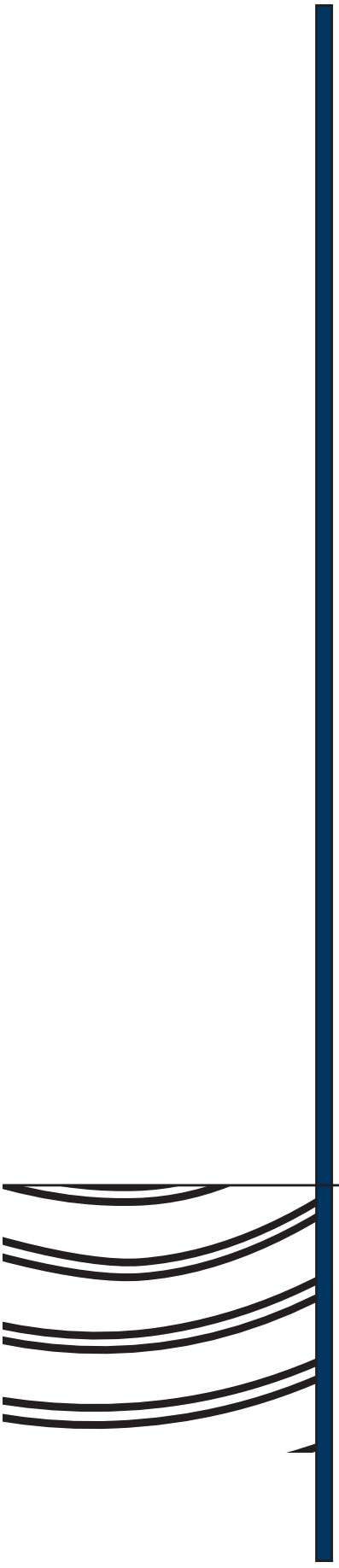

Appendix D:
Traffic Analysis

DRAFT

TRAFFIC IMPACT STUDY FOR THE CARSON MARKETPLACE

OCTOBER 2005

PREPARED FOR

CITY OF CARSON

PREPARED BY

KAKU ASSOCIATES
A Corporation

DRAFT

TRAFFIC IMPACT STUDY
FOR THE
CARSON MARKETPLACE

October 2005

Prepared for:

CITY OF CARSON

Prepared by:

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I. INTRODUCTION

This report documents the results of a study to evaluate the potential traffic impacts of the proposed Carson Marketplace project in the City of Carson, California. Kaku Associates, Inc. conducted the study in support of the environmental impact report (EIR) for the proposed project.

PROJECT DESCRIPTION

The Carson Marketplace project is located in the City of Carson in the South Bay area of Los Angeles County on a currently undeveloped site. It is located approximately 17 miles south of downtown Los Angeles and approximately 6.5 miles east of the Pacific Ocean. The project site is comprised of approximately 168 acres located southwest of the San Diego Freeway (I-405), and north of the Avalon Boulevard interchange. The project site is bounded by the Dominguez Golf Course to the north, the Torrance Lateral Flood Control Channel and residential uses to the south and west, industrial uses to the west, and the I-405 Freeway to the east. Figure 1 illustrates the project site and study area.

The project proposes the following land uses:

- *Regional Commercial – 1,370,000 square feet (sf)*: This would include regional big-box retail centers, e.g., supermarket, electronic superstore, home improvement superstore, discount club, home furnishing superstore, office supply store, pet supply store, etc.
- *Neighborhood Commercial – 130,000 sf:* This would include neighborhood retail shops such as supermarket, shopping center, etc.
- *Residential – 1,550 dwelling units:* 400 apartment units and 1,150 condominium units
- *Hotel – 300 Rooms*
- *Restaurants – 81,125 sf:* This would include high-turnover (sit down) restaurants, fast food restaurants, and quality restaurants

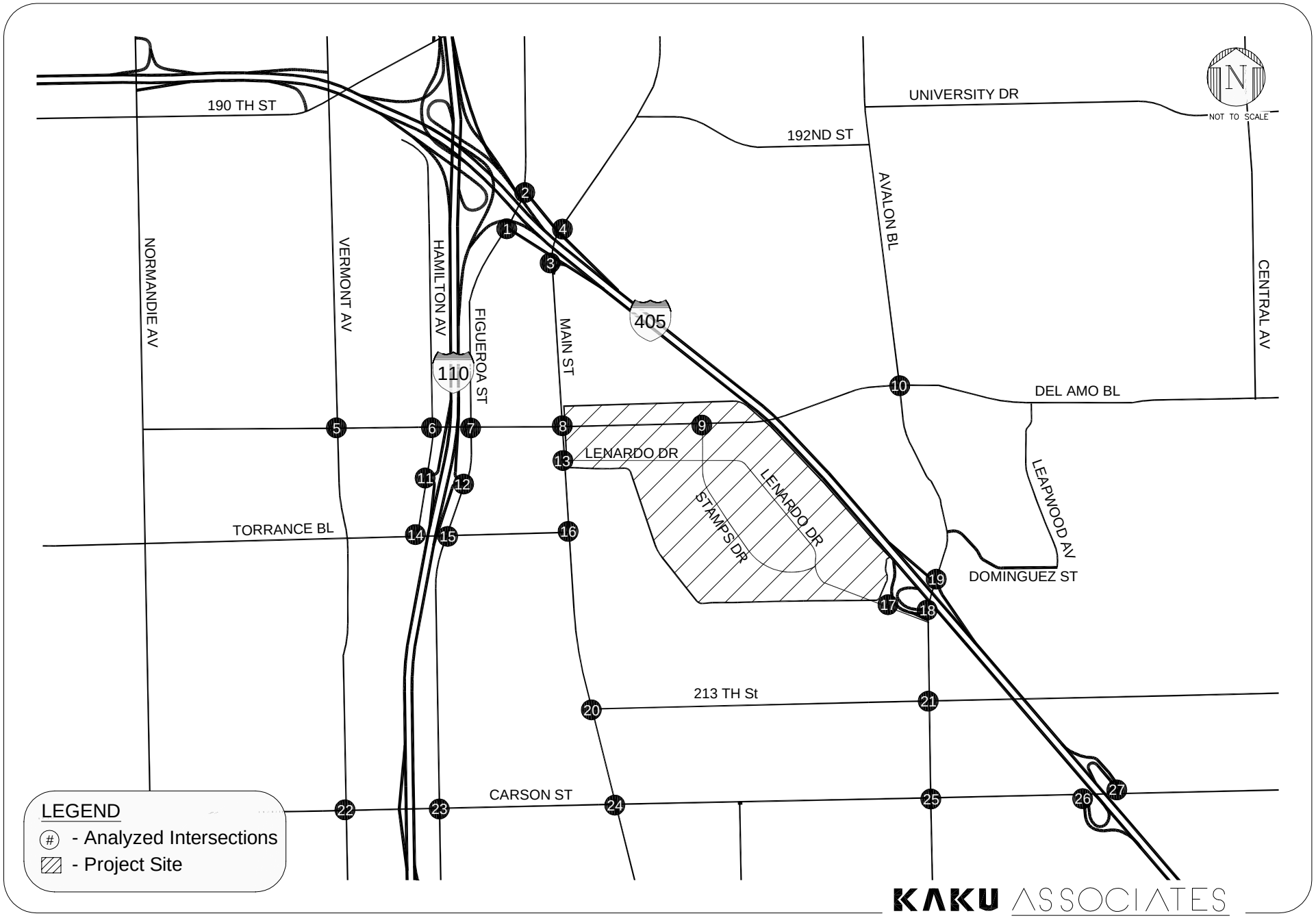

FIGURE 1

STUDY AREA & LOCATION OF ANALYZED INTERSECTIONS

- *Commercial Recreation/Entertainment – 214,000 sf*: This would include a 4,500-seat multiplex movie theater, bowling alley, fitness center, and multi-purpose recreation center

The project site consists of two components. The majority of the project site, consisting of 157 acres, is located south of Del Amo Boulevard, while the remaining 11 acres are located north of Del Amo Boulevard. The project component south of Del Amo Boulevard, as illustrated in the site plan in Figure 2, would have signalized access and egress at three locations. Stamps Drive at Del Amo Boulevard would provide access from Del Amo Boulevard to the project site. This intersection would be re-constructed and reconfigured as part of the project. A second major access location would result from the proposed improvements to the Avalon Boulevard interchange at the I-405, with the extension of Lenardo Drive to Avalon Boulevard. A third signalized access location is proposed at Lenardo Drive and Main Street.

The project component north of Del Amo Boulevard would have one major access and egress location from the north leg of the new intersection of Stamps Drive and Del Amo Boulevard. Another minor access is proposed to Del Amo Boulevard between Main Street and Stamps Drive, primarily to serve the residential development north of Del Amo Boulevard. Chapter VII: Site Access and Parking contains a detailed discussion of site access locations.

Proposed improvements at the Avalon Boulevard/I-405 interchange are a project design feature to be implemented concurrently with the project by another entity. These improvements include the following: Lenardo Drive would be extended east to Avalon Boulevard, intersecting Avalon Boulevard at the approximate location of the existing I-405 southbound ramps. The I-405 southbound on/off-ramps that currently intersect with Avalon Boulevard would be realigned and reconfigured to intersect with Lenardo Drive west of Avalon Boulevard. A new I-405 southbound on-ramp is proposed as an east leg to the new Avalon Boulevard/Lenardo Drive intersection. The I-405 northbound off-ramp would also be reconfigured to allow left-turn movements to southbound Avalon Boulevard.

FIGURE 2
DRAFT CONCEPTUAL SITE PLAN

STUDY SCOPE

The scope of work for this study was developed in conjunction with the City of Carson. The base assumptions, technical methodologies, and geographic coverage of the study were all identified as part of the study approach. The study analyzes the potential project-generated traffic impacts on the adjacent street system. The traffic analysis compares the future (year 2010) full project buildout conditions with future (year 2010) base conditions without the project to determine the effect of project on the transportation systems that include freeways, streets, and transit services. The following traffic scenarios are evaluated in the study:

- Existing (2005) Conditions - The analysis of existing traffic conditions provides a basis for the remainder of the study. The existing conditions analysis includes an assessment of streets, traffic volumes, and operating conditions within the study area.

- Cumulative (2010) Base Conditions - The objective of this scenario is to project future traffic growth and operating conditions that could be expected to result from regional growth and related projects in the vicinity of the project site by the year 2010.

- Cumulative (2010) plus Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under future conditions with the addition of the project-generated traffic. The impacts of the proposed project on future traffic operating conditions were then identified.

The study evaluates the potential for project impacts during the weekday morning and afternoon peak hours on 27 intersection locations. Figure 1 shows the location of analyzed intersections:

1. Figueroa Street & I-405 southbound on-ramp
2. Figueroa Street & I-405 northbound off-ramp
3. Main Street & I-405 southbound on-ramp
4. Main Street & I-405 northbound off-ramp
5. Vermont Avenue & Del Amo Boulevard
6. Hamilton Avenue & Del Amo Boulevard
7. Figueroa Street & Del Amo Boulevard
8. Main Street & Del Amo Boulevard
9. Stamps Drive & Del Amo Boulevard (future intersection)
10. Avalon Boulevard & Del Amo Boulevard
11. Hamilton Avenue & I-110 southbound ramps
12. Figueroa Street & I-110 northbound ramps
13. Main Street & Lenardo Drive (future intersection)
14. Hamilton Avenue & Torrance Boulevard
15. Figueroa Street & Torrance Boulevard
16. Main Street & Torrance Boulevard
17. Lenardo Drive & I-405 southbound ramps (future intersection)

18. Avalon Boulevard & I-405 southbound ramps
19. Avalon Boulevard & I-405 northbound ramps
20. Main Street & 213th Street
21. Avalon Boulevard & 213th Street
22. Vermont Avenue & Carson Street
23. Figueroa Street & Carson Street
24. Main Street & Carson Street
25. Avalon Boulevard & Carson Street
26. I-405 southbound ramps & Carson Street
27. I-405 northbound ramps & Carson Street

The study also includes an analysis of potential project impacts on the regional transportation system using level of service standards established in the Los Angeles County Congestion Management Program (CMP).

Finally, the study presents an analysis of project site access and projected parking demands.

ORGANIZATION OF REPORT

This report is divided into ten chapters, including the Introduction. Chapter II describes the existing circulation system and traffic conditions within the study area. Chapter III describes the methodologies used to forecast future traffic volumes. Chapter IV presents an assessment of potential traffic impacts for the future traffic conditions and the anticipated traffic generated by the proposed project. Chapter V recommends traffic mitigation measures for direct project traffic impacts. Chapter VI contains the results of the CMP as part of the regional transportation system impact analysis for the project. Chapters VII and VIII provide assessments of site access and parking for the project. A qualitative assessment of traffic impacts for potential project alternatives relative to the proposed project is presented in Chapter IX. Finally, Chapter X provides a summary and conclusion. Background data and details of the technical analyses are included in various appendices to this report.

II. EXISTING CONDITIONS

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions within the study area. The assessment of conditions relevant to this study includes a description of the study area, an inventory of the local street system in the vicinity of the project site, a review of traffic volumes on these facilities, an assessment of the operating conditions, and the current transit service in the study area. A detailed description of these elements is presented in this chapter.

EXISTING STREET SYSTEM

As illustrated in Figure 1, the project site is located southwest of the San Diego Freeway (I-405), and north of the Avalon Boulevard interchange, with Del Amo Boulevard running between the northern and southern components of the project. I-405 and the Harbor Freeway (I-110) provide the primary regional access to the project site via interchanges located at I-405/Avalon Boulevard, I-405/Main Street, I-110/Figueroa Street, and I-110/Hamilton Avenue.

The existing street system serving the study area includes 190th Street, Del Amo Boulevard, Torrance Boulevard, 213th Street, and Carson Street in the east-west direction and Vermont Avenue, Hamilton Avenue, Figueroa Street, Main Street, and Avalon Boulevard in the north-south direction. Del Amo Boulevard via Stamps Drive, Main Street via Lenardo Drive, Avalon Boulevard and the I-405 southbound ramps via Lenardo Drive provide direct access to the project site.

Table 1 provides further descriptions of the key streets in the study area. Diagrams of the existing lane configurations at the study intersections are provided in Appendix A to this report.

TABLE 1
EXISTING SURFACE STREET CHARACTERISTICS

SEGMENT	FROM	TO	LANE		MEDIAN	PARKING RESTRICTIONS		SPEED
			NB/EB	SB/WB	TYPE	NB/EB	SB/WB	LIMIT
Vermont Ave	190th St	Knox St	2	2	2LT	PA	NSAT	40
	Knox St	Del Amo Blvd	2	2	2LT	PA	NSAT	40
	Del Amo Blvd	Torrance Blvd	2	2	2LT	PA	PA	40
	Torrance Blvd	Carson St	2	2	RM/2LT	PA	PA	40
	Carson St	220th St	2	2	2LT	PA	PA	40
Hamilton Ave	Beginning	Knox St	1	1	UD	PA	PA	35
	Knox St	Del Amo Blvd	2	2	DY/2LT	NSAT/PA	PA	35
	Del Amo Blvd	Torrance Blvd	2	2	DY	NSAT	NSAT	35
Figueroa St	190th St	Del Amo Blvd	2	2	RM/2LT	NSAT/PA	NSAT	40
	Del Amo Blvd	Torrance	2	2	RM/2LT	PA	PA	40
	Torrance Blvd	Carson St	2	2	RM	PA	PA	40/25
	Carson St	223rd St	2	2	RM	PA	PA/GZ	40/25
Main St	Victoria St	192nd St	2	2	2LT/RM	NSAT	PA	45
	192nd St	Del Amo Blvd	2	2	RM	PA	PA	45
	Del Amo Blvd	Torrance Blvd	2	2	RM2LT	PA	PA	45
	Torrance Blvd	Carson St	3/2	2	RM/2LT	PA/RZ	PA/RZ	45/25
	Carson St	223rd St	2	2/3	RM/2LT	PA/RZ	PA	35/25
Avalon Blvd	192nd St	Del Amo Blvd	3/Bike Lane	3	RM	NSAT	NSAT	40
	Del Amo Blvd	213th St	3	3	RM	NSAT	NSAT	35
	213th St	Carson St	3	3	RM	NSAT	NSAT	35
	Carson St	223rd St	2	3/2	RM	PA/30min PA	NSAT/GZ/PA	35
192nd St	Avalon Blvd	Main St	1/2	2/1	DY	PA	PA	25
Del Amo Blvd	Central	Avalon Blvd	2/Bike	2/Bike	RM	NSAT	NSAT	45
	Avalon Blvd	Main St	3	3	RM	NSAT	NSAT	40
	Main St	Figueroa St	3	3	RM	NSAT	NSAT	40
	Figueroa St	Normandie Ave	2	2	RM/2LT	PA	NSAT	40
Torrance Blvd	Normandie Ave	Vermont Ave	2	2	DY/2LT	NSAT/PA	NSAT	35
	Vermont Ave	Figueroa St	2	2	DY/2LT	NSAT	NSAT	40
	Figueroa St	Main St	2	2	2LT	NSAT	PA	40
213th St	Main St	Bolsa St	1	1	SDY	PA	PA	30
	Bolsa St	Avalon Blvd	1/2	2/1	SDY	PA	PA	30
	Avalon Blvd	Perry St	2/1	1/2	2LT/DY	NSAT	NSAT	30
Carson St	Normandie Ave	Vermont Ave	2	2	2LT	PA	PA	35
	Vermont Ave	Figueroa St	3	2	2LT	NSAT	PA	35
	Figueroa St	Main St	3	3/2	RM	PA	PA/NSAT	35
	Main St	Avalon Blvd	3/2	2	RM	NSAT/PA	NSAT/PA	25/35
	Avalon Blvd	Vera St	3/2	2/3	RM	NSAT	PA/NSAT	35/25

Notes:

MEDIAN TYPE: DY = Double Yellow Centerline
SDY = Single Dashed Yellow Centerline
2LT = Dual Left Turn Centerline
RM = Raised Median
UD = Undivided Lane

PARKING: PA = Parking Allowed
NSAT = No Stopping Anytime
GZ = Green zone - Passenger loading and unloading
RZ = Red zone - No parking allowed

LANES: # = Number of lanes

EXISTING TRAFFIC VOLUMES AND LEVEL OF SERVICE

This section presents the existing intersection peak hour traffic volumes, a description of the methodology used to analyze the intersection traffic conditions, and the resulting level of service conditions at each of the study intersections.

Existing Traffic Volumes

New weekday morning and afternoon peak hour intersection turning moving count data was collected for the 24 existing study intersection locations. These weekday traffic volumes, illustrated in Figure 3, represent the existing conditions for the purposes of this analysis.

Level of Service Methodology

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. Level of service definitions for signalized intersections are provided in Table 2 and level of service definitions for stop-controlled intersections are provided in Table 3.

All of the study intersections are controlled by traffic signals except for the intersections of Figueroa Street & I-405 northbound off-ramp, Hamilton Avenue & Del Amo Boulevard, and Hamilton Avenue & 110 southbound ramps. The Intersection Capacity Utilization (ICU) method of intersection analysis, per the City of Carson requirements for analyzing signalized intersection conditions, was used to determine the intersection volume-to-capacity (V/C) ratio and corresponding level of service for each signalized study intersection.

The *Highway Capacity Manual* (Transportation Research Board, 2000) methodology for analysis of unsignalized intersections, wherein the level of service is based on average delay time per vehicle entering the intersection, was used to analyze the stop-controlled intersections.

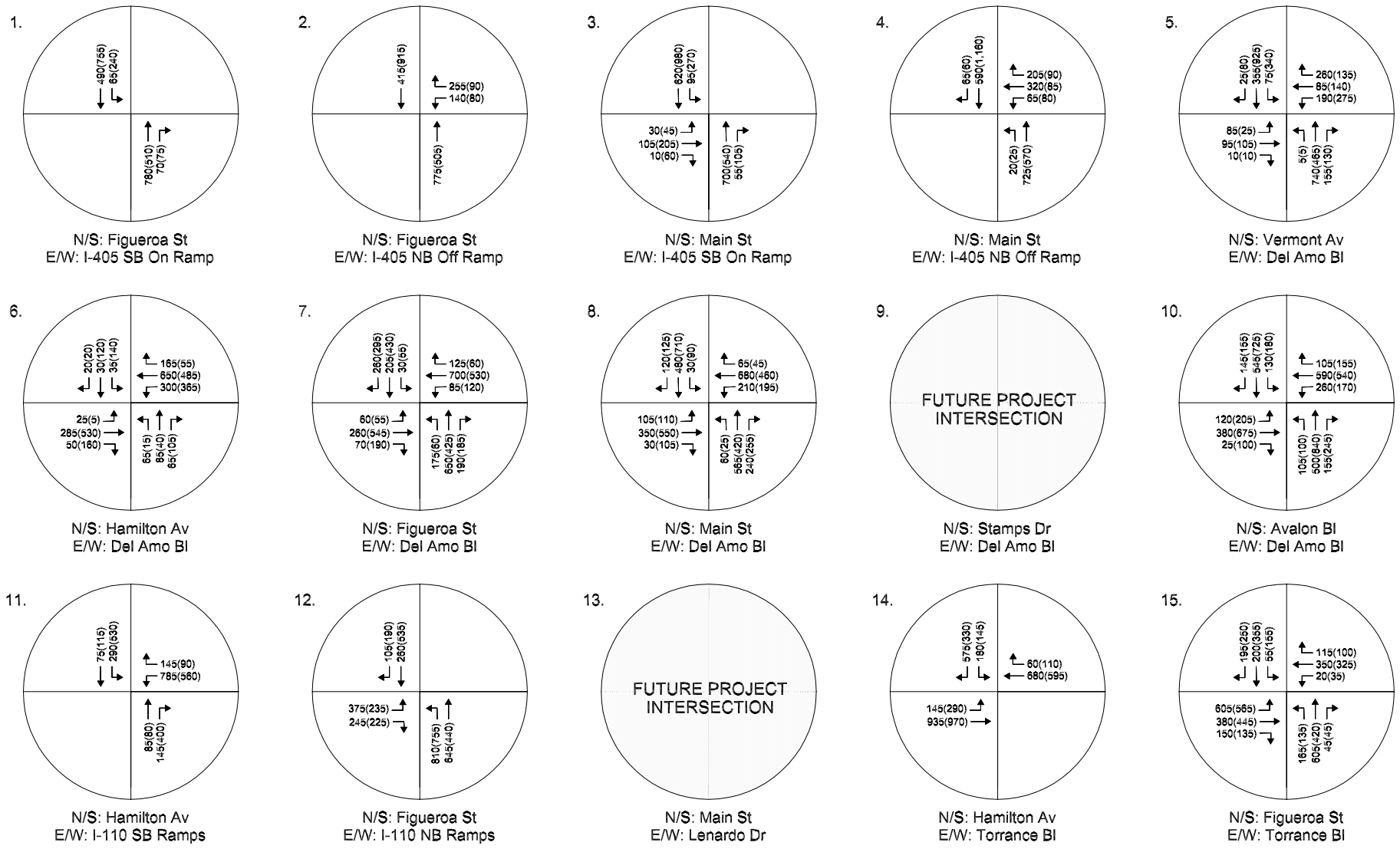

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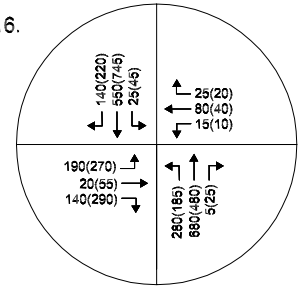
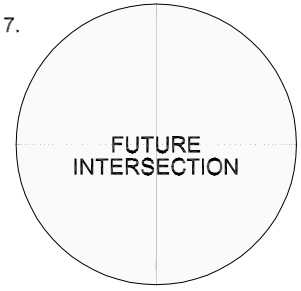
FIGURE 3 (PAGE 1 of 2)
EXISTING (YEAR 2005) WEEKDAY PEAK HOUR TRAFFIC VOLUMES

16.



N/S: Main St
E/W: Torrance Bl

17.



N/S: I-405 SB Off Ramp
E/W: Lenardo Dr

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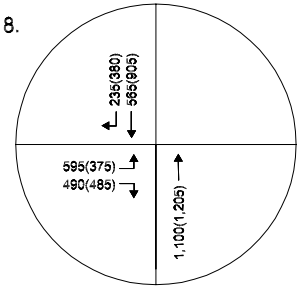

N/S: Avalon Bl
E/W: I-405 SB Ramps

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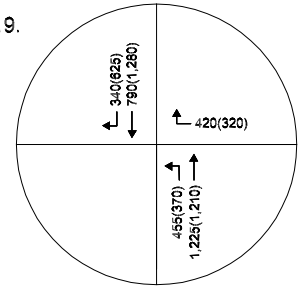

N/S: Avalon Bl
E/W: I-405 NB Ramps

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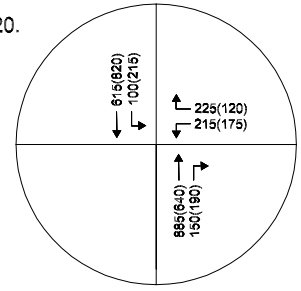

N/S: Main St
E/W: 213 TH St

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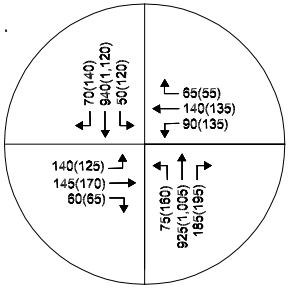

N/S: Avalon Blvd
E/W: 213 TH St

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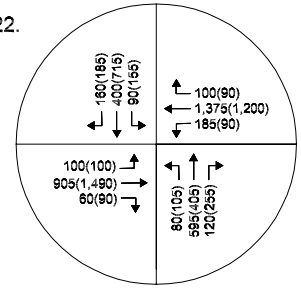
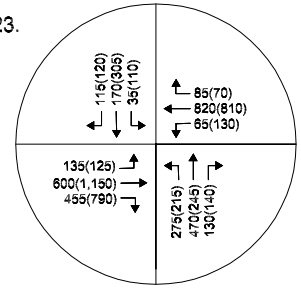


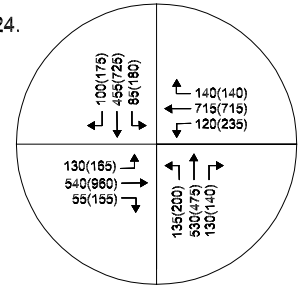
N/S: Vermont Av
E/W: Carson St

23.



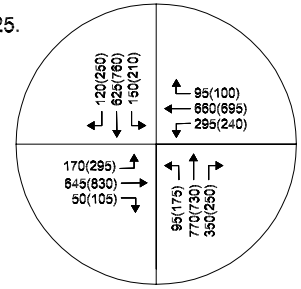
N/S: Figueroa St
E/W: Carson St

24.



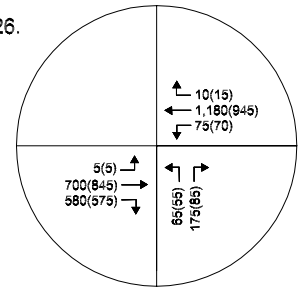
N/S: Main St
E/W: Carson St

25.



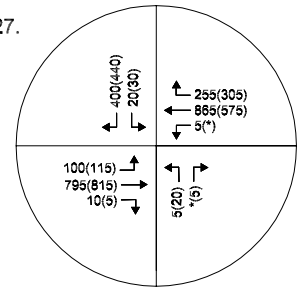
N/S: Avalon Bl
E/W: Carson St

26.



N/S: I-405 SB Ramps
E/W: Carson St

27.



N/S: I-405 NB Ramps
E/W: Carson St

LEGEND

X(X) - AM(PM) Peak Hour Traffiv Volume
(rounded to the nearest 5 vehicles)

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FIGURE 3 (PAGE 2 of 2)
EXISTING (YEAR 2005) WEEKDAY PEAK HOUR TRAFFIC VOLUMES

TABLE 2
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

Level of Service	Intersection Capacity Utilization	Definition
A	0.000-0.600	EXCELLENT. No Vehicle waits longer than one red light and no approach phase is fully used.
B	0.601-0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701-0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801-0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901-1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: *Highway Capacity Manual, Special Report 209* , Transportation Research Board, 1994.

TABLE 3
LEVEL OF SERVICE DEFINITIONS FOR
STOP-CONTROLLED INTERSECTIONS

Level of Service	Average Total Delay (seconds/vehicle)
A	$\leq$ 10.0
B	> 10.0 and $\leq$ 15.0
C	> 15.0 and $\leq$ 25.0
D	> 25.0 and $\leq$ 35.0
E	> 35.0 and $\leq$ 50.0
F	> 50.0

Source: *Highway Capacity Manual,* Transportation Research Board, 2000.

Existing Levels of Service

The traffic volumes presented in Figure 3 were analyzed as described above to determine the current operating conditions at the 24 intersection locations. The intersection level of service worksheets are included in Appendix C.

Table 4 summarizes the results of this analysis indicating the existing morning and afternoon peak hour V/C ratio or average delay in seconds and corresponding level of service at the analyzed intersections. As indicated in the table, all of the 24 study intersections are currently operating at an acceptable level of service, i.e., LOS D or better, during the morning peak hour.

During the afternoon peak hour, 20 of the 24 study intersections are currently operating at LOS D or better. The following four intersections are operating at LOS E:

6. Hamilton Avenue & Del Amo Boulevard (all-way stop-controlled)
11. Hamilton Avenue & I-110 southbound ramps (all-way strop-controlled)
19. Avalon Boulevard & I-405 northbound ramps
22. Vermont Avenue & Carson Street

EXISTING PUBLIC TRANSPORTATION

Eleven bus lines operated by two different transportation agencies currently serve the study area. The City of Carson operates seven of the 11 bus lines. The Los Angeles County Metropolitan Transportation Authority (MTA) operates the other four bus lines. All of these bus lines have stops near the project site. These transit lines are described below:

Metropolitan Transportation Authority

- MTA Line 205 – Line 205 operates between Willowbrook and San Pedro, passing through Compton, Carson, and Wilmington. In the vicinity of the project, this line operates on Carson Street, Avalon Boulevard, and Vermont Avenue.

TABLE 4
INTERSECTION LEVEL OF SERVICE ANALYSIS SUMMARY
EXISTING (YEAR 2005) CONDITIONS

Intersection	Existing Conditions			
	A.M. Peak Hour		P.M. Peak Hour	
	V/C or Delay	LOS	V/C or Delay	LOS
1. Figueroa St & I-405 SB On-Ramp	0.385	A	0.410	A
2. Figueroa St & I-405 NB Off-Ramp [1]	22.3	C	17.3	C
3. Main St & I-405 SB On-Ramp	0.466	A	0.637	B
4. Main St & I-405 NB Off-Ramp	0.695	B	0.720	C
5. Vermont Av & Del Amo Bl	0.596	A	0.706	C
6. Hamilton Av & Del Amo Bl [2]	21.1	C	36.3	E
7. Figueroa St & Del Amo Bl	0.628	B	0.591	A
8. Main St & Del Amo Bl	0.590	A	0.635	B
9. Stamps Dr & Del Amo Bl	**Future Intersection**			
10. Avalon Bl & Del Amo Bl	0.557	A	0.621	B
11. Hamilton Av & 110 SB Ramps [2]	20.8	C	47.2	E
12. Figueroa St & 110 NB Ramps	0.739	C	0.742	C
13. Main St & Lenardo Dr	**Future Intersection**			
14. Hamilton Av & Torrance Bl	0.657	B	0.648	B
15. Figueroa St & Torrance Bl	0.743	C	0.744	C
16. Main St & Torrance Bl	0.585	A	0.652	B
17. Lenardo Dr & I-405 SB Off-Ramp	**Future Intersection**			
18. Avalon Bl & I-405 SB Ramps	0.750	C	0.779	C
19. Avalon Bl & I-405 NB Ramps	0.894	D	0.933	E
20. Main St & 213th St	0.761	C	0.681	B
21. Avalon Bl & 213th St	0.549	A	0.691	B
22. Vermont Av & Carson St	0.833	D	0.911	E
23. Figueroa St & Carson St	0.669	B	0.826	D
24. Main St & Carson St	0.558	A	0.791	C
25. Avalon Bl & Carson St	0.758	C	0.821	D
26. Main St & 213th St	0.526	A	0.500	A
27. I-405 NB Ramps & Carson St	0.623	B	0.571	A

NOTE: ICU Methodology used for signalized intersections. 2000 HCM Unsignalized Methodology used for unsignalized intersections.
[1] - Intersection controlled with stop signs on 2 approach directions
[2] - Intersection controlled with stop signs on all approach directions

- MTA Line 445 – Line 445 is an express line that operates between San Pedro and downtown Los Angeles, passing through Wilmington and Carson on the 110 Freeway. This line operates on the 110 Freeway in the vicinity of the project.

- MTA Lines 446/447 – Lines 446/447 operate between San Pedro and downtown Los Angeles passing through Wilmington, Carson, and Los Angeles. In the vicinity of the project, these lines operate on Avalon Boulevard and the 110 Freeway.

- MTA Line 550 – Line 550 operates between San Pedro and West Hollywood passing through Mid-City, Exposition Park, and Harbor City. In the vicinity of the project, this line operates on Normandie Avenue, Vermont Avenue, and the 110 Freeway.

City of Carson Circuit Transit System

All Carson Circuit routes run in one direction, while regional bus lines run in both directions. All buses meet every 40 minutes at the Bus Terminal just north of the South Bay Pavilion.

- CAA (Cal-State Dominguez Hills) – This line runs along Central Avenue, Avalon Boulevard, Del Amo Boulevard, Leapwood Avenue, and Dominguez Street.

- CAB (Keystone) - This line operates along Avalon Boulevard, Carson Street, Main Street, and Figueroa Street.

- CAC (Scottsdale) - This line runs north-south along Avalon Boulevard in the vicinity of the project.

- CA D&G (Metro Blue Line) - These lines operate in opposite directions along Avalon Boulevard, Del Amo Boulevard, Carson Street, and Dominguez Street.

- CAE (Turmont) - This line operates along Central Avenue, Avalon Boulevard, and Del Amo Boulevard.

- CAF (Business Center South) - This line operates along Avalon Boulevard, Del Amo Boulevard, Figueroa Street, and 213th Street.

- CAH (Hemingway Park) - This line operates along Avalon Boulevard.

III. FUTURE TRAFFIC CONDITIONS

In order to evaluate the potential impact of the proposed project on the local street system, it was necessary to develop estimates of future traffic conditions both with and without the project. Future traffic volumes without the project were estimated, representing the cumulative base conditions. The traffic generated by the proposed project was estimated and separately assigned to the surrounding street system. The project-generated traffic was added to the cumulative base projections to represent cumulative plus project conditions.

CUMULATIVE (2010) BASE TRAFFIC PROJECTIONS

The cumulative base traffic projects reflect growth in traffic from two primary sources: background or ambient growth in the existing traffic volumes to reflect the effects of overall regional growth both in and outside of the study area, and traffic generated by specific projects located within, or in the vicinity of, the study area. These factors are described below.

Background Growth Factor

An ambient growth factor of 1% per year was applied to adjust the existing base year traffic volumes to reflect the effects of regional growth and development by the year 2010. The factor was developed after review of Southern California Association of Governments (SCAG) year 2000 and year 2015 model data and the background growth rates contained in the CMP for the South Bay subregion. This adjustment was applied to the base year 2005 traffic volume data to reflect the effect of ambient growth by the year 2010.

Cumulative Projects

Cumulative base traffic forecasts include the effect of specific projects, called related projects, expected to be implemented in the vicinity of the proposed project site prior to the buildout date of the proposed project. The City of Carson provided a list of related or cumulative projects expected to be completed by year 2010. These cumulative projects are taken into account in terms of the extent of growth, the location of growth, and the origins/destinations of trips. Table 5 lists the cumulative projects and their locations are illustrated in Figure 4. There are a total of 36 cumulative projects in the vicinity of the study area.

Trip Generation. Trip generation estimates for each of the cumulative projects listed in Table 5 were developed using trip generation rates from *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003) unless otherwise noted. The cumulative projects are expected to generate approximately 70,850 daily vehicle trips, of which about 4,420 trips would occur during the morning peak hour and 6,880 trips would occur during the afternoon peak hour.

Trip Distribution. The geographic distribution of the traffic generated by the cumulative projects depends on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which the employees and potential patrons of the proposed commercial developments would be drawn, the geographic distribution of activity centers to which residents of proposed residential developments would be drawn, and the location of the projects in relation to the surrounding street system. Using those factors, the distribution patterns were developed and used for the cumulative projects.

Traffic Assignment. The trip generation estimates were assigned to the local street system using the trip distribution patterns described above. These volumes were added to the existing traffic volumes plus the ambient growth to represent cumulative base conditions (i.e., future conditions without the proposed project). Cumulative base volumes are illustrated in Figure 5.

PROJECT TRAFFIC VOLUMES

The development of traffic generation estimates for the proposed project involved the use of the three-step process similar to that discussed above for the cumulative projects.

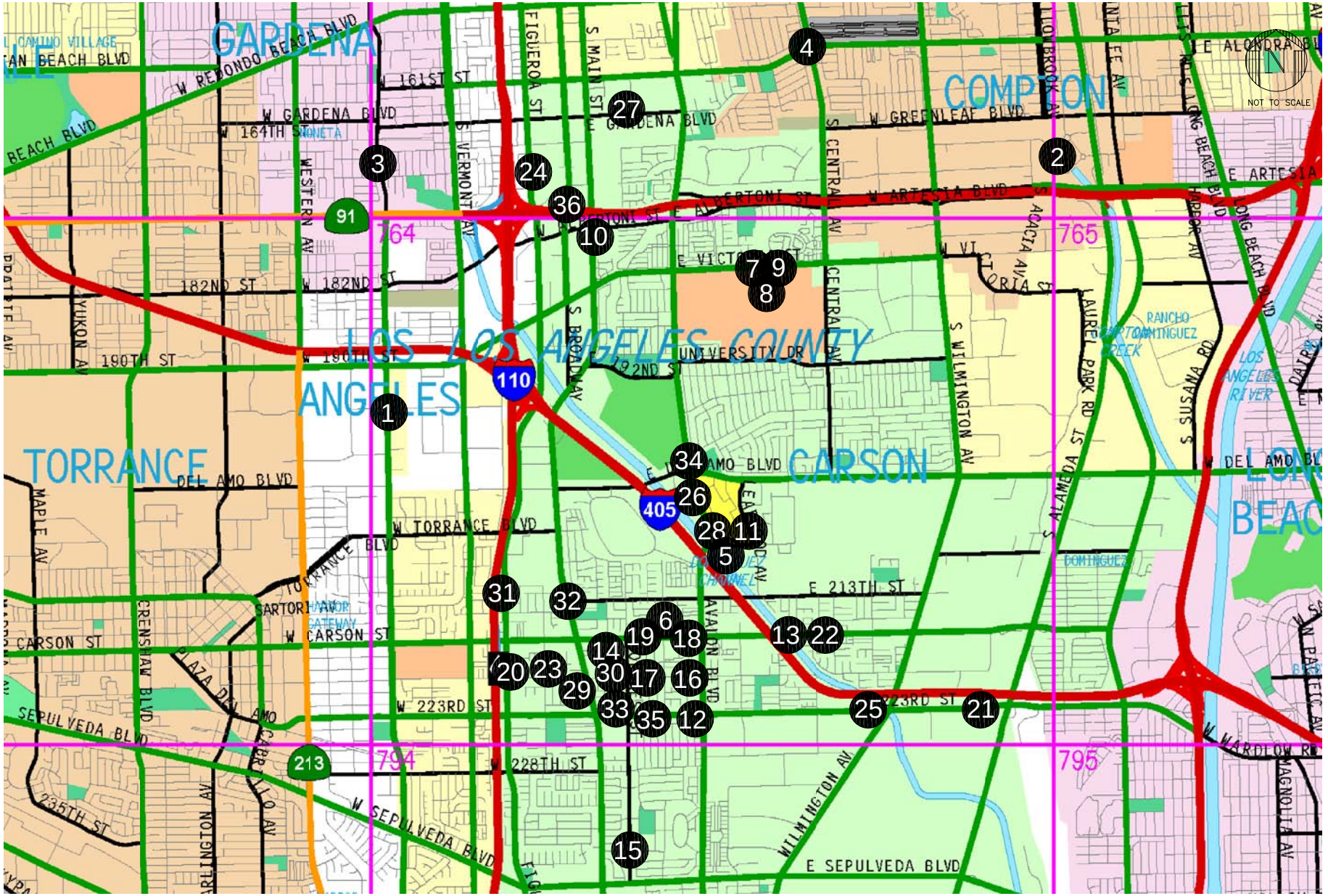

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FIGURE 4
APPROXIMATE LOCATION OF RELATED PROJECTS

TABLE 5

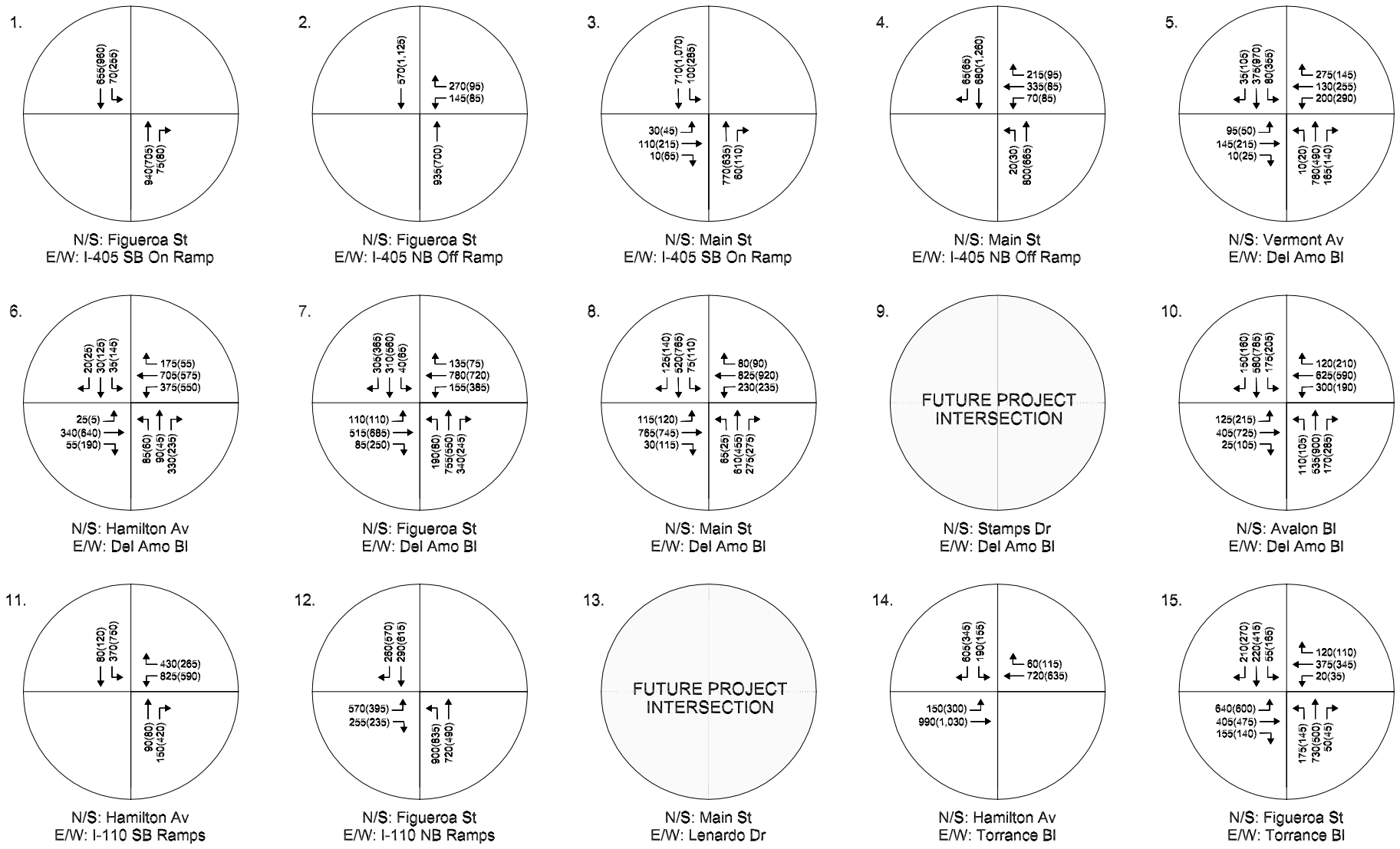
TRIP GENERATION ESTIMATES FOR THE CUMULATIVE PROJECTS

	PROJECT LOCATION	LAND-USE	SIZE		TRIP GENERATION						
					DAILY	A.M. PEAK HOUR			P.M. PEAK HOUR		
						IN	OUT	TOTAL	IN	OUT	TOTAL
1	19503 Normandie Avenue	Shopping Center	160.000	KSF	6,870	101	64	165	288	312	600
2	Gateway Towne Center	Shopping Center	509.666	KSF	21,885	320	205	525	917	994	1,911
		Single Family Housing	38	DU	364	7	22	29	24	14	38
		Movie Theater	2000	Seats	3,520	18	2	20	58	102	160
	Subtotal				*25,769*	*345*	*229*	*574*	*999*	*1,110*	*2,109*
3	16908 Normandie Avenue	Residential Condos	21	DU	123	2	7	9	7	4	11
4	901 S. Central	Sav-on Retail	24.000	KSF	1,064	79	85	164	29	36	65
5	Domunguez Technology Center	Technology	840.997	KSF	5,862	681	93	774	99	725	824
		Industrial	693.822	KSF	2,317	280	46	326	64	255	319
		Office	567.673	KSF	1,885	239	33	272	44	217	261
	Subtotal				*10,064*	*1,200*	*172*	*1,372*	*207*	*1,197*	*1,404*
6	Dominguez Hills Village	Childcare	150	Children	672	64	56	120	58	65	123
7	CSUDH Campus	Univ. Student Growth @ 3.9 p.a.	1479	Students	3,520	249	62	311	93	218	311
8	CSUDH - University Housing	Single Family Residential	125	DU	1,196	24	70	94	79	47	126
		Townhouses	125	DU	733	9	46	55	44	21	65
	Subtotal				*1,929*	*33*	*116*	*149*	*123*	*68*	*191*
9	CSUDH/ Home Depot Center Phase II	Hotel	200	Rooms	1,784	78	56	134	69	71	140
		Administrative Offices	30.000	KSF	100	12	2	14	2	12	14
		Athletic Performance Ctr,	30.000	KSF	1,290	53	39	92	109	64	173
		Training Facilities	50.000	KSF	2,150	89	64	153	181	107	288
		Dormitories	240	Beds	571	40	10	50	15	35	50
	Subtotal				*5,895*	*272*	*171*	*443*	*376*	*289*	*665*
10	Prime Wheel Expansion [1]	Warehouse And Office	165.000	KSF	1,292	140	27	167	44	150	194
11	South Bay Pavilion	Future Development	1009.207	KSF	30,516	382	245	627	1,382	1,497	2,879
		Less: Existing after demolition	783.753	KSF	25,891	328	210	538	1,169	1,267	2,436
		Incremental Development	225.454	KSF	4,625	54	35	89	213	230	443
		Less: 10% Pass by trips			463	5	4	9	21	23	44
	Subtotal	*Total Incremental Project Trips*			*4,162*	*49*	*31*	*80*	*192*	*207*	*399*
12	643 E. 223rd Street	Townhouses	40	DU	234	3	15	18	14	7	21
13	1216 E. Carson Street	Detached Condos	7	DU	41	1	2	3	3	1	4
14	21841 Orrick Avenue	Detached Condos	8	DU	47	1	3	4	3	1	4
15	235 E. 235th Street	Detached Condos	11	DU	64	1	4	5	4	2	6
16	630 E. 220th Street	Townhouses	8	DU	47	1	3	4	3	1	4
17	22038 Grace Street	Detached Condos	3	DU	18	0	1	1	1	1	2
18	616 E. Carson Street	Townhouses	100	DU	586	7	37	44	35	17	52
19	430-437 E. Carson Street	Townhouses	98	DU	574	7	36	43	34	17	51
20	21917 S. Figueroa Street	Townhouses	6	DU	35	1	2	3	2	1	3
21	2350 E. 223rd Street	Office	126.400	KSF	420	54	7	61	10	48	58
22	1249 E. Carson	Church	25.000	KSF	228	10	8	18	9	8	17
23	132 W. 220th Street	Detached Condos	6	DU	35	1	2	3	2	1	3
24	17120 S. Figueroa Street	Industrial	58.962	KSF	197	24	4	28	5	22	27
25	1333 E. 223 Street	Car Dealership Expansion	145.000	KSF	3,109	43	54	97	67	72	139
26	20320 Avalon Boulevard	Gas Station w/ Convenience store	6.000	KSF	977	30	30	60	40	40	80
27	249 E. Gardena Boulevard	Warehousing/Manufacturing	78.408	KSF	300	29	28	57	21	37	58
28	20700 Avalon Boulevard	24 Hour Fitness	33.000	KSF	1,087	20	27	47	68	66	134
29	22005 Main Street	Office / Retail Center	10.205	KSF	112	8	8	16	3	12	15
30	21914 Dolores Street	Detached Condos	3	DU	18	0	1	1	1	1	2
31	21225 S. Figueroa Street	Church	5.200	KSF	47	2	2	4	2	1	3
32	21240-21250 Main Street	Strip Commercial	5.620	KSF	241	4	2	6	10	11	21
33	21915 Dolores Street	Detached Condos	4	DU	23	0	2	2	1	1	2
34	20240 Avalon Boulevard	Commercial Drive-Thru	1.667	KSF	827	162	143	305	31	34	65
35	418 223rd Street	Attached Condos	6	DU	35	1	2	3	2	1	3
36	17420 Broadway	4-Unit Industrial/Manufacturing	40.000	KSF	153	15	14	29	11	19	30
		Office Buildings	10	KSF	110	14	2	16	3	12	15
	Subtotal				*188*	*16*	*16*	*32*	*13*	*20*	*33*
Total					**70,850**	**2,960**	**1,459**	**4,419**	**2,800**	**4,079**	**6,879**

Note:

Source: List Of Related Projects: Carson Community Development Department, City Of Carson.

[1] Traffic Impact Analysis Study for the Prime Wheel Corporation Site Expansion Project, Kaku Associates, April 2004.



LEGEND

X(X) - AM(PM) Peak Hour Traffiv Volume
(rounded to the nearest 5 vehicles)

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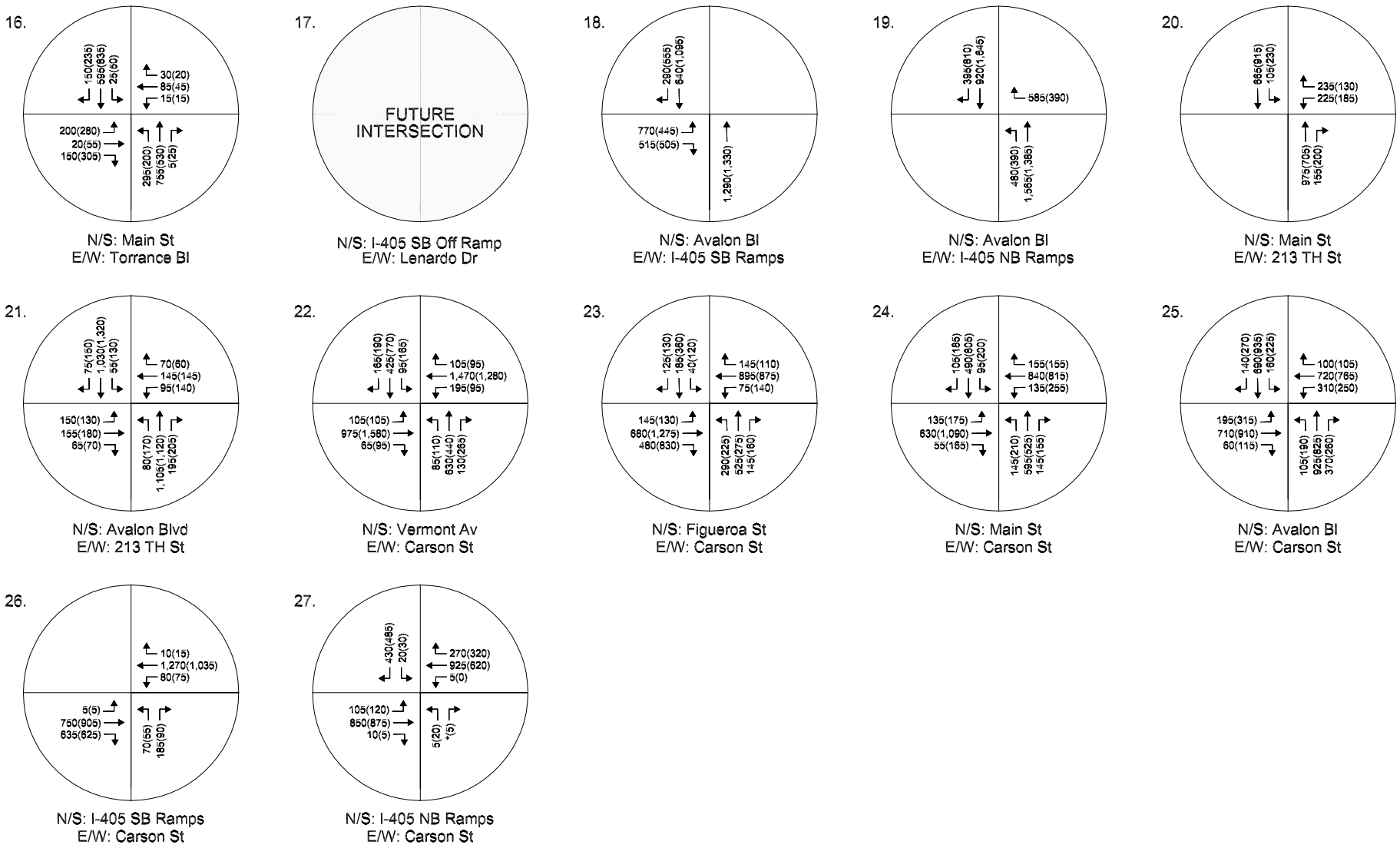
FIGURE 5 (PAGE 1 of 2)
CUMULATIVE BASE (YEAR 2010) WEEKDAY PEAK HOUR TRAFFIC VOLUMES



LEGEND

X(X) - AM(PM) Peak Hour Traffiv Volume
(rounded to the nearest 5 vehicles)

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FIGURE 5 (PAGE 2 of 2)
CUMULATIVE BASE (YEAR 2010) WEEKDAY PEAK HOUR TRAFFIC VOLUMES

Project Traffic Generation

Trip generation rates from *Trip Generation, 7th Edition* were utilized to estimate the number of trips associated with the development of the different components of the project. The rates account for all types of vehicle trips that may be generated by the proposed uses (e.g., patron, employee, and delivery/service trips). These rates are summarized in Table 6.

As indicated, the project would add approximately 1,370,000 sf of regional commercial area; 130,000 sf of neighborhood commercial area; 1,150 residential condominiums; 400 residential apartments; a 300-room hotel; 81,125 sf of restaurants; a 4,500 seat multiplex theater; and 104,000 sf of other entertainment/commercial recreation development. As shown in Table 7, it is estimated that the proposed development would generate a total of approximately 68,950 daily trips, of which about 2,510 would occur in the morning peak hour and about 5,770 in the afternoon peak hour.

As indicated in Table 7, pass-by trip reduction and internal trip credits were taken for the commercial components but not for the residential or the hotel components of the project. Pass-by credits account for trips that would have been passing by the project site regardless of the project. These trips are not new trips generated by the project because they are already on the adjacent roadway system. Internal trip capture is a key characteristic of a multi-use development. Trips among the various land uses can be made on site and these internal trips are not made on the surrounding street system. These trips can be either made by walking or by a vehicle entirely on internal roadways without using streets external to the site.

Project Traffic Distribution

The geographic distribution of traffic generated by the proposed project depends on several factors. These include the type and density of the proposed land uses, the geographic distribution of population from which the patrons and employees of the project retail and commercial components may be drawn, and the location of the project access points in relation to the surrounding street system. Considering those factors, three separate trip distribution patterns were developed according to the nature of the land use and the corresponding percentage of traffic likely to be regionally-oriented and using the freeway system as opposed to

TABLE 6
CARSON MARKETPLACE
TRIP GENERATION RATES

No.	Land Use	ITE Code	Per Unit	Daily	A.M. Peak Hour			P.M. Peak Hour		
					In	Out	Total	In	Out	Total
1	Shopping Center [a]	820	KSF	LN(T) = 0.65 LN(X)+5.83	61%	39%	Ln(T) = 0.6 Ln(X)+2.29	48%	52%	Ln(T)= 0.66 Ln(X)+3.4
2	Supermarket	850	KSF	T = 66.95*(X)+1391.56	61%	39%	3.25	51%	49%	10.45
3	Electronic Superstore	863	KSF	45.04	70%	30%	0.28	49%	51%	4.50
4	Home Improvement Superstore	862	KSF	Ln(T) = 0.7 Ln(X)+4.85	54%	46%	1.20	47%	53%	2.45
5	Discount Club	861	KSF	41.80	71%	29%	0.56	50%	50%	4.24
6	Home Furnishing Superstore	869	KSF	47.81	70%	30%	[1]	45%	55%	4.01
7	Office Supply Store	867	KSF	[2]	70%	30%	[2]	53%	47%	3.40
8	Pet Supply Superstore [2]	866	KSF	[2]	70%	30%	[2]	50%	50%	4.96
9	Apartments	220	DU	T = 6.01(X)+150.35	20%	80%	T = 0.49(X)+3.73	65%	35%	T = 0.55(X)+17.65
10	Condominiums	230	DU	Ln(T) = 0.85 Ln(X)+2.55	17%	83%	L(n) = 0.8 Ln(X)+0.26	67%	33%	L(n) = 0.82 Ln(X)+0.32
11	Hotel	310	Rooms	T = 8.95(X)+373.16	61%	39%	Ln(T) = 1.24 Ln(X)-2	53%	47%	0.59
12	High-Turnover (Sit Down) Restaurant	932	KSF	127.15	52%	48%	11.52	61%	29%	10.92
13	Fast Food Restaurant	933	KSF	716	60%	40%	43.87	51%	49%	26.15
14	Quality Restaurant	931	KSF	89.95	60%	40%	0.81	67%	33%	7.49
15	Multiplex Movie Theater [3]	445	Seats	[3]	90%	10%	0.035	36%	64%	0.08
16	Bowling Alley	437	KSF	33.33	60%	40%	3.13	35%	65%	3.54
17	Fitness Center	492	KSF	32.93	42%	58%	1.21	51%	49%	4.05
18	Multi-Purpose Recreation Center [4]	435	KSF	[4]	80%	20%	[4]	62%	38%	3.35

Source: Institute of Transportation Engineers (ITE), *Trip Generation, Seventh Edition*, 2003, unless otherwise noted.

[1] Weekday a.m. peak hour trip rate not available from ITE. Weekday a.m. peak hour trips assumed to be 13% of the weekday p.m. peak hour trips, similar to ratio for discount club (ITE 861).

[2] Weekday daily and a.m. peak hour rates not available from ITE. Weekday p.m. peak hour trips assumed to be 10% of the weekday daily trips, and weekday a.m. peak hour trips assumed to be 6% of the weekday p.m. peak hour trips, similar to ratios for electronic superstore (ITE 863).

[3] Weekday daily and a.m. peak hour rates not available from ITE. Weekday p.m. peak hour trips assumed to be 10% of the weekday daily trips, and weekday a.m. peak hour trips assumed to be 4% of the weekday p.m. peak hour tri

[4] Weekday daily and a.m. peak hour rates not available from ITE. Weekday p.m. peak hour trips assumed to be 6% of the weekday daily trips, and weekday a.m. peak hour trips assumed to be 33% of the weekday p.m. peak hour tri

TABLE 7
CARSON MARKETPLACE
PROPOSED PROJECT TRIP GENERATION ESTIMATES

No.	Land Use	ITE Code	Size	Unit	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
	REGIONAL RETAIL										
1	Shopping Center [a]	820	500.000	KSF	19,332	251	160	411	869	942	1,811
	(Less-20% Internal)				(3,866)	(50)	(32)	(82)	(174)	(188)	(362)
	(Less-25% Pass By - PM & Daily)				(4,833)	0	0	0	(217)	(236)	(453)
	Subtotal				10,633	201	128	329	478	518	996
2	Supermarket	850	70.000	KSF	6,078	139	89	228	373	359	732
	(Less-20% Internal)				(1,216)	(28)	(18)	(46)	(75)	(72)	(146)
	(Less-40% Pass By)				(1,945)	(44)	(28)	(73)	(119)	(115)	(234)
	Subtotal				2,917	67	43	109	179	172	352
3	Electronic Superstore	863	50.000	KSF	2,252	10	4	14	110	115	225
	(Less-20% Internal)				(450)	(2)	(1)	(3)	(22)	(23)	(45)
	(Less-10% Pass By)				(180)	(1)	0	(1)	(9)	(9)	(18)
	Subtotal				1,622	7	3	10	79	83	162
4	Home Improvement Superstore	862	150.000	KSF	4,262	97	83	180	173	195	368
	(Less-20% Internal)				(852)	(19)	(17)	(36)	(35)	(39)	(74)
	(Less-20% Pass By)				(682)	(16)	(13)	(29)	(28)	(31)	(59)
	Subtotal				2,728	62	53	115	110	125	235
5	Discount Club	861	150.000	KSF	6,270	60	24	84	318	318	636
	(Less-20% Internal)				(1,254)	(12)	(5)	(17)	(64)	(64)	(127)
	(Less-30% Pass By)				(1,505)	(14)	(6)	(20)	(76)	(76)	(153)
	Subtotal				3,511	34	13	47	178	178	356
6	Home Furnishing Superstore	869	350.000	KSF	16,734	128	55	183	632	772	1,404
	(Less-20% Internal)				(3,347)	(26)	(11)	(37)	(126)	(154)	(281)
	(Less-20% Pass By)				(1,339)	(20)	(9)	(29)	(101)	(124)	(225)
	Subtotal				12,048	82	35	117	405	494	898
7	Office Supply Store	867	50.000	KSF	1,700	7	3	10	90	80	170
	(Less-20% Internal)				(340)	(1)	(1)	(2)	(18)	(16)	(34)
	(Less-20% Pass By)				(476)	(1)	0	(2)	(14)	(13)	(27)
	Subtotal				884	5	2	6	58	51	109
8	Pet Supply Superstore	866	50.000	KSF	2,480	11	4	15	124	124	248
	(Less-20% Internal)				(496)	(2)	(1)	(3)	(25)	(25)	(50)
	(Less-10% Pass By)				(198)	(1)	0	(1)	(10)	(10)	(20)
	Subtotal				1,786	8	3	11	89	89	178
	Subtotal for Regional Retail Center		***1,370.000***	***KSF***	***36,129***	***466***	***280***	***744***	***1,576***	***1,710***	***3,286***
	NEIGHBORHOOD RETAIL										
9	Supermarket	850	20.000	KSF	2,731	40	25	65	107	102	209
	(Less-20% Internal)				(546)	(8)	(5)	(13)	(21)	(20)	(42)
	(Less-40% Pass By)				(874)	(13)	(8)	(21)	(34)	(33)	(67)
	Subtotal				1,311	19	12	31	52	49	100
10	Shopping Center [a]	820	110.000	KSF	7,225	101	65	166	320	347	667
	(Less-20% Internal)				(1,445)	(20)	(13)	(33)	(64)	(69)	(133)
	(Less-25% Pass By - PM & Daily)				(1,806)	0	0	0	(80)	(87)	(167)
	Subtotal				3,974	81	52	133	176	191	367
	Subtotal for Neighborhood Retail Center		***130.000***	***KSF***	***5,285***	***100***	***64***	***164***	***228***	***240***	***467***
	RESIDENTIAL										
11	Apartments	220	400	DU	2,554	40	160	200	155	83	238
12	Condominiums	230	1,150	DU	5,117	62	302	364	298	147	445
	Subtotal for Residential		***1,550***	***DU***	***7,671***	***102***	***462***	***564***	***453***	***230***	***683***
	HOTEL										
13	Hotel	310	300	Rooms	3,058	98	62	160	94	83	177
	Subtotal for Hotel		***300***	***Rooms***	***3,058***	***98***	***62***	***160***	***94***	***83***	***177***
	RESTAURANTS										
14	High-Turnover (Sit Down) Restaurant	932	50.000	KSF	6,358	300	276	576	333	213	546
	(Less-20% Internal)				(1,272)	(60)	(55)	(115)	(67)	(43)	(109)
	(Less-20% Pass By)				(1,017)	(48)	(44)	(92)	(53)	(34)	(87)
	Subtotal				4,069	192	177	369	213	136	350
15	Fast Food Restaurant	933	15.000	KSF	10,740	395	263	658	200	192	392
	(Less-20% Internal)				(2,148)	(79)	(53)	(132)	(40)	(38)	(78)
	(Less-30% Pass By)				(2,578)	(95)	(63)	(158)	(48)	(46)	(94)
	Subtotal				6,014	221	147	368	112	108	220
16	Quality Restaurant	931	16.125	KSF	1,450	8	5	13	81	40	121
	(Less-20% Internal)				(290)	(2)	(1)	(3)	(16)	(8)	(24)
	(Less-10% Pass By)				(116)	(1)	0	(1)	(7)	(3)	(10)
	Subtotal				1,044	5	4	9	58	29	87
	Subtotal for Restaurants		***81.125***	***KSF***	***11,127***	***418***	***328***	***746***	***383***	***273***	***657***
	COMMERCIAL RECREATION/ENTERTAINMENT										
17	Multiplex Movie Theater	445	4500	Seats	3,600	12	1	13	130	230	360
	(Less-20% Internal)		110.000	KSF	(720)	(2)	0	(3)	(26)	(46)	(72)
	(Less-10% Pass By)				(288)	(1)	0	(1)	(21)	(37)	(58)
	Subtotal				2,592	9	1	9	83	147	230
18	Bowling Alley	437	25.000	KSF	833	47	31	78	31	44	89
	(Less-20% Internal)				(167)	(9)	(6)	(16)	(6)	(9)	(18)
	(Less-10% Pass By)				(67)	(4)	(3)	(6)	(3)	(4)	(7)
	Subtotal				599	34	22	56	22	31	64
19	Fitness Center	492	35.000	KSF	1,153	18	24	42	72	70	142
	(Less-20% Pass By)				(231)	(4)	(5)	(8)	(14)	(14)	(28)
	Subtotal				922	14	19	34	58	56	114
20	Multi-Purpose Recreation Center	435	44.000	KSF	2,450	39	10	49	91	56	147
	(Less-20% Internal)				(490)	(8)	(2)	(10)	(18)	(11)	(29)
	(Less-20% Pass By)				(392)	(6)	(2)	(8)	(15)	(9)	(24)
	Subtotal				1,568	25	6	31	58	36	94
	Subtotal for Commercial Recreation/Entertainment		***214.000***	***KSF***	***5,681***	***82***	***48***	***130***	***221***	***270***	***502***
	TOTAL				**68,951**	**1,266**	**1,244**	**2,508**	**2,955**	**2,806**	**5,772**

the local street system. Figures 6A through 6C illustrate the distribution patterns for the following three groups of land uses:

- Regional commercial and hotel
- Neighborhood commercial, restaurants, and entertainment/commercial recreation
- Residential apartments and condominiums

Project Traffic Assignment

The traffic expected to be generated by the proposed project was assigned to the street network using the distribution patterns described in Figures 6A, 6B and 6C. Figure 7 shows the assignment of project-only traffic volumes for the morning and afternoon peak hours at the 27 analyzed intersection locations.

CUMULATIVE (2010) PLUS PROJECT TRAFFIC PROJECTIONS

The project-generated traffic volumes from Figure 7 were added to the cumulative base traffic volumes illustrated in Figure 5 to develop cumulative plus project peak hour traffic volumes. The resulting cumulative plus project traffic volumes for the morning and afternoon peak hours are shown in Figure 8.

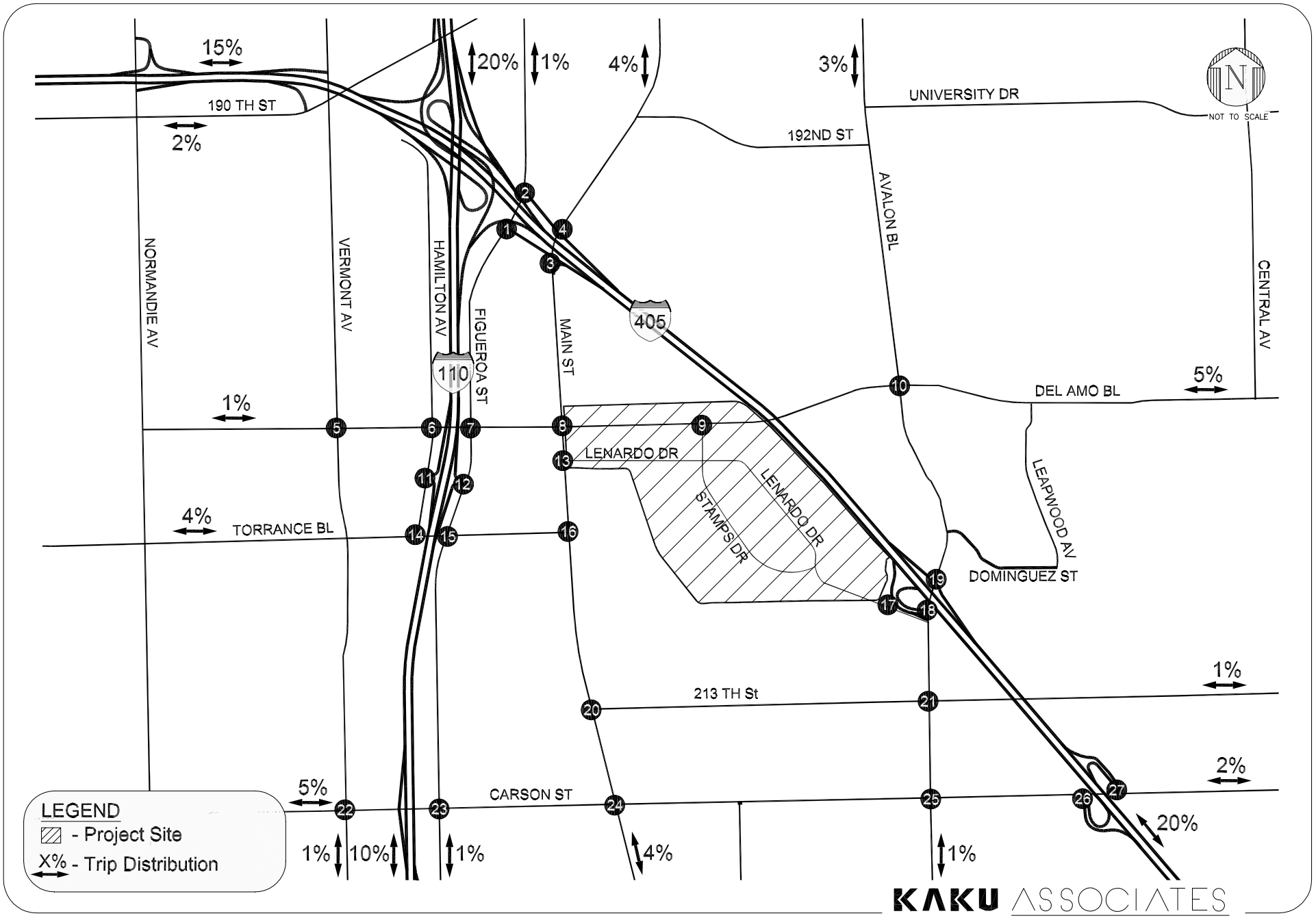


FIGURE 6A
TRIP DISTRIBUTION - REGIONAL COMMERCIAL AND HOTEL

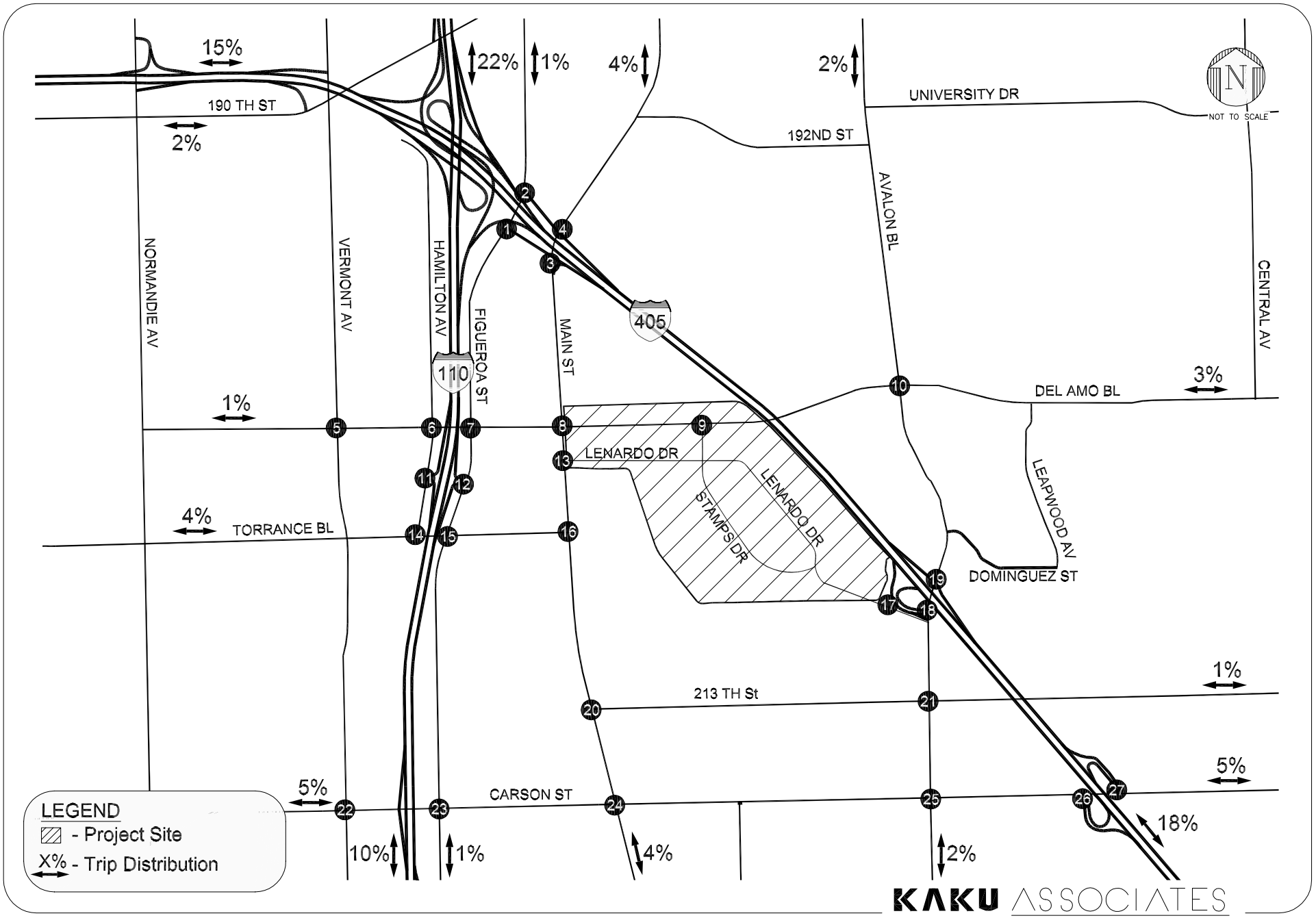


FIGURE 6B
TRIP DISTRIBUTION - RESIDENTIAL

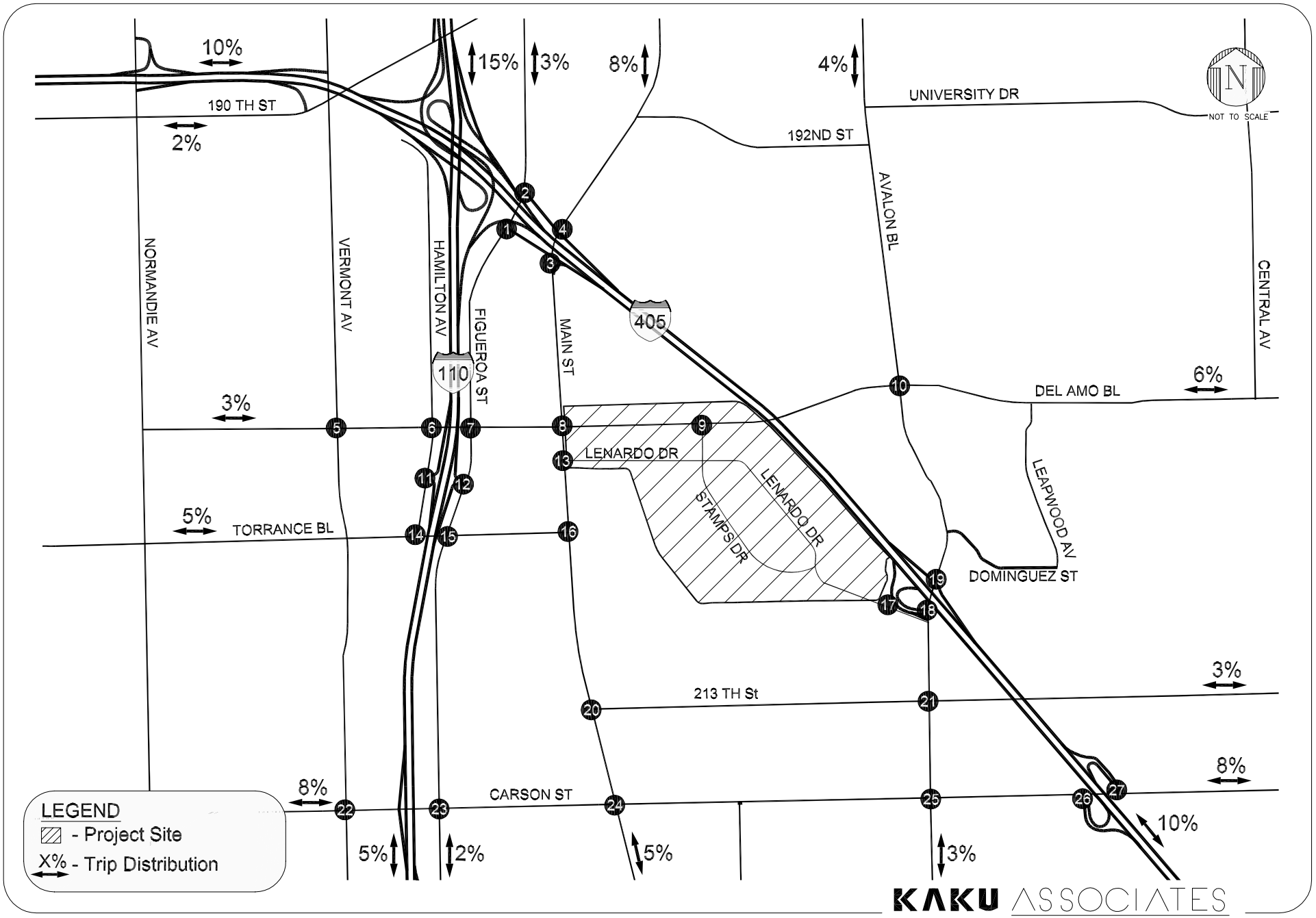
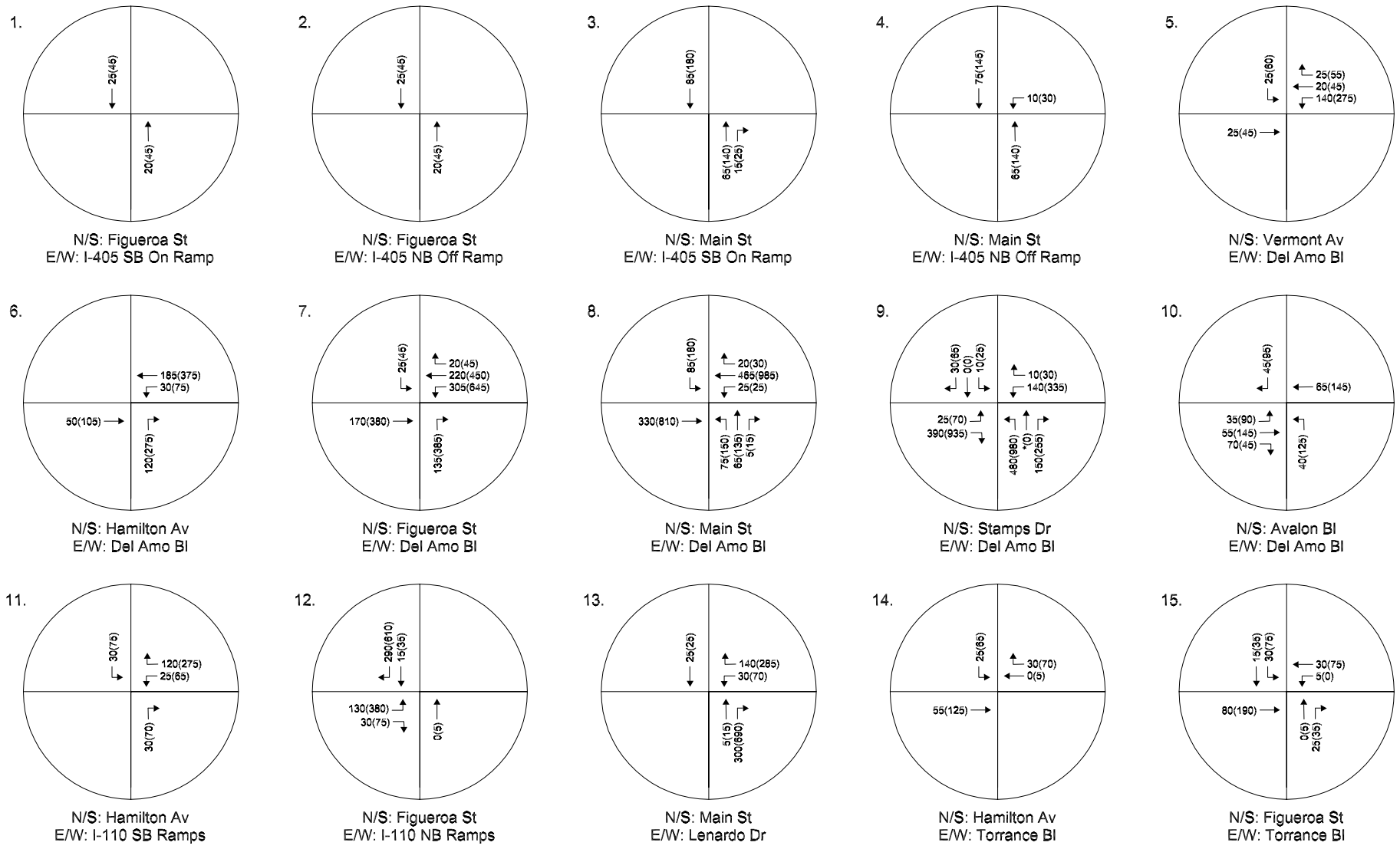


FIGURE 6C

TRIP DISTRIBUTION - NEIGHBORHOOD COMMERCIAL ENTERTAINMENT AND RESTAURANTS



LEGEND

X(X) - AM(PM) Peak Hour Traffiv Volume

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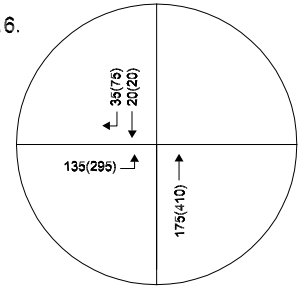
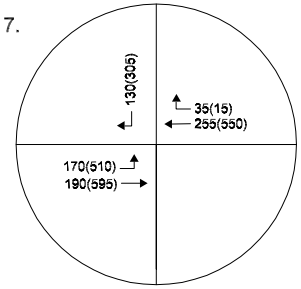
FIGURE 7 (PAGE 1 of 2)
PROJECT ONLY WEEKDAY PEAK HOUR TRAFFIC VOLUMES

16.



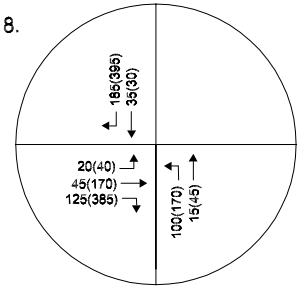
N/S: Main St
E/W: Torrance Bl

17.



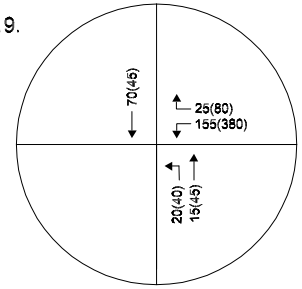
N/S: I-405 SB Off Ramp
E/W: Lenardo Dr

18.



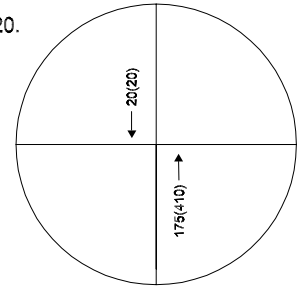
N/S: Avalon Bl
E/W: I-405 SB Ramps

19.



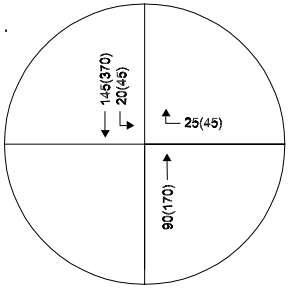
N/S: Avalon Bl
E/W: I-405 NB Ramps

20.



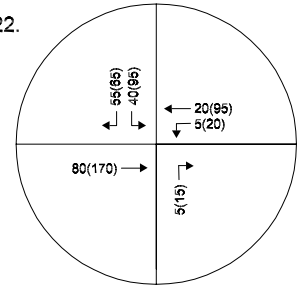
N/S: Main St
E/W: 213 TH St

21.



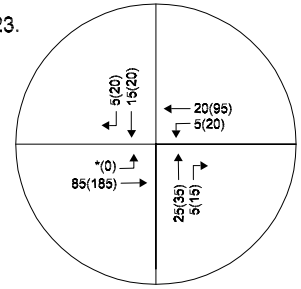
N/S: Avalon Blvd
E/W: 213 TH St

22.



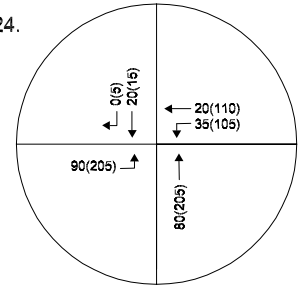
N/S: Vermont Av
E/W: Carson St

23.



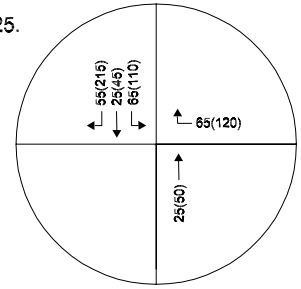
N/S: Figueroa St
E/W: Carson St

24.



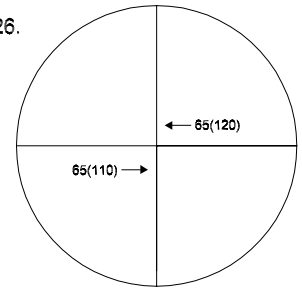
N/S: Main St
E/W: Carson St

25.



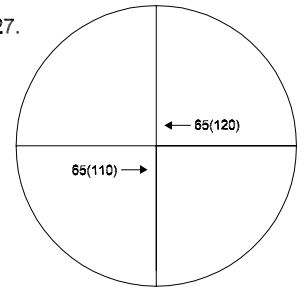
N/S: Avalon Bl
E/W: Carson St

26.



N/S: I-405 SB Ramps
E/W: Carson St

27.



N/S: I-405 NB Ramps
E/W: Carson St

LEGEND

X(X) - AM(PM) Peak Hour Traffiv Volume

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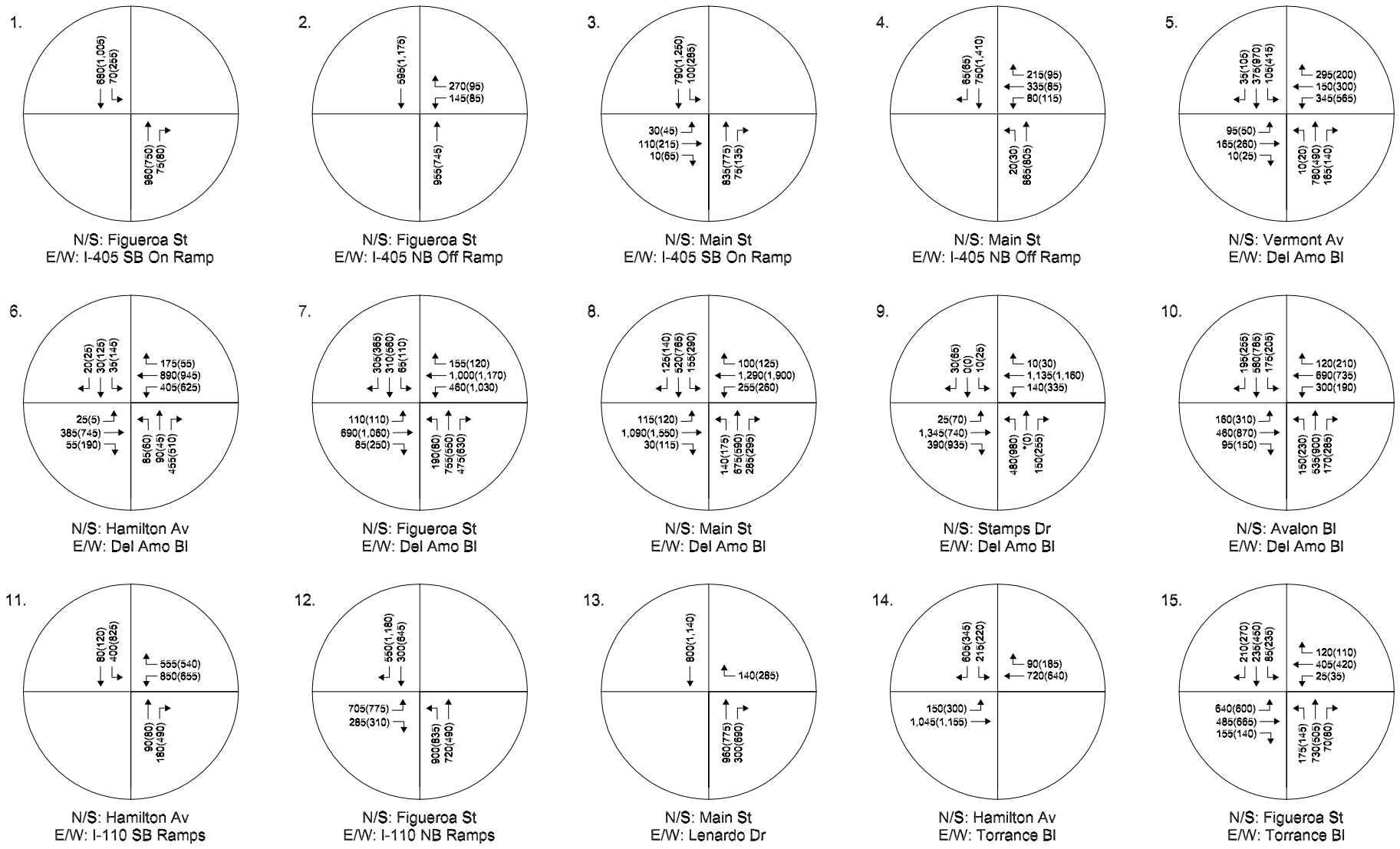
FIGURE 7 (PAGE 2 of 2)
PROJECT ONLY WEEKDAY PEAK HOUR TRAFFIC VOLUMES



LEGEND

X(X) - AM(PM) Peak Hour Traffiv Volume
(rounded to the nearest 5 vehicles)

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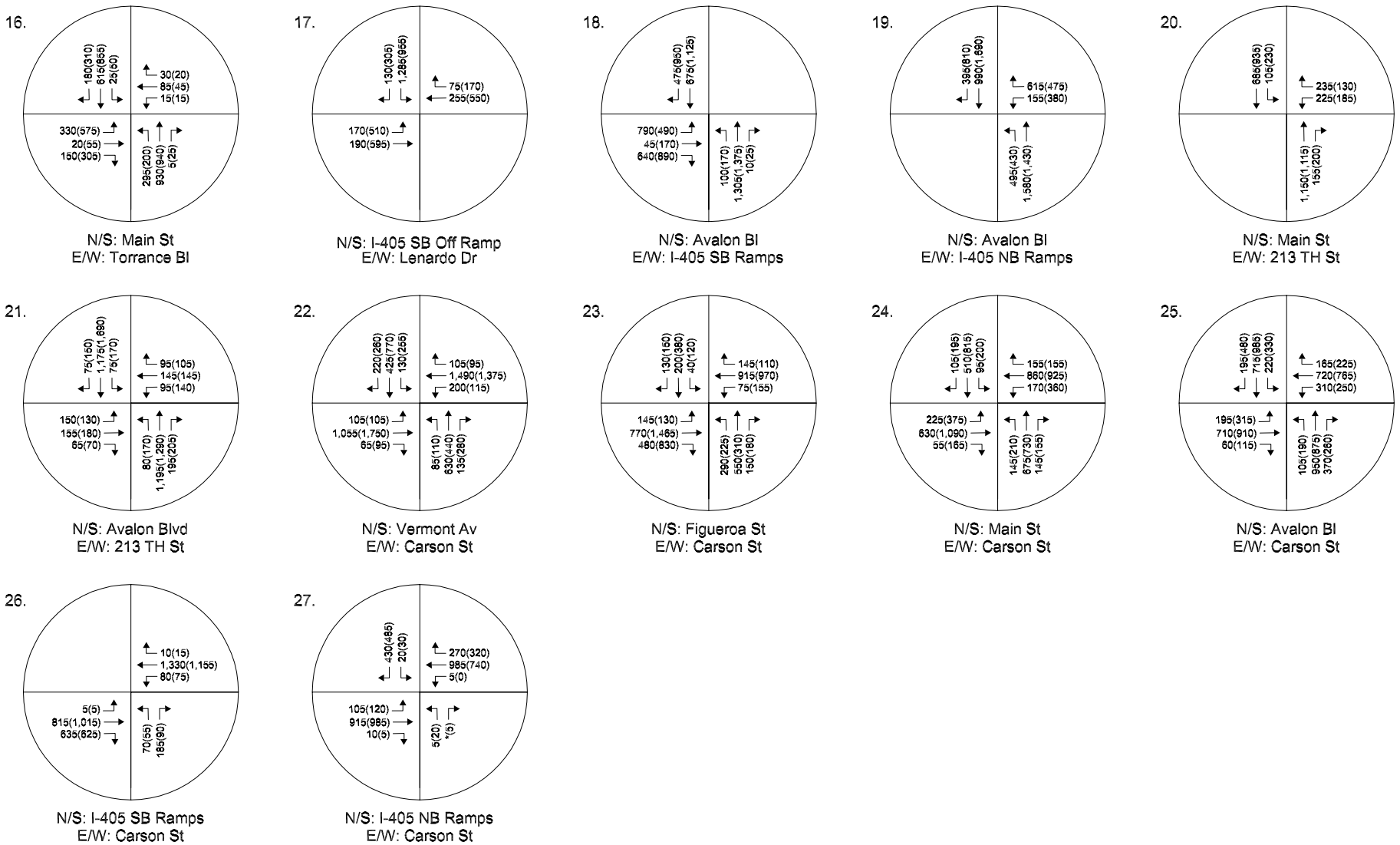
FIGURE 8 (PAGE 1 of 2)
CUMULATIVE PLUS PROJECT (YEAR 2010) WEEKDAY PEAK HOUR TRAFFIC VOLUMES



LEGEND

X(X) - AM(PM) Peak Hour Traffiv Volume
(rounded to the nearest 5 vehicles)

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FIGURE 8 (PAGE 2 of 2)
CUMULATIVE PLUS PROJECT (YEAR 2010) WEEKDAY PEAK HOUR TRAFFIC VOLUMES

IV. INTERSECTION IMPACT ANALYSIS

This chapter presents an analysis of the potential impacts of the traffic generated by the proposed Carson Marketplace project on the local street system. The analysis compares the projected levels of service at each study intersection under future base and future base plus project conditions to estimate the incremental increase in the V/C ratio caused by the proposed project. This provides the information needed to assess the potential impact of the project using the significance criteria.

SIGNIFICANT TRAFFIC IMPACT CRITERIA

Threshold criteria were applied to determine if a project has a significant traffic impact at an intersection. Based on these criteria, a project impact would be considered significant if the following conditions are met:

1. The increase in the V/C ratio that can be attributed to the project is equal to or exceeds 0.020; ***and***
2. Under future base plus project conditions, the intersection is projected to operate at LOS E or F (represented by a V/C ratio of 0.901 or greater).

Under these standards, a project would not have a significant impact at an intersection, regardless of the V/C ratio increase that it caused, if the intersection is operating at LOS A, B, C or D under future base plus project traffic conditions. Conversely, if an intersection is or is projected to be operating at LOS E or F, the project would have an adverse significant impact if it caused an increase in the V/C ratio of more than 0.02.

YEAR 2010 CUMULATIVE OPERATING CONDITIONS

Cumulative (2010) Base Traffic Conditions

Projected cumulative base (i.e., without project) intersection operating conditions are presented in Table 8. Analysis of traffic conditions under the projected year 2010 cumulative base conditions found that 18 of the 24 study intersections are projected to operate at an acceptable level of service, i.e., LOS D or better, during both the morning and afternoon peak hours. The following six intersections are projected to operate at LOS E or worse during one or both of the peak hours:

2. Figueroa Street & I-405 northbound off-ramp (unsignalized) –
   LOS E during the a.m. peak hour

6. Hamilton Avenue & Del Amo Boulevard (unsignalized) –
   LOS F during the a.m. and p.m. peak hours

7. Figueroa Street & Del Amo Boulevard – LOS E during the p.m. peak hour

11. Hamilton Avenue & I-110 southbound ramps (unsignalized) –
    LOS F during the p.m. peak hour

19. Avalon Boulevard & I-405 northbound ramps –
    LOS F during the a.m. and p.m. peak hours

22. Vermont Avenue & Carson Street – LOS E during the p.m. peak hour

Cumulative (2010) plus Project Traffic Conditions

The results of the cumulative plus project intersection level of service analysis and the cumulative plus project impact analysis are presented in Table 8. As shown in Table 8, 13 of the 27 study intersections (including the three new intersections) are projected to operate at an acceptable level of service, i.e., LOS D or better, during both the morning and afternoon peak hours. The following 14 intersections are projected to operate at LOS E or F during one or both peak hours:

2. Figueroa Street & I-405 northbound off-ramp (unsignalized) –
   LOS E during the a.m. peak hour

5. Vermont Avenue & Del Amo Boulevard – LOS E during the p.m. peak hour

TABLE 8
INTERSECTION LEVEL OF SERVICE ANALYSIS SUMMARY
FUTURE (YEAR 2010) CONDITIONS

Intersection	Time Period	Cumulative Base Conditions V/C or Delay	Cumulative Base Conditions LOS	Cumulative Plus Project Conditions V/C or Delay	Cumulative Plus Project Conditions LOS	Project Increase in V/C	Significant Project Impact	Cumulative Plus Project Plus Mitigations V/C	Cumulative Plus Project Plus Mitigations LOS	Project Increase in V/C	Significant Project Impact
1. Figueroa St & I-405 SB On-Ramp	**A.M.**	0.437	A	0.443	A	0.006	NO				
	P.M.	0.480	A	0.494	A	0.014	NO				
2. Figueroa St & I-405 NB Off-Ramp [1][3]	**A.M.**	40.3	E	44.5	E						
	P.M.	28.4	D	32.7	D						
	A.M.	0.560		0.566		0.006	NO				
	P.M.	0.510		0.525		0.015	NO				
3. Main St & I-405 SB On-Ramp	**A.M.**	0.496	A	0.522	A	0.026	NO				
	P.M.	0.686	B	0.738	C	0.052	NO				
4. Main St & I-405 NB Off-Ramp	**A.M.**	0.754	C	0.801	D	0.047	NO				
	P.M.	0.785	C	0.885	D	0.100	NO				
5. Vermont Av & Del Amo Bl	**A.M.**	0.625	B	0.729	C	0.104	NO	0.649	B	0.024	NO
	P.M.	0.775	C	0.998	E	0.223	**YES**	0.865	D	0.090	NO
6. Hamilton Av & Del Amo Bl [2][3]	**A.M.**	57.0	F	**	F		[4]				
	P.M.	**	F	**	F		[4]				
	A.M.	0.687		0.797		0.110	**YES**	0.626	B	-0.061	NO
	P.M.	0.944		1.194		0.250	**YES**	0.851	D	-0.093	NO
7. Figueroa St & Del Amo Bl	**A.M.**	0.722	C	0.938	E	0.216	**YES**	0.720	C	-0.002	NO
	P.M.	0.972	E	1.493	F	0.521	**YES**	0.962	E	-0.010	NO
8. Main St & Del Amo Bl	**A.M.**	0.732	C	0.891	D	0.159	NO	0.707	C	-0.025	NO
	P.M.	0.723	C	1.068	F	0.345	**YES**	0.876	D	0.153	NO
9. Stamps Dr & Del Amo Bl	**A.M.**	**Future Project**		0.773	C	n/a	n/a				
	P.M.	**Intersection**		0.893	D	n/a	n/a				
10. Avalon Bl & Del Amo Bl	**A.M.**	0.635	B	0.687	B	0.052	NO				
	P.M.	0.711	C	0.883	D	0.172	NO				
11. Hamilton Av & 110 SB Ramps [2][3]	**A.M.**	28.9	D	41.6	E		[4]				
	P.M.	**	F	**	F		[4]				
	A.M.	0.708		0.737		0.029	**YES**	0.674	B	-0.034	NO
	P.M.	0.877		0.973		0.096	**YES**	0.827	D	-0.050	NO
12. Figueroa St & 110 NB Ramps	**A.M.**	0.865	D	0.932	E	0.067	**YES**	0.821	D	-0.044	NO
	P.M.	0.865	D	1.247	F	0.382	**YES**	0.976	E	0.111	**YES**
13. Main St & Lenardo Dr	**A.M.**	**Future Project**		0.467	A	n/a	n/a				
	P.M.	**Intersection**		0.601	B	n/a	n/a				
14. Hamilton Av & Torrance Bl	**A.M.**	0.687	B	0.705	C	0.018	NO				
	P.M.	0.680	B	0.724	C	0.044	NO				
15. Figueroa St & Torrance Bl	**A.M.**	0.809	D	0.863	D	0.054	NO	0.843	D	0.034	NO
	P.M.	0.799	C	0.929	E	0.130	**YES**	0.874	D	0.075	NO
16. Main St & Torrance Bl	**A.M.**	0.686	B	0.776	C	0.090	NO	0.765	C	0.079	NO
	PM	0.743	C	0.935	E	0.192	**YES**	0.900	D	0.157	NO
17. Lenardo Dr & I-405 SB Off-Ramp	**A.M.**	**Future Intersection**		0.746	C	n/a	n/a				
	P.M.			0.843	D	n/a	n/a				
18. Avalon Bl & I-405 SB Ramps / future Lenardo Dr	**A.M.**	0.826	D	0.847	D	0.021	NO				
	P.M.	0.833	D	0.897	D	0.064	NO				
19. Avalon Bl & I-405 NB Ramps	**A.M.**	1.054	F	0.988	E	-0.066	NO				
	P.M.	1.102	F	1.092	F	-0.010	NO				
20. Main St & 213th St	**A.M.**	0.809	D	0.863	D	0.054	NO				
	P.M.	0.723	C	0.851	D	0.128	NO				
21. Avalon Bl & 213th St	**A.M.**	0.600	A	0.632	B	0.032	NO				
	P.M.	0.753	C	0.830	D	0.077	NO				
22. Vermont Av & Carson St	**A.M.**	0.879	D	0.910	E	0.031	**YES**	0.777	C	-0.102	NO
	P.M.	0.963	E	1.028	F	0.065	**YES**	0.865	D	-0.098	NO
23. Figueroa St & Carson St	**A.M.**	0.740	C	0.756	C	0.016	NO	0.756	C	0.016	NO
	P.M.	0.876	D	0.908	E	0.032	**YES**	0.861	D	-0.015	NO
24. Main St & Carson St	**A.M.**	0.606	B	0.683	B	0.077	NO	0.630	B	0.024	NO
	P.M.	0.856	D	0.926	E	0.070	**YES**	0.842	D	-0.014	NO
25. Avalon Bl & Carson St	**A.M.**	0.830	D	0.875	D	0.045	NO	0.780	C	-0.050	NO
	P.M.	0.888	D	0.978	E	0.090	**YES**	0.872	D	-0.016	NO
[4]	**A.M.**							0.798	C	-0.032	NO
	P.M.							0.908	E	0.020	**YES**
26. I-405 SB Ramps & Carson St	**A.M.**	0.505	A	0.518	A	0.013	NO				
	P.M.	0.500	A	0.523	A	0.023	NO				
27. I-405 NB Ramps & Carson St	**A.M.**	0.661	B	0.681	B	0.020	NO				
	P.M.	0.618	B	0.652	B	0.034	NO				

NOTE: ICU Methodology used for signalized intersections.
2000 HCM Unsignalized Methodology used for unsignalized intersections.

[1] - Intersection controlled with stop signs on 2 approach directions.

[2] - Intersection controlled with stop signs on all approach directions.

[3] - The top rows show analysis using Highway Capacity Manual stop-controlled methodology, for the purpose of evaluating the operating condition of the intersection. Average intersection vehicular delay in seconds per vehicle is reported rather than V/C ratio. The bottom rows show analysis using the CMA methodology, for the purpose of application of City of Los Angeles significance criteria. V/C ratio is reported.

[4] - The top rows in the "Plus Mitigations" columns at Avalon Bl/Carson St indicate results with full mitigation consisting of widening to provide right-turn lanes on all four approaches. The bottom rows indicate results with right-turn lanes on the northbound, southbound, and westbound approaches but not the eastbound approach.

** - Volumes exceed the limits of the Highway Capacity Manual stop-controlled software. Average delay cannot be calculated. Indicates overloaded (LOS F) conditions.

6. Hamilton Avenue & Del Amo Boulevard (unsignalized) –
   LOS F during the a.m. and p.m. peak hours

7. Figueroa Street & Del Amo Boulevard –
   LOS E during the a.m. and LOS F during the p.m. peak hour

8. Main Street & Del Amo Boulevard – LOS F during the p.m. peak hour

11. Hamilton Avenue & I-110 southbound ramps (unsignalized) –
    LOS E during a.m. and LOS F during the p.m. peak hour

12. Figueroa Street & I-110 northbound ramps –
    LOS E during a.m. and LOS F during the p.m. peak hour

15. Figueroa Street & Torrance Boulevard – LOS E during the p.m. peak hour

16. Main Street & Torrance Boulevard – LOS E during the p.m. peak hour

19. Avalon Boulevard & I-405 northbound ramps –
    LOS E during the a.m. and LOS F during the p.m. peak hour

22. Vermont Avenue & Carson Street –
    LOS E during the a.m. and LOS F during the p.m. peak hour

23. Figueroa Street & Carson Street – LOS E during the p.m. peak hour

24. Main Street & Carson Street – LOS E during the p.m. peak hour

25. Avalon Boulevard & Carson Street – LOS E during the p.m. peak hour

PROJECT IMPACTS

Table 8 shows that, using the criteria for determination of significant impacts; the proposed project would create significant traffic impacts at the following 12 intersection locations during the morning or afternoon peak hour or both:

5. Vermont Avenue & Del Amo Boulevard (p.m. peak hour)

6. Hamilton Avenue & Del Amo Boulevard (both peak hours)

7. Figueroa Street & Del Amo Boulevard (both peak hours)

8. Main Street & Del Amo Boulevard (p.m. peak hour)

11. Hamilton Avenue & I-110 southbound ramps (both peak hours)

12. Figueroa Street & I-110 northbound ramps (both peak hours)

15. Figueroa Street & Torrance Boulevard (p.m. peak hour)

16. Main Street & Torrance Boulevard (p.m. peak hour)

22. Vermont Avenue & Carson Street (both peak hours)

23. Figueroa Street & Carson Street (p.m. peak hour)

24. Main Street & Carson Street (p.m. peak hour)

25. Avalon Boulevard & Carson Street (p.m. peak hour)

V. INTERSECTION MITIGATION MEASURES

The traffic impact analysis presented in Chapter IV determined that the project would result in significant impacts at 12 of the study intersections under future plus project conditions. Potential mitigation measures to address these direct project impacts are discussed in this chapter.

PROJECT MITIGATION MEASURES

Project mitigation measures are suggested in this section for the intersections at which direct project impacts were identified in Chapter IV:

- Intersection 5 – Vermont Avenue and Del Amo Boulevard - The traffic at this intersection would be significantly impacted only during the p.m. peak hour. The addition of a second left-turn lane on the westbound Del Amo Boulevard approach to this intersection would reduce the projected V/C ratio from 0.998 and LOS E to V/C 0.865 and LOS D during the p.m. peak hour and mitigate the significant traffic impact at this location. The westbound approach lane configuration with the proposed improvement would be two left-turn lanes, a through lane, and a right-turn lane. The improvement is feasible within the existing right-of-way, but would require moving the median island southwards on the east leg of the intersection. Also, the westbound departure lanes would be restriped to shift northwards.

- Intersection 6 – Hamilton Avenue & Del Amo Boulevard - The traffic at this stop-controlled intersection would be significantly impacted during both the morning and afternoon peak hours. The following improvements are proposed:

  - Installation of a traffic signal
  - Addition of a northbound right-turn lane for a northbound configuration of a left-turn lane, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way and would require restriping the northbound approach to provide the right-turn lane.

  These improvements would result in a projected V/C of 0626 and LOS B in the a.m. peak hour and a V/C of 0.851 and LOS D during the p.m. peak hour and would mitigate the significant traffic impact at this intersection.

- Intersection 7 - Figueroa Street & Del Amo Boulevard - The following improvements are proposed to mitigate the significant traffic impact at this intersection:

    - Addition of a southbound right-turn lane for a southbound configuration of one left-turn lane, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way and would require restriping on the southbound approach.
    - Addition of a second westbound left-turn lane for a westbound configuration of two left-turn lanes, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way and would require moving the median island southwards and restriping to provide the additional left-turn lane.
    - Addition of an eastbound through lane and a right-turn lane for an eastbound configuration of one left-turn lane, three through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way and would require restriping the eastbound approach lanes. Also, the westbound departure lanes would be restriped to shift northwards.

    These improvements would reduce the projected morning peak hour V/C from 0.938 and LOS E to 0.720 and LOS C. The afternoon peak hour V/C would be reduced from 1.493 and LOS F to 0.962 and LOS E, reducing the incremental impact and mitigating the signification traffic impact at this intersection location.

- Intersection 8 – Main Street and Del Amo Boulevard - The following improvements are suggested at this intersection to mitigate the significant impact:

    - Addition of a second southbound left-turn lane and a right-turn lane for a southbound configuration of two left-turn lanes, two through lanes and a right-turn lane. This improvement would require dedication from the project site on the east side of the Main Street, north of Del Amo Boulevard, moving the median island, and restriping all of the lanes. This would also require removal of existing underutilized on-street parking along the west side of the north leg.
    - Addition of a second westbound left-turn lane for an approach configuration of two left-turn lanes, two through lanes and an optional through and a right-turn lane. This could be accomplished by moving the median island and restriping all of the lanes.
    - Addition of a second northbound left-turn lane and a right-turn lane for a northbound configuration of two left-turn lanes, two through lanes, and a right-turn lane. This improvement would require dedication from the project site on the east side of the Main Street south of Del Amo Boulevard, moving the median island, and restriping all of the lanes. This would also require removal of existing underutilized on-street parking along the east side of the south leg.
    - Addition of a second eastbound left-turn lane for a eastbound configuration of two left-turn lanes, two through lanes, and an optional through and a right-turn lane. This could be accomplished by moving the median island and restriping all of the lanes.

    These improvements would mitigate the afternoon peak hour significant impact by reducing the projected V/C from 1.068 and LOS F to a V/C of 0.876 and LOS D.

- Intersection 11 – Hamilton Avenue & I-110 Southbound Ramps - Traffic at this intersection would be significantly impacted during both the morning and afternoon peak

hours. In addition to signalizing the intersection, restriping the southbound approach for a lane configuration of one left-turn lane and a shared left-turn/through lane would mitigate the intersection with a projected V/C of 0.674 and LOS B in the a.m. peak hour and V/C of 0.827 and LOS D in the p.m. peak hour. The improvement is feasible within the existing right-of way and would require restriping on the southbound approach of the intersection.

- Intersection 12 – Figueroa Street & I-110 Northbound Ramps - The following improvements are proposed at this location to reduce the impact during the a.m. and p.m. peak hours.

    - Addition of a second southbound right-turn lane for a configuration of two through lanes and two right-turn lanes. This improvement could require a combination of partial widening on the west side of the north leg of the intersection along with modifying the median islands and restriping the lanes on both the north and south legs to shift them easterly.
    - Addition of an eastbound right-turn lane for an eastbound configuration of two left-turn lanes and a right-turn lane. This improvement would require restriping on the eastbound approach to provide for the addition of a right-turn lane.

  These improvements would fully mitigate the significant traffic impact during the morning peak hour by reducing the projected V/C from 0.932 and LOS E to a V/C of 0.821 and LOS D. During the afternoon peak hour, the improvements would partially mitigate the impact from a V/C of 1.247 and LOS F to a V/C of 0.976 and LOS E but would not completely mitigate the significant traffic impact at this intersection. The improvements are feasible within the existing right-of-way

- Intersection 15 – Figueroa Street & Torrance Boulevard - Traffic at this intersection would be significantly impacted during the evening peak hour. Adding a second southbound left-turn lane for a southbound lane configuration of two left-turn lanes, two through lanes, and a right-turn lane could mitigate this impact. This improvement would involve moving the median on the north leg, moving the median on the south leg to shadow the southbound left-turn lanes, and restriping the lanes. The improvement would also require removal of existing on-street parking along the east side of the north leg. The improvement would result in a projected V/C of 0.874 and LOS D in the evening peak hour, thus mitigating the significant impact. The improvement is feasible within the existing right-of-way.

- Intersection 16 – Main Street & Torrance Boulevard - Traffic at this intersection would be significantly impacted during the evening peak hour. A proposed improvement of restriping the eastbound approach to a lane configuration of one left-turn lane and a through/right-turn lane would result in a projected V/C of 0.900 and LOS D during the evening peak hour, thus mitigating the significant impact at this intersection. The improvement is feasible within the existing right-of-way.

- Intersection 22 – Vermont Avenue & Carson Street - Traffic at this intersection would be significantly impacted during both the morning and the evening peak hours. The following two improvements would mitigate the significant traffic impact at this intersection:

- Restriping the westbound right-turn lane to a shared through/right-turn lane for a configuration of one left-turn lane, two through lanes, and a shared through/right-turn lane. This would require the westbound departure lanes to be restriped to provide for a third westbound departure lane and could involve removal of the existing curb-side parking provided on the north side of the west leg to about 350 feet west of the intersection. This parking is already prohibited during peak periods.
- Restriping the eastbound right-turn lane to be a shared through/right-turn lane for a configuration of one left-turn lane, two through lanes, and a shared through/ right-turn lane.

These improvements would reduce the projected V/C from 0.910 and LOS E to 0.777 and LOS C for the morning peak hour and the afternoon peak hour V/C from 1.028 and LOS F to 0.865 and LOS D, mitigating the significant traffic impact at this intersection. The improvements are feasible within the existing right-of-way.

- Intersection 23 – Figueroa Street and Carson Street - Traffic at this intersection would be significantly impacted during the afternoon peak hour. The addition at the southbound approach of a right-turn lane for a southbound configuration of two left-turn lanes, two through lanes, and a right-turn lane is proposed at this location. This would reduce the projected afternoon peak hour V/C from 0.908 and LOS E to 0.861 and LOS D, mitigating the significant traffic impact at this location. This improvement is feasible within the existing right-of-way and would require moving the median island and restriping on the north leg of the intersection. The improvement would also require removal of existing on-street parking along the west side of the north leg.

- Intersection 24 – Main Street & Carson Street - Traffic at this intersection would be significantly impacted during the afternoon peak hour. The following improvements are proposed at this location that would mitigate the significant traffic impact at this location:

  - Addition of a second westbound left-turn lane for a westbound configuration of two left-turn lanes, two through lanes, and a shared through/right-turn lane. This would require removal of the median island and restriping on the east leg of the intersection.
  - Addition of a second eastbound left-turn lane for a eastbound configuration of two left-turn lanes, two through lanes, and a shared through/right-turn lane. This would require removal of the median island and restriping on the west leg of the intersection.

  These improvements would reduce the afternoon peak hour V/C from 0.926 and LOS E to a V/C of 0.842 and LOS D, mitigating the project impact at the intersection. The improvements are feasible within the existing right-of-way.

- Intersection 25 – Avalon Boulevard & Carson Street - Traffic conditions at this intersection would be significantly impacted during the afternoon peak hour. The following improvements would mitigate the impact at this location:

  - Addition of a southbound right-turn lane for a configuration of one left-turn lane, three through lanes, and a right-turn lane. This would require dedication on the west side of the north leg of the intersection and, depending upon the amount of dedication, possible reduction or removal of the median island.

- Addition of a westbound right-turn lane for a configuration of two left-turn lanes, two through lanes, and a right-turn lane. This would require dedication on the north side of the east leg of the intersection and, depending upon the amount of dedication, possible reduction or removal of the median island.
- Addition of a northbound right-turn lane for a configuration of one left-turn lane, three through lanes, and a right-turn lane. This would require dedication on the east side on the south leg of the intersection and, depending upon the amount of dedication, possible reduction or removal of the median island.
- Addition of an eastbound right-turn lane for a configuration of two left-turn lanes, two through lanes, and a right-turn lane. This would require dedication on the south side on the west leg of the intersection and, depending upon the amount of dedication, possible reduction or removal of the median island.

These improvements would reduce the projected afternoon peak hour V/C from 0.978 and LOS E to a V/C of 0.872 and LOS D, mitigating the significant impact at this location.

These improvements are not, however, feasible within the existing right-of-way and would require acquisition or dedication of right-of-way from adjacent parcels. The adjacent land uses include the Carson City Hall on the northeast corner of the intersection and commercial uses on the remaining three corners of the intersection. The necessary width can be obtained adjacent to City Hall on the north side of Carson Street through reduction of a portion of the existing landscaped area, allowing construction of the right-turn lane on the westbound Carson Street approach. Information from the City of Carson indicates that the parcels on the southeast and northwest corners may redevelop, at which point it may be possible to obtain the necessary right-of-way on the east side of Avalon Boulevard south of Carson Street and on the west side of Avalon Boulevard north of Carson Street, allowing construction of the right-turn lanes on the northbound and southbound Avalon Boulevard approaches. If the proposed right-turn lanes were provided on these three approaches but not on the eastbound Carson Street approach, it is estimated that the projected afternoon peak hour V/C would be reduced from 0.978 to 0.908. Although this would partially alleviate the project impact, it would not fully mitigate the impact to a level below significance.

Implementation of the mitigation measures would necessitate traffic signal modifications potentially including some combination of new signage, controller cabinets, poles, mast arms, detectors, and/or signal heads. In addition, the proposed improvements at intersection locations where widening or raised median modification is required could involve relocation of existing utility features, storm drains, signage, planters, streetlights, etc., as necessary for the construction of the above improvements.

Table 8 in Chapter IV presents the V/C ratios, levels of service, and incremental project impacts presuming that the proposed mitigation measures are implemented. Appendix A illustrates the change in intersection lane configurations and operations as a result of the proposed

improvements identified in the column “future plus project plus mitigations (year 2010) conditions.”

MITIGATION PHASING PROGRAM

The proposed project consists of a number of different land uses that may be developed in phases. Since the project may be implemented over a period of time, its related traffic growth and thus the intersection impacts identified earlier in this chapter would also occur over a period of time. Some impacts will be triggered at earlier stages of development and others will be triggered at later stages. Therefore, a mitigation phasing program was developed in order to provide flexibility to accommodate staged development over time while ensuring that the necessary improvements are implemented when and where needed to achieve mitigation as development occurs. The mitigation phasing program includes mitigation thresholds designed to ensure that the required mitigation measures are implemented as needed to mitigate traffic impacts as development proceeds on the project site, without requiring “front-loading” of the mitigations.

The magnitudes of the project impacts at the various impacted intersections were reviewed to determine the percentage of the projected project traffic increase at each location at which the project impacts would be triggered. Table 9 lists the impacted intersections sorted by the percentage of p.m. peak hour trip increase impacting the intersection, grouped by 10% increments.

The mitigation program is predicated on an assumption that the Avalon Boulevard/I-405 interchange improvements, including the extension of Lenardo Drive to Avalon Boulevard, realignment of the southbound I-405 ramps to intersect the Lenardo Drive extension rather than Avalon Boulevard directly, a new southbound on-ramp as the east leg of the Avalon Boulevard/Lenardo Drive intersection, and reconfiguration of the northbound off-ramp to permit left turns to southbound Avalon Boulevard, would be implemented concurrent with the project. If project implementation proceeds prior to implementation of the Avalon Boulevard/I-405 interchange improvements, the mixed-use residential/commercial components in Districts 1 and 3 of the proposed project only (to the commercial limits indicated for Districts 1 and 3 in the illustrative project plan) should be occupied prior to implementation of the Avalon Boulevard/I-405

TABLE 9
PROJECT TRIP LEVELS TRIGGERING SIGNIFICANT IMPACTS

Percent of P.M. Peak Hour Project Trips	Intersections Significantly Impacted
1% - 10%	**3 Intersections:** *6. Hamilton Avenue & Del Amo Boulevard* *7. Figueroa Street & Del Amo Boulevard* *12. Figueroa Street & I-110 NB Ramps*
11% - 20%	**3 Intersections:** 6. Hamilton Avenue & Del Amo Boulevard 7. Figueroa Street & Del Amo Boulevard 12. Figueroa Street & I-110 NB Ramps
21% - 30%	**5 Intersections:** 6. Hamilton Avenue & Del Amo Boulevard 7. Figueroa Street & Del Amo Boulevard *11. Hamilton Avenue & I-110 SB Ramps* 12. Figueroa Street & I-110 NB Ramps *25. Avalon Boulevard & Carson Street*
31% - 40%	**6 Intersections:** 6. Hamilton Avenue & Del Amo Boulevard 7. Figueroa Street & Del Amo Boulevard 11. Hamilton Avenue & I-110 SB Ramps 12. Figueroa Street & I-110 NB Ramps *22. Vermont Avenue & Carson Street* 25. Avalon Boulevard & Carson Street
41% - 50%	**6 Intersections:** 6. Hamilton Avenue & Del Amo Boulevard 7. Figueroa Street & Del Amo Boulevard 11. Hamilton Avenue & I-110 SB Ramps 12. Figueroa Street & I-110 NB Ramps 22. Vermont Avenue & Carson Street 25. Avalon Boulevard & Carson Street
51% - 60%	**8 Intersections:** *5. Vermont Avenue & Del Amo Boulevard* 6. Hamilton Avenue & Del Amo Boulevard 7. Figueroa Street & Del Amo Boulevard *8. Main Street & Del Amo Boulevard* 11. Hamilton Avenue & I-110 SB Ramps 12. Figueroa Street & I-110 NB Ramps 22. Vermont Avenue & Carson Street 25. Avalon Boulevard & Carson Street
61% - 70%	**9 Intersections:** 5. Vermont Avenue & Del Amo Boulevard 6. Hamilton Avenue & Del Amo Boulevard 7. Figueroa Street & Del Amo Boulevard 8. Main Street & Del Amo Boulevard 11. Hamilton Avenue & I-110 SB Ramps 12. Figueroa Street & I-110 NB Ramps 22. Vermont Avenue & Carson Street *24. Main Street & Carson Street* 25. Avalon Boulevard & Carson Street

TABLE 9
PROJECT TRIP LEVELS TRIGGERING SIGNIFICANT IMPACTS

Percent of P.M. Peak Hour Project Trips	Intersections Significantly Impacted
71% - 80%	**11 Intersections:** 5. Vermont Avenue & Del Amo Boulevard 6. Hamilton Avenue & Del Amo Boulevard 7. Figueroa Street & Del Amo Boulevard 8. Main Street & Del Amo Boulevard 11. Hamilton Avenue & I-110 SB Ramps 12. Figueroa Street & I-110 NB Ramps *15. Figueroa Street & Torrance Boulevard* 22. Vermont Avenue & Carson Street *23. Figueroa Street & Carson Street* 24. Main Street & Carson Street 25. Avalon Boulevard & Carson Street
81% - 90%	**12 Intersections:** 5. Vermont Avenue & Del Amo Boulevard 6. Hamilton Avenue & Del Amo Boulevard 7. Figueroa Street & Del Amo Boulevard 8. Main Street & Del Amo Boulevard 11. Hamilton Avenue & I-110 SB Ramps 12. Figueroa Street & I-110 NB Ramps 15. Figueroa Street & Torrance Boulevard *16. Main Street & Torrance Boulevard* 22. Vermont Avenue & Carson Street 23. Figueroa Street & Carson Street 24. Main Street & Carson Street 25. Avalon Boulevard & Carson Street
91% - 100%	**12 Intersections:** 5. Vermont Avenue & Del Amo Boulevard 6. Hamilton Avenue & Del Amo Boulevard 7. Figueroa Street & Del Amo Boulevard 8. Main Street & Del Amo Boulevard 11. Hamilton Avenue & I-110 SB Ramps 12. Figueroa Street & I-110 NB Ramps 15. Figueroa Street & Torrance Boulevard 16. Main Street & Torrance Boulevard 22. Vermont Avenue & Carson Street 23. Figueroa Street & Carson Street 24. Main Street & Carson Street 25. Avalon Boulevard & Carson Street

Italics indicates additional intersection triggered at given increment.

interchange improvements. It is estimated that these components alone would generate approximately 22% of the total project trip generation during the p.m. peak hour. Therefore, per Table 9, development of these components alone would trigger implementation of the project mitigation measures at the Hamilton Avenue/Del Amo Boulevard, Figueroa Street/Del Amo Boulevard, Hamilton Avenue/I-110 southbound ramps, and Figueroa Street/I-110 northbound ramps intersections.

VI. REGIONAL TRANSPORTATION SYSTEM IMPACT ANALYSIS

This section presents an analysis of potential project impacts on the regional transportation system, including impacts on the I-110, I-405, SR-91, and I-710 freeways and impacts on the existing transit system serving the study area. This analysis was conducted in accordance with the transportation impact analysis procedures outlined in the County CMP.

FREEWAY IMPACT ANALYSIS

The regional setting of the project site within the freeway network and the regional nature of certain of the project land uses suggested that the following freeway segments were selected for the freeway level of service analysis:

State Route 91

- Between I-110 Interchange and Avalon Boulevard
- Between Avalon Boulevard and Central Avenue
- Between Central Avenue and Wilmington Avenue
- Between Wilmington Avenue and Alameda Street/Santa Fe Avenue
- Between Alameda Street/Santa Fe Avenue and Long Beach Boulevard

Interstate Route 110

- Between Anaheim Street and Pacific Coast Highway
- Between Pacific Coast Highway and Sepulveda Boulevard
- Between Sepulveda Boulevard and Carson Street
- Between Carson Street and Torrance Boulevard
- Between Torrance Boulevard and I-405 Interchange
- Between I-405 Interchange and SR-91 Interchange
- Between SR-91 Interchange and Redondo Beach Boulevard
- Between Redondo Beach Boulevard and Rosecrans Avenue
- Between Rosecrans Avenue and El Segundo Boulevard

Interstate Route 405

- Between Long Beach Boulevard and I-710 Interchange
- Between I-710 Interchange and Alameda Street
- Between Alameda Street and Wilmington Avenue
- Between Wilmington Avenue and Carson Street
- Between Carson Street and Avalon Boulevard
- Between Avalon Boulevard and I-110 Interchange
- Between I-110 Interchange and Vermont Avenue
- Between Vermont Avenue and Normandie Avenue
- Between Normandie Avenue and Western Avenue
- Between Western Avenue and Crenshaw Boulevard
- Between Crenshaw Boulevard and Redondo Beach Boulevard
- Between Redondo Beach Boulevard and Hawthorne Boulevard

Interstate Route 710

- Between Pacific Coast Highway and Willow Street
- Between Willow Street and I-405 Interchange
- Between I-405 Interchange and Del Amo Boulevard
- Between Del Amo Boulevard and Long Beach Boulevard
- Between Long Beach Boulevard and SR-91 Interchange
- Between SR-91 Interchange and Alondra Boulevard

Freeway Level of Service Methodology

Freeway segment levels of service were determined based on V/C ratios and the definitions shown in Table 10. In accordance with values established in *Highway Capacity Manual*, an LOS E service capacity of approximately 2,200 vehicles per hour per lane (vphpl) was used for freeway mixed-flow lanes. For the purposes of this analysis, auxiliary and high-occupancy vehicle (HOV) lanes were analyzed as the equivalent of half of a mixed-flow lane.

TABLE 10
LEVEL OF SERVICE DEFINITIONS FOR FREEWAY MAINLINE SEGMENTS

Level of Service	Volume/Capacity Ratio
A	0.00 - 0.35
B	>0.35 - 0.54
C	>0.54 - 0.77
D	>0.77 - 0.93
E	>0.93 - 1.00
F(0)	>1.00 - 1.25
F(1)	>1.25 - 1.35
F(2)	>1.35 - 1.45
F(3)	>1.45

Source: *2004 Congestion Management Program for Los Angeles County* , MTA, 2004.

Existing Conditions

Existing freeway mainline traffic volumes were obtained from *2004 Traffic Volumes on California State Highways* (California Department of Transportation [Caltrans]). Peak hour volumes by direction were derived by applying directional and peak hour factors derived from this manual, and freeway LOS was analyzed using the V/C methodology described above.

Table 11 presents a summary of the analysis for the existing conditions. The analysis indicates the following general conditions for the freeway segments analyzed:

- State Route 91 - This freeway is operating at LOS E or F during the a.m. peak hour in the westbound direction from Central Avenue in the west to Alameda Street/Santa Fe Avenue in the east.

- Interstate Route 110 - This freeway is operating at LOS E or F during the a.m. peak hour in the northbound direction from Carson Street in the south to State Route 91 in the north and during the p.m. peak hour in the southbound direction.

- Interstate Route 405 - This freeway is operating at LOS E or F during the a.m. peak hour in the northbound direction from Long Beach Boulevard in the south to I-110 Interchange in the north. The southbound direction is operating at LOS E or F during the p.m. peak hour from the I-710 Interchange in the south to Avalon Boulevard in the north. The northbound direction of the freeway is operating at LOS E or F from Normandie Avenue in the south to Redondo Beach Boulevard in the north during both the a.m. and p.m. peak hours.

- Interstate Route 710 - This freeway is operating at LOS E or F during the a.m. and p.m. peak hours in the southbound direction from Pacific Coast Highway in the south to the I-405 Interchange in the north.

Cumulative (2010) Base Conditions

Projected year 2010 cumulative base peak hour traffic volumes were developed by adjusting the existing freeway mainline traffic volumes from *2004 Traffic Volumes on California State Highways* using 1% per year as the growth factor for the freeways in the region.

Projected V/C ratios and levels of service with these volumes are shown in Table 11. The cumulative base (year 2010) analysis indicates the following conditions at which the analyzed freeway segment would operate:

TABLE 11
FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS

FREEWAY	SEGMENT	AM/PM	LANES & CAPACITY				EXISTING CONDITIONS (YEAR 2005)						CUMULATIVE CONDITIONS (YEAR 2010)						PROJECT ONLY TRAFFIC		CUMULATIVE PLUS PROJECT (2035)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound			North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
SR-91	Between I-110 Interchange & Avalon Boulevard	**A.M.**	5	6.5	11,000	14,300	10,045	0.91	D	5,806	0.41	B	10,542	0.96	E	6,094	0.43	B	32	81	10,574	0.96	E	6,175	0.43	B	0.00	No	0.00	No
		P.M.	5	6.5	11,000	14,300	6,024	0.55	C	8,637	0.60	C	6,323	0.57	C	9,064	0.63	C	147	357	6,470	0.59	C	9,421	0.66	C	0.02	No	0.03	No
SR-91	Between Avalon Boulevard & Central Avenue	**A.M.**	5	5	11,000	11,000	10,150	0.92	D	5,867	0.53	B	10,653	0.97	E	6,158	0.56	C	120	296	10,773	0.98	E	6,454	0.59	C	0.01	No	0.03	No
		P.M.	5	5	11,000	11,000	6,088	0.55	C	8,728	0.79	D	6,389	0.58	C	9,160	0.83	D	119	283	6,508	0.59	C	9,443	0.86	D	0.01	No	0.03	No
SR-91	Between Central Avenue & Wilmington Avenue	**A.M.**	5	5	11,000	11,000	10,309	0.94	E	5,959	0.54	B	10,819	0.98	E	6,254	0.57	C	89	220	10,908	0.99	E	6,474	0.59	C	0.01	No	0.02	No
		P.M.	5	5	11,000	11,000	6,183	0.56	C	8,864	0.81	D	6,489	0.59	C	9,303	0.85	D	90	208	6,579	0.60	C	9,511	0.86	D	0.01	No	0.01	No
SR-91	Between Wilmington Avenue & Alameda Street. Santa Fe Avenue	**A.M.**	5	5	11,000	11,000	10,679	0.97	E	6,173	0.56	C	11,208	1.02	F(0)	6,478	0.59	C	65	165	11,273	1.02	F(0)	6,643	0.60	C	0.00	No	0.01	No
		P.M.	5	5	11,000	11,000	6,405	0.58	C	9,183	0.83	D	6,722	0.61	C	9,637	0.88	D	71	155	6,793	0.62	C	9,792	0.89	D	0.01	No	0.01	No
SR-91 [3]	Between Alameda Street/Santa Fe Avenue & Long Beach Boulevard	**A.M.**	5	4.5	11,000	9,900	11,102	1.01	F(0)	6,417	0.65	C	11,652	1.06	F(0)	6,735	0.68	C	46	115	11,698	1.06	F(0)	6,850	0.69	C	0.00	No	0.01	No
		P.M.	5	4.5	11,000	9,900	6,658	0.61	C	9,546	0.96	E	6,988	0.64	C	10,019	1.01	F(0)	50	107	7,038	0.64	C	10,126	1.02	F(0)	0.00	No	0.01	No
I-110	Between Anaheim Street & Pacific Coast Highway	**A.M.**	4.5	4.5	9,900	9,900	5,693	0.58	C	3,888	0.39	B	5,975	0.60	C	4,080	0.41	B	27	76	6,002	0.61	C	4,156	0.42	B	0.01	No	0.01	No
		P.M.	4.5	4.5	9,900	9,900	3,785	0.38	B	5,344	0.54	B	3,972	0.40	B	5,608	0.57	C	32	71	4,004	0.40	B	5,679	0.57	C	0.00	No	0.00	No
I-110	Between Pacific Coast Highway & Sepulveda Boulevard	**A.M.**	4.5	4	9,900	8,800	7,523	0.76	C	5,138	0.58	C	7,896	0.80	D	5,392	0.61	C	39	102	7,935	0.80	D	5,494	0.62	C	0.00	No	0.01	No
		P.M.	4.5	4	9,900	8,800	5,002	0.51	B	7,062	0.80	D	5,249	0.53	B	7,412	0.84	D	41	97	5,290	0.53	B	7,509	0.85	D	0.00	No	0.01	No
I-110	Between Sepulveda Boulevard & Carson Street	**A.M.**	4	4	8,800	8,800	8,197	0.93	D	6,004	0.68	C	8,602	0.98	E	6,301	0.72	C	59	157	8,661	0.98	E	6,458	0.73	C	0.00	No	0.01	No
		P.M.	4	4	8,800	8,800	5,863	0.67	C	7,684	0.87	D	6,153	0.70	C	8,064	0.92	D	66	147	6,219	0.71	C	8,211	0.93	D	0.01	No	0.01	No
I-110	Between Carson Street & Torrance Boulevard	**A.M.**	4	4	8,800	8,800	9,526	1.08	F(0)	6,978	0.79	D	9,997	1.14	F(0)	7,323	0.83	D	96	254	10,093	1.15	F(0)	7,577	0.86	D	0.01	No	0.03	No
		P.M.	4	4	8,800	8,800	6,814	0.77	C	8,930	1.01	F(0)	7,151	0.81	D	9,372	1.07	F(0)	102	241	7,253	0.82	D	9,613	1.09	F(0)	0.01	No	0.02	***YES***
I-110	Between Torrance Boulevard & I-405 Interchange	**A.M.**	3.5	4	7,700	8,800	10,190	1.32	F(1)	7,464	0.85	D	10,695	1.39	F(2)	7,834	0.89	D	96	254	10,791	1.40	F(2)	8,088	0.92	D	0.01	No	0.03	No
		P.M.	3.5	4	7,700	8,800	7,289	0.95	E	9,553	1.09	F(0)	7,650	0.99	E	10,026	1.14	F(0)	102	241	7,752	1.01	F(0)	10,267	1.17	F(0)	0.02	***YES***	0.03	***YES***
I-110	Between I-405 Interchange & SR-91 Interchange	**A.M.**	5.5	4	12,100	8,800	12,051	1.00	E	8,828	1.00	E	12,648	1.05	F(0)	9,265	1.05	F(0)	236	527	12,884	1.06	F(0)	9,792	1.11	F(0)	0.01	No	0.06	***YES***
		P.M.	5.5	4	12,100	8,800	8,620	0.71	C	11,297	1.28	F(1)	9,047	0.75	C	11,856	1.35	F(1)	225	559	9,272	0.77	C	12,415	1.41	F(2)	0.02	No	0.06	***YES***
I-110	Between SR-91 Interchange & Redondo Beach Boulevard	**A.M.**	5	5.5	11,000	12,100	12,037	1.09	F(0)	8,817	0.73	C	12,561	1.14	F(0)	9,201	0.76	C	55	93	12,616	1.15	F(0)	9,294	0.77	C	0.01	No	0.01	No
		P.M.	5	5.5	11,000	12,100	8,942	0.81	D	11,719	0.97	E	9,332	0.85	D	12,230	1.01	F(0)	42	107	9,374	0.85	D	12,337	1.02	F(0)	0.00	No	0.01	No
I-110	Los Angeles - Redondo Beach Boulevard & Rosecrans Avenue	**A.M.**	5	5.5	11,000	12,100	9,377	0.85	D	10,518	0.87	D	9,841	0.89	D	11,039	0.91	D	39	64	9,880	0.90	D	11,103	0.92	D	0.01	No	0.01	No
		P.M.	5	5.5	11,000	12,100	8,620	0.78	D	10,014	0.83	D	9,047	0.82	D	10,509	0.87	D	28	73	9,075	0.83	D	10,582	0.87	D	0.01	No	0.00	No
I-110	Between Rosecrans Avenue & El Segundo Boulevard	**A.M.**	5	5.5	11,000	12,100	9,644	0.88	D	10,819	0.89	D	10,122	0.92	D	11,355	0.94	E	25	35	10,147	0.92	D	11,390	0.94	E	0.00	No	0.00	No
		P.M.	5	5.5	11,000	12,100	8,866	0.81	D	10,300	0.85	D	9,305	0.85	D	10,810	0.89	D	16	43	9,321	0.85	D	10,853	0.90	D	0.00	No	0.01	No
I-405	Between Long Beach Boulevard & I-710 Interchange	**A.M.**	5	5.5	11,000	12,100	12,229	1.11	F(0)	9,973	0.82	D	12,834	1.17	F(0)	10,467	0.87	D	50	127	12,884	1.17	F(0)	10,594	0.88	D	0.00	No	0.01	No
		P.M.	5	5.5	11,000	12,100	10,165	0.92	D	11,275	0.93	D	10,668	0.97	E	11,834	0.98	E	48	122	10,716	0.97	E	11,956	0.99	E	0.00	No	0.01	No
I-405 [3]	Between I-710 Interchange & Alameda Street	**A.M.**	5.5	5	12,100	11,000	12,271	1.01	F(0)	10,008	0.91	D	12,879	1.06	F(0)	10,503	0.95	E	70	187	12,949	1.07	F(0)	10,690	0.97	E	0.01	No	0.02	No
		P.M.	5.5	5	12,100	11,000	10,200	0.84	D	11,314	1.03	F(0)	10,705	0.88	D	11,874	1.08	F(0)	94	167	10,799	0.89	D	12,041	1.09	F(0)	0.01	No	0.01	No
I-405	Between Alameda Street & Wilmington Avenue	**A.M.**	5.5	5	12,100	11,000	11,950	0.99	E	10,029	0.91	D	12,528	1.04	F(0)	10,514	0.96	E	124	321	12,652	1.05	F(0)	10,835	0.99	E	0.01	No	0.03	No
		P.M.	5.5	5	12,100	11,000	9,418	0.78	D	11,299	1.03	F(0)	9,873	0.82	D	11,845	1.08	F(0)	137	302	10,010	0.83	D	12,147	1.10	F(0)	0.01	No	0.02	***YES***
I-405	Between Wilmington Avenue & Carson Street	**A.M.**	4.5	4.5	9,900	9,900	11,656	1.18	F(0)	9,782	0.99	E	12,184	1.23	F(0)	10,226	1.03	F(0)	154	406	12,338	1.25	F(0)	10,632	1.07	F(0)	0.02	***YES***	0.04	***YES***
		P.M.	4.5	4.5	9,900	9,900	9,185	0.93	D	11,020	1.11	F(0)	9,602	0.97	E	11,520	1.16	F(0)	164	387	9,766	0.99	E	11,907	1.20	F(0)	0.02	No	0.04	***YES***
I-405	Between Carson Street & Avalon Boulevard	**A.M.**	4.5	4.5	9,900	9,900	10,678	1.08	F(0)	8,961	0.91	D	11,196	1.13	F(0)	9,396	0.95	E	191	499	11,387	1.15	F(0)	9,895	1.00	E	0.02	***YES***	0.05	No
		P.M.	4.5	4.5	9,900	9,900	8,415	0.85	D	10,095	1.02	F(0)	8,823	0.89	D	10,585	1.07	F(0)	195	478	9,018	0.91	D	11,063	1.12	F(0)	0.02	No	0.05	***YES***
I-405 [3]	Between Avalon Boulevard & I-110 Interchange	**A.M.**	4.5	5.5	9,900	12,100	11,255	1.14	F(0)	9,445	0.78	D	11,812	1.19	F(0)	9,913	0.82	D	191	499	12,003	1.21	F(0)	10,412	0.86	D	0.02	***YES***	0.04	No
		P.M.	4.5	5.5	9,900	12,100	8,869	0.90	D	10,641	0.88	D	9,308	0.94	E	11,168	0.92	D	195	478	9,503	0.96	E	11,646	0.96	E	0.02	No	0.04	No
I-405	Between I-110 Interchange & Vermont Avenue	**A.M.**	5	4.5	11,000	9,900	9,975	0.91	D	7,149	0.72	C	10,451	0.95	E	7,491	0.76	C	164	382	10,615	0.97	E	7,873	0.80	D	0.02	No	0.04	No
		P.M.	5	4.5	11,000	9,900	9,806	0.89	D	7,733	0.78	D	10,274	0.93	D	8,102	0.82	D	160	402	10,434	0.95	E	8,504	0.86	D	0.02	No	0.04	No

TABLE 11
FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS

FREEWAY	SEGMENT	AM/PM	LANES & CAPACITY				EXISTING CONDITIONS (YEAR 2005)						CUMULATIVE CONDITIONS (YEAR 2010)						PROJECT ONLY TRAFFIC		CUMULATIVE PLUS PROJECT (2035)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound			North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-405	Between Vermont Avenue & Normandie Avenue	**A.M.**	6	4.5	13,200	9,900	9,906	0.75	C	7,100	0.72	C	10,396	0.79	D	7,451	0.75	C	141	310	10,537	0.80	D	7,761	0.78	D	0.01	No	0.03	No
		P.M.	6	4.5	13,200	9,900	9,738	0.74	C	7,679	0.78	D	9,642	0.73	C	7,603	0.77	C	130	330	9,772	0.74	C	7,933	0.80	D	0.01	No	0.03	No
I-405	Between Normandie Avenue & Western Avenue	**A.M.**	4.5	4.5	9,900	9,900	9,903	1.00	E	7,098	0.72	C	10,381	1.05	F(0)	7,440	0.75	C	112	236	10,493	1.06	F(0)	7,676	0.78	D	0.01	No	0.03	No
		P.M.	4.5	4.5	9,900	9,900	9,736	0.98	E	7,677	0.78	D	9,642	0.97	E	7,603	0.77	C	99	254	9,741	0.98	E	7,857	0.79	D	0.01	No	0.02	No
I-405	Between Western Avenue & Crenshaw Boulevard	**A.M.**	4.5	4.5	9,900	9,900	9,648	0.97	E	6,915	0.70	C	10,109	1.02	F(0)	7,246	0.73	C	88	180	10,197	1.03	F(0)	7,426	0.75	C	0.01	No	0.02	No
		P.M.	4.5	4.5	9,900	9,900	9,484	0.96	E	7,479	0.76	C	9,393	0.95	E	7,408	0.75	C	73	195	9,466	0.96	E	7,603	0.77	C	0.01	No	0.02	No
I-405	Between Crenshaw Boulevard & Redondo Beach Boulevard	**A.M.**	4.5	4.5	9,900	9,900	9,320	0.94	E	6,680	0.67	C	9,769	0.99	E	7,002	0.71	C	63	124	9,832	0.99	E	7,126	0.72	C	0.00	No	0.01	No
		P.M.	4.5	4.5	9,900	9,900	9,162	0.93	D	7,225	0.73	C	9,074	0.92	D	7,156	0.72	C	48	137	9,122	0.92	D	7,293	0.74	C	0.00	No	0.02	No
I-405	Between Redondo Beach Boulevard & Hawthorne Boulevard	**A.M.**	4.5	4.5	9,900	9,900	9,104	0.92	D	6,525	0.66	C	9,555	0.97	E	6,848	0.69	C	46	94	9,601	0.97	E	6,942	0.70	C	0.00	No	0.01	No
		P.M.	4.5	4.5	9,900	9,900	8,950	0.90	D	7,058	0.71	C	8,862	0.90	D	6,988	0.71	C	35	102	8,897	0.90	D	7,090	0.72	C	0.00	No	0.01	No
I-710	Between Pacific Coast Highway & Willow Street	**A.M.**	3	3	6,600	6,600	5,497	0.83	D	6,448	0.98	E	5,769	0.87	D	6,767	1.03	F(0)	13	30	5,782	0.88	D	6,797	1.03	F(0)	0.01	No	0.00	No
		P.M.	3	3	6,600	6,600	5,355	0.81	D	6,281	0.95	E	5,302	0.80	D	6,219	0.94	E	12	28	5,314	0.81	D	6,247	0.95	E	0.01	No	0.01	No
I-710 [3]	Between Willow Street & I-405 Interchange	**A.M.**	3.5	3	7,700	6,600	5,892	0.77	C	6,911	1.05	F(0)	6,184	0.80	D	7,254	1.10	F(0)	19	50	6,203	0.81	D	7,304	1.11	F(0)	0.01	No	0.01	No
		P.M.	3.5	3	7,700	6,600	5,740	0.75	C	6,733	1.02	F(0)	5,683	0.74	C	6,666	1.01	F(0)	20	49	5,703	0.74	C	6,715	1.02	F(0)	0.00	No	0.01	No
I-710	Between I-405 Interchange & Del Amo Boulevard	**A.M.**	4.5	4	9,900	8,800	6,395	0.65	C	7,501	0.85	D	6,712	0.68	C	7,873	0.89	D	31	76	6,743	0.68	C	7,949	0.90	D	0.00	No	0.01	No
		P.M.	4.5	4	9,900	8,800	6,230	0.63	C	7,307	0.83	D	6,168	0.62	C	7,235	0.82	D	28	75	6,196	0.63	C	7,310	0.83	D	0.01	No	0.01	No
I-710 [3]	Between Del Amo Boulevard & Long Beach Boulevard	**A.M.**	5	4	11,000	8,800	6,431	0.58	C	7,544	0.86	D	6,750	0.61	C	7,917	0.90	D	0	0	6,750	0.61	C	7,917	0.90	D	0.00	No	0.00	No
		P.M.	5	4	11,000	8,800	6,265	0.57	C	7,349	0.84	D	6,203	0.56	C	7,276	0.83	D	0	0	6,203	0.56	C	7,276	0.83	D	0.00	No	0.00	No
I-710	Between Long Beach Boulevard & SR-91 Interchange	**A.M.**	5	4.5	11,000	9,900	6,791	0.62	C	7,965	0.80	D	7,127	0.65	C	8,360	0.84	D	0	0	7,127	0.65	C	8,360	0.84	D	0.00	No	0.00	No
		P.M.	5	4.5	11,000	9,900	6,615	0.60	C	7,759	0.78	D	6,550	0.60	C	7,682	0.78	D	0	0	6,550	0.60	C	7,682	0.78	D	0.00	No	0.00	No
I-710	Between SR-91 Interchange & Alondra Boulevard	**A.M.**	5.5	5.5	12,100	12,100	7,832	0.65	C	9,187	0.76	C	8,220	0.68	C	9,642	0.80	D	28	75	8,248	0.68	C	9,717	0.80	D	0.00	No	0.00	No
		P.M.	5.5	5.5	12,100	12,100	7,630	0.63	C	8,949	0.74	C	7,554	0.62	C	8,861	0.73	C	31	76	7,585	0.63	C	8,937	0.74	C	0.01	No	0.01	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of 1% per year was applied to grow the data available from Caltrans 2004 Traffic Volumes on California State Highways for Existing (Year 2005) and Future (Year 2010) projections.
[3] CMP freeway monitoring stations.

- State Route 91 - All of this freeway's analyzed segments would operate at LOS E or F in the a.m. peak hour in the westbound direction.

- Interstate Route 110 - The freeway segment from Sepulveda Boulevard in the south to Redondo Beach Boulevard in the north would operate at LOS E or F during the a.m. peak hour in the northbound direction. The segment from Carson Street in the south to Redondo Beach Boulevard in the north would operate at LOS E or F during the p.m. peak hour in the southbound direction.

- Interstate Route 405 - Almost all of the analyzed freeway segments would operate at LOS E or F during the a.m. and p.m. peak hours in the northbound direction. In the southbound direction, the freeway segment from Long Beach Boulevard in the south to Avalon Boulevard in the north would operate at LOS E or F during the a.m., p.m. or both peak hours.

- Interstate Route 710 – The freeway segment from Pacific Coast Highway in the south to I-405 Interchange in the north would operate at LOS E or F during both the a.m. and p.m. peak hours in the southbound direction.

Cumulative (2010) plus Project Analysis

Cumulative plus project freeway volumes were developed by adding trips from the proposed Carson Marketplace project to the cumulative base volumes.

Freeway Impact Analysis

The CMP traffic impact analysis guidelines indicate that a project impact on the regional transportation system is considered to be significant when the following threshold is exceeded:

- The proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C ≥0.02), causing LOS F (V/C > 1.00)

- If the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C ≥ 0.02)

Table 11 summarizes the significant impact analysis for the analyzed freeway segments. Following is a list of the freeway segments where the addition of project-generated traffic is projected to create a significant impact based on the CMP impact criteria:

Interstate Route 110

- Between Carson Street and Torrance Boulevard during the p.m. peak hour in the southbound direction
- Between Torrance Boulevard and the I-405 Interchange during the p.m. peak hour for northbound and southbound directions
- Between the I-405 Interchange and the SR-91 Interchange during both a.m. and p.m. peak hours in the southbound direction

Interstate Route 405

- Between Alameda Street and Wilmington Avenue during the p.m. peak hour in the southbound direction
- Between Wilmington Avenue and Carson Street during the a.m. hour in the northbound direction and during both a.m. and p.m. peak hours in the southbound direction
- Between Carson Street and Avalon Boulevard during the a.m. peak hour in the northbound direction and during the p.m. peak hour in the southbound direction
- Between Avalon Boulevard and the I-110 Interchange during the a.m. peak hour in the northbound direction

Implementation of additional freeway capacity to address significant cumulative conditions is beyond the ability of any individual project to implement and, as such, the project's incremental impacts on poor cumulative conditions on these segments would be considered significant and unavoidable.

REGIONAL TRANSIT IMPACT ANALYSIS

Potential increases in transit person trips generated by the proposed project were estimated as follows. Section D.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the projected number of vehicle trips. This methodology assumes an average vehicle ridership (AVR) factor of 1.4 in order to estimate the number of person trips to and from the project and then provides guidance regarding the

percent of person trips assigned to public transit depending on the type of use (commercial/residential) and the proximity to transit service. The nearest designated CMP transit corridor is the Harbor Freeway Corridor. Since the project site is located outside the one-quarter mile boundary from these services, the CMP guidelines estimate that approximately 3.5% of the project person trips may use public transit to travel to and from the site.

As discussed in Chapter III and shown in Table 7, the proposed project is expected to generate approximately 2,508 vehicle trips during the morning peak hour and 5,772 vehicle trips during the afternoon peak hour. Applying the AVR of 1.4 to the number of vehicle trips results in an estimated 3,511 and 8,081 person trips in the morning and the afternoon peak hours, respectively. Finally, assuming the 3.5% transit mode split suggested in the CMP, this results in approximately 123 new transit person trips in the morning and 282 new transit person trips in the afternoon peak hours that the project would add to the transit lines providing service in the vicinity of the project site.

As shown in Chapter II, there are 11 bus lines that provide service in the vicinity of the project. Based on analysis of the existing operating schedules for these bus lines, it is estimated that there are a total of 23 buses in the a.m. peak hour and 24 buses in the p.m. peak hour serving the vicinity of the project. This results in the conclusion that the project could add, on an average, approximately five person trips per bus in the a.m. peak hour and 12 person trips per bus in the p.m. peak hour. Twelve persons per bus represents the equivalent of slightly more than 25% of the capacity of a typical 45-passenger bus. At this level of absorption of transit system capacity, it is concluded that project-related impacts to the regional transit system could be significant.

Mitigation of this impact could require some combination of the following:

- Extension of existing public bus routes into the project site
- Provision of additional buses to increase frequency and capacity on key routes serving the project site
- Provision of transit stops, potentially including benches and shelters, in and adjacent to the project site

VII. SITE ACCESS ANALYSIS

PROJECT ACCESS PLAN

The project component north of Del Amo Boulevard would consist of 250 for-sale condominiums and 50,000 sf of neighborhood commercial land uses. The following access locations are proposed for these land uses:

- The major access and egress location would be provided at the intersection of Del Amo Boulevard and Stamps Drive, where the north leg of the intersection would provide for entry and exit of vehicular traffic from the northern component of the project. This intersection would be signalized as part of the project. It is suggested that the project provide two inbound (northbound) and three (southbound) lanes on the extension of Stamps Drive north of Del Amo Boulevard, for a southbound approach lane configuration of one left-turn lane, one shared through/right-turn lane, and one right-turn lane. Improvements should be made on Del Amo Boulevard at this location, which would result in a westbound lane configuration of two left-turn lanes, two through lanes, and a right-turn lane. The eastbound lane configuration on Del Amo Boulevard should be improved to include two left-turn lanes, two through lanes, and two right-turn lanes. The northbound approach is the egress from the south component of the project site, with the proposed lane configuration of two left-turn lanes, a through lane, and two right-turn lanes.

- A second access would be provided on westbound Del Amo Boulevard between the intersections of Del Amo Boulevard & Stamps Drive in the east and Del Amo Boulevard & Main Street in the west. This access would mostly facilitate the residential access to the project north of Del Amo Boulevard and would provide right-turn-in/right-turn-out movements only.

The project component south of Del Amo Boulevard contains the proposed regional commercial, hotel, entertainment/commercial recreational land uses and the majority of the residential and neighborhood commercial uses. The following describes the three access and egress points for this project component:

- One of the two major access locations would be at Del Amo Boulevard and Stamps Drive where the south leg of Stamps Drive would provide vehicular access to and from the project component south of the Del Amo Boulevard. Given the high levels of turning volumes projected for this location, it is suggested that the project provide two inbound (southbound) and five outbound (northbound) lanes on Stamps Drive south of Del Amo Boulevard, for a northbound approach lane configuration of two left-turn lanes, one

through lane, and two right-turn lanes. Del Amo Boulevard should be improved to provide two left-turn lanes, two through lanes, and one right-turn lane on the westbound approach and two left-turn lanes, two through lanes, and two right-turn lanes on the eastbound approach. This intersection would be signalized as part of the project. The southbound approach at this intersection would serve as the exit from the north component of the project site and is proposed to have a left-turn lane, a shared through/right-turn lane, and a right-turn lane. This intersection is projected to operate at V/C 0.773 and LOS C in the morning peak hour and V/C 0.893 and LOS D in the afternoon peak hour.

- The second major access location for the project component south of Del Amo Boulevard would be provided at the new intersection of I-405 southbound on/off-ramps and Lenardo Drive. This intersection would be part of the separate improvements proposed for the southbound on/off-ramps and northbound off-ramps at the Avalon Boulevard Interchange with the I-405. Following is a brief description of the improvements proposed:

    - Lenardo Drive would be extended to intersect with Avalon Boulevard where a new I-405 southbound on-ramp is proposed as an east leg to the intersection. Following is the lane configuration proposed at this intersection:

        - Southbound lane configuration of a through lane, a shared through/right-turn lane, and a free flow right-turn lane
        - Northbound lane configuration of two through lanes and a right-turn lane for traffic onto the new I-405 southbound on-ramp
        - Eastbound lane configuration of one exclusive left-turn lane, a shared left-turn/through lane, a shared through/right-turn lane, and a right-turn lane

      This intersection is projected to operate at V/C 0.847 and LOS D in the a.m. peak hour. During the p.m. peak hour the intersection is projected to operate at V/C 0.897 and LOS D.

    - The existing I-405 southbound on/off-ramps are proposed to intersect Lenardo Drive as a north leg to this proposed new 'T' intersection. Following is the lane configuration proposed at this intersection:

        - Southbound lane configuration of a left-turn lane, a shared left/right-turn lane, and a right turn lane
        - Westbound lane configuration of a through lane, a shared through/right-turn lane, and a right-turn lane
        - Eastbound lane configuration of two left-turn lanes and two through lanes

      This intersection is projected operate at V/C 0.746 and LOS C in the a.m. peak hour. During the p.m. peak hour the intersection is projected to operate at V/C 0.843 and LOS D.

    - A part of the proposed improvements at the Avalon Boulevard interchange with I-405 is to provide left-turn capability from the I-405 northbound off-ramp to

southbound Avalon Boulevard. Following is the lane configuration proposed at this intersection:

- Southbound lane configuration of two through lanes, and a free-flow right-turn lane onto the I-405 northbound on-ramp
- Westbound lane configuration of two left-turn lanes and a free-flow right-turn lane
- Northbound lane configuration of two left-turn lanes and two through lanes

This intersection is projected to operate at V/C 0.988 and LOS E in the a.m. peak hour. During the p.m. peak hour the intersection is projected to operate at V/C 1.092 and LOS F. This represents an improvement over the baseline conditions projected without the project and without the Avalon Boulevard/I-405 interchange improvements.

- A third signalized access location for the project site would be provided from Lenardo Drive at Main Street. The proposed lane configuration at this intersection is as follows:

  - Southbound lane configuration of two through lanes and a left-turn lane
  - Westbound lane configuration of a left-turn lane and a right-turn lane
  - Northbound lane configuration of two through lanes and a right-turn lane

  This intersection is projected to operate at V/C 0.467 and LOS A in the a.m. peak hour. During the p.m. peak hour the intersection is projected to operate at V/C 0.601 and LOS B.

Appendix A illustrates the proposed lane configurations described above at the site access locations. These configurations were assumed to be in place as part of the cumulative plus project level of service analysis presented in Table 8 in Chapter IV.

SITE ACCESS IMPACT ANALYSIS

Project access impacts would be considered significant under either of the following conditions:

- A new site access intersection is projected to operate at LOS E or F during one or both of the peak hours; or

- An existing site access intersection is projected to operate at LOS E or F during one or both of the peak hours and the increase in the V/C ratio at an existing site access intersection that can be attributed to the Project is equal to or exceeds 0.020.

As indicated in Table 8, the main site access points at the intersections of Stamps Drive at Del Amo Boulevard, Lenardo Drive at Main Street, Lenardo Drive at the I-405 southbound ramps, and Lenardo Drive at Avalon Boulevard are all projected to operate at LOS D or better under year 2010 future conditions with the project. Therefore, site access impacts would not be considered significant.

VIII. PARKING ANALYSIS

The parking analysis for the proposed project was conducted in two ways. First, potential project parking requirements were calculated according to the City of Carson "General Development Standards." Second, a demand analysis was conducted to estimate peak parking demands for the proposed project, including application of shared parking concepts.

PARKING IMPACT CRITERIA

A project would normally considered to have a significant impact on parking if the project provides less parking than needed as determined through an analysis of demand from the project. Therefore, under this guideline, the proposed project is considered to have a significant parking impact if the number of spaces required to accommodate project activities exceeds the number of parking spaces provided.

PARKING REQUIRED PER GENERAL DEVELOPMENT STANDARDS

The City of Carson's "General Development Standards" require the following parking supply by land use:

- Regional Commercial uses:
  - Specialized stores for apparel, household supplies, business supplies, big box, promotional retail, service retail, restaurant, drive-through, community center – five spaces per 1,000 square feet of gross leasable area
  - Theaters – one space per every three seats
  - Hotels – 1.5 spaces per room

- Mixed-Use uses:
  - Apartments, townhomes, condominiums (one bedroom) – 1.5 spaces per unit plus guest parking at one space per four units
  - Apartments, townhomes, condominiums (two bedrooms or more) – two spaces per unit plus guest parking at one space per four units
  - Vertically or commercially integrated commercial uses – five spaces per 1,000 sf of gross leasable area

- Uses permitted in Regional Commercial – see Regional Commercial requirements above

Calculation of the project parking requirement per the "General Development Standards" is shown in Table 12. As indicated in the table, it is estimated that application of the "General Development Standards" requirements would require the project to provide approximately 13,614 parking spaces.

PARKING DEMAND ANALYSIS

A parking demand analysis was conducted for the proposed project to determine the amount of parking that would be needed that would adequately serve the multiple land uses proposed as part of the Carson Marketplace development. The parking analysis was conducted using the Urban Land Institute (ULI) Shared Parking Model. Table 13 presents a summary of the analysis.

ULI's *Shared Parking* describes shared parking as follows:

> "Shared parking is defined as parking space that can be used to serve two or more individual land uses without conflict or encroachment. The opportunity to implement shared parking is the result of two conditions:
>
> - Variations in the peak accumulation of parked vehicles as the result of different activity patterns of adjacent or nearby land uses (by hour, by day, by season);
>
> - Relationships among land use activities that result in people's attraction to two or more land uses on a single auto trip to a given area or development."

Most zoning codes provide peak parking ratios for individual land uses. While this appropriately recognizes that separate land uses generate different parking demands on an individual basis, it does not reflect the fact that the combined peak parking demand, when a mixture of land uses shares the same parking supply, can be substantially less than the sum of the individual demands. For example, retail uses peak in the early to mid-afternoon while restaurant uses peak in the lunchtime and/or evening hours (depending on the type of restaurant) and cinema uses peak in the evening hours.

TABLE 12
PARKING REQUIREMENTS PER GENERAL DEVELOPMENT STANDARDS - CARSON MARKETPLACE

Category	Land Uses	Size	Unit	Parking Rate [1]	Total
CM	Regional Commercial	1,370.000	KSF	5/1,000 sq. ft. GLA	6,850
CM	Theater	4,500	Seats	1/3 Seats	1,500
CM	Hotel	300	Rooms	1.5/ Room	450
CM & MU-M	Restaurants	81.125	KSF	5/1,000 sq. ft. GLA	406
MU-M	Neighborhood Commercial	130.000	KSF	5/1,000 sq. ft. GLA	650
MU-M	1-bedroom Apartment/Condominium	500	Dwelling Units	1.5/Unit	750
MU-M	2-bedroom Apartment/Condominium	1,050	Dwelling Units	2/Unit	2,100
	- Guest Spaces for Residential Units	1,550	Dwelling Units	1/4 Units	388
MU-M	Bowling Alley	25.000	KSF	5/1,000 sq. ft. GLA	125
MU-M	Fitness Center	35.000	KSF	5/1,000 sq. ft. GLA	175
MU-M	Multi-Purpose Recreation Center	44.000	KSF	5/1,000 sq. ft. GLA	220
Commercial Total					10,376
Residential Total					3,238
Grand Total					13,614

[1] Source: "General Development Standards," The Planning Center, October 2005.

Notes:
CM = Commercial Marketplace
MU-M = Mixed-Use
KSF = 1,000 Square Feet
GLA = Gross Leasable Area

TABLE 13
SHARED PARKING DEMAND SUMMARY - CARSON MARKETPLACE

PEAK MONTH: DECEMBER -- PEAK PERIOD: 2 P.M., WEEKEND

			Weekday					Weekend					Weekday			Weekend		
	Project Data		Base	Driving	Non-Captive	Project		Base	Driving	Non-Captive	Project		Peak Hr Adj	Peak Mo Adj	Estimated Parking	Peak Hr Adj	Peak Mo Adj	Estimated Parking
Land Use	Quantity	Unit	Rate	Ratio	Ratio	Rate	Unit	Rate	Ratio	Ratio	Rate	Unit	1 PM	December	Demand	2 PM	December	Demand
Super Regional Shopping Center (>600k)	1,500,000	sf GLA	3.20	1.00	1.00	3.20	/ksf GLA	3.60	1.00	1.00	3.60	/ksf GLA	1.00	1.00	4,800	1.00	1.00	5,400
Employee			0.80	0.95	1.00	0.76	/ksf GLA	0.90	0.95	1.00	0.86	/ksf GLA	0.90	1.00	1,140	0.95	1.00	1,283
Fine/Casual Dining Restaurant	66,125	sf GLA	15.25	1.00	0.90	13.73	/ksf GLA	17.00	1.00	0.90	15.30	/ksf GLA	1.00	1.00	680	0.90	1.00	455
Employee			2.75	0.80	1.00	2.20	/ksf GLA	3.00	0.80	1.00	2.40	/ksf GLA	0.64	1.00	131	0.80	1.00	119
Fast Food Restaurant	15,000	sf GLA	12.75	1.00	0.90	11.48	/ksf GLA	12.00	1.00	0.90	10.80	/ksf GLA	1.00	1.00	172	0.90	1.00	146
Employee			2.25	0.80	1.00	1.80	/ksf GLA	2.00	0.80	1.00	1.60	/ksf GLA	0.64	1.00	27	0.80	1.00	23
Cineplex	4,500	seats	0.19	1.00	0.90	0.17	/seat	0.26	1.00	0.90	0.23	/seat	1.00	0.23	80	0.90	0.67	388
Employee			0.01	0.80	1.00	0.01	/seat	0.01	0.80	1.00	0.01	/seat	0.64	0.50	11	0.80	0.80	17
Health Club	35,000	sf GLA	6.60	1.00	1.00	6.60	/ksf GLA	5.50	1.00	1.00	5.50	/ksf GLA	1.00	0.90	146	1.00	0.90	43
Employee			0.40	1.00	1.00	0.40	/ksf GLA	0.25	1.00	1.00	0.25	/ksf GLA	1.00	1.00	11	1.00	1.00	5
Active Entertainment	69,000	sf GLA	4.20	1.00	0.90	3.78	/ksf GLA	6.50	1.00	0.90	5.85	/ksf GLA	1.00	0.67	175	0.90	0.67	271
Employee			0.40	0.80	1.00	0.32	/ksf GLA	0.50	0.80	1.00	0.40	/ksf GLA	0.64	0.80	18	0.80	0.80	22
Hotel-Business	300	rooms	1.00	1.00	1.00	1.00	/rooms	0.90	1.00	1.00	0.90	/rooms	1.00	0.67	111	1.00	0.67	109
Employee			0.25	1.00	1.00	0.25	/rooms	0.18	1.00	1.00	0.18	/rooms	1.00	1.00	76	1.00	1.00	54
Residential, Rental	400	units																
Reserved	1.50	Sp/Unit	1.50	1.00	1.00	1.50	/unit	1.50	1.00	1.00	1.50	/unit	1.00	1.00	600	1.00	1.00	600
Guest	400	units	0.15	1.00	1.00	0.15	/unit	0.15	1.00	1.00	0.15	/unit	1.00	1.00	60	1.00	1.00	60
Residential, Owned	1,150	units																
Reserved	1.70	Sp/Unit	1.70	1.00	1.00	1.70	/unit	1.70	1.00	1.00	1.70	/unit	1.00	1.00	1,955	1.00	1.00	1,955
Guest	1,150	units	0.15	1.00	1.00	0.15	/unit	0.15	1.00	1.00	0.15	/unit	1.00	1.00	173	1.00	1.00	173

Commercial Customer	6,164	Commercial Customer	6,812
Commercial Employee	1,414	Commercial Employee	1,523
Commercial Total	7,578	Commercial Total	8,335
Resident Reserved	2,555	Resident Reserved	2,555
Guest Reserved	233	Guest Reserved	233
Residential Total	2,788	Residential Total	2,788
Grand Total	10,366	Grand Total	11,123

Three types of shared parking effects were considered in this study: variations in time-of-day accumulation of parking demands, seasonal variations, and internal capture between the various uses. Peak demand ratios, time-of-day variation factors, and seasonal variation factors from ULI research were used in the analysis.

Table 13 illustrates the input assumptions for the shared parking analysis. For each land use in the proposed project, the table shows the base parking demand ratio for a weekday and a Saturday, the driving ratio, the percentage of demand projected to be captured internally within the project, and the peak hour and peak month adjustment ratios (a December weekend at 2 p.m. was determined to be the peak month and time).

The residential and commercial components of the project were considered separately, both due to the typical approach of providing dedicated (non-shared) spaces for residents and the fact that the residential and commercial components are physically located in different portions of the project site. As indicated in Table 13, the shared parking model estimates a parking demand of approximately 7,578 parking spaces during the weekday peak hour and about 8,335 parking spaces during the weekend peak hour of the peak month of December for the proposed commercial uses. The model estimates a separate demand for approximately 2,788 spaces to serve the residential components of the project, including 2,555 resident spaces and 233 guest spaces. Thus, the total peak demand including both the commercial and residential components is estimated at 10,366 spaces on a weekday and 11,123 spaces on a weekend during the peak month of December.

Appendix D illustrates the projected variation in peak parking demand for the different months of the year during a weekday and a weekend. Also, it includes the projected daily variation in the parking demand for the December peak month by hour throughout the day.

SUMMARY COMPARISON

Based on the City's "General Development Standards," it is estimated that 10,376 parking spaces would be required for the commercial component of the project. With consideration of shared parking, using peak demand, time-of-day, and seasonal factors from ULI research, a peak shared demand for approximately 8,335 spaces is projected at 2 p.m. on a weekend day

during the peak month of December (2,041 spaces less than required under the “General Development Standards”).

Based on the City’s “General Development Standards,” it is similarly estimated that 3,238 spaces would be required for the residential component of the project, including both resident and guest spaces. Based on ULI demand factors, peak demand for the residential uses is estimated at about 2,788 spaces (450 less than required under the “General Development Standards”).

Thus, provision of the parking required by the “General Development Standards” would be more than sufficient to accommodate the projected peak demands. The Specific Plan for the project site contains provisions for the implementation of a shared parking program. The shared parking program may be approved by the City’s Planning Manager if it can be demonstrated that the project parking supply would be adequate to meet the project’s peak shared parking demand under the ULI shared parking model. Under this Specific Plan provision, the Applicant may request the approval of a shared parking plan, in lieu of the City’s “General Development Standards.”

IX. PROJECT ALTERNATIVES

This chapter presents a qualitative assessment of traffic impacts for potential alternatives to the Carson Marketplace project relative to the impacts of the project itself.

ALTERNATIVE 1 – NO PROJECT DEVELOPMENT

Under Alternative 1, the project site would remain in its current state. It is assumed that there would be some pressure for and interest in reuse of the site, but no project would be approved in the foreseeable future. Further, no site remediation would occur.

Future traffic conditions under this alternative would change due to the development of the identified related projects and regional growth. As shown in Table 8 in Chapter IV, six of the 27 study intersections are anticipated to operate at LOS E or F during the morning or evening or both the peak hours under year 2010 conditions without the project. The No Project Alternative would not result in any significant project impacts at the 27 intersection locations analyzed. The access improvements proposed as part of the project would not be constructed under this alternative.

ALTERNATIVE 2 – DEVELOPMENT PER GENERAL PLAN DESIGNATIONS

Under Alternative 2, the project site would be developed with uses that are in keeping with the Mixed-Use - Business Park designation in the 2004 General Plan update. Development under this alternative would include a mix of light industrial and commercial uses. Commercial uses under this alternative would include both regional and neighborhood serving uses. Development would occur under the aegis of multiple applicants who would develop smaller, individual projects, pursuant to market demand and availability of interested developers. While the proposed uses would be consistent with the site's General Plan designation, development under this alternative would require implementation of the otherwise planned rezoning to ML

(Light Industrial) for Plan consistency. In lieu of a Specific Plan, development would be subject to the requirements of the ML zone (inclusive of cross-referenced commercial requirements) and the site's existing Design Overlay and Organic Refuse Landfill Overlay designations. The total amount of development would be equivalent to the amount of commercial development that would occur under the proposed project, with equal amounts of commercial and industrial development. The commercial use includes neighborhood, regional and restaurant uses, in the same proportion as the proposed project.

As indicated in Table 14, Alternative 2 is projected to generate approximately 2,100 trips during the morning peak hour, about 3,975 trips during the afternoon peak hour, and approximately 43,890 daily trips. Compared to the proposed project, Alternative 2 is projected to generate approximately 16% fewer trips during the morning peak hour, 31% fewer trips during the afternoon peak hour, and 36% fewer trips on a daily basis.

The proposed project is expected to have significant impacts at ten intersections and is expected to have significant impacts on the regional freeway and public transit systems. Since Alternative 2 would generate fewer trips than the proposed project, it is estimated that Alternative 2 would result in significant traffic impacts at the following nine intersections:

5. Vermont Avenue & Del Amo Boulevard
6. Hamilton Avenue & Del Amo Boulevard
7. Figueroa Street & Del Amo Boulevard
8. Main Street & Del Amo Boulevard
11. Hamilton Avenue & I-110 southbound ramps
12. Figueroa Street & I-110 northbound ramps
22. Vermont Avenue & Carson Street
24. Main Street & Carson Street
25. Avalon Boulevard & Carson Street

Although Alternative 2 would result in significant impacts at these locations, the magnitude of the impacts would be less than the proposed project's impact at these locations. Similarly, significant impacts would be anticipated to the regional freeway and public transit systems under Alternative 2, but to a lesser magnitude than for the proposed project.

TABLE 14
ALTERNATIVE 2 TRIP GENERATION ESTIMATES
CARSON MARKETPLACE - DEVELOPMENT PER GENERAL PLAN DESIGNATIONS

No.	Land Use	ITE Code	Size	Unit	Daily	A.M. Peak Hour			P.M. Peak Hour		
						In	Out	Total	In	Out	Total
	REGIONAL RETAIL										
1	Shopping Center [a]	820	312.489	KSF	14,242	189	121	310	637	691	1,328
	(Less-20% Internal)				(2,848)	(38)	(24)	(62)	(127)	(138)	(266)
	(Less-25% Pass By - PM & Daily)				(3,561)	0	0	0	(159)	(173)	(332)
	Subtotal				7,833	151	97	248	351	380	730
2	Supermarket	850	43.748	KSF	4,320	87	55	142	233	224	457
	(Less-20% Internal)				(864)	(17)	(11)	(28)	(47)	(45)	(91)
	(Less-40% Pass By)				(1,382)	(28)	(18)	(46)	(74)	(72)	(146)
	Subtotal				2,074	42	26	68	112	107	220
3	Electronic Superstore	863	31.249	KSF	1,407	6	3	9	69	72	141
	(Less-20% Internal)				(281)	(1)	(1)	(2)	(14)	(14)	(28)
	(Less-10% Pass By)				(113)	(1)	0	(1)	(6)	(6)	(11)
	Subtotal				1,013	4	2	6	49	52	102
4	Home Improvement Superstore	862	93.747	KSF	3,067	60	52	112	108	122	230
	(Less-20% Internal)				(613)	(12)	(10)	(22)	(22)	(24)	(46)
	(Less-20% Pass By)				(491)	(10)	(8)	(18)	(17)	(20)	(37)
	Subtotal				1,963	38	34	72	69	78	147
5	Discount Club	861	93.747	KSF	3,919	37	15	52	199	198	397
	(Less-20% Internal)				(784)	(7)	(3)	(10)	(40)	(40)	(79)
	(Less-30% Pass By)				(941)	(9)	(4)	(13)	(48)	(47)	(95)
	Subtotal				2,194	21	8	29	111	111	223
6	Home Furnishing Superstore	869	218.742	KSF	10,458	80	34	114	395	482	877
	(Less-20% Internal)				(2,092)	(16)	(7)	(23)	(79)	(96)	(175)
	(Less-20% Pass By)				(837)	(13)	(5)	(18)	(63)	(77)	(140)
	Subtotal				7,529	51	22	73	253	309	562
7	Office Supply Store	867	31.249	KSF	1,060	4	2	6	56	50	106
	(Less-20% Internal)				(212)	(1)	0	(1)	(11)	(10)	(21)
	(Less-20% Pass By)				(297)	(1)	0	(1)	(9)	(8)	(17)
	Subtotal				551	2	2	4	36	32	68
8	Pet Supply Superstore	866	31.249	KSF	1,550	6	3	9	78	77	155
	(Less-20% Internal)				(310)	(1)	(1)	(2)	(16)	(15)	(31)
	(Less-10% Pass By)				(124)	(1)	0	(1)	(6)	(6)	(12)
	Subtotal				1,116	4	2	6	56	56	112
	Subtotal for Regional Retail Center		***856.220***	***KSF***	***24,273***	***313***	***193***	***506***	***1,037***	***1,125***	***2,164***
	NEIGHBORHOOD RETAIL										
9	Supermarket	850	20.000	KSF	2,731	40	25	65	107	102	209
	(Less-20% Internal)				(546)	(8)	(5)	(13)	(21)	(20)	(42)
	(Less-40% Pass By)				(874)	(13)	(8)	(21)	(34)	(33)	(67)
	Subtotal				1,311	19	12	31	52	49	100
10	Shopping Center [a]	820	61.245	KSF	4,938	71	46	117	217	236	453
	(Less-20% Internal)				(988)	(14)	(9)	(23)	(43)	(47)	(91)
	(Less-25% Pass By - PM & Daily)				(1,235)	0	0	0	(54)	(59)	(113)
	Subtotal				2,715	57	37	94	120	130	249
	Subtotal for Neighborhood Retail Center		***81.245***	***KSF***	***4,026***	***76***	***49***	***125***	***172***	***179***	***349***
	RESTAURANTS										
14	High-Turnover (Sit Down) Restaurant	932	37.017	KSF	4,707	222	204	426	246	158	404
	(Less-20% Internal)				(941)	(44)	(41)	(85)	(49)	(32)	(81)
	(Less-20% Pass By)				(753)	(36)	(33)	(68)	(39)	(25)	(65)
	Subtotal				3,013	142	130	273	158	101	258
15	Fast Food Restaurant	933	11.105	KSF	7,951	292	195	487	148	142	290
	(Less-20% Internal)				(1,590)	(58)	(39)	(97)	(30)	(28)	(58)
	(Less-30% Pass By)				(1,908)	(70)	(47)	(117)	(35)	(34)	(70)
	Subtotal				4,453	164	109	273	83	80	162
16	Quality Restaurant	931	11.938	KSF	1,074	6	4	10	60	29	89
	(Less-20% Internal)				(215)	(1)	(1)	(2)	(12)	(6)	(18)
	(Less-10% Pass By)				(86)	(1)	0	(1)	(5)	(2)	(7)
	Subtotal				773	4	3	7	43	21	64
	Subtotal for Restaurants		***60.060***	***KSF***	***8,239***	***310***	***242***	***553***	***284***	***202***	***484***
	LIGHT INDUSTRIAL										
	Light Industrial	110	997.600	KSF	7,350	808	110	918	117	861	978
	Subtotal for Light Industrial		***997.600***		***7,350***	***808***	***110***	***918***	***117***	***861***	***978***
	TOTAL				**43,888**	**1,507**	**594**	**2,102**	**1,610**	**2,367**	**3,975**

ALTERNATIVE 3 – REDUCED DENSITY

Under Alternative 3, the project site would be developed under the same Specific Plan as the proposed project, with the same mix of uses, except that development would be reduced across the board by 25%. All other project development standards would be unchanged from those set forth for the proposed project.

As indicated in Table 15, Alternative 3 is projected to generate about 1,930 trips during the morning peak hour, about 4,460 trips during the afternoon peak hour, and approximately 53,700 daily trips. Compared to the proposed project, Alternative 3 is projected to generate approximately 23% fewer trips during the morning peak hour, 23% fewer trips during the afternoon peak hour, and 22% fewer daily trips.

Since Alternative 3 would generate fewer trips than the proposed project, the magnitude of its impacts on the intersections would be less than for the proposed project. Although the magnitude of the impacts would be less, it is nevertheless estimated that Alternative 2 would result in significant impacts at the same ten intersections impacted by the proposed project. These intersections are listed below:

5. Vermont Avenue & Del Amo Boulevard
6. Hamilton Avenue & Del Amo Boulevard
7. Figueroa Street & Del Amo Boulevard
8. Main Street & Del Amo Boulevard
11. Hamilton Avenue & I-110 southbound ramps
12. Figueroa Street & I-110 northbound ramps
22. Vermont Avenue & Carson Street
23. Figueroa Street & Carson Street
24. Main Street & Carson Street
25. Avalon Boulevard & Carson Street

Significant impacts would be anticipated to the regional freeway and public transit systems under Alternative 3, but to a lesser magnitude than for the proposed project.

TABLE 15
ALTERNATIVE 3 TRIP GENERATION ESTIMATES
CARSON MARKETPLACE - REDUCED DENSITY

No.	Land Use	ITE Code	Size	Unit	Daily	A.M. Peak Hour			P.M. Peak Hour		
						In	Out	Total	In	Out	Total
	REGIONAL RETAIL										
1	Shopping Center [a]	820	375.000	KSF	16,035	211	135	346	719	779	1,498
	(Less-20% Internal)				(3,207)	(42)	(27)	(69)	(144)	(156)	(300)
	(Less-25% Pass By - PM & Daily)				(4,009)	0	0	0	(180)	(195)	(375)
	Subtotal				8,819	169	108	277	395	428	823
2	Supermarket	850	52.500	KSF	4,906	104	67	171	280	269	549
	(Less-20% Internal)				(981)	(21)	(13)	(34)	(56)	(54)	(110)
	(Less-40% Pass By)				(1,570)	(33)	(22)	(55)	(90)	(86)	(176)
	Subtotal				2,355	50	32	82	134	129	263
3	Electronic Superstore	863	37.500	KSF	1,689	8	3	11	83	86	169
	(Less-20% Internal)				(338)	(2)	(1)	(2)	(17)	(17)	(34)
	(Less-10% Pass By)				(135)	(1)	0	(1)	(7)	(7)	(14)
	Subtotal				1,216	5	2	8	59	62	121
4	Home Improvement Superstore	862	112.500	KSF	3,484	73	62	135	130	146	276
	(Less-20% Internal)				(697)	(15)	(12)	(27)	(26)	(29)	(55)
	(Less-20% Pass By)				(557)	(12)	(10)	(22)	(21)	(23)	(44)
	Subtotal				2,230	46	40	86	83	94	177
5	Discount Club	861	112.500	KSF	4,703	45	18	63	239	238	477
	(Less-20% Internal)				(941)	(9)	(4)	(13)	(48)	(48)	(95)
	(Less-30% Pass By)				(1,129)	(11)	(4)	(15)	(57)	(57)	(115)
	Subtotal				2,633	25	10	35	134	133	267
6	Home Furnishing Superstore	869	262.500	KSF	12,550	96	41	137	474	579	1,053
	(Less-20% Internal)				(2,510)	(19)	(8)	(27)	(95)	(116)	(211)
	(Less-20% Pass By)				(1,004)	(15)	(7)	(22)	(76)	(93)	(168)
	Subtotal				9,036	62	26	88	303	370	674
7	Office Supply Store	867	37.500	KSF	1,280	6	2	8	68	60	128
	(Less-20% Internal)				(256)	(1)	0	(2)	(14)	(12)	(26)
	(Less-20% Pass By)				(358)	(1)	0	(1)	(11)	(10)	(20)
	Subtotal				666	4	2	5	43	38	82
8	Pet Supply Superstore	866	37.500	KSF	1,860	8	3	11	93	93	186
	(Less-20% Internal)				(372)	(2)	(1)	(2)	(19)	(19)	(37)
	(Less-10% Pass By)				(149)	(1)	0	(1)	(7)	(7)	(15)
	Subtotal				1,339	5	2	8	67	67	134
	Subtotal for Regional Retail Center		***1,027.500***	***KSF***	***28,294***	***366***	***222***	***589***	***1,218***	***1,321***	***2,541***
	NEIGHBORHOOD RETAIL										
9	Supermarket	850	15.000	KSF	2,396	30	19	49	80	77	157
	(Less-20% Internal)				(479)	(6)	(4)	(10)	(16)	(15)	(31)
	(Less-40% Pass By)				(767)	(10)	(6)	(16)	(26)	(25)	(50)
	Subtotal				1,150	14	9	23	38	37	76
10	Shopping Center [a]	820	82.500	KSF	5,993	85	54	139	264	287	551
	(Less-20% Internal)				(1,199)	(17)	(11)	(28)	(53)	(57)	(110)
	(Less-25% Pass By - PM & Daily)				(1,498)	0	0	0	(66)	(72)	(138)
	Subtotal				3,296	68	43	111	145	158	303
	Subtotal for Neighborhood Retail Center		***97.500***	***KSF***	***4,446***	***82***	***52***	***134***	***183***	***195***	***379***
	RESIDENTIAL										
11	Apartments	220	300	DU	1,953	30	121	151	119	64	183
12	Condominiums	230	863	DU	4,007	49	240	289	236	116	352
	Subtotal for Residential		***1,163***	***DU***	***5,960***	***79***	***361***	***440***	***355***	***180***	***535***
	HOTEL										
13	Hotel	310	225	Rooms	2,387	68	44	112	70	63	133
	Subtotal for Hotel		***225***	***Rooms***	***2,387***	***68***	***44***	***112***	***70***	***63***	***133***
	RESTAURANTS										
14	High-Turnover (Sit Down) Restaurant	932	37.500	KSF	4,768	225	207	432	250	160	410
	(Less-20% Internal)				(954)	(45)	(41)	(86)	(50)	(32)	(82)
	(Less-20% Pass By)				(763)	(36)	(33)	(69)	(40)	(26)	(66)
	Subtotal				3,051	144	133	277	160	102	262
15	Fast Food Restaurant	933	11.250	KSF	8,055	296	198	494	150	144	294
	(Less-20% Internal)				(1,611)	(59)	(40)	(99)	(30)	(29)	(59)
	(Less-30% Pass By)				(1,933)	(71)	(47)	(119)	(36)	(35)	(71)
	Subtotal				4,511	166	111	276	84	80	164
16	Quality Restaurant	931	12.094	KSF	1,088	6	4	10	61	30	91
	(Less-20% Internal)				(218)	(1)	(1)	(2)	(12)	(6)	(18)
	(Less-10% Pass By)				(87)	(1)	0	(1)	(5)	(2)	(7)
	Subtotal				783	4	3	7	44	22	66
	Subtotal for Restaurants		***60.844***	***KSF***	***8,345***	***314***	***247***	***560***	***288***	***204***	***492***
	COMMERCIAL RECREATION/ENTERTAINMENT										
17	Multiplex Movie Theater	445	3,375	Seats	2,700	8	1	9	97	173	270
	(Less-20% Internal)		82.500	KSF	(540)	(2)	0	(2)	(19)	(35)	(54)
	(Less-10% Pass By)				(216)	(1)	0	(1)	(16)	(28)	(43)
	Subtotal				1,944	5	1	6	62	110	173
18	Bowling Alley	437	18.750	KSF	625	35	24	59	23	32	66
	(Less-20% Internal)				(125)	(7)	(5)	(12)	(5)	(6)	(13)
	(Less-10% Pass By)				(50)	(3)	(2)	(5)	(2)	(3)	(5)
	Subtotal				450	25	17	42	16	23	48
19	Fitness Center	492	26.250	KSF	864	13	19	32	54	52	106
	(Less-20% Pass By)				(173)	(3)	(4)	(6)	(11)	(10)	(21)
	Subtotal				691	10	15	26	43	42	85
20	Multi-Purpose Recreation Center	435	33.000	KSF	1,850	30	7	37	69	42	111
	(Less-20% Internal)				(370)	(6)	(1)	(7)	(14)	(8)	(22)
	(Less-20% Pass By)				(296)	(5)	(1)	(6)	(11)	(7)	(18)
	Subtotal				1,184	19	5	24	44	27	71
	Subtotal for Commercial Recreation/Entertainment		***160.500***	***KSF***	***4,269***	***59***	***38***	***98***	***165***	***202***	***377***
	TOTAL				**53,701**	**968**	**964**	**1,933**	**2,279**	**2,165**	**4,457**

ALTERNATIVE 4 – ALTERNATIVE SITE

Under this alternative, the project would be developed in a manner similar to the proposed project, under a similar Specific Plan, with a similar development program, but the development would be relocated to the Shell refinery site located approximately one mile east of the proposed project site and would require the removal of the existing Shell refinery. Vera Street bounds the site on the west, Wilmington Avenue on the east, Del Amo Boulevard on the north and 213th Street on the south. Primary regional access to the site is via the San Diego (I-405), Artesia (SR-91) and Harbor (I-110) Freeways, although the freeway access to the alternative site is farther than the access available to the proposed project site.

Alternative 4 is expected to generate the same number of trips as the proposed project and thus would result in approximately 2,510 trips during the morning peak hour, 5,770 trips during the evening peak hour and 68,950 daily trips. The alternative is therefore estimated to result in a level of traffic impact at key intersections within the study area similar to the alternative site but could have significant impacts at a greater number of intersections than the proposed project since the alternative site is located farther from the freeway system.

The location of the alternative site is such that it would be able to have a greater number of project access points from the adjacent streets than the proposed project. With a greater number of access points, the project access and egress locations could operate at a better level of service than those for the proposed project.

Freeway and public transit impacts for Alternative 4 would likely be similar in nature to those for the proposed project.

X. SUMMARY AND CONCLUSIONS

This study was undertaken to analyze the potential traffic impacts of the proposed Carson Marketplace in the City of Carson. The following summarizes the results of this analysis:

- The proposed project consists of the construction of 1,370,000 sf of regional commercial area, 130,000 sf of neighborhood commercial area, 1,550 residential apartments and condominiums, a 300-room hotel, 81,125 sf of restaurant space, and 214,000 sf of commercial recreation/entertainment land uses.

- The project site is comprised of approximately 168 acres located southwest of the San Diego Freeway (I-405) and north of the Avalon Boulevard Interchange. The project is divided into two components, one north and one south of Del Amo Boulevard. Access to the northern component would be provided via the intersection of Stamps Drive and Del Amo Boulevard and one minor right-turn in/right-turn out access from westbound Del Amo Boulevard. The south leg of the intersection of Del Amo Boulevard and Stamps Drive would provide access to/from the south component of the project site. The second major access for the southern component would be achieved by extension of Lenardo Drive to Avalon Boulevard as part of the proposed Avalon Boulevard/I-405 interchange improvements. A third signalized access would be provided from Lenardo Drive at Main Street.

  The proposed improvements at the Avalon Boulevard/I-405 interchange are a project design feature to be implemented concurrently with the project by another entity. These improvements include the extension of Lenardo Drive to Avalon Boulevard, realignment of the southbound I-405 ramps to intersect the Lenardo Drive extension rather than Avalon Boulevard directly, a new southbound on-ramp as the east leg of the Avalon Boulevard/Lenardo Drive intersection, and reconfiguration of the northbound off-ramp to permit left-turns to southbound Avalon Boulevard, would be implemented concurrent with the project.

- The project is expected to generate approximately 2,510 trips during the a.m. peak hour and 5,770 trips during the p.m. peak hour.

- After applying the significant impact criteria to the level of service analysis for the future without and with project traffic, it was determined that the project would create significant impacts at five of the 27 analyzed intersections during the a.m. peak hour and 12 of the 27 intersections in the p.m. peak hour.

- Mitigation measures are proposed that will completely mitigate the significant traffic impacts at all intersections except the intersection of Figueroa Street and the I-110 northbound ramps and, depending on availability of right-of-way, the intersection of Avalon Boulevard and Carson Street. At the Figueroa Street/I-110 northbound ramps,

the proposed improvement would reduce the incremental traffic impact but would not reduce it to insignificance according to City of Carson criteria. At Avalon Boulevard/Carson Street, the project impact would be fully mitigated if sufficient right-of-way could be obtained to implement the entire mitigation, but would be reduced and not fully mitigated if only a portion of the mitigation could be implemented.

- Since the project may be implemented in phases over time, a mitigation threshold program has been developed that establishes triggers for intersection mitigations based on the percent of total project p.m. peak hour trips that would be generated by any individual phase of development. In addition, the program limits development to the mixed-use residential/commercial components in Districts 1 and 3 of the project only (to the commercial limits indicated for Districts 1 and 3 in the illustrative project plan) until such time as the related Avalon Boulevard/I-405 interchange improvements are implemented.

- The project could have significant impacts on four of the 32 analyzed freeway segments during the a.m. peak hour and seven of the 32 segments during the p.m. peak hour.

- The projected level of additional transit riders generated by the proposed project could have a significant impact on public transit services in the vicinity of the project. Mitigation of this impact could require some combination of extension of bus routes into the project site, provision of additional buses to increase frequency and capacity of the system, and provision of bus stops including benches and shelters at key locations.

- The main site access points of Stamps Drive at Del Amo Boulevard, Lenardo Drive at Main Street, Lenardo Drive at the I-405 southbound ramps, and Lenardo Drive at Avalon Boulevard are all projected to operate at LOS D or better with the project. Traffic impacts at these access points are considered to be insignificant.

- It is estimated that application of the parking requirements set forth in the City of Carson's "General Development Standards" would require the project to provide approximately 13,614 parking spaces, including 10,376 spaces for the commercial component of the project and 3,238 spaces for the residential component of the project (resident and guest spaces). A shared parking analysis conducted using the ULI Shared Parking model determined that the proposed commercial uses would generate a peak shared demand for approximately 8,335 spaces on a peak weekend afternoon in the peak month of December, while the residential uses would generate a peak demand for about 2,788 spaces. Thus, provision of the parking required by the "General Development Standards" would be more than sufficient to accommodate the projected peak demands.

  The Specific Plan for the project site contains provisions for the implementation of a shared parking program. The shared parking program may be approved by the City's Planning Manager if it can be demonstrated that the project parking supply would be adequate to meet the project's peak shared parking demand under the ULI shared parking model. Under this Specific Plan provision, the Applicant may request the approval of a shared parking plan, in lieu of the City's "General Development Standards."

REFERENCES

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2004 Traffic Volumes on California State Highways, California Department of Transportation.

Congestion Management Program For Los Angeles County, Los Angeles County Metropolitan Transportation Authority, July 22, 2004.

Draft Project and Program Environmental Impact Report, Metro 2000, City of Carson, September 1993.

Highway Capacity Manual, Transportation Research Board, 2000.

Parking Requirements for Shopping Centers, Summary Recommendations and Research Study Report, 2nd Edition, Urban Land Institute, 2000.

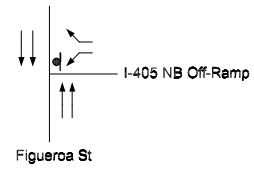
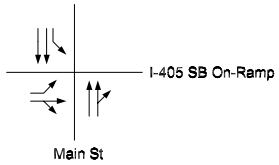
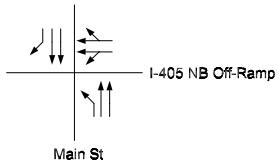
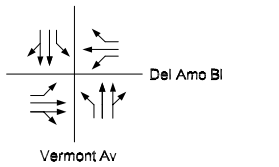
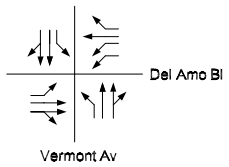
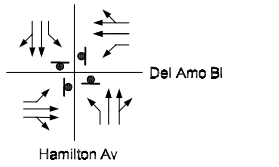
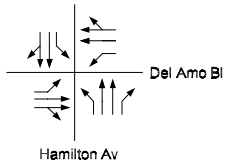
Shared Parking, Urban Land Institute, 1983.

Trip Generation, 7th Edition, Institute of Transportation Engineers, 2003.

APPENDIX A

LANE CONFIGURATIONS

INTERSECTION LANE CONFIGURATIONS

	EXISTING CONDITIONS	FUTURE PLUS PROJECT (YEAR 2010) CONDITIONS	FUTURE PLUS PROJECT PLUS MITIGATIONS (YEAR 2010) CONDITIONS
1. Figueroa St & I-405 SB On-Ramp		Same As Existing	Same As Existing
2. Figueroa St & I-405 NB Off-Ramp		Same As Existing	Same As Existing
3. Main St & I-405 SB On-Ramp		Same As Existing	Same As Existing
4. Main St & I-405 NB Off-Ramp		Same As Existing	Same As Existing
5. Vermont Av & Del Amo Bl		Same As Existing	
6. Hamilton Av & Del Amo Bl		Same As Existing	

LEGEND

= Stop Sign Controlled Approach
FF = Free Flow Right Turn

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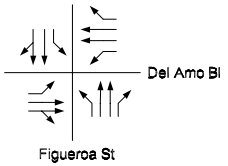
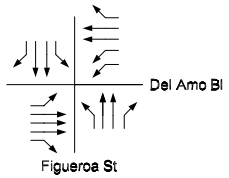
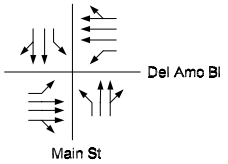
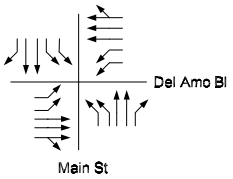
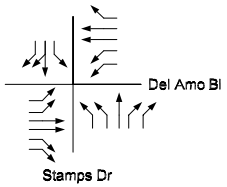
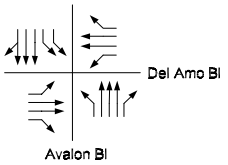
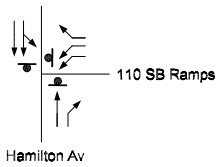
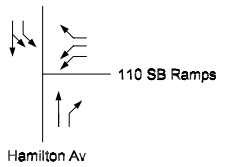
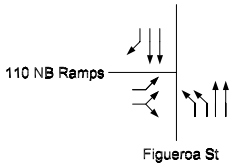
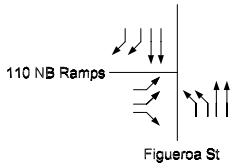
INTERSECTION LANE CONFIGURATIONS

	EXISTING CONDITIONS	FUTURE PLUS PROJECT (YEAR 2010) CONDITIONS	FUTURE PLUS PROJECT PLUS MITIGATIONS (YEAR 2010) CONDITIONS
7. Figueroa St & Del Amo Bl		Same As Existing	
8. Main St & Del Amo Bl		Same As Existing	
9. Stamps Dr & Del Amo Bl	FUTURE PROJECT INTERSECTION		Same As Future Plus Project
10. Avalon Bl & Del Amo Bl		Same As Existing	Same As Existing
11. Hamilton Av & 110 SB Ramps		Same As Existing	
12. Figueroa St & 110 NB Ramps		Same As Existing	

LEGEND

= Stop Sign Controlled Approach

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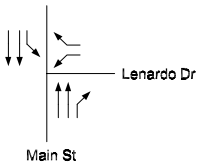
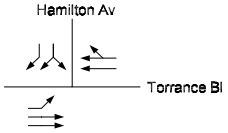
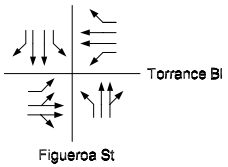
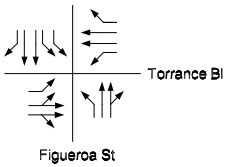
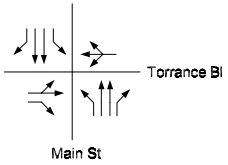
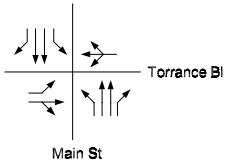
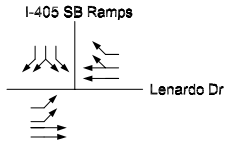
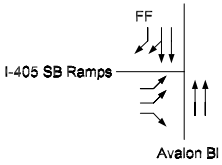
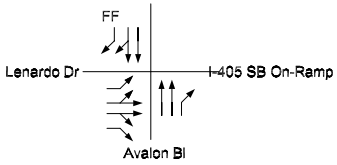
INTERSECTION LANE CONFIGURATIONS

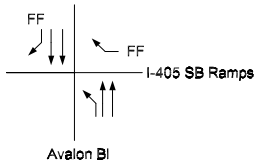
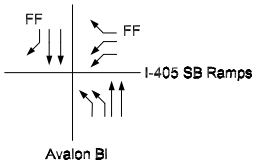
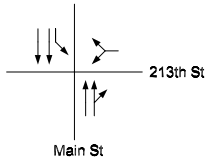
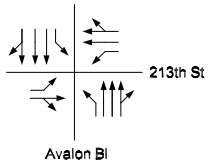
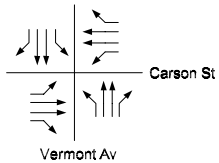
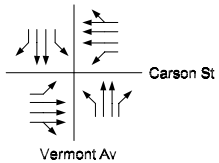
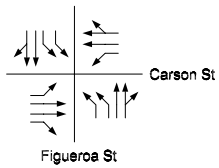
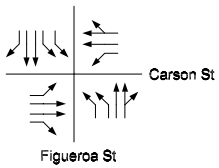
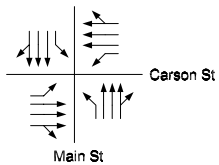
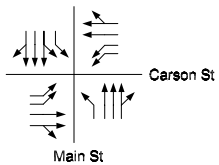
	EXISTING CONDITIONS	FUTURE PLUS PROJECT (YEAR 2010) CONDITIONS	FUTURE PLUS PROJECT PLUS MITIGATIONS (YEAR 2010) CONDITIONS
13. Main St & Lenardo Dr	FUTURE INTERSECTION		Same As Future Plus Project
14. Hamilton Av & Torrance Bl		Same As Existing	Same As Existing
15. Figueroa St & Torrance Bl		Same As Existing	
16. Main St & Torrance Bl		Same As Existing	
17. Lenardo Dr & I-405 SB Ramps	FUTURE INTERSECTION		Same As Future Plus Project
18. Avalon Bl & Lenardo Dr / I-405 SB Ramps			Same As Future Plus Project

LEGEND

FF = Free Flow Right Turn

KAKU ASSOCIATES

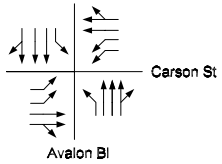
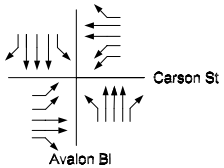
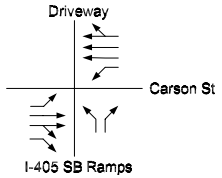
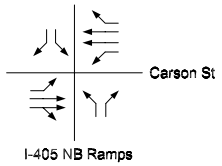
INTERSECTION LANE CONFIGURATIONS

	EXISTING CONDITIONS	FUTURE PLUS PROJECT (YEAR 2010) CONDITIONS	FUTURE PLUS PROJECT PLUS MITIGATIONS (YEAR 2010) CONDITIONS
19. Avalon Bl & I-405 NB Ramps			Same As Existing
20. Main St & 213th St		Same As Existing	Same As Existing
21. Avalon Bl & 213th St		Same As Existing	Same As Existing
22. Vermont Av & Carson St		Same As Existing	
23. Figueroa St & Carson St		Same As Existing	
24. Main St & Carson St		Same As Existing	

LEGEND

FF = Free Flow Right Turn

INTERSECTION LANE CONFIGURATIONS

	EXISTING CONDITIONS	FUTURE PLUS PROJECT (YEAR 2010) CONDITIONS	FUTURE PLUS PROJECT PLUS MITIGATIONS (YEAR 2010) CONDITIONS
25. Avalon Bl & Carson St		Same As Existing	
26. I-405 SB Ramps & Carson St		Same As Existing	Same As Existing
27. I-405 NB Ramps Carson St		Same As Existing	Same As Existing

APPENDIX B

TRAFFIC COUNTS

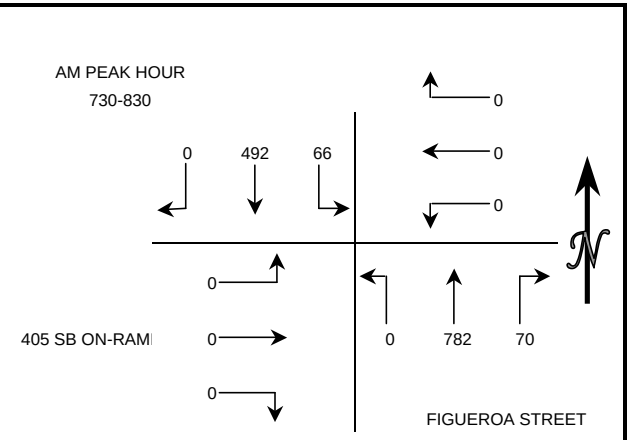
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

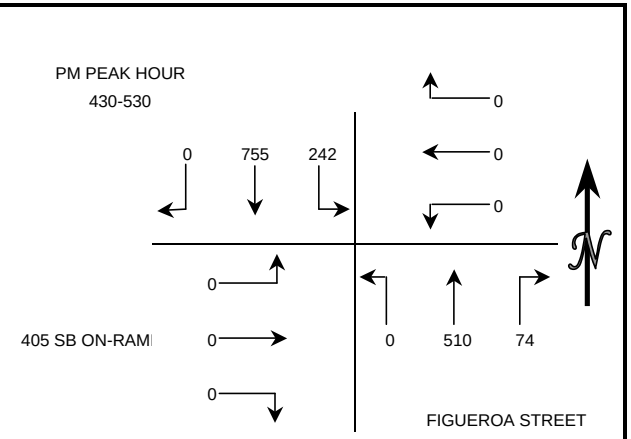
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S FIGUEROA STREET
E/W 405 SB ON-RAMP

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	0	71	18	0	0	0	10	107	0	0	0	0	206
715-730	0	126	15	0	0	0	21	141	0	0	0	0	303
730-745	0	138	18	0	0	0	25	174	0	0	0	0	355
745-800	0	153	16	0	0	0	21	210	0	0	0	0	400
800-815	0	108	13	0	0	0	17	197	0	0	0	0	335
815-830	0	93	19	0	0	0	7	201	0	0	0	0	320
830-845	0	103	10	0	0	0	13	180	0	0	0	0	306
845-900	0	110	18	0	0	0	9	131	0	0	0	0	268
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	0	488	67	0	0	0	77	632	0	0	0	0	1264
715-815	0	525	62	0	0	0	84	722	0	0	0	0	1393
730-830	0	492	66	0	0	0	70	782	0	0	0	0	1410
745-845	0	457	58	0	0	0	58	788	0	0	0	0	1361
800-900	0	414	60	0	0	0	46	709	0	0	0	0	1229



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	0	163	59	0	0	0	15	124	0	0	0	0	361
415-430	0	149	50	0	0	0	20	128	0	0	0	0	347
430-445	0	162	57	0	0	0	16	130	0	0	0	0	365
445-500	0	150	62	0	0	0	17	128	0	0	0	0	357
500-515	0	246	68	0	0	0	20	130	0	0	0	0	464
515-530	0	197	55	0	0	0	21	122	0	0	0	0	395
530-545	0	173	48	0	0	0	19	97	0	0	0	0	337
545-600	0	145	52	0	0	0	24	132	0	0	0	0	353
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	0	624	228	0	0	0	68	510	0	0	0	0	1430
415-515	0	707	237	0	0	0	73	516	0	0	0	0	1533
430-530	0	755	242	0	0	0	74	510	0	0	0	0	1581
445-545	0	766	233	0	0	0	77	477	0	0	0	0	1553
500-600	0	761	223	0	0	0	84	481	0	0	0	0	1549



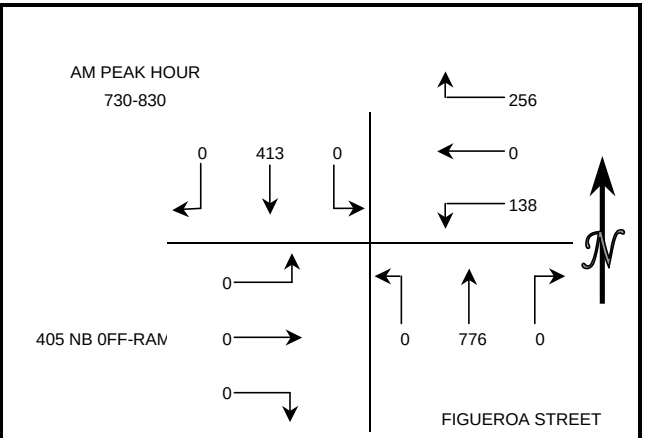
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

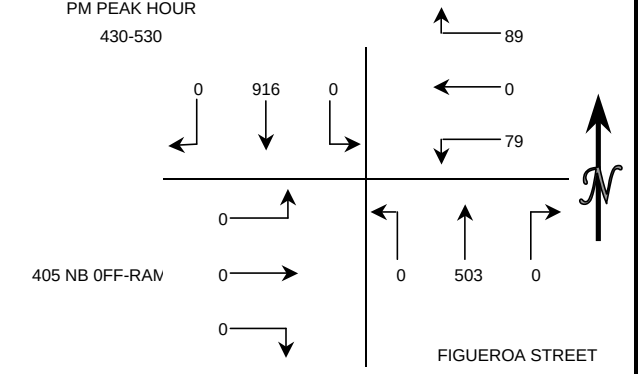
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S FIGUEROA STREET
E/W 405 NB 0FF-RAMP

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	0	84	0	49	0	23	0	110	0	0	0	0	266
715-730	0	111	0	52	0	25	0	134	0	0	0	0	322
730-745	0	126	0	61	0	30	0	184	0	0	0	0	401
745-800	0	128	0	69	0	33	0	199	0	0	0	0	429
800-815	0	90	0	61	0	32	0	200	0	0	0	0	383
815-830	0	69	0	65	0	43	0	193	0	0	0	0	370
830-845	0	79	0	48	0	42	0	182	0	0	0	0	351
845-900	0	76	0	37	0	38	0	134	0	0	0	0	285
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	0	449	0	231	0	111	0	627	0	0	0	0	1418
715-815	0	455	0	243	0	120	0	717	0	0	0	0	1535
730-830	0	413	0	256	0	138	0	776	0	0	0	0	1583
745-845	0	366	0	243	0	150	0	774	0	0	0	0	1533
800-900	0	314	0	211	0	155	0	709	0	0	0	0	1389



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	0	172	0	24	0	23	0	117	0	0	0	0	336
415-430	0	184	0	25	0	17	0	137	0	0	0	0	363
430-445	0	209	0	26	0	18	0	129	0	0	0	0	382
445-500	0	211	0	30	0	16	0	116	0	0	0	0	373
500-515	0	261	0	20	0	22	0	134	0	0	0	0	437
515-530	0	235	0	13	0	23	0	124	0	0	0	0	395
530-545	0	217	0	29	0	15	0	102	0	0	0	0	363
545-600	0	191	0	20	0	18	0	123	0	0	0	0	352
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	0	776	0	105	0	74	0	499	0	0	0	0	1454
415-515	0	865	0	101	0	73	0	516	0	0	0	0	1555
430-530	0	916	0	89	0	79	0	503	0	0	0	0	1587
445-545	0	924	0	92	0	76	0	476	0	0	0	0	1568
500-600	0	904	0	82	0	78	0	483	0	0	0	0	1547



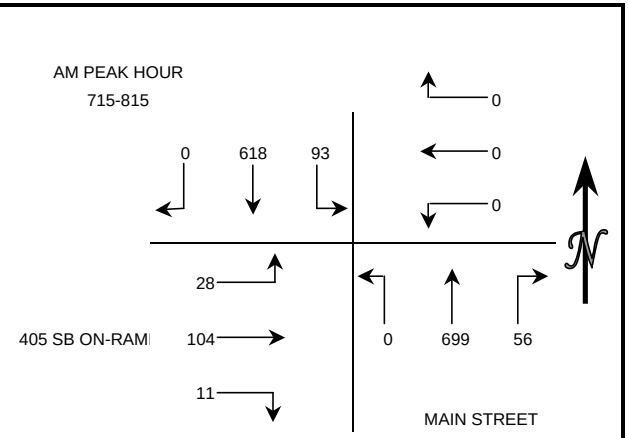
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

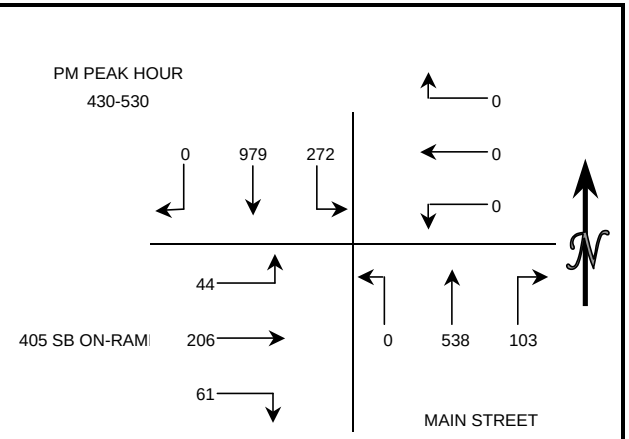
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S MAIN STREET
E/W 405 SB ON-RAMP

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	0	136	29	0	0	0	14	111	0	5	20	4	319
715-730	0	182	20	0	0	0	17	125	0	2	22	6	374
730-745	0	148	23	0	0	0	10	176	0	3	27	7	394
745-800	0	157	26	0	0	0	18	212	0	3	31	11	458
800-815	0	131	24	0	0	0	11	186	0	3	24	4	383
815-830	0	126	18	0	0	0	11	149	0	2	16	4	326
830-845	0	103	22	0	0	0	12	97	0	2	16	3	255
845-900	0	74	11	0	0	0	7	83	0	3	19	6	203
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	0	623	98	0	0	0	59	624	0	13	100	28	1545
715-815	0	618	93	0	0	0	56	699	0	11	104	28	1609
730-830	0	562	91	0	0	0	50	723	0	11	98	26	1561
745-845	0	517	90	0	0	0	52	644	0	10	87	22	1422
800-900	0	434	75	0	0	0	41	515	0	10	75	17	1167



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	0	186	78	0	0	0	14	111	0	16	47	5	457
415-430	0	210	46	0	0	0	17	130	0	10	49	10	472
430-445	0	233	66	0	0	0	31	119	0	13	47	11	520
445-500	0	218	53	0	0	0	19	125	0	18	50	8	491
500-515	0	290	93	0	0	0	29	155	0	19	61	12	659
515-530	0	238	60	0	0	0	24	139	0	11	48	13	533
530-545	0	238	54	0	0	0	23	132	0	15	44	13	519
545-600	0	189	41	0	0	0	19	110	0	14	37	19	429
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	0	847	243	0	0	0	81	485	0	57	193	34	1940
415-515	0	951	258	0	0	0	96	529	0	60	207	41	2142
430-530	0	979	272	0	0	0	103	538	0	61	206	44	2203
445-545	0	984	260	0	0	0	95	551	0	63	203	46	2202
500-600	0	955	248	0	0	0	95	536	0	59	190	57	2140



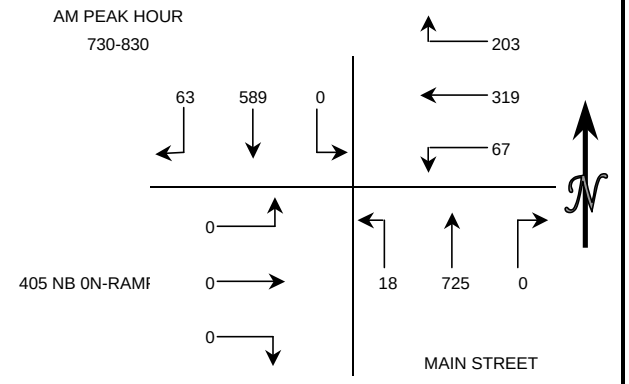
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

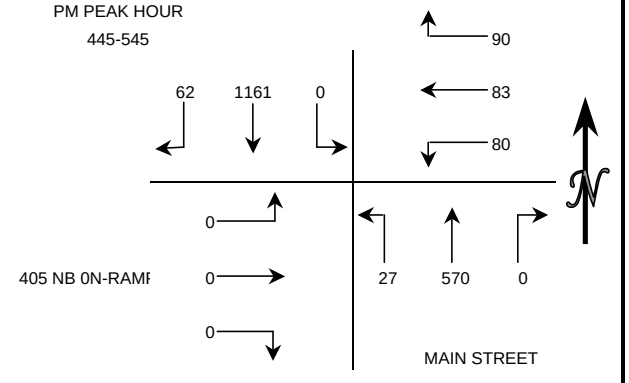
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S MAIN STREET
E/W 405 NB 0N-RAMP

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	13	149	0	27	59	6	0	96	2	0	0	0	352
715-730	13	185	0	41	53	15	0	122	6	0	0	0	435
730-745	21	171	0	61	72	13	0	198	5	0	0	0	541
745-800	16	161	0	42	85	15	0	216	4	0	0	0	539
800-815	13	127	0	40	71	17	0	162	7	0	0	0	437
815-830	13	130	0	60	91	22	0	149	2	0	0	0	467
830-845	11	107	0	27	74	16	0	114	4	0	0	0	353
845-900	13	74	0	26	62	12	0	83	7	0	0	0	277
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	63	666	0	171	269	49	0	632	17	0	0	0	1867
715-815	63	644	0	184	281	60	0	698	22	0	0	0	1952
730-830	63	589	0	203	319	67	0	725	18	0	0	0	1984
745-845	53	525	0	169	321	70	0	641	17	0	0	0	1796
800-900	50	438	0	153	298	67	0	508	20	0	0	0	1534



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	12	253	0	29	25	25	0	129	5	0	0	0	478
415-430	13	225	0	23	16	20	0	112	9	0	0	0	418
430-445	11	271	0	26	21	20	0	129	4	0	0	0	482
445-500	21	247	0	26	22	21	0	121	8	0	0	0	466
500-515	16	377	0	22	19	27	0	172	11	0	0	0	644
515-530	12	264	0	20	17	12	0	129	5	0	0	0	459
530-545	13	273	0	22	25	20	0	148	3	0	0	0	504
545-600	7	216	0	25	21	10	0	114	4	0	0	0	397
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	57	996	0	104	84	86	0	491	26	0	0	0	1844
415-515	61	1120	0	97	78	88	0	534	32	0	0	0	2010
430-530	60	1159	0	94	79	80	0	551	28	0	0	0	2051
445-545	62	1161	0	90	83	80	0	570	27	0	0	0	2073
500-600	48	1130	0	89	82	69	0	563	23	0	0	0	2004



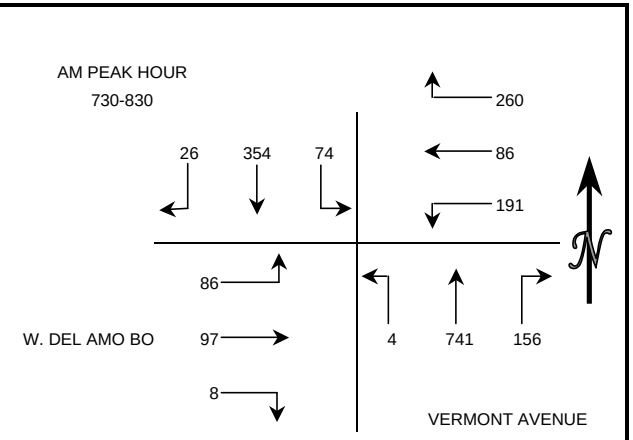
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

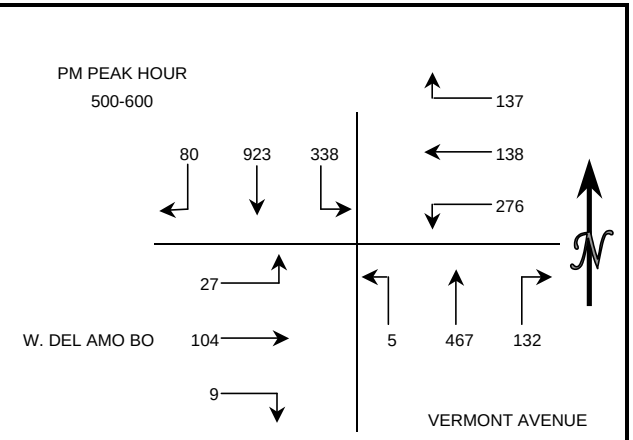
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: CARSON MAKETPLACE COUNTS
DATE: WEDNESDAY, JULY 6TH, 2005
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S VERMONT AVENUE
E/W W. DEL AMO BOULEVARD

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	2	52	20	42	9	27	25	122	2	1	16	13	331
715-730	3	81	18	44	16	32	39	165	0	7	13	6	424
730-745	4	112	21	70	26	54	36	195	1	1	29	19	568
745-800	9	76	17	77	14	48	42	188	1	4	29	24	529
800-815	6	72	23	50	22	40	44	168	1	1	17	19	463
815-830	7	94	13	63	24	49	34	190	1	2	22	24	523
830-845	6	101	24	54	14	45	22	158	0	2	11	9	446
845-900	6	83	14	69	11	34	26	125	1	2	9	11	391
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	18	321	76	233	65	161	142	670	4	13	87	62	1852
715-815	22	341	79	241	78	174	161	716	3	13	88	68	1984
730-830	26	354	74	260	86	191	156	741	4	8	97	86	2083
745-845	28	343	77	244	74	182	142	704	3	9	79	76	1961
800-900	25	350	74	236	71	168	126	641	3	7	59	63	1823



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	19	152	64	28	17	53	31	118	1	1	17	6	507
415-430	11	171	59	24	11	42	37	119	0	3	18	4	499
430-445	11	180	98	21	26	66	51	130	2	4	30	13	632
445-500	15	202	72	29	19	53	42	106	1	3	12	7	561
500-515	27	261	108	40	33	74	26	117	0	1	17	7	711
515-530	25	235	79	33	33	68	40	126	1	3	37	6	686
530-545	14	244	88	35	46	62	31	111	4	2	26	9	672
545-600	14	183	63	29	26	72	35	113	0	3	24	5	567
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	56	705	293	102	73	214	161	473	4	11	77	30	2199
415-515	64	814	337	114	89	235	156	472	3	11	77	31	2403
430-530	78	878	357	123	111	261	159	479	4	11	96	33	2590
445-545	81	942	347	137	131	257	139	460	6	9	92	29	2630
500-600	80	923	338	137	138	276	132	467	5	9	104	27	2636



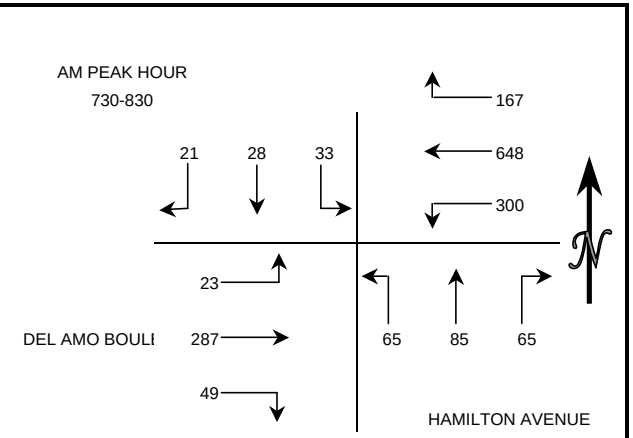
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

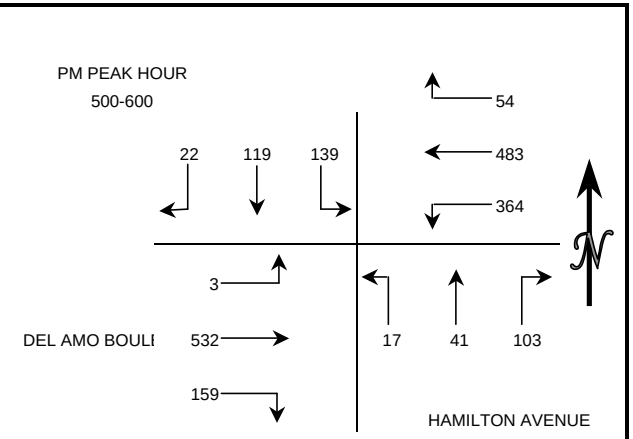
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S HAMILTON AVENUE
E/W DEL AMO BOULEVARD

15 MIN COUNTS	7:00 AM TO 9:00 AM												
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	3	8	8	24	106	70	19	17	12	9	45	8	329
715-730	2	2	11	28	132	95	6	22	8	14	56	3	379
730-745	5	5	9	45	166	82	13	21	17	17	85	3	468
745-800	4	6	9	41	176	72	16	18	15	12	79	7	455
800-815	3	6	8	39	162	65	17	27	23	10	68	7	435
815-830	9	11	7	42	144	81	19	19	10	10	55	6	413
830-845	2	10	10	26	138	74	20	27	20	16	52	2	397
845-900	0	15	8	24	95	49	11	20	11	7	39	5	284
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	14	21	37	138	580	319	54	78	52	52	265	21	1631
715-815	14	19	37	153	636	314	52	88	63	53	288	20	1737
730-830	21	28	33	167	648	300	65	85	65	49	287	23	1771
745-845	18	33	34	148	620	292	72	91	68	48	254	22	1700
800-900	14	42	33	131	539	269	67	93	64	43	214	20	1529



15 MIN COUNTS	4:00 PM TO 6:00 PM												
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	11	21	53	11	108	82	33	10	4	21	81	2	437
415-430	12	24	26	18	97	90	31	17	4	27	109	2	457
430-445	9	25	38	17	102	89	36	10	7	43	126	4	506
445-500	2	23	35	12	109	93	38	9	3	35	126	2	487
500-515	8	28	55	7	111	83	25	12	4	36	122	0	491
515-530	3	31	33	16	123	88	29	12	3	40	144	1	523
530-545	3	33	25	14	124	98	28	9	9	45	128	2	518
545-600	8	27	26	17	125	95	21	8	1	38	138	0	504
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	34	93	152	58	416	354	138	46	18	126	442	10	1887
415-515	31	100	154	54	419	355	130	48	18	141	483	8	1941
430-530	22	107	161	52	445	353	128	43	17	154	518	7	2007
445-545	16	115	148	49	467	362	120	42	19	156	520	5	2019
500-600	22	119	139	54	483	364	103	41	17	159	532	3	2036



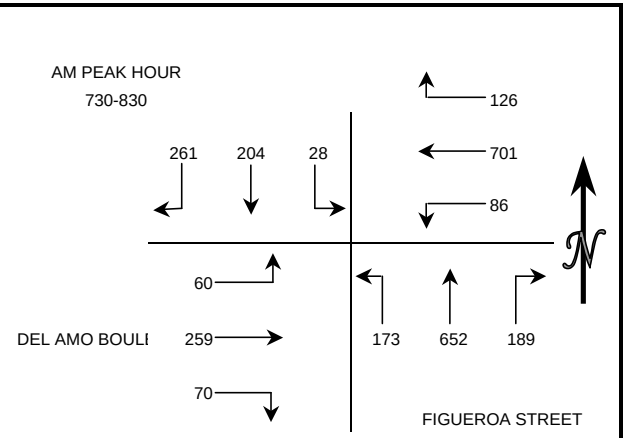
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

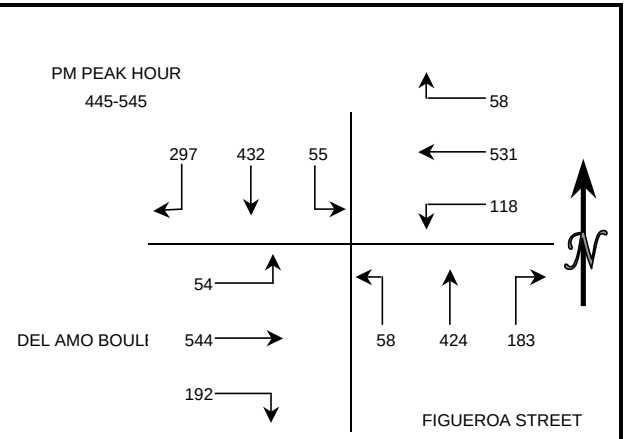
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S FIGUEROA STREET
E/W DEL AMO BOULEVARD

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	45	30	2	9	125	23	42	108	28	19	37	10	478
715-730	55	49	5	21	155	19	35	116	32	17	57	9	570
730-745	68	63	5	31	189	27	42	137	39	16	66	16	699
745-800	87	66	5	33	169	22	57	187	52	17	77	18	790
800-815	63	33	10	30	166	22	50	166	43	18	61	12	674
815-830	43	42	8	32	177	15	40	162	39	19	55	14	646
830-845	58	37	3	7	144	14	34	163	32	19	45	13	569
845-900	46	39	6	18	104	10	25	104	25	18	42	5	442
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	255	208	17	94	638	91	176	548	151	69	237	53	2537
715-815	273	211	25	115	679	90	184	606	166	68	261	55	2733
730-830	261	204	28	126	701	86	189	652	173	70	259	60	2809
745-845	251	178	26	102	656	73	181	678	166	73	238	57	2679
800-900	210	151	27	87	591	61	149	595	139	74	203	44	2331



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	57	82	17	16	124	27	40	115	24	64	105	21	692
415-430	75	74	16	8	117	13	60	109	17	40	105	19	653
430-445	56	85	14	11	121	21	40	124	22	35	134	13	676
445-500	62	82	11	10	130	24	52	102	14	52	135	15	689
500-515	89	127	21	16	110	28	50	109	14	58	143	13	778
515-530	74	110	11	20	145	32	31	122	16	47	146	11	765
530-545	72	113	12	12	146	34	50	91	14	35	120	15	714
545-600	65	67	14	8	146	15	42	112	13	50	118	18	668
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	250	323	58	45	492	85	192	450	77	191	479	68	2710
415-515	282	368	62	45	478	86	202	444	67	185	517	60	2796
430-530	281	404	57	57	506	105	173	457	66	192	558	52	2908
445-545	297	432	55	58	531	118	183	424	58	192	544	54	2946
500-600	300	417	58	56	547	109	173	434	57	190	527	57	2925



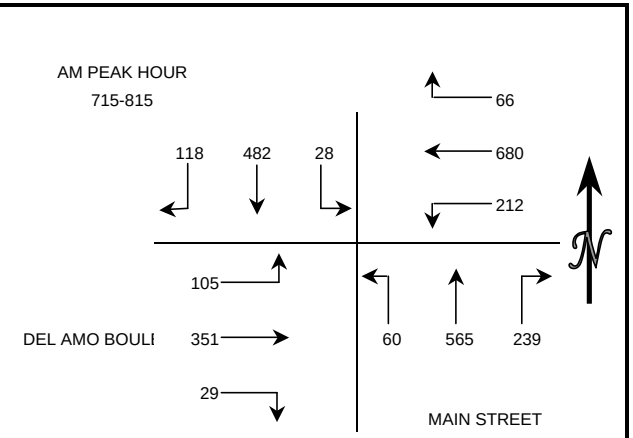
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

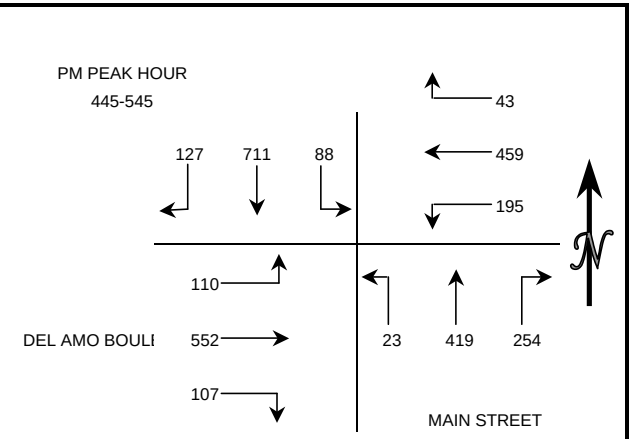
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: CARSON MARKETPLACE
DATE: DECEMBER 9, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S MAIN STREET
E/W DEL AMO BOULEVARD

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	19	97	6	5	130	45	32	84	13	3	44	13	491
715-730	29	162	9	16	156	73	50	101	11	6	71	25	709
730-745	26	133	7	23	196	58	56	164	20	6	99	24	812
745-800	23	110	4	13	162	36	74	168	16	7	102	25	740
800-815	40	77	8	14	166	45	59	132	13	10	79	31	674
815-830	24	81	6	9	140	27	58	114	18	5	78	22	582
830-845	33	66	6	10	129	22	40	93	12	10	72	16	509
845-900	16	44	8	3	93	19	43	76	6	7	61	16	392
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	97	502	26	57	644	212	212	517	60	22	316	87	2752
715-815	118	482	28	66	680	212	239	565	60	29	351	105	2935
730-830	113	401	25	59	664	166	247	578	67	28	358	102	2808
745-845	120	334	24	46	597	130	231	507	59	32	331	94	2505
800-900	113	268	28	36	528	113	200	415	49	32	290	85	2157



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	30	135	18	10	103	47	71	98	5	14	116	24	671
415-430	28	153	20	6	90	32	67	102	3	16	120	24	661
430-445	31	155	18	10	102	46	70	89	6	13	111	30	681
445-500	29	153	23	9	109	41	58	97	4	27	151	24	725
500-515	35	187	30	11	116	50	56	128	5	32	122	25	797
515-530	32	211	22	10	125	55	76	106	8	32	140	28	845
530-545	31	160	13	13	109	49	64	88	6	16	139	33	721
545-600	25	116	31	10	125	58	51	106	3	22	111	27	685
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	118	596	79	35	404	166	266	386	18	70	498	102	2738
415-515	123	648	91	36	417	169	251	416	18	88	504	103	2864
430-530	127	706	93	40	452	192	260	420	23	104	524	107	3048
445-545	127	711	88	43	459	195	254	419	23	107	552	110	3088
500-600	123	674	96	44	475	212	247	428	22	102	512	113	3048



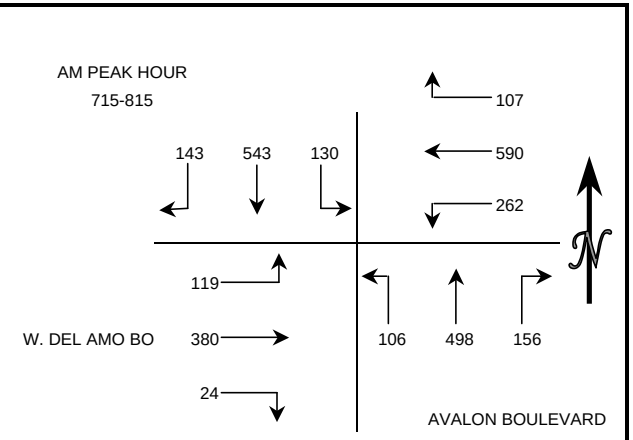
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

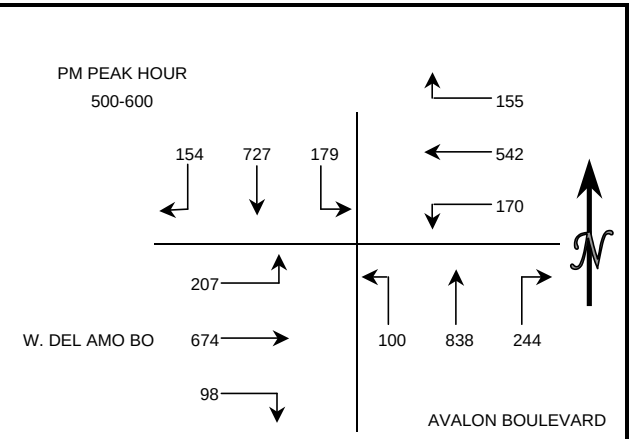
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: CARSON MAKETPLACE COUNTS
DATE: WEDNESDAY, JULY 6TH, 2005
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S AVALON BOULEVARD
E/W W. DEL AMO BOULEVARD

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	27	102	24	23	107	33	36	83	16	5	54	13	523
715-730	32	150	28	32	159	66	36	111	26	4	70	23	737
730-745	49	133	26	23	132	56	31	143	23	7	108	27	758
745-800	28	138	41	33	161	76	49	135	29	8	120	39	857
800-815	34	122	35	19	138	64	40	109	28	5	82	30	706
815-830	33	128	38	14	118	61	33	125	25	7	76	34	692
830-845	31	110	18	15	111	61	37	106	15	10	88	19	621
845-900	36	113	30	18	98	59	31	147	28	8	77	22	667
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	136	523	119	111	559	231	152	472	94	24	352	102	2875
715-815	143	543	130	107	590	262	156	498	106	24	380	119	3058
730-830	144	521	140	89	549	257	153	512	105	27	386	130	3013
745-845	126	498	132	81	528	262	159	475	97	30	366	122	2876
800-900	134	473	121	66	465	245	141	487	96	30	323	105	2686



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	22	141	44	39	96	35	42	173	27	15	137	46	817
415-430	27	174	47	29	79	39	34	173	29	22	140	29	822
430-445	24	178	56	36	135	43	39	203	28	27	197	37	1003
445-500	35	184	43	44	121	61	62	190	31	25	152	40	988
500-515	37	187	48	41	156	36	69	236	30	25	158	50	1073
515-530	44	168	38	46	146	37	50	189	24	15	171	49	977
530-545	38	203	44	33	120	52	62	183	24	37	168	49	1013
545-600	35	169	49	35	120	45	63	230	22	21	177	59	1025
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	108	677	190	148	431	178	177	739	115	89	626	152	3630
415-515	123	723	194	150	491	179	204	802	118	99	647	156	3886
430-530	140	717	185	167	558	177	220	818	113	92	678	176	4041
445-545	154	742	173	164	543	186	243	798	109	102	649	188	4051
500-600	154	727	179	155	542	170	244	838	100	98	674	207	4088



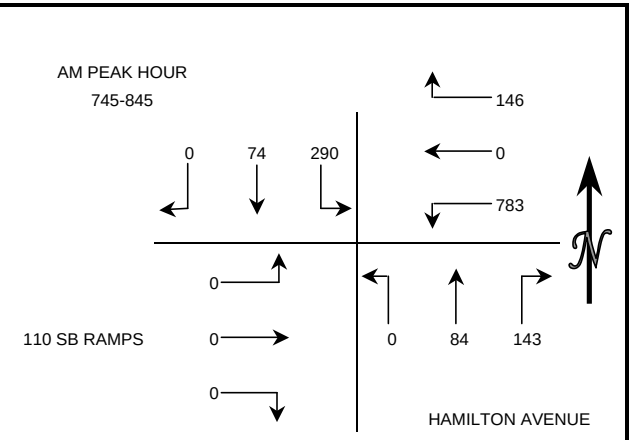
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

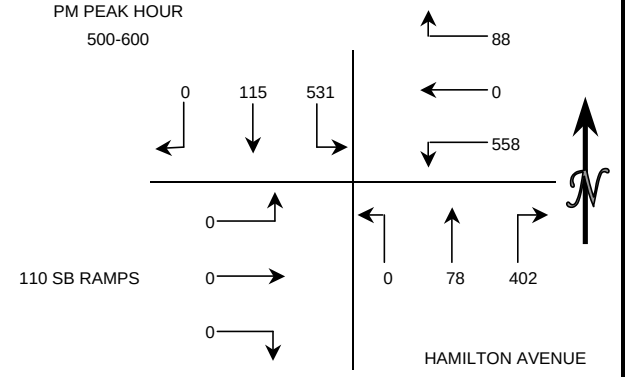
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S HAMILTON AVENUE
E/W 110 SB RAMPS

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	0	13	80	42	0	173	36	10	0	0	0	0	354
715-730	0	12	93	39	0	192	40	9	0	0	0	0	385
730-745	0	13	96	37	0	125	45	13	0	0	0	0	329
745-800	0	10	79	26	0	185	44	17	0	0	0	0	361
800-815	0	15	65	46	0	210	40	18	0	0	0	0	394
815-830	0	25	74	39	0	209	26	26	0	0	0	0	399
830-845	0	24	72	35	0	179	33	23	0	0	0	0	366
845-900	0	18	61	37	0	129	41	12	0	0	0	0	298
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	0	48	348	144	0	675	165	49	0	0	0	0	1429
715-815	0	50	333	148	0	712	169	57	0	0	0	0	1469
730-830	0	63	314	148	0	729	155	74	0	0	0	0	1483
745-845	0	74	290	146	0	783	143	84	0	0	0	0	1520
800-900	0	82	272	157	0	727	140	79	0	0	0	0	1457



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	0	20	108	22	0	138	78	32	0	0	0	0	398
415-430	0	21	129	24	0	150	65	29	0	0	0	0	418
430-445	0	27	122	35	0	159	75	13	0	0	0	0	431
445-500	0	23	125	39	0	130	75	14	0	0	0	0	406
500-515	0	25	139	28	0	132	97	19	0	0	0	0	440
515-530	0	29	126	27	0	145	119	19	0	0	0	0	465
530-545	0	36	137	23	0	147	97	15	0	0	0	0	455
545-600	0	25	129	10	0	134	89	25	0	0	0	0	412
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	0	91	484	120	0	577	293	88	0	0	0	0	1653
415-515	0	96	515	126	0	571	312	75	0	0	0	0	1695
430-530	0	104	512	129	0	566	366	65	0	0	0	0	1742
445-545	0	113	527	117	0	554	388	67	0	0	0	0	1766
500-600	0	115	531	88	0	558	402	78	0	0	0	0	1772



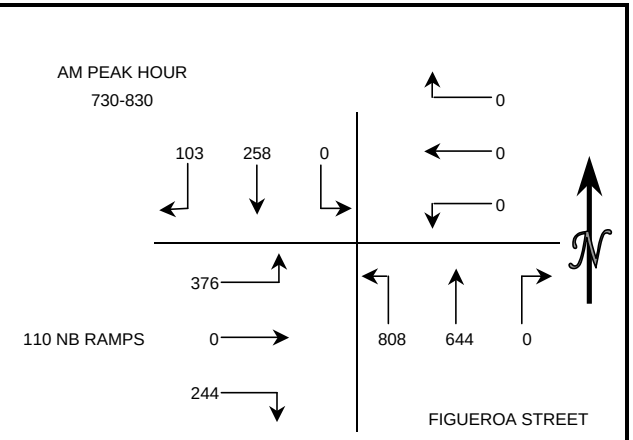
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

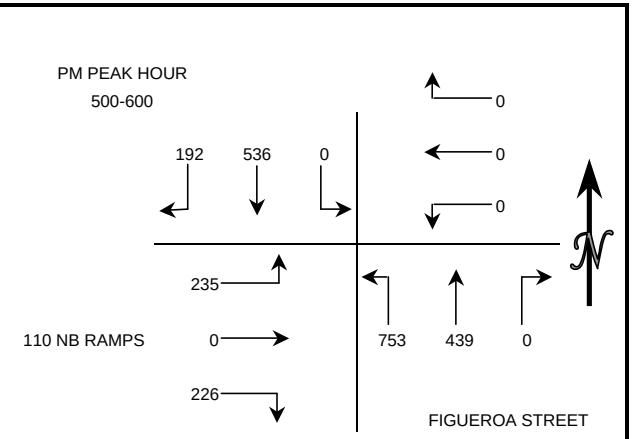
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S FIGUEROA STREET
E/W 110 NB RAMPS

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	25	53	0	0	0	0	0	77	172	40	0	65	432
715-730	24	61	0	0	0	0	0	104	186	40	0	80	495
730-745	25	79	0	0	0	0	0	144	198	57	0	81	584
745-800	25	79	0	0	0	0	0	200	215	59	0	105	683
800-815	27	53	0	0	0	0	0	151	214	66	0	100	611
815-830	26	47	0	0	0	0	0	149	181	62	0	90	555
830-845	28	44	0	0	0	0	0	141	178	62	0	89	542
845-900	22	47	0	0	0	0	0	96	174	63	0	79	481
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	99	272	0	0	0	0	0	525	771	196	0	331	2194
715-815	101	272	0	0	0	0	0	599	813	222	0	366	2373
730-830	103	258	0	0	0	0	0	644	808	244	0	376	2433
745-845	106	223	0	0	0	0	0	641	788	249	0	384	2391
800-900	103	191	0	0	0	0	0	537	747	253	0	358	2189



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	64	95	0	0	0	0	0	94	164	53	0	58	528
415-430	52	91	0	0	0	0	0	131	161	51	0	60	546
430-445	40	97	0	0	0	0	0	112	165	45	0	76	535
445-500	54	117	0	0	0	0	0	108	189	63	0	62	593
500-515	61	146	0	0	0	0	0	111	173	60	0	52	603
515-530	49	144	0	0	0	0	0	120	184	57	0	59	613
530-545	37	130	0	0	0	0	0	92	181	54	0	60	554
545-600	45	116	0	0	0	0	0	116	215	55	0	64	611
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	210	400	0	0	0	0	0	445	679	212	0	256	2202
415-515	207	451	0	0	0	0	0	462	688	219	0	250	2277
430-530	204	504	0	0	0	0	0	451	711	225	0	249	2344
445-545	201	537	0	0	0	0	0	431	727	234	0	233	2363
500-600	192	536	0	0	0	0	0	439	753	226	0	235	2381



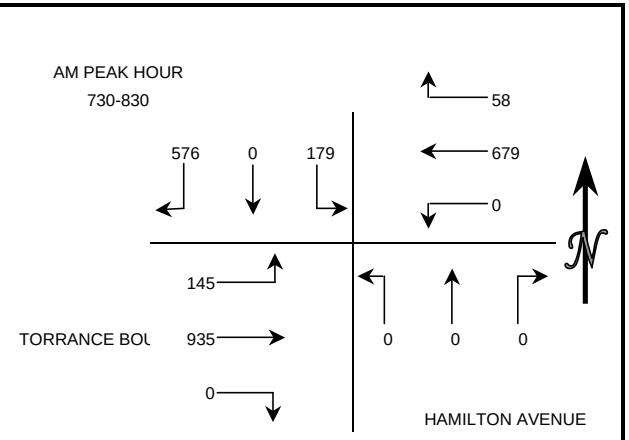
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

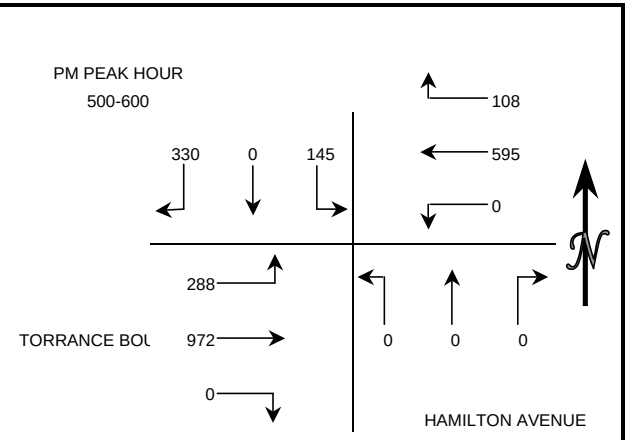
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S HAMILTON AVENUE
E/W TORRANCE BOULEVARD

15 MIN COUNTS	7:00 AM TO 9:00 AM												
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	120	0	50	13	116	0	0	0	0	0	184	23	506
715-730	120	0	34	7	134	0	0	0	0	0	237	32	564
730-745	130	0	32	19	162	0	0	0	0	0	258	38	639
745-800	164	0	46	11	192	0	0	0	0	0	246	42	701
800-815	141	0	55	17	183	0	0	0	0	0	226	38	660
815-830	141	0	46	11	142	0	0	0	0	0	205	27	572
830-845	142	0	66	10	124	0	0	0	0	0	188	36	566
845-900	106	0	33	16	106	0	0	0	0	0	182	31	474
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	534	0	162	50	604	0	0	0	0	0	925	135	2410
715-815	555	0	167	54	671	0	0	0	0	0	967	150	2564
730-830	576	0	179	58	679	0	0	0	0	0	935	145	2572
745-845	588	0	213	49	641	0	0	0	0	0	865	143	2499
800-900	530	0	200	54	555	0	0	0	0	0	801	132	2272



15 MIN COUNTS	4:00 PM TO 6:00 PM												
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	98	0	51	25	121	0	0	0	0	0	224	57	576
415-430	91	0	51	21	118	0	0	0	0	0	206	65	552
430-445	107	0	62	15	133	0	0	0	0	0	200	60	577
445-500	80	0	44	22	148	0	0	0	0	0	231	42	567
500-515	87	0	59	32	165	0	0	0	0	0	220	71	634
515-530	76	0	25	31	152	0	0	0	0	0	238	75	597
530-545	88	0	41	24	136	0	0	0	0	0	269	69	627
545-600	79	0	20	21	142	0	0	0	0	0	245	73	580
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	376	0	208	83	520	0	0	0	0	0	861	224	2272
415-515	365	0	216	90	564	0	0	0	0	0	857	238	2330
430-530	350	0	190	100	598	0	0	0	0	0	889	248	2375
445-545	331	0	169	109	601	0	0	0	0	0	958	257	2425
500-600	330	0	145	108	595	0	0	0	0	0	972	288	2438



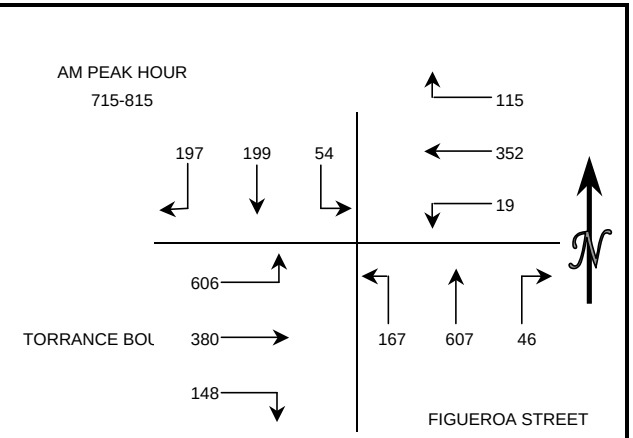
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

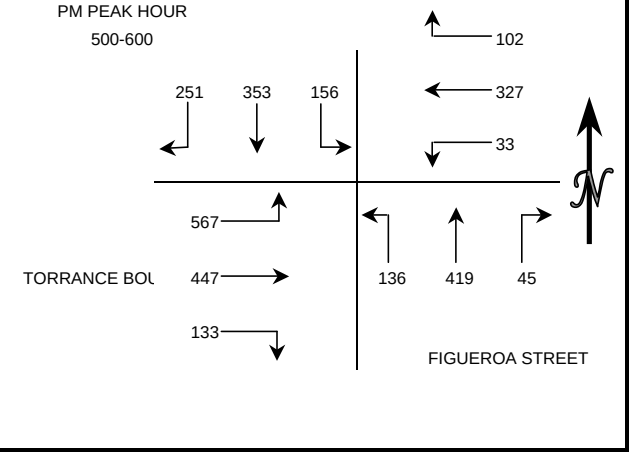
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S FIGUEROA STREET
E/W TORRANCE BOULEVARD

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	32	37	4	20	46	3	16	102	15	28	59	128	490
715-730	44	48	13	33	92	5	12	127	30	37	85	180	706
730-745	46	70	22	30	105	2	4	174	58	44	104	145	804
745-800	52	48	10	32	82	11	19	163	49	34	95	151	746
800-815	55	33	9	20	73	1	11	143	30	33	96	130	634
815-830	57	39	12	21	84	4	14	150	46	35	105	132	699
830-845	37	32	18	22	59	3	8	139	58	24	103	123	626
845-900	44	32	12	26	51	0	9	108	24	30	74	111	521
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	174	203	49	115	325	21	51	566	152	143	343	604	2746
715-815	197	199	54	115	352	19	46	607	167	148	380	606	2890
730-830	210	190	53	103	344	18	48	630	183	146	400	558	2883
745-845	201	152	49	95	298	19	52	595	183	126	399	536	2705
800-900	193	136	51	89	267	8	42	540	158	122	378	496	2480



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	56	65	33	34	58	6	11	121	34	22	119	144	703
415-430	48	70	29	21	52	10	11	127	49	26	134	111	688
430-445	47	58	21	27	65	9	20	115	30	41	105	118	656
445-500	49	81	19	26	77	4	17	115	45	24	113	104	674
500-515	74	94	43	28	78	6	9	81	42	39	101	136	731
515-530	70	100	31	29	96	15	15	108	27	33	114	147	785
530-545	55	94	44	24	76	8	8	119	30	30	128	142	758
545-600	52	65	38	21	77	4	13	111	37	31	104	142	695
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	200	274	102	108	252	29	59	478	158	113	471	477	2721
415-515	218	303	112	102	272	29	57	438	166	130	453	469	2749
430-530	240	333	114	110	316	34	61	419	144	137	433	505	2846
445-545	248	369	137	107	327	33	49	423	144	126	456	529	2948
500-600	251	353	156	102	327	33	45	419	136	133	447	567	2969



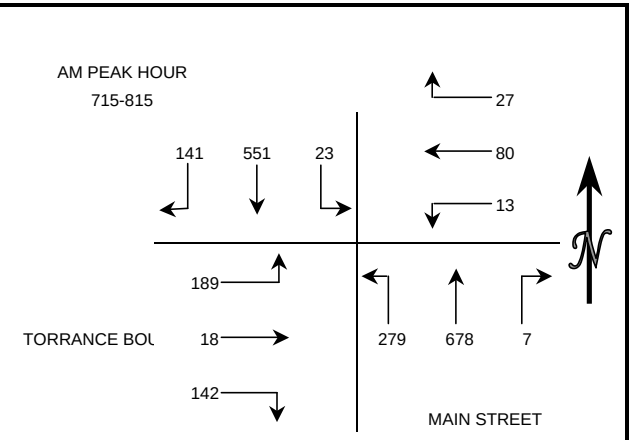
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

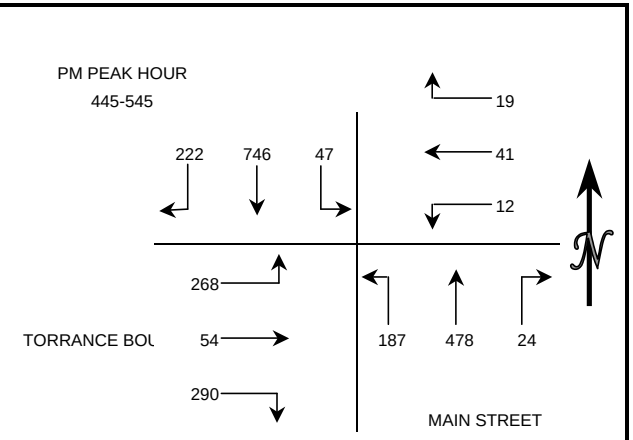
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 9TH, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S MAIN STREET
E/W TORRANCE BOULEVARD

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	31	106	2	6	17	4	0	83	45	21	3	32	350
715-730	20	164	9	6	26	4	2	118	60	26	3	39	477
730-745	38	167	3	5	27	3	0	198	76	41	1	40	599
745-800	43	134	5	8	17	6	3	194	78	43	9	57	597
800-815	40	86	6	8	10	0	2	168	65	32	5	53	475
815-830	46	61	3	7	19	0	1	122	52	28	3	46	388
830-845	26	66	5	8	19	0	4	91	46	29	4	51	349
845-900	32	56	2	4	8	2	3	76	41	21	9	48	302
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	132	571	19	25	87	17	5	593	259	131	16	168	2023
715-815	141	551	23	27	80	13	7	678	279	142	18	189	2148
730-830	167	448	17	28	73	9	6	682	271	144	18	196	2059
745-845	155	347	19	31	65	6	10	575	241	132	21	207	1809
800-900	144	269	16	27	56	2	10	457	204	110	21	198	1514



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	35	146	10	7	9	1	4	116	36	73	13	55	505
415-430	41	159	8	6	12	0	4	118	45	74	7	56	530
430-445	44	164	5	4	4	1	5	104	43	90	16	63	543
445-500	44	167	9	5	12	4	11	124	37	61	12	69	555
500-515	53	193	10	3	8	3	1	117	53	73	12	65	591
515-530	65	194	14	7	13	3	4	112	51	87	17	73	640
530-545	60	192	14	4	8	2	8	125	46	69	13	61	602
545-600	37	163	8	6	13	5	3	101	54	66	12	66	534
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	164	636	32	22	37	6	24	462	161	298	48	243	2133
415-515	182	683	32	18	36	8	21	463	178	298	47	253	2219
430-530	206	718	38	19	37	11	21	457	184	311	57	270	2329
445-545	222	746	47	19	41	12	24	478	187	290	54	268	2388
500-600	215	742	46	20	42	13	16	455	204	295	54	265	2367



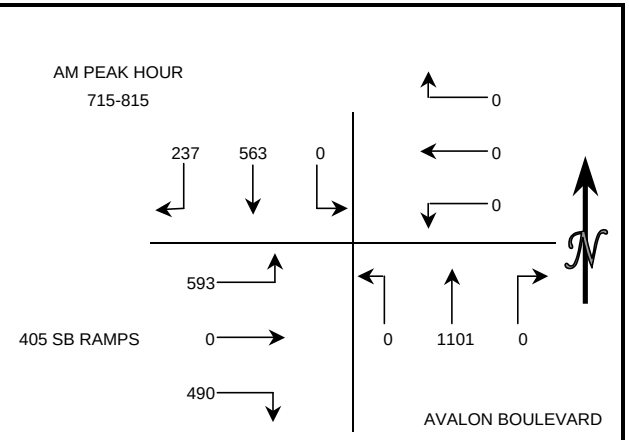
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

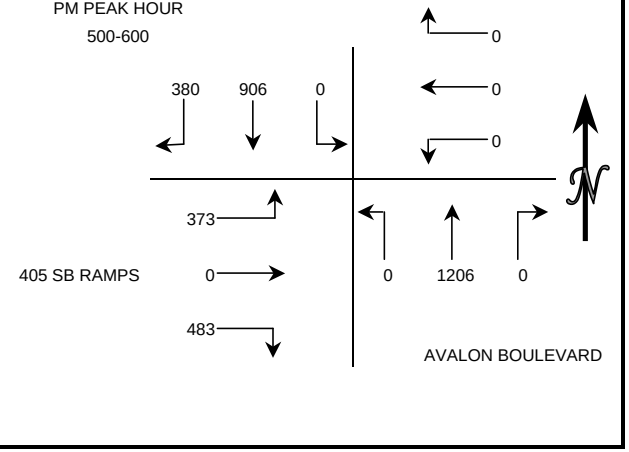
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 9TH, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S AVALON BOULEVARD
E/W 405 SB RAMPS

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	55	111	0	0	0	0	0	174	0	109	0	117	566
715-730	68	171	0	0	0	0	0	220	0	106	0	123	688
730-745	71	151	0	0	0	0	0	295	0	135	0	112	764
745-800	49	115	0	0	0	0	0	316	0	139	0	189	808
800-815	49	126	0	0	0	0	0	270	0	110	0	169	724
815-830	50	115	0	0	0	0	0	227	0	98	0	120	610
830-845	48	116	0	0	0	0	0	178	0	72	0	164	578
845-900	34	133	0	0	0	0	0	194	0	91	0	150	602
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	243	548	0	0	0	0	0	1005	0	489	0	541	2826
715-815	237	563	0	0	0	0	0	1101	0	490	0	593	2984
730-830	219	507	0	0	0	0	0	1108	0	482	0	590	2906
745-845	196	472	0	0	0	0	0	991	0	419	0	642	2720
800-900	181	490	0	0	0	0	0	869	0	371	0	603	2514



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	65	217	0	0	0	0	0	281	0	128	0	117	808
415-430	99	222	0	0	0	0	0	302	0	105	0	137	865
430-445	92	221	0	0	0	0	0	276	0	106	0	98	793
445-500	80	262	0	0	0	0	0	287	0	129	0	93	851
500-515	103	206	0	0	0	0	0	305	0	121	0	85	820
515-530	94	246	0	0	0	0	0	312	0	108	0	103	863
530-545	98	205	0	0	0	0	0	288	0	132	0	79	802
545-600	85	249	0	0	0	0	0	301	0	122	0	106	863
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	336	922	0	0	0	0	0	1146	0	468	0	445	3317
415-515	374	911	0	0	0	0	0	1170	0	461	0	413	3329
430-530	369	935	0	0	0	0	0	1180	0	464	0	379	3327
445-545	375	919	0	0	0	0	0	1192	0	490	0	360	3336
500-600	380	906	0	0	0	0	0	1206	0	483	0	373	3348



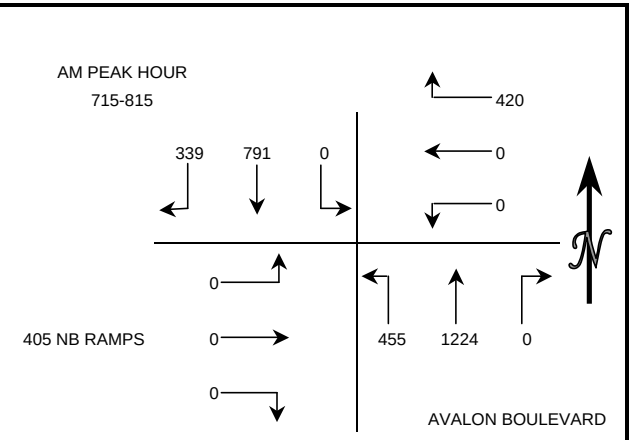
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

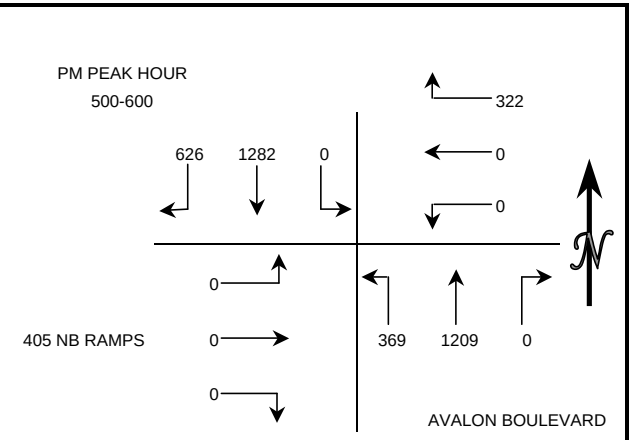
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 9TH, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S AVALON BOULEVARD
E/W 405 NB RAMPS

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	87	179	0	74	0	0	0	209	80	0	0	0	629
715-730	94	232	0	82	0	0	0	230	115	0	0	0	753
730-745	94	216	0	96	0	0	0	293	120	0	0	0	819
745-800	59	164	0	116	0	0	0	377	119	0	0	0	835
800-815	92	179	0	126	0	0	0	324	101	0	0	0	822
815-830	72	159	0	96	0	0	0	283	79	0	0	0	689
830-845	64	157	0	82	0	0	0	268	77	0	0	0	648
845-900	58	166	0	74	0	0	0	268	66	0	0	0	632
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	334	791	0	368	0	0	0	1109	434	0	0	0	3036
715-815	339	791	0	420	0	0	0	1224	455	0	0	0	3229
730-830	317	718	0	434	0	0	0	1277	419	0	0	0	3165
745-845	287	659	0	420	0	0	0	1252	376	0	0	0	2994
800-900	286	661	0	378	0	0	0	1143	323	0	0	0	2791



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	164	295	0	92	0	0	0	326	88	0	0	0	965
415-430	139	311	0	84	0	0	0	324	101	0	0	0	959
430-445	133	346	0	78	0	0	0	306	85	0	0	0	948
445-500	123	296	0	93	0	0	0	297	66	0	0	0	875
500-515	158	325	0	81	0	0	0	315	94	0	0	0	973
515-530	192	329	0	73	0	0	0	295	102	0	0	0	991
530-545	144	328	0	91	0	0	0	293	91	0	0	0	947
545-600	132	300	0	77	0	0	0	306	82	0	0	0	897
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	559	1248	0	347	0	0	0	1253	340	0	0	0	3747
415-515	553	1278	0	336	0	0	0	1242	346	0	0	0	3755
430-530	606	1296	0	325	0	0	0	1213	347	0	0	0	3787
445-545	617	1278	0	338	0	0	0	1200	353	0	0	0	3786
500-600	626	1282	0	322	0	0	0	1209	369	0	0	0	3808



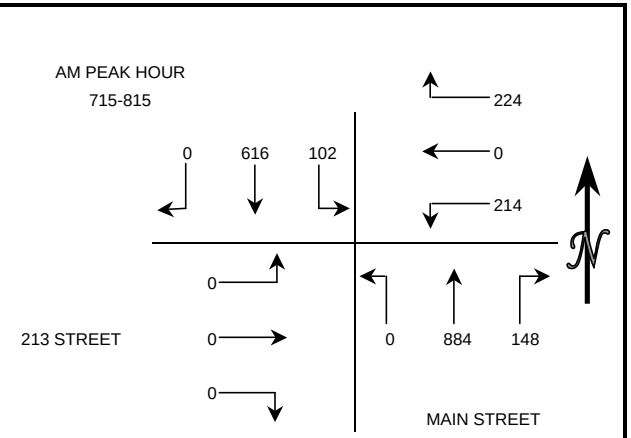
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

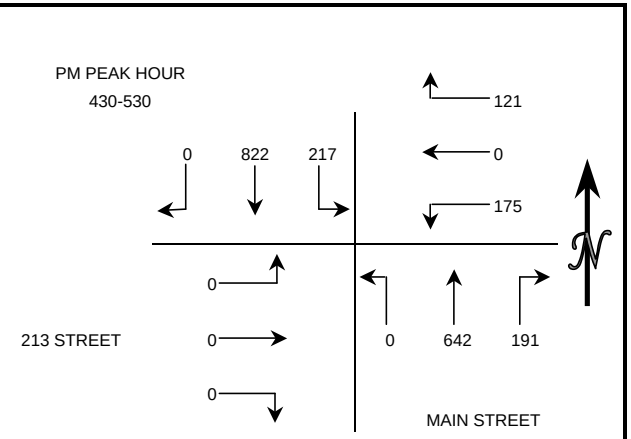
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: TUESDAY, DECEMBER 7TH, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S MAIN STREET
E/W 213 STREET

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	0	76	22	35	0	42	13	112	0	0	0	0	300
715-730	0	195	16	52	0	50	32	183	0	0	0	0	528
730-745	0	184	24	62	0	74	40	242	0	0	0	0	626
745-800	0	140	33	52	0	58	37	240	0	0	0	0	560
800-815	0	97	29	58	0	32	39	219	0	0	0	0	474
815-830	0	76	36	46	0	27	26	139	0	0	0	0	350
830-845	0	92	20	34	0	36	11	104	0	0	0	0	297
845-900	0	76	20	36	0	27	13	110	0	0	0	0	282
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	0	595	95	201	0	224	122	777	0	0	0	0	2014
715-815	0	616	102	224	0	214	148	884	0	0	0	0	2188
730-830	0	497	122	218	0	191	142	840	0	0	0	0	2010
745-845	0	405	118	190	0	153	113	702	0	0	0	0	1681
800-900	0	341	105	174	0	122	89	572	0	0	0	0	1403



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	0	144	50	26	0	57	45	185	0	0	0	0	507
415-430	0	189	55	34	0	36	45	146	0	0	0	0	505
430-445	0	195	44	27	0	46	58	155	0	0	0	0	525
445-500	0	211	48	32	0	37	42	189	0	0	0	0	559
500-515	0	215	62	30	0	50	51	150	0	0	0	0	558
515-530	0	201	63	32	0	42	40	148	0	0	0	0	526
530-545	0	208	54	24	0	28	40	135	0	0	0	0	489
545-600	0	159	63	22	0	25	51	123	0	0	0	0	443
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	0	739	197	119	0	176	190	675	0	0	0	0	2096
415-515	0	810	209	123	0	169	196	640	0	0	0	0	2147
430-530	0	822	217	121	0	175	191	642	0	0	0	0	2168
445-545	0	835	227	118	0	157	173	622	0	0	0	0	2132
500-600	0	783	242	108	0	145	182	556	0	0	0	0	2016



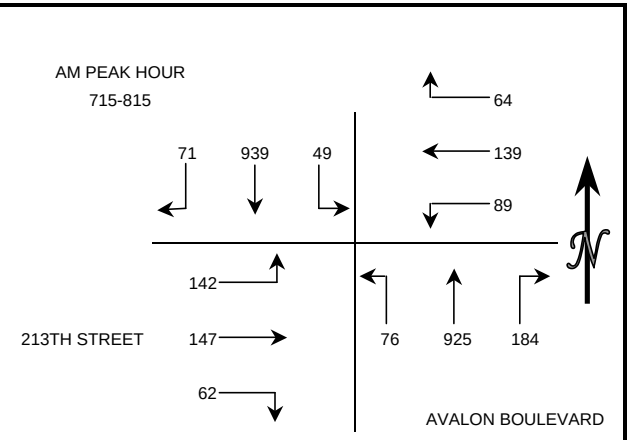
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

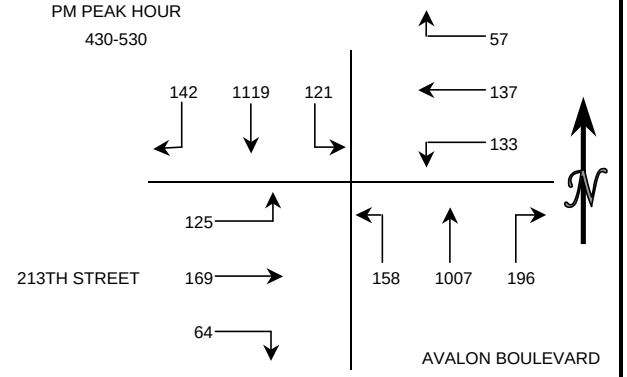
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 9TH, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S AVALON BOULEVARD
E/W 213TH STREET

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	12	156	12	7	18	14	39	135	12	16	16	24	461
715-730	14	241	14	11	38	18	37	183	17	10	33	32	648
730-745	16	240	18	18	34	25	48	256	20	16	36	35	762
745-800	20	254	8	18	32	16	51	271	22	15	46	36	789
800-815	21	204	9	17	35	30	48	215	17	21	32	39	688
815-830	24	180	8	14	15	15	40	216	23	14	31	20	600
830-845	11	181	5	8	15	14	28	199	28	10	33	23	555
845-900	19	192	12	9	12	13	36	161	25	13	23	28	543
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	62	891	52	54	122	73	175	845	71	57	131	127	2660
715-815	71	939	49	64	139	89	184	925	76	62	147	142	2887
730-830	81	878	43	67	116	86	187	958	82	66	145	130	2839
745-845	76	819	30	57	97	75	167	901	90	60	142	118	2632
800-900	75	757	34	48	77	72	152	791	93	58	119	110	2386



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	42	193	30	19	21	35	61	268	48	14	36	28	795
415-430	38	274	21	18	17	28	49	225	33	13	49	27	792
430-445	39	284	24	13	36	30	53	254	40	19	48	37	877
445-500	31	289	41	13	24	28	53	220	40	13	39	29	820
500-515	31	251	34	21	46	44	33	283	45	17	48	29	882
515-530	41	295	22	10	31	31	57	250	33	15	34	30	849
530-545	38	294	26	7	22	27	40	269	23	20	34	26	826
545-600	42	301	24	13	23	29	31	232	15	19	35	36	800
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	150	1040	116	63	98	121	216	967	161	59	172	121	3284
415-515	139	1098	120	65	123	130	188	982	158	62	184	122	3371
430-530	142	1119	121	57	137	133	196	1007	158	64	169	125	3428
445-545	141	1129	123	51	123	130	183	1022	141	65	155	114	3377
500-600	152	1141	106	51	122	131	161	1034	116	71	151	121	3357



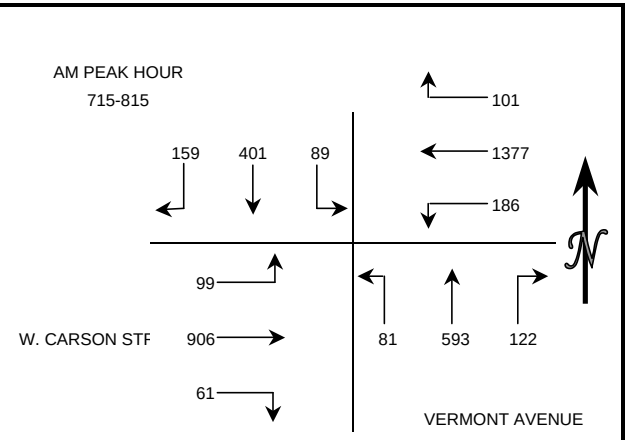
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

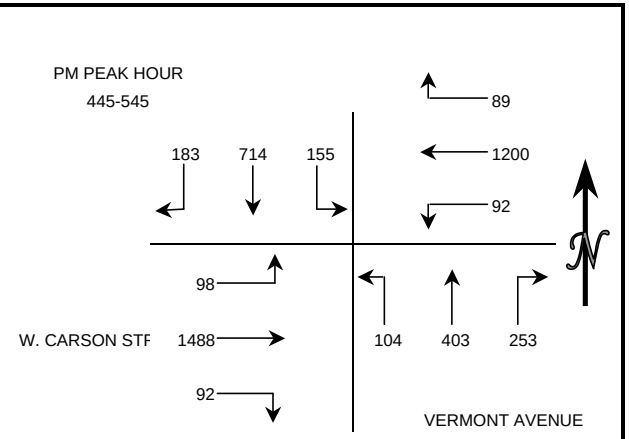
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: CARSON MAKETPLACE COUNTS
DATE: WEDNESDAY, JULY 6TH, 2005
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S VERMONT AVENUE
E/W W. CARSON STREET

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	25	59	12	19	338	54	29	111	18	9	152	27	853
715-730	33	87	25	26	312	46	21	119	12	12	195	20	908
730-745	39	96	17	34	343	38	34	157	22	18	278	34	1110
745-800	41	103	27	13	346	44	33	175	28	14	229	20	1073
800-815	46	115	20	28	376	58	34	142	19	17	204	25	1084
815-830	31	72	15	11	292	30	33	135	25	12	189	21	866
830-845	44	79	16	12	328	31	33	119	25	13	181	23	904
845-900	25	61	16	12	317	26	41	94	20	20	187	25	844
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	138	345	81	92	1339	182	117	562	80	53	854	101	3944
715-815	159	401	89	101	1377	186	122	593	81	61	906	99	4175
730-830	157	386	79	86	1357	170	134	609	94	61	900	100	4133
745-845	162	369	78	64	1342	163	133	571	97	56	803	89	3927
800-900	146	327	67	63	1313	145	141	490	89	62	761	94	3698



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	37	144	26	13	283	27	90	105	19	25	297	29	1095
415-430	41	162	32	24	291	24	50	91	22	24	347	31	1139
430-445	37	154	33	20	252	19	57	99	22	22	379	42	1136
445-500	41	149	27	30	311	24	65	110	27	18	373	26	1201
500-515	56	221	47	16	265	35	71	97	20	29	356	20	1233
515-530	49	170	32	13	326	16	63	107	30	22	396	30	1254
530-545	37	174	49	30	298	17	54	89	27	23	363	22	1183
545-600	49	153	35	27	303	18	47	83	26	20	327	24	1112
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	156	609	118	87	1137	94	262	405	90	89	1396	128	4571
415-515	175	686	139	90	1119	102	243	397	91	93	1455	119	4709
430-530	183	694	139	79	1154	94	256	413	99	91	1504	118	4824
445-545	183	714	155	89	1200	92	253	403	104	92	1488	98	4871
500-600	191	718	163	86	1192	86	235	376	103	94	1442	96	4782



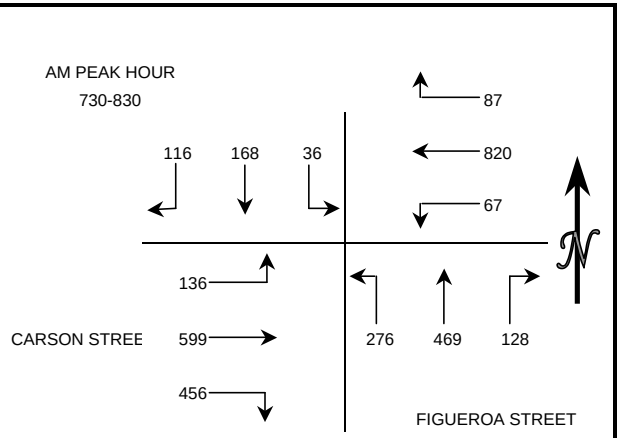
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

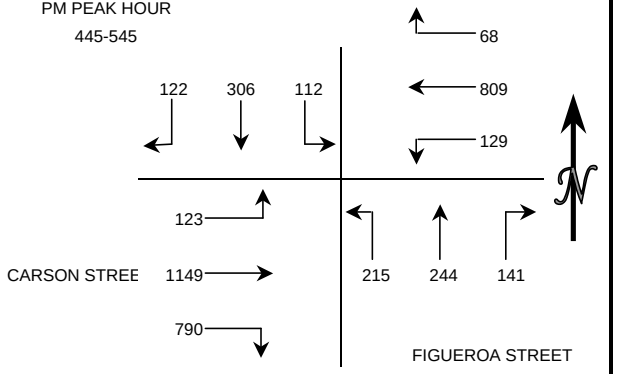
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: CARSON MAKETPLACE COUNTS
DATE: TUESDAY, JULY 19TH, 2005
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S FIGUEROA STREET
E/W CARSON STREET

15 MIN COUNTS	7:00 AM TO 9:00 AM												
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	17	20	8	11	141	7	22	61	32	79	85	22	505
715-730	30	30	12	25	188	17	27	101	59	79	117	21	706
730-745	33	55	11	26	193	23	34	112	62	121	159	37	866
745-800	31	52	13	26	218	22	37	125	82	111	170	42	929
800-815	24	36	7	22	207	8	30	138	69	122	143	28	834
815-830	28	25	5	13	202	14	27	94	63	102	127	29	729
830-845	20	31	18	13	161	17	26	99	48	118	143	27	721
845-900	39	34	16	6	181	13	20	55	40	103	145	23	675
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	111	157	44	88	740	69	120	399	235	390	531	122	3006
715-815	118	173	43	99	806	70	128	476	272	433	589	128	3335
730-830	116	168	36	87	820	67	128	469	276	456	599	136	3358
745-845	103	144	43	74	788	61	120	456	262	453	583	126	3213
800-900	111	126	46	54	751	52	103	386	220	445	558	107	2959



15 MIN COUNTS	4:00 PM TO 6:00 PM												
	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	33	53	25	13	172	30	39	43	42	195	229	44	918
415-430	24	71	20	12	170	27	32	49	38	188	246	28	905
430-445	37	57	15	18	178	29	43	56	40	192	277	39	981
445-500	30	75	28	22	188	29	39	84	58	223	319	24	1119
500-515	31	85	35	18	192	23	30	47	39	187	272	47	1006
515-530	31	72	24	19	210	39	38	56	48	198	305	26	1066
530-545	30	74	25	9	219	38	34	57	70	182	253	26	1017
545-600	23	79	22	11	193	23	41	51	68	202	315	34	1062
HOUR TOTALS													
	1	2	3	4	5	6	7	8	9	10	11	12	
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	124	256	88	65	708	115	153	232	178	798	1071	135	3923
415-515	122	288	98	70	728	108	144	236	175	790	1114	138	4011
430-530	129	289	102	77	768	120	150	243	185	800	1173	136	4172
445-545	122	306	112	68	809	129	141	244	215	790	1149	123	4208
500-600	115	310	106	57	814	123	143	211	225	769	1145	133	4151



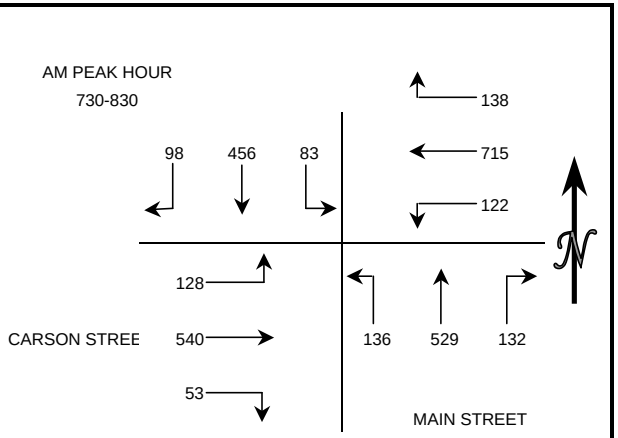
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

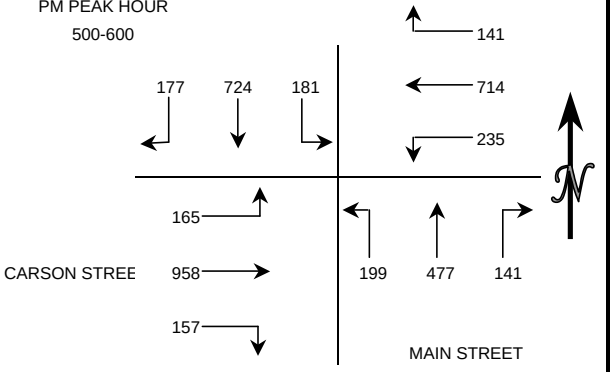
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
PROJECT: CARSON MAKETPLACE COUNTS
DATE: TUESDAY, JULY 19TH, 2005
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S MAIN STREET
E/W CARSON STREET

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	26	62	14	15	131	14	30	62	29	10	94	10	497
715-730	17	116	16	18	139	20	23	95	23	19	109	25	620
730-745	25	165	21	34	192	25	44	149	33	13	147	33	881
745-800	32	138	20	31	179	47	30	158	39	13	146	46	879
800-815	21	79	20	45	186	33	34	123	26	19	136	22	744
815-830	20	74	22	28	158	17	24	99	38	8	111	27	626
830-845	21	65	22	16	140	26	20	75	33	21	117	21	577
845-900	28	66	16	10	138	14	24	69	29	18	118	30	560
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	100	481	71	98	641	106	127	464	124	55	496	114	2877
715-815	95	498	77	128	696	125	131	525	121	64	538	126	3124
730-830	98	456	83	138	715	122	132	529	136	53	540	128	3130
745-845	94	356	84	120	663	123	108	455	136	61	510	116	2826
800-900	90	284	80	99	622	90	102	366	126	66	482	100	2507



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	31	151	43	29	139	38	21	110	40	26	197	40	865
415-430	43	151	56	25	144	30	32	99	33	45	202	36	896
430-445	26	179	47	37	152	48	34	111	34	43	240	48	999
445-500	36	152	51	38	226	37	43	111	44	24	209	43	1014
500-515	45	150	43	35	145	73	30	118	48	36	260	38	1021
515-530	56	211	46	32	186	62	39	106	53	41	236	37	1105
530-545	37	185	46	40	204	36	26	123	48	34	231	50	1060
545-600	39	178	46	34	179	64	46	130	50	46	231	40	1083
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	136	633	197	129	661	153	130	431	151	138	848	167	3774
415-515	150	632	197	135	667	188	139	439	159	148	911	165	3930
430-530	163	692	187	142	709	220	146	446	179	144	945	166	4139
445-545	174	698	186	145	761	208	138	458	193	135	936	168	4200
500-600	177	724	181	141	714	235	141	477	199	157	958	165	4269



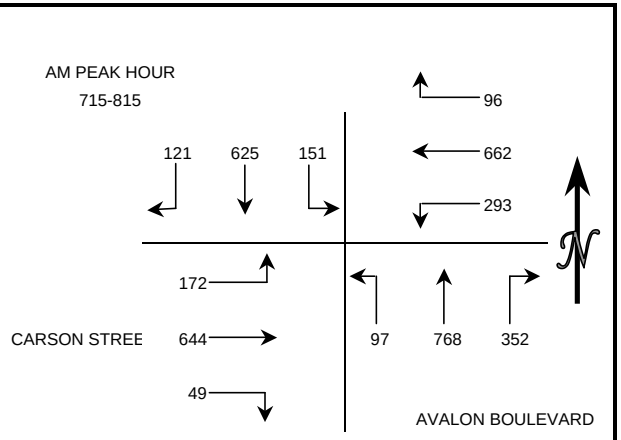
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

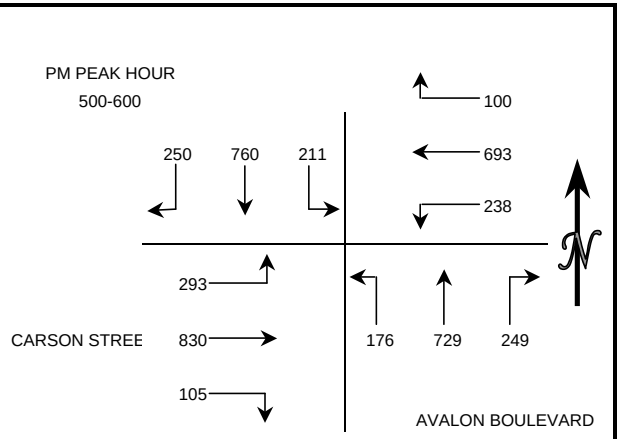
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 9TH, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S AVALON BOULEVARD
E/W CARSON STREET

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	19	118	28	14	132	42	53	120	15	18	112	33	704
715-730	27	175	41	28	172	83	70	155	27	10	126	34	948
730-745	34	170	45	22	212	96	109	214	27	18	201	57	1205
745-800	33	151	34	23	151	71	86	231	15	16	193	40	1044
800-815	27	129	31	23	127	43	87	168	28	5	124	41	833
815-830	30	127	35	17	149	45	80	158	23	14	126	38	842
830-845	28	107	36	18	148	53	64	142	20	19	115	39	789
845-900	33	113	45	16	151	45	45	113	30	14	115	37	757
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	113	614	148	87	667	292	318	720	84	62	632	164	3901
715-815	121	625	151	96	662	293	352	768	97	49	644	172	4030
730-830	124	577	145	85	639	255	362	771	93	53	644	176	3924
745-845	118	514	136	81	575	212	317	699	86	54	558	158	3508
800-900	118	476	147	74	575	186	276	581	101	52	480	155	3221



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	56	139	32	31	156	65	55	173	35	28	185	67	1022
415-430	61	194	43	32	172	89	65	144	25	24	192	90	1131
430-445	54	197	47	29	136	53	64	169	39	30	189	70	1077
445-500	53	186	54	20	145	80	74	164	30	27	162	71	1066
500-515	64	221	55	39	165	62	69	211	46	23	200	86	1241
515-530	57	188	49	27	175	60	62	199	40	20	237	64	1178
530-545	78	172	42	15	180	42	56	176	42	24	197	60	1084
545-600	51	179	65	19	173	74	62	143	48	38	196	83	1131
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	224	716	176	112	609	287	258	650	129	109	728	298	4296
415-515	232	798	199	120	618	284	272	688	140	104	743	317	4515
430-530	228	792	205	115	621	255	269	743	155	100	788	291	4562
445-545	252	767	200	101	665	244	261	750	158	94	796	281	4569
500-600	250	760	211	100	693	238	249	729	176	105	830	293	4634



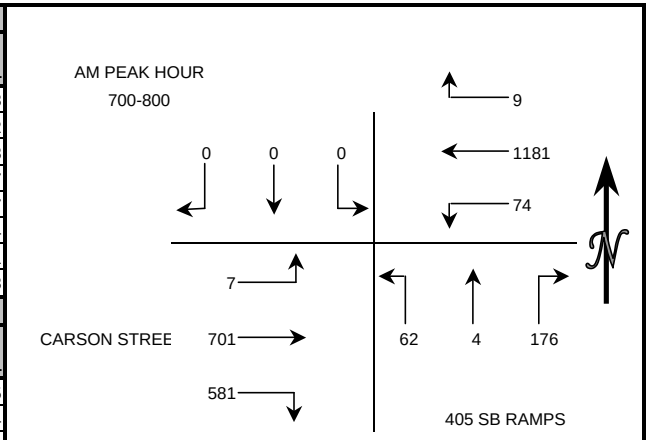
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

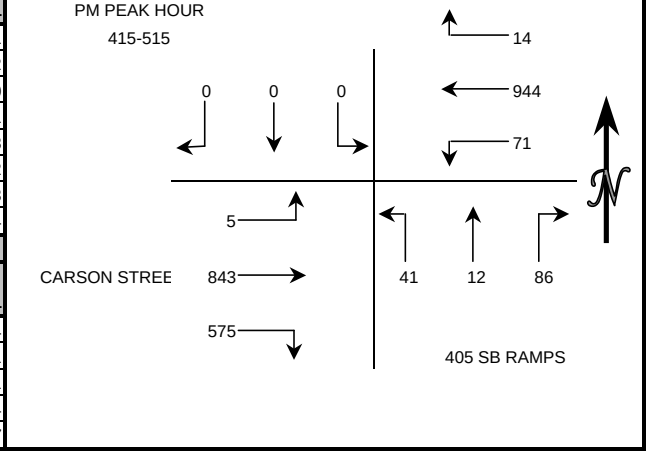
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S 405 SB RAMPS
E/W CARSON STREET

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	0	0	0	2	239	10	45	1	22	140	129	0	588
715-730	0	0	0	4	346	22	39	1	17	152	160	1	742
730-745	0	0	0	2	319	27	36	1	12	152	196	3	748
745-800	0	0	0	1	277	15	56	1	11	137	216	3	717
800-815	0	0	0	1	244	11	39	0	9	106	170	7	587
815-830	0	0	0	2	186	18	31	4	10	119	153	1	524
830-845	0	0	0	5	201	12	27	2	12	98	141	3	501
845-900	0	0	0	3	184	11	20	0	7	77	93	3	398
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	0	0	0	9	1181	74	176	4	62	581	701	7	2795
715-815	0	0	0	8	1186	75	170	3	49	547	742	14	2794
730-830	0	0	0	6	1026	71	162	6	42	514	735	14	2576
745-845	0	0	0	9	908	56	153	7	42	460	680	14	2329
800-900	0	0	0	11	815	52	117	6	38	400	557	14	2010



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	0	0	0	6	217	13	25	3	10	139	195	3	611
415-430	0	0	0	1	244	18	31	3	10	152	211	2	672
430-445	0	0	0	5	232	21	15	2	12	144	208	1	640
445-500	0	0	0	5	218	11	19	3	13	127	223	2	621
500-515	0	0	0	3	250	21	21	4	6	152	201	0	658
515-530	0	0	0	2	246	16	16	1	7	138	226	0	652
530-545	0	0	0	1	234	12	17	3	4	143	228	1	643
545-600	0	0	0	3	246	5	5	3	7	110	212	3	594
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	0	0	0	17	911	63	90	11	45	562	837	8	2544
415-515	0	0	0	14	944	71	86	12	41	575	843	5	2591
430-530	0	0	0	15	946	69	71	10	38	561	858	3	2571
445-545	0	0	0	11	948	60	73	11	30	560	878	3	2574
500-600	0	0	0	9	976	54	59	11	24	543	867	4	2547



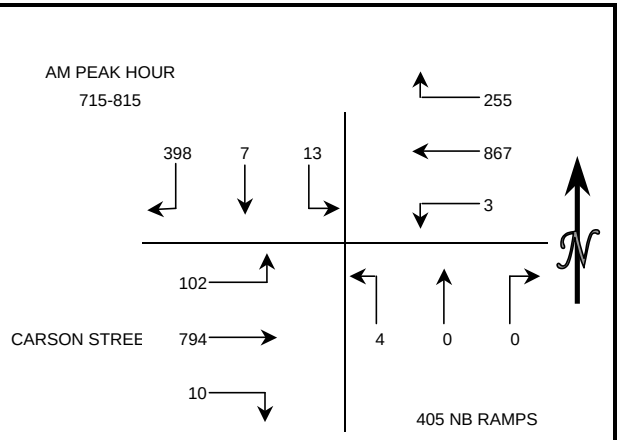
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

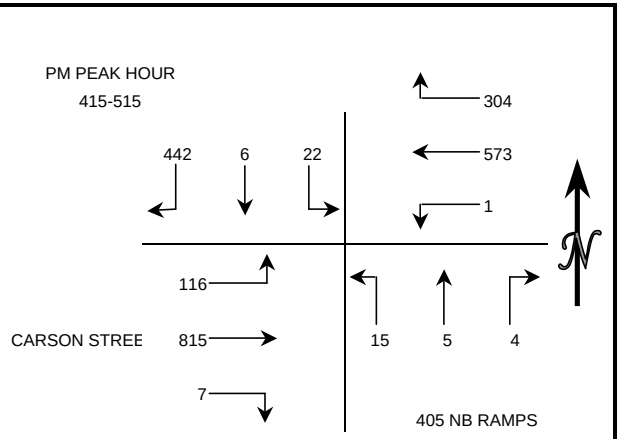
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES, INC.
PROJECT: CARSON MARKETPLACE
DATE: THURSDAY, DECEMBER 2ND, 2004
PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
INTERSECTION: N/S 405 NB RAMPS
E/W CARSON STREET

15 MIN COUNTS	7:00 AM TO 9:00 AM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	104	0	2	68	150	0	0	0	0	3	134	26	487
715-730	100	1	0	65	276	1	0	0	1	2	162	32	640
730-745	108	2	3	75	239	0	0	0	0	1	222	22	672
745-800	94	2	3	59	198	2	0	0	1	3	237	26	625
800-815	96	2	7	56	154	0	0	0	2	4	173	22	516
815-830	93	3	8	48	122	0	0	0	0	1	156	27	458
830-845	118	1	4	40	102	2	1	0	0	6	149	21	444
845-900	96	3	11	62	103	0	1	1	1	1	117	18	414
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	406	5	8	267	863	3	0	0	2	9	755	106	2424
715-815	398	7	13	255	867	3	0	0	4	10	794	102	2453
730-830	391	9	21	238	713	2	0	0	3	9	788	97	2271
745-845	401	8	22	203	576	4	1	0	3	14	715	96	2043
800-900	403	9	30	206	481	2	2	1	3	12	595	88	1832



15 MIN COUNTS	4:00 PM TO 6:00 PM												
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	94	0	10	50	116	1	2	2	7	2	206	21	511
415-430	125	1	9	63	144	0	0	0	5	3	199	34	583
430-445	108	2	5	91	149	0	2	2	1	2	204	21	587
445-500	107	0	3	63	134	0	0	0	0	0	202	37	546
500-515	102	3	5	87	146	1	2	3	9	2	210	24	594
515-530	96	0	9	59	168	0	0	1	3	0	192	35	563
530-545	101	0	3	73	164	0	1	0	2	0	213	36	593
545-600	110	0	5	47	151	0	0	0	2	0	205	27	547
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	434	3	27	267	543	1	4	4	13	7	811	113	2227
415-515	442	6	22	304	573	1	4	5	15	7	815	116	2310
430-530	413	5	22	300	597	1	4	6	13	4	808	117	2290
445-545	406	3	20	282	612	1	3	4	14	2	817	132	2296
500-600	409	3	22	266	629	1	3	4	16	2	820	122	2297



APPENDIX C

LEVEL OF SERVICE WORKSHEETS

EXISTING (YEAR 2005) WEEKDAY PEAK HOUR

LEVEL OF SERVICE WORKSHEETS

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & I-405 SB ON RAMP**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.285 *
	TH	2.00	492	3,200	0.154	N-S(2):	0.154
	LT	1.00	66	1,600	0.041 *	E-W(1):	0.000 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	V/C:	0.285
Northbound	RT	1.00	70	1,600	0.044	Lost Time:	0.100
	TH	2.00	782	3,200	0.244 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.385
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.310 *
	TH	2.00	755	3,200	0.236	N-S(2):	0.236
	LT	1.00	242	1,600	0.151 *	E-W(1):	0.000 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	V/C:	0.310
Northbound	RT	1.00	74	1,600	0.046	Lost Time:	0.100
	TH	2.00	510	3,200	0.159 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.410
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	LOS:	A

* - Denotes critical movement

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

Intersection #2 #2 Figueroa St & I-405 NB Off-Ramp

Average Delay (sec/veh): 5.5 Worst Case Level Of Service: C[22.3]

Street Name:	Figueroa St						I-405 NB Off-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2 0 0			0 0 2 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	776	0	0	413	0	0	0	0	138	0	256
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	776	0	0	413	0	0	0	0	138	0	256
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	776	0	0	413	0	0	0	0	138	0	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	776	0	0	413	0	0	0	0	138	0	256
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	982	xxxx	388
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	250	xxxx	616
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	250	xxxx	616
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.55	xxxx	0.42
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.0	xxxx	2.0
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	35.9	xxxx	14.9
LOS by Move:	*	*	*	*	*	*	*	*	*	E	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			22.3		
ApproachLOS:	*			*			*			C		

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

Intersection #2 #2 Figueroa St & I-405 NB Off-Ramp

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: C[17.3]

Street Name:	Figueroa St						I-405 NB Off-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2 0 0			0 0 2 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	503	0	0	916	0	0	0	0	79	0	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	503	0	0	916	0	0	0	0	79	0	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	503	0	0	916	0	0	0	0	79	0	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	503	0	0	916	0	0	0	0	79	0	89
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	961	xxxx	252
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	258	xxxx	754
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	258	xxxx	754
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.31	xxxx	0.12
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.3	xxxx	0.4
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	25.0	xxxx	10.4
LOS by Move:	*	*	*	*	*	*	*	*	*	D	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			17.3		
ApproachLOS:	*			*			*			C		

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & I-405 NB OFF-RAMP**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.243 *
	TH	2.00	413	3,200	0.129	N-S(2):	0.129
	LT	0.00	0	0	0.000 *	E-W(1):	0.086
Westbound	RT	1.00	256	1,600	0.160 *	E-W(2):	0.160 *
	TH	0.00	0	0	0.000		
	LT	1.00	138	1,600	0.086	V/C:	0.403
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	776	3,200	0.243 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.503
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.157
	TH	2.00	916	3,200	0.286 *	N-S(2):	0.286 *
	LT	0.00	0	0	0.000	E-W(1):	0.049
Westbound	RT	1.00	89	1,600	0.056 *	E-W(2):	0.056 *
	TH	0.00	0	0	0.000		
	LT	1.00	79	1,600	0.049	V/C:	0.342
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	503	3,200	0.157		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.442
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & I-405 SB ON RAMP**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.294 *
	TH	2.00	618	3,200	0.193	N-S(2):	0.193
	LT	1.00	93	1,600	0.058 *	E-W(1):	0.072 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.366
Northbound	RT	0.00	56	0	0.000	Lost Time:	0.100
	TH	2.00	699	3,200	0.236 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	11	0	0.000	ICU:	0.466
	TH	1.00	104	1,600	0.072 *		
	LT	1.00	28	1,600	0.018	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.370 *
	TH	2.00	979	3,200	0.306	N-S(2):	0.306
	LT	1.00	272	1,600	0.170 *	E-W(1):	0.167 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.537
Northbound	RT	0.00	103	0	0.000	Lost Time:	0.100
	TH	2.00	538	3,200	0.200 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	61	0	0.000	ICU:	0.637
	TH	1.00	206	1,600	0.167 *		
	LT	1.00	44	1,600	0.028	LOS:	B

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & I-405 NB OFF-RAMP**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	63	1,600	0.039	N-S(1):	0.411 *
	TH	2.00	589	3,200	0.184 *	N-S(2):	0.000
	LT	0.00	0	0	0.000	E-W(1):	0.184 *
Westbound	RT	0.00	203	0	0.000	E-W(2):	0.000
	TH	2.00	319	3,200	0.184 *		
	LT	0.00	67	1,600	0.042	V/C:	0.595
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	725	3,200	0.227 *		
	LT	1.00	18	1,600	0.011		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.695
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	62	1,600	0.039	N-S(1):	0.541 *
	TH	2.00	1,161	3,200	0.363 *	N-S(2):	0.000
	LT	0.00	0	0	0.000	E-W(1):	0.079 *
Westbound	RT	0.00	90	0	0.000	E-W(2):	0.000
	TH	2.00	83	3,200	0.079 *		
	LT	0.00	80	1,600	0.050	V/C:	0.620
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	570	3,200	0.178 *		
	LT	1.00	27	1,600	0.017		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.720
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **VERMONT AV & DEL AMO BL**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	26	0	0.000	N-S(1):	0.326 *
	TH	2.00	354	3,200	0.119	N-S(2):	0.122
	LT	1.00	74	1,600	0.046 *	E-W(1):	0.152
Westbound	RT	1.00	260	1,600	0.116 *	E-W(2):	0.170 *
	TH	1.00	86	1,600	0.054		
	LT	1.00	191	1,600	0.119	V/C:	0.496
Northbound	RT	0.00	156	0	0.000	Lost Time:	0.100
	TH	2.00	741	3,200	0.280 *		
	LT	1.00	4	1,600	0.003		
Eastbound	RT	0.00	8	0	0.000	ICU:	0.596
	TH	2.00	97	3,200	0.033		
	LT	1.00	86	1,600	0.054 *	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	80	0	0.000	N-S(1):	0.398 *
	TH	2.00	923	3,200	0.313	N-S(2):	0.316
	LT	1.00	338	1,600	0.211 *	E-W(1):	0.208 *
Westbound	RT	1.00	137	1,600	0.000	E-W(2):	0.103
	TH	1.00	138	1,600	0.086		
	LT	1.00	276	1,600	0.173 *	V/C:	0.606
Northbound	RT	0.00	132	0	0.000	Lost Time:	0.100
	TH	2.00	467	3,200	0.187 *		
	LT	1.00	5	1,600	0.003		
Eastbound	RT	0.00	9	0	0.000	ICU:	0.706
	TH	2.00	104	3,200	0.035 *		
	LT	1.00	27	1,600	0.017	LOS:	C

* - Denotes critical movement

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

Intersection #6 #6 Hamilton Av & Del Amo Bl

Cycle (sec):	100	Critical Vol./Cap. (X):	0.764
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	21.1
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Hamilton Av						Del Amo Bl					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	65	85	65	33	28	21	23	287	49	300	648	167
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	85	65	33	28	21	23	287	49	300	648	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	85	65	33	28	21	23	287	49	300	648	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	85	65	33	28	21	23	287	49	300	648	167
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	65	85	65	33	28	21	23	287	49	300	648	167
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.13	0.87	1.00	1.14	0.86	1.00	1.71	0.29	1.00	1.59	0.41
Final Sat.:	360	433	350	336	405	320	392	732	127	486	848	224
Capacity Analysis Module:												
Vol/Sat:	0.18	0.20	0.19	0.10	0.07	0.07	0.06	0.39	0.39	0.62	0.76	0.74
Crit Moves:		****		****				****			****	
Delay/Veh:	13.7	13.2	12.4	13.2	12.3	11.7	11.8	15.3	15.0	20.7	27.4	25.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.7	13.2	12.4	13.2	12.3	11.7	11.8	15.3	15.0	20.7	27.4	25.3
LOS by Move:	B	B	B	B	B	B	B	C	C	C	D	D
ApproachDel:	13.1			12.5			15.1			25.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.1			12.5			15.1			25.3		
LOS by Appr:	B			B			C			D		

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

Intersection #6 #6 Hamilton Av & Del Amo Bl

Cycle (sec):	100	Critical Vol./Cap. (X):	0.924
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	36.3
Optimal Cycle:	0	Level Of Service:	E

Street Name:	Hamilton Av						Del Amo Bl					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	17	41	103	139	119	22	3	532	159	364	483	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	41	103	139	119	22	3	532	159	364	483	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	41	103	139	119	22	3	532	159	364	483	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	41	103	139	119	22	3	532	159	364	483	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	17	41	103	139	119	22	3	532	159	364	483	54
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.69	0.31	1.00	1.54	0.46	1.00	1.80	0.20
Final Sat.:	292	306	326	307	539	101	356	613	187	394	739	83
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.32	0.45	0.22	0.22	0.01	0.87	0.85	0.92	0.65	0.65
Crit Moves:			****	****				****		****		
Delay/Veh:	14.7	15.0	16.9	21.3	15.6	15.4	12.3	46.7	43.0	57.7	25.0	24.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.7	15.0	16.9	21.3	15.6	15.4	12.3	46.7	43.0	57.7	25.0	24.5
LOS by Move:	B	C	C	C	C	C	B	E	E	F	D	C
ApproachDel:	16.2			18.4			45.7			38.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	16.2			18.4			45.7			38.2		
LOS by Appr:	C			C			E			E		

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & DEL AMO BL**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	21	0	0.000	N-S(1):	0.068 *
	TH	2.00	28	3,200	0.015	N-S(2):	0.056
	LT	1.00	33	1,600	0.021 *	E-W(1):	0.293 *
Westbound	RT	0.00	167	0	0.000	E-W(2):	0.269
	TH	2.00	648	3,200	0.255		
	LT	1.00	300	1,600	0.188 *	V/C:	0.361
Northbound	RT	0.00	65	0	0.000	Lost Time:	0.100
	TH	2.00	85	3,200	0.047 *		
	LT	1.00	65	1,600	0.041		
Eastbound	RT	0.00	49	0	0.000	ICU:	0.461
	TH	2.00	287	3,200	0.105 *		
	LT	1.00	23	1,600	0.014	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	22	0	0.000	N-S(1):	0.151 *
	TH	2.00	119	3,200	0.044	N-S(2):	0.055
	LT	1.00	139	1,600	0.087 *	E-W(1):	0.444 *
Westbound	RT	0.00	54	0	0.000	E-W(2):	0.170
	TH	2.00	483	3,200	0.168		
	LT	1.00	364	1,600	0.228 *	V/C:	0.595
Northbound	RT	0.00	103	1,600	0.064 *	Lost Time:	0.100
	TH	2.00	41	1,600	0.026		
	LT	1.00	17	1,600	0.011		
Eastbound	RT	0.00	159	0	0.000	ICU:	0.695
	TH	2.00	532	3,200	0.216 *		
	LT	1.00	3	1,600	0.002	LOS:	B

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & DEL AMO BL**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	261	1,600	0.163 *	N-S(1):	0.222
	TH	2.00	204	1,600	0.128	N-S(2):	0.271 *
	LT	1.00	28	1,600	0.018	E-W(1):	0.123
Westbound	RT	1.00	126	1,600	0.061	E-W(2):	0.257 *
	TH	2.00	701	3,200	0.219 *		
	LT	1.00	86	1,600	0.054	V/C:	0.528
Northbound	RT	1.00	189	1,600	0.064	Lost Time:	0.100
	TH	2.00	652	3,200	0.204		
	LT	1.00	173	1,600	0.108 *		
Eastbound	RT	0.00	70	0	0.000	ICU:	0.628
	TH	3.00	259	4,800	0.069		
	LT	1.00	60	1,600	0.038 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	297	0	0.000	N-S(1):	0.167
	TH	2.00	432	3,200	0.228 *	N-S(2):	0.264 *
	LT	1.00	55	1,600	0.034	E-W(1):	0.227 *
Westbound	RT	1.00	58	1,600	0.002	E-W(2):	0.200
	TH	2.00	531	3,200	0.166		
	LT	1.00	118	1,600	0.074 *	V/C:	0.491
Northbound	RT	1.00	183	1,600	0.041	Lost Time:	0.100
	TH	2.00	424	3,200	0.133		
	LT	1.00	58	1,600	0.036 *		
Eastbound	RT	0.00	192	0	0.000	ICU:	0.591
	TH	3.00	544	4,800	0.153 *		
	LT	1.00	54	1,600	0.034	LOS:	A

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & DEL AMO BL**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	118	0	0.000	N-S(1):	0.269 *
	TH	2.00	482	3,200	0.188	N-S(2):	0.226
	LT	1.00	28	1,600	0.018 *	E-W(1):	0.212
Westbound	RT	0.00	66	0	0.000	E-W(2):	0.221 *
	TH	3.00	680	4,800	0.155 *		
	LT	1.00	212	1,600	0.133	V/C:	0.490
Northbound	RT	0.00	239	0	0.000	Lost Time:	0.100
	TH	2.00	565	3,200	0.251 *		
	LT	1.00	60	1,600	0.038		
Eastbound	RT	0.00	29	0	0.000	ICU:	0.590
	TH	3.00	351	4,800	0.079		
	LT	1.00	105	1,600	0.066 *	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	127	0	0.000	N-S(1):	0.265
	TH	2.00	711	3,200	0.262 *	N-S(2):	0.276 *
	LT	1.00	88	1,600	0.055	E-W(1):	0.259 *
Westbound	RT	0.00	43	0	0.000	E-W(2):	0.174
	TH	3.00	459	4,800	0.105		
	LT	1.00	195	1,600	0.122 *	V/C:	0.535
Northbound	RT	0.00	254	0	0.000	Lost Time:	0.100
	TH	2.00	419	3,200	0.210		
	LT	1.00	23	1,600	0.014 *		
Eastbound	RT	0.00	107	0	0.000	ICU:	0.635
	TH	3.00	552	4,800	0.137 *		
	LT	1.00	110	1,600	0.069	LOS:	B

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & DEL AMO BL**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	143	0	0.000	N-S(1):	0.153
	TH	3.00	543	4,800	0.143 *	N-S(2):	0.209 *
	LT	2.00	130	2,560	0.051	E-W(1):	0.248 *
Westbound	RT	0.00	107	0	0.000	E-W(2):	0.219
	TH	3.00	590	4,800	0.145		
	LT	1.00	262	1,600	0.164 *	V/C:	0.457
Northbound	RT	0.00	156	0	0.000	Lost Time:	0.100
	TH	4.00	498	6,400	0.102		
	LT	1.00	106	1,600	0.066 *		
Eastbound	RT	0.00	24	0	0.000	ICU:	0.557
	TH	3.00	380	4,800	0.084 *		
	LT	1.00	119	1,600	0.074	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	154	0	0.000	N-S(1):	0.239
	TH	3.00	727	4,800	0.184 *	N-S(2):	0.247 *
	LT	2.00	179	2,560	0.070	E-W(1):	0.267
Westbound	RT	0.00	155	0	0.000	E-W(2):	0.274 *
	TH	3.00	542	4,800	0.145 *		
	LT	1.00	170	1,600	0.106	V/C:	0.521
Northbound	RT	0.00	244	0	0.000	Lost Time:	0.100
	TH	4.00	838	6,400	0.169		
	LT	1.00	100	1,600	0.063 *		
Eastbound	RT	0.00	98	0	0.000	ICU:	0.621
	TH	3.00	674	4,800	0.161		
	LT	1.00	207	1,600	0.129 *	LOS:	B

* - Denotes critical movement

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

Intersection #11 #11 Hamilton Av & 110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.741
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	20.8
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Hamilton Av						110 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	84	143	290	74	0	0	0	0	783	0	146
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	84	143	290	74	0	0	0	0	783	0	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	84	143	290	74	0	0	0	0	783	0	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	84	143	290	74	0	0	0	0	783	0	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	84	143	290	74	0	0	0	0	783	0	146
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	473	522	466	492	0	0	0	0	1057	0	633
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.18	0.27	0.62	0.15	xxxx	xxxx	xxxx	xxxx	0.74	xxxx	0.23
Crit Moves:			****	****						****		
Delay/Veh:	0.0	11.6	11.7	21.6	11.0	0.0	0.0	0.0	0.0	26.0	0.0	9.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.6	11.7	21.6	11.0	0.0	0.0	0.0	0.0	26.0	0.0	9.9
LOS by Move:	*	B	B	C	B	*	*	*	*	D	*	A
ApproachDel:		11.7			19.4			xxxxxx			23.5	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		11.7			19.4			xxxxxx			23.5	
LOS by Appr:		B			C			*			C	

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

Intersection #11 #11 Hamilton Av & 110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	1.131
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	47.2
Optimal Cycle:	0	Level Of Service:	E

Street Name:	Hamilton Av						110 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	78	402	531	115	0	0	0	0	558	0	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	78	402	531	115	0	0	0	0	558	0	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	78	402	531	115	0	0	0	0	558	0	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	78	402	531	115	0	0	0	0	558	0	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	78	402	531	115	0	0	0	0	558	0	88
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	479	533	470	493	0	0	0	0	926	0	542
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.16	0.75	1.13	0.23	xxxx	xxxx	xxxx	xxxx	0.60	xxxx	0.16
Crit Moves:			****	****						****		
Delay/Veh:	0.0	11.5	26.8	108.9	12.0	0.0	0.0	0.0	0.0	21.3	0.0	10.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.5	26.8	108.9	12.0	0.0	0.0	0.0	0.0	21.3	0.0	10.5
LOS by Move:	*	B	D	F	B	*	*	*	*	C	*	B
ApproachDel:		24.3			91.6			xxxxxx			19.8	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		24.3			91.6			xxxxxx			19.8	
LOS by Appr:		C			F			*			C	

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & 110 SB RAMPS**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.234 *
	TH	2.00	74	1,600	0.228	N-S(2):	0.228
	LT	0.00	290	1,600	0.181 *	E-W(1):	0.306 *
Westbound	RT	1.00	146	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	2.00	783	2,560	0.306 *	V/C:	0.540
Northbound	RT	1.00	143	1,600	0.000	Lost Time:	0.100
	TH	1.00	84	1,600	0.053 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.640
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.409 *
	TH	2.00	115	1,600	0.404	N-S(2):	0.404
	LT	0.00	531	1,600	0.332 *	E-W(1):	0.218 *
Westbound	RT	1.00	88	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	2.00	558	2,560	0.218 *	V/C:	0.627
Northbound	RT	1.00	402	1,600	0.077 *	Lost Time:	0.100
	TH	1.00	78	1,600	0.049		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.727
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & 110 NB RAMPS**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	103	1,600	0.000	N-S(1):	0.201
	TH	2.00	258	3,200	0.081 *	N-S(2):	0.397 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.242 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.639
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	644	3,200	0.201		
	LT	2.00	808	2,560	0.316 *		
Eastbound	RT	0.79	244	1,259	0.000	ICU:	0.739
	TH	0.00	0	0	0.000		
	LT	1.21	376	1,553	0.242 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	192	1,600	0.000	N-S(1):	0.137
	TH	2.00	536	3,200	0.168 *	N-S(2):	0.462 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.180 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.642
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	439	3,200	0.137		
	LT	2.00	753	2,560	0.294 *		
Eastbound	RT	0.98	226	1,569	0.000	ICU:	0.742
	TH	0.00	0	0	0.000		
	LT	1.02	235	1,305	0.180 *	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & TORRANCE BL**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.53	576	2,441	0.177	N-S(1):	0.236 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	0.47	179	759	0.236 *	E-W(1):	0.292
Westbound	RT	0.00	58	0	0.000	E-W(2):	0.321 *
	TH	2.00	679	3,200	0.230 *		
	LT	0.00	0	0	0.000	V/C:	0.557
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.657
	TH	2.00	935	3,200	0.292		
	LT	1.00	145	1,600	0.091 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.39	330	2,223	0.019	N-S(1):	0.148 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	0.61	145	977	0.148 *	E-W(1):	0.304
Westbound	RT	0.00	108	0	0.000	E-W(2):	0.400 *
	TH	2.00	595	3,200	0.220 *		
	LT	0.00	0	0	0.000	V/C:	0.548
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.648
	TH	2.00	972	3,200	0.304		
	LT	1.00	288	1,600	0.180 *	LOS:	B

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & TORRANCE BL**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	197	1,600	0.000	N-S(1):	0.238 *
	TH	2.00	199	3,200	0.062	N-S(2):	0.166
	LT	1.00	54	1,600	0.034 *	E-W(1):	0.405 *
Westbound	RT	1.00	115	1,600	0.038	E-W(2):	0.000
	TH	2.00	352	3,200	0.110 *		
	LT	1.00	19	1,600	0.012	V/C:	0.643
Northbound	RT	0.00	46	0	0.000	Lost Time:	0.100
	TH	2.00	607	3,200	0.204 *		
	LT	1.00	167	1,600	0.104		
Eastbound	RT	0.00	148	0	0.000	ICU:	0.743
	TH	1.40	380	2,235	0.236		
	LT	1.60	606	2,052	0.295 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	251	1,600	0.000	N-S(1):	0.243 *
	TH	2.00	353	3,200	0.110	N-S(2):	0.195
	LT	1.00	156	1,600	0.098 *	E-W(1):	0.401 *
Westbound	RT	1.00	102	1,600	0.000	E-W(2):	0.000
	TH	2.00	327	3,200	0.102 *		
	LT	1.00	33	1,600	0.021	V/C:	0.644
Northbound	RT	0.00	45	0	0.000	Lost Time:	0.100
	TH	2.00	419	3,200	0.145 *		
	LT	1.00	136	1,600	0.085		
Eastbound	RT	0.00	133	0	0.000	ICU:	0.744
	TH	1.52	447	2,427	0.239		
	LT	1.48	567	1,898	0.299 *	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & TORRANCE BL**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	141	1,600	0.000	N-S(1):	0.228
	TH	2.00	551	3,200	0.172 *	N-S(2):	0.281 *
	LT	1.00	23	1,600	0.014	E-W(1):	0.204 *
Westbound	RT	0.00	27	0	0.000	E-W(2):	0.000
	TH	1.00	80	1,600	0.075 *		
	LT	0.00	13	1,600	0.008	V/C:	0.485
Northbound	RT	0.00	7	0	0.000	Lost Time:	0.100
	TH	2.00	678	3,200	0.214		
	LT	2.00	279	2,560	0.109 *		
Eastbound	RT	1.00	142	1,600	0.002	ICU:	0.585
	TH	1.00	18	1,600	0.129 *		
	LT	0.00	189	1,600	0.118	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	222	1,600	0.000	N-S(1):	0.186
	TH	2.00	746	3,200	0.233 *	N-S(2):	0.306 *
	LT	1.00	47	1,600	0.029	E-W(1):	0.246 *
Westbound	RT	0.00	19	0	0.000	E-W(2):	0.000
	TH	1.00	41	1,600	0.045 *		
	LT	0.00	12	1,600	0.008	V/C:	0.552
Northbound	RT	0.00	24	0	0.000	Lost Time:	0.100
	TH	2.00	478	3,200	0.157		
	LT	2.00	187	2,560	0.073 *		
Eastbound	RT	1.00	290	1,600	0.123	ICU:	0.652
	TH	1.00	54	1,600	0.201 *		
	LT	0.00	268	1,600	0.168	LOS:	B

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & I-405 SB RAMPS**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	237	1,600	0.000	N-S(1):	0.344 *
	TH	2.00	563	3,200	0.176	N-S(2):	0.176
	LT	0.00	0	0	0.000 *	E-W(1):	0.306 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.650
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,101	3,200	0.344 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	490	1,600	0.306 *	ICU:	0.750
	TH	0.00	0	0	0.000		
	LT	2.00	593	2,560	0.232	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	380	1,600	0.121	N-S(1):	0.377 *
	TH	2.00	906	3,200	0.283	N-S(2):	0.283
	LT	0.00	0	0	0.000 *	E-W(1):	0.302 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.679
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,206	3,200	0.377 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	483	1,600	0.302 *	ICU:	0.779
	TH	0.00	0	0	0.000		
	LT	2.00	373	2,560	0.146	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & I-405 NB RAMPS**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	339	1,600	0.212	N-S(1):	0.383
	TH	2.00	791	3,200	0.247 *	N-S(2):	0.531 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	1.00	420	1,600	0.263 *	E-W(2):	0.263 *
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000	V/C:	0.794
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,224	3,200	0.383		
	LT	1.00	455	1,600	0.284 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.894
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	626	1,600	0.391	N-S(1):	0.378
	TH	2.00	1,282	3,200	0.401 *	N-S(2):	0.632 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	1.00	322	1,600	0.201 *	E-W(2):	0.201 *
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000	V/C:	0.833
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,209	3,200	0.378		
	LT	1.00	369	1,600	0.231 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.933
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & 213RD ST**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.387 *
	TH	2.00	616	3,200	0.193	N-S(2):	0.193
	LT	1.00	102	1,600	0.064 *	E-W(1):	0.274 *
Westbound	RT	0.51	224	818	0.149	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.49	214	782	0.274 *	V/C:	0.661
Northbound	RT	0.00	148	0	0.000	Lost Time:	0.100
	TH	2.00	884	3,200	0.323 *		
	LT	1.00	0	1,600	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.761
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.396 *
	TH	2.00	822	3,200	0.257	N-S(2):	0.257
	LT	1.00	217	1,600	0.136 *	E-W(1):	0.185 *
Westbound	RT	0.41	121	654	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.59	175	946	0.185 *	V/C:	0.581
Northbound	RT	0.00	191	0	0.000	Lost Time:	0.100
	TH	2.00	642	3,200	0.260 *		
	LT	1.00	0	1,600	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.681
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	B

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & 213RD ST**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	71	0	0.000	N-S(1):	0.262 *
	TH	3.00	939	4,800	0.210	N-S(2):	0.258
	LT	1.00	49	1,600	0.031 *	E-W(1):	0.187 *
Westbound	RT	0.00	64	0	0.000	E-W(2):	0.152
	TH	2.00	139	3,200	0.063		
	LT	1.00	89	1,600	0.056 *	V/C:	0.449
Northbound	RT	0.00	184	0	0.000	Lost Time:	0.100
	TH	3.00	925	4,800	0.231 *		
	LT	1.00	76	1,600	0.048		
Eastbound	RT	0.00	62	0	0.000	ICU:	0.549
	TH	1.00	147	1,600	0.131 *		
	LT	1.00	142	1,600	0.089	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	142	0	0.000	N-S(1):	0.327
	TH	3.00	1,119	4,800	0.263 *	N-S(2):	0.362 *
	LT	1.00	121	1,600	0.076	E-W(1):	0.229 *
Westbound	RT	0.00	57	0	0.000	E-W(2):	0.139
	TH	2.00	137	3,200	0.061		
	LT	1.00	133	1,600	0.083 *	V/C:	0.591
Northbound	RT	0.00	196	0	0.000	Lost Time:	0.100
	TH	3.00	1,007	4,800	0.251		
	LT	1.00	158	1,600	0.099 *		
Eastbound	RT	0.00	64	0	0.000	ICU:	0.691
	TH	1.00	169	1,600	0.146 *		
	LT	1.00	125	1,600	0.078	LOS:	B

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **VERMONT AV & CARSON ST**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	159	1,600	0.038	N-S(1):	0.241 *
	TH	2.00	401	3,200	0.125	N-S(2):	0.176
	LT	1.00	89	1,600	0.056 *	E-W(1):	0.399
Westbound	RT	1.00	101	1,600	0.008	E-W(2):	0.492 *
	TH	2.00	1,377	3,200	0.430 *		
	LT	1.00	186	1,600	0.116	V/C:	0.733
Northbound	RT	1.00	122	1,600	0.000	Lost Time:	0.100
	TH	2.00	593	3,200	0.185 *		
	LT	1.00	81	1,600	0.051		
Eastbound	RT	1.00	61	1,600	0.000	ICU:	0.833
	TH	2.00	906	3,200	0.283		
	LT	1.00	99	1,600	0.062 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	183	1,600	0.053	N-S(1):	0.223
	TH	2.00	714	3,200	0.223 *	N-S(2):	0.288 *
	LT	1.00	155	1,600	0.097	E-W(1):	0.523 *
Westbound	RT	1.00	89	1,600	0.000	E-W(2):	0.436
	TH	2.00	1,200	3,200	0.375		
	LT	1.00	92	1,600	0.058 *	V/C:	0.811
Northbound	RT	1.00	253	1,600	0.101	Lost Time:	0.100
	TH	2.00	403	3,200	0.126		
	LT	1.00	104	1,600	0.065 *		
Eastbound	RT	1.00	92	1,600	0.000	ICU:	0.911
	TH	2.00	1,488	3,200	0.465 *		
	LT	1.00	98	1,600	0.061	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & CARSON ST**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	116	0	0.000	N-S(1):	0.201 *
	TH	2.00	168	3,200	0.089	N-S(2):	0.197
	LT	2.00	36	2,560	0.014 *	E-W(1):	0.241
Westbound	RT	0.00	87	0	0.000	E-W(2):	0.368 *
	TH	2.00	820	3,200	0.283 *		
	LT	1.00	67	1,600	0.042	V/C:	0.569
Northbound	RT	0.00	128	0	0.000	Lost Time:	0.100
	TH	2.00	469	3,200	0.187 *		
	LT	2.00	276	2,560	0.108		
Eastbound	RT	1.00	456	1,600	0.199	ICU:	0.669
	TH	2.00	599	3,200	0.187		
	LT	1.00	136	1,600	0.085 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	122	0	0.000	N-S(1):	0.164
	TH	2.00	306	3,200	0.134 *	N-S(2):	0.218 *
	LT	2.00	112	2,560	0.044	E-W(1):	0.508 *
Westbound	RT	0.00	68	0	0.000	E-W(2):	0.351
	TH	2.00	809	3,200	0.274		
	LT	1.00	129	1,600	0.081 *	V/C:	0.726
Northbound	RT	0.00	141	0	0.000	Lost Time:	0.100
	TH	2.00	244	3,200	0.120		
	LT	2.00	215	2,560	0.084 *		
Eastbound	RT	1.00	790	1,600	0.427 *	ICU:	0.826
	TH	2.00	1,149	3,200	0.359		
	LT	1.00	123	1,600	0.077	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & CARSON ST**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	98	0	0.000	N-S(1):	0.190
	TH	3.00	456	4,800	0.115 *	N-S(2):	0.200 *
	LT	1.00	83	1,600	0.052	E-W(1):	0.200
Westbound	RT	0.00	138	0	0.000	E-W(2):	0.258 *
	TH	3.00	715	4,800	0.178 *		
	LT	1.00	122	1,600	0.076	V/C:	0.458
Northbound	RT	0.00	132	0	0.000	Lost Time:	0.100
	TH	3.00	529	4,800	0.138		
	LT	1.00	136	1,600	0.085 *		
Eastbound	RT	0.00	53	0	0.000	ICU:	0.558
	TH	3.00	540	4,800	0.124		
	LT	1.00	128	1,600	0.080 *	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	177	0	0.000	N-S(1):	0.242
	TH	3.00	724	4,800	0.188 *	N-S(2):	0.312 *
	LT	1.00	181	1,600	0.113	E-W(1):	0.379 *
Westbound	RT	0.00	141	0	0.000	E-W(2):	0.281
	TH	3.00	714	4,800	0.178		
	LT	1.00	235	1,600	0.147 *	V/C:	0.691
Northbound	RT	0.00	141	0	0.000	Lost Time:	0.100
	TH	3.00	477	4,800	0.129		
	LT	1.00	199	1,600	0.124 *		
Eastbound	RT	0.00	157	0	0.000	ICU:	0.791
	TH	3.00	958	4,800	0.232 *		
	LT	1.00	165	1,600	0.103	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & CARSON ST**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	121	0	0.000	N-S(1):	0.327 *
	TH	3.00	625	4,800	0.155	N-S(2):	0.216
	LT	1.00	151	1,600	0.094 *	E-W(1):	0.331 *
Westbound	RT	0.00	96	0	0.000	E-W(2):	0.304
	TH	2.00	662	3,200	0.237		
	LT	2.00	293	2,560	0.114 *	V/C:	0.658
Northbound	RT	0.00	352	0	0.000	Lost Time:	0.100
	TH	3.00	768	4,800	0.233 *		
	LT	1.00	97	1,600	0.061		
Eastbound	RT	0.00	49	0	0.000	ICU:	0.758
	TH	2.00	644	3,200	0.217 *		
	LT	2.00	172	2,560	0.067	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	250	0	0.000	N-S(1):	0.336 *
	TH	3.00	760	4,800	0.210	N-S(2):	0.320
	LT	1.00	211	1,600	0.132 *	E-W(1):	0.385 *
Westbound	RT	0.00	100	0	0.000	E-W(2):	0.362
	TH	2.00	693	3,200	0.248		
	LT	2.00	238	2,560	0.093 *	V/C:	0.721
Northbound	RT	0.00	249	0	0.000	Lost Time:	0.100
	TH	3.00	729	4,800	0.204 *		
	LT	1.00	176	1,600	0.110		
Eastbound	RT	0.00	105	0	0.000	ICU:	0.821
	TH	2.00	830	3,200	0.292 *		
	LT	2.00	293	2,560	0.114	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **I-405 SB RAMPS & CARSON ST**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.113 *
	TH	0.00	0	0	0.000	N-S(2):	0.039
	LT	0.00	0	0	0.000 *	E-W(1):	0.313 *
Westbound	RT	0.00	9	0	0.000	E-W(2):	0.252
	TH	3.00	1,181	4,800	0.248		
	LT	1.00	74	1,600	0.046 *	V/C:	0.426
Northbound	RT	0.00	176	0	0.000	Lost Time:	0.100
	TH	1.00	4	1,600	0.113 *		
	LT	1.00	62	1,600	0.039		
Eastbound	RT	1.36	581	2,175	0.239	ICU:	0.526
	TH	1.64	701	2,625	0.267 *		
	LT	1.00	7	1,600	0.004	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.061 *
	TH	0.00	0	0	0.000	N-S(2):	0.026
	LT	0.00	0	0	0.000 *	E-W(1):	0.339 *
Westbound	RT	0.00	14	0	0.000	E-W(2):	0.203
	TH	3.00	944	4,800	0.200		
	LT	1.00	71	1,600	0.044 *	V/C:	0.400
Northbound	RT	0.00	86	0	0.000	Lost Time:	0.100
	TH	1.00	12	1,600	0.061 *		
	LT	1.00	41	1,600	0.026		
Eastbound	RT	1.22	575	1,946	0.274	ICU:	0.500
	TH	1.78	843	2,854	0.295 *		
	LT	1.00	5	1,600	0.003	LOS:	A

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **I405 NB RAMPS & CARSON ST**
Description: **EXISTING CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	398	1,600	0.185 *	N-S(1):	0.008
	TH	1.00	7	1,600	0.013	N-S(2):	0.188 *
	LT	0.00	13	1,600	0.008	E-W(1):	0.253
Westbound	RT	1.00	255	1,600	0.151	E-W(2):	0.335 *
	TH	2.00	867	3,200	0.271 *		
	LT	1.00	3	1,600	0.002	V/C:	0.523
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	1.00	0	1,600	0.000		
	LT	1.00	4	1,600	0.003 *		
Eastbound	RT	0.00	10	0	0.000	ICU:	0.623
	TH	2.00	794	3,200	0.251		
	LT	1.00	102	1,600	0.064 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	442	1,600	0.204 *	N-S(1):	0.020
	TH	1.00	6	1,600	0.018	N-S(2):	0.213 *
	LT	0.00	22	1,600	0.014	E-W(1):	0.258 *
Westbound	RT	1.00	304	1,600	0.176	E-W(2):	0.252
	TH	2.00	573	3,200	0.179		
	LT	1.00	1	1,600	0.001 *	V/C:	0.471
Northbound	RT	0.00	4	0	0.000	Lost Time:	0.100
	TH	1.00	5	1,600	0.006		
	LT	1.00	15	1,600	0.009 *		
Eastbound	RT	0.00	7	0	0.000	ICU:	0.571
	TH	2.00	815	3,200	0.257 *		
	LT	1.00	116	1,600	0.073	LOS:	A

* - Denotes critical movement

CUMULATIVE BASE (YEAR 2010) WEEKDAY PEAK HOUR

LEVEL OF SERVICE WORKSHEETS

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & I-405 SB ON RAMP**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.337 *
	TH	2.00	654	3,200	0.204	N-S(2):	0.204
	LT	1.00	69	1,600	0.043 *	E-W(1):	0.000 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	V/C:	0.337
Northbound	RT	1.00	74	1,600	0.046	Lost Time:	0.100
	TH	2.00	941	3,200	0.294 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.437
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.380 *
	TH	2.00	958	3,200	0.299	N-S(2):	0.299
	LT	1.00	254	1,600	0.159 *	E-W(1):	0.000 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	V/C:	0.380
Northbound	RT	1.00	78	1,600	0.049	Lost Time:	0.100
	TH	2.00	707	3,200	0.221 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.480
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	LOS:	A

* - Denotes critical movement

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

Intersection #2 #2 Figueroa St & I-405 NB Off-Ramp

Average Delay (sec/veh): 8.7 Worst Case Level Of Service: E[40.3]

Street Name:	Figueroa St						I-405 NB Off-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2 0 0			0 0 2 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	934	0	0	571	0	0	0	0	145	0	269
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	934	0	0	571	0	0	0	0	145	0	269
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	934	0	0	571	0	0	0	0	145	0	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	934	0	0	571	0	0	0	0	145	0	269
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1220	xxxx	467
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	175	xxxx	548
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	175	xxxx	548
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.83	xxxx	0.49
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.7	xxxx	2.7
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	82.2	xxxx	17.7
LOS by Move:	*	*	*	*	*	*	*	*	*	F	*	C
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			40.3		
ApproachLOS:	*			*			*			E		

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

Intersection #2 #2 Figueroa St & I-405 NB Off-Ramp

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: D[28.4]

Street Name:	Figueroa St						I-405 NB Off-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2 0 0			0 0 2 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	700	0	0	1127	0	0	0	0	83	0	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	700	0	0	1127	0	0	0	0	83	0	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	700	0	0	1127	0	0	0	0	83	0	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	700	0	0	1127	0	0	0	0	83	0	93
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1264	xxxx	350
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	164	xxxx	652
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	164	xxxx	652
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.51	xxxx	0.14
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.5	xxxx	0.5
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	47.4	xxxx	11.4
LOS by Move:	*	*	*	*	*	*	*	*	*	E	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			28.4		
ApproachLOS:	*			*			*			D		

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & I-405 NB OFF-RAMP**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.292 *
	TH	2.00	571	3,200	0.178	N-S(2):	0.178
	LT	0.00	0	0	0.000 *	E-W(1):	0.091
Westbound	RT	1.00	269	1,600	0.168 *	E-W(2):	0.168 *
	TH	0.00	0	0	0.000		
	LT	1.00	145	1,600	0.091	V/C:	0.460
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	934	3,200	0.292 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.560
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.219
	TH	2.00	1,127	3,200	0.352 *	N-S(2):	0.352 *
	LT	0.00	0	0	0.000	E-W(1):	0.052
Westbound	RT	1.00	93	1,600	0.058 *	E-W(2):	0.058 *
	TH	0.00	0	0	0.000		
	LT	1.00	83	1,600	0.052	V/C:	0.410
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	700	3,200	0.219		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.510
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & I-405 SB ON RAMP**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.320 *
	TH	2.00	708	3,200	0.221	N-S(2):	0.221
	LT	1.00	98	1,600	0.061 *	E-W(1):	0.076 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.396
Northbound	RT	0.00	59	0	0.000	Lost Time:	0.100
	TH	2.00	770	3,200	0.259 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	12	0	0.000	ICU:	0.496
	TH	1.00	109	1,600	0.076 *		
	LT	1.00	29	1,600	0.018	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.411 *
	TH	2.00	1,070	3,200	0.334	N-S(2):	0.334
	LT	1.00	286	1,600	0.179 *	E-W(1):	0.175 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.586
Northbound	RT	0.00	108	0	0.000	Lost Time:	0.100
	TH	2.00	633	3,200	0.232 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	64	0	0.000	ICU:	0.686
	TH	1.00	216	1,600	0.175 *		
	LT	1.00	46	1,600	0.029	LOS:	B

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & I-405 NB OFF-RAMP**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	66	1,600	0.041	N-S(1):	0.461 *
	TH	2.00	678	3,200	0.212 *	N-S(2):	0.000
	LT	0.00	0	0	0.000	E-W(1):	0.193 *
Westbound	RT	0.00	213	0	0.000	E-W(2):	0.000
	TH	2.00	335	3,200	0.193 *		
	LT	0.00	70	1,600	0.044	V/C:	0.654
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	798	3,200	0.249 *		
	LT	1.00	19	1,600	0.012		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.754
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	65	1,600	0.041	N-S(1):	0.602 *
	TH	2.00	1,261	3,200	0.394 *	N-S(2):	0.000
	LT	0.00	0	0	0.000	E-W(1):	0.083 *
Westbound	RT	0.00	95	0	0.000	E-W(2):	0.000
	TH	2.00	87	3,200	0.083 *		
	LT	0.00	84	1,600	0.053	V/C:	0.685
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	667	3,200	0.208 *		
	LT	1.00	28	1,600	0.018		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.785
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **VERMONT AV & DEL AMO BL**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	34	0	0.000	N-S(1):	0.344 *
	TH	2.00	373	3,200	0.127	N-S(2):	0.133
	LT	1.00	78	1,600	0.049 *	E-W(1):	0.174
Westbound	RT	1.00	273	1,600	0.122 *	E-W(2):	0.181 *
	TH	1.00	128	1,600	0.080		
	LT	1.00	201	1,600	0.126	V/C:	0.525
Northbound	RT	0.00	164	0	0.000	Lost Time:	0.100
	TH	2.00	781	3,200	0.295 *		
	LT	1.00	9	1,600	0.006		
Eastbound	RT	0.00	12	0	0.000	ICU:	0.625
	TH	2.00	143	3,200	0.048		
	LT	1.00	95	1,600	0.059 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	104	0	0.000	N-S(1):	0.419 *
	TH	2.00	972	3,200	0.336	N-S(2):	0.349
	LT	1.00	355	1,600	0.222 *	E-W(1):	0.256 *
Westbound	RT	1.00	144	1,600	0.000	E-W(2):	0.190
	TH	1.00	255	1,600	0.159		
	LT	1.00	290	1,600	0.181 *	V/C:	0.675
Northbound	RT	0.00	139	0	0.000	Lost Time:	0.100
	TH	2.00	492	3,200	0.197 *		
	LT	1.00	20	1,600	0.013		
Eastbound	RT	0.00	25	0	0.000	ICU:	0.775
	TH	2.00	215	3,200	0.075 *		
	LT	1.00	50	1,600	0.031	LOS:	C

* - Denotes critical movement

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

Intersection #6 #6 Hamilton Av & Del Amo Bl

Cycle (sec):	100	Critical Vol./Cap. (X):	1.037
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	57.0
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Hamilton Av						Del Amo Bl					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	83	89	332	35	29	22	24	338	56	375	703	175
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	83	89	332	35	29	22	24	338	56	375	703	175
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	89	332	35	29	22	24	338	56	375	703	175
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	89	332	35	29	22	24	338	56	375	703	175
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	83	89	332	35	29	22	24	338	56	375	703	175
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.14	0.86	1.00	1.72	0.28	1.00	1.60	0.40
Final Sat.:	319	334	370	286	341	271	312	570	95	394	678	172
Capacity Analysis Module:												
Vol/Sat:	0.26	0.27	0.90	0.12	0.08	0.08	0.08	0.59	0.59	0.95	1.04	1.02
Crit Moves:			****	****				****			****	
Delay/Veh:	17.1	16.6	54.5	16.5	15.3	14.7	14.7	26.5	25.9	63.7	83.2	76.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.1	16.6	54.5	16.5	15.3	14.7	14.7	26.5	25.9	63.7	83.2	76.4
LOS by Move:	C	C	F	C	C	B	B	D	D	F	F	F
ApproachDel:	41.7			15.7			25.7			76.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	41.7			15.7			25.7			76.4		
LOS by Appr:	E			C			D			F		

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

Intersection #6 #6 Hamilton Av & Del Amo Bl

Cycle (sec):	100	Critical Vol./Cap. (X):	1.619
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	135.6
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Hamilton Av						Del Amo Bl					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	61	43	236	146	125	23	3	642	189	552	574	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	43	236	146	125	23	3	642	189	552	574	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	61	43	236	146	125	23	3	642	189	552	574	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	43	236	146	125	23	3	642	189	552	574	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	61	43	236	146	125	23	3	642	189	552	574	57
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.69	0.31	1.00	1.55	0.45	1.00	1.82	0.18
Final Sat.:	278	289	311	278	489	91	310	519	156	341	652	65
Capacity Analysis Module:												
Vol/Sat:	0.22	0.15	0.76	0.53	0.26	0.25	0.01	1.24	1.21	1.62	0.88	0.87
Crit Moves:			****	****				****		****		
Delay/Veh:	18.8	16.9	41.8	28.3	18.9	18.6	14.1	161	151.2	317.1	53.6	52.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.8	16.9	41.8	28.3	18.9	18.6	14.1	161	151.2	317.1	53.6	52.3
LOS by Move:	C	C	E	D	C	C	B	F	F	F	F	F
ApproachDel:	34.5			23.5			158.2			176.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	34.5			23.5			158.2			176.5		
LOS by Appr:	D			C			F			F		

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & DEL AMO BL**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	22	0	0.000	N-S(1):	0.230 *
	TH	2.00	29	3,200	0.016	N-S(2):	0.068
	LT	1.00	35	1,600	0.022 *	E-W(1):	0.357 *
Westbound	RT	0.00	175	0	0.000	E-W(2):	0.289
	TH	2.00	703	3,200	0.274		
	LT	1.00	375	1,600	0.234 *	V/C:	0.587
Northbound	RT	0.00	332	1,600	0.208 *	Lost Time:	0.100
	TH	2.00	89	1,600	0.056		
	LT	1.00	83	1,600	0.052		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.687
	TH	2.00	338	3,200	0.123 *		
	LT	1.00	24	1,600	0.015	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	23	0	0.000	N-S(1):	0.239 *
	TH	2.00	125	3,200	0.046	N-S(2):	0.084
	LT	1.00	146	1,600	0.091 *	E-W(1):	0.605 *
Westbound	RT	0.00	57	0	0.000	E-W(2):	0.199
	TH	2.00	574	3,200	0.197		
	LT	1.00	552	1,600	0.345 *	V/C:	0.844
Northbound	RT	0.00	236	1,600	0.148 *	Lost Time:	0.100
	TH	2.00	43	1,600	0.027		
	LT	1.00	61	1,600	0.038		
Eastbound	RT	0.00	189	0	0.000	ICU:	0.944
	TH	2.00	642	3,200	0.260 *		
	LT	1.00	3	1,600	0.002	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & DEL AMO BL**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	304	0	0.000	N-S(1):	0.262
	TH	2.00	309	3,200	0.192 *	N-S(2):	0.310 *
	LT	1.00	42	1,600	0.026	E-W(1):	0.285
Westbound	RT	1.00	135	1,600	0.058	E-W(2):	0.312 *
	TH	2.00	781	3,200	0.244 *		
	LT	1.00	156	1,600	0.098	V/C:	0.622
Northbound	RT	1.00	341	1,600	0.116	Lost Time:	0.100
	TH	2.00	756	3,200	0.236		
	LT	1.00	189	1,600	0.118 *		
Eastbound	RT	0.00	83	0	0.000	ICU:	0.722
	TH	2.00	516	3,200	0.187		
	LT	1.00	109	1,600	0.068 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	364	0	0.000	N-S(1):	0.210
	TH	2.00	562	3,200	0.289 *	N-S(2):	0.340 *
	LT	1.00	63	1,600	0.039	E-W(1):	0.532 *
Westbound	RT	1.00	76	1,600	0.008	E-W(2):	0.295
	TH	2.00	722	3,200	0.226		
	LT	1.00	386	1,600	0.241 *	V/C:	0.872
Northbound	RT	1.00	245	1,600	0.000	Lost Time:	0.100
	TH	2.00	548	3,200	0.171		
	LT	1.00	81	1,600	0.051 *		
Eastbound	RT	0.00	248	0	0.000	ICU:	0.972
	TH	2.00	683	3,200	0.291 *		
	LT	1.00	110	1,600	0.069	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & DEL AMO BL**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	127	0	0.000	N-S(1):	0.324 *
	TH	2.00	518	3,200	0.202	N-S(2):	0.241
	LT	1.00	73	1,600	0.046 *	E-W(1):	0.308 *
Westbound	RT	0.00	81	0	0.000	E-W(2):	0.262
	TH	3.00	824	4,800	0.189		
	LT	1.00	228	1,600	0.143 *	V/C:	0.632
Northbound	RT	0.00	277	0	0.000	Lost Time:	0.100
	TH	2.00	612	3,200	0.278 *		
	LT	1.00	63	1,600	0.039		
Eastbound	RT	0.00	30	0	0.000	ICU:	0.732
	TH	3.00	763	4,800	0.165 *		
	LT	1.00	116	1,600	0.073	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	139	0	0.000	N-S(1):	0.297
	TH	2.00	766	3,200	0.283 *	N-S(2):	0.298 *
	LT	1.00	109	1,600	0.068	E-W(1):	0.325 *
Westbound	RT	0.00	91	0	0.000	E-W(2):	0.286
	TH	3.00	918	4,800	0.210		
	LT	1.00	235	1,600	0.147 *	V/C:	0.623
Northbound	RT	0.00	277	0	0.000	Lost Time:	0.100
	TH	2.00	456	3,200	0.229		
	LT	1.00	24	1,600	0.015 *		
Eastbound	RT	0.00	113	0	0.000	ICU:	0.723
	TH	3.00	743	4,800	0.178 *		
	LT	1.00	121	1,600	0.076	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & DEL AMO BL**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	150	0	0.000	N-S(1):	0.179
	TH	3.00	580	4,800	0.152 *	N-S(2):	0.221 *
	LT	2.00	175	2,560	0.068	E-W(1):	0.314 *
Westbound	RT	1.00	120	1,600	0.020	E-W(2):	0.273
	TH	2.00	625	3,200	0.195		
	LT	1.00	301	1,600	0.188 *	V/C:	0.535
Northbound	RT	1.00	169	1,600	0.000	Lost Time:	0.100
	TH	3.00	534	4,800	0.111		
	LT	1.00	111	1,600	0.069 *		
Eastbound	RT	1.00	25	1,600	0.000	ICU:	0.635
	TH	2.00	404	3,200	0.126 *		
	LT	1.00	125	1,600	0.078	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	162	0	0.000	N-S(1):	0.266 *
	TH	3.00	783	4,800	0.197	N-S(2):	0.263
	LT	2.00	203	2,560	0.079 *	E-W(1):	0.345 *
Westbound	RT	1.00	208	1,600	0.067	E-W(2):	0.320
	TH	2.00	589	3,200	0.184		
	LT	1.00	189	1,600	0.118 *	V/C:	0.611
Northbound	RT	1.00	287	1,600	0.061	Lost Time:	0.100
	TH	3.00	899	4,800	0.187 *		
	LT	1.00	105	1,600	0.066		
Eastbound	RT	1.00	103	1,600	0.000	ICU:	0.711
	TH	2.00	727	3,200	0.227 *		
	LT	1.00	217	1,600	0.136	LOS:	C

* - Denotes critical movement

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

Intersection #11 #11 Hamilton Av & 110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.832
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	28.9
Optimal Cycle:	0	Level Of Service:	D

Street Name:	Hamilton Av						110 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	88	150	369	78	0	0	0	0	824	0	432
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	88	150	369	78	0	0	0	0	824	0	432
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	88	150	369	78	0	0	0	0	824	0	432
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	88	150	369	78	0	0	0	0	824	0	432
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	88	150	369	78	0	0	0	0	824	0	432
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	429	470	443	466	0	0	0	0	1006	0	602
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.21	0.32	0.83	0.17	xxxx	xxxx	xxxx	xxxx	0.82	xxxx	0.72
Crit Moves:			****	****						****		
Delay/Veh:	0.0	12.7	13.3	38.8	11.7	0.0	0.0	0.0	0.0	34.2	0.0	22.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.7	13.3	38.8	11.7	0.0	0.0	0.0	0.0	34.2	0.0	22.0
LOS by Move:	*	B	B	E	B	*	*	*	*	D	*	C
ApproachDel:		13.1			34.1			xxxxxx			30.0	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		13.1			34.1			xxxxxx			30.0	
LOS by Appr:		B			D			*			D	

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

Intersection #11 #11 Hamilton Av & 110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	1.686
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	129.7
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Hamilton Av						110 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	82	422	749	121	0	0	0	0	590	0	264
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	82	422	749	121	0	0	0	0	590	0	264
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	82	422	749	121	0	0	0	0	590	0	264
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	82	422	749	121	0	0	0	0	590	0	264
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	82	422	749	121	0	0	0	0	590	0	264
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	455	504	444	465	0	0	0	0	916	0	538
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.18	0.84	1.69	0.26	xxxx	xxxx	xxxx	xxxx	0.64	xxxx	0.49
Crit Moves:			****	****						****		
Delay/Veh:	0.0	12.2	36.0	338.3	12.9	0.0	0.0	0.0	0.0	23.4	0.0	15.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.2	36.0	338.3	12.9	0.0	0.0	0.0	0.0	23.4	0.0	15.5
LOS by Move:	*	B	E	F	B	*	*	*	*	C	*	C
ApproachDel:		32.1			293.1			xxxxxx			21.0	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		32.1			293.1			xxxxxx			21.0	
LOS by Appr:		D			F			*			C	

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & 110 SB RAMPS**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.286 *
	TH	2.00	78	1,600	0.279	N-S(2):	0.279
	LT	0.00	369	1,600	0.231 *	E-W(1):	0.322 *
Westbound	RT	1.00	432	1,600	0.039	E-W(2):	0.039
	TH	0.00	0	0	0.000		
	LT	2.00	824	2,560	0.322 *	V/C:	0.608
Northbound	RT	1.00	150	1,600	0.000	Lost Time:	0.100
	TH	1.00	88	1,600	0.055 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.708
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.547 *
	TH	2.00	121	1,600	0.544	N-S(2):	0.544
	LT	0.00	749	1,600	0.468 *	E-W(1):	0.230 *
Westbound	RT	1.00	264	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	2.00	590	2,560	0.230 *	V/C:	0.777
Northbound	RT	1.00	422	1,600	0.079 *	Lost Time:	0.100
	TH	1.00	82	1,600	0.051		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.877
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & 110 NB RAMPS**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	261	1,600	0.000	N-S(1):	0.225
	TH	2.00	288	3,200	0.090 *	N-S(2):	0.442 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.323 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.765
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	721	3,200	0.225		
	LT	2.00	901	2,560	0.352 *		
Eastbound	RT	0.62	256	991	0.000	ICU:	0.865
	TH	0.00	0	0	0.000		
	LT	1.38	571	1,768	0.323 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	569	1,600	0.158	N-S(1):	0.153
	TH	2.00	613	3,200	0.192 *	N-S(2):	0.518 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.247 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.765
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	488	3,200	0.153		
	LT	2.00	835	2,560	0.326 *		
Eastbound	RT	0.75	237	1,198	0.000	ICU:	0.865
	TH	0.00	0	0	0.000		
	LT	1.25	396	1,602	0.247 *	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & TORRANCE BL**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.52	605	2,435	0.186	N-S(1):	0.248 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	0.48	190	765	0.248 *	E-W(1):	0.309
Westbound	RT	0.00	61	0	0.000	E-W(2):	0.339 *
	TH	2.00	720	3,200	0.244 *		
	LT	0.00	0	0	0.000	V/C:	0.587
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.687
	TH	2.00	989	3,200	0.309		
	LT	1.00	152	1,600	0.095 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.38	347	2,203	0.020	N-S(1):	0.158 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	0.62	157	997	0.158 *	E-W(1):	0.322
Westbound	RT	0.00	113	0	0.000	E-W(2):	0.422 *
	TH	2.00	633	3,200	0.233 *		
	LT	0.00	0	0	0.000	V/C:	0.580
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.680
	TH	2.00	1,030	3,200	0.322		
	LT	1.00	302	1,600	0.189 *	LOS:	B

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & TORRANCE BL**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	210	1,600	0.000	N-S(1):	0.279 *
	TH	2.00	222	3,200	0.069	N-S(2):	0.178
	LT	1.00	57	1,600	0.036 *	E-W(1):	0.430 *
Westbound	RT	1.00	122	1,600	0.041	E-W(2):	0.000
	TH	2.00	373	3,200	0.117 *		
	LT	1.00	20	1,600	0.013	V/C:	0.709
Northbound	RT	0.00	48	0	0.000	Lost Time:	0.100
	TH	2.00	728	3,200	0.243 *		
	LT	1.00	175	1,600	0.109		
Eastbound	RT	0.00	155	0	0.000	ICU:	0.809
	TH	1.40	403	2,232	0.250		
	LT	1.61	642	2,054	0.313 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	269	1,600	0.000	N-S(1):	0.274 *
	TH	2.00	415	3,200	0.130	N-S(2):	0.219
	LT	1.00	164	1,600	0.103 *	E-W(1):	0.425 *
Westbound	RT	1.00	112	1,600	0.000	E-W(2):	0.000
	TH	2.00	346	3,200	0.108 *		
	LT	1.00	35	1,600	0.022	V/C:	0.699
Northbound	RT	0.00	47	0	0.000	Lost Time:	0.100
	TH	2.00	501	3,200	0.171 *		
	LT	1.00	143	1,600	0.089		
Eastbound	RT	0.00	140	0	0.000	ICU:	0.799
	TH	1.52	477	2,432	0.254		
	LT	1.48	601	1,895	0.317 *	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & TORRANCE BL**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	148	1,600	0.000	N-S(1):	0.252
	TH	2.00	596	3,200	0.186 *	N-S(2):	0.371 *
	LT	1.00	24	1,600	0.015	E-W(1):	0.215 *
Westbound	RT	0.00	28	0	0.000	E-W(2):	0.000
	TH	1.00	84	1,600	0.079 *		
	LT	0.00	14	1,600	0.009	V/C:	0.586
Northbound	RT	1.00	7	1,600	0.000	Lost Time:	0.100
	TH	2.00	757	3,200	0.237		
	LT	1.00	296	1,600	0.185 *		
Eastbound	RT	1.00	151	1,600	0.000	ICU:	0.686
	TH	1.00	19	1,600	0.136 *		
	LT	0.00	198	1,600	0.124	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	233	1,600	0.000	N-S(1):	0.196
	TH	2.00	833	3,200	0.260 *	N-S(2):	0.384 *
	LT	1.00	49	1,600	0.031	E-W(1):	0.259 *
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.000
	TH	1.00	43	1,600	0.048 *		
	LT	0.00	13	1,600	0.008	V/C:	0.643
Northbound	RT	1.00	25	1,600	0.008	Lost Time:	0.100
	TH	2.00	528	3,200	0.165		
	LT	1.00	199	1,600	0.124 *		
Eastbound	RT	1.00	307	1,600	0.068	ICU:	0.743
	TH	1.00	57	1,600	0.211 *		
	LT	0.00	281	1,600	0.176	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & I-405 SB RAMPS**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	289	1,600	0.000	N-S(1):	0.404 *
	TH	2.00	640	3,200	0.200	N-S(2):	0.200
	LT	0.00	0	0	0.000 *	E-W(1):	0.322 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.726
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,292	3,200	0.404 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	515	1,600	0.322 *	ICU:	0.826
	TH	0.00	0	0	0.000		
	LT	2.00	769	2,560	0.300	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.01	553	1,610	0.205	N-S(1):	0.416 *
	TH	1.99	1,096	3,190	0.344	N-S(2):	0.344
	LT	0.00	0	0	0.000 *	E-W(1):	0.317 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.733
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,331	3,200	0.416 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	507	1,600	0.317 *	ICU:	0.833
	TH	0.00	0	0	0.000		
	LT	2.00	445	2,560	0.174	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & I-405 NB RAMPS**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	396	1,600	0.248	N-S(1):	0.490
	TH	2.00	920	3,200	0.288 *	N-S(2):	0.587 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	1.00	587	1,600	0.367 *	E-W(2):	0.367 *
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000	V/C:	0.954
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,567	3,200	0.490		
	LT	1.00	478	1,600	0.299 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	1.054
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	F

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	812	1,600	0.508	N-S(1):	0.433
	TH	2.00	1,645	3,200	0.514 *	N-S(2):	0.757 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	1.00	392	1,600	0.245 *	E-W(2):	0.245 *
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000	V/C:	1.002
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,387	3,200	0.433		
	LT	1.00	388	1,600	0.243 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	1.102
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	F

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & 213RD ST**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.421 *
	TH	2.00	666	3,200	0.208	N-S(2):	0.208
	LT	1.00	107	1,600	0.067 *	E-W(1):	0.288 *
Westbound	RT	0.51	236	819	0.157	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.49	225	781	0.288 *	V/C:	0.709
Northbound	RT	0.00	156	0	0.000	Lost Time:	0.100
	TH	2.00	977	3,200	0.354 *		
	LT	1.00	0	1,600	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.809
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.427 *
	TH	2.00	916	3,200	0.286	N-S(2):	0.286
	LT	1.00	230	1,600	0.144 *	E-W(1):	0.196 *
Westbound	RT	0.41	129	659	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.59	184	941	0.196 *	V/C:	0.623
Northbound	RT	0.00	201	0	0.000	Lost Time:	0.100
	TH	2.00	703	3,200	0.283 *		
	LT	1.00	0	1,600	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.723
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & 213RD ST**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	75	0	0.000	N-S(1):	0.304 *
	TH	3.00	1,032	4,800	0.231	N-S(2):	0.281
	LT	1.00	54	1,600	0.034 *	E-W(1):	0.196 *
Westbound	RT	0.00	70	0	0.000	E-W(2):	0.161
	TH	2.00	146	3,200	0.068		
	LT	1.00	93	1,600	0.058 *	V/C:	0.500
Northbound	RT	0.00	193	0	0.000	Lost Time:	0.100
	TH	3.00	1,104	4,800	0.270 *		
	LT	1.00	80	1,600	0.050		
Eastbound	RT	0.00	65	0	0.000	ICU:	0.600
	TH	1.00	155	1,600	0.138 *		
	LT	1.00	149	1,600	0.093	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	149	0	0.000	N-S(1):	0.356
	TH	3.00	1,319	4,800	0.306 *	N-S(2):	0.411 *
	LT	1.00	128	1,600	0.080	E-W(1):	0.242 *
Westbound	RT	0.00	60	0	0.000	E-W(2):	0.146
	TH	2.00	144	3,200	0.064		
	LT	1.00	140	1,600	0.088 *	V/C:	0.653
Northbound	RT	0.00	206	0	0.000	Lost Time:	0.100
	TH	3.00	1,121	4,800	0.276		
	LT	1.00	168	1,600	0.105 *		
Eastbound	RT	0.00	69	0	0.000	ICU:	0.753
	TH	1.00	178	1,600	0.154 *		
	LT	1.00	131	1,600	0.082	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **VERMONT AV & CARSON ST**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	167	1,600	0.039	N-S(1):	0.255 *
	TH	2.00	426	3,200	0.133	N-S(2):	0.186
	LT	1.00	93	1,600	0.058 *	E-W(1):	0.426
Westbound	RT	1.00	106	1,600	0.008	E-W(2):	0.524 *
	TH	2.00	1,469	3,200	0.459 *		
	LT	1.00	195	1,600	0.122	V/C:	0.779
Northbound	RT	1.00	128	1,600	0.000	Lost Time:	0.100
	TH	2.00	630	3,200	0.197 *		
	LT	1.00	85	1,600	0.053		
Eastbound	RT	1.00	64	1,600	0.000	ICU:	0.879
	TH	2.00	973	3,200	0.304		
	LT	1.00	104	1,600	0.065 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	192	1,600	0.056	N-S(1):	0.239
	TH	2.00	768	3,200	0.240 *	N-S(2):	0.308 *
	LT	1.00	163	1,600	0.102	E-W(1):	0.555 *
Westbound	RT	1.00	93	1,600	0.000	E-W(2):	0.463
	TH	2.00	1,278	3,200	0.399		
	LT	1.00	97	1,600	0.061 *	V/C:	0.863
Northbound	RT	1.00	266	1,600	0.106	Lost Time:	0.100
	TH	2.00	439	3,200	0.137		
	LT	1.00	109	1,600	0.068 *		
Eastbound	RT	1.00	97	1,600	0.000	ICU:	0.963
	TH	2.00	1,581	3,200	0.494 *		
	LT	1.00	103	1,600	0.064	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & CARSON ST**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	123	0	0.000	N-S(1):	0.224 *
	TH	2.00	187	3,200	0.097	N-S(2):	0.210
	LT	2.00	39	2,560	0.015 *	E-W(1):	0.259
Westbound	RT	0.00	144	0	0.000	E-W(2):	0.416 *
	TH	2.00	896	3,200	0.325 *		
	LT	1.00	73	1,600	0.046	V/C:	0.640
Northbound	RT	0.00	143	0	0.000	Lost Time:	0.100
	TH	2.00	527	3,200	0.209 *		
	LT	2.00	290	2,560	0.113		
Eastbound	RT	1.00	479	1,600	0.209	ICU:	0.740
	TH	2.00	681	3,200	0.213		
	LT	1.00	145	1,600	0.091 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	131	0	0.000	N-S(1):	0.182
	TH	2.00	361	3,200	0.154 *	N-S(2):	0.242 *
	LT	2.00	119	2,560	0.046	E-W(1):	0.534 *
Westbound	RT	0.00	112	0	0.000	E-W(2):	0.389
	TH	2.00	875	3,200	0.308		
	LT	1.00	138	1,600	0.086 *	V/C:	0.776
Northbound	RT	0.00	161	0	0.000	Lost Time:	0.100
	TH	2.00	275	3,200	0.136		
	LT	2.00	226	2,560	0.088 *		
Eastbound	RT	1.00	830	1,600	0.448 *	ICU:	0.876
	TH	2.00	1,277	3,200	0.399		
	LT	1.00	130	1,600	0.081	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & CARSON ST**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	103	0	0.000	N-S(1):	0.212
	TH	3.00	491	4,800	0.124 *	N-S(2):	0.214 *
	LT	1.00	93	1,600	0.058	E-W(1):	0.228
Westbound	RT	0.00	156	0	0.000	E-W(2):	0.292 *
	TH	3.00	840	4,800	0.208 *		
	LT	1.00	136	1,600	0.085	V/C:	0.506
Northbound	RT	0.00	144	0	0.000	Lost Time:	0.100
	TH	3.00	593	4,800	0.154		
	LT	1.00	144	1,600	0.090 *		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.606
	TH	3.00	629	4,800	0.143		
	LT	1.00	135	1,600	0.084 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	187	0	0.000	N-S(1):	0.268
	TH	3.00	803	4,800	0.206 *	N-S(2):	0.337 *
	LT	1.00	201	1,600	0.126	E-W(1):	0.419 *
Westbound	RT	0.00	156	0	0.000	E-W(2):	0.312
	TH	3.00	817	4,800	0.203		
	LT	1.00	253	1,600	0.158 *	V/C:	0.756
Northbound	RT	0.00	157	0	0.000	Lost Time:	0.100
	TH	3.00	523	4,800	0.142		
	LT	1.00	209	1,600	0.131 *		
Eastbound	RT	0.00	165	0	0.000	ICU:	0.856
	TH	3.00	1,089	4,800	0.261 *		
	LT	1.00	174	1,600	0.109	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & CARSON ST**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	140	0	0.000	N-S(1):	0.369 *
	TH	3.00	689	4,800	0.173	N-S(2):	0.240
	LT	1.00	159	1,600	0.099 *	E-W(1):	0.361 *
Westbound	RT	0.00	102	0	0.000	E-W(2):	0.334
	TH	2.00	721	3,200	0.257		
	LT	2.00	308	2,560	0.120 *	V/C:	0.730
Northbound	RT	0.00	371	0	0.000	Lost Time:	0.100
	TH	3.00	923	4,800	0.270 *		
	LT	1.00	107	1,600	0.067		
Eastbound	RT	0.00	58	0	0.000	ICU:	0.830
	TH	2.00	712	3,200	0.241 *		
	LT	2.00	197	2,560	0.077	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	268	0	0.000	N-S(1):	0.366
	TH	3.00	936	4,800	0.251 *	N-S(2):	0.370 *
	LT	1.00	224	1,600	0.140	E-W(1):	0.418 *
Westbound	RT	0.00	107	0	0.000	E-W(2):	0.395
	TH	2.00	767	3,200	0.273		
	LT	2.00	251	2,560	0.098 *	V/C:	0.788
Northbound	RT	0.00	262	0	0.000	Lost Time:	0.100
	TH	3.00	824	4,800	0.226		
	LT	1.00	191	1,600	0.119 *		
Eastbound	RT	0.00	116	0	0.000	ICU:	0.888
	TH	2.00	908	3,200	0.320 *		
	LT	2.00	313	2,560	0.122	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & CARSON ST**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.068 *
	TH	0.00	0	0	0.000	N-S(2):	0.043
	LT	0.00	0	0	0.000 *	E-W(1):	0.337 *
Westbound	RT	0.00	9	0	0.000	E-W(2):	0.270
	TH	3.00	1,268	4,800	0.266		
	LT	1.00	78	1,600	0.049 *	V/C:	0.405
Northbound	RT	1.00	186	1,600	0.068 *	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	1.00	69	1,600	0.043		
Eastbound	RT	1.37	633	2,195	0.257	ICU:	0.505
	TH	1.63	751	2,605	0.288 *		
	LT	1.00	7	1,600	0.004	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.011
	TH	0.00	0	0	0.000 *	N-S(2):	0.035 *
	LT	0.00	0	0	0.000	E-W(1):	0.365 *
Westbound	RT	0.00	15	0	0.000	E-W(2):	0.221
	TH	3.00	1,033	4,800	0.218		
	LT	1.00	75	1,600	0.047 *	V/C:	0.400
Northbound	RT	1.00	92	1,600	0.011	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	1.00	56	1,600	0.035 *		
Eastbound	RT	1.22	623	1,957	0.290	ICU:	0.500
	TH	1.78	905	2,843	0.318 *		
	LT	1.00	5	1,600	0.003	LOS:	A

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **I405 NB RAMPS & CARSON ST**
Description: **CUMULATIVE BASE CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	432	1,600	0.203 *	N-S(1):	0.013
	TH	0.00	0	0	0.000	N-S(2):	0.206 *
	LT	1.00	21	1,600	0.013	E-W(1):	0.271
Westbound	RT	1.00	269	1,600	0.155	E-W(2):	0.355 *
	TH	2.00	923	3,200	0.288 *		
	LT	1.00	3	1,600	0.002	V/C:	0.561
Northbound	RT	1.00	0	1,600	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	1.00	4	1,600	0.003 *		
Eastbound	RT	0.00	11	0	0.000	ICU:	0.661
	TH	2.00	850	3,200	0.269		
	LT	1.00	107	1,600	0.067 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	487	1,600	0.228 *	N-S(1):	0.020
	TH	0.00	0	0	0.000	N-S(2):	0.241 *
	LT	1.00	29	1,600	0.018	E-W(1):	0.277 *
Westbound	RT	1.00	320	1,600	0.182	E-W(2):	0.270
	TH	2.00	621	3,200	0.194		
	LT	1.00	1	1,600	0.001 *	V/C:	0.518
Northbound	RT	1.00	4	1,600	0.002	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	1.00	21	1,600	0.013 *		
Eastbound	RT	0.00	7	0	0.000	ICU:	0.618
	TH	2.00	877	3,200	0.276 *		
	LT	1.00	122	1,600	0.076	LOS:	B

* - Denotes critical movement

CUMULATIVE PLUS PROJECT (YEAR 2010) WEEKDAY PEAK HOUR

LEVEL OF SERVICE WORKSHEETS

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & I-405 SB ON RAMP**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.343 *
	TH	2.00	679	3,200	0.212	N-S(2):	0.212
	LT	1.00	69	1,600	0.043 *	E-W(1):	0.000 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	V/C:	0.343
Northbound	RT	1.00	74	1,600	0.046	Lost Time:	0.100
	TH	2.00	961	3,200	0.300 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.443
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.394 *
	TH	2.00	1,004	3,200	0.314	N-S(2):	0.314
	LT	1.00	254	1,600	0.159 *	E-W(1):	0.000 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	V/C:	0.394
Northbound	RT	1.00	78	1,600	0.049	Lost Time:	0.100
	TH	2.00	751	3,200	0.235 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.494
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000 *	LOS:	A

* - Denotes critical movement

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

Intersection #2 #2 Figueroa St & I-405 NB Off-Ramp

Average Delay (sec/veh): 9.4 Worst Case Level Of Service: E[44.5]

Street Name:	Figueroa St						I-405 NB Off-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2 0 0			0 0 2 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	955	0	0	596	0	0	0	0	145	0	269
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	955	0	0	596	0	0	0	0	145	0	269
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	955	0	0	596	0	0	0	0	145	0	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	955	0	0	596	0	0	0	0	145	0	269
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1253	xxxx	478
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	167	xxxx	539
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	167	xxxx	539
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.87	xxxx	0.50
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.1	xxxx	2.8
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	93.6	xxxx	18.1
LOS by Move:	*	*	*	*	*	*	*	*	*	F	*	C
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			44.5		
ApproachLOS:	*			*			*			E		

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

Intersection #2 #2 Figueroa St & I-405 NB Off-Ramp

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: D[32.7]

Street Name:	Figueroa St						I-405 NB Off-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2 0 0			0 0 2 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	0	744	0	0	1173	0	0	0	0	83	0	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	744	0	0	1173	0	0	0	0	83	0	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	744	0	0	1173	0	0	0	0	83	0	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	744	0	0	1173	0	0	0	0	83	0	93
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1331	xxxx	372
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	149	xxxx	631
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	149	xxxx	631
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.56	xxxx	0.15
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.8	xxxx	0.5
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	56.3	xxxx	11.7
LOS by Move:	*	*	*	*	*	*	*	*	*	F	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			32.7		
ApproachLOS:	*			*			*			D		

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & I-405 NB OFF-RAMP**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.298 *
	TH	2.00	596	3,200	0.186	N-S(2):	0.186
	LT	0.00	0	0	0.000 *	E-W(1):	0.091
Westbound	RT	1.00	269	1,600	0.168 *	E-W(2):	0.168 *
	TH	0.00	0	0	0.000		
	LT	1.00	145	1,600	0.091	V/C:	0.466
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	955	3,200	0.298 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.566
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.233
	TH	2.00	1,173	3,200	0.367 *	N-S(2):	0.367 *
	LT	0.00	0	0	0.000	E-W(1):	0.052
Westbound	RT	1.00	93	1,600	0.058 *	E-W(2):	0.058 *
	TH	0.00	0	0	0.000		
	LT	1.00	83	1,600	0.052	V/C:	0.425
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	744	3,200	0.233		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.525
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & I-405 SB ON RAMP**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.346 *
	TH	2.00	791	3,200	0.247	N-S(2):	0.247
	LT	1.00	98	1,600	0.061 *	E-W(1):	0.076 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.422
Northbound	RT	0.00	76	0	0.000	Lost Time:	0.100
	TH	2.00	835	3,200	0.285 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	12	0	0.000	ICU:	0.522
	TH	1.00	109	1,600	0.076 *		
	LT	1.00	29	1,600	0.018	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.463 *
	TH	2.00	1,249	3,200	0.390	N-S(2):	0.390
	LT	1.00	286	1,600	0.179 *	E-W(1):	0.175 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.638
Northbound	RT	0.00	135	0	0.000	Lost Time:	0.100
	TH	2.00	774	3,200	0.284 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	64	0	0.000	ICU:	0.738
	TH	1.00	216	1,600	0.175 *		
	LT	1.00	46	1,600	0.029	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & I-405 NB OFF-RAMP**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	66	1,600	0.041	N-S(1):	0.505 *
	TH	2.00	751	3,200	0.235 *	N-S(2):	0.000
	LT	0.00	0	0	0.000	E-W(1):	0.196 *
Westbound	RT	0.00	213	0	0.000	E-W(2):	0.000
	TH	2.00	335	3,200	0.196 *		
	LT	0.00	80	1,600	0.050	V/C:	0.701
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	863	3,200	0.270 *		
	LT	1.00	19	1,600	0.012		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.801
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	65	1,600	0.041	N-S(1):	0.692 *
	TH	2.00	1,408	3,200	0.440 *	N-S(2):	0.000
	LT	0.00	0	0	0.000	E-W(1):	0.093 *
Westbound	RT	0.00	95	0	0.000	E-W(2):	0.000
	TH	2.00	87	3,200	0.093 *		
	LT	0.00	116	1,600	0.073	V/C:	0.785
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	807	3,200	0.252 *		
	LT	1.00	28	1,600	0.018		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.885
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **VERMONT AV & DEL AMO BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	34	0	0.000	N-S(1):	0.359 *
	TH	2.00	373	3,200	0.127	N-S(2):	0.133
	LT	1.00	103	1,600	0.064 *	E-W(1):	0.270 *
Westbound	RT	1.00	297	1,600	0.121	E-W(2):	0.180
	TH	1.00	148	1,600	0.093		
	LT	1.00	343	1,600	0.214 *	V/C:	0.629
Northbound	RT	0.00	164	0	0.000	Lost Time:	0.100
	TH	2.00	781	3,200	0.295 *		
	LT	1.00	9	1,600	0.006		
Eastbound	RT	0.00	12	0	0.000	ICU:	0.729
	TH	2.00	167	3,200	0.056 *		
	LT	1.00	95	1,600	0.059	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	104	0	0.000	N-S(1):	0.456 *
	TH	2.00	972	3,200	0.336	N-S(2):	0.349
	LT	1.00	414	1,600	0.259 *	E-W(1):	0.442 *
Westbound	RT	1.00	200	1,600	0.000	E-W(2):	0.217
	TH	1.00	298	1,600	0.186		
	LT	1.00	564	1,600	0.353 *	V/C:	0.898
Northbound	RT	0.00	139	0	0.000	Lost Time:	0.100
	TH	2.00	492	3,200	0.197 *		
	LT	1.00	20	1,600	0.013		
Eastbound	RT	0.00	25	0	0.000	ICU:	0.998
	TH	2.00	260	3,200	0.089 *		
	LT	1.00	50	1,600	0.031	LOS:	E

* - Denotes critical movement

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

Intersection #6 #6 Hamilton Av & Del Amo Bl

Cycle (sec):	100	Critical Vol./Cap. (X):	1.316
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	125.2
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Hamilton Av						Del Amo Bl					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	83	89	453	35	29	22	24	387	56	406	889	175
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	83	89	453	35	29	22	24	387	56	406	889	175
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	89	453	35	29	22	24	387	56	406	889	175
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	89	453	35	29	22	24	387	56	406	889	175
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	83	89	453	35	29	22	24	387	56	406	889	175
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.14	0.86	1.00	1.75	0.25	1.00	1.67	0.33
Final Sat.:	308	323	356	283	336	267	312	577	84	379	675	135
Capacity Analysis Module:												
Vol/Sat:	0.27	0.28	1.27	0.12	0.09	0.08	0.08	0.67	0.67	1.07	1.32	1.30
Crit Moves:			****	****				****			****	
Delay/Veh:	17.9	17.4	171.6	17.0	15.8	15.2	15.1	32.8	32.1	97.8	184	175.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.9	17.4	171.6	17.0	15.8	15.2	15.1	32.8	32.1	97.8	184	175.8
LOS by Move:	C	C	F	C	C	C	C	D	D	F	F	F
ApproachDel:	129.2			16.1			31.8			159.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	129.2			16.1			31.8			159.5		
LOS by Appr:	F			C			D			F		

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

Intersection #6 #6 Hamilton Av & Del Amo Bl

Cycle (sec):	100	Critical Vol./Cap. (X):	1.914
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	275.7
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Hamilton Av						Del Amo Bl					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	61	43	511	146	125	23	3	746	189	627	947	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	43	511	146	125	23	3	746	189	627	947	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	61	43	511	146	125	23	3	746	189	627	947	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	43	511	146	125	23	3	746	189	627	947	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	61	43	511	146	125	23	3	746	189	627	947	57
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.69	0.31	1.00	1.60	0.40	1.00	1.89	0.11
Final Sat.:	276	287	304	273	482	90	300	504	130	328	650	39
Capacity Analysis Module:												
Vol/Sat:	0.22	0.15	1.68	0.54	0.26	0.26	0.01	1.48	1.46	1.91	1.46	1.45
Crit Moves:			****	****				****		****		
Delay/Veh:	19.4	17.5	348.7	30.2	19.7	19.5	14.8	261	250.8	446.8	248	245.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.4	17.5	348.7	30.2	19.7	19.5	14.8	261	250.8	446.8	248	245.6
LOS by Move:	C	C	F	D	C	C	B	F	F	F	F	F
ApproachDel:	292.8			24.9			258.2			324.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	292.8			24.9			258.2			324.5		
LOS by Appr:	F			C			F			F		

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & DEL AMO BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	22	0	0.000	N-S(1):	0.305 *
	TH	2.00	29	3,200	0.016	N-S(2):	0.068
	LT	1.00	35	1,600	0.022 *	E-W(1):	0.392 *
Westbound	RT	0.00	175	0	0.000	E-W(2):	0.348
	TH	2.00	889	3,200	0.333		
	LT	1.00	406	1,600	0.254 *	V/C:	0.697
Northbound	RT	0.00	453	1,600	0.283 *	Lost Time:	0.100
	TH	2.00	89	1,600	0.056		
	LT	1.00	83	1,600	0.052		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.797
	TH	2.00	387	3,200	0.138 *		
	LT	1.00	24	1,600	0.015	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	23	0	0.000	N-S(1):	0.410 *
	TH	2.00	125	3,200	0.046	N-S(2):	0.084
	LT	1.00	146	1,600	0.091 *	E-W(1):	0.684 *
Westbound	RT	0.00	57	0	0.000	E-W(2):	0.316
	TH	2.00	947	3,200	0.314		
	LT	1.00	627	1,600	0.392 *	V/C:	1.094
Northbound	RT	0.00	511	1,600	0.319 *	Lost Time:	0.100
	TH	2.00	43	1,600	0.027		
	LT	1.00	61	1,600	0.038		
Eastbound	RT	0.00	189	0	0.000	ICU:	1.194
	TH	2.00	746	3,200	0.292 *		
	LT	1.00	3	1,600	0.002	LOS:	F

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & DEL AMO BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	304	0	0.000	N-S(1):	0.278
	TH	2.00	309	3,200	0.192 *	N-S(2):	0.310 *
	LT	1.00	67	1,600	0.042	E-W(1):	0.528 *
Westbound	RT	1.00	156	1,600	0.056	E-W(2):	0.380
	TH	2.00	999	3,200	0.312		
	LT	1.00	459	1,600	0.287 *	V/C:	0.838
Northbound	RT	1.00	474	1,600	0.009	Lost Time:	0.100
	TH	2.00	756	3,200	0.236		
	LT	1.00	189	1,600	0.118 *		
Eastbound	RT	0.00	83	0	0.000	ICU:	0.938
	TH	2.00	688	3,200	0.241 *		
	LT	1.00	109	1,600	0.068	LOS:	E

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	364	0	0.000	N-S(1):	0.239
	TH	2.00	562	3,200	0.289 *	N-S(2):	0.340 *
	LT	1.00	109	1,600	0.068	E-W(1):	1.053 *
Westbound	RT	1.00	120	1,600	0.007	E-W(2):	0.435
	TH	2.00	1,171	3,200	0.366		
	LT	1.00	1,030	1,600	0.644 *	V/C:	1.393
Northbound	RT	1.00	628	1,600	0.000	Lost Time:	0.100
	TH	2.00	548	3,200	0.171		
	LT	1.00	81	1,600	0.051 *		
Eastbound	RT	0.00	248	0	0.000	ICU:	1.493
	TH	2.00	1,062	3,200	0.409 *		
	LT	1.00	110	1,600	0.069	LOS:	F

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & DEL AMO BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	127	0	0.000	N-S(1):	0.398 *
	TH	2.00	518	3,200	0.202	N-S(2):	0.288
	LT	1.00	156	1,600	0.098 *	E-W(1):	0.393 *
Westbound	RT	0.00	100	0	0.000	E-W(2):	0.363
	TH	3.00	1,290	4,800	0.290		
	LT	1.00	254	1,600	0.159 *	V/C:	0.791
Northbound	RT	0.00	284	0	0.000	Lost Time:	0.100
	TH	2.00	675	3,200	0.300 *		
	LT	1.00	138	1,600	0.086		
Eastbound	RT	0.00	30	0	0.000	ICU:	0.891
	TH	3.00	1,092	4,800	0.234 *		
	LT	1.00	116	1,600	0.073	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	139	0	0.000	N-S(1):	0.457 *
	TH	2.00	766	3,200	0.283	N-S(2):	0.392
	LT	1.00	288	1,600	0.180 *	E-W(1):	0.511 *
Westbound	RT	0.00	123	0	0.000	E-W(2):	0.498
	TH	3.00	1,902	4,800	0.422		
	LT	1.00	262	1,600	0.164 *	V/C:	0.968
Northbound	RT	0.00	293	0	0.000	Lost Time:	0.100
	TH	2.00	592	3,200	0.277 *		
	LT	1.00	175	1,600	0.109		
Eastbound	RT	0.00	113	0	0.000	ICU:	1.068
	TH	3.00	1,551	4,800	0.347 *		
	LT	1.00	121	1,600	0.076	LOS:	F

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **STAMPS DR & DEL AMO BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.88	31	3,006	0.006	N-S(1):	0.034
	TH	0.12	2	194	0.010 *	N-S(2):	0.198 *
	LT	1.00	12	1,600	0.008	E-W(1):	0.475 *
Westbound	RT	1.00	11	1,600	0.000	E-W(2):	0.365
	TH	2.00	1,133	3,200	0.354		
	LT	2.00	139	2,560	0.054 *	V/C:	0.673
Northbound	RT	2.00	152	3,200	0.026	Lost Time:	0.100
	TH	1.00	0	1,600	0.000		
	LT	2.00	480	2,560	0.188 *		
Eastbound	RT	2.00	391	3,200	0.047	ICU:	0.773
	TH	2.00	1,346	3,200	0.421 *		
	LT	2.00	27	2,560	0.011	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.97	65	3,152	0.010	N-S(1):	0.043
	TH	0.03	1	48	0.021 *	N-S(2):	0.403 *
	LT	1.00	26	1,600	0.016	E-W(1):	0.363
Westbound	RT	1.00	28	1,600	0.001	E-W(2):	0.390 *
	TH	2.00	1,161	3,200	0.363 *		
	LT	2.00	337	2,560	0.132	V/C:	0.793
Northbound	RT	2.00	255	3,200	0.027	Lost Time:	0.100
	TH	1.00	1	1,600	0.001		
	LT	2.00	978	2,560	0.382 *		
Eastbound	RT	2.00	934	3,200	0.139	ICU:	0.893
	TH	2.00	739	3,200	0.231		
	LT	2.00	68	2,560	0.027 *	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & DEL AMO BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	194	0	0.000	N-S(1):	0.179
	TH	3.00	580	4,800	0.161 *	N-S(2):	0.255 *
	LT	2.00	175	2,560	0.068	E-W(1):	0.332 *
Westbound	RT	1.00	120	1,600	0.020	E-W(2):	0.317
	TH	2.00	692	3,200	0.216		
	LT	1.00	301	1,600	0.188 *	V/C:	0.587
Northbound	RT	1.00	169	1,600	0.000	Lost Time:	0.100
	TH	3.00	534	4,800	0.111		
	LT	1.00	151	1,600	0.094 *		
Eastbound	RT	1.00	96	1,600	0.000	ICU:	0.687
	TH	2.00	461	3,200	0.144 *		
	LT	1.00	162	1,600	0.101	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	256	0	0.000	N-S(1):	0.266
	TH	3.00	783	4,800	0.216 *	N-S(2):	0.360 *
	LT	2.00	203	2,560	0.079	E-W(1):	0.390
Westbound	RT	1.00	208	1,600	0.067	E-W(2):	0.423 *
	TH	2.00	735	3,200	0.230 *		
	LT	1.00	189	1,600	0.118	V/C:	0.783
Northbound	RT	1.00	287	1,600	0.061	Lost Time:	0.100
	TH	3.00	899	4,800	0.187		
	LT	1.00	230	1,600	0.144 *		
Eastbound	RT	1.00	149	1,600	0.000	ICU:	0.883
	TH	2.00	870	3,200	0.272		
	LT	1.00	309	1,600	0.193 *	LOS:	D

* - Denotes critical movement

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

Intersection #11 #11 Hamilton Av & 110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.947
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	41.6
Optimal Cycle:	0	Level Of Service:	E

Street Name:	Hamilton Av						110 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	88	179	400	78	0	0	0	0	850	0	553
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	88	179	400	78	0	0	0	0	850	0	553
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	88	179	400	78	0	0	0	0	850	0	553
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	88	179	400	78	0	0	0	0	850	0	553
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	88	179	400	78	0	0	0	0	850	0	553
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	412	450	430	452	0	0	0	0	980	0	584
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.21	0.40	0.93	0.17	xxxx	xxxx	xxxx	xxxx	0.87	xxxx	0.95
Crit Moves:			****	****								****
Delay/Veh:	0.0	13.3	15.2	55.5	12.1	0.0	0.0	0.0	0.0	41.3	0.0	49.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.3	15.2	55.5	12.1	0.0	0.0	0.0	0.0	41.3	0.0	49.1
LOS by Move:	*	B	C	F	B	*	*	*	*	E	*	E
ApproachDel:		14.6			48.4			xxxxxx			44.4	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		14.6			48.4			xxxxxx			44.4	
LOS by Appr:		B			E			*			E	

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

Intersection #11 #11 Hamilton Av & 110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	2.022
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	185.1
Optimal Cycle:	0	Level Of Service:	F

Street Name:	Hamilton Av						110 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0	2 0	0 0	1
Volume Module:												
Base Vol:	0	82	492	824	121	0	0	0	0	654	0	539
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	82	492	824	121	0	0	0	0	654	0	539
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	82	492	824	121	0	0	0	0	654	0	539
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	82	492	824	121	0	0	0	0	654	0	539
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	82	492	824	121	0	0	0	0	654	0	539
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	426	469	408	430	0	0	0	0	904	0	530
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.19	1.05	2.02	0.28	xxxx	xxxx	xxxx	xxxx	0.72	xxxx	1.02
Crit Moves:			****	****								****
Delay/Veh:	0.0	13.0	82.7	488.3	14.2	0.0	0.0	0.0	0.0	28.9	0.0	69.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.0	82.7	488.3	14.2	0.0	0.0	0.0	0.0	28.9	0.0	69.2
LOS by Move:	*	B	F	F	B	*	*	*	*	D	*	F
ApproachDel:		72.8			427.6			xxxxxx			47.1	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		72.8			427.6			xxxxxx			47.1	
LOS by Appr:		F			F			*			E	

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & 110 SB RAMPS**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.305 *
	TH	2.00	78	1,600	0.299	N-S(2):	0.299
	LT	0.00	400	1,600	0.250 *	E-W(1):	0.332 *
Westbound	RT	1.00	553	1,600	0.096	E-W(2):	0.096
	TH	0.00	0	0	0.000		
	LT	2.00	850	2,560	0.332 *	V/C:	0.637
Northbound	RT	1.00	179	1,600	0.000	Lost Time:	0.100
	TH	1.00	88	1,600	0.055 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.737
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.618 *
	TH	2.00	121	1,600	0.591	N-S(2):	0.591
	LT	0.00	824	1,600	0.515 *	E-W(1):	0.255 *
Westbound	RT	1.00	539	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	2.00	654	2,560	0.255 *	V/C:	0.873
Northbound	RT	1.00	492	1,600	0.103 *	Lost Time:	0.100
	TH	1.00	82	1,600	0.051		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.973
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & 110 NB RAMPS**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	550	1,600	0.035	N-S(1):	0.226
	TH	2.00	301	3,200	0.094 *	N-S(2):	0.446 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.386 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.832
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	722	3,200	0.226		
	LT	2.00	901	2,560	0.352 *		
Eastbound	RT	0.58	284	921	0.000	ICU:	0.932
	TH	0.00	0	0	0.000		
	LT	1.42	703	1,823	0.386 *	LOS:	E

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	1,178	1,600	0.397 *	N-S(1):	0.154
	TH	2.00	647	3,200	0.202	N-S(2):	0.723 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.424 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	1.147
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	492	3,200	0.154		
	LT	2.00	835	2,560	0.326 *		
Eastbound	RT	0.57	310	914	0.000	ICU:	1.247
	TH	0.00	0	0	0.000		
	LT	1.43	775	1,829	0.424 *	LOS:	F

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & STAMPS DR (LENARDO DR)**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.300 *
	TH	2.00	802	3,200	0.251	N-S(2):	0.251
	LT	0.00	0	0	0.000 *	E-W(1):	0.018
Westbound	RT	1.00	138	1,600	0.086 *	E-W(2):	0.086 *
	TH	0.00	0	0	0.000		
	LT	0.00	28	1,600	0.018	V/C:	0.386
Northbound	RT	1.00	301	1,600	0.171	Lost Time:	0.100
	TH	2.00	959	3,200	0.300 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.486
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.388 *
	TH	2.00	1,140	3,200	0.356	N-S(2):	0.356
	LT	0.00	0	0	0.000 *	E-W(1):	0.044
Westbound	RT	1.00	287	1,600	0.179 *	E-W(2):	0.179 *
	TH	0.00	0	0	0.000		
	LT	0.00	70	1,600	0.044	V/C:	0.567
Northbound	RT	1.00	690	1,600	0.388 *	Lost Time:	0.100
	TH	2.00	774	3,200	0.242		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.667
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	B

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & TORRANCE BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.47	605	2,358	0.192	N-S(1):	0.257 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	0.53	216	842	0.257 *	E-W(1):	0.327
Westbound	RT	0.00	89	0	0.000	E-W(2):	0.348 *
	TH	2.00	722	3,200	0.253 *		
	LT	0.00	0	0	0.000	V/C:	0.605
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.705
	TH	2.00	1,046	3,200	0.327		
	LT	1.00	152	1,600	0.095 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.22	347	1,955	0.023	N-S(1):	0.178 *
	TH	0.00	0	0	0.000	N-S(2):	0.000
	LT	0.78	221	1,245	0.178 *	E-W(1):	0.361
Westbound	RT	0.00	184	0	0.000	E-W(2):	0.446 *
	TH	2.00	638	3,200	0.257 *		
	LT	0.00	0	0	0.000	V/C:	0.624
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.724
	TH	2.00	1,155	3,200	0.361		
	LT	1.00	302	1,600	0.189 *	LOS:	C

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & TORRANCE BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	210	1,600	0.000	N-S(1):	0.303 *
	TH	2.00	236	3,200	0.074	N-S(2):	0.183
	LT	1.00	85	1,600	0.053 *	E-W(1):	0.460 *
Westbound	RT	1.00	122	1,600	0.023	E-W(2):	0.000
	TH	2.00	403	3,200	0.126 *		
	LT	1.00	24	1,600	0.015	V/C:	0.763
Northbound	RT	0.00	72	0	0.000	Lost Time:	0.100
	TH	2.00	729	3,200	0.250 *		
	LT	1.00	175	1,600	0.109		
Eastbound	RT	0.00	155	0	0.000	ICU:	0.863
	TH	1.50	485	2,396	0.267		
	LT	1.50	642	1,923	0.334 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	269	1,600	0.000	N-S(1):	0.331 *
	TH	2.00	449	3,200	0.140	N-S(2):	0.229
	LT	1.00	237	1,600	0.148 *	E-W(1):	0.498 *
Westbound	RT	1.00	112	1,600	0.000	E-W(2):	0.000
	TH	2.00	421	3,200	0.132 *		
	LT	1.00	37	1,600	0.023	V/C:	0.829
Northbound	RT	0.00	81	0	0.000	Lost Time:	0.100
	TH	2.00	504	3,200	0.183 *		
	LT	1.00	143	1,600	0.089		
Eastbound	RT	0.00	140	0	0.000	ICU:	0.929
	TH	1.72	665	2,748	0.293		
	LT	1.28	601	1,641	0.366 *	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & TORRANCE BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	182	1,600	0.000	N-S(1):	0.306
	TH	2.00	616	3,200	0.193 *	N-S(2):	0.378 *
	LT	1.00	24	1,600	0.015	E-W(1):	0.298 *
Westbound	RT	0.00	28	0	0.000	E-W(2):	0.000
	TH	1.00	84	1,600	0.079 *		
	LT	0.00	14	1,600	0.009	V/C:	0.676
Northbound	RT	1.00	7	1,600	0.000	Lost Time:	0.100
	TH	2.00	931	3,200	0.291		
	LT	1.00	296	1,600	0.185 *		
Eastbound	RT	1.00	151	1,600	0.000	ICU:	0.776
	TH	1.00	19	1,600	0.219 *		
	LT	0.00	332	1,600	0.208	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	310	1,600	0.000	N-S(1):	0.324
	TH	2.00	853	3,200	0.267 *	N-S(2):	0.391 *
	LT	1.00	49	1,600	0.031	E-W(1):	0.444 *
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.000
	TH	1.00	43	1,600	0.048 *		
	LT	0.00	13	1,600	0.008	V/C:	0.835
Northbound	RT	1.00	25	1,600	0.008	Lost Time:	0.100
	TH	2.00	938	3,200	0.293		
	LT	1.00	199	1,600	0.124 *		
Eastbound	RT	1.00	307	1,600	0.068	ICU:	0.935
	TH	1.00	57	1,600	0.396 *		
	LT	0.00	577	1,600	0.361	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **NEW DRIVEWAY & I-405 SB OFF-RAMP**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	132	1,600	0.016	N-S(1):	0.501 *
	TH	0.00	0	0	0.000	N-S(2):	0.016
	LT	2.00	1,283	2,560	0.501 *	E-W(1):	0.046
Westbound	RT	1.00	74	1,600	0.000	E-W(2):	0.162 *
	TH	2.00	254	3,200	0.079 *		
	LT	0.00	0	0	0.000	V/C:	0.663
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.763
	TH	2.00	146	3,200	0.046		
	LT	2.00	213	2,560	0.083 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	305	1,600	0.031	N-S(1):	0.372 *
	TH	0.00	0	0	0.000	N-S(2):	0.031
	LT	2.00	953	2,560	0.372 *	E-W(1):	0.186
Westbound	RT	1.00	171	1,600	0.000	E-W(2):	0.371 *
	TH	2.00	551	3,200	0.172 *		
	LT	0.00	0	0	0.000	V/C:	0.743
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.843
	TH	2.00	595	3,200	0.186		
	LT	2.00	510	2,560	0.199 *	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & I-405 SB RAMPS**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.24	476	1,982	0.041	N-S(1):	0.439 *
	TH	1.76	677	2,818	0.240	N-S(2):	0.303
	LT	0.00	0	0	0.000 *	E-W(1):	0.308 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.747
Northbound	RT	1.00	10	1,600	0.006	Lost Time:	0.100
	TH	2.00	1,305	3,200	0.439 *		
	LT	0.00	101	1,600	0.063		
Eastbound	RT	2.00	642	3,200	0.169	ICU:	0.847
	TH	0.00	0	0	0.000		
	LT	2.00	788	2,560	0.308 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.37	949	2,196	0.282	N-S(1):	0.483
	TH	1.63	1,125	2,604	0.432 *	N-S(2):	0.540 *
	LT	0.00	0	0	0.000	E-W(1):	0.257 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.797
Northbound	RT	1.00	25	1,600	0.016	Lost Time:	0.100
	TH	2.00	1,375	3,200	0.483		
	LT	0.00	172	1,600	0.108 *		
Eastbound	RT	2.00	891	3,200	0.225	ICU:	0.897
	TH	0.52	170	827	0.206		
	LT	1.48	488	1,899	0.257 *	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & I-405 NB RAMPS**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	396	1,600	0.248	N-S(1):	0.494
	TH	2.00	991	3,200	0.310 *	N-S(2):	0.504 *
	LT	0.00	0	0	0.000	E-W(1):	0.384 *
Westbound	RT	1.00	614	1,600	0.384 *	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	2.00	153	2,560	0.060	V/C:	0.888
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,580	3,200	0.494		
	LT	2.00	497	2,560	0.194 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.988
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	E

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	812	1,600	0.508	N-S(1):	0.447
	TH	2.00	1,691	3,200	0.528 *	N-S(2):	0.696 *
	LT	0.00	0	0	0.000	E-W(1):	0.296 *
Westbound	RT	1.00	473	1,600	0.296 *	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	2.00	379	2,560	0.148	V/C:	0.992
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,431	3,200	0.447		
	LT	2.00	430	2,560	0.168 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	1.092
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	F

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & 213RD ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.475 *
	TH	2.00	686	3,200	0.214	N-S(2):	0.214
	LT	1.00	107	1,600	0.067 *	E-W(1):	0.288 *
Westbound	RT	0.51	236	819	0.157	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.49	225	781	0.288 *	V/C:	0.763
Northbound	RT	0.00	156	0	0.000	Lost Time:	0.100
	TH	2.00	1,151	3,200	0.408 *		
	LT	1.00	0	1,600	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.863
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.555 *
	TH	2.00	936	3,200	0.293	N-S(2):	0.293
	LT	1.00	230	1,600	0.144 *	E-W(1):	0.196 *
Westbound	RT	0.41	129	659	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.59	184	941	0.196 *	V/C:	0.751
Northbound	RT	0.00	201	0	0.000	Lost Time:	0.100
	TH	2.00	1,113	3,200	0.411 *		
	LT	1.00	0	1,600	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.851
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & 213RD ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	75	0	0.000	N-S(1):	0.336 *
	TH	3.00	1,175	4,800	0.260	N-S(2):	0.310
	LT	1.00	75	1,600	0.047 *	E-W(1):	0.196 *
Westbound	RT	0.00	95	0	0.000	E-W(2):	0.168
	TH	2.00	146	3,200	0.075		
	LT	1.00	93	1,600	0.058 *	V/C:	0.532
Northbound	RT	0.00	193	0	0.000	Lost Time:	0.100
	TH	3.00	1,194	4,800	0.289 *		
	LT	1.00	80	1,600	0.050		
Eastbound	RT	0.00	65	0	0.000	ICU:	0.632
	TH	1.00	155	1,600	0.138 *		
	LT	1.00	149	1,600	0.093	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	149	0	0.000	N-S(1):	0.419
	TH	3.00	1,688	4,800	0.383 *	N-S(2):	0.488 *
	LT	1.00	171	1,600	0.107	E-W(1):	0.242 *
Westbound	RT	0.00	106	0	0.000	E-W(2):	0.160
	TH	2.00	144	3,200	0.078		
	LT	1.00	140	1,600	0.088 *	V/C:	0.730
Northbound	RT	0.00	206	0	0.000	Lost Time:	0.100
	TH	3.00	1,291	4,800	0.312		
	LT	1.00	168	1,600	0.105 *		
Eastbound	RT	0.00	69	0	0.000	ICU:	0.830
	TH	1.00	178	1,600	0.154 *		
	LT	1.00	131	1,600	0.082	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **VERMONT AV & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	220	1,600	0.073	N-S(1):	0.280 *
	TH	2.00	426	3,200	0.133	N-S(2):	0.186
	LT	1.00	132	1,600	0.083 *	E-W(1):	0.453
Westbound	RT	1.00	106	1,600	0.000	E-W(2):	0.530 *
	TH	2.00	1,489	3,200	0.465 *		
	LT	1.00	199	1,600	0.124	V/C:	0.810
Northbound	RT	1.00	134	1,600	0.000	Lost Time:	0.100
	TH	2.00	630	3,200	0.197 *		
	LT	1.00	85	1,600	0.053		
Eastbound	RT	1.00	64	1,600	0.000	ICU:	0.910
	TH	2.00	1,054	3,200	0.329		
	LT	1.00	104	1,600	0.065 *	LOS:	E

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	258	1,600	0.097	N-S(1):	0.298
	TH	2.00	768	3,200	0.240 *	N-S(2):	0.308 *
	LT	1.00	257	1,600	0.161	E-W(1):	0.620 *
Westbound	RT	1.00	93	1,600	0.000	E-W(2):	0.494
	TH	2.00	1,376	3,200	0.430		
	LT	1.00	115	1,600	0.072 *	V/C:	0.928
Northbound	RT	1.00	282	1,600	0.104	Lost Time:	0.100
	TH	2.00	439	3,200	0.137		
	LT	1.00	109	1,600	0.068 *		
Eastbound	RT	1.00	97	1,600	0.000	ICU:	1.028
	TH	2.00	1,752	3,200	0.548 *		
	LT	1.00	103	1,600	0.064	LOS:	F

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	128	0	0.000	N-S(1):	0.234 *
	TH	2.00	200	3,200	0.103	N-S(2):	0.216
	LT	2.00	39	2,560	0.015 *	E-W(1):	0.288
Westbound	RT	0.00	144	0	0.000	E-W(2):	0.422 *
	TH	2.00	915	3,200	0.331 *		
	LT	1.00	76	1,600	0.048	V/C:	0.656
Northbound	RT	0.00	149	0	0.000	Lost Time:	0.100
	TH	2.00	552	3,200	0.219 *		
	LT	2.00	290	2,560	0.113		
Eastbound	RT	1.00	479	1,600	0.209	ICU:	0.756
	TH	2.00	768	3,200	0.240		
	LT	1.00	146	1,600	0.091 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	149	0	0.000	N-S(1):	0.199
	TH	2.00	379	3,200	0.165 *	N-S(2):	0.253 *
	LT	2.00	119	2,560	0.046	E-W(1):	0.555 *
Westbound	RT	0.00	112	0	0.000	E-W(2):	0.420
	TH	2.00	971	3,200	0.338		
	LT	1.00	156	1,600	0.098 *	V/C:	0.808
Northbound	RT	0.00	178	0	0.000	Lost Time:	0.100
	TH	2.00	311	3,200	0.153		
	LT	2.00	226	2,560	0.088 *		
Eastbound	RT	1.00	830	1,600	0.448	ICU:	0.908
	TH	2.00	1,463	3,200	0.457 *		
	LT	1.00	131	1,600	0.082	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	105	0	0.000	N-S(1):	0.229 *
	TH	3.00	509	4,800	0.128	N-S(2):	0.218
	LT	1.00	93	1,600	0.058 *	E-W(1):	0.249
Westbound	RT	0.00	156	0	0.000	E-W(2):	0.354 *
	TH	3.00	860	4,800	0.212 *		
	LT	1.00	170	1,600	0.106	V/C:	0.583
Northbound	RT	0.00	144	0	0.000	Lost Time:	0.100
	TH	3.00	675	4,800	0.171 *		
	LT	1.00	144	1,600	0.090		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.683
	TH	3.00	629	4,800	0.143		
	LT	1.00	227	1,600	0.142 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	194	0	0.000	N-S(1):	0.311
	TH	3.00	816	4,800	0.210 *	N-S(2):	0.341 *
	LT	1.00	201	1,600	0.126	E-W(1):	0.485 *
Westbound	RT	0.00	156	0	0.000	E-W(2):	0.461
	TH	3.00	925	4,800	0.225		
	LT	1.00	359	1,600	0.224 *	V/C:	0.826
Northbound	RT	0.00	157	0	0.000	Lost Time:	0.100
	TH	3.00	730	4,800	0.185		
	LT	1.00	209	1,600	0.131 *		
Eastbound	RT	0.00	165	0	0.000	ICU:	0.926
	TH	3.00	1,089	4,800	0.261 *		
	LT	1.00	377	1,600	0.236	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	195	0	0.000	N-S(1):	0.414 *
	TH	3.00	714	4,800	0.189	N-S(2):	0.256
	LT	1.00	222	1,600	0.139 *	E-W(1):	0.361 *
Westbound	RT	0.00	165	0	0.000	E-W(2):	0.354
	TH	2.00	721	3,200	0.277		
	LT	2.00	308	2,560	0.120 *	V/C:	0.775
Northbound	RT	0.00	371	0	0.000	Lost Time:	0.100
	TH	3.00	949	4,800	0.275 *		
	LT	1.00	107	1,600	0.067		
Eastbound	RT	0.00	58	0	0.000	ICU:	0.875
	TH	2.00	712	3,200	0.241 *		
	LT	2.00	197	2,560	0.077	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	482	0	0.000	N-S(1):	0.445 *
	TH	3.00	983	4,800	0.305	N-S(2):	0.424
	LT	1.00	332	1,600	0.208 *	E-W(1):	0.418
Westbound	RT	0.00	227	0	0.000	E-W(2):	0.433 *
	TH	2.00	767	3,200	0.311 *		
	LT	2.00	251	2,560	0.098	V/C:	0.878
Northbound	RT	0.00	262	0	0.000	Lost Time:	0.100
	TH	3.00	874	4,800	0.237 *		
	LT	1.00	191	1,600	0.119		
Eastbound	RT	0.00	116	0	0.000	ICU:	0.978
	TH	2.00	908	3,200	0.320		
	LT	2.00	313	2,560	0.122 *	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **I-405 SB RAMPS & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.068 *
	TH	0.00	0	0	0.000	N-S(2):	0.043
	LT	0.00	0	0	0.000 *	E-W(1):	0.350 *
Westbound	RT	0.00	9	0	0.000	E-W(2):	0.283
	TH	3.00	1,331	4,800	0.279		
	LT	1.00	78	1,600	0.049 *	V/C:	0.418
Northbound	RT	1.00	186	1,600	0.068 *	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	1.00	69	1,600	0.043		
Eastbound	RT	1.31	633	2,100	0.269	ICU:	0.518
	TH	1.69	814	2,700	0.301 *		
	LT	1.00	7	1,600	0.004	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.011
	TH	0.00	0	0	0.000 *	N-S(2):	0.035 *
	LT	0.00	0	0	0.000	E-W(1):	0.388 *
Westbound	RT	0.00	15	0	0.000	E-W(2):	0.246
	TH	3.00	1,153	4,800	0.243		
	LT	1.00	75	1,600	0.047 *	V/C:	0.423
Northbound	RT	1.00	92	1,600	0.011	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	1.00	56	1,600	0.035 *		
Eastbound	RT	1.14	623	1,828	0.310	ICU:	0.523
	TH	1.86	1,013	2,972	0.341 *		
	LT	1.00	5	1,600	0.003	LOS:	A

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **I405 NB RAMPS & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	432	1,600	0.203 *	N-S(1):	0.013
	TH	1.00	0	1,600	0.013	N-S(2):	0.206 *
	LT	0.00	21	1,600	0.013	E-W(1):	0.291
Westbound	RT	1.00	269	1,600	0.155	E-W(2):	0.375 *
	TH	2.00	987	3,200	0.308 *		
	LT	1.00	3	1,600	0.002	V/C:	0.581
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	1.00	0	1,600	0.000		
	LT	1.00	4	1,600	0.003 *		
Eastbound	RT	0.00	11	0	0.000	ICU:	0.681
	TH	2.00	913	3,200	0.289		
	LT	1.00	107	1,600	0.067 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	487	1,600	0.228 *	N-S(1):	0.021
	TH	1.00	0	1,600	0.018	N-S(2):	0.241 *
	LT	0.00	29	1,600	0.018	E-W(1):	0.311 *
Westbound	RT	1.00	320	1,600	0.182	E-W(2):	0.307
	TH	2.00	740	3,200	0.231		
	LT	1.00	1	1,600	0.001 *	V/C:	0.552
Northbound	RT	0.00	4	0	0.000	Lost Time:	0.100
	TH	1.00	0	1,600	0.003		
	LT	1.00	21	1,600	0.013 *		
Eastbound	RT	0.00	7	0	0.000	ICU:	0.652
	TH	2.00	985	3,200	0.310 *		
	LT	1.00	122	1,600	0.076	LOS:	B

* - Denotes critical movement

CUMULATIVE PLUS PROJECT PLUS MITIGATIONS (YEAR 2010)
WEEKDAY PEAK HOUR

LEVEL OF SERVICE WORKSHEETS

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **VERMONT AV & DEL AMO BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS+MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	34	0	0.000	N-S(1):	0.359 *
	TH	2.00	373	3,200	0.127	N-S(2):	0.133
	LT	1.00	103	1,600	0.064 *	E-W(1):	0.190 *
Westbound	RT	1.00	297	1,600	0.121	E-W(2):	0.180
	TH	1.00	148	1,600	0.093		
	LT	2.00	343	2,560	0.134 *	V/C:	0.549
Northbound	RT	0.00	164	0	0.000	Lost Time:	0.100
	TH	2.00	781	3,200	0.295 *		
	LT	1.00	9	1,600	0.006		
Eastbound	RT	0.00	12	0	0.000	ICU:	0.649
	TH	2.00	167	3,200	0.056 *		
	LT	1.00	95	1,600	0.059	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	104	0	0.000	N-S(1):	0.456 *
	TH	2.00	972	3,200	0.336	N-S(2):	0.349
	LT	1.00	414	1,600	0.259 *	E-W(1):	0.309 *
Westbound	RT	1.00	200	1,600	0.000	E-W(2):	0.217
	TH	1.00	298	1,600	0.186		
	LT	2.00	564	2,560	0.220 *	V/C:	0.765
Northbound	RT	0.00	139	0	0.000	Lost Time:	0.100
	TH	2.00	492	3,200	0.197 *		
	LT	1.00	20	1,600	0.013		
Eastbound	RT	0.00	25	0	0.000	ICU:	0.865
	TH	2.00	260	3,200	0.089 *		
	LT	1.00	50	1,600	0.031	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & DEL AMO BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS - MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	22	0	0.000	N-S(1):	0.051
	TH	2.00	29	3,200	0.016 *	N-S(2):	0.068 *
	LT	1.00	35	1,600	0.022	E-W(1):	0.392 *
Westbound	RT	0.00	175	0	0.000	E-W(2):	0.348
	TH	2.00	889	3,200	0.333		
	LT	1.00	406	1,600	0.254 *	V/C:	0.460
Northbound	RT	1.00	453	1,600	0.029	Lost Time:	0.100
	TH	2.00	89	3,200	0.028		
	LT	1.00	83	1,600	0.052 *		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.560
	TH	2.00	387	3,200	0.138 *		
	LT	1.00	24	1,600	0.015	LOS:	A

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	23	0	0.000	N-S(1):	0.104 *
	TH	2.00	125	3,200	0.046	N-S(2):	0.084
	LT	1.00	146	1,600	0.091 *	E-W(1):	0.684 *
Westbound	RT	0.00	57	0	0.000	E-W(2):	0.316
	TH	2.00	947	3,200	0.314		
	LT	1.00	627	1,600	0.392 *	V/C:	0.788
Northbound	RT	1.00	511	1,600	0.000	Lost Time:	0.100
	TH	2.00	43	3,200	0.013 *		
	LT	1.00	61	1,600	0.038		
Eastbound	RT	0.00	189	0	0.000	ICU:	0.888
	TH	2.00	746	3,200	0.292 *		
	LT	1.00	3	1,600	0.002	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & DEL AMO BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS+ MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	304	1,600	0.122	N-S(1):	0.278 *
	TH	2.00	309	3,200	0.097	N-S(2):	0.240
	LT	1.00	67	1,600	0.042 *	E-W(1):	0.322
Westbound	RT	1.00	156	1,600	0.056	E-W(2):	0.380 *
	TH	2.00	999	3,200	0.312 *		
	LT	2.00	459	2,560	0.179	V/C:	0.658
Northbound	RT	1.00	474	1,600	0.153	Lost Time:	0.100
	TH	2.00	756	3,200	0.236 *		
	LT	1.00	189	1,600	0.118		
Eastbound	RT	1.00	83	1,600	0.000	ICU:	0.758
	TH	3.00	688	4,800	0.143		
	LT	1.00	109	1,600	0.068 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	364	1,600	0.159	N-S(1):	0.239 *
	TH	2.00	562	3,200	0.176	N-S(2):	0.227
	LT	1.00	109	1,600	0.068 *	E-W(1):	0.623 *
Westbound	RT	1.00	120	1,600	0.007	E-W(2):	0.435
	TH	2.00	1,171	3,200	0.366		
	LT	2.00	1,030	2,560	0.402 *	V/C:	0.862
Northbound	RT	1.00	628	1,600	0.071	Lost Time:	0.100
	TH	2.00	548	3,200	0.171 *		
	LT	1.00	81	1,600	0.051		
Eastbound	RT	1.00	248	1,600	0.104	ICU:	0.962
	TH	3.00	1,062	4,800	0.221 *		
	LT	1.00	110	1,600	0.069	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & DEL AMO BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS+MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	127	1,600	0.043	N-S(1):	0.272 *
	TH	2.00	518	3,200	0.162	N-S(2):	0.216
	LT	2.00	156	2,560	0.061 *	E-W(1):	0.333
Westbound	RT	0.00	100	0	0.000	E-W(2):	0.335 *
	TH	3.00	1,290	4,800	0.290 *		
	LT	2.00	254	2,560	0.099	V/C:	0.607
Northbound	RT	1.00	284	1,600	0.098	Lost Time:	0.100
	TH	2.00	675	3,200	0.211 *		
	LT	2.00	138	2,560	0.054		
Eastbound	RT	0.00	30	0	0.000	ICU:	0.707
	TH	3.00	1,092	4,800	0.234		
	LT	2.00	116	2,560	0.045 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	139	1,600	0.049	N-S(1):	0.298
	TH	2.00	766	3,200	0.239 *	N-S(2):	0.307 *
	LT	2.00	288	2,560	0.113	E-W(1):	0.449
Westbound	RT	0.00	123	0	0.000	E-W(2):	0.469 *
	TH	3.00	1,902	4,800	0.422 *		
	LT	2.00	262	2,560	0.102	V/C:	0.776
Northbound	RT	1.00	293	1,600	0.101	Lost Time:	0.100
	TH	2.00	592	3,200	0.185		
	LT	2.00	175	2,560	0.068 *		
Eastbound	RT	0.00	113	0	0.000	ICU:	0.876
	TH	3.00	1,551	4,800	0.347		
	LT	2.00	121	2,560	0.047 *	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **HAMILTON AV & 110 SB RAMPS**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS+MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.242 *
	TH	0.33	78	522	0.149	N-S(2):	0.000
	LT	1.67	400	2,142	0.187 *	E-W(1):	0.332 *
Westbound	RT	1.00	553	1,600	0.196	E-W(2):	0.196
	TH	0.00	0	0	0.000		
	LT	2.00	850	2,560	0.332 *	V/C:	0.574
Northbound	RT	1.00	179	1,600	0.000	Lost Time:	0.100
	TH	1.00	88	1,600	0.055 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.674
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.472 *
	TH	0.26	121	410	0.295	N-S(2):	0.000
	LT	1.74	824	2,232	0.369 *	E-W(1):	0.255 *
Westbound	RT	1.00	539	1,600	0.042	E-W(2):	0.042
	TH	0.00	0	0	0.000		
	LT	2.00	654	2,560	0.255 *	V/C:	0.727
Northbound	RT	1.00	492	1,600	0.103 *	Lost Time:	0.100
	TH	1.00	82	1,600	0.051		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.827
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & 110 NB RAMPS**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS + MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	2.00	550	3,200	0.062	N-S(1):	0.226
	TH	2.00	301	3,200	0.094 *	N-S(2):	0.446 *
	LT	0.00	0	0	0.000	E-W(1):	0.275 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.721
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	722	3,200	0.226		
	LT	2.00	901	2,560	0.352 *		
Eastbound	RT	1.00	284	1,600	0.000	ICU:	0.821
	TH	0.00	0	0	0.000		
	LT	2.00	703	2,560	0.275 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	2.00	1,178	3,200	0.247 *	N-S(1):	0.154
	TH	2.00	647	3,200	0.202	N-S(2):	0.573 *
	LT	0.00	0	0	0.000	E-W(1):	0.303 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.876
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	492	3,200	0.154		
	LT	2.00	835	2,560	0.326 *		
Eastbound	RT	1.00	310	1,600	0.000	ICU:	0.976
	TH	0.00	0	0	0.000		
	LT	2.00	775	2,560	0.303 *	LOS:	E

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & TORRANCE BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS + MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	210	1,600	0.000	N-S(1):	0.283 *
	TH	2.00	236	3,200	0.074	N-S(2):	0.183
	LT	2.00	85	2,560	0.033 *	E-W(1):	0.460 *
Westbound	RT	1.00	122	1,600	0.050	E-W(2):	0.000
	TH	2.00	403	3,200	0.126 *		
	LT	1.00	24	1,600	0.015	V/C:	0.743
Northbound	RT	0.00	72	0	0.000	Lost Time:	0.100
	TH	2.00	729	3,200	0.250 *		
	LT	1.00	175	1,600	0.109		
Eastbound	RT	0.00	155	0	0.000	ICU:	0.843
	TH	1.50	485	2,396	0.267		
	LT	1.50	642	1,923	0.334 *	LOS:	D

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	269	1,600	0.000	N-S(1):	0.276 *
	TH	2.00	449	3,200	0.140	N-S(2):	0.229
	LT	2.00	237	2,560	0.093 *	E-W(1):	0.498 *
Westbound	RT	1.00	112	1,600	0.000	E-W(2):	0.000
	TH	2.00	421	3,200	0.132 *		
	LT	1.00	37	1,600	0.023	V/C:	0.774
Northbound	RT	0.00	81	0	0.000	Lost Time:	0.100
	TH	2.00	504	3,200	0.183 *		
	LT	1.00	143	1,600	0.089		
Eastbound	RT	0.00	140	0	0.000	ICU:	0.874
	TH	1.72	665	2,748	0.293		
	LT	1.28	601	1,641	0.366 *	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & TORRANCE BL**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS + MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	182	1,600	0.000	N-S(1):	0.306
	TH	2.00	616	3,200	0.193 *	N-S(2):	0.378 *
	LT	1.00	24	1,600	0.015	E-W(1):	0.287 *
Westbound	RT	0.00	28	0	0.000	E-W(2):	0.000
	TH	1.00	84	1,600	0.079 *		
	LT	0.00	14	1,600	0.009	V/C:	0.665
Northbound	RT	1.00	7	1,600	0.000	Lost Time:	0.100
	TH	2.00	931	3,200	0.291		
	LT	1.00	296	1,600	0.185 *		
Eastbound	RT	0.00	151	0	0.000	ICU:	0.765
	TH	1.00	19	1,600	0.106		
	LT	1.00	332	1,600	0.208 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	310	1,600	0.000	N-S(1):	0.324
	TH	2.00	853	3,200	0.267 *	N-S(2):	0.391 *
	LT	1.00	49	1,600	0.031	E-W(1):	0.409 *
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.000
	TH	1.00	43	1,600	0.048 *		
	LT	0.00	13	1,600	0.008	V/C:	0.800
Northbound	RT	1.00	25	1,600	0.008	Lost Time:	0.100
	TH	2.00	938	3,200	0.293		
	LT	1.00	199	1,600	0.124 *		
Eastbound	RT	0.00	307	0	0.000	ICU:	0.900
	TH	1.00	57	1,600	0.228		
	LT	1.00	577	1,600	0.361 *	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **VERMONT AV & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS+MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	220	1,600	0.073	N-S(1):	0.280 *
	TH	2.00	426	3,200	0.133	N-S(2):	0.186
	LT	1.00	132	1,600	0.083 *	E-W(1):	0.357
Westbound	RT	0.00	106	0	0.000	E-W(2):	0.397 *
	TH	3.00	1,489	4,800	0.332 *		
	LT	1.00	199	1,600	0.124	V/C:	0.677
Northbound	RT	1.00	134	1,600	0.000	Lost Time:	0.100
	TH	2.00	630	3,200	0.197 *		
	LT	1.00	85	1,600	0.053		
Eastbound	RT	0.00	64	0	0.000	ICU:	0.777
	TH	3.00	1,054	4,800	0.233		
	LT	1.00	104	1,600	0.065 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	258	1,600	0.097	N-S(1):	0.298
	TH	2.00	768	3,200	0.240 *	N-S(2):	0.308 *
	LT	1.00	257	1,600	0.161	E-W(1):	0.457 *
Westbound	RT	0.00	93	0	0.000	E-W(2):	0.370
	TH	3.00	1,376	4,800	0.306		
	LT	1.00	115	1,600	0.072 *	V/C:	0.765
Northbound	RT	1.00	282	1,600	0.104	Lost Time:	0.100
	TH	2.00	439	3,200	0.137		
	LT	1.00	109	1,600	0.068 *		
Eastbound	RT	0.00	97	0	0.000	ICU:	0.865
	TH	3.00	1,752	4,800	0.385 *		
	LT	1.00	103	1,600	0.064	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **FIGUEROA ST & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS+MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	128	1,600	0.000	N-S(1):	0.234 *
	TH	2.00	200	3,200	0.063	N-S(2):	0.176
	LT	2.00	39	2,560	0.015 *	E-W(1):	0.288
Westbound	RT	0.00	144	0	0.000	E-W(2):	0.422 *
	TH	2.00	915	3,200	0.331 *		
	LT	1.00	76	1,600	0.048	V/C:	0.656
Northbound	RT	0.00	149	0	0.000	Lost Time:	0.100
	TH	2.00	552	3,200	0.219 *		
	LT	2.00	290	2,560	0.113		
Eastbound	RT	1.00	479	1,600	0.209	ICU:	0.756
	TH	2.00	768	3,200	0.240		
	LT	1.00	146	1,600	0.091 *	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	149	1,600	0.011	N-S(1):	0.199
	TH	2.00	379	3,200	0.118 *	N-S(2):	0.206 *
	LT	2.00	119	2,560	0.046	E-W(1):	0.555 *
Westbound	RT	0.00	112	0	0.000	E-W(2):	0.420
	TH	2.00	971	3,200	0.338		
	LT	1.00	156	1,600	0.098 *	V/C:	0.761
Northbound	RT	0.00	178	0	0.000	Lost Time:	0.100
	TH	2.00	311	3,200	0.153		
	LT	2.00	226	2,560	0.088 *		
Eastbound	RT	1.00	830	1,600	0.448	ICU:	0.861
	TH	2.00	1,463	3,200	0.457 *		
	LT	1.00	131	1,600	0.082	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **MAIN ST & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS + MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	105	0	0.000	N-S(1):	0.229 *
	TH	3.00	509	4,800	0.128	N-S(2):	0.184
	LT	1.00	93	1,600	0.058 *	E-W(1):	0.249
Westbound	RT	0.00	156	0	0.000	E-W(2):	0.354 *
	TH	3.00	860	4,800	0.212 *		
	LT	1.00	170	1,600	0.106	V/C:	0.583
Northbound	RT	0.00	144	0	0.000	Lost Time:	0.100
	TH	3.00	675	4,800	0.171 *		
	LT	2.00	144	2,560	0.056		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.683
	TH	3.00	629	4,800	0.143		
	LT	1.00	227	1,600	0.142 *	LOS:	B

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	194	0	0.000	N-S(1):	0.311 *
	TH	3.00	816	4,800	0.210	N-S(2):	0.292
	LT	1.00	201	1,600	0.126 *	E-W(1):	0.485 *
Westbound	RT	0.00	156	0	0.000	E-W(2):	0.461
	TH	3.00	925	4,800	0.225		
	LT	1.00	359	1,600	0.224 *	V/C:	0.796
Northbound	RT	0.00	157	0	0.000	Lost Time:	0.100
	TH	3.00	730	4,800	0.185 *		
	LT	2.00	209	2,560	0.082		
Eastbound	RT	0.00	165	0	0.000	ICU:	0.896
	TH	3.00	1,089	4,800	0.261 *		
	LT	1.00	377	1,600	0.236	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS+FULL MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	195	1,600	0.060	N-S(1):	0.337 *
	TH	3.00	714	4,800	0.149	N-S(2):	0.216
	LT	1.00	222	1,600	0.139 *	E-W(1):	0.343 *
Westbound	RT	1.00	165	1,600	0.000	E-W(2):	0.302
	TH	2.00	721	3,200	0.225		
	LT	2.00	308	2,560	0.120 *	V/C:	0.680
Northbound	RT	1.00	371	1,600	0.136	Lost Time:	0.100
	TH	3.00	949	4,800	0.198 *		
	LT	1.00	107	1,600	0.067		
Eastbound	RT	1.00	58	1,600	0.000	ICU:	0.780
	TH	2.00	712	3,200	0.223 *		
	LT	2.00	197	2,560	0.077	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	482	1,600	0.203	N-S(1):	0.390 *
	TH	3.00	983	4,800	0.205	N-S(2):	0.324
	LT	1.00	332	1,600	0.208 *	E-W(1):	0.382 *
Westbound	RT	1.00	227	1,600	0.000	E-W(2):	0.362
	TH	2.00	767	3,200	0.240		
	LT	2.00	251	2,560	0.098 *	V/C:	0.772
Northbound	RT	1.00	262	1,600	0.085	Lost Time:	0.100
	TH	3.00	874	4,800	0.182 *		
	LT	1.00	191	1,600	0.119		
Eastbound	RT	1.00	116	1,600	0.000	ICU:	0.872
	TH	2.00	908	3,200	0.284 *		
	LT	2.00	313	2,560	0.122	LOS:	D

* - Denotes critical movement

Project Title: **CARSON MARKETPLACE EIR**
Intersection: **AVALON BL & CARSON ST**
Description: **CUMULATIVE BASE + PROJECT CONDITIONS+MITIGATION**

Date/Time: **AM PEAK HOUR (7:30-8:30)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	195	1,600	0.060	N-S(1):	0.337 *
	TH	3.00	714	4,800	0.149	N-S(2):	0.216
	LT	1.00	222	1,600	0.139 *	E-W(1):	0.361 *
Westbound	RT	1.00	165	1,600	0.000	E-W(2):	0.302
	TH	2.00	721	3,200	0.225		
	LT	2.00	308	2,560	0.120 *	V/C:	0.698
Northbound	RT	1.00	371	1,600	0.136	Lost Time:	0.100
	TH	3.00	949	4,800	0.198 *		
	LT	1.00	107	1,600	0.067		
Eastbound	RT	0.00	58	0	0.000	ICU:	0.798
	TH	2.00	712	3,200	0.241 *		
	LT	2.00	197	2,560	0.077	LOS:	C

Date/Time: **PM PEAK HOUR (7:30-8:30)**

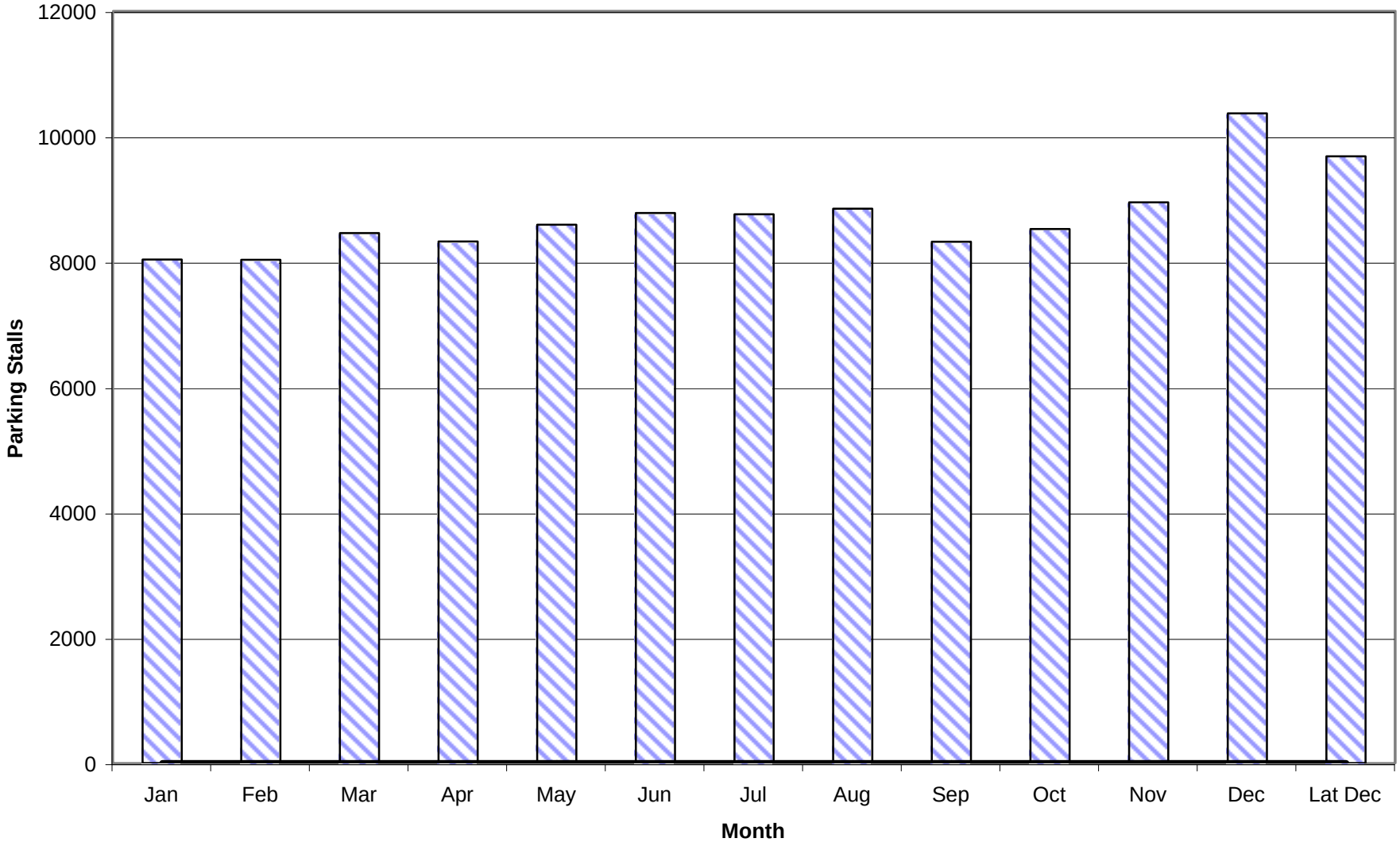
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	482	1,600	0.203	N-S(1):	0.390 *
	TH	3.00	983	4,800	0.205	N-S(2):	0.324
	LT	1.00	332	1,600	0.208 *	E-W(1):	0.418 *
Westbound	RT	1.00	227	1,600	0.000	E-W(2):	0.362
	TH	2.00	767	3,200	0.240		
	LT	2.00	251	2,560	0.098 *	V/C:	0.808
Northbound	RT	1.00	262	1,600	0.085	Lost Time:	0.100
	TH	3.00	874	4,800	0.182 *		
	LT	1.00	191	1,600	0.119		
Eastbound	RT	0.00	116	0	0.000	ICU:	0.908
	TH	2.00	908	3,200	0.320 *		
	LT	2.00	313	2,560	0.122	LOS:	E

* - Denotes critical movement

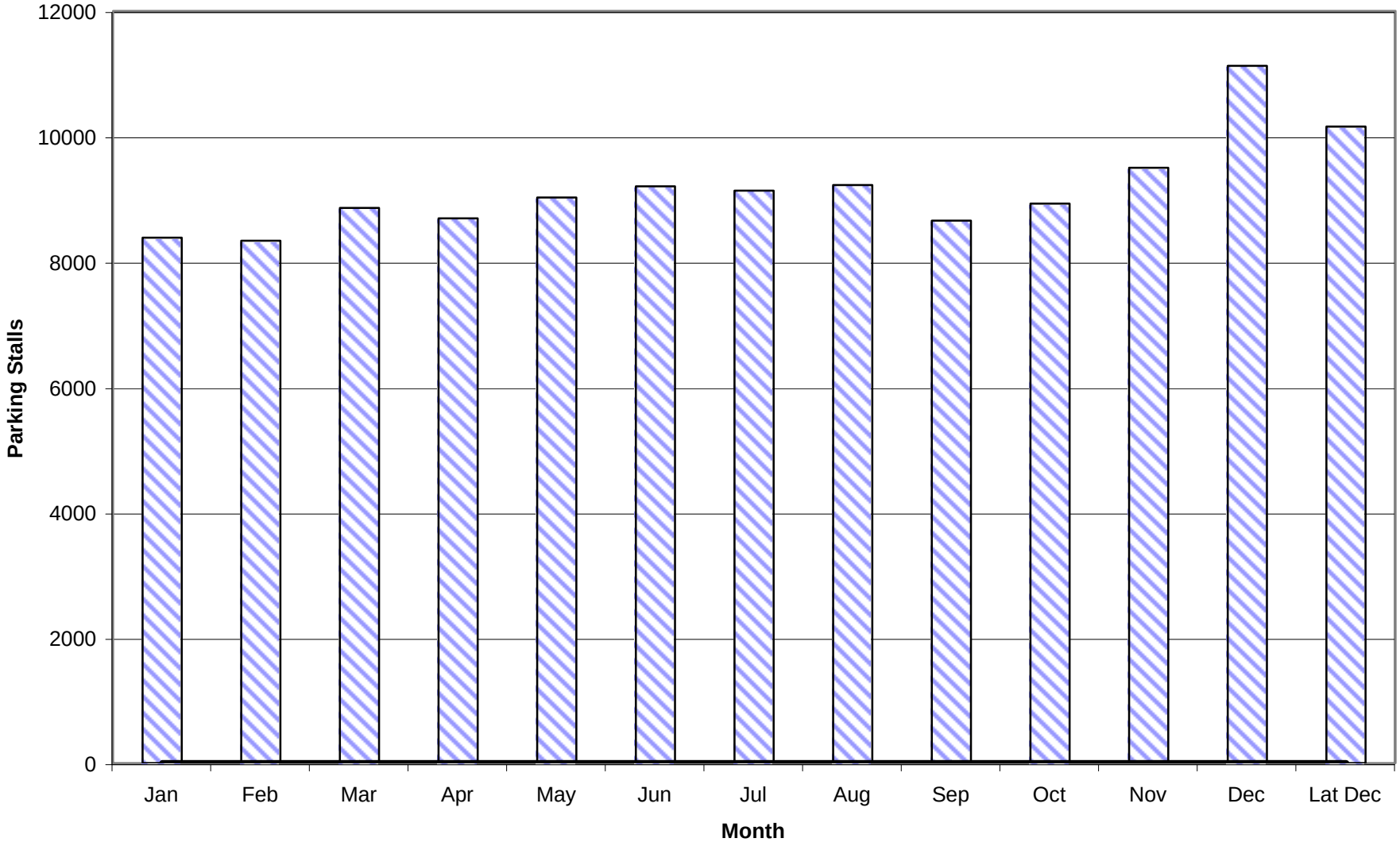
APPENDIX D

SHARED PARKING ANALYSIS

Weekday Month-By-Month Estimated Parking Demand



Weekend Month-By-Month Estimated Parking Demand



Peak Month Daily Parking Demand by Hour