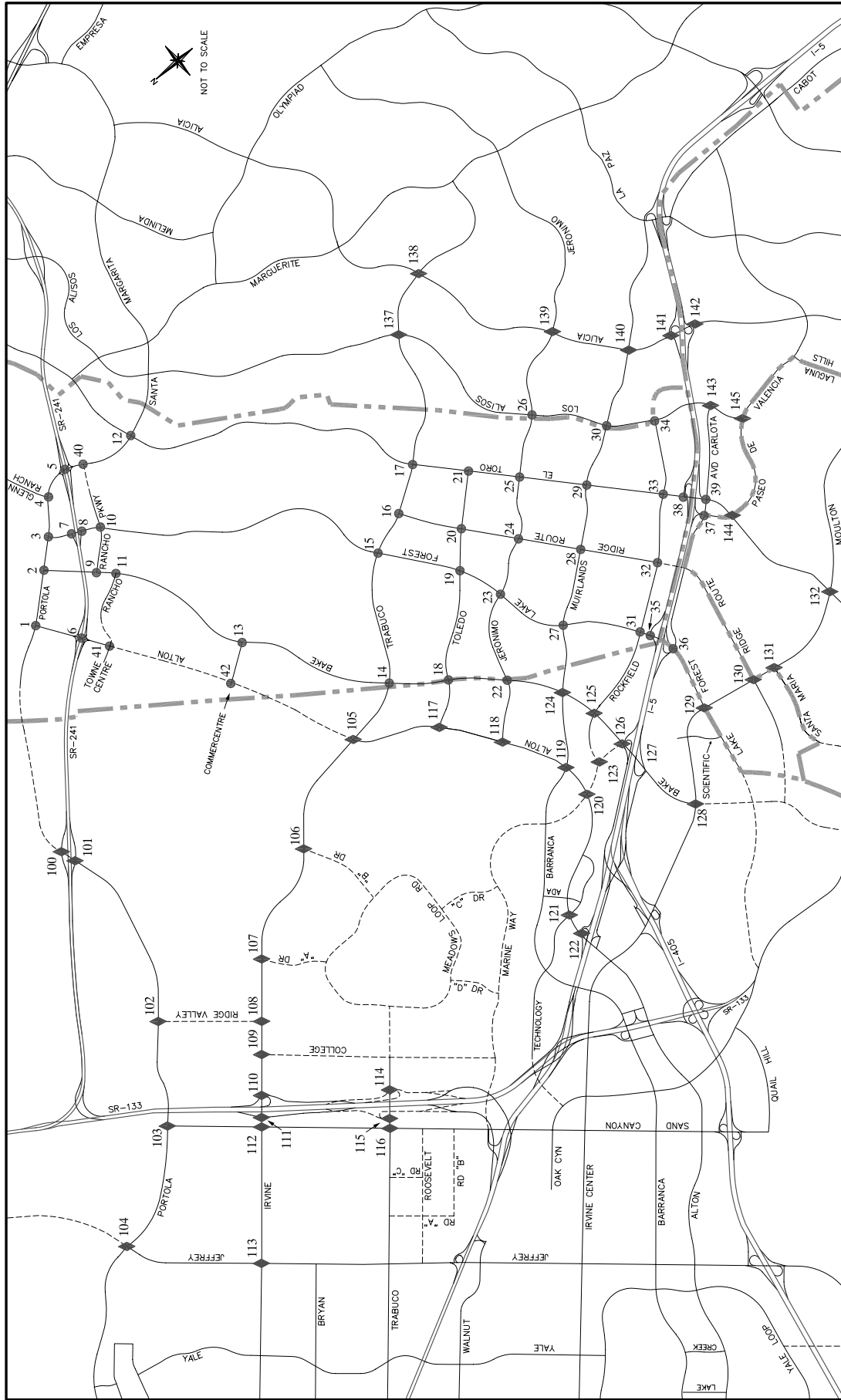


Figure C-1
2030 INTERSECTION LOCATION MAP

Legend
 - - - - City of Lake Forest Limits
 - - - - Future Roadway
 ● Analyzed intersection within study area
 ◆ Analyzed intersection within extended study area

1. Alton & Portola

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	19	.01	99	.06
NBT	2	3400	38	.01*	118	.03*
NBR	f		80		195	
SBL	1	1700	317	.19*	135	.08*
SBT	2	3400	84	.02	48	.01
SBR	d	1700	0	.00	4	.00
EBL	2	3400	2	.00	3	.00
EBT	2	3400	353	.10*	140	.04*
EBR	f		72		29	
WBL	2	3400	141	.04*	133	.04*
WBT	3	5100	147	.03	267	.05
WBR	f		125		244	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .39 .24

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	50	.03	220	.13*
NBT	2	3400	60	.02*	100	.03
NBR	f		220		540	
SBL	1	1700	170	.10*	70	.04
SBT	2	3400	90	.03	70	.02*
SBR	d	1700	0	.00	10	.01
EBL	2	3400	10	.00	10	.00
EBT	2	3400	1060	.31*	670	.20*
EBR	f		140		110	
WBL	2	3400	290	.09*	320	.09*
WBT	3	5100	750	.15	970	.19
WBR	f		80		130	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 .49

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	50	.03	170	.10*
NBT	2	3400	70	.02*	80	.02
NBR	f		320		570	
SBL	1	1700	160	.09*	60	.04
SBT	2	3400	80	.02	80	.02*
SBR	d	1700	0	.00	10	.01
EBL	2	3400	10	.00	10	.00
EBT	2	3400	870	.26*	760	.22*
EBR	f		100		120	
WBL	2	3400	350	.10*	370	.11*
WBT	3	5100	880	.17	870	.17
WBR	f		80		120	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .52 .50

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	60	.04	170	.10*
NBT	2	3400	70	.02*	90	.03
NBR	f		320		580	
SBL	1	1700	160	.09*	60	.04
SBT	2	3400	80	.02	80	.02*
SBR	d	1700	0	.00	10	.01
EBL	2	3400	10	.00	10	.00
EBT	2	3400	850	.25*	750	.22*
EBR	f		90		110	
WBL	2	3400	340	.10*	360	.11*
WBT	3	5100	910	.18	860	.17
WBR	f		80		120	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .51 .50

2. Bake & Portola

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	100	.06*	367	.22
NBT	1.5	5100	144	{.04}	366	{.17}*
NBR	1.5		140		830	
SBL	1	1700	108	.06	248	.15*
SBT	2	3400	378	.11*	318	.09
SBR	d	1700	115	.07	284	.17
EBL	1	1700	271	.16	290	.17*
EBT	3	5100	208	.04*	485	.10
EBR	d	1700	226	.13	127	.07
WBL	2	3400	953	.28*	558	.16
WBT	2	3400	376	.11	678	.20*
WBR	d	1700	58	.03	78	.05
Right Turn Adjustment			EBR	.04*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.58		.74

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	150	.09*	460	.27*
NBT	1.5	5100	130	{.04}	330	{.13}
NBR	1.5		110		890	
SBL	1	1700	130	.08	220	.13
SBT	2	3400	270	.08*	300	.09*
SBR	d	1700	270	.16	430	.25
EBL	1	1700	450	.26*	450	.26*
EBT	3	5100	530	.10	1020	.20
EBR	d	1700	190	.11	180	.11
WBL	2	3400	990	.29	620	.18
WBT	2	3400	820	.24*	1220	.36*
WBR	d	1700	130	.08	90	.05
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.72		1.03

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	180	.11*	460	.27*
NBT	1.5	5100	180	.05	310	{.13}
NBR	1.5		90		890	
SBL	1	1700	140	.08	200	.12
SBT	2	3400	260	.08*	330	.10*
SBR	d	1700	290	.17	430	.25
EBL	1	1700	430	.25*	490	.29*
EBT	3	5100	480	.09	1040	.20
EBR	d	1700	170	.10	210	.12
WBL	2	3400	950	.28	570	.17
WBT	2	3400	900	.26*	1170	.34*
WBR	d	1700	110	.06	90	.05
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.75		1.05

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	180	.11*	460	.27*
NBT	1.5	5100	180	.05	310	{.16}
NBR	1.5		90		890	
SBL	1	1700	140	.08	200	.12
SBT	2	3400	260	.08*	330	.10*
SBR	d	1700	290	.17	430	.25
EBL	1	1700	430	.25*	490	.29*
EBT	3	5100	480	.09	1040	.20
EBR	d	1700	170	.10	210	.12
WBL	2	3400	950	.28	570	.17
WBT	3	5100	900	.18*	1170	.23*
WBR	d	1700	110	.06	90	.05
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.67		.94

2. Bake & Portola

2030 City Preferred Plan w/Alternative Mitigation						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	180	.11*	460	.27*
NBT	1.5	5100	180	.05	310	{.17}
NBR	1.5		90		890	
SBL	1	1700	140	.08	200	.12
SBT	2	3400	260	.08*	330	.10*
SBR	d	1700	290	.17	430	.25
EBL	2	3400	430	.13*	490	.14*
EBT	3	5100	480	.09	1040	.20
EBR	d	1700	170	.10	210	.12
WBL	2	3400	950	.28	570	.17
WBT	2	3400	900	.26*	1170	.34*
WBR	d	1700	110	.06	90	.05
Right Turn Adjustment					SBR	.04*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION			.63		.94	

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	180	.11*	450	.26*
NBT	1.5	5100	180	.05	320	{.13}
NBR	1.5		100		880	
SBL	1	1700	140	.08	200	.12
SBT	2	3400	260	.08*	330	.10*
SBR	d	1700	290	.17	440	.26
EBL	1	1700	430	.25*	490	.29*
EBT	3	5100	470	.09	1050	.21
EBR	d	1700	180	.11	220	.13
WBL	2	3400	950	.28	590	.17
WBT	2	3400	920	.27*	1140	.34*
WBR	d	1700	110	.06	90	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .76 1.04

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	180	.11*	450	.26*
NBT	1.5	5100	180	.05	320	{.16}
NBR	1.5		100		880	
SBL	1	1700	140	.08	200	.12
SBT	2	3400	260	.08*	330	.10*
SBR	d	1700	290	.17	440	.26
EBL	1	1700	430	.25*	490	.29*
EBT	3	5100	470	.09	1050	.21
EBR	d	1700	180	.11	220	.13
WBL	2	3400	950	.28	590	.17
WBT	3	5100	920	.18*	1140	.22*
WBR	d	1700	110	.06	90	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .67 .92

2030 Landowners Plan w/Alternative Mitigation						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	180	.11*	450	.26*
NBT	1.5	5100	180	.05	320	{.17}
NBR	1.5		100		880	
SBL	1	1700	140	.08	200	.12
SBT	2	3400	260	.08*	330	.10*
SBR	d	1700	290	.17	440	.26
EBL	2	3400	430	.13*	490	.14*
EBT	3	5100	470	.09	1050	.21
EBR	d	1700	180	.11	220	.13
WBL	2	3400	950	.28	590	.17
WBT	2	3400	920	.27*	1140	.34*
WBR	d	1700	110	.06	90	.05
Right Turn Adjustment					SBR	.05*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .64 .94

3. Lake Forest & Portola

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	38	.02	92	.05
NBT	2	3400	124	.04*	161	.05*
NBR	d	1700	260	.15	505	.30
SBL	1	1700	196	.12*	199	.12*
SBT	2	3400	156	.05	138	.04
SBR	d	1700	6	.00	6	.00
EBL	2	3400	9	.00	9	.00
EBT	3	5100	441	.09	1214	.24*
EBR	d	1700	60	.04	52	.03
WBL	2	3400	618	.18	328	.10*
WBT	3	5100	1366	.27*	908	.18
WBR	d	1700	248	.15	132	.08
Right Turn Adjustment Clearance Interval					NBR	.17*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .48 .73

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	50	.03	100	.06
NBT	2	3400	170	.05*	190	.06*
NBR	d	1700	350	.21	540	.32
SBL	1	1700	220	.13*	350	.21*
SBT	2	3400	100	.03	170	.05
SBR	d	1700	20	.01	20	.01
EBL	2	3400	20	.01*	20	.01
EBT	3	5100	750	.15	1720	.34*
EBR	d	1700	70	.04	50	.03
WBL	2	3400	640	.19	600	.18*
WBT	3	5100	2080	.41*	1410	.28
WBR	d	1700	310	.18	170	.10
Right Turn Adjustment Clearance Interval					NBR	.12*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .65 .96

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	50	.03	100	.06
NBT	2	3400	160	.05*	170	.05*
NBR	d	1700	220	.13	460	.27
SBL	1	1700	200	.12*	350	.21*
SBT	2	3400	100	.03	160	.05
SBR	d	1700	20	.01	30	.02
EBL	2	3400	20	.01*	20	.01
EBT	3	5100	680	.13	1740	.34*
EBR	d	1700	70	.04	50	.03
WBL	2	3400	570	.17	470	.14*
WBT	3	5100	2110	.41*	1310	.26
WBR	d	1700	300	.18	150	.09
Right Turn Adjustment Clearance Interval					NBR	.11*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .64 .90

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	50	.03	90	.05
NBT	2	3400	170	.05*	180	.05*
NBR	d	1700	240	.14	470	.28
SBL	1	1700	200	.12*	350	.21*
SBT	2	3400	100	.03	160	.05
SBR	d	1700	20	.01	20	.01
EBL	2	3400	20	.01*	20	.01
EBT	3	5100	690	.14	1740	.34*
EBR	d	1700	60	.04	50	.03
WBL	2	3400	560	.16	480	.14*
WBT	3	5100	2140	.42*	1310	.26
WBR	d	1700	300	.18	160	.09
Right Turn Adjustment Clearance Interval					NBR	.12*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .65 .91

4. Glenn Ranch & Portola

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	40	.02	60	.04
NBT	2	3400	17	.01*	21	.01*
NBR	0	0	33	.02	74	.04
SBL	2	3400	369	.11*	299	.09*
SBT	2	3400	37	.01	16	.00
SBR	f		469		470	
EBL	2	3400	317	.09*	667	.20
EBT	3	5100	632	.12	1906	.37*
EBR	1	1700	25	.01	56	.03
WBL	2	3400	96	.03	39	.01*
WBT	3	5100	1684	.33*	876	.17
WBR	1	1700	72	.04	253	.15
Right Turn Adjustment					NBR	.02*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .59 .55

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	50	.03	70	.04
NBT	2	3400	30	.02*	30	.02*
NBR	0	0	30		90	.05
SBL	2	3400	490	.14*	690	.20*
SBT	2	3400	50	.01	30	.01
SBR	f		710		1120	
EBL	2	3400	830	.24*	1190	.35*
EBT	3	5100	470	.09	2030	.40
EBR	1	1700	20	.01	70	.04
WBL	2	3400	130	.04	60	.02
WBT	3	5100	2020	.40*	800	.16*
WBR	1	1700	250	.15	370	.22
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .85 .78

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	60	.04	90	.05
NBT	2	3400	20	.01*	20	.01*
NBR	0	0	30	.02	70	.04
SBL	2	3400	410	.12*	390	.11*
SBT	2	3400	50	.01	30	.01
SBR	f		960		850	
EBL	2	3400	520	.15*	1210	.36*
EBT	3	5100	600	.12	1940	.38
EBR	1	1700	20	.01	70	.04
WBL	2	3400	100	.03	50	.01
WBT	3	5100	1750	.34*	840	.16*
WBR	1	1700	80	.05	260	.15
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .67 .69

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	60	.04	90	.05
NBT	2	3400	20	.01*	20	.01*
NBR	0	0	30	.02	70	.04
SBL	2	3400	390	.11*	390	.11*
SBT	2	3400	50	.01	20	.01
SBR	f		970		850	
EBL	2	3400	540	.16*	1210	.36*
EBT	3	5100	610	.12	1950	.38
EBR	1	1700	30	.02	70	.04
WBL	2	3400	100	.03	60	.02
WBT	3	5100	1780	.35*	840	.16*
WBR	1	1700	70	.04	250	.15
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .68 .69

5. Portola & SR-241 Ramps

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	633	.19*	181	.05
NBT	3	5100	1203	.24	902	.18*
NBR	f		62		42	
SBL	2	3400	223	.07	890	.26*
SBT	2	3400	607	.18*	1333	.39
SBR	f		260		95	
EBL	1	1700	101	.06*	164	.10*
EBT	0	0	0		0	
EBR	f		144		416	
WBL	2	3400	138	.04	71	.02
WBT	0	0	0		0	
WBR	f		1523		311	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .48 .59

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	460	.14	330	.10
NBT	3	5100	1200	.24*	880	.17*
NBR	f		80		240	
SBL	2	3400	260	.08*	1400	.41*
SBT	2	3400	530	.16	1330	.39
SBR	f		250		120	
EBL	1	1700	200	.12*	110	.06*
EBT	0	0	0		0	
EBR	f		320		390	
WBL	2	3400	320	.09	150	.04
WBT	0	0	0		0	
WBR	f		2140		460	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .49 .69

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	520	.15*	250	.07
NBT	3	5100	990	.19	890	.17*
NBR	f		80		210	
SBL	2	3400	240	.07	1220	.36*
SBT	2	3400	600	.18*	1130	.33
SBR	f		260		100	
EBL	1	1700	130	.08	110	.06*
EBT	0	0	0		0	
EBR	f		230		400	
WBL	2	3400	350	.10*	160	.05
WBT	0	0	0		0	
WBR	f		1800		370	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .48 .64

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	540	.16*	240	.07
NBT	3	5100	1010	.20	890	.17*
NBR	f		100		180	
SBL	2	3400	240	.07	1230	.36*
SBT	2	3400	590	.17*	1130	.33
SBR	f		260		100	
EBL	1	1700	120	.07	110	.06*
EBT	0	0	0		0	
EBR	f		220		430	
WBL	2	3400	280	.08*	160	.05
WBT	0	0	0		0	
WBR	f		1840		370	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .46 .64

6. Alton & SR-241 Ramps

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	23	.01	15	.01
NBT	2	3400	20	.01*	19	.01*
NBR	f		26		17	
SBL	1	1700	128	.08*	135	.08*
SBT	2	3400	21	.01	14	.00
SBR	f		459		268	
EBL	2	3400	210	.06*	394	.12*
EBT	0	0	0		0	
EBR	f		43		26	
WBL	2	3400	19	.01	6	.00
WBT	0	0	0		0	
WBR	f		142		123	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .20 .26

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	60	.04	530	.31*
NBT	3	5100	440	.09*	680	.13
NBR	f		270		1480	
SBL	1	1700	140	.08*	120	.07
SBT	3	5100	680	.13	710	.14*
SBR	f		20		60	
EBL	2	3400	130	.04	60	.02
EBT	0	0	0		0	
EBR	f		740		90	
WBL	2	3400	1470	.43*	510	.15*
WBT	0	0	0		0	
WBR	f		180		150	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .65 .65

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	110	.06*	300	.18*
NBT	3	5100	470	.09	750	.15
NBR	f		310		1180	
SBL	1	1700	140	.08	90	.05
SBT	3	5100	770	.15*	690	.14*
SBR	f		20		110	
EBL	2	3400	190	.06	70	.02
EBT	0	0	0		0	
EBR	f		390		130	
WBL	2	3400	1220	.36*	540	.16*
WBT	0	0	0		0	
WBR	f		120		130	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .53

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	110	.06*	310	.18*
NBT	3	5100	470	.09	790	.15
NBR	f		300		1150	
SBL	1	1700	130	.08	80	.05
SBT	3	5100	770	.15*	710	.14*
SBR	f		30		110	
EBL	2	3400	190	.06	70	.02
EBT	0	0	0		0	
EBR	f		380		130	
WBL	2	3400	1200	.35*	520	.15*
WBT	0	0	0		0	
WBR	f		120		140	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .61 .52

7. Lake Forest & SR-241 NB

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	128	.04*	222	.07
NBT	2	3400	877	.26	1249	.37*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	885	.26*	864	.25
SBR	1	1700	100	.06	212	.12
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .35 .42

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	80	.02	530	.16*
NBT	2	3400	1100	.32*	1230	.36
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	770	.23	1010	.30*
SBR	1	1700	10	.01	290	.17
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .37 .51

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	110	.03	440	.13*
NBT	2	3400	930	.27*	1110	.33
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	670	.20	950	.28*
SBR	1	1700	10	.01	210	.12
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .32 .46

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	130	.04	420	.12*
NBT	2	3400	950	.28*	1110	.33
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	730	.21	960	.28*
SBR	1	1700	10	.01	200	.12
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .33 .45

8. Lake Forest & SR-241 SB

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	2	3400	693	.20	1372	.40*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	999	.29*	779	.23
SBR	0	0	0		0	
EBL	2	3400	245	.07*	110	.03*
EBT	0	0	0		0	
EBR	1	1700	223	.13	151	.09
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment Clearance Interval			EBR	.06*		.05*

TOTAL CAPACITY UTILIZATION .47 .48

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	2	3400	950	.28*	1660	.49*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	770	.23	1020	.30
SBR	0	0	0		0	
EBL	2	3400	270	.08*	100	.03*
EBT	0	0	0		0	
EBR	1	1700	590	.35	200	.12
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment Clearance Interval			EBR	.23*		.05*

TOTAL CAPACITY UTILIZATION .64 .57

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	2	3400	880	.26*	1440	.42*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	670	.20	950	.28
SBR	0	0	0		0	
EBL	2	3400	200	.06*	100	.03*
EBT	0	0	0		0	
EBR	1	1700	470	.28	220	.13
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment Clearance Interval			EBR	.17*		.05*

TOTAL CAPACITY UTILIZATION .54 .50

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	2	3400	910	.27*	1430	.42*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	720	.21	960	.28
SBR	0	0	0		0	
EBL	2	3400	210	.06*	100	.03*
EBT	0	0	0		0	
EBR	1	1700	450	.26	250	.15
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment Clearance Interval			EBR	.15*	EBR	.01*

TOTAL CAPACITY UTILIZATION .53 .51

9. Bake & Rancho N

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	2	3400	717	.21	1891	.56*
NBR	d	1700	85	.05	241	.14
SBL	1	1700	59	.03	171	.10*
SBT	2	3400	1850	.54*	901	.26
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	122	.04*	164	.05*
WBT	0	0	0		0	
WBR	2	3400	65	.02	173	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .63 .76

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	2	3400	700	.21	1790	.53*
NBR	d	1700	540	.32	840	.49
SBL	1	1700	150	.09	180	.11*
SBT	2	3400	1700	.50*	850	.25
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	700	.21*	730	.21*
WBT	0	0	0		0	
WBR	2	3400	50	.01	280	.08
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .76 .90

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	2	3400	820	.24	1740	.51*
NBR	d	1700	600	.35	770	.45
SBL	1	1700	140	.08	190	.11*
SBT	2	3400	1590	.47*	900	.26
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	650	.19*	670	.20*
WBT	0	0	0		0	
WBR	2	3400	50	.01	280	.08
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .71 .87

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	2	3400	830	.24	1740	.51*
NBR	d	1700	580	.34	810	.48
SBL	1	1700	140	.08	190	.11*
SBT	2	3400	1580	.46*	900	.26
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	730	.21*	670	.20*
WBT	0	0	0		0	
WBR	2	3400	40	.01	280	.08
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .72 .87

10. Lake Forest & Rancho

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	158	.09*	261	.15*
NBT	2	3400	621	.18	1075	.32
NBR	d	1700	85	.05	29	.02
SBL	1	1700	147	.09	96	.06
SBT	2	3400	862	.25*	913	.27*
SBR	d	1700	107	.06	86	.05
EBL	1	1700	42	.02	102	.06*
EBT	1	1700	43	.03*	17	.01
EBR	1	1700	57	.03	161	.09
WBL	1	1700	11	.01*	69	.04
WBT	2	3400	5	.00	70	.02*
WBR	1	1700	14	.01	99	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .43 .55

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	220	.13	320	.19
NBT	2	3400	830	.24*	1270	.37*
NBR	d	1700	420	.25	600	.35
SBL	1	1700	310	.18*	230	.14*
SBT	2	3400	900	.26	930	.27
SBR	d	1700	220	.13	120	.07
EBL	1	1700	30	.02	160	.09
EBT	1	1700	350	.21*	810	.48*
EBR	1	1700	80	.05	190	.11
WBL	1	1700	470	.28*	470	.28*
WBT	2	3400	930	.27	630	.19
WBR	1	1700	110	.06	360	.21
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .96 1.32

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	190	.11*	320	.19
NBT	2	3400	760	.22	1220	.36*
NBR	d	1700	380	.22	630	.37
SBL	1	1700	200	.12	190	.11*
SBT	2	3400	810	.24*	930	.27
SBR	d	1700	190	.11	110	.06
EBL	1	1700	30	.02	110	.06
EBT	1	1700	340	.20*	780	.46*
EBR	1	1700	90	.05	180	.11
WBL	1	1700	560	.33*	430	.25*
WBT	2	3400	880	.26	550	.16
WBR	1	1700	110	.06	240	.14
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .93 1.23

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	190	.11*	320	.19
NBT	2	3400	750	.22	1220	.36*
NBR	d	1700	370	.22	670	.39
SBL	1	1700	170	.10	230	.14*
SBT	2	3400	870	.26*	930	.27
SBR	d	1700	190	.11	110	.06
EBL	1	1700	30	.02	130	.08
EBT	1	1700	330	.19*	800	.47*
EBR	1	1700	90	.05	180	.11
WBL	1	1700	580	.34*	420	.25*
WBT	2	3400	930	.27	560	.16
WBR	1	1700	160	.09	210	.12
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .95 1.27

11. Bake & Rancho S

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	203	.12*	15	.01
NBT	2	3400	776	.23	1992	.59*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	1762	.52*	1011	.30
SBR	1	1700	134	.08	15	.01
EBL	2	3400	24	.01*	144	.04*
EBT	0	0	0		0	
EBR	1	1700	8	.00	85	.05
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .70 .68

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	120	.07*	70	.04
NBT	2	3400	1040	.31	2270	.67*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	1930	.57*	1350	.40
SBR	1	1700	390	.23	340	.20
EBL	2	3400	250	.07*	390	.11*
EBT	0	0	0		0	
EBR	1	1700	30	.02	130	.08
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .76 .83

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	190	.11*	150	.09
NBT	2	3400	1100	.32	2030	.60*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	1680	.49*	1190	.35
SBR	1	1700	490	.29	490	.29
EBL	2	3400	370	.11*	520	.15*
EBT	0	0	0		0	
EBR	1	1700	120	.07	210	.12
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .76 .80

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	180	.11*	150	.09
NBT	2	3400	1110	.33	2040	.60*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	1720	.51*	1200	.35
SBR	1	1700	520	.31	490	.29
EBL	2	3400	350	.10*	540	.16*
EBT	0	0	0		0	
EBR	1	1700	120	.07	210	.12
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .77 .81

12. El Toro & Portola/Santa M

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	261	.15*	241	.14
NBT	3	5100	130	.03	419	.08*
NBR	f		270		526	
SBL	1	1700	66	.04	352	.21*
SBT	3	5100	492	.10*	564	.11
SBR	1	1700	193	.11	541	.32
EBL	2	3400	16	.00	222	.07
EBT	3	5100	447	.09*	1030	.20*
EBR	1	1700	209	.12	543	.32
WBL	2	3400	633	.19*	384	.11*
WBT	4	6800	1245	.18	684	.10
WBR	d	1700	19	.01	52	.03
Right Turn Adjustment Clearance Interval					SBR	.01* .05*

TOTAL CAPACITY UTILIZATION .58 .66

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	610	.36*	580	.34*
NBT	3	5100	230	.05	620	.12
NBR	f		280		470	
SBL	1	1700	60	.04	350	.21
SBT	3	5100	730	.14*	670	.13*
SBR	1	1700	380	.22	750	.44
EBL	2	3400	60	.02*	620	.18
EBT	3	5100	580	.11	1850	.36*
EBR	1	1700	510	.30	940	.55
WBL	2	3400	550	.16	400	.12*
WBT	4	6800	2190	.32*	1210	.18
WBR	d	1700	30	.02	50	.03
Right Turn Adjustment Clearance Interval					SBR	.06* .05* SBR .08* .05*

TOTAL CAPACITY UTILIZATION .95 1.08

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	440	.26*	490	.29*
NBT	3	5100	160	.03	670	.13
NBR	f		290		520	
SBL	1	1700	60	.04	340	.20
SBT	3	5100	820	.16*	630	.12*
SBR	1	1700	400	.24	710	.42
EBL	2	3400	60	.02	570	.17
EBT	3	5100	660	.13*	1670	.33*
EBR	1	1700	430	.25	810	.48
WBL	2	3400	620	.18*	440	.13*
WBT	4	6800	1950	.29	1130	.17
WBR	d	1700	20	.01	50	.03
Right Turn Adjustment Clearance Interval					SBR	.06* .05* SBR .08* .05*

TOTAL CAPACITY UTILIZATION .84 1.00

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	430	.25*	520	.31*
NBT	3	5100	170	.03	660	.13
NBR	f		280		520	
SBL	1	1700	60	.04	350	.21
SBT	3	5100	840	.16*	630	.12*
SBR	1	1700	370	.22	700	.41
EBL	2	3400	60	.02	540	.16
EBT	3	5100	700	.14*	1670	.33*
EBR	1	1700	450	.26	780	.46
WBL	2	3400	600	.18*	440	.13*
WBT	4	6800	1940	.29	1130	.17
WBR	d	1700	20	.01	50	.03
Right Turn Adjustment Clearance Interval					SBR	.04* .05* SBR .07* .05*

TOTAL CAPACITY UTILIZATION .82 1.01

13. Bake & Commercentre

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	140	.08*	25	.01
NBT	2	3400	1096	.32	1588	.47*
NBR	d	1700	718	.42	190	.11
SBL	1	1700	25	.01	16	.01*
SBT	2	3400	1569	.46*	1083	.32
SBR	d	1700	44	.03	10	.01
EBL	1	1700	15	.01	68	.04
EBT	2	3400	3	.00*	25	.01*
EBR	0	0	24	.01	122	.07
WBL	2	3400	171	.05*	665	.20*
WBT	1	1700	24	.02	4	.01
WBR	0	0	6		11	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.64		.74

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	90	.05*	10	.01
NBT	2	3400	1160	.34	1370	.40*
NBR	d	1700	780	.46	170	.10
SBL	1	1700	30	.02	50	.03*
SBT	2	3400	1170	.34*	1040	.31
SBR	d	1700	70	.04	20	.01
EBL	1	1700	130	.08	190	.11
EBT	2	3400	250	.08*	50	.03*
EBR	0	0	30		70	.04
WBL	2	3400	140	.04*	700	.21*
WBT	1	1700	20	.02	150	.11
WBR	0	0	20		40	
Right Turn Adjustment				NBR	.06*	
Clearance Interval					.05*	.05*
TOTAL CAPACITY UTILIZATION				.62		.72

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	80	.05*	20	.01
NBT	2	3400	1040	.31	1420	.42*
NBR	d	1700	660	.39	250	.15
SBL	1	1700	30	.02	50	.03*
SBT	2	3400	1400	.41*	960	.28
SBR	d	1700	100	.06	50	.03
EBL	1	1700	110	.06	210	.12
EBT	2	3400	150	.06*	80	.04*
EBR	0	0	60		70	
WBL	2	3400	290	.09*	610	.18*
WBT	1	1700	80	.06	80	.06
WBR	0	0	30		30	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.66		.72

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	80	.05*	10	.01
NBT	2	3400	1030	.30	1430	.42*
NBR	d	1700	670	.39	260	.15
SBL	1	1700	30	.02	50	.03*
SBT	2	3400	1390	.41*	950	.28
SBR	d	1700	110	.06	50	.03
EBL	1	1700	110	.06	220	.13
EBT	2	3400	170	.07*	100	.05*
EBR	0	0	60		70	
WBL	2	3400	340	.10*	630	.19*
WBT	1	1700	90	.07	90	.07
WBR	0	0	30		30	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.68		.74

14. Bake & Irvine/Trabuco

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	367	.22	135	.08
NBT	2	3400	1642	.48*	1353	.40*
NBR	1	1700	280	.16	731	.43
SBL	2	3400	55	.02*	232	.07*
SBT	3	5100	1169	.23	1595	.31
SBR	1	1700	458	.27	552	.32
EBL	2	3400	507	.15*	451	.13
EBT	3	5100	189	.04	1015	.20*
EBR	1	1700	72	.04	237	.14
WBL	2	3400	1002	.29	316	.09*
WBT	3	5100	1256	.25*	291	.06
WBR	1	1700	226	.13	62	.04
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .95 .81

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	690	.41*	640	.38*
NBT	2	3400	1560	.46	1200	.35
NBR	1	1700	200	.12	630	.37
SBL	2	3400	40	.01	210	.06
SBT	3	5100	910	.18*	1630	.32*
SBR	1	1700	220	.13	300	.18
EBL	2	3400	420	.12*	320	.09
EBT	3	5100	370	.07	1340	.26*
EBR	1	1700	700	.41	540	.32
WBL	2	3400	870	.26	280	.08*
WBT	3	5100	1570	.31*	580	.11
WBR	1	1700	210	.12	40	.02
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION 1.07 1.09

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	650	.38*	630	.37*
NBT	2	3400	1270	.37	1350	.40
NBR	1	1700	220	.13	670	.39
SBL	2	3400	40	.01	180	.05
SBT	3	5100	1340	.26*	1420	.28*
SBR	1	1700	190	.11	340	.20
EBL	2	3400	490	.14*	270	.08
EBT	3	5100	390	.08	1330	.26*
EBR	1	1700	650	.38	550	.32
WBL	2	3400	920	.27	320	.09*
WBT	3	5100	1560	.31*	600	.12
WBR	1	1700	190	.11	40	.02
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION 1.14 1.05

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	650	.19*	630	.19*
NBT	2	3400	1270	.37	1350	.40
NBR	1	1700	220	.13	670	.39
SBL	2	3400	40	.01	180	.05
SBT	3	5100	1340	.26*	1420	.28*
SBR	1	1700	190	.11	340	.20
EBL	2	3400	490	.14	270	.08
EBT	2.5	6800	390	.11*	1330	{.26}*
EBR	1.5		650	.19	550	{.18}
WBL	2	3400	920	.27*	320	.09*
WBT	4	6800	1560	.23	600	.09
WBR	d	1700	190	.11	40	.02
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .88 .87

14. Baké & Irvine/Trabuco

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	640	.38*	630	.37*
NBT	2	3400	1260	.37	1390	.41
NBR	1	1700	220	.13	660	.39
SBL	2	3400	30	.01	170	.05
SBT	3	5100	1380	.27*	1420	.28*
SBR	1	1700	190	.11	340	.20
EBL	2	3400	470	.14*	250	.07
EBT	3	5100	400	.08	1350	.26*
EBR	1	1700	650	.38	550	.32
WBL	2	3400	900	.26	320	.09*
WBT	3	5100	1580	.31*	590	.12
WBR	1	1700	190	.11	40	.02
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION 1.15 1.05

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	640	.19*	630	.19*
NBT	2	3400	1260	.37	1390	.41
NBR	1	1700	220	.13	660	.39
SBL	2	3400	30	.01	170	.05
SBT	3	5100	1380	.27*	1420	.28*
SBR	1	1700	190	.11	340	.20
EBL	2	3400	470	.14	250	.07
EBT	2.5	6800	400	.12*	1350	{.26}*
EBR	1.5		650	.19	550	{.18}
WBL	2	3400	900	.26*	320	.09*
WBT	4	6800	1580	.23	590	.09
WBR	d	1700	190	.11	40	.02
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION .89 .87

15. Lake Forest & Trabuco

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	238	.07*	277	.08
NBT	3	5100	814	.16	1022	.20*
NBR	1	1700	105	.06	532	.31
SBL	2	3400	231	.07	409	.12*
SBT	3	5100	1113	.28*	1040	.24
SBR	0	0	325		181	
EBL	2	3400	212	.06*	370	.11
EBT	3	5100	536	.11	1226	.24*
EBR	1	1700	456	.27	185	.11
WBL	2	3400	420	.12	252	.07*
WBT	3	5100	1184	.23*	489	.10
WBR	1	1700	440	.26	395	.23
Right Turn Adjustment Clearance Interval			EBR	.05*	NBR	.06*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .74 .74

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	280	.08*	260	.08*
NBT	3	5100	990	.19	1020	.20
NBR	1	1700	70	.04	700	.41
SBL	2	3400	320	.09	410	.12
SBT	3	5100	1000	.25*	1110	.25*
SBR	0	0	250		160	
EBL	2	3400	180	.05*	290	.09
EBT	3	5100	660	.13	1450	.28*
EBR	1	1700	420	.25	220	.13
WBL	2	3400	650	.19	270	.08*
WBT	3	5100	1360	.27*	710	.14
WBR	1	1700	460	.27	460	.27
Right Turn Adjustment Clearance Interval			EBR	.06*	NBR	.14*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .76 .88

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	280	.08*	270	.08
NBT	3	5100	890	.17	1150	.23*
NBR	1	1700	60	.04	720	.42
SBL	2	3400	320	.09	330	.10*
SBT	3	5100	1220	.29*	1100	.25
SBR	0	0	260		170	
EBL	2	3400	170	.05	320	.09
EBT	3	5100	690	.14*	1410	.28*
EBR	1	1700	440	.26	200	.12
WBL	2	3400	690	.20*	250	.07*
WBT	3	5100	1330	.26	760	.15
WBR	1	1700	350	.21	460	.27
Right Turn Adjustment Clearance Interval			EBR	.06*	NBR	.14*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .82 .87

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	280	.08*	270	.08
NBT	3	5100	880	.17	1190	.23*
NBR	1	1700	60	.04	710	.42
SBL	2	3400	330	.10	330	.10*
SBT	3	5100	1300	.30*	1100	.25
SBR	0	0	250		150	
EBL	2	3400	170	.05	290	.09
EBT	3	5100	690	.14*	1430	.28*
EBR	1	1700	450	.26	210	.12
WBL	2	3400	670	.20*	260	.08*
WBT	3	5100	1320	.26	750	.15
WBR	1	1700	350	.21	460	.27
Right Turn Adjustment Clearance Interval			EBR	.06*	NBR	.13*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .83 .87

16. Ridge Route & Trabuco

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	196	.12*	206	.12*
NBT	0	0	0		0	
NBR	1	1700	159	.09	248	.15
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	535	.10	1792	.35*
EBR	d	1700	207	.12	178	.10
WBL	1	1700	225	.13	143	.08*
WBT	3	5100	1589	.31*	822	.16
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .48 .60

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	290	.17*	260	.15*
NBT	0	0	0		0	
NBR	1	1700	80	.05	330	.19
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	790	.15	2140	.42*
EBR	d	1700	130	.08	220	.13
WBL	1	1700	260	.15	110	.06*
WBT	3	5100	1930	.38*	1070	.21
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .60 .68

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	270	.16*	270	.16*
NBT	0	0	0		0	
NBR	1	1700	80	.05	390	.23
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	780	.15	2000	.39*
EBR	d	1700	180	.11	260	.15
WBL	1	1700	300	.18	100	.06*
WBT	3	5100	1840	.36*	1090	.21
WBR	0	0	0		0	
Right Turn Adjustment					NBR	.02*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 .68

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	230	.14*	270	.16*
NBT	0	0	0		0	
NBR	1	1700	80	.05	350	.21
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	780	.15	2060	.40*
EBR	d	1700	190	.11	210	.12
WBL	1	1700	280	.16	110	.06*
WBT	3	5100	1850	.36*	1090	.21
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .55 .67

17. El Toro & Trabuco

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	298	.09*	317	.09
NBT	3	5100	917	.20	1009	.23*
NBR	0	0	123		176	
SBL	2	3400	260	.08	250	.07*
SBT	3	5100	1395	.27*	828	.16
SBR	1	1700	388	.23	152	.09
EBL	2	3400	199	.06*	541	.16
EBT	3	5100	315	.09	1225	.27*
EBR	0	0	150		158	
WBL	2	3400	305	.09	187	.06*
WBT	3	5100	1014	.24*	484	.12
WBR	0	0	235		147	
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for SBR						

TOTAL CAPACITY UTILIZATION .71 .68

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	530	.16*	460	.14
NBT	3	5100	1410	.30	1560	.45*
NBR	0	0	140		710	
SBL	2	3400	270	.08	290	.09*
SBT	3	5100	1730	.34*	1160	.23
SBR	1	1700	270	.16	170	.10
EBL	2	3400	140	.04*	600	.18
EBT	3	5100	320	.09	1240	.33*
EBR	0	0	350	.21	460	
WBL	2	3400	310	.09	230	.07*
WBT	3	5100	1250	.30*	510	.13
WBR	0	0	270		170	
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for SBR						

TOTAL CAPACITY UTILIZATION .89 .99

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	450	.13*	510	.15
NBT	3	5100	1230	.27	1710	.47*
NBR	0	0	130		680	
SBL	2	3400	270	.08	270	.08*
SBT	3	5100	1920	.38*	1070	.21
SBR	1	1700	350	.21	130	.08
EBL	2	3400	110	.03*	620	.18
EBT	3	5100	330	.10	1270	.32*
EBR	0	0	350	.21	340	
WBL	2	3400	340	.10	230	.07*
WBT	3	5100	1200	.28*	510	.13
WBR	0	0	250		160	
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for SBR						

TOTAL CAPACITY UTILIZATION .87 .99

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	480	.14*	500	.15
NBT	3	5100	1230	.27	1800	.48*
NBR	0	0	140		670	
SBL	2	3400	270	.08	260	.08*
SBT	3	5100	2030	.40*	1080	.21
SBR	1	1700	270	.16	130	.08
EBL	2	3400	120	.04*	580	.17
EBT	3	5100	340	.10	1290	.33*
EBR	0	0	340	.20	380	
WBL	2	3400	300	.09	230	.07*
WBT	3	5100	1260	.29*	520	.13
WBR	0	0	240		160	
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for SBR						

TOTAL CAPACITY UTILIZATION .92 1.01

17. El Toro & Trabuco

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	480	.14*	500	.15
NBT	3	5100	1230	.24	1800	.35*
NBR	d	1700	140	.08	670	.39
SBL	2	3400	270	.08	260	.08*
SBT	3	5100	2030	.40*	1080	.21
SBR	1	1700	270	.16	130	.08
EBL	2	3400	120	.04*	580	.17
EBT	3	5100	340	.10	1290	.33*
EBR	0	0	340	.20	380	
WBL	2	3400	300	.09	230	.07*
WBT	3	5100	1260	.25*	520	.10
WBR	d	1700	240	.14	160	.09
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for SBR						

TOTAL CAPACITY UTILIZATION .88 .88

18. Bake & Toledo

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	284	.17*	26	.02
NBT	3	5100	2076	.41	1887	.37*
NBR	d	1700	41	.02	349	.21
SBL	1	1700	42	.02	97	.06*
SBT	3	5100	1892	.37*	2048	.40
SBR	d	1700	226	.13	60	.04
EBL	2	3400	63	.02	186	.05
EBT	2	3400	13	.00*	327	.10*
EBR	1	1700	16	.01	181	.11
WBL	1	1700	440	.26*	71	.04*
WBT	2	3400	322	.11	35	.02
WBR	0	0	55		73	.04
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .85 .62

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	220	.13*	40	.02
NBT	3	5100	2170	.43	2020	.40*
NBR	d	1700	20	.01	320	.19
SBL	1	1700	60	.04	120	.07*
SBT	3	5100	2060	.40*	2250	.44
SBR	d	1700	120	.07	60	.04
EBL	2	3400	120	.04*	180	.05
EBT	2	3400	20	.01	410	.12*
EBR	1	1700	30	.02	240	.14
WBL	1	1700	270	.16	30	.02*
WBT	2	3400	590	.20*	50	.03
WBR	0	0	80		90	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .82 .66

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	240	.14*	40	.02
NBT	3	5100	1870	.37	2190	.43*
NBR	d	1700	20	.01	310	.18
SBL	1	1700	60	.04	120	.07*
SBT	3	5100	2410	.47*	2120	.42
SBR	d	1700	190	.11	60	.04
EBL	2	3400	100	.03*	200	.06
EBT	2	3400	20	.01	440	.13*
EBR	1	1700	30	.02	230	.14
WBL	1	1700	250	.15	40	.02*
WBT	2	3400	600	.20*	60	.04
WBR	0	0	70		90	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .89 .70

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	240	.14*	40	.02
NBT	3	5100	1850	.36	2210	.43*
NBR	d	1700	20	.01	310	.18
SBL	1	1700	70	.04	120	.07*
SBT	3	5100	2390	.47*	2130	.42
SBR	d	1700	230	.14	60	.04
EBL	2	3400	110	.03*	200	.06
EBT	2	3400	20	.01	450	.13*
EBR	1	1700	30	.02	210	.12
WBL	1	1700	280	.16	40	.02*
WBT	2	3400	590	.19*	60	.04
WBR	0	0	70		80	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .88 .70

19. Lake Forest & Toledo

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	49	.03*	61	.04
NBT	3	5100	800	.16	1239	.24*
NBR	d	1700	45	.03	92	.05
SBL	1	1700	47	.03	60	.04*
SBT	3	5100	1389	.27*	1083	.21
SBR	d	1700	39	.02	41	.02
EBL	1	1700	15	.01	88	.05
EBT	2	3400	88	.05*	222	.08*
EBR	0	0	82		64	
WBL	1	1700	125	.07*	46	.03*
WBT	2	3400	246	.08	82	.04
WBR	0	0	26		49	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .47 .44

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	60	.04*	60	.04
NBT	3	5100	940	.18	1500	.29*
NBR	d	1700	30	.02	80	.05
SBL	1	1700	60	.04	60	.04*
SBT	3	5100	1510	.30*	1190	.23
SBR	d	1700	50	.03	80	.05
EBL	1	1700	20	.01	50	.03
EBT	2	3400	100	.05*	330	.13*
EBR	0	0	70		100	
WBL	1	1700	210	.12*	40	.02*
WBT	2	3400	350	.11	80	.04
WBR	0	0	40		50	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .56 .53

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	60	.04*	60	.04
NBT	3	5100	840	.16	1620	.32*
NBR	d	1700	30	.02	100	.06
SBL	1	1700	50	.03	60	.04*
SBT	3	5100	1760	.35*	1160	.23
SBR	d	1700	20	.01	80	.05
EBL	1	1700	20	.01	60	.04
EBT	2	3400	90	.05*	340	.13*
EBR	0	0	90		100	
WBL	1	1700	200	.12*	50	.03*
WBT	2	3400	360	.11	90	.04
WBR	0	0	30		50	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .61 .57

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	70	.04*	60	.04
NBT	3	5100	820	.16	1660	.33*
NBR	d	1700	30	.02	70	.04
SBL	1	1700	50	.03	50	.03*
SBT	3	5100	1800	.35*	1170	.23
SBR	d	1700	40	.02	80	.05
EBL	1	1700	20	.01	50	.03
EBT	2	3400	100	.05*	350	.13*
EBR	0	0	80		100	
WBL	1	1700	220	.13*	60	.04*
WBT	2	3400	320	.10	90	.04
WBR	0	0	30		50	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .58

20. Ridge Route & Toledo

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	36	.02*	39	.02
NBT	2	3400	266	.11	423	.14*
NBR	0	0	97		46	
SBL	1	1700	60	.04	47	.03*
SBT	2	3400	413	.15*	267	.08
SBR	0	0	97		17	
EBL	1	1700	46	.03*	77	.05
EBT	2	3400	148	.05	382	.13*
EBR	0	0	34		48	
WBL	1	1700	107	.06	38	.02*
WBT	2	3400	278	.10*	89	.05
WBR	0	0	61		68	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .35 .37

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	50	.03*	40	.02
NBT	2	3400	270	.11	400	.13*
NBR	0	0	100		40	
SBL	1	1700	60	.04	70	.04*
SBT	2	3400	360	.13*	200	.06
SBR	0	0	70		20	
EBL	1	1700	50	.03*	80	.05
EBT	2	3400	140	.05	470	.15*
EBR	0	0	30		50	
WBL	1	1700	180	.11	70	.04*
WBT	2	3400	500	.17*	90	.05
WBR	0	0	70		80	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .41 .41

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	50	.03*	40	.02
NBT	2	3400	250	.10	450	.15*
NBR	0	0	100		50	
SBL	1	1700	60	.04	60	.04*
SBT	2	3400	410	.15*	190	.06
SBR	0	0	90		20	
EBL	1	1700	50	.03*	100	.06
EBT	2	3400	140	.05	490	.16*
EBR	0	0	30		50	
WBL	1	1700	200	.12	50	.03*
WBT	2	3400	470	.16*	110	.06
WBR	0	0	70		90	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .42 .43

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	50	.03*	40	.02
NBT	2	3400	260	.11	470	.15*
NBR	0	0	100		40	
SBL	1	1700	60	.04	70	.04*
SBT	2	3400	410	.15*	190	.06
SBR	0	0	90		20	
EBL	1	1700	50	.03*	90	.05
EBT	2	3400	140	.05	470	.15*
EBR	0	0	30		50	
WBL	1	1700	210	.12	60	.04*
WBT	2	3400	450	.15*	120	.06
WBR	0	0	70		80	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .41 .43

21. El Toro & Toledo

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	134	.08*	103	.06
NBT	3	5100	922	.18	1698	.33*
NBR	d	1700	2	.00	22	.01
SBL	1	1700	2	.00	7	.00
SBT	3	5100	1513	.30*	1286	.25
SBR	d	1700	195	.11	80	.05
EBL	1.5		46		308	
EBT	0.5	3400	10	.02*	17	.10*
EBR	1	1700	111	.07	140	.08
WBL	0	0	20		13	
WBT	1	1700	15	.02*	9	.02*
WBR	0	0	2		13	
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .47 .50

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	140	.08*	110	.06
NBT	3	5100	2060	.40	2320	.45*
NBR	d	1700	10	.01	20	.01
SBL	1	1700	10	.01	10	.01*
SBT	3	5100	1990	.39*	1770	.35
SBR	d	1700	420	.25	90	.05
EBL	1.5		60		380	
EBT	0.5	3400	10	.02*	20	.12*
EBR	1	1700	100	.06	170	.10
WBL	0	0	20		10	
WBT	1	1700	20	.03*	10	.02*
WBR	0	0	10		10	
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .57 .65

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	140	.08*	110	.06
NBT	3	5100	1800	.35	2490	.49*
NBR	d	1700	10	.01	20	.01
SBL	1	1700	10	.01	10	.01*
SBT	3	5100	2230	.44*	1610	.32
SBR	d	1700	420	.25	100	.06
EBL	1.5		60		410	
EBT	0.5	3400	10	.02*	20	.13*
EBR	1	1700	100	.06	170	.10
WBL	0	0	20		10	
WBT	1	1700	20	.03*	10	.02*
WBR	0	0	10		10	
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .62 .70

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	140	.08*	120	.07
NBT	3	5100	1820	.36	2530	.50*
NBR	d	1700	10	.01	20	.01
SBL	1	1700	10	.01	10	.01*
SBT	3	5100	2290	.45*	1590	.31
SBR	d	1700	410	.24	120	.07
EBL	1.5		60		400	
EBT	0.5	3400	10	.02*	20	.12*
EBR	1	1700	100	.06	180	.11
WBL	0	0	20		10	
WBT	1	1700	20	.03*	10	.02*
WBR	0	0	10		10	
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .63 .70

22. Bake & Jeronimo

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	397	.23*	43	.03
NBT	3	5100	2016	.40	2061	.40*
NBR	d	1700	27	.02	494	.29
SBL	1	1700	66	.04	84	.05*
SBT	3	5100	2085	.41*	2110	.41
SBR	d	1700	103	.06	20	.01
EBL	2	3400	8	.00	107	.03
EBT	2	3400	40	.01*	478	.14*
EBR	1	1700	47	.03	378	.22
WBL	1	1700	346	.20*	99	.06*
WBT	2	3400	511	.17	76	.04
WBR	0	0	71		67	
Right Turn Adjustment					EBR	.05*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .90 .75

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	410	.24*	40	.02
NBT	3	5100	1980	.39	2210	.43*
NBR	d	1700	40	.02	410	.24
SBL	1	1700	60	.04	120	.07*
SBT	3	5100	2160	.42*	2300	.45
SBR	d	1700	50	.03	10	.01
EBL	2	3400	10	.00	80	.02
EBT	2	3400	60	.02	690	.20*
EBR	1	1700	60	.04	310	.18
WBL	1	1700	330	.19	120	.07*
WBT	2	3400	660	.23*	120	.06
WBR	0	0	130		70	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .94 .82

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	410	.24*	40	.02
NBT	3	5100	1720	.34	2340	.46*
NBR	d	1700	40	.02	390	.23
SBL	1	1700	70	.04	110	.06*
SBT	3	5100	2480	.49*	2150	.42
SBR	d	1700	50	.03	10	.01
EBL	2	3400	10	.00	90	.03
EBT	2	3400	60	.02	730	.21*
EBR	1	1700	50	.03	290	.17
WBL	1	1700	310	.18	120	.07*
WBT	2	3400	720	.24*	130	.06
WBR	0	0	110		70	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION 1.02 .85

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	410	.12*	40	.01
NBT	3	5100	1720	.34	2340	.46*
NBR	d	1700	40	.02	390	.23
SBL	1	1700	70	.04	110	.06*
SBT	3	5100	2480	.49*	2150	.42
SBR	d	1700	50	.03	10	.01
EBL	2	3400	10	.00	90	.03
EBT	2	3400	60	.02	730	.21*
EBR	1	1700	50	.03	290	.17
WBL	1	1700	310	.18	120	.07*
WBT	2	3400	720	.24*	130	.06
WBR	0	0	110		70	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .90 .85

22. Bake & Jeronimo

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	410	.24*	30	.02
NBT	3	5100	1690	.33	2370	.46*
NBR	d	1700	40	.02	380	.22
SBL	1	1700	60	.04	110	.06*
SBT	3	5100	2490	.49*	2140	.42
SBR	d	1700	50	.03	10	.01
EBL	2	3400	10	.00	100	.03
EBT	2	3400	60	.02	740	.22*
EBR	1	1700	50	.03	270	.16
WBL	1	1700	320	.19	130	.08*
WBT	2	3400	740	.25*	130	.06
WBR	0	0	110		70	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION 1.03 .87

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	410	.12*	30	.01
NBT	3	5100	1690	.33	2370	.46*
NBR	d	1700	40	.02	380	.22
SBL	1	1700	60	.04	110	.06*
SBT	3	5100	2490	.49*	2140	.42
SBR	d	1700	50	.03	10	.01
EBL	2	3400	10	.00	100	.03
EBT	2	3400	60	.02	740	.22*
EBR	1	1700	50	.03	270	.16
WBL	1	1700	320	.19	130	.08*
WBT	2	3400	740	.25*	130	.06
WBR	0	0	110		70	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .91 .87

23. Lake Forest & Jeronimo

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	103	.06*	82	.05
NBT	3	5100	803	.16	1501	.29*
NBR	1	1700	155	.09	181	.11
SBL	1	1700	209	.12	114	.07*
SBT	3	5100	1175	.23*	1076	.21
SBR	1	1700	193	.11	129	.08
EBL	1	1700	59	.03*	118	.07
EBT	2	3400	302	.13	666	.22*
EBR	0	0	126		82	
WBL	1	1700	238	.14	201	.12*
WBT	2	3400	618	.25*	238	.09
WBR	0	0	241		71	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .75

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	130	.08*	70	.04
NBT	3	5100	920	.18	1740	.34*
NBR	1	1700	120	.07	210	.12
SBL	1	1700	200	.12	120	.07*
SBT	3	5100	1170	.23*	1160	.23
SBR	1	1700	390	.23	170	.10
EBL	1	1700	70	.04	140	.08
EBT	2	3400	310	.12*	840	.27*
EBR	0	0	110		70	
WBL	1	1700	490	.29*	270	.16*
WBT	2	3400	590	.25	280	.11
WBR	0	0	260		80	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .77 .89

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	80	.05*	70	.04
NBT	3	5100	810	.16	1850	.36*
NBR	1	1700	140	.08	280	.16
SBL	1	1700	210	.12	120	.07*
SBT	3	5100	1490	.29*	1130	.22
SBR	1	1700	320	.19	190	.11
EBL	1	1700	80	.05	170	.10
EBT	2	3400	310	.12*	810	.26*
EBR	0	0	110		70	
WBL	1	1700	400	.24*	260	.15*
WBT	2	3400	710	.29	290	.11
WBR	0	0	260		90	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .75 .89

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	110	.06*	70	.04
NBT	3	5100	800	.16	1880	.37*
NBR	1	1700	160	.09	270	.16
SBL	1	1700	210	.12	120	.07*
SBT	3	5100	1530	.30*	1150	.23
SBR	1	1700	330	.19	200	.12
EBL	1	1700	80	.05	150	.09
EBT	2	3400	300	.12*	830	.26*
EBR	0	0	110		70	
WBL	1	1700	370	.22*	260	.15*
WBT	2	3400	720	.29	280	.11
WBR	0	0	260		90	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .75 .90

24. Ridge Route & Jeronimo

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	192	.11*	57	.03
NBT	2	3400	310	.09	393	.12*
NBR	d	1700	51	.03	131	.08
SBL	1	1700	22	.01	86	.05*
SBT	2	3400	228	.07*	250	.07
SBR	d	1700	62	.04	49	.03
EBL	1	1700	136	.08	73	.04
EBT	2	3400	610	.21*	947	.30*
EBR	0	0	101		81	
WBL	1	1700	43	.03*	92	.05*
WBT	2	3400	312	.11	345	.13
WBR	0	0	46		85	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.47		.57

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	190	.11*	60	.04
NBT	2	3400	320	.09	420	.12*
NBR	d	1700	70	.04	270	.16
SBL	1	1700	10	.01	60	.04*
SBT	2	3400	270	.08*	250	.07
SBR	d	1700	40	.02	60	.04
EBL	1	1700	140	.08	60	.04
EBT	2	3400	650	.22*	1210	.38*
EBR	0	0	110		70	
WBL	1	1700	80	.05*	170	.10*
WBT	2	3400	460	.15	440	.15
WBR	0	0	60		80	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.51		.69

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	190	.11*	60	.04
NBT	2	3400	320	.09	460	.14*
NBR	d	1700	70	.04	280	.16
SBL	1	1700	10	.01	60	.04*
SBT	2	3400	300	.09*	220	.06
SBR	d	1700	60	.04	70	.04
EBL	1	1700	130	.08	70	.04
EBT	2	3400	690	.24*	1220	.38*
EBR	0	0	130		70	
WBL	1	1700	100	.06*	180	.11*
WBT	2	3400	460	.15	430	.15
WBR	0	0	50		80	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.55		.72

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	190	.11*	60	.04
NBT	2	3400	320	.09	470	.14*
NBR	d	1700	60	.04	280	.16
SBL	1	1700	10	.01	60	.04*
SBT	2	3400	320	.09*	220	.06
SBR	d	1700	40	.02	70	.04
EBL	1	1700	130	.08	70	.04
EBT	2	3400	690	.24*	1230	.38*
EBR	0	0	130		70	
WBL	1	1700	100	.06*	170	.10*
WBT	2	3400	460	.15	420	.15
WBR	0	0	50		80	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.55		.71

25. El Toro & Jeronimo

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	65	.04*	82	.05*
NBT	3	5100	620	.12	1379	.27
NBR	1	1700	249	.15	251	.15
SBL	1	1700	272	.16	66	.04
SBT	3	5100	1593	.31*	1366	.27*
SBR	d	1700	176	.10	333	.20
EBL	1	1700	104	.06	251	.15*
EBT	2	3400	284	.12*	380	.16
EBR	0	0	133		179	
WBL	2	3400	393	.12*	262	.08
WBT	2	3400	549	.16	469	.14*
WBR	1	1700	114	.07	259	.15
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for NBR						

TOTAL CAPACITY UTILIZATION .64 .66

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	130	.08	80	.05
NBT	3	5100	1880	.37*	1750	.34*
NBR	1	1700	250	.15	280	.16
SBL	1	1700	410	.24*	330	.19*
SBT	3	5100	1590	.31	1240	.24
SBR	d	1700	170	.10	390	.23
EBL	1	1700	120	.07*	330	.19*
EBT	2	3400	260	.10	520	.22
EBR	0	0	70		240	
WBL	2	3400	570	.17	280	.08
WBT	2	3400	790	.23*	580	.17*
WBR	1	1700	130	.08	320	.19
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for NBR						

TOTAL CAPACITY UTILIZATION .96 .94

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	140	.08	90	.05
NBT	3	5100	1590	.31*	1920	.38*
NBR	1	1700	290	.17	260	.15
SBL	1	1700	400	.24*	220	.13*
SBT	3	5100	1890	.37	1210	.24
SBR	d	1700	150	.09	400	.24
EBL	1	1700	160	.09*	340	.20*
EBT	2	3400	250	.10	600	.23
EBR	0	0	90		170	
WBL	2	3400	480	.14	300	.09
WBT	2	3400	820	.24*	560	.16*
WBR	1	1700	150	.09	350	.21
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for NBR						

TOTAL CAPACITY UTILIZATION .93 .92

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	160	.09	90	.05
NBT	3	5100	1620	.32*	1970	.39*
NBR	1	1700	280	.16	250	.15
SBL	1	1700	400	.24*	230	.14*
SBT	3	5100	1870	.37	1210	.24
SBR	d	1700	210	.12	390	.23
EBL	1	1700	150	.09*	320	.19*
EBT	2	3400	250	.10	600	.23
EBR	0	0	80		190	
WBL	2	3400	590	.17	290	.09
WBT	2	3400	740	.22*	560	.16*
WBR	1	1700	140	.08	360	.21
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for NBR						

TOTAL CAPACITY UTILIZATION .92 .93

26. Los Alisos & Jeronimo

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	197	.12*	160	.09
NBT	3	5100	527	.10	1281	.25*
NBR	d	1700	192	.11	303	.18
SBL	1	1700	231	.14	271	.16*
SBT	3	5100	1227	.24*	771	.15
SBR	d	1700	281	.17	98	.06
EBL	1	1700	161	.09*	324	.19
EBT	2	3400	546	.16	762	.22*
EBR	d	1700	193	.11	233	.14
WBL	1	1700	266	.16	207	.12*
WBT	2	3400	999	.29*	388	.11
WBR	1	1700	134	.08	244	.14
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .79 .80

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	180	.11*	140	.08
NBT	3	5100	740	.15	1510	.30*
NBR	d	1700	310	.18	290	.17
SBL	1	1700	290	.17	260	.15*
SBT	3	5100	1250	.25*	1040	.20
SBR	d	1700	480	.28	160	.09
EBL	1	1700	180	.11*	390	.23
EBT	2	3400	560	.16	1160	.34*
EBR	d	1700	260	.15	280	.16
WBL	1	1700	250	.15	200	.12*
WBT	2	3400	1310	.39*	500	.15
WBR	1	1700	220	.13	270	.16
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .91 .96

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	190	.11*	150	.09
NBT	3	5100	690	.14	1560	.31*
NBR	d	1700	280	.16	370	.22
SBL	1	1700	300	.18	260	.15*
SBT	3	5100	1430	.28*	1020	.20
SBR	d	1700	440	.26	160	.09
EBL	1	1700	170	.10*	410	.24
EBT	2	3400	610	.18	1050	.31*
EBR	d	1700	210	.12	290	.17
WBL	1	1700	260	.15	170	.10*
WBT	2	3400	1300	.38*	530	.16
WBR	1	1700	170	.10	280	.16
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .92 .92

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	190	.11*	150	.09
NBT	3	5100	690	.14	1560	.31*
NBR	d	1700	280	.16	370	.22
SBL	1	1700	300	.18	260	.15*
SBT	3	5100	1430	.28*	1020	.20
SBR	d	1700	440	.26	160	.09
EBL	2	3400	170	.05*	410	.12
EBT	2	3400	610	.18	1050	.31*
EBR	d	1700	210	.12	290	.17
WBL	2	3400	260	.08	170	.05*
WBT	2	3400	1300	.38*	530	.16
WBR	d	1700	170	.10	280	.16
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .87 .87

26. Los Alisos & Jeronimo

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	170	.10*	170	.10
NBT	3	5100	680	.13	1590	.31*
NBR	d	1700	280	.16	330	.19
SBL	1	1700	310	.18	260	.15*
SBT	3	5100	1420	.28*	1030	.20
SBR	d	1700	470	.28	140	.08
EBL	1	1700	180	.11*	390	.23
EBT	2	3400	570	.17	1110	.33*
EBR	d	1700	230	.14	270	.16
WBL	1	1700	260	.15	180	.11*
WBT	2	3400	1310	.39*	530	.16
WBR	1	1700	180	.11	280	.16
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.93		.95

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	170	.10*	170	.10
NBT	3	5100	680	.13	1590	.31*
NBR	d	1700	280	.16	330	.19
SBL	1	1700	310	.18	260	.15*
SBT	3	5100	1420	.28*	1030	.20
SBR	d	1700	470	.28	140	.08
EBL	2	3400	180	.05*	390	.11
EBT	2	3400	570	.17	1110	.33*
EBR	d	1700	230	.14	270	.16
WBL	2	3400	260	.08	180	.05*
WBT	2	3400	1310	.39*	530	.16
WBR	d	1700	180	.11	280	.16
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.87		.89

27. Lake Forest & Muirlands

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	53	.02*	42	.01
NBT	3	5100	721	.14	1409	.28*
NBR	1	1700	65	.04	238	.14
SBL	2	3400	107	.03	190	.06*
SBT	3	5100	1412	.28*	1056	.21
SBR	1	1700	177	.10	86	.05
EBL	2	3400	71	.02*	289	.09
EBT	2	3400	154	.05	1078	.32*
EBR	1	1700	35	.02	168	.10
WBL	2	3400	285	.08	228	.07*
WBT	2	3400	649	.19*	201	.06
WBR	1	1700	133	.08	133	.08
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .56 .78

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	40	.01*	120	.04
NBT	3	5100	810	.16	1470	.29*
NBR	1	1700	140	.08	530	.31
SBL	2	3400	60	.02	140	.04*
SBT	3	5100	1730	.34*	1230	.24
SBR	1	1700	130	.08	100	.06
EBL	2	3400	70	.02*	500	.15
EBT	2	3400	280	.08	1160	.34*
EBR	1	1700	90	.05	180	.11
WBL	2	3400	390	.11	320	.09*
WBT	2	3400	920	.27*	300	.09
WBR	1	1700	150	.09	120	.07
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .69 .81

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	40	.01*	110	.03
NBT	3	5100	730	.14	1600	.31*
NBR	1	1700	130	.08	560	.33
SBL	2	3400	70	.02	150	.04*
SBT	3	5100	1870	.37*	1210	.24
SBR	1	1700	210	.12	100	.06
EBL	2	3400	70	.02*	540	.16
EBT	2	3400	310	.09	1120	.33*
EBR	1	1700	80	.05	180	.11
WBL	2	3400	440	.13	320	.09*
WBT	2	3400	870	.26*	310	.09
WBR	1	1700	120	.07	120	.07
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .71 .82

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	50	.01*	110	.03
NBT	3	5100	740	.15	1560	.31*
NBR	1	1700	140	.08	610	.36
SBL	2	3400	60	.02	140	.04*
SBT	3	5100	1910	.37*	1200	.24
SBR	1	1700	200	.12	110	.06
EBL	2	3400	70	.02*	600	.18
EBT	2	3400	300	.09	1090	.32*
EBR	1	1700	80	.05	170	.10
WBL	2	3400	490	.14	330	.10*
WBT	2	3400	860	.25*	330	.10
WBR	1	1700	140	.08	120	.07
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .70 .82

28. Ridge Route & Muirlands

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	103	.06*	106	.06
NBT	2	3400	307	.09	329	.10*
NBR	d	1700	113	.07	200	.12
SBL	1	1700	83	.05	170	.10*
SBT	2	3400	207	.09*	211	.08
SBR	0	0	94		47	
EBL	1	1700	54	.03*	97	.06
EBT	2	3400	328	.10	1209	.36*
EBR	1	1700	51	.03	83	.05
WBL	1	1700	123	.07	92	.05*
WBT	2	3400	837	.25*	484	.14
WBR	1	1700	99	.06	106	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .48 .66

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	90	.05*	130	.08*
NBT	2	3400	320	.09	410	.12
NBR	d	1700	140	.08	310	.18
SBL	1	1700	10	.01	90	.05
SBT	2	3400	300	.11*	290	.09*
SBR	0	0	60		30	
EBL	1	1700	20	.01*	90	.05
EBT	2	3400	480	.14	1550	.46*
EBR	1	1700	50	.03	90	.05
WBL	1	1700	140	.08	210	.12*
WBT	2	3400	1240	.36*	650	.19
WBR	1	1700	70	.04	80	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .58 .80

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	90	.05*	150	.09
NBT	2	3400	320	.09	470	.14*
NBR	d	1700	140	.08	310	.18
SBL	1	1700	10	.01	90	.05*
SBT	2	3400	370	.12*	290	.09
SBR	0	0	50		20	
EBL	1	1700	20	.01*	80	.05
EBT	2	3400	500	.15	1550	.46*
EBR	1	1700	70	.04	90	.05
WBL	1	1700	140	.08	210	.12*
WBT	2	3400	1200	.35*	680	.20
WBR	1	1700	60	.04	90	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .58 .82

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	90	.05*	160	.09
NBT	2	3400	310	.09	470	.14*
NBR	d	1700	140	.08	320	.19
SBL	1	1700	10	.01	90	.05*
SBT	2	3400	360	.13*	300	.09
SBR	0	0	70		20	
EBL	1	1700	30	.02*	100	.06
EBT	2	3400	490	.14	1540	.45*
EBR	1	1700	60	.04	80	.05
WBL	1	1700	150	.09	220	.13*
WBT	2	3400	1260	.37*	680	.20
WBR	1	1700	70	.04	80	.05
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .82

29. El Toro & Muirlands

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	99	.03*	214	.06
NBT	3	5100	715	.14	1527	.30*
NBR	1	1700	44	.03	346	.20
SBL	2	3400	186	.05	216	.06*
SBT	3	5100	1238	.24*	998	.20
SBR	1	1700	258	.15	50	.03
EBL	2	3400	123	.04*	222	.07
EBT	2	3400	257	.08	854	.25*
EBR	1	1700	138	.08	249	.15
WBL	2	3400	220	.06	221	.07*
WBT	2	3400	619	.18*	399	.12
WBR	1	1700	139	.08	221	.13
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .54 .73

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	110	.03	210	.06
NBT	3	5100	1810	.35*	1530	.30*
NBR	1	1700	90	.05	410	.24
SBL	2	3400	180	.05*	370	.11*
SBT	3	5100	1750	.34	1270	.25
SBR	1	1700	290	.17	70	.04
EBL	2	3400	110	.03*	220	.06
EBT	2	3400	320	.09	1000	.29*
EBR	1	1700	130	.08	360	.21
WBL	2	3400	300	.09	320	.09*
WBT	2	3400	930	.27*	590	.17
WBR	1	1700	250	.15	320	.19
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .75 .84

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	110	.03*	210	.06
NBT	3	5100	1650	.32	1690	.33*
NBR	1	1700	70	.04	390	.23
SBL	2	3400	220	.06	270	.08*
SBT	3	5100	1960	.38*	1260	.25
SBR	1	1700	290	.17	70	.04
EBL	2	3400	130	.04*	210	.06
EBT	2	3400	300	.09	1060	.31*
EBR	1	1700	140	.08	330	.19
WBL	2	3400	360	.11	280	.08*
WBT	2	3400	880	.26*	610	.18
WBR	1	1700	180	.11	310	.18
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .76 .85

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	100	.03*	220	.06
NBT	3	5100	1640	.32	1740	.34*
NBR	1	1700	70	.04	380	.22
SBL	2	3400	210	.06	290	.09*
SBT	3	5100	1990	.39*	1270	.25
SBR	1	1700	350	.21	70	.04
EBL	2	3400	130	.04*	210	.06
EBT	2	3400	310	.09	1060	.31*
EBR	1	1700	130	.08	320	.19
WBL	2	3400	330	.10	290	.09*
WBT	2	3400	890	.26*	620	.18
WBR	1	1700	210	.12	300	.18
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .77 .88

30. Los Alisos & Muirlands

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	229	.13*	202	.12
NBT	3	5100	666	.15	1536	.35*
NBR	0	0	93		228	
SBL	1	1700	291	.17	169	.10*
SBT	3	5100	1173	.23*	880	.17
SBR	d	1700	231	.14	117	.07
EBL	1	1700	116	.07*	333	.20*
EBT	2	3400	407	.16	709	.27
EBR	0	0	129		201	
WBL	1	1700	234	.14	139	.08
WBT	2	3400	875	.30*	445	.20*
WBR	0	0	129		233	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .78 .90

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	280	.16*	260	.15
NBT	3	5100	820	.18	1740	.39*
NBR	0	0	80		240	
SBL	1	1700	360	.21	310	.18*
SBT	3	5100	1190	.23*	900	.18
SBR	d	1700	200	.12	250	.15
EBL	1	1700	220	.13*	380	.22*
EBT	2	3400	380	.15	930	.35
EBR	0	0	140		260	
WBL	1	1700	220	.13	140	.08
WBT	2	3400	1390	.46*	570	.24*
WBR	0	0	170		230	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION 1.03 1.08

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	240	.14*	260	.15
NBT	3	5100	770	.17	1800	.40*
NBR	0	0	80		260	
SBL	1	1700	350	.21	330	.19*
SBT	3	5100	1260	.25*	890	.17
SBR	d	1700	290	.17	230	.14
EBL	1	1700	190	.11*	450	.26*
EBT	2	3400	380	.17	860	.32
EBR	0	0	190		220	
WBL	1	1700	230	.14	150	.09
WBT	2	3400	1290	.43*	570	.24*
WBR	0	0	180		250	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .98 1.14

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	240	.07*	260	.08
NBT	3	5100	770	.15	1800	.35*
NBR	d	1700	80	.05	260	.15
SBL	2	3400	350	.10	330	.10*
SBT	3	5100	1260	.25*	890	.17
SBR	d	1700	290	.17	230	.14
EBL	2	3400	190	.06*	450	.13
EBT	2	3400	380	.17	860	.32*
EBR	0	0	190		220	
WBL	1	1700	230	.14	150	.09*
WBT	2	3400	1290	.43*	570	.24
WBR	0	0	180		250	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .86 .91

30. Los Alisos & Muirlands

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	PK HOUR V/C	PM PK HOUR VOL	PK HOUR V/C
NBL	1	1700	290	.17*	260	.15
NBT	3	5100	760	.16	1780	.40*
NBR	0	0	80		260	
SBL	1	1700	370	.22	310	.18*
SBT	3	5100	1310	.26*	880	.17
SBR	d	1700	230	.14	250	.15
EBL	1	1700	210	.12*	430	.25*
EBT	2	3400	390	.16	870	.32
EBR	0	0	150		230	
WBL	1	1700	220	.13	150	.09
WBT	2	3400	1310	.43*	560	.24*
WBR	0	0	160		270	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION 1.03 1.12

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	PK HOUR V/C	PM PK HOUR VOL	PK HOUR V/C
NBL	2	3400	290	.09*	260	.08
NBT	3	5100	760	.15	1780	.35*
NBR	d	1700	80	.05	260	.15
SBL	2	3400	370	.11	310	.09*
SBT	3	5100	1310	.26*	880	.17
SBR	d	1700	230	.14	250	.15
EBL	2	3400	210	.06*	430	.13
EBT	2	3400	390	.16	870	.32*
EBR	0	0	150		230	
WBL	1	1700	220	.13	150	.09*
WBT	2	3400	1310	.43*	560	.24
WBR	0	0	160		270	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .89 .90

31. Lake Forest & Rockfield

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	516	.15*	508	.15
NBT	3	5100	986	.19	1550	.30*
NBR	1	1700	168	.10	530	.31
SBL	2	3400	103	.03	136	.04*
SBT	4	6800	1623	.25*	1075	.17
SBR	0	0	72		95	
EBL	2	3400	60	.02	188	.06
EBT	2	3400	109	.03*	509	.15*
EBR	2	3400	137	.04	204	.06
WBL	2	3400	466	.14*	415	.12*
WBT	2	3400	398	.12	171	.05
WBR	1	1700	100	.06	135	.08
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .66

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	560	.16*	630	.19
NBT	3	5100	1280	.25	1870	.37*
NBR	1	1700	170	.10	300	.18
SBL	2	3400	170	.05	200	.06*
SBT	4	6800	2000	.31*	1340	.21
SBR	0	0	110		120	
EBL	2	3400	60	.02*	260	.08
EBT	2	3400	180	.05	790	.23*
EBR	2	3400	210	.06	260	.08
WBL	2	3400	370	.11	490	.14*
WBT	2	3400	750	.22*	300	.09
WBR	1	1700	150	.09	250	.15
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .76 .85

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	550	.16*	620	.18
NBT	3	5100	1180	.23	2000	.39*
NBR	1	1700	180	.11	310	.18
SBL	2	3400	180	.05	190	.06*
SBT	4	6800	2140	.33*	1300	.21
SBR	0	0	120		120	
EBL	2	3400	70	.02*	270	.08
EBT	2	3400	180	.05	840	.25*
EBR	2	3400	210	.06	250	.07
WBL	2	3400	400	.12	500	.15*
WBT	2	3400	800	.24*	300	.09
WBR	1	1700	140	.08	230	.14
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .80 .90

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	550	.16*	610	.18
NBT	3	5100	1190	.23	2000	.39*
NBR	1	1700	160	.09	300	.18
SBL	2	3400	170	.05	190	.06*
SBT	4	6800	2240	.35*	1310	.21
SBR	0	0	120		120	
EBL	2	3400	70	.02*	260	.08
EBT	2	3400	180	.05	850	.25*
EBR	2	3400	220	.06	260	.08
WBL	2	3400	390	.11	500	.15*
WBT	2	3400	800	.24*	290	.09
WBR	1	1700	140	.08	230	.14
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .82 .90

32. Ridge Route & Rockfield

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0.5		66		28	
NBT	1.5	3400	38	.04*	24	.02*
NBR	0		45		12	
SBL	0.5		147		141	
SBT	1.5	3400	13	.09*	23	.09*
SBR	0		317	.19	135	
EBL	1	1700	84	.05*	385	.23*
EBT	2	3400	210	.06	1067	.33
EBR	0	0	7		52	
WBL	1	1700	11	.01	21	.01
WBT	2	3400	407	.14*	391	.16*
WBR	0	0	75		145	
Right Turn Adjustment			SBR	.06*		
Clearance Interval				.05*		.05*
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .43 .55

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0.5		280		270	
NBT	1.5	3400	130	.19*	580	.38*
NBR	0		240		440	
SBL	0.5		90		70	
SBT	1.5	3400	400	.17*	370	.14*
SBR	0		80		40	
EBL	1	1700	40	.02	80	.05
EBT	2	3400	200	.10*	1440	.50*
EBR	0	0	140		270	
WBL	1	1700	420	.25*	210	.12*
WBT	2	3400	660	.21	500	.17
WBR	0	0	50		80	
Clearance Interval				.05*		.05*
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .76 1.19

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0.5		270		260	
NBT	1.5	3400	140	.19*	630	.39*
NBR	0		220		440	
SBL	0.5		100		70	
SBT	1.5	3400	460	.19*	360	.14*
SBR	0		100		40	
EBL	1	1700	40	.02	110	.06
EBT	2	3400	200	.10*	1450	.50*
EBR	0	0	150		250	
WBL	1	1700	430	.25*	200	.12*
WBT	2	3400	700	.22	510	.17
WBR	0	0	60		80	
Clearance Interval				.05*		.05*
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .78 1.20

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0.5		270	.16*	260	
NBT	1.5	3400	140	.08	630	.26*
NBR	0	1700	220	.13	440	.26
SBL	0.5		100		70	
SBT	1.5	3400	460	.19*	360	.14*
SBR	0		100		40	
EBL	1	1700	40	.02	110	.06
EBT	2	3400	200	.10*	1450	.50*
EBR	0	0	150		250	
WBL	1	1700	430	.25*	200	.12*
WBT	2	3400	700	.22	510	.17
WBR	0	0	60		80	
Clearance Interval				.05*		.05*
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .75 1.07

32. Ridge Route & Rockfield

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0.5		280		250	
NBT	1.5	3400	130	.18*	650	.39*
NBR	0		210		420	
SBL	0.5		100		80	
SBT	1.5	3400	460	.19*	360	.14*
SBR	0		100		40	
EBL	1	1700	40	.02	90	.05
EBT	2	3400	190	.10*	1460	.50*
EBR	0	0	140		250	
WBL	1	1700	450	.26*	210	.12*
WBT	2	3400	690	.22	510	.17
WBR	0	0	50		70	
Clearance Interval				.05*	.05*	
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .78 1.20

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0.5		280	.16*	250	
NBT	1.5	3400	130	.08	650	.26*
NBR	d	1700	210	.12	420	.25
SBL	0.5		100		80	
SBT	1.5	3400	460	.19*	360	.14*
SBR	0		100		40	
EBL	1	1700	40	.02	90	.05
EBT	2	3400	190	.10*	1460	.50*
EBR	0	0	140		250	
WBL	1	1700	450	.26*	210	.12*
WBT	2	3400	690	.22	510	.17
WBR	0	0	50		70	
Clearance Interval				.05*	.05*	
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .76 1.07

33. El Toro & Rockfield

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	172	.05*	315	.09
NBT	3	5100	837	.18	1261	.28*
NBR	0	0	96		155	
SBL	2	3400	142	.04	219	.06*
SBT	3	5100	1346	.28*	1122	.23
SBR	0	0	65		62	
EBL	2	3400	120	.04	447	.13
EBT	2	3400	194	.11*	590	.25*
EBR	0	0	218	.13	255	
WBL	2	3400	454	.13*	342	.10*
WBT	2	3400	308	.12	289	.13
WBR	0	0	86		144	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .74

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	230	.07*	310	.09*
NBT	4	6800	1160	.17	1260	.19
NBR	d	1700	50	.03	200	.12
SBL	2	3400	180	.05	290	.09
SBT	4	6800	1530	.27*	1580	.25*
SBR	0	0	290		130	
EBL	2	3400	310	.09*	700	.21
EBT	2	3400	100	.03	920	.27*
EBR	f		100		180	
WBL	2	3400	410	.12	280	.08*
WBT	2	3400	330	.10*	390	.11
WBR	1	1700	250	.15	120	.07
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .58 .74

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	220	.06*	320	.09*
NBT	4	6800	980	.14	1370	.20
NBR	d	1700	60	.04	200	.12
SBL	2	3400	180	.05	270	.08
SBT	4	6800	1720	.30*	1520	.24*
SBR	0	0	330		130	
EBL	2	3400	300	.09*	750	.22
EBT	2	3400	90	.03	890	.26*
EBR	f		110		170	
WBL	2	3400	430	.13	280	.08*
WBT	2	3400	330	.10*	380	.11
WBR	1	1700	210	.12	100	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .60 .72

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	220	.06*	310	.09*
NBT	4	6800	1000	.15	1400	.21
NBR	d	1700	60	.04	230	.14
SBL	2	3400	180	.05	270	.08
SBT	4	6800	1740	.30*	1550	.25*
SBR	0	0	310		120	
EBL	2	3400	300	.09*	760	.22
EBT	2	3400	100	.03	870	.26*
EBR	f		100		180	
WBL	2	3400	430	.13	270	.08*
WBT	2	3400	350	.10*	390	.11
WBR	1	1700	180	.11	110	.06
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .60 .73

34. Los Alisos & Rockfield

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	211	.12*	268	.16*
NBT	2	3400	810	.24	1422	.42
NBR	0	0	3		7	
SBL	1	1700	12	.01	22	.01
SBT	2	3400	968	.44*	878	.35*
SBR	0	0	511		314	
EBL	1.5		233		499	
EBT	0.5	3400	13	.07*	36	.16*
EBR	1	1700	185	.11	288	.17
WBL	0	0	23		19	
WBT	1	1700	29	.03*	23	.02*
WBR	d	1700	54	.03	24	.01
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .71 .74

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	410	.24*	410	.24*
NBT	2	3400	1010	.30	1630	.48
NBR	0	0	10		10	
SBL	1	1700	10	.01	10	.01
SBT	2	3400	900	.45*	1010	.38*
SBR	0	0	620		270	
EBL	1.5		210		660	
EBT	0.5	3400	90	.09*	50	.21*
EBR	1	1700	230	.14	460	.27
WBL	0	0	20		20	
WBT	1	1700	110	.08*	70	.05*
WBR	d	1700	40	.02	20	.01
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .91 .93

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	370	.22*	390	.23*
NBT	2	3400	930	.28	1740	.51
NBR	0	0	10		10	
SBL	1	1700	10	.01	10	.01
SBT	2	3400	1000	.48*	940	.36*
SBR	0	0	640		280	
EBL	1.5		200		610	
EBT	0.5	3400	90	.09*	40	.19*
EBR	1	1700	210	.12	470	.28
WBL	0	0	20		20	
WBT	1	1700	110	.08*	70	.05*
WBR	d	1700	40	.02	20	.01
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .92 .88

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	370	.22*	390	.23
NBT	2	3400	930	.28	1740	.51*
NBR	0	0	10		10	
SBL	1	1700	10	.01	10	.01*
SBT	2	3400	1000	.29*	940	.28
SBR	1	1700	640	.38	280	.16
EBL	1.5		200		610	
EBT	0.5	3400	90	.09*	40	.19*
EBR	1	1700	210	.12	470	.28
WBL	0	0	20		20	
WBT	1	1700	110	.08*	70	.05*
WBR	d	1700	40	.02	20	.01
Right Turn Adjustment			SBR	.02*		
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .75 .81

34. Los Alisos & Rockfield

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	340	.20*	390	.23*
NBT	2	3400	960	.29	1730	.51
NBR	0	0	10		10	
SBL	1	1700	10	.01	10	.01
SBT	2	3400	990	.49*	960	.36*
SBR	0	0	660		280	
EBL	1.5		210		620	
EBT	0.5	3400	90	.09*	40	.19*
EBR	1	1700	210	.12	460	.27
WBL	0	0	20		20	
WBT	1	1700	110	.08*	70	.05*
WBR	d	1700	40	.02	20	.01
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .91 .88

35. Lake Forest & I-5 NB

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	1510	.30*	2187	.43*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	3	5100	1078	.21	1236	.24
SBR	f		1136		879	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	543	.16*	235	.07*
WBT	0	0	0		0	
WBR	2	3400	628	.18	427	.13
Right Turn Adjustment Clearance Interval			WBR	.02*	WBR	.06*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .53 .61

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	1860	.36*	2490	.49*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	3	5100	1350	.26	1430	.28
SBR	f		1240		1120	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	900	.26*	340	.10*
WBT	0	0	0		0	
WBR	2	3400	630	.19	370	.11
Right Turn Adjustment Clearance Interval					WBR	.01*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .67 .65

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	1760	.35*	2590	.51*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	3	5100	1460	.29	1440	.28
SBR	f		1310		1090	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	890	.26*	340	.10*
WBT	0	0	0		0	
WBR	2	3400	610	.18	380	.11
Right Turn Adjustment Clearance Interval					WBR	.01*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .66 .67

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	1750	.34*	2590	.51*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	3	5100	1490	.29	1450	.28
SBR	f		1370		1090	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	880	.26*	340	.10*
WBT	0	0	0		0	
WBR	2	3400	600	.18	380	.11
Right Turn Adjustment Clearance Interval					WBR	.01*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .65 .67

36. Lake Forest & I-5/Carlota

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	4	6800	597	.10*	1087	.17*
NBR	0	0	57		87	
SBL	2	3400	292	.09*	333	.10*
SBT	3	5100	826	.16	603	.12
SBR	f		568		573	
EBL	2.5		792		1646	
EBT	1.5	6800	342	.17*	905	.38*
EBR	1	1700	578	.34	469	.28
WBL	1	1700	128	.08*	144	.08*
WBT	0	0	0		0	
WBR	2	3400	187	.06	380	.11
Right Turn Adjustment			EBR	.15*		
Clearance Interval				.05*		.05*

Note: Assumes E/W Split Phasing

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	4	6800	790	.13	1700	.28*
NBR	0	0	100		200	
SBL	2	3400	330	.10	370	.11*
SBT	3	5100	1410	.28*	890	.17
SBR	f		470		570	
EBL	2.5		1150		1690	
EBT	1.5	6800	570	.25*	1030	.40*
EBR	1	1700	560	.33	350	.21
WBL	1	1700	260	.15*	250	.15*
WBT	0	0	0		0	
WBR	2	3400	110	.03	410	.12
Right Turn Adjustment			EBR	.08*		
Clearance Interval				.05*		.05*

Note: Assumes E/W Split Phasing

TOTAL CAPACITY UTILIZATION .64 .78

TOTAL CAPACITY UTILIZATION .81 .99

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	4	6800	780	.13	1750	.29*
NBR	0	0	90		200	
SBL	2	3400	340	.10	360	.11*
SBT	3	5100	1490	.29*	920	.18
SBR	f		460		560	
EBL	2.5		1060		1730	
EBT	1.5	6800	560	.24*	1020	.40*
EBR	1	1700	520	.31	320	.19
WBL	1	1700	270	.16*	250	.15*
WBT	0	0	0		0	
WBR	2	3400	120	.04	410	.12
Right Turn Adjustment			EBR	.07*		
Clearance Interval				.05*		.05*

Note: Assumes E/W Split Phasing

TOTAL CAPACITY UTILIZATION .81 1.00

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	4	6800	780	.13	1750	.29*
NBR	0	0	90		200	
SBL	2	3400	340	.10	360	.11*
SBT	3	5100	1490	.29*	920	.18
SBR	f		460		560	
EBL	3	5100	1060	.21*	1730	.34*
EBT	2	3400	560	.16	1020	.30
EBR	1	1700	520	.31	320	.19
WBL	2	3400	270	.08*	250	.07*
WBT	0	0	0		0	
WBR	2	3400	120	.04	410	.12
Right Turn Adjustment			EBR	.10*		
Clearance Interval				.05*		.05*

Note: Assumes E/W Split Phasing
Note: Assumes Right-Turn Overlap for WBR

TOTAL CAPACITY UTILIZATION .73 .86

36. Lake Forest & I-5/Carlota

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	4	6800	790	.13	1780	.29*
NBR	0	0	90		200	
SBL	2	3400	340	.10	380	.11*
SBT	3	5100	1490	.29*	910	.18
SBR	f		470		560	
EBL	2.5		1040		1690	
EBT	1.5	6800	560	.24*	1020	.40*
EBR	1	1700	540	.32	310	.18
WBL	1	1700	270	.16*	250	.15*
WBT	0	0	0		0	
WBR	2	3400	120	.04	410	.12
Right Turn Adjustment			EBR	.08*		
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .82 1.00

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	4	6800	790	.13	1780	.29*
NBR	0	0	90		200	
SBL	2	3400	340	.10	380	.11*
SBT	3	5100	1490	.29*	910	.18
SBR	f		470		560	
EBL	3	5100	1040	.20*	1690	.33*
EBT	2	3400	560	.16	1020	.30
EBR	1	1700	540	.32	310	.18
WBL	2	3400	270	.08*	250	.07*
WBT	0	0	0		0	
WBR	2	3400	120	.04	410	.12
Right Turn Adjustment			EBR	.12*		
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for WBR						

TOTAL CAPACITY UTILIZATION .74 .85

37. Paseo De Valencia & Carlota

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	187	.06*	166	.05
NBT	2	3400	26	.02	100	.06*
NBR	0	0	29	.02	261	.15
SBL	2	3400	753	.22*	805	.24*
SBT	2	3400	572	.18	376	.12
SBR	0	0	26		32	
EBL	2	3400	133	.04*	379	.11
EBT	2	3400	187	.06	695	.20*
EBR	1	1700	93	.05	610	.36
WBL	1	1700	17	.01	39	.02*
WBT	2	3400	397	.12*	316	.09
WBR	1	1700	490	.29	507	.30
Right Turn Adjustment					Multi	.19*
Clearance Interval				.05*		.05*
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .49 .76

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	350	.10*	280	.08*
NBT	2	3400	30	.02	100	.06
NBR	0	0	50	.03	280	.16
SBL	2	3400	1150	.34*	1310	.39*
SBT	2	3400	710	.21	510	.16
SBR	0	0	10		50	
EBL	2	3400	120	.04*	560	.16*
EBT	2	3400	190	.06	520	.15
EBR	1	1700	100	.06	830	.49
WBL	1	1700	30	.02	50	.03
WBT	2	3400	480	.14*	360	.11*
WBR	1	1700	510	.30	520	.31
Right Turn Adjustment					EBR	.19*
Clearance Interval				.05*		.05*
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .67 .98

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	340	.10*	270	.08*
NBT	2	3400	30	.02	100	.06
NBR	0	0	50	.03	280	.16
SBL	2	3400	1060	.31*	1450	.43*
SBT	2	3400	720	.21	480	.16
SBR	0	0	10		50	
EBL	2	3400	110	.03*	560	.16*
EBT	2	3400	190	.06	550	.16
EBR	1	1700	100	.06	820	.48
WBL	1	1700	30	.02	50	.03
WBT	2	3400	490	.14*	370	.11*
WBR	1	1700	510	.30	510	.30
Right Turn Adjustment					EBR	.18*
Clearance Interval				.05*		.05*
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .63 1.01

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	340	.10*	270	.08*
NBT	2	3400	30	.02	100	.06
NBR	0	0	50	.03	280	.16
SBL	2.5		1060		1450	
SBT	1.5	6800	720	.26*	480	.29*
SBR	0		10		50	
EBL	2	3400	110	.03*	560	.16*
EBT	2	3400	190	.06	550	.16
EBR	1	1700	100	.06	820	.48
WBL	1	1700	30	.02	50	.03
WBT	2	3400	490	.14*	370	.11*
WBR	1	1700	510	.30	510	.30
Right Turn Adjustment					EBR	.18*
Clearance Interval				.05*		.05*
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .58 .87

37. Paseo De Valencia & Carlota

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	370	.11*	270	.08*
NBT	2	3400	30	.02	100	.06
NBR	0	0	50	.03	280	.16
SBL	2	3400	1050	.31*	1430	.42*
SBT	2	3400	720	.21	520	.17
SBR	0	0	10		60	
EBL	2	3400	120	.04*	570	.17*
EBT	2	3400	180	.05	520	.15
EBR	1	1700	100	.06	820	.48
WBL	1	1700	30	.02	50	.03
WBT	2	3400	460	.14*	370	.11*
WBR	1	1700	510	.30	510	.30
Right Turn Adjustment					EBR	.17*
Clearance Interval				.05*		.05*
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .65 1.00

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	370	.11*	270	.08*
NBT	2	3400	30	.02	100	.06
NBR	0	0	50	.03	280	.16
SBL	2.5		1050		1430	
SBT	1.5	6800	720	.26*	520	.30*
SBR	0		10		60	
EBL	2	3400	120	.04*	570	.17*
EBT	2	3400	180	.05	520	.15
EBR	1	1700	100	.06	820	.48
WBL	1	1700	30	.02	50	.03
WBT	2	3400	460	.14*	370	.11*
WBR	1	1700	510	.30	510	.30
Right Turn Adjustment					EBR	.17*
Clearance Interval				.05*		.05*
Note: Assumes N/S Split Phasing						

TOTAL CAPACITY UTILIZATION .60 .88

38. El Toro & Bridger/I-5 NB

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	57	.03*	157	.09*
NBT	2.5	6800	1012	{.23}	1220	{.24}
NBR	1.5		871		743	{.22}
SBL	0	0	0		0	
SBT	3	5100	1988	.39*	1742	.34*
SBR	1	1700	76	.04	92	.05
EBL	1	1700	36	.02*	114	.07*
EBT	1	1700	6	.00	3	.00
EBR	1	1700	153	.09	216	.13
WBL	1.5		437		483	
WBT	0	5100	82	{.17}*	60	{.19}*
WBR	1.5		614		659	
Right Turn Adjustment			EBR	.04*		
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .70 .74

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	60	.04*	160	.09*
NBT	2.5	6800	1070	{.28}	1080	{.28}
NBR	1.5		1170		1170	
SBL	0	0	0		0	
SBT	5	8500	2110	.26*	2020	.25*
SBR	0	0	80		90	
EBL	1	1700	40	.02*	110	.06*
EBT	1	1700	10	.01	10	.01
EBR	1	1700	150	.09	220	.13
WBL	1.5		600		580	
WBT	0	5100	80	.25*	60	.22*
WBR	1.5		680		560	
Right Turn Adjustment			EBR	.03*		
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .65 .67

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	60	.04*	160	.09*
NBT	2.5	6800	940	{.26}	1210	{.29}
NBR	1.5		1190		1140	
SBL	0	0	0		0	
SBT	5	8500	2320	.28*	1930	.24*
SBR	0	0	80		90	
EBL	1	1700	40	.02*	110	.06*
EBT	1	1700	10	.01	10	.01
EBR	1	1700	150	.09	220	.13
WBL	1.5		620		590	
WBT	0	5100	80	{.24}*	60	.23*
WBR	1.5		630		560	
Right Turn Adjustment			EBR	.03*		
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .66 .67

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	60	.04*	160	.09*
NBT	2.5	6800	960	{.27}	1250	{.30}
NBR	1.5		1180		1130	
SBL	0	0	0		0	
SBT	5	8500	2320	.28*	1950	.24*
SBR	0	0	80		90	
EBL	1	1700	40	.02*	110	.06*
EBT	1	1700	10	.01	10	.01
EBR	1	1700	150	.09	220	.13
WBL	1.5		610		590	
WBT	0	5100	80	{.23}*	60	.23*
WBR	1.5		630		570	
Right Turn Adjustment			EBR	.03*		
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .65 .67

39. El Toro & Avd Carlota

Existing Count (2004)						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	899	.18*	1364	.27*
NBR	d	1700	14	.01	42	.02
SBL	2	3400	92	.03*	299	.09*
SBT	3	5100	677	.13	715	.14
SBR	1	1700	674	.40	662	.39
EBL	1.5		733	.22*	686	
EBT	1.5	5100	182	.11	831	.30*
EBR	1	1700	132	.08	128	.08
WBL	1	1700	29	.02	42	.02
WBT	1	1700	135	.08*	90	.05*
WBR	1	1700	261	.15	501	.29
Right Turn Adjustment			WBR	.04*	WBR	.15*
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for SBR WBR						

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	4	6800	920	.14*	1410	.21*
NBR	d	1700	10	.01	30	.02
SBL	2	3400	90	.03*	310	.09*
SBT	3	5100	840	.16	770	.15
SBR	1	1700	760	.45	730	.43
EBL	1.5		890	.26*	780	
EBT	1.5	5100	310	.18	1020	.35*
EBR	1	1700	290	.17	180	.11
WBL	1	1700	10	.01	40	.02
WBT	1	1700	180	.11*	50	.03*
WBR	1	1700	420	.25	660	.39
Right Turn Adjustment			Multi	.13*	WBR	.27*
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for SBR WBR						

TOTAL CAPACITY UTILIZATION .60 .91

TOTAL CAPACITY UTILIZATION .72 1.00

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	4	6800	890	.13	1420	.21*
NBR	d	1700	10	.01	40	.02
SBL	2	3400	90	.03	290	.09*
SBT	3	5100	890	.17*	710	.14
SBR	1	1700	760	.45	720	.42
EBL	1.5		850	.25*	850	
EBT	1.5	5100	300	.18	1060	.37*
EBR	1	1700	250	.15	240	.14
WBL	1	1700	20	.01	40	.02
WBT	1	1700	180	.11*	50	.03*
WBR	1	1700	410	.24	660	.39
Right Turn Adjustment			Multi	.12*	WBR	.27*
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for SBR WBR						

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	4	6800	890	.13	1420	.21*
NBR	d	1700	10	.01	40	.02
SBL	2	3400	90	.03	290	.09*
SBT	3	5100	890	.17*	710	.14
SBR	1	1700	760	.45	720	.42
EBL	2	3400	850	.25*	850	.25
EBT	2	3400	300	.16	1060	.38*
EBR	0	0	250		240	
WBL	0	0	20		40	
WBT	1	1700	180	.12*	50	.05*
WBR	2	3400	410	.12	660	.19
Right Turn Adjustment			SBR	.03*	WBR	.05*
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for SBR WBR						

TOTAL CAPACITY UTILIZATION .70 1.02

TOTAL CAPACITY UTILIZATION .62 .83

39. El Toro & Avd Carlota

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	4	6800	840	.12	1420	.21*
NBR	d	1700	10	.01	40	.02
SBL	2	3400	90	.03	300	.09*
SBT	3	5100	890	.17*	720	.14
SBR	1	1700	760	.45	720	.42
EBL	1.5		860	.25*	870	
EBT	1.5	5100	270	.16	1050	.38*
EBR	1	1700	240	.14	190	.11
WBL	1	1700	10	.01	40	.02
WBT	1	1700	140	.08*	60	.04*
WBR	1	1700	450	.26	660	.39
Right Turn Adjustment		Multi		.16*	WBR	.26*
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for SBR WBR						
TOTAL CAPACITY UTILIZATION			.71		1.03	

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	4	6800	840	.12	1420	.21*
NBR	d	1700	10	.01	40	.02
SBL	2	3400	90	.03	300	.09*
SBT	3	5100	890	.17*	720	.14
SBR	1	1700	760	.45	720	.42
EBL	2	3400	860	.25*	870	.26
EBT	2	3400	270	.15	1050	.36*
EBR	0	0	240		190	
WBL	0	0	10		40	
WBT	1	1700	140	.09*	60	.06*
WBR	2	3400	450	.13	660	.19
Right Turn Adjustment		SBR		.03*	WBR	.04*
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for SBR WBR						
TOTAL CAPACITY UTILIZATION			.59		.81	

40. Portola & Rancho

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	1540	.45*	850	.25*
NBT	4	6800	1450	.21	1650	.24
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	4	6800	790	.12*	1670	.25*
SBR	d	1700	300	.18	120	.07
EBL	1.5		110	.03*	210	.12*
EBT	0	5100	0		0	
EBR	1.5		460		1470	.43
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			SBR	.04*	EBR	.12*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .69 .79

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	1250	.37*	730	.21*
NBT	4	6800	1340	.20	1590	.23
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	4	6800	760	.11*	1520	.22*
SBR	d	1700	320	.19	100	.06
EBL	1.5		90	.03*	160	.09*
EBT	0	5100	0		0	
EBR	1.5		500	.15	1290	.38
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			SBR	.06*	EBR	.13*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .70

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	1140	.34*	740	.22*
NBT	4	6800	1350	.20	1580	.23
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	4	6800	760	.11*	1540	.23*
SBR	d	1700	230	.14	110	.06
EBL	1.5		120	{.05}*	120	.07*
EBT	0	5100	0	{.05}	0	
EBR	1.5		560		1200	.35
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment					EBR	.11*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .55 .68

41. Alton & Towne Centre Dr

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	430	.13*	240	.07
NBT	3	5100	560	.11	1900	.37*
NBR	1	1700	500	.29	280	.16
SBL	2	3400	500	.15	180	.05*
SBT	3	5100	2100	.41*	980	.19
SBR	1	1700	300	.18	150	.09
EBL	1	1700	130	.08*	320	.19*
EBT	1	1700	80	.05	160	.09
EBR	1	1700	170	.10	450	.26
WBL	1	1700	160	.09	520	.31
WBT	1	1700	180	.15*	180	.41*
WBR	0	0	80		520	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .82 1.07

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	190	.06*	330	.10
NBT	3	5100	630	.12	1900	.37*
NBR	1	1700	360	.21	420	.25
SBL	2	3400	240	.07	170	.05*
SBT	3	5100	2020	.40*	1050	.21
SBR	1	1700	120	.07	140	.08
EBL	1	1700	170	.10	140	.08
EBT	1	1700	90	.05*	100	.06*
EBR	1	1700	350	.21	270	.16
WBL	1	1700	410	.24*	400	.24*
WBT	1	1700	140	.15	130	.21
WBR	0	0	110		230	
Right Turn Adjustment			EBR	.11*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .91 .77

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	190	.06*	330	.10
NBT	3	5100	630	.12	1900	.37*
NBR	1	1700	360	.21	420	.25
SBL	2	3400	240	.07	170	.05*
SBT	3	5100	2020	.40*	1050	.21
SBR	1	1700	120	.07	140	.08
EBL	1	1700	170	.10*	140	.08*
EBT	1	1700	90	.05	100	.06
EBR	1	1700	350	.21	270	.16
WBL	2	3400	410	.12	400	.12
WBT	1	1700	140	.15*	130	.21*
WBR	0	0	110		230	
Right Turn Adjustment			EBR	.03*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .79 .76

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	170	.05*	320	.09
NBT	3	5100	620	.12	1910	.37*
NBR	1	1700	360	.21	450	.26
SBL	2	3400	230	.07	170	.05*
SBT	3	5100	2000	.39*	1050	.21
SBR	1	1700	120	.07	150	.09
EBL	1	1700	170	.10	130	.08
EBT	1	1700	90	.05*	100	.06*
EBR	1	1700	360	.21	270	.16
WBL	1	1700	450	.26*	410	.24*
WBT	1	1700	140	.15	120	.21
WBR	0	0	110		230	
Right Turn Adjustment			EBR	.12*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .92 .77

41. Alton & Towne Centre Dr

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	170	.05*	320	.09
NBT	3	5100	620	.12	1910	.37*
NBR	1	1700	360	.21	450	.26
SBL	2	3400	230	.07	170	.05*
SBT	3	5100	2000	.39*	1050	.21
SBR	1	1700	120	.07	150	.09
EBL	1	1700	170	.10*	130	.08*
EBT	1	1700	90	.05	100	.06
EBR	1	1700	360	.21	270	.16
WBL	2	3400	450	.13	410	.12
WBT	1	1700	140	.15*	120	.21*
WBR	0	0	110		230	
Right Turn Adjustment			EBR	.05*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.79		.76

42. Alton & Commercentre

2030 Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1410	.28*	2050	.40*
NBR	d	1700	510	.30	140	.08
SBL	1	1700	300	.18*	160	.09*
SBT	3	5100	2120	.42	1780	.35
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		50	.01*	510	.15*
WBT	0	5100	0		0	
WBR	1.5		80	{.00}	370	{.15}
Right Turn Adjustment			NBR	.01*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.53		.69

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1030	.20	2370	.46*
NBR	d	1700	340	.20	280	.16
SBL	1	1700	230	.14	190	.11*
SBT	3	5100	2550	.50*	1530	.30
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		230	.07*	410	.12*
WBT	0	5100	0		0	
WBR	1.5		150	{.00}	270	{.08}
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.62		.74

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	3	5100	1000	.20	2400	.47*
NBR	d	1700	360	.21	310	.18
SBL	1	1700	230	.14	190	.11*
SBT	3	5100	2580	.51*	1540	.30
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		250	.07*	400	.12*
WBT	0	5100	0		0	
WBR	1.5		140	{.00}	280	{.08}
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.63		.75

100. Portola Pkwy. at SR-241 NB Ramps

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	55	.03	382	.22
NBT	2	3400	1436	.42*	2200	.65*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	1118	.33	18	.01
SBR	1	1700	0	.00	0	.00
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		550		4	
WBT	0	3400	1	.16*	2	
WBR	0.5		0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .63 .70

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	55	.03*	382	.22
NBT	2	3400	1216	.36	2350	.69*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	1288	.38*	1	.00
SBR	1	1700	30	.02	1	.00
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		540		1	
WBT	0	3400	1	.16*	2	
WBR	0.5		0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .74

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	55	.03*	382	.22
NBT	2	3400	1206	.35	2340	.69*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	1298	.38*	1	.00
SBR	1	1700	50	.03	1	.00
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1.5		540		1	
WBT	0	3400	1	.16*	2	
WBR	0.5		0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .74

101. Portola Pkwy. at SR-241 SB Ramps

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	1.5	5100	1210	.36	1307	.38*
NBR	1.5		128	.08	519	.31
SBL	1	1700	2	.00	8	.00
SBT	2	3400	1550	.46*	23	.01
SBR	0	0	0		0	
EBL	0.5		100	.06*	73	.04*
EBT	0	3400	0		3	
EBR	1.5		2		7	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 .47

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	1.5	5100	1060	.31	1437	.42*
NBR	1.5		78	.05	509	.30
SBL	1	1700	2	.00	8	.00
SBT	2	3400	1710	.50*	1	.00
SBR	0	0	0		0	
EBL	0.5		30	.02*	83	.05*
EBT	0	3400	0		3	
EBR	1.5		12	.01	7	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 .52

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	1.5	5100	1050	.31	1427	.42*
NBR	1.5		98	.06	519	.31
SBL	1	1700	2	.00	8	.00
SBT	2	3400	1730	.51*	1	.00
SBR	0	0	0		0	
EBL	0.5		30	.02*	83	.05*
EBT	0	3400	0		3	
EBR	1.5		12	.01	7	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .58 .52

102. Ridge Vly. at Portola Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	168	.05*	298	.09*
NBT	1	1700	66	.04	160	.09
NBR	1	1700	355	.21	395	.23
SBL	1	1700	103	.06	60	.04
SBT	2	3400	300	.10*	76	.04*
SBR	0	0	48		45	
EBL	1	1700	19	.01	82	.05
EBT	2	3400	898	.26*	1716	.50*
EBR	1	1700	283	.17	234	.14
WBL	1	1700	164	.10*	311	.18*
WBT	2	3400	246	.08	1767	.55
WBR	0	0	9		109	
Right Turn Adjustment Clearance Interval			NBR	.04*		.05*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .60 .86

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	178	.05*	288	.08
NBT	1	1700	66	.04	150	.09*
NBR	1	1700	365	.21	415	.24
SBL	1	1700	103	.06	60	.04*
SBT	2	3400	310	.11*	66	.03
SBR	0	0	58		45	
EBL	1	1700	29	.02	102	.06
EBT	2	3400	748	.22*	1776	.52*
EBR	1	1700	203	.12	214	.13
WBL	1	1700	204	.12*	321	.19*
WBT	2	3400	346	.10	1647	.52
WBR	0	0	9		109	
Right Turn Adjustment Clearance Interval			NBR	.02*	NBR	.01*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 .90

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	178	.05*	288	.08
NBT	1	1700	66	.04	160	.09*
NBR	1	1700	365	.21	415	.24
SBL	1	1700	103	.06	60	.04*
SBT	2	3400	300	.11*	76	.04
SBR	0	0	58		45	
EBL	1	1700	19	.01	112	.07
EBT	2	3400	758	.22*	1796	.53*
EBR	1	1700	213	.13	224	.13
WBL	1	1700	204	.12*	311	.18*
WBT	2	3400	376	.11	1657	.52
WBR	0	0	9		109	
Right Turn Adjustment Clearance Interval			NBR	.02*	NBR	.01*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 .90

103. Sand Cyn. Av. at Portola Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	84	.02*	531	.16*
NBT	0	0	0		0	
NBR	2	3400	339	.10	1036	.30
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3400	1597	.47*	1064	.31
EBR	f		593		47	
WBL	2	3400	738	.22*	173	.05
WBT	2	3400	1289	.38	1309	.39*
WBR	0	0	0		0	
Right Turn Adjustment Clearance Interval					NBR	.08*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .76 .68

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	94	.03*	511	.15*
NBT	0	0	0		0	
NBR	2	3400	259	.08	1076	.32
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3400	1457	.43*	1104	.32*
EBR	f		563		37	
WBL	2	3400	768	.23*	173	.05*
WBT	2	3400	1389	.41	1209	.36
WBR	0	0	0		0	
Right Turn Adjustment Clearance Interval					NBR	.13*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .74 .70

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	94	.03*	511	.15*
NBT	0	0	0		0	
NBR	2	3400	259	.08	1066	.31
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3400	1447	.43*	1124	.33*
EBR	f		563		17	
WBL	2	3400	778	.23*	183	.05*
WBT	2	3400	1389	.41	1199	.35
WBR	0	0	0		0	
Right Turn Adjustment Clearance Interval					NBR	.12*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .74 .70

104. Jeffrey Rd. at Portola Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	259	.08*	342	.10*
NBT	2	3400	162	.05	456	.13
NBR	1	1700	197	.12	455	.27
SBL	2	3400	426	.13	70	.02
SBT	3	5100	519	.12*	209	.06*
SBR	0	0	113		321	.19
EBL	2	3400	272	.08	264	.08*
EBT	3	5100	1607	.32*	465	.09
EBR	1	1700	781	.46	75	.04
WBL	2	3400	690	.20*	266	.08
WBT	3	5100	478	.09	1647	.32*
WBR	d	1700	16	.01	0	.00
Right Turn Adjustment			EBR	.06*	SBR	.07*
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .83 .68

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	239	.07*	222	.07
NBT	2	3400	152	.04	546	.16*
NBR	1	1700	187	.11	455	.27
SBL	2	3400	396	.12	60	.02*
SBT	3	5100	629	.15*	209	.06
SBR	0	0	123		311	.18
EBL	2	3400	272	.08	264	.08*
EBT	3	5100	1497	.29*	515	.10
EBR	1	1700	581	.34	65	.04
WBL	2	3400	680	.20*	266	.08
WBT	3	5100	598	.12	1517	.30*
WBR	d	1700	26	.02	20	.01
Right Turn Adjustment					SBR	.01*
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .76 .62

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	249	.07*	222	.07
NBT	2	3400	152	.04	536	.16*
NBR	1	1700	197	.12	455	.27
SBL	2	3400	376	.11	50	.01*
SBT	3	5100	669	.16*	229	.07
SBR	0	0	133		301	.18
EBL	2	3400	272	.08	274	.08*
EBT	3	5100	1507	.30*	535	.10
EBR	1	1700	571	.34	65	.04
WBL	2	3400	680	.20*	256	.08
WBT	3	5100	608	.12	1517	.30*
WBR	d	1700	16	.01	20	.01
Right Turn Adjustment					SBR	.02*
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .78 .62

105. Alton Pkwy. at Irvine Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	138	.04*	872	.26*
NBT	3	5100	634	.12	1457	.29
NBR	f		83		281	
SBL	2	3400	287	.08	365	.11
SBT	3	5100	959	.19*	770	.15*
SBR	f		485		1134	
EBL	2.5		1354		647	.19
EBT	2.5	8500	1590	.35*	1128	.22*
EBR	1	1700	598	.35	265	.16
WBL	2	3400	264	.08	114	.03
WBT	3	5100	1226	.24*	1532	.30*
WBR	1	1700	622	.37	285	.17
Right Turn Adjustment			WBR	.05*		
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .92 .98

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	138	.04*	882	.26
NBT	3	5100	534	.10	1667	.33*
NBR	f		63		281	
SBL	2	3400	297	.09	305	.09*
SBT	3	5100	1189	.23*	730	.14
SBR	f		855		884	
EBL	2.5		1024	.30	857	
EBT	2.5	8500	1690	.33*	1148	.24*
EBR	1	1700	558	.33	265	.16
WBL	2	3400	274	.08	94	.03
WBT	3	5100	1246	.24*	1592	.31*
WBR	1	1700	502	.30	335	.20
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .89 1.02

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	138	.04*	882	.26
NBT	3	5100	534	.10	1667	.33*
NBR	f		63		281	
SBL	2	3400	297	.09	305	.09*
SBT	3	5100	1189	.23*	730	.14
SBR	f		855		884	
EBL	3	5100	1024	.20*	857	.17*
EBT	3	5100	1690	.33	1148	.23
EBR	d	1700	558	.33	265	.16
WBL	2	3400	274	.08	94	.03
WBT	3	5100	1246	.24*	1592	.31*
WBR	1	1700	502	.30	335	.20
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .76 .95

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	138	.04*	892	.26
NBT	3	5100	534	.10	1687	.33*
NBR	f		73		271	
SBL	2	3400	297	.09	295	.09*
SBT	3	5100	1199	.24*	740	.15
SBR	f		885		874	
EBL	2.5		1014	.30	887	
EBT	2.5	8500	1680	.33*	1148	.24*
EBR	1	1700	568	.33	255	.15
WBL	2	3400	274	.08	94	.03
WBT	3	5100	1246	.24*	1572	.31*
WBR	1	1700	492	.29	345	.20
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .90 1.02

105. Alton Pkwy. at Irvine Bl.

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	PK HOUR V/C	PM PK HOUR VOL	PK HOUR V/C
NBL	2	3400	138	.04*	892	.26
NBT	3	5100	534	.10	1687	.33*
NBR	f		73		271	
SBL	2	3400	297	.09	295	.09*
SBT	3	5100	1199	.24*	740	.15
SBR	f		885		874	
EBL	3	5100	1014	.20*	887	.17*
EBT	3	5100	1680	.33	1148	.23
EBR	d	1700	568	.33	255	.15
WBL	2	3400	274	.08	94	.03
WBT	3	5100	1246	.24*	1572	.31*
WBR	1	1700	492	.29	345	.20
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.77		.95

106. B Dr. at Irvine Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	1	1700	78	.05*	111	.07*
NBT	0	0	0		0	
NBR	1	1700	123	.07	89	.05
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	3457	.68*	2034	.40
EBR	1	1700	65	.04	86	.05
WBL	1	1700	85	.05*	124	.07
WBT	3	5100	2182	.43	3395	.67*
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .83 .79

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	1	1700	78	.05*	111	.07*
NBT	0	0	0		0	
NBR	1	1700	113	.07	129	.08
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	3197	.63*	2244	.44
EBR	1	1700	85	.05	86	.05
WBL	1	1700	135	.08*	104	.06
WBT	3	5100	2512	.49	3235	.63*
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .81 .75

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	1	1700	88	.05*	111	.07*
NBT	0	0	0		0	
NBR	1	1700	113	.07	139	.08
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	3187	.62*	2244	.44
EBR	1	1700	75	.04	96	.06
WBL	1	1700	125	.07*	114	.07
WBT	3	5100	2562	.50	3205	.63*
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .79 .75

107. A Dr. at Irvine Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	166	.05	444	.13
NBT	1	1700	58	.03*	204	.12*
NBR	1	1700	186	.11	342	.20
SBL	1	1700	164	.10*	88	.05*
SBT	2	3400	222	.07	125	.04
SBR	1	1700	146	.09	117	.07
EBL	1	1700	97	.06	112	.07*
EBT	3	5100	2920	.57*	1690	.33
EBR	1	1700	434	.26	256	.15
WBL	2	3400	334	.10*	329	.10
WBT	3	5100	2018	.40	2869	.56*
WBR	1	1700	84	.05	144	.08
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.85		.85

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	136	.04	444	.13
NBT	1	1700	58	.03*	204	.12*
NBR	1	1700	196	.12	352	.21
SBL	1	1700	164	.10*	98	.06*
SBT	2	3400	222	.07	125	.04
SBR	1	1700	156	.09	127	.07
EBL	1	1700	77	.05	122	.07*
EBT	3	5100	2700	.53*	1890	.37
EBR	1	1700	414	.24	236	.14
WBL	2	3400	354	.10*	329	.10
WBT	3	5100	2348	.46	2719	.53*
WBR	1	1700	94	.06	154	.09
Right Turn Adjustment			NBR	.01*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.82		.83

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	126	.04	434	.13
NBT	1	1700	58	.03*	204	.12*
NBR	1	1700	186	.11	352	.21
SBL	1	1700	164	.10*	98	.06*
SBT	2	3400	222	.07	125	.04
SBR	1	1700	146	.09	127	.07
EBL	1	1700	87	.05	122	.07*
EBT	3	5100	2700	.53*	1920	.38
EBR	1	1700	414	.24	226	.13
WBL	2	3400	354	.10*	309	.09
WBT	3	5100	2408	.47	2719	.53*
WBR	1	1700	74	.04	154	.09
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.81		.83

108. Ridge Vly. at Irvine Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2	3400	463	.14*	304	.09*
SBT	0	0	0		0	
SBR	1	1700	250	.15	318	.19
EBL	2	3400	255	.08	349	.10*
EBT	3	5100	2887	.57*	1836	.36
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	3	5100	2140	.42	2872	.56*
WBR	1	1700	345	.20	501	.29
Right Turn Adjustment					SBR	.02*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .76 .82

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2	3400	403	.12*	284	.08*
SBT	0	0	0		0	
SBR	1	1700	300	.18	328	.19
EBL	2	3400	265	.08*	359	.11*
EBT	3	5100	2707	.53	2056	.40
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	3	5100	2450	.48*	2732	.54*
WBR	1	1700	345	.20	491	.29
Right Turn Adjustment					SBR	.03*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .73 .81

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2	3400	413	.12*	284	.08*
SBT	0	0	0		0	
SBR	1	1700	290	.17	328	.19
EBL	2	3400	265	.08*	359	.11*
EBT	3	5100	2697	.53	2086	.41
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	3	5100	2500	.49*	2732	.54*
WBR	1	1700	345	.20	501	.29
Right Turn Adjustment					SBR	.03*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .74 .81

109. College Dr. at Irvine Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1.5		52	.02*	197	{.09}*
NBT	0	5100	0		0	{.09}
NBR	1.5		183		469	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	2867	.56*	1773	.35
EBR	1	1700	237	.14	87	.05
WBL	2	3400	513	.15*	333	.10
WBT	3	5100	1848	.36	2701	.53*
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .78 .67

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1.5		52	.02*	187	.11*
NBT	0	5100	0		0	
NBR	1.5		193		529	.16
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	2697	.53*	1943	.38
EBR	1	1700	267	.16	77	.05
WBL	2	3400	563	.17*	333	.10
WBT	3	5100	2158	.42	2551	.50*
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .77 .66

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1.5		52	.02*	187	.11*
NBT	0	5100	0		0	
NBR	1.5		183		529	.16
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	2687	.53*	1963	.38
EBR	1	1700	267	.16	67	.04
WBL	2	3400	573	.17*	343	.10
WBT	3	5100	2198	.43	2541	.50*
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .77 .66

110. ETC E. Leg NB Ramps at Irvine Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	128	.08*	165	.10*
NBT	0	0	0		0	
NBR	1	1700	415	.24	570	.34
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	2994	.59*	1292	.25
EBR	f		191		93	
WBL	0	0	0		0	
WBT	3	5100	1612	.34	2606	.59*
WBR	0	0	101		414	
Right Turn Adjustment			NBR	.16*		
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .88 .74

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	118	.07*	175	.10*
NBT	0	0	0		0	
NBR	1	1700	405	.24	560	.33
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	2854	.56*	1462	.29
EBR	f		151		113	
WBL	0	0	0		0	
WBT	3	5100	1902	.39	2446	.56*
WBR	0	0	101		404	
Right Turn Adjustment			NBR	.17*	NBR	.03*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .85 .74

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	128	.08*	175	.10*
NBT	0	0	0		0	
NBR	1	1700	405	.24	550	.32
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	2854	.56*	1482	.29
EBR	f		151		113	
WBL	0	0	0		0	
WBT	3	5100	1942	.40	2436	.56*
WBR	0	0	101		414	
Right Turn Adjustment			NBR	.16*	NBR	.02*
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .85 .73

111. ETC E. Leg SB Ramps at Irvine B1.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2	3400	281	.08*	44	.01*
SBT	0	0	0		0	
SBR	1	1700	93	.05	82	.05
EBL	0	0	0		0	
EBT	3	5100	2889	.57*	1316	.26*
EBR	d	1700	206	.12	315	.19
WBL	1	1700	244	.14*	425	.25*
WBT	3	5100	1367	.27	2358	.46
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .84 .57

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2	3400	371	.11*	64	.02*
SBT	0	0	0		0	
SBR	1	1700	113	.07	72	.04
EBL	0	0	0		0	
EBT	3	5100	2619	.51*	1486	.29*
EBR	d	1700	206	.12	315	.19
WBL	1	1700	224	.13*	425	.25*
WBT	3	5100	1677	.33	2218	.43
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .80 .61

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2	3400	361	.11*	44	.01*
SBT	0	0	0		0	
SBR	1	1700	113	.07	62	.04
EBL	0	0	0		0	
EBT	3	5100	2619	.51*	1526	.30*
EBR	d	1700	206	.12	315	.19
WBL	1	1700	204	.12*	425	.25*
WBT	3	5100	1737	.34	2198	.43
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .79 .61

112. Sand Cyn. Av. at Irvine Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	130	.04*	418	.12
NBT	3	5100	838	.16	1610	.32*
NBR	1	1700	682	.40	479	.28
SBL	2	3400	115	.03	16	.00
SBT	3	5100	1267	.25*	349	.07
SBR	d	1700	23	.01	16	.01
EBL	2	3400	105	.03	67	.02*
EBT	4	6800	2517	.37*	1035	.15
EBR	1	1700	427	.25	204	.12
WBL	2	3400	319	.09*	387	.11
WBT	3	5100	1136	.22	2126	.42*
WBR	1	1700	21	.01	143	.08
Right Turn Adjustment Clearance Interval			NBR	.07*		
				.05*		.05*

TOTAL CAPACITY UTILIZATION .87 .81

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	120	.04*	418	.12
NBT	3	5100	828	.16	1630	.32*
NBR	1	1700	682	.40	519	.31
SBL	2	3400	75	.02	1	.00
SBT	3	5100	1247	.24*	359	.07
SBR	d	1700	23	.01	26	.02
EBL	2	3400	65	.02	77	.02*
EBT	4	6800	2297	.34*	1185	.17
EBR	1	1700	547	.32	204	.12
WBL	2	3400	329	.10*	377	.11
WBT	3	5100	1436	.28	1986	.39*
WBR	1	1700	31	.02	123	.07
Right Turn Adjustment Clearance Interval			NBR	.06*		
				.05*		.05*

TOTAL CAPACITY UTILIZATION .83 .78

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	120	.04*	428	.13
NBT	3	5100	848	.17	1610	.32*
NBR	1	1700	682	.40	519	.31
SBL	2	3400	95	.03	1	.00
SBT	3	5100	1217	.24*	359	.07
SBR	d	1700	33	.02	26	.02
EBL	2	3400	55	.02	77	.02*
EBT	4	6800	2277	.33*	1235	.18
EBR	1	1700	547	.32	214	.13
WBL	2	3400	389	.11*	377	.11
WBT	3	5100	1436	.28	1976	.39*
WBR	1	1700	41	.02	113	.07
Right Turn Adjustment Clearance Interval			NBR	.07*		
				.05*		.05*

TOTAL CAPACITY UTILIZATION .84 .78

113. Jeffrey Rd. at Irvine Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	38	.01*	314	.09
NBT	3	5100	555	.11	1617	.32*
NBR	d	1700	256	.15	571	.34
SBL	2	3400	529	.16	168	.05*
SBT	3	5100	1670	.33*	853	.17
SBR	d	1700	339	.20	143	.08
EBL	2	3400	136	.04	163	.05*
EBT	3	5100	2312	.45*	1015	.20
EBR	1	1700	60	.04	186	.11
WBL	2	3400	124	.04*	694	.20
WBT	3	5100	789	.15	2403	.47*
WBR	1	1700	190	.11	183	.11
Clearance Interval				.05*	.05*	

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	28	.01*	304	.09
NBT	3	5100	535	.10	1617	.32*
NBR	d	1700	226	.13	651	.38
SBL	2	3400	509	.15	148	.04*
SBT	3	5100	1610	.32*	873	.17
SBR	d	1700	339	.20	153	.09
EBL	2	3400	126	.04	163	.05*
EBT	3	5100	2192	.43*	1105	.22
EBR	1	1700	1	.00	166	.10
WBL	2	3400	274	.08*	754	.22
WBT	3	5100	949	.19	2263	.44*
WBR	1	1700	170	.10	153	.09
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION .88 .94
 ATMS CREDIT -.05 -.05
 FINAL ICU .83 .89

TOTAL CAPACITY UTILIZATION .89 .90
 ATMS CREDIT -.05 -.05
 FINAL ICU .84 .85

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	38	.01*	304	.09
NBT	3	5100	535	.10	1607	.32*
NBR	d	1700	226	.13	631	.37
SBL	2	3400	519	.15	188	.06*
SBT	3	5100	1640	.32*	863	.17
SBR	d	1700	319	.19	143	.08
EBL	2	3400	136	.04	163	.05*
EBT	3	5100	2152	.42*	1155	.23
EBR	1	1700	10	.01	166	.10
WBL	2	3400	274	.08*	734	.22
WBT	3	5100	959	.19	2283	.45*
WBR	1	1700	180	.11	153	.09
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION .88 .93
 ATMS CREDIT -.05 -.05
 FINAL ICU .83 .88

114. SR-133 NB Ramps at Trabuco Rd.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1.5		289	{.17}*	259	.08*
NBT	0	5100	0	.17	0	
NBR	1.5		570		368	{.07}
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3400	1340	.39*	692	.20
EBR	f		110		500	
WBL	0	0	0		0	
WBT	2	3400	611	.18	1371	.40*
WBR	f		80		360	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.61		.53

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1.5		309	{.15}*	259	{.08}*
NBT	0	5100	0	.15	0	{.08}
NBR	1.5		480		398	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		20	{.01}*
EBT	2	3400	1320	.39*	702	.21
EBR	f		110		500	
WBL	0	0	0		0	
WBT	2	3400	661	.19	1341	.39*
WBR	f		70		360	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.59		.53

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1.5		309	{.16}*	259	{.08}*
NBT	0	5100	0	.16	0	{.08}
NBR	1.5		510		378	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		20	{.01}*
EBT	2	3400	1290	.38*	702	.21
EBR	f		110		500	
WBL	0	0	0		0	
WBT	2	3400	681	.20	1341	.39*
WBR	f		70		370	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.59		.53

115. SR-133 SB Ramps at Trabuco Rd.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1.5		350		182	
SBT	0	5100	0	{.19}*	0	.09*
SBR	1.5		750		290	
EBL	0	0	0		0	
EBT	2	3400	1090	.32*	962	.28
EBR	f		170		241	
WBL	0	0	0		0	
WBT	2	3400	700	.21	1215	.36*
WBR	f		220		451	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .56 .50

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1.5		330		172	
SBT	0	5100	0	{.19}*	0	.09*
SBR	1.5		800		300	
EBL	0	0	0		0	
EBT	2	3400	1090	.32*	1002	.29
EBR	f		130		251	
WBL	0	0	30	{.02}*	1	
WBT	2	3400	730	.22	1215	.36*
WBR	f		220		451	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .58 .50

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1.5		330		182	
SBT	0	5100	0	{.19}*	0	.09*
SBR	1.5		810		300	
EBL	0	0	0		0	
EBT	2	3400	1060	.31*	992	.29
EBR	f		120		251	
WBL	0	0	60	{.04}*	1	
WBT	2	3400	730	.23	1225	.36*
WBR	f		220		451	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .59 .50

116. Sand Cyn. Av. at Trabuco Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	179	.05*	514	.15
NBT	3	5100	1101	.22	2029	.40*
NBR	1	1700	289	.17	485	.29
SBL	2	3400	311	.09	237	.07*
SBT	3	5100	2114	.41*	1393	.27
SBR	d	1700	192	.11	252	.15
EBL	2	3400	287	.08	242	.07*
EBT	3	5100	680	.13*	520	.10
EBR	f		514		338	
WBL	2	3400	611	.18*	452	.13
WBT	2	3400	499	.15	736	.22*
WBR	d	1700	342	.20	322	.19
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .82 .81
 ATMS CREDIT -.05 -.05
 FINAL ICU .77 .76

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	179	.05*	514	.15
NBT	3	5100	1091	.21	2029	.40*
NBR	1	1700	289	.17	495	.29
SBL	2	3400	331	.10	247	.07*
SBT	3	5100	2174	.43*	1403	.28
SBR	d	1700	182	.11	232	.14
EBL	2	3400	297	.09	272	.08*
EBT	3	5100	610	.12*	570	.11
EBR	f		444		328	
WBL	2	3400	651	.19*	452	.13
WBT	2	3400	529	.16	746	.22*
WBR	d	1700	352	.21	322	.19
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .84 .82
 ATMS CREDIT -.05 -.05
 FINAL ICU .79 .77

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	179	.05*	514	.15
NBT	3	5100	1091	.21	2039	.40*
NBR	1	1700	289	.17	505	.30
SBL	2	3400	301	.09	247	.07*
SBT	3	5100	2204	.43*	1423	.28
SBR	d	1700	202	.12	212	.12
EBL	2	3400	297	.09	262	.08*
EBT	3	5100	610	.12*	540	.11
EBR	f		444		348	
WBL	2	3400	671	.20*	442	.13
WBT	2	3400	519	.15	766	.23*
WBR	d	1700	352	.21	322	.19
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .85 .83
 ATMS CREDIT -.05 -.05
 FINAL ICU .80 .78

117. Alton Pkwy. at Toledo Wy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	45	.03	20	.01
NBT	3	5100	1039	.20*	1981	.39*
NBR	f		120		305	
SBL	1	1700	255	.15*	336	.20*
SBT	3	5100	1033	.20	1019	.20
SBR	0	0	12		0	
EBL	1	1700	0	.00	13	.01
EBT	1	1700	36	.04*	59	.04*
EBR	0	0	25		9	
WBL	1	1700	161	.09*	32	.02*
WBT	1	1700	43	.03	30	.02
WBR	1	1700	741	.44	576	.34
Right Turn Adjustment Clearance Interval			WBR	.20*	WBR	.14*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .73 .84

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	45	.03	30	.02
NBT	3	5100	889	.17*	2151	.42*
NBR	f		90		355	
SBL	1	1700	325	.19*	326	.19*
SBT	3	5100	1243	.25	939	.18
SBR	0	0	12		0	
EBL	1	1700	0	.00	13	.01
EBT	1	1700	26	.04*	59	.04*
EBR	0	0	35		1	
WBL	1	1700	231	.14*	32	.02*
WBT	1	1700	43	.03	30	.02
WBR	1	1700	741	.44	656	.39
Right Turn Adjustment Clearance Interval			WBR	.12*	WBR	.20*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .71 .92

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	45	.03	30	.02
NBT	3	5100	889	.17*	2151	.42*
NBR	f		90		355	
SBL	1	1700	325	.19*	326	.19*
SBT	3	5100	1243	.25	939	.18
SBR	0	0	12		0	
EBL	1	1700	0	.00	13	.01
EBT	1	1700	26	.04*	59	.04*
EBR	0	0	35		1	
WBL	1	1700	231	.14*	32	.02*
WBT	1	1700	43	.03	30	.02
WBR	1	1700	741	.44	656	.39
Right Turn Adjustment Clearance Interval			WBR	.07*	WBR	.15*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .66 .87

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	25	.01	20	.01
NBT	3	5100	899	.18*	2181	.43*
NBR	f		80		355	
SBL	1	1700	315	.19*	336	.20*
SBT	3	5100	1243	.25	949	.19
SBR	0	0	12		0	
EBL	1	1700	0	.00	13	.01
EBT	1	1700	36	.04*	49	.03*
EBR	0	0	35		1	
WBL	1	1700	251	.15*	32	.02*
WBT	1	1700	43	.03	40	.02
WBR	1	1700	741	.44	636	.37
Right Turn Adjustment Clearance Interval			WBR	.11*	WBR	.18*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .72 .91

Note: Assumes Right-Turn Overlap for WBR

117. Alton Pkwy. at Toledo Wy.

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	PK HOUR V/C	PM PK HOUR VOL	PK HOUR V/C
NBL	1	1700	25	.01	20	.01
NBT	3	5100	899	.18*	2181	.43*
NBR	f		80		355	
SBL	1	1700	315	.19*	336	.20*
SBT	3	5100	1243	.25	949	.19
SBR	0	0	12		0	
EBL	1	1700	0	.00	13	.01
EBT	1	1700	36	.04*	49	.03*
EBR	0	0	35		1	
WBL	1	1700	251	.15*	32	.02*
WBT	1	1700	43	.03	40	.02
WBR	1	1700	741	.44	636	.37
Right Turn Adjustment			WBR	.06*	WBR	.13*
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for WBR						

TOTAL CAPACITY UTILIZATION .67 .86

118. Alton Pkwy. at Jeronimo Rd.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	187	.11*	22	.01
NBT	3	5100	1783	.35	2085	.41*
NBR	f		299		540	
SBL	2	3400	34	.01	68	.02*
SBT	3	5100	1270	.25*	1825	.36
SBR	0	0	23		3	
EBL	1	1700	8	.00	45	.03
EBT	1	1700	14	.01*	52	.03*
EBR	f		29		189	
WBL	2	3400	722	.21*	686	.20*
WBT	1	1700	55	.03	15	.01
WBR	1	1700	116	.07	130	.08
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .63 .71

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	187	.11*	22	.01
NBT	3	5100	1543	.30	2345	.46*
NBR	f		299		580	
SBL	2	3400	44	.01	68	.02*
SBT	3	5100	1620	.32*	1705	.33
SBR	0	0	13		3	
EBL	1	1700	8	.00	55	.03
EBT	1	1700	14	.01*	52	.03*
EBR	f		29		189	
WBL	2	3400	782	.23*	706	.21*
WBT	1	1700	55	.03	15	.01
WBR	1	1700	116	.07	140	.08
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .72 .77

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	187	.11*	22	.01
NBT	3	5100	1533	.30	2355	.46*
NBR	f		299		590	
SBL	2	3400	34	.01	78	.02*
SBT	3	5100	1640	.33*	1705	.33
SBR	0	0	23		3	
EBL	1	1700	8	.00	55	.03
EBT	1	1700	14	.01*	52	.03*
EBR	f		29		189	
WBL	2	3400	802	.24*	716	.21*
WBT	1	1700	65	.04	15	.01
WBR	1	1700	116	.07	140	.08
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .74 .77

119. Alton Pkwy. at Muirlands Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	PM PK HOUR V/C		
NBL	1	1700	13	.01	12	.01
NBT	3	5100	1114	.22*	1213	.24*
NBR	f		116		411	
SBL	2	3400	25	.01*	221	.07*
SBT	3	5100	1003	.20	1018	.20
SBR	f		1167		1178	
EBL	2.5		1219		1285	
EBT	1.5	6800	429	.25*	788	.31*
EBR	0		42		9	
WBL	2	3400	254	.07	133	.04
WBT	2	3400	750	.24*	460	.16*
WBR	0	0	57		92	
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .77 .83

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	PM PK HOUR V/C		
NBL	1	1700	13	.01*	12	.01
NBT	3	5100	944	.19	1403	.28*
NBR	f		96		451	
SBL	2	3400	55	.02	211	.06*
SBT	3	5100	1293	.25*	928	.18
SBR	f		1257		1178	
EBL	2.5		1159		1385	
EBT	1.5	6800	439	.24*	808	.32*
EBR	0		42		9	
WBL	2	3400	284	.08	123	.04
WBT	2	3400	840	.26*	460	.17*
WBR	0	0	47		102	
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .81 .88

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	PM PK HOUR V/C		
NBL	1	1700	13	.01*	12	.01
NBT	3	5100	944	.19	1413	.28*
NBR	f		86		441	
SBL	2	3400	65	.02	211	.06*
SBT	3	5100	1313	.26*	948	.19
SBR	f		1267		1178	
EBL	2.5		1149		1395	
EBT	1.5	6800	429	.24*	798	.32*
EBR	0		42		9	
WBL	2	3400	284	.08	123	.04
WBT	2	3400	840	.26*	460	.17*
WBR	0	0	47		102	
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .82 .88

120. Marine Wy. at Alton Pk.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	1	.00	1	.00
NBT	2	3400	1	.00*	1	.00*
NBR	1	1700	1	.00	1	.00
SBL	1	1700	174	.10*	211	.12*
SBT	2	3400	0	.00	0	.00
SBR	1	1700	311	.18	444	.26
EBL	1	1700	419	.25*	490	.29*
EBT	3	5100	1166	.23	1577	.31
EBR	1	1700	0	.00	0	.00
WBL	1	1700	0	.00	0	.00
WBT	3	5100	1219	.24*	1057	.21*
WBR	1	1700	231	.14	161	.09
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.64		.67

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	51	.03	1	.00
NBT	2	3400	21	.01*	1	.00*
NBR	1	1700	1	.00	1	.00
SBL	1	1700	174	.10*	211	.12*
SBT	2	3400	0	.00	0	.00
SBR	1	1700	311	.18	444	.26
EBL	1	1700	419	.25*	490	.29*
EBT	3	5100	996	.20	1807	.35
EBR	1	1700	0	.00	0	.00
WBL	1	1700	20	.01	1	.00
WBT	3	5100	1529	.30*	967	.19*
WBR	1	1700	241	.14	161	.09
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.71		.65

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	1	1700	41	.02	1	.00
NBT	2	3400	21	.01*	1	.00*
NBR	1	1700	1	.00	1	.00
SBL	1	1700	174	.10*	211	.12*
SBT	2	3400	0	.00	0	.00
SBR	1	1700	311	.18	434	.26
EBL	1	1700	409	.24*	490	.29*
EBT	3	5100	996	.20	1807	.35
EBR	1	1700	1	.00	20	.01
WBL	1	1700	20	.01	1	.00
WBT	3	5100	1549	.30*	987	.19*
WBR	1	1700	241	.14	161	.09
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.70		.65

121. Alton Pkwy. at Technology Dr. W.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	910	.27	666	.20*
NBT	3	5100	1973	.39*	1022	.20
NBR	1	1700	741	.44	104	.06
SBL	1	1700	53	.03*	16	.01
SBT	4	6800	758	.11	1610	.24*
SBR	1	1700	187	.11	523	.31
EBL	1.5		320		460	.14*
EBT	1.5	5100	301	.12*	213	.13
EBR	2	3400	329	.10	1258	.37
WBL	2.5		344	.10	1068	.21*
WBT	1.5	6800	625	.24*	301	.20
WBR	0		190		41	
Right Turn Adjustment					EBR	.03*
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for EBR						

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	870	.26	656	.19*
NBT	3	5100	1873	.37*	1132	.22
NBR	1	1700	621	.37	194	.11
SBL	1	1700	53	.03*	16	.01
SBT	4	6800	898	.13	1460	.21*
SBR	1	1700	197	.12	533	.31
EBL	1.5		330		480	
EBT	1.5	5100	271	.12*	243	.14*
EBR	2	3400	329	.10	1238	.36
WBL	2.5		464	.14	1068	
WBT	1.5	6800	685	.26*	321	.21*
WBR	0		190		41	
Right Turn Adjustment					EBR	.03*
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .83 .87

TOTAL CAPACITY UTILIZATION .83 .83

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	2	3400	880	.26	646	.19*
NBT	3	5100	1863	.37*	1152	.23
NBR	1	1700	611	.36	184	.11
SBL	1	1700	53	.03*	16	.01
SBT	4	6800	898	.13	1490	.22*
SBR	1	1700	237	.14	533	.31
EBL	1.5		330		520	.15*
EBT	1.5	5100	271	.12*	233	.14
EBR	2	3400	319	.09	1218	.36
WBL	2.5		464	.14	1058	
WBT	1.5	6800	665	.25*	321	.21*
WBR	0		190		41	
Right Turn Adjustment					EBR	.02*
Clearance Interval				.05*		.05*
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .82 .84

122. Alton Pkwy. at I-5 NB Ramps

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	3192	.63*	1580	.31
NBR	f		290		761	
SBL	0	0	0		0	
SBT	3	5100	1326	.26	2176	.43*
SBR	f		200		1522	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2.5		1234		378	.11*
WBT	0	5100	0	.32*	0	
WBR	0.5		418		212	.12
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION 1.00 .59

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	2982	.58*	1780	.35
NBR	f		310		731	
SBL	0	0	0		0	
SBT	3	5100	1586	.31	2096	.41*
SBR	f		210		1442	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2.5		1304		398	.12*
WBT	0	5100	0	.33*	0	
WBR	0.5		378		202	.12
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .96 .58

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	2962	.58*	1780	.35
NBR	f		310		741	
SBL	0	0	0		0	
SBT	3	5100	1586	.31	2096	.41*
SBR	f		190		1422	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2.5		1324		398	
WBT	0	5100	0	.34*	0	.12*
WBR	0.5		388		192	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .97 .58

123. Marine Wy. at Rockfield

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	2	3400	1308	.38*	780	.23
NBR	1	1700	125	.07	192	.11
SBL	1	1700	55	.03*	178	.10
SBT	2	3400	601	.18	1348	.40*
SBR	0	0	0		0	
EBL	0	0	1		1	
EBT	0	0	1		1	
EBR	0	0	1		1	
WBL	1.5		149		402	.12*
WBT	0	5100	0	{.05}*	0	
WBR	1.5		152		200	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.51		.57

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	2	3400	1358	.40*	740	.22
NBR	1	1700	105	.06	212	.12
SBL	1	1700	45	.03*	188	.11
SBT	2	3400	621	.18	1318	.39*
SBR	0	0	0		0	
EBL	0	0	1		1	
EBT	0	0	1		1	
EBR	0	0	1		1	
WBL	1.5		149		392	.12*
WBT	0	5100	0	{.05}*	0	
WBR	1.5		162		200	{.00}
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.53		.56

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	HOUR V/C	PM PK HOUR VOL	HOUR V/C
NBL	0	0	0		0	
NBT	2	3400	1338	.39*	740	.22
NBR	1	1700	105	.06	202	.12
SBL	1	1700	45	.03*	188	.11
SBT	2	3400	631	.19	1338	.39*
SBR	0	0	0		0	
EBL	0	0	1		1	
EBT	0	0	1		1	
EBR	0	0	1		1	
WBL	1.5		159		392	.12*
WBT	0	5100	0	.06*	0	
WBR	1.5		162		210	{.00}
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.53		.56

124. Bake Pkwy. at Muirlands

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	134	.04*	44	.01
NBT	4	6800	2680	.39	2631	.39*
NBR	d	1700	85	.05	403	.24
SBL	2	3400	113	.03	261	.08*
SBT	4	6800	2847	.42*	2735	.40
SBR	f		256		65	
EBL	2	3400	88	.03*	370	.11
EBT	2	3400	92	.03	948	.28*
EBR	f		35		274	
WBL	2	3400	248	.07	174	.05*
WBT	2	3400	630	.19*	122	.04
WBR	f		72		62	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .73 .85

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	134	.04*	44	.01
NBT	4	6800	2460	.36	2761	.41*
NBR	d	1700	95	.06	403	.24
SBL	2	3400	113	.03	201	.06*
SBT	4	6800	3167	.47*	2615	.38
SBR	f		226		85	
EBL	2	3400	88	.03*	360	.11
EBT	2	3400	92	.03	998	.29*
EBR	f		35		294	
WBL	2	3400	168	.05	184	.05*
WBT	2	3400	790	.23*	132	.04
WBR	f		32		62	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .82 .86

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	114	.03*	34	.01
NBT	4	6800	2410	.35	2761	.41*
NBR	d	1700	95	.06	433	.25
SBL	2	3400	103	.03	181	.05*
SBT	4	6800	3187	.47*	2605	.38
SBR	f		236		85	
EBL	2	3400	88	.03*	350	.10
EBT	2	3400	92	.03	998	.29*
EBR	f		35		274	
WBL	2	3400	138	.04	184	.05*
WBT	2	3400	790	.23*	142	.04
WBR	f		42		72	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .81 .85

125. Bake Pkwy. at Rockfield Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	531	.16*	148	.04
NBT	4	6800	2739	.40	2695	.40*
NBR	f		755		272	
SBL	2	3400	430	.13	542	.16*
SBT	4	6800	2661	.39*	2818	.41
SBR	1	1700	55	.03	66	.04
EBL	1	1700	13	.01	162	.10*
EBT	2	3400	135	.04*	314	.09
EBR	f		36		113	
WBL	2.5		3		684	
WBT	1.5	6800	84	.02*	526	.18*
WBR	f		37		408	
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .66 .89

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	561	.17*	148	.04
NBT	4	6800	2529	.37	2845	.42*
NBR	f		715		282	
SBL	2	3400	430	.13	572	.17*
SBT	4	6800	2901	.43*	2688	.40
SBR	1	1700	55	.03	66	.04
EBL	1	1700	13	.01	172	.10
EBT	2	3400	115	.03*	334	.10*
EBR	f		36		113	
WBL	2.5		33	.01	674	
WBT	1.5	6800	94	.03*	526	.18*
WBR	f		27		398	
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .71 .92

2030 City Preferred Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	561	.17*	148	.04
NBT	4	6800	2529	.37	2845	.42*
NBR	f		715		282	
SBL	2	3400	430	.13	572	.17*
SBT	4	6800	2901	.43*	2688	.40
SBR	1	1700	55	.03	66	.04
EBL	1	1700	13	.01*	172	.10*
EBT	2	3400	115	.03	334	.10
EBR	f		36		113	
WBL	3	5100	33	.01	674	.13
WBT	2	3400	94	.03*	526	.15*
WBR	d	1700	27	.02	398	.23
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION .69 .89

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	561	.17*	138	.04
NBT	4	6800	2479	.36	2845	.42*
NBR	f		755		292	
SBL	2	3400	430	.13	562	.17*
SBT	4	6800	2881	.42*	2678	.39
SBR	1	1700	55	.03	66	.04
EBL	1	1700	13	.01	172	.10
EBT	2	3400	115	.03*	324	.10*
EBR	f		36		113	
WBL	2.5		23	.01	674	
WBT	1.5	6800	84	.02*	526	.18*
WBR	f		37		408	
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						

TOTAL CAPACITY UTILIZATION .69 .92

125. Bake Pkwy. at Rockfield Bl.

2030 Landowners Plan w/Mitigation						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	561	.17*	138	.04
NBT	4	6800	2479	.36	2845	.42*
NBR	f		755		292	
SBL	2	3400	430	.13	562	.17*
SBT	4	6800	2881	.42*	2678	.39
SBR	1	1700	55	.03	66	.04
EBL	1	1700	13	.01*	172	.10*
EBT	2	3400	115	.03	324	.10
EBR	f		36		113	
WBL	3	5100	23	.00	674	.13
WBT	2	3400	84	.02*	526	.15*
WBR	d	1700	37	.02	408	.24
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.67		.89

126. Bake Pkwy. at I-5 NB Ramps

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	523	.31	539	.32*
NBT	3	5100	3335	.65*	2855	.56
NBR	f		481		932	
SBL	0	0	0		0	
SBT	3	5100	484	.14	1268	.28*
SBR	0	0	300	.18	163	
EBL	2	3400	304	.09*	349	.10*
EBT	0	0	0		0	
EBR	1	1700	266	.16	663	.39
WBL	1	1700	128	.08	231	.14
WBT	2	3400	717	.21*	268	.08*
WBR	2	3400	327	.10	118	.03
Right Turn Adjustment Clearance Interval					EBR	.11*
				.05*		.05*

TOTAL CAPACITY UTILIZATION 1.00 .94

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	513	.30	529	.31
NBT	3	5100	3205	.63*	3065	.60*
NBR	f		481		932	
SBL	0	0	0		30	{.02}*
SBT	3	5100	534	.16	1248	.28
SBR	0	0	300	.18	163	
EBL	2	3400	294	.09*	349	.10*
EBT	0	0	0		0	
EBR	1	1700	286	.17	643	.38
WBL	1	1700	128	.08	241	.14
WBT	2	3400	747	.22*	248	.07*
WBR	2	3400	237	.07	58	.02
Right Turn Adjustment Clearance Interval					EBR	.09*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .99 .93

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	493	.29	539	.32
NBT	3	5100	3205	.63*	3075	.60*
NBR	f		491		932	
SBL	0	0	30	{.02}*	1	
SBT	3	5100	554	.17	1238	.27
SBR	0	0	310	.18	163	
EBL	2	3400	294	.09*	349	.10*
EBT	0	0	0		0	
EBR	1	1700	286	.17	653	.38
WBL	1	1700	128	.08	251	.15
WBT	2	3400	727	.21*	238	.07*
WBR	2	3400	217	.06	58	.02
Right Turn Adjustment Clearance Interval					EBR	.11*
				.05*		.05*

TOTAL CAPACITY UTILIZATION 1.00 .93

127. Bake Pkwy. at I-5 SB Ramps

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	1455	.29*	1855	.36*
NBR	f		10		64	
SBL	0	0	0		0	
SBT	3	5100	683	.13	1152	.23
SBR	f		195		1010	
EBL	2.5		2884	.57*	2471	.48*
EBT	0	6800	0		0	
EBR	1.5		644	.38	38	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .91 .89

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	1435	.28*	1865	.37*
NBR	f		10		64	
SBL	0	0	0		0	
SBT	3	5100	753	.15	1132	.22
SBR	f		195		1000	
EBL	2.5		2754	.54*	2591	.51*
EBT	0	6800	0		0	
EBR	1.5		654	.38	58	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .87 .93

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	1425	.28*	1865	.37*
NBR	f		10		64	
SBL	0	0	0		0	
SBT	3	5100	783	.15	1152	.23
SBR	f		185		1000	
EBL	2.5		2764	.54*	2621	.51*
EBT	0	6800	0		0	
EBR	1.5		644	.38	38	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .87 .93

128. Bake Pkwy. at ICD

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	42	.01	110	.03
NBT	3	5100	402	.08*	308	.06*
NBR	d	1700	183	.11	67	.04
SBL	2	3400	171	.05*	156	.05*
SBT	3	5100	21	.00	282	.06
SBR	1	1700	66	.04	44	.03
EBL	2	3400	63	.02*	19	.01
EBT	3	5100	743	.15	1438	.28*
EBR	d	1700	207	.12	552	.32
WBL	2	3400	62	.02	46	.01*
WBT	4	6800	1569	.23*	1626	.24
WBR	d	1700	281	.17	192	.11
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.43		.45

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	32	.01	110	.03
NBT	3	5100	362	.07*	308	.06*
NBR	d	1700	173	.10	67	.04
SBL	2	3400	171	.05*	116	.03*
SBT	3	5100	21	.00	272	.05
SBR	1	1700	66	.04	44	.03
EBL	2	3400	63	.02*	39	.01
EBT	3	5100	723	.14	1488	.29*
EBR	d	1700	217	.13	562	.33
WBL	2	3400	62	.02	56	.02*
WBT	4	6800	1599	.24*	1646	.24
WBR	d	1700	281	.17	172	.10
Right Turn Adjustment					EBR	.01*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.43		.46

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	32	.01	110	.03
NBT	3	5100	352	.07*	318	.06*
NBR	d	1700	173	.10	77	.05
SBL	2	3400	181	.05*	116	.03*
SBT	3	5100	31	.01	252	.05
SBR	1	1700	66	.04	54	.03
EBL	2	3400	63	.02*	39	.01
EBT	3	5100	703	.14	1458	.29*
EBR	d	1700	207	.12	572	.34
WBL	2	3400	62	.02	56	.02*
WBT	4	6800	1609	.24*	1626	.24
WBR	d	1700	281	.17	192	.11
Right Turn Adjustment					EBR	.02*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.43		.47

129. Lake Forest Dr. at ICD

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	141	.04*	175	.05
NBT	3	5100	510	.10	914	.18*
NBR	1	1700	76	.04	86	.05
SBL	2	3400	386	.11	609	.18*
SBT	3	5100	998	.20*	763	.15
SBR	f		182		383	
EBL	2	3400	80	.02*	193	.06
EBT	3	5100	654	.13	1926	.38*
EBR	d	1700	145	.09	82	.05
WBL	2	3400	46	.01	84	.02*
WBT	3	5100	2015	.40*	1113	.22
WBR	1	1700	338	.20	474	.28
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .71 .81

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	141	.04*	175	.05
NBT	3	5100	520	.10	934	.18*
NBR	1	1700	76	.04	116	.07
SBL	2	3400	376	.11	599	.18*
SBT	3	5100	1118	.22*	733	.14
SBR	f		122		403	
EBL	2	3400	80	.02*	233	.07
EBT	3	5100	664	.13	1916	.38*
EBR	d	1700	145	.09	82	.05
WBL	2	3400	56	.02	84	.02*
WBT	3	5100	2055	.40*	1133	.22
WBR	1	1700	318	.19	454	.27
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .73 .81

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	141	.04*	175	.05
NBT	3	5100	530	.10	934	.18*
NBR	1	1700	86	.05	116	.07
SBL	2	3400	406	.12	599	.18*
SBT	3	5100	1118	.22*	743	.15
SBR	f		122		393	
EBL	2	3400	80	.02*	253	.07
EBT	3	5100	664	.13	1906	.37*
EBR	d	1700	145	.09	82	.05
WBL	2	3400	46	.01	84	.02*
WBT	3	5100	2065	.40*	1133	.22
WBR	1	1700	338	.20	464	.27
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .73 .80

130. Ridge Route at Moulton Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	PM PK HOUR V/C	AM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	23	.01	92	.03
NBT	2	3400	106	.03*	321	.09*
NBR	1	1700	180	.11	654	.38
SBL	2	3400	303	.09*	676	.20*
SBT	2	3400	233	.07	107	.03
SBR	1	1700	41	.02	32	.02
EBL	2	3400	14	.00	53	.02
EBT	3	5100	734	.14	2440	.48*
EBR	1	1700	51	.03	53	.03
WBL	2	3400	535	.16	280	.08*
WBT	4	6800	2661	.39*	1297	.19
WBR	1	1700	591	.35	336	.20
Right Turn Adjustment Clearance Interval					NBR	.23*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .56 1.13

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	PM PK HOUR V/C	AM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	13	.00	102	.03
NBT	2	3400	106	.03*	331	.10*
NBR	1	1700	190	.11	654	.38
SBL	2	3400	323	.10*	666	.20*
SBT	2	3400	253	.07	107	.03
SBR	1	1700	41	.02	32	.02
EBL	2	3400	14	.00	53	.02
EBT	3	5100	734	.14	2450	.48*
EBR	1	1700	51	.03	43	.03
WBL	2	3400	545	.16	250	.07*
WBT	4	6800	2681	.39*	1297	.19
WBR	1	1700	591	.35	346	.20
Right Turn Adjustment Clearance Interval					NBR	.23*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .57 1.13

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	PM PK HOUR V/C	AM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	13	.00	92	.03
NBT	2	3400	106	.03*	331	.10*
NBR	1	1700	190	.11	654	.38
SBL	2	3400	323	.10*	656	.19*
SBT	2	3400	253	.07	117	.03
SBR	1	1700	41	.02	32	.02
EBL	2	3400	14	.00	53	.02
EBT	3	5100	784	.15	2450	.48*
EBR	1	1700	51	.03	53	.03
WBL	2	3400	535	.16	250	.07*
WBT	4	6800	2691	.40*	1297	.19
WBR	1	1700	581	.34	346	.20
Right Turn Adjustment Clearance Interval					NBR	.23*
				.05*		.05*

TOTAL CAPACITY UTILIZATION .58 1.12

131. Santa Maria Av. at Moulton Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	1.5		199	.06*	115	{.03}*
NBT	0	5100	0		0	{.03}
NBR	1.5		334	{.00}	266	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	1021	.20	3801	.75*
EBR	1	1700	107	.06	99	.06
WBL	1	1700	464	.27	264	.16*
WBT	3	5100	4416	.87*	1516	.30
WBR	0	0	0		0	
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .98 .99

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	1.5		199	.06*	115	{.03}*
NBT	0	5100	0		0	{.03}
NBR	1.5		324	{.00}	266	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	1041	.20	3831	.75*
EBR	1	1700	107	.06	79	.05
WBL	1	1700	454	.27	274	.16*
WBT	3	5100	4456	.87*	1496	.29
WBR	0	0	0		0	
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .98 .99

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	1.5		199	.06*	115	.03*
NBT	0	5100	0		0	
NBR	1.5		334	{.00}	256	.08
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	1071	.21	3821	.75*
EBR	1	1700	107	.06	79	.05
WBL	1	1700	464	.27	284	.17*
WBT	3	5100	4466	.88*	1496	.29
WBR	0	0	0		0	
Clearance Interval				.05*	.05*	
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .99 1.00

132. El Toro Rd. at Moulton Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	556	.16*	278	.08
NBT	3	5100	642	.13	805	.16*
NBR	1	1700	127	.07	308	.18
SBL	2	3400	365	.11	441	.13*
SBT	3	5100	616	.12*	953	.19
SBR	1	1700	413	.24	466	.27
EBL	2	3400	225	.07*	384	.11
EBT	3	5100	758	.15	2959	.58*
EBR	1	1700	178	.10	557	.33
WBL	2	3400	206	.06	344	.10*
WBT	3	5100	3551	.70*	1351	.26
WBR	1	1700	463	.27	465	.27
Right Turn Adjustment			SBR	.07*		
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION 1.17 1.02

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	556	.16*	278	.08
NBT	3	5100	572	.11	835	.16*
NBR	1	1700	117	.07	308	.18
SBL	2	3400	355	.10	431	.13*
SBT	3	5100	616	.12*	883	.17
SBR	1	1700	413	.24	486	.29
EBL	2	3400	225	.07*	394	.12
EBT	3	5100	748	.15	2969	.58*
EBR	1	1700	188	.11	557	.33
WBL	2	3400	216	.06	344	.10*
WBT	3	5100	3561	.70*	1311	.26
WBR	1	1700	443	.26	475	.28
Right Turn Adjustment			SBR	.07*		
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION 1.17 1.02

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	576	.17*	288	.08
NBT	3	5100	572	.11	835	.16*
NBR	1	1700	127	.07	308	.18
SBL	2	3400	335	.10	411	.12*
SBT	3	5100	616	.12*	883	.17
SBR	1	1700	413	.24	486	.29
EBL	2	3400	225	.07*	384	.11
EBT	3	5100	798	.16	2969	.58*
EBR	1	1700	178	.10	547	.32
WBL	2	3400	206	.06	344	.10*
WBT	3	5100	3581	.70*	1301	.26
WBR	1	1700	433	.25	485	.29
Right Turn Adjustment			SBR	.07*		
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION 1.18 1.01

137. Los Alisos Bl. at Trabuco Rd.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	330	.19*	311	.18*
NBT	3	5100	535	.10	1159	.23
NBR	d	1700	115	.07	383	.23
SBL	1	1700	88	.05	127	.07
SBT	3	5100	1057	.27*	676	.16*
SBR	0	0	296		159	
EBL	1	1700	201	.12*	283	.17
EBT	2	3400	358	.11	990	.29*
EBR	d	1700	451	.27	210	.12
WBL	1	1700	336	.20	184	.11*
WBT	2	3400	1058	.31*	580	.17
WBR	d	1700	106	.06	38	.02
Clearance Interval				.05*	.05*	
TOTAL CAPACITY UTILIZATION				.94	.79	

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	320	.19*	331	.19*
NBT	3	5100	435	.09	1209	.24
NBR	d	1700	85	.05	413	.24
SBL	1	1700	108	.06	97	.06
SBT	3	5100	1147	.28*	636	.15*
SBR	0	0	296		149	
EBL	1	1700	201	.12*	293	.17
EBT	2	3400	348	.10	960	.28*
EBR	d	1700	451	.27	210	.12
WBL	1	1700	376	.22	184	.11*
WBT	2	3400	1018	.30*	580	.17
WBR	d	1700	76	.04	48	.03
Clearance Interval				.05*	.05*	
TOTAL CAPACITY UTILIZATION				.94	.78	

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1700	320	.19*	331	.19*
NBT	3	5100	415	.08	1209	.24
NBR	d	1700	115	.07	433	.25
SBL	1	1700	98	.06	77	.05
SBT	3	5100	1207	.29*	646	.16*
SBR	0	0	286		149	
EBL	1	1700	201	.12*	303	.18
EBT	2	3400	348	.10	950	.28*
EBR	d	1700	461	.27	210	.12
WBL	1	1700	356	.21	194	.11*
WBT	2	3400	1028	.30*	580	.17
WBR	d	1700	86	.05	48	.03
Clearance Interval				.05*	.05*	
TOTAL CAPACITY UTILIZATION				.95	.79	

138. Trabuco Rd. at Alicia Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	PM PK HOUR V/C	AM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	228	.13	292	.17
NBT	2	3400	838	.25*	531	.16*
NBR	d	1700	53	.03	128	.08
SBL	1	1700	155	.09*	714	.42*
SBT	2	3400	306	.09	731	.22
SBR	d	1700	89	.05	168	.10
EBL	1	1700	204	.12*	165	.10
EBT	3	5100	772	.15	1297	.25*
EBR	d	1700	55	.03	241	.14
WBL	1	1700	88	.05	98	.06*
WBT	3	5100	1383	.27*	1040	.20
WBR	d	1700	488	.29	314	.18
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION .78 .94

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	PM PK HOUR V/C	AM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	238	.14	302	.18
NBT	2	3400	798	.23*	531	.16*
NBR	d	1700	53	.03	128	.08
SBL	1	1700	115	.07*	704	.41*
SBT	2	3400	306	.09	691	.20
SBR	d	1700	99	.06	158	.09
EBL	1	1700	194	.11*	175	.10
EBT	3	5100	762	.15	1327	.26*
EBR	d	1700	65	.04	251	.15
WBL	1	1700	88	.05	98	.06*
WBT	3	5100	1423	.28*	1050	.21
WBR	d	1700	508	.30	314	.18
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION .74 .94

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	PM PK HOUR V/C	AM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	238	.14	292	.17
NBT	2	3400	808	.24*	531	.16*
NBR	d	1700	53	.03	128	.08
SBL	1	1700	145	.09*	714	.42*
SBT	2	3400	316	.09	711	.21
SBR	d	1700	89	.05	138	.08
EBL	1	1700	194	.11*	165	.10
EBT	3	5100	762	.15	1327	.26*
EBR	d	1700	65	.04	231	.14
WBL	1	1700	88	.05	98	.06*
WBT	3	5100	1453	.28*	1050	.21
WBR	d	1700	498	.29	334	.20
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION .77 .95

139. Jeronimo Rd. at Alicia Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	532	.16	251	.07*
NBT	2	3400	1018	.30*	454	.13
NBR	1	1700	71	.04	116	.07
SBL	2	3400	54	.02*	234	.07
SBT	2	3400	408	.12	1018	.30*
SBR	1	1700	176	.10	631	.37
EBL	2	3400	496	.15*	261	.08
EBT	3	5100	1075	.21	1540	.30*
EBR	1	1700	174	.10	414	.24
WBL	2	3400	108	.03	168	.05*
WBT	3	5100	1122	.22*	1148	.23
WBR	1	1700	116	.07	115	.07
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION .74 .77

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	572	.17	241	.07*
NBT	2	3400	1008	.30*	454	.13
NBR	1	1700	61	.04	116	.07
SBL	2	3400	54	.02*	224	.07
SBT	2	3400	418	.12	1008	.30*
SBR	1	1700	206	.12	571	.34
EBL	2	3400	446	.13*	291	.09
EBT	3	5100	1075	.21	1610	.32*
EBR	1	1700	174	.10	434	.26
WBL	2	3400	108	.03	178	.05*
WBT	3	5100	1202	.24*	1148	.23
WBR	1	1700	116	.07	115	.07
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION .74 .79

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	552	.16	251	.07*
NBT	2	3400	1028	.30*	464	.14
NBR	1	1700	61	.04	116	.07
SBL	2	3400	54	.02*	224	.07
SBT	2	3400	398	.12	1008	.30*
SBR	1	1700	196	.12	571	.34
EBL	2	3400	436	.13*	271	.08
EBT	3	5100	1085	.21	1590	.31*
EBR	1	1700	174	.10	464	.27
WBL	2	3400	108	.03	168	.05*
WBT	3	5100	1232	.24*	1148	.23
WBR	1	1700	116	.07	115	.07
Clearance Interval				.05*	.05*	

TOTAL CAPACITY UTILIZATION .74 .78

140. Alicia Pkwy. at Muirlands Bl.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	352	.10*	553	.16
NBT	3	5100	1791	.35	2251	.44*
NBR	1	1700	82	.05	245	.14
SBL	1	1700	147	.09	265	.16*
SBT	3	5100	2140	.42*	2011	.39
SBR	1	1700	97	.06	142	.08
EBL	1	1700	98	.06*	265	.16
EBT	2	3400	333	.10	880	.26*
EBR	1	1700	518	.30	639	.38
WBL	1	1700	242	.14	151	.09*
WBT	2	3400	930	.27*	574	.17
WBR	1	1700	521	.31	305	.18
Right Turn Adjustment			EBR	.01*		
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .91 1.00

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	282	.08*	553	.16
NBT	3	5100	1731	.34	2321	.46*
NBR	1	1700	82	.05	245	.14
SBL	1	1700	177	.10	225	.13*
SBT	3	5100	2250	.44*	1961	.38
SBR	1	1700	117	.07	142	.08
EBL	1	1700	98	.06*	275	.16
EBT	2	3400	353	.10	890	.26*
EBR	1	1700	478	.28	589	.35
WBL	1	1700	232	.14	161	.09*
WBT	2	3400	910	.27*	594	.17
WBR	1	1700	541	.32	335	.20
Right Turn Adjustment			EBR	.01*		
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .91 .99

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	302	.09*	563	.17
NBT	3	5100	1731	.34	2331	.46*
NBR	1	1700	62	.04	245	.14
SBL	1	1700	177	.10	225	.13*
SBT	3	5100	2260	.44*	1991	.39
SBR	1	1700	97	.06	142	.08
EBL	1	1700	98	.06*	275	.16
EBT	2	3400	373	.11	910	.27*
EBR	1	1700	498	.29	569	.33
WBL	1	1700	232	.14	161	.09*
WBT	2	3400	900	.26*	594	.17
WBR	1	1700	541	.32	325	.19
Right Turn Adjustment			EBR	.02*		
Clearance Interval				.05*		.05*
Note: Assumes Right-Turn Overlap for EBR						

TOTAL CAPACITY UTILIZATION .92 1.00

141. I-5 NB Ramps at Alicia Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1.5		115	{.06}*	300	{.17}*
NBT	0	5100	0	.06	0	.17
NBR	1.5		186		588	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	1574	.31*	2525	.50*
EBR	f		1730		504	
WBL	0	0	0		0	
WBT	3	5100	1235	.24	1795	.35
WBR	f		3070		947	
Clearance Interval				.05*	.05*	
TOTAL CAPACITY UTILIZATION				.42	.72	

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1.5		115	{.06}*	300	{.17}*
NBT	0	5100	0	.06	0	.17
NBR	1.5		166		578	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	1464	.29*	2605	.51*
EBR	f		1780		504	
WBL	0	0	0		0	
WBT	3	5100	1245	.24	1705	.33
WBR	f		3110		937	
Clearance Interval				.05*	.05*	
TOTAL CAPACITY UTILIZATION				.40	.73	

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1.5		105	{.05}*	300	{.17}*
NBT	0	5100	0	.05	0	.17
NBR	1.5		156		578	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	3	5100	1464	.29*	2625	.51*
EBR	f		1790		484	
WBL	0	0	0		0	
WBT	3	5100	1235	.24	1695	.33
WBR	f		3160		947	
Clearance Interval				.05*	.05*	
TOTAL CAPACITY UTILIZATION				.39	.73	

142. I-5 SB Ramps at Alicia Pkwy.

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2.5		967		1184	
SBT	0	6800	0	{.20}*	0	{.33}*
SBR	1.5		761		1175	
EBL	0	0	0		0	
EBT	3	5100	2333	.46*	1905	.37*
EBR	f		200		211	
WBL	0	0	0		0	
WBT	3	5100	809	.16	1330	.26
WBR	f		580		795	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .71 .75

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2.5		937		1224	
SBT	0	6800	0	{.19}*	0	{.33}*
SBR	1.5		751		1205	
EBL	0	0	0		0	
EBT	3	5100	2303	.45*	1945	.38*
EBR	f		200		221	
WBL	0	0	0		0	
WBT	3	5100	829	.16	1270	.25
WBR	f		580		755	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .69 .76

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2.5		927		1224	
SBT	0	6800	0	{.19}*	0	{.34}*
SBR	1.5		751		1225	
EBL	0	0	0		0	
EBT	3	5100	2323	.46*	1945	.38*
EBR	f		200		221	
WBL	0	0	0		0	
WBT	3	5100	829	.16	1260	.25
WBR	f		560		755	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .70 .77

143. Los Alisos Bl. at Avd de la Carlot

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	435	.13*	192	.06*
NBT	3	5100	922	.18	1055	.21
NBR	0	0	12		4	
SBL	1	1700	6	.00	20	.01
SBT	2	3400	811	.24*	1171	.34*
SBR	1	1700	276	.16	305	.18
EBL	1.5		230		976	
EBT	0.5	3400	2	.07*	16	.29*
EBR	1	1700	77	.05	432	.25
WBL	0	0	6		8	
WBT	1	1700	22	.02*	4	.01*
WBR	d	1700	12	.01	9	.01
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for SBR						

TOTAL CAPACITY UTILIZATION .51 .75

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	435	.13*	192	.06*
NBT	3	5100	802	.16	1085	.21
NBR	0	0	12		4	
SBL	1	1700	6	.00	20	.01
SBT	2	3400	881	.26*	1101	.32*
SBR	1	1700	286	.17	315	.19
EBL	1.5		220		1026	
EBT	0.5	3400	2	.07*	16	.31*
EBR	1	1700	57	.03	422	.25
WBL	0	0	6		8	
WBT	1	1700	22	.02*	4	.01*
WBR	d	1700	12	.01	9	.01
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for SBR						

TOTAL CAPACITY UTILIZATION .53 .75

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	2	3400	465	.14*	172	.05*
NBT	3	5100	802	.16	1105	.22
NBR	0	0	12		4	
SBL	1	1700	6	.00	20	.01
SBT	2	3400	901	.26*	1091	.32*
SBR	1	1700	266	.16	325	.19
EBL	1.5		220		1016	
EBT	0.5	3400	2	.07*	16	.30*
EBR	1	1700	37	.02	422	.25
WBL	0	0	6		8	
WBT	1	1700	22	.02*	4	.01*
WBR	d	1700	12	.01	9	.01
Clearance Interval				.05*	.05*	
Note: Assumes E/W Split Phasing						
Note: Assumes Right-Turn Overlap for SBR						

TOTAL CAPACITY UTILIZATION .54 .73

144. El Toro Rd. at Paseo de Valencia

Current General Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	144	.04	120	.04
NBT	3	5100	801	.16*	742	.15*
NBR	1	1700	366	.22	306	.18
SBL	2	3400	311	.09*	429	.13*
SBT	3	5100	576	.12	860	.17
SBR	0	0	14		24	
EBL	1	1700	34	.02	56	.03
EBT	2	3400	821	.24*	775	.23*
EBR	1	1700	275	.16	161	.09
WBL	2	3400	345	.10*	459	.14*
WBT	2	3400	415	.12	266	.08
WBR	1	1700	290	.17	402	.24
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .64 .70

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	144	.04	110	.03
NBT	3	5100	711	.14*	752	.15*
NBR	1	1700	376	.22	336	.20
SBL	2	3400	301	.09*	479	.14*
SBT	3	5100	576	.12	820	.17
SBR	0	0	14		24	
EBL	1	1700	34	.02	56	.03
EBT	2	3400	821	.24*	735	.22*
EBR	1	1700	285	.17	161	.09
WBL	2	3400	335	.10*	429	.13*
WBT	2	3400	425	.13	266	.08
WBR	1	1700	340	.20	402	.24
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .62 .69

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	124	.04	110	.03
NBT	3	5100	731	.14*	752	.15*
NBR	1	1700	376	.22	356	.21
SBL	2	3400	311	.09*	399	.12*
SBT	3	5100	566	.11	830	.17
SBR	0	0	14		24	
EBL	1	1700	44	.03	56	.03
EBT	2	3400	821	.24*	795	.23*
EBR	1	1700	255	.15	151	.09
WBL	2	3400	365	.11*	429	.13*
WBT	2	3400	465	.14	266	.08
WBR	1	1700	240	.14	412	.24
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .63 .68

145. Los Alisos Bl. at Paseo de Valencia

Current General Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	3	5100	721	.14*	1269	.25*
SBT	0	0	0		0	
SBR	1	1700	194	.11	95	.06
EBL	2	3400	58	.02*	231	.07
EBT	2	3400	489	.14	1701	.50*
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	2	3400	1816	.53*	665	.20
WBR	2	3400	1152	.34	749	.22
Clearance Interval			.05*		.05*	
Note: Assumes Right-Turn Overlap for SBR WBR						

TOTAL CAPACITY UTILIZATION .74 .80

2030 City Preferred Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		30	
SBL	3	5100	781	.15*	1209	.24*
SBT	0	0	20		1	
SBR	1	1700	194	.11	95	.06
EBL	2	3400	58	.02*	231	.07
EBT	2	3400	489	.14	1701	.50*
EBR	0	0	0		0	
WBL	0	0	70		1	
WBT	2	3400	1816	.55*	665	.20
WBR	2	3400	1042	.31	789	.23
Clearance Interval			.05*		.05*	
Note: Assumes Right-Turn Overlap for SBR WBR						

TOTAL CAPACITY UTILIZATION .77 .79

2030 Landowners Plan						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	0	0	1		20	
NBR	0	0	0		10	
SBL	3	5100	781	.15*	1219	.24*
SBT	0	0	30		1	
SBR	1	1700	194	.11	95	.06
EBL	2	3400	58	.02*	231	.07
EBT	2	3400	489	.14	1701	.50*
EBR	0	0	0		0	
WBL	0	0	30		1	
WBT	2	3400	1816	.54*	665	.20
WBR	2	3400	1072	.32	779	.23
Clearance Interval			.05*		.05*	
Note: Assumes Right-Turn Overlap for SBR WBR						

TOTAL CAPACITY UTILIZATION .76 .79