

**Appendix G Transportation Improvement
Mitigation Program**



PROPOSED SAN PEDRO COMMUNITY PLAN
TRANSPORTATION IMPROVEMENT MITIGATION
PROGRAM (TIMP)

Submitted by:



Submitted to:

City of Los Angeles
Department of City Planning

September 7, 2011

16-J06-1670

DOCUMENT VERSION CONTROL

Comment	Date	Version No.
San Pedro New Community Plan TIMP	September 24, 2010	1.00
San Pedro New Community Plan TIMP with Executive Summary	September 28, 2010	1.01
Proposed San Pedro Community Plan TIMP incorporating DCP comments	May 10, 2011	1.10
Incorporate DCP comments	June 20, 2011	1.20
Incorporate DCP and LADOT comments	August 2, 2011	1.30
Incorporate DCP comments	September 7, 2011	1.40

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EX EXECUTIVE SUMMARY

EX.1 INTRODUCTION

The San Pedro Transportation Improvement Mitigation Program (TIMP) identifies needed transportation programs and provides recommendations to guide future transportation-related decisions in the proposed San Pedro Community Plan. The goal of the TIMP is to identify transportation system deficiencies resulting from traffic generated by projected land use patterns, employment and population growth by year 2030, and to recommend mitigation programs to accommodate the forecast demands on the system. Transportation programs include plans for highway and street infrastructure capital improvements, public transit improvements, transportation demand management, transportation system management, and traffic control measures.

This proposed TIMP has been developed through a systematic process that included the following steps:

- Development of a Focused Travel Demand Model for the San Pedro Area;
- Analysis of 2005 Traffic Conditions (“Existing Traffic Conditions”);
- Year 2030 Current Land Use Plan with Committed Roadway Network (“Current Land Use Plan”);
- Year 2030 Proposed Land Use Plan with Committed Roadway Network (“Proposed Land Use Plan”);
 - Year 2030 Proposed Land Use Plan with Transportation Network Alternative One (“Transportation Alternative One”);
 - Year 2030 Proposed Land Use Plan with Transportation Network Alternative Two (“Transportation Alternative Two”);
 - Year 2030 Proposed Land Use Plan with Transportation Network Alternative Three (“Transportation Alternative Three”);
 - Year 2030 Proposed Land Use Plan with Transportation Network Alternative Four (“Transportation Alternative Four”);
 - Year 2030 Preferred Transportation Alternative (“Preferred Alternative”);
- Year 2030 Proposed Land Use Plan with TIMP (“Proposed Plan with TIMP”).

EX.2 ANALYSIS METHODOLOGY AND IMPACT CRITERIA

The San Pedro Community Plan Area was evaluated through the use of a travel demand model. This model produces projected volumes on the roadway system, and is based on socio-economic data such as housing, population and jobs; and a roadway network which contains facility types, speeds and capacities. The projected volumes from the model were used to calculate level of service in the Community Plan Area. The analysis covered the PM peak hour,

since trips are generally highest in the PM peak period when retail, entertainment, and tourist trips overlap with commute trips.

Level of service (LOS) is a qualitative measure describing traffic flow conditions. The ranges vary from LOS A at free flow conditions to LOS F at extremely congested conditions. The methodology used to determine the roadway segment (also referred to as “link”) LOS involves the calculation of the volume-to-capacity (V/C) ratio on each of the links.

In order to determine transportation impacts, the following criteria have been developed by the Los Angeles Department of Transportation (LADOT) for use in all Community Plan projects. This is used to determine if there is a significant transportation impact associated with the proposed land use plan that should be mitigated by the proposed TIMP.

The roadway system within the proposed San Pedro Community Plan area is considered to be significantly impacted if one or both of the following conditions exist:

- The “volume-weighted” average V/C ratio under the Proposed Plan with TIMP conditions for all of the analyzed roadway segments substantially exceeds that of Existing Traffic Conditions; or
- The number of links projected to operate at unsatisfactory levels of service (LOS E or F) under the Proposed Plan with TIMP conditions substantially exceeds the number for Existing Traffic Conditions.

The volume weighted V/C ratio is used in order to obtain aggregate statistics regarding the transportation conditions, allowing a comparison of different scenarios and alternatives. The volume weighted average V/C ratio is calculated by taking the volume of each link and multiplying it by its corresponding V/C ratio. This is divided by the sum of the total volumes, and essentially represents the average V/C ratio for the entire network in San Pedro.

EX.3 2005 TRAFFIC CONDITIONS

Existing Traffic Conditions were assessed for the San Pedro Community Plan Area for the year 2005. **Table EX 1** provides a summary of Existing Traffic Conditions, and includes the daily vehicle miles traveled (VMT), daily vehicle hours of travel (VHT), and overall daily average speed on the streets within the San Pedro Community Plan Area. VMT is a measure of how much and how far people are driving, and is calculated as the total miles travelled daily within the Community Plan area. The higher the VMT, the more auto travel there is, with related increases in emissions. VHT is a measure of how much time is spent traveling, and is calculated as the total number of hours daily that vehicles spend on the roadways within the Community Plan area. Increasing VHT indicates more time spent in slower-moving, congested streets. A total of approximately five percent (32 of 618 links) of San Pedro’s roadways operate at an LOS

E or F. The volume-weighted V/C ratio is 0.605; which indicates that on the whole, the streets in the San Pedro are an average of 60.5 percent of capacity in the PM peak hour.

TABLE EX 1 2005 TRAFFIC CONDITIONS – ARTERIAL SUMMARY

Existing Traffic Conditions	
VMT	56,792
VHT	1,895
Avg Speed (mph)	30
Weighted Avg V/C	0.605
Links at LOS E or F	32

EX.4 FUTURE CONDITIONS

Future year 2030 conditions were assessed using the current land use plan, the proposed land use plan, and roadway network alternatives. Information regarding the alternatives analysis can be found in the report, only the Current Land Use Plan and the Proposed Land Use Plan with TIMP is discussed in this summary.

EX.4.1 YEAR 2030 CURRENT LAND USE PLAN WITH COMMITTED ROADWAY NETWORK

The 2030 Current Land Use Plan with Committed Roadway Network (Current Land Use Plan) is an analysis of what would occur if no changes were made to the current land use plan. The 2030 Current Land Use Plan with Committed Roadway Network assumes the existing roadway system is in place, along with committed roadway improvements. **Table EX 2** illustrates the Current Land Use Plan Arterial Summary. A total of approximately six percent (37 of 610 roadway links) of San Pedro’s roadways are forecast to operate at an LOS E or F in the Current Land Use Plan scenario. The volume-weighted V/C ratio is 0.662 for the Current Land Use Plan scenario. This indicates that on the whole, the streets in the San Pedro Community Plan will operate at an average of 66.2 percent of capacity in the PM peak hour. This V/C represents LOS B, which is very good overall operating conditions.

**TABLE EX 2 YEAR 2030 CURRENT LAND USE PLAN WITH COMMITTED ROADWAY NETWORK –
ARTERIAL SUMMARY**

Current Land Use Plan Traffic Conditions	
VMT	67,475
VHT	2,385
Avg Speed (mph)	28
Weighted Avg V/C	0.662
Links at LOS E or F	37

EX.4.2 YEAR 2030 PROPOSED LAND USE PLAN WITH TIMP

The Year 2030 Preferred Transportation Alternative plus the inclusion of the TIMP policies, forms the Year 2030 Proposed Land Use Plan with TIMP (Proposed Land Use Plan with TIMP), and includes the reclassification of 9th Street and Pacific Avenue, plus a combination of Network Alternatives One through Four. For this analysis, the 2030 Preferred Transportation Alternative is the same as the Year 2030 Proposed Land Use Plan with TIMP. Under the Proposed Land Use Plan with TIMP, the following changes would occur:

- Reclassification of 9th Street from Miraleste Drive to Western Avenue from a Major Highway Class II to a Modified Major Highway Class II.
- Reclassification of 9th Street from Western Avenue to Pacific Avenue from a Major Highway Class II to a Modified Secondary Arterial with two lanes.
- Reclassification of Pacific Avenue from O’Farrell Street to Shepard Street from a Secondary Arterial to a Modified Secondary Arterial with four lanes.
- Conversion of 5th Street from Harbor Boulevard to Pacific Avenue from an existing two lane Secondary Arterial into a one lane one-way westbound Secondary Arterial with angled parking.
- Conversion of 7th Street from Harbor Boulevard to Pacific Avenue from an existing two lane Secondary Arterial into a one lane one-way eastbound Secondary Arterial with angled parking.
- Closure of 6th Street, a local roadway, from Harbor Boulevard to Pacific Avenue.
- Reclassification of Gaffey Street from 9th Street to 25th Street from a Major Highway Class II to a Modified Major Highway Class II. Four lanes will be maintained during peak commute hours (7:00-9:00 a.m. and 4:00-6:00 p.m.).
- Reclassification of Gaffey Street from 25th Street to Shepard Street from a Major Highway Class II to a Secondary Arterial.
- Implementation of the adopted City Bicycle Plan, which includes new categories of bikeways, including “Bicycle Friendly Streets”.

The proposed San Pedro TIMP consists of the following elements which are examined in detail in the full report:

- Transportation System Management (TSM) Strategies
- Transit Improvements
- Non-Motorized Transportation
- Transportation Demand Management (TDM) Strategies
- Capital Improvements
- Residential Neighborhood Protection Plans.

Table EX3 shows the Proposed Land Use Plan with TIMP arterial summary, which includes VMT, VHT and average speed. Roadway segments operating at LOS E or F (V/C of 0.91 or worse) were identified to ascertain the level of congestion expected in the future. A total of six percent of San Pedro roadways are forecast to operate at an LOS E and F (39 of 610 roadway links) in the Proposed Land Use Plan with TIMP. The volume-weighted V/C ratio is 0.669, which indicates that on average, the streets in the San Pedro Community Plan Area would utilize approximately 66.9 percent of roadway capacity in the PM peak hour. The V/C ratio is at level of service B, which is very good overall operating conditions.

TABLE EX 3 YEAR 2030 PROPOSED LAND USE PLAN WITH TIMP – ARTERIAL SUMMARY

Proposed Land Use Plan with TIMP Traffic Conditions	
VMT	67,189
VHT	2,382
Avg Speed (mph)	28
Weighted Avg V/C	0.669
Links at LOS E or F	39

The Proposed Land Use Plan with TIMP causes little change to transportation conditions in the San Pedro Community Plan Area as compared to the Current Land Use Plan. The 2030 analyses showed higher VMT, VHT, V/C and number of links at E or F than the Existing Traffic Conditions. The roadway link level of service analysis and aggregate statistics, such as vehicle miles of travel (VMT) show little variation between the Proposed Land Use Plan with TIMP and the other 2030 alternatives. With the relatively limited number of opportunities to provide additional roadway capacity in San Pedro through the addition of travel lanes, the number of the arterial roadway segments projected to be at capacity in 2030 are very similar between all the alternatives that were analyzed.

A summary of the roadway link levels of service and aggregate statistics are shown in **Table EX4**. It can be seen that the Proposed Land Use Plan with TIMP shows a lower VMT and slightly lower VHT, but the average V/C is higher than the Current Land Use Plan. Both future scenarios have higher aggregate statistics than the Existing Traffic Conditions.

TABLE EX 4 SUMMARY –AGGREGATE STATISTICS

Scenario	VMT	VHT	Avg. Speed	Weighted V/C	Links at LOS E or F
Existing Traffic Conditions	56,792	1,895	30	0.605	32
Current Land Use Plan	67,475	2,385	28	0.662	37
Proposed Land Use Plan with TIMP	67,189	2,382	28	0.669	39

1.0 INTRODUCTION

The San Pedro Transportation Improvement Mitigation Program (TIMP) identifies needed transportation programs and provides recommendations to guide future transportation-related decisions in the proposed San Pedro Community Plan. The goal of the TIMP is to identify transportation system deficiencies resulting from traffic generated by projected land use patterns, employment and population growth by year 2030, and to recommend mitigation programs to accommodate the forecast demands on the system. Transportation programs include plans for highway and street infrastructure capital improvements, public transit improvements, transportation demand management, transportation system management, and traffic control measures.

1.1 STUDY SCOPE

This proposed TIMP has been developed through a systematic process that included the following steps:

- Development of a focused travel demand model for the San Pedro Area;
- Analysis of 2005 Traffic Conditions (“Existing Traffic Conditions”);
- Year 2030 Current Land Use Plan with Committed Roadway Network (“Current Land Use Plan”);
- Year 2030 Proposed Land Use Plan with Committed Roadway Network (“Proposed Land Use Plan”);
 - Year 2030 Proposed Land Use Plan with Transportation Network Alternative One (“Transportation Alternative One”);
 - Year 2030 Proposed Land Use Plan with Transportation Network Alternative Two (“Transportation Alternative Two”);
 - Year 2030 Proposed Land Use Plan with Transportation Network Alternative Three (“Transportation Alternative Three”);
 - Year 2030 Proposed Land Use Plan with Transportation Network Alternative Four (“Transportation Alternative Four”);
 - Year 2030 Preferred Transportation Alternative (“Preferred Alternative”);
- Year 2030 Proposed Land Use Plan with TIMP (“Proposed Plan with TIMP”).

The Southern California Association of Governments (SCAG) regional model was the starting point for development of the San Pedro travel demand model. The model was refined to better reflect current and future conditions within the San Pedro Community Plan Area.

The projected horizon for this study is year 2030. The Current Land Use Plan forecast shows the results of the Current Land Use Plan with only the committed future roadway system in place. Additional model runs were made of the Proposed Land Use Plan with the committed future roadway system in place, along with several network alternatives. These alternatives were

used to develop the proposed TIMP. Finally, the 2030 Proposed Land Use Plan with TIMP model run shows the improvements resulting from recommended mitigation programs.

The following sections present a description of the methodology used to analyze traffic conditions and to determine significant impacts.

1.2 CAPACITY AND LEVEL OF SERVICE ANALYSIS METHODOLOGY

Development proposals that involve large areas which are not expected to be fully implemented until 2030 or beyond (such as Community Plans) are not analyzed effectively by detailed intersection volume/capacity analyses. In cases such as these, roadway segment level of service analyses are sufficient as a means to determine service capacity and projected deficiencies of the roadway network in the community.

Level of Service (LOS) is a qualitative measure used to describe the conditions of traffic, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS definitions for street segments are summarized in **Table 1**. The City of Los Angeles Department of Transportation (LADOT) has established LOS D as a minimum satisfactory level of service. As seen in **Table 1**, LOS is related to the ratio of traffic demand volume to capacity (V/C) for a street segment.

TABLE 1 LEVEL OF SERVICE INTERPRETATION

Level of Service	Description	Volume to Capacity Ratio
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers have freedom of operation.	.00-.60
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	.61-.70
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	.71-.80
D	Fair Operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long standing traffic queues. <u>This level is typically associated with design practice for peak periods.</u>	.81-.90
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	.91-1.00
F	Forced flow. Represents jammed conditions. Backups from locations downstream or in the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.00
Source: <i>Highway Capacity Manual</i> , Special Report 209, Transportation Research Board, Washington, D.C., 2000		

1.3 EFFECTIVENESS OF COMMUNITY PLAN PROGRAM TRANSPORTATION IMPROVEMENT MITIGATION PROGRAM MEASURES

The LADOT has established that the primary objective of the Community Plan Program Transportation Improvement Mitigation Program (TIMP) is to attempt to mitigate impacts attributable to growth within the Community Plan area. LADOT has adopted Significant Impact Criteria that are utilized in traffic studies for individual development projects that focus on intersection-level analysis. Generally, those criteria are more useful in examining “project-specific” generated impacts and not area-wide forecasted impacts based on generalized increases in population and employment. The transportation analysis in this TIMP is focused on roadway link level of service analysis and aggregate statistics, such as vehicle miles of travel (VMT) associated with 2030 conditions in the San Pedro Community Plan Area. The following criteria have been developed by LADOT for use in all Community Plan projects to determine the effectiveness and adequacy of the proposed TIMP:

The roadway system within the San Pedro Community Plan Area is considered to be significantly impacted if one or both of the following conditions exist:

- The “volume-weighted” average of the Volume to Capacity (V/C) ratio under the Year 2030 Proposed Land Use Plan with TIMP conditions for all of the analyzed roadway segments exceeds that of the 2005 Traffic Conditions; or
- The number of roadway links projected to operate at unsatisfactory levels of service (LOS E or F) under the Year 2030 Proposed Land Use Plan with TIMP conditions exceeds the number for 2005 Traffic Conditions.

1.4 CUMULATIVE AND PROJECT-RELATED IMPACTS

The purpose of the TIMP is to mitigate impacts related to the Year 2030 Proposed Land Use Plan with TIMP as compared to the 2005 Traffic Conditions. Specific project-related traffic impacts are impacts caused by traffic generated as a result of future developments in the study area and not by traffic generated by regional growth. Cumulative impacts are attributable to cumulative traffic growth (including all regional traffic growth) in addition to project traffic that would occur from 2005 to 2030.

1.5 APPLICABLE ADOPTED REGIONAL AND SUBREGIONAL PLANS

Because of its critical location in Los Angeles, other regional plans have been evaluated in relationship to the San Pedro TIMP. These plans include:

- SCAG’s 2008 Regional Transportation Plan Update;
- Metro’s Draft 2008 Long-Range Transportation Plan;
- Metro’s Congestion Management Plan;
- SCQAMD Air Quality Management Plan.

1.6 COORDINATION WITH OTHER ON-GOING STUDIES

The San Pedro TIMP has been developed with the knowledge that several new or on-going transportation system improvement and subregional studies are currently in progress and may have an impact on the recommendations of the TIMP. The studies that have been identified include the following:

- City of Los Angeles Bicycle Plan;
- San Pedro Parking study (CRA/LA);
- San Pedro Waterfront Redevelopment Project (Port of Los Angeles);
- Proposed Ponte Vista Specific Plan in the Wilmington/Harbor City Community Plan.

The proposed land uses from the latter two projects listed have been included in the 2030 analyses, and roadway improvements that were identified as mitigation for these projects are also included.

1.7 ORGANIZATION OF THIS REPORT

The following report summarizes the proposed TIMP developed for the proposed San Pedro Community Plan, and analyzes the 2005 Traffic Conditions, the Current Land Use Plan and the Proposed Land Use Plan. Both the Current and Proposed Land Use Plans are analyzed for the Year 2030. A list of proposed TIMP measures is presented in Chapter 4. The goal is to evaluate the effects of the proposed TIMP on Year 2030 traffic conditions once the proposed TIMP measures are approved by the Department of City Planning and LADOT.

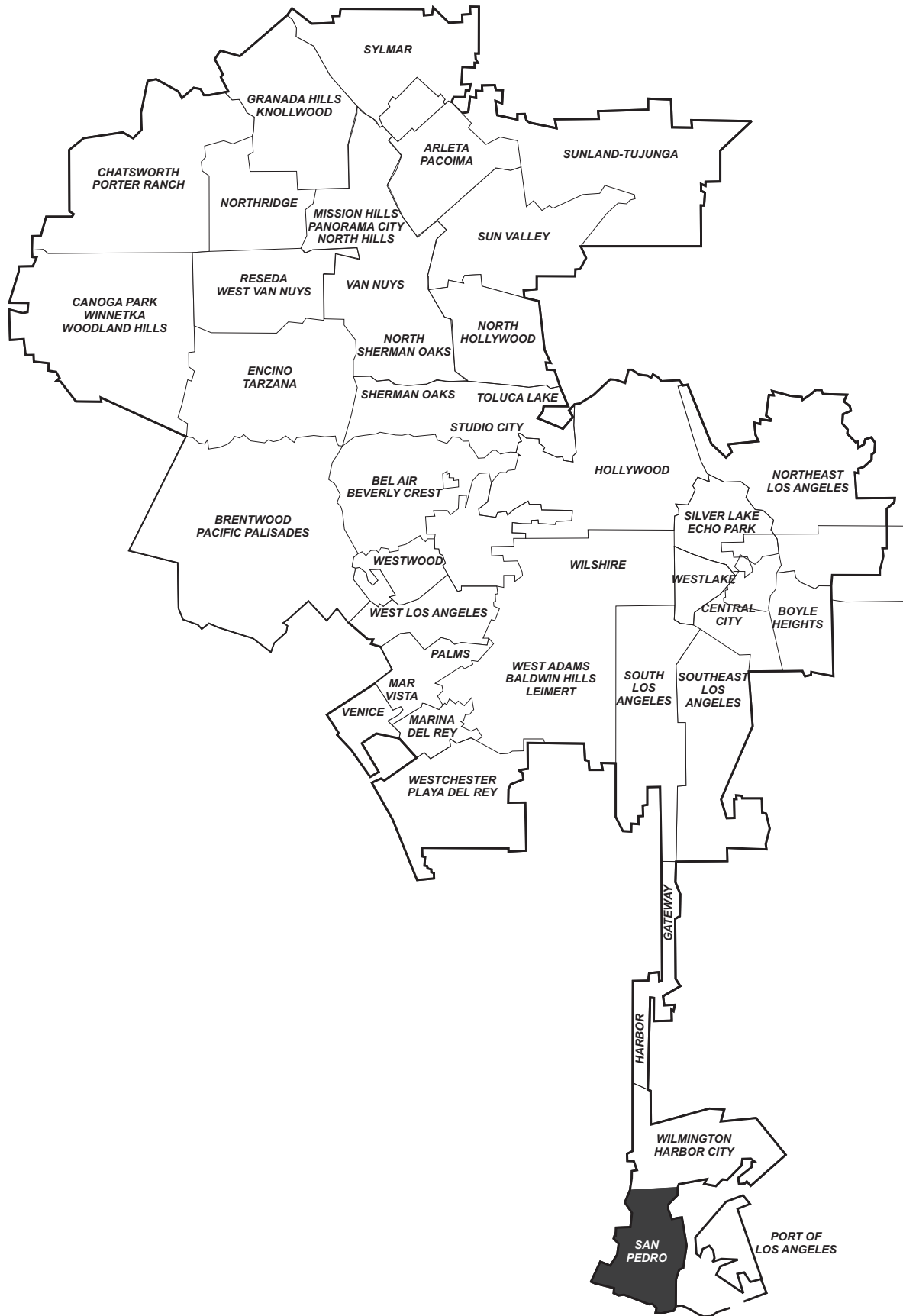
This chapter presents an introduction to the report and the proposed TIMP, along with the level of service methodology and significance criteria to be applied toward the evaluation of traffic conditions. Chapter 2 presents a summary of 2005 Traffic Conditions, and Chapter 3 presents the Year 2030 conditions without TIMP improvements. The Year 2030 Proposed Land Use Plan Transportation Network Alternatives are also presented in Chapter 3. Chapter 4 describes the various transportation improvements within Metro's Long Range Transportation Plan (LRTP), as well as those included in the proposed TIMP. These include proposed street reclassifications, infrastructure (capital) improvements, public transit improvements, transportation systems management (TSM) measures, transportation demand management (TDM) strategies, and neighborhood traffic management options. Chapter 5 discusses the results of the 2030 Proposed Land Use Plan with TIMP forecasts, and finally, Chapter 6 presents the congestion management program transportation impact analysis.

2.0 EXISTING CONDITIONS

2.1 SETTING AND LAND USE

The San Pedro Community Plan TIMP study area is located in the southernmost portion of the City of Los Angeles, approximately 20 miles south of downtown Los Angeles. The proposed San Pedro Community Plan Area encompasses approximately 11.40 square miles, or about 2.3 percent of the 487.70 square miles encompassed by the City of Los Angeles. **Figure 1** provides a regional view of the San Pedro Community Plan Area in context with the City of Los Angeles and other Community Plan areas in the City. The community is bounded by the Tosco Oil Refinery complex and military naval reservation on the north, the Rancho Palos Verdes city limit on the west, the Port of Los Angeles on the east, and the Pacific Ocean on the south. **Figure 2** shows a detailed view of the San Pedro Community Plan Area and its boundaries.

The topography is varied with level areas to the east adjacent to the Port of Los Angeles, rising to the rolling hillsides of the Palos Verdes Peninsula to the west with dramatic sea cliffs and shorelines at the Pacific Ocean. Transportation corridors include Western Avenue, Gaffey Street, Pacific Avenue, and Harbor Boulevard which provide north-south circulation; Capitol Drive, Ninth Street, 25th Street and Paseo Del Mar provide east-west circulation. The area is easily accessible via the I-110 Freeway, and SR-47, which provides access to the City of Long Beach and I-710.

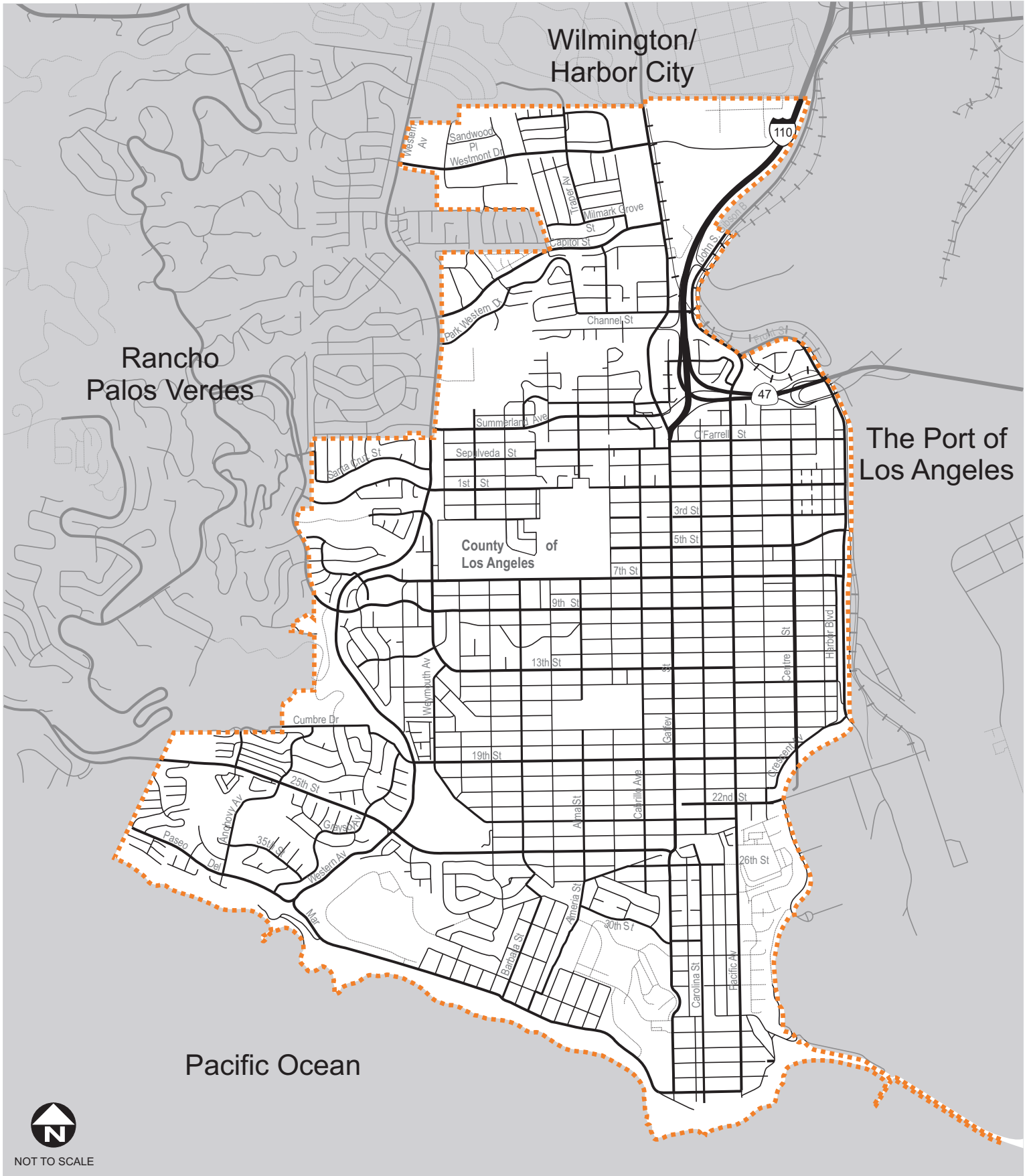


NOT TO SCALE



Proposed San Pedro Community Plan TIMP

Figure 1
Regional Location of
San Pedro Community Plan Area



2.2 DEMOGRAPHICS

Census data shows that in 2000 there were 79,012 residents in the San Pedro Community Plan Area representing a population density of 6,931 persons per square mile. The population density is slightly lower than the citywide average in Los Angeles of 7,607 persons per square mile. The San Pedro Community Plan Area contains 2.1 percent of the population in the City. According to data supplied by the City of Los Angeles Planning Department, the San Pedro Community Plan Area population is expected to grow by five percent from 2000 to 2030 to a resident population of 83,152. The population is based upon the Planning Department’s adjusted SCAG population projection for 2030.

2.2.1 ETHNICITY

Of the varied ethnic groups that reside in the San Pedro Community Plan Area, White-Non-Hispanics and Hispanics or Latinos comprise the largest demographic with 45 percent and 41 percent of the total population, respectively. Black or African Americans comprise the third largest demographic, with six percent of the total population, followed closely by Asian and Pacific Islanders with five percent of the total population. Table 2 below shows a complete breakdown of ethnicities for both San Pedro and the City of Los Angeles.

TABLE 2 ETHNICITY OF RESIDENTS

Ethnicity	San Pedro	City of Los Angeles
Asian/ Pacific Islander	5%	10%
Black/ African American	6%	11%
Hispanic/Latino	41%	46%
White-Non Hispanic	45%	30%
Multiple Races	3%	2%
Other Races	1%	1%

Sources: City of Los Angeles Census 2000 Statistical Profile.

2.2.2 GENDER, OCCUPATION AND INCOME

According to the 2000 Census Data, the gender of residents is evenly divided with females representing slightly more than half the residents (51.2 percent) of San Pedro. About 30 percent of the residents live alone and 43 percent are married. The average household size is 2.4 persons across all households and 3.2 persons for family households. Approximately 41 percent of dwelling units are owner occupied, 53 percent are renter occupied, and six percent are vacant.

Occupations of residents, as shown in **Table 3**, are very similar to that of Los Angeles County and the City of Los Angeles. Approximately 33 percent of San Pedro’s residents have management and professional related occupations. Sales and office occupations are the second highest grouping, comprising approximately 28 percent of San Pedro resident’s occupations.

TABLE 3 OCCUPATIONS OF RESIDENTS

Occupation Grouping	% of Residents		
	San Pedro	Los Angeles City	Los Angeles County
Management, professional, and related occupations	33%	34%	34%
Management, business, financial operations occupations	13%	13%	13%
Professional and related occupations	20%	21%	21%
Service occupations	14%	16%	16%
Sales and office occupations	28%	27%	27%
Sales and related occupations	11%	11%	11%
Office and administrative support occupations	17%	16%	16%
Farming, fishing, and forestry occupations	0%	0%	0%
Construction, extraction, and maintenance occupations	9%	8%	8%
Production, transportation, and material moving	16%	15%	15%
Production occupations	6%	10%	10%
Transportation and material moving occupations	10%	5%	5%

Source: 2000 Census

The socioeconomic characteristics of the San Pedro area are summarized in **Table 4**. The 2000 median annual income in the San Pedro Community Plan Area was \$44,095, which is higher than both the City of Los Angeles and Los Angeles County whose median household income was \$36,687 and \$42,189, respectively.

TABLE 4 MEDIAN HOUSEHOLD INCOME

Census Area	Population	Median Household Income
City of Los Angeles	3,694,820	\$36,687
Los Angeles County	9,519,338	\$42,189
San Pedro	79,012	\$44,095

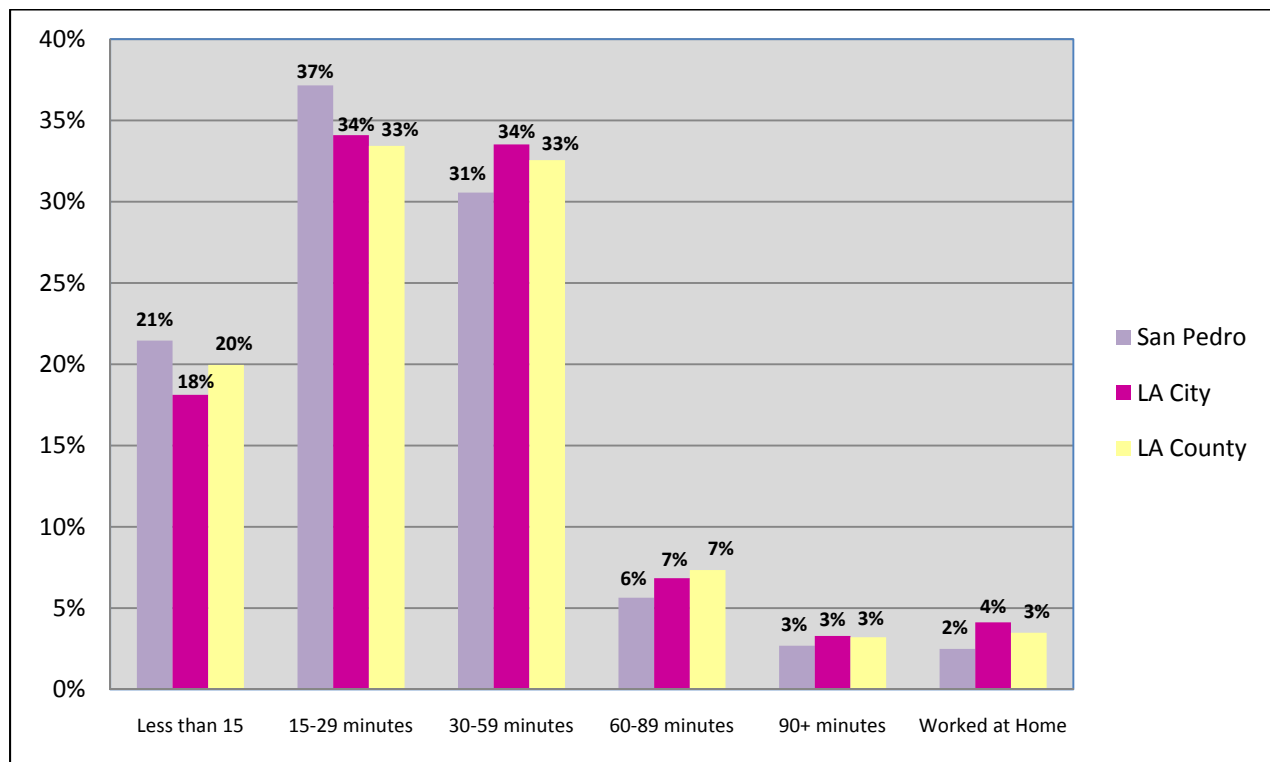
Source: 2000 Census

2.3 COMMUTE CHARACTERISTICS

2.3.1 TRAVEL TIME TO WORK

As shown in **Figure 3**, residents of San Pedro take less time to travel to work than others living in Los Angeles. When compared to average travel times to work for residents in the City of Los Angeles and Los Angeles County, a slightly higher percentage of San Pedro's residents travel to work in 15 minutes or less. Conversely, a slightly lower percentage of San Pedro's residents take longer than 30 minutes to travel to work when compared to the City-wide and County-wide averages. According to the 2000 Census data, the highest percentage of San Pedro residents, 37 percent, commute to work within the "15-29 minutes" travel time range, compared to 34 percent of residents in the City of Los Angeles and 33 percent of residents in Los Angeles County.

FIGURE 3 TRAVEL TIME TO WORK

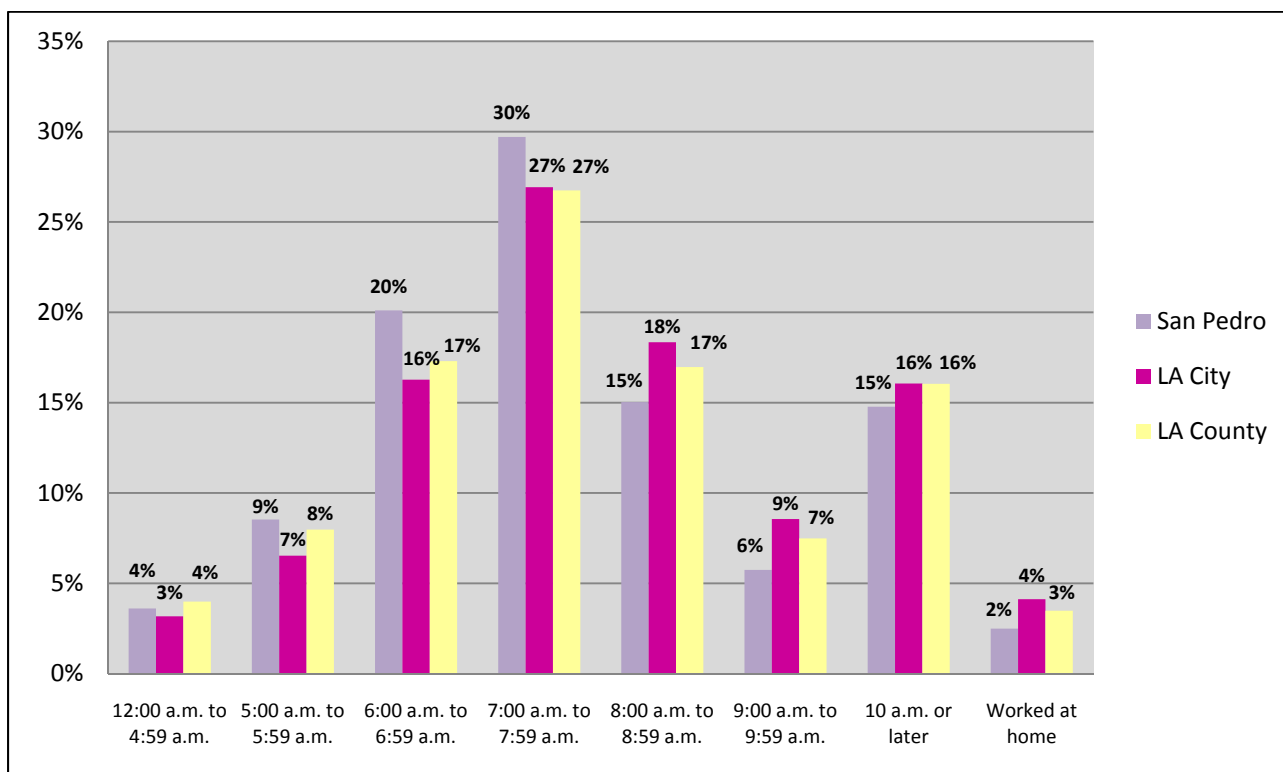


Source: 2000 Census

2.3.2 TIME DEPARTURE TO WORK

Overall, residents of San Pedro depart for work earlier than both the average City of Los Angeles and Los Angeles County residents, as shown in **Figure 4**. According to 2000 Census data, 63 percent of San Pedro residents depart for work before 8:00 a.m., compared to approximately 53 percent of City of Los Angeles residents and 56 percent of Los Angeles County residents. The highest concentration of work departures in San Pedro occurs between 7:00 a.m. and 7:59 a.m.

FIGURE 4 TIME OF DEPARTURE TO WORK



Source: 2000 Census

2.3.3 MEANS OF TRAVEL

Table 5 illustrates the means of travel to work for San Pedro's residents. As shown, the percentage of workers who drive alone in San Pedro is higher than both the City of Los Angeles and Los Angeles County. Approximately 77 percent of San Pedro workers drive alone to work, opposed to 66 percent of City of Los Angeles workers and 70 percent of Los Angeles County workers. With respect to carpooling, approximately 14 to 15 percent of San Pedro, City of Los Angeles, and Los Angeles County residents carpool to work. The largest discrepancy in mode split between San Pedro, the City of Los Angeles, and Los Angeles County occurred with transit. In San Pedro, only three percent of workers utilize transit for their journey to work, opposed to 10 percent in the City of Los Angeles, and seven percent in Los Angeles County. The percentage of workers who either biked, walked, worked at home, or traveled to work using another form of transportation is evenly split between San Pedro, the City of Los Angeles, and Los Angeles County.

TABLE 5 MEANS OF TRAVEL TO WORK

Mode	San Pedro	City of Los Angeles	Los Angeles County
Drive Alone	77%	66%	70%
Car Pool	14%	15%	15%
Transit	3%	10%	7%
Bike	0%	1%	1%
Walk	3%	4%	3%
Work At Home	2%	4%	3%
Other	1%	1%	1%

Source: 2000 Census

2.4 HIGHWAY SYSTEM CHARACTERISTICS

The highway system within the San Pedro area generally follows a north-south grid system, except in areas adjacent to the coast. Being located on a peninsula, San Pedro is limited in the number of through routes; most traffic enters and leaves the area from the north. Freeway access to San Pedro is provided via I-110 (Harbor Freeway), SR-47 (Vincent Thomas Bridge/Seaside Avenue/Ocean Boulevard), and I-710 (Long Beach Freeway). There are several major streets including Western Avenue, Gaffey Street and Harbor Boulevard, which all generally run north-south; and 9th Street and 25th Street which generally run east-west. The area is also served by several secondary and collector streets.

Traffic counts provided below for freeway systems in the San Pedro Community Plan Area were obtained from the 2007 annual average daily traffic (AADT) counts maintained by the Traffic and Vehicle Data Systems Unit of the California Department of Transportation (Caltrans).

2.4.1 FREEWAYS

As mentioned above, three freeway systems provide regional access from the San Pedro Community Plan Area to all other areas of the Southern California region.

Freeway facilities are high-volume/high-speed roadways with limited access occurring only at grade-separated interchanges. Both I-110 and SR-47 are located within or adjacent to San Pedro. I-710, located east of San Pedro, also provides alternate north-south regional access. Interchanges in the San Pedro area are provided at the following locations:

- I-110 (Harbor Freeway)
 - Channel Street (Southbound Only)
 - John S. Gibson Boulevard (Northbound Only)
 - SR-47 Freeway
 - Gaffey Street
- SR-47 (Vincent Thomas Bridge/Seaside Avenue/Ocean Boulevard) / SR-103 (Terminal Island Freeway)
 - I-110 Freeway
 - Gaffey Street
 - Harbor Boulevard

I-110 (Harbor Freeway) – The Harbor Freeway is a north-south oriented freeway that originates from San Pedro. It provides north-south regional access to San Pedro. The Harbor Freeway provides a major transportation link from the Ports of Los Angeles and Long Beach to the South Bay Cities, downtown Los Angeles and northern Los Angeles County where it terminates in the City of Pasadena. It is generally an eight lane facility with four lanes in each direction. The 2007 AADT on the freeway segment between the Terminal Island Freeway junction and Channel Street interchange was approximately 76,000 vehicles per day.

SR-47/SR-103 (Terminal Island Freeway) – The Terminal Island Freeway consists of four lane and six-lane segments. A four lane segment provides east-west access via the Vincent Thomas Bridge connecting the San Pedro Peninsula and Terminal Island. A six lane north-south segment between Ocean Boulevard and Anaheim Street crosses the Cerritos Channel via the Commodore Schuyler F. Heim drawbridge. North of Anaheim Street it narrows to four lanes and terminates at Willow Street. The 2007 AADT on the freeway segment of SR-103 between Anaheim Street and the Pacific Coast Highway interchange was 13,700 vehicles per day. Along SR-47 between Harbor Boulevard and the junction with I-110 the 2007 AADT was 49,500 vehicles per day.

I-710 (Long Beach Freeway) – The Long Beach Freeway is a six lane freeway located to the east of San Pedro. It provides north-south regional access to the Ports of Long Beach and Los Angeles and the San Pedro Community Plan Area via the Vincent Thomas Bridge from Terminal Island. The Long Beach Freeway provides a major transportation link to downtown Los Angeles and northern Los Angeles County where it terminates in the San Gabriel Valley area. The 2007 AADT on the freeway segment between Anaheim Street and the Pacific Coast Highway interchange was 133,000 vehicles per day.

2.4.2 SURFACE ROADWAYS

As noted earlier, the major roadways in the San Pedro area generally follow a grid pattern. Roadways are classified as Major Class II Highways (typically 100-104 feet right of way and two to three lanes in each direction), Secondary Highways (typically 80-90 feet of right of way and two lanes each direction), Collector streets (typically one lane each direction) and Local Streets (one lane each direction). Below are the generalized street and highway cross sections, which represent fully dedicated and improved streets by designation and type, as shown in the City's General Plan Transportation Element. Not all designations reflect actual conditions, and not all are found within the San Pedro Community Plan Area:

Major Class II Highway-Class II - 104' ROW

a. Standard

- 12' Sidewalk/Parkway + 13' Curb Lane
- 4 Full-Time Through Lanes
- 2 Part-Time Parking Lanes
- 1 Median/Left Turn Lane

b. Pedestrian Priority Segments

- 17' Sidewalk/Parkway + 8' Curb Parking
- 4 Full-Time Through Lanes
- All-Day Parking
- 1 Median/Left Turn Lane

Secondary Highway - 90' ROW

a. Standard

- 10' Sidewalk/Parkway + 19' Curb Lane
- 4 Full-Time Through Lanes
- All-Day Parking
- 1 Median/Left Turn Lane

b. Pedestrian Priority Segments

- 15' Sidewalk/Parkway + 8' Curb Parking
- 4 Full-Time Through Lanes
- All-Day Parking

Collector Streets

- a. Standard - 64' ROW
 - 10' Sidewalk/Parkway
 - 2 Full-Time Through Lanes
 - 2 Full-Time Parking Lanes
- b. Industrial - 64' ROW
 - 8' Sidewalk
 - On-Street Parking Restrictions
 - 2 Full-Time Through Lanes
 - Minimum 35' Curb Radius
- c. Hillside - 50' ROW
 - 5' Sidewalk
 - 2 Full-Time Through Lanes
 - 2 Full-Time Parking Lanes

It is important to note that not all streets meet these specifications exactly and that some classifications vary on a case by case basis.

Appendix A-1 lists major segments on all of the roadways included in the travel demand forecasting model, their classification, number of peak hour and off-peak travel lanes, nature of on-street parking and the posted speed limit in the study area. Unless specifically stated, the number of travel lanes during the peak and off-peak hours are the same. The following paragraphs discuss the significant and regional roadways in the San Pedro Community Plan Area.

2.4.3 MAJOR CLASS II HIGHWAYS

The San Pedro Community Plan Area is traversed by a series of Major Highways, which run both north-south and east-west. Major Highways are generally four- to six-lane facilities that are designed to provide a high level of mobility to vehicles while providing access to adjacent properties. Major Highways in the study area include all or portions of the following:

- Western Avenue (SR-213)
- Gaffey Street
- John S. Gibson Boulevard
- Front Street/Harbor Boulevard
- 9th Street
- 25th Street
- Channel Street

North-South

Western Avenue – Western Avenue is a north-south route through the western limits of San Pedro from Paseo del Mar at the Pacific Ocean to the northern limits of the San Pedro Community Plan Area. It consists of one lane in each direction from Paseo del Mar to West 25th Street, and two lanes in each direction from West 25th Street to the northern limit of the San Pedro.

Gaffey Street – Gaffey Street runs north-south through San Pedro and has two lanes in each direction to south of 5th Street, and three lanes in each direction north of 5th Street during the peak hours (due to on-street parking restrictions). North of 1st Street and leading to the junction with the I-110 freeway on ramp, the roadway expands to six full-time lanes and reverts back to two lanes in each direction north of the freeway.

John S. Gibson Boulevard – John S. Gibson Boulevard is a continuation of Pacific Avenue to the north of the I-110 northbound on/off ramps at Pacific Avenue. It is located in the northeastern limits of the San Pedro Community Plan Area and consists of two lanes in each direction.

Front Street/Harbor Boulevard – Front Street/Harbor Boulevard is located along the eastern limits of San Pedro between Crescent Avenue to the south and Pacific Avenue to the north. Running north-south, it consists of two lanes in each direction.

East-West

9th Street – 9th Street runs east-west and is classified as a Major Highway west of Pacific Avenue to Miraleste Drive. It generally has one travel lane in each direction, except west of Dodson Avenue to Miraleste Drive where it widens to two lanes in each direction.

25th Street – 25th Street runs east-west from Gaffey Street to the western limits of the San Pedro Community Plan Area. It is one lane in each direction from Gaffey Street to Patton Avenue, and one to two lanes in each direction from Patton Avenue to the western limits of San Pedro.

Channel Street – Channel Street serves as an east-west connector between North Gaffey Street and Pacific Avenue, and has two travel lanes in each direction.

2.4.4 SECONDARY ROADWAYS

Secondary Highways are generally two- to four-lane roadways that provide local connections to the major highway network. These roadways may be classified as secondary arterials in a standard classification scheme. The Secondary Highways in the study area include all or portions of the following:

- Weymouth Avenue
- Pacific Avenue
- Centre Street
- Westmont Drive
- Capitol Drive
- Summerland Avenue
- 1st Street
- 5th Street
- 7th Street
- 13th Street
- 19th Street
- 22nd Street
- Paseo del Mar
- Shepard Street

North-South

Weymouth Avenue – Weymouth Avenue is a north-south route that extends through San Pedro from Western Avenue to Elanita Drive. North of 13th Street, Weymouth Avenue is classified as a Secondary Highway and south of 13th Street it is classified as a Collector Street. It is located in the western portion of San Pedro and consists of one lane in each direction.

Pacific Avenue – Pacific Avenue is a north-south route that extends through San Pedro from Front Street to Shepard Street. It is located in the eastern limits of San Pedro and consists of one lane in each direction.

Centre Street – Centre Street is a north-south route that extends through San Pedro from O’Farrell Street to Crescent Avenue. Centre Street is classified as a Secondary Highway between 1st Street and 7th Street, and a Collector Street between O’Farrell Street and 1st Street and between 7th Street and Crescent Avenue. It is located in the eastern limits of San Pedro and consists of one to two lanes in each direction.

East-West

Westmont Drive – Westmont Drive is an east-west route that extends through San Pedro from Western Avenue to Gaffey Street. It is located in the northern limits of San Pedro and consists of two lanes in each direction.

Capitol Drive – Capitol Drive is an east-west route that extends through San Pedro from Western Avenue to Gaffey Street. It is located in the northern limits of San Pedro and consists of two lanes in each direction.

Summerland Avenue – Summerland Avenue is an east-west route that extends through San Pedro from Western Avenue to Gaffey Street. It is located in the northern limits of San Pedro and consists of one lane in each direction.

1st Street – 1st Street is an east-west route that extends throughout San Pedro. West of Western Avenue 1st Street is classified as a Collector Street, and east of Western Avenue it is classified as a Secondary Highway. It is located in the central limits of San Pedro and consists of one lane in each direction.

5th Street – 5th Street is an east-west route that extends through San Pedro from Gaffey Street to Harbor Boulevard. It is located in the central limits of San Pedro and consists of one lane in each direction.

7th Street – 7th Street is an east-west route that extends through San Pedro from Weymouth Avenue to Harbor Boulevard. It is located in the central limits of San Pedro and consists of one lane in each direction.

13th Street – 13th Street is an east-west route that extends through San Pedro from Weymouth Avenue to Pacific Avenue. It is located in the central limits of San Pedro and consists of one lane in each direction.

19th Street – 19th Street is an east-west route that extends through San Pedro from Western Avenue to Crescent Avenue. West of Pacific Avenue, 19th Street is classified as a Secondary Highway and east of Pacific Avenue it is classified as a Collector Street. It is located in the southern limits of San Pedro and consists of one lane in each direction.

22nd Street – 22nd Street is an east-west route that extends through San Pedro from Gaffey Street to the city's eastern city limits. It is located in the southern limits of San Pedro and consists of one lane in each direction.

Paseo del Mar – Paseo del Mar is an east-west route that extends through San Pedro from the western boundary to Pacific Avenue. It is located in the southern limits of San Pedro and consists of one lane in each direction.

Shepard Street – Shepard Street is an east-west route that extends through San Pedro from Paseo Del Mar to Pacific Avenue. It is located in the southern limits of San Pedro and consists of one lane in each direction.





2.4.5 COLLECTOR STREETS

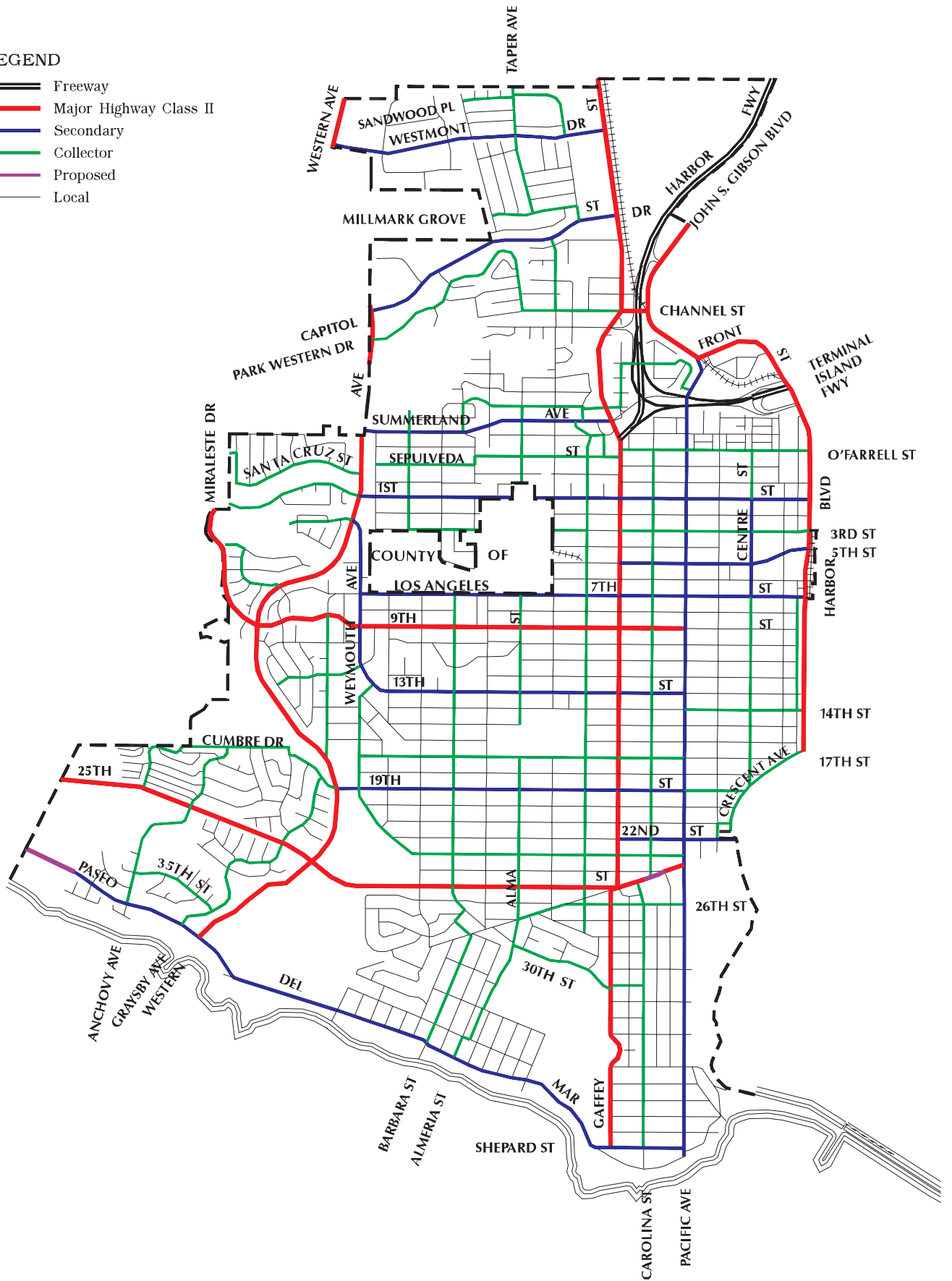
The network of Major and Secondary Highways are complemented by an extensive network of Collector Streets. Some of the more significant Collector Streets within San Pedro include portions of the following:

- Taper Avenue
- Park Western Drive
- Channel Street
- Sepulveda Street
- O'Farrell Street
- 1st Street
- 3rd street
- 14th Street
- 23rd Street
- 26th Street
- 30th Street
- 35th Street
- Anchovy Avenue
- Graysby Avenue
- Weymouth Avenue
- Elanita Street
- Barbara Street
- Patton Street
- Almeria Street
- Alma Street
- Meyler Street
- Carolina Street
- Grand Avenue
- Centre Street
- Crescent Avenue
- Beacon Street

Figure 5 illustrates the existing roadway designations in the San Pedro Community Plan Area.

LEGEND

-  Freeway
-  Major Highway Class II
-  Secondary
-  Collector
-  Proposed
-  Local



2.4.6 SIGNALIZED INTERSECTIONS AND TRAFFIC CONTROL DEVICES

The signal system in this area is currently in the process of being updated to the Automated Traffic Surveillance and Control (ATSAC) system. This system allows monitoring and control of the signal from a central Traffic Operations Center (TOC) at City Hall. The importance of linking to the ATSAC system is the ability to coordinate the signals in relationship with other signals along a travel corridor. Signal coordination minimizes delay, due to stops, and enhances vehicle flow. Studies by the Los Angeles Department of Transportation have shown that the ATSAC system reasonably increases capacities on roadways by approximately seven percent. Once complete, the entire signal system in San Pedro will be online with the ATSAC system.

The next generation of signal system upgrade is to an Adaptive Traffic Control System (ATCS). The ATCS system automatically adjusts signal timing dynamically during different times of the day based on traffic volumes and directions. In addition, LADOT staff can manually adjust traffic signals remotely from the department's command center to respond to accidents, weather, special events, and other emergencies.

It is anticipated that all traffic signals citywide will be a part of the ATSAC and ATCS systems by the year 2030. LADOT recognizes the increased efficiency of the traffic flow by allowing a credit to the volume to capacity (V/C) ratio along roadway links. The ATSAC credit is seven percent increase in capacity and the ATCS credit is an additional three percent increase in capacity. Therefore, for 2030 conditions, a total of 10 percent increase in capacity is assumed.

2.5 EXISTING OPERATING CONDITIONS - METHODOLOGY

In order to understand the operating conditions of traffic, it is important to understand the concept of level of service (LOS) and the methodology used to determine the LOS. Level of service is a qualitative measure describing traffic flow conditions. The ranges vary from LOS A at free flow conditions to LOS F at extremely congested conditions. The methodology used to determine the link LOS involves the calculation of the V/C ratio on each of the links.

Assumed capacities on roadway links were developed in conjunction with LADOT. The capacities reflect the maximum number of vehicles per hour that can be reasonably carried on the roadway under prevailing traffic conditions. The assumed roadway capacities for each type of facility used are as follows:

Facility Type	Hourly Capacity (veh./lane/hour)
Freeway mainline	2,000
Freeway ramp	600
Freeway connector	1,600
Two-way major arterial	800
Two-way secondary arterial	700
Collector and local streets	600

2.5.1 MODEL REFINEMENT

The Southern California Association of Governments (SCAG) travel demand model was used for the traffic analysis. The SCAG model was focused and refined to provide a tool to analyze future impacts due to growth and changes in land uses in the San Pedro Community Plan Area. Socioeconomic (SED) data such as housing, population and jobs was identified for the Community Plan Area. This data is placed in the model through the use of traffic analysis zones (TAZ) which represent geographical areas. The TAZs and roadway network in the SCAG model are large and less refined, so for this analysis, it required the disaggregation of traffic analysis zones, addition of roads to the street network and updates of the SCAG socioeconomic data. The following is a short discussion of the refinement work conducted for the San Pedro Community Plan.

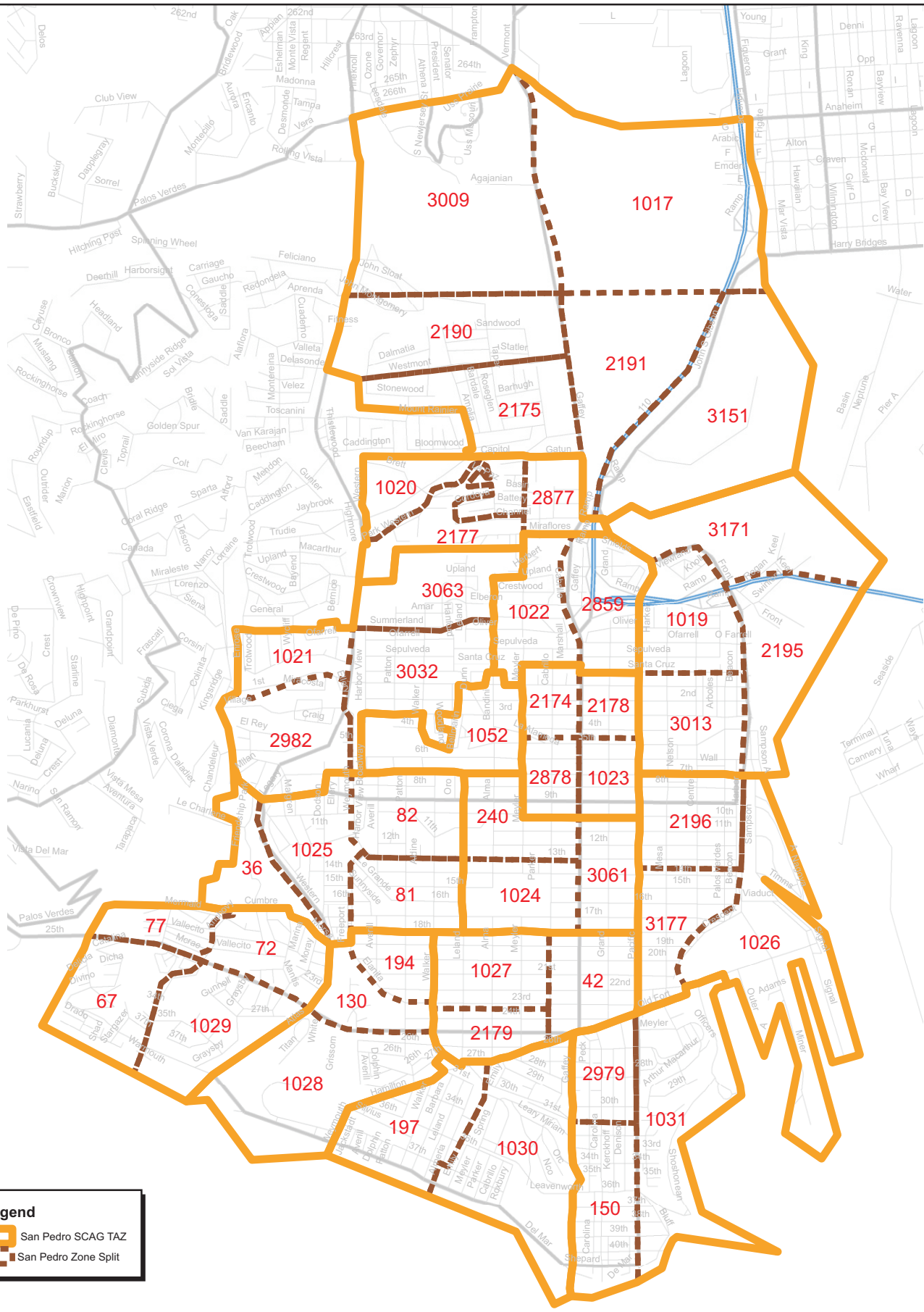
The number of TAZ's was increased from 15 zones to 49 zones within the San Pedro area. The new TAZ boundaries were determined based on current and proposed land uses. **Figure 6** shows the new refined TAZ system in the San Pedro Community Plan Area.

Information regarding the street system in and around San Pedro needed to be further detailed to conduct a community plan level of analysis. The SCAG model contained roadways only down to the secondary arterial level. The goal of the network refinement task was to add all roadways that were determined to be significant for the study, including collector streets.

The goal of the model development was to include all major and secondary roadways in the model. Most collector streets were also added to the model's network, although some discontinuous or dead-end roadways could not be modeled. For a model to be considered accurate and appropriate for use in traffic forecasting, it must replicate actual conditions to within a certain level of accuracy. Validation guidelines have been established by LADOT based on Caltrans and FHWA standards. The model was calibrated to within 10 percent on a screenline basis, which meets Caltrans and FHWA standards. Screenlines are imaginary lines drawn across several parallel roadways, creating a cordon or boundary, and are used to assess the performance of the model in terms of forecasting traffic on each roadway crossing the screenline in comparison to actual traffic counts on those roadways. Model volumes were

within 10 percent of the actual volumes. Therefore, the result of the modeling effort is a refined travel demand forecast model for the San Pedro area, sensitive enough to forecast future link-level conditions.

The V/C for the roadway segments was calculated, and the average V/C for the entire San Pedro Community Plan Area was assessed by obtaining the volume weighted average V/C. The volume weighted average V/C ratio is calculated by taking the volume of each link and multiplying it by its corresponding V/C ratio. This is divided by the sum of the total volume on all links. The resultant essentially represents the average V/C ratio for the entire roadway network in San Pedro Community Plan Area.



Legend

- San Pedro SCAG TAZ
- San Pedro Zone Split



Proposed San Pedro Community Plan TIMP

Figure 6
Traffic Analysis Zones in the
San Pedro Community Plan Area

2.5.2 *SELECTED HIGHWAY SEGMENTS FOR ANALYSIS*

As discussed in the Highway System Characteristics section of this chapter, a majority of the streets in San Pedro are designated as Collectors and local streets. This is true even of non-continuous streets and streets that provide only local access. In reality, many of the local access and non-contiguous streets function and operate as local streets. Such roadways seldom experience significant traffic impacts due to congestion but they are often used as cut through routes by drivers seeking to avoid congestion on nearby Major or Secondary Highways. The TIMP examines collector-level and higher facilities within the City's jurisdiction. The reason for evaluating these facilities is that, typically, streets designated as Collectors, Secondary and Major Class II Highways play a significant role in the movement of traffic, while local streets primarily provide direct access to abutting land uses, including homes.

2.5.3 *EXISTING TRAFFIC CONDITIONS*

Appendix A-2 presents the results of the volume-to-capacity calculations for the existing traffic conditions for the year 2005. The table lists the roadway separated by each designated segment that lies within the San Pedro Community Plan Area. The existing traffic volumes are presented under the column heading "Volume". Traffic volumes have been separated by direction, indicated by the "NB/EB" or "SB/WB" heading. These represent north- and southbound directions or east- and westbound directions of travel, depending on the orientation of the facility.

The calculated volume-to-capacity ratio for each direction is presented under the column "V/C". The associated Level of Service for each V/C range is presented in the final columns under "LOS." **Table 6** summarizes the existing traffic conditions and includes the daily vehicle miles traveled (VMT), daily vehicle hours traveled (VHT), and overall daily average speed on the streets within the San Pedro Community Plan Area. VMT is a measure of how much and how far people are driving and is calculated as the total miles travelled daily within the Community Plan area. The higher the VMT, the more auto travel there is, with related increases in emissions. VHT is a measure of how much time is spent traveling, and is calculated as the total number of hours daily that vehicles spend on the roadways within the Community Plan area. Increasing VHT indicates more time spent in slower-moving, congested streets. Segments operating at LOS E or F (with a V/C of 0.91 or worse) are roadways that are tracked for San Pedro's significant growth impacts. A total of 32 roadway segments (or links) out of a total of 618 links, or approximately five percent, of San Pedro roadways operate at an LOS E or F in the existing traffic conditions. The volume-weighted V/C ratio is 0.605 for the existing traffic conditions. This indicates that on average, the streets in San Pedro Community Plan Area utilize approximately 60.5 percent of roadway capacity in the PM peak hour. The V/C ratio is at LOS B, which indicates very good overall operating conditions. VMT and VHT are highest in the PM peak period when commercial and retail trips overlap with commute trips.

TABLE 6 2005 TRAFFIC CONDITIONS – ARTERIAL SUMMARY

Existing Traffic Conditions	
VMT	56,792
VHT	1,895
Avg Speed (mph)	30
Weighted Avg V/C	0.605
Links at LOS E or F	32

2.6 TRANSIT SERVICES

Fixed-route public transportation services in the San Pedro area are currently provided by the Los Angeles County Metropolitan Transportation Authority (Metro), Commuter Express services provided by the Los Angeles Department of Transportation (LADOT), the Palos Verdes Peninsula Transit Authority (PVPTA), the Metropolitan Area Express (MAX), and the Port of Los Angeles. **Figure 7** illustrates transit routes serving the San Pedro area including five Metro routes, two LADOT routes, three PVPTA routes, two MAX routes, and one Port of Los Angeles Waterfront Red Car Line. The following provides a brief description of these transit routes:

Metro Transit Routes

205: Line 205 provides local service between San Pedro and Willowbrook. In the study area, this line travels along 13th Street, Weymouth Avenue, 7th Street, Pacific Avenue, 1st Street, and Western Avenue.

225/226: Line 225/226 from Redondo Beach to LAX was cancelled due to underutilization and high public subsidy. Ownership of the line was transferred to the Palos Verdes Peninsula Transit Authority for community-based operation and the line currently provides service between San Pedro and Redondo Beach.

445: Line 445 provides the only all day express service between San Pedro and Downtown Los Angeles. In the study area, line 445 travels along 22nd Street, Gaffey Street, 19th Street, Pacific Avenue, 1st Street, Harbor Boulevard the SR-47 Freeway, and the Harbor (I-110) Freeway.

446/447: Lines 446 and 447 provide express service on a limited basis between San Pedro and Downtown Los Angeles, requiring a connection to line 445 at Artesia Transit Center between the hours of 7:30 AM and 6:30 PM. In the study area, line 446 operates along Paseo Del Mar, Shepard Street, Pacific Avenue, and John S. Gibson Boulevard. Line 447 travels along Gaffey Street, 13th Street, Weymouth Avenue, 7th Street, Harbor Boulevard, Front Street, and joins line 446 on John S. Gibson Boulevard.

550: This line provides express service between San Pedro and West Hollywood. In the study area, this line travels along 13th Street, Weymouth Avenue, 7th Street, and Gaffey Street.

LADOT Transit

DASH San Pedro: The DASH San Pedro line provides community circulator service in San Pedro. This DASH service operates every 20 minutes between 6:40 AM and 7:30 PM on Western Avenue, Summerland Avenue, Gaffey Street, 1st Street, Grand Avenue, O'Farrell Street, Centre Street, 6th Street, Harbor Boulevard, 7th Street, 19th Street, and Alma Street.

Commuter Express: Line 142 runs between San Pedro and the Transit Mall at Long Beach, with service every thirty minutes from 5:20 AM to 11:10 PM. Within the study area, the line services Port's O'Call at Sampson Way, Gaffey Street and 7th Street, and Gaffey Street and 1st Street.

Palos Verdes Peninsula Transit Authority (PVPTA)

225: Line 225 provides service between San Pedro and Redondo Beach via the Palos Verdes Peninsula cities. In the study area, this line operates along Averill Avenue, 9th Street, Weymouth Avenue, Western Avenue, 1st Street, and Miraleste Drive.

Green: The Green line provides service between San Pedro and the Palos Verdes Peninsula. In the study area, this line travels along Western Avenue and 1st street.

Orange: The Orange line provides one-way bus service to and from schools throughout the Palos Verdes Peninsula. Within the study area, this line travels along Western Avenue and 1st Street.

Metropolitan Area Express (MAX)

MAX, the Municipal Area Express, is a commuter bus service operated by the City of Torrance, specifically designed to address the commuting needs of South Bay residents who work in the El Segundo employment center. MAX offers two routes through the South Bay, and operates during the morning and afternoon peak commuting hours.

3: This line provides commuter service between San Pedro and El Segundo. In the study area, this line travels along Pacific Avenue, 9th Street, Weymouth Avenue, and Western Avenue.

3X: This line provides freeway express service between San Pedro and El Segundo. In the study area, this line travels along 25th Street, Western Avenue, Paseo Del Mar, Shepard Street, Pacific Avenue, 9th Street, Gaffey Street, and the Harbor (I-110) Freeway.

Port of Los Angeles

Waterfront Red Car Line (WRC): The WRC is a 1.5 mile long vintage trolley line connecting San Pedro's World Cruise Center and the nearby Fanfare at San Pedro Gateway with other

attractions along the waterfront. Other attractions include 6th Street and the LA Maritime Museum, Ports O' Call, Fisherman's Wharf and 22nd Street Landing. The Red Cars operate from 10 a.m. to 9:30 p.m., Friday through Monday. Red Cars also run on Tuesday, Wednesday, and Thursday when cruise ships are in Port.

Table 7 lists the bus routes serving the San Pedro Community Plan Area and shows the days of operation and approximate weekday hours of operation. Seven of the bus routes serving the area operate seven days per week, two bus routes only operate Monday through Friday, and two bus routes operate Monday through Friday with only limited service.

TABLE 7 TRANSIT ROUTES

Operator	Line	Weekday Hours		Monday-Friday	Saturday	Sunday & Holiday
		Start Time	Stop Time			
MTA	205	4:54 AM	9:47 PM	X	X	X
MTA	445	5:04 AM	6:14 PM	X	X	X
MTA	446	4:26 AM	12:24 AM	X	X	X
MTA	447	5:17 AM	8:37 PM	X	X	X
MTA	550	4:52 AM	10:29 PM	X	X	X
LADOT - DASH	San Pedro	6:40 AM	7:00 PM	X	X	X
LADOT – Commuter Express	142	5:20 AM	11:10 PM	X	X	X
PVPTA	225	6:05 AM	1:35 PM	X		
PVPTA	Green	6:47 AM	5:42 PM	X		
PVPTA	Orange	AM and PM		School Days		
		School Peak Hours				
MAX	3	AM and PM Peak Hour		X		Limited Holidays Only
MAX	3X			X		

Legend

MTA Metro Transit

- MTA 205
- MTA 445
- MTA 446
- MTA 447
- MTA 550

MAX Municipal Area Express

- MX3
- MX3X

SANP San Pedro DASH

- SANP

CE LADOT Commuter Express

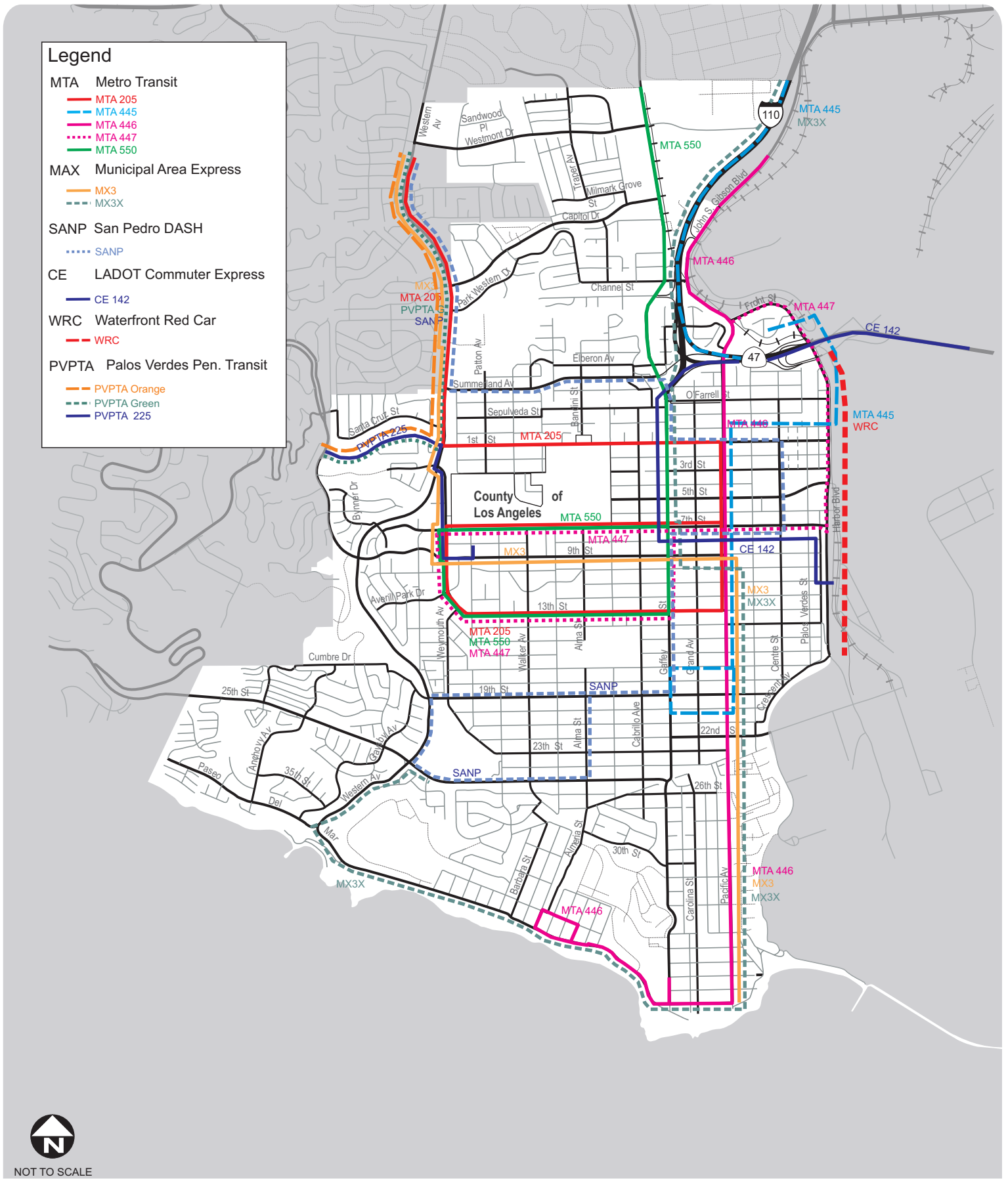
- CE 142

WRC Waterfront Red Car

- WRC

PVPTA Palos Verdes Pen. Transit

- PVPTA Orange
- PVPTA Green
- PVPTA 225



NOT TO SCALE



2.7 BICYCLE FACILITIES

The City of Los Angeles City Council approved the 2010 Bicycle Plan on March 1, 2011. The Bicycle Plan includes the following bicycle facilities: Class I Bicycle Paths, Class II Bicycle Lanes, and Class III Bicycle Routes and Bicycle-Friendly Streets.

Bicycle facilities are classified based on a standard typology, which is described in further detail below. **Figure 8** shows the locations of the existing and proposed bicycle facilities within the San Pedro Community Plan Area.

- **Class I Bikeways (Bicycle Paths)** are exclusive car free facilities that are typically not located within a roadway area. And provide a separated right-of-way for bicycle travel that is typically shared with pedestrians and provides a typical to 12-foot wide path. Bike path intersections are usually minimized, and street crossings often require special treatment.
- **Class II Bikeways (Bicycle Lanes)** provide on-street right-of-way in the form of a striped lane for the exclusive use of bicyclists, except where right-turning vehicles are allowed to encroach. Bicycle Lanes are typically five to seven feet wide and located to the right of vehicular travel lanes.
- **Class III Bikeways (Bicycle Routes)** are signed routes for use by bicyclists without the benefit of allocated right-of-way. Bicyclists share lanes with motor vehicles. Bike routes are typically designated along streets with lower traffic volumes, wider curb lanes or are otherwise better suited for bicycle travel.
- **Class III Bikeways (Bicycle-Friendly Streets)** are primarily on collector and local roadways. These corridors generally parallel major commercial corridors, and have the potential to provide access to local destinations and provide connections to other bicycle facilities.

Within the study area, there are several existing bicycle facilities. Bicycle racks are provided at various public and private locations throughout the San Pedro Community Plan. According to the 2010 Bicycle Plan, the following Bicycle Path currently exists within the San Pedro Community Plan Area:

- Crescent Avenue from 22nd Street to Harbor Boulevard/Miner Street

The following Bicycle Lanes currently exist within the San Pedro Community Plan Area:

- 9th Street from Miraleste Drive Street to Gaffey Street
- Front Street from Pacific Avenue to Harbor Freeway N/B On-Ramp
- Gaffey Street from Anaheim Street to Channel Street

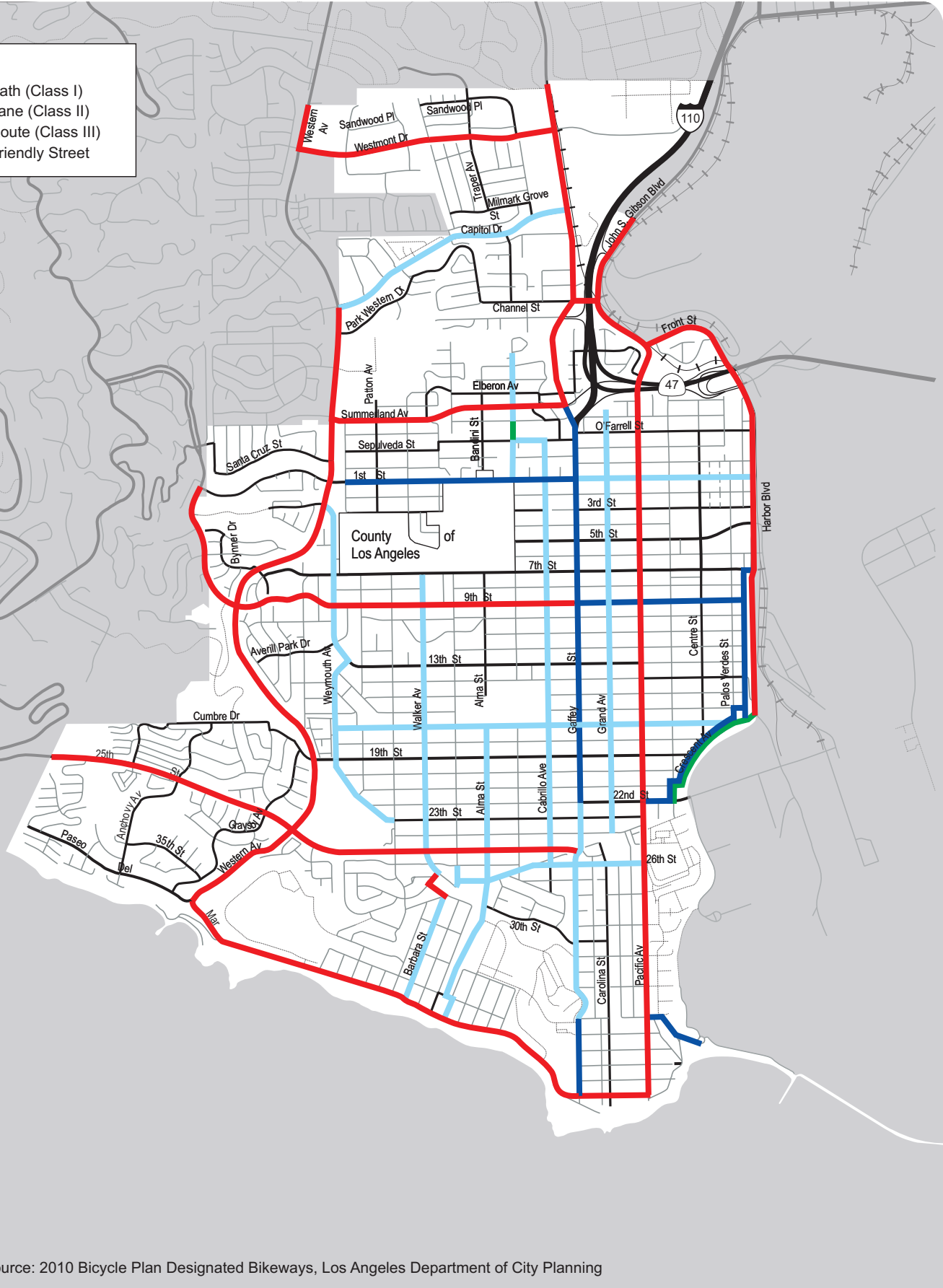
- Harbor Boulevard from I-110 N/B On-Ramp to 22nd Street
- John S. Gibson Boulevard from Channel Street to Figueroa Street
- Miraleste Drive from 989' north of Village Way to 9th Street
- Pacific Avenue from 22nd Street to Shepard Street
- Paseo del Mar from Western Avenue to Gaffey Street
- Shepard Street from Gaffey Street to Pacific Avenue

The following Bicycle Routes currently exist within the San Pedro Community Plan Area:

- 7th Street from Beacon Street to Harbor Boulevard
- 16th Street from Palos Verdes Street to Beacon Street
- 21st Street from Mesa Street to Crescent Avenue
- 22nd Street from Pacific Avenue to Mesa Street
- 25th Street from Rancho Palos Verdes to Western Avenue
- 9th Street from Gaffey Street to Beacon Street
- Beacon Street from Crescent Avenue to 7th Street
- Crescent Avenue from 21st Street to Palos Verdes Street/Beacon Street
- Gaffey Street from Channel Street to 22nd Street
- Mesa Street from 22nd Street to 21st Street
- Oliver Vickery Circle Way from Stephen M White Drive to Cabrillo Beach
- Palos Verdes Street from Crescent Avenue to 16th Street
- Stephen M White Drive from Pacific Avenue to Oliver Vickery Circle Way
- Summerland Avenue from Western Avenue to Gaffey Street
- Western Avenue from Summerland Avenue to Paseo del Mar
- Westmont Drive from Western Avenue to Gaffey Street

Legend

- █ Bike Path (Class I)
- █ Bike Lane (Class II)
- █ Bike Route (Class III)
- █ Bike Friendly Street



NOT TO SCALE

Source: 2010 Bicycle Plan Designated Bikeways, Los Angeles Department of City Planning



Figure 8
Proposed San Pedro Community Plan TIMP Proposed Bicycle Facilities to Serve the San Pedro Community Plan Area

3.0 YEAR 2030 CONDITIONS

In this chapter, Year 2030 scenarios and analyses are presented. The first is the Current Land Use Plan, which is based on the current land uses contained in the existing San Pedro Community Plan. The second is the Proposed Land Use Plan, which is reflective of land use changes proposed for the San Pedro Community Plan.

To better reflect cumulative growth in the area, two nearby projects were included:

- San Pedro Waterfront – This project is located east of the San Pedro Community Plan Area, and has an approved Environmental Impact Report (EIR). The preferred alternative land uses were included in the model along with roadway mitigation measures.
- Ponte Vista – This proposed project is located on Western Avenue just north of the San Pedro Community Plan Area. Although the project is not currently approved, a moderate density project was assumed and included in the model.

The future conditions also assume that the LADOT ATSAC and ATCS traffic signal systems are in place for all intersections by 2030. As noted in section 2.4.6, this effectively increases roadway capacity by 10 percent as compared to 2005 conditions.

3.1 YEAR 2030 CURRENT LAND USE PLAN WITH COMMITTED ROADWAY NETWORK

The Year 2030 Current Land Use Plan with Committed Roadway Network (Current Land Use Plan) is an analysis of what would occur if no changes were made to the current land use plan. **Table 8** shows the Current Land Use Plan arterial summary, which includes VMT, VHT and average speed. Roadway segments operating at LOS E or F (V/C of 0.91 or worse) were identified to ascertain the level of congestion expected in the future. A total of approximately six percent (37 of 610 roadway links) of San Pedro roadways are forecast to operate at an LOS E and F in the Current Land Use Plan scenario.

The volume-weighted V/C ratio is 0.662 for the year 2030 Current Land Use Plan. This indicates that on average, the streets in the San Pedro Community Plan Area utilize approximately 66.2 percent of roadway capacity in the PM peak. The V/C ratio is at LOS B, which constitutes very good overall operating conditions. **Table A-3** in the Appendix shows the Current Land Use Plan level of service for each arterial segment in the San Pedro Community Plan Area.

**TABLE 8 YEAR 2030 CURRENT LAND USE PLAN WITH COMMITTED ROADWAY NETWORK –
ARTERIAL SUMMARY**

Current Land Use Plan Traffic Conditions	
VMT	67,475
VHT	2,385
Avg Speed (mph)	28
Weighted Avg V/C	0.662
Links at LOS E or F	37

Table 9 includes a comparison of the Current Land Use Plan to the existing traffic conditions. As shown, the total VMT increases by 18.8 percent when comparing the Current Land Use Plan scenario to the existing traffic conditions. There is an overall total increase in VHT of 25.8 percent, and the average speed decreases by two mph between the Current Land Use Plan and the existing traffic conditions.

**TABLE 9 COMPARISON – EXISTING TRAFFIC CONDITIONS - YEAR 2030 CURRENT LAND USE PLAN
WITH COMMITTED ROADWAY NETWORK**

	Existing Traffic Conditions	Current Land Use Plan
VMT	56,792	67,475
VHT	1,895	2,385
Avg Speed (mph)	30	28
Weighted Avg V/C	0.605	0.662
Links at LOS E or F	32	37

3.2 YEAR 2030 PROPOSED LAND USE PLAN

Evaluation of the Year 2030 Proposed Land Use Plan begins with evaluation of the Proposed Land Use Plan on the committed roadway network system, and then a series of network alternatives were evaluated in order to develop the proposed roadway network and TIMP.

The land use changes proposed for the San Pedro Community Plan concentrate development in the downtown area of San Pedro, as well as allowing a moderate increase in industrial development along North Gaffey Street and commercial and mixed use development at 25th Street and Western Avenue. The number of jobs in the San Pedro Community Plan Area with the Proposed Land Use Plan is forecast to grow to 19,148 in 2030, an increase of 5,841 jobs, or 44 percent over the current 13,307 jobs in San Pedro. The Proposed Land Use Plan anticipates concentrating growth in areas where the mix of housing and jobs are in proximity to one another, such as the downtown area, reducing the need for extra vehicle trips.

3.2.1 YEAR 2030 PROPOSED LAND USE PLAN WITH COMMITTED ROADWAY NETWORK

The Year 2030 Proposed Land Use Plan and Committed Roadway Network (Proposed Land Use Plan) was analyzed, and the arterial summary results are shown in **Table 10**. The summary includes VMT, VHT and average speed. Roadway segments operating at LOS E or F (V/C of 0.91 or worse) were identified to ascertain the level of congestion expected in the future. A total of approximately six percent, or 39 of 610 links, of San Pedro roadways are forecast to operate at an LOS E and F in the Proposed Land Use Plan. This is slightly higher than the Current Plan due to changes in proposed land uses. The volume-weighted V/C ratio is 0.668; this indicates that on average, the streets in the San Pedro Community Plan Area utilize approximately 66.8 percent of roadway capacity in the PM peak hour. The V/C ratio is at LOS B, which is very good overall operating conditions. **Table A-4** in the Appendix shows the Proposed Land Use Plan roadway Level of Service for each arterial segment in the San Pedro Community Plan Area.

**TABLE 10 YEAR 2030 PROPOSED LAND USE PLAN WITH COMMITTED ROADWAY NETWORK –
ARTERIAL SUMMARY**

Proposed Land Use Plan Traffic Conditions	
VMT	67,264
VHT	2,402
Avg Speed (mph)	28
Weighted Avg V/C	0.668
Links at LOS E or F	39

Table 11 includes a comparison of the Proposed Land Use Plan, the Current Land Use Plan and existing traffic conditions arterial statistics. The data shows that the Proposed Land Use Plan and the Current Land Use Plan have higher VMT and VHT than existing traffic conditions. The Proposed Land Use Plan and Current Land Use Plan have very similar arterial statistics.

TABLE 11 COMPARISON - EXISTING TRAFFIC CONDITIONS - YEAR 2030 CURRENT PLAN AND PROPOSED LAND USE PLAN WITH COMMITTED ROADWAY NETWORK

PM Peak Hour Data	Existing Traffic Conditions	Current Land Use Plan	Proposed Land Use Plan
VMT	56,792	67,475	67,264
VHT	1,895	2,385	2,402
Avg. Speed	30	28	28
Weighted V/C	0.605	0.662	0.668
Links at LOS E or F	32	37	39

3.2.2 YEAR 2030 PROPOSED LAND USE PLAN WITH TRANSPORTATION NETWORK ALTERNATIVE ONE

The roadway network in San Pedro is largely built out, so there are relatively few streets that can be expected to provide additional capacity in the future. To arrive at the Proposed Land Use Plan with TIMP, four alternative networks were analyzed; all have the same Proposed Land Use Plan, but each has various modifications to the transportation network.

Two very similar network alternatives were analyzed as the Year 2030 Proposed Land Use Plan with Transportation Network Alternative One (Transportation Alternative One), and the following changes would occur:

Alternative 1

- Conversion of 5th Street from Harbor Boulevard to Pacific Avenue from an existing two lane Secondary Arterial into a one lane one-way westbound Secondary Arterial with angled parking.
- Conversion of 7th Street from Harbor Boulevard to Pacific Avenue from an existing two lane Secondary Arterial into a one lane one-way eastbound Secondary Arterial with angled parking.

Alternative 1A

- Conversion of 5th Street from Harbor Boulevard to Pacific Avenue from an existing two lane Secondary Arterial into a two lane one-way westbound Secondary Arterial.
- Conversion of 7th Street from Harbor Boulevard to Pacific Avenue from an existing two lane Secondary Arterial into a two lane one-way eastbound Secondary Arterial.

Both alternatives were shown to generally change traffic conditions and volumes only in the downtown area, since areas further away would not be impacted by a change to one-way operations. **Table 12** shows the Transportation Alternative One arterial summary, which includes VMT, VHT and average speed. Roadway segments operating at LOS E or F (V/C of 0.91

or worse) were identified to ascertain the level of congestion expected in the future. **Table A-5** in the Appendix shows the Transportation Alternative One and 1A roadway Level of Service for each arterial segment in the San Pedro Community Plan Area.

Transportation Alternative One shows that approximately six percent of San Pedro roadways are forecast to operate at LOS E and F (37 of 604 Links). The volume-weighted V/C ratio is 0.666, which indicates that on average, the streets in the San Pedro Community Plan Area would utilize approximately 66.6 percent of roadway capacity in the PM peak hour. The V/C ratio is at LOS B, which is very good overall operating conditions.

Transportation Alternative 1A also shows that approximately six percent of roadways are forecast to operate at LOS E and F (38 of 604 Links). The volume weighted V/C ratio is 0.665, which indicates that on average, the streets in the San Pedro Community Plan Area would utilize approximately 66.5 percent of roadway capacity in the PM peak hour. The V/C ratio is at LOS B, which is very good overall operating conditions.

The arterial summary shows there is little difference in overall statistics if 5th Street and 7th Street were one-lane or two-lanes.

**TABLE 12 YEAR 2030 PROPOSED LAND USE PLAN WITH TRANSPORTATION NETWORK
ALTERNATIVE ONE – ARTERIAL SUMMARY**

	Transportation Alternative One Traffic Conditions	
	Alternative 1	Alternative 1A
VMT	67,285	67,367
VHT	2,385	2,373
Avg Speed (mph)	28	28
Weighted Avg V/C	0.666	0.665
Links at LOS E or F	37	38

Table 13 includes a comparison of the Transportation Alternative One, the Current Land Use Plan and Existing Traffic Conditions arterial statistics. The data shows that the Transportation Alternative One and the Current Land Use Plan have higher VMT and VHT than Existing Traffic Conditions. Transportation Alternative One and the Current Land Use Plan have very similar arterial statistics.

TABLE 13 COMPARISON – EXISTING TRAFFIC CONDITIONS - YEAR 2030 CURRENT LAND USE PLAN WITH COMMITTED ROADWAY NETWORK AND YEAR 2030 TRANSPORTATION NETWORK ALTERNATIVE ONE

PM Peak Hour Data	Existing Traffic Conditions	Current Land Use Plan	Transportation Alternative One	
			Alternative 1	Alternative 1A
VMT	56,792	67,475	67,285	67,367
VHT	1,895	2,385	2,385	2,373
Avg. Speed	30	28	28	28
Weighted V/C	0.605	0.662	0.666	0.665
Links at LOS E or F	32	37	37	38

3.2.3 YEAR 2030 PROPOSED PLAN LAND USE WITH TRANSPORTATION NETWORK ALTERNATIVE TWO

Year 2030 Proposed Land Use Plan with Transportation Alternative Two (Transportation Alternative Two) includes the closure of 6th Street, a local roadway, from Harbor Boulevard to Pacific Avenue. This could be implemented with either option in Alternative One. The travel demand model used for this analysis does not include local roadways; therefore model data is not available for this alternative. Traffic volumes are relatively low along 6th Street; therefore any changes to the conditions would be minimal.

If the closure of 6th Street were to take place, LADOT would require additional analysis that would provide details of the changes to traffic volumes and movements that would occur due to the roadway closure and shifting of volumes to other streets.

3.2.4 YEAR 2030 PROPOSED PLAN LAND USE WITH TRANSPORTATION NETWORK ALTERNATIVE THREE

Year 2030 Proposed Land Use Plan with Transportation Alternative Three (Transportation Alternative Three) includes changes to Gaffey Street between 22nd Street and 25th Street, and 9th Street to Shepard Street. Under Network Alternative Three, the following changes would occur:

- Reclassification of Gaffey Street from 9th Street to 22nd Street from a Major Highway Class II to a Modified Major Highway Class II. Four lanes will be maintained during peak commute hours (7:00-9:00 a.m. and 4:00-6:00 p.m.). Note that six lanes are assumed to be in place during peak commute hours between 5th Street and 9th Street, since this was a mitigation measure for the San Pedro Waterfront project.
- Four lanes on Gaffey Street between 22nd Street and 25th Street.

- Reclassification of Gaffey Street from 25th Street to Shepard Street from a Major Highway Class II to a Secondary Arterial.

Table 14 shows the Transportation Alternative Three arterial summary, which includes VMT, VHT and average speed. Roadway segments operating at LOS E or F (V/C of 0.91 or worse) were identified to ascertain the level of congestion expected in the future. A total of approximately six percent of San Pedro roadways are forecast to operate at an LOS E and F (37 of 610 Links) in the Transportation Alternative Three scenario. The volume-weighted V/C ratio is 0.664, which indicates that on average, the streets in the San Pedro Community Plan Area would utilize approximately 66.4 percent of roadway capacity in the PM peak hour. The V/C ratio is at LOS B, which indicates that overall operating conditions are very good. **Table A-6** in the Appendix shows the Transportation Alternative Three level of service for each arterial segment in the San Pedro Community Plan Area.

**TABLE 14 YEAR 2030 PROPOSED LAND USE PLAN WITH TRANSPORTATION NETWORK
ALTERNATIVE THREE – ARTERIAL SUMMARY**

Transportation Alternative Three Traffic Conditions	
VMT	67,418
VHT	2,401
Avg Speed (mph)	28
Weighted Avg V/C	0.664
Links at LOS E or F	37

Table 15 includes a comparison of the Transportation Alternative Three to the Current Land Use Plan and Existing Traffic Conditions. While the Existing Traffic Conditions show lower VMT, VHT, V/C and number of links at E or F, there is little difference between Transportation Alternative Three and the Current Land Use Plan statistics.

**TABLE 15 COMPARISON – EXISTING CONDITIONS - YEAR 2030 CURRENT LAND USE PLAN WITH
COMMITTED ROADWAY NETWORK AND YEAR 2030 PROPOSED LAND USE PLAN WITH
TRANSPORTATION NETWORK ALTERNATIVE THREE**

PM Peak Hour Data	Existing Traffic Conditions	Current Land Use Plan	Transportation Alternative Three
VMT	56,792	67,475	67,418
VHT	1,895	2,385	2,401
Avg. Speed	30	28	28
Weighted V/C	0.605	0.662	0.664
Links at LOS E or F	32	37	37

3.2.5 YEAR 2030 PROPOSED LAND USE PLAN WITH TRANSPORTATION NETWORK ALTERNATIVE FOUR

The Year 2030 Proposed Land Use Plan with Transportation Network Alternative Four (Transportation Alternative Four) includes the addition of potential Bicycle Lanes on Western Avenue, 25th Street and Pacific Avenue; and the addition of a potential Bicycle Route on Gaffey Street. However, two locations have sufficient pavement width to accommodate bike lanes without the removal of a vehicle travel lane; therefore two locations were assumed to require the removal of a vehicle travel lane along portions of these roadways at these locations:

- 25th Street from the Rancho Palos Verdes border to Gaffey Street;
- Pacific Avenue between Front Street and Channel Street.

Table 16 shows the Transportation Alternative Four arterial summary, which includes VMT, VHT and average speed. Roadway segments operating at LOS E or F (V/C of 0.91 or worse) were identified to ascertain the level of congestion expected in the future. A total of approximately seven percent of San Pedro roadways are forecast to operate at an LOS E and F (40 of 610 Links) in the Transportation Alternative Four scenario. The volume-weighted V/C ratio is 0.677, which indicates that on average, the streets in the San Pedro Community Plan Area utilize approximately 67.7 percent of roadway capacity in the PM peak hour. The V/C ratio is at LOS B, which is very good overall operating conditions. **Table A-7** in the Appendix shows the Transportation Alternative Four level of service for each arterial segment in the San Pedro Community Plan Area.

TABLE 16 YEAR 2030 PROPOSED LAND USE PLAN WITH TRANSPORTATION NETWORK ALTERNATIVE FOUR – ARTERIAL SUMMARY

Transportation Alternative Four Traffic Conditions	
VMT	67,560
VHT	2,412
Avg Speed (mph)	28
Weighted Avg V/C	0.677
Links at LOS E or F	40

Table 17 is a comparison of Transportation Alternative Four to the Current Land Use Plan and Existing Traffic conditions. The table shows that Transportation Alternative Four has the highest V/C and the most number of roadway links that are at LOS E or F.

TABLE 17 COMPARISON – EXISTING CONDITIONS – YEAR 2030 CURRENT LAND USE PLAN WITH COMMITTED NETWORK AND YEAR 2030 TRANSPORTATION NETWORK ALTERNATIVE FOUR

PM Peak Hour Data	Existing Traffic Conditions	Current Land Use Plan	Transportation Alternative Four
VMT	56,792	67,475	67,560
VHT	1,895	2,385	2,412
Avg. Speed	30	28	28
Weighted V/C	0.605	0.662	0.677
Links at LOS E or F	32	37	40

3.2.6 YEAR 2030 PREFERRED TRANSPORTATION ALTERNATIVE

The Year 2030 Preferred Transportation Alternative (Preferred Alternative) includes the Year 2030 Proposed Land Use Plan, the reclassification of 9th Street and Pacific Avenue, plus a combination of Transportation Alternatives One through Four. The preferred roadway network was selected based on land use objectives and analysis of peak hour roadway data. The Preferred Alternative will be carried forward to be assessed with the TIMP mitigations. Under the Preferred Alternative, the following changes would occur:

- Reclassification of 9th Street from Miraleste Drive to Western Avenue from a Major Highway Class II to a Modified Major Highway Class II.
- Reclassification of 9th Street from Western Avenue to Pacific Avenue from a Major Highway Class II to a Modified Secondary Arterial with two lanes.
- Reclassification of Pacific Avenue from O’Farrell Street to Shepard Street from a Secondary Arterial to a Modified Secondary Arterial with four lanes.
- Conversion of 5th Street from Harbor Boulevard to Pacific Avenue from an existing two lane Secondary Arterial into a one lane, one-way westbound Secondary Arterial with angled parking.
- Conversion of 7th Street from Harbor Boulevard to Pacific Avenue from an existing two lane Secondary Arterial into a one lane, one-way eastbound Secondary Arterial with angled parking.
- Closure of 6th Street, a local roadway, from Harbor Boulevard to Pacific Avenue.
- Reclassification of Gaffey Street from 9th Street to 25th Street from a Major Highway Class II to a Modified Major Highway Class II. Four lanes will be maintained during peak commute hours (7:00-9:00 a.m. and 4:00-6:00 p.m.).
- Reclassification of Gaffey Street from 25th Street to Shepard Street from a Major Highway Class II to a Secondary Arterial.
- Addition of a Bicycle Lane on Western Avenue from Capitol Drive to Paseo del Mar.

- Addition of a Bicycle Lane on 25th Street from the Rancho Palos Verdes border to Gaffey Street.
- Addition of a Bicycle Lane on Gaffey Street from Channel Street to Summerland Avenue.
- Designate Grand Avenue from Summerland Avenue to 23rd Street as a Bicycle-Friendly Street.

Table 18 shows the Preferred Alternative arterial summary, which includes VMT, VHT and average speed. Roadway segments operating at LOS E or F (V/C of 0.91 or worse) were identified to ascertain the level of congestion expected in the future. A total of approximately six percent of San Pedro roadways are forecast to operate at an LOS E and F (39 of 610 Links) in the Preferred Alternative scenario. The volume-weighted V/C ratio is 0.669, which indicates that on average, the streets in the San Pedro Community Plan Area would utilize approximately 66.9 percent of roadway capacity in the PM peak hour. The V/C ratio is at LOS B, which indicates very good overall operating conditions. **Table A-8** in the Appendix shows the Preferred Alternative level of service for each arterial segment in the San Pedro Community Plan Area.

TABLE 18 YEAR 2030 PREFERRED TRANSPORTATION ALTERNATIVE – ARTERIAL SUMMARY

Preferred Alternative Traffic Conditions	
VMT	67,189
VHT	2,382
Avg Speed (mph)	28
Weighted Avg V/C	0.669
Links at LOS E or F	39

Table 19 includes a comparison of the Preferred Alternative to the Current Land Use Plan and Existing Traffic Conditions. The Preferred Alternative has slightly lower VMT and VHT than the Current Land Use Plan, and slightly higher V/C and two additional links that operate at LOS E or F. Both the Current Land Use Plan and the Preferred Alternative have higher VMT, VHT, V/C and number of links at LOS E or F than the Existing Traffic Conditions.

TABLE 19 COMPARISON – EXISTING TRAFFIC CONDITIONS – YEAR 2030 CURRENT LAND USE PLAN WITH COMMITTED NETWORK AND YEAR 2030 PREFERRED TRANSPORTATION ALTERNATIVE

PM Peak Hour Data	Existing Traffic Conditions	Current Land Use Plan	Preferred Alternative
VMT	56,792	67,475	67,189
VHT	1,895	2,385	2,382
Avg. Speed	30	28	28
Weighted V/C	0.605	0.662	0.669
Links at LOS E or F	32	37	39

3.2.7 CONCLUSIONS ABOUT 2030 FUTURE ALTERNATIVES

The Proposed Land Use Plan causes little change to transportation conditions in the San Pedro Community Plan Area as compared to the Current Land Use Plan. All 2030 analyses showed higher VMT, VHT, V/C and number of links at E or F than the Existing Traffic Conditions. The roadway link level of service analysis and aggregate statistics, such as vehicle miles of travel (VMT) show little change with the Proposed Land Use Plan, and the alternatives show little overall change. With the relatively limited number of opportunities to provide additional roadway capacity in San Pedro through the addition of travel lanes, the number of the arterial roadway segments projected to be at capacity in 2030 are very similar among the alternatives that were analyzed.

A summary of the roadway link levels of service and aggregate statistics are shown in **Table 20**. The Preferred Alternative generally shows the lowest VMT and VHT (except for Transportation Alternative 1A) of the modeled alternatives, but the average V/C is slightly higher than some of the alternatives.

TABLE 20 SUMMARY – ALL ALTERNATIVE STATISTICS

Scenario	VMT	VHT	Avg. Speed	Weighted V/C	Links at LOS E or F
Existing Traffic Conditions	56,792	1,895	30	0.605	32
Current Land Use Plan	67,475	2,385	28	0.662	37
Proposed Land Use Plan	67,264	2,402	28	0.668	39
Transportation Alternative One	67,285	2,385	28	0.666	37
Transportation Alternative One-A	67,367	2,373	28	0.665	38
Transportation Alternative Two *	N/A	N/A	N/A	N/A	N/A
Transportation Alternative Three	67,418	2,401	28	0.664	37
Transportation Alternative Four	67,560	2,412	28	0.677	40
Preferred Alternative	67,189	2,382	28	0.669	39
* Alternative could not be modeled, because the model used for this analysis does not include local roadways, thus data was not available for this alternative.					

4.0 PROPOSED TRANSPORTATION IMPROVEMENT AND MITIGATION PROGRAM – PROPOSED SAN PEDRO COMMUNITY PLAN

This chapter summarizes the long-term regional transportation improvement plans in the area, followed by the key elements of the proposed San Pedro Community Plan Transportation Improvement and Mitigation Program (TIMP).

4.1 REGIONAL IMPROVEMENT PLANS

A number of regional improvement plans affect transportation in the San Pedro area, including the Los Angeles County Congestion Management Program (CMP) and the 2009 Long-Range Transportation Plan (LRTP) prepared by the Los Angeles County Metropolitan Transportation Authority (Metro), and the 2008 Regional Transportation Plan Update (RTP), “Making the Connections” prepared by the Southern California Association of Governments (SCAG).

- The Los Angeles County CMP is a state mandated program that is the monitoring and analytical basis for transportation funding decisions made through the State Transportation Improvement Program (STIP) process. The LRTP is a strategic document that serves as a framework for meeting current and projected mobility needs for Los Angeles County. The Plan recommends highway, bus, rail and demand management improvements, and identifies funding sources and implementation schedules over the 20-year period.
- The 2009 LRTP also includes funding for general categories of improvements, such as Arterial Improvements, Non-motorized Transportation, Rideshare and Other Incentive Programs, Park-and-Ride Lot Expansion, and Intelligent Transportation System (ITS) improvements for which Call For Project Applications can be submitted for projects in the Plan area.
- The 2008 Regional Transportation Plan (RTP) was approved in May 2008 by the Southern California Association of Governments (SCAG). The RTP is a planning document that serves as the Regional Transportation Plan required under State and Federal statute. The RTP forecasts long-term transportation demands, and identifies policies, actions, and funding sources to accommodate those demands. The RTP identifies the construction of new transportation facilities; as well as transportation systems management (TSM), transportation demand management (TDM), and land use strategies.

The RTP is financially constrained, and must demonstrate that all projects in the constrained plan have adequate funding. The RTP consists of:

- The Regional Transportation Improvement Program (RTIP) which represents the first six years of already-committed funding for projects.
 - The Financially Constrained RTP, which includes all projects that can be reasonably funded within the planning horizon of the RTP, along with the RTIP projects.
 - The Strategic Plan which represents projects of merit that do not currently have sufficient funding, and should be considered for funding in the future.
- The RTP includes the following projects in the San Pedro Community Plan Area:
 - I-110/SR-47/Harbor Boulevard Interchange Improvements (Strategic Plan – no current funding)
 - SR-47 (Vincent Thomas Bridge) and I-110 – Study capacity improvements (RTIP – contains funding for this project)
 - Downtown San Pedro Transportation Hub – Planning/Engineering (RTIP – contains funding for this project)
- There are many regional policies in the RTP related to integrated transportation and land use planning for reducing transportation system demands and encouraging alternative modes of transportation that are supported by San Pedro Community Plan TIMP policies. These include:
 - Identify regional strategic areas for infill and investment
 - Structure the plan on a three-tiered system of centers development related to existing, planned and potential transportation infrastructure
 - Develop “complete communities” with mixed use districts
 - Develop nodes on corridors
 - Plan for additional housing and jobs near transit
 - Plan for changing demands in types of housing
 - Continue to protect stable existing single family areas
 - Ensure adequate access to open space and habitat preservation
 - Incorporate local input and feedback on future growth
 - Promote land use patterns supportive of goods movement and logistics industries

4.2 PROPOSED TRANSPORTATION IMPROVEMENT AND MITIGATION PROGRAM (TIMP)

California has passed laws addressing climate change. AB 32 and SB 375 must be adhered to when developing a local community plan. AB 32 requires a reduction in Green House Gas Emissions, while SB 375 relates climate change standards outlined in AB 32 to land use plans

and must be adhered to when implementing the San Pedro Community Plan. SB 375 requires that metropolitan planning organizations (MPOs) include sustainable communities' strategies (SCS), as defined in their regional transportation plans (RTPs) for the purpose of reducing greenhouse gas emissions; aligning planning for transportation and housing; and creating specified incentives for the implementation of the strategies. The San Pedro Community Plan is a local community plan that must be consistent with the Citywide transportation policies. The San Pedro Community Plan TIMP includes policies and programs that will further the goals of these two legislative initiatives.

The proposed San Pedro Community Plan Transportation Improvement and Mitigation Program consists of the following elements:

- Transportation System Management (TSM) Strategies
- Transit Improvements
- Non-Motorized Transportation
- Transportation Demand Management (TDM) Strategies
- Capital Improvements
- Neighborhood Traffic Management Plans
- Parking Policies

4.2.1 *TRANSPORTATION SYSTEMS MANAGEMENT STRATEGIES*

Transportation Systems Management Strategies are strategies to increase the efficiency of existing transportation infrastructure through traffic engineering and traffic operation control, by monitoring and synchronizing traffic signals, imposing peak period parking restrictions, making improvements to intersections and other measures. The following are TSM strategies that could be used in the San Pedro Community Plan Area:

- Install Automated Traffic Surveillance and Control (ATSAC) at all newly signalized intersections. Upgrade equipment and strategies as new technologies evolve.
- Implement or enhance "Smart Corridors" to coordinate Caltrans' freeway traffic management system with the ATSAC/ATCS highway and street traffic signal management system to enhance incident management and motorist information and reduce traffic delays. This would coordinate signals between Caltrans and LADOT jurisdictions.
- Improve the enforcement of all parking restrictions in San Pedro including tow away response.
- Identify and implement intersection improvements, including channelization, turn lanes, signal modifications, and turn restrictions on all Major Class II and Secondary Highways, and along some Collector streets, throughout the San Pedro Community Plan Area.
- Support the installation of a Citywide Traveler Information System to alert motorists to impending street closures and other events which block traffic.

The major components of Transportation Systems Management (TSM) strategies are summarized and discussed in this section. In the previous sections it has been shown that increases in congestion are projected to occur throughout the Community Plan when compared to 2005 conditions. From a practical or financial standpoint, there is limited opportunity to widen streets to resolve the congestion problem, except, perhaps, at isolated intersections when the adjacent properties redevelop. Roadway widening resulting in narrowed sidewalks and/or parkways, would also be counter-productive to the goal of enhancing the pedestrian environment. As a result, many of the improvements included in the San Pedro Community Plan TIMP utilize transportation system management strategies. These include the following:

- Signalization Improvements - The City of Los Angeles is implementing the second phase of the Automated Traffic Surveillance and Control (ATSAC) signal system. The ATSAC system applies smart corridor technology to traffic signal controls through a series of signal timing enhancements that are designed to manage and minimize congestion at intersections. Phase II of this system is called Adaptive Traffic Control System (ATCS). This system takes the smart corridor technology to a higher level, whereby the traffic signals along an entire street or corridor are optimized to balance traffic demand by direction. The full implementation of ATSAC and ATCS will have significant benefits in the San Pedro Community Plan through the reduction of congestion. Studies have shown increases in the capacities of roadways by approximately seven percent upon integration of signal systems with ATSAC and an additional three percent with ATCS. These gains appear in the form of less congestion, and fewer delays and stops at intersections. Traffic flow is improved and in addition, system operations, monitoring and control are significantly enhanced. This system is currently under construction in San Pedro, and should be fully operational in 2030.
- Parking Restrictions - It is common in many parts of the City of Los Angeles for Major and Secondary Highways to provide additional capacity in the peak periods by converting the curb lane to a travel lane and prohibiting parking. Such restrictions are in place in San Pedro along Gaffey Street. As other traffic congested areas with on-street parking are identified, these may also be studied for peak period parking restrictions.
- Left Turn Lanes or Turn Prohibitions at Intersections – There are many locations throughout San Pedro where left turns are made from a shared through-left turn lane. This often causes the through traffic lane to be blocked as left-turning vehicles wait for a gap in the opposing traffic, thereby significantly reducing the capacity of the street. Most noticeably, this occurs along Gaffey Street and Pacific Avenue at unsignalized intersections. The provision of exclusive left turn lanes through the removal of some on-street parking and re-striping the intersection approaches with left turn lanes within the existing curb-to-curb width is one opportunity to increase the through capacity of such streets. An alternative approach to increasing capacity of such corridors without roadway widening is to prohibit left turns from a shared through/left-turn lane during

peak periods, which may be desirable along heavily traveled roadways such as Gaffey Street or Pacific Avenue.

4.2.2 TRANSIT IMPROVEMENTS

The Los Angeles Citywide General Plan Framework Transportation Improvement and Mitigation Program contain seven transit recommendations:

1. Collaborate with other local, regional, state and federal agencies to expand Citywide bus service miles by five percent per year to support significant increases in transit ridership.
2. Increase transit service along high demand routes and corridors in transit dependent areas to reduce bus overcrowding.
3. Provide additional express and local bus service along major transit corridors to augment future rail service and reduce congestion along congested corridors.
4. Provide shuttles and other services that increase access to and within centers, districts, and mixed-use boulevards to encourage growth and to mitigate traffic impacts of that growth.
5. Increase accessibility in areas with high transit dependence, reduce the unit cost of service delivery, and create entrepreneurial opportunities, by developing alternative community based services, expanding existing community based services, and participating in demonstration projects.
6. Seek maximum opportunities for entrepreneurial services and other private sector initiatives through such strategies as demonstration programs and financial incentives.
7. Implement one supplemental program per year to provide transit between depressed residential areas and work opportunities.

Some of the strategies mentioned above, such as the first recommendation, are regional in scope and cannot be implemented in just one planning area such as San Pedro. However, given the nature of the San Pedro Community Plan Area, improvements to the transit system in this area may result in additional accessibility to all other areas of the City. Continued support of DASH transit provides transit access to areas within the San Pedro Community Plan Area. The second and third recommendations, dealing with high-demand corridors are also regional in nature but have been included in the Metro's countywide plan and in the Regional Transportation Plan.

PUBLIC TRANSPORTATION

Improvement of the public transportation system to meet future increases in trip demand in the San Pedro area due to use of the private automobile should be considered. Both peak hour commuter and local community service could be improved.

The following improvements should be encouraged during the next five years:

1. *Transit Hub* – Encourage the development of a transit hub in downtown San Pedro. The SCAG RTIP currently includes funding for Planning and Engineering of a transit hub.
2. *Carpools* - Computerized data systems for forming carpools need to be expanded and improved. Employers should encourage, where possible, use of carpools through incentives such as preferential parking.
3. *Staggered Work Hours* - Work hours need to be staggered where feasible in order to spread peak hour traffic, reduce congestion, and allow more efficient use of both buses and the street system.
4. *Bus System* - More buses are needed for both express and local service. More frequent service and additional routes are necessary. Specialized service such as expanded Metro Rapid and Metro Express bus systems, minibuses and demand response (dial-a-ride) may be appropriate in some areas.
5. *Preferential Bus/Carpool Lanes* – Investigate the potential to develop preferential and/or exclusive lanes on appropriate surface streets and freeways to facilitate the movement of buses and carpools.
6. *Street Improvements* - Jog eliminations, street widening, bus bays or turnouts and improved traffic signal systems could facilitate the movement of buses and carpools.
7. *Future Rail Alignments* – Study connections from San Pedro to the regional rail system.

TRANSIT PRIORITY

In order to promote transit usage by commuters who currently drive, transit should be made more competitive, convenient and reliable by linking urban form and transit opportunities. Priority should be given to:

- Reduce the overall travel time (total of actual travel and waiting time)
- Maintain transit fares low enough to capture some auto drivers
- Improve adherence to schedules

Below are examples of possible strategies that would help to achieve the above-identified goals:

- Signal coordination, upgrade or replacement to enhance overall traffic flow
- Public transit signal priority to increase bus travel speeds and lower transit times
- Improve street signage and striping placement

These strategies can be most effectively realized when transit facilities are given priority in land use planning and urban form development. Within pedestrian oriented areas, an emphasis is placed more on the movement of people than automobiles. For example, transit priority roadways would be established on those routes that have three or more bus lines having a 10-minute or shorter headway in the PM peak period. These roads not only carry higher volumes of transit activity but also carry the largest volumes of commute period bus riders, whose destinations include the residential portions and community activity centers within the San Pedro Community Plan Area.

TRANSIT CONNECTIVITY

In order to improve transit connectivity in the San Pedro Area, policies must be implemented that provide adequate pedestrian and bicycle facilities as well as multi-modal transit centers. This will maximize potential ridership and ease the transfer process from one mode to another. The following policies contribute to increasing transit connectivity:

- Improve the safety, ease and convenience of using transit by making improvement to transit waiting areas, including lighting, shelters, benches and adequately sized waiting areas.
- Recommend that development projects provide transit amenities such as shade trees, bus shelters, bicycle racks or lockers and stamped crosswalks located at intersections served by different transit modes, or intersections Metro identifies as major transfer nodes.
- Consider the provision of transit amenities as a traffic mitigation measure in discretionary projects.
- Support Metro's plan to construct multi-modal transit centers at locations served by various types of transit.
- Encourage large commercial, residential and mixed-use projects to include on-demand shuttle services to major transit stations and major activity centers or destinations in and around San Pedro.
- Encourage developments to offer monthly transit commuters discounts on transit passes.
- Support the location of taxi layover and pick up zones near transit stations and major pedestrian destinations.

- Support the implementation of bike-transit centers (similar to the Long Beach Bike Station) to provide commuters a place to store their bicycles and obtain bicycle repairs, accessories, and drinking water.
- Improve on-street bicycle access to bicycle commuter facilities at Metro bus stops.
- Expand LADOT City Ride program.
- Expand shuttle routes to supplement other paratransit services.
- Provide vehicle ingress and egress to project sites that minimize interference with bus traffic.
- Minimize driveways along streets served by articulated buses.
- Support increased bus service along high demand routes
- Periodically review DASH routes to ensure maximum ridership.
- Support development of coordinated intermodal public transit plans to implement future public transit services.
- Provide enhanced amenities at major transit stops, including widened sidewalks, when possible, pedestrian waiting areas, transit shelters, enhanced lighting, improved crosswalks, information kiosks, and advanced fare collection mechanisms.

4.2.3 NON-MOTORIZED TRANSPORTATION POLICIES

BICYCLE POLICIES

The Los Angeles City Council approved the 2010 Bicycle Plan. The Plan represents a new commitment by Los Angeles to complete streets, and recognizes that the roadway system needs to accommodate modes of travel other than motorized vehicles. The proposed San Pedro TIMP provides focus for bicyclists at the community level.

The purpose of developing bicycle policies for San Pedro is to enhance the safety of and convenience for bicyclists during their trips as well as provide them with facilities to store their bicycles when they reach their desired destination. The safety of other transit modes must also be taken in consideration when developing a comprehensive bicycle policy. The following set of recommendations addresses these concerns:

- Add neighborhood linkages to the Citywide and neighborhood bicycle networks.
- Increase the number of Bicycle Lanes and/or improve the quality of the street right of way for bicyclists.
- Increase the supply of quality bicycle parking in City facilities, and develop citywide bicycle parking standards.
- Build a system of safe, convenient and attractive Bikeways to promote bicycling as an option.
- Promote bikeway connectivity to connect residential neighborhoods to schools, open space areas, employment centers and other community-serving uses.
- Implement the Los Angeles Bicycle Plan

- Provide and maintain existing and future bicycle facilities as identified in the City’s adopted Bicycle Plan:
 - **Bicycle Paths**
 - Crescent Ave. from 22nd St. to Harbor Bl./Miner St. – Existing Bicycle Path
 - Meyler St. from Bandini Canyon Park to Sepulveda St. – Future Bicycle Path
 - Westmont Dr. from Western Ave. to Amelia Ave. – Existing Bicycle Path
 - **Bicycle Lanes**
 - 25th St. from Rancho Palos Verdes to Gaffey St. – Future Bicycle Lane
 - 27th St. from Barbara St. to Walker Ave. – Future Bicycle Lane
 - 9th St. from 1st St. to Gaffey St. – Existing Bicycle Lane
 - Barbara St. from 27th St. to Hamilton Ave. – Future Bicycle Lane
 - Channel St. from Gaffey St. to John S. Gibson Blvd. – Future Bicycle Lane
 - Front St. from Pacific Ave. to Harbor Fwy. N/B On-Ramp – Existing Bicycle Lane
 - Gaffey St. from Anaheim St. to Channel St. – Existing Bicycle Lane
 - Gaffey St. from Channel St. to Summerland Ave. – Future Bicycle Lane
 - Harbor Bl. From I-110 N/B On-Ramp to 22nd St. – Existing Bicycle Lane
 - John S. Gibson Blvd. from Channel St. to Figueroa St. – Existing Bicycle Lane
 - Miraleste Dr. from 989’ north of Village Way to 9th St. – Existing Bicycle Lane
 - Pacific Ave. from Channel St. to 22nd St. – Future Bicycle Lane
 - Pacific Ave. from 22nd St. to Shepard St. – Existing Bicycle Lane
 - Paseo del Mar from Western Ave. to Gaffey St. – Existing Bicycle Lane
 - Shepard St. from Gaffey St. to Pacific Ave. – Existing Bicycle Lane
 - Summerland Ave. from Western Ave. to Gaffey St. – Future Bicycle Lane
 - Western Ave. from Capitol St. to Summerland Ave. – Future Bicycle Lane
 - Western Ave. from Santa Cruz St. to Paseo del Mar – Future Bicycle Lane
 - Western Ave. from Summerland Ave. to Santa Cruz St. – Future Bicycle Lane
 - Western Ave. from Palos Verdes Dr. N to Westmont Dr. – Future Bicycle Lane
 - Westmont Dr. from Western Ave. to Gaffey St. – Future Bicycle Lane
 - **Bicycle Routes**
 - 1st St. from Harbor View to Gaffey St. – Future Bicycle Route
 - 7th St. from Beacon St. to Harbor B. – Existing Bicycle Route
 - 16th St. from Palos Verdes St. to Beacon St. – Existing Bicycle Route
 - 21st St. from Mesa St. to Crescent Av. – Existing Bicycle Route
 - 22nd St. from Pacific Ave. to Mesa St. – Existing Bicycle Route
 - 25th St. from Rancho Palos Verdes to Western Ave. – Existing Bicycle Route
 - 9th St. from Gaffey St. to Beacon St. – Existing Bicycle Route
 - Beacon St. from Crescent Av. To 7th St. – Existing Bicycle Route
 - Crescent Av. From 21st St. to Palos Verdes St./Beacon St. – Existing Bicycle Route
 - Gaffey St. from Channel St. to 22nd St. – Existing Bicycle Route
 - Gaffey St. from 36th St. to Shepard St. – Future Bicycle Route
 - Mesa St. from 22nd St. to 21st St. – Existing Bicycle Route
 - Oliver Vickery Circle Wy. From Stephen M White Dr. to Cabrillo Beach – Existing Bicycle Route

- Palos Verdes St. from Crescent Av. To 16th St. – Existing Bicycle Route
- Stephen M White Dr. from Pacific Av. To Oliver Vickery Circle Wy. – Existing Bicycle Route
- Summerland Ave. from Western Ave. to Gaffey St. – Existing Bicycle Route
- Western Ave. from Summerland Ave. to Paseo del Mar – Existing Bicycle Route
- Westmont Dr. from Western Ave. to Gaffey St. – Existing Bicycle Route
- **Bicycle Friendly Streets**
- 17th St. from Weymouth Ave. to Palos Verdes St. – Bicycle Friendly Street
- 1st St. from Gaffey St. to Harbor Blvd. – Bicycle Friendly Street
- 26th St. from Hamilton Ave. to Pacific Ave. – Bicycle Friendly Street
- 27th St. from Leland Ave. to Hamilton Ave. – Bicycle Friendly Street
- 37th St. from Alma St. to Emily St. – Bicycle Friendly Street
- Alma St. from 17th St. to 37th St. – Bicycle Friendly Street
- Alma St. from 40' north of 30th St. to 30th St. – Bicycle Friendly Street
- Barbara St. from 31st St. to Paseo del Mar – Bicycle Friendly Street
- Beacon Av. From 7th St. to 11th St. – Bicycle Friendly Street
- Cabrillo Ave. from Sepulveda St. to 26th St. – Bicycle Friendly Street
- Capitol Dr. from Palos Verdes City limits to Gaffey Street – Bicycle Friendly Street
- Elanita Dr. from 19th St. to Patton Ave. – Bicycle Friendly Street
- Emily St. from 37th St. to Paseo del Mar – Bicycle Friendly Street
- Gaffey St. from 22nd St. to 36th St. – Bicycle Friendly Street
- Grand Ave. from 170' north of Oliver St. to 24th St. – Bicycle Friendly Street
- Hamilton Ave. from 27th St. to 26th St. – Bicycle Friendly Street
- Leland St. from Walker Ave. to 26th St. – Bicycle Friendly Street
- Meyler St. from Herbert St. to 240' south of Oliver St. – Bicycle Friendly Street
- Meyler St. from Sepulveda St. to 1st St. – Bicycle Friendly Street
- Sepulveda St. from Meyler St. to Cabrillo Ave. – Bicycle Friendly Street
- Walker Ave. from 7th St. to Leland St. – Bicycle Friendly Street
- Weymouth Ave. from Western Ave. to 19th St. – Bicycle Friendly Street
- Provide the following amenities: expanded Bicycle Lanes and Bicycle-Friendly Streets Share the Road bicycle icons; bicycle friendly drainage ditches; directional/way finding signage; and bicycle push buttons or bicycle signals; bicycle loop detectors.
- Place bicycle facilities in new non-residential developments.
- Enforce LAMC 12.21-A16; which requires bicycle storage areas in all new non-residential developments and public spaces.
- Promote bicycle safety.
- Coordinate with Metro and LADOT to secure funding for bikeway maintenance and bicycle safety education.

PEDESTRIAN POLICIES

Enhancing walkability is a key concern to San Pedro area residents. Providing features that allow a pedestrian to have a sense of safety and comfort is the most effective way to increase the area's walkability. The following policies can enhance walkability:

- Improve sidewalks, streets, street walls and alleys to encourage walking.
- Construct sidewalks in areas where gaps exist.
- Allow variation from street standards at intersections to allow wider sidewalks
- Implement street re-designation recommendations to widen sidewalks where possible.
- Use building materials and design features that create a feeling of safety and comfort for pedestrians: permeable pavement, street benches, shrubs, trees for shading, public art, and appropriate lighting.
- Provide clean and safe sidewalks (maintenance).
- For streets with high volumes of pedestrian traffic the following should be addressed:
 - Building frontages
 - Building signage and lighting
 - Sidewalk treatments
 - Crosswalk and street crossing
 - On-street parking
 - Off-street parking near driveways
 - On-site landscaping
- Coordinate with Bureau of Engineering to facilitate sidewalk dining permits.
- Maintain San Pedro's existing public rights of way including streets and walk ways for public use.
- Preserve or maintain existing alleys at the rear of lots that front major or secondary highways
- Prohibit curb-cuts on streets with a high volume of pedestrian traffic when alternative access exists.
- Support alternative crossing systems such as diagonal crossing to expedite pedestrian crossing at intersections that have high levels of pedestrian traffic.
- Pursue funding sources to provide pedestrian amenities in San Pedro.
- Support Safe Routes to School program implementation.
- Support the use of a traffic impact fee, tax increment monies, grant money, bonds and other financing measures, for pedestrian amenities in San Pedro.
- Consider the effects of traffic mitigation measures on pedestrians in order to avoid adverse impacts on high volume pedestrian locations.

PEDESTRIAN-ORIENTED AREAS

Pedestrian-priority areas or street segments are those areas or facilities where pedestrians and their treatment are the priority. Typically, these streets can serve as open space in both the

daytime and nighttime, and are served by buildings with ground floor retail and services and sidewalks that are wide, lined with open canopied street trees and have pedestrian scale lighting. Pedestrian Priority Streets are described in the Transportation Element as streets that make pedestrians a priority by allowing for wider sidewalks (15 to 17 feet), curb side parking, wide crosswalks and signals that allow longer crossing times for pedestrians.

An opportunity exists to close 6th Street between Pacific Avenue and Mesa Street or possibly Centre Street to vehicular traffic in order to make a pedestrian-priority area. Network Alternatives have been analyzed as part of this document, with consideration to the closure of 6th Street, as well as the potential to have 5th and 7th Streets as one-way roadways.

4.2.4 *TRANSPORTATION DEMAND MANAGEMENT STRATEGIES*

Transportation Demand Management (TDM) is the application of strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles), or to redistribute this demand in space or in time. Increasingly, there is recognition of the value of using TDM to solve local traffic and mobility problems. In many areas of the City of Los Angeles, it is no longer feasible to widen roadways or intersections to provide increased capacity for accommodating growth. Recent State of California legislation regarding Greenhouse Gas reduction (AB 32 and SB 375) and similar efforts nationwide to reduce vehicle miles travelled also emphasize reducing travel rather than accommodating more vehicle trips. TDM can be highly cost effective in reducing trips if: (1) there is a specific problem to be solved, (2) participants are motivated to solve the problem, and (3) there is support to affect change.

Significant trip reductions (as compared to existing trip making) have been achieved at individual sites and mixed use sites when these conditions have existed. Transit-friendly site design elements and car- and vanpool parking spaces, when included as a condition of development approval can help achieve reductions in trip generation. TDM requirements affecting property owners and developers that are implemented as part of city policy through Trip Reduction Ordinances (TRO), the Transportation Element, the Congestion Management Plan, and specific plans provide tools to mitigate the effect of traffic generated by new developments.

Transportation Demand Management plans have also been accepted by the City's Department of Transportation as part of the environmental review process and mitigation for recent developments in Los Angeles. This is in recognition of the fact that in many areas it is not feasible to continue to widen streets or add capacity to accommodate growth due to right of way constraints as well as secondary impacts of roadway expansion.

Other public policy issues to be considered in crafting a TDM program for the proposed San Pedro Community Plan TIMP include:

- Recognition of the dynamics between land use and travel demand in local land use planning. Effective land use policies can help the area's economy by ensuring convenient access and high levels of mobility safeguarding environmental quality; and
- Creating a tangible return on investments in public services and infrastructure for those asked to provide financial support for TDM programs;
- A reluctance of the government agencies to add regulatory burdens that affect the region's economy;
- Inability to add capacity due to right of way constraints or secondary environmental impacts, in many areas of the City of Los Angeles; and
- Growing importance of trip reduction in supporting sustainable development patterns and reduction in Greenhouse Gases.

INSTITUTIONAL COORDINATION

There are many organizations involved in the planning, funding and delivery of trip reduction programs including the Southern California Association of Governments (SCAG), the Los Angeles County Metropolitan Transportation Authority (Metro), various Transportation Management Associations (TMA), and local cities. Key institutional issues affecting the planning for and delivery of TDM actions in the San Pedro Community Plan Area include:

- The Los Angeles County Metropolitan Transportation Authority (Metro) supports the development, funding, and delivery of TDM activities in Los Angeles County. It oversees the County's Congestion Management Program including the TDM element requiring each jurisdiction to have a TDM ordinance to reduce vehicle trips at work sites with a particular emphasis on managing trip making at sites being developed. Metro distributes funds for TDM projects biennially on a competitive basis. A review of prior TDM projects must be conducted to determine their effectiveness in order to guide future investments.
- Local cities and developers also have taken responsibility for delivering TDM services often through Transportation Management Associations. Communities and major development areas with TMAs will be better prepared to respond to specific local needs. SCAG will be looking to deliver their rideshare services through TMAs. City or developer sponsored TMAs should be considered where the amount and type of development would warrant such a program. Generally, this would include a significant amount of office, retail and/or other commercial land uses clustered in a specific project area.
- The South Bay Cities Council of Governments (SBCCOG) monitors public transit in the South Bay and reviews coordination and needed improvements to transit systems. Additionally, they promote Transportation Demand Management (TDM) projects, such as vanpools and carpools.

TECHNOLOGY

Information technology is being embraced as a means for removing the need to travel, opening up opportunities that improve productivity at work, and increasing telecommuting and working at home. In regard to TDM, the use of technology has been demonstrated in:

- The development of real time ride-matching capabilities along with use of mapping.
- Use of computerized transportation information displays.
- The growing incidence of work occurring away from an office including at home on a part-time basis, and home-based businesses.
- In-vehicle navigation systems including vehicle tracking and dispatching systems.
- Availability of, and improvement of, traffic condition reports, including 511 systems.
- Better “real-time” information for transit riders including bus/train arrival times.
- The use of communication technology as a substitute for trip making.
- Use of car sharing systems.

TDM programs need to consider how technology can improve operations, customer access and convenience for people working outside of the standard workplace.

CITYWIDE POLICY CONTEXT

GENERAL PLAN TRANSPORTATION ELEMENT

The Transportation Element of the General Plan establishes a citywide strategy to achieve long-term mobility and accessibility within the City of Los Angeles. With respect to Transportation Demand Management, it includes Goals, Objectives and Policies that guide demand management in the city. The goals and objectives related to reducing trips through programs and policies are summarized below. Recommendations for TDM measures in the San Pedro Community Plan should be consistent with adopted City policies listed below.

GOAL A

Adequate accessibility to work opportunities and essential services, and acceptable levels of mobility for all those who live, work, travel, or move goods in Los Angeles.

Objective 1

Expand neighborhood transportation services and programs to enhance neighborhood accessibility.

Objective 2

Mitigate the impacts of traffic growth, reduce congestion, and improve air quality by implementing a comprehensive program of multimodal strategies that encompass physical and operational improvements as well as demand management.

Objective 3

Support development in regional centers, community centers, major economic activity areas and along mixed-use boulevards as designated in the Community Plans.

Objective 4

Preserve the existing character of lower density residential areas and maintain pedestrian-oriented environments where appropriate

Objective 5

Incorporate available local, state, and federal funding opportunities to provide sufficient financing for transportation improvements and programs.

Objective 6

Provide an ongoing evaluation of transportation programs to determine whether the goals and objectives of the Citywide General Plan Framework and this element are being met, or if these goals and objectives should be modified to reflect changing circumstances.

CITY OF LOS ANGELES MUNICIPAL CODE

Los Angeles City Municipal Code section 12.26. contains required Transportation Demand Management and Trip Reduction measures as described in the following paragraphs. Within the City's municipal code, Transportation Demand Management (TDM) is defined as the alteration of travel behavior through programs of incentives, services, and policies, including encouraging the use of alternatives to single-occupant vehicles such as public transit, cycling, walking, carpooling/vanpooling and changes in work schedule that move trips out of the peak period or eliminate them altogether (as in the case in telecommuting or compressed work weeks). Trip Reduction is defined as reduction in the number of work-related trips made by single-occupant vehicles. Specific requirements for developments of various sizes are summarized from the code below.

- Development in excess of 25,000 square feet of gross floor area shall provide a bulletin board, display case, or kiosk (displaying transportation information) where the greatest number of employees are likely to see it. The transportation information displayed should include, but is not limited to current routes and schedules for public transit serving the site; telephone numbers for referrals on transportation information including numbers for the regional ridesharing agency and local transit operations; ridesharing promotion material supplied by commuter-oriented organizations; regional/local Bicycle Route and facility information; and a listing of on-

site services or facilities that are available for carpoolers, vanpoolers, bicyclists, and transit riders.

- Development in excess of 50,000 square feet of gross floor area shall provide the above plus: (1) designated parking areas for employee carpools and vanpools as close as practical to the main pedestrian entrance(s) of the building(s); (2) one permanent, clearly identified (signed and striped) carpool/vanpool parking space for the first 50,000 to 100,000 square feet of gross floor area and one additional permanent, clearly identified (signed and striped) carpool/vanpool parking space for any development over 100,000 square feet of gross floor area; and (3) parking spaces clearly identified (signed and striped) shall be provided in the designated carpool/vanpool parking area at any time during the building's occupancy sufficient to meet employee demand for such spaces. Absent such demand, parking spaces within the designated carpool/vanpool parking area may be used by other vehicles and other amenities.
- Development in excess of 100,000 square feet of gross floor area shall provide the above plus: (1) a safe and convenient area in which carpool/vanpool vehicles may load and unload passengers other than in their assigned parking area; (2) sidewalks or other designated pathways following direct and safe routes from the external pedestrian circulation system to each building in the development; (3) possible bus stop improvements; and (4) safe and convenient access from the external circulation system to bicycle parking facilities on-site.

ADDITIONAL SPECIFIC TDM STRATEGIES FOR THE SAN PEDRO COMMUNITY PLAN AREA

Additional specific TDM strategies may be appropriate based on the type of development patterns that evolve over time. Major considerations include the size of expected development projects, the land use density, the mix of uses and proximity to transit services. More dense projects with a mix of uses will support successful TDM programs more readily than smaller single use developments. Recommendations for TDM measures to be considered in the San Pedro Community Plan Area, that may extend beyond the City municipal code requirements, will be based on:

- The area's employment, residential, travel, and demographic characteristics;
- Existing Community TDM-related transportation services and facilities;
- City of Los Angeles TDM policies and practices (e.g., requirement for TDM Plan for new developments, TDM Ordinance, and bicycle parking requirements);
- Implementation of projects and improvements that have been endorsed and/or improved (e.g., Citywide Bicycle Plan); and
- Available transit services within and near the community plan area.

Additional TDM strategies and measures recommended for the San Pedro Community Plan Area may include:

- Support the creation of Transportation Management Associations (TMA) where there is the appropriate type of larger mixed use developments and in downtown San Pedro.
- Support the provision of cash incentives for persons to find alternatives to the solo driver commute to work.
- Promote the use of shared cars as a stand-alone mobility option or as part of a multimodal trip chain.
- Promote the offer of merchant incentives to customers for using transit.
- Maintain existing shuttle services and develop expanded shuttle services, focused on access to major transit hubs and corridors.
- Encourage large residential, commercial, industrial, and mixed-use projects to provide shuttle services for tenants or employees to Metro and other transit hubs.
- Develop a financing mechanism to fund transportation programs that offer alternatives to the solo driver.
- Promote TDM Plans for individual developments where applicable and where needed to mitigate congestion impacts that cannot be mitigated by additional roadway system capacity. These plans could establish vehicle trip caps, a program for monitoring vehicle trips, and a system of incentives and penalties for meeting vehicle trip goals. TDM plans can be used a part of the mitigation package within traffic studies and environmental documents.
- Adopt a strategy for project-related vehicle trips to be mitigated through bicycle plan projects and/or programs.
- Encourage employers to adopt telecommuting policies and incentives for transit use.
- Support the dedication of on-street parking for shared cars in locations with high demand for shared cars.
- Encourage non-residential developments to provide employees with the option of flexible work schedules and onsite telecommuting facilities to minimize peak hour traffic congestion.
- For certain residential projects, designate a Transportation Coordinator to be appointed by its homeowner's or tenant association boards whose responsibility will be to educate residents on transit services, distribute transit maps and schedules, survey and collect the resident's ridership information, coordinate carpool and rideshare programs, and manage the distribution of the continual subsidy for monthly transit passes.
- Consider parking cash-out option for residents within designated residential projects. Cash-out means that the resident may not be required to pay for parking spaces which would not be used and the money could be used for other modes of travel.
- For appropriately sized commercial projects, provide a Guaranteed Ride Home for employees that do not drive to work. This service allows employees to leave their

vehicles at home without feeling that they would be stranded should an emergency arise that requires transportation to their home area.

4.2.5 CAPITAL IMPROVEMENTS

Major and Secondary Highways in the San Pedro area should be improved and maintained to encourage their use rather than Local Streets through residential areas. Improvements should be phased according to need and be designed to minimize disruption to the residential and commercial areas that they serve. Low-cost, short-term improvements such as street parking restrictions, provision of adequate off-street parking, and management of local street intersections with major arterials should be emphasized. Green Street Standard Plans should be used when designing new streets or improving existing streets.

CUSTOMIZED STREET STANDARDS

The development of the proposed San Pedro Community Plan TIMP included a review of the street standards in San Pedro. City standard street dimensions for Major Highways (104' ROW, 80' roadway), Secondary Highways (90' ROW, 70' roadway) and Collector Streets (64' ROW, 44' roadway) treat all streets so designated in a similar fashion in terms of dedication and widening requirements when developments occur in the City. In San Pedro, there are a number of reasons why the standard street dimensions cannot be achieved or may not be appropriate given the character of the streets and the land uses along them. For example, along Pacific Avenue, portions of this roadway will not likely ever be widened to the designated standard due to the historic nature and development patterns of the area. There are also other historic buildings in San Pedro that would have to be displaced to implement the roadway cross sections called for by the current standard street dimensions.

A review was made of streets where roadway standards could be modified in order to help meet pedestrian friendly, bicycle, or historic goals. The need for adequate sidewalk width and parkways to buffer pedestrians from moving cars was considered, as well as the number and location of historic buildings that would preclude street widening. Modified street design standards have been designated for several locations in San Pedro. Some of the streets are designated "Modified Major Highway" and "Modified Secondary Highway" meaning that they are still planned to function as Major Highways or Secondary Highways, but they will have a non-standard cross section and reduced width. The standards do not change the number of travel lanes from what currently exists, but they change the number of lanes which would normally be required at build-out on some streets and instead dedicate some of the right of way to parking or wider sidewalks.

Reclassified Street:

- Reclassification of Gaffey Street from 25th Street to Shepard Street from a Major Highway Class II to a Secondary Arterial.

Modified Streets:

- Reclassification of 9th Street from Miraleste Drive to Western Avenue from a Major Highway Class II to a Modified Major Highway Class II.
- Reclassification of 9th Street from Western Avenue to Pacific Avenue from a Major Highway Class II to a Modified Secondary Arterial with two lanes.
- Reclassification of Pacific Avenue from O'Farrell Street to Shepard Street from a Secondary Arterial to a Modified Secondary Arterial with four lanes.
- Reclassification of Gaffey Street from 9th Street to 25th Street from a Major Highway Class II to a Modified Major Highway Class II. Four lanes will be maintained during peak commute hours (7:00-9:00 a.m. and 4:00-6:00 p.m.).

ADDITIONAL FACILITY IMPROVEMENTS

There is the potential for other roadway and transportation improvements that may help facilitate transportation in San Pedro. These include Intelligent Transportation Systems Improvements, as well as other roadway and freeway improvements.

- Intelligent Transportation Systems (ITS) Improvements – The ATCS system provides capacity improvements on the arterial highway system through the use of new technology to monitor traffic conditions and adjust the signal system accordingly. These and other applications of technology to transportation are referred to as Intelligent Transportation Systems (ITS). Some of the types of ITS elements that would be applicable in the San Pedro Community Plan include the following:
 - Variable Message Signs (VMS) – VMS could be employed along key arterials to alert motorists to unusual circumstances ahead and alternate routes to avoid congestion. These would be particularly applicable to approach routes to Downtown San Pedro when street closures are in effect. Movable VMS signs are currently employed in San Pedro during special events, but a more permanent and attractive system of VMS trailblazer signs (smaller than the freeway VMS) along major corridors should be implemented.
 - Transit Information Kiosks/Next Bus Information - At major transit stops and transfer points, and other activity centers, real time information about transit services and the time at which the next bus will arrive should be employed.
 - Real Time Traveler Information - Internet services currently provide on-line transportation conditions that allow travelers to check traffic conditions or obtain feedback on the best route to take between a given origin and destination. Los Angeles County is conducting a demonstration project that allows drivers to receive updates on the recommended route via cell phone as conditions change during their journey.

- Intersection Improvements – There may be locations where intersection congestion causes drivers to seek alternate routes. Coordination with LADOT should be maintained in order to identify and improve any such locations.
- Roadway Extensions - Consider completion of the gap of N. Meyler Street north and south of Miraflores Avenue and Channel Street in order to provide additional north-south access west of Gaffey Street.
- Other Roadway Changes - Remove the link of Hamilton Avenue between Carolina Street and Denison Avenue from the street network. There is a cemetery located here that prevents this portion of Hamilton from functioning as Major Highway Class II. The remaining portions of Hamilton Avenue from Gaffey Street to Pacific Avenue shall be re-designated as a Local Street. Remove the segment of Paseo del Mar proposed for extension, since this is a private road in the Palos Verdes Shores Mobile Home Park community.
- Freeway-related improvements - There is a freeway improvement planned in the vicinity of the San Pedro Community Plan Area which would improve conditions on streets within the Community Plan Area.
 - I-110/SR 47/Harbor Boulevard Interchange improvements.
- Potential Freeway-access improvements - There are potential freeway access projects that may be investigated in the vicinity of the San Pedro Community Plan Area which may improve conditions for freeway access within the Community Plan Area. These would require extensive studies, and would involve both Caltrans and LADOT:
 - I-110 interchange at Capitol Drive
 - I-110 interchange at Pacific Avenue.

4.2.6 NEIGHBORHOOD TRAFFIC MANAGEMENT PLANS

In the San Pedro Community Plan Area, there is a predominance of local residential streets. As traffic volumes build up on the arterial street network, some drivers seek alternate routes on residential streets to avoid the arterial congestion. This is often referred to as "cut-through" traffic. Areas with grid system patterns of streets are particularly susceptible to cut-through traffic because the local streets are often parallel to major and secondary highways and provide convenient alternate routes. Similarly, areas with only limited arterial streets and collector streets connecting neighborhoods often experience cut-through traffic on those collectors when drivers look for alternate routes. Several of the neighborhoods in the San Pedro Community Plan Area experience commuter cut-through traffic daily.

Plans are frequently developed to reduce the impacts of traffic on local residential streets by either slowing the speed of the traffic or reducing the volume of cut through traffic by making it harder for such vehicles to reach the residential streets. LADOT has been proactive in identifying areas where cut-through traffic exists, and implements measures to help discourage

it through the use of stop signs and speed humps. As improvements are made to the arterial street system, cut-through traffic will also decrease. Upon request from members of the community or the Council office, the City should hold neighborhood meetings to identify where traffic or parking intrusion is considered a problem. Such meetings are important not only to identify the locations of problems, but also to discuss the pros and cons of potential solutions to the problems.

TRAFFIC CONTROL MEASURES

In addition to the methods currently used by LADOT, other traffic control measures may be considered. These types of neighborhood traffic control devices may be used to regulate, warn and guide traffic in residential areas:

- Diverters
- Semi-diverters or partial street closures
- Chokers (narrowing of the roadway)
- Turn Restrictions
- Turn Channelization
- Stop signs
- Traffic circles
- Speed humps
- Special pavement
- On-street Parking
- Bikeway Striping
- Warning or Advisory signs

Installation of certain types of traffic control devices such as stop signs, require satisfaction of specific criteria to justify their installation. LADOT must study conditions within the neighborhood to determine if the installation on such traffic control devices is warranted.

4.2.7 PARKING POLICIES

Parking policies in San Pedro, especially the downtown area, must allow flexibility in the application of existing parking requirements to improve the utilization of the existing parking supply and existing land in San Pedro. A parking management district or districts may be created to enable the implementation of shared parking policies (e.g. evening parking uses for bank parking facilities and other parking resources). To support the parking needs of persons who do not own cars but use cars occasionally, parking policies must accommodate shared cars. Recommended parking policies include.

- Improve utilization of existing public parking structures and lots.

- Support the study of an Intelligent Parking System which uses electronic technology to provide information on the location and pricing of available parking in real-time. Consider the use of Intelligent Parking Systems to vary the price of parking minute-by-minute in response to changes in supply and demand.
- Support the creation of a parking management district or districts in areas of high parking demand which would allow motorists to park wherever vacant parking spaces exist within a group of shared parking facilities.
- Encourage creative thinking and flexibility in the provision of required parking within parking management districts or when a public parking facility is located within walking distance of a proposed development. For example, encourage the 24-hour use of off-site parking spaces.
- Maintain the existing number of publicly available parking resources in the downtown area of San Pedro. For example; support of a No Net Loss policy will maintain the existing number of publicly available parking spaces within San Pedro's downtown area.
- Encourage projects located within the downtown area to replace publicly available parking spaces which are lost to new development, on a one-for-one basis, by any of the following means:
 - On-site spaces
 - Off-site spaces obtained through private leasing arrangements
 - Off-site spaces obtained through alternative parking programs such as a parking management district.
- Provision of replacement parking may be considered a traffic mitigation measure by decision makers.
- Establish maximum parking requirements for individual projects. For example; consider existing LAMC parking requirements to be the maximum number of parking spaces allowed for projects.
- Require applicants for residential, mixed-use or commercial projects who request parking spaces that exceed the maximum to make the additional spaces requested available for use by the general public.
- Support parking programs that encourage transit use.
- Maximize the use of on-street parking spaces.
- Encourage multi-uses of loading zones. The loading zones could be used for parking during the times loading and unloading would not occur, such as evenings.
- Develop new off-street public parking resources, including parking structures and underground parking, in accordance with design standards.
- Support proposals to build parking structures that can be used by multiple customer groups in areas of high parking demand.

- Support construction of parking structures that can be converted to other uses in the long-term.
- Require ground-floor commercial uses in off-street parking facilities that are located in commercial areas.
- Apply the Citywide Urban Design guidelines for parking facilities.
- Encourage the screening and landscaping of parking lots. Promote use of permeable paving material on new and existing parking lots.
- Support the use of financing tools to increase parking capacity in San Pedro.
- Promote the use of assessment districts and other financing tools as a means of constructing new parking structures in areas with parking deficits.

4.3 FUNDING

The proposed San Pedro Community Plan does not include a new funding mechanism to assist the City in implementing the elements of this TIMP. The City will rely on existing local and regional funding programs and the private sector to implement the policies and programs of the TIMP. One method that could be used to develop a new source of funding that would assess part of the costs of transportation improvements to new developments would be through a development impact fee program. The City would need to conduct a nexus study that clearly establishes the nexus between the trips generated by new development and the costs associated with the transportation improvements required to reduce the impacts of those developments. Such studies have been conducted in other areas of the City of Los Angeles (Warner Center, West Los Angeles, Coastal Transportation Corridor) where traffic impact fees are now in place. A recommendation of this TIMP is to consider conducting a nexus study within applicable areas that can be used to determine:

- The impact of development anticipated by the San Pedro Community Plan on traffic in San Pedro.
- The cost of implementing prioritized traffic mitigation measures contained within the proposed San Pedro Community Plan.
- A method of allocating the cost of implementing prioritized traffic mitigation measures to individual development projects.

The City could initiate a study to address funding mechanisms for transportation demand management programs, such as a Traffic Impact Fee, tax increments, bonds, grants, benefit assessment districts, and other financing options. They could also work to promote the establishment of Benefit Assessment Districts, which can fund capital improvements for transit and shared car options. However, due to the limited amount of large development potential in San Pedro, this may not be a feasible method to help identify additional funding.

5.0 TRAFFIC CONDITIONS WITH TIMP

5.1 EFFECTIVENESS OF TIMP TRIP REDUCTIONS

The programs and policies of the TIMP that relate to reducing trip generation by various San Pedro land uses will largely be implemented through private sector efforts to better design developments that accommodate alternate modes of travel and encourage residents and employees to rideshare and use alternate modes of transportation. In addition, TIMP programs for public improvements can be implemented through traffic studies for major developments and by Transportation (“T”) conditions for zone changes, conditions of approval for Conditional Use Permits and tract conditions for subdivisions. If appropriate areas are identified that could justify a nexus study, an impact fee may also provide funding for some of the TIMP programs and policies.

It should also be noted that while it is expected that the mixed-use, transit-oriented development zones in San Pedro will help reduce vehicle trips, the effectiveness of such strategies will not be fully effective until they have been more widely implemented throughout the region. If transit-oriented development is only located on one end of a two-way trip (origin and destination), the use of transit will be less than when in the future, both ends of the trip are located in transit oriented development areas.

5.2 YEAR 2030 PROPOSED LAND USE PLAN WITH TIMP

The Year 2030 Preferred Transportation Alternative plus the inclusion of the TIMP policies, forms the Year 2030 Proposed Land Use Plan with TIMP (Proposed Land Use Plan with TIMP), and includes the reclassification of 9th Street and Pacific Avenue, plus a combination of Network Alternatives One through Four. Under the Proposed Land Use Plan with TIMP, the following changes were studied:

- Reclassification of 9th Street from Miraleste Drive to Western Avenue from a Major Highway Class II to a Modified Major Highway Class II.
- Reclassification of 9th Street from Western Avenue to Pacific Avenue from a Major Highway Class II to a Modified Secondary Arterial with two lanes.
- Reclassification of Pacific Avenue from O’Farrell Street to Shepard Street from a Secondary Arterial to a Modified Secondary Arterial with four lanes.
- Conversion of 5th Street from Harbor Boulevard to Pacific Avenue from an existing two lane Secondary Arterial into a one lane one-way westbound Secondary Arterial with angled parking.
- Conversion of 7th Street from Harbor Boulevard to Pacific Avenue from an existing two lane Secondary Arterial into a one lane one-way eastbound Secondary Arterial with angled parking.
- Closure of 6th Street, a local roadway, from Harbor Boulevard to Pacific Avenue.

- Reclassification of Gaffey Street from 9th Street to 25th Street from a Major Highway Class II to a Modified Major Highway Class II. Four lanes will be maintained during peak commute hours (7:00-9:00 a.m. and 4:00-6:00 p.m.).
- Reclassification of Gaffey Street from 25th Street to Shepard Street from a Major Highway Class II to a Secondary Arterial.
- Implementation of Bicycle Lanes, Routes and Bicycle-Friendly streets including:
 - Addition of a Class II bike lane on Western Avenue from Capitol Drive to Paseo del Mar.
 - Addition of a Class II bike lane on 25th Street from the Rancho Palos Verdes border to Gaffey Street.
 - Addition of a Class III bike route on Gaffey Street from Channel Street to 22nd Street.








Table 21 shows the Proposed Land Use Plan with TIMP arterial summary, which includes VMT, VHT and average speed. Roadway segments operating at LOS E or F (V/C of 0.91 or worse) were identified to ascertain the level of congestion expected in the future. A total of approximately six percent of San Pedro roadways are forecast to operate at an LOS E and F (39 of 610 Links) in the Proposed Land Use Plan with TIMP. The volume-weighted V/C ratio is 0.669, which indicates that on average, the streets in the San Pedro Community Plan Area would utilize approximately 66.9 percent of roadway capacity in the PM peak hour. The V/C ratio is at LOS B, which represents very good overall operating conditions, although some streets operate at worse service levels during peak hours. **Table A-9** in the Appendix shows the Proposed Land Use Plan with TIMP level of service for each arterial segment in the San Pedro Community Plan Area. Figure 9 illustrates the San Pedro Community Plan Area Proposed Functional Classification system.

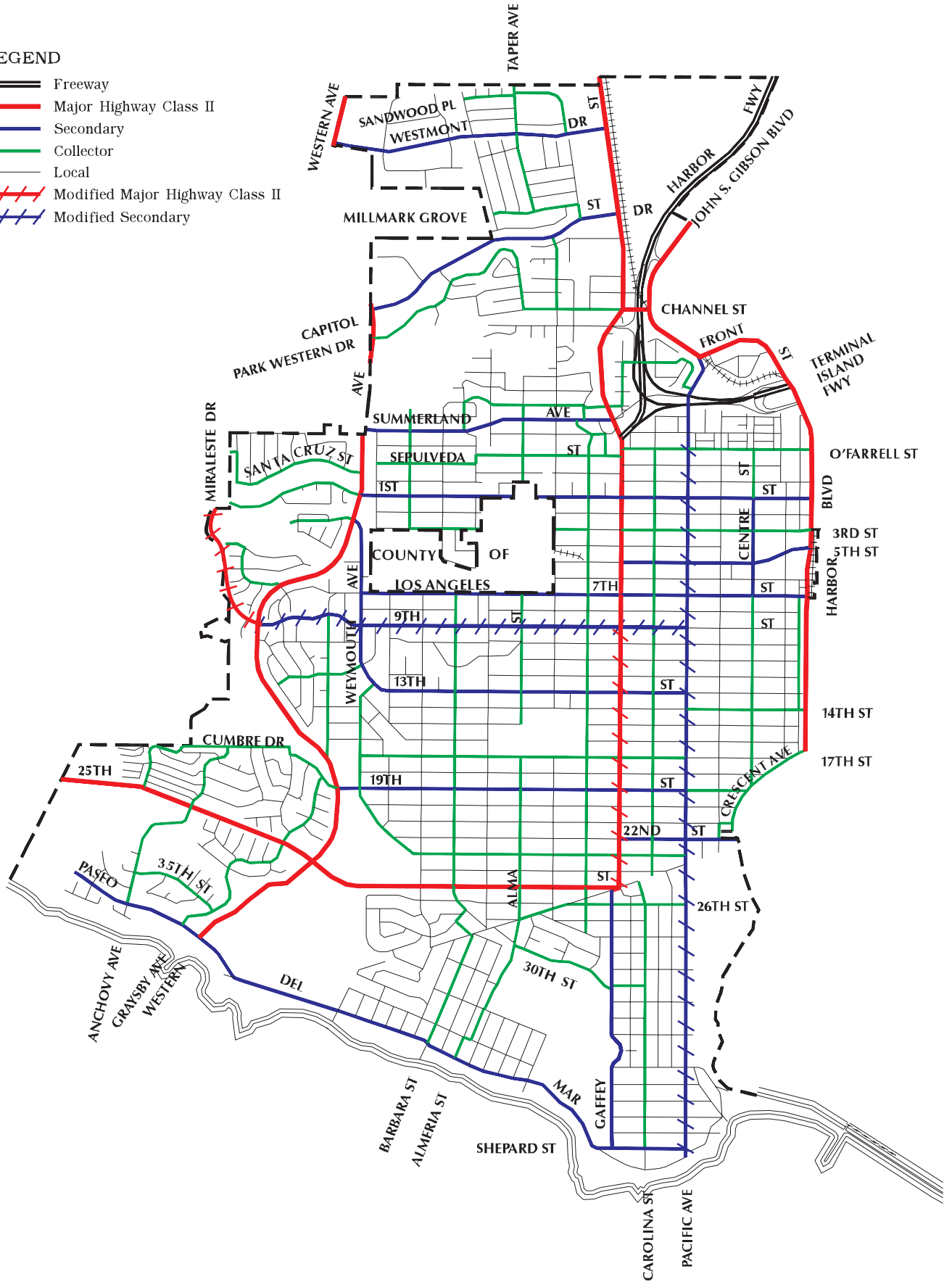
TABLE 21 YEAR 2030 PROPOSED LAND USE PLAN WITH TIMP – ARTERIAL SUMMARY

Proposed Land Use Plan with TIMP Traffic Conditions	
VMT	67,189
VHT	2,382
Avg Speed (mph)	28
Weighted Avg V/C	0.669
Links at LOS E or F	39

The Proposed Land Use Plan with TIMP causes little change to transportation conditions in the San Pedro Community Plan Area as compared to the Current Land Use Plan. All 2030 analyses showed higher VMT, VHT, V/C and number of links at E or F than the Existing Traffic Conditions. With the relatively limited number of opportunities to provide additional roadway capacity in San Pedro through the addition of travel lanes, the number of the arterial roadway segments projected to be at capacity in 2030 are very similar between the alternatives that were analyzed.

LEGEND

-  Freeway
-  Major Highway Class II
-  Secondary
-  Collector
-  Local
-  Modified Major Highway Class II
-  Modified Secondary



A summary of the roadway link levels of service and aggregate statistics are shown in **Table 22**. It can be seen that the Preferred Alternative shows slightly lower VMT and VHT as compared to the Current Land Use Plan, but the average V/C is higher.

TABLE 22 SUMMARY –AGGREGATE STATISTICS

Scenario	VMT	VHT	Avg. Speed	Weighted V/C	Links at LOS E or F
Existing Traffic Conditions	56,792	1,895	30	0.605	32
Current Land Use Plan	67,475	2,385	28	0.662	37
Proposed Land Use Plan	67,264	2,402	28	0.668	39
Transportation Alternative One	67,285	2,385	28	0.666	37
Transportation Alternative One-A	67,367	2,373	28	0.665	38
Transportation Alternative Two *	N/A	N/A	N/A	N/A	N/A
Transportation Alternative Three	67,418	2,401	28	0.664	37
Transportation Alternative Four	67,560	2,412	28	0.677	40
Preferred Alternative	67,189	2,382	28	0.669	39
Proposed Land Use Plan with TIMP	67,189	2,382	28	0.669	39
* Alternative could not be modeled					

Table 22 illustrates that the Proposed Land Use Plan with TIMP total vehicle miles of travel and vehicle hours of travel will be reduced as compared to the Current Land Use Plan, and will have a slightly higher weighted V/C and number of roadway links at LOS E or F, as compared to the Current Land Use Plan. Notwithstanding this, the overall V/C ratio is at LOS B, which represents very good operating conditions. The difference in V/C is nominal and would not worsen roadway operating conditions as perceived by the traveling public.

The two thresholds of significance adopted by the City of Los Angeles Department of Transportation are related to weighted average V/C ratio and the number of links at LOS E or F; both compared to Existing Traffic Conditions. Since the proposed San Pedro Community Plan with TIMP has not improved both of the measures to better than the Current Land Use Plan,

the transportation impacts associated with the Proposed Land Use Plan with TIMP are not fully mitigated. However, the TIMP includes strategies aimed to encourage alternative modes of travel, such as the creation of pedestrian friendly environments and providing bicycle improvements.

The EIR for the proposed San Pedro Community Plan compares the Proposed Land Use Plan with TIMP to Existing Traffic Conditions and concludes that there is a significant impact associated with the proposed Plan.

6.0 CONGESTION MANAGEMENT PROGRAM TRANSPORTATION IMPACT ANALYSIS

6.1 BACKGROUND

The Congestion Management Program (CMP) for Los Angeles County, first developed by the Metropolitan Transportation Authority in 1992, is a state-mandated program enacted by the state legislature with the passage of Assembly Bill 471 (1989), as amended by Assembly Bills 1791 (1990), 1435 (1992), and 3090 in June, 1990. It has been developed to meet the requirements of Section 65089 of the California Government Code and is intended to address regional congestion by linking transportation, land use and air quality decisions.

The CMP is a key link in countywide, multi-modal planning and program implementation. The CMP includes a deficiency plan which is designed to implement strategies that either fully mitigate congestion or alternatively, provide measurable improvement to congestion and air quality. With the inclusion of the deficiency plan, the CMP strengthens partnership among local jurisdictions, Metro, and other regional agencies.

The purpose of this section is to conduct a CMP Transportation Impact Analysis (TIA) level of analysis consistent with established guidelines. The following section presents the CMP analysis and results for the proposed San Pedro Community Plan TIMP.

6.2 HOW MODEL WAS USED FOR ANALYSIS

The Congestion Management Program's Transportation Impact Analysis (TIA) prepared for the proposed San Pedro Community Plan compares future growth in vehicle trips associated with land use changes and future development under Proposed Land Use Plan with TIMP conditions with the Current Land Use Plan conditions. The refined model developed for the proposed San Pedro Community Plan TIMP was used to forecast traffic conditions expected to occur in Year 2030 under the two conditions.

Weekday PM peak period forecast were analyzed for impacts of the proposed project. Based on the Southern California Association of Governments (SCAG) trip-generation survey, "Home-Work" trips (as a percentage of daily traffic by all trip types) generated about the same percentage for both AM and PM peak periods, whereas the percentages of "Other-Work" and "Non-Work" trips were substantially higher in the PM peak period than the AM peak period. Therefore, it can be assumed that the weekday PM peak period traffic volumes would be higher than AM peak period traffic and hence, will provide the worst-case scenario analyses.

6.3 SCOPE OF ANALYSIS

As presented in the 2010 Congestion Management Program for Los Angeles County, CMP TIA guidelines, intersection analyses are particularly well suited towards analysis projects where land use types and design details are known. Where land uses are not defined (such as with projects that are limited to zone designations and parcel size with no information on access locations), the level of detail in TIA should be adjusted accordingly. This applies directly to redevelopment areas, citywide general plans and in this case, community level plans. In such cases, where project definition is insufficient for meaningful intersection level of service, CMP arterial segment analysis is conducted instead of intersection level.

CMP analysis is typically conducted on all CMP identified highway facilities. This includes CMP roadway segments where the proposed San Pedro Community Plan will add 50 or more peak hour trips (total of both directions) and mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

In this study, the CMP analysis is refined as allowed under Appendix D of the 2010 Congestion Management Program for Los Angeles County to be more suited to the goals of the TIMP for the San Pedro Community Plan. Because mitigation of freeway impact is beyond the scope of the proposed Community Plan TIMP, freeway segment analysis is not conducted under this study. Freeway segment analysis may be conducted as a separate analysis outside of the Community Plan TIMP and New Community Plan Program effort.

6.4 CMP IMPACT ANALYSIS

As discussed in Appendix D - Guidelines for CMP Transportation Impact Analysis of the 2010 Congestion Management Program for Los Angeles County, “volume to capacity ratios must be calculated for each segment and LOS values assigned using the V/C-LOS equivalency” for traffic impact analysis involving arterial segment analysis. CMP guidelines state that “A capacity of 800 vehicles per hour per through traffic lane must be used, unless localized conditions necessitate alternative values to approximate current intersection congestion levels”. For this analysis, the capacity as assigned by the Los Angeles Department of Transportation has been used.

The criteria for determining a significant impact is described by the following definition:

- “For the purpose of a CMP TIA, a significant project impact occurs when the proposed project increases traffic demand on a CMP facility by two percent of capacity ($V/C = 0.02$), causing a worsening of LOS F ($V/C = 1.00$).”

According to the 2010 CMP for Los Angeles Country there are two CMP arterial roadway intersections within the San Pedro Community Plan Area:

- Western Avenue at 9th Street
- Gaffey Street at 9th Street

Although no CMP segment shows an increase of 50 or more peak hour trips, the change in V/C has been calculated. **Table 23** shows the V/C for the roadways identified in the CMP.

TABLE 23 CHANGE IN V/C RATIO AT CMP MONITORING LOCATIONS – CURRENT LAND USE PLAN VS. PROPOSED LAND USE PLAN WITH TIMP

Street Name	From	Current Land Use Plan		Proposed Land Use Plan with TIMP		Change in V/C	
		N/E	S/W	N/E	S/W	S/W	N/E
Western Ave	South of 9th St	0.715	1.145	0.722	1.149	0.007	0.004
Western Ave	North of 9th St	0.610	0.963	0.629	0.974	0.019	0.011
Gaffey St	South of 9th St	0.217	0.532	0.218	0.530	0.001	-0.002
Gaffey St	North of 9th St	0.257	0.613	0.251	0.588	-0.006	-0.025

The analysis shows there is no increase in V/C of 0.02 or more on segments that operate at LOS F; therefore there is no impact on the CMP roadway system.

APPENDIX A: ROADWAY LINK DATA

- APPENDIX A-1 ROADWAY INVENTORY
- APPENDIX A-2 EXISTING TRAFFIC CONDITIONS
- APPENDIX A-3 CURRENT LAND USE PLAN
- APPENDIX A-4 PROPOSED LAND USE PLAN
- APPENDIX A-5 TRANSPORTATION ALTERNATIVE ONE
- APPENDIX A-6 TRANSPORTATION ALTERNATIVE THREE
- APPENDIX A-7 TRANSPORTATION ALTERNATIVE FOUR
- APPENDIX A-8 PREFERRED ALTERNATIVE
- APPENDIX A-9 PROPOSED PLAN WITH TIMP

Appendix A-1 Roadway Inventory

Segment	From	To	Roadway Classification	Capacity per Lane	Median Type	Northbound/Eastbound					Southbound/Westbound				
						Off Peak Lanes	Add'l Peak Lane	Bike Lane	Parking Restrictions	Speed Limit	Off Peak Lanes	Add'l Peak Lane	Bike Lane	Parking Restrictions	Speed Limit
25TH ST (e/w)	Moray Av	Anchovy Av	Major Highway Class II	800	DDY	2	No	Y	NONE	35	1	No	N	NONE	40
25TH ST (e/w)	Anchovy Av	Mermaid Dr	Major Highway Class II	800	TWLTL	2	No	Y	NONE		1	No	N	NONE	
25TH ST (e/w)	Mermaid Dr	West City Limit	Major Highway Class II	800	DDY	1	No		NPAT		1	No		NPAT	
26TH ST (e/w)	Pacific Av	Carolina St	Collector	600	SBY	1	No	N	NPAT		1	No	N	NONE	
26TH ST (e/w)	Carolina St	Gaffey St	Collector	600	SBY	1	No	N	NONE		1	No	N	NONE	
26TH ST (e/w)	Gaffey St	Cabrillo Av	Collector	600	UD	1	No	N	NONE		1	No	N	NONE	
26TH ST (e/w)	Cabrillo Av	Hamilton Av	Collector	600	UD	1	No	N	NONE		1	No	N	NONE	
26TH ST (e/w)	Moray Av	Graysby Av	Collector	600	UD	1	No	N	NONE		1	No	N	NONE	
HAMILTON AV (e/w)	26th St	Alma St	Collector	600	UD	1	No	N	NONE		1	No	N	NONE	
30TH ST (e/w)	Gaffey St	Alma St	Collector	600	SBY	1	No	N	NONE		1	No	N	NONE	
31ST ST (e/w)	Carolina St	Gaffey St	Collector	600	SBY	1	No	N	NONE		1	No	N	NONE	
35TH ST (e/w)	Graysby Av	Anchovy Av	Collector	600	SBY	1	No	N	NONE		1	No	N	NONE	
37TH ST (e/w)	Alma St	Almeria St	Collector	600	SBY	1	No	N	NONE		1	No	N	NONE	
SHEPARD ST (e/w)	Pacific Ave	Carolina St	Secondary	700	SDY	1	No	Y	NONE		1	No	Y	NONE	
SHEPARD ST (e/w)	Carolina St	Gaffey St	Secondary	700	SDY	1	No	Y	NONE		1	No	Y	NONE	
PASEO DEL MAR (e/w)	Gaffey St	Roxbury St	Secondary	700	SDY	1	No	Y	TANSAT		1	No	Y	TANSAT	35
PASEO DEL MAR (e/w)	Roxbury St	Almeria St	Secondary	700	DDY	1	No	Y	NONE		1	No	Y	NONE	
PASEO DEL MAR (e/w)	Almeria St	Barbara St	Secondary	700	DDY	1	No	Y	NONE		1	No	Y	NONE	
PASEO DEL MAR (e/w)	Barbara St	Weymouth Av	Secondary	700	SDY	1	No	Y	NONE	35	1	No	Y	NONE	35
PASEO DEL MAR (e/w)	Weymouth Av	Western Av	Secondary	700	SDY	1	No	Y	NP 10p-6a		1	No	Y	TANSAT	20
PASEO DEL MAR (e/w)	Western Av	Graysby Av	Secondary	700	RM	1	No	N	NONE		1	No	N	NONE	
PASEO DEL MAR (e/w)	Graysby Av	Anchovy Av	Secondary	700	RM	1	No	N	NONE		1	No	N	NONE	35
PASEO DEL MAR (e/w)	Anchovy Av	Catalina Vista	Secondary	700	RM	1	No	N	NONE		1	No	N	NONE	

*Speed limit posted in the field.

Parking Restrictions (Mid-Block, Typical Section)

None = No Restrictions (Parking OK)	TANSAT = Tow-Away No Stopping Any Time	PL = Passenger Loading
NPAT = No Parking Any Time	TANS 7-9 = Tow-Away No Stopping (Specify Hours)	
NP 7-9 = No Parking (Specify Hours)	2HR 9-4 = Two-Hour Parking (Specify Hours)	

Median Type (Mid-Block)

UD = Undivided (No Striping)	RM = Raised Median
SDY = Single Double Yellow	TWLTL = Two-Way Left Turn
DDY = Double Double Yellow	SBY = Single Broken Yellow

Current Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
JOHN S. GIBSON BLVD	North City Limit	Channel St	2	2	1600	1600	1,603	2,431	0.911	1.381	E	F
FRONT ST	Pacific Av	Swinford St	2	2	1600	1600	548	467	0.311	0.265	A	A
HARBOR BLVD	Swinford St	O'Farrell St	3	3	2400	2400	1,591	1,706	0.603	0.646	B	B
HARBOR BLVD	O'Farrell St	1st St	3	3	2400	2400	1,392	1,416	0.527	0.536	A	A
HARBOR BLVD	1st St	3rd St	3	3	2400	2400	1,413	1,416	0.535	0.536	A	A
HARBOR BLVD	3rd St	5th St	3	3	2400	2400	1,181	1,043	0.447	0.395	A	A
HARBOR BLVD	5th St	7th St	3	3	2400	2400	851	648	0.322	0.245	A	A
HARBOR BLVD	7th St	14th St	2	2	1600	1600	652	595	0.370	0.338	A	A
HARBOR BLVD	14th St	Crescent Av	2	2	1600	1600	500	479	0.284	0.272	A	A
CRESCENT AV	Harbor Blvd	19th St	1	1	600	600	41	43	0.062	0.065	A	A
CRESCENT AV	19th St	21st St	1	1	600	600	28	30	0.042	0.045	A	A
BEACON ST	7th St	14th St	1	1	600	600	26	45	0.039	0.068	A	A
CENTRE ST	O'Farrell St	1st St	1	1	600	600	60	85	0.091	0.129	A	A
CENTRE ST	1st St	2nd St	1	1	700	700	60	125	0.078	0.162	A	A
CENTRE ST	2nd St	3rd St	1	1	700	700	60	125	0.078	0.162	A	A
CENTRE ST	3rd St	5th St	2	2	1400	1400	236	217	0.153	0.141	A	A
CENTRE ST	5th St	6th St	1	1	700	700	531	603	0.690	0.783	B	C
CENTRE ST	6th St	7th St	1	1	700	700	531	603	0.690	0.783	B	C
CENTRE ST	7th St	14th St	1	1	600	600	469	657	0.711	0.995	C	E
CENTRE ST	14th St	Crescent Av	1	1	600	600	105	142	0.159	0.215	A	A
MESA ST	21st St	22nd St	1	1	600	600	28	30	0.042	0.045	A	A
PACIFIC AV	Channel St	Front St	2	2	1600	1600	1,119	1,895	0.636	1.077	B	F
PACIFIC AV	Front St	Upland Av	1	1	700	700	805	1,498	1.045	1.945	F	F
PACIFIC AV	Upland Av	O'Farrell St	2	2	1400	1400	678	1,309	0.440	0.850	A	D
PACIFIC AV	O'Farrell St	1st St	2	2	1400	1400	648	1,181	0.421	0.767	A	C
PACIFIC AV	1st St	3rd St	2	2	1400	1400	648	1,141	0.421	0.741	A	C
PACIFIC AV	3rd St	5th St	2	2	1400	1400	474	872	0.308	0.566	A	A
PACIFIC AV	5th St	7th St	2	2	1400	1400	1,029	1,417	0.668	0.920	B	E
PACIFIC AV	7th St	9th St	2	2	1400	1400	795	1,263	0.516	0.820	A	D
PACIFIC AV	9th St	13th St	2	2	1400	1400	552	965	0.358	0.627	A	B
PACIFIC AV	13th St	14th St	2	2	1400	1400	533	916	0.346	0.595	A	A
PACIFIC AV	14th St	17th St	2	2	1400	1400	507	929	0.329	0.603	A	B
PACIFIC AV	17th St	19th St	2	2	1400	1400	208	546	0.135	0.355	A	A
PACIFIC AV	19th St	22nd St	2	2	1400	1400	131	164	0.085	0.106	A	A
PACIFIC AV	22nd St	23rd St	1	1	700	700	167	268	0.217	0.348	A	A
PACIFIC AV	23rd St	24th St	1	1	700	700	167	248	0.217	0.322	A	A
PACIFIC AV	24th St	26th St	1	1	700	700	167	248	0.217	0.322	A	A
PACIFIC AV	26th St	36th St	1	1	700	700	98	108	0.127	0.140	A	A
PACIFIC AV	36th St	Bluff Pl	1	1	700	700	98	108	0.127	0.140	A	A
GRAND AV	O'Farrell St	1st St	1	1	600	600	45	151	0.068	0.229	A	A
GRAND AV	1st St	3rd St	1	1	600	600	35	254	0.053	0.385	A	A
GRAND AV	3rd St	5th St	1	1	600	600	333	391	0.505	0.592	A	A
GRAND AV	5th St	7th St	1	1	600	600	17	45	0.026	0.068	A	A
GRAND AV	7th St	9th St	1	1	600	600	14	24	0.021	0.036	A	A
GRAND AV	9th St	13th St	1	1	600	600	36	50	0.055	0.076	A	A
GRAND AV	13th St	17th St	1	1	600	600	42	47	0.064	0.071	A	A
GRAND AV	17th St	19th St	1	1	600	600	257	295	0.389	0.447	A	A
GRAND AV	19th St	22nd St	1	1	600	600	183	343	0.277	0.520	A	A
GRAND AV	22nd St	23rd St	1	1	600	600	37	50	0.056	0.076	A	A

Current Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
GRAND AV	23rd St	24th St	1	1	600	600	29	29	0.044	0.044	A	A
CAROLINA ST	Hamilton Av	26th St	1	1	600	600	50	154	0.076	0.233	A	A
CAROLINA ST	26th St	31st St	1	1	600	600	50	154	0.076	0.233	A	A
CAROLINA ST	31st St	36th St	1	1	600	600	45	46	0.068	0.070	A	A
CAROLINA ST	36th St	Shepard St	1	1	600	600	4	29	0.006	0.044	A	A
GAFFEY PL	MacArthur Av	Elberon Av	1	1	600	600	33	84	0.050	0.127	A	A
GAFFEY ST	North City Limit	Westmont Dr	2	2	1600	1600	815	1,359	0.463	0.772	A	C
GAFFEY ST	Westmont Dr	Capitol Dr	2	2	1600	1600	516	1,001	0.293	0.569	A	A
GAFFEY ST	Capitol Dr	Channel St	2	2	1600	1600	666	974	0.378	0.553	A	A
GAFFEY ST	Channel St	Elberon Av	2	2	1600	1600	586	2,694	0.333	1.531	A	F
GAFFEY ST	Elberon Av	Summerland Av	2	2	1600	1600	799	2,428	0.454	1.380	A	F
GAFFEY ST	Summerland Av	Sepulveda St	3	3	2400	2400	1,490	2,559	0.564	0.969	A	E
GAFFEY ST	Sepulveda St	Santa Cruz St	3	3	2400	2400	1,452	2,331	0.550	0.883	A	D
GAFFEY ST	Santa Cruz St	1st St	3	3	2400	2400	1,452	2,331	0.550	0.883	A	D
GAFFEY ST	1st St	3rd St	3	3	2400	2400	1,240	1,940	0.470	0.735	A	C
GAFFEY ST	3rd St	5th St	3	3	2400	2400	653	1,458	0.247	0.552	A	A
GAFFEY ST	5th St	7th St	3	3	2400	2400	633	1,458	0.240	0.552	A	A
GAFFEY ST	7th St	9th St	3	3	2400	2400	574	1,405	0.217	0.532	A	A
GAFFEY ST	9th St	13th St	2	2	1600	1600	452	1,078	0.257	0.613	A	B
GAFFEY ST	13th St	17th St	2	2	1600	1600	420	1,027	0.239	0.584	A	A
GAFFEY ST	17th St	18th St	2	2	1600	1600	354	850	0.201	0.483	A	A
GAFFEY ST	18th St	19th St	2	2	1600	1600	354	850	0.201	0.483	A	A
GAFFEY ST	19th St	22nd St	2	2	1600	1600	517	883	0.294	0.502	A	A
GAFFEY ST	22nd St	23rd St	1	1	800	800	525	1,070	0.597	1.216	A	F
GAFFEY ST	23rd St	25th St	1	1	800	800	408	866	0.464	0.984	A	E
GAFFEY ST	25th St	26th St	1	1	800	800	374	667	0.425	0.758	A	C
GAFFEY ST	26th St	31st St	1	1	800	800	316	541	0.359	0.615	A	B
GAFFEY ST	31st St	Shepard St	1	1	800	800	333	552	0.378	0.627	A	B
MARSHALL CT	Oliver St	Sepulveda St	1	1	600	600	5	26	0.008	0.039	A	A
BARRYWOOD AV	Sandwood Pl	Westmont Dr	1	1	600	600	337	145	0.511	0.220	A	A
BARRYWOOD AV	Millmark Grove St	Capitol Rd	1	1	600	600	335	276	0.508	0.418	A	A
CABRILLO AV	Elberon Av	Summerland Av	1	1	600	600	244	195	0.370	0.295	A	A
CABRILLO AV	Summerland Av	Oliver St	1	1	600	600	5	26	0.008	0.039	A	A
CABRILLO AV	Sepulveda St	1st St	1	1	600	600	18	151	0.027	0.229	A	A
CABRILLO AV	1st St	3rd St	1	1	600	600	163	323	0.247	0.489	A	A
CABRILLO AV	3rd St	7th St	1	1	600	600	109	125	0.165	0.189	A	A
CABRILLO AV	7th St	9th St	1	1	600	600	150	201	0.227	0.305	A	A
CABRILLO AV	9th St	13th St	1	1	600	600	135	246	0.205	0.373	A	A
CABRILLO AV	13th St	17th St	1	1	600	600	114	142	0.173	0.215	A	A
CABRILLO AV	17th St	19th St	1	1	600	600	21	24	0.032	0.036	A	A
CABRILLO AV	19th St	23rd St	1	1	600	600	14	20	0.021	0.030	A	A
CABRILLO AV	23rd St	25th St	1	1	600	600	58	81	0.088	0.123	A	A
CABRILLO AV	25th St	26th St	1	1	600	600	3	8	0.005	0.012	A	A
TAPER AV	Sandwood Pl	Westmont Dr	1	1	600	600	206	211	0.312	0.320	A	A
TAPER AV	Westmont Dr	Barhugh Pl	1	1	600	600	286	381	0.433	0.577	A	A
TAPER AV	Barhugh Pl	Millmark Grove St	1	1	600	600	113	78	0.171	0.118	A	A
MEYLER ST	Capitol Rd	Channel St	1	1	600	600	430	253	0.652	0.383	B	A
BANDINI ST	Elberon Av	Summerland Av	1	1	600	600	35	38	0.053	0.058	A	A
BANDINI ST	Summerland Av	Sepulveda St	1	1	600	600	42	105	0.064	0.159	A	A

Current Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
BANDINI ST	Sepulveda St	Santa Cruz St	1	1	600	600	65	122	0.098	0.185	A	A
ALMA ST	7th St	9th St	1	1	600	600	61	108	0.092	0.164	A	A
ALMA ST	9th St	13th St	1	1	600	600	82	113	0.124	0.171	A	A
ALMA ST	13th St	15th St	1	1	600	600	53	56	0.080	0.085	A	A
ALMA ST	17th St	19th St	1	1	600	600	18	32	0.027	0.048	A	A
ALMA ST	19th St	23rd St	1	1	600	600	42	178	0.064	0.270	A	A
ALMA ST	23rd St	25th St	1	1	600	600	21	19	0.032	0.029	A	A
ALMA ST	25th St	Hamilton Av	1	1	600	600	87	142	0.132	0.215	A	A
ALMA ST	Hamilton Av	30th St	1	1	600	600	154	304	0.233	0.461	A	A
ALMA ST	30th St	37th St	1	1	600	600	108	247	0.164	0.374	A	A
ALMERIA ST	37th St	Paseo Del Mar	1	1	600	600	6	5	0.009	0.008	A	A
HANFORD AV	Sepulveda St (north)	Sepulveda St (south)	1	1	600	600	98	171	0.148	0.259	A	A
HANFORD AV	Elberon Av	Summerland Av	1	1	600	600	46	33	0.070	0.050	A	A
WALKER AV	7th St	9th St	1	1	600	600	48	49	0.073	0.074	A	A
WALKER AV	9th St	13th St	1	1	600	600	97	186	0.147	0.282	A	A
WALKER AV	13th St	17th St	1	1	600	600	43	10	0.065	0.015	A	A
WALKER AV	17th St	19th St	1	1	600	600	15	16	0.023	0.024	A	A
WALKER AV	19th St	23rd St	1	1	600	600	54	134	0.082	0.203	A	A
WALKER AV	23rd St	25th St	1	1	600	600	56	58	0.085	0.088	A	A
WALKER AV	25th St	27th St	1	1	600	600	124	207	0.188	0.314	A	A
27TH ST	Walker Av	Barbara St	1	1	600	600	124	207	0.188	0.314	A	A
BARBARA ST	27th St	31st St	1	1	600	600	34	37	0.052	0.056	A	A
BARBARA ST	31st St	Paseo Del Mar	1	1	600	600	35	31	0.053	0.047	A	A
PATTON AV	Summerland Av	Sepulveda St	1	1	600	600	28	79	0.042	0.120	A	A
PATTON AV	Sepulveda St	1st St	1	1	600	600	20	35	0.030	0.053	A	A
PATTON AV	1st St	3rd St	1	1	600	600	147	160	0.223	0.242	A	A
WEYMOUTH AV	Western Av	7th St	1	1	700	700	120	210	0.156	0.273	A	A
WEYMOUTH AV	7th St	9th St	1	1	700	700	131	221	0.170	0.287	A	A
WEYMOUTH AV	9th St	Averill Park Dr	1	1	700	700	189	473	0.245	0.614	A	B
WEYMOUTH AV	Averill Park Dr	13th St	1	1	700	700	163	371	0.212	0.482	A	A
WEYMOUTH AV	13th St	17th St	1	1	600	600	87	240	0.132	0.364	A	A
WEYMOUTH AV	17th St	19th St	1	1	600	600	47	116	0.071	0.176	A	A
ELANITA DR	19th St	23rd St	1	1	600	600	178	264	0.270	0.400	A	A
DODSON AV	9th St	Averill Park Dr	1	1	600	600	38	97	0.058	0.147	A	A
DODSON AV	Averill Park Dr	Western Av	1	1	600	600	96	231	0.145	0.350	A	A
WESTERN AV	North City Limit	Westmont Dr	2	2	1600	1600	2,103	2,194	1.195	1.247	F	F
WESTERN AV	Westmont Dr	Capitol Dr	2	2	1600	1600	1,647	1,810	0.936	1.028	E	F
WESTERN AV	Capitol Dr	Park Western Dr	2	2	1600	1600	1,529	1,979	0.869	1.124	D	F
WESTERN AV	Park Western Dr	Crestwood St	2	2	1600	1600	1,451	2,199	0.824	1.249	D	F
WESTERN AV	Crestwood St	Summerland Av	2	2	1600	1600	1,465	2,204	0.832	1.252	D	F
WESTERN AV	Summerland Av	Santa Cruz St	2	2	1600	1600	1,562	2,377	0.888	1.351	D	F
WESTERN AV	Santa Cruz St	1st St	2	2	1600	1600	1,556	2,365	0.884	1.344	D	F
WESTERN AV	1st St	Weymouth Av	2	2	1600	1600	1,205	1,913	0.685	1.087	B	F
WESTERN AV	Weymouth Av	Bynner Dr	2	2	1600	1600	1,073	1,695	0.610	0.963	B	E
WESTERN AV	Bynner Dr	9th St	2	2	1600	1600	1,073	1,695	0.610	0.963	B	E
WESTERN AV	9th St	Dodson Av	2	2	1600	1600	1,258	2,016	0.715	1.145	C	F
WESTERN AV	Dodson Av	19th St	2	2	1600	1600	1,274	2,025	0.724	1.151	C	F
WESTERN AV	19th St	25th St	2	2	1600	1600	772	1,421	0.439	0.807	A	D
WESTERN AV	25th St	Paseo Del Mar	1	1	800	800	97	227	0.110	0.258	A	A

Current Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
BYNNER DR (e/w)	El Rey Rd	Western Av	1	1	600	600	46	38	0.070	0.058	A	A
MORAY AV	Morse Dr	25th St	1	1	600	600	92	150	0.139	0.227	A	A
MORAY AV	25th St	26th St	1	1	600	600	40	38	0.061	0.058	A	A
GRAYSBY AV	26th St	35th St	1	1	600	600	148	264	0.224	0.400	A	A
GRAYSBY AV	35th St	Paseo Del Mar	1	1	600	600	6	6	0.009	0.009	A	A
ENROSE AV	Via Colinita	Santa Cruz St	1	1	600	600	17	11	0.026	0.017	A	A
SANTA CRUZ ST (e/w)	Enrose Av	Western Av	1	1	600	600	17	11	0.026	0.017	A	A
MANTIS AV	Cumbre Dr	Morse Dr	1	1	600	600	236	151	0.358	0.229	A	A
ANCHOVY AV	Cumbre Dr	25th St	1	1	600	600	114	161	0.173	0.244	A	A
ANCHOVY AV	25th St	35th St	1	1	600	600	29	27	0.044	0.041	A	A
ANCHOVY AV	35th St	Paseo Del Mar	1	1	600	600	21	21	0.032	0.032	A	A
SANDWOOD PL (e/w)	Amelia Av	Taper Av	1	1	600	600	356	544	0.539	0.824	A	D
SANDWOOD PL (e/w)	Taper Av	Barrywood Av	1	1	600	600	145	337	0.220	0.511	A	A
WESTMONT DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	229	640	0.149	0.416	A	A
WESTMONT DR (e/w)	Barrywood Av	Taper Av	2	2	1400	1400	83	303	0.054	0.197	A	A
WESTMONT DR (e/w)	Taper Av	Western Av	2	2	1400	1400	171	301	0.111	0.195	A	A
MILLMARK GROVE ST (e/w)	Barrywood Av	Taper Av	1	1	600	600	276	335	0.418	0.508	A	A
MILLMARK GROVE ST (e/w)	Taper Av	Amelia Av	1	1	600	600	197	221	0.298	0.335	A	A
CAPITOL DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	313	490	0.203	0.318	A	A
CAPITOL DR (e/w)	Barrywood Av	Meyler St	2	2	1400	1400	148	266	0.096	0.173	A	A
CAPITOL DR (e/w)	Meyler St	Mt Rose Rd	2	2	1400	1400	238	533	0.155	0.346	A	A
CAPITOL DR (e/w)	Mt Rose Rd	Western Av	2	2	1400	1400	382	469	0.248	0.305	A	A
CHANNEL ST (e/w)	John S. Gibson Blvd	Gaffey St	2	2	1600	1600	1,215	1,271	0.690	0.722	B	C
CHANNEL ST (e/w)	Gaffey St	Meyler St	1	1	600	600	514	729	0.779	1.105	C	F
CHANNEL ST (e/w)	Meyler St	Park Western Dr	1	1	600	600	230	338	0.348	0.512	A	A
PARK WESTERN DR	Channel St	Quiglet Pl	1	1	600	600	49	151	0.074	0.229	A	A
PARK WESTERN DR (e/w)	Quiglet Pl.	Western Av	1	1	600	600	70	369	0.106	0.559	A	A
MACARTHUR AV (e/w)	Gaffey Pl	Pacific Av	1	1	600	600	194	255	0.294	0.386	A	A
ELBERON AV (e/w)	Gaffey Pl	Gaffey St	1	1	600	600	33	84	0.050	0.127	A	A
ELBERON AV (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	193	180	0.292	0.273	A	A
ELBERON AV (e/w)	Cabrillo Av	Bandini St	1	1	600	600	28	65	0.042	0.098	A	A
ELBERON AV (e/w)	Bandini St	Hanford Av	1	1	600	600	35	49	0.053	0.074	A	A
SUMMERLAND AV (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	364	700	0.473	0.909	A	E
SUMMERLAND AV (e/w)	Cabrillo Av	Bandini St	1	1	700	700	350	616	0.455	0.800	A	D
SUMMERLAND AV (e/w)	Bandini St	Hanford Av	1	1	700	700	320	525	0.416	0.682	A	B
SUMMERLAND AV (e/w)	Crestwood St	Patton Av	1	1	700	700	353	546	0.458	0.709	A	C
SUMMERLAND AV (e/w)	Patton Av	Western Av	1	1	700	700	422	563	0.548	0.731	A	C
OLIVER ST	Marshall Ct	Cabrillo Av	1	1	600	600	26	5	0.039	0.008	A	A
O'FARRELL ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	232	318	0.352	0.482	A	A
O'FARRELL ST (e/w)	Centre St	Pacific Av	1	1	600	600	177	236	0.268	0.358	A	A
O'FARRELL ST (e/w)	Pacific Av	Grand Av	1	1	600	600	124	282	0.188	0.427	A	A
O'FARRELL ST (e/w)	Grand Av	Gaffey St	1	1	600	600	276	282	0.418	0.427	A	A
SEPULVEDA ST (e/w)	Gaffey St	Marshall Ct	1	1	600	600	130	321	0.197	0.486	A	A
SEPULVEDA ST (e/w)	Marshall Ct	Cabrillo Av	1	1	600	600	77	278	0.117	0.421	A	A
SEPULVEDA ST (e/w)	Cabrillo Av	Bandini St	1	1	600	600	62	129	0.094	0.195	A	A
SEPULVEDA ST (e/w)	Bandini St	Hanford Av	1	1	600	600	98	171	0.148	0.259	A	A
SEPULVEDA ST (e/w)	Hanford Av	Patton Av	1	1	600	600	18	19	0.027	0.029	A	A
SEPULVEDA ST (e/w)	Patton Av	Harbor View Av	1	1	600	600	18	19	0.027	0.029	A	A
1ST ST (e/w)	Harbor Blvd	Centre St	1	1	700	700	4	4	0.005	0.005	A	A

Current Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
1ST ST (e/w)	Centre St	Pacific Av	1	1	700	700	44	4	0.057	0.005	A	A
1ST ST (e/w)	Pacific Av	Grand Av	1	1	700	700	37	34	0.048	0.044	A	A
1ST ST (e/w)	Grand Av	Gaffey St	1	1	700	700	103	43	0.134	0.056	A	A
1ST ST (e/w)	Gaffey	Cabrillo Av	1	1	700	700	714	789	0.927	1.025	E	F
1ST ST (e/w)	Cabrillo Av	Bandini St	1	1	700	700	678	727	0.881	0.944	D	E
1ST ST (e/w)	Bandini St	Patton Av	1	1	700	700	593	641	0.770	0.832	C	D
1ST ST (e/w)	Patton Av	Western Av	1	1	700	700	764	814	0.992	1.057	E	F
1ST ST (e/w)	Western Av	West City Limit	1	1	600	600	290	437	0.439	0.662	A	B
3RD ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	231	373	0.350	0.565	A	A
3RD ST (e/w)	Centre St	Pacific Av	1	1	600	600	402	628	0.609	0.952	B	E
3RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	343	330	0.520	0.500	A	A
3RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	481	587	0.729	0.889	C	D
3RD ST (e/w)	Cabrillo Av	Meyler St	1	1	600	600	7	24	0.011	0.036	A	A
3RD ST (e/w)	Hanford Av	Patton Av	1	1	600	600	50	45	0.076	0.068	A	A
5TH ST (e/w)	Harbor Blvd	Centre St	2	2	1400	1400	334	396	0.217	0.257	A	A
5TH ST (e/w)	Centre St	Mesa St	1	1	700	700	363	334	0.471	0.434	A	A
5TH ST (e/w)	Mesa St	Pacific Av	1	1	700	700	523	510	0.679	0.662	B	B
5TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	358	354	0.465	0.460	A	A
5TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	11	38	0.014	0.049	A	A
7TH ST (e/w)	Harbor Blvd	Beacon St	1	1	700	700	300	488	0.390	0.634	A	B
7TH ST (e/w)	Beacon St	Centre St	1	1	700	700	300	488	0.390	0.634	A	B
7TH ST (e/w)	Centre St	Pacific Av	1	1	700	700	283	356	0.368	0.462	A	A
7TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	36	68	0.047	0.088	A	A
7TH ST (e/w)	Grand Av	Gaffey Av	1	1	700	700	36	84	0.047	0.109	A	A
7TH ST (e/w)	Gaffey Av	Cabrillo Av	1	1	700	700	90	130	0.117	0.169	A	A
7TH ST (e/w)	Cabrillo Av	Bandini St / Alma St	1	1	700	700	30	35	0.039	0.045	A	A
7TH ST (e/w)	Bandini St / Alma St	Walker Av	1	1	700	700	33	46	0.043	0.060	A	A
7TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	27	44	0.035	0.057	A	A
9TH ST (e/w)	Pacific Av	Grand Av	1	1	800	800	300	360	0.341	0.409	A	A
9TH ST (e/w)	Grand Av	Gaffey St	1	1	800	800	310	364	0.352	0.414	A	A
9TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	551	812	0.626	0.923	B	E
9TH ST (e/w)	Cabrillo Av	Meyler St	1	1	800	800	386	563	0.439	0.640	A	B
9TH ST (e/w)	Meyler St	Alma St	1	1	800	800	386	563	0.439	0.640	A	B
9TH ST (e/w)	Alma St	Walker St	1	1	800	800	430	622	0.489	0.707	A	C
9TH ST (e/w)	Walker St	Weymouth Av	1	1	800	800	332	436	0.377	0.495	A	A
9TH ST (e/w)	Weymouth Av	Dodson Av	1	1	800	800	269	178	0.306	0.202	A	A
9TH ST (e/w)	Dodson Av	Western Av	1	1	800	800	365	216	0.415	0.245	A	A
9TH ST (e/w)	Western Av	Miraleste Dr	1	1	800	800	562	278	0.639	0.316	B	A
MIRALESTE DR	9th St	West City Limit	1	1	800	800	549	236	0.624	0.268	B	A
AVERILL PARK DR (e/w)	Weymouth Av	Dodson Av	1	1	600	600	57	133	0.086	0.202	A	A
13TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	35	60	0.045	0.078	A	A
13TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	35	60	0.045	0.078	A	A
13TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	138	186	0.179	0.242	A	A
13TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	12	26	0.016	0.034	A	A
13TH ST (e/w)	Alma St	Walker Av	1	1	700	700	65	76	0.084	0.099	A	A
13TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	64	74	0.083	0.096	A	A
GULCH RD (e/w)	Harbor Blvd	Beacon St	1	1	600	600	111	191	0.168	0.289	A	A
14TH ST (e/w)	Beacon St	Centre St	1	1	600	600	86	149	0.130	0.226	A	A
14TH ST (e/w)	Centre St	Pacific Av	1	1	600	600	75	114	0.114	0.173	A	A

Current Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
17TH ST (e/w)	Pacific Av	Grand Av	1	1	600	600	467	390	0.708	0.591	C	A
17TH ST (e/w)	Grand Av	Gaffey St	1	1	600	600	211	97	0.320	0.147	A	A
17TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	15	14	0.023	0.021	A	A
17TH ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	35	33	0.053	0.050	A	A
17TH ST (e/w)	Alma St	Leland St	1	1	600	600	42	29	0.064	0.044	A	A
17TH ST (e/w)	Leland St	Walker Av	1	1	600	600	42	29	0.064	0.044	A	A
17TH ST (e/w)	Walker Av	Weymouth Av	1	1	600	600	25	40	0.038	0.061	A	A
19TH ST (e/w)	Crescent Av	Pacific Av	1	1	600	600	230	181	0.348	0.274	A	A
19TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	66	327	0.086	0.425	A	A
19TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	345	484	0.448	0.629	A	B
19TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	95	366	0.123	0.475	A	A
19TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	90	358	0.117	0.465	A	A
19TH ST (e/w)	Alma St	Walker Av	1	1	700	700	180	325	0.234	0.422	A	A
19TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	172	237	0.223	0.308	A	A
19TH ST (e/w)	Weymouth Av	Western Av	1	1	700	700	385	433	0.500	0.562	A	A
MORSE DR (e/w)	Western Av	Mantis Av	1	1	600	600	236	151	0.358	0.229	A	A
CUMBRE DR (e/w)	Mantis Av	Pescadores Av	1	1	600	600	151	236	0.229	0.358	A	A
CUMBRE DR (e/w)	Pescadores Av	Anchovy Av	1	1	600	600	151	236	0.229	0.358	A	A
CUMBRE DR (e/w)	Anchovy Av	Mermaid Dr	1	1	600	600	39	44	0.059	0.067	A	A
MERMAID DR	Cumbre Dr	25th St	1	1	600	600	50	29	0.076	0.044	A	A
21ST ST (e/w)	Mesa St	Crescent Av	1	1	600	600	28	30	0.042	0.045	A	A
22ND ST (e/w)	Via Cabrillo Marina	Mesa St	1	1	700	700	273	564	0.355	0.732	A	C
22ND ST (e/w)	Mesa St	Pacific Av	1	1	700	700	273	564	0.355	0.732	A	C
22ND ST (e/w)	Pacific Av	Grand Av	1	1	700	700	205	424	0.266	0.551	A	A
22ND ST (e/w)	Grand Av	Gaffey St	1	1	700	700	156	339	0.203	0.440	A	A
23RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	31	20	0.047	0.030	A	A
23RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	39	20	0.059	0.030	A	A
23RD ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	239	353	0.362	0.535	A	A
23RD ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	204	301	0.309	0.456	A	A
23RD ST (e/w)	Alma St	Walker Av	1	1	600	600	122	184	0.185	0.279	A	A
23RD ST (e/w)	Walker Av	Elanita Dr	1	1	600	600	184	134	0.279	0.203	A	A
25TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	226	288	0.257	0.327	A	A
25TH ST (e/w)	Cabrillo Av	Alma St	1	1	800	800	246	325	0.280	0.369	A	A
25TH ST (e/w)	Alma St	Walker Av	1	1	800	800	393	416	0.447	0.473	A	A
25TH ST (e/w)	Walker Av	Patton Av	1	1	800	800	417	358	0.474	0.407	A	A
25TH ST (e/w)	Patton Av	Western Av	1	1	800	800	417	358	0.474	0.407	A	A
25TH ST (e/w)	Western Av	Moray Av	2	2	1600	1600	607	1,072	0.345	0.609	A	B
25TH ST (e/w)	Moray Av	Anchovy Av	2	2	1600	1600	446	796	0.253	0.452	A	A
25TH ST (e/w)	Anchovy Av	Mermaid Dr	1	1	800	800	463	812	0.526	0.923	A	E
25TH ST (e/w)	Mermaid Dr	West City Limit	1	1	800	800	466	814	0.530	0.925	A	E
26TH ST (e/w)	Pacific Av	Carolina St	1	1	600	600	69	138	0.105	0.209	A	A
26TH ST (e/w)	Carolina St	Gaffey St	1	1	600	600	31	23	0.047	0.035	A	A
26TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	57	148	0.086	0.224	A	A
26TH ST (e/w)	Cabrillo Av	Hamilton Av	1	1	600	600	61	157	0.092	0.238	A	A
26TH ST (e/w)	Moray Av	Graysby Av	1	1	600	600	148	264	0.224	0.400	A	A
HAMILTON AV (e/w)	26th St	Alma St	1	1	600	600	61	157	0.092	0.238	A	A
30TH ST (e/w)	Gaffey St	Alma St	1	1	600	600	132	241	0.200	0.365	A	A
31ST ST (e/w)	Carolina St	Gaffey St	1	1	600	600	16	10	0.024	0.015	A	A
35TH ST (e/w)	Graysby Av	Anchovy Av	1	1	600	600	41	4	0.062	0.006	A	A

Current Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
37TH ST (e/w)	Alma St	Almeria St	1	1	600	600	30	32	0.045	0.048	A	A
SHEPARD ST (e/w)	Pacific Ave	Carolina St	1	1	700	700	105	131	0.136	0.170	A	A
SHEPARD ST (e/w)	Carolina St	Gaffey St	1	1	700	700	103	126	0.134	0.164	A	A
PASEO DEL MAR (e/w)	Gaffey St	Roxbury St	1	1	700	700	10	18	0.013	0.023	A	A
PASEO DEL MAR (e/w)	Roxbury St	Almeria St	1	1	700	700	10	18	0.013	0.023	A	A
PASEO DEL MAR (e/w)	Almeria St	Barbara St	1	1	700	700	12	18	0.016	0.023	A	A
PASEO DEL MAR (e/w)	Barbara St	Weymouth Av	1	1	700	700	10	16	0.013	0.021	A	A
PASEO DEL MAR (e/w)	Weymouth Av	Western Av	1	1	700	700	10	16	0.013	0.021	A	A
PASEO DEL MAR (e/w)	Western Av	Graysby Av	1	1	700	700	107	243	0.139	0.316	A	A
PASEO DEL MAR (e/w)	Graysby Av	Anchovy Av	1	1	700	700	107	242	0.139	0.314	A	A
PASEO DEL MAR (e/w)	Anchovy Av	Catalina Vista	1	1	700	700	116	252	0.151	0.327	A	A

Total Links	610	V/C
Links at E or F (with	37	6%
		0.662

Proposed Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
JOHN S. GIBSON BLVD	North City Limit	Channel St	2	2	1600	1600	1,589	2,473	0.903	1.405	E	F
FRONT ST	Pacific Av	Swinford St	2	2	1600	1600	567	437	0.322	0.248	A	A
HARBOR BLVD	Swinford St	O'Farrell St	3	3	2400	2400	1,630	1,718	0.617	0.651	B	B
HARBOR BLVD	O'Farrell St	1st St	3	3	2400	2400	1,436	1,450	0.544	0.549	A	A
HARBOR BLVD	1st St	3rd St	3	3	2400	2400	1,456	1,450	0.552	0.549	A	A
HARBOR BLVD	3rd St	5th St	3	3	2400	2400	1,179	1,065	0.447	0.403	A	A
HARBOR BLVD	5th St	7th St	3	3	2400	2400	828	652	0.314	0.247	A	A
HARBOR BLVD	7th St	14th St	2	2	1600	1600	642	613	0.365	0.348	A	A
HARBOR BLVD	14th St	Crescent Av	2	2	1600	1600	509	510	0.289	0.290	A	A
CRESCENT AV	Harbor Blvd	19th St	1	1	600	600	36	49	0.055	0.074	A	A
CRESCENT AV	19th St	21st St	1	1	600	600	31	39	0.047	0.059	A	A
BEACON ST	7th St	14th St	1	1	600	600	48	32	0.073	0.048	A	A
CENTRE ST	O'Farrell St	1st St	1	1	600	600	64	95	0.097	0.144	A	A
CENTRE ST	1st St	2nd St	1	1	700	700	64	116	0.083	0.151	A	A
CENTRE ST	2nd St	3rd St	1	1	700	700	64	116	0.083	0.151	A	A
CENTRE ST	3rd St	5th St	2	2	1400	1400	255	209	0.166	0.136	A	A
CENTRE ST	5th St	6th St	1	1	700	700	589	606	0.765	0.787	C	C
CENTRE ST	6th St	7th St	1	1	700	700	589	606	0.765	0.787	C	C
CENTRE ST	7th St	14th St	1	1	600	600	539	699	0.817	1.059	D	F
CENTRE ST	14th St	Crescent Av	1	1	600	600	101	145	0.153	0.220	A	A
MESA ST	21st St	22nd St	1	1	600	600	31	39	0.047	0.059	A	A
PACIFIC AV	Channel St	Front St	2	2	1600	1600	1,075	1,906	0.611	1.083	B	F
PACIFIC AV	Front St	Upland Av	1	1	700	700	795	1,494	1.032	1.940	F	F
PACIFIC AV	Upland Av	O'Farrell St	2	2	1400	1400	669	1,301	0.434	0.845	A	D
PACIFIC AV	O'Farrell St	1st St	2	2	1400	1400	646	1,143	0.419	0.742	A	C
PACIFIC AV	1st St	3rd St	2	2	1400	1400	646	1,123	0.419	0.729	A	C
PACIFIC AV	3rd St	5th St	2	2	1400	1400	507	884	0.329	0.574	A	A
PACIFIC AV	5th St	7th St	2	2	1400	1400	1,080	1,456	0.701	0.945	C	E
PACIFIC AV	7th St	9th St	2	2	1400	1400	818	1,244	0.531	0.808	A	D
PACIFIC AV	9th St	13th St	2	2	1400	1400	568	948	0.369	0.616	A	B
PACIFIC AV	13th St	14th St	2	2	1400	1400	547	904	0.355	0.587	A	A
PACIFIC AV	14th St	17th St	2	2	1400	1400	517	908	0.336	0.590	A	A
PACIFIC AV	17th St	19th St	2	2	1400	1400	194	522	0.126	0.339	A	A
PACIFIC AV	19th St	22nd St	2	2	1400	1400	124	150	0.081	0.097	A	A
PACIFIC AV	22nd St	23rd St	1	1	700	700	165	263	0.214	0.342	A	A
PACIFIC AV	23rd St	24th St	1	1	700	700	165	239	0.214	0.310	A	A
PACIFIC AV	24th St	26th St	1	1	700	700	165	239	0.214	0.310	A	A
PACIFIC AV	26th St	36th St	1	1	700	700	97	108	0.126	0.140	A	A
PACIFIC AV	36th St	Bluff Pl	1	1	700	700	97	108	0.126	0.140	A	A
GRAND AV	O'Farrell St	1st St	1	1	600	600	33	281	0.050	0.426	A	A
GRAND AV	1st St	3rd St	1	1	600	600	20	384	0.030	0.582	A	A
GRAND AV	3rd St	5th St	1	1	600	600	351	397	0.532	0.602	A	B
GRAND AV	5th St	7th St	1	1	600	600	22	31	0.033	0.047	A	A
GRAND AV	7th St	9th St	1	1	600	600	17	13	0.026	0.020	A	A
GRAND AV	9th St	13th St	1	1	600	600	49	50	0.074	0.076	A	A
GRAND AV	13th St	17th St	1	1	600	600	39	31	0.059	0.047	A	A
GRAND AV	17th St	19th St	1	1	600	600	279	300	0.423	0.455	A	A
GRAND AV	19th St	22nd St	1	1	600	600	179	335	0.271	0.508	A	A
GRAND AV	22nd St	23rd St	1	1	600	600	25	32	0.038	0.048	A	A

Proposed Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
GRAND AV	23rd St	24th St	1	1	600	600	44	46	0.067	0.070	A	A
CAROLINA ST	Hamilton Av	26th St	1	1	600	600	53	136	0.080	0.206	A	A
CAROLINA ST	26th St	31st St	1	1	600	600	53	136	0.080	0.206	A	A
CAROLINA ST	31st St	36th St	1	1	600	600	38	39	0.058	0.059	A	A
CAROLINA ST	36th St	Shepard St	1	1	600	600	4	50	0.006	0.076	A	A
GAFFEY PL	MacArthur Av	Elberon Av	1	1	600	600	30	77	0.045	0.117	A	A
GAFFEY ST	North City Limit	Westmont Dr	2	2	1600	1600	980	1,450	0.557	0.824	A	D
GAFFEY ST	Westmont Dr	Capitol Dr	2	2	1600	1600	874	922	0.497	0.524	A	A
GAFFEY ST	Capitol Dr	Channel St	2	2	1600	1600	731	1,090	0.415	0.619	A	B
GAFFEY ST	Channel St	Elberon Av	2	2	1600	1600	590	2,710	0.335	1.540	A	F
GAFFEY ST	Elberon Av	Summerland Av	2	2	1600	1600	810	2,431	0.460	1.381	A	F
GAFFEY ST	Summerland Av	Sepulveda St	3	3	2400	2400	1,501	2,526	0.569	0.957	A	E
GAFFEY ST	Sepulveda St	Santa Cruz St	3	3	2400	2400	1,488	2,161	0.564	0.819	A	D
GAFFEY ST	Santa Cruz St	1st St	3	3	2400	2400	1,488	2,161	0.564	0.819	A	D
GAFFEY ST	1st St	3rd St	3	3	2400	2400	1,276	1,847	0.483	0.700	A	B
GAFFEY ST	3rd St	5th St	3	3	2400	2400	668	1,449	0.253	0.549	A	A
GAFFEY ST	5th St	7th St	3	3	2400	2400	622	1,450	0.236	0.549	A	A
GAFFEY ST	7th St	9th St	3	3	2400	2400	560	1,370	0.212	0.519	A	A
GAFFEY ST	9th St	13th St	2	2	1600	1600	441	1,025	0.251	0.582	A	A
GAFFEY ST	13th St	17th St	2	2	1600	1600	415	971	0.236	0.552	A	A
GAFFEY ST	17th St	18th St	2	2	1600	1600	338	799	0.192	0.454	A	A
GAFFEY ST	18th St	19th St	2	2	1600	1600	338	799	0.192	0.454	A	A
GAFFEY ST	19th St	22nd St	2	2	1600	1600	522	852	0.297	0.484	A	A
GAFFEY ST	22nd St	23rd St	1	1	800	800	543	1,079	0.617	1.226	B	F
GAFFEY ST	23rd St	25th St	1	1	800	800	420	857	0.477	0.974	A	E
GAFFEY ST	25th St	26th St	1	1	800	800	378	689	0.430	0.783	A	C
GAFFEY ST	26th St	31st St	1	1	800	800	320	536	0.364	0.609	A	B
GAFFEY ST	31st St	Shepard St	1	1	800	800	337	548	0.383	0.623	A	B
MARSHALL CT	Oliver St	Sepulveda St	1	1	600	600	9	24	0.014	0.036	A	A
BARRYWOOD AV	Sandwood Pl	Westmont Dr	1	1	600	600	330	147	0.500	0.223	A	A
BARRYWOOD AV	Millmark Grove St	Capitol Rd	1	1	600	600	346	274	0.524	0.415	A	A
CABRILLO AV	Elberon Av	Summerland Av	1	1	600	600	236	191	0.358	0.289	A	A
CABRILLO AV	Summerland Av	Oliver St	1	1	600	600	9	24	0.014	0.036	A	A
CABRILLO AV	Sepulveda St	1st St	1	1	600	600	16	150	0.024	0.227	A	A
CABRILLO AV	1st St	3rd St	1	1	600	600	170	308	0.258	0.467	A	A
CABRILLO AV	3rd St	7th St	1	1	600	600	100	93	0.152	0.141	A	A
CABRILLO AV	7th St	9th St	1	1	600	600	149	188	0.226	0.285	A	A
CABRILLO AV	9th St	13th St	1	1	600	600	134	248	0.203	0.376	A	A
CABRILLO AV	13th St	17th St	1	1	600	600	115	142	0.174	0.215	A	A
CABRILLO AV	17th St	19th St	1	1	600	600	20	26	0.030	0.039	A	A
CABRILLO AV	19th St	23rd St	1	1	600	600	12	22	0.018	0.033	A	A
CABRILLO AV	23rd St	25th St	1	1	600	600	71	81	0.108	0.123	A	A
CABRILLO AV	25th St	26th St	1	1	600	600	3	8	0.005	0.012	A	A
TAPER AV	Sandwood Pl	Westmont Dr	1	1	600	600	215	209	0.326	0.317	A	A
TAPER AV	Westmont Dr	Barhugh Pl	1	1	600	600	297	383	0.450	0.580	A	A
TAPER AV	Barhugh Pl	Millmark Grove St	1	1	600	600	120	80	0.182	0.121	A	A
MEYLER ST	Capitol Rd	Channel St	1	1	600	600	451	249	0.683	0.377	B	A
BANDINI ST	Elberon Av	Summerland Av	1	1	600	600	26	4	0.039	0.006	A	A
BANDINI ST	Summerland Av	Sepulveda St	1	1	600	600	54	156	0.082	0.236	A	A

Proposed Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
BANDINI ST	Sepulveda St	Santa Cruz St	1	1	600	600	65	205	0.098	0.311	A	A
ALMA ST	7th St	9th St	1	1	600	600	53	115	0.080	0.174	A	A
ALMA ST	9th St	13th St	1	1	600	600	83	114	0.126	0.173	A	A
ALMA ST	13th St	15th St	1	1	600	600	51	52	0.077	0.079	A	A
ALMA ST	17th St	19th St	1	1	600	600	18	32	0.027	0.048	A	A
ALMA ST	19th St	23rd St	1	1	600	600	40	160	0.061	0.242	A	A
ALMA ST	23rd St	25th St	1	1	600	600	22	19	0.033	0.029	A	A
ALMA ST	25th St	Hamilton Av	1	1	600	600	91	149	0.138	0.226	A	A
ALMA ST	Hamilton Av	30th St	1	1	600	600	157	315	0.238	0.477	A	A
ALMA ST	30th St	37th St	1	1	600	600	109	255	0.165	0.386	A	A
ALMERIA ST	37th St	Paseo Del Mar	1	1	600	600	6	4	0.009	0.006	A	A
HANFORD AV	Sepulveda St (north)	Sepulveda St (south)	1	1	600	600	108	167	0.164	0.253	A	A
HANFORD AV	Elberon Av	Summerland Av	1	1	600	600	43	29	0.065	0.044	A	A
WALKER AV	7th St	9th St	1	1	600	600	41	43	0.062	0.065	A	A
WALKER AV	9th St	13th St	1	1	600	600	97	187	0.147	0.283	A	A
WALKER AV	13th St	17th St	1	1	600	600	47	10	0.071	0.015	A	A
WALKER AV	17th St	19th St	1	1	600	600	15	18	0.023	0.027	A	A
WALKER AV	19th St	23rd St	1	1	600	600	56	154	0.085	0.233	A	A
WALKER AV	23rd St	25th St	1	1	600	600	64	69	0.097	0.105	A	A
WALKER AV	25th St	27th St	1	1	600	600	155	182	0.235	0.276	A	A
27TH ST	Walker Av	Barbara St	1	1	600	600	155	182	0.235	0.276	A	A
BARBARA ST	27th St	31st St	1	1	600	600	36	25	0.055	0.038	A	A
BARBARA ST	31st St	Paseo Del Mar	1	1	600	600	36	46	0.055	0.070	A	A
PATTON AV	Summerland Av	Sepulveda St	1	1	600	600	34	86	0.052	0.130	A	A
PATTON AV	Sepulveda St	1st St	1	1	600	600	20	36	0.030	0.055	A	A
PATTON AV	1st St	3rd St	1	1	600	600	147	158	0.223	0.239	A	A
WEYMOUTH AV	Western Av	7th St	1	1	700	700	129	198	0.168	0.257	A	A
WEYMOUTH AV	7th St	9th St	1	1	700	700	140	210	0.182	0.273	A	A
WEYMOUTH AV	9th St	Averill Park Dr	1	1	700	700	196	504	0.255	0.655	A	B
WEYMOUTH AV	Averill Park Dr	13th St	1	1	700	700	169	404	0.219	0.525	A	A
WEYMOUTH AV	13th St	17th St	1	1	600	600	86	273	0.130	0.414	A	A
WEYMOUTH AV	17th St	19th St	1	1	600	600	51	144	0.077	0.218	A	A
ELANITA DR	19th St	23rd St	1	1	600	600	199	287	0.302	0.435	A	A
DODSON AV	9th St	Averill Park Dr	1	1	600	600	37	99	0.056	0.150	A	A
DODSON AV	Averill Park Dr	Western Av	1	1	600	600	99	234	0.150	0.355	A	A
WESTERN AV	North City Limit	Westmont Dr	2	2	1600	1600	2,058	2,226	1.169	1.265	F	F
WESTERN AV	Westmont Dr	Capitol Dr	2	2	1600	1600	1,651	1,834	0.938	1.042	E	F
WESTERN AV	Capitol Dr	Park Western Dr	2	2	1600	1600	1,563	1,992	0.888	1.132	D	F
WESTERN AV	Park Western Dr	Crestwood St	2	2	1600	1600	1,484	2,189	0.843	1.244	D	F
WESTERN AV	Crestwood St	Summerland Av	2	2	1600	1600	1,497	2,193	0.851	1.246	D	F
WESTERN AV	Summerland Av	Santa Cruz St	2	2	1600	1600	1,587	2,365	0.902	1.344	E	F
WESTERN AV	Santa Cruz St	1st St	2	2	1600	1600	1,578	2,354	0.897	1.338	D	F
WESTERN AV	1st St	Weymouth Av	2	2	1600	1600	1,240	1,924	0.705	1.093	C	F
WESTERN AV	Weymouth Av	Bynner Dr	2	2	1600	1600	1,100	1,719	0.625	0.977	B	E
WESTERN AV	Bynner Dr	9th St	2	2	1600	1600	1,100	1,719	0.625	0.977	B	E
WESTERN AV	9th St	Dodson Av	2	2	1600	1600	1,286	2,027	0.731	1.152	C	F
WESTERN AV	Dodson Av	19th St	2	2	1600	1600	1,302	2,035	0.740	1.156	C	F
WESTERN AV	19th St	25th St	2	2	1600	1600	794	1,420	0.451	0.807	A	D
WESTERN AV	25th St	Paseo Del Mar	1	1	800	800	103	226	0.117	0.257	A	A

Proposed Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
BYNNER DR (e/w)	El Rey Rd	Western Av	1	1	600	600	29	48	0.044	0.073	A	A
MORAY AV	Morse Dr	25th St	1	1	600	600	98	182	0.148	0.276	A	A
MORAY AV	25th St	26th St	1	1	600	600	47	42	0.071	0.064	A	A
GRAYSBY AV	26th St	35th St	1	1	600	600	154	287	0.233	0.435	A	A
GRAYSBY AV	35th St	Paseo Del Mar	1	1	600	600	7	7	0.011	0.011	A	A
ENROSE AV	Via Colinita	Santa Cruz St	1	1	600	600	16	17	0.024	0.026	A	A
SANTA CRUZ ST (e/w)	Enrose Av	Western Av	1	1	600	600	16	17	0.024	0.026	A	A
MANTIS AV	Cumbre Dr	Morse Dr	1	1	600	600	232	151	0.352	0.229	A	A
ANCHOVY AV	Cumbre Dr	25th St	1	1	600	600	113	159	0.171	0.241	A	A
ANCHOVY AV	25th St	35th St	1	1	600	600	30	27	0.045	0.041	A	A
ANCHOVY AV	35th St	Paseo Del Mar	1	1	600	600	22	21	0.033	0.032	A	A
SANDWOOD PL (e/w)	Amelia Av	Taper Av	1	1	600	600	357	546	0.541	0.827	A	D
SANDWOOD PL (e/w)	Taper Av	Barrywood Av	1	1	600	600	147	330	0.223	0.500	A	A
WESTMONT DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	245	667	0.159	0.433	A	A
WESTMONT DR (e/w)	Barrywood Av	Taper Av	2	2	1400	1400	98	336	0.064	0.218	A	A
WESTMONT DR (e/w)	Taper Av	Western Av	2	2	1400	1400	185	332	0.120	0.216	A	A
MILLMARK GROVE ST (e/w)	Barrywood Av	Taper Av	1	1	600	600	274	346	0.415	0.524	A	A
MILLMARK GROVE ST (e/w)	Taper Av	Amelia Av	1	1	600	600	193	225	0.292	0.341	A	A
CAPITOL DR (e/w)	Barrywood Av	Barrywood Av	2	2	1400	1400	334	551	0.217	0.358	A	A
CAPITOL DR (e/w)	Barrywood Av	Meyler St	2	2	1400	1400	167	311	0.108	0.202	A	A
CAPITOL DR (e/w)	Meyler St	Mt Rose Rd	2	2	1400	1400	243	590	0.158	0.383	A	A
CAPITOL DR (e/w)	Mt Rose Rd	Western Av	2	2	1400	1400	428	483	0.278	0.314	A	A
CHANNEL ST (e/w)	John S. Gibson Blvd	Gaffey St	2	2	1600	1600	1,258	1,314	0.715	0.747	C	C
CHANNEL ST (e/w)	Gaffey St	Meyler St	1	1	600	600	506	717	0.767	1.086	C	F
CHANNEL ST (e/w)	Meyler St	Park Western Dr	1	1	600	600	233	305	0.353	0.462	A	A
PARK WESTERN DR	Channel St	Quiglet Pl	1	1	600	600	41	127	0.062	0.192	A	A
PARK WESTERN DR (e/w)	Quiglet Pl.	Western Av	1	1	600	600	69	346	0.105	0.524	A	A
MACARTHUR AV (e/w)	Gaffey Pl	Pacific Av	1	1	600	600	194	261	0.294	0.395	A	A
ELBERON AV (e/w)	Gaffey Pl	Gaffey St	1	1	600	600	30	77	0.045	0.117	A	A
ELBERON AV (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	188	176	0.285	0.267	A	A
ELBERON AV (e/w)	Cabrillo Av	Bandini St	1	1	600	600	30	63	0.045	0.095	A	A
ELBERON AV (e/w)	Bandini St	Hanford Av	1	1	600	600	36	41	0.055	0.062	A	A
SUMMERLAND AV (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	372	743	0.483	0.965	A	E
SUMMERLAND AV (e/w)	Cabrillo Av	Bandini St	1	1	700	700	352	663	0.457	0.861	A	D
SUMMERLAND AV (e/w)	Bandini St	Hanford Av	1	1	700	700	315	529	0.409	0.687	A	B
SUMMERLAND AV (e/w)	Crestwood St	Patton Av	1	1	700	700	346	546	0.449	0.709	A	C
SUMMERLAND AV (e/w)	Patton Av	Western Av	1	1	700	700	419	568	0.544	0.738	A	C
OLIVER ST	Marshall Ct	Cabrillo Av	1	1	600	600	24	9	0.036	0.014	A	A
O'FARRELL ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	248	301	0.376	0.456	A	A
O'FARRELL ST (e/w)	Centre St	Pacific Av	1	1	600	600	199	220	0.302	0.333	A	A
O'FARRELL ST (e/w)	Pacific Av	Grand Av	1	1	600	600	133	288	0.202	0.436	A	A
O'FARRELL ST (e/w)	Grand Av	Gaffey St	1	1	600	600	414	288	0.627	0.436	B	A
SEPULVEDA ST (e/w)	Gaffey St	Marshall Ct	1	1	600	600	128	355	0.194	0.538	A	A
SEPULVEDA ST (e/w)	Marshall Ct	Cabrillo Av	1	1	600	600	75	308	0.114	0.467	A	A
SEPULVEDA ST (e/w)	Cabrillo Av	Bandini St	1	1	600	600	60	158	0.091	0.239	A	A
SEPULVEDA ST (e/w)	Bandini St	Hanford Av	1	1	600	600	108	167	0.164	0.253	A	A
SEPULVEDA ST (e/w)	Hanford Av	Patton Av	1	1	600	600	18	15	0.027	0.023	A	A
SEPULVEDA ST (e/w)	Patton Av	Harbor View Av	1	1	600	600	18	15	0.027	0.023	A	A
1ST ST (e/w)	Harbor Blvd	Centre St	1	1	700	700	4	4	0.005	0.005	A	A

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Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
1ST ST (e/w)	Centre St	Pacific Av	1	1	700	700	24	4	0.031	0.005	A	A
1ST ST (e/w)	Pacific Av	Grand Av	1	1	700	700	50	50	0.065	0.065	A	A
1ST ST (e/w)	Grand Av	Gaffey St	1	1	700	700	102	20	0.132	0.026	A	A
1ST ST (e/w)	Gaffey	Cabrillo Av	1	1	700	700	722	741	0.938	0.962	E	E
1ST ST (e/w)	Cabrillo Av	Bandini St	1	1	700	700	682	699	0.886	0.908	D	E
1ST ST (e/w)	Bandini St	Patton Av	1	1	700	700	604	679	0.784	0.882	C	D
1ST ST (e/w)	Patton Av	Western Av	1	1	700	700	772	853	1.003	1.108	F	F
1ST ST (e/w)	Western Av	West City Limit	1	1	600	600	291	458	0.441	0.694	A	B
3RD ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	276	384	0.418	0.582	A	A
3RD ST (e/w)	Centre St	Pacific Av	1	1	600	600	461	666	0.698	1.009	B	F
3RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	373	353	0.565	0.535	A	A
3RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	398	607	0.603	0.920	B	E
3RD ST (e/w)	Cabrillo Av	Meyler St	1	1	600	600	7	8	0.011	0.012	A	A
3RD ST (e/w)	Hanford Av	Patton Av	1	1	600	600	42	38	0.064	0.058	A	A
5TH ST (e/w)	Harbor Blvd	Centre St	2	2	1400	1400	399	486	0.259	0.316	A	A
5TH ST (e/w)	Centre St	Mesa St	1	1	700	700	375	372	0.487	0.483	A	A
5TH ST (e/w)	Mesa St.	Pacific Av	1	1	700	700	610	626	0.792	0.813	C	D
5TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	376	393	0.488	0.510	A	A
5TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	10	64	0.013	0.083	A	A
7TH ST (e/w)	Harbor Blvd	Beacon St	1	1	700	700	319	505	0.414	0.656	A	B
7TH ST (e/w)	Beacon St	Centre St	1	1	700	700	333	518	0.432	0.673	A	B
7TH ST (e/w)	Centre St	Pacific Av	1	1	700	700	461	487	0.599	0.632	A	B
7TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	34	58	0.044	0.075	A	A
7TH ST (e/w)	Grand Av	Gaffey Av	1	1	700	700	39	77	0.051	0.100	A	A
7TH ST (e/w)	Gaffey Av	Cabrillo Av	1	1	700	700	96	149	0.125	0.194	A	A
7TH ST (e/w)	Cabrillo Av	Bandini St / Alma St	1	1	700	700	33	38	0.043	0.049	A	A
7TH ST (e/w)	Bandini St / Alma St	Walker Av	1	1	700	700	26	46	0.034	0.060	A	A
7TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	40	28	0.052	0.036	A	A
9TH ST (e/w)	Pacific Av	Grand Av	1	1	800	800	305	356	0.347	0.405	A	A
9TH ST (e/w)	Grand Av	Gaffey St	1	1	800	800	320	359	0.364	0.408	A	A
9TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	550	818	0.625	0.930	B	E
9TH ST (e/w)	Cabrillo Av	Meyler St	1	1	800	800	390	571	0.443	0.649	A	B
9TH ST (e/w)	Meyler St	Alma St	1	1	800	800	390	571	0.443	0.649	A	B
9TH ST (e/w)	Alma St	Walker St	1	1	800	800	428	640	0.486	0.727	A	C
9TH ST (e/w)	Walker St	Weymouth Av	1	1	800	800	331	453	0.376	0.515	A	A
9TH ST (e/w)	Weymouth Av	Dodson Av	1	1	800	800	275	159	0.313	0.181	A	A
9TH ST (e/w)	Dodson Av	Western Av	1	1	800	800	374	197	0.425	0.224	A	A
9TH ST (e/w)	Western Av	Miraleste Dr	1	1	800	800	576	276	0.655	0.314	B	A
MIRALESTE DR	9th St	West City Limit	1	1	800	800	563	235	0.640	0.267	B	A
AVERILL PARK DR (e/w)	Weymouth Av	Dodson Av	1	1	600	600	61	134	0.092	0.203	A	A
13TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	36	54	0.047	0.070	A	A
13TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	36	54	0.047	0.070	A	A
13TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	140	189	0.182	0.245	A	A
13TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	15	32	0.019	0.042	A	A
13TH ST (e/w)	Alma St	Walker Av	1	1	700	700	64	80	0.083	0.104	A	A
13TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	62	78	0.081	0.101	A	A
GULCH RD (e/w)	Harbor Blvd	Beacon St	1	1	600	600	119	196	0.180	0.297	A	A
14TH ST (e/w)	Beacon St	Centre St	1	1	600	600	91	151	0.138	0.229	A	A
14TH ST (e/w)	Centre St	Pacific Av	1	1	600	600	89	123	0.135	0.186	A	A

Proposed Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
17TH ST (e/w)	Pacific Av	Grand Av	1	1	600	600	480	401	0.727	0.608	C	B
17TH ST (e/w)	Grand Av	Gaffey St	1	1	600	600	200	102	0.303	0.155	A	A
17TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	16	15	0.024	0.023	A	A
17TH ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	37	33	0.056	0.050	A	A
17TH ST (e/w)	Alma St	Leland St	1	1	600	600	49	48	0.074	0.073	A	A
17TH ST (e/w)	Leland St	Walker Av	1	1	600	600	49	48	0.074	0.073	A	A
17TH ST (e/w)	Walker Av	Weymouth Av	1	1	600	600	45	48	0.068	0.073	A	A
19TH ST (e/w)	Crescent Av	Pacific Av	1	1	600	600	198	156	0.300	0.236	A	A
19TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	65	331	0.084	0.430	A	A
19TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	374	505	0.486	0.656	A	B
19TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	98	362	0.127	0.470	A	A
19TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	92	352	0.119	0.457	A	A
19TH ST (e/w)	Alma St	Walker Av	1	1	700	700	182	337	0.236	0.438	A	A
19TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	170	230	0.221	0.299	A	A
19TH ST (e/w)	Weymouth Av	Western Av	1	1	700	700	395	459	0.513	0.596	A	A
MORSE DR (e/w)	Western Av	Mantis Av	1	1	600	600	232	151	0.352	0.229	A	A
CUMBRE DR (e/w)	Mantis Av	Pescadores Av	1	1	600	600	151	232	0.229	0.352	A	A
CUMBRE DR (e/w)	Pescadores Av	Anchovy Av	1	1	600	600	151	232	0.229	0.352	A	A
CUMBRE DR (e/w)	Anchovy Av	Mermaid Dr	1	1	600	600	30	43	0.045	0.065	A	A
MERMAID DR	Cumbre Dr	25th St	1	1	600	600	50	50	0.076	0.076	A	A
21ST ST (e/w)	Mesa St	Crescent Av	1	1	600	600	31	39	0.047	0.059	A	A
22ND ST (e/w)	Via Cabrillo Marina	Mesa St	1	1	700	700	283	601	0.368	0.781	A	C
22ND ST (e/w)	Mesa St	Pacific Av	1	1	700	700	283	601	0.368	0.781	A	C
22ND ST (e/w)	Pacific Av	Grand Av	1	1	700	700	216	457	0.281	0.594	A	A
22ND ST (e/w)	Grand Av	Gaffey St	1	1	700	700	167	375	0.217	0.487	A	A
23RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	30	23	0.045	0.035	A	A
23RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	37	23	0.056	0.035	A	A
23RD ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	243	374	0.368	0.567	A	A
23RD ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	193	323	0.292	0.489	A	A
23RD ST (e/w)	Alma St	Walker Av	1	1	600	600	109	194	0.165	0.294	A	A
23RD ST (e/w)	Walker Av	Elanita Dr	1	1	600	600	188	172	0.285	0.261	A	A
25TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	238	281	0.270	0.319	A	A
25TH ST (e/w)	Cabrillo Av	Alma St	1	1	800	800	271	320	0.308	0.364	A	A
25TH ST (e/w)	Alma St	Walker Av	1	1	800	800	427	414	0.485	0.470	A	A
25TH ST (e/w)	Walker Av	Patton Av	1	1	800	800	427	393	0.485	0.447	A	A
25TH ST (e/w)	Patton Av	Western Av	1	1	800	800	427	393	0.485	0.447	A	A
25TH ST (e/w)	Western Av	Moray Av	2	2	1600	1600	617	1,091	0.351	0.620	A	B
25TH ST (e/w)	Moray Av	Anchovy Av	2	2	1600	1600	451	787	0.256	0.447	A	A
25TH ST (e/w)	Anchovy Av	Mermaid Dr	1	1	800	800	469	802	0.533	0.911	A	E
25TH ST (e/w)	Mermaid Dr	West City Limit	1	1	800	800	472	804	0.536	0.914	A	E
26TH ST (e/w)	Pacific Av	Carolina St	1	1	600	600	67	131	0.102	0.198	A	A
26TH ST (e/w)	Carolina St	Gaffey St	1	1	600	600	33	38	0.050	0.058	A	A
26TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	57	152	0.086	0.230	A	A
26TH ST (e/w)	Cabrillo Av	Hamilton Av	1	1	600	600	61	161	0.092	0.244	A	A
26TH ST (e/w)	Moray Av	Graysby Av	1	1	600	600	154	287	0.233	0.435	A	A
HAMILTON AV (e/w)	26th St	Alma St	1	1	600	600	61	161	0.092	0.244	A	A
30TH ST (e/w)	Gaffey St	Alma St	1	1	600	600	134	230	0.203	0.348	A	A
31ST ST (e/w)	Carolina St	Gaffey St	1	1	600	600	16	11	0.024	0.017	A	A
35TH ST (e/w)	Graysby Av	Anchovy Av	1	1	600	600	19	21	0.029	0.032	A	A

Proposed Land Use Plan

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
37TH ST (e/w)	Alma St	Almeria St	1	1	600	600	35	42	0.053	0.064	A	A
SHEPARD ST (e/w)	Pacific Ave	Carolina St	1	1	700	700	110	130	0.143	0.169	A	A
SHEPARD ST (e/w)	Carolina St	Gaffey St	1	1	700	700	107	125	0.139	0.162	A	A
PASEO DEL MAR (e/w)	Gaffey St	Roxbury St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Roxbury St	Almeria St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Almeria St	Barbara St	1	1	700	700	14	19	0.018	0.025	A	A
PASEO DEL MAR (e/w)	Barbara St	Weymouth Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Weymouth Av	Western Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Western Av	Graysby Av	1	1	700	700	115	243	0.149	0.316	A	A
PASEO DEL MAR (e/w)	Graysby Av	Anchovy Av	1	1	700	700	114	243	0.148	0.316	A	A
PASEO DEL MAR (e/w)	Anchovy Av	Catalina Vista	1	1	700	700	122	250	0.158	0.325	A	A

Total Links	610		V/C
Links at E or F	39	6%	0.668

Transportation Alternative 1

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
JOHN S. GIBSON BLVD	North City Limit	Channel St	2	2	1600	1600	1,578	2,477	0.897	1.407	D	F
FRONT ST	Pacific Av	Swinford St	2	2	1600	1600	560	420	0.318	0.239	A	A
HARBOR BLVD	Swinford St	O'Farrell St	3	3	2400	2400	1,622	1,687	0.614	0.639	B	B
HARBOR BLVD	O'Farrell St	1st St	3	3	2400	2400	1,419	1,448	0.538	0.548	A	A
HARBOR BLVD	1st St	3rd St	3	3	2400	2400	1,486	1,478	0.563	0.560	A	A
HARBOR BLVD	3rd St	5th St	3	3	2400	2400	1,039	1,174	0.394	0.445	A	A
HARBOR BLVD	5th St	7th St	3	3	2400	2400	1,346	858	0.510	0.325	A	A
HARBOR BLVD	7th St	14th St	2	2	1600	1600	715	653	0.406	0.371	A	A
HARBOR BLVD	14th St	Crescent Av	2	2	1600	1600	579	556	0.329	0.316	A	A
CRESCENT AV	Harbor Blvd	19th St	1	1	600	600	31	39	0.047	0.059	A	A
CRESCENT AV	19th St	21st St	1	1	600	600	29	35	0.044	0.053	A	A
BEACON ST	7th St	14th St	1	1	600	600	44	31	0.067	0.047	A	A
CENTRE ST	O'Farrell St	1st St	1	1	600	600	58	82	0.088	0.124	A	A
CENTRE ST	1st St	2nd St	1	1	700	700	281	272	0.365	0.353	A	A
CENTRE ST	2nd St	3rd St	1	1	700	700	281	272	0.365	0.353	A	A
CENTRE ST	3rd St	5th St	2	2	1400	1400	662	194	0.430	0.126	A	A
CENTRE ST	5th St	6th St	1	1	700	700	554	464	0.719	0.603	C	B
CENTRE ST	6th St	7th St	1	1	700	700	554	464	0.719	0.603	C	B
CENTRE ST	7th St	14th St	1	1	600	600	523	699	0.792	1.059	C	F
CENTRE ST	14th St	Crescent Av	1	1	600	600	99	134	0.150	0.203	A	A
MESA ST	21st St	22nd St	1	1	600	600	29	35	0.044	0.053	A	A
PACIFIC AV	Channel St	Front St	2	2	1600	1600	1,050	1,919	0.597	1.090	A	F
PACIFIC AV	Front St	Upland Av	1	1	700	700	797	1,524	1.035	1.979	F	F
PACIFIC AV	Upland Av	O'Farrell St	2	2	1400	1400	672	1,333	0.436	0.866	A	D
PACIFIC AV	O'Farrell St	1st St	2	2	1400	1400	668	1,175	0.434	0.763	A	C
PACIFIC AV	1st St	3rd St	2	2	1400	1400	606	992	0.394	0.644	A	B
PACIFIC AV	3rd St	5th St	2	2	1400	1400	604	844	0.392	0.548	A	A
PACIFIC AV	5th St	7th St	2	2	1400	1400	766	1,585	0.497	1.029	A	F
PACIFIC AV	7th St	9th St	2	2	1400	1400	672	1,154	0.436	0.749	A	C
PACIFIC AV	9th St	13th St	2	2	1400	1400	505	903	0.328	0.586	A	A
PACIFIC AV	13th St	14th St	2	2	1400	1400	507	865	0.329	0.562	A	A
PACIFIC AV	14th St	17th St	2	2	1400	1400	468	879	0.304	0.571	A	A
PACIFIC AV	17th St	19th St	2	2	1400	1400	174	456	0.113	0.296	A	A
PACIFIC AV	19th St	22nd St	2	2	1400	1400	125	160	0.081	0.104	A	A
PACIFIC AV	22nd St	23rd St	1	1	700	700	166	308	0.216	0.400	A	A
PACIFIC AV	23rd St	24th St	1	1	700	700	166	245	0.216	0.318	A	A
PACIFIC AV	24th St	26th St	1	1	700	700	166	245	0.216	0.318	A	A
PACIFIC AV	26th St	36th St	1	1	700	700	97	114	0.126	0.148	A	A
PACIFIC AV	36th St	Bluff Pl	1	1	700	700	97	114	0.126	0.148	A	A
GRAND AV	O'Farrell St	1st St	1	1	600	600	35	178	0.053	0.270	A	A
GRAND AV	1st St	3rd St	1	1	600	600	38	286	0.058	0.433	A	A
GRAND AV	3rd St	5th St	1	1	600	600	187	346	0.283	0.524	A	A
GRAND AV	5th St	7th St	1	1	600	600	22	34	0.033	0.052	A	A
GRAND AV	7th St	9th St	1	1	600	600	17	13	0.026	0.020	A	A
GRAND AV	9th St	13th St	1	1	600	600	42	50	0.064	0.076	A	A
GRAND AV	13th St	17th St	1	1	600	600	31	28	0.047	0.042	A	A
GRAND AV	17th St	19th St	1	1	600	600	248	335	0.376	0.508	A	A

Transportation Alternative 1

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
GRAND AV	19th St	22nd St	1	1	600	600	167	329	0.253	0.498	A	A
GRAND AV	22nd St	23rd St	1	1	600	600	43	43	0.065	0.065	A	A
GRAND AV	23rd St	24th St	1	1	600	600	48	36	0.073	0.055	A	A
CAROLINA ST	Hamilton Av	26th St	1	1	600	600	53	136	0.080	0.206	A	A
CAROLINA ST	26th St	31st St	1	1	600	600	53	136	0.080	0.206	A	A
CAROLINA ST	31st St	36th St	1	1	600	600	35	38	0.053	0.058	A	A
CAROLINA ST	36th St	Shepard St	1	1	600	600	4	34	0.006	0.052	A	A
GAFFEY PL	MacArthur Av	Elberon Av	1	1	600	600	30	75	0.045	0.114	A	A
GAFFEY ST	North City Limit	Westmont Dr	2	2	1600	1600	962	1,460	0.547	0.830	A	D
GAFFEY ST	Westmont Dr	Capitol Dr	2	2	1600	1600	865	940	0.491	0.534	A	A
GAFFEY ST	Capitol Dr	Channel St	2	2	1600	1600	730	1,103	0.415	0.627	A	B
GAFFEY ST	Channel St	Elberon Av	2	2	1600	1600	593	2,530	0.337	1.438	A	F
GAFFEY ST	Elberon Av	Summerland Av	2	2	1600	1600	850	2,250	0.483	1.278	A	F
GAFFEY ST	Summerland Av	Sepulveda St	3	3	2400	2400	1,525	2,542	0.578	0.963	A	E
GAFFEY ST	Sepulveda St	Santa Cruz St	3	3	2400	2400	1,483	2,355	0.562	0.892	A	D
GAFFEY ST	Santa Cruz St	1st St	3	3	2400	2400	1,483	2,355	0.562	0.892	A	D
GAFFEY ST	1st St	3rd St	3	3	2400	2400	1,112	1,934	0.421	0.733	A	C
GAFFEY ST	3rd St	5th St	3	3	2400	2400	641	1,468	0.243	0.556	A	A
GAFFEY ST	5th St	7th St	3	3	2400	2400	659	1,479	0.250	0.560	A	A
GAFFEY ST	7th St	9th St	3	3	2400	2400	586	1,392	0.222	0.527	A	A
GAFFEY ST	9th St	13th St	2	2	1600	1600	448	1,034	0.255	0.588	A	A
GAFFEY ST	13th St	17th St	2	2	1600	1600	410	980	0.233	0.557	A	A
GAFFEY ST	17th St	18th St	2	2	1600	1600	339	810	0.193	0.460	A	A
GAFFEY ST	18th St	19th St	2	2	1600	1600	339	810	0.193	0.460	A	A
GAFFEY ST	19th St	22nd St	2	2	1600	1600	484	833	0.275	0.473	A	A
GAFFEY ST	22nd St	23rd St	1	1	800	800	558	1,056	0.634	1.200	B	F
GAFFEY ST	23rd St	25th St	1	1	800	800	434	871	0.493	0.990	A	E
GAFFEY ST	25th St	26th St	1	1	800	800	378	684	0.430	0.777	A	C
GAFFEY ST	26th St	31st St	1	1	800	800	320	531	0.364	0.603	A	B
GAFFEY ST	31st St	Shepard St	1	1	800	800	337	542	0.383	0.616	A	B
MARSHALL CT	Oliver St	Sepulveda St	1	1	600	600	15	23	0.023	0.035	A	A
BARRYWOOD AV	Sandwood Pl	Westmont Dr	1	1	600	600	323	140	0.489	0.212	A	A
BARRYWOOD AV	Millmark Grove St	Capitol Rd	1	1	600	600	360	281	0.545	0.426	A	A
CABRILLO AV	Elberon Av	Summerland Av	1	1	600	600	239	185	0.362	0.280	A	A
CABRILLO AV	Summerland Av	Oliver St	1	1	600	600	15	23	0.023	0.035	A	A
CABRILLO AV	Sepulveda St	1st St	1	1	600	600	17	109	0.026	0.165	A	A
CABRILLO AV	1st St	3rd St	1	1	600	600	168	310	0.255	0.470	A	A
CABRILLO AV	3rd St	7th St	1	1	600	600	79	83	0.120	0.126	A	A
CABRILLO AV	7th St	9th St	1	1	600	600	154	182	0.233	0.276	A	A
CABRILLO AV	9th St	13th St	1	1	600	600	134	240	0.203	0.364	A	A
CABRILLO AV	13th St	17th St	1	1	600	600	112	138	0.170	0.209	A	A
CABRILLO AV	17th St	19th St	1	1	600	600	20	26	0.030	0.039	A	A
CABRILLO AV	19th St	23rd St	1	1	600	600	12	21	0.018	0.032	A	A
CABRILLO AV	23rd St	25th St	1	1	600	600	73	81	0.111	0.123	A	A
CABRILLO AV	25th St	26th St	1	1	600	600	3	8	0.005	0.012	A	A
TAPER AV	Sandwood Pl	Westmont Dr	1	1	600	600	222	217	0.336	0.329	A	A
TAPER AV	Westmont Dr	Barhugh Pl	1	1	600	600	309	388	0.468	0.588	A	A

Transportation Alternative 1

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSC		Level of Service With ATSC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
TAPER AV	Barhugh Pl	Millmark Grove St	1	1	600	600	133	87	0.202	0.132	A	A
MEYLER ST	Capitol Rd	Channel St	1	1	600	600	446	250	0.676	0.379	B	A
BANDINI ST	Elberon Av	Summerland Av	1	1	600	600	44	9	0.067	0.014	A	A
BANDINI ST	Summerland Av	Sepulveda St	1	1	600	600	59	122	0.089	0.185	A	A
BANDINI ST	Sepulveda St	Santa Cruz St	1	1	600	600	75	141	0.114	0.214	A	A
ALMA ST	7th St	9th St	1	1	600	600	59	112	0.089	0.170	A	A
ALMA ST	9th St	13th St	1	1	600	600	84	113	0.127	0.171	A	A
ALMA ST	13th St	15th St	1	1	600	600	51	52	0.077	0.079	A	A
ALMA ST	17th St	19th St	1	1	600	600	18	32	0.027	0.048	A	A
ALMA ST	19th St	23rd St	1	1	600	600	40	165	0.061	0.250	A	A
ALMA ST	23rd St	25th St	1	1	600	600	22	19	0.033	0.029	A	A
ALMA ST	25th St	Hamilton Av	1	1	600	600	90	148	0.136	0.224	A	A
ALMA ST	Hamilton Av	30th St	1	1	600	600	157	314	0.238	0.476	A	A
ALMA ST	30th St	37th St	1	1	600	600	109	255	0.165	0.386	A	A
ALMERIA ST	37th St	Paseo Del Mar	1	1	600	600	6	4	0.009	0.006	A	A
HANFORD AV	Sepulveda St (north)	Sepulveda St (south)	1	1	600	600	121	170	0.183	0.258	A	A
HANFORD AV	Elberon Av	Summerland Av	1	1	600	600	42	29	0.064	0.044	A	A
WALKER AV	7th St	9th St	1	1	600	600	46	26	0.070	0.039	A	A
WALKER AV	9th St	13th St	1	1	600	600	96	185	0.145	0.280	A	A
WALKER AV	13th St	17th St	1	1	600	600	43	10	0.065	0.015	A	A
WALKER AV	17th St	19th St	1	1	600	600	15	18	0.023	0.027	A	A
WALKER AV	19th St	23rd St	1	1	600	600	55	141	0.083	0.214	A	A
WALKER AV	23rd St	25th St	1	1	600	600	64	69	0.097	0.105	A	A
WALKER AV	25th St	27th St	1	1	600	600	155	182	0.235	0.276	A	A
27TH ST	Walker Av	Barbara St	1	1	600	600	155	182	0.235	0.276	A	A
BARBARA ST	27th St	31st St	1	1	600	600	37	31	0.056	0.047	A	A
BARBARA ST	31st St	Paseo Del Mar	1	1	600	600	34	42	0.052	0.064	A	A
PATTON AV	Summerland Av	Sepulveda St	1	1	600	600	34	85	0.052	0.129	A	A
PATTON AV	Sepulveda St	1st St	1	1	600	600	33	38	0.050	0.058	A	A
PATTON AV	1st St	3rd St	1	1	600	600	147	159	0.223	0.241	A	A
WEYMOUTH AV	Western Av	7th St	1	1	700	700	113	191	0.147	0.248	A	A
WEYMOUTH AV	7th St	9th St	1	1	700	700	124	203	0.161	0.264	A	A
WEYMOUTH AV	9th St	Averill Park Dr	1	1	700	700	191	500	0.248	0.649	A	B
WEYMOUTH AV	Averill Park Dr	13th St	1	1	700	700	167	401	0.217	0.521	A	A
WEYMOUTH AV	13th St	17th St	1	1	600	600	88	274	0.133	0.415	A	A
WEYMOUTH AV	17th St	19th St	1	1	600	600	52	145	0.079	0.220	A	A
ELANITA DR	19th St	23rd St	1	1	600	600	199	291	0.302	0.441	A	A
DODSON AV	9th St	Averill Park Dr	1	1	600	600	37	98	0.056	0.148	A	A
DODSON AV	Averill Park Dr	Western Av	1	1	600	600	98	234	0.148	0.355	A	A
WESTERN AV	North City Limit	Westmont Dr	2	2	1600	1600	2,077	2,293	1.180	1.303	F	F
WESTERN AV	Westmont Dr	Capitol Dr	2	2	1600	1600	1,650	1,846	0.938	1.049	E	F
WESTERN AV	Capitol Dr	Park Western Dr	2	2	1600	1600	1,560	1,981	0.886	1.126	D	F
WESTERN AV	Park Western Dr	Crestwood St	2	2	1600	1600	1,480	2,204	0.841	1.252	D	F
WESTERN AV	Crestwood St	Summerland Av	2	2	1600	1600	1,493	2,208	0.848	1.255	D	F
WESTERN AV	Summerland Av	Santa Cruz St	2	2	1600	1600	1,600	2,374	0.909	1.349	E	F
WESTERN AV	Santa Cruz St	1st St	2	2	1600	1600	1,593	2,362	0.905	1.342	E	F

Transportation Alternative 1

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
WESTERN AV	1st St	Weymouth Av	2	2	1600	1600	1,236	1,913	0.702	1.087	C	F
WESTERN AV	Weymouth Av	Bynner Dr	2	2	1600	1600	1,111	1,714	0.631	0.974	B	E
WESTERN AV	Bynner Dr	9th St	2	2	1600	1600	1,111	1,714	0.631	0.974	B	E
WESTERN AV	9th St	Dodson Av	2	2	1600	1600	1,274	2,017	0.724	1.146	C	F
WESTERN AV	Dodson Av	19th St	2	2	1600	1600	1,290	2,026	0.733	1.151	C	F
WESTERN AV	19th St	25th St	2	2	1600	1600	780	1,404	0.443	0.798	A	C
WESTERN AV	25th St	Paseo Del Mar	1	1	800	800	103	226	0.117	0.257	A	A
BYNNER DR (e/w)	El Rey Rd	Western Av	1	1	600	600	47	50	0.071	0.076	A	A
MORAY AV	Morse Dr	25th St	1	1	600	600	98	181	0.148	0.274	A	A
MORAY AV	25th St	26th St	1	1	600	600	49	42	0.074	0.064	A	A
GRAYSBY AV	26th St	35th St	1	1	600	600	154	287	0.233	0.435	A	A
GRAYSBY AV	35th St	Paseo Del Mar	1	1	600	600	7	7	0.011	0.011	A	A
ENROSE AV	Via Colinita	Santa Cruz St	1	1	600	600	17	14	0.026	0.021	A	A
SANTA CRUZ ST (e/w)	Enrose Av	Western Av	1	1	600	600	17	14	0.026	0.021	A	A
MANTIS AV	Cumbre Dr	Morse Dr	1	1	600	600	231	151	0.350	0.229	A	A
ANCHOVY AV	Cumbre Dr	25th St	1	1	600	600	113	159	0.171	0.241	A	A
ANCHOVY AV	25th St	35th St	1	1	600	600	30	27	0.045	0.041	A	A
ANCHOVY AV	35th St	Paseo Del Mar	1	1	600	600	22	21	0.033	0.032	A	A
SANDWOOD PL (e/w)	Amelia Av	Taper Av	1	1	600	600	357	546	0.541	0.827	A	D
SANDWOOD PL (e/w)	Taper Av	Barrywood Av	1	1	600	600	140	323	0.212	0.489	A	A
WESTMONT DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	236	660	0.153	0.429	A	A
WESTMONT DR (e/w)	Barrywood Av	Taper Av	2	2	1400	1400	97	337	0.063	0.219	A	A
WESTMONT DR (e/w)	Taper Av	Western Av	2	2	1400	1400	183	339	0.119	0.220	A	A
MILLMARK GROVE ST (e/w)	Barrywood Av	Taper Av	1	1	600	600	281	360	0.426	0.545	A	A
MILLMARK GROVE ST (e/w)	Taper Av	Amelia Av	1	1	600	600	194	227	0.294	0.344	A	A
CAPITOL DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	342	570	0.222	0.370	A	A
CAPITOL DR (e/w)	Barrywood Av	Meyler St	2	2	1400	1400	166	316	0.108	0.205	A	A
CAPITOL DR (e/w)	Meyler St	Mt Rose Rd	2	2	1400	1400	244	589	0.158	0.382	A	A
CAPITOL DR (e/w)	Mt Rose Rd	Western Av	2	2	1400	1400	433	486	0.281	0.316	A	A
CHANNEL ST (e/w)	John S. Gibson Blvd	Gaffey St	2	2	1600	1600	1,317	1,349	0.748	0.766	C	C
CHANNEL ST (e/w)	Gaffey St	Meyler St	1	1	600	600	507	738	0.768	1.118	C	F
CHANNEL ST (e/w)	Meyler St	Park Western Dr	1	1	600	600	234	333	0.355	0.505	A	A
PARK WESTERN DR	Channel St	Quiglet Pl	1	1	600	600	32	155	0.048	0.235	A	A
PARK WESTERN DR (e/w)	Quiglet Pl.	Western Av	1	1	600	600	70	373	0.106	0.565	A	A
MACARTHUR AV (e/w)	Gaffey Pl	Pacific Av	1	1	600	600	195	260	0.295	0.394	A	A
ELBERON AV (e/w)	Gaffey Pl	Gaffey St	1	1	600	600	30	75	0.045	0.114	A	A
ELBERON AV (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	194	178	0.294	0.270	A	A
ELBERON AV (e/w)	Cabrillo Av	Bandini St	1	1	600	600	29	69	0.044	0.105	A	A
ELBERON AV (e/w)	Bandini St	Hanford Av	1	1	600	600	25	26	0.038	0.039	A	A
SUMMERLAND AV (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	384	690	0.499	0.896	A	D
SUMMERLAND AV (e/w)	Cabrillo Av	Bandini St	1	1	700	700	364	608	0.473	0.790	A	C
SUMMERLAND AV (e/w)	Bandini St	Hanford Av	1	1	700	700	321	512	0.417	0.665	A	B
SUMMERLAND AV (e/w)	Crestwood St	Patton Av	1	1	700	700	352	530	0.457	0.688	A	B
SUMMERLAND AV (e/w)	Patton Av	Western Av	1	1	700	700	425	552	0.552	0.717	A	C
OLIVER ST	Marshall Ct	Cabrillo Av	1	1	600	600	23	15	0.035	0.023	A	A
O'FARRELL ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	305	319	0.462	0.483	A	A

Transportation Alternative 1

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
O'FARRELL ST (e/w)	Centre St	Pacific Av	1	1	600	600	271	262	0.411	0.397	A	A
O'FARRELL ST (e/w)	Pacific Av	Grand Av	1	1	600	600	173	318	0.262	0.482	A	A
O'FARRELL ST (e/w)	Grand Av	Gaffey St	1	1	600	600	352	318	0.533	0.482	A	A
SEPULVEDA ST (e/w)	Gaffey St	Marshall Ct	1	1	600	600	140	286	0.212	0.433	A	A
SEPULVEDA ST (e/w)	Marshall Ct	Cabrillo Av	1	1	600	600	87	232	0.132	0.352	A	A
SEPULVEDA ST (e/w)	Cabrillo Av	Bandini St	1	1	600	600	71	123	0.108	0.186	A	A
SEPULVEDA ST (e/w)	Bandini St	Hanford Av	1	1	600	600	121	170	0.183	0.258	A	A
SEPULVEDA ST (e/w)	Hanford Av	Patton Av	1	1	600	600	31	17	0.047	0.026	A	A
SEPULVEDA ST (e/w)	Patton Av	Harbor View Av	1	1	600	600	31	17	0.047	0.026	A	A
1ST ST (e/w)	Harbor Blvd	Centre St	1	1	700	700	108	136	0.140	0.177	A	A
1ST ST (e/w)	Centre St	Pacific Av	1	1	700	700	233	295	0.303	0.383	A	A
1ST ST (e/w)	Pacific Av	Grand Av	1	1	700	700	44	227	0.057	0.295	A	A
1ST ST (e/w)	Grand Av	Gaffey St	1	1	700	700	152	227	0.197	0.295	A	A
1ST ST (e/w)	Gaffey	Cabrillo Av	1	1	700	700	728	853	0.945	1.108	E	F
1ST ST (e/w)	Cabrillo Av	Bandini St	1	1	700	700	692	768	0.899	0.997	D	E
1ST ST (e/w)	Bandini St	Patton Av	1	1	700	700	607	676	0.788	0.878	C	D
1ST ST (e/w)	Patton Av	Western Av	1	1	700	700	790	851	1.026	1.105	F	F
1ST ST (e/w)	Western Av	West City Limit	1	1	600	600	311	462	0.471	0.700	A	C
3RD ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	523	381	0.792	0.577	C	A
3RD ST (e/w)	Centre St	Pacific Av	1	1	600	600	495	812	0.750	1.230	C	F
3RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	396	361	0.600	0.547	B	A
3RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	466	470	0.706	0.712	C	C
3RD ST (e/w)	Cabrillo Av	Meyler St	1	1	600	600	10	5	0.015	0.008	A	A
3RD ST (e/w)	Hanford Av	Patton Av	1	1	600	600	4	40	0.006	0.061	A	A
5TH ST (e/w)	Harbor Blvd	Centre St		1		700		621		0.806	A	D
5TH ST (e/w)	Centre St	Mesa St		1		700		242		0.314	A	A
5TH ST (e/w)	Mesa St.	Pacific Av		1		700		433		0.562	A	A
5TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	311	165	0.404	0.214	A	A
5TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	42	45	0.055	0.058	A	A
7TH ST (e/w)	Harbor Blvd	Beacon St	1		700		105		0.136		A	A
7TH ST (e/w)	Beacon St	Centre St	1		700		109		0.142		A	A
7TH ST (e/w)	Centre St	Pacific Av	1		700		374		0.486		A	A
7TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	26	33	0.034	0.043	A	A
7TH ST (e/w)	Grand Av	Gaffey Av	1	1	700	700	27	50	0.035	0.065	A	A
7TH ST (e/w)	Gaffey Av	Cabrillo Av	1	1	700	700	96	131	0.125	0.170	A	A
7TH ST (e/w)	Cabrillo Av	Bandini St / Alma St	1	1	700	700	24	37	0.031	0.048	A	A
7TH ST (e/w)	Bandini St / Alma St	Walker Av	1	1	700	700	47	47	0.061	0.061	A	A
7TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	45	43	0.058	0.056	A	A
9TH ST (e/w)	Pacific Av	Grand Av	1	1	800	800	238	326	0.270	0.370	A	A
9TH ST (e/w)	Grand Av	Gaffey St	1	1	800	800	253	329	0.288	0.374	A	A
9TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	502	801	0.570	0.910	A	E
9TH ST (e/w)	Cabrillo Av	Meyler St	1	1	800	800	344	551	0.391	0.626	A	B
9TH ST (e/w)	Meyler St	Alma St	1	1	800	800	344	551	0.391	0.626	A	B
9TH ST (e/w)	Alma St	Walker St	1	1	800	800	383	615	0.435	0.699	A	B
9TH ST (e/w)	Walker St	Weymouth Av	1	1	800	800	287	429	0.326	0.488	A	A
9TH ST (e/w)	Weymouth Av	Dodson Av	1	1	800	800	234	146	0.266	0.166	A	A
9TH ST (e/w)	Dodson Av	Western Av	1	1	800	800	333	184	0.378	0.209	A	A

Transportation Alternative 1

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAAC		Level of Service With ATSAAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
9TH ST (e/w)	Western Av	Miraleste Dr	1	1	800	800	566	276	0.643	0.314	B	A
MIRALESTE DR	9th St	West City Limit	1	1	800	800	567	236	0.644	0.268	B	A
AVERILL PARK DR (e/w)	Weymouth Av	Dodson Av	1	1	600	600	61	135	0.092	0.205	A	A
13TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	29	66	0.038	0.086	A	A
13TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	29	66	0.038	0.086	A	A
13TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	139	194	0.181	0.252	A	A
13TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	16	33	0.021	0.043	A	A
13TH ST (e/w)	Alma St	Walker Av	1	1	700	700	65	81	0.084	0.105	A	A
13TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	63	79	0.082	0.103	A	A
GULCH RD (e/w)	Harbor Blvd	Beacon St	1	1	600	600	152	218	0.230	0.330	A	A
14TH ST (e/w)	Beacon St	Centre St	1	1	600	600	120	174	0.182	0.264	A	A
14TH ST (e/w)	Centre St	Pacific Av	1	1	600	600	120	172	0.182	0.261	A	A
17TH ST (e/w)	Pacific Av	Grand Av	1	1	600	600	436	421	0.661	0.638	B	B
17TH ST (e/w)	Grand Av	Gaffey St	1	1	600	600	188	87	0.285	0.132	A	A
17TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	19	21	0.029	0.032	A	A
17TH ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	40	38	0.061	0.058	A	A
17TH ST (e/w)	Alma St	Leland St	1	1	600	600	43	40	0.065	0.061	A	A
17TH ST (e/w)	Leland St	Walker Av	1	1	600	600	43	40	0.065	0.061	A	A
17TH ST (e/w)	Walker Av	Weymouth Av	1	1	600	600	38	25	0.058	0.038	A	A
19TH ST (e/w)	Crescent Av	Pacific Av	1	1	600	600	206	159	0.312	0.241	A	A
19TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	45	250	0.058	0.325	A	A
19TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	336	468	0.436	0.608	A	B
19TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	98	352	0.127	0.457	A	A
19TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	92	344	0.119	0.447	A	A
19TH ST (e/w)	Alma St	Walker Av	1	1	700	700	182	323	0.236	0.419	A	A
19TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	174	231	0.226	0.300	A	A
19TH ST (e/w)	Weymouth Av	Western Av	1	1	700	700	392	450	0.509	0.584	A	A
MORSE DR (e/w)	Western Av	Mantis Av	1	1	600	600	231	151	0.350	0.229	A	A
CUMBRE DR (e/w)	Mantis Av	Pescadores Av	1	1	600	600	151	231	0.229	0.350	A	A
CUMBRE DR (e/w)	Pescadores Av	Anchovy Av	1	1	600	600	151	231	0.229	0.350	A	A
CUMBRE DR (e/w)	Anchovy Av	Mermaid Dr	1	1	600	600	27	41	0.041	0.062	A	A
MERMAID DR	Cumbre Dr	25th St	1	1	600	600	30	34	0.045	0.052	A	A
21ST ST (e/w)	Mesa St	Crescent Av	1	1	600	600	29	35	0.044	0.053	A	A
22ND ST (e/w)	Via Cabrillo Marina	Mesa St	1	1	700	700	347	638	0.451	0.829	A	D
22ND ST (e/w)	Mesa St	Pacific Av	1	1	700	700	347	638	0.451	0.829	A	D
22ND ST (e/w)	Pacific Av	Grand Av	1	1	700	700	281	460	0.365	0.597	A	A
22ND ST (e/w)	Grand Av	Gaffey St	1	1	700	700	219	370	0.284	0.481	A	A
23RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	41	63	0.062	0.095	A	A
23RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	39	63	0.059	0.095	A	A
23RD ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	243	376	0.368	0.570	A	A
23RD ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	192	325	0.291	0.492	A	A
23RD ST (e/w)	Alma St	Walker Av	1	1	600	600	108	201	0.164	0.305	A	A
23RD ST (e/w)	Walker Av	Elanita Dr	1	1	600	600	184	165	0.279	0.250	A	A
25TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	252	300	0.286	0.341	A	A
25TH ST (e/w)	Cabrillo Av	Alma St	1	1	800	800	287	338	0.326	0.384	A	A
25TH ST (e/w)	Alma St	Walker Av	1	1	800	800	442	434	0.502	0.493	A	A
25TH ST (e/w)	Walker Av	Patton Av	1	1	800	800	441	410	0.501	0.466	A	A

Transportation Alternative 1

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
25TH ST (e/w)	Patton Av	Western Av	1	1	800	800	441	410	0.501	0.466	A	A
25TH ST (e/w)	Western Av	Moray Av	2	2	1600	1600	619	1,093	0.352	0.621	A	B
25TH ST (e/w)	Moray Av	Anchovy Av	2	2	1600	1600	451	788	0.256	0.448	A	A
25TH ST (e/w)	Anchovy Av	Mermaid Dr	1	1	800	800	470	803	0.534	0.913	A	E
25TH ST (e/w)	Mermaid Dr	West City Limit	1	1	800	800	472	805	0.536	0.915	A	E
26TH ST (e/w)	Pacific Av	Carolina St	1	1	600	600	68	130	0.103	0.197	A	A
26TH ST (e/w)	Carolina St	Gaffey St	1	1	600	600	32	46	0.048	0.070	A	A
26TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	58	152	0.088	0.230	A	A
26TH ST (e/w)	Cabrillo Av	Hamilton Av	1	1	600	600	61	161	0.092	0.244	A	A
26TH ST (e/w)	Moray Av	Graysby Av	1	1	600	600	154	287	0.233	0.435	A	A
HAMILTON AV (e/w)	26th St	Alma St	1	1	600	600	61	161	0.092	0.244	A	A
30TH ST (e/w)	Gaffey St	Alma St	1	1	600	600	134	231	0.203	0.350	A	A
31ST ST (e/w)	Carolina St	Gaffey St	1	1	600	600	16	11	0.024	0.017	A	A
35TH ST (e/w)	Graysby Av	Anchovy Av	1	1	600	600	19	21	0.029	0.032	A	A
37TH ST (e/w)	Alma St	Almeria St	1	1	600	600	41	26	0.062	0.039	A	A
SHEPARD ST (e/w)	Pacific Ave	Carolina St	1	1	700	700	104	130	0.135	0.169	A	A
SHEPARD ST (e/w)	Carolina St	Gaffey St	1	1	700	700	101	126	0.131	0.164	A	A
PASEO DEL MAR (e/w)	Gaffey St	Roxbury St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Roxbury St	Almeria St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Almeria St	Barbara St	1	1	700	700	14	19	0.018	0.025	A	A
PASEO DEL MAR (e/w)	Barbara St	Weymouth Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Weymouth Av	Western Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Western Av	Graysby Av	1	1	700	700	115	243	0.149	0.316	A	A
PASEO DEL MAR (e/w)	Graysby Av	Anchovy Av	1	1	700	700	114	243	0.148	0.316	A	A
PASEO DEL MAR (e/w)	Anchovy Av	Catalina Vista	1	1	700	700	122	250	0.158	0.325	A	A

Total Links	604		V/C
Links at E or F	37	6%	0.666

Transportation Alternative 1A

Transportation Alternative 1A

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
JOHN S. GIBSON BLVD	North City Limit	Channel St	2	2	1600	1600	1,578	2,521	0.897	1.432	D	F
FRONT ST	Pacific Av	Swinford St	2	2	1600	1600	574	418	0.326	0.238	A	A
HARBOR BLVD	Swinford St	O'Farrell St	3	3	2400	2400	1,623	1,700	0.615	0.644	B	B
HARBOR BLVD	O'Farrell St	1st St	3	3	2400	2400	1,415	1,442	0.536	0.546	A	A
HARBOR BLVD	1st St	3rd St	3	3	2400	2400	1,398	1,484	0.530	0.562	A	A
HARBOR BLVD	3rd St	5th St	3	3	2400	2400	951	1,171	0.360	0.444	A	A
HARBOR BLVD	5th St	7th St	3	3	2400	2400	1,347	846	0.510	0.320	A	A
HARBOR BLVD	7th St	14th St	2	2	1600	1600	715	640	0.406	0.364	A	A
HARBOR BLVD	14th St	Crescent Av	2	2	1600	1600	579	545	0.329	0.310	A	A
CRESCENT AV	Harbor Blvd	19th St	1	1	600	600	31	42	0.047	0.064	A	A
CRESCENT AV	19th St	21st St	1	1	600	600	29	38	0.044	0.058	A	A
BEACON ST	7th St	14th St	1	1	600	600	44	31	0.067	0.047	A	A
CENTRE ST	O'Farrell St	1st St	1	1	600	600	58	80	0.088	0.121	A	A
CENTRE ST	1st St	2nd St	1	1	700	700	369	244	0.479	0.317	A	A
CENTRE ST	2nd St	3rd St	1	1	700	700	369	244	0.479	0.317	A	A
CENTRE ST	3rd St	5th St	2	2	1400	1400	764	185	0.496	0.120	A	A
CENTRE ST	5th St	6th St	1	1	700	700	569	444	0.739	0.577	C	A
CENTRE ST	6th St	7th St	1	1	700	700	569	444	0.739	0.577	C	A
CENTRE ST	7th St	14th St	1	1	600	600	523	699	0.792	1.059	C	F
CENTRE ST	14th St	Crescent Av	1	1	600	600	99	137	0.150	0.208	A	A
MESA ST	21st St	22nd St	1	1	600	600	29	38	0.044	0.058	A	A
PACIFIC AV	Channel St	Front St	2	2	1600	1600	1,048	1,975	0.595	1.122	A	F
PACIFIC AV	Front St	Upland Av	1	1	700	700	797	1,566	1.035	2.034	F	F
PACIFIC AV	Upland Av	O'Farrell St	2	2	1400	1400	672	1,368	0.436	0.888	A	D
PACIFIC AV	O'Farrell St	1st St	2	2	1400	1400	667	1,207	0.433	0.784	A	C
PACIFIC AV	1st St.	3rd St	2	2	1400	1400	605	1,047	0.393	0.680	A	B
PACIFIC AV	3rd St	5th St	2	2	1400	1400	589	882	0.382	0.573	A	A
PACIFIC AV	5th St	7th St	2	2	1400	1400	750	1,632	0.487	1.060	A	F
PACIFIC AV	7th St	9th St	2	2	1400	1400	672	1,187	0.436	0.771	A	C
PACIFIC AV	9th St	13th St	2	2	1400	1400	505	933	0.328	0.606	A	B
PACIFIC AV	13th St	14th St	2	2	1400	1400	507	895	0.329	0.581	A	A
PACIFIC AV	14th St	17th St	2	2	1400	1400	468	906	0.304	0.588	A	A
PACIFIC AV	17th St	19th St	2	2	1400	1400	174	445	0.113	0.289	A	A
PACIFIC AV	19th St	22nd St	2	2	1400	1400	125	161	0.081	0.105	A	A
PACIFIC AV	22nd St	23rd St	1	1	700	700	165	276	0.214	0.358	A	A
PACIFIC AV	23rd St	24th St	1	1	700	700	165	252	0.214	0.327	A	A
PACIFIC AV	24th St	26th St	1	1	700	700	165	252	0.214	0.327	A	A
PACIFIC AV	26th St	36th St	1	1	700	700	97	115	0.126	0.149	A	A
PACIFIC AV	36th St	Bluff Pl	1	1	700	700	97	115	0.126	0.149	A	A
GRAND AV	O'Farrell St	1st St	1	1	600	600	44	186	0.067	0.282	A	A
GRAND AV	1st St	3rd St	1	1	600	600	47	287	0.071	0.435	A	A
GRAND AV	3rd St	5th St	1	1	600	600	187	342	0.283	0.518	A	A
GRAND AV	5th St	7th St	1	1	600	600	22	44	0.033	0.067	A	A
GRAND AV	7th St	9th St	1	1	600	600	17	13	0.026	0.020	A	A
GRAND AV	9th St	13th St	1	1	600	600	47	43	0.071	0.065	A	A
GRAND AV	13th St	17th St	1	1	600	600	48	46	0.073	0.070	A	A
GRAND AV	17th St	19th St	1	1	600	600	248	375	0.376	0.568	A	A

Transportation Alternative 1A

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
GRAND AV	19th St	22nd St	1	1	600	600	166	329	0.252	0.498	A	A
GRAND AV	22nd St	23rd St	1	1	600	600	37	29	0.056	0.044	A	A
GRAND AV	23rd St	24th St	1	1	600	600	33	40	0.050	0.061	A	A
CAROLINA ST	Hamilton Av	26th St	1	1	600	600	53	130	0.080	0.197	A	A
CAROLINA ST	26th St	31st St	1	1	600	600	53	130	0.080	0.197	A	A
CAROLINA ST	31st St	36th St	1	1	600	600	41	26	0.062	0.039	A	A
CAROLINA ST	36th St	Shepard St	1	1	600	600	4	26	0.006	0.039	A	A
GAFFEY PL	MacArthur Av	Elberon Av	1	1	600	600	30	82	0.045	0.124	A	A
GAFFEY ST	North City Limit	Westmont Dr	2	2	1600	1600	964	1,449	0.548	0.823	A	D
GAFFEY ST	Westmont Dr	Capitol Dr	2	2	1600	1600	868	927	0.493	0.527	A	A
GAFFEY ST	Capitol Dr	Channel St	2	2	1600	1600	730	1,098	0.415	0.624	A	B
GAFFEY ST	Channel St	Elberon Av	2	2	1600	1600	597	2,502	0.339	1.422	A	F
GAFFEY ST	Elberon Av	Summerland Av	2	2	1600	1600	855	2,220	0.486	1.261	A	F
GAFFEY ST	Summerland Av	Sepulveda St	3	3	2400	2400	1,531	2,526	0.580	0.957	A	E
GAFFEY ST	Sepulveda St	Santa Cruz St	3	3	2400	2400	1,492	2,215	0.565	0.839	A	D
GAFFEY ST	Santa Cruz St	1st St	3	3	2400	2400	1,492	2,215	0.565	0.839	A	D
GAFFEY ST	1st St	3rd St	3	3	2400	2400	1,111	1,868	0.421	0.708	A	C
GAFFEY ST	3rd St	5th St	3	3	2400	2400	641	1,413	0.243	0.535	A	A
GAFFEY ST	5th St	7th St	3	3	2400	2400	659	1,424	0.250	0.539	A	A
GAFFEY ST	7th St	9th St	3	3	2400	2400	586	1,357	0.222	0.514	A	A
GAFFEY ST	9th St	13th St	2	2	1600	1600	448	1,011	0.255	0.574	A	A
GAFFEY ST	13th St	17th St	2	2	1600	1600	410	959	0.233	0.545	A	A
GAFFEY ST	17th St	18th St	2	2	1600	1600	339	788	0.193	0.448	A	A
GAFFEY ST	18th St	19th St	2	2	1600	1600	339	788	0.193	0.448	A	A
GAFFEY ST	19th St	22nd St	2	2	1600	1600	484	831	0.275	0.472	A	A
GAFFEY ST	22nd St	23rd St	1	1	800	800	558	1,078	0.634	1.225	B	F
GAFFEY ST	23rd St	25th St	1	1	800	800	434	862	0.493	0.980	A	E
GAFFEY ST	25th St	26th St	1	1	800	800	378	682	0.430	0.775	A	C
GAFFEY ST	26th St	31st St	1	1	800	800	320	530	0.364	0.602	A	B
GAFFEY ST	31st St	Shepard St	1	1	800	800	337	542	0.383	0.616	A	B
MARSHALL CT	Oliver St	Sepulveda St	1	1	600	600	15	22	0.023	0.033	A	A
BARRYWOOD AV	Sandwood Pl	Westmont Dr	1	1	600	600	322	140	0.488	0.212	A	A
BARRYWOOD AV	Millmark Grove St	Capitol Rd	1	1	600	600	358	281	0.542	0.426	A	A
CABRILLO AV	Elberon Av	Summerland Av	1	1	600	600	232	185	0.352	0.280	A	A
CABRILLO AV	Summerland Av	Oliver St	1	1	600	600	15	22	0.023	0.033	A	A
CABRILLO AV	Sepulveda St	1st St	1	1	600	600	17	215	0.026	0.326	A	A
CABRILLO AV	1st St	3rd St	1	1	600	600	166	331	0.252	0.502	A	A
CABRILLO AV	3rd St	7th St	1	1	600	600	78	105	0.118	0.159	A	A
CABRILLO AV	7th St	9th St	1	1	600	600	153	184	0.232	0.279	A	A
CABRILLO AV	9th St	13th St	1	1	600	600	134	238	0.203	0.361	A	A
CABRILLO AV	13th St	17th St	1	1	600	600	112	137	0.170	0.208	A	A
CABRILLO AV	17th St	19th St	1	1	600	600	20	26	0.030	0.039	A	A
CABRILLO AV	19th St	23rd St	1	1	600	600	12	21	0.018	0.032	A	A
CABRILLO AV	23rd St	25th St	1	1	600	600	78	81	0.118	0.123	A	A
CABRILLO AV	25th St	26th St	1	1	600	600	3	8	0.005	0.012	A	A
TAPER AV	Sandwood Pl	Westmont Dr	1	1	600	600	223	217	0.338	0.329	A	A
TAPER AV	Westmont Dr	Barhugh Pl	1	1	600	600	308	389	0.467	0.589	A	A

Transportation Alternative 1A

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
TAPER AV	Barhugh Pl	Millmark Grove St	1	1	600	600	131	87	0.198	0.132	A	A
MEYLER ST	Capitol Rd	Channel St	1	1	600	600	448	250	0.679	0.379	B	A
BANDINI ST	Elberon Av	Summerland Av	1	1	600	600	33	9	0.050	0.014	A	A
BANDINI ST	Summerland Av	Sepulveda St	1	1	600	600	59	119	0.089	0.180	A	A
BANDINI ST	Sepulveda St	Santa Cruz St	1	1	600	600	73	157	0.111	0.238	A	A
ALMA ST	7th St	9th St	1	1	600	600	56	112	0.085	0.170	A	A
ALMA ST	9th St	13th St	1	1	600	600	84	115	0.127	0.174	A	A
ALMA ST	13th St	15th St	1	1	600	600	51	52	0.077	0.079	A	A
ALMA ST	17th St	19th St	1	1	600	600	18	32	0.027	0.048	A	A
ALMA ST	19th St	23rd St	1	1	600	600	40	169	0.061	0.256	A	A
ALMA ST	23rd St	25th St	1	1	600	600	22	19	0.033	0.029	A	A
ALMA ST	25th St	Hamilton Av	1	1	600	600	90	149	0.136	0.226	A	A
ALMA ST	Hamilton Av	30th St	1	1	600	600	157	314	0.238	0.476	A	A
ALMA ST	30th St	37th St	1	1	600	600	109	255	0.165	0.386	A	A
ALMERIA ST	37th St	Paseo Del Mar	1	1	600	600	6	4	0.009	0.006	A	A
HANFORD AV	Sepulveda St (north)	Sepulveda St (south)	1	1	600	600	121	169	0.183	0.256	A	A
HANFORD AV	Elberon Av	Summerland Av	1	1	600	600	42	29	0.064	0.044	A	A
WALKER AV	7th St	9th St	1	1	600	600	44	30	0.067	0.045	A	A
WALKER AV	9th St	13th St	1	1	600	600	96	180	0.145	0.273	A	A
WALKER AV	13th St	17th St	1	1	600	600	44	10	0.067	0.015	A	A
WALKER AV	17th St	19th St	1	1	600	600	15	18	0.023	0.027	A	A
WALKER AV	19th St	23rd St	1	1	600	600	55	142	0.083	0.215	A	A
WALKER AV	23rd St	25th St	1	1	600	600	64	69	0.097	0.105	A	A
WALKER AV	25th St	27th St	1	1	600	600	155	182	0.235	0.276	A	A
27TH ST	Walker Av	Barbara St	1	1	600	600	155	182	0.235	0.276	A	A
BARBARA ST	27th St	31st St	1	1	600	600	26	38	0.039	0.058	A	A
BARBARA ST	31st St	Paseo Del Mar	1	1	600	600	26	41	0.039	0.062	A	A
PATTON AV	Summerland Av	Sepulveda St	1	1	600	600	34	87	0.052	0.132	A	A
PATTON AV	Sepulveda St	1st St	1	1	600	600	33	38	0.050	0.058	A	A
PATTON AV	1st St	3rd St	1	1	600	600	147	163	0.223	0.247	A	A
WEYMOUTH AV	Western Av	7th St	1	1	700	700	117	203	0.152	0.264	A	A
WEYMOUTH AV	7th St	9th St	1	1	700	700	129	214	0.168	0.278	A	A
WEYMOUTH AV	9th St	Averill Park Dr	1	1	700	700	191	501	0.248	0.651	A	B
WEYMOUTH AV	Averill Park Dr	13th St	1	1	700	700	167	404	0.217	0.525	A	A
WEYMOUTH AV	13th St	17th St	1	1	600	600	88	270	0.133	0.409	A	A
WEYMOUTH AV	17th St	19th St	1	1	600	600	52	142	0.079	0.215	A	A
ELANITA DR	19th St	23rd St	1	1	600	600	199	288	0.302	0.436	A	A
DODSON AV	9th St	Averill Park Dr	1	1	600	600	37	99	0.056	0.150	A	A
DODSON AV	Averill Park Dr	Western Av	1	1	600	600	99	234	0.150	0.355	A	A
WESTERN AV	North City Limit	Westmont Dr	2	2	1600	1600	2,072	2,304	1.177	1.309	F	F
WESTERN AV	Westmont Dr	Capitol Dr	2	2	1600	1600	1,646	1,857	0.935	1.055	E	F
WESTERN AV	Capitol Dr	Park Western Dr	2	2	1600	1600	1,556	1,986	0.884	1.128	D	F
WESTERN AV	Park Western Dr	Crestwood St	2	2	1600	1600	1,476	2,196	0.839	1.248	D	F
WESTERN AV	Crestwood St	Summerland Av	2	2	1600	1600	1,489	2,200	0.846	1.250	D	F
WESTERN AV	Summerland Av	Santa Cruz St	2	2	1600	1600	1,588	2,364	0.902	1.343	E	F
WESTERN AV	Santa Cruz St	1st St	2	2	1600	1600	1,581	2,351	0.898	1.336	D	F

Transportation Alternative 1A

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
WESTERN AV	1st St	Weymouth Av	2	2	1600	1600	1,241	1,932	0.705	1.098	C	F
WESTERN AV	Weymouth Av	Bynner Dr	2	2	1600	1600	1,111	1,722	0.631	0.978	B	E
WESTERN AV	Bynner Dr	9th St	2	2	1600	1600	1,111	1,722	0.631	0.978	B	E
WESTERN AV	9th St	Dodson Av	2	2	1600	1600	1,274	2,024	0.724	1.150	C	F
WESTERN AV	Dodson Av	19th St	2	2	1600	1600	1,290	2,032	0.733	1.155	C	F
WESTERN AV	19th St	25th St	2	2	1600	1600	780	1,411	0.443	0.802	A	D
WESTERN AV	25th St	Paseo Del Mar	1	1	800	800	103	226	0.117	0.257	A	A
BYNNER DR (e/w)	El Rey Rd	Western Av	1	1	600	600	45	40	0.068	0.061	A	A
MORAY AV	Morse Dr	25th St	1	1	600	600	98	182	0.148	0.276	A	A
MORAY AV	25th St	26th St	1	1	600	600	48	42	0.073	0.064	A	A
GRAYSBY AV	26th St	35th St	1	1	600	600	154	287	0.233	0.435	A	A
GRAYSBY AV	35th St	Paseo Del Mar	1	1	600	600	7	7	0.011	0.011	A	A
ENROSE AV	Via Colinita	Santa Cruz St	1	1	600	600	17	14	0.026	0.021	A	A
SANTA CRUZ ST (e/w)	Enrose Av	Western Av	1	1	600	600	17	14	0.026	0.021	A	A
MANTIS AV	Cumbre Dr	Morse Dr	1	1	600	600	231	151	0.350	0.229	A	A
ANCHOVY AV	Cumbre Dr	25th St	1	1	600	600	113	159	0.171	0.241	A	A
ANCHOVY AV	25th St	35th St	1	1	600	600	30	27	0.045	0.041	A	A
ANCHOVY AV	35th St	Paseo Del Mar	1	1	600	600	22	21	0.033	0.032	A	A
SANDWOOD PL (e/w)	Amelia Av	Taper Av	1	1	600	600	357	546	0.541	0.827	A	D
SANDWOOD PL (e/w)	Taper Av	Barrywood Av	1	1	600	600	140	322	0.212	0.488	A	A
WESTMONT DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	236	661	0.153	0.429	A	A
WESTMONT DR (e/w)	Barrywood Av	Taper Av	2	2	1400	1400	97	338	0.063	0.219	A	A
WESTMONT DR (e/w)	Taper Av	Western Av	2	2	1400	1400	183	337	0.119	0.219	A	A
MILLMARK GROVE ST (e/w)	Barrywood Av	Taper Av	1	1	600	600	281	358	0.426	0.542	A	A
MILLMARK GROVE ST (e/w)	Taper Av	Amelia Av	1	1	600	600	194	226	0.294	0.342	A	A
CAPITOL DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	342	561	0.222	0.364	A	A
CAPITOL DR (e/w)	Barrywood Av	Meyler St	2	2	1400	1400	166	310	0.108	0.201	A	A
CAPITOL DR (e/w)	Meyler St	Mt Rose Rd	2	2	1400	1400	244	584	0.158	0.379	A	A
CAPITOL DR (e/w)	Mt Rose Rd	Western Av	2	2	1400	1400	438	486	0.284	0.316	A	A
CHANNEL ST (e/w)	John S. Gibson Blvd	Gaffey St	2	2	1600	1600	1,324	1,342	0.752	0.763	C	C
CHANNEL ST (e/w)	Gaffey St	Meyler St	1	1	600	600	506	724	0.767	1.097	C	F
CHANNEL ST (e/w)	Meyler St	Park Western Dr	1	1	600	600	232	318	0.352	0.482	A	A
PARK WESTERN DR	Channel St	Quiglet Pl	1	1	600	600	46	140	0.070	0.212	A	A
PARK WESTERN DR (e/w)	Quiglet Pl.	Western Av	1	1	600	600	70	358	0.106	0.542	A	A
MACARTHUR AV (e/w)	Gaffey Pl	Pacific Av	1	1	600	600	195	266	0.295	0.403	A	A
ELBERON AV (e/w)	Gaffey Pl	Gaffey St	1	1	600	600	30	82	0.045	0.124	A	A
ELBERON AV (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	187	178	0.283	0.270	A	A
ELBERON AV (e/w)	Cabrillo Av	Bandini St	1	1	600	600	29	69	0.044	0.105	A	A
ELBERON AV (e/w)	Bandini St	Hanford Av	1	1	600	600	49	33	0.074	0.050	A	A
SUMMERLAND AV (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	385	686	0.500	0.891	A	D
SUMMERLAND AV (e/w)	Cabrillo Av	Bandini St	1	1	700	700	365	612	0.474	0.795	A	C
SUMMERLAND AV (e/w)	Bandini St	Hanford Av	1	1	700	700	322	519	0.418	0.674	A	B
SUMMERLAND AV (e/w)	Crestwood St	Patton Av	1	1	700	700	353	537	0.458	0.697	A	B
SUMMERLAND AV (e/w)	Patton Av	Western Av	1	1	700	700	427	559	0.555	0.726	A	C
OLIVER ST	Marshall Ct	Cabrillo Av	1	1	600	600	22	15	0.033	0.023	A	A
O'FARRELL ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	282	312	0.427	0.473	A	A

Transportation Alternative 1A

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSC		Level of Service With ATSC		
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	
O'FARRELL ST (e/w)	Centre St	Pacific Av	1	1	600	600	234	241	0.355	0.365	A	A	
O'FARRELL ST (e/w)	Pacific Av	Grand Av	1	1	600	600	151	315	0.229	0.477	A	A	
O'FARRELL ST (e/w)	Grand Av	Gaffey St	1	1	600	600	338	315	0.512	0.477	A	A	
SEPULVEDA ST (e/w)	Gaffey St	Marshall Ct	1	1	600	600	139	411	0.211	0.623	A	B	
SEPULVEDA ST (e/w)	Marshall Ct	Cabrillo Av	1	1	600	600	87	357	0.132	0.541	A	A	
SEPULVEDA ST (e/w)	Cabrillo Av	Bandini St	1	1	600	600	71	144	0.108	0.218	A	A	
SEPULVEDA ST (e/w)	Bandini St	Hanford Av	1	1	600	600	121	169	0.183	0.256	A	A	
SEPULVEDA ST (e/w)	Hanford Av	Patton Av	1	1	600	600	31	17	0.047	0.026	A	A	
SEPULVEDA ST (e/w)	Patton Av	Harbor View Av	1	1	600	600	31	17	0.047	0.026	A	A	
1ST ST (e/w)	Harbor Blvd	Centre St	1	1	700	700	121	54	0.157	0.070	A	A	
1ST ST (e/w)	Centre St	Pacific Av	1	1	700	700	218	299	0.283	0.388	A	A	
1ST ST (e/w)	Pacific Av	Grand Av	1	1	700	700	56	235	0.073	0.305	A	A	
1ST ST (e/w)	Grand Av	Gaffey St	1	1	700	700	157	235	0.204	0.305	A	A	
1ST ST (e/w)	Gaffey	Cabrillo Av	1	1	700	700	728	771	0.945	1.001	E	F	
1ST ST (e/w)	Cabrillo Av	Bandini St	1	1	700	700	694	771	0.901	1.001	E	F	
1ST ST (e/w)	Bandini St	Patton Av	1	1	700	700	608	699	0.790	0.908	C	E	
1ST ST (e/w)	Patton Av	Western Av	1	1	700	700	794	874	1.031	1.135	F	F	
1ST ST (e/w)	Western Av	West City Limit	1	1	600	600	307	462	0.465	0.700	A	C	
3RD ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	523	390	0.792	0.591	C	A	
3RD ST (e/w)	Centre St	Pacific Av	1	1	600	600	495	815	0.750	1.235	C	F	
3RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	397	368	0.602	0.558	B	A	
3RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	455	470	0.689	0.712	B	C	
3RD ST (e/w)	Cabrillo Av	Meyler St	1	1	600	600	10	5	0.015	0.008	A	A	
3RD ST (e/w)	Hanford Av	Patton Av	1	1	600	600	4	45	0.006	0.068	A	A	
5TH ST (e/w)	Harbor Blvd	Centre St		2		1400		718		0.466		A	A
5TH ST (e/w)	Centre St	Mesa St		2		1400		264		0.171		A	A
5TH ST (e/w)	Mesa St.	Pacific Av		2		1400		456		0.296		A	A
5TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	297	165	0.386	0.214	A	A	
5TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	36	32	0.047	0.042	A	A	
7TH ST (e/w)	Harbor Blvd	Beacon St	2			1400		106		0.069		A	A
7TH ST (e/w)	Beacon St	Centre St	2			1400		110		0.071		A	A
7TH ST (e/w)	Centre St	Pacific Av	2			1400		411		0.267		A	A
7TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	35	34	0.045	0.044	A	A	
7TH ST (e/w)	Grand Av	Gaffey Av	1	1	700	700	27	52	0.035	0.068	A	A	
7TH ST (e/w)	Gaffey Av	Cabrillo Av	1	1	700	700	96	112	0.125	0.145	A	A	
7TH ST (e/w)	Cabrillo Av	Bandini St / Alma St	1	1	700	700	24	37	0.031	0.048	A	A	
7TH ST (e/w)	Bandini St / Alma St	Walker Av	1	1	700	700	39	34	0.051	0.044	A	A	
7TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	50	35	0.065	0.045	A	A	
9TH ST (e/w)	Pacific Av	Grand Av	1	1	800	800	239	330	0.272	0.375	A	A	
9TH ST (e/w)	Grand Av	Gaffey St	1	1	800	800	253	333	0.288	0.378	A	A	
9TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	503	793	0.572	0.901	A	E	
9TH ST (e/w)	Cabrillo Av	Meyler St	1	1	800	800	344	548	0.391	0.623	A	B	
9TH ST (e/w)	Meyler St	Alma St	1	1	800	800	344	548	0.391	0.623	A	B	
9TH ST (e/w)	Alma St	Walker St	1	1	800	800	385	615	0.438	0.699	A	B	
9TH ST (e/w)	Walker St	Weymouth Av	1	1	800	800	290	434	0.330	0.493	A	A	
9TH ST (e/w)	Weymouth Av	Dodson Av	1	1	800	800	231	150	0.263	0.170	A	A	
9TH ST (e/w)	Dodson Av	Western Av	1	1	800	800	331	188	0.376	0.214	A	A	

Transportation Alternative 1A

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
9TH ST (e/w)	Western Av	Miraleste Dr	1	1	800	800	559	277	0.635	0.315	B	A
MIRALESTE DR	9th St	West City Limit	1	1	800	800	559	236	0.635	0.268	B	A
AVERILL PARK DR (e/w)	Weymouth Av	Dodson Av	1	1	600	600	61	134	0.092	0.203	A	A
13TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	29	66	0.038	0.086	A	A
13TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	29	66	0.038	0.086	A	A
13TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	139	194	0.181	0.252	A	A
13TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	16	32	0.021	0.042	A	A
13TH ST (e/w)	Alma St	Walker Av	1	1	700	700	66	81	0.086	0.105	A	A
13TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	64	79	0.083	0.103	A	A
GULCH RD (e/w)	Harbor Blvd	Beacon St	1	1	600	600	152	217	0.230	0.329	A	A
14TH ST (e/w)	Beacon St	Centre St	1	1	600	600	120	173	0.182	0.262	A	A
14TH ST (e/w)	Centre St	Pacific Av	1	1	600	600	120	169	0.182	0.256	A	A
17TH ST (e/w)	Pacific Av	Grand Av	1	1	600	600	439	463	0.665	0.702	B	C
17TH ST (e/w)	Grand Av	Gaffey St	1	1	600	600	191	90	0.289	0.136	A	A
17TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	19	21	0.029	0.032	A	A
17TH ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	40	38	0.061	0.058	A	A
17TH ST (e/w)	Alma St	Leland St	1	1	600	600	47	39	0.071	0.059	A	A
17TH ST (e/w)	Leland St	Walker Av	1	1	600	600	47	39	0.071	0.059	A	A
17TH ST (e/w)	Walker Av	Weymouth Av	1	1	600	600	50	38	0.076	0.058	A	A
19TH ST (e/w)	Crescent Av	Pacific Av	1	1	600	600	205	159	0.311	0.241	A	A
19TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	45	239	0.058	0.310	A	A
19TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	315	473	0.409	0.614	A	B
19TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	98	358	0.127	0.465	A	A
19TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	92	350	0.119	0.455	A	A
19TH ST (e/w)	Alma St	Walker Av	1	1	700	700	183	327	0.238	0.425	A	A
19TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	176	235	0.229	0.305	A	A
19TH ST (e/w)	Weymouth Av	Western Av	1	1	700	700	389	449	0.505	0.583	A	A
MORSE DR (e/w)	Western Av	Mantis Av	1	1	600	600	231	151	0.350	0.229	A	A
CUMBRE DR (e/w)	Mantis Av	Pescadores Av	1	1	600	600	151	231	0.229	0.350	A	A
CUMBRE DR (e/w)	Pescadores Av	Anchovy Av	1	1	600	600	151	231	0.229	0.350	A	A
CUMBRE DR (e/w)	Anchovy Av	Mermaid Dr	1	1	600	600	30	41	0.045	0.062	A	A
MERMAID DR	Cumbre Dr	25th St	1	1	600	600	42	46	0.064	0.070	A	A
21ST ST (e/w)	Mesa St	Crescent Av	1	1	600	600	29	38	0.044	0.058	A	A
22ND ST (e/w)	Via Cabrillo Marina	Mesa St	1	1	700	700	347	628	0.451	0.816	A	D
22ND ST (e/w)	Mesa St	Pacific Av	1	1	700	700	347	628	0.451	0.816	A	D
22ND ST (e/w)	Pacific Av	Grand Av	1	1	700	700	281	483	0.365	0.627	A	B
22ND ST (e/w)	Grand Av	Gaffey St	1	1	700	700	218	393	0.283	0.510	A	A
23RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	48	25	0.073	0.038	A	A
23RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	45	25	0.068	0.038	A	A
23RD ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	243	369	0.368	0.559	A	A
23RD ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	187	318	0.283	0.482	A	A
23RD ST (e/w)	Alma St	Walker Av	1	1	600	600	103	197	0.156	0.298	A	A
23RD ST (e/w)	Walker Av	Elanita Dr	1	1	600	600	180	163	0.273	0.247	A	A
25TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	252	299	0.286	0.340	A	A
25TH ST (e/w)	Cabrillo Av	Alma St	1	1	800	800	293	337	0.333	0.383	A	A
25TH ST (e/w)	Alma St	Walker Av	1	1	800	800	449	432	0.510	0.491	A	A
25TH ST (e/w)	Walker Av	Patton Av	1	1	800	800	448	410	0.509	0.466	A	A

Transportation Alternative 1A

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAAC		Level of Service With ATSAAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
25TH ST (e/w)	Patton Av	Western Av	1	1	800	800	448	410	0.509	0.466	A	A
25TH ST (e/w)	Western Av	Moray Av	2	2	1600	1600	619	1,093	0.352	0.621	A	B
25TH ST (e/w)	Moray Av	Anchovy Av	2	2	1600	1600	451	788	0.256	0.448	A	A
25TH ST (e/w)	Anchovy Av	Mermaid Dr	1	1	800	800	470	803	0.534	0.913	A	E
25TH ST (e/w)	Mermaid Dr	West City Limit	1	1	800	800	472	805	0.536	0.915	A	E
26TH ST (e/w)	Pacific Av	Carolina St	1	1	600	600	68	136	0.103	0.206	A	A
26TH ST (e/w)	Carolina St	Gaffey St	1	1	600	600	27	30	0.041	0.045	A	A
26TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	58	152	0.088	0.230	A	A
26TH ST (e/w)	Cabrillo Av	Hamilton Av	1	1	600	600	61	161	0.092	0.244	A	A
26TH ST (e/w)	Moray Av	Graysby Av	1	1	600	600	154	287	0.233	0.435	A	A
HAMILTON AV (e/w)	26th St	Alma St	1	1	600	600	61	161	0.092	0.244	A	A
30TH ST (e/w)	Gaffey St	Alma St	1	1	600	600	134	231	0.203	0.350	A	A
31ST ST (e/w)	Carolina St	Gaffey St	1	1	600	600	16	11	0.024	0.017	A	A
35TH ST (e/w)	Graysby Av	Anchovy Av	1	1	600	600	19	21	0.029	0.032	A	A
37TH ST (e/w)	Alma St	Almeria St	1	1	600	600	37	39	0.056	0.059	A	A
SHEPARD ST (e/w)	Pacific Ave	Carolina St	1	1	700	700	103	130	0.134	0.169	A	A
SHEPARD ST (e/w)	Carolina St	Gaffey St	1	1	700	700	100	126	0.130	0.164	A	A
PASEO DEL MAR (e/w)	Gaffey St	Roxbury St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Roxbury St	Almeria St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Almeria St	Barbara St	1	1	700	700	14	19	0.018	0.025	A	A
PASEO DEL MAR (e/w)	Barbara St	Weymouth Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Weymouth Av	Western Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Western Av	Graysby Av	1	1	700	700	115	243	0.149	0.316	A	A
PASEO DEL MAR (e/w)	Graysby Av	Anchovy Av	1	1	700	700	114	243	0.148	0.316	A	A
PASEO DEL MAR (e/w)	Anchovy Av	Catalina Vista	1	1	700	700	122	250	0.158	0.325	A	A

305 links - 3 links (one way)

Total Links	Total Link	604	V/C
Links at E or F	Links at E	38	6%
			0.665

Transportation Alternative Three

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
PASEO DEL MAR (e/w)	Western Av	Graysby Av	1	1	700	700	115	243	0.149	0.316	A	A
PASEO DEL MAR (e/w)	Graysby Av	Anchovy Av	1	1	700	700	114	243	0.148	0.316	A	A
PASEO DEL MAR (e/w)	Anchovy Av	Catalina Vista	1	1	700	700	122	250	0.158	0.325	A	A

Total Links	610		V/C
Total Links	37	6%	0.664

Transportation Alternative Four

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
JOHN S. GIBSON BLVD	North City Limit	Channel St	2	2	1600	1600	1,562	2,382	0.888	1.353	D	F
FRONT ST	Pacific Av	Swinford St	2	2	1600	1600	365	414	0.207	0.235	A	A
HARBOR BLVD	Swinford St	O'Farrell St	3	3	2400	2400	1,657	1,524	0.628	0.577	B	A
HARBOR BLVD	O'Farrell St	1st St	3	3	2400	2400	1,450	1,247	0.549	0.472	A	A
HARBOR BLVD	1st St	3rd St	3	3	2400	2400	1,470	1,247	0.557	0.472	A	A
HARBOR BLVD	3rd St	5th St	3	3	2400	2400	1,179	909	0.447	0.344	A	A
HARBOR BLVD	5th St	7th St	3	3	2400	2400	826	516	0.313	0.195	A	A
HARBOR BLVD	7th St	14th St	2	2	1600	1600	640	504	0.364	0.286	A	A
HARBOR BLVD	14th St	Crescent Av	2	2	1600	1600	509	442	0.289	0.251	A	A
CRESCENT AV	Harbor Blvd	19th St	1	1	600	600	30	39	0.045	0.059	A	A
CRESCENT AV	19th St	21st St	1	1	600	600	30	38	0.045	0.058	A	A
BEACON ST	7th St	14th St	1	1	600	600	47	47	0.071	0.071	A	A
CENTRE ST	O'Farrell St	1st St	1	1	600	600	64	80	0.097	0.121	A	A
CENTRE ST	1st St	2nd St	1	1	700	700	64	133	0.083	0.173	A	A
CENTRE ST	2nd St	3rd St	1	1	700	700	64	133	0.083	0.173	A	A
CENTRE ST	3rd St	5th St	2	2	1400	1400	255	203	0.166	0.132	A	A
CENTRE ST	5th St	6th St	1	1	700	700	604	611	0.784	0.794	C	C
CENTRE ST	6th St	7th St	1	1	700	700	604	611	0.784	0.794	C	C
CENTRE ST	7th St	14th St	1	1	600	600	539	699	0.817	1.059	D	F
CENTRE ST	14th St	Crescent Av	1	1	600	600	98	130	0.148	0.197	A	A
MESA ST	21st St	22nd St	1	1	600	600	30	38	0.045	0.058	A	A
PACIFIC AV	Channel St	Front St	1	1	800	800	896	1,511	1.018	1.717	F	F
PACIFIC AV	Front St	Upland Av	2	2	1400	1400	675	1,335	0.438	0.867	A	D
PACIFIC AV	Upland Av	O'Farrell St	2	2	1400	1400	544	1,171	0.353	0.760	A	C
PACIFIC AV	O'Farrell St	1st St	2	2	1400	1400	519	1,104	0.337	0.717	A	C
PACIFIC AV	1st St.	3rd St	2	2	1400	1400	519	1,031	0.337	0.669	A	B
PACIFIC AV	3rd St	5th St	2	2	1400	1400	410	821	0.266	0.533	A	A
PACIFIC AV	5th St	7th St	2	2	1400	1400	992	1,435	0.644	0.932	B	E
PACIFIC AV	7th St	9th St	2	2	1400	1400	752	1,212	0.488	0.787	A	C
PACIFIC AV	9th St	13th St	2	2	1400	1400	497	948	0.323	0.616	A	B
PACIFIC AV	13th St	14th St	2	2	1400	1400	475	911	0.308	0.592	A	A
PACIFIC AV	14th St	17th St	2	2	1400	1400	446	888	0.290	0.577	A	A
PACIFIC AV	17th St	19th St	2	2	1400	1400	182	483	0.118	0.314	A	A
PACIFIC AV	19th St	22nd St	2	2	1400	1400	118	167	0.077	0.108	A	A
PACIFIC AV	22nd St	23rd St	1	1	700	700	157	236	0.204	0.306	A	A
PACIFIC AV	23rd St	24th St	1	1	700	700	157	230	0.204	0.299	A	A
PACIFIC AV	24th St	26th St	1	1	700	700	157	230	0.204	0.299	A	A
PACIFIC AV	26th St	36th St	1	1	700	700	94	109	0.122	0.142	A	A
PACIFIC AV	36th St	Bluff Pl	1	1	700	700	94	109	0.122	0.142	A	A
GRAND AV	O'Farrell St	1st St	1	1	600	600	30	298	0.045	0.452	A	A
GRAND AV	1st St	3rd St	1	1	600	600	30	397	0.045	0.602	A	B
GRAND AV	3rd St	5th St	1	1	600	600	337	445	0.511	0.674	A	B
GRAND AV	5th St	7th St	1	1	600	600	22	61	0.033	0.092	A	A
GRAND AV	7th St	9th St	1	1	600	600	17	52	0.026	0.079	A	A
GRAND AV	9th St	13th St	1	1	600	600	40	43	0.061	0.065	A	A
GRAND AV	13th St	17th St	1	1	600	600	46	33	0.070	0.050	A	A
GRAND AV	17th St	19th St	1	1	600	600	229	331	0.347	0.502	A	A
GRAND AV	19th St	22nd St	1	1	600	600	180	333	0.273	0.505	A	A

Appendix A-7 Transportation Alternative Four

Transportation Alternative Four

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
GRAND AV	22nd St	23rd St	1	1	600	600	28	50	0.042	0.076	A	A
GRAND AV	23rd St	24th St	1	1	600	600	46	41	0.070	0.062	A	A
CAROLINA ST	Hamilton Av	26th St	1	1	600	600	59	146	0.089	0.221	A	A
CAROLINA ST	26th St	31st St	1	1	600	600	59	146	0.089	0.221	A	A
CAROLINA ST	31st St	36th St	1	1	600	600	49	26	0.074	0.039	A	A
CAROLINA ST	36th St	Shepard St	1	1	600	600	4	33	0.006	0.050	A	A
GAFFEY PL	MacArthur Av	Elberon Av	1	1	600	600	48	61	0.073	0.092	A	A
GAFFEY ST	North City Limit	Westmont Dr	2	2	1600	1600	949	1,368	0.539	0.777	A	C
GAFFEY ST	Westmont Dr	Capitol Dr	2	2	1600	1600	592	1,117	0.336	0.635	A	B
GAFFEY ST	Capitol Dr	Channel St	2	2	1600	1600	734	1,019	0.417	0.579	A	A
GAFFEY ST	Channel St	Elberon Av	2	2	1600	1600	714	2,737	0.406	1.555	A	F
GAFFEY ST	Elberon Av	Summerland Av	2	2	1600	1600	939	2,448	0.534	1.391	A	F
GAFFEY ST	Summerland Av	Sepulveda St	3	3	2400	2400	1,568	2,739	0.594	1.038	A	F
GAFFEY ST	Sepulveda St	Santa Cruz St	3	3	2400	2400	1,564	2,216	0.592	0.839	A	D
GAFFEY ST	Santa Cruz St	1st St	3	3	2400	2400	1,564	2,216	0.592	0.839	A	D
GAFFEY ST	1st St	3rd St	3	3	2400	2400	1,369	1,947	0.519	0.738	A	C
GAFFEY ST	3rd St	5th St	3	3	2400	2400	772	1,462	0.292	0.554	A	A
GAFFEY ST	5th St	7th St	3	3	2400	2400	703	1,419	0.266	0.538	A	A
GAFFEY ST	7th St	9th St	3	3	2400	2400	636	1,410	0.241	0.534	A	A
GAFFEY ST	9th St	13th St	2	2	1600	1600	523	1,079	0.297	0.613	A	B
GAFFEY ST	13th St	17th St	2	2	1600	1600	491	1,019	0.279	0.579	A	A
GAFFEY ST	17th St	18th St	2	2	1600	1600	407	864	0.231	0.491	A	A
GAFFEY ST	18th St	19th St	2	2	1600	1600	407	864	0.231	0.491	A	A
GAFFEY ST	19th St	22nd St	2	2	1600	1600	532	858	0.302	0.488	A	A
GAFFEY ST	22nd St	23rd St	1	1	800	800	553	1,061	0.628	1.206	B	F
GAFFEY ST	23rd St	25th St	1	1	800	800	430	854	0.489	0.970	A	E
GAFFEY ST	25th St	26th St	1	1	800	800	381	684	0.433	0.777	A	C
GAFFEY ST	26th St	31st St	1	1	800	800	323	533	0.367	0.606	A	B
GAFFEY ST	31st St	Shepard St	1	1	800	800	340	545	0.386	0.619	A	B
MARSHALL CT	Oliver St	Sepulveda St	1	1	600	600	17	35	0.026	0.053	A	A
BARRYWOOD AV	Sandwood Pl	Westmont Dr	1	1	600	600	328	138	0.497	0.209	A	A
BARRYWOOD AV	Millmark Grove St	Capitol Rd	1	1	600	600	363	281	0.550	0.426	A	A
CABRILLO AV	Elberon Av	Summerland Av	1	1	600	600	278	188	0.421	0.285	A	A
CABRILLO AV	Summerland Av	Oliver St	1	1	600	600	17	35	0.026	0.053	A	A
CABRILLO AV	Sepulveda St	1st St	1	1	600	600	19	291	0.029	0.441	A	A
CABRILLO AV	1st St	3rd St	1	1	600	600	167	395	0.253	0.598	A	A
CABRILLO AV	3rd St	7th St	1	1	600	600	101	172	0.153	0.261	A	A
CABRILLO AV	7th St	9th St	1	1	600	600	150	182	0.227	0.276	A	A
CABRILLO AV	9th St	13th St	1	1	600	600	134	245	0.203	0.371	A	A
CABRILLO AV	13th St	17th St	1	1	600	600	115	141	0.174	0.214	A	A
CABRILLO AV	17th St	19th St	1	1	600	600	20	26	0.030	0.039	A	A
CABRILLO AV	19th St	23rd St	1	1	600	600	12	22	0.018	0.033	A	A
CABRILLO AV	23rd St	25th St	1	1	600	600	75	81	0.114	0.123	A	A
CABRILLO AV	25th St	26th St	1	1	600	600	3	8	0.005	0.012	A	A
TAPER AV	Sandwood Pl	Westmont Dr	1	1	600	600	217	218	0.329	0.330	A	A
TAPER AV	Westmont Dr	Barhugh Pl	1	1	600	600	303	379	0.459	0.574	A	A
TAPER AV	Barhugh Pl	Millmark Grove St	1	1	600	600	126	87	0.191	0.132	A	A
MEYLER ST	Capitol Rd	Channel St	1	1	600	600	448	240	0.679	0.364	B	A

Transportation Alternative Four

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
BANDINI ST	Elberon Av	Summerland Av	1	1	600	600	44	4	0.067	0.006	A	A
BANDINI ST	Summerland Av	Sepulveda St	1	1	600	600	61	153	0.092	0.232	A	A
BANDINI ST	Sepulveda St	Santa Cruz St	1	1	600	600	76	154	0.115	0.233	A	A
ALMA ST	7th St	9th St	1	1	600	600	57	125	0.086	0.189	A	A
ALMA ST	9th St	13th St	1	1	600	600	84	117	0.127	0.177	A	A
ALMA ST	13th St	15th St	1	1	600	600	52	53	0.079	0.080	A	A
ALMA ST	17th St	19th St	1	1	600	600	18	32	0.027	0.048	A	A
ALMA ST	19th St	23rd St	1	1	600	600	40	189	0.061	0.286	A	A
ALMA ST	23rd St	25th St	1	1	600	600	23	19	0.035	0.029	A	A
ALMA ST	25th St	Hamilton Av	1	1	600	600	91	152	0.138	0.230	A	A
ALMA ST	Hamilton Av	30th St	1	1	600	600	157	317	0.238	0.480	A	A
ALMA ST	30th St	37th St	1	1	600	600	109	255	0.165	0.386	A	A
ALMERIA ST	37th St	Paseo Del Mar	1	1	600	600	6	4	0.009	0.006	A	A
HANFORD AV	Sepulveda St (north)	Sepulveda St (south)	1	1	600	600	109	166	0.165	0.252	A	A
HANFORD AV	Elberon Av	Summerland Av	1	1	600	600	43	30	0.065	0.045	A	A
WALKER AV	7th St	9th St	1	1	600	600	25	45	0.038	0.068	A	A
WALKER AV	9th St	13th St	1	1	600	600	97	183	0.147	0.277	A	A
WALKER AV	13th St	17th St	1	1	600	600	36	10	0.055	0.015	A	A
WALKER AV	17th St	19th St	1	1	600	600	15	18	0.023	0.027	A	A
WALKER AV	19th St	23rd St	1	1	600	600	57	136	0.086	0.206	A	A
WALKER AV	23rd St	25th St	1	1	600	600	64	69	0.097	0.105	A	A
WALKER AV	25th St	27th St	1	1	600	600	155	182	0.235	0.276	A	A
27TH ST	Walker Av	Barbara St	1	1	600	600	155	182	0.235	0.276	A	A
BARBARA ST	27th St	31st St	1	1	600	600	44	36	0.067	0.055	A	A
BARBARA ST	31st St	Paseo Del Mar	1	1	600	600	43	32	0.065	0.048	A	A
PATTON AV	Summerland Av	Sepulveda St	1	1	600	600	34	90	0.052	0.136	A	A
PATTON AV	Sepulveda St	1st St	1	1	600	600	20	38	0.030	0.058	A	A
PATTON AV	1st St	3rd St	1	1	600	600	146	159	0.221	0.241	A	A
WEYMOUTH AV	Western Av	7th St	1	1	700	700	123	209	0.160	0.271	A	A
WEYMOUTH AV	7th St	9th St	1	1	700	700	134	220	0.174	0.286	A	A
WEYMOUTH AV	9th St	Averill Park Dr	1	1	700	700	190	502	0.247	0.652	A	B
WEYMOUTH AV	Averill Park Dr	13th St	1	1	700	700	164	404	0.213	0.525	A	A
WEYMOUTH AV	13th St	17th St	1	1	600	600	85	266	0.129	0.403	A	A
WEYMOUTH AV	17th St	19th St	1	1	600	600	50	138	0.076	0.209	A	A
ELANITA DR	19th St	23rd St	1	1	600	600	198	306	0.300	0.464	A	A
DODSON AV	9th St	Averill Park Dr	1	1	600	600	36	100	0.055	0.152	A	A
DODSON AV	Averill Park Dr	Western Av	1	1	600	600	99	234	0.150	0.355	A	A
WESTERN AV	North City Limit	Westmont Dr	2	2	1600	1600	2,098	2,357	1.192	1.339	F	F
WESTERN AV	Westmont Dr	Capitol Dr	2	2	1600	1600	1,651	1,901	0.938	1.080	E	F
WESTERN AV	Capitol Dr	Park Western Dr	2	2	1600	1600	1,569	2,059	0.891	1.170	D	F
WESTERN AV	Park Western Dr	Crestwood St	2	2	1600	1600	1,489	2,320	0.846	1.318	D	F
WESTERN AV	Crestwood St	Summerland Av	2	2	1600	1600	1,502	2,324	0.853	1.320	D	F
WESTERN AV	Summerland Av	Santa Cruz St	2	2	1600	1600	1,616	2,432	0.918	1.382	E	F
WESTERN AV	Santa Cruz St	1st St	2	2	1600	1600	1,606	2,421	0.913	1.376	E	F
WESTERN AV	1st St	Weymouth Av	2	2	1600	1600	1,238	1,973	0.703	1.121	C	F
WESTERN AV	Weymouth Av	Bynner Dr	2	2	1600	1600	1,104	1,756	0.627	0.998	B	E
WESTERN AV	Bynner Dr	9th St	2	2	1600	1600	1,104	1,756	0.627	0.998	B	E

Transportation Alternative Four

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
WESTERN AV	9th St	Dodson Av	2	2	1600	1600	1,285	2,049	0.730	1.164	C	F
WESTERN AV	Dodson Av	19th St	2	2	1600	1600	1,302	2,058	0.740	1.169	C	F
WESTERN AV	19th St	25th St	2	2	1600	1600	791	1,425	0.449	0.810	A	D
WESTERN AV	25th St	Paseo Del Mar	1	1	800	800	103	226	0.117	0.257	A	A
BYNNER DR (e/w)	El Rey Rd	Western Av	1	1	600	600	49	28	0.074	0.042	A	A
MORAY AV	Morse Dr	25th St	1	1	600	600	100	183	0.152	0.277	A	A
MORAY AV	25th St	26th St	1	1	600	600	47	34	0.071	0.052	A	A
GRAYSBY AV	26th St	35th St	1	1	600	600	154	287	0.233	0.435	A	A
GRAYSBY AV	35th St	Paseo Del Mar	1	1	600	600	7	7	0.011	0.011	A	A
ENROSE AV	Via Colinita	Santa Cruz St	1	1	600	600	15	17	0.023	0.026	A	A
SANTA CRUZ ST (e/w)	Enrose Av	Western Av	1	1	600	600	15	17	0.023	0.026	A	A
MANTIS AV	Cumbre Dr	Morse Dr	1	1	600	600	232	151	0.352	0.229	A	A
ANCHOVY AV	Cumbre Dr	25th St	1	1	600	600	113	159	0.171	0.241	A	A
ANCHOVY AV	25th St	35th St	1	1	600	600	30	27	0.045	0.041	A	A
ANCHOVY AV	35th St	Paseo Del Mar	1	1	600	600	22	21	0.033	0.032	A	A
SANDWOOD PL (e/w)	Amelia Av	Taper Av	1	1	600	600	357	546	0.541	0.827	A	D
SANDWOOD PL (e/w)	Taper Av	Barrywood Av	1	1	600	600	138	328	0.209	0.497	A	A
WESTMONT DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	237	659	0.154	0.428	A	A
WESTMONT DR (e/w)	Barrywood Av	Taper Av	2	2	1400	1400	98	330	0.064	0.214	A	A
WESTMONT DR (e/w)	Taper Av	Western Av	2	2	1400	1400	179	334	0.116	0.217	A	A
MILLMARK GROVE ST (e/w)	Barrywood Av	Taper Av	1	1	600	600	281	363	0.426	0.550	A	A
MILLMARK GROVE ST (e/w)	Taper Av	Amelia Av	1	1	600	600	193	237	0.292	0.359	A	A
CAPITOL DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	339	580	0.220	0.377	A	A
CAPITOL DR (e/w)	Barrywood Av	Meyler St	2	2	1400	1400	166	325	0.108	0.211	A	A
CAPITOL DR (e/w)	Meyler St	Mt Rose Rd	2	2	1400	1400	234	600	0.152	0.390	A	A
CAPITOL DR (e/w)	Mt Rose Rd	Western Av	2	2	1400	1400	419	493	0.272	0.320	A	A
CHANNEL ST (e/w)	John S. Gibson Blvd	Gaffey St	2	2	1600	1600	1,213	1,421	0.689	0.807	B	D
CHANNEL ST (e/w)	Gaffey St	Meyler St	1	1	600	600	491	771	0.744	1.168	C	F
CHANNEL ST (e/w)	Meyler St	Park Western Dr	1	1	600	600	228	365	0.345	0.553	A	A
PARK WESTERN DR	Channel St	Quiglet Pl	1	1	600	600	50	186	0.076	0.282	A	A
PARK WESTERN DR (e/w)	Quiglet Pl.	Western Av	1	1	600	600	69	410	0.105	0.621	A	B
MACARTHUR AV (e/w)	Gaffey Pl	Pacific Av	1	1	600	600	201	234	0.305	0.355	A	A
ELBERON AV (e/w)	Gaffey Pl	Gaffey St	1	1	600	600	48	61	0.073	0.092	A	A
ELBERON AV (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	230	174	0.348	0.264	A	A
ELBERON AV (e/w)	Cabrillo Av	Bandini St	1	1	600	600	29	62	0.044	0.094	A	A
ELBERON AV (e/w)	Bandini St	Hanford Av	1	1	600	600	47	40	0.071	0.061	A	A
SUMMERLAND AV (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	395	719	0.513	0.934	A	E
SUMMERLAND AV (e/w)	Cabrillo Av	Bandini St	1	1	700	700	402	618	0.522	0.803	A	D
SUMMERLAND AV (e/w)	Bandini St	Hanford Av	1	1	700	700	357	486	0.464	0.631	A	B
SUMMERLAND AV (e/w)	Crestwood St	Patton Av	1	1	700	700	387	503	0.503	0.653	A	B
SUMMERLAND AV (e/w)	Patton Av	Western Av	1	1	700	700	464	525	0.603	0.682	B	B
OLIVER ST	Marshall Ct	Cabrillo Av	1	1	600	600	35	17	0.053	0.026	A	A
O'FARRELL ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	246	295	0.373	0.447	A	A
O'FARRELL ST (e/w)	Centre St	Pacific Av	1	1	600	600	183	215	0.277	0.326	A	A
O'FARRELL ST (e/w)	Pacific Av	Grand Av	1	1	600	600	151	227	0.229	0.344	A	A
O'FARRELL ST (e/w)	Grand Av	Gaffey St	1	1	600	600	449	227	0.680	0.344	B	A
SEPULVEDA ST (e/w)	Gaffey St	Marshall Ct	1	1	600	600	139	437	0.211	0.662	A	B

Transportation Alternative Four

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
SEPULVEDA ST (e/w)	Marshall Ct	Cabrillo Av	1	1	600	600	75	392	0.114	0.594	A	A
SEPULVEDA ST (e/w)	Cabrillo Av	Bandini St	1	1	600	600	60	105	0.091	0.159	A	A
SEPULVEDA ST (e/w)	Bandini St	Hanford Av	1	1	600	600	109	166	0.165	0.252	A	A
SEPULVEDA ST (e/w)	Hanford Av	Patton Av	1	1	600	600	18	16	0.027	0.024	A	A
SEPULVEDA ST (e/w)	Patton Av	Harbor View Av	1	1	600	600	18	16	0.027	0.024	A	A
1ST ST (e/w)	Harbor Blvd	Centre St	1	1	700	700	4	4	0.005	0.005	A	A
1ST ST (e/w)	Centre St	Pacific Av	1	1	700	700	57	4	0.074	0.005	A	A
1ST ST (e/w)	Pacific Av	Grand Av	1	1	700	700	43	19	0.056	0.025	A	A
1ST ST (e/w)	Grand Av	Gaffey St	1	1	700	700	99	50	0.129	0.065	A	A
1ST ST (e/w)	Gaffey	Cabrillo Av	1	1	700	700	730	754	0.948	0.979	E	E
1ST ST (e/w)	Cabrillo Av	Bandini St	1	1	700	700	698	767	0.906	0.996	E	E
1ST ST (e/w)	Bandini St	Patton Av	1	1	700	700	628	702	0.816	0.912	D	E
1ST ST (e/w)	Patton Av	Western Av	1	1	700	700	797	877	1.035	1.139	F	F
1ST ST (e/w)	Western Av	West City Limit	1	1	600	600	290	446	0.439	0.676	A	B
3RD ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	290	338	0.439	0.512	A	A
3RD ST (e/w)	Centre St	Pacific Av	1	1	600	600	474	643	0.718	0.974	C	E
3RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	426	369	0.645	0.559	B	A
3RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	484	597	0.733	0.905	C	E
3RD ST (e/w)	Cabrillo Av	Meyler St	1	1	600	600	7	21	0.011	0.032	A	A
3RD ST (e/w)	Hanford Av	Patton Av	1	1	600	600	27	28	0.041	0.042	A	A
5TH ST (e/w)	Harbor Blvd	Centre St	2	2	1400	1400	357	394	0.232	0.256	A	A
5TH ST (e/w)	Centre St	Mesa St	1	1	700	700	391	369	0.508	0.479	A	A
5TH ST (e/w)	Mesa St.	Pacific Av	1	1	700	700	561	559	0.729	0.726	C	C
5TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	438	402	0.569	0.522	A	A
5TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	54	87	0.070	0.113	A	A
7TH ST (e/w)	Harbor Blvd	Beacon St	1	1	700	700	349	508	0.453	0.660	A	B
7TH ST (e/w)	Beacon St	Centre St	1	1	700	700	349	508	0.453	0.660	A	B
7TH ST (e/w)	Centre St	Pacific Av	1	1	700	700	359	365	0.466	0.474	A	A
7TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	34	56	0.044	0.073	A	A
7TH ST (e/w)	Grand Av	Gaffey Av	1	1	700	700	39	66	0.051	0.086	A	A
7TH ST (e/w)	Gaffey Av	Cabrillo Av	1	1	700	700	100	68	0.130	0.088	A	A
7TH ST (e/w)	Cabrillo Av	Bandini St / Alma St	1	1	700	700	33	38	0.043	0.049	A	A
7TH ST (e/w)	Bandini St / Alma St	Walker Av	1	1	700	700	39	28	0.051	0.036	A	A
7TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	34	25	0.044	0.032	A	A
9TH ST (e/w)	Pacific Av	Grand Av	1	1	800	800	319	332	0.363	0.377	A	A
9TH ST (e/w)	Grand Av	Gaffey St	1	1	800	800	330	343	0.375	0.390	A	A
9TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	563	797	0.640	0.906	B	E
9TH ST (e/w)	Cabrillo Av	Meyler St	1	1	800	800	403	546	0.458	0.620	A	B
9TH ST (e/w)	Meyler St	Alma St	1	1	800	800	403	546	0.458	0.620	A	B
9TH ST (e/w)	Alma St	Walker St	1	1	800	800	442	620	0.502	0.705	A	C
9TH ST (e/w)	Walker St	Weymouth Av	1	1	800	800	346	436	0.393	0.495	A	A
9TH ST (e/w)	Weymouth Av	Dodson Av	1	1	800	800	284	149	0.323	0.169	A	A
9TH ST (e/w)	Dodson Av	Western Av	1	1	800	800	384	187	0.436	0.213	A	A
9TH ST (e/w)	Western Av	Miraleste Dr	1	1	800	800	593	284	0.674	0.323	B	A
MIRALESTE DR	9th St	West City Limit	1	1	800	800	580	243	0.659	0.276	B	A
AVERILL PARK DR (e/w)	Weymouth Av	Dodson Av	1	1	600	600	62	134	0.094	0.203	A	A

Transportation Alternative Four

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
13TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	36	47	0.047	0.061	A	A
13TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	36	47	0.047	0.061	A	A
13TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	140	183	0.182	0.238	A	A
13TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	15	26	0.019	0.034	A	A
13TH ST (e/w)	Alma St	Walker Av	1	1	700	700	66	75	0.086	0.097	A	A
13TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	64	73	0.083	0.095	A	A
GULCH RD (e/w)	Harbor Blvd	Beacon St	1	1	600	600	146	183	0.221	0.277	A	A
14TH ST (e/w)	Beacon St	Centre St	1	1	600	600	118	138	0.179	0.209	A	A
14TH ST (e/w)	Centre St	Pacific Av	1	1	600	600	119	125	0.180	0.189	A	A
17TH ST (e/w)	Pacific Av	Grand Av	1	1	600	600	411	438	0.623	0.664	B	B
17TH ST (e/w)	Grand Av	Gaffey St	1	1	600	600	182	107	0.276	0.162	A	A
17TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	16	15	0.024	0.023	A	A
17TH ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	37	33	0.056	0.050	A	A
17TH ST (e/w)	Alma St	Leland St	1	1	600	600	37	33	0.056	0.050	A	A
17TH ST (e/w)	Leland St	Walker Av	1	1	600	600	37	33	0.056	0.050	A	A
17TH ST (e/w)	Walker Av	Weymouth Av	1	1	600	600	36	36	0.055	0.055	A	A
19TH ST (e/w)	Crescent Av	Pacific Av	1	1	600	600	211	158	0.320	0.239	A	A
19TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	56	260	0.073	0.338	A	A
19TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	315	468	0.409	0.608	A	B
19TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	99	384	0.129	0.499	A	A
19TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	94	374	0.122	0.486	A	A
19TH ST (e/w)	Alma St	Walker Av	1	1	700	700	187	332	0.243	0.431	A	A
19TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	175	245	0.227	0.318	A	A
19TH ST (e/w)	Weymouth Av	Western Av	1	1	700	700	432	480	0.561	0.623	A	B
MORSE DR (e/w)	Western Av	Mantis Av	1	1	600	600	232	151	0.352	0.229	A	A
CUMBRE DR (e/w)	Mantis Av	Pescadores Av	1	1	600	600	151	232	0.229	0.352	A	A
CUMBRE DR (e/w)	Pescadores Av	Anchovy Av	1	1	600	600	151	232	0.229	0.352	A	A
CUMBRE DR (e/w)	Anchovy Av	Mermaid Dr	1	1	600	600	29	34	0.044	0.052	A	A
MERMAID DR	Cumbre Dr	25th St	1	1	600	600	35	47	0.053	0.071	A	A
21ST ST (e/w)	Mesa St	Crescent Av	1	1	600	600	30	38	0.045	0.058	A	A
22ND ST (e/w)	Via Cabrillo Marina	Mesa St	1	1	700	700	283	534	0.368	0.694	A	B
22ND ST (e/w)	Mesa St	Pacific Av	1	1	700	700	283	534	0.368	0.694	A	B
22ND ST (e/w)	Pacific Av	Grand Av	1	1	700	700	219	435	0.284	0.565	A	A
22ND ST (e/w)	Grand Av	Gaffey St	1	1	700	700	169	353	0.219	0.458	A	A
23RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	43	5	0.065	0.008	A	A
23RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	30	5	0.045	0.008	A	A
23RD ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	245	341	0.371	0.517	A	A
23RD ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	191	290	0.289	0.439	A	A
23RD ST (e/w)	Alma St	Walker Av	1	1	600	600	107	190	0.162	0.288	A	A
23RD ST (e/w)	Walker Av	Elanita Dr	1	1	600	600	187	151	0.283	0.229	A	A
25TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	245	278	0.278	0.316	A	A
25TH ST (e/w)	Cabrillo Av	Alma St	1	1	800	800	283	317	0.322	0.360	A	A
25TH ST (e/w)	Alma St	Walker Av	1	1	800	800	443	412	0.503	0.468	A	A
25TH ST (e/w)	Walker Av	Patton Av	1	1	800	800	445	391	0.506	0.444	A	A
25TH ST (e/w)	Patton Av	Western Av	1	1	800	800	445	391	0.506	0.444	A	A
25TH ST (e/w)	Western Av	Moray Av	1	1	800	800	617	1,079	0.701	1.226	C	F
25TH ST (e/w)	Moray Av	Anchovy Av	1	1	800	800	452	770	0.514	0.875	A	D
25TH ST (e/w)	Anchovy Av	Mermaid Dr	1	1	800	800	471	791	0.535	0.899	A	D

Transportation Alternative Four

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
25TH ST (e/w)	Mermaid Dr	West City Limit	1	1	800	800	474	792	0.539	0.900	A	E
26TH ST (e/w)	Pacific Av	Carolina St	1	1	600	600	62	120	0.094	0.182	A	A
26TH ST (e/w)	Carolina St	Gaffey St	1	1	600	600	34	37	0.052	0.056	A	A
26TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	57	151	0.086	0.229	A	A
26TH ST (e/w)	Cabrillo Av	Hamilton Av	1	1	600	600	61	159	0.092	0.241	A	A
26TH ST (e/w)	Moray Av	Graysby Av	1	1	600	600	154	287	0.233	0.435	A	A
HAMILTON AV (e/w)	26th St	Alma St	1	1	600	600	61	159	0.092	0.241	A	A
30TH ST (e/w)	Gaffey St	Alma St	1	1	600	600	134	228	0.203	0.345	A	A
31ST ST (e/w)	Carolina St	Gaffey St	1	1	600	600	16	11	0.024	0.017	A	A
35TH ST (e/w)	Graysby Av	Anchovy Av	1	1	600	600	20	21	0.030	0.032	A	A
37TH ST (e/w)	Alma St	Almeria St	1	1	600	600	46	26	0.070	0.039	A	A
SHEPARD ST (e/w)	Pacific Ave	Carolina St	1	1	700	700	109	133	0.142	0.173	A	A
SHEPARD ST (e/w)	Carolina St	Gaffey St	1	1	700	700	106	128	0.138	0.166	A	A
PASEO DEL MAR (e/w)	Gaffey St	Roxbury St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Roxbury St	Almeria St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Almeria St	Barbara St	1	1	700	700	14	19	0.018	0.025	A	A
PASEO DEL MAR (e/w)	Barbara St	Weymouth Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Weymouth Av	Western Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Western Av	Graysby Av	1	1	700	700	115	243	0.149	0.316	A	A
PASEO DEL MAR (e/w)	Graysby Av	Anchovy Av	1	1	700	700	114	243	0.148	0.316	A	A
PASEO DEL MAR (e/w)	Anchovy Av	Catalina Vista	1	1	700	700	122	250	0.158	0.325	A	A

Total Links	610		V/C
Links at E or F (with ATSAC)	40	7%	0.677

Appendix A-8 Preferred Alternative

Preferred Alternative

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
JOHN S. GIBSON BLVD	North City Limit	Channel St	2	2	1600	1600	1,608	2,457	0.914	1.396	E	F
FRONT ST	Pacific Av	Swinford St	2	2	1600	1600	500	471	0.284	0.268	A	A
HARBOR BLVD	Swinford St	O'Farrell St	3	3	2400	2400	1,609	1,611	0.609	0.610	B	B
HARBOR BLVD	O'Farrell St	1st St	3	3	2400	2400	1,390	1,374	0.527	0.520	A	A
HARBOR BLVD	1st St	3rd St	3	3	2400	2400	1,461	1,411	0.553	0.534	A	A
HARBOR BLVD	3rd St	5th St	3	3	2400	2400	1,035	1,133	0.392	0.429	A	A
HARBOR BLVD	5th St	7th St	3	3	2400	2400	1,339	825	0.507	0.313	A	A
HARBOR BLVD	7th St	14th St	2	2	1600	1600	709	620	0.403	0.352	A	A
HARBOR BLVD	14th St	Crescent Av	2	2	1600	1600	575	520	0.327	0.295	A	A
CRESCENT AV	Harbor Blvd	19th St	1	1	600	600	31	42	0.047	0.064	A	A
CRESCENT AV	19th St	21st St	1	1	600	600	29	38	0.044	0.058	A	A
BEACON ST	7th St	14th St	1	1	600	600	44	31	0.067	0.047	A	A
CENTRE ST	O'Farrell St	1st St	1	1	600	600	58	94	0.088	0.142	A	A
CENTRE ST	1st St	2nd St	1	1	700	700	289	351	0.375	0.456	A	A
CENTRE ST	2nd St	3rd St	1	1	700	700	289	351	0.375	0.456	A	A
CENTRE ST	3rd St	5th St	2	2	1400	1400	668	215	0.434	0.140	A	A
CENTRE ST	5th St	6th St	1	1	700	700	559	482	0.726	0.626	C	B
CENTRE ST	6th St	7th St	1	1	700	700	559	482	0.726	0.626	C	B
CENTRE ST	7th St	14th St	1	1	600	600	522	699	0.791	1.059	C	F
CENTRE ST	14th St	Crescent Av	1	1	600	600	97	138	0.147	0.209	A	A
MESA ST	21st St	22nd St	1	1	600	600	29	38	0.044	0.058	A	A
PACIFIC AV	Channel St	Front St	2	2	1600	1600	1,112	1,986	0.632	1.128	B	F
PACIFIC AV	Front St	Upland Av	2	2	1400	1400	833	1,678	0.541	1.090	A	F
PACIFIC AV	Upland Av	O'Farrell St	2	2	1400	1400	703	1,451	0.456	0.942	A	E
PACIFIC AV	O'Farrell St	1st St	2	2	1400	1400	698	1,260	0.453	0.818	A	D
PACIFIC AV	1st St	3rd St	2	2	1400	1400	636	1,012	0.413	0.657	A	B
PACIFIC AV	3rd St	5th St	2	2	1400	1400	617	867	0.401	0.563	A	A
PACIFIC AV	5th St	7th St	2	2	1400	1400	776	1,580	0.504	1.026	A	F
PACIFIC AV	7th St	9th St	2	2	1400	1400	688	1,169	0.447	0.759	A	C
PACIFIC AV	9th St	13th St	2	2	1400	1400	520	935	0.338	0.607	A	B
PACIFIC AV	13th St	14th St	2	2	1400	1400	526	897	0.342	0.582	A	A
PACIFIC AV	14th St	17th St	2	2	1400	1400	484	907	0.314	0.589	A	A
PACIFIC AV	17th St	19th St	2	2	1400	1400	176	524	0.114	0.340	A	A
PACIFIC AV	19th St	22nd St	2	2	1400	1400	126	159	0.082	0.103	A	A
PACIFIC AV	22nd St	23rd St	1	1	700	700	165	258	0.214	0.335	A	A
PACIFIC AV	23rd St	24th St	1	1	700	700	165	238	0.214	0.309	A	A
PACIFIC AV	24th St	26th St	1	1	700	700	165	238	0.214	0.309	A	A
PACIFIC AV	26th St	36th St	1	1	700	700	97	104	0.126	0.135	A	A
PACIFIC AV	36th St	Bluff Pl	1	1	700	700	97	104	0.126	0.135	A	A
GRAND AV	O'Farrell St	1st St	1	1	600	600	34	163	0.052	0.247	A	A
GRAND AV	1st St	3rd St	1	1	600	600	40	282	0.061	0.427	A	A
GRAND AV	3rd St	5th St	1	1	600	600	184	333	0.279	0.505	A	A
GRAND AV	5th St	7th St	1	1	600	600	22	41	0.033	0.062	A	A
GRAND AV	7th St	9th St	1	1	600	600	17	17	0.026	0.026	A	A

Appendix A-8 Preferred Alternative

Preferred Alternative

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
GRAND AV	9th St	13th St	1	1	600	600	35	32	0.053	0.048	A	A
GRAND AV	13th St	17th St	1	1	600	600	49	40	0.074	0.061	A	A
GRAND AV	17th St	19th St	1	1	600	600	260	292	0.394	0.442	A	A
GRAND AV	19th St	22nd St	1	1	600	600	166	323	0.252	0.489	A	A
GRAND AV	22nd St	23rd St	1	1	600	600	31	26	0.047	0.039	A	A
GRAND AV	23rd St	24th St	1	1	600	600	34	42	0.052	0.064	A	A
CAROLINA ST	Hamilton Av	26th St	1	1	600	600	53	138	0.080	0.209	A	A
CAROLINA ST	26th St	31st St	1	1	600	600	53	138	0.080	0.209	A	A
CAROLINA ST	31st St	36th St	1	1	600	600	35	30	0.053	0.045	A	A
CAROLINA ST	36th St	Shepard St	1	1	600	600	4	31	0.006	0.047	A	A
GAFFEY PL	MacArthur Av	Elberon Av	1	1	600	600	30	107	0.045	0.162	A	A
GAFFEY ST	North City Limit	Westmont Dr	2	2	1600	1600	995	1,432	0.565	0.814	A	D
GAFFEY ST	Westmont Dr	Capitol Dr	2	2	1600	1600	888	923	0.505	0.524	A	A
GAFFEY ST	Capitol Dr	Channel St	2	2	1600	1600	762	1,098	0.433	0.624	A	B
GAFFEY ST	Channel St	Elberon Av	2	2	1600	1600	582	2,614	0.331	1.485	A	F
GAFFEY ST	Elberon Av	Summerland Av	2	2	1600	1600	827	2,338	0.470	1.328	A	F
GAFFEY ST	Summerland Av	Sepulveda St	3	3	2400	2400	1,553	2,512	0.588	0.952	A	E
GAFFEY ST	Sepulveda St	Santa Cruz St	3	3	2400	2400	1,521	2,246	0.576	0.851	A	D
GAFFEY ST	Santa Cruz St	1st St	3	3	2400	2400	1,521	2,246	0.576	0.851	A	D
GAFFEY ST	1st St	3rd St	3	3	2400	2400	1,108	1,859	0.420	0.704	A	C
GAFFEY ST	3rd St	5th St	3	3	2400	2400	641	1,431	0.243	0.542	A	A
GAFFEY ST	5th St	7th St	3	3	2400	2400	660	1,443	0.250	0.547	A	A
GAFFEY ST	7th St	9th St	3	3	2400	2400	575	1,400	0.218	0.530	A	A
GAFFEY ST	9th St	13th St	2	2	1600	1600	442	1,034	0.251	0.588	A	A
GAFFEY ST	13th St	17th St	2	2	1600	1600	402	982	0.228	0.558	A	A
GAFFEY ST	17th St	18th St	2	2	1600	1600	328	815	0.186	0.463	A	A
GAFFEY ST	18th St	19th St	2	2	1600	1600	328	815	0.186	0.463	A	A
GAFFEY ST	19th St	22nd St	2	2	1600	1600	486	862	0.276	0.490	A	A
GAFFEY ST	22nd St	23rd St	1	1	800	800	558	1,095	0.634	1.244	B	F
GAFFEY ST	23rd St	25th St	1	1	800	800	434	880	0.493	1.000	A	F
GAFFEY ST	25th St	26th St	1	1	700	700	378	688	0.491	0.894	A	D
GAFFEY ST	26th St	31st St	1	1	700	700	320	541	0.416	0.703	A	C
GAFFEY ST	31st St	Shepard St	1	1	700	700	337	553	0.438	0.718	A	C
MARSHALL CT	Oliver St	Sepulveda St	1	1	600	600	17	28	0.026	0.042	A	A
BARRYWOOD AV	Sandwood Pl	Westmont Dr	1	1	600	600	325	150	0.492	0.227	A	A
BARRYWOOD AV	Millmark Grove St	Capitol Rd	1	1	600	600	362	273	0.548	0.414	A	A
CABRILLO AV	Elberon Av	Summerland Av	1	1	600	600	219	185	0.332	0.280	A	A
CABRILLO AV	Summerland Av	Oliver St	1	1	600	600	17	28	0.026	0.042	A	A
CABRILLO AV	Sepulveda St	1st St	1	1	600	600	17	220	0.026	0.333	A	A
CABRILLO AV	1st St	3rd St	1	1	600	600	155	383	0.235	0.580	A	A
CABRILLO AV	3rd St	7th St	1	1	600	600	67	129	0.102	0.195	A	A
CABRILLO AV	7th St	9th St	1	1	600	600	153	183	0.232	0.277	A	A
CABRILLO AV	9th St	13th St	1	1	600	600	134	240	0.203	0.364	A	A
CABRILLO AV	13th St	17th St	1	1	600	600	112	137	0.170	0.208	A	A

Preferred Alternative

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
CABRILLO AV	17th St	19th St	1	1	600	600	20	26	0.030	0.039	A	A
CABRILLO AV	19th St	23rd St	1	1	600	600	12	21	0.018	0.032	A	A
CABRILLO AV	23rd St	25th St	1	1	600	600	81	81	0.123	0.123	A	A
CABRILLO AV	25th St	26th St	1	1	600	600	3	8	0.005	0.012	A	A
TAPER AV	Sandwood Pl	Westmont Dr	1	1	600	600	220	206	0.333	0.312	A	A
TAPER AV	Westmont Dr	Barhugh Pl	1	1	600	600	299	368	0.453	0.558	A	A
TAPER AV	Barhugh Pl	Millmark Grove St	1	1	600	600	124	78	0.188	0.118	A	A
MEYLER ST	Capitol Rd	Channel St	1	1	600	600	463	246	0.702	0.373	C	A
BANDINI ST	Elberon Av	Summerland Av	1	1	600	600	47	12	0.071	0.018	A	A
BANDINI ST	Summerland Av	Sepulveda St	1	1	600	600	62	138	0.094	0.209	A	A
BANDINI ST	Sepulveda St	Santa Cruz St	1	1	600	600	75	144	0.114	0.218	A	A
ALMA ST	7th St	9th St	1	1	600	600	59	115	0.089	0.174	A	A
ALMA ST	9th St	13th St	1	1	600	600	84	113	0.127	0.171	A	A
ALMA ST	13th St	15th St	1	1	600	600	52	52	0.079	0.079	A	A
ALMA ST	17th St	19th St	1	1	600	600	18	32	0.027	0.048	A	A
ALMA ST	19th St	23rd St	1	1	600	600	40	174	0.061	0.264	A	A
ALMA ST	23rd St	25th St	1	1	600	600	22	19	0.033	0.029	A	A
ALMA ST	25th St	Hamilton Av	1	1	600	600	90	148	0.136	0.224	A	A
ALMA ST	Hamilton Av	30th St	1	1	600	600	157	313	0.238	0.474	A	A
ALMA ST	30th St	37th St	1	1	600	600	109	255	0.165	0.386	A	A
ALMERIA ST	37th St	Paseo Del Mar	1	1	600	600	6	4	0.009	0.006	A	A
HANFORD AV	Sepulveda St (north)	Sepulveda St (south)	1	1	600	600	120	169	0.182	0.256	A	A
HANFORD AV	Elberon Av	Summerland Av	1	1	600	600	42	29	0.064	0.044	A	A
WALKER AV	7th St	9th St	1	1	600	600	37	37	0.056	0.056	A	A
WALKER AV	9th St	13th St	1	1	600	600	96	180	0.145	0.273	A	A
WALKER AV	13th St	17th St	1	1	600	600	40	10	0.061	0.015	A	A
WALKER AV	17th St	19th St	1	1	600	600	15	18	0.023	0.027	A	A
WALKER AV	19th St	23rd St	1	1	600	600	55	136	0.083	0.206	A	A
WALKER AV	23rd St	25th St	1	1	600	600	64	69	0.097	0.105	A	A
WALKER AV	25th St	27th St	1	1	600	600	155	182	0.235	0.276	A	A
27TH ST	Walker Av	Barbara St	1	1	600	600	155	182	0.235	0.276	A	A
BARBARA ST	27th St	31st St	1	1	600	600	28	32	0.042	0.048	A	A
BARBARA ST	31st St	Paseo Del Mar	1	1	600	600	39	25	0.059	0.038	A	A
PATTON AV	Summerland Av	Sepulveda St	1	1	600	600	34	86	0.052	0.130	A	A
PATTON AV	Sepulveda St	1st St	1	1	600	600	32	37	0.048	0.056	A	A
PATTON AV	1st St	3rd St	1	1	600	600	149	160	0.226	0.242	A	A
WEYMOUTH AV	Western Av	7th St	1	1	700	700	120	198	0.156	0.257	A	A
WEYMOUTH AV	7th St	9th St	1	1	700	700	131	210	0.170	0.273	A	A
WEYMOUTH AV	9th St	Averill Park Dr	1	1	700	700	192	491	0.249	0.638	A	B
WEYMOUTH AV	Averill Park Dr	13th St	1	1	700	700	168	392	0.218	0.509	A	A
WEYMOUTH AV	13th St	17th St	1	1	600	600	89	260	0.135	0.394	A	A
WEYMOUTH AV	17th St	19th St	1	1	600	600	53	132	0.080	0.200	A	A
ELANITA DR	19th St	23rd St	1	1	600	600	199	291	0.302	0.441	A	A

Appendix A-8 Preferred Alternative

Preferred Alternative

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
DODSON AV	9th St	Averill Park Dr	1	1	600	600	37	98	0.056	0.148	A	A
DODSON AV	Averill Park Dr	Western Av	1	1	600	600	98	234	0.148	0.355	A	A
WESTERN AV	North City Limit	Westmont Dr	2	2	1600	1600	2,054	2,312	1.167	1.314	F	F
WESTERN AV	Westmont Dr	Capitol Dr	2	2	1600	1600	1,650	1,839	0.938	1.045	E	F
WESTERN AV	Capitol Dr	Park Western Dr	2	2	1600	1600	1,556	1,991	0.884	1.131	D	F
WESTERN AV	Park Western Dr	Crestwood St	2	2	1600	1600	1,476	2,143	0.839	1.218	D	F
WESTERN AV	Crestwood St	Summerland Av	2	2	1600	1600	1,490	2,148	0.847	1.220	D	F
WESTERN AV	Summerland Av	Santa Cruz St	2	2	1600	1600	1,557	2,373	0.885	1.348	D	F
WESTERN AV	Santa Cruz St	1st St	2	2	1600	1600	1,549	2,362	0.880	1.342	D	F
WESTERN AV	1st St	Weymouth Av	2	2	1600	1600	1,239	1,919	0.704	1.090	C	F
WESTERN AV	Weymouth Av	Bynner Dr	2	2	1600	1600	1,107	1,714	0.629	0.974	B	E
WESTERN AV	Bynner Dr	9th St	2	2	1600	1600	1,107	1,714	0.629	0.974	B	E
WESTERN AV	9th St	Dodson Av	2	2	1600	1600	1,271	2,023	0.722	1.149	C	F
WESTERN AV	Dodson Av	19th St	2	2	1600	1600	1,287	2,032	0.731	1.155	C	F
WESTERN AV	19th St	25th St	2	2	1600	1600	780	1,403	0.443	0.797	A	C
WESTERN AV	25th St	Paseo Del Mar	1	1	800	800	103	225	0.117	0.256	A	A
BYNNER DR (e/w)	El Rey Rd	Western Av	1	1	600	600	42	31	0.064	0.047	A	A
MORAY AV	Morse Dr	25th St	1	1	600	600	98	182	0.148	0.276	A	A
MORAY AV	25th St	26th St	1	1	600	600	48	36	0.073	0.055	A	A
GRAYSBY AV	26th St	35th St	1	1	600	600	154	287	0.233	0.435	A	A
GRAYSBY AV	35th St	Paseo Del Mar	1	1	600	600	7	7	0.011	0.011	A	A
ENROSE AV	Via Colinita	Santa Cruz St	1	1	600	600	16	14	0.024	0.021	A	A
SANTA CRUZ ST (e/w)	Enrose Av	Western Av	1	1	600	600	16	14	0.024	0.021	A	A
MANTIS AV	Cumbre Dr	Morse Dr	1	1	600	600	231	151	0.350	0.229	A	A
ANCHOVY AV	Cumbre Dr	25th St	1	1	600	600	113	159	0.171	0.241	A	A
ANCHOVY AV	25th St	35th St	1	1	600	600	30	27	0.045	0.041	A	A
ANCHOVY AV	35th St	Paseo Del Mar	1	1	600	600	22	21	0.033	0.032	A	A
SANDWOOD PL (e/w)	Amelia Av	Taper Av	1	1	600	600	357	546	0.541	0.827	A	D
SANDWOOD PL (e/w)	Taper Av	Barrywood Av	1	1	600	600	150	325	0.227	0.492	A	A
WESTMONT DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	246	648	0.160	0.421	A	A
WESTMONT DR (e/w)	Barrywood Av	Taper Av	2	2	1400	1400	96	322	0.062	0.209	A	A
WESTMONT DR (e/w)	Taper Av	Western Av	2	2	1400	1400	184	329	0.119	0.214	A	A
MILLMARK GROVE ST (e/w)	Barrywood Av	Taper Av	1	1	600	600	273	362	0.414	0.548	A	A
MILLMARK GROVE ST (e/w)	Taper Av	Amelia Av	1	1	600	600	194	238	0.294	0.361	A	A
CAPITOL DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	333	559	0.216	0.363	A	A
CAPITOL DR (e/w)	Barrywood Av	Meyler St	2	2	1400	1400	167	303	0.108	0.197	A	A
CAPITOL DR (e/w)	Meyler St	Mt Rose Rd	2	2	1400	1400	241	593	0.156	0.385	A	A
CAPITOL DR (e/w)	Mt Rose Rd	Western Av	2	2	1400	1400	428	489	0.278	0.318	A	A
CHANNEL ST (e/w)	John S. Gibson Blvd	Gaffey St	2	2	1600	1600	1,277	1,251	0.726	0.711	C	C
CHANNEL ST (e/w)	Gaffey St	Meyler St	1	1	600	600	504	686	0.764	1.039	C	F
CHANNEL ST (e/w)	Meyler St	Park Western Dr	1	1	600	600	234	263	0.355	0.398	A	A
PARK WESTERN DR	Channel St	Quiglet Pl	1	1	600	600	38	84	0.058	0.127	A	A
PARK WESTERN DR (e/w)	Quiglet Pl.	Western Av	1	1	600	600	69	302	0.105	0.458	A	A

Preferred Alternative

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
MACARTHUR AV (e/w)	Gaffey Pl	Pacific Av	1	1	600	600	194	291	0.294	0.441	A	A
ELBERON AV (e/w)	Gaffey Pl	Gaffey St	1	1	600	600	30	107	0.045	0.162	A	A
ELBERON AV (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	174	181	0.264	0.274	A	A
ELBERON AV (e/w)	Cabrillo Av	Bandini St	1	1	600	600	30	71	0.045	0.108	A	A
ELBERON AV (e/w)	Bandini St	Hanford Av	1	1	600	600	26	32	0.039	0.048	A	A
SUMMERLAND AV (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	354	752	0.460	0.977	A	E
SUMMERLAND AV (e/w)	Cabrillo Av	Bandini St	1	1	700	700	338	692	0.439	0.899	A	D
SUMMERLAND AV (e/w)	Bandini St	Hanford Av	1	1	700	700	290	580	0.377	0.753	A	C
SUMMERLAND AV (e/w)	Crestwood St	Patton Av	1	1	700	700	321	598	0.417	0.777	A	C
SUMMERLAND AV (e/w)	Patton Av	Western Av	1	1	700	700	394	620	0.512	0.805	A	D
OLIVER ST	Marshall Ct	Marshall Av	1	1	600	600	28	17	0.042	0.026	A	A
O'FARRELL ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	301	297	0.456	0.450	A	A
O'FARRELL ST (e/w)	Centre St	Pacific Av	1	1	600	600	266	225	0.403	0.341	A	A
O'FARRELL ST (e/w)	Pacific Av	Grand Av	1	1	600	600	156	301	0.236	0.456	A	A
O'FARRELL ST (e/w)	Grand Av	Gaffey St	1	1	600	600	320	301	0.485	0.456	A	A
SEPULVEDA ST (e/w)	Gaffey St	Marshall Ct	1	1	600	600	140	373	0.212	0.565	A	A
SEPULVEDA ST (e/w)	Marshall Ct	Cabrillo Av	1	1	600	600	82	328	0.124	0.497	A	A
SEPULVEDA ST (e/w)	Cabrillo Av	Bandini St	1	1	600	600	70	113	0.106	0.171	A	A
SEPULVEDA ST (e/w)	Bandini St	Hanford Av	1	1	600	600	120	169	0.182	0.256	A	A
SEPULVEDA ST (e/w)	Hanford Av	Patton Av	1	1	600	600	30	17	0.045	0.026	A	A
SEPULVEDA ST (e/w)	Patton Av	Harbor View Av	1	1	600	600	30	17	0.045	0.026	A	A
1ST ST (e/w)	Harbor Blvd	Centre St	1	1	700	700	113	140	0.147	0.182	A	A
1ST ST (e/w)	Centre St	Pacific Av	1	1	700	700	298	301	0.387	0.391	A	A
1ST ST (e/w)	Pacific Av	Grand Av	1	1	700	700	55	244	0.071	0.317	A	A
1ST ST (e/w)	Grand Av	Gaffey St	1	1	700	700	175	244	0.227	0.317	A	A
1ST ST (e/w)	Gaffey	Cabrillo Av	1	1	700	700	740	784	0.961	1.018	E	F
1ST ST (e/w)	Cabrillo Av	Bandini St	1	1	700	700	714	732	0.927	0.951	E	E
1ST ST (e/w)	Bandini St	Patton Av	1	1	700	700	636	677	0.826	0.879	D	D
1ST ST (e/w)	Patton Av	Western Av	1	1	700	700	819	854	1.064	1.109	F	F
1ST ST (e/w)	Western Av	West City Limit	1	1	600	600	303	466	0.459	0.706	A	C
3RD ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	504	355	0.764	0.538	C	A
3RD ST (e/w)	Centre St	Pacific Av	1	1	600	600	483	850	0.732	1.288	C	F
3RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	377	372	0.571	0.564	A	A
3RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	427	467	0.647	0.708	B	C
3RD ST (e/w)	Cabrillo Av	Meyler St	1	1	600	600	7	30	0.011	0.045	A	A
3RD ST (e/w)	Hanford Av	Patton Av	1	1	600	600	39	26	0.059	0.039	A	A
5TH ST (e/w)	Harbor Blvd	Centre St	0	1	0	700	0	610		0.792		C
5TH ST (e/w)	Centre St	Mesa St	0	1	0	700	0	234		0.304		A
5TH ST (e/w)	Mesa St.	Pacific Av	0	1	0	700	0	424		0.551		A
5TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	294	164	0.382	0.213	A	A
5TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	50	37	0.065	0.048	A	A
7TH ST (e/w)	Harbor Blvd	Beacon St	1	0	700		105		0.136		A	
7TH ST (e/w)	Beacon St	Centre St	1	0	700		108		0.140		A	
7TH ST (e/w)	Centre St	Pacific Av	1	0	700		362		0.470		A	

Appendix A-8 Preferred Alternative

Preferred Alternative

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
7TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	26	31	0.034	0.040	A	A
7TH ST (e/w)	Grand Av	Gaffey Av	1	1	700	700	27	52	0.035	0.068	A	A
7TH ST (e/w)	Gaffey Av	Cabrillo Av	1	1	700	700	106	87	0.138	0.113	A	A
7TH ST (e/w)	Cabrillo Av	Bandini St / Alma St	1	1	700	700	24	37	0.031	0.048	A	A
7TH ST (e/w)	Bandini St / Alma St	Walker Av	1	1	700	700	31	46	0.040	0.060	A	A
7TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	37	47	0.048	0.061	A	A
9TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	243	315	0.316	0.409	A	A
9TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	259	318	0.336	0.413	A	A
9TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	503	799	0.653	1.038	B	F
9TH ST (e/w)	Cabrillo Av	Meyler St	1	1	700	700	344	551	0.447	0.716	A	C
9TH ST (e/w)	Meyler St	Alma St	1	1	700	700	344	551	0.447	0.716	A	C
9TH ST (e/w)	Alma St	Walker St	1	1	700	700	381	614	0.495	0.797	A	C
9TH ST (e/w)	Walker St	Weymouth Av	1	1	700	700	285	434	0.370	0.564	A	A
9TH ST (e/w)	Weymouth Av	Dodson Av	1	1	700	700	229	156	0.297	0.203	A	A
9TH ST (e/w)	Dodson Av	Western Av	1	1	700	700	327	193	0.425	0.251	A	A
9TH ST (e/w)	Western Av	Miraleste Dr	1	1	600	600	553	274	0.838	0.415	D	A
MIRALESTE DR	9th St	West City Limit	1	1	800	800	551	234	0.626	0.266	B	A
AVERILL PARK DR (e/w)	Weymouth Av	Dodson Av	1	1	600	600	61	136	0.092	0.206	A	A
13TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	29	68	0.038	0.088	A	A
13TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	29	68	0.038	0.088	A	A
13TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	139	195	0.181	0.253	A	A
13TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	17	34	0.022	0.044	A	A
13TH ST (e/w)	Alma St	Walker Av	1	1	700	700	66	83	0.086	0.108	A	A
13TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	64	81	0.083	0.105	A	A
GULCH RD (e/w)	Harbor Blvd	Beacon St	1	1	600	600	148	220	0.224	0.333	A	A
14TH ST (e/w)	Beacon St	Centre St	1	1	600	600	117	176	0.177	0.267	A	A
14TH ST (e/w)	Centre St	Pacific Av	1	1	600	600	119	172	0.180	0.261	A	A
17TH ST (e/w)	Pacific Av	Grand Av	1	1	600	600	460	397	0.697	0.602	B	B
17TH ST (e/w)	Grand Av	Gaffey St	1	1	600	600	199	106	0.302	0.161	A	A
17TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	19	21	0.029	0.032	A	A
17TH ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	40	38	0.061	0.058	A	A
17TH ST (e/w)	Alma St	Leland St	1	1	600	600	49	36	0.074	0.055	A	A
17TH ST (e/w)	Leland St	Walker Av	1	1	600	600	49	36	0.074	0.055	A	A
17TH ST (e/w)	Walker Av	Weymouth Av	1	1	600	600	33	36	0.050	0.055	A	A
19TH ST (e/w)	Crescent Av	Pacific Av	1	1	600	600	204	161	0.309	0.244	A	A
19TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	45	322	0.058	0.418	A	A
19TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	326	477	0.423	0.619	A	B
19TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	98	363	0.127	0.471	A	A
19TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	92	354	0.119	0.460	A	A
19TH ST (e/w)	Alma St	Walker Av	1	1	700	700	183	325	0.238	0.422	A	A
19TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	174	237	0.226	0.308	A	A
19TH ST (e/w)	Weymouth Av	Western Av	1	1	700	700	397	447	0.516	0.581	A	A

Appendix A-8 Preferred Alternative

Preferred Alternative

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
MORSE DR (e/w)	Western Av	Mantis Av	1	1	600	600	231	151	0.350	0.229	A	A
CUMBRE DR (e/w)	Mantis Av	Pescadores Av	1	1	600	600	151	231	0.229	0.350	A	A
CUMBRE DR (e/w)	Pescadores Av	Anchovy Av	1	1	600	600	151	231	0.229	0.350	A	A
CUMBRE DR (e/w)	Anchovy Av	Mermaid Dr	1	1	600	600	41	40	0.062	0.061	A	A
MERMAID DR	Cumbre Dr	25th St	1	1	600	600	38	44	0.058	0.067	A	A
21ST ST (e/w)	Mesa St	Crescent Av	1	1	600	600	29	38	0.044	0.058	A	A
22ND ST (e/w)	Via Cabrillo Marina	Mesa St	1	1	700	700	345	606	0.448	0.787	A	C
22ND ST (e/w)	Mesa St	Pacific Av	1	1	700	700	345	606	0.448	0.787	A	C
22ND ST (e/w)	Pacific Av	Grand Av	1	1	700	700	279	477	0.362	0.619	A	B
22ND ST (e/w)	Grand Av	Gaffey St	1	1	700	700	218	382	0.283	0.496	A	A
23RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	31	19	0.047	0.029	A	A
23RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	48	19	0.073	0.029	A	A
23RD ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	243	363	0.368	0.550	A	A
23RD ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	183	312	0.277	0.473	A	A
23RD ST (e/w)	Alma St	Walker Av	1	1	600	600	99	197	0.150	0.298	A	A
23RD ST (e/w)	Walker Av	Elanita Dr	1	1	600	600	176	157	0.267	0.238	A	A
25TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	250	300	0.284	0.341	A	A
25TH ST (e/w)	Cabrillo Av	Alma St	1	1	800	800	293	339	0.333	0.385	A	A
25TH ST (e/w)	Alma St	Walker Av	1	1	800	800	449	434	0.510	0.493	A	A
25TH ST (e/w)	Walker Av	Patton Av	1	1	800	800	447	409	0.508	0.465	A	A
25TH ST (e/w)	Patton Av	Western Av	1	1	800	800	447	409	0.508	0.465	A	A
25TH ST (e/w)	Western Av	Moray Av	1	1	800	800	618	1,086	0.702	1.234	C	F
25TH ST (e/w)	Moray Av	Anchovy Av	1	1	800	800	451	776	0.513	0.882	A	D
25TH ST (e/w)	Anchovy Av	Mermaid Dr	1	1	800	800	470	797	0.534	0.906	A	E
25TH ST (e/w)	Mermaid Dr	West City Limit	1	1	800	800	472	799	0.536	0.908	A	E
26TH ST (e/w)	Pacific Av	Carolina St	1	1	600	600	68	134	0.103	0.203	A	A
26TH ST (e/w)	Carolina St	Gaffey St	1	1	600	600	30	5	0.045	0.008	A	A
26TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	58	152	0.088	0.230	A	A
26TH ST (e/w)	Cabrillo Av	Hamilton Av	1	1	600	600	61	161	0.092	0.244	A	A
26TH ST (e/w)	Moray Av	Graysby Av	1	1	600	600	154	287	0.233	0.435	A	A
HAMILTON AV (e/w)	26th St	Alma St	1	1	600	600	61	161	0.092	0.244	A	A
30TH ST (e/w)	Gaffey St	Alma St	1	1	600	600	134	231	0.203	0.350	A	A
31ST ST (e/w)	Carolina St	Gaffey St	1	1	600	600	16	11	0.024	0.017	A	A
35TH ST (e/w)	Graysby Av	Anchovy Av	1	1	600	600	20	21	0.030	0.032	A	A
37TH ST (e/w)	Alma St	Almeria St	1	1	600	600	31	35	0.047	0.053	A	A
SHEPARD ST (e/w)	Pacific Ave	Carolina St	1	1	700	700	114	130	0.148	0.169	A	A
SHEPARD ST (e/w)	Carolina St	Gaffey St	1	1	700	700	111	126	0.144	0.164	A	A
PASEO DEL MAR (e/w)	Gaffey St	Roxbury St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Roxbury St	Almeria St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Almeria St	Barbara St	1	1	700	700	14	19	0.018	0.025	A	A
PASEO DEL MAR (e/w)	Barbara St	Weymouth Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Weymouth Av	Western Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Western Av	Graysby Av	1	1	700	700	115	243	0.149	0.316	A	A
PASEO DEL MAR (e/w)	Graysby Av	Anchovy Av	1	1	700	700	114	243	0.148	0.316	A	A

Appendix A-8 Preferred Alternative

Preferred Alternative

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
PASEO DEL MAR (e/w)	Anchovy Av	Catalina Vista	1	1	700	700	122	250	0.158	0.325	A	A

Total Links **604**
Links at E or F (with **39** **6%** **0.669** **V/C**

Proposed Plan with TIMP

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
JOHN S. GIBSON BLVD	North City Limit	Channel St	2	2	1600	1600	1,608	2,457	0.914	1.396	E	F
FRONT ST	Pacific Av	Swinford St	2	2	1600	1600	500	471	0.284	0.268	A	A
HARBOR BLVD	Swinford St	O'Farrell St	3	3	2400	2400	1,609	1,611	0.609	0.610	B	B
HARBOR BLVD	O'Farrell St	1st St	3	3	2400	2400	1,390	1,374	0.527	0.520	A	A
HARBOR BLVD	1st St	3rd St	3	3	2400	2400	1,461	1,411	0.553	0.534	A	A
HARBOR BLVD	3rd St	5th St	3	3	2400	2400	1,035	1,133	0.392	0.429	A	A
HARBOR BLVD	5th St	7th St	3	3	2400	2400	1,339	825	0.507	0.313	A	A
HARBOR BLVD	7th St	14th St	2	2	1600	1600	709	620	0.403	0.352	A	A
HARBOR BLVD	14th St	Crescent Av	2	2	1600	1600	575	520	0.327	0.295	A	A
CRESCENT AV	Harbor Blvd	19th St	1	1	600	600	31	42	0.047	0.064	A	A
CRESCENT AV	19th St	21st St	1	1	600	600	29	38	0.044	0.058	A	A
BEACON ST	7th St	14th St	1	1	600	600	44	31	0.067	0.047	A	A
CENTRE ST	O'Farrell St	1st St	1	1	600	600	58	94	0.088	0.142	A	A
CENTRE ST	1st St	2nd St	1	1	700	700	289	351	0.375	0.456	A	A
CENTRE ST	2nd St	3rd St	1	1	700	700	289	351	0.375	0.456	A	A
CENTRE ST	3rd St	5th St	2	2	1400	1400	668	215	0.434	0.140	A	A
CENTRE ST	5th St	6th St	1	1	700	700	559	482	0.726	0.626	C	B
CENTRE ST	6th St	7th St	1	1	700	700	559	482	0.726	0.626	C	B
CENTRE ST	7th St	14th St	1	1	600	600	522	699	0.791	1.059	C	F
CENTRE ST	14th St	Crescent Av	1	1	600	600	97	138	0.147	0.209	A	A
MESA ST	21st St	22nd St	1	1	600	600	29	38	0.044	0.058	A	A
PACIFIC AV	Channel St	Front St	2	2	1600	1600	1,112	1,986	0.632	1.128	B	F
PACIFIC AV	Front St	Upland Av	2	2	1400	1400	833	1,678	0.541	1.090	A	F
PACIFIC AV	Upland Av	O'Farrell St	2	2	1400	1400	703	1,451	0.456	0.942	A	E
PACIFIC AV	O'Farrell St	1st St	2	2	1400	1400	698	1,260	0.453	0.818	A	D
PACIFIC AV	1st St	3rd St	2	2	1400	1400	636	1,012	0.413	0.657	A	B
PACIFIC AV	3rd St	5th St	2	2	1400	1400	617	867	0.401	0.563	A	A
PACIFIC AV	5th St	7th St	2	2	1400	1400	776	1,580	0.504	1.026	A	F
PACIFIC AV	7th St	9th St	2	2	1400	1400	688	1,169	0.447	0.759	A	C
PACIFIC AV	9th St	13th St	2	2	1400	1400	520	935	0.338	0.607	A	B
PACIFIC AV	13th St	14th St	2	2	1400	1400	526	897	0.342	0.582	A	A
PACIFIC AV	14th St	17th St	2	2	1400	1400	484	907	0.314	0.589	A	A
PACIFIC AV	17th St	19th St	2	2	1400	1400	176	524	0.114	0.340	A	A
PACIFIC AV	19th St	22nd St	2	2	1400	1400	126	159	0.082	0.103	A	A
PACIFIC AV	22nd St	23rd St	1	1	700	700	165	258	0.214	0.335	A	A
PACIFIC AV	23rd St	24th St	1	1	700	700	165	238	0.214	0.309	A	A
PACIFIC AV	24th St	26th St	1	1	700	700	165	238	0.214	0.309	A	A
PACIFIC AV	26th St	36th St	1	1	700	700	97	104	0.126	0.135	A	A
PACIFIC AV	36th St	Bluff Pl	1	1	700	700	97	104	0.126	0.135	A	A
GRAND AV	O'Farrell St	1st St	1	1	600	600	34	163	0.052	0.247	A	A
GRAND AV	1st St	3rd St	1	1	600	600	40	282	0.061	0.427	A	A
GRAND AV	3rd St	5th St	1	1	600	600	184	333	0.279	0.505	A	A
GRAND AV	5th St	7th St	1	1	600	600	22	41	0.033	0.062	A	A
GRAND AV	7th St	9th St	1	1	600	600	17	17	0.026	0.026	A	A

Appendix A-9 Proposed Plan with TIMP

Proposed Plan with TIMP

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
GRAND AV	9th St	13th St	1	1	600	600	35	32	0.053	0.048	A	A
GRAND AV	13th St	17th St	1	1	600	600	49	40	0.074	0.061	A	A
GRAND AV	17th St	19th St	1	1	600	600	260	292	0.394	0.442	A	A
GRAND AV	19th St	22nd St	1	1	600	600	166	323	0.252	0.489	A	A
GRAND AV	22nd St	23rd St	1	1	600	600	31	26	0.047	0.039	A	A
GRAND AV	23rd St	24th St	1	1	600	600	34	42	0.052	0.064	A	A
CAROLINA ST	Hamilton Av	26th St	1	1	600	600	53	138	0.080	0.209	A	A
CAROLINA ST	26th St	31st St	1	1	600	600	53	138	0.080	0.209	A	A
CAROLINA ST	31st St	36th St	1	1	600	600	35	30	0.053	0.045	A	A
CAROLINA ST	36th St	Shepard St	1	1	600	600	4	31	0.006	0.047	A	A
GAFFEY PL	MacArthur Av	Elberon Av	1	1	600	600	30	107	0.045	0.162	A	A
GAFFEY ST	North City Limit	Westmont Dr	2	2	1600	1600	995	1,432	0.565	0.814	A	D
GAFFEY ST	Westmont Dr	Capitol Dr	2	2	1600	1600	888	923	0.505	0.524	A	A
GAFFEY ST	Capitol Dr	Channel St	2	2	1600	1600	762	1,098	0.433	0.624	A	B
GAFFEY ST	Channel St	Elberon Av	2	2	1600	1600	582	2,614	0.331	1.485	A	F
GAFFEY ST	Elberon Av	Summerland Av	2	2	1600	1600	827	2,338	0.470	1.328	A	F
GAFFEY ST	Summerland Av	Sepulveda St	3	3	2400	2400	1,553	2,512	0.588	0.952	A	E
GAFFEY ST	Sepulveda St	Santa Cruz St	3	3	2400	2400	1,521	2,246	0.576	0.851	A	D
GAFFEY ST	Santa Cruz St	1st St	3	3	2400	2400	1,521	2,246	0.576	0.851	A	D
GAFFEY ST	1st St	3rd St	3	3	2400	2400	1,108	1,859	0.420	0.704	A	C
GAFFEY ST	3rd St	5th St	3	3	2400	2400	641	1,431	0.243	0.542	A	A
GAFFEY ST	5th St	7th St	3	3	2400	2400	660	1,443	0.250	0.547	A	A
GAFFEY ST	7th St	9th St	3	3	2400	2400	575	1,400	0.218	0.530	A	A
GAFFEY ST	9th St	13th St	2	2	1600	1600	442	1,034	0.251	0.588	A	A
GAFFEY ST	13th St	17th St	2	2	1600	1600	402	982	0.228	0.558	A	A
GAFFEY ST	17th St	18th St	2	2	1600	1600	328	815	0.186	0.463	A	A
GAFFEY ST	18th St	19th St	2	2	1600	1600	328	815	0.186	0.463	A	A
GAFFEY ST	19th St	22nd St	2	2	1600	1600	486	862	0.276	0.490	A	A
GAFFEY ST	22nd St	23rd St	1	1	800	800	558	1,095	0.634	1.244	B	F
GAFFEY ST	23rd St	25th St	1	1	800	800	434	880	0.493	1.000	A	F
GAFFEY ST	25th St	26th St	1	1	700	700	378	688	0.491	0.894	A	D
GAFFEY ST	26th St	31st St	1	1	700	700	320	541	0.416	0.703	A	C
GAFFEY ST	31st St	Shepard St	1	1	700	700	337	553	0.438	0.718	A	C
MARSHALL CT	Oliver St	Sepulveda St	1	1	600	600	17	28	0.026	0.042	A	A
BARRYWOOD AV	Sandwood Pl	Westmont Dr	1	1	600	600	325	150	0.492	0.227	A	A
BARRYWOOD AV	Millmark Grove St	Capitol Rd	1	1	600	600	362	273	0.548	0.414	A	A
CABRILLO AV	Elberon Av	Summerland Av	1	1	600	600	219	185	0.332	0.280	A	A
CABRILLO AV	Summerland Av	Oliver St	1	1	600	600	17	28	0.026	0.042	A	A
CABRILLO AV	Sepulveda St	1st St	1	1	600	600	17	220	0.026	0.333	A	A
CABRILLO AV	1st St	3rd St	1	1	600	600	155	383	0.235	0.580	A	A
CABRILLO AV	3rd St	7th St	1	1	600	600	67	129	0.102	0.195	A	A
CABRILLO AV	7th St	9th St	1	1	600	600	153	183	0.232	0.277	A	A
CABRILLO AV	9th St	13th St	1	1	600	600	134	240	0.203	0.364	A	A
CABRILLO AV	13th St	17th St	1	1	600	600	112	137	0.170	0.208	A	A

Proposed Plan with TIMP

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
CABRILLO AV	17th St	19th St	1	1	600	600	20	26	0.030	0.039	A	A
CABRILLO AV	19th St	23rd St	1	1	600	600	12	21	0.018	0.032	A	A
CABRILLO AV	23rd St	25th St	1	1	600	600	81	81	0.123	0.123	A	A
CABRILLO AV	25th St	26th St	1	1	600	600	3	8	0.005	0.012	A	A
TAPER AV	Sandwood Pl	Westmont Dr	1	1	600	600	220	206	0.333	0.312	A	A
TAPER AV	Westmont Dr	Barhugh Pl	1	1	600	600	299	368	0.453	0.558	A	A
TAPER AV	Barhugh Pl	Millmark Grove St	1	1	600	600	124	78	0.188	0.118	A	A
MEYLER ST	Capitol Rd	Channel St	1	1	600	600	463	246	0.702	0.373	C	A
BANDINI ST	Elberon Av	Summerland Av	1	1	600	600	47	12	0.071	0.018	A	A
BANDINI ST	Summerland Av	Sepulveda St	1	1	600	600	62	138	0.094	0.209	A	A
BANDINI ST	Sepulveda St	Santa Cruz St	1	1	600	600	75	144	0.114	0.218	A	A
ALMA ST	7th St	9th St	1	1	600	600	59	115	0.089	0.174	A	A
ALMA ST	9th St	13th St	1	1	600	600	84	113	0.127	0.171	A	A
ALMA ST	13th St	15th St	1	1	600	600	52	52	0.079	0.079	A	A
ALMA ST	17th St	19th St	1	1	600	600	18	32	0.027	0.048	A	A
ALMA ST	19th St	23rd St	1	1	600	600	40	174	0.061	0.264	A	A
ALMA ST	23rd St	25th St	1	1	600	600	22	19	0.033	0.029	A	A
ALMA ST	25th St	Hamilton Av	1	1	600	600	90	148	0.136	0.224	A	A
ALMA ST	Hamilton Av	30th St	1	1	600	600	157	313	0.238	0.474	A	A
ALMA ST	30th St	37th St	1	1	600	600	109	255	0.165	0.386	A	A
ALMERIA ST	37th St	Paseo Del Mar	1	1	600	600	6	4	0.009	0.006	A	A
HANFORD AV	Sepulveda St (north)	Sepulveda St (south)	1	1	600	600	120	169	0.182	0.256	A	A
HANFORD AV	Elberon Av	Summerland Av	1	1	600	600	42	29	0.064	0.044	A	A
WALKER AV	7th St	9th St	1	1	600	600	37	37	0.056	0.056	A	A
WALKER AV	9th St	13th St	1	1	600	600	96	180	0.145	0.273	A	A
WALKER AV	13th St	17th St	1	1	600	600	40	10	0.061	0.015	A	A
WALKER AV	17th St	19th St	1	1	600	600	15	18	0.023	0.027	A	A
WALKER AV	19th St	23rd St	1	1	600	600	55	136	0.083	0.206	A	A
WALKER AV	23rd St	25th St	1	1	600	600	64	69	0.097	0.105	A	A
WALKER AV	25th St	27th St	1	1	600	600	155	182	0.235	0.276	A	A
27TH ST	Walker Av	Barbara St	1	1	600	600	155	182	0.235	0.276	A	A
BARBARA ST	27th St	31st St	1	1	600	600	28	32	0.042	0.048	A	A
BARBARA ST	31st St	Paseo Del Mar	1	1	600	600	39	25	0.059	0.038	A	A
PATTON AV	Summerland Av	Sepulveda St	1	1	600	600	34	86	0.052	0.130	A	A
PATTON AV	Sepulveda St	1st St	1	1	600	600	32	37	0.048	0.056	A	A
PATTON AV	1st St	3rd St	1	1	600	600	149	160	0.226	0.242	A	A
WEYMOUTH AV	Western Av	7th St	1	1	700	700	120	198	0.156	0.257	A	A
WEYMOUTH AV	7th St	9th St	1	1	700	700	131	210	0.170	0.273	A	A
WEYMOUTH AV	9th St	Averill Park Dr	1	1	700	700	192	491	0.249	0.638	A	B
WEYMOUTH AV	Averill Park Dr	13th St	1	1	700	700	168	392	0.218	0.509	A	A
WEYMOUTH AV	13th St	17th St	1	1	600	600	89	260	0.135	0.394	A	A
WEYMOUTH AV	17th St	19th St	1	1	600	600	53	132	0.080	0.200	A	A
ELANITA DR	19th St	23rd St	1	1	600	600	199	291	0.302	0.441	A	A

Proposed Plan with TIMP

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
DODSON AV	9th St	Averill Park Dr	1	1	600	600	37	98	0.056	0.148	A	A
DODSON AV	Averill Park Dr	Western Av	1	1	600	600	98	234	0.148	0.355	A	A
WESTERN AV	North City Limit	Westmont Dr	2	2	1600	1600	2,054	2,312	1.167	1.314	F	F
WESTERN AV	Westmont Dr	Capitol Dr	2	2	1600	1600	1,650	1,839	0.938	1.045	E	F
WESTERN AV	Capitol Dr	Park Western Dr	2	2	1600	1600	1,556	1,991	0.884	1.131	D	F
WESTERN AV	Park Western Dr	Crestwood St	2	2	1600	1600	1,476	2,143	0.839	1.218	D	F
WESTERN AV	Crestwood St	Summerland Av	2	2	1600	1600	1,490	2,148	0.847	1.220	D	F
WESTERN AV	Summerland Av	Santa Cruz St	2	2	1600	1600	1,557	2,373	0.885	1.348	D	F
WESTERN AV	Santa Cruz St	1st St	2	2	1600	1600	1,549	2,362	0.880	1.342	D	F
WESTERN AV	1st St	Weymouth Av	2	2	1600	1600	1,239	1,919	0.704	1.090	C	F
WESTERN AV	Weymouth Av	Bynner Dr	2	2	1600	1600	1,107	1,714	0.629	0.974	B	E
WESTERN AV	Bynner Dr	9th St	2	2	1600	1600	1,107	1,714	0.629	0.974	B	E
WESTERN AV	9th St	Dodson Av	2	2	1600	1600	1,271	2,023	0.722	1.149	C	F
WESTERN AV	Dodson Av	19th St	2	2	1600	1600	1,287	2,032	0.731	1.155	C	F
WESTERN AV	19th St	25th St	2	2	1600	1600	780	1,403	0.443	0.797	A	C
WESTERN AV	25th St	Paseo Del Mar	1	1	800	800	103	225	0.117	0.256	A	A
BYNNER DR (e/w)	El Rey Rd	Western Av	1	1	600	600	42	31	0.064	0.047	A	A
MORAY AV	Morse Dr	25th St	1	1	600	600	98	182	0.148	0.276	A	A
MORAY AV	25th St	26th St	1	1	600	600	48	36	0.073	0.055	A	A
GRAYSBY AV	26th St	35th St	1	1	600	600	154	287	0.233	0.435	A	A
GRAYSBY AV	35th St	Paseo Del Mar	1	1	600	600	7	7	0.011	0.011	A	A
ENROSE AV	Via Colinita	Santa Cruz St	1	1	600	600	16	14	0.024	0.021	A	A
SANTA CRUZ ST (e/w)	Enrose Av	Western Av	1	1	600	600	16	14	0.024	0.021	A	A
MANTIS AV	Cumbre Dr	Morse Dr	1	1	600	600	231	151	0.350	0.229	A	A
ANCHOVY AV	Cumbre Dr	25th St	1	1	600	600	113	159	0.171	0.241	A	A
ANCHOVY AV	25th St	35th St	1	1	600	600	30	27	0.045	0.041	A	A
ANCHOVY AV	35th St	Paseo Del Mar	1	1	600	600	22	21	0.033	0.032	A	A
SANDWOOD PL (e/w)	Amelia Av	Taper Av	1	1	600	600	357	546	0.541	0.827	A	D
SANDWOOD PL (e/w)	Taper Av	Barrywood Av	1	1	600	600	150	325	0.227	0.492	A	A
WESTMONT DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	246	648	0.160	0.421	A	A
WESTMONT DR (e/w)	Barrywood Av	Taper Av	2	2	1400	1400	96	322	0.062	0.209	A	A
WESTMONT DR (e/w)	Taper Av	Western Av	2	2	1400	1400	184	329	0.119	0.214	A	A
MILLMARK GROVE ST (e/w)	Barrywood Av	Taper Av	1	1	600	600	273	362	0.414	0.548	A	A
MILLMARK GROVE ST (e/w)	Taper Av	Amelia Av	1	1	600	600	194	238	0.294	0.361	A	A
CAPITOL DR (e/w)	Gaffey St	Barrywood Av	2	2	1400	1400	333	559	0.216	0.363	A	A
CAPITOL DR (e/w)	Barrywood Av	Meyler St	2	2	1400	1400	167	303	0.108	0.197	A	A
CAPITOL DR (e/w)	Meyler St	Mt Rose Rd	2	2	1400	1400	241	593	0.156	0.385	A	A
CAPITOL DR (e/w)	Mt Rose Rd	Western Av	2	2	1400	1400	428	489	0.278	0.318	A	A
CHANNEL ST (e/w)	John S. Gibson Blvd	Gaffey St	2	2	1600	1600	1,277	1,251	0.726	0.711	C	C
CHANNEL ST (e/w)	Gaffey St	Meyler St	1	1	600	600	504	686	0.764	1.039	C	F
CHANNEL ST (e/w)	Meyler St	Park Western Dr	1	1	600	600	234	263	0.355	0.398	A	A
PARK WESTERN DR	Channel St	Quiglet Pl	1	1	600	600	38	84	0.058	0.127	A	A
PARK WESTERN DR (e/w)	Quiglet Pl.	Western Av	1	1	600	600	69	302	0.105	0.458	A	A

Appendix A-9 Proposed Plan with TIMP

Proposed Plan with TIMP

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
MACARTHUR AV (e/w)	Gaffey Pl	Pacific Av	1	1	600	600	194	291	0.294	0.441	A	A
ELBERON AV (e/w)	Gaffey Pl	Gaffey St	1	1	600	600	30	107	0.045	0.162	A	A
ELBERON AV (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	174	181	0.264	0.274	A	A
ELBERON AV (e/w)	Cabrillo Av	Bandini St	1	1	600	600	30	71	0.045	0.108	A	A
ELBERON AV (e/w)	Bandini St	Hanford Av	1	1	600	600	26	32	0.039	0.048	A	A
SUMMERLAND AV (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	354	752	0.460	0.977	A	E
SUMMERLAND AV (e/w)	Cabrillo Av	Bandini St	1	1	700	700	338	692	0.439	0.899	A	D
SUMMERLAND AV (e/w)	Bandini St	Hanford Av	1	1	700	700	290	580	0.377	0.753	A	C
SUMMERLAND AV (e/w)	Crestwood St	Patton Av	1	1	700	700	321	598	0.417	0.777	A	C
SUMMERLAND AV (e/w)	Patton Av	Western Av	1	1	700	700	394	620	0.512	0.805	A	D
OLIVER ST	Marshall Ct	Western Av	1	1	600	600	28	17	0.042	0.026	A	A
O'FARRELL ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	301	297	0.456	0.450	A	A
O'FARRELL ST (e/w)	Centre St	Pacific Av	1	1	600	600	266	225	0.403	0.341	A	A
O'FARRELL ST (e/w)	Pacific Av	Grand Av	1	1	600	600	156	301	0.236	0.456	A	A
O'FARRELL ST (e/w)	Grand Av	Gaffey St	1	1	600	600	320	301	0.485	0.456	A	A
SEPULVEDA ST (e/w)	Gaffey St	Marshall Ct	1	1	600	600	140	373	0.212	0.565	A	A
SEPULVEDA ST (e/w)	Marshall Ct	Cabrillo Av	1	1	600	600	82	328	0.124	0.497	A	A
SEPULVEDA ST (e/w)	Cabrillo Av	Bandini St	1	1	600	600	70	113	0.106	0.171	A	A
SEPULVEDA ST (e/w)	Bandini St	Hanford Av	1	1	600	600	120	169	0.182	0.256	A	A
SEPULVEDA ST (e/w)	Hanford Av	Patton Av	1	1	600	600	30	17	0.045	0.026	A	A
SEPULVEDA ST (e/w)	Patton Av	Harbor View Av	1	1	600	600	30	17	0.045	0.026	A	A
1ST ST (e/w)	Harbor Blvd	Centre St	1	1	700	700	113	140	0.147	0.182	A	A
1ST ST (e/w)	Centre St	Pacific Av	1	1	700	700	298	301	0.387	0.391	A	A
1ST ST (e/w)	Pacific Av	Grand Av	1	1	700	700	55	244	0.071	0.317	A	A
1ST ST (e/w)	Grand Av	Gaffey St	1	1	700	700	175	244	0.227	0.317	A	A
1ST ST (e/w)	Gaffey	Cabrillo Av	1	1	700	700	740	784	0.961	1.018	E	F
1ST ST (e/w)	Cabrillo Av	Bandini St	1	1	700	700	714	732	0.927	0.951	E	E
1ST ST (e/w)	Bandini St	Patton Av	1	1	700	700	636	677	0.826	0.879	D	D
1ST ST (e/w)	Patton Av	Western Av	1	1	700	700	819	854	1.064	1.109	F	F
1ST ST (e/w)	Western Av	West City Limit	1	1	600	600	303	466	0.459	0.706	A	C
3RD ST (e/w)	Harbor Blvd	Centre St	1	1	600	600	504	355	0.764	0.538	C	A
3RD ST (e/w)	Centre St	Pacific Av	1	1	600	600	483	850	0.732	1.288	C	F
3RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	377	372	0.571	0.564	A	A
3RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	427	467	0.647	0.708	B	C
3RD ST (e/w)	Cabrillo Av	Meyler St	1	1	600	600	7	30	0.011	0.045	A	A
3RD ST (e/w)	Hanford Av	Patton Av	1	1	600	600	39	26	0.059	0.039	A	A
5TH ST (e/w)	Harbor Blvd	Centre St	0	1	0	700	0	610		0.792		C
5TH ST (e/w)	Centre St	Mesa St	0	1	0	700	0	234		0.304		A
5TH ST (e/w)	Mesa St.	Pacific Av	0	1	0	700	0	424		0.551		A
5TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	294	164	0.382	0.213	A	A
5TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	50	37	0.065	0.048	A	A
7TH ST (e/w)	Harbor Blvd	Beacon St	1	0	700		105		0.136		A	
7TH ST (e/w)	Beacon St	Centre St	1	0	700		108		0.140		A	
7TH ST (e/w)	Centre St	Pacific Av	1	0	700		362		0.470		A	

Proposed Plan with TIMP

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
7TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	26	31	0.034	0.040	A	A
7TH ST (e/w)	Grand Av	Gaffey Av	1	1	700	700	27	52	0.035	0.068	A	A
7TH ST (e/w)	Gaffey Av	Cabrillo Av	1	1	700	700	106	87	0.138	0.113	A	A
7TH ST (e/w)	Cabrillo Av	Bandini St / Alma St	1	1	700	700	24	37	0.031	0.048	A	A
7TH ST (e/w)	Bandini St / Alma St	Walker Av	1	1	700	700	31	46	0.040	0.060	A	A
7TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	37	47	0.048	0.061	A	A
9TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	243	315	0.316	0.409	A	A
9TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	259	318	0.336	0.413	A	A
9TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	503	799	0.653	1.038	B	F
9TH ST (e/w)	Cabrillo Av	Meyler St	1	1	700	700	344	551	0.447	0.716	A	C
9TH ST (e/w)	Meyler St	Alma St	1	1	700	700	344	551	0.447	0.716	A	C
9TH ST (e/w)	Alma St	Walker St	1	1	700	700	381	614	0.495	0.797	A	C
9TH ST (e/w)	Walker St	Weymouth Av	1	1	700	700	285	434	0.370	0.564	A	A
9TH ST (e/w)	Weymouth Av	Dodson Av	1	1	700	700	229	156	0.297	0.203	A	A
9TH ST (e/w)	Dodson Av	Western Av	1	1	700	700	327	193	0.425	0.251	A	A
9TH ST (e/w)	Western Av	Miraleste Dr	1	1	600	600	553	274	0.838	0.415	D	A
MIRALESTE DR	9th St	West City Limit	1	1	800	800	551	234	0.626	0.266	B	A
AVERILL PARK DR (e/w)	Weymouth Av	Dodson Av	1	1	600	600	61	136	0.092	0.206	A	A
13TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	29	68	0.038	0.088	A	A
13TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	29	68	0.038	0.088	A	A
13TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	139	195	0.181	0.253	A	A
13TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	17	34	0.022	0.044	A	A
13TH ST (e/w)	Alma St	Walker Av	1	1	700	700	66	83	0.086	0.108	A	A
13TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	64	81	0.083	0.105	A	A
GULCH RD (e/w)	Harbor Blvd	Beacon St	1	1	600	600	148	220	0.224	0.333	A	A
14TH ST (e/w)	Beacon St	Centre St	1	1	600	600	117	176	0.177	0.267	A	A
14TH ST (e/w)	Centre St	Pacific Av	1	1	600	600	119	172	0.180	0.261	A	A
17TH ST (e/w)	Pacific Av	Grand Av	1	1	600	600	460	397	0.697	0.602	B	B
17TH ST (e/w)	Grand Av	Gaffey St	1	1	600	600	199	106	0.302	0.161	A	A
17TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	19	21	0.029	0.032	A	A
17TH ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	40	38	0.061	0.058	A	A
17TH ST (e/w)	Alma St	Leland St	1	1	600	600	49	36	0.074	0.055	A	A
17TH ST (e/w)	Leland St	Walker Av	1	1	600	600	49	36	0.074	0.055	A	A
17TH ST (e/w)	Walker Av	Weymouth Av	1	1	600	600	33	36	0.050	0.055	A	A
19TH ST (e/w)	Crescent Av	Pacific Av	1	1	600	600	204	161	0.309	0.244	A	A
19TH ST (e/w)	Pacific Av	Grand Av	1	1	700	700	45	322	0.058	0.418	A	A
19TH ST (e/w)	Grand Av	Gaffey St	1	1	700	700	326	477	0.423	0.619	A	B
19TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	700	700	98	363	0.127	0.471	A	A
19TH ST (e/w)	Cabrillo Av	Alma St	1	1	700	700	92	354	0.119	0.460	A	A
19TH ST (e/w)	Alma St	Walker Av	1	1	700	700	183	325	0.238	0.422	A	A
19TH ST (e/w)	Walker Av	Weymouth Av	1	1	700	700	174	237	0.226	0.308	A	A
19TH ST (e/w)	Weymouth Av	Western Av	1	1	700	700	397	447	0.516	0.581	A	A

Proposed Plan with TIMP

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
MORSE DR (e/w)	Western Av	Mantis Av	1	1	600	600	231	151	0.350	0.229	A	A
CUMBRE DR (e/w)	Mantis Av	Pescadores Av	1	1	600	600	151	231	0.229	0.350	A	A
CUMBRE DR (e/w)	Pescadores Av	Anchovy Av	1	1	600	600	151	231	0.229	0.350	A	A
CUMBRE DR (e/w)	Anchovy Av	Mermaid Dr	1	1	600	600	41	40	0.062	0.061	A	A
MERMAID DR	Cumbre Dr	25th St	1	1	600	600	38	44	0.058	0.067	A	A
21ST ST (e/w)	Mesa St	Crescent Av	1	1	600	600	29	38	0.044	0.058	A	A
22ND ST (e/w)	Via Cabrillo Marina	Mesa St	1	1	700	700	345	606	0.448	0.787	A	C
22ND ST (e/w)	Mesa St	Pacific Av	1	1	700	700	345	606	0.448	0.787	A	C
22ND ST (e/w)	Pacific Av	Grand Av	1	1	700	700	279	477	0.362	0.619	A	B
22ND ST (e/w)	Grand Av	Gaffey St	1	1	700	700	218	382	0.283	0.496	A	A
23RD ST (e/w)	Pacific Av	Grand Av	1	1	600	600	31	19	0.047	0.029	A	A
23RD ST (e/w)	Grand Av	Gaffey St	1	1	600	600	48	19	0.073	0.029	A	A
23RD ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	243	363	0.368	0.550	A	A
23RD ST (e/w)	Cabrillo Av	Alma St	1	1	600	600	183	312	0.277	0.473	A	A
23RD ST (e/w)	Alma St	Walker Av	1	1	600	600	99	197	0.150	0.298	A	A
23RD ST (e/w)	Walker Av	Elanita Dr	1	1	600	600	176	157	0.267	0.238	A	A
25TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	800	800	250	300	0.284	0.341	A	A
25TH ST (e/w)	Cabrillo Av	Alma St	1	1	800	800	293	339	0.333	0.385	A	A
25TH ST (e/w)	Alma St	Walker Av	1	1	800	800	449	434	0.510	0.493	A	A
25TH ST (e/w)	Walker Av	Patton Av	1	1	800	800	447	409	0.508	0.465	A	A
25TH ST (e/w)	Patton Av	Western Av	1	1	800	800	447	409	0.508	0.465	A	A
25TH ST (e/w)	Western Av	Moray Av	1	1	800	800	618	1,086	0.702	1.234	C	F
25TH ST (e/w)	Moray Av	Anchovy Av	1	1	800	800	451	776	0.513	0.882	A	D
25TH ST (e/w)	Anchovy Av	Mermaid Dr	1	1	800	800	470	797	0.534	0.906	A	E
25TH ST (e/w)	Mermaid Dr	West City Limit	1	1	800	800	472	799	0.536	0.908	A	E
26TH ST (e/w)	Pacific Av	Carolina St	1	1	600	600	68	134	0.103	0.203	A	A
26TH ST (e/w)	Carolina St	Gaffey St	1	1	600	600	30	5	0.045	0.008	A	A
26TH ST (e/w)	Gaffey St	Cabrillo Av	1	1	600	600	58	152	0.088	0.230	A	A
26TH ST (e/w)	Cabrillo Av	Hamilton Av	1	1	600	600	61	161	0.092	0.244	A	A
26TH ST (e/w)	Moray Av	Graysby Av	1	1	600	600	154	287	0.233	0.435	A	A
HAMILTON AV (e/w)	26th St	Alma St	1	1	600	600	61	161	0.092	0.244	A	A
30TH ST (e/w)	Gaffey St	Alma St	1	1	600	600	134	231	0.203	0.350	A	A
31ST ST (e/w)	Carolina St	Gaffey St	1	1	600	600	16	11	0.024	0.017	A	A
35TH ST (e/w)	Graysby Av	Anchovy Av	1	1	600	600	20	21	0.030	0.032	A	A
37TH ST (e/w)	Alma St	Almeria St	1	1	600	600	31	35	0.047	0.053	A	A
SHEPARD ST (e/w)	Pacific Ave	Carolina St	1	1	700	700	114	130	0.148	0.169	A	A
SHEPARD ST (e/w)	Carolina St	Gaffey St	1	1	700	700	111	126	0.144	0.164	A	A
PASEO DEL MAR (e/w)	Gaffey St	Roxbury St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Roxbury St	Almeria St	1	1	700	700	12	20	0.016	0.026	A	A
PASEO DEL MAR (e/w)	Almeria St	Barbara St	1	1	700	700	14	19	0.018	0.025	A	A
PASEO DEL MAR (e/w)	Barbara St	Weymouth Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Weymouth Av	Western Av	1	1	700	700	12	17	0.016	0.022	A	A
PASEO DEL MAR (e/w)	Western Av	Graysby Av	1	1	700	700	115	243	0.149	0.316	A	A
PASEO DEL MAR (e/w)	Graysby Av	Anchovy Av	1	1	700	700	114	243	0.148	0.316	A	A

Proposed Plan with TIMP

Segment	From	To	Peak Lanes		Capacity		Volumes		V/C Ratio With ATSAC		Level of Service With ATSAC	
			N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W	N/E	S/W
PASEO DEL MAR (e/w)	Anchovy Av	Catalina Vista	1	1	700	700	122	250	0.158	0.325	A	A

V/C

Total Links **604**

Links at E or F (with **39** **6%** **0.669**

