Exhibit A
2009 Update
Avila Circulation Study

On November 14,1989 the Board of Supervisors approved the Avila Circulation Study and adopted a Resolution imposing road improvement fees on new development under the provisions of Ordinance 2379. The Board adopted the most recent update of the Avila Circulation Study on December 16, 2008.

Building Activity
Since the last Update, one commercial building permit was issued, and there were no other residential permits issued. The reporting period of this update is from July 1, 2008 through June 30, 2009.

Road Improvement Fund
During the 2008/2009 fiscal year the fund received approximately $5,944.00 in new fees and $6,265 in interest. At the end of the 2008/200 fiscal year there was approximately $363,320 in the account.

Fee Appeals
There were no Road Improvement Fee appeals during the last fiscal year.

TRANSPORTATION IMPROVEMENTS
The Avila Circulation Study contains a list of recommended improvements for several modes of transportation in the community as well as projects from the adopted Capital Improvement Program that are funded through Road Improvement Fees.

PROJECTS UNDER DEVELOPMENT

Installation of a Traffic Signal at Avila Beach Drive and First Street $300,000
The project will install a traffic signal, a crosswalk, and streetlights at this intersection. The number of pedestrians and bicyclists is anticipated to increase with the extension of the Bob Jones Bike Trail and the signal is needed to accommodate the crossing of this traffic by including a dedicated bicycle and pedestrian phase. With the completion of the traffic signal, the Public Works Department intends to remove the current pedestrian crossing at Avila Beach Drive and San Miguel Street since the signal presents a more optimal place for pedestrian traffic to cross.

Currently the traffic signal is designed and ready to proceed with construction. In addition, the Parks Department is working with the adjacent property owners on coordinating the extension of the Bob Jones Trail to this location. The intent of the County is to coordinate the construction of both projects to minimize the impact to the community.

Construction is scheduled for the spring of 2010.

This is a project that is identified in the Circulation Study as payable with impact fees however there is funding for the signal from PG&E fees that will cover most of the construction costs.

Bob Jones Bikeway Extension **$375,000**
The project consists of the relocation of the entrance/exit of the Bob Jones Bikeway from its current location on San Miguel Street to a new location on First Street. This project is being developed by the County Parks Department, and will be coordinated with the installation of the traffic signal at Avila Brach Drive and First Street.

Construction is scheduled for the spring of 2010.

Funding is from Unocal Funds.

San Luis Bay Drive and US 101 Project Study Report **$250,000**
The multi-year project will prepare a Project Study Report to evaluate long-term solutions to relieve projected congestion issues at the interchange and adjacent intersections at buildout. This will include a detailed analysis of the interaction of the intersection of San Luis Bay Drive and US 101 and Ontario Road. This report will also refine const estimates and identify potential environmental and right-of-way impacts. This report is necessary in order to achieve agreement from CalTrans and other stakeholders about changes to the operation of the interchange

The report is anticipated to be started in 2010

Funding will be from the Roadway Impact Fees.

Pedestrian Walkway - Port San Luis to Unocal Pier (Study Only) **$300,000**
The report will identify corridor options for the Avila to Harford Pier Path. The multi-use path would extend from First Street to Harford Pier. In addition, the project will include an analysis of options for crossing San Luis Obispo Creek. The lead agency for this project is the County Parks Department and the available funds should bring the project pre-construction.

There is currently a RFP out for this project.

Funding will be from PG&E Steam Generator Mitigation Funds.

Study Intersection Operations at See Canyon Road **$10,000**
The community has continuing concerns with the operation of the intersection of San Luis Bay Drive and See Canyon Road/ Bellevue-Santa Fe Charter School Driveway. County Staff will be preparing a report detailing the current operation of the intersection and exploring the available options to modify the intersection.

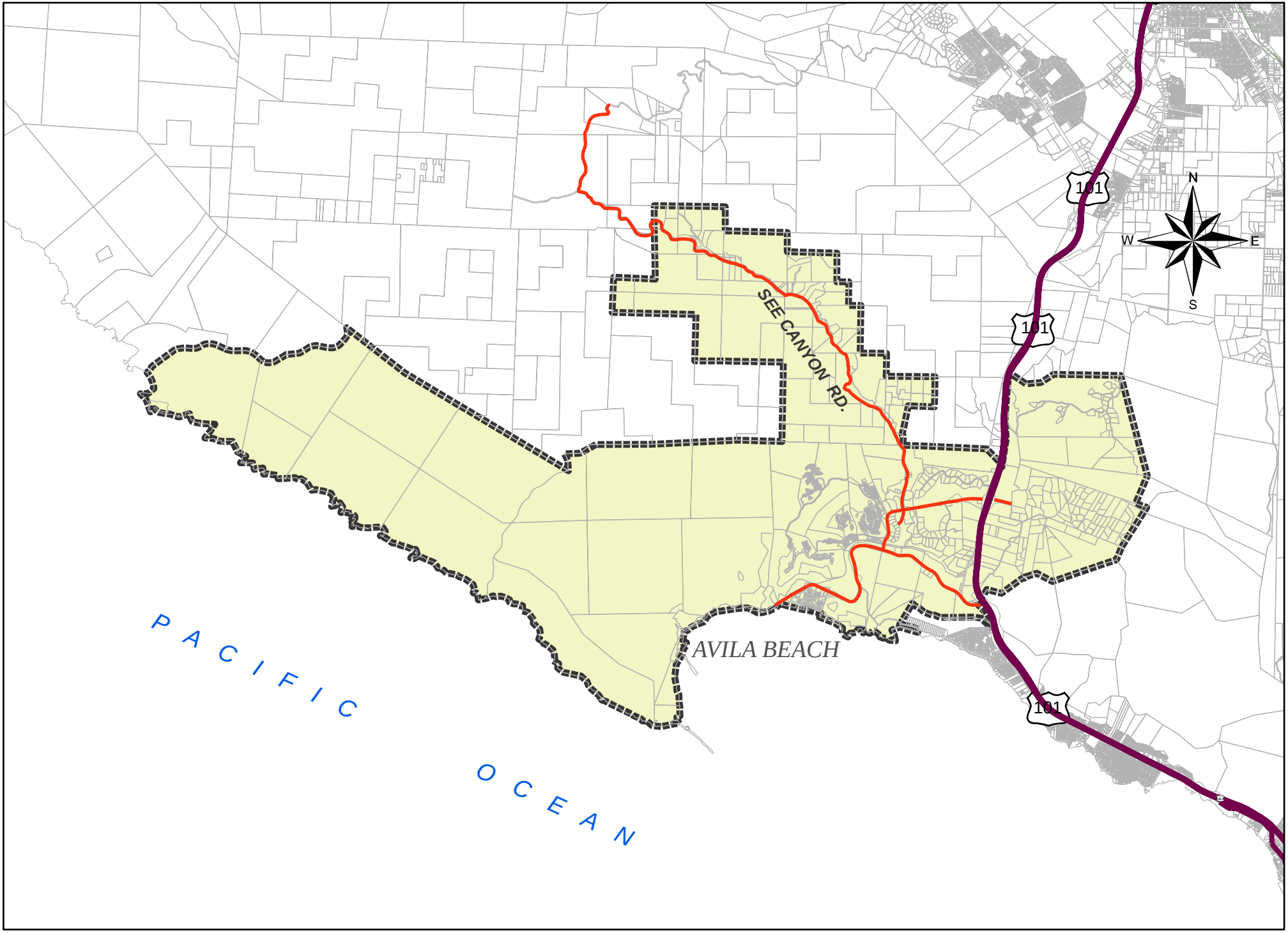
This report will be completed in 2010.

Funding sources are still being identified.

ROAD IMPROVEMENT FEES
Since the last update the 5-year update has been completed and recommends a fee of $4,146

per peek hour trip generated. This is a 55% increase over the current fee of $2,673. This increase is due to the reduction in estimated trips associated with the completion of several developments at lower densities than allowed in the Avila General Plan. As well as increases in project development and construction cost estimates over the last three years.

Attachments
Figure 1 - Map of Study Area
Table A - Capital Improvement Projects Table
Table B - Road Impact Fee Fund Balance
Avila Valley Circulation Study – January 2009



AVILA ROAD FEE AREA

Avila Capital Improvement Program								
2009 Update								
Priority	**Project**	**Cost Estimate**	**Less**			**Funding From Impact Fees**	**Other Funding**	**Expected Construction Commencement [1]**
			Existing Deficiencies	Other Sources	Through Traffic			
San Luis Bay Drive								
	San Luis Creek Bridge Replacement	$6,935,420		$5,418,106		$1,517,314	HBRR/RSHA/TEA	Complete
10	Widening for Bike Lanes	$822,824		$822,824		$0	APCD (potential)	2025
2	Study Intersection Operations at See Canyon Road	$10,000		$10,000		$0	To Be Determined	2010
Avila Beach Drive								
11	Widening for Bike Lanes	$2,250,838		$2,250,838		$0	APCD (potential)	2020
9	Signal - San Miguel Street and Intersection Improvements	$240,500				$240,500		2025
12	Signal - San Luis Street and Intersection Improvements	$227,500				$227,500		2025
1	Signal - First Street and Intersection Improvements	$260,000				$260,000		2010
3	Pedestrian Walkway - Port San Luis to Unocal Pier (Up to PS&E)	$300,000		$300,000		$0	PG&E Steam Generator Mitigation Funds	2011
6	Construct 100 Stall Intercept Parking Lot	$1,093,178		$1,093,178		$0	County Parking In-Lieu Fee Program/APCD	2020
Ontario Road								
	Widening for Bike Lanes	$650,600		$650,600		$0	APCD (potential)	Complete
State Route 101								
8	Modify Avila Interchange	$7,920,000		$3,960,000		$3,960,000	STIP (potential)	2020
7	San Luis Bay Drive @ SR 101 Bridge Widening	$4,000,000		$2,000,000		$2,000,000	STIP (potential)	2015
4	San Luis Bay Drive Interchange Project Study Report	$250,000				$250,000		2012
Cave Landing Bike Trails								
5	Construct Trail Between Shell Beach and Avila Beach	$379,000		$379,000		$0	Department of Fish and Game	2012
	Totals	$25,339,860		$16,884,546	$0	$8,455,314		

Budgeted Projects Funded from Avila RIF			Total As of
			06/30/09
Project #	Description	Budgeted 2008/09	
AVILA RIF - Beginning Cash Balance			138,995.45
	Fees	12,000	5,944.00
	Interest	5,000	6,264.63
	Subtotal Cash Balance		151,204.08
	Project Costs:	Budgeted 2008/09	Total Spent This Fiscal Year As of
			06/30/09
300181	San Luis Bay Dr Bridge Widening	(98,004)	
	Other funding	-	
	TOTAL FUNDED BY AVILA RIF	(98,004)	-236,087.38
300364	San Luis Bay Dr Interchange	200,000	89.98
245R12C123	AVILA TRAFFIC STUDIES	5,000	23,880
	Total Costs		-212,117.70
	Ending Cash Balance		363,321.78

In prior years, Avila Fee area funded the San Luis Bay Drive Bridge Project, now that much of the cost has been reimbursed with Federal Bridge Funds, the Avila Fee area is refunded this amount. Any new costs to the project will reduce the refunded amount.

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Avila Valley Circulation Study

San Luis Obispo County, California

Final: January 2009
5th Draft: October 2008
4th Draft: February 2008
3rd Draft: November 2007
2nd Draft: August 2007
1st Draft: March 2007

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Appendix B Existing Conditions Freeway and Intersection Levels of Service

Appendix C Existing Conditions Peak Hour Signal Warrants

Appendix D Traffic Model Plots, Methodologies and Socioeconomic Data

Appendix E Traffic Model Plots, Methodologies and Socioeconomic Data

Appendix F Future Conditions Freeway and Intersection Levels of Service

Appendix G Future Conditions Peak Hour Signal Warrants

Appendix H Mitigated Future Conditions Intersection Levels of Service

Appendix I Road Improvement Order of Magnitude Costs

CHAPTER 1
INTRODUCTION

This study is the latest in a series of evaluations of the Avila Beach and Avila Valley area. Analysis of the circulation system began in 1988 with the first comprehensive study of the existing and future traffic demand. That study, completed by DKS Associates, was initiated to address concerns over the ability of the existing and planned roadway system to accommodate increased traffic levels in light of development proposals in the area. That study recommended a series of capacity enhancements for the county roads plus several transportation management strategies, such as park and rides, public transit, bicycle and parking management. This study was used as the basis for the implementation of the County's Avila Road Improvement Fee Program.

In 1992 a follow up study was completed to further reframe the technical evaluation of the current and future roadway capacities and affirm the improvement program. That study was authored by Wilbur Smith and Associates and focused on development of moderate roadway capacity enhancement and additional detail on the non-street strategies. As stated in Title 22, Land Use Ordinance from the San Luis Obispo County Code:

"The following standards apply within the Avila Beach urban reserve line to the land use categories or specific areas listed. Avila Beach urban standards are grouped by those applicable to Avila Valley and San Luis Bay Estates.

A. Avila Valley. The following standards apply only to Avila Valley, to the land use categories or specific areas listed.

1. Communitywide – Avila Beach Drive and San Luis Bay Drive Level of Service. The level of service (LOS) for Avila Beach Drive and San Luis Bay Drive shall be based on the average hourly weekday two-way 3:00 p.m. to 6:00 p.m. traffic counts to be conducted during the second week in May of each year."

Finally, the 1992 document was the basis for an update of the Road Improvement Fee Program.

In 2001, the Avila Beach community's remediation work was completed by Unocal. That same year, the Avila Beach Specific Plan was adopted by the County Board of Supervisors. The Specific Plan outlined the vision for Avila Beach and provided the primary impetus for the 2001 Avila Circulation Study, a comprehensive transportation evaluation of the Avila Beach and Avila Valley area. That Study, prepared by TPG Consulting, identified both the short-range and long-range circulation needs of the Avila Beach and Avila Valley area.

In November 2003, TPG Consulting prepared the 2003 *Avila Circulation Study, Port San Luis Harbor Master Plan Update* for the Harbor District by updating the 2001 Circulation Element. It builds on the information developed for the 2001 Study, updates the existing conditions and analyzes the future conditions with and without the proposed changes to Port San Luis Harbor. The Port Master Plan responded to changing opportunities for the use and development of the Port's properties to meet the present and future needs of the boating public. Detailed information on the Harbor plans can be found in the Port San Luis Harbor District, *Port Master Plan*, June 10, 2003.

The study encompasses the following tasks:

1. *Review of the existing conditions*
2. *Evaluation of the future conditions*
3. *Development of transportation system options*
4. *Preparation of improvement cost estimates*
5. *Outlining funding options*
6. *Review of the emergency access plan*

The Avila Valley area is an unincorporated coastal area just north of the City of Pismo Beach and west of U.S. 101. Avila Beach is a small, unincorporated community located in the south-central coastal portion of San Luis Obispo County. On San Luis Bay, the town of Avila Beach backs up against the Irish Hills, which are part of the California Coast Range. Port San Luis is a working port providing facilities and services to coastal residents and visitors.

The study area is a popular tourist/recreational area with beach, marina, hot springs, golf, and other recreational attractions. The Diablo Canyon Nuclear Power Plant is also located within the study area. The Valley area has recently experienced growth in residential and related commercial uses, and further growth is anticipated over the next ten years.

Avila Beach is about nine miles south of the City of San Luis Obispo. From U.S. 101, the major north/south highway traversing this portion of California, Avila Beach is accessed from either Avila Beach Drive or San Luis Bay Drive. Figure 1 shows the regional location of Avila Beach. The approach to Avila Beach is through the Avila Valley, where major housing tracts, a local school and two mineral spring resorts are located. West of Avila Beach along Avila Beach Drive is Port San Luis, operated by the local Harbor District. Avila Beach Drive also serves PG&E's Diablo Canyon Nuclear Power Plant.

The town of Avila Beach is less than a half-mile square, bordered by Avila Beach Drive, which forms the northern and western edges of the town, the Pacific Ocean to the south, and the former site of the Unocal Tank Farm to the east. San Luis Obispo Creek, which parallels Avila Beach Drive, creates a natural division between the town and the Avila Beach Golf Course and the San Luis Bay Inn to the west and north. The former Unocal Tank Farm site was home to tank storage units for over 90 years. The tanks were removed in 1998. Over the past five (5) years, Avila Beach has undergone redevelopment with about 40% of the CBD being developed. There are tentative discussions about development at the old Tank Farm site that are outside of this study/fee program and would need to be explored under GPA.

Front Street, which parallels the beach, is the main commercial street in Avila Beach. It offers locals and tourists alike beach-supporting retail, such as food service, rental equipment, grocery store and bars. Local landmarks in Avila Beach are the historic commercial storefronts on Front Street, the Avila Beach Pier and the San Luis Yacht Club. The town has an old-fashioned beach town feel, attracting large numbers of tourists on summer weekends.

SEE CANYON RD.

101

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P A C I F I C

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06-1052

Avila Valley Circulation Study
San Luis Obispo County

Figure 1

STUDY AREA

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Community Input Process

The *2001 Avila Circulation Study* was greatly assisted by the Transportation Committee of the Avila Valley Advisory Council (AVAC). The citizens group met a number of times during the preparation of the 2001 study, providing valuable insight and guidance in the development of the existing and future conditions evaluations, along with the selection of appropriate improvement options. In this study the Land Use Committee of AVAC met to discuss and update the *2007 Avila Valley Circulation Study*.

The Committee and the process were guided by a series of policy statements. These include the following Mission Statement, Goals and Objectives.

Mission Statement: To promote an appropriate and efficient inter-modal transportation system to serve Avila Valley and Port San Luis area residents, businesses and recreational users consistent with the built and natural environments, fiscal, and cultural constraints.

Goal 1: To provide an appropriate and efficient transportation system to serve the present and future needs of the Avila Valley and Port San Luis.

Objective 1: Using current land use and traffic data, review the list of improvements and corresponding priorities contained in the Avila Circulation Study Capital Improvement Program (CIP) to determine their relevance. Specific areas to be reviewed include, but are not limited to, the following:

The need for, and timing of, improvements to:

- *The Avila Village entrance, including a street sign for Bay Laurel Drive.*
- *Avila Beach Drive*
- *The Avila Beach Drive and San Luis Bay Drive interchanges with U.S. 101*
- *The Ontario Road (frontage road) intersection at the San Luis Bay Drive interchange with U.S. 101*
- *Other arterial roads*

Objective 2: Improve safety throughout the transportation system serving the Avila Valley and Port San Luis by identifying traffic controls and other improvements necessary to prevent conflicts among motor vehicles, bicycles, and pedestrians. Review the Avila Circulation Study CIP to identify gaps in planned transportation safety improvements.

Objective 3: Review the adequacy of emergency access and evacuation plans for the Avila Valley.

Goal 2: To ensure that special events in the Avila Valley provide adequate access management.

Objective 1: Obtain relevant information about past and scheduled future events and, upon consultation with pertinent entities, formulate any necessary recommendations for reduced impacts.

<u>Goal 3:</u> To expand the use of alternative forms of transportation in the Avila Valley

Objective 1: Identify transportation options for special events and peak summer weekend visitorship, including park and ride shuttle transportation.

Objective 2: Identify strategies (vehicle pools, public transit, paid parking, etc.) to reduce the number of commuter trips.

<u>Goal 4:</u> To ensure the transportation system accommodates buildout of the land uses designated by the San Luis Bay Area Plan, both Inland and Coastal portions.

Objective 1: Ensure that road capacities are consistent with relevant provisions of the Coastal Act regarding coastal-related and coastal-dependent uses.

Objective 2: Identify potential development allowed by the San Luis Bay Area Plan, both Inland and Coastal portions, and evaluate potential transportation impacts.

Objective 3: The County intends to require a Traffic Impact Study be prepared in conjunction with any proposed amendment to the Area Plan.

<u>Goal 5:</u> To identify a framework for information sharing, coordination and implementation of transportation-related issues among stakeholders.

These Goals and Objectives continue to be applicable for this update

CHAPTER 2
EXISTING CONDITIONS

The Avila area is served by two interchanges, which connect to U.S. 101. West of the freeway these two routes join into a single roadway leading to the area's beach activity center and residential areas. All local roadways in the study area have two through lanes and are classified by the County of San Luis Obispo into three general categories: arterial, collector, and minor roadways. U.S. 101 is classified by Caltrans as a freeway and has four lanes. The roadway network is shown in Figure 2.

The two arterial routes providing primary access to the study area are Avila Beach Drive and San Luis Bay Drive. Avila Beach Drive is a winding 4 1/2 mile long two-lane roadway from U.S. 101 to its terminus at Port San Luis. East of Cave Landing Road, Avila Beach Drive maintains minimal shoulders as the roadway width is constrained on the south by steep rocky slopes and on the north by the parallel San Luis Obispo Creek. Left turn bays exist on Avila Beach Drive at selected intersections. Parking is allowed on the portion of Avila Beach Drive west of San Luis Street.

San Luis Bay Drive begins east of U.S. 101 and terminates with a stop sign controlled approach at Avila Beach Drive. This arterial roadway is generally used by trips originating or terminating north of Avila Beach. Shoulders are provided along San Luis Bay Drive; however, parking is not permitted.

The intersection of Avila Beach Drive at San Luis Bay Drive is the most critical intersection in the study area. As the juncture of the main access roads to Avila Beach, the highest turning volumes are experienced at this location.

A number of collector roadways are found in the area and they include Front Street, San Luis Street, San Miguel Street, Shell Beach Road, Cave Landing Road, See Canyon Road, and Monte Road. Front Street is located between the beach and the commercial/residential development to the north. San Luis Street and San Miguel Street provide access from Avila Beach Drive to the commercial and parking facilities in town. Shell Beach Road is a frontage road located west of U.S. 101 from Avila Beach Drive to Pismo Beach. Lupine Canyon Road is a private collector/drive serving 630 homes in the San Luis Bay Estates area. Cave Landing Road is a narrow route providing access to Pirates Cove. See Canyon Road is a rolling narrow two-lane route that accesses agriculture and single-family homes and agricultural operations west of U.S. 101. This roadway extends as Prefumo Canyon Road into the City of San Luis Obispo. Finally, Monte Road provides a connection between San Luis Bay Drive and Avila Beach Drive east of U.S. 101 and also provides access to agricultural and residential areas to the east.

The remaining roads, which are not classified by the County of San Luis Obispo as either arterials or collectors are deemed to be minor roadways. Figure 3 shows an existing aerial of the Avila Beach area.

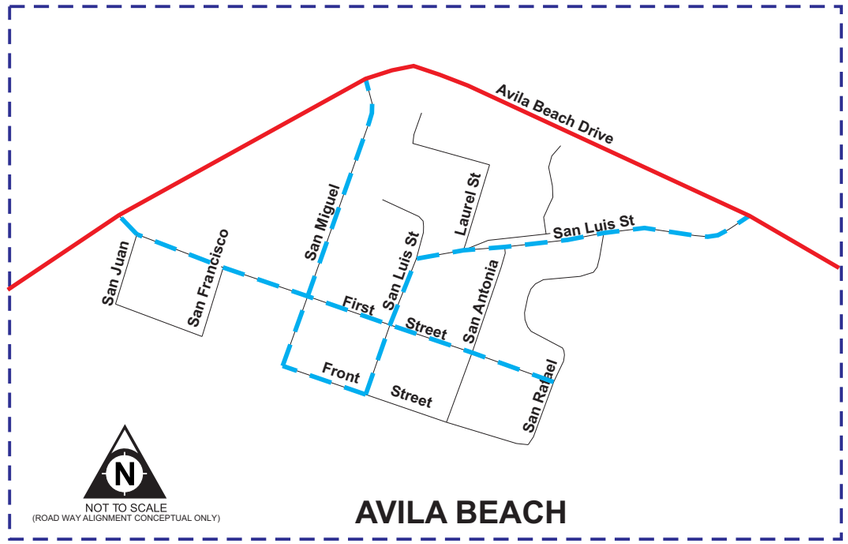
The transportation corridor data, including right-of way-widths, pavement width, travel lanes, travel speed, grades and planned improvements, for the study locations in the Avila area are shown in Table 1.

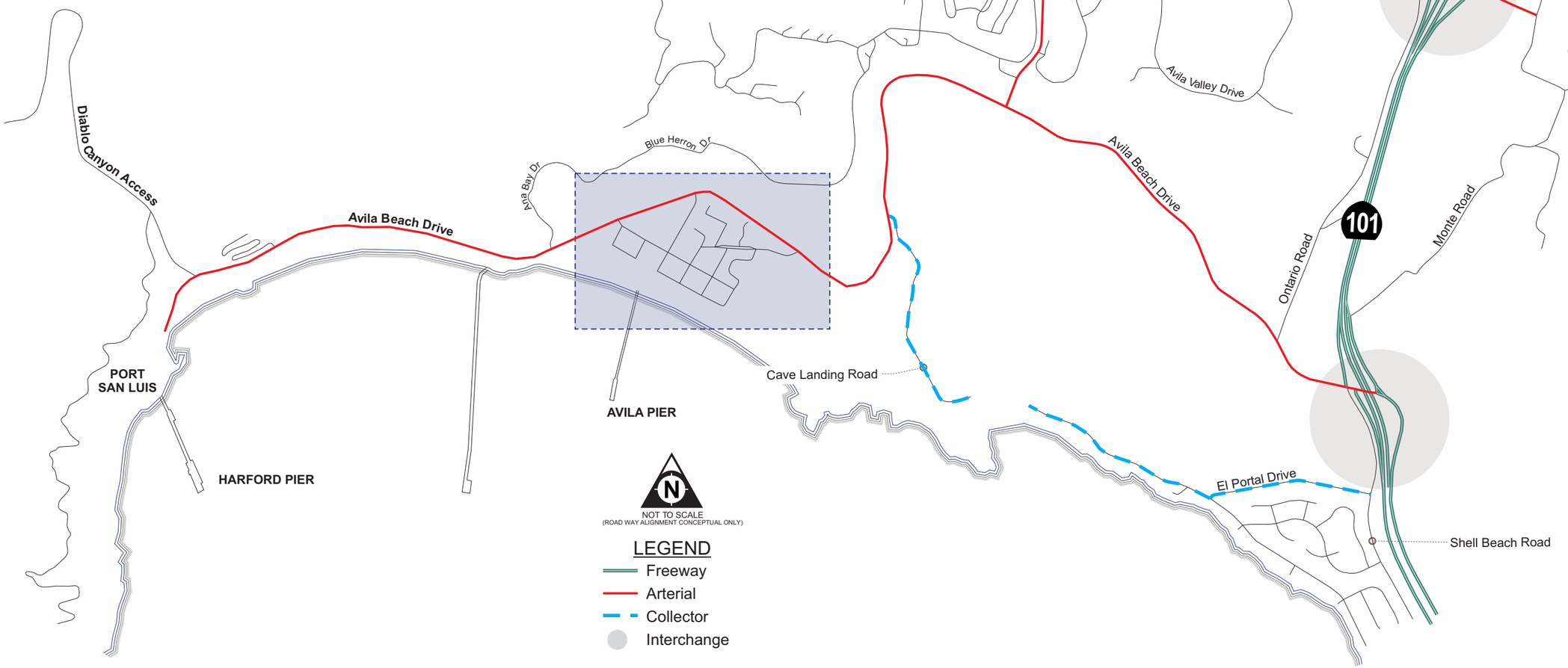
06-1052

Avila Valley Circulation Study
San Luis Obispo County

Figure 2

CIRCULATION NETWORK





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TOWN OF AVILA BEACH

Avila Valley Circulation Study
San Luis Obispo County

06-1052

Figure 3

TABLE 1:
TRANSPORTATION CORRIDOR DATA

Road	Segment	Pavement widths	Travel lanes	Travel speed (85%/posted)
Avila Beach Drive	U.S. 101 to San Luis Bay Dr.	29-37	2	60/45
	San Luis Bay Dr. to San Luis St.	49-62	2	na/45
	San Luis St. to San Miguel St.	62	2	na/40
	San Miguel St. to Port San Luis	36-62	2	47-49/40
Cave Landing		25	2	na/NPS
Front Street		47-57	2	na/NPS
Monte Road		18-21	2	na/NPS
Ontario Road		30-31	2	na/NPS
Shell Beach Road		34-40	2	na/45
San Luis Street		35	2	na/NPS
San Luis Bay Drive	U.S. 101 to Bay Laurel.	35-36	2	na/55/25 (school zone)
	Bay Laurel. to Avila Beach Dr.	36	2	na/NPS
See Canyon Road		18-23	2	na/NPS
Squire Canyon Road		23	2	na/15

na = not available *NPS = no posted speed*

The Avila area roadway network was inventoried to determine the roadway cross-sections, average daily traffic volumes, traffic control devices, and posted speeds. All roadway intersections in the study area are presently stop sign controlled or uncontrolled. Currently, no intersections are signalized. Posted speed limits in the area were also inventoried. Figure 4 depicts the locations of stop signs and the posted speed limits in the study area.

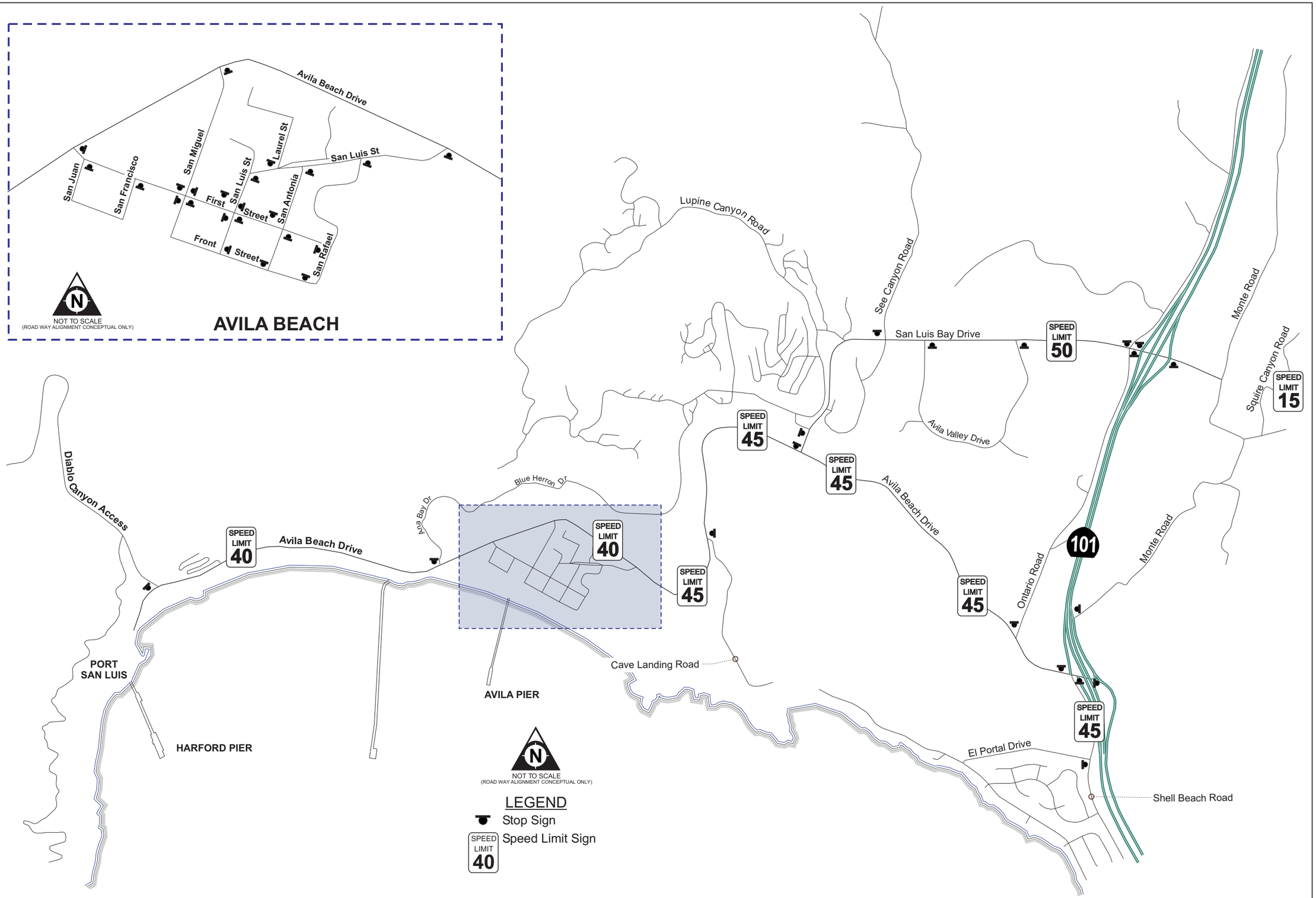
2006 Traffic Volumes

Historically, the County of San Luis Obispo has collected traffic volume data for the Avila area. Permanent count stations have been established on Avila Beach Drive just west of San Luis Bay Drive, San Luis Bay Drive west of Ontario Road and San Luis Street west of Avila Beach Drive. These locations are counted annually in May. These traffic counts generally tally the number of vehicles on a per hour, per day, and per week basis. This information provides the basis for analyzing the current conditions of the roadway system. During the Unocal Beach clean-up efforts, the count stations were discontinued. Regular traffic counting was resumed in 2003.

TPG Consulting collected daily traffic volume count information in 2006 during both the summer/holiday weekends (count data collected during the 3-week period between August 11, 2006 through September 4, 2006) and the non-summer weekday periods (count data collected during the week of September 5, 2006 through September 13, 2006). It should be noted that traffic volumes collected along San Luis Bay Drive were collected prior to the road closure. All count data is included in Appendix A. For analysis purposes, a typical weekday is considered to occur on a Tuesday, Wednesday or Thursday. For study purposes Mondays and Fridays are excluded from typical weekday analysis due to fluctuations typically associated with weekend travel. The peak hour for both the weekend summer/holiday and non-summer weekday time periods were determined based on the count data collected in 2006. The 2006 traffic volume count data used for each of the study locations is shown on Figure 5.

The Avila area is a very attractive destination for recreational users due to the number of outdoor facilities and activities available in the area. The beach and port facilities, in particular, generate their peak use during the summer season on weekends. Traffic to/from these sites during non-summer months is typically less than the summer traffic, usually on the order of 21 percent less during a weekday. The non-summer weekday traffic volumes are consistently lower than summer weekday volumes. The distribution of traffic over a 24-hour period is a constraining factor on the transportation circulation system. The larger the peak condition for any time period, the greater the demand placed on roadway capacity. While the above comparisons are solely made for the major roadways, seasonal variations may differ slightly for internal roadways.

Typically, non-summer and summer/holiday traffic will vary during a typical week with Tuesday being the busiest weekday and Saturday being the busiest weekend day. This trait consistently occurs at several locations for both summer and non-summer conditions. While the percentage increase in summer weekend traffic over summer weekday traffic is significant at the major access routes to the beach area, the largest changes occur on streets in the town. Based on the 2006 traffic count Avila Beach Drive, between San Luis Bay Drive and San Luis Street, carried the largest two-way traffic volumes in the area, ranging from 8,800 vehicles per day during non-summer weekdays to over 16,400 vehicles per day on holiday/summer weekends.



06-1052

Avila Valley Circulation Study
San Luis Obispo County

Figure 4

EXISTING TRAFFIC CONTROL DEVICES

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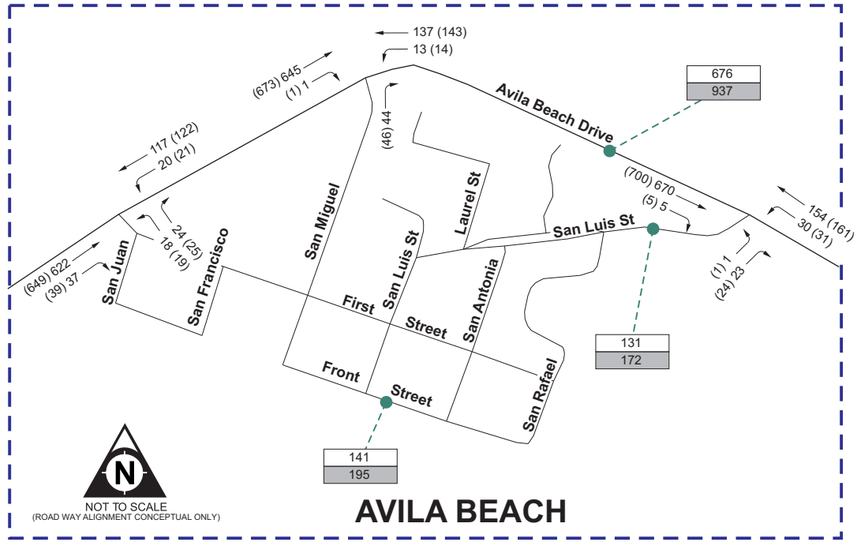
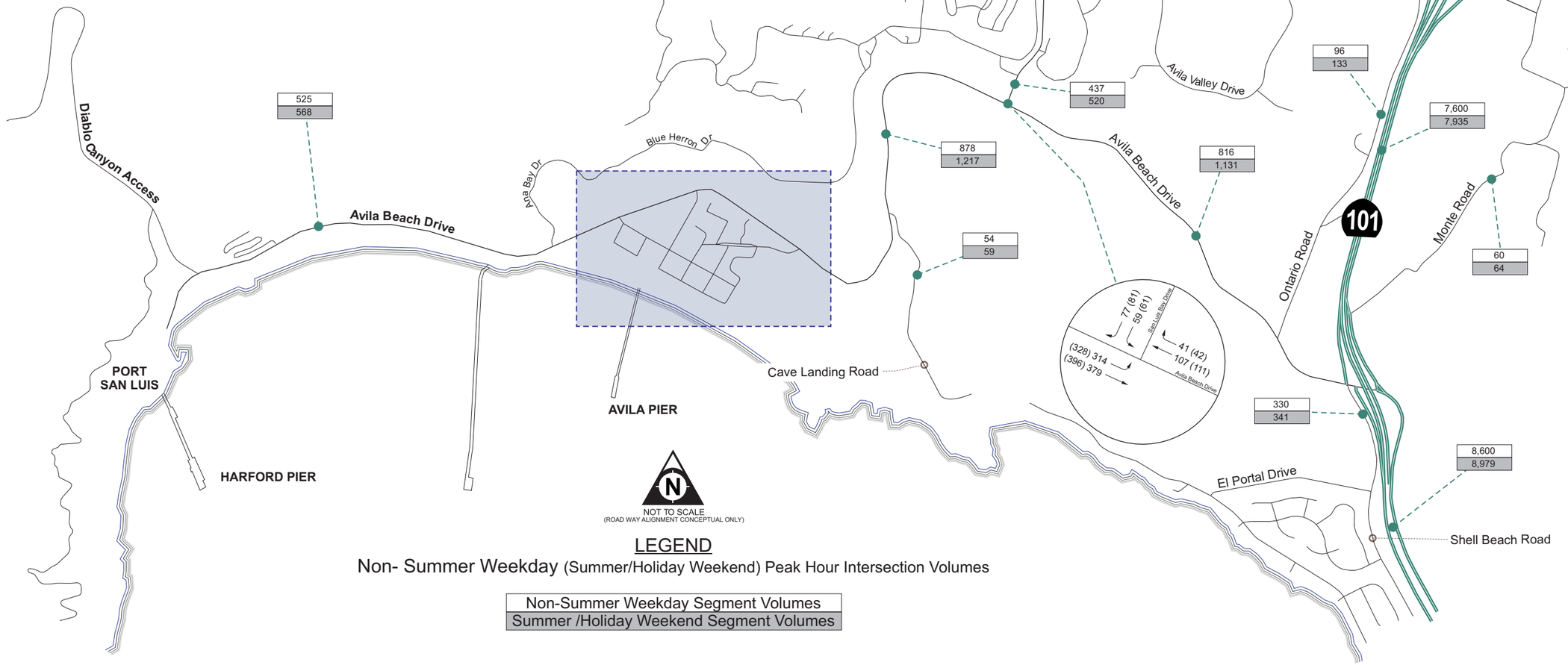
06-1052

Avila Valley Circulation Study
San Luis Obispo County

Figure 5

EXISTING PEAK HOUR WEEKDAY AND WEEKEND VOLUMES





LEGEND

Non- Summer Weekday (Summer/Holiday Weekend) Peak Hour Intersection Volumes

Non-Summer Weekday Segment Volumes
Summer /Holiday Weekend Segment Volumes

TPG Consulting Incorporated

Level of Service Methodology

The maintenance of acceptable levels of service (LOS) for the Avila Valley and Avila Beach area streets is important for balancing future development with the reasonable level and scale of roadway improvements in the community. The County of San Luis Obispo has established level of service "C" as the accepted level of service for roadways in the Avila area (Local Coastal Plan – San Luis Bay – Coastal Area Plan). Previous studies have attempted to acknowledge the wide range of traffic volumes experienced in the area during the summer months. This prompted the establishment of a level of service of "D" for the summertime weekends. Table 2 shows the accepted level of service standard during the non-summer weekday peak hour and during the summer weekend peak hour.

TABLE 2:
LEVEL OF SERVICE STANDARD

Level of Service Standard	Peak Hour
C	Non-summer weekday
D	Summer weekend

The 1992 Study laid the groundwork for a program to test the performance of the street system in the study area. By establishing a level of service standard more closely tied to the seasonality of the traffic demand, the County was able to focus on the normal demand. In February 1994 the County Board of Supervisors established a monitoring program for Avila area roads based on the average non-summer weekday peak-hour traffic volume. This monitoring program includes annual traffic counts collected during the month of May. These annual traffic counts are used to calculate the current level of service. Peak hour capacity was calculated for roadway segments using the *1997 Highway Capacity Manual* methodology for two-lane roadways. This calculation was then compared against the previously adopted capacity contained in the 1992 Study. The *1997 Highway Capacity Manual* was based on substantial research on the carrying capacity of roadways and at the time represented the current industry standard for evaluation of level of service on a 2-lane roadway. That comparison showed that the *1997 Highway Capacity Manual* yielded a significantly higher capacity. In discussing the applicability of this latest information to the Avila Circulation Study, it was determined that a blending of the 1992 study capacity and the *1997 Highway Capacity Manual* capacity would be appropriate. That process yielded the roadway capacities shown in Table 3 for use in this Study.

TABLE 3:
ROADWAY CAPACITY
2-LANE (TWO-WAY VOLUMES)

Level of Service	Service Flow Rate	Volume to Capacity
A	< 1,180	0.00-0.59
B	< 1,380	0.60-0.69
C	< 1,580	0.70-0.79
D	< 1,780	0.80-0.89
E	< 2,000	0.90-0.99
F	> 2,000	> 1.00

For U.S. 101 the *2000 Highway Capacity Manual* and *HCS+* software, freeway module, was used for calculation of capacity using the basic freeway segments, as appropriate. The analyses were based on peak hour traffic volumes and existing roadway conditions including terrain, lane and shoulder widths, vehicle mix and direction of flow.

Intersection Level of Service

For analysis purposes, the *2000 Highway Capacity Manual* defines six levels of service (LOS). They are given letter designations from "A" to "F", with "A" representing the best operating conditions and "F" the worst. Table 4 contains a complete description of each level of service category for signalized and unsignalized intersections. The intersection levels of service calculations were completed using *HCS+* (unsignalized) and *Synchro 6.0* (signalized) software packages. In the future scenario, the intersection of Avila Beach Drive and San Luis Bay Road is analyzed signalized.

TABLE 4: INTERSECTION LEVEL OF SERVICE DESCRIPTION			**Intersections**	
			Signalized	**Unsignalized[1]**
Level of Service	**Conditions**	**Signalized Intersection Description**	**Delay (secs/veh)**	**Delay (secs/veh)**
"A"	Free Flow	*Users experience very low delay. Progression is favorable and most vehicles do not stop at all.*	≤ 10.0	≤ 10.0
"B"	Stable Operations	*Vehicles travel with good progression. Some vehicles stop, causing slight delay.*	> 10.0 to 20.0	> 10.0 to 15.0
"C"	Stable Operations	*Higher delays result from fair progression. A significant number of vehicles stop, although many continue to pass through the intersection without stopping.*	> 20.0 to 35.0	> 15.0 to 25.0
"D"	Approaching Unstable	*Congestion is noticeable. Progression is unfavorable, with more vehicles stopping rather than passing through the intersection.*	> 35.0 to 55.0	> 25.0 to 35.0
"E"	Unstable Operations	*Traffic volumes are at capacity. Users experience poor progression and long delays.*	> 55.0 to 80.0	> 35.0 to 50.0
"F"	Forced Flow	*Intersection's capacity is oversaturated, causing poor progression and unusually long delays.*	> 80.0	> 50.0

Source: 2000 Highway Capacity Manual, Transportation Research Board.
[1] Unsignalized intersections include TWSC and AWSC

Traffic volumes for the study area were developed using the 2006 daily summer weekend and daily non-summer weekday traffic counts collected by TPG. Non-summer weekday traffic volumes along U.S. 101 were taken from the *2005 Traffic Volumes on California State Highways.* Based on Caltrans provided count station data along U.S. 101 near the Avila area, these volumes were factored to create the summer/holiday weekend volumes. The levels of service were calculated for the study locations using the methodology described previously.

Table 5 shows the 2006 non-summer weekday volumes and summer weekend/holiday traffic volumes. Table 5 also includes the volume-to-capacity ratio (v/c) calculation and the resulting LOS for each road segment. The analyses were based on both existing non-summer weekday and summer/holiday peak hour traffic volumes. For the freeway analysis, additional factors such as terrain, roadway lane and shoulder width, vehicle mix, and direction of flow were used to establish capacity. Table 5 summarizes the estimated peak hour LOS at several locations. These are based on the two-way peak hour volumes shown in the Table 5.

TABLE 5:
EXISTING CONDITIONS (2006)

Road	Segment	Non-Summer Weekday Peak Hour			Summer/Holiday Weekend Peak Hour		
		Volume	v/c[3]	LOS	Volume	v/c[3]	LOS
Avila Beach Drive	U.S. 101 to San Luis Bay Dr.	816	0.41	A	1,131	0.57	A
	San Luis Bay Dr. to San Luis St.	878	0.44	A	1,217	0.61	B
	San Luis St. to San Miguel St.	676	0.34	A	937	0.47	A
	San Miguel St. to Port San Luis	525	0.26	A	568	0.28	A
Cave Landing		54	0.03	A	59	0.03	A
Front Street		141	0.07		195	0.10	A
Monte Road		60	0.03	A	64	0.03	A
Ontario Road		96	0.05	A	133	0.07	A
Shell Beach Road		330	0.17	A	341	0.17	A
San Luis Street		131	0.07	A	172	0.09	A
San Luis Bay Drive	U.S. 101 to Bay Laurel	506	0.25	A	582	0.29	A
	Bay Laurel to Avila Beach Dr.	437	0.22	A	520	0.26	A
See Canyon Road		105	0.05	A	128	0.06	A
Squire Canyon Road		42	0.02	A	43	0.02	A

Freeway[1]	Segment	Volume	Density (pc/mi/h)	LOS	Volume	Density (pc/mi/h)	LOS
U.S. 101	N of San Luis Bay Dr.	8,300	---	F	8,666	---	F
	San Luis Bay Dr. to Avila Beach Dr.	7,600	36.8	E	7,935	40.5	E
	S of Avila Beach Dr.	8,600	---	F	8,979	---	F

Intersection[2]	Peak Hour Signal Warrant Met	Non-Summer Weekday Peak Hour		Summer/Holiday Weekend Peak Hour	
		LOS	Delay[4] (secs)	LOS	Delay[4] (secs)
Avila Beach at San Luis Bay	YES				
o EB Left		A	8.4	A	8.4
o SB Approach		D	31.0	E	36.1
Avila Beach at San Luis Street	NO				
o WB Left		A	9.3	A	9.4
o NB Approach		B	14.2	B	14.7
Avila Beach at San Miguel Street	NO				
o WB Left		A	9.1	A	9.2
o NB Approach		B	14.2	B	14.7
Avila Beach at First Street	NO				
o WB Left		A	9.2	A	9.3
o NB Approach		C	15.1	C	15.7

[1] LOS calculated using HCS+ Freeway Module
[2] LOS calculated using HCS+ Unsignalized Module
[3] V/C = volume-to-capacity ratio
[4] Delay per vehicle
--- = exceeds software parameters

Caltrans uses a LOS "C" as their acceptable standard for traffic impact studies and the County of San Luis Obispo uses a LOS "C" during the non-summer weekday peak hour and a LOS "D" during the summer weekend peak hour as their acceptable standard for traffic impact studies. The County policy was established in 1995 through the adoption of an ordinance (*Co. Ord. 2702*). The ordinance calls for the level of service to be based on the average weekday two-way volume for Avila Beach Drive and San Luis Bay Drive between the hours of 3pm and 6pm during the second week in May. All County segments currently operate at LOS "A" and therefore meet the criterion. U.S. 101 however, currently is operating at a level of service "E" or worse, falling below the Caltrans LOS standard. Copies of the freeway segment and intersection analyses are included in Appendix B.

A controlling location, or "bottleneck," for traffic flow in the study area is the intersection of San Luis Bay Drive at Avila Beach Drive. This critical intersection is controlled by a stop sign on San Luis Bay Drive. Based on traffic volumes observed during a weekday during the summer months, the southbound approach of the Avila Beach Drive at San Luis Bay Drive intersection is currently operating below an acceptable level of service (LOS "F") during the PM peak hour. This is due to the stop sign controlled southbound left-turn movement onto eastbound Avila Beach Drive, which, due to the shared southbound lane, delays right-turning vehicles onto westbound Avila Beach Drive.

Signal Warrant Analysis

Rural peak hour volume signal warrants were prepared for the unsignalized intersections based on the methodologies in the *California Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways*. Based on the rural peak hour volume warrant, the warrant is currently met at the Avila Beach Drive at San Luis Bay intersection. The warrant is not currently met at the remaining unsignalized intersections in the Existing conditions. This warrant analysis is limited to the peak hour volume warrant only and other conditions may exist which meet other traffic signal warrants. Copies of the warrant analyses are included in Appendix C.

Transit Service

Since 1990, transit service to and from Avila and Avila Valley has been provided in various forms. Beginning in 1990 the San Luis Obispo Regional Transit Agency (SLORTA) operated direct daily service to Avila during the summer. Three round trips per day were provided and the ridership generated a fare box return of less than 1%. This service was not continued in 1991 because of this limited performance.

Again in the summer of 1995, service to Avila was attempted. Similar results occurred and the ridership generated a fare box ratio of less than 2%.

Currently, service to the Avila Valley is limited to daily service from the Central Coast Area Transit (CCAT) service between San Luis Obispo and Pismo Beach. A flag stop is provided at the P.G. & E. information center for those riders wishing to travel to or from the Valley. No service is provided to the town of Avila.

In 2001, the Avila Beach Community Foundation received a shuttle bus grant from the San Luis Obispo Air Pollution Control District (SLOAPCD) in the amount of $140,000. The Foundation approved a matching grant of $50,000 for a total project cost of $190,000. The demonstration project provided for shuttle bus service to and from Avila Beach and Avila Valley. It began operation in January 2002 and ended in June 2003. The Foundation applied to the San Luis Obispo Council of Governments (SLOCOG) to continue the service. In July 2003, SLOCOG found this to a reasonable to meet un-met transit meet, and directed the County to secure 90% of the funding. The Foundation is responsible for the 10% match.

The Avila Beach Community Foundation began a weekend only trolley bus service in January of 2002 serving the Avila area up to the border o Pismo City. This initial Trolley service lasted one and a half years finances by a grant from the Foundation and the Air Pollution Control District, which permitted the purchase of a used Trolley as well as operating funds. The Foundation applied for and received a designation by SLOCOG of this Trolley service as an "Unmet Transit Need", "Reasonable to Meet" and therefore received Transportation Development monies from the County of San Luis Obispo to continue the Trolley operation beginning July 1, 2003, with the Foundation providing 10% of the cost to eliminate the need to charge a fare. To integrate this Trolley service with other public transit, SLOCOG directed the South County Transit Agency to assume responsibility for operating and financing the Trolley. The SCAT operating began January 1, 2005 utilizing the Trolley owned by the Foundation and with the Foundation continuing to grant funds to cover 10 of the cost. Recently, SCAT received a grant of $120,000 to use in acquiring an almost new Trolley to replace the Foundation Trolley. The utilization of the Trolley has not yet achieved the goal set by SLOCOG but community discussions of parking and traffic problems typically includes a reference to a potential increased use of the Trolley.

Parking

Public parking is currently supplied in a number of locations within Avila Beach. Specifically, the Earl's Alley parking lot, on-street parking in the commercial area of town and parking along Avila Beach Drive are the primary locations. Figure 6 shows the public parking lot and on-street parking locations.

Since the *2003 Harbor District Master Plan Update*, the parking supply has increased slightly from 952 to 956 overall spaces, with the four (4) added parking spaces located at the Post Office Parking Lot. Additional key points about the public parking supply are as follows:

- ***Front Street Diagonal Parking.*** *Parking along Front Street has historically been in a diagonal parking arrangement. The remodeled streetscape re-installed the historic parking pattern along Front Street. Spaces have been laid out at 45 degrees and 30 degrees on the two sides of the street, in order to make it possible to provide wider sidewalks. Time limits of 3 hours between the hours of 6:00 AM and 2:00 AM have been imposed between San Luis Street and San Juan Street.*

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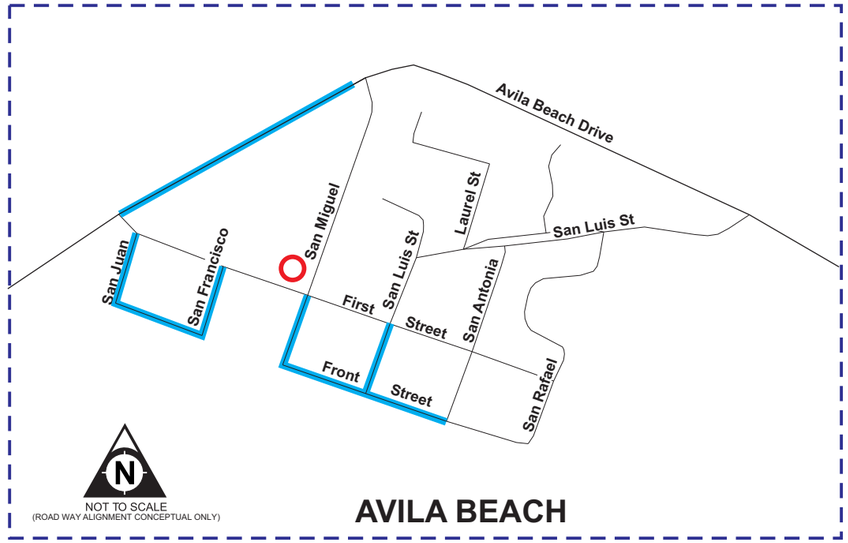
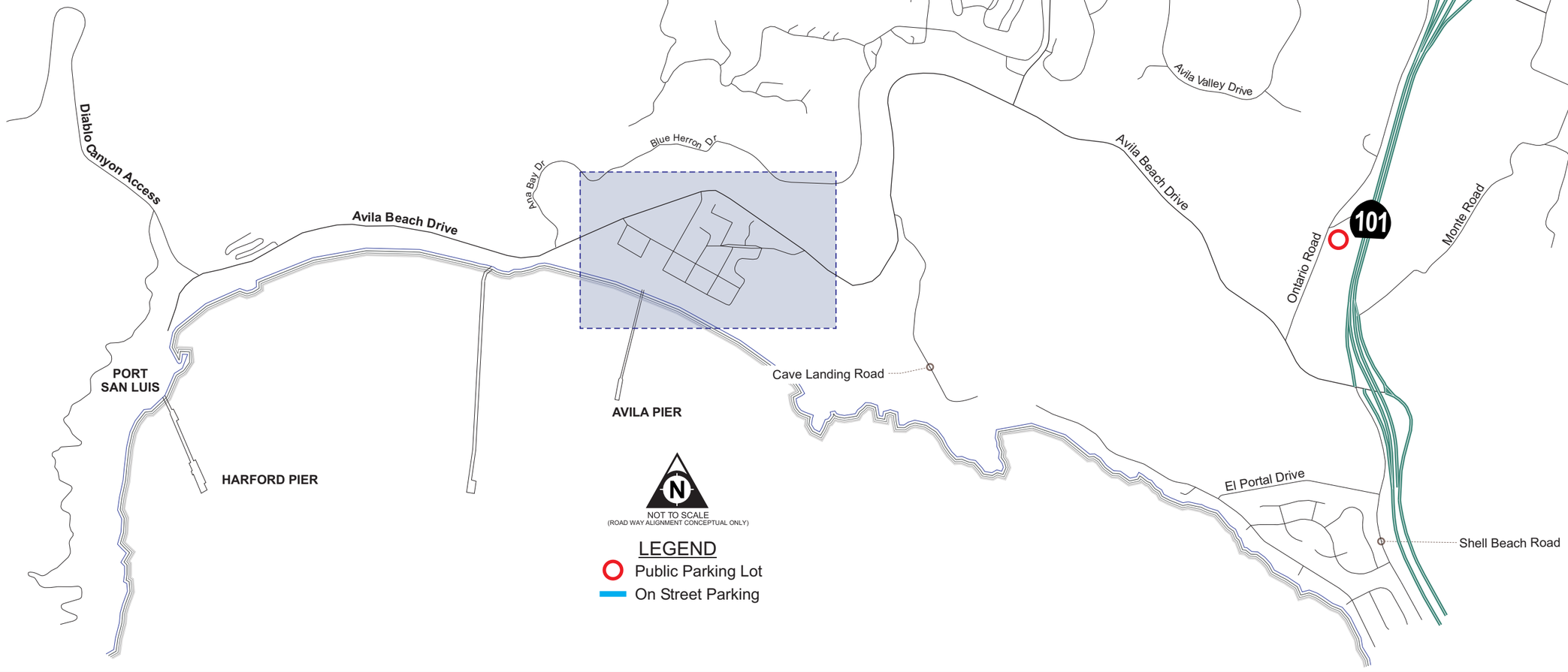
Figure 6

PARKING PROGRAM





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- ***Side Street Parking.*** *Parking on some side streets has been changed from parallel parking in some locations to diagonal parking. These locations include both sides of San Juan Street and San Francisco Street. Time limits of 3 hours between the hours of 6:00 AM and 2:00 AM have been imposed along both San Juan and San Francisco Streets between Front Street and First Street.*
- ***Residential Neighborhood Parking.*** *Residential neighborhood on-street parking is planned to continue to be uncontrolled, with residents and beach goers able to use these stalls.*

Currently, all new development in Avila Beach must supply its own on-site parking to meet County standards. This requirement has been identified as an unnecessary burden on restaurant and retail development. In most cases, commercial development in Avila relies on the beach itself to generate its customers; visitors park for the beach and then walk to retail and restaurant locations. Parking for dinner restaurants is readily available since many beach-goers have vacated their spaces by late afternoon.

As shown in Table 6, primarily beach users generate parking demand in Avila Beach. When the beach is full, beach goers create a demand for approximately 1,000 parking spaces. In addition, the commercial uses also create a demand for parking. On busy summer days, that commercial demand is somewhat shared with the beach parking demand. People visit these local businesses as a part of a trip to the beach, so most parking demand for the commercial uses is contained within the beach demand. At less busy times, those trips made to visit the Avila Beach businesses are necessarily shared trips to the beach.

TABLE 6
PARKING DEMAND

Retail parking demand (at 3 spaces per 1,000 square feet)	
Proposed Retail (70,000 square feet)	210
Total Potential Retail Parking Demand	**210**
Beach Demand (1 person per 80 square feet of beach; 3.35 persons per car; 95.9% auto use)	
Usable Beach Area	6.4 acres
Total Number of Possible Beach Users	3,485
Parking Spaces Required	998
Total Potential Beach Parking Demand	**998**

Substantial parking will be supplied within the town area. However it is projected that during the busiest summer demand there will be a shortage of parking in the community. Assuming a parking occupancy rate of 85%, which accounts for vehicle turn-over and commercial parking activities, the available supply at any given moment will be approximately 800 stalls. With demand projected to be approximately 1,000 vehicles, it is estimated that during the busiest summer days the community will fall short by about 200 stalls.

Table 7 shows a current inventory of the parking supply. In addition to these parking resources within the town, several additional locations within the study area provide parking. Included in this inventory is the Bob Jones Park and Ride facility located on Ontario Road. This 27-stall facility was developed by the County of San Luis Obispo and serves a dual role. During the week it provides a venue for park-and-ride activity along the U.S. 101 corridor, while on weekends it acts as a trailhead for the bicycle/pedestrian trail running between Ontario Road and the town. The second major facility is the P.G. & E. building, also located on Ontario Road. This former information center for the Diablo Canyon Power Plant currently has 76 stalls.

TABLE 7
PARKING SUPPLY SUMMARY

Location	Supply
Front Street	140
Side Streets	132
First Street	61
Earl's Alley Parking Lot	355
Post Office Parking Lot	18
Avila Beach Drive (curbside parking)	250
Total Available Public Parking	956

Bicycle

The Avila Beach Specific Plan proposes a number of improvements to bicycle facilities in the Avila Beach area. An extension of the existing Bob Jones Bicycle Path is proposed to terminate at the Front Street Park, with the path crossing under the Avila Beach Drive Bridge. If the crossing under the bridge is shown to be infeasible for structural, environmental or other reason, the bike path will cross Avila Beach Drive at the intersection of San Miguel Street, and terminate at the Earl's Alley parking lot or some other location where bicycle racks can be provided.

Bicycle storage facilities are proposed to be located in the town of Avila Beach at several key locations. There would be bicycle racks installed in the Front Street park, at both ends of the Front Street Plaza, at the post office and Community Services District building, and at the foot of the pier.

A bicycle-pedestrian path between Avila Beach and Shell Beach via Cave Landing Road could be constructed, as well. If the existing landslide damage along Cave Landing Road is repaired, the right-of-way could be designed to accommodate a recreational trail facility. A right-of-way would be needed to extend the bicycle/pedestrian path through the Tank Farm site to connect with Front Street.

A copy of the bicycle system plan is shown in Figure 7.

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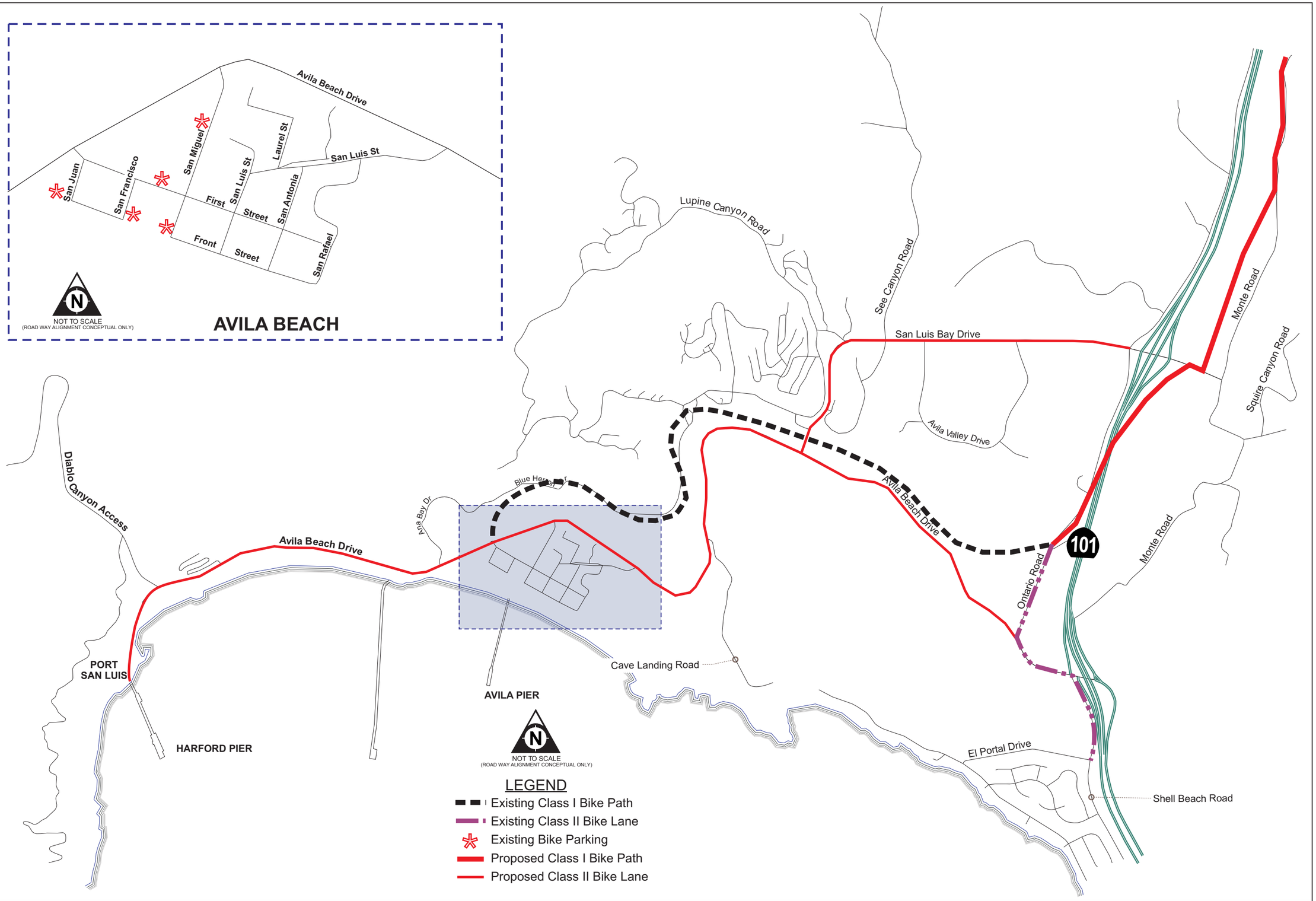
Figure 7

BICYCLE SYSTEM PLAN



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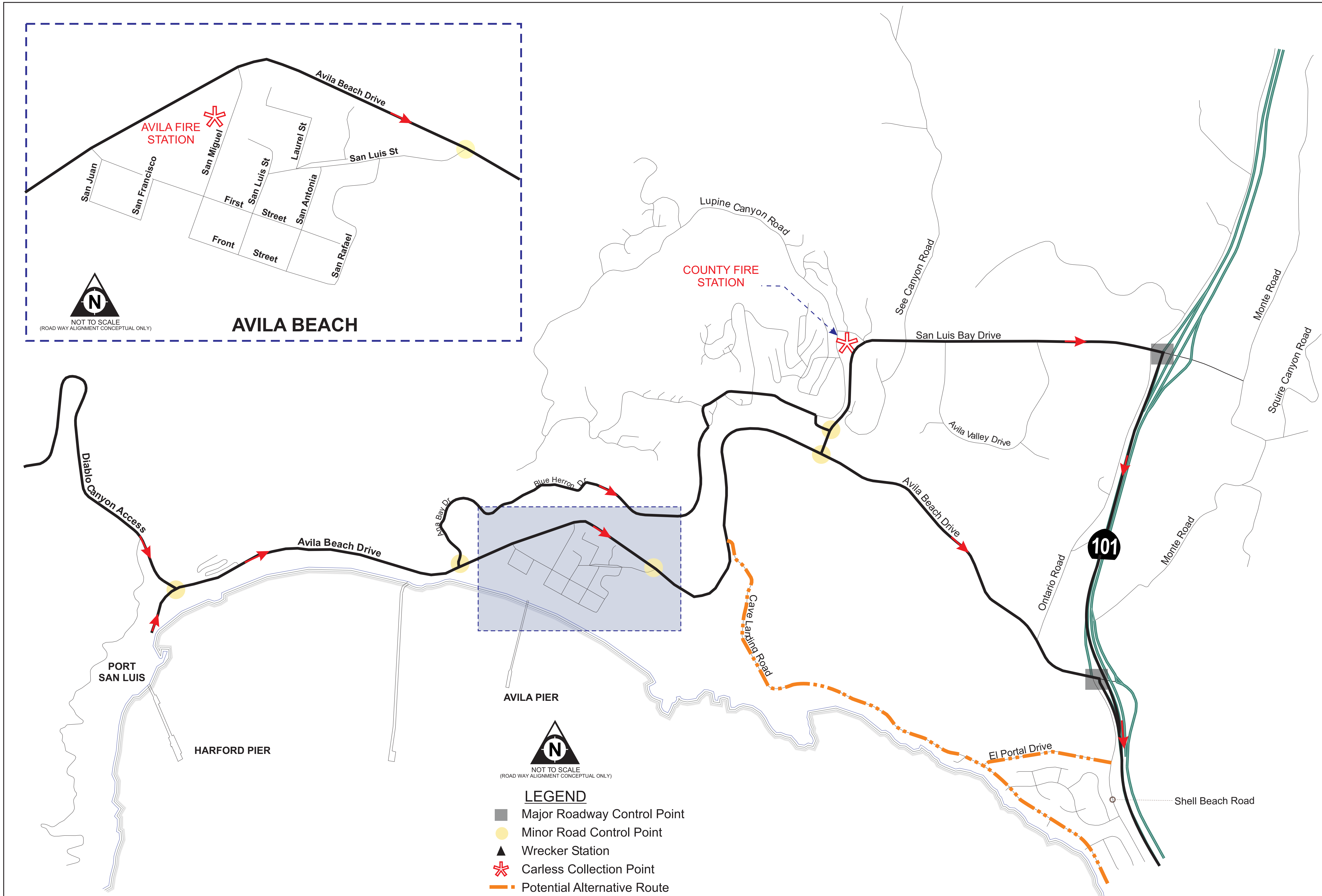
Emergency Evacuation Plan

As part of the operations plans for the Diablo Canyon Nuclear Power Plant, an Emergency Evacuation Plan has been prepared and, in the wake of current disasters such as Hurricane Katrina, has been reevaluated by the San Luis Obispo County Civil Grand Jury in the *2006-2007 San Luis Obispo County Civil Grand Jury Report*. The current Emergency Evacuation Plan is shown in Figure 8. Based on the results of this report one recommendation was made to the current Evacuation Plan. Historically, the Cave Landing Road to Bluff Drive segment leading to Shell Beach has been considered an alternative evacuation route. As stated in the Grand Jury Report, Cave Landing Road is a dirt road that should be upgraded and designated as exit route from Avila Beach to Shell Beach. The estimated cost to upgrade and designate Cave Landing Road as an alternative route is $6,000,000 to $10,000,000, largely due to the need to construct a structure to bridge a significant landslide that has closed Cave Landing Road. The *Cave Landing Road Feasibility Study* is included in Appendix D. The County Office of Emergency Services is responsible for managing the plan shown in Figure 8.



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Avila Valley Circulation Study
San Luis Obispo County

Figure 8

EMERGENCY EVACUATION PLAN

TPG Consulting incorporated

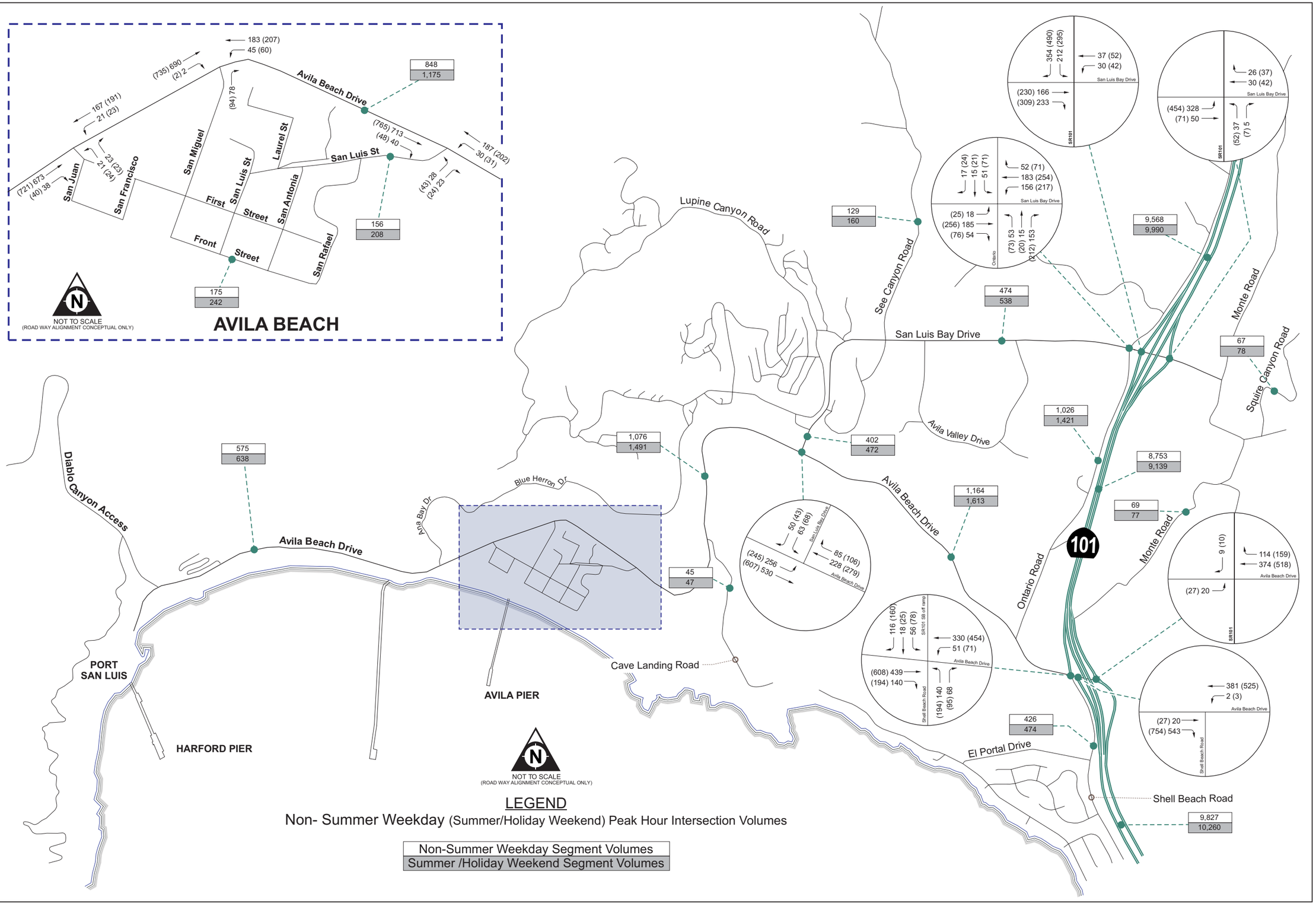
CHAPTER 3
BUILDOUT PROJECTIONS WITHOUT IMPROVEMENTS

Future (2020) Traffic

Future (2020) average daily traffic (ADT) volumes for the Study area were developed from the TP+ model. The updated TP+ model, which includes a modification to the boundaries, refinement of the TAZ structure, and an updated inventory of the available lot, was utilized. Peak hour percentages used to convert the daily weekday segment and intersection volumes to peak hour volumes were calculated based on 2006 daily segment count data. That volume was then converted to a summer peak hour volume for the road segments and the key intersections. The weekday/weekend volumes were established using data collected by the County, which showed the relative difference in traffic volumes at several key locations. From these volumes factors were developed to adjust the daily traffic to reflect the typical summer weekend or holiday traffic volumes. Copies of the model plots, modeling methodologies and socioeconomic data are shown in Appendix E.

Table 8 and Figure 9 show the future summer and holiday traffic volumes along with the non-summer volumes. The volume-to-capacity ratios (v/c) and the resulting LOS for each road segment are also presented in Table 8, as well as the density and LOS for the freeway segments and the delay and LOS for the study intersection. The analyses were based on projected future weekday and summer/holiday peak hour traffic volumes.

Table 8 shows the Future (2020) Conditions summer/holiday traffic volumes along with the non-summer volumes. The volume-to-capacity ratios (v/c) and the resulting level of service (LOS) for each road segment are also presented. The analyses were based on projected future weekday and summer/holiday peak hour traffic volumes.



LEGEND

Non- Summer Weekday (Summer/Holiday Weekend) Peak Hour Intersection Volumes

Non-Summer Weekday Segment Volumes
Summer /Holiday Weekend Segment Volumes

06-1052

Avila Valley Circulation Study
San Luis Obispo County

Figure 9

FUTURE PEAK HOUR WEEKDAY AND WEEKEND VOLUMES

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TABLE 8:
FUTURE (2020) CONDITIONS

Road	Segment	Non-Summer Weekday Peak Hour			Summer/Holiday Weekend Peak Hour		
		Volume	v/c[3]	LOS	Volume	v/c[3]	LOS
Avila Beach Drive	U.S. 101 to San Luis Bay Dr.	1,164	0.58	A	1,613	0.81	D
	San Luis Bay Dr. to San Luis St.	1,076	0.54	A	1,491	0.75	C
	San Luis St. to San Miguel St.	848	0.42	A	1,175	0.59	A
	San Miguel St. to Port San Luis	575	0.29	A	638	0.02	A
Cave Landing		45	0.02	A	47	0.02	A
Front Street		175	0.09	A	242	0.12	A
Monte Road		69	0.03	A	77	0.04	A
Ontario Road		1,026	0.51	A	1,421	0.71	C
Shell Beach Road		426	0.21	A	474	0.24	A
San Luis Street		156	0.08	A	208	0.10	A
San Luis Bay Drive	U.S. 101 to Bay Laurel	474	0.24	A	538	0.27	A
	Bay Laurel. to Avila Beach Dr.	402	0.20	A	472	0.24	A
See Canyon Road		129	0.06	A	160	0.08	A
Squire Canyon Road		67	0.03	A	78	0.04	A
Freeway[1]	**Segment**	**Volume**	**Density (pc/mi/h)**	**LOS**	**Volume**	**Density (pc/mi/h)**	**LOS**
U.S. 101	N of San Luis Bay Dr.	9,568	---	F	9,990	---	F
	San Luis Bay Dr. to Avila Beach Dr.	8,753	---	F	9,139	---	F
	S of Avila Beach Dr.	9,827	---	F	10,260	---	F

Intersection[2]	Peak Hour Signal Warrant Met	Non Summer Weekday Peak Hour		Summer/Holiday Weekend Peak Hour	
		LOS	Delay[4] (secs)	LOS	Delay[4] (secs)
Avila Beach at San Luis Bay[2]		B	11.4	B	11.7
Avila Beach at San Luis Street	NO				
o WB Left		A	9.6	A	9.9
o NB Approach		C	19.1	C	22.7
Avila Beach at San Miguel Street	YES				
o WB Left		A	9.4	A	9.7
o NB Approach		C	16.0	C	17.6
Avila Beach at First Street	NO				
o WB Left		A	9.4	A	9.6
o NB Approach		C	16.8	C	18.5
San Luis Bay Drive at U.S. 101 NB ramps	NO	B	13.2	B	12.4
San Luis Bay Drive at U.S. 101 SB ramps	YES	B	10.5	B	10.0
San Luis Bay Drive at Ontario Road	YES	B	18.8	C	29.6

TABLE 8:
FUTURE (2020) CONDITIONS

Intersection[2]	Peak Hour Signal Warrant Met	Non Summer Weekday Peak Hour		Summer/Holiday Weekend Peak Hour	
		LOS	Delay[4] (secs)	LOS	Delay[4] (secs)
Avila Beach Drive at U.S. 101 NB ramps	NO				
o EB Left		A	8.5	A	9.3
o SB Approach		B	11.2	B	12.8
Avila Beach Drive at U.S. 101 SB on-ramp	NO				
o EB Left		A	8.7	A	9.6
Avila Beach Drive at U.S. 101 SB off-ramp/Shell Beach Road	YES	B	11.3	B	15.2

[1] LOS calculated using HCS+ Freeway Module
[2] LOS calculated using HCS+ Unsignalized Module/Synchro 6.0
[3] V/C = volume-to-capacity ratio
[4] = Delay per vehicle
--- = exceeds software parameters

No arterial segments are projected to operate at below the County of San Luis Obispo's adopted level of service during either the non-summer peak hour (October through May) weekday (LOS "C") or the summer/holiday (June through September) weekend peak hour (LOS "D"). U.S. 101 is projected to operate at LOS "F" during both the non-summer and summer/holiday weekend peak hours. The signalized intersection of San Luis Bay Drive at Avila Beach Drive is also projected to operate at a LOS "B" during both the non-summer and summer/holiday weekend peak hours. Copies of the freeway and intersection analyses are shown in Appendix F.

San Luis Bay Drive at U.S. 101 interchange evaluation

The evaluation provided in Table 8 for the San Luis Bay Drive at U.S. 101 interchange intersections was based on traffic volumes developed from the Avila Traffic Model; typical representative existing traffic counts were not available due to the shift in traffic associated with the closure of the San Luis Bay Drive interchange for bridge widening and is intended to provide a hypothetical future level of service analysis of the area. It was assumed that the interchange intersections of San Luis Bay Drive at U.S. 101 NB ramps, San Luis Bay Drive at U.S. 101 SB ramps, and San Luis Bay Drive at Ontario Road were signalized. As shown in Table 8, the three (3) signalized intersections of San Luis Bay Drive at U.S. 101 NB ramps, San Luis Bay Drive at U.S. 101 SB ramps, and San Luis Bay Drive at U.S. 101 Ontario Roads are projected to operate at or above the appropriate level of service standard in both the non-summer and summer/holiday weekend peak hours. Future improvement alternatives at the interchange include but are not limited to:

1. installation of a roundabout at the intersection of San Luis Bay Drive at Ontario Road
2. installation of additional intersection capacity (i.e. approach lanes) at the intersection of San Luis Bay Drive at Ontario Road

A Project Study Report (PSR) would need to be prepared to explore the possible alternatives to the San Luis Bay interchange area.

Avila Beach Drive at U.S. 101 interchanges evaluation

The evaluation provided in Table 8 for the Avila Beach Drive at U.S. 101 interchange intersections was based on traffic volumes developed from the Avila Traffic Model; typical representative existing traffic counts were not available due to the shift in traffic associated with the closure of the San Luis Bay Drive interchange for bridge widening. It was assumed that the interchange intersections of Avila Beach Drive at U.S. 101 NB ramps and Avila Beach Drive at U.S. 101 SB off-ramp/Shell Beach Road were signalized.

Pinnacle Traffic Engineering prepared an assessment of the Avila Beach Drive at U.S. 101 interchange area to evaluate the impacts associated with the temporary closure of San Luis Bay Drive. This assessment was prepared in June 2007. The analysis described four (4) future improvement alternatives:

1. installation of an all-way stop-control at the intersection of Avila Beach Drive at U.S. 101 SB off-ramp/Shell Beach Road
2. installation of a traffic signal at the intersection of Avila Beach Drive at U.S. 101 SB off-ramp/Shell Beach Road
3. installation of a roundabout at the intersection of Avila Beach Drive at U.S. 101 SB off-ramp/Shell Beach Road
4. installation of additional intersection capacity (i.e. approach lanes) at the intersection of Avila Beach Drive at U.S. 101 SB off-ramp/Shell Beach Road

Funding for these alternatives would need to be done through the preparation of a PSR or through the Caltrans encroachment process.

Signal Warrant Analysis

Rural peak hour volume signal warrants were prepared for the unsignalized intersections based on the methodologies in the *California Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways*. Based on the rural peak hour volume warrant, the warrant is projected to be met at the Avila Beach Drive at San Miguel Street intersection in the Future (2020) conditions. This warrant analysis is limited to the peak hour volume warrant only and other conditions may exist which meet other traffic signal warrants. Copies of the warrant analyses are included in Appendix G.

All future development will need to prepared individual traffic impact studies reflective of the specific developments to determine any impacts the development may

CHAPTER 4
RECOMMENDED IMPROVEMENT PROJECTS

As shown in the previous chapter, the intersections of Avila Beach Drive at San Luis Street, Avila Beach Drive at San Miguel Street and Avila Beach Drive at First Street were all projected to have movements projected to operate at or above the adopted level of service standard in the Future (2020) conditions. The intersection of Avila Beach Drive at San Miguel Street is projected to meet the rural peak hour volume warrant. To mitigate the meeting of the rural peak hour volume warrant the following improvements are recommended:

Avila Beach Drive at San Miguel Street
- Signalize the intersection
- Coordinate/optimize the intersection

Even though the intersections of Avila Beach Drive at San Luis Street and Avila Beach Drive and First Street are not projected to have operational failures or meet the rural peak hour volume warrant in the Future (2020) conditions, the following improvements were also shown:

Avila Beach Drive at San Luis Street
- Signalize the intersection
- Coordinate/optimize the intersection signal

Avila Beach Drive at First Street
- Signalize the intersection
- Coordinate/optimize the intersection

If these improvements are implemented the LOS at the study locations are as shown in Table 9. Copies of the signalized intersection analyses are shown in Appendix H.

TABLE 9:
MITIGATED FUTURE (2020) CONDITIONS

Intersection[2]	Control Type	Non-Summer Weekday Peak Hour		Summer/Holiday Weekend Peak Hour	
		LOS	Delay[1] (secs)	LOS	Delay[1] (secs)
Avila Beach at San Luis Bay	Signal	B	11.4	B	11.7
Avila Beach at San Luis Street	Signal	A	5.7	A	6.4
Avila Beach at San Miguel Street	Signal	A	9.0	B	10.6
Avila Beach at First Street	Signal	A	7.0	A	7.8

[1] *Delay per vehicle* [2] *LOS calculated using Synchro 6.0*

With the improvements shown above, all the study intersections are projected to continue to operate at or above the adopted LOS standard in the non-summer weekday peak hour.

It should be noted that with the signalization of the Avila Beach at First Street intersection and the close proximity of the intersection with the First Street at San Juan Street intersection queuing issues may be present in both the non-summer and summer/holiday weekend peak hours that would affect traffic on San Juan Street. Based on the LOS shown in Table 9 it is projected that the 95th percentile queue length at the Avila Beach at First Street intersection will be 36 feet in the non-summer peak hour and 42 feet in the summer/holiday weekend peak hour. Currently there is less than a 100 feet distance between the two intersections.

As shown in Chapter 3, based on preliminary analysis results the need for signalization and lane additions at intersections at the San Luis Bay Drive at U.S. 101 interchange and Avila Beach Drive at U.S. 101 interchange areas may be needed. Further analysis and the preparation of Project Study Reports at both locations would need to be prepared to identify the exact improvements needed.

Recommended Circulation Plan

It is clear from the foregoing evaluation of the future traffic demand that the existing transportation infrastructure will provide a high level of service during typical weekday peak periods. However, during summer weekends and holidays some sub-standard levels of service can be anticipated at intersections located on Avila Beach Drive between San Luis Bay Drive and San Luis Street. Roadway upgrading would be needed to serve future traffic volumes anticipated on summer weekends and holidays. Widening this segment would, however, be disruptive and would potentially have major environmental impacts due to intrusion into San Luis Creek and substantial cuts into the hillside. Widening this roadway would also have high construction costs relative to the number of cars carried.

The widening would also result in considerable reserve capacity that, given the limits of future development in the study area, is not likely to be ever used. Moreover, to the extent that there is limited parking supply in town, this capacity would encourage more recreational travelers to drive into the area to seek parking that is not available either in the town of Avila Beach or at the Harbor. For the above reasons, widening Avila Beach Drive to four lanes is not recommended. Therefore, it is recommended that the issues associated with future summer time traffic congestion should be addressed using transportation system management strategies.

Three capital improvements to the area roadways are recommended for implementation in the future.

1. *Upgrade the two interchanges to improve traffic operations and accommodate future traffic volumes*
2. *Widen U.S. 101 to accommodate high occupancy vehicle(HOV) lanes*
3. *Install traffic signals as warranted at key intersections*

CHAPTER 5
ALTERNATIVE TRANSPORTATION MODES

Transportation System Management

Over the past 25 years, transportation systems management (TSM) programs have been established in many areas to help reduce traffic and parking congestion while avoiding the need for high capital cost improvements. Most TSM programs are oriented toward commute travel, with policies and promotional activities implemented at major employment sites, downtown areas, or on regional highways with large volumes of commute trips. TSM programs can involve a wide variety of policy actions, promotional activities, and physical improvements.

The Avila area, as primarily a recreational and relatively low-density residential area, is not well suited to many of the standard TSM activities implemented elsewhere. Its one major employer, the Diablo Canyon Nuclear Power Plant, is large enough to warrant an on-site TSM program. Its residential based commute travel is relatively low and directionally counters the peak flow of traffic into or out of the area. The focus of TSM strategies would therefore need to address recreational travel to and from the beach. Since this is of limited duration during summer weekends and holidays, TSM measures should be considered to reduce auto trips into the town and associated parking congestion. The following TSM measures can be used:

- *Public transit service improvements*
- *Intercept parking with shuttle transit service*
- *Ride-sharing incentives*
- *Bicycle/transit facilities*
- *Parking Management (as an alternative to constructing new parking facilities)*
- *Travel demand management (e.g. flexible work hours to reduce peak period travel)*
- *Spot roadway improvements to remove localized bottlenecks (e.g. channelization or signalization at intersections)*

In addition, traffic management at all special events should be handled through the County permit process. As part of that process is the requirement for the preparation of a traffic management plan for each event. The County of San Luis Obispo should continue to collect annual counts during the month of May and augment with a summer weekend count.

Public Transit Improvements

Because the study area is a relatively isolated location and has a limited resident population base, it is not likely that public transit could play a major role in reducing traffic levels during typical weekdays. However, during summer weekends or holidays improving transit service will in the future play a key role in reducing peak traffic to and from the beach areas in Avila. It is recommended that, as parking becomes more difficult in the town area a regional transit strategy be implemented. Operation of a direct route on weekends during the summer season, with service from the Five Cities area directly into Avila Beach and then on to downtown San Luis Obispo will be warranted.

This service should be operated between 10 A.M. and 6 P.M. for approximately 32 weekend days per summer. In addition to the summer schedule, this service should be considered for any special event where the demand for parking is projected to exceed the supply of stalls in town.

Intercept Parking and Shuttle Service

Long range, the concept of providing intercept parking facilities near U.S. 101 with a shuttle bus into the beach areas is warranted for several reasons. As noted previously, the growth in demand for use of beach facilities is projected to be greater than the anticipated parking supply. Parking in Avila Beach is already at or near capacity during summer weekends and holidays. Once the available parking is taken, any excess demand can only be served by off-site parking. Avila Beach has only two entry points along U.S. 101 and all visitors must use these for access. This makes it relatively easy to sign and route drivers to intercept parking facilities; this is especially true for out-of-town visitors. Remote parking would be substantially easier and less costly to develop than parking in the town of Avila and the Harbor areas.

In the long term, there is an opportunity to also establish these intercept parking facilities as park-and-ride lots for weekday commuters into San Luis Obispo. Generally, they are most likely to attract riders when parking and traffic congestion is severe, and the shuttle service itself is convenient and low in cost. As noted above, some of the necessary conditions will exist in the future in the Avila area. Assuming the shuttle only operates on summer weekends and that existing SLORTA, SLO Transit or other available buses are used for the service, costs of the shuttle operation would be relatively small.

As described previously in this report, it is estimated that with development of the planned land uses in the Town of Avila parking demand will exceed the supply by about 200 stalls. Two locations are suggested for development of the needed parking stalls. Use of the existing parking area at PG & E visitor center on Ontario Road would greatly minimize the capital cost associated with parking lot development. This 75 stall lot could be used to provide an intercept facility for traffic arriving from the north. A lease agreement for use of the lot during the summer and holidays would have to be completed between the County and P. G. & E. The second location is near the Avila Beach Drive interchange. A 100-125 stall lot would need to be constructed at this location to intercept traffic from the south.

A shuttle bus would be used to transport riders from the intercept lots to the town, beaches and Harbor. The shuttle bus would also operate from 10 A.M. until 6 P.M. Changeable message signs would be constructed at each of the interchanges to inform travelers of alternative parking options whenever the parking lots in town were nearing capacity. This shuttle system should also be used for any special event where the demand for parking is projected to exceed the supply of stalls in town. As part of the development of the park-and-ride lots message signs would be installed at the freeway off ramps to inform motorists that the parking in town was full and that the travelers should use the intercept lots. These message signs could also be used during special events at the Harbor or in Town to inform visitors of parking availability.

Alternative parking options also exist for consideration. These include augmentation of parking within the core of the town. This could be accomplished through the purchase of additional land adjoining the Harbor District lot on First Street. A second option is to develop a new lot within the town. One option that has recently been proposed is to use the Unocal property along Avila Beach Drive just west of Cave Landing Road. This property could be developed to provide for intercept parking and would need to be tied to a shuttle bus into town. Additional road improvements would also be needed along Avila Beach Drive to accommodate both right turns and left turns into the site and to safely address the sight distance along the curve.

The goal of these options is to add the 200 stalls necessary to eliminate the shortfall as close to town as possible. The difficulty with this strategy is that the traffic accessing the community would continue to use the critical segment of Avila Beach Drive between San Luis Bay Drive and San Luis Street. The option to expand the Harbor lot would also use very valuable land and could be quite expensive. The Unocal lot option would necessitate additional road improvements and operation of a shuttle bus.

PG & E Diablo Canyon Power Plant Shuttle Service

The PG&E Diablo Canyon Power Plant is a major contributor to the total number of daily vehicle trips within the Avila Beach study area. The Plant employs an estimated 1,300 employees, approximately 900 of which travel to and from the facility on a typical weekday.

In an effort to curtail the need for additional road capacity on Avila Beach Drive in the future, solutions which focus on removing traffic from the roadway may provide to be a viable alternative to increasing roadway capacity or widening. By moving employee trips from automobiles and concentrating them in shuttle buses, additional roadway capacity will be made available at a relatively low cost. One approach focuses on employer-based shuttle programs which allow for parking at a distance with service to and from an intended destination.

The following outlines a service description for a proposed PG&E Employee Shuttle:

Operator:	PG&E
Equipment:	1 40-passenger diesel-fueled shuttle bus
Service:	4 round-trips per day (2 morning runs & 2 evening runs) between a Park & Ride Lot to be located near San Luis Bay Drive and SR101, and the Diablo Canyon facility
Headways:	1 hour per run
Days of Operation:	Monday thru Friday
Cost of Operation:	Approximately $39,000 annually

By operating a limited employee shuttle service (as outlined above), PG&E can help to reduce traffic demands within the Avila area by removing approximately 80 peak hour vehicle trips per weekday from the roadway network. These 80 automobile trips removed from the roadways could then be used by new development without requiring road widening. Additional buses could be added at the park & ride to shift more PG&E employees to the shuttle. Each bus would free up more capacity to be used by new development.

This relatively low-cost solution also provides a considerable cost savings to participating employees through a reduction in vehicle operating and fuel costs; the annual cost of operating the shuttle is approximately $245,544 less than the annual cost of operating 80 employee vehicles along the same route. In other words, the shuttle would operate at an annual cost of approximately $483 per employee, but it would cost an employee approximately $3,552 annually to operate his/her own private vehicle along the same route. Operating costs include gas, oil, maintenance and tires. All calculations were based on an assumed gas/diesel price of $3.50 per gallon.

In addition to capacity and operating cost savings, a PG&E employee shuttle would also serve to reduce traffic related emissions by approximately 838,944 lbs per year; the shuttle service (as outlined above) would contribute approximately 20,736 lbs of carbon dioxide per year, while the 80 employee vehicles operating along the same route would contribute a combined total of approximately 859,680 lbs. All calculations were derived from the Travel Matters Emissions Calculator - a project sponsored by the Federal Transit Administration, in cooperation with the Transportation Research Board and the American Public Transportation Association (www.travelmatters.org). The calculator converts "other" emissions (methane and nitrous oxide) into equivalent amounts of carbon dioxide.

Bicycle Provisions

Bicycling should be encouraged, as an alternative means of access and the provision of bike lanes on Avila Beach Drive and San Luis Bay Drive should be included as an element of any roadway widening. The completion of the bicycle path from San Luis Bay Drive to San Miguel Street along San Luis Creek will greatly enhance bicycling as an alternative mode of travel within the study area.

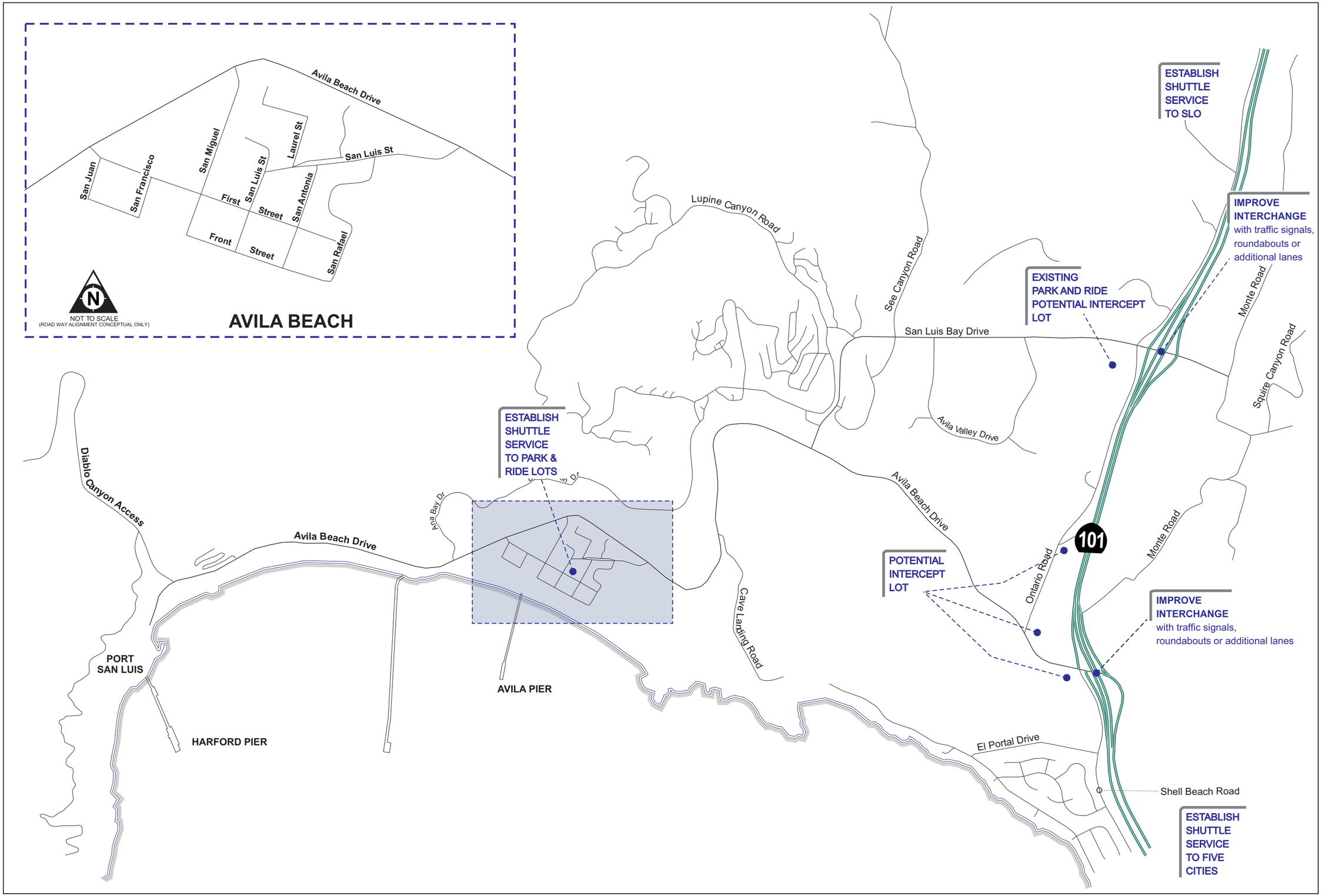
While it is not anticipated that a significant shift in traffic demand will be shifted to bicycles, this alternative mode can play a role in increasing the accessibility to and from the study area. Furthermore, the completion of the bike path will encourage the relocation of bicyclists from the congested segment of Avila Beach Drive between San Luis Bay Drive and San Luis Street.

One option available to would have visitors travel to the area via automobile and park in one of the intercept parking lots, using bicycles and the bike trail to travel into the beach area. This would also assist in relieving some traffic demand on Avila Beach Drive and San Luis Bay Drive.

It will be important to provide and encourage use of alternative modes for beach area access during summer weekends and holidays. It is recommended that an aggressive TSM program be established for the area. Key elements for the program that should be considered for implementation are intercept parking with shuttle service, public transit service improvements and bicycle facilities. Policies should also be established to limit public parking supply increases in the future. The primary objective of the TSM program should be to effectively and efficiently manage traffic and parking in the future. The following are the recommended TSM programs:

1. *Initiate direct bus service linking San Luis Obispo-Avila-Pismo Beach – exists with Avila Trolley*
2. *Implement intercept park and ride lots with shuttle bus service*
3. *Improve bicycle facilities and routes – Bob Jones Bike Trail*
4. *Implement U.S. 101 reader boards directing to intercept parking*
5. *Implement a County permit process for all special events*
6. *Establish a parking district for Avila Beach for on-going improvements*
7. *Evaluate the potential for one-way traffic on streets in the town of Avila Beach*

Improvements recommended for implementation are shown in Figure 10.



06-1052

Avila Valley Circulation Study
San Luis Obispo County

Figure 10

RECOMMENDED IMPROVEMENTS

TPG Consulting Incorporated

CHAPTER 6
IMPROVEMENT COST ESTIMATES AND FUNDING MECHANISMS

The previous chapter identified a list of street improvement projects (listed by street segments) needed to facilitate the planned land uses and maintain the desired level of service. The purpose of this section is to provide an overview of the costs of each of the planned projects. The cost estimates provided for the planned street projects are intended to be "order-of-magnitude" estimates. For the purposes of these estimates, costs have been based on typical costs and have been defined from current local information on construction costs supplied by the County of San Luis Obispo. More detailed engineering studies would be needed to refine these cost estimates for project budgeting purposes.

Table 10 delineates the costs of the planned projects described in the previous chapter along with suggested funding sources for each street segment. Total costs of the Avila area improvements (including traffic signals and special studies) are currently estimated at approximately $25.6 million for build-out. Copies of the cost estimate calculations are included in Appendix I.

Funding Analysis

This section of the study will address the long-term financial plan for implementing the planned street system improvements. Under California case law, public agencies (cities and counties) must adopt circulation plans, which are fully funded, or can be fully funded through actions controlled by the adopting agency. Therefore, the financial plan in this report has been developed to provide a series of funding options for consideration during the draft review period. The result of that review will be the establishment of a funding program that is "in-balance".

Revenue Surplus/Shortfall

The calculation of the revenue surplus or shortfall begins with the identification of the projects that are needed to address current capacity problems in the study area. California court cases stipulate that future development cannot be held financially responsible for existing capacity problems. Therefore, the first priority for use of the existing revenues is to address current congestion problems. Based on the existing level of service analysis Avila currently has no projects that fall below the County's level of service standard. Therefore no remedial projects need to be addressed using existing revenues. Therefore, all funds from existing sources are available for construction of the future planned projects outlined above. The following shows the calculation of the street revenue shortfall for the Avila plan.

TABLE 10:
ROAD IMPROVEMENT COST ESTIMATES

Road	Cost Estimate	Less			Funding From Impact Fees	Actual Construction Cost	Regional / Urban	Expected Completion
		Existing Deficiencies	Other Sources	Through Traffic				
SAN LUIS BAY DRIVE								
SL Creek Bridge Widening			$ 5,418,106 [2]		$ 1,517,314	$7,083,907	$ 148,486 [13]	Complete
Widening for Bike Lanes	$822,824		$ 822,824 [3]					July-20
AVILA BEACH DRIVE								
Widening for Bike Lanes	$2,250,838		$2,250,838 [3]					July-20
Signal - San Miguel St.	$240,500				$ 240,500			July-15
Signal - San Luis St.	$227,500				$ 227,500			July-10
Signal - First St.	$260,000		$ 260,000 [6]					July-09
Pedestrian Walkway - Port San Luis to Cal Poly Pier – Study only	$300,000		$ 300,000 [6]					July - 20
Construct 100 Stall Intercept Parking Lot	$1,093,178		$ 1,093,178 [4]					July-20
ONTARIO ROAD								
Widening for Class II Bike Lanes from Bob Jones Trail to Avila Beach Drive			$ 650,600 [3]			$650,600		Complete
U.S. 101								
Modify Avila Interchange	$7,920,000		$ 3,960,000 [5]		$ 3,960,000			July-25
S. L. Bay Drive @ U.S. 101 Bridge Widening & S. L Bay Drive Ramp Relocation	$4,000,000		$ 2,000,000 [5]		$ 2,000,000			July-20
San Luis Bay Drive Interchange Project Study Report	$250,000				$ 250,000			June - 12
CAVE LANDING BIKE TRAIL								
Construct Trail between Shell Beach and Avila Beach	$379,000		$ 379,000 [1]					July-20

TABLE 10:
ROAD IMPROVEMENT COST ESTIMATES

Road	Cost Estimate	Less			Funding From Impact Fees	Actual Construction Cost	Regional / Urban	Expected Completion
		Existing Deficiencies	Other Sources	Through Traffic				
BOB JONES BIKE TRAIL								
Construct Bike Path between Avila Beach Drive/San Miguel to Avila Park	$336,000		$ 336,000 [7,8]					July-10
Construct Bike Path between San Luis Obispo Land Conservancy Octagon Barn to Ontario Road Staging Area	$2,100,000		$ 2,100,000 [9, 10, 11, 12]					July-15
Sub-totals	*$ 20,179,840*		*$ 19,570,546*		*$ 8,195,314*	*$7,734,507*	*$148,486*	
Previously expended					*$ (1,517,314)*			
Total Cost					**$ 26,397,032**			

Notes:

1) California Department of Fish and Game Grant (CDFG) (programmed)

2) Federal Bridge Program

3) State Bicycle Transportation Account or SLOCOG RSHA funds

4) assumes$100,000 from County Parking In-Lieu Fee Program and balance from Air Pollution Control District funding (potential)

5) Regional Funding

6) PG&E Diablo Canyon Steam Generator replacement mitigation account
7) CDFG - $300,000
8) Unocal - $36,000
9) CDFG - $400,000
10) Regional Funding - $300,000
11) TEA - $1,000,000
12) SAFETEA-LU - $400,000

13) SLO COG

Calculation of Revenue Surplus/Shortfall

Projected Revenue for Capital Projects	
Regional Funds	$ 6,408,486
California Department of Fish and Game	$ 1,079,000
State Bicycle Transportation Account	$ 3,724,262
Federal Highway Bridge Program	$ 5,418,106
Air Pollution Control District	$ 993,178
County Parking In-lieu Fee Program	$ 100,000
PG&E Diablo Canyon Steam Generator replacement mitigation account	$ 560,000
Unocal	$ 36,000
TEA	$ 1,000,000
SAFETEA-LU	$ 400,000
County Road Impact Fees	$ 112,343
Balance Available for Capital Projects	$19,831,375
Estimated Project Costs	-$26,397,032
Shortfall	***$ 6,565,657***

Regional Funding

Regional funding sources, such as sales tax revenue, vehicle license fee revenue, or gas tax revenue or increase is anticipated to generate a substantial level of funding over the life of the Avila circulation plan. All told regional funding sources are projected to supply approximately $6,408,486. Primarily this funding will be concentrated on five projects in and around the two interchanges. Regional funding sources are expected to pay for approximately half of the improvements to the Avila Beach Drive interchange. In addition it is anticipated that this funding source will contribute approximately $2,000,000 for the San Luis Bay Drive at U.S. 101 bridge widening and San Luis Bay Drive ramp relocation.

California Department of Fish and Game

The California Department of Fish and Game, as part of the settlement of the Unocal environmental restoration program, has funded a number of projects throughout the Avila area. One bicycle project is included in the approved program. The completion of the Cave Landing Bike Trail between Shell Beach and Avila Beach and the Bob Jones Bike Trail between Avila Beach Drive/San Miguel to Avila Park and between San Luis Obispo Land Conservancy Octagon Barn to the Ontario Road Staging Area is to be funded by this grant which totals $1,079,000.

Federal Highway Bridge Program (HBP)

The County of San Luis Obispo has received a grant from the San Luis Obispo Council of Governments for the widening of the San Luis Bay Drive Bridge at Avila Beach Drive totaling $5,418,106. The balance of the project was funded by the County's Road Impact Fee program and San Luis Obispo COG funds.

Air Pollution Control District (APCD)

Historically, the APCD has been a source of funding for a number of air quality related projects and should be pursued as a potential funding source.

County Parking In-Lieu Fee Program

Historically the County has established a parking in-lieu fee program for the town of Avila. This program has allowed commercial and office development to pay a fee in-lieu of providing parking on-site. This program will be especially helpful as reconstruction of the businesses takes place. It is assumed that this program will generate approximately $100,000, which will be used in the development of the Avila Beach Drive park and ride lot. It is estimated there is a balance of approximately $69,121 in the account.

PG&E Diablo Canyon Steam Generator Mitigation Funds

The County has received funds in the amounts of $300,000 to conduct a study for a pedestrian walkway from Port San Luis to the Unocal Pier and $260,000 for the installation of a traffic signal at Avila Beach Drive at First Street from the PG&E Diablo Canyon Steam Generator mitigation funds.

Unocal Funds

County Parks has $36,000 in funds committed from Unocal. These funds will be used for the construction of the Bob Jones Pathway from Avila Beach Drive/San Miguel Street to Avila Park.

TEA funds

The County, through SLOCOG, has received $1,000,000 in TEA funds for the construction of the Bob Jones Pathway section from the San Luis Obispo Land Conservancy Octagon Barn to the Ontario Road Staging Area. The balance of the project is to be funded using funds from the California Department of Fish and Game, regional funds and SAFETEA-LU funds.

SAFETEA-LU funds

The County has received a grant in the amount of $400,000 from SAFETEA-LU funds for construction of the Bob Jones Pathway section from the San Luis Obispo Land Conservancy Octagon Barn to the Ontario Road Staging Area. The balance of the project is to be funded using funds from the California Department of Fish and Game and TEA funds.

County Road Impact Fees

The County's current Avila Road Improvement Fee program was established in Fiscal Year 1990/91. At the end of fiscal year 2006/2007 there was approximately $112,343 in the account. The County has expended funds from this account for the reconstruction of the San Luis Bay Drive bridge widening. The current fee is $1,864 per unit.

The non-fee revenue for the projected road improvement cost totals $ 26,397,032 under current County policy. The remaining road improvement cost balance of $ 8,195,314 is to be funded through the road impact fee program. $1,517,314 has been collected and expended to fund the San Luis Creek Bridge widening project, leaving a balance of $6,678,000. The road impact program has an approximate balance of $112,343 balance, leaving the unfunded balance at approximately $6,565,657. Based on this unfunded balance, the Avila Road Improvement Fee will be updated using the following method.

The method for calculation of the fee selected by the County allocates all costs associated with the improvements equally through additional traffic generated from the new land uses. This method allows for a more equal distribution of allocated costs and assists in the ease of use. Using the traffic model it was determined that approximately 1,584 additional peak hour trips will be added as a result of the build-out of the planned land uses.

Dividing the unfunded balance or shortfall of $6,565,657 by 1,584 yields a cost of $4146.05 per new peak hour trip. The Avila area is expected to add 270 new homes under the current land plan. Those single-family homes are estimated to generate approximately 1.01 peak hour trips per dwelling unit. This would translate into a fee per unit of $4,187.51 (1.01 peak hour trips x $4,146.05).

Recommended Funding Plan

Based on the foregoing review of potential funding sources in San Luis Obispo County, funding options for the Avila area improvements are relatively limited. State and Federal funding sources for transportation improvements are becoming increasingly scarce, and are not keeping up with inflation. One promising source at the County level is the local sales tax initiative process. However, revenues from this source, should it be approved by the voters at some time in the future, would most likely be earmarked primarily for regional improvements such as widening of Route 101 and associated freeway interchange improvements in the county. It should therefore not be counted on for generating any major share of the Avila area local improvement costs.

Based on the available funding sources and the options for additional funding as summarized above, the recommended funding plan for the Avila Circulation Study is as follows:

1) *Maximize existing revenues from local, county, state and federal sources with emphasis on Air Pollution Control District funds along with State and Regional Transportation Improvement Program funds.*

2) *Continue the current County policy of requiring new development to construct the appropriate local street improvements as part of their project.*

3) *Temporary event venues should contribute to solutions for event impacts.*

4) *Regularly update the Road Impact Fee to fund the identified projects.*

5) *After the shuttle demonstration program is completed, pursue Transportation Development Act through SLOCOG funding for implementation of the summer park-and-ride and intercity transit service program.*

6) *Review each of the existing funding sources and the road impact fees every two years for changes in local, county, state and federal revenues, as well as changes in the project list and estimated project costs. Modify revenues as necessary.*

7) *At such time as the parking demand in the town of Avila consistently exceeds the supply, actively begin to develop satellite parking, plus implement the park-and-ride shuttle and intercity bus programs. In conjunction with these projects, review the potential for the introduction of paid parking in the town and Port areas.*

The capital improvement funding program outlined here does not address widening of State Route 101 through the Avila Study Area, although this appears to be a high priority need. It is assumed that freeway widening would be funded from regional and state sources. Given the critical nature of the roadway, the Route 101 improvements should be a high priority project to list in the Regional Transportation Plan.

All future development will need to prepared individual traffic impact studies reflective of the specific developments to determine any impacts the development may

APPENDIX A

EXISTING COUNT DATA

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BWT HWY 101 & SAN LUIS BAY DR
Jurisdiction	
Study Type	Volume (ch1)
Location Code	8968
Direction	East
Date	8/11/2006
Real Time	15:23
Start Date	8/11/2006
Start Time	16:00
Sample Time	00:15
Operator Number	57
Machine Number	2

Friday, August 11, 2006

	8/11/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16	705	155	167	197	186
17	703	157	231	184	131
18	469	132	104	134	99
19	475	140	107	117	111
20	414	104	132	92	86
21	205	73	52	46	34
22	135	46	29	27	33
23	134	43	38	28	25
	3240	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	16:30
PM Peak Hour Total	771
PM Peak Hour Factor	83.44 %

	8/12/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	97	34	15	32	16
01	38	13	5	7	13
02	26	6	11	4	5
03	11	5	3	2	1
04	5	0	2	1	2
05	4	0	1	2	1
06	34	5	5	7	17
07	78	14	18	21	25
08	128	29	31	32	36
09	175	32	46	54	43
10	269	59	61	67	82
11	355	76	91	99	89
12	415	88	102	116	109
13	452	109	105	113	125
14	601	154	153	149	145
15	680	147	181	181	171
16	674	160	178	181	155
17	615	162	161	134	158
18	463	139	112	111	101
19	365	104	117	88	56
20	270	67	66	72	65
21	229	45	65	66	53
22	146	42	21	26	57
23	145	39	37	42	27
	6275	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	355
AM Peak Hour Factor	89.65 %
PM Peak Hour Start	15:15
PM Peak Hour Total	693
PM Peak Hour Factor	95.72 %

	8/13/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	45	15	14	11	5
01	43	14	12	10	7
02	17	4	2	8	3
03	12	3	3	4	2
04	5	2	2	1	0
05	11	4	2	2	3
06	29	5	4	9	11
07	74	20	19	21	14
08	104	10	23	32	39
09	183	38	41	58	46
10	309	66	85	64	94
11	413	96	109	118	90
12	477	119	101	139	118
13	507	130	135	132	110
14	650	161	156	171	162
15	654	151	157	163	183
16	660	157	171	179	153
17	553	160	160	109	124
18	445	145	121	94	85
19	303	77	64	89	73
20	213	64	48	51	50
21	143	45	33	35	30
22	97	29	29	21	18
23	44	19	14	8	3
	5991	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	417
AM Peak Hour Factor	88.35 %
PM Peak Hour Start	15:45
PM Peak Hour Total	690
PM Peak Hour Factor	94.26 %

	8/14/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	21	3	10	5	3
01	7	4	1	1	1
02	4	3	1	0	0
03	3	2	0	0	1
04	5	0	3	1	1
05	19	5	3	5	6
06	47	6	6	13	22
07	94	21	24	23	26
08	127	23	32	34	38
09	158	31	44	39	44
10	249	56	51	58	84
11	302	80	61	71	90
12	323	96	62	65	100
13	383	109	91	102	81
14	404	101	96	105	102
15	466	101	116	126	123
16	517	112	134	141	130
17	443	122	117	120	84
18	288	86	69	70	63
19	250	74	52	63	61
20	165	44	41	52	28
21	114	33	33	25	23
22	77	20	18	17	22
23	47	15	13	13	6
	4513	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	302
AM Peak Hour Factor	83.89 %
PM Peak Hour Start	16:15
PM Peak Hour Total	527
PM Peak Hour Factor	93.44 %

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BWT HWY 101 & SAN LUIS BAY DR
Jurisdiction	
Study Type	Volume (ch1)
Location Code	8968
Direction	East
Date	8/11/2006
Real Time	15:23
Start Date	8/11/2006
Start Time	16:00
Sample Time	00:15
Operator Number	57
Machine Number	2

Tuesday, August 15, 2006

	8/15/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	14	3	4	2	5
01	6	2	1	1	2
02	7	1	3	1	2
03	13	5	0	2	6
04	4	0	0	0	4
05	27	5	4	6	12
06	42	8	8	8	18
07	86	15	16	33	22
08	133	29	28	42	34
09	154	32	43	37	42
10	270	71	63	60	76
11	324	66	95	88	75
12	367	91	90	102	84
13	410	116	92	100	102
14	407	120	79	105	103
15	499	126	126	132	115
16	607	176	119	150	162
17	706	178	257	153	118
18	312	91	73	85	63
19	240	71	65	56	48
20	176	60	52	33	31
21	134	39	34	37	24
22	69	25	10	13	21
23	63	27	18	10	8
	5070	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	325
AM Peak Hour Factor	85.53 %
PM Peak Hour Start	16:45
PM Peak Hour Total	750
PM Peak Hour Factor	72.96 %

	8/16/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	20	5	9	3	3
01	7	1	2	2	2
02	11	2	3	2	4
03	4	1	1	1	1
04	2	0	0	1	1
05	16	2	3	4	7
06	44	12	9	11	12
07	88	26	15	23	24
08	133	34	27	35	37
09	156	32	34	38	52
10	252	62	54	66	70
11	273	60	59	85	69
12	368	104	86	89	89
13	350	81	81	91	97
14	391	88	107	87	109
15	469	114	107	146	102
16	645	149	135	183	178
17	616	144	201	141	130
18	311	96	84	77	54
19	242	70	64	52	56
20	210	66	64	43	37
21	124	30	33	36	25
22	96	28	21	24	23
23	65	24	14	16	11
	4893	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	274
AM Peak Hour Factor	80.59 %
PM Peak Hour Start	16:30
PM Peak Hour Total	706
PM Peak Hour Factor	87.81 %

	8/17/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	39	12	13	8	6
01	18	4	3	4	7
02	9	2	2	3	2
03	4	0	1	0	3
04	3	2	0	0	1
05	15	2	5	6	2
06	33	6	9	9	9
07	79	22	16	23	18
08	119	29	28	37	25
09	145	26	41	38	40
10	256	59	60	63	74
11	315	79	81	67	88
12	313	70	82	83	78
13	397	99	103	103	92
14	393	117	89	95	92
15	446	97	111	122	116
16	539	121	107	150	161
17	597	148	198	130	121
18	291	94	72	65	60
19	262	67	78	65	52
20	159	48	28	44	39
21	132	32	54	30	16
22	109	20	27	35	27
23	68	22	18	17	11
	4741	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	315
AM Peak Hour Factor	89.49 %
PM Peak Hour Start	16:30
PM Peak Hour Total	657
PM Peak Hour Factor	82.95 %

	8/18/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	36	15	12	4	5
01	8	0	5	2	1
02	10	3	5	2	0
03	4	2	1	0	1
04	12	1	6	1	4
05	18	2	6	4	6
06	39	4	11	9	15
07	81	21	18	18	24
08	126	21	27	32	46
09	166	34	41	41	50
10	286	68	59	69	90
11	324	68	93	73	90
12	345	84	90	87	84
13	392	97	103	101	91
14	406	98	85	117	106
15	504	125	118	139	122
16	623	155	134	169	165
17	673	169	208	164	132
18	432	134	86	99	113
19	468	135	118	106	109
20	390	111	126	73	80
21	211	50	75	49	37
22	131	48	25	27	31
23	113	46	24	19	24
	5798	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	324
AM Peak Hour Factor	87.10 %
PM Peak Hour Start	16:30
PM Peak Hour Total	711
PM Peak Hour Factor	85.46 %

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BWT HWY 101 & SAN LUIS BAY DR
Jurisdiction	
Study Type	Volume (ch1)
Location Code	8968
Direction	East
Date	8/11/2006
Real Time	15:23
Start Date	8/11/2006
Start Time	16:00
Sample Time	00:15
Operator Number	57
Machine Number	2

Saturday, August 19, 2006

	8/19/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	57	15	14	12	16
01	34	12	4	6	12
02	23	5	12	4	2
03	10	1	2	2	5
04	6	3	0	1	2
05	12	2	3	4	3
06	40	4	6	14	16
07	60	19	14	13	14
08	97	10	31	24	32
09	178	48	29	46	55
10	278	42	76	69	91
11	329	80	95	66	88
12	285	96	94	95	
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
	1409	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	335
AM Peak Hour Factor	88.16 %
PM Peak Hour Start	
PM Peak Hour Total	
PM Peak Hour Factor	

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BWT HWY 101 & SAN LUIS BAY DR
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9867
Direction	West
Date	8/11/2006
Real Time	15:23
Start Date	8/11/2006
Start Time	16:00
Sample Time	00:15
Operator Number	57
Machine Number	2

Friday, August 11, 2006

08-11-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16	377	87	95	87	108
17	386	92	106	84	104
18	399	125	113	78	83
19	224	77	53	53	41
20	182	49	47	29	57
21	152	31	36	43	42
22	128	34	22	41	31
23	75	22	22	20	11
	1923	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	17:30
PM Peak Hour Total	426
PM Peak Hour Factor	85.20 %

08-12-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	31	11	14	2	4
01	16	5	4	3	4
02	15	7	5	1	2
03	4	0	0	2	2
04	14	2	3	4	5
05	47	4	8	9	26
06	143	28	22	36	57
07	147	31	34	35	47
08	207	49	43	47	68
09	227	44	71	47	65
10	296	70	64	64	98
11	413	88	102	100	123
12	520	134	134	118	134
13	550	123	146	144	137
14	510	119	146	120	125
15	463	118	126	100	119
16	366	98	90	88	90
17	335	79	99	83	74
18	300	70	89	75	66
19	207	42	67	55	43
20	176	55	35	50	36
21	169	49	37	49	34
22	113	29	35	23	26
23	63	25	19	5	14
	5332	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	413
AM Peak Hour Factor	83.94 %
PM Peak Hour Start	13:00
PM Peak Hour Total	550
PM Peak Hour Factor	94.18 %

08-13-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	32	11	11	5	5
01	20	5	6	2	7
02	18	3	3	8	4
03	21	5	4	7	5
04	34	10	3	8	13
05	44	2	8	16	18
06	85	15	20	13	37
07	139	26	30	20	63
08	198	41	43	60	54
09	272	46	50	88	88
10	349	83	58	91	117
11	416	101	103	105	107
12	495	106	141	112	136
13	584	122	140	161	161
14	544	139	130	140	135
15	409	112	96	110	91
16	366	84	111	94	77
17	300	83	68	80	69
18	223	47	57	60	59
19	176	50	44	41	41
20	124	28	39	29	28
21	110	32	25	25	28
22	41	14	13	9	5
23	20	5	7	3	5
	5020	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	426
AM Peak Hour Factor	91.03 %
PM Peak Hour Start	13:15
PM Peak Hour Total	601
PM Peak Hour Factor	93.32 %

08-14-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	0	1	3	2
01	12	3	3	2	4
02	15	2	3	1	9
03	5	1	1	0	3
04	16	0	10	3	3
05	91	14	17	27	33
06	211	43	44	66	58
07	235	52	68	61	54
08	198	46	49	56	47
09	197	42	36	49	70
10	221	49	51	50	71
11	274	79	64	63	68
12	316	67	79	82	88
13	376	88	95	94	99
14	322	69	84	76	93
15	323	92	71	82	78
16	238	76	55	62	45
17	201	51	59	45	46
18	212	57	55	43	57
19	154	44	41	38	31
20	102	23	22	24	33
21	106	24	35	26	21
22	44	17	18	6	3
23	19	4	7	6	2
	3894	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	277
AM Peak Hour Factor	87.66 %
PM Peak Hour Start	13:00
PM Peak Hour Total	376
PM Peak Hour Factor	94.95 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BWT HWY 101 & SAN LUIS BAY DR
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9867
Direction	West
Date	8/11/2006
Real Time	15:23
Start Date	8/11/2006
Start Time	16:00
Sample Time	00:15
Operator Number	57
Machine Number	2

Tuesday, August 15, 2006

08-15-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	2	2	2	0
01	12	1	3	5	3
02	3	1	0	1	1
03	9	2	1	3	3
04	31	3	6	6	16
05	257	28	53	90	86
06	310	72	77	80	81
07	273	75	69	64	65
08	239	63	54	49	73
09	211	52	61	54	44
10	266	55	53	79	79
11	321	89	77	74	81
12	319	78	84	76	81
13	315	74	78	73	90
14	337	76	98	82	81
15	274	62	65	71	76
16	201	46	58	45	52
17	184	38	38	55	53
18	217	53	57	47	60
19	172	45	47	52	28
20	116	20	38	35	23
21	87	19	27	18	23
22	49	9	20	8	12
23	24	6	8	7	3
	4233	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	325
AM Peak Hour Factor	90.28 %
PM Peak Hour Start	13:45
PM Peak Hour Total	346
PM Peak Hour Factor	88.27 %

08-16-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	18	5	5	3	5
01	17	3	7	2	5
02	7	3	1	1	2
03	13	2	2	2	7
04	38	1	13	11	13
05	282	29	59	89	105
06	341	68	89	82	102
07	228	52	63	40	73
08	225	62	60	48	55
09	227	57	51	57	62
10	281	62	54	80	85
11	299	60	61	93	85
12	324	71	81	87	85
13	345	93	89	82	81
14	339	67	98	75	99
15	323	83	90	75	75
16	239	54	66	50	69
17	275	76	54	64	81
18	238	53	70	56	59
19	160	36	50	46	28
20	123	28	31	36	28
21	76	17	18	19	22
22	69	22	18	15	14
23	30	8	8	8	6
	4517	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	351
AM Peak Hour Factor	83.57 %
PM Peak Hour Start	14:15
PM Peak Hour Total	355
PM Peak Hour Factor	89.65 %

08-17-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	14	5	3	5	1
01	10	0	3	4	3
02	7	1	3	2	1
03	9	3	0	3	3
04	38	2	6	9	21
05	267	32	47	95	93
06	346	88	72	97	89
07	260	70	56	51	83
08	241	46	59	65	71
09	222	53	46	63	60
10	253	51	68	64	70
11	284	64	56	72	92
12	320	87	88	58	87
13	321	75	64	85	97
14	352	91	91	90	80
15	270	72	82	50	66
16	272	58	80	51	83
17	246	60	70	56	60
18	219	63	65	42	49
19	160	45	40	41	34
20	109	32	26	27	24
21	113	26	33	26	28
22	45	12	10	12	11
23	25	6	9	6	4
	4403	Total			

AM Peak Hour Start	05:45
AM Peak Hour Total	350
AM Peak Hour Factor	90.21 %
PM Peak Hour Start	13:45
PM Peak Hour Total	369
PM Peak Hour Factor	95.10 %

08-18-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	11	3	4	1	3
01	10	2	3	3	2
02	8	1	4	2	1
03	14	1	5	1	7
04	40	3	10	11	16
05	242	33	52	73	84
06	303	77	58	75	93
07	227	46	70	57	54
08	274	51	64	71	88
09	225	39	52	67	67
10	282	75	72	73	62
11	340	83	60	90	107
12	395	106	81	103	105
13	356	95	93	80	88
14	380	94	88	96	102
15	391	85	96	96	114
16	401	90	111	96	104
17	396	93	108	88	107
18	377	97	109	100	71
19	247	76	77	45	49
20	163	42	41	40	40
21	117	29	25	28	35
22	100	25	23	25	27
23	73	21	20	21	11
	5372	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	340
AM Peak Hour Factor	79.44 %
PM Peak Hour Start	17:45
PM Peak Hour Total	413
PM Peak Hour Factor	94.72 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BWT HWY 101 & SAN LUIS BAY DR
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9867
Direction	West
Date	8/11/2006
Real Time	15:23
Start Date	8/11/2006
Start Time	16:00
Sample Time	00:15
Operator Number	57
Machine Number	2

Saturday, August 19, 2006

08-19-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	32	4	12	8	8
01	16	4	7	2	3
02	11	1	4	4	2
03	11	2	5	2	2
04	21	5	3	6	7
05	91	13	13	30	35
06	132	32	34	30	36
07	166	22	37	44	63
08	191	36	43	60	52
09	244	53	56	60	75
10	338	71	80	98	89
11	433	106	110	115	102
12	339	113	103	123	
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
	2025	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	433
AM Peak Hour Factor	94.13 %
PM Peak Hour Start	
PM Peak Hour Total	
PM Peak Hour Factor	

Mitron Systems Volume Count Report

Site Name	EB+WB AVILA BEACH BETWEEN SAN LUIS ST & SAN LUIS BAY DR.
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9883
Direction	None
Date	8/26/2006
Real Time	15:34
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	2409

2-directional volume

Saturday, August 26, 2006

Do not use data from 8/26/06 and 8/27/06

08-26-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16	506	131	146	121	108
17	384	94	108	96	86
18	322	70	104	76	72
19	218	75	65	43	35
20	165	39	43	45	38
21	128	29	16	62	21
22	60	18	22	13	7
23	32	12	10	3	7
	1815	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	16:00
PM Peak Hour Total	506
PM Peak Hour Factor	86.64 %

08-27-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	2	4	2	0
01	3	0	0	1	2
02	6	4	0	2	0
03	3	1	0	1	1
04	24	4	8	8	4
05	196	7	49	79	61
06	276	54	71	74	77
07	230	46	63	60	61
08	180	40	45	48	47
09	193	32	46	52	63
10	232	64	50	60	58
11	343	79	84	81	99
12	389	93	95	108	93
13	450	83	140	114	113
14	397	80	113	111	93
15	381	102	93	90	96
16	314	52	89	87	86
17	247	56	69	59	63
18	240	70	70	50	50
19	138	37	45	30	26
20	90	30	21	27	12
21	92	23	24	26	19
22	38	13	13	6	6
23	36	12	13	3	8
	4506	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	343
AM Peak Hour Factor	86.62 %
PM Peak Hour Start	13:00
PM Peak Hour Total	450
PM Peak Hour Factor	80.36 %

08-28-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	0	1	3	2
01	13	5	3	2	3
02	9	2	2	2	3
03	4	0	1	3	0
04	73	8	17	18	30
05	577	68	140	172	197
06	456	116	117	139	84
07	307	93	76	58	80
08	169	33	39	37	60
09	192	41	47	47	57
10	202	36	58	42	66
11	324	54	69	103	98
12	375	88	104	107	76
13	333	95	76	89	73
14	337	78	79	102	78
15	323	92	86	73	72
16	283	80	83	65	55
17	285	70	73	79	63
18	200	51	51	54	44
19	124	32	33	35	24
20	96	38	19	24	15
21	80	7	24	22	27
22	37	19	6	10	2
23	26	9	6	8	3
	4831	Total			

AM Peak Hour Start	05:15
AM Peak Hour Total	625
AM Peak Hour Factor	79.31 %
PM Peak Hour Start	12:15
PM Peak Hour Total	382
PM Peak Hour Factor	89.25 %

08-29-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	3	2	2	0
01	7	4	3	0	0
02	7	3	2	0	2
03	9	0	1	4	4
04	63	6	17	19	21
05	556	61	123	177	195
06	466	126	138	111	91
07	291	78	91	41	81
08	211	45	52	48	66
09	194	49	38	51	56
10	263	61	57	62	83
11	344	69	90	89	96
12	358	98	76	90	94
13	417	100	112	93	112
14	323	85	75	88	75
15	384	100	102	99	83
16	268	70	60	60	78
17	241	61	63	62	55
18	216	54	58	47	57
19	154	33	45	46	30
20	97	34	20	17	26
21	80	14	18	20	28
22	44	11	13	14	6
23	31	4	12	10	5
	5031	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	636
AM Peak Hour Factor	81.54 %
PM Peak Hour Start	13:00
PM Peak Hour Total	417
PM Peak Hour Factor	93.08 %

Mitron Systems Volume Count Report

Site Name	EB+WB AVILA BEACH BETWEEN SAN LUIS ST & SAN LUIS BAY DR.
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9883
Direction	None
Date	8/26/2006
Real Time	15:34
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	2409

Wednesday, August 30, 2006

08-30-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	2	1	1	2
01	9	2	4	2	1
02	6	3	1	0	2
03	14	1	3	3	7
04	67	5	16	15	31
05	550	72	124	154	200
06	458	124	110	124	100
07	270	71	64	73	62
08	170	29	43	46	52
09	166	39	29	51	47
10	209	38	49	63	59
11	311	66	72	85	88
12	367	76	95	72	124
13	438	98	116	113	111
14	325	86	85	82	72
15	332	108	75	87	62
16	245	50	66	69	60
17	281	72	87	67	55
18	183	47	47	34	55
19	160	35	44	39	42
20	109	26	33	19	31
21	105	27	25	33	20
22	46	9	17	10	10
23	25	4	11	5	5
	4852	Total			

AM Peak Hour Start	05:15
AM Peak Hour Total	602
AM Peak Hour Factor	75.25 %
PM Peak Hour Start	12:45
PM Peak Hour Total	451
PM Peak Hour Factor	90.93 %

08-31-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	14	1	8	1	4
01	11	1	3	4	3
02	7	2	3	1	1
03	8	0	2	5	1
04	52	7	13	8	24
05	457	51	108	131	167
06	390	107	96	107	80
07	262	71	70	73	48
08	206	56	58	39	53
09	220	42	56	44	78
10	260	54	60	64	82
11	293	70	74	74	75
12	392	105	103	86	98
13	404	98	126	86	94
14	391	74	87	137	93
15	483	115	110	128	130
16	513	108	130	129	146
17	607	135	142	168	162
18	512	162	129	134	87
19	226	61	73	46	46
20	133	32	39	32	30
21	122	27	19	35	41
22	99	31	31	16	21
23	51	16	7	14	14
	6113	Total			

AM Peak Hour Start	05:15
AM Peak Hour Total	513
AM Peak Hour Factor	76.80 %
PM Peak Hour Start	17:15
PM Peak Hour Total	634
PM Peak Hour Factor	94.35 %

09-01-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	23	4	9	8	2
01	14	3	4	5	2
02	7	2	3	2	0
03	11	2	4	3	2
04	32	5	3	15	9
05	110	7	15	37	51
06	142	20	41	47	34
07	141	22	31	37	51
08	179	34	46	50	49
09	196	40	48	55	53
10	362	60	72	125	105
11	484	111	88	134	151
12	717	179	159	191	188
13	716	186	161	178	191
14	688	175	167	126	220
15	581	165	138	145	133
16	491	142	122	105	122
17	410	110	103	110	87
18	326	88	81	69	88
19	269	74	65	63	67
20	164	40	45	42	37
21	151	40	35	42	34
22	83	35	17	13	18
23	66	37	7	13	9
	6363	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	484
AM Peak Hour Factor	80.13 %
PM Peak Hour Start	12:30
PM Peak Hour Total	726
PM Peak Hour Factor	95.03 %

09-02-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	31	14	10	3	4
01	15	3	3	3	6
02	16	10	5	1	0
03	9	1	2	4	2
04	31	4	7	9	11
05	87	5	11	34	37
06	115	18	28	23	46
07	159	28	20	61	50
08	209	47	46	56	60
09	317	47	72	90	108
10	439	114	87	94	144
11	705	132	170	180	223
12	896	210	242	207	237
13	862	215	187	208	252
14	1233	272	317	315	329
15	1038	326	270	233	209
16	618	181	150	146	141
17	408	98	96	94	120
18	373	116	105	73	79
19	252	73	79	61	39
20	145	50	33	34	28
21	136	31	35	38	32
22	80	26	16	22	16
23	47	11	15	6	15
	8221	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	705
AM Peak Hour Factor	79.04 %
PM Peak Hour Start	14:15
PM Peak Hour Total	1287
PM Peak Hour Factor	97.80 %

Mitron Systems Volume Count Report

Site Name	EB+WB AVILA BEACH BETWEEN SAN LUIS ST & SAN LUIS BAY DR.
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9883
Direction	None
Date	8/26/2006
Real Time	15:34
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	2409

Sunday, September 03, 2006

09-03-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	27	16	4	3	4
01	9	2	1	3	3
02	10	6	3	0	1
03	8	3	0	4	1
04	15	2	5	6	2
05	143	13	36	39	55
06	162	41	46	34	41
07	154	35	35	48	36
08	167	30	39	44	54
09	264	62	71	57	74
10	374	55	96	111	112
11	530	100	124	134	172
12	614	141	161	153	159
13	658	164	152	186	156
14	622	160	171	129	162
15	530	125	172	118	115
16	364	121	76	95	72
17	288	67	95	54	72
18	230	47	70	50	63
19	118	42	32	20	24
20	77	20	26	15	16
21	94	21	23	29	21
22	44	21	5	11	7
23	22	8	9	3	2
	5524	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	530
AM Peak Hour Factor	77.03 %
PM Peak Hour Start	13:30
PM Peak Hour Total	673
PM Peak Hour Factor	90.46 %

09-04-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	5	1	1	1
01	6	1	3	2	0
02	1	1	0	0	0
03	12	1	3	3	5
04	61	2	17	18	24
05	514	61	128	159	166
06	411	108	126	101	76
07	273	69	78	59	67
08	182	56	37	39	50
09	156	35	41	37	43
10	144	36	29	38	41
11	224	44	51	70	59
12	139	68	71		
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
	2131	Total			

AM Peak Hour Start	05:15
AM Peak Hour Total	561
AM Peak Hour Factor	84.49 %
PM Peak Hour Start	
PM Peak Hour Total	
PM Peak Hour Factor	

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9890
Direction	East
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Saturday, August 26, 2006

	8/26/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18	466	126	147	101	92
19	453	141	112	103	97
20	327	119	73	75	60
21	104	40	32	23	9
22	104	26	28	28	22
23	32	13	6	8	5
	1486	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	18:15
PM Peak Hour Total	481
PM Peak Hour Factor	81.80 %

	8/27/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	4	1	1	2
01	13	3	0	7	3
02	7	6	1	0	0
03	2	1	0	0	1
04	3	1	0	0	2
05	14	4	5	1	4
06	80	8	21	34	17
07	74	14	18	25	17
08	105	17	27	27	34
09	123	17	35	46	25
10	171	36	43	44	48
11	185	44	44	49	48
12	232	48	61	58	65
13	232	50	45	57	80
14	379	101	82	105	91
15	338	84	86	82	86
16	305	96	74	80	55
17	200	57	60	39	44
18	187	55	38	47	47
19	114	27	32	34	21
20	77	17	21	18	21
21	68	14	14	21	19
22	52	10	21	13	8
23	25	4	7	7	7
	2994	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	185
AM Peak Hour Factor	94.39 %
PM Peak Hour Start	14:00
PM Peak Hour Total	379
PM Peak Hour Factor	90.24 %

	8/28/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	19	10	1	3	5
01	13	2	2	6	3
02	5	1	2	1	1
03	1	0	0	0	1
04	3	2	0	0	1
05	12	3	3	2	4
06	82	7	27	26	22
07	72	15	17	23	17
08	71	15	21	14	21
09	134	28	34	38	34
10	169	38	37	45	49
11	195	42	40	52	61
12	232	51	63	45	73
13	237	55	61	56	65
14	286	43	83	77	83
15	347	68	75	73	131
16	686	185	134	230	137
17	273	113	56	55	49
18	198	43	48	65	42
19	113	35	31	20	27
20	66	21	19	11	15
21	40	6	12	12	10
22	48	8	19	11	10
23	28	6	5	13	4
	3330	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	195
AM Peak Hour Factor	79.92 %
PM Peak Hour Start	16:00
PM Peak Hour Total	686
PM Peak Hour Factor	74.57 %

	8/29/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	11	6	2	1	2
01	13	2	3	5	3
02	2	1	0	0	1
03	3	1	0	2	0
04	3	1	0	0	2
05	17	3	6	2	6
06	88	12	25	26	25
07	56	18	12	17	9
08	83	13	22	25	23
09	136	26	40	32	38
10	166	30	55	43	38
11	195	50	56	40	49
12	241	55	44	76	66
13	265	63	68	66	68
14	344	65	96	91	92
15	392	97	73	92	130
16	739	205	150	250	134
17	296	90	102	63	41
18	211	50	64	54	43
19	145	36	43	40	26
20	74	18	12	18	26
21	52	11	15	9	17
22	63	16	25	14	8
23	56	14	14	14	14
	3651	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	195
AM Peak Hour Factor	87.05 %
PM Peak Hour Start	16:00
PM Peak Hour Total	739
PM Peak Hour Factor	73.90 %

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9890
Direction	East
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Wednesday, August 30, 2006

	8/30/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	3	0	2	1
01	15	2	3	8	2
02	5	2	3	0	0
03	5	1	1	1	2
04	9	2	1	2	4
05	17	2	2	4	9
06	82	11	27	24	20
07	67	18	18	21	10
08	82	16	26	20	20
09	103	21	22	27	33
10	178	28	50	46	54
11	184	45	43	51	45
12	244	63	61	54	66
13	306	80	73	65	88
14	351	74	103	88	86
15	370	89	61	105	115
16	613	181	102	221	109
17	318	102	74	85	57
18	226	61	68	59	38
19	135	38	40	33	24
20	74	12	19	18	25
21	69	27	16	13	13
22	66	18	20	18	10
23	25	8	0	12	5
	3550	Total			

AM Peak Hour Start	10:15
AM Peak Hour Total	195
AM Peak Hour Factor	90.28 %
PM Peak Hour Start	15:45
PM Peak Hour Total	619
PM Peak Hour Factor	70.02 %

	8/31/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	20	6	7	4	3
01	10	2	3	2	3
02	16	4	6	3	3
03	9	0	4	4	1
04	8	1	2	1	4
05	22	2	5	9	6
06	89	13	27	32	17
07	88	22	18	23	25
08	89	17	26	19	27
09	151	26	33	41	51
10	227	73	49	53	52
11	204	38	47	61	58
12	242	58	68	55	61
13	248	63	59	69	57
14	310	81	85	76	68
15	382	89	95	76	122
16	665	194	126	192	153
17	363	97	92	92	82
18	427	81	118	99	129
19	370	128	80	97	65
20	173	61	46	36	30
21	112	21	41	26	24
22	91	19	36	20	16
23	66	21	17	14	14
	4382	Total			

AM Peak Hour Start	10:00
AM Peak Hour Total	227
AM Peak Hour Factor	77.74 %
PM Peak Hour Start	16:00
PM Peak Hour Total	665
PM Peak Hour Factor	85.70 %

	9/1/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	17	3	3	4	7
01	13	2	8	2	1
02	9	8	0	0	1
03	5	0	3	2	0
04	11	2	2	3	4
05	15	1	3	5	6
06	96	12	29	28	27
07	47	9	11	14	13
08	97	25	25	27	20
09	123	28	19	33	43
10	217	47	55	56	59
11	279	74	60	54	91
12	321	71	82	99	69
13	406	101	94	106	105
14	463	101	108	129	125
15	482	118	112	132	120
16	441	118	103	114	106
17	337	114	72	91	60
18	328	61	85	97	85
19	231	74	55	49	53
20	162	44	39	48	31
21	120	30	26	37	27
22	124	33	36	30	25
23	51	19	11	10	11
	4395	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	279
AM Peak Hour Factor	76.65 %
PM Peak Hour Start	14:45
PM Peak Hour Total	487
PM Peak Hour Factor	92.23 %

	9/2/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	23	3	3	9	8
01	19	7	1	6	5
02	9	3	3	0	3
03	8	1	2	3	2
04	8	1	3	1	3
05	23	4	6	6	7
06	75	10	25	20	20
07	53	6	16	13	18
08	93	18	25	27	23
09	189	30	48	65	46
10	275	59	73	69	74
11	402	87	95	111	109
12	457	130	119	100	108
13	464	119	102	117	126
14	544	130	141	132	141
15	562	121	148	119	174
16	539	142	137	119	141
17	598	139	129	130	200
18	1033	267	314	276	176
19	372	129	87	89	67
20	209	58	46	46	59
21	152	43	34	31	44
22	106	26	30	29	21
23	50	12	17	13	8
	6263	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	402
AM Peak Hour Factor	90.54 %
PM Peak Hour Start	17:45
PM Peak Hour Total	1057
PM Peak Hour Factor	84.16 %

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9890
Direction	East
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Sunday, September 03, 2006

	9/3/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	25	8	8	4	5
01	14	7	2	4	1
02	11	3	7	1	0
03	6	2	1	0	3
04	7	0	4	0	3
05	18	2	5	5	6
06	88	13	20	40	15
07	67	11	19	20	17
08	124	24	28	24	48
09	159	22	33	47	57
10	258	62	52	63	81
11	321	87	69	102	63
12	397	89	99	96	113
13	412	90	108	108	106
14	518	123	139	114	142
15	547	155	118	146	128
16	451	134	102	103	112
17	367	110	85	95	77
18	278	71	74	86	47
19	147	38	43	38	28
20	115	25	29	17	44
21	53	10	18	16	9
22	53	6	21	19	7
23	24	6	3	5	10
	4460	Total			

	9/4/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	1	0	3	0
01	5	1	2	2	0
02	5	1	1	1	2
03	5	0	3	2	0
04	6	1	0	1	4
05	19	1	3	7	8
06	94	12	29	28	25
07	74	12	17	16	29
08	90	23	23	19	25
09	134	29	31	34	40
10	123	27	34	29	33
11	137	31	29	37	40
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
	696	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	339
AM Peak Hour Factor	83.09 %
PM Peak Hour Start	14:45
PM Peak Hour Total	561
PM Peak Hour Factor	90.48 %

AM Peak Hour Start	11:00
AM Peak Hour Total	137
AM Peak Hour Factor	85.63 %
PM Peak Hour Start	
PM Peak Hour Total	
PM Peak Hour Factor	

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9891
Direction	West
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Saturday, August 26, 2006

	8/26/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18	196	46	48	53	49
19	99	31	18	26	24
20	87	31	25	17	14
21	85	46	13	12	14
22	33	12	5	8	8
23	8	2	4	1	1
	508	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	18:00
PM Peak Hour Total	196
PM Peak Hour Factor	92.45 %

	8/27/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	2	0	0	0
01	7	1	2	4	0
02	2	1	0	1	0
03	11	1	1	4	5
04	65	7	4	12	42
05	235	66	52	50	67
06	222	67	61	42	52
07	156	51	40	33	32
08	123	35	29	20	39
09	163	36	47	46	34
10	184	40	35	50	59
11	199	49	50	47	53
12	247	67	54	47	79
13	243	70	55	49	69
14	222	63	48	53	58
15	197	55	56	31	55
16	173	51	45	33	44
17	155	33	41	38	43
18	130	36	34	26	34
19	71	22	17	17	15
20	50	18	11	11	10
21	54	20	14	12	8
22	29	5	6	9	9
23	8	2	5	0	1
	2948	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	245
AM Peak Hour Factor	91.42 %
PM Peak Hour Start	12:45
PM Peak Hour Total	253
PM Peak Hour Factor	80.06 %

	8/28/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	2	2	3	1
01	6	1	1	2	2
02	3	0	2	0	1
03	23	2	0	4	17
04	218	14	21	60	123
05	520	157	152	109	102
06	333	121	65	75	72
07	156	47	52	25	32
08	143	31	46	30	36
09	152	38	44	25	45
10	163	38	45	38	42
11	243	68	58	50	67
12	206	58	49	52	47
13	180	52	45	37	46
14	211	55	45	60	51
15	176	38	46	42	50
16	138	35	36	33	34
17	146	47	37	31	31
18	103	33	33	20	17
19	73	22	18	19	14
20	38	9	9	3	17
21	54	16	21	11	6
22	17	6	2	4	5
23	7	2	1	3	1
	3317	Total			

AM Peak Hour Start	04:45
AM Peak Hour Total	541
AM Peak Hour Factor	86.15 %
PM Peak Hour Start	14:00
PM Peak Hour Total	211
PM Peak Hour Factor	87.92 %

	8/29/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	0	0	2	2
01	4	0	1	1	2
02	2	0	1	0	1
03	25	4	4	6	11
04	210	16	22	56	116
05	581	165	171	119	126
06	308	92	78	66	72
07	162	35	56	37	34
08	154	36	50	34	34
09	165	39	44	37	45
10	201	45	53	48	55
11	223	50	58	64	51
12	245	52	61	63	69
13	224	54	71	53	46
14	220	50	47	59	64
15	194	55	58	43	38
16	169	44	47	40	38
17	149	46	38	34	31
18	135	32	44	26	33
19	87	28	22	23	14
20	51	15	16	7	13
21	63	21	22	8	12
22	23	8	4	3	8
23	18	7	6	2	3
	3617	Total			

AM Peak Hour Start	05:00
AM Peak Hour Total	581
AM Peak Hour Factor	84.94 %
PM Peak Hour Start	12:30
PM Peak Hour Total	257
PM Peak Hour Factor	90.49 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9891
Direction	West
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Wednesday, August 30, 2006

	8/30/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	1	2	1	4
01	9	3	2	2	2
02	6	1	1	1	3
03	32	3	7	5	17
04	229	11	29	71	118
05	548	148	174	119	107
06	317	104	86	70	57
07	177	63	50	28	36
08	134	32	42	35	25
09	141	39	41	31	30
10	187	48	54	31	54
11	227	65	50	49	63
12	267	57	72	61	77
13	236	66	66	49	55
14	233	51	49	69	64
15	162	55	45	29	33
16	188	42	38	43	65
17	139	31	44	30	34
18	129	25	42	25	37
19	106	30	32	21	23
20	72	13	24	17	18
21	59	26	13	9	11
22	29	8	9	2	10
23	14	3	2	2	7
	3649	Total			

AM Peak Hour Start	04:45
AM Peak Hour Total	559
AM Peak Hour Factor	80.32 %
PM Peak Hour Start	12:15
PM Peak Hour Total	276
PM Peak Hour Factor	89.61 %

	8/31/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	1	3	2	2
01	12	4	4	2	2
02	8	3	1	1	3
03	24	6	1	4	13
04	189	9	24	48	108
05	478	130	156	102	90
06	283	94	68	64	57
07	191	69	36	45	41
08	153	32	41	37	43
09	176	44	50	40	42
10	209	47	56	58	48
11	222	50	55	64	53
12	257	55	70	62	70
13	216	55	61	46	54
14	285	78	68	66	73
15	320	81	85	75	79
16	349	77	90	83	99
17	432	118	112	113	89
18	244	94	61	40	49
19	126	48	33	22	23
20	87	28	21	18	20
21	96	23	38	19	16
22	43	13	13	9	8
23	30	9	11	5	5
	4438	Total			

AM Peak Hour Start	04:45
AM Peak Hour Total	496
AM Peak Hour Factor	79.49 %
PM Peak Hour Start	16:45
PM Peak Hour Total	442
PM Peak Hour Factor	93.64 %

	9/1/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	10	6	1	2	1
01	7	4	0	1	2
02	8	1	0	3	4
03	11	2	3	3	3
04	45	13	9	10	13
05	147	37	49	18	43
06	111	37	26	19	29
07	154	35	45	33	41
08	150	40	35	32	43
09	186	40	49	42	55
10	289	85	73	68	63
11	401	95	89	117	100
12	469	120	130	115	104
13	441	118	119	105	99
14	396	79	127	105	85
15	369	96	90	102	81
16	305	75	76	82	72
17	275	89	65	59	62
18	227	59	61	58	49
19	169	54	52	30	33
20	119	31	32	25	31
21	91	27	27	23	14
22	58	12	13	24	9
23	40	10	10	11	9
	4478	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	401
AM Peak Hour Factor	85.68 %
PM Peak Hour Start	12:00
PM Peak Hour Total	469
PM Peak Hour Factor	90.19 %

	9/2/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	10	1	5	3	1
01	14	2	6	3	3
02	4	1	0	1	2
03	17	5	2	3	7
04	35	5	12	6	12
05	112	35	35	15	27
06	108	23	38	26	21
07	173	53	44	43	33
08	190	47	52	37	54
09	322	74	91	84	73
10	427	82	116	101	128
11	614	123	164	159	168
12	627	152	164	154	157
13	800	160	191	214	235
14	940	258	265	229	188
15	578	176	147	127	128
16	349	109	87	73	80
17	337	77	93	89	78
18	244	62	60	64	58
19	139	55	32	30	22
20	97	24	15	28	30
21	76	31	14	20	11
22	52	19	15	7	11
23	29	7	8	11	3
	6294	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	614
AM Peak Hour Factor	91.37 %
PM Peak Hour Start	13:45
PM Peak Hour Total	987
PM Peak Hour Factor	93.11 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9891
Direction	West
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Sunday, September 03, 2006

	9/3/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	2	3	2	0
01	10	1	2	5	2
02	5	0	1	3	1
03	8	3	0	1	4
04	56	6	1	16	33
05	173	37	59	38	39
06	132	37	35	30	30
07	134	49	28	30	27
08	187	35	43	53	56
09	225	46	59	44	76
10	343	82	89	78	94
11	472	105	140	103	124
12	467	105	135	120	107
13	478	138	114	106	120
14	397	92	102	87	116
15	289	75	83	77	54
16	242	72	42	54	74
17	180	41	53	40	46
18	142	37	46	32	27
19	70	18	14	15	23
20	44	8	5	15	16
21	64	23	22	15	4
22	27	9	8	4	6
23	6	1	3	1	1
	4158	Total			

AM Peak Hour Start	11:00	
AM Peak Hour Total	472	
AM Peak Hour Factor	84.29	%
PM Peak Hour Start	12:15	
PM Peak Hour Total	500	
PM Peak Hour Factor	90.58	%

	9/4/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	1	1	1	1
01	2	1	1	0	0
02	5	0	0	1	4
03	24	3	4	2	15
04	243	19	24	65	135
05	544	156	156	108	124
06	285	84	73	57	71
07	165	53	58	32	22
08	123	33	33	31	26
09	142	39	29	34	40
10	137	35	34	24	44
11	171	27	43	49	52
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
	1845	Total			

AM Peak Hour Start	04:45	
AM Peak Hour Total	555	
AM Peak Hour Factor	88.94	%
PM Peak Hour Start		
PM Peak Hour Total		
PM Peak Hour Factor		

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9890
Direction	East
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Saturday, August 26, 2006

	8/26/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18	466	126	147	101	92
19	453	141	112	103	97
20	327	119	73	75	60
21	104	40	32	23	9
22	104	26	28	28	22
23	32	13	6	8	5
	1486	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	18:15
PM Peak Hour Total	481
PM Peak Hour Factor	81.80 %

	8/27/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	4	1	1	2
01	13	3	0	7	3
02	7	6	1	0	0
03	2	1	0	0	1
04	3	1	0	0	2
05	14	4	5	1	4
06	80	8	21	34	17
07	74	14	18	25	17
08	105	17	27	27	34
09	123	17	35	46	25
10	171	36	43	44	48
11	185	44	44	49	48
12	232	48	61	58	65
13	232	50	45	57	80
14	379	101	82	105	91
15	338	84	86	82	86
16	305	96	74	80	55
17	200	57	60	39	44
18	187	55	38	47	47
19	114	27	32	34	21
20	77	17	21	18	21
21	68	14	14	21	19
22	52	10	21	13	8
23	25	4	7	7	7
	2994	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	185
AM Peak Hour Factor	94.39 %
PM Peak Hour Start	14:00
PM Peak Hour Total	379
PM Peak Hour Factor	90.24 %

	8/28/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	19	10	1	3	5
01	13	2	2	6	3
02	5	1	2	1	1
03	1	0	0	0	1
04	3	2	0	0	1
05	12	3	3	2	4
06	82	7	27	26	22
07	72	15	17	23	17
08	71	15	21	14	21
09	134	28	34	38	34
10	169	38	37	45	49
11	195	42	40	52	61
12	232	51	63	45	73
13	237	55	61	56	65
14	286	43	83	77	83
15	347	68	75	73	131
16	686	185	134	230	137
17	273	113	56	55	49
18	198	43	48	65	42
19	113	35	31	20	27
20	66	21	19	11	15
21	40	6	12	12	10
22	48	8	19	11	10
23	28	6	5	13	4
	3330	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	195
AM Peak Hour Factor	79.92 %
PM Peak Hour Start	16:00
PM Peak Hour Total	686
PM Peak Hour Factor	74.57 %

	8/29/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	11	6	2	1	2
01	13	2	3	5	3
02	2	1	0	0	1
03	3	1	0	2	0
04	3	1	0	0	2
05	17	3	6	2	6
06	88	12	25	26	25
07	56	18	12	17	9
08	83	13	22	25	23
09	136	26	40	32	38
10	166	30	55	43	38
11	195	50	56	40	49
12	241	55	44	76	66
13	265	63	68	66	68
14	344	65	96	91	92
15	392	97	73	92	130
16	739	205	150	250	134
17	296	90	102	63	41
18	211	50	64	54	43
19	145	36	43	40	26
20	74	18	12	18	26
21	52	11	15	9	17
22	63	16	25	14	8
23	56	14	14	14	14
	3651	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	195
AM Peak Hour Factor	87.05 %
PM Peak Hour Start	16:00
PM Peak Hour Total	739
PM Peak Hour Factor	73.90 %

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9890
Direction	East
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Wednesday, August 30, 2006

	8/30/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	3	0	2	1
01	15	2	3	8	2
02	5	2	3	0	0
03	5	1	1	1	2
04	9	2	1	2	4
05	17	2	2	4	9
06	82	11	27	24	20
07	67	18	18	21	10
08	82	16	26	20	20
09	103	21	22	27	33
10	178	28	50	46	54
11	184	45	43	51	45
12	244	63	61	54	66
13	306	80	73	65	88
14	351	74	103	88	86
15	370	89	61	105	115
16	613	181	102	221	109
17	318	102	74	85	57
18	226	61	68	59	38
19	135	38	40	33	24
20	74	12	19	18	25
21	69	27	16	13	13
22	66	18	20	18	10
23	25	8	0	12	5
	3550	Total			

AM Peak Hour Start	10:15
AM Peak Hour Total	195
AM Peak Hour Factor	90.28 %
PM Peak Hour Start	15:45
PM Peak Hour Total	619
PM Peak Hour Factor	70.02 %

	8/31/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	20	6	7	4	3
01	10	2	3	2	3
02	16	4	6	3	3
03	9	0	4	4	1
04	8	1	2	1	4
05	22	2	5	9	6
06	89	13	27	32	17
07	88	22	18	23	25
08	89	17	26	19	27
09	151	26	33	41	51
10	227	73	49	53	52
11	204	38	47	61	58
12	242	58	68	55	61
13	248	63	59	69	57
14	310	81	85	76	68
15	382	89	95	76	122
16	665	194	126	192	153
17	363	97	92	92	82
18	427	81	118	99	129
19	370	128	80	97	65
20	173	61	46	36	30
21	112	21	41	26	24
22	91	19	36	20	16
23	66	21	17	14	14
	4382	Total			

AM Peak Hour Start	10:00
AM Peak Hour Total	227
AM Peak Hour Factor	77.74 %
PM Peak Hour Start	16:00
PM Peak Hour Total	665
PM Peak Hour Factor	85.70 %

	9/1/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	17	3	3	4	7
01	13	2	8	2	1
02	9	8	0	0	1
03	5	0	3	2	0
04	11	2	2	3	4
05	15	1	3	5	6
06	96	12	29	28	27
07	47	9	11	14	13
08	97	25	25	27	20
09	123	28	19	33	43
10	217	47	55	56	59
11	279	74	60	54	91
12	321	71	82	99	69
13	406	101	94	106	105
14	463	101	108	129	125
15	482	118	112	132	120
16	441	118	103	114	106
17	337	114	72	91	60
18	328	61	85	97	85
19	231	74	55	49	53
20	162	44	39	48	31
21	120	30	26	37	27
22	124	33	36	30	25
23	51	19	11	10	11
	4395	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	279
AM Peak Hour Factor	76.65 %
PM Peak Hour Start	14:45
PM Peak Hour Total	487
PM Peak Hour Factor	92.23 %

	9/2/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	23	3	3	9	8
01	19	7	1	6	5
02	9	3	3	0	3
03	8	1	2	3	2
04	8	1	3	1	3
05	23	4	6	6	7
06	75	10	25	20	20
07	53	6	16	13	18
08	93	18	25	27	23
09	189	30	48	65	46
10	275	59	73	69	74
11	402	87	95	111	109
12	457	130	119	100	108
13	464	119	102	117	126
14	544	130	141	132	141
15	562	121	148	119	174
16	539	142	137	119	141
17	598	139	129	130	200
18	1033	267	314	276	176
19	372	129	87	89	67
20	209	58	46	46	59
21	152	43	34	31	44
22	106	26	30	29	21
23	50	12	17	13	8
	6263	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	402
AM Peak Hour Factor	90.54 %
PM Peak Hour Start	17:45
PM Peak Hour Total	1057
PM Peak Hour Factor	84.16 %

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9890
Direction	East
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Sunday, September 03, 2006

	9/3/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	25	8	8	4	5
01	14	7	2	4	1
02	11	3	7	1	0
03	6	2	1	0	3
04	7	0	4	0	3
05	18	2	5	5	6
06	88	13	20	40	15
07	67	11	19	20	17
08	124	24	28	24	48
09	159	22	33	47	57
10	258	62	52	63	81
11	321	87	69	102	63
12	397	89	99	96	113
13	412	90	108	108	106
14	518	123	139	114	142
15	547	155	118	146	128
16	451	134	102	103	112
17	367	110	85	95	77
18	278	71	74	86	47
19	147	38	43	38	28
20	115	25	29	17	44
21	53	10	18	16	9
22	53	6	21	19	7
23	24	6	3	5	10
	4460	Total			

	9/4/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	1	0	3	0
01	5	1	2	2	0
02	5	1	1	1	2
03	5	0	3	2	0
04	6	1	0	1	4
05	19	1	3	7	8
06	94	12	29	28	25
07	74	12	17	16	29
08	90	23	23	19	25
09	134	29	31	34	40
10	123	27	34	29	33
11	137	31	29	37	40
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
	696	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	339
AM Peak Hour Factor	83.09 %
PM Peak Hour Start	14:45
PM Peak Hour Total	561
PM Peak Hour Factor	90.48 %

AM Peak Hour Start	11:00
AM Peak Hour Total	137
AM Peak Hour Factor	85.63 %
PM Peak Hour Start	
PM Peak Hour Total	
PM Peak Hour Factor	

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BTW PORT OF SLO & SAN MIGUEL
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9880
Direction	East
Date	8/19/2006
Real Time	13:55
Start Date	8/19/2006
Start Time	14:00
Sample Time	00:15
Operator Number	29
Machine Number	1106

Saturday, August 19, 2006

	8/19/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14	336	60	80	101	95
15	326	79	67	91	89
16	265	56	67	73	69
17	239	65	76	47	51
18	200	53	46	57	44
19	170	57	33	54	26
20	135	32	33	35	35
21	124	25	44	24	31
22	98	39	25	11	23
23	62	29	16	10	7
	1955	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	14:15
PM Peak Hour Total	355
PM Peak Hour Factor	87.87 %

	8/20/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	33	10	7	6	10
01	39	12	19	5	3
02	5	2	0	1	2
03	5	1	2	1	1
04	3	1	2	0	0
05	11	1	4	2	4
06	15	1	5	2	7
07	41	17	13	7	4
08	38	7	5	8	18
09	76	18	23	20	15
10	119	25	25	35	34
11	158	38	41	35	44
12	225	62	41	64	58
13	230	68	46	70	46
14	361	90	91	95	85
15	335	84	99	83	69
16	266	68	70	61	67
17	200	60	44	45	51
18	147	30	46	35	36
19	137	43	33	37	24
20	96	26	17	22	31
21	85	28	23	17	17
22	52	17	20	3	12
23	36	19	8	0	9
	2713	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	158
AM Peak Hour Factor	89.77 %
PM Peak Hour Start	14:30
PM Peak Hour Total	363
PM Peak Hour Factor	91.67 %

	8/21/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	0	5	3	0
01	4	0	2	1	1
02	5	1	1	0	3
03	3	2	0	1	0
04	4	0	1	3	0
05	6	0	1	3	2
06	25	9	3	3	10
07	51	20	17	7	7
08	34	7	10	14	3
09	55	12	7	15	21
10	116	31	28	19	38
11	125	26	31	36	32
12	149	32	43	39	35
13	162	34	49	41	38
14	154	41	34	38	41
15	208	59	56	36	57
16	188	38	49	45	56
17	199	54	55	49	41
18	117	34	28	21	34
19	87	25	16	23	23
20	72	30	15	13	14
21	32	5	10	8	9
22	36	12	8	6	10
23	42	18	6	10	8
	1882	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	131
AM Peak Hour Factor	86.18 %
PM Peak Hour Start	16:45
PM Peak Hour Total	214
PM Peak Hour Factor	95.54 %

	8/22/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	17	3	5	6	3
01	11	3	3	3	2
02	13	2	7	1	3
03	1	0	0	0	1
04	1	0	0	0	1
05	7	0	1	5	1
06	18	3	7	3	5
07	71	13	26	20	12
08	46	4	14	22	6
09	58	13	13	20	12
10	81	13	19	31	18
11	113	19	34	36	24
12	166	37	36	50	43
13	173	33	39	40	61
14	178	40	46	40	52
15	225	63	67	39	56
16	388	57	71	102	158
17	535	131	222	101	81
18	178	61	43	38	36
19	120	26	35	32	27
20	83	27	21	24	11
21	64	16	14	25	9
22	38	12	4	10	12
23	50	22	10	12	6
	2635	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	113
AM Peak Hour Factor	78.47 %
PM Peak Hour Start	16:30
PM Peak Hour Total	613
PM Peak Hour Factor	69.03 %

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BTW PORT OF SLO & SAN MIGUEL
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9880
Direction	East
Date	8/19/2006
Real Time	13:55
Start Date	8/19/2006
Start Time	14:00
Sample Time	00:15
Operator Number	29
Machine Number	1106

Wednesday, August 23, 2006

	8/23/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	26	7	11	2	6
01	13	1	2	6	4
02	12	3	8	1	0
03	5	2	2	0	1
04	4	1	2	1	0
05	14	0	2	7	5
06	33	1	10	12	10
07	78	20	23	17	18
08	40	9	10	4	17
09	54	14	14	13	13
10	84	20	22	24	18
11	127	33	29	27	38
12	193	36	48	53	56
13	191	45	47	46	53
14	203	49	52	49	53
15	251	59	76	56	60
16	419	81	63	115	160
17	553	140	217	106	90
18	166	59	31	39	37
19	103	28	30	31	14
20	67	19	21	14	13
21	62	25	8	21	8
22	32	8	7	4	13
23	41	20	3	17	1
	2771	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	127
AM Peak Hour Factor	83.55 %
PM Peak Hour Start	16:30
PM Peak Hour Total	632
PM Peak Hour Factor	72.81 %

	8/24/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	19	0	10	7	2
01	5	0	0	2	3
02	11	1	8	1	1
03	3	2	0	1	0
04	3	1	0	1	1
05	11	2	3	4	2
06	26	3	5	7	11
07	59	20	17	14	8
08	41	11	8	6	16
09	63	13	15	19	16
10	80	20	19	26	15
11	133	36	23	38	36
12	134	28	34	34	38
13	161	31	38	46	46
14	198	29	42	51	76
15	251	55	68	60	68
16	434	80	75	115	164
17	501	125	206	84	86
18	189	55	27	51	56
19	110	40	25	22	23
20	87	33	21	18	15
21	47	16	16	7	8
22	47	16	15	3	13
23	42	17	11	12	2
	2655	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	133
AM Peak Hour Factor	87.50 %
PM Peak Hour Start	16:30
PM Peak Hour Total	610
PM Peak Hour Factor	74.03 %

	8/25/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	33	12	12	7	2
01	10	4	3	2	1
02	13	3	5	1	4
03	3	3	0	0	0
04	4	1	1	0	2
05	10	2	3	3	2
06	26	7	5	9	5
07	71	23	22	18	8
08	51	6	13	20	12
09	49	15	9	12	13
10	90	29	18	21	22
11	136	29	36	32	39
12	191	40	51	67	33
13	174	58	37	48	31
14	188	40	56	48	44
15	258	66	60	69	63
16	421	82	69	115	155
17	444	117	170	95	62
18	203	61	49	40	53
19	162	40	35	47	40
20	144	48	29	42	25
21	117	26	33	32	26
22	100	32	32	16	20
23	73	24	14	20	15
	2971	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	136
AM Peak Hour Factor	87.18 %
PM Peak Hour Start	16:30
PM Peak Hour Total	557
PM Peak Hour Factor	81.91 %

	8/26/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	33	7	10	9	7
01	9	2	5	2	0
02	9	2	0	3	4
03	3	3	0	0	0
04	3	3	0	0	0
05	10	1	5	1	3
06	17	2	2	4	9
07	59	21	19	10	9
08	55	15	13	15	12
09	79	11	26	18	24
10	129	30	25	36	38
11	157	37	33	54	33
12	173	33	37	56	47
13	259	70	56	66	67
14	113	47	66		
15					
16					
17					
18					
19					
20					
21					
22					
23					
	1108	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	162
AM Peak Hour Factor	75.00 %
PM Peak Hour Start	13:00
PM Peak Hour Total	259
PM Peak Hour Factor	92.50 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BTW PORT OF SLO & SAN MIGUEL
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9881
Direction	West
Date	8/19/2006
Real Time	13:55
Start Date	8/19/2006
Start Time	14:00
Sample Time	00:15
Operator Number	29
Machine Number	1106

Saturday, August 19, 2006

8/19/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14	316	77	97	78	64
15	258	52	56	81	69
16	209	51	44	60	54
17	257	65	67	54	71
18	222	70	42	67	43
19	193	54	60	46	33
20	134	31	38	35	30
21	117	38	23	20	36
22	94	30	24	26	14
23	46	6	18	19	3
	1846	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	14:00
PM Peak Hour Total	316
PM Peak Hour Factor	81.44 %

8/20/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	14	4	4	5	1
01	11	1	1	3	6
02	6	2	0	4	0
03	12	3	0	4	5
04	25	13	7	4	1
05	57	5	7	17	28
06	132	41	35	32	24
07	59	11	9	19	20
08	111	21	27	36	27
09	133	27	31	26	49
10	212	48	47	50	67
11	236	54	67	52	63
12	240	39	58	77	66
13	275	68	66	76	65
14	292	93	58	73	68
15	241	57	68	56	60
16	220	54	62	53	51
17	185	54	31	46	54
18	173	39	55	42	37
19	156	32	44	40	40
20	66	21	16	16	13
21	66	22	11	12	21
22	32	13	6	10	3
23	15	3	3	5	4
	2969	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	240
AM Peak Hour Factor	89.55 %
PM Peak Hour Start	13:15
PM Peak Hour Total	300
PM Peak Hour Factor	80.65 %

8/21/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	9	2	4	3	0
01	10	1	4	1	4
02	9	7	2	0	0
03	2	2	0	0	0
04	30	0	5	10	15
05	195	8	33	78	76
06	275	96	60	65	54
07	140	36	41	41	22
08	110	41	24	18	27
09	120	35	18	38	29
10	140	39	39	29	33
11	146	34	34	40	38
12	170	51	51	46	22
13	172	35	47	40	50
14	145	40	32	37	36
15	146	36	38	39	33
16	110	37	28	26	19
17	128	33	25	37	33
18	113	32	16	41	24
19	84	26	23	19	16
20	64	22	7	14	21
21	59	16	8	25	10
22	40	23	2	10	5
23	13	3	4	6	0
	2430	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	310
AM Peak Hour Factor	80.73 %
PM Peak Hour Start	13:15
PM Peak Hour Total	177
PM Peak Hour Factor	88.50 %

8/22/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	2	4	1	0
01	10	2	5	0	3
02	3	2	1	0	0
03	10	0	2	4	4
04	51	0	8	23	20
05	608	34	138	179	257
06	802	263	202	185	152
07	329	91	104	65	69
08	135	37	33	32	33
09	103	17	34	26	26
10	118	28	27	29	34
11	162	42	36	42	42
12	166	46	36	39	45
13	177	31	33	39	74
14	140	39	28	44	29
15	174	33	47	55	39
16	128	33	30	39	26
17	136	28	31	35	42
18	148	27	29	49	43
19	85	26	19	30	10
20	53	14	16	9	14
21	69	9	9	19	32
22	49	19	13	13	4
23	29	4	4	14	7
	3692	Total			

AM Peak Hour Start	05:45
AM Peak Hour Total	907
AM Peak Hour Factor	86.22 %
PM Peak Hour Start	13:15
PM Peak Hour Total	185
PM Peak Hour Factor	62.50 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BTW PORT OF SLO & SAN MIGUEL
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9881
Direction	West
Date	8/19/2006
Real Time	13:55
Start Date	8/19/2006
Start Time	14:00
Sample Time	00:15
Operator Number	29
Machine Number	1106

Wednesday, August 23, 2006

8/23/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	12	7	2	2	1
01	12	3	4	0	5
02	3	0	0	0	3
03	7	1	0	4	2
04	63	10	8	26	19
05	674	46	126	219	283
06	791	281	193	181	136
07	324	102	92	90	40
08	150	57	35	29	29
09	131	37	13	32	49
10	125	29	31	36	29
11	168	45	33	54	36
12	208	49	50	60	49
13	189	44	50	47	48
14	141	35	26	31	49
15	159	36	31	49	43
16	118	29	37	30	22
17	108	23	21	33	31
18	109	23	25	35	26
19	82	32	23	13	14
20	73	37	15	12	9
21	55	6	11	15	23
22	49	22	12	5	10
23	12	0	0	8	4
	3763	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	976
AM Peak Hour Factor	86.22 %
PM Peak Hour Start	12:00
PM Peak Hour Total	208
PM Peak Hour Factor	86.67 %

8/24/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	9	2	3	2	2
01	5	0	2	1	2
02	4	4	0	0	0
03	9	0	0	4	5
04	66	2	12	25	27
05	653	45	110	214	284
06	815	287	205	197	126
07	324	79	105	90	50
08	164	54	32	31	47
09	135	33	39	22	41
10	157	63	31	26	37
11	159	43	41	45	30
12	191	58	48	29	56
13	149	39	38	43	29
14	169	41	58	40	30
15	172	42	36	56	38
16	91	21	22	24	24
17	102	24	16	30	32
18	114	26	23	36	29
19	99	28	24	18	29
20	62	19	18	12	13
21	76	15	15	21	25
22	80	27	23	21	9
23	30	8	7	9	6
	3835	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	990
AM Peak Hour Factor	86.24 %
PM Peak Hour Start	12:00
PM Peak Hour Total	191
PM Peak Hour Factor	82.33 %

8/25/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	1	0	4	2
01	8	0	0	1	7
02	9	8	1	0	0
03	11	2	0	0	9
04	72	5	11	26	30
05	582	40	111	218	213
06	764	272	180	165	147
07	333	98	110	74	51
08	115	33	34	31	17
09	111	23	30	12	46
10	147	45	19	33	50
11	191	50	40	57	44
12	199	55	54	41	49
13	178	40	42	47	49
14	159	50	43	27	39
15	150	35	37	40	38
16	149	45	31	33	40
17	174	42	39	40	53
18	226	42	53	72	59
19	196	62	41	51	42
20	126	49	25	29	23
21	93	14	28	22	29
22	66	31	9	15	11
23	42	14	10	12	6
	4108	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	883
AM Peak Hour Factor	81.16 %
PM Peak Hour Start	18:15
PM Peak Hour Total	246
PM Peak Hour Factor	85.42 %

8/26/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	14	8	0	2	4
01	11	0	5	4	2
02	9	6	0	0	3
03	5	0	0	4	1
04	26	0	3	11	12
05	102	16	14	15	57
06	154	57	42	39	16
07	94	31	12	35	16
08	131	25	35	34	37
09	173	38	39	38	58
10	180	58	38	40	44
11	190	48	54	45	43
12	248	59	64	60	65
13	279	74	64	67	74
14	123	66	57		
15					
16					
17					
18					
19					
20					
21					
22					
23					
	1739	Total			

AM Peak Hour Start	05:45
AM Peak Hour Total	195
AM Peak Hour Factor	85.53 %
PM Peak Hour Start	13:00
PM Peak Hour Total	279
PM Peak Hour Factor	94.26 %

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BTW PORT OF SLO & SAN MIGUEL
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9880
Direction	East
Date	8/19/2006
Real Time	13:55
Start Date	8/19/2006
Start Time	14:00
Sample Time	00:15
Operator Number	29
Machine Number	1106

Saturday, August 19, 2006

	8/19/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14	336	60	80	101	95
15	326	79	67	91	89
16	265	56	67	73	69
17	239	65	76	47	51
18	200	53	46	57	44
19	170	57	33	54	26
20	135	32	33	35	35
21	124	25	44	24	31
22	98	39	25	11	23
23	62	29	16	10	7
	1955	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	14:15
PM Peak Hour Total	355
PM Peak Hour Factor	87.87 %

	8/20/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	33	10	7	6	10
01	39	12	19	5	3
02	5	2	0	1	2
03	5	1	2	1	1
04	3	1	2	0	0
05	11	1	4	2	4
06	15	1	5	2	7
07	41	17	13	7	4
08	38	7	5	8	18
09	76	18	23	20	15
10	119	25	25	35	34
11	158	38	41	35	44
12	225	62	41	64	58
13	230	68	46	70	46
14	361	90	91	95	85
15	335	84	99	83	69
16	266	68	70	61	67
17	200	60	44	45	51
18	147	30	46	35	36
19	137	43	33	37	24
20	96	26	17	22	31
21	85	28	23	17	17
22	52	17	20	3	12
23	36	19	8	0	9
	2713	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	158
AM Peak Hour Factor	89.77 %
PM Peak Hour Start	14:30
PM Peak Hour Total	363
PM Peak Hour Factor	91.67 %

	8/21/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	0	5	3	0
01	4	0	2	1	1
02	5	1	1	0	3
03	3	2	0	1	0
04	4	0	1	3	0
05	6	0	1	3	2
06	25	9	3	3	10
07	51	20	17	7	7
08	34	7	10	14	3
09	55	12	7	15	21
10	116	31	28	19	38
11	125	26	31	36	32
12	149	32	43	39	35
13	162	34	49	41	38
14	154	41	34	38	41
15	208	59	56	36	57
16	188	38	49	45	56
17	199	54	55	49	41
18	117	34	28	21	34
19	87	25	16	23	23
20	72	30	15	13	14
21	32	5	10	8	9
22	36	12	8	6	10
23	42	18	6	10	8
	1882	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	131
AM Peak Hour Factor	86.18 %
PM Peak Hour Start	16:45
PM Peak Hour Total	214
PM Peak Hour Factor	95.54 %

	8/22/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	17	3	5	6	3
01	11	3	3	3	2
02	13	2	7	1	3
03	1	0	0	0	1
04	1	0	0	0	1
05	7	0	1	5	1
06	18	3	7	3	5
07	71	13	26	20	12
08	46	4	14	22	6
09	58	13	13	20	12
10	81	13	19	31	18
11	113	19	34	36	24
12	166	37	36	50	43
13	173	33	39	40	61
14	178	40	46	40	52
15	225	63	67	39	56
16	388	57	71	102	158
17	535	131	222	101	81
18	178	61	43	38	36
19	120	26	35	32	27
20	83	27	21	24	11
21	64	16	14	25	9
22	38	12	4	10	12
23	50	22	10	12	6
	2635	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	113
AM Peak Hour Factor	78.47 %
PM Peak Hour Start	16:30
PM Peak Hour Total	613
PM Peak Hour Factor	69.03 %

Mitron Systems Volume Count Report

Site Name	EB AVILA BEACH BTW PORT OF SLO & SAN MIGUEL
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9880
Direction	East
Date	8/19/2006
Real Time	13:55
Start Date	8/19/2006
Start Time	14:00
Sample Time	00:15
Operator Number	29
Machine Number	1106

Wednesday, August 23, 2006

	8/23/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	26	7	11	2	6
01	13	1	2	6	4
02	12	3	8	1	0
03	5	2	2	0	1
04	4	1	2	1	0
05	14	0	2	7	5
06	33	1	10	12	10
07	78	20	23	17	18
08	40	9	10	4	17
09	54	14	14	13	13
10	84	20	22	24	18
11	127	33	29	27	38
12	193	36	48	53	56
13	191	45	47	46	53
14	203	49	52	49	53
15	251	59	76	56	60
16	419	81	63	115	160
17	553	140	217	106	90
18	166	59	31	39	37
19	103	28	30	31	14
20	67	19	21	14	13
21	62	25	8	21	8
22	32	8	7	4	13
23	41	20	3	17	1
	2771	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	127
AM Peak Hour Factor	83.55 %
PM Peak Hour Start	16:30
PM Peak Hour Total	632
PM Peak Hour Factor	72.81 %

	8/24/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	19	0	10	7	2
01	5	0	0	2	3
02	11	1	8	1	1
03	3	2	0	1	0
04	3	1	0	1	1
05	11	2	3	4	2
06	26	3	5	7	11
07	59	20	17	14	8
08	41	11	8	6	16
09	63	13	15	19	16
10	80	20	19	26	15
11	133	36	23	38	36
12	134	28	34	34	38
13	161	31	38	46	46
14	198	29	42	51	76
15	251	55	68	60	68
16	434	80	75	115	164
17	501	125	206	84	86
18	189	55	27	51	56
19	110	40	25	22	23
20	87	33	21	18	15
21	47	16	16	7	8
22	47	16	15	3	13
23	42	17	11	12	2
	2655	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	133
AM Peak Hour Factor	87.50 %
PM Peak Hour Start	16:30
PM Peak Hour Total	610
PM Peak Hour Factor	74.03 %

	8/25/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	33	12	12	7	2
01	10	4	3	2	1
02	13	3	5	1	4
03	3	3	0	0	0
04	4	1	1	0	2
05	10	2	3	3	2
06	26	7	5	9	5
07	71	23	22	18	8
08	51	6	13	20	12
09	49	15	9	12	13
10	90	29	18	21	22
11	136	29	36	32	39
12	191	40	51	67	33
13	174	58	37	48	31
14	188	40	56	48	44
15	258	66	60	69	63
16	421	82	69	115	155
17	444	117	170	95	62
18	203	61	49	40	53
19	162	40	35	47	40
20	144	48	29	42	25
21	117	26	33	32	26
22	100	32	32	16	20
23	73	24	14	20	15
	2971	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	136
AM Peak Hour Factor	87.18 %
PM Peak Hour Start	16:30
PM Peak Hour Total	557
PM Peak Hour Factor	81.91 %

	8/26/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	33	7	10	9	7
01	9	2	5	2	0
02	9	2	0	3	4
03	3	3	0	0	0
04	3	3	0	0	0
05	10	1	5	1	3
06	17	2	2	4	9
07	59	21	19	10	9
08	55	15	13	15	12
09	79	11	26	18	24
10	129	30	25	36	38
11	157	37	33	54	33
12	173	33	37	56	47
13	259	70	56	66	67
14	113	47	66		
15					
16					
17					
18					
19					
20					
21					
22					
23					
	1108	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	162
AM Peak Hour Factor	75.00 %
PM Peak Hour Start	13:00
PM Peak Hour Total	259
PM Peak Hour Factor	92.50 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BTW PORT OF SLO & SAN MIGUEL
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9881
Direction	West
Date	8/19/2006
Real Time	13:55
Start Date	8/19/2006
Start Time	14:00
Sample Time	00:15
Operator Number	29
Machine Number	1106

Saturday, August 19, 2006

8/19/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14	316	77	97	78	64
15	258	52	56	81	69
16	209	51	44	60	54
17	257	65	67	54	71
18	222	70	42	67	43
19	193	54	60	46	33
20	134	31	38	35	30
21	117	38	23	20	36
22	94	30	24	26	14
23	46	6	18	19	3
	1846	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	14:00
PM Peak Hour Total	316
PM Peak Hour Factor	81.44 %

8/20/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	14	4	4	5	1
01	11	1	1	3	6
02	6	2	0	4	0
03	12	3	0	4	5
04	25	13	7	4	1
05	57	5	7	17	28
06	132	41	35	32	24
07	59	11	9	19	20
08	111	21	27	36	27
09	133	27	31	26	49
10	212	48	47	50	67
11	236	54	67	52	63
12	240	39	58	77	66
13	275	68	66	76	65
14	292	93	58	73	68
15	241	57	68	56	60
16	220	54	62	53	51
17	185	54	31	46	54
18	173	39	55	42	37
19	156	32	44	40	40
20	66	21	16	16	13
21	66	22	11	12	21
22	32	13	6	10	3
23	15	3	3	5	4
	2969	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	240
AM Peak Hour Factor	89.55 %
PM Peak Hour Start	13:15
PM Peak Hour Total	300
PM Peak Hour Factor	80.65 %

8/21/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	9	2	4	3	0
01	10	1	4	1	4
02	9	7	2	0	0
03	2	2	0	0	0
04	30	0	5	10	15
05	195	8	33	78	76
06	275	96	60	65	54
07	140	36	41	41	22
08	110	41	24	18	27
09	120	35	18	38	29
10	140	39	39	29	33
11	146	34	34	40	38
12	170	51	51	46	22
13	172	35	47	40	50
14	145	40	32	37	36
15	146	36	38	39	33
16	110	37	28	26	19
17	128	33	25	37	33
18	113	32	16	41	24
19	84	26	23	19	16
20	64	22	7	14	21
21	59	16	8	25	10
22	40	23	2	10	5
23	13	3	4	6	0
	2430	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	310
AM Peak Hour Factor	80.73 %
PM Peak Hour Start	13:15
PM Peak Hour Total	177
PM Peak Hour Factor	88.50 %

8/22/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	2	4	1	0
01	10	2	5	0	3
02	3	2	1	0	0
03	10	0	2	4	4
04	51	0	8	23	20
05	608	34	138	179	257
06	802	263	202	185	152
07	329	91	104	65	69
08	135	37	33	32	33
09	103	17	34	26	26
10	118	28	27	29	34
11	162	42	36	42	42
12	166	46	36	39	45
13	177	31	33	39	74
14	140	39	28	44	29
15	174	33	47	55	39
16	128	33	30	39	26
17	136	28	31	35	42
18	148	27	29	49	43
19	85	26	19	30	10
20	53	14	16	9	14
21	69	9	9	19	32
22	49	19	13	13	4
23	29	4	4	14	7
	3692	Total			

AM Peak Hour Start	05:45
AM Peak Hour Total	907
AM Peak Hour Factor	86.22 %
PM Peak Hour Start	13:15
PM Peak Hour Total	185
PM Peak Hour Factor	62.50 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BTW PORT OF SLO & SAN MIGUEL
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9881
Direction	West
Date	8/19/2006
Real Time	13:55
Start Date	8/19/2006
Start Time	14:00
Sample Time	00:15
Operator Number	29
Machine Number	1106

Wednesday, August 23, 2006

8/23/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	12	7	2	2	1
01	12	3	4	0	5
02	3	0	0	0	3
03	7	1	0	4	2
04	63	10	8	26	19
05	674	46	126	219	283
06	791	281	193	181	136
07	324	102	92	90	40
08	150	57	35	29	29
09	131	37	13	32	49
10	125	29	31	36	29
11	168	45	33	54	36
12	208	49	50	60	49
13	189	44	50	47	48
14	141	35	26	31	49
15	159	36	31	49	43
16	118	29	37	30	22
17	108	23	21	33	31
18	109	23	25	35	26
19	82	32	23	13	14
20	73	37	15	12	9
21	55	6	11	15	23
22	49	22	12	5	10
23	12	0	0	8	4
	3763	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	976
AM Peak Hour Factor	86.22 %
PM Peak Hour Start	12:00
PM Peak Hour Total	208
PM Peak Hour Factor	86.67 %

8/24/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	9	2	3	2	2
01	5	0	2	1	2
02	4	4	0	0	0
03	9	0	0	4	5
04	66	2	12	25	27
05	653	45	110	214	284
06	815	287	205	197	126
07	324	79	105	90	50
08	164	54	32	31	47
09	135	33	39	22	41
10	157	63	31	26	37
11	159	43	41	45	30
12	191	58	48	29	56
13	149	39	38	43	29
14	169	41	58	40	30
15	172	42	36	56	38
16	91	21	22	24	24
17	102	24	16	30	32
18	114	26	23	36	29
19	99	28	24	18	29
20	62	19	18	12	13
21	76	15	15	21	25
22	80	27	23	21	9
23	30	8	7	9	6
	3835	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	990
AM Peak Hour Factor	86.24 %
PM Peak Hour Start	12:00
PM Peak Hour Total	191
PM Peak Hour Factor	82.33 %

8/25/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	1	0	4	2
01	8	0	0	1	7
02	9	8	1	0	0
03	11	2	0	0	9
04	72	5	11	26	30
05	582	40	111	218	213
06	764	272	180	165	147
07	333	98	110	74	51
08	115	33	34	31	17
09	111	23	30	12	46
10	147	45	19	33	50
11	191	50	40	57	44
12	199	55	54	41	49
13	178	40	42	47	49
14	159	50	43	27	39
15	150	35	37	40	38
16	149	45	31	33	40
17	174	42	39	40	53
18	226	42	53	72	59
19	196	62	41	51	42
20	126	49	25	29	23
21	93	14	28	22	29
22	66	31	9	15	11
23	42	14	10	12	6
	4108	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	883
AM Peak Hour Factor	81.16 %
PM Peak Hour Start	18:15
PM Peak Hour Total	246
PM Peak Hour Factor	85.42 %

8/26/2006

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	14	8	0	2	4
01	11	0	5	4	2
02	9	6	0	0	3
03	5	0	0	4	1
04	26	0	3	11	12
05	102	16	14	15	57
06	154	57	42	39	16
07	94	31	12	35	16
08	131	25	35	34	37
09	173	38	39	38	58
10	180	58	38	40	44
11	190	48	54	45	43
12	248	59	64	60	65
13	279	74	64	67	74
14	123	66	57		
15					
16					
17					
18					
19					
20					
21					
22					
23					
	1739	Total			

AM Peak Hour Start	05:45
AM Peak Hour Total	195
AM Peak Hour Factor	85.53 %
PM Peak Hour Start	13:00
PM Peak Hour Total	279
PM Peak Hour Factor	94.26 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9891
Direction	West
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Saturday, August 26, 2006

	8/26/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18	196	46	48	53	49
19	99	31	18	26	24
20	87	31	25	17	14
21	85	46	13	12	14
22	33	12	5	8	8
23	8	2	4	1	1
	508	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	18:00
PM Peak Hour Total	196
PM Peak Hour Factor	92.45 %

	8/27/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	2	0	0	0
01	7	1	2	4	0
02	2	1	0	1	0
03	11	1	1	4	5
04	65	7	4	12	42
05	235	66	52	50	67
06	222	67	61	42	52
07	156	51	40	33	32
08	123	35	29	20	39
09	163	36	47	46	34
10	184	40	35	50	59
11	199	49	50	47	53
12	247	67	54	47	79
13	243	70	55	49	69
14	222	63	48	53	58
15	197	55	56	31	55
16	173	51	45	33	44
17	155	33	41	38	43
18	130	36	34	26	34
19	71	22	17	17	15
20	50	18	11	11	10
21	54	20	14	12	8
22	29	5	6	9	9
23	8	2	5	0	1
	2948	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	245
AM Peak Hour Factor	91.42 %
PM Peak Hour Start	12:45
PM Peak Hour Total	253
PM Peak Hour Factor	80.06 %

	8/28/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	2	2	3	1
01	6	1	1	2	2
02	3	0	2	0	1
03	23	2	0	4	17
04	218	14	21	60	123
05	520	157	152	109	102
06	333	121	65	75	72
07	156	47	52	25	32
08	143	31	46	30	36
09	152	38	44	25	45
10	163	38	45	38	42
11	243	68	58	50	67
12	206	58	49	52	47
13	180	52	45	37	46
14	211	55	45	60	51
15	176	38	46	42	50
16	138	35	36	33	34
17	146	47	37	31	31
18	103	33	33	20	17
19	73	22	18	19	14
20	38	9	9	3	17
21	54	16	21	11	6
22	17	6	2	4	5
23	7	2	1	3	1
	3317	Total			

AM Peak Hour Start	04:45
AM Peak Hour Total	541
AM Peak Hour Factor	86.15 %
PM Peak Hour Start	14:00
PM Peak Hour Total	211
PM Peak Hour Factor	87.92 %

	8/29/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	0	0	2	2
01	4	0	1	1	2
02	2	0	1	0	1
03	25	4	4	6	11
04	210	16	22	56	116
05	581	165	171	119	126
06	308	92	78	66	72
07	162	35	56	37	34
08	154	36	50	34	34
09	165	39	44	37	45
10	201	45	53	48	55
11	223	50	58	64	51
12	245	52	61	63	69
13	224	54	71	53	46
14	220	50	47	59	64
15	194	55	58	43	38
16	169	44	47	40	38
17	149	46	38	34	31
18	135	32	44	26	33
19	87	28	22	23	14
20	51	15	16	7	13
21	63	21	22	8	12
22	23	8	4	3	8
23	18	7	6	2	3
	3617	Total			

AM Peak Hour Start	05:00
AM Peak Hour Total	581
AM Peak Hour Factor	84.94 %
PM Peak Hour Start	12:30
PM Peak Hour Total	257
PM Peak Hour Factor	90.49 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9891
Direction	West
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Wednesday, August 30, 2006

	8/30/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	1	2	1	4
01	9	3	2	2	2
02	6	1	1	1	3
03	32	3	7	5	17
04	229	11	29	71	118
05	548	148	174	119	107
06	317	104	86	70	57
07	177	63	50	28	36
08	134	32	42	35	25
09	141	39	41	31	30
10	187	48	54	31	54
11	227	65	50	49	63
12	267	57	72	61	77
13	236	66	66	49	55
14	233	51	49	69	64
15	162	55	45	29	33
16	188	42	38	43	65
17	139	31	44	30	34
18	129	25	42	25	37
19	106	30	32	21	23
20	72	13	24	17	18
21	59	26	13	9	11
22	29	8	9	2	10
23	14	3	2	2	7
	3649	Total			

AM Peak Hour Start	04:45
AM Peak Hour Total	559
AM Peak Hour Factor	80.32 %
PM Peak Hour Start	12:15
PM Peak Hour Total	276
PM Peak Hour Factor	89.61 %

	8/31/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	1	3	2	2
01	12	4	4	2	2
02	8	3	1	1	3
03	24	6	1	4	13
04	189	9	24	48	108
05	478	130	156	102	90
06	283	94	68	64	57
07	191	69	36	45	41
08	153	32	41	37	43
09	176	44	50	40	42
10	209	47	56	58	48
11	222	50	55	64	53
12	257	55	70	62	70
13	216	55	61	46	54
14	285	78	68	66	73
15	320	81	85	75	79
16	349	77	90	83	99
17	432	118	112	113	89
18	244	94	61	40	49
19	126	48	33	22	23
20	87	28	21	18	20
21	96	23	38	19	16
22	43	13	13	9	8
23	30	9	11	5	5
	4438	Total			

AM Peak Hour Start	04:45
AM Peak Hour Total	496
AM Peak Hour Factor	79.49 %
PM Peak Hour Start	16:45
PM Peak Hour Total	442
PM Peak Hour Factor	93.64 %

	9/1/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	10	6	1	2	1
01	7	4	0	1	2
02	8	1	0	3	4
03	11	2	3	3	3
04	45	13	9	10	13
05	147	37	49	18	43
06	111	37	26	19	29
07	154	35	45	33	41
08	150	40	35	32	43
09	186	40	49	42	55
10	289	85	73	68	63
11	401	95	89	117	100
12	469	120	130	115	104
13	441	118	119	105	99
14	396	79	127	105	85
15	369	96	90	102	81
16	305	75	76	82	72
17	275	89	65	59	62
18	227	59	61	58	49
19	169	54	52	30	33
20	119	31	32	25	31
21	91	27	27	23	14
22	58	12	13	24	9
23	40	10	10	11	9
	4478	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	401
AM Peak Hour Factor	85.68 %
PM Peak Hour Start	12:00
PM Peak Hour Total	469
PM Peak Hour Factor	90.19 %

	9/2/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	10	1	5	3	1
01	14	2	6	3	3
02	4	1	0	1	2
03	17	5	2	3	7
04	35	5	12	6	12
05	112	35	35	15	27
06	108	23	38	26	21
07	173	53	44	43	33
08	190	47	52	37	54
09	322	74	91	84	73
10	427	82	116	101	128
11	614	123	164	159	168
12	627	152	164	154	157
13	800	160	191	214	235
14	940	258	265	229	188
15	578	176	147	127	128
16	349	109	87	73	80
17	337	77	93	89	78
18	244	62	60	64	58
19	139	55	32	30	22
20	97	24	15	28	30
21	76	31	14	20	11
22	52	19	15	7	11
23	29	7	8	11	3
	6294	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	614
AM Peak Hour Factor	91.37 %
PM Peak Hour Start	13:45
PM Peak Hour Total	987
PM Peak Hour Factor	93.11 %

Mitron Systems Volume Count Report

Site Name	WB AVILA BEACH BETWEEN SAN MIGUEL ST AND SAN LUIS ST
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9891
Direction	West
Date	8/26/2006
Real Time	17:40
Start Date	8/26/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Sunday, September 03, 2006

	9/3/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	2	3	2	0
01	10	1	2	5	2
02	5	0	1	3	1
03	8	3	0	1	4
04	56	6	1	16	33
05	173	37	59	38	39
06	132	37	35	30	30
07	134	49	28	30	27
08	187	35	43	53	56
09	225	46	59	44	76
10	343	82	89	78	94
11	472	105	140	103	124
12	467	105	135	120	107
13	478	138	114	106	120
14	397	92	102	87	116
15	289	75	83	77	54
16	242	72	42	54	74
17	180	41	53	40	46
18	142	37	46	32	27
19	70	18	14	15	23
20	44	8	5	15	16
21	64	23	22	15	4
22	27	9	8	4	6
23	6	1	3	1	1
	4158	Total			

AM Peak Hour Start	11:00	
AM Peak Hour Total	472	
AM Peak Hour Factor	84.29	%
PM Peak Hour Start	12:15	
PM Peak Hour Total	500	
PM Peak Hour Factor	90.58	%

	9/4/2006				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	1	1	1	1
01	2	1	1	0	0
02	5	0	0	1	4
03	24	3	4	2	15
04	243	19	24	65	135
05	544	156	156	108	124
06	285	84	73	57	71
07	165	53	58	32	22
08	123	33	33	31	26
09	142	39	29	34	40
10	137	35	34	24	44
11	171	27	43	49	52
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
	1845	Total			

AM Peak Hour Start	04:45	
AM Peak Hour Total	555	
AM Peak Hour Factor	88.94	%
PM Peak Hour Start		
PM Peak Hour Total		
PM Peak Hour Factor		

Mitron Systems Volume Count Report

Site Name	CAVE LANDING RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9874
Direction	None
Date	8/16/2006
Real Time	12:30
Start Date	8/16/2006
Start Time	13:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

2-directional volume

Wednesday, August 16, 2006

08-16-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13	80	15	22	25	18
14	110	27	26	32	25
15	88	25	27	18	18
16	94	27	24	28	15
17	65	14	22	12	17
18	83	20	19	18	26
19	77	20	19	16	22
20	46	7	20	15	4
21	22	6	6	7	3
22	20	12	4	1	3
23	27	7	9	2	9
	712	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	14:00
PM Peak Hour Total	110
PM Peak Hour Factor	85.94 %

08-17-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	3	0	2	1
01	15	3	5	3	4
02	1	0	1	0	0
03	1	1	0	0	0
04	0	0	0	0	0
05	2	0	0	2	0
06	3	0	0	0	3
07	9	2	6	1	0
08	20	8	4	5	3
09	31	6	2	11	12
10	34	12	8	5	9
11	49	12	13	9	15
12	63	12	17	20	14
13	91	23	28	16	24
14	130	28	33	29	40
15	119	28	30	29	32
16	83	29	15	20	19
17	78	23	19	21	15
18	69	15	29	10	15
19	45	12	10	12	11
20	20	9	8	0	3
21	20	4	4	6	6
22	10	4	3	0	3
23	4	0	1	2	1
	903	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	49
AM Peak Hour Factor	81.67 %
PM Peak Hour Start	14:00
PM Peak Hour Total	130
PM Peak Hour Factor	81.25 %

08-18-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	11	2	3	1	5
01	10	2	3	3	2
02	2	1	0	0	1
03	2	1	0	0	1
04	1	0	0	0	1
05	2	0	0	0	2
06	2	0	0	2	0
07	10	2	1	3	4
08	16	4	3	7	2
09	21	6	8	3	4
10	25	5	4	6	10
11	38	5	14	13	6
12	58	14	14	13	17
13	50	11	16	6	17
14	66	11	19	19	17
15	62	17	20	16	9
16	60	21	9	18	12
17	31	6	10	10	5
18	28	7	8	5	8
19	20	8	6	4	2
20	20	8	3	4	5
21	9	2	3	1	3
22	4	0	3	1	0
23	3	0	2	1	0
	551	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	42
AM Peak Hour Factor	75.00 %
PM Peak Hour Start	14:30
PM Peak Hour Total	73
PM Peak Hour Factor	91.25 %

08-19-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	0	2	0	0
01	6	3	0	1	2
02	2	0	0	0	2
03	1	0	0	0	1
04	1	1	0	0	0
05	0	0	0	0	0
06	3	2	1	0	0
07	2	0	2	0	0
08	14	3	5	3	3
09	18	5	5	4	4
10	23	6	5	6	6
11	50	13	13	9	15
12	49	9	12	13	15
13	55	10	19	17	9
14	85	19	27	21	18
15	49	10	6	15	18
16	60	21	14	10	15
17	47	8	15	16	8
18	61	21	16	17	7
19	60	13	15	10	22
20	18	4	2	9	3
21	9	3	1	3	2
22	13	2	4	4	3
23	8	2	1	0	5
	636	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	50
AM Peak Hour Factor	83.33 %
PM Peak Hour Start	14:00
PM Peak Hour Total	85
PM Peak Hour Factor	78.70 %

Mitron Systems Volume Count Report

Site Name	CAVE LANDING RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9874
Direction	None
Date	8/16/2006
Real Time	12:30
Start Date	8/16/2006
Start Time	13:00
Sample Time	00:15
Operator Number	29
Machine Number	1012

Sunday, August 20, 2006

08-20-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	3	2	1	1
01	7	1	3	1	2
02	0	0	0	0	0
03	1	0	0	1	0
04	2	0	0	2	0
05	0	0	0	0	0
06	7	4	0	2	1
07	11	4	2	2	3
08	3	3	0	0	0
09	8	1	1	0	6
10	25	1	4	13	7
11	30	4	8	11	7
12	42	17	6	12	7
13	68	18	11	18	21
14	74	20	26	15	13
15	56	19	16	13	8
16	46	16	11	9	10
17	34	4	7	8	15
18	43	13	17	9	4
19	29	7	6	8	8
20	21	8	4	5	4
21	15	3	3	3	6
22	5	2	0	0	3
23	12	3	2	6	1
	546	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	32
AM Peak Hour Factor	61.54 %
PM Peak Hour Start	13:30
PM Peak Hour Total	85
PM Peak Hour Factor	81.73 %

08-21-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	13	3	7	1	2
01	6	2	1	0	3
02	4	2	0	2	0
03	0	0	0	0	0
04	1	0	1	0	0
05	5	1	2	1	1
06	7	2	3	2	0
07	5	1	0	3	1
08	7	3	2	2	0
09	10	2	2	1	5
10	27	7	6	6	8
11	27	3	12	9	3
12	43	16	11	9	7
13	52	11	13	14	14
14	67	17	17	19	14
15	51	13	11	16	11
16	56	16	16	15	9
17	42	14	7	9	12
18	38	10	7	7	14
19	30	11	3	9	7
20	27	10	13	2	2
21	16	5	3	3	5
22	15	8	1	3	3
23	11	1	4	6	0
	560	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	32
AM Peak Hour Factor	66.67 %
PM Peak Hour Start	13:45
PM Peak Hour Total	67
PM Peak Hour Factor	88.16 %

08-22-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	11	4	3	1	3
01	5	3	1	0	1
02	0	0	0	0	0
03	4	1	0	0	3
04	6	0	2	0	4
05	5	1	2	1	1
06	6	2	0	1	3
07	12	0	5	5	2
08	8	2	1	1	4
09	20	5	3	11	1
10	30	10	5	8	7
11	38	11	5	14	8
12	75	25	15	13	22
13	60	12	17	12	19
14	58	4	14	24	16
15	70	13	24	17	16
16	74	24	16	14	20
17	43	9	7	9	18
18	43	12	11	9	11
19	40	11	11	13	5
20	24	7	6	5	6
21	13	2	5	2	4
22	31	7	5	10	9
23	12	2	2	2	6
	688	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	38
AM Peak Hour Factor	67.86 %
PM Peak Hour Start	15:15
PM Peak Hour Total	81
PM Peak Hour Factor	84.38 %

08-23-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	19	6	4	4	5
01	6	3	0	2	1
02	4	0	2	1	1
03	6	0	3	3	0
04	3	0	2	1	0
05	4	2	0	0	2
06	6	1	1	2	2
07	21	5	4	6	6
08	10	4	4	0	2
09	23	0	6	11	6
10	26	5	12	3	6
11	47	5	7	19	16
12	80	11	28	19	22
13	100	30	16	19	35
14	59	33	26		
15					
16					
17					
18					
19					
20					
21					
22					
23					
	414	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	47
AM Peak Hour Factor	61.84 %
PM Peak Hour Start	13:30
PM Peak Hour Total	113
PM Peak Hour Factor	80.71 %

Mitron Systems Volume Count Report

Site Name	EB FRONT ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9860
Direction	East
Date	8/11/2006
Real Time	11:56
Start Date	8/11/2006
Start Time	12:00
Sample Time	00:15
Operator Number	57
Machine Number	33

Friday, August 11, 2006

08-11-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12	94	27	20	24	23
13	104	25	31	25	23
14	99	30	23	22	24
15	76	24	20	14	18
16	25	6	5	8	6
17	42	12	8	9	13
18	54	13	13	17	11
19	30	13	5	5	7
20	20	5	5	2	8
21	19	6	8	4	1
22	6	1	1	3	1
23	0	0	0	0	0
	569	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	13:15
PM Peak Hour Total	109
PM Peak Hour Factor	87.90 %

08-12-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	1	0	1	1
01	1	0	0	1	0
02	1	0	1	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	2	0	0	1	1
06	1	1	0	0	0
07	7	2	3	1	1
08	11	2	1	6	2
09	8	4	0	3	1
10	34	7	10	9	8
11	61	9	12	13	27
12	94	18	26	24	26
13	105	28	22	27	28
14	117	27	29	24	37
15	102	22	26	30	24
16	124	34	31	35	24
17	61	17	12	17	15
18	55	8	18	15	14
19	43	20	11	8	4
20	16	9	4	0	3
21	13	3	3	1	6
22	3	0	0	2	1
23	5	2	2	1	0
	867	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	61
AM Peak Hour Factor	56.48 %
PM Peak Hour Start	15:45
PM Peak Hour Total	124
PM Peak Hour Factor	88.57 %

08-13-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	1	0	0	0	1
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	4	0	1	2	1
06	2	0	1	0	1
07	9	2	0	2	5
08	11	3	1	2	5
09	13	2	2	6	3
10	25	3	3	9	10
11	64	12	20	18	14
12	77	18	16	22	21
13	101	13	25	29	34
14	101	22	32	16	31
15	80	15	27	24	14
16	42	12	8	15	7
17	43	13	7	10	13
18	37	9	11	10	7
19	25	9	5	5	6
20	17	4	5	4	4
21	9	2	3	3	1
22	3	3	0	0	0
23	1	0	0	1	0
	665	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	64
AM Peak Hour Factor	80.00 %
PM Peak Hour Start	13:30
PM Peak Hour Total	117
PM Peak Hour Factor	86.03 %

08-14-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	2	1	0	1	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	4	0	0	3	1
06	6	4	0	2	0
07	19	4	5	6	4
08	8	2	0	3	3
09	16	2	4	5	5
10	29	9	7	4	9
11	43	9	15	6	13
12	74	19	14	20	21
13	87	23	18	23	23
14	70	17	27	10	16
15	45	14	15	8	8
16	56	13	17	12	14
17	51	8	21	11	11
18	28	1	9	11	7
19	24	10	2	4	8
20	17	5	1	3	8
21	4	0	1	3	0
22	6	1	2	1	2
23	1	0	0	0	1
	590	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	43
AM Peak Hour Factor	71.67 %
PM Peak Hour Start	13:30
PM Peak Hour Total	90
PM Peak Hour Factor	83.33 %

Mitron Systems Volume Count Report

Site Name	EB FRONT ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9860
Direction	East
Date	8/11/2006
Real Time	11:56
Start Date	8/11/2006
Start Time	12:00
Sample Time	00:15
Operator Number	57
Machine Number	33

Tuesday, August 15, 2006

08-15-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	0	1	0	0
01	0	0	0	0	0
02	1	0	0	0	1
03	0	0	0	0	0
04	0	0	0	0	0
05	3	1	0	1	1
06	1	1	0	0	0
07	15	2	3	6	4
08	23	4	5	5	9
09	17	3	7	0	7
10	69	10	15	23	21
11	59	18	8	10	23
12	94	21	29	24	20
13	86	22	16	27	21
14	95	21	31	23	20
15	61	13	10	18	20
16	45	15	9	6	15
17	45	10	11	10	14
18	35	11	11	8	5
19	31	9	6	7	9
20	9	3	2	2	2
21	9	3	4	2	0
22	4	0	2	1	1
23	1	0	1	0	0
	704	Total			

AM Peak Hour Start	10:15
AM Peak Hour Total	77
AM Peak Hour Factor	83.70 %
PM Peak Hour Start	13:30
PM Peak Hour Total	100
PM Peak Hour Factor	80.65 %

08-16-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	1	0	0	1	0
02	1	0	0	0	1
03	0	0	0	0	0
04	0	0	0	0	0
05	1	0	1	0	0
06	3	0	0	1	2
07	7	2	1	2	2
08	15	1	5	4	5
09	14	3	4	3	4
10	28	4	6	6	12
11	47	6	11	11	19
12	86	23	27	24	12
13	89	22	17	24	26
14	71	22	24	15	10
15	59	22	17	13	7
16	39	8	10	15	6
17	36	13	6	7	10
18	40	15	15	5	5
19	29	9	11	0	9
20	15	6	4	3	2
21	5	2	2	1	0
22	3	1	1	0	1
23	2	0	0	1	1
	591	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	47
AM Peak Hour Factor	61.84 %
PM Peak Hour Start	13:30
PM Peak Hour Total	96
PM Peak Hour Factor	92.31 %

08-17-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	1	0	0	0
01	1	0	1	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	1	0	1	0	0
06	10	0	2	6	2
07	15	3	1	7	4
08	17	3	5	5	4
09	22	5	7	6	4
10	20	2	7	5	6
11	45	10	9	8	18
12	92	16	28	25	23
13	98	35	27	19	17
14	66	15	20	9	22
15	61	25	17	12	7
16	34	8	10	6	10
17	38	4	9	13	12
18	42	6	19	10	7
19	15	7	4	1	3
20	12	5	1	3	3
21	6	2	2	2	0
22	3	0	1	1	1
23	3	1	0	2	0
	602	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	45
AM Peak Hour Factor	62.50 %
PM Peak Hour Start	12:15
PM Peak Hour Total	111
PM Peak Hour Factor	79.29 %

08-18-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	1	0	0	1	0
05	3	0	0	0	3
06	7	0	0	4	3
07	19	2	6	6	5
08	28	6	9	6	7
09	40	9	11	9	11
10	41	6	15	9	11
11	64	15	14	14	21
12	104	27	28	22	27
13	84	19	31	22	12
14	69	14	22	20	13
15	54	12	17	14	11
16	53	11	13	14	15
17	36	11	7	6	12
18	55	15	16	17	7
19	35	11	11	6	7
20	19	8	5	3	3
21	9	3	1	3	2
22	4	0	1	2	1
23	7	2	0	2	3
	732	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	64
AM Peak Hour Factor	76.19 %
PM Peak Hour Start	12:00
PM Peak Hour Total	104
PM Peak Hour Factor	92.86 %

Mitron Systems Volume Count Report

Site Name	EB FRONT ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9860
Direction	East
Date	8/11/2006
Real Time	11:56
Start Date	8/11/2006
Start Time	12:00
Sample Time	00:15
Operator Number	57
Machine Number	33

Saturday, August 19, 2006

08-19-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	0	0	4	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	1	0	1	0	0
06	1	0	0	0	1
07	3	0	0	0	3
08	22	3	2	6	11
09	20	3	8	5	4
10	52	12	7	11	22
11	69	17	19	15	18
12	90	20	24	27	19
13	107	28	18	28	33
14	89	18	25	27	19
15	85	16	20	25	24
16	71	14	25	13	19
17	57	13	15	18	11
18	53	12	12	12	17
19	36	12	11	8	5
20	24	4	7	6	7
21	17	6	2	5	4
22	5	0	3	1	1
23	9	2	1	4	2
	815	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	73
AM Peak Hour Factor	82.95 %
PM Peak Hour Start	13:00
PM Peak Hour Total	107
PM Peak Hour Factor	81.06 %

08-20-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	1	1	0	0	0
03	2	0	1	0	1
04	1	1	0	0	0
05	1	0	1	0	0
06	1	0	0	1	0
07	11	1	6	1	3
08	11	5	2	2	2
09	30	5	8	10	7
10	37	3	12	10	12
11	66	13	15	19	19
12	81	18	26	18	19
13	92	24	20	26	22
14	91	33	22	21	15
15	71	21	22	12	16
16	70	17	12	22	19
17	32	7	11	5	9
18	39	8	12	11	8
19	25	14	3	5	3
20	11	4	4	3	0
21	12	2	6	3	1
22	3	1	0	2	0
23	2	1	0	1	0
	690	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	66
AM Peak Hour Factor	86.84 %
PM Peak Hour Start	13:30
PM Peak Hour Total	103
PM Peak Hour Factor	78.03 %

08-21-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	0	1	0	0
01	1	0	0	1	0
02	2	1	0	0	1
03	0	0	0	0	0
04	0	0	0	0	0
05	2	0	0	0	2
06	7	2	2	1	2
07	12	4	3	2	3
08	13	1	5	3	4
09	28	6	5	4	13
10	37	9	8	8	12
11	62	22	17	4	19
12	72	18	22	18	14
13	89	25	27	21	16
14	68	20	18	15	15
15	52	12	16	13	11
16	31	7	8	10	6
17	24	6	8	4	6
18	46	11	9	13	13
19	31	14	8	4	5
20	16	5	2	9	0
21	8	4	1	1	2
22	3	1	0	2	0
23	2	0	1	0	1
	607	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	62
AM Peak Hour Factor	70.45 %
PM Peak Hour Start	13:00
PM Peak Hour Total	89
PM Peak Hour Factor	82.41 %

08-22-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	1	0	1	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	0	0	0	0	0
06	6	1	1	3	1
07	14	3	5	3	3
08	21	4	6	5	6
09	26	5	5	5	11
10	27	0	8	12	7
11	46	7	10	12	17
12	74	23	12	20	19
13	63	17	21	16	9
14	57	12	17	15	13
15	41	12	11	13	5
16	32	14	8	5	5
17	41	15	8	10	8
18	30	10	7	7	6
19	12	4	4	3	1
20	3	1	0	1	1
21	6	3	1	1	1
22	2	1	0	0	1
23	1	0	1	0	0
	503	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	46
AM Peak Hour Factor	67.65 %
PM Peak Hour Start	12:30
PM Peak Hour Total	77
PM Peak Hour Factor	91.67 %

Mitron Systems Volume Count Report

Site Name	EB FRONT ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9860
Direction	East
Date	8/11/2006
Real Time	11:56
Start Date	8/11/2006
Start Time	12:00
Sample Time	00:15
Operator Number	57
Machine Number	33

Wednesday, August 23, 2006

08-23-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	1	0	1	0
01	1	0	1	0	0
02	1	0	0	0	1
03	0	0	0	0	0
04	0	0	0	0	0
05	0	0	0	0	0
06	9	1	2	3	3
07	5	2	1	2	0
08	10	1	3	3	3
09	9	4	0	2	3
10	33	6	4	14	9
11	48	9	13	14	12
12	60	11	14	17	18
13	75	24	18	18	15
14	58	14	10	8	26
15	42	11	13	8	10
16	31	8	4	9	10
17	25	7	5	8	5
18	10	3	5	1	1
19	4	2	0	0	2
20	1	0	0	1	0
21	0	0	0	0	0
22	3	0	2	0	1
23	0	0	0	0	0
	427	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	48
AM Peak Hour Factor	85.71 %
PM Peak Hour Start	12:45
PM Peak Hour Total	78
PM Peak Hour Factor	81.25 %

08-24-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	1	0	1	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	0	0	0	0	0
06	3	1	0	2	0
07	4	0	0	2	2
08	5	1	0	2	2
09	5	1	0	0	4
10	5	1	3	1	0
11	40	6	5	8	21
12	22	3	5	6	8
13	45	9	12	10	14
14	73	14	19	25	15
15	60	16	10	17	17
16					
17					
18					
19					
20					
21					
22					
23					
	263	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	40
AM Peak Hour Factor	47.62 %
PM Peak Hour Start	14:15
PM Peak Hour Total	75
PM Peak Hour Factor	75.00 %

Mitron Systems Volume Count Report

Site Name	EB + WB Front St
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9859
Direction	None
Date	8/11/2006
Real Time	11:57
Start Date	8/11/2006
Start Time	12:00
Sample Time	00:15
Operator Number	57
Machine Number	33

EB + WB volumes - subtract EB volumes to get WB volumes

Friday, August 11, 2006

08-11-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12	204	35	66	49	54
13	221	64	37	61	59
14	259	78	73	61	47
15	167	50	31	39	47
16	210	41	46	65	58
17	162	52	25	48	37
18	173	47	45	45	36
19	90	27	29	24	10
20	55	13	19	10	13
21	49	19	12	5	13
22	24	10	5	6	3
23	6	5	0	1	0
	1620	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	13:30
PM Peak Hour Total	271
PM Peak Hour Factor	86.86 %

08-12-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	12	2	2	6	2
01	1	0	1	0	0
02	2	0	1	1	0
03	0	0	0	0	0
04	0	0	0	0	0
05	2	0	0	1	1
06	14	2	4	3	5
07	14	4	3	4	3
08	31	5	7	8	11
09	73	24	15	13	21
10	166	24	58	43	41
11	239	49	58	60	72
12	250	51	62	80	57
13	295	75	75	78	67
14	195	66	51	45	33
15	203	53	53	57	40
16	212	64	51	50	47
17	158	46	38	33	41
18	124	24	42	23	35
19	74	20	20	20	14
20	73	30	23	5	15
21	41	8	13	9	11
22	16	3	2	6	5
23	13	4	8	1	0
	2208	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	239
AM Peak Hour Factor	82.99 %
PM Peak Hour Start	13:00
PM Peak Hour Total	295
PM Peak Hour Factor	94.55 %

08-13-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	0	0	3	0
01	8	2	1	3	2
02	0	0	0	0	0
03	4	1	2	1	0
04	0	0	0	0	0
05	7	0	1	5	1
06	7	1	2	1	3
07	15	1	4	6	4
08	47	10	12	7	18
09	88	25	18	18	27
10	118	23	19	44	32
11	254	52	49	73	80
12	235	59	71	43	62
13	195	51	52	47	45
14	234	48	82	44	60
15	242	55	67	62	58
16	175	48	42	58	27
17	172	50	29	37	56
18	123	41	26	26	30
19	87	26	21	21	19
20	72	22	19	23	8
21	22	4	8	7	3
22	11	10	0	1	0
23	1	0	0	1	0
	2120	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	254
AM Peak Hour Factor	79.38 %
PM Peak Hour Start	14:45
PM Peak Hour Total	244
PM Peak Hour Factor	91.04 %

08-14-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	5	0	2	1	2
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	0	0	0	0	0
06	0	0	0	0	0
07	4	1	0	1	2
08	10	0	3	3	4
09	28	0	0	7	21
10	107	27	29	22	29
11	127	26	28	31	42
12	160	47	30	46	37
13	150	43	37	38	32
14	147	31	49	36	31
15	126	36	28	29	33
16	116	38	33	15	30
17	103	23	35	28	17
18	59	9	17	20	13
19	59	10	17	16	16
20	32	6	11	4	11
21	17	5	4	6	2
22	8	0	7	1	0
23	4	2	1	0	1
	1262	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	127
AM Peak Hour Factor	75.60 %
PM Peak Hour Start	12:30
PM Peak Hour Total	163
PM Peak Hour Factor	88.59 %

Mitron Systems Volume Count Report

Site Name	EB + WB Front St
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9859
Direction	None
Date	8/11/2006
Real Time	11:57
Start Date	8/11/2006
Start Time	12:00
Sample Time	00:15
Operator Number	57
Machine Number	33

Tuesday, August 15, 2006

08-15-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	2	1	0	0
01	2	0	2	0	0
02	4	1	0	2	1
03	0	0	0	0	0
04	0	0	0	0	0
05	7	1	0	3	3
06	17	3	2	5	7
07	29	4	5	13	7
08	30	8	12	8	2
09	55	6	21	17	11
10	122	32	23	29	38
11	171	39	39	50	43
12	173	46	48	47	32
13	167	40	53	44	30
14	186	44	65	41	36
15	119	22	27	40	30
16	92	24	28	26	14
17	68	18	15	19	16
18	66	19	18	15	14
19	55	16	10	17	12
20	19	4	8	5	2
21	14	6	5	3	0
22	8	2	2	1	3
23	5	0	0	5	0
	1412	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	171
AM Peak Hour Factor	85.50 %
PM Peak Hour Start	14:00
PM Peak Hour Total	186
PM Peak Hour Factor	71.54 %

08-16-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	1	0	0	0
01	1	0	1	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	1	0	1	0	0
05	3	0	1	0	2
06	14	0	1	6	7
07	38	8	14	12	4
08	50	17	8	14	11
09	57	8	14	17	18
10	63	14	16	17	16
11	88	21	21	15	31
12	115	16	27	38	34
13	179	36	31	69	43
14	150	40	35	37	38
15	137	46	40	22	29
16	92	14	27	32	19
17	69	12	17	19	21
18	81	23	30	10	18
19	50	15	14	12	9
20	27	8	14	3	2
21	19	10	4	4	1
22	10	1	1	4	4
23	8	0	0	5	3
	1253	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	88
AM Peak Hour Factor	70.97 %
PM Peak Hour Start	13:30
PM Peak Hour Total	187
PM Peak Hour Factor	67.75 %

08-17-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	1	0	0	0	1
03	0	0	0	0	0
04	1	0	0	1	0
05	2	2	0	0	0
06	23	2	5	5	11
07	27	9	8	2	8
08	56	8	12	27	9
09	51	11	9	19	12
10	61	10	10	21	20
11	144	24	23	37	60
12	142	49	35	28	30
13	176	36	34	47	59
14	138	36	37	26	39
15	104	32	29	19	24
16	89	34	23	9	23
17	73	17	19	22	15
18	39	15	6	8	10
19	44	10	14	13	7
20	33	7	13	5	8
21	21	4	2	11	4
22	10	4	2	3	1
23	3	0	0	1	2
	1238	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	144
AM Peak Hour Factor	60.00 %
PM Peak Hour Start	13:30
PM Peak Hour Total	179
PM Peak Hour Factor	75.85 %

08-18-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	1	0	0	1
01	2	1	0	0	1
02	1	0	0	1	0
03	0	0	0	0	0
04	1	0	0	1	0
05	3	0	0	2	1
06	17	2	0	8	7
07	31	3	13	8	7
08	27	11	7	4	5
09	37	14	12	6	5
10	71	9	21	19	22
11	101	23	26	25	27
12	208	47	69	30	62
13	193	49	49	48	47
14	216	66	60	45	45
15	111	20	32	28	31
16	142	35	27	51	29
17	146	49	34	32	31
18	116	38	21	35	22
19	81	23	20	17	21
20	64	23	15	17	9
21	19	4	5	4	6
22	10	4	1	3	2
23	8	2	0	2	4
	1607	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	101
AM Peak Hour Factor	93.52 %
PM Peak Hour Start	13:30
PM Peak Hour Total	221
PM Peak Hour Factor	83.71 %

Mitron Systems Volume Count Report

Site Name	EB + WB Front St
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9859
Direction	None
Date	8/11/2006
Real Time	11:57
Start Date	8/11/2006
Start Time	12:00
Sample Time	00:15
Operator Number	57
Machine Number	33

Saturday, August 19, 2006

08-19-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	3	4	1	0
01	1	0	1	0	0
02	2	1	0	1	0
03	1	0	0	1	0
04	0	0	0	0	0
05	3	0	1	0	2
06	11	0	0	6	5
07	20	4	2	8	6
08	53	11	5	11	26
09	83	13	27	24	19
10	99	19	20	34	26
11	178	38	45	46	49
12	151	29	49	34	39
13	235	48	55	68	64
14	190	43	46	51	50
15	171	40	49	39	43
16	215	53	70	47	45
17	137	34	38	37	28
18	114	22	16	44	32
19	62	13	26	13	10
20	38	8	16	9	5
21	39	11	11	6	11
22	24	5	8	6	5
23	8	2	2	3	1
	1843	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	178
AM Peak Hour Factor	90.82 %
PM Peak Hour Start	13:00
PM Peak Hour Total	235
PM Peak Hour Factor	86.40 %

08-20-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	0	0	0	3
01	3	2	1	0	0
02	0	0	0	0	0
03	6	0	3	0	3
04	1	1	0	0	0
05	4	0	0	0	4
06	8	1	3	3	1
07	26	5	9	6	6
08	44	4	13	9	18
09	89	28	14	19	28
10	153	18	33	31	71
11	137	41	38	24	34
12	234	47	69	49	69
13	247	59	62	78	48
14	196	61	45	37	53
15	190	58	47	43	42
16	145	39	23	35	48
17	140	40	39	31	30
18	69	18	22	17	12
19	56	14	10	13	19
20	24	12	9	1	2
21	22	5	7	3	7
22	5	1	2	2	0
23	3	2	0	1	0
	1805	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	181
AM Peak Hour Factor	63.73 %
PM Peak Hour Start	12:45
PM Peak Hour Total	268
PM Peak Hour Factor	85.90 %

08-21-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	0	1	0	0
01	2	1	0	1	0
02	5	2	0	2	1
03	0	0	0	0	0
04	3	0	2	0	1
05	4	0	0	4	0
06	18	6	5	2	5
07	26	3	11	3	9
08	40	12	12	8	8
09	52	14	11	7	20
10	75	16	16	21	22
11	92	31	24	14	23
12	113	27	38	23	25
13	146	36	35	44	31
14	108	30	27	25	26
15	84	33	24	18	9
16	74	17	19	25	13
17	63	16	15	16	16
18	79	22	20	25	12
19	59	20	14	12	13
20	39	10	14	15	0
21	13	7	3	3	0
22	11	5	0	5	1
23	3	0	1	0	2
	1110	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	98
AM Peak Hour Factor	79.03 %
PM Peak Hour Start	13:00
PM Peak Hour Total	146
PM Peak Hour Factor	82.95 %

08-22-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	2	0	1	1	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	1	0	0	0	1
06	21	1	0	8	12
07	30	2	4	11	13
08	33	5	7	14	7
09	52	19	2	7	24
10	88	17	15	35	21
11	134	31	27	32	44
12	212	61	55	47	49
13	165	37	46	47	35
14	172	45	55	39	33
15	100	23	25	32	20
16	94	26	21	28	19
17	102	46	20	13	23
18	60	17	14	12	17
19	59	12	14	11	22
20	38	3	18	12	5
21	26	13	2	6	5
22	11	2	5	0	4
23	10	0	4	4	2
	1410	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	134
AM Peak Hour Factor	76.14 %
PM Peak Hour Start	12:00
PM Peak Hour Total	212
PM Peak Hour Factor	86.89 %

Mitron Systems Volume Count Report

Site Name	EB + WB Front St
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9859
Direction	None
Date	8/11/2006
Real Time	11:57
Start Date	8/11/2006
Start Time	12:00
Sample Time	00:15
Operator Number	57
Machine Number	33

Wednesday, August 23, 2006

08-23-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	5	0	0	5	0
01	3	0	0	3	0
02	0	0	0	0	0
03	0	0	0	0	0
04	2	0	0	2	0
05	3	0	0	0	3
06	30	1	2	15	12
07	25	4	7	13	1
08	34	7	8	5	14
09	46	18	3	13	12
10	65	8	21	17	19
11	124	31	27	39	27
12	167	20	39	42	66
13	184	50	59	43	32
14	106	28	24	22	32
15	98	25	32	19	22
16	73	13	8	31	21
17	72	19	10	22	21
18	60	7	15	25	13
19	76	15	20	22	19
20	28	10	11	4	3
21	27	6	5	12	4
22	15	7	2	2	4
23	2	0	0	2	0
	1245	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	124
AM Peak Hour Factor	79.49 %
PM Peak Hour Start	12:45
PM Peak Hour Total	218
PM Peak Hour Factor	82.58 %

08-24-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	0	1	0	0
01	1	0	1	0	0
02	0	0	0	0	0
03	1	0	1	0	0
04	3	0	3	0	0
05	1	0	0	0	1
06	14	0	2	4	8
07	33	9	13	9	2
08	54	17	6	23	8
09	49	4	9	20	16
10	88	19	18	24	27
11	115	25	28	14	48
12	215	60	61	41	53
13	127	29	30	46	22
14	157	46	44	29	38
15					
16					
17					
18					
19					
20					
21					
22					
23					
	859	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	115
AM Peak Hour Factor	59.90 %
PM Peak Hour Start	12:00
PM Peak Hour Total	215
PM Peak Hour Factor	88.11 %

Mitron Systems Volume Count Report

Site Name	NB/SB MONTE RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9873
Direction	None
Date	8/18/2006
Real Time	17:30
Start Date	8/18/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	815

2-directional volume

Friday, August 18, 2006

08-18-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18	42	14	11	10	7
19	24	10	5	5	4
20	26	7	8	8	3
21	22	5	8	3	6
22	9	3	3	2	1
23	14	5	2	4	3
	137	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	18:00
PM Peak Hour Total	42
PM Peak Hour Factor	75.00 %

08-19-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	5	3	1	0	1
01	1	0	0	1	0
02	3	2	0	1	0
03	0	0	0	0	0
04	0	0	0	0	0
05	3	1	1	0	1
06	12	3	0	4	5
07	18	4	1	5	8
08	55	16	5	14	20
09	43	14	8	10	11
10	56	15	18	14	9
11	60	11	17	16	16
12	59	15	17	7	20
13	40	6	11	18	5
14	47	15	12	8	12
15	47	18	5	10	14
16	32	5	9	6	12
17	60	19	15	18	8
18	39	10	10	7	12
19	40	10	15	9	6
20	31	5	8	6	12
21	27	4	14	3	6
22	19	5	7	1	6
23	11	3	4	0	4
	708	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	60
AM Peak Hour Factor	88.24 %
PM Peak Hour Start	16:45
PM Peak Hour Total	64
PM Peak Hour Factor	84.21 %

08-20-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	1	0	2	1
01	2	0	0	0	2
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	3	0	0	2	1
06	20	2	5	6	7
07	10	1	3	2	4
08	26	3	6	9	8
09	34	4	6	6	18
10	29	9	8	6	6
11	28	2	11	11	4
12	42	14	12	10	6
13	58	7	15	19	17
14	39	9	6	14	10
15	43	17	9	7	10
16	50	12	13	9	16
17	50	14	15	10	11
18	45	14	9	14	8
19	32	10	9	8	5
20	20	7	3	4	6
21	9	4	2	2	1
22	15	4	5	3	3
23	2	1	0	0	1
	561	Total			

AM Peak Hour Start	09:30
AM Peak Hour Total	41
AM Peak Hour Factor	56.94 %
PM Peak Hour Start	13:15
PM Peak Hour Total	60
PM Peak Hour Factor	78.95 %

08-21-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	0	1	0	0
01	0	0	0	0	0
02	1	0	0	0	1
03	0	0	0	0	0
04	6	1	0	0	5
05	14	3	2	2	7
06	23	3	3	6	11
07	41	5	8	15	13
08	51	18	12	11	10
09	36	4	8	8	16
10	51	11	12	14	14
11	40	6	6	12	16
12	42	8	10	10	14
13	38	6	8	15	9
14	57	16	18	16	7
15	47	13	14	9	11
16	45	11	9	15	10
17	66	17	20	17	12
18	59	16	19	10	14
19	27	8	8	7	4
20	21	1	6	5	9
21	14	4	5	4	1
22	10	3	1	2	4
23	6	0	2	3	1
	696	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	58
AM Peak Hour Factor	80.56 %
PM Peak Hour Start	17:00
PM Peak Hour Total	66
PM Peak Hour Factor	82.50 %

Mitron Systems Volume Count Report

Site Name	NB/SB MONTE RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9873
Direction	None
Date	8/18/2006
Real Time	17:30
Start Date	8/18/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	815

Tuesday, August 22, 2006

	08-22-06 (Ch1)				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	2	0	2	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	1	1	0	0	0
05	10	2	3	4	1
06	17	3	5	4	5
07	54	8	4	20	22
08	43	11	10	10	12
09	33	9	8	5	11
10	47	9	12	10	16
11	47	14	8	11	14
12	51	11	15	10	15
13	43	9	9	13	12
14	55	10	18	15	12
15	52	14	13	14	11
16	61	9	20	17	15
17	57	14	16	19	8
18	54	14	15	11	14
19	42	6	13	13	10
20	30	11	5	7	7
21	14	4	0	5	5
22	15	6	5	2	2
23	5	2	2	0	1
	735	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	63
AM Peak Hour Factor	71.59 %
PM Peak Hour Start	16:15
PM Peak Hour Total	66
PM Peak Hour Factor	82.50 %

	08-23-06 (Ch1)				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	0	1	1	1
01	2	0	2	0	0
02	1	1	0	0	0
03	1	0	1	0	0
04	1	1	0	0	0
05	13	2	0	5	6
06	26	7	2	5	12
07	52	5	12	11	24
08	47	10	18	10	9
09	33	7	11	6	9
10	45	8	18	8	11
11	50	15	12	10	13
12	43	12	11	11	9
13	47	8	13	13	13
14	40	11	6	17	6
15	58	17	19	12	10
16	65	16	18	13	18
17	61	16	14	16	15
18	44	14	11	7	12
19	41	9	8	9	15
20	28	6	10	7	5
21	24	7	9	4	4
22	11	4	3	1	3
23	2	0	0	2	0
	738	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	63
AM Peak Hour Factor	65.63 %
PM Peak Hour Start	16:00
PM Peak Hour Total	65
PM Peak Hour Factor	90.28 %

	08-24-06 (Ch1)				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	2	1	1	0	0
05	5	3	0	0	2
06	24	5	7	8	4
07	50	8	6	23	13
08	50	13	7	14	16
09	46	12	14	11	9
10	55	14	5	16	20
11	49	15	5	14	15
12	43	7	15	10	11
13	37	11	6	12	8
14	52	14	13	19	6
15	47	18	8	12	9
16	61	11	13	19	18
17	67	11	25	17	14
18	38	9	13	9	7
19	35	8	13	4	10
20	27	5	10	4	8
21	20	6	6	4	4
22	11	6	2	3	0
23	9	5	1	0	3
	728	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	56
AM Peak Hour Factor	60.87 %
PM Peak Hour Start	16:30
PM Peak Hour Total	73
PM Peak Hour Factor	73.00 %

	08-25-06 (Ch1)				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	0	1	0	1
01	1	0	1	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	1	1	0	0	0
05	6	0	0	4	2
06	21	3	4	4	10
07	40	10	9	11	10
08	52	19	9	7	17
09	42	11	8	14	9
10	40	7	15	7	11
11	44	8	12	13	11
12	53	19	4	13	17
13	58	11	17	13	17
14	50	14	15	16	5
15	62	14	17	13	18
16	52	14	12	13	13
17	74	26	19	15	14
18	52	19	10	10	13
19	50	13	17	8	12
20	34	16	7	9	2
21	29	5	5	5	14
22	24	11	2	5	6
23	18	8	1	5	4
	805	Total			

AM Peak Hour Start	08:00
AM Peak Hour Total	52
AM Peak Hour Factor	68.42 %
PM Peak Hour Start	17:00
PM Peak Hour Total	74
PM Peak Hour Factor	71.15 %

Mitron Systems Volume Count Report

Site Name	NB/SB MONTE RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9873
Direction	None
Date	8/18/2006
Real Time	17:30
Start Date	8/18/2006
Start Time	18:00
Sample Time	00:15
Operator Number	29
Machine Number	815

Saturday, August 26, 2006

	08-26-06 (Ch1)				
HR Begin	HR Total	00-15	15-30	30-45	45-00
00	5	3	1	0	1
01	1	1	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	7	3	4	0	0
06	7	1	2	2	2
07	21	5	7	1	8
08	38	4	10	11	13
09	45	13	13	9	10
10	55	10	9	22	14
11	62	12	15	18	17
12	55	10	17	13	15
13	64	16	13	16	19
14	18	18			
15					
16					
17					
18					
19					
20					
21					
22					
23					
	378	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	63
AM Peak Hour Factor	71.59 %
PM Peak Hour Start	13:15
PM Peak Hour Total	66
PM Peak Hour Factor	86.84 %

Mitron Systems Volume Count Report

Site Name	NB Ontario
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9873
Direction	North
Date	8/11/2006
Real Time	16:50
Start Date	8/11/2006
Start Time	17:00
Sample Time	00:15
Operator Number	57
Machine Number	27

Friday, August 11, 2006

08-11-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17	52	10	23	10	9
18	51	17	17	14	3
19	43	21	5	9	8
20	17	4	2	5	6
21	10	7	2	0	1
22	6	0	4	0	2
23	3	0	3	0	0
	182	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	17:15
PM Peak Hour Total	59
PM Peak Hour Factor	64.13 %

08-12-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	1	0	0	2
01	4	3	0	1	0
02	1	0	0	0	1
03	1	1	0	0	0
04	0	0	0	0	0
05	1	0	0	0	1
06	1	0	0	1	0
07	16	4	6	3	3
08	14	1	5	5	3
09	45	5	9	12	19
10	34	10	10	6	8
11	78	11	29	18	20
12	94	20	20	25	29
13	86	37	15	22	12
14	108	29	31	22	26
15	99	32	30	19	18
16	83	19	17	20	27
17	69	18	20	12	19
18	47	17	18	8	4
19	30	6	4	16	4
20	9	2	4	2	1
21	13	2	3	2	6
22	5	0	1	1	3
23	4	0	0	0	4
	845	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	78
AM Peak Hour Factor	67.24 %
PM Peak Hour Start	12:15
PM Peak Hour Total	111
PM Peak Hour Factor	75.00 %

08-13-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	0	2	0	1
01	1	0	1	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	1	1	0	0	0
05	0	0	0	0	0
06	1	0	1	0	0
07	5	2	1	1	1
08	12	7	1	1	3
09	47	5	7	10	25
10	52	14	12	10	16
11	72	12	20	13	27
12	69	18	20	16	15
13	98	16	23	24	35
14	75	9	21	21	24
15	111	33	32	28	18
16	116	37	24	23	32
17	77	27	10	26	14
18	53	13	3	21	16
19	36	2	6	25	3
20	9	2	2	0	5
21	3	2	1	0	0
22	5	0	1	2	2
23	1	0	0	0	1
	847	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	72
AM Peak Hour Factor	66.67 %
PM Peak Hour Start	14:45
PM Peak Hour Total	117
PM Peak Hour Factor	88.64 %

08-14-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	1	0	0	0	1
02	1	0	0	1	0
03	0	0	0	0	0
04	0	0	0	0	0
05	0	0	0	0	0
06	15	7	2	3	3
07	19	4	6	4	5
08	22	1	6	6	9
09	26	7	6	4	9
10	44	3	13	10	18
11	47	18	12	9	8
12	37	11	9	5	12
13	55	7	19	15	14
14	43	9	10	11	13
15	66	13	16	23	14
16	48	12	10	12	14
17	54	18	8	13	15
18	50	13	8	15	14
19	20	6	6	6	2
20	18	6	6	3	3
21	9	2	3	2	2
22	2	1	1	0	0
23	3	1	2	0	0
	580	Total			

AM Peak Hour Start	10:15
AM Peak Hour Total	59
AM Peak Hour Factor	81.94 %
PM Peak Hour Start	15:00
PM Peak Hour Total	66
PM Peak Hour Factor	71.74 %

Mitron Systems Volume Count Report

Site Name	NB Ontario
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9873
Direction	North
Date	8/11/2006
Real Time	16:50
Start Date	8/11/2006
Start Time	17:00
Sample Time	00:15
Operator Number	57
Machine Number	27

Tuesday, August 15, 2006

08-15-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	1	0	0	0	1
04	1	1	0	0	0
05	5	0	0	4	1
06	8	1	1	3	3
07	25	5	9	7	4
08	16	2	5	6	3
09	19	2	3	8	6
10	40	9	9	11	11
11	64	24	21	9	10
12	49	12	9	14	14
13	49	10	10	10	19
14	69	22	19	19	9
15	69	15	11	32	11
16	44	13	10	14	7
17	70	12	19	21	18
18	27	11	5	8	3
19	57	6	31	10	10
20	9	0	3	3	3
21	8	2	3	3	0
22	3	0	3	0	0
23	0	0	0	0	0
	633	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	67
AM Peak Hour Factor	69.79 %
PM Peak Hour Start	13:45
PM Peak Hour Total	79
PM Peak Hour Factor	89.77 %

08-16-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	0	1	0	2
01	0	0	0	0	0
02	3	1	0	0	2
03	1	0	0	0	1
04	1	0	0	0	1
05	10	1	1	5	3
06	11	4	0	3	4
07	30	15	10	1	4
08	24	3	6	9	6
09	21	5	5	9	2
10	35	8	5	11	11
11	50	20	10	12	8
12	54	14	16	10	14
13	59	20	13	12	14
14	70	12	22	12	24
15	43	12	13	12	6
16	53	10	13	15	15
17	65	14	28	11	12
18	34	8	8	10	8
19	58	9	14	20	15
20	11	4	4	2	1
21	5	0	0	3	2
22	6	3	0	2	1
23	4	0	3	1	0
	651	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	53
AM Peak Hour Factor	66.25 %
PM Peak Hour Start	16:30
PM Peak Hour Total	72
PM Peak Hour Factor	64.29 %

08-17-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	0	1	0	1
01	0	0	0	0	0
02	2	0	0	0	2
03	0	0	0	0	0
04	0	0	0	0	0
05	6	0	1	4	1
06	12	5	0	1	6
07	22	9	7	0	6
08	23	1	5	7	10
09	31	3	5	13	10
10	47	3	14	9	21
11	38	8	10	8	12
12	62	17	17	18	10
13	73	17	13	23	20
14	54	18	6	13	17
15	69	12	15	19	23
16	76	16	13	19	28
17	55	11	11	10	23
18	56	21	12	14	9
19	26	15	1	5	5
20	10	3	3	1	3
21	10	1	5	4	0
22	7	2	5	0	0
23	5	0	0	5	0
	686	Total			

AM Peak Hour Start	10:15
AM Peak Hour Total	52
AM Peak Hour Factor	61.90 %
PM Peak Hour Start	16:00
PM Peak Hour Total	76
PM Peak Hour Factor	67.86 %

08-18-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	1	0	1	0	0
04	0	0	0	0	0
05	10	2	1	0	7
06	6	2	1	3	0
07	26	18	3	1	4
08	26	4	4	11	7
09	23	2	7	7	7
10	49	12	13	17	7
11	48	19	11	11	7
12	57	11	11	24	11
13	50	16	13	15	6
14	54	12	12	20	10
15	60	11	14	20	15
16	83	27	17	16	23
17	30	9	6	7	8
18	35	16	16	3	
19					
20					
21					
22					
23					
	558	Total			

AM Peak Hour Start	10:15
AM Peak Hour Total	56
AM Peak Hour Factor	73.68 %
PM Peak Hour Start	16:00
PM Peak Hour Total	83
PM Peak Hour Factor	76.85 %

Mitron Systems Volume Count Report

Site Name	SB Ontario
Jurisdiction	
Study Type	Volume (ch1)
Location Code	8971
Direction	South
Date	8/11/2006
Real Time	16:35
Start Date	8/11/2006
Start Time	17:00
Sample Time	00:15
Operator Number	57
Machine Number	34

Friday, August 11, 2006

08-11-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17	127	19	43	46	19
18	32	14	7	6	5
19	16	4	4	4	4
20	11	4	0	1	6
21	4	3	1	0	0
22	4	0	2	1	1
23	6	0	3	2	1
	200	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	17:00
PM Peak Hour Total	127
PM Peak Hour Factor	69.02 %

08-12-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	0	0	0	1
01	2	1	0	0	1
02	1	0	0	1	0
03	0	0	0	0	0
04	1	0	1	0	0
05	2	1	0	0	1
06	5	0	2	2	1
07	5	2	1	1	1
08	18	1	5	8	4
09	25	6	12	5	2
10	27	6	3	2	16
11	46	15	8	13	10
12	44	10	16	9	9
13	52	12	16	13	11
14	58	21	10	12	15
15	62	18	14	17	13
16	53	20	14	11	8
17	45	11	15	9	10
18	17	4	8	2	3
19	9	1	1	3	4
20	10	4	2	1	3
21	7	4	0	1	2
22	3	0	1	1	1
23	4	1	1	1	1
	497	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	52
AM Peak Hour Factor	81.25 %
PM Peak Hour Start	14:45
PM Peak Hour Total	64
PM Peak Hour Factor	88.89 %

08-13-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	1	1	0	0
01	0	0	0	0	0
02	1	1	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	2	1	0	1	0
06	3	1	0	1	1
07	6	1	1	3	1
08	8	1	1	2	4
09	18	6	6	1	5
10	35	6	8	9	12
11	35	6	11	8	10
12	57	20	10	17	10
13	60	19	13	12	16
14	58	14	8	10	26
15	46	11	9	10	16
16	41	12	10	14	5
17	52	8	8	14	22
18	20	4	6	5	5
19	12	2	3	5	2
20	6	1	1	3	1
21	4	2	1	0	1
22	2	0	1	1	0
23	1	1	0	0	0
	469	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	38
AM Peak Hour Factor	79.17 %
PM Peak Hour Start	13:00
PM Peak Hour Total	60
PM Peak Hour Factor	78.95 %

08-14-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	2	1	0	1	0
02	1	1	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	0	0	0	0	0
06	9	3	2	1	3
07	6	1	2	2	1
08	19	1	6	5	7
09	19	3	9	4	3
10	22	4	7	4	7
11	43	3	6	23	11
12	34	13	4	9	8
13	42	7	16	6	13
14	39	9	11	9	10
15	43	10	13	9	11
16	45	8	8	16	13
17	57	9	21	16	11
18	30	4	11	9	6
19	12	4	3	4	1
20	13	0	4	3	6
21	10	5	3	2	0
22	2	1	1	0	0
23	0	0	0	0	0
	448	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	43
AM Peak Hour Factor	46.74 %
PM Peak Hour Start	16:30
PM Peak Hour Total	59
PM Peak Hour Factor	70.24 %

Mitron Systems Volume Count Report

Site Name	SB Ontario
Jurisdiction	
Study Type	Volume (ch1)
Location Code	8971
Direction	South
Date	8/11/2006
Real Time	16:35
Start Date	8/11/2006
Start Time	17:00
Sample Time	00:15
Operator Number	57
Machine Number	34

Tuesday, August 15, 2006

08-15-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	2	0	0	0	2
02	1	1	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	2	1	0	1	0
06	7	0	3	1	3
07	18	4	5	7	2
08	23	3	7	6	7
09	12	3	2	2	5
10	37	5	11	11	10
11	44	12	12	5	15
12	40	19	6	8	7
13	43	10	10	10	13
14	30	9	7	6	8
15	34	7	6	10	11
16	37	5	9	15	8
17	113	8	42	47	16
18	28	7	9	4	8
19	15	0	7	4	4
20	12	3	6	1	2
21	16	1	5	6	4
22	2	1	0	1	0
23	0	0	0	0	0
	516	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	45
AM Peak Hour Factor	93.75 %
PM Peak Hour Start	17:00
PM Peak Hour Total	113
PM Peak Hour Factor	60.11 %

08-16-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	1	0	0	1	0
02	1	1	0	0	0
03	1	1	0	0	0
04	0	0	0	0	0
05	1	0	0	0	1
06	4	2	0	1	1
07	11	5	1	1	4
08	17	1	8	3	5
09	21	5	5	6	5
10	32	5	8	10	9
11	57	10	18	15	14
12	43	17	8	11	7
13	29	8	12	5	4
14	27	3	10	9	5
15	41	9	14	7	11
16	51	10	11	10	20
17	55	7	22	9	17
18	50	16	17	7	10
19	19	9	7	2	1
20	12	3	1	2	6
21	0	0	0	0	0
22	1	0	0	0	1
23	2	1	0	1	0
	476	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	57
AM Peak Hour Factor	79.17 %
PM Peak Hour Start	17:15
PM Peak Hour Total	64
PM Peak Hour Factor	72.73 %

08-17-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	0	1	0	1
01	0	0	0	0	0
02	0	0	0	0	0
03	1	0	0	0	1
04	0	0	0	0	0
05	0	0	0	0	0
06	10	2	0	5	3
07	8	1	2	5	0
08	22	3	3	8	8
09	26	7	6	2	11
10	35	10	3	8	14
11	33	6	10	8	9
12	28	3	10	8	7
13	29	8	2	4	15
14	37	10	6	10	11
15	30	5	7	13	5
16	47	15	10	15	7
17	67	13	19	19	16
18	28	6	8	13	1
19	18	8	5	2	3
20	18	4	2	7	5
21	5	2	1	0	2
22	3	0	0	3	0
23	2	0	0	1	1
	449	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	38
AM Peak Hour Factor	67.86 %
PM Peak Hour Start	17:00
PM Peak Hour Total	67
PM Peak Hour Factor	88.16 %

08-18-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	2	0	0	0
01	1	0	0	1	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	0	0	0	0	0
06	3	0	0	2	1
07	12	3	4	2	3
08	20	1	4	7	8
09	27	7	5	5	10
10	32	7	9	5	11
11	29	5	5	12	7
12	38	8	6	13	11
13	32	12	7	6	7
14	31	8	6	12	5
15	59	11	9	17	22
16	55	19	5	21	10
17	82	17	23	27	15
18	22	10	8	4	
19					
20					
21					
22					
23					
	445	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	33
AM Peak Hour Factor	68.75 %
PM Peak Hour Start	17:00
PM Peak Hour Total	82
PM Peak Hour Factor	75.93 %

Mitron Systems Volume Count Report

Site Name	NB PALISADES RD
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9888
Direction	North
Date	8/26/2006
Real Time	16:58
Start Date	8/26/2006
Start Time	17:00
Sample Time	00:15
Operator Number	29
Machine Number	2303

Saturday, August 26, 2006

08-26-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17	133	37	42	30	24
18	110	23	39	20	28
19	84	28	16	19	21
20	60	19	20	10	11
21	30	13	8	5	4
22	16	5	5	4	2
23	11	5	3	2	1
	444	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	17:00
PM Peak Hour Total	133
PM Peak Hour Factor	79.17 %

08-27-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	10	3	3	2	2
01	5	2	1	1	1
02	2	1	1	0	0
03	2	1	0	0	1
04	2	2	0	0	0
05	3	2	0	1	0
06	4	1	0	1	2
07	32	7	6	4	15
08	46	10	16	9	11
09	50	10	14	14	12
10	83	16	22	27	18
11	91	25	14	27	25
12	87	18	24	21	24
13	117	32	33	25	27
14	120	24	35	32	29
15	124	40	32	28	24
16	148	36	41	42	29
17	138	37	45	28	28
18	107	26	25	34	22
19	84	26	21	19	18
20	52	13	7	21	11
21	33	16	7	5	5
22	13	3	2	5	3
23	12	4	6	2	0
	1365	Total			

AM Peak Hour Start	10:15
AM Peak Hour Total	92
AM Peak Hour Factor	85.19 %
PM Peak Hour Start	16:30
PM Peak Hour Total	153
PM Peak Hour Factor	85.00 %

08-28-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	3	2	2	1
01	2	0	0	2	0
02	1	1	0	0	0
03	1	0	0	0	1
04	3	2	0	0	1
05	5	0	2	1	2
06	15	1	0	3	11
07	29	11	6	6	6
08	60	15	15	14	16
09	54	20	13	7	14
10	82	20	24	19	19
11	85	19	15	18	33
12	86	21	24	24	17
13	119	34	31	19	35
14	109	37	25	26	21
15	131	29	34	37	31
16	212	42	73	45	52
17	181	43	46	48	44
18	108	28	28	26	26
19	64	17	19	12	16
20	55	26	9	5	15
21	21	8	5	5	3
22	15	4	2	3	6
23	13	3	4	4	2
	1459	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	85
AM Peak Hour Factor	64.39 %
PM Peak Hour Start	16:15
PM Peak Hour Total	213
PM Peak Hour Factor	72.95 %

08-29-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	3	2	2	0
01	4	1	3	0	0
02	2	2	0	0	0
03	2	1	0	1	0
04	0	0	0	0	0
05	1	0	0	0	1
06	12	1	1	5	5
07	32	9	8	8	7
08	65	19	12	23	11
09	68	21	13	22	12
10	97	18	28	15	36
11	108	32	30	21	25
12	199	47	25	60	67
13	423	84	115	125	99
14	304	78	41	66	119
15	509	112	110	161	126
16	487	108	126	126	127
17	508	117	191	115	85
18	298	83	72	71	72
19	143	41	41	40	21
20	86	30	25	16	15
21	60	25	9	16	10
22	36	9	10	8	9
23	18	8	7	1	2
	3469	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	119
AM Peak Hour Factor	82.64 %
PM Peak Hour Start	16:30
PM Peak Hour Total	561
PM Peak Hour Factor	73.43 %

Mitron Systems Volume Count Report

Site Name	NB PALISADES RD
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9888
Direction	North
Date	8/26/2006
Real Time	16:58
Start Date	8/26/2006
Start Time	17:00
Sample Time	00:15
Operator Number	29
Machine Number	2303

Wednesday, August 30, 2006

08-30-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	15	7	4	4	0
01	4	0	2	1	1
02	42	40	1	1	0
03	5	0	5	0	0
04	8	0	1	4	3
05	34	6	4	7	17
06	97	8	23	28	38
07	106	38	33	20	15
08	93	28	28	15	22
09	92	26	22	17	27
10	100	19	28	21	32
11	113	23	32	33	25
12	128	29	23	33	43
13	199	35	36	84	44
14	139	33	42	30	34
15	159	28	43	40	48
16	177	41	51	46	39
17	169	53	42	35	39
18	107	33	30	22	22
19	80	18	27	21	14
20	56	19	10	11	16
21	46	12	11	14	9
22	23	12	5	2	4
23	13	0	8	1	4
	2005	Total			

AM Peak Hour Start	06:30
AM Peak Hour Total	137
AM Peak Hour Factor	90.13 %
PM Peak Hour Start	13:30
PM Peak Hour Total	203
PM Peak Hour Factor	60.42 %

08-31-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	2	1	1	2
01	4	1	1	0	2
02	5	1	1	1	2
03	1	0	0	0	1
04	3	0	2	1	0
05	6	3	2	1	0
06	14	3	3	2	6
07	32	3	8	7	14
08	62	21	18	14	9
09	75	22	15	15	23
10	99	19	35	20	25
11	138	36	28	29	45
12	106	20	35	25	26
13	143	25	38	39	41
14	154	29	40	43	42
15	166	30	33	42	61
16	179	47	43	45	44
17	251	54	69	92	36
18	153	29	52	31	41
19	167	47	34	47	39
20	83	26	24	13	20
21	55	17	13	14	11
22	40	14	14	8	4
23	20	5	5	5	5
	1962	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	138
AM Peak Hour Factor	76.67 %
PM Peak Hour Start	16:45
PM Peak Hour Total	259
PM Peak Hour Factor	70.38 %

09-01-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	13	4	5	2	2
01	16	2	3	4	7
02	5	3	0	1	1
03	2	0	0	0	2
04	3	2	1	0	0
05	5	2	1	1	1
06	14	1	1	6	6
07	28	5	4	3	16
08	37	15	5	10	7
09	81	17	13	26	25
10	91	11	23	27	30
11	143	30	35	40	38
12	153	46	38	34	35
13	170	52	39	43	36
14	170	44	44	40	42
15	162	32	51	33	46
16	203	44	53	52	54
17	153	50	26	37	40
18	128	45	22	26	35
19	100	29	20	24	27
20	91	21	28	20	22
21	69	14	19	21	15
22	55	15	16	15	9
23	32	16	7	4	5
	1924	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	143
AM Peak Hour Factor	89.38 %
PM Peak Hour Start	16:15
PM Peak Hour Total	209
PM Peak Hour Factor	96.76 %

09-02-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	13	7	4	1	1
01	8	4	3	1	0
02	8	3	3	2	0
03	1	0	0	0	1
04	3	3	0	0	0
05	3	1	1	1	0
06	11	2	2	4	3
07	17	1	6	5	5
08	32	8	8	9	7
09	52	6	15	8	23
10	97	27	15	24	31
11	146	44	42	22	38
12	184	27	43	53	61
13	267	56	55	95	61
14	175	43	38	50	44
15	187	44	40	36	67
16	189	45	44	43	57
17	138	49	29	35	25
18	164	48	37	48	31
19	147	51	47	23	26
20	56	26	12	7	11
21	48	11	14	18	5
22	21	4	6	8	3
23	17	4	4	4	5
	1984	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	146
AM Peak Hour Factor	82.95 %
PM Peak Hour Start	12:45
PM Peak Hour Total	267
PM Peak Hour Factor	70.26 %

Mitron Systems Volume Count Report

Site Name	NB PALISADES RD
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9888
Direction	North
Date	8/26/2006
Real Time	16:58
Start Date	8/26/2006
Start Time	17:00
Sample Time	00:15
Operator Number	29
Machine Number	2303

Sunday, September 03, 2006

09-03-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	13	6	2	3	2
01	4	1	0	2	1
02	5	1	0	1	3
03	4	1	1	1	1
04	2	0	1	1	0
05	8	3	3	1	1
06	18	2	3	2	11
07	18	3	4	3	8
08	26	6	1	8	11
09	63	9	9	20	25
10	66	9	12	19	26
11	131	27	31	28	45
12	138	46	27	32	33
13	159	41	43	36	39
14	168	38	41	51	38
15	137	35	28	34	40
16	142	46	29	26	41
17	125	32	26	40	27
18	124	26	31	33	34
19	76	21	24	19	12
20	46	17	9	10	10
21	30	8	6	9	7
22	17	10	1	4	2
23	2	1	0	0	1
	1522	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	131
AM Peak Hour Factor	72.78 %
PM Peak Hour Start	13:45
PM Peak Hour Total	169
PM Peak Hour Factor	82.84 %

09-04-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	4	2	1	1
01	2	0	1	0	1
02	4	3	1	0	0
03	2	0	0	1	1
04	3	2	0	0	1
05	1	0	1	0	0
06	13	0	4	5	4
07	29	10	4	6	9
08	78	14	19	24	21
09	76	17	13	14	32
10	92	28	24	21	19
11	74	17	15	20	22
12	105	26	21	31	27
13	83	19	24	23	17
14	86	14	22	27	23
15	25	25			
16					
17					
18					
19					
20					
21					
22					
23					
	681	Total			

AM Peak Hour Start	09:45
AM Peak Hour Total	105
AM Peak Hour Factor	82.03 %
PM Peak Hour Start	12:00
PM Peak Hour Total	105
PM Peak Hour Factor	84.68 %

Mitron Systems Volume Count Report

Site Name	SB PALISADES RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9889
Direction	South
Date	8/26/2006
Real Time	16:58
Start Date	8/26/2006
Start Time	17:00
Sample Time	00:15
Operator Number	29
Machine Number	2303

Saturday, August 26, 2006

08-26-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17	141	26	40	40	35
18	135	40	27	39	29
19	74	24	18	17	15
20	43	8	14	10	11
21	29	8	8	9	4
22	11	5	0	2	4
23	16	4	4	6	2
	449	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	17:15
PM Peak Hour Total	155
PM Peak Hour Factor	96.88 %

08-27-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	4	1	0	1
01	3	2	1	0	0
02	4	0	2	0	2
03	0	0	0	0	0
04	1	0	0	0	1
05	15	4	4	2	5
06	44	6	9	15	14
07	77	10	12	29	26
08	104	24	27	28	25
09	93	33	14	18	28
10	91	20	17	31	23
11	117	25	20	33	39
12	111	33	25	22	31
13	124	34	29	38	23
14	140	28	34	44	34
15	131	34	35	32	30
16	100	33	19	22	26
17	103	21	32	32	18
18	91	29	24	19	19
19	58	15	18	12	13
20	45	16	14	8	7
21	26	7	8	8	3
22	10	3	2	2	3
23	6	2	2	1	1
	1500	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	117
AM Peak Hour Factor	75.00 %
PM Peak Hour Start	14:30
PM Peak Hour Total	147
PM Peak Hour Factor	83.52 %

08-28-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	5	0	1	2	2
01	4	2	1	0	1
02	0	0	0	0	0
03	1	1	0	0	0
04	1	1	0	0	0
05	15	4	2	6	3
06	37	2	10	10	15
07	98	8	23	29	38
08	105	21	22	25	37
09	88	18	28	21	21
10	97	30	19	27	21
11	110	32	27	28	23
12	115	22	32	27	34
13	103	26	21	30	26
14	93	20	37	21	15
15	118	26	29	32	31
16	99	22	22	24	31
17	89	20	21	25	23
18	70	27	13	12	18
19	63	15	18	20	10
20	37	11	10	10	6
21	19	4	4	9	2
22	15	6	3	6	0
23	6	2	1	1	2
	1388	Total			

AM Peak Hour Start	07:15
AM Peak Hour Total	111
AM Peak Hour Factor	73.03 %
PM Peak Hour Start	12:15
PM Peak Hour Total	119
PM Peak Hour Factor	87.50 %

08-29-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	1	0	1	0	0
02	0	0	0	0	0
03	2	0	1	1	0
04	2	0	0	0	2
05	16	6	1	4	5
06	42	4	15	12	11
07	102	17	26	26	33
08	109	31	22	31	25
09	88	25	20	26	17
10	115	26	34	30	25
11	95	12	31	30	22
12	100	23	23	26	28
13	107	32	27	27	21
14	122	30	29	37	26
15	114	25	31	35	23
16	89	23	20	27	19
17	95	21	34	15	25
18	99	19	28	29	23
19	57	14	11	20	12
20	43	16	14	10	3
21	29	7	6	10	6
22	25	6	6	6	7
23	10	2	5	2	1
	1462	Total			

AM Peak Hour Start	07:45
AM Peak Hour Total	117
AM Peak Hour Factor	88.64 %
PM Peak Hour Start	14:00
PM Peak Hour Total	122
PM Peak Hour Factor	82.43 %

Mitron Systems Volume Count Report

Site Name	SB PALISADES RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9889
Direction	South
Date	8/26/2006
Real Time	16:58
Start Date	8/26/2006
Start Time	17:00
Sample Time	00:15
Operator Number	29
Machine Number	2303

Wednesday, August 30, 2006

08-30-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	3	1	2	0
01	1	0	0	0	1
02	1	0	0	1	0
03	1	0	1	0	0
04	4	0	1	1	2
05	19	4	1	5	9
06	37	3	8	11	15
07	111	15	22	32	42
08	103	27	22	23	31
09	107	25	29	25	28
10	111	22	25	32	32
11	91	17	19	30	25
12	144	36	33	37	38
13	122	30	40	23	29
14	110	34	31	22	23
15	131	36	35	35	25
16	97	18	18	30	31
17	102	29	23	30	20
18	86	23	21	21	21
19	63	15	18	16	14
20	37	13	7	8	9
21	25	8	4	12	1
22	26	5	5	7	9
23	10	0	6	3	1
	1545	Total			

AM Peak Hour Start	07:15
AM Peak Hour Total	123
AM Peak Hour Factor	73.21 %
PM Peak Hour Start	12:30
PM Peak Hour Total	145
PM Peak Hour Factor	90.63 %

08-31-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	8	3	3	1	1
01	1	0	0	0	1
02	2	0	0	1	1
03	1	0	0	0	1
04	1	0	1	0	0
05	16	4	1	2	9
06	37	3	10	13	11
07	88	9	17	29	33
08	124	34	22	27	41
09	101	29	19	27	26
10	120	26	21	35	38
11	99	27	25	23	24
12	122	32	37	23	30
13	118	28	25	32	33
14	144	36	42	33	33
15	131	29	26	35	41
16	134	37	33	25	39
17	116	31	23	37	25
18	128	19	33	43	33
19	94	25	25	23	21
20	57	12	22	13	10
21	41	10	12	9	10
22	38	12	9	7	10
23	14	5	2	4	3
	1735	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	125
AM Peak Hour Factor	82.24 %
PM Peak Hour Start	15:30
PM Peak Hour Total	146
PM Peak Hour Factor	89.02 %

09-01-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	16	4	6	5	1
01	8	1	2	1	4
02	3	1	1	0	1
03	5	3	1	1	0
04	1	0	0	0	1
05	11	1	2	4	4
06	7	0	2	3	2
07	45	10	9	16	10
08	90	16	26	29	19
09	112	34	28	21	29
10	121	31	23	30	37
11	170	40	47	40	43
12	178	37	53	40	48
13	213	70	51	42	50
14	170	51	34	41	44
15	174	48	45	39	42
16	141	42	24	40	35
17	117	30	35	26	26
18	109	28	29	21	31
19	95	20	30	21	24
20	59	15	17	13	14
21	50	22	8	7	13
22	46	19	6	13	8
23	26	11	5	3	7
	1967	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	170
AM Peak Hour Factor	90.43 %
PM Peak Hour Start	13:00
PM Peak Hour Total	213
PM Peak Hour Factor	76.07 %

09-02-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	12	3	4	5	0
01	7	5	0	1	1
02	4	2	2	0	0
03	1	0	1	0	0
04	1	0	0	1	0
05	5	1	1	0	3
06	15	1	2	5	7
07	27	4	6	4	13
08	60	13	22	7	18
09	111	21	22	21	47
10	124	33	22	35	34
11	179	33	33	56	57
12	196	50	48	56	42
13	189	36	55	50	48
14	276	74	55	71	76
15	234	70	56	56	52
16	170	43	46	32	49
17	135	32	35	30	38
18	124	32	30	33	29
19	100	17	33	25	25
20	64	19	13	25	7
21	59	16	8	15	20
22	22	4	5	8	5
23	14	3	4	5	2
	2129	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	179
AM Peak Hour Factor	78.51 %
PM Peak Hour Start	14:00
PM Peak Hour Total	276
PM Peak Hour Factor	90.79 %

Mitron Systems Volume Count Report

Site Name	SB PALISADES RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9889
Direction	South
Date	8/26/2006
Real Time	16:58
Start Date	8/26/2006
Start Time	17:00
Sample Time	00:15
Operator Number	29
Machine Number	2303

Sunday, September 03, 2006

09-03-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	11	5	3	2	1
01	4	2	0	1	1
02	4	0	3	1	0
03	3	0	1	1	1
04	2	0	0	0	2
05	16	3	6	5	2
06	17	1	4	7	5
07	32	7	9	9	7
08	68	14	16	23	15
09	106	19	33	25	29
10	123	27	37	23	36
11	169	36	46	40	47
12	189	49	49	49	42
13	172	29	56	36	51
14	164	32	44	42	46
15	164	33	42	43	46
16	111	31	29	25	26
17	139	30	35	40	34
18	65	11	16	20	18
19	75	23	15	21	16
20	46	9	14	15	8
21	24	6	8	5	5
22	19	6	3	3	7
23	5	3	1	1	0
	1728	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	169
AM Peak Hour Factor	89.89 %
PM Peak Hour Start	12:00
PM Peak Hour Total	189
PM Peak Hour Factor	96.43 %

09-04-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	1	0	1	1
01	1	0	1	0	0
02	2	0	0	1	1
03	3	1	1	1	0
04	2	0	0	0	2
05	19	6	2	5	6
06	37	5	4	12	16
07	98	9	21	34	34
08	137	38	38	23	38
09	88	20	15	19	34
10	74	19	14	21	20
11	71	7	25	17	22
12	103	21	27	31	24
13	72	4	21	29	18
14	84	17	26	24	17
15	21	21			
16					
17					
18					
19					
20					
21					
22					
23					
	815	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	144
AM Peak Hour Factor	94.74 %
PM Peak Hour Start	12:00
PM Peak Hour Total	103
PM Peak Hour Factor	83.06 %

Mitron Systems Volume Count Report

Site Name	EB SAN LUIS ST
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9885
Direction	East
Date	8/26/2006
Real Time	15:47
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	711

Saturday, August 26, 2006

08-26-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16	98	27	31	22	18
17	107	23	29	32	23
18	65	13	20	17	15
19	65	20	20	14	11
20	44	11	10	11	12
21	39	12	9	11	7
22	23	4	11	5	3
23	6	3	1	0	2
	447	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	17:00
PM Peak Hour Total	107
PM Peak Hour Factor	83.59 %

08-27-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	0	2	0	2
01	0	0	0	0	0
02	5	2	0	1	2
03	0	0	0	0	0
04	2	0	0	0	2
05	4	1	0	2	1
06	31	4	9	4	14
07	31	6	6	8	11
08	45	9	8	12	16
09	32	5	9	5	13
10	52	13	11	13	15
11	49	12	11	13	13
12	66	16	8	24	18
13	64	12	22	16	14
14	69	14	15	25	15
15	72	15	23	14	20
16	63	14	15	15	19
17	54	12	16	15	11
18	49	12	6	11	20
19	44	8	10	20	6
20	20	11	4	1	4
21	10	3	3	4	0
22	9	4	3	2	0
23	3	0	3	0	0
	778	Total			

AM Peak Hour Start	10:00
AM Peak Hour Total	52
AM Peak Hour Factor	86.67 %
PM Peak Hour Start	14:30
PM Peak Hour Total	78
PM Peak Hour Factor	78.00 %

08-28-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	1	0	1	0
01	1	0	1	0	0
02	2	2	0	0	0
03	3	1	0	1	1
04	1	0	0	0	1
05	4	0	1	1	2
06	18	4	5	5	4
07	49	6	15	12	16
08	39	13	5	9	12
09	36	2	12	6	16
10	32	7	3	8	14
11	44	10	8	14	12
12	74	21	14	20	19
13	57	15	18	17	7
14	60	10	11	19	20
15	66	23	21	8	14
16	71	17	14	17	23
17	55	15	12	14	14
18	51	9	17	16	9
19	47	15	14	17	1
20	16	4	5	3	4
21	18	6	3	5	4
22	12	3	3	4	2
23	2	1	0	0	1
	760	Total			

AM Peak Hour Start	07:15
AM Peak Hour Total	56
AM Peak Hour Factor	87.50 %
PM Peak Hour Start	14:30
PM Peak Hour Total	83
PM Peak Hour Factor	90.22 %

08-29-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	5	2	3	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	1	1	0	0	0
04	0	0	0	0	0
05	3	0	1	1	1
06	20	1	3	4	12
07	51	7	14	12	18
08	40	13	6	12	9
09	41	7	11	9	14
10	32	11	3	10	8
11	65	17	6	23	19
12	54	15	7	14	18
13	43	13	14	9	7
14	69	19	18	13	19
15	78	15	24	20	19
16	69	13	18	19	19
17	47	13	15	9	10
18	51	16	11	10	14
19	34	12	5	5	12
20	18	7	3	7	1
21	24	9	2	8	5
22	15	4	9	0	2
23	6	2	3	1	0
	766	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	65
AM Peak Hour Factor	70.65 %
PM Peak Hour Start	14:45
PM Peak Hour Total	78
PM Peak Hour Factor	81.25 %

Mitron Systems Volume Count Report

Site Name	EB SAN LUIS ST
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9885
Direction	East
Date	8/26/2006
Real Time	15:47
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	711

Wednesday, August 30, 2006

08-30-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	0	0	0	2
01	0	0	0	0	0
02	3	0	3	0	0
03	0	0	0	0	0
04	1	1	0	0	0
05	4	0	0	2	2
06	17	0	5	7	5
07	48	7	16	12	13
08	29	7	10	6	6
09	34	8	8	5	13
10	42	9	14	8	11
11	49	13	10	15	11
12	54	17	19	2	16
13	61	12	15	16	18
14	57	18	16	11	12
15	78	18	27	18	15
16	64	9	19	19	17
17	47	14	12	14	7
18	70	26	11	21	12
19	57	15	21	11	10
20	24	5	3	11	5
21	17	4	3	5	5
22	10	2	2	3	3
23	8	2	2	1	3
	776	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	49
AM Peak Hour Factor	81.67 %
PM Peak Hour Start	15:00
PM Peak Hour Total	78
PM Peak Hour Factor	72.22 %

08-31-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	4	0	0	0
01	1	1	0	0	0
02	5	0	2	0	3
03	0	0	0	0	0
04	1	0	0	0	1
05	3	0	0	1	2
06	28	5	1	9	13
07	43	9	9	7	18
08	39	7	8	13	11
09	42	11	12	8	11
10	33	10	6	8	9
11	57	9	14	11	23
12	67	14	19	12	22
13	76	18	17	23	18
14	57	14	13	16	14
15	83	8	28	28	19
16	45	6	12	7	20
17	71	15	21	12	23
18	83	19	12	21	31
19	106	17	28	30	31
20	63	21	11	15	16
21	34	17	7	2	8
22	44	19	10	0	15
23	20	4	4	4	8
	1005	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	57
AM Peak Hour Factor	61.96 %
PM Peak Hour Start	19:15
PM Peak Hour Total	110
PM Peak Hour Factor	88.71 %

09-01-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	1	1	1	1
01	13	3	2	4	4
02	2	1	1	0	0
03	5	0	3	0	2
04	1	1	0	0	0
05	8	1	2	4	1
06	11	0	3	3	5
07	28	9	4	7	8
08	25	3	5	12	5
09	37	9	8	8	12
10	56	18	8	11	19
11	71	14	11	14	32
12	97	28	26	29	14
13	50	7	14	11	18
14	80	15	20	23	22
15	94	18	20	23	33
16	69	22	18	19	10
17	72	18	21	14	19
18	56	16	12	15	13
19	63	16	22	19	6
20	36	10	11	6	9
21	33	14	10	8	1
22	26	3	10	4	9
23	12	1	1	10	0
	949	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	71
AM Peak Hour Factor	55.47 %
PM Peak Hour Start	15:15
PM Peak Hour Total	98
PM Peak Hour Factor	74.24 %

09-02-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	0	1	2	1
01	8	4	1	3	0
02	1	0	0	1	0
03	2	0	1	1	0
04	2	0	0	0	2
05	2	0	1	0	1
06	4	0	2	0	2
07	20	3	6	5	6
08	23	8	6	5	4
09	34	8	6	10	10
10	59	8	21	18	12
11	63	12	18	9	24
12	55	18	14	14	9
13	84	23	17	18	26
14	107	27	20	41	19
15	138	32	39	34	33
16	123	33	28	28	34
17	85	30	21	19	15
18	95	21	25	26	23
19	74	33	18	15	8
20	39	15	12	7	5
21	15	6	3	5	1
22	23	6	7	5	5
23	20	13	5	1	1
	1080	Total			

AM Peak Hour Start	10:15
AM Peak Hour Total	63
AM Peak Hour Factor	75.00 %
PM Peak Hour Start	15:15
PM Peak Hour Total	139
PM Peak Hour Factor	89.10 %

Mitron Systems Volume Count Report

Site Name	EB SAN LUIS ST
Jurisdiction	
Study Type	Volume (2-way)
Location Code	9885
Direction	East
Date	8/26/2006
Real Time	15:47
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	711

Sunday, September 03, 2006

09-03-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	9	0	5	2	2
01	3	0	2	1	0
02	5	1	3	1	0
03	2	0	2	0	0
04	4	2	1	0	1
05	2	0	0	1	1
06	9	1	1	3	4
07	11	1	4	3	3
08	14	5	3	4	2
09	34	5	8	11	10
10	46	15	11	16	4
11	72	22	15	16	19
12	88	18	30	16	24
13	79	12	16	21	30
14	84	16	19	23	26
15	99	20	14	37	28
16	98	28	25	23	22
17	65	21	25	13	6
18	57	20	16	13	8
19	41	10	14	11	6
20	29	9	12	4	4
21	25	5	5	9	6
22	13	7	2	2	2
23	4	1	1	1	1
	893	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	72
AM Peak Hour Factor	81.82 %
PM Peak Hour Start	15:30
PM Peak Hour Total	118
PM Peak Hour Factor	79.73 %

09-04-06 (Ch2(2-1))

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	0	2	0	1
01	2	2	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	4	0	2	0	2
05	4	0	1	2	1
06	23	6	5	5	7
07	39	9	13	7	10
08	45	16	10	4	15
09	20	6	6	6	2
10	26	5	8	4	9
11	35	10	7	4	14
12	39	12	7	9	11
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
	240	Total			

AM Peak Hour Start	07:15
AM Peak Hour Total	46
AM Peak Hour Factor	71.88 %
PM Peak Hour Start	12:00
PM Peak Hour Total	39
PM Peak Hour Factor	81.25 %

Mitron Systems Volume Count Report

Site Name	WB SAN LUIS ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9884
Direction	West
Date	8/26/2006
Real Time	15:47
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	711

Saturday, August 26, 2006

08-26-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16	52	13	17	13	9
17	46	9	8	16	13
18	50	11	18	6	15
19	29	12	6	6	5
20	29	5	8	6	10
21	15	4	4	5	2
22	14	6	5	0	3
23	3	1	1	1	0
	238	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	17:30
PM Peak Hour Total	58
PM Peak Hour Factor	80.56 %

08-27-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	1	1	0	0
01	0	0	0	0	0
02	1	0	0	1	0
03	0	0	0	0	0
04	1	1	0	0	0
05	5	0	1	1	3
06	16	2	3	5	6
07	27	6	8	2	11
08	27	3	5	13	6
09	35	8	6	10	11
10	30	5	7	8	10
11	50	16	8	11	15
12	54	16	14	10	14
13	56	10	18	12	16
14	54	11	10	14	19
15	38	9	10	11	8
16	48	11	11	13	13
17	37	8	6	13	10
18	34	8	8	7	11
19	25	6	9	4	6
20	15	3	4	5	3
21	15	3	7	4	1
22	7	3	3	1	0
23	8	3	3	0	2
	585	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	50
AM Peak Hour Factor	78.13 %
PM Peak Hour Start	13:15
PM Peak Hour Total	57
PM Peak Hour Factor	79.17 %

08-28-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	0	0	1	1
01	4	1	2	0	1
02	1	0	1	0	0
03	0	0	0	0	0
04	5	2	2	0	1
05	6	0	1	2	3
06	18	0	6	3	9
07	29	5	4	7	13
08	29	7	9	7	6
09	26	8	5	5	8
10	22	3	6	4	9
11	49	12	11	13	13
12	48	14	13	13	8
13	38	10	7	13	8
14	39	9	9	15	6
15	38	11	7	11	9
16	40	15	10	10	5
17	47	17	7	12	11
18	32	10	8	9	5
19	30	5	13	6	6
20	20	6	4	9	1
21	20	5	4	8	3
22	5	2	2	1	0
23	14	5	5	3	1
	562	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	49
AM Peak Hour Factor	94.23 %
PM Peak Hour Start	12:00
PM Peak Hour Total	48
PM Peak Hour Factor	85.71 %

08-29-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	0	1	2	0
01	1	0	1	0	0
02	2	1	0	0	1
03	1	1	0	0	0
04	4	2	2	0	0
05	7	1	2	2	2
06	27	3	2	12	10
07	42	8	13	8	13
08	41	5	11	11	14
09	31	8	7	5	11
10	46	12	10	13	11
11	59	9	13	18	19
12	45	8	8	16	13
13	66	24	16	17	9
14	62	17	12	19	14
15	63	14	24	15	10
16	40	11	10	4	15
17	39	11	9	12	7
18	35	12	8	8	7
19	39	11	7	13	8
20	19	6	3	3	7
21	13	1	3	3	6
22	12	3	4	2	3
23	5	2	2	1	0
	702	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	59
AM Peak Hour Factor	77.63 %
PM Peak Hour Start	14:30
PM Peak Hour Total	71
PM Peak Hour Factor	73.96 %

Mitron Systems Volume Count Report

Site Name	WB SAN LUIS ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9884
Direction	West
Date	8/26/2006
Real Time	15:47
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	711

Wednesday, August 30, 2006

08-30-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	1	0	0	0
01	3	1	1	1	0
02	1	0	0	0	1
03	0	0	0	0	0
04	3	1	1	1	0
05	2	0	1	0	1
06	23	0	6	7	10
07	22	4	4	7	7
08	30	4	9	9	8
09	25	6	3	9	7
10	39	9	10	14	6
11	48	12	15	9	12
12	43	5	9	10	19
13	59	15	12	21	11
14	42	12	9	14	7
15	38	9	12	12	5
16	50	12	18	10	10
17	55	17	13	14	11
18	33	5	9	6	13
19	35	8	8	7	12
20	20	2	9	3	6
21	22	7	3	6	6
22	11	2	3	4	2
23	5	1	3	1	0
	610	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	48
AM Peak Hour Factor	80.00 %
PM Peak Hour Start	12:45
PM Peak Hour Total	67
PM Peak Hour Factor	79.76 %

08-31-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	1	1	0	1
01	3	1	1	1	0
02	1	0	1	0	0
03	0	0	0	0	0
04	5	3	0	0	2
05	4	0	1	3	0
06	24	2	7	6	9
07	37	8	10	9	10
08	38	12	10	6	10
09	43	8	10	15	10
10	61	17	7	16	21
11	48	9	14	14	11
12	74	20	23	16	15
13	69	21	15	14	19
14	63	13	16	23	11
15	54	8	12	15	19
16	94	17	24	30	23
17	117	28	31	27	31
18	90	26	18	30	16
19	52	21	17	5	9
20	36	15	12	1	8
21	18	4	2	4	8
22	29	9	12	4	4
23	11	7	1	0	3
	974	Total			

AM Peak Hour Start	10:00
AM Peak Hour Total	61
AM Peak Hour Factor	72.62 %
PM Peak Hour Start	17:00
PM Peak Hour Total	117
PM Peak Hour Factor	94.35 %

09-01-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	2	2	1	1
01	5	1	3	1	0
02	3	2	1	0	0
03	3	0	1	0	2
04	1	1	0	0	0
05	2	0	0	1	1
06	17	0	1	9	7
07	16	4	3	2	7
08	29	5	11	7	6
09	32	4	11	10	7
10	53	10	9	16	18
11	83	19	13	24	27
12	78	25	17	16	20
13	107	25	29	26	27
14	117	27	24	21	45
15	80	19	18	19	24
16	60	16	16	16	12
17	49	14	12	10	13
18	68	17	16	14	21
19	35	10	5	14	6
20	30	6	8	10	6
21	22	9	3	5	5
22	15	4	3	2	6
23	13	7	2	1	3
	924	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	83
AM Peak Hour Factor	76.85 %
PM Peak Hour Start	14:00
PM Peak Hour Total	117
PM Peak Hour Factor	65.00 %

09-02-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	5	2	2	0	1
01	4	0	2	1	1
02	6	4	1	1	0
03	1	0	1	0	0
04	3	1	1	0	1
05	2	0	0	0	2
06	8	0	2	3	3
07	18	2	4	9	3
08	32	6	11	6	9
09	58	7	12	18	21
10	50	8	17	13	12
11	87	16	18	26	27
12	117	25	29	20	43
13	93	26	17	22	28
14	82	18	21	25	18
15	129	28	57	24	20
16	74	18	16	16	24
17	54	14	11	9	20
18	55	15	13	15	12
19	30	8	10	6	6
20	33	9	13	7	4
21	31	5	4	9	13
22	10	2	4	3	1
23	8	3	2	3	0
	990	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	87
AM Peak Hour Factor	80.56 %
PM Peak Hour Start	15:00
PM Peak Hour Total	129
PM Peak Hour Factor	56.58 %

Mitron Systems Volume Count Report

Site Name	WB SAN LUIS ST
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9884
Direction	West
Date	8/26/2006
Real Time	15:47
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	711

Sunday, September 03, 2006

09-03-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	5	3	0	1	1
01	3	0	2	1	0
02	4	1	2	0	1
03	2	0	1	0	1
04	2	1	1	0	0
05	6	0	2	0	4
06	12	0	5	3	4
07	13	2	7	2	2
08	36	6	10	6	14
09	49	14	10	9	16
10	65	10	13	21	21
11	62	17	15	14	16
12	94	19	28	23	24
13	100	22	27	26	25
14	87	29	14	25	19
15	71	12	24	17	18
16	65	13	12	16	24
17	45	14	6	14	11
18	53	13	13	15	12
19	25	9	5	4	7
20	15	1	2	6	6
21	16	6	3	5	2
22	9	3	2	1	3
23	4	1	1	2	0
	843	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	74
AM Peak Hour Factor	88.10 %
PM Peak Hour Start	13:15
PM Peak Hour Total	107
PM Peak Hour Factor	92.24 %

09-04-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	1	1	0	0
01	3	2	1	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	3	1	2	0	0
05	3	0	0	2	1
06	25	3	7	8	7
07	34	7	6	10	11
08	44	11	13	7	13
09	34	7	12	9	6
10	37	7	8	10	12
11	37	3	15	7	12
12	75	10	20	24	21
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
	297	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	45
AM Peak Hour Factor	86.54 %
PM Peak Hour Start	12:00
PM Peak Hour Total	75
PM Peak Hour Factor	78.13 %

Mitron Systems Volume Count Report

Site Name	NB + SB SAN LUIS BAY DR BTW HWY 101 & BLUE HERON
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9876
Direction	None
Date	8/19/2006
Real Time	11:57
Start Date	8/19/2006
Start Time	12:00
Sample Time	00:15
Operator Number	29
Machine Number	601

Saturday, August 19, 2006

08-19-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12	433	104	91	124	114
13	427	88	97	114	128
14	399	109	95	110	85
15	367	82	115	83	87
16	333	96	94	76	67
17	260	76	62	67	55
18	299	59	74	85	81
19	235	65	65	55	50
20	204	57	37	62	48
21	220	67	42	73	38
22	127	30	36	22	39
23	64	17	7	25	15
	3368	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	13:15
PM Peak Hour Total	448
PM Peak Hour Factor	87.50 %

08-20-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	42	21	8	5	8
01	25	14	0	7	4
02	11	4	2	4	1
03	15	2	0	11	2
04	12	4	3	5	0
05	50	5	13	21	11
06	70	24	16	15	15
07	119	21	18	44	36
08	196	42	37	65	52
09	254	54	36	74	90
10	300	58	67	80	95
11	386	88	106	108	84
12	478	107	110	128	133
13	546	129	141	136	140
14	484	141	112	136	95
15	404	121	87	89	107
16	299	73	60	71	95
17	271	74	56	76	65
18	216	62	59	46	49
19	249	71	76	61	41
20	160	44	32	48	36
21	103	23	33	28	19
22	71	30	20	10	11
23	31	10	7	7	7
	4792	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	397
AM Peak Hour Factor	91.90 %
PM Peak Hour Start	13:15
PM Peak Hour Total	558
PM Peak Hour Factor	98.94 %

08-21-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	14	4	2	2	6
01	4	0	2	2	0
02	10	5	0	2	3
03	2	0	2	0	0
04	26	0	7	11	8
05	151	18	43	45	45
06	219	28	32	73	86
07	271	61	54	81	75
08	256	36	65	63	92
09	306	53	81	86	86
10	347	80	84	93	90
11	373	86	92	82	113
12	311	82	71	65	93
13	379	76	82	112	109
14	339	75	85	84	95
15	370	82	101	89	98
16	337	86	78	79	94
17	353	89	112	59	93
18	292	71	96	55	70
19	198	89	39	37	33
20	162	42	34	40	46
21	111	26	34	30	21
22	61	20	16	21	4
23	32	10	7	9	6
	4924	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	373
AM Peak Hour Factor	82.52 %
PM Peak Hour Start	13:30
PM Peak Hour Total	381
PM Peak Hour Factor	85.04 %

08-22-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	17	4	9	1	3
01	7	4	1	2	0
02	9	2	2	3	2
03	1	0	1	0	0
04	64	11	14	13	26
05	409	76	105	126	102
06	407	118	72	110	107
07	391	90	95	114	92
08	302	81	64	107	50
09	277	67	59	78	73
10	336	53	85	88	110
11	451	100	96	117	138
12	360	73	106	87	94
13	462	93	108	161	100
14	425	109	121	101	94
15	359	107	99	67	86
16	367	85	86	90	106
17	395	82	95	118	100
18	328	92	60	100	76
19	220	79	54	46	41
20	192	50	46	57	39
21	129	28	36	45	20
22	55	19	11	13	12
23	50	14	21	9	6
	6013	Total			

AM Peak Hour Start	05:15
AM Peak Hour Total	451
AM Peak Hour Factor	89.48 %
PM Peak Hour Start	13:30
PM Peak Hour Total	491
PM Peak Hour Factor	76.24 %

Mitron Systems Volume Count Report

Site Name	NB + SB SAN LUIS BAY DR BTW HWY 101 & BLUE HERON
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9876
Direction	None
Date	8/19/2006
Real Time	11:57
Start Date	8/19/2006
Start Time	12:00
Sample Time	00:15
Operator Number	29
Machine Number	601

Wednesday, August 23, 2006

08-23-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	21	8	9	2	2
01	11	6	1	2	2
02	5	0	3	2	0
03	8	0	3	2	3
04	54	7	11	15	21
05	410	67	106	109	128
06	356	94	94	90	78
07	300	72	82	73	73
08	263	60	59	57	87
09	302	77	70	78	77
10	322	97	70	90	65
11	441	105	114	136	86
12	442	110	94	95	143
13	392	120	95	92	85
14	416	63	87	156	110
15	424	104	102	116	102
16	335	79	73	97	86
17	341	95	104	93	49
18	384	90	94	92	108
19	219	63	59	38	59
20	197	61	65	46	25
21	154	42	45	37	30
22	68	26	10	19	13
23	42	10	11	11	10
	5907	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	441
AM Peak Hour Factor	81.07 %
PM Peak Hour Start	14:30
PM Peak Hour Total	472
PM Peak Hour Factor	75.64 %

08-24-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	6	0	2	0	4
01	18	5	5	4	4
02	7	2	1	0	4
03	8	0	2	1	5
04	68	4	16	7	41
05	400	57	101	126	116
06	347	81	86	82	98
07	388	85	99	123	81
08	296	70	65	83	78
09	357	79	94	79	105
10	376	108	96	94	78
11	449	110	113	118	108
12	458	110	86	113	149
13	455	89	118	111	137
14	418	132	99	92	95
15	450	132	117	98	103
16	353	99	72	91	91
17	396	98	111	97	90
18	312	82	97	67	66
19	263	69	81	48	65
20	231	71	49	68	43
21	173	47	38	51	37
22	89	39	20	24	6
23	49	19	11	13	6
	6367	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	449
AM Peak Hour Factor	95.13 %
PM Peak Hour Start	13:15
PM Peak Hour Total	498
PM Peak Hour Factor	90.88 %

08-25-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	17	6	4	6	1
01	17	0	8	6	3
02	1	0	0	1	0
03	14	2	4	4	4
04	83	17	10	24	32
05	404	90	104	109	101
06	369	87	89	92	101
07	341	81	89	81	90
08	266	68	52	80	66
09	337	85	93	80	79
10	388	64	94	119	111
11	465	93	143	120	109
12	462	95	142	109	116
13	467	115	105	146	101
14	476	119	130	128	99
15	521	134	131	121	135
16	561	142	139	151	129
17	565	151	153	133	128
18	425	116	143	93	73
19	338	116	74	78	70
20	185	50	34	47	54
21	186	55	45	51	35
22	118	48	24	27	19
23	66	21	20	18	7
	7072	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	467
AM Peak Hour Factor	81.64 %
PM Peak Hour Start	16:30
PM Peak Hour Total	584
PM Peak Hour Factor	95.42 %

08-26-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	33	13	9	9	2
01	31	4	15	8	4
02	17	8	5	2	2
03	30	8	8	7	7
04	28	5	7	15	1
05	56	7	15	20	14
06	125	35	28	28	34
07	214	31	47	84	52
08	208	58	49	57	44
09	329	71	88	60	110
10	328	56	62	99	111
11	549	133	135	148	133
12	643	147	131	151	214
13	703	188	222	153	140
14	152	152			
15					
16					
17					
18					
19					
20					
21					
22					
23					
	3446	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	549
AM Peak Hour Factor	92.74 %
PM Peak Hour Start	12:45
PM Peak Hour Total	777
PM Peak Hour Factor	87.50 %

Mitron Systems Volume Count Report

Site Name	NB+SB San Luis Bay Dr North of Avila
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9865
Direction	NA
Date	8/11/2006
Real Time	14:45
Start Date	8/11/2006
Start Time	15:00
Sample Time	00:15
Operator Number	57
Machine Number	25

NB + SB volumes - subtract SB volumes to get NB volumes

Friday, August 11, 2006

Do not use data from 8/11/06 and 8/12/06

08-11-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15	546	128	132	162	124
16	644	138	158	170	178
17	709	180	212	170	147
18	471	137	116	114	104
19	409	113	97	117	82
20	314	85	94	74	61
21	226	80	60	43	43
22	120	43	25	24	28
23	95	32	23	23	17
	3534	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	16:30
PM Peak Hour Total	740
PM Peak Hour Factor	87.26 %

08-12-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	63	9	26	17	11
01	28	11	5	6	6
02	19	4	4	5	6
03	10	4	1	1	4
04	7	1	0	2	4
05	45	1	9	12	23
06	82	25	17	15	25
07	140	27	31	41	41
08	173	42	34	39	58
09	236	50	60	63	63
10	337	74	68	73	122
11	398	94	101	103	100
12	476	111	114	125	126
13	504	117	122	119	146
14	537	138	123	130	146
15	506	113	122	134	137
16	569	159	150	151	109
17	419	94	123	108	94
18	389	98	110	83	98
19	288	78	72	74	64
20	239	66	61	44	68
21	191	45	58	44	44
22	153	45	37	40	31
23	115	23	35	39	18
	5924	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	420
AM Peak Hour Factor	86.07 %
PM Peak Hour Start	15:45
PM Peak Hour Total	597
PM Peak Hour Factor	93.87 %

08-13-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	58	18	11	15	14
01	30	11	6	7	6
02	14	3	5	3	3
03	21	6	5	5	5
04	7	2	0	3	2
05	31	3	3	7	18
06	57	9	15	16	17
07	101	22	24	21	34
08	156	50	34	44	28
09	217	39	56	63	59
10	272	62	55	77	78
11	411	97	83	117	114
12	493	131	125	114	123
13	536	137	141	127	131
14	491	136	124	125	106
15	481	124	112	136	109
16	466	119	130	114	103
17	408	92	114	102	100
18	301	90	76	71	64
19	229	59	64	65	41
20	183	54	40	46	43
21	107	22	22	31	32
22	83	20	19	13	31
23	46	17	12	9	8
	5199	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	411
AM Peak Hour Factor	87.82 %
PM Peak Hour Start	13:00
PM Peak Hour Total	536
PM Peak Hour Factor	95.04 %

08-14-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	27	8	10	6	3
01	10	2	4	3	1
02	12	1	3	2	6
03	4	0	0	2	2
04	20	0	7	8	5
05	94	12	24	26	32
06	162	34	35	48	45
07	242	54	71	59	58
08	184	38	51	44	51
09	204	51	42	44	67
10	289	51	73	72	93
11	318	69	81	87	81
12	379	102	104	95	78
13	413	77	123	95	118
14	415	93	106	106	110
15	442	116	113	100	113
16	452	110	126	119	97
17	407	115	110	108	74
18	305	87	71	69	78
19	216	67	41	75	33
20	153	50	45	34	24
21	94	31	18	24	21
22	72	18	19	13	22
23	50	22	11	11	6
	4964	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	330
AM Peak Hour Factor	88.71 %
PM Peak Hour Start	15:45
PM Peak Hour Total	468
PM Peak Hour Factor	92.86 %

Mitron Systems Volume Count Report

Site Name	NB+SB San Luis Bay Dr North of Avila
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9865
Direction	NA
Date	8/11/2006
Real Time	14:45
Start Date	8/11/2006
Start Time	15:00
Sample Time	00:15
Operator Number	57
Machine Number	25

Tuesday, August 15, 2006

08-15-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	11	5	3	2	1
01	19	3	3	7	6
02	17	6	6	1	4
03	6	4	0	1	1
04	26	2	7	6	11
05	207	24	40	65	78
06	278	80	77	61	60
07	283	72	80	52	79
08	260	64	62	61	73
09	236	63	64	48	61
10	352	86	74	98	94
11	418	88	122	101	107
12	491	115	134	135	107
13	469	127	109	107	126
14	452	113	110	97	132
15	450	139	97	102	112
16	516	129	113	114	160
17	645	165	207	134	139
18	314	69	82	93	70
19	250	73	63	63	51
20	152	54	41	31	26
21	137	41	27	45	24
22	70	17	20	17	16
23	58	17	13	18	10
	6117	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	418
AM Peak Hour Factor	85.66 %
PM Peak Hour Start	16:45
PM Peak Hour Total	666
PM Peak Hour Factor	80.43 %

08-16-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	27	10	13	4	0
01	19	1	5	10	3
02	7	3	2	1	1
03	5	1	1	1	2
04	30	1	9	10	10
05	211	21	39	61	90
06	290	70	81	72	67
07	264	60	73	60	71
08	249	55	57	59	78
09	259	61	53	70	75
10	289	75	62	95	57
11	369	73	77	104	115
12	384	95	89	87	113
13	390	109	81	111	89
14	393	90	83	120	100
15	488	108	128	116	136
16	553	109	116	152	176
17	578	139	200	133	106
18	309	84	89	64	72
19	244	65	67	59	53
20	197	75	41	49	32
21	123	33	33	28	29
22	105	30	35	22	18
23	58	23	15	10	10
	5841	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	369
AM Peak Hour Factor	80.22 %
PM Peak Hour Start	16:30
PM Peak Hour Total	667
PM Peak Hour Factor	83.38 %

08-17-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	28	12	11	4	1
01	18	1	1	9	7
02	3	0	1	2	0
03	7	1	1	1	4
04	26	5	8	5	8
05	195	19	43	63	70
06	278	77	68	65	68
07	278	77	66	58	77
08	246	60	52	58	76
09	222	57	54	59	52
10	340	70	94	81	95
11	360	93	92	77	98
12	420	102	120	115	83
13	451	115	99	122	115
14	377	81	104	92	100
15	501	119	134	120	128
16	524	133	99	138	154
17	586	150	188	145	103
18	387	127	71	103	86
19	286	69	80	82	55
20	184	59	35	43	47
21	152	30	57	34	31
22	95	20	31	25	19
23	56	23	10	18	5
	6020	Total			

AM Peak Hour Start	10:15
AM Peak Hour Total	363
AM Peak Hour Factor	95.53 %
PM Peak Hour Start	16:45
PM Peak Hour Total	637
PM Peak Hour Factor	84.71 %

08-18-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	26	13	3	5	5
01	19	1	7	9	2
02	18	4	6	5	3
03	11	6	3	1	1
04	33	2	7	12	12
05	194	26	37	56	75
06	256	62	69	67	58
07	242	62	69	54	57
08	221	41	53	54	73
09	270	58	57	63	92
10	346	91	89	86	80
11	383	85	85	94	119
12	451	107	129	104	111
13	445	122	109	95	119
14	450	114	119	113	104
15	487	128	112	131	116
16	433	143	119	171	
17					
18					
19					
20					
21					
22					
23					
	4285	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	383
AM Peak Hour Factor	80.46 %
PM Peak Hour Start	15:45
PM Peak Hour Total	549
PM Peak Hour Factor	80.26 %

Mitron Systems Volume Count Report

Site Name	SB San Luis Bay Dr North of Avila
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9866
Direction	South
Date	8/11/2006
Real Time	14:35
Start Date	8/11/2006
Start Time	15:00
Sample Time	00:15
Operator Number	57
Machine Number	6

Friday, August 11, 2006

Do not use data from 8/11/06 and 8/12/06

08-11-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15	262	61	66	79	56
16	138	78	60	0	0
17	0	0	0	0	0
18	0	0	0	0	0
19	0	0	0	0	0
20	0	0	0	0	0
21	0	0	0	0	0
22	0	0	0	0	0
23	0	0	0	0	0
	400	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	15:15
PM Peak Hour Total	279
PM Peak Hour Factor	88.29 %

08-12-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	0	0	0	0	0
06	0	0	0	0	0
07	0	0	0	0	0
08	0	0	0	0	0
09	0	0	0	0	0
10	0	0	0	0	0
11	88	0	0	20	68
12	310	69	72	85	84
13	332	78	86	71	97
14	314	90	93	67	64
15	263	58	65	64	76
16	309	85	92	77	55
17	190	46	57	48	39
18	186	45	53	39	49
19	160	48	46	35	31
20	105	30	24	19	32
21	74	20	19	15	20
22	61	23	15	14	9
23	44	9	15	14	6
	2436	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	88
AM Peak Hour Factor	32.35 %
PM Peak Hour Start	13:30
PM Peak Hour Total	351
PM Peak Hour Factor	90.46 %

08-13-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	21	6	6	2	7
01	17	6	3	3	5
02	6	2	2	1	1
03	12	3	2	4	3
04	5	0	0	3	2
05	20	1	3	5	11
06	42	8	13	9	12
07	55	15	11	8	21
08	112	39	22	31	20
09	134	22	34	40	38
10	169	40	36	42	51
11	291	64	61	87	79
12	302	62	80	74	86
13	342	90	99	74	79
14	284	91	72	61	60
15	253	50	70	71	62
16	206	58	49	59	40
17	186	41	52	52	41
18	140	44	28	32	36
19	104	25	33	27	19
20	81	27	17	21	16
21	48	10	10	14	14
22	22	7	4	3	8
23	15	4	3	4	4
	2867	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	291
AM Peak Hour Factor	83.62 %
PM Peak Hour Start	12:30
PM Peak Hour Total	349
PM Peak Hour Factor	88.13 %

08-14-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	9	2	5	1	1
01	3	0	2	0	1
02	3	0	2	0	1
03	3	0	0	1	2
04	13	0	4	5	4
05	80	9	16	28	27
06	140	33	26	49	32
07	148	31	43	42	32
08	102	25	29	27	21
09	112	30	21	27	34
10	174	37	43	46	48
11	193	42	48	47	56
12	213	61	56	49	47
13	262	54	77	55	76
14	226	50	66	56	54
15	213	59	55	46	53
16	192	54	47	51	40
17	196	58	52	52	34
18	157	44	39	33	41
19	103	33	15	43	12
20	61	10	17	22	12
21	55	16	10	14	15
22	30	7	7	11	5
23	10	1	2	6	1
	2698	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	193
AM Peak Hour Factor	86.16 %
PM Peak Hour Start	13:00
PM Peak Hour Total	262
PM Peak Hour Factor	85.06 %

Mitron Systems Volume Count Report

Site Name	SB San Luis Bay Dr North of Avila
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9866
Direction	South
Date	8/11/2006
Real Time	14:35
Start Date	8/11/2006
Start Time	15:00
Sample Time	00:15
Operator Number	57
Machine Number	6

Tuesday, August 15, 2006

08-15-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	1	0	1	1
01	9	2	0	3	4
02	7	4	2	0	1
03	4	3	0	0	1
04	22	2	5	5	10
05	194	19	38	63	74
06	242	74	70	53	45
07	200	55	51	38	56
08	142	39	35	32	36
09	126	33	36	27	30
10	210	52	48	48	62
11	140	34	61	45	0
12	0	0	0	0	0
13	69	0	0	2	67
14	237	60	52	56	69
15	216	63	52	50	51
16	172	46	47	40	39
17	252	65	57	61	69
18	138	32	34	48	24
19	106	29	26	25	26
20	67	30	16	10	11
21	65	24	11	15	15
22	29	10	9	6	4
23	14	1	4	6	3
	2664	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	281
AM Peak Hour Factor	94.93 %
PM Peak Hour Start	17:00
PM Peak Hour Total	252
PM Peak Hour Factor	91.30 %

08-16-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	11	4	6	1	0
01	6	1	1	3	1
02	3	2	0	0	1
03	4	0	1	1	2
04	24	0	7	9	8
05	196	18	37	59	82
06	253	68	70	61	54
07	160	38	42	39	41
08	138	33	30	32	43
09	150	30	38	42	40
10	174	41	40	52	41
11	212	43	51	59	59
12	234	60	59	46	69
13	217	66	44	61	46
14	229	54	43	68	64
15	232	54	61	47	70
16	190	47	46	54	43
17	184	44	46	52	42
18	155	41	41	34	39
19	120	35	29	33	23
20	87	33	14	26	14
21	66	16	17	12	21
22	36	12	10	9	5
23	25	8	7	8	2
	3106	Total			

AM Peak Hour Start	05:45
AM Peak Hour Total	281
AM Peak Hour Factor	85.67 %
PM Peak Hour Start	14:30
PM Peak Hour Total	247
PM Peak Hour Factor	90.81 %

08-17-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	1	5	1	0
01	6	0	0	4	2
02	0	0	0	0	0
03	3	0	1	1	1
04	23	5	6	5	7
05	185	16	40	59	70
06	244	75	63	59	47
07	163	43	44	34	42
08	140	35	21	38	46
09	139	32	31	36	40
10	184	36	48	48	52
11	207	51	46	54	56
12	269	60	78	70	61
13	252	56	56	66	74
14	195	52	61	43	39
15	235	65	64	43	63
16	203	56	51	37	59
17	195	63	45	48	39
18	181	58	40	44	39
19	127	41	29	32	25
20	98	20	21	26	31
21	82	15	34	20	13
22	45	12	14	8	11
23	27	8	4	13	2
	3210	Total			

AM Peak Hour Start	05:30
AM Peak Hour Total	267
AM Peak Hour Factor	89.00 %
PM Peak Hour Start	12:00
PM Peak Hour Total	269
PM Peak Hour Factor	86.22 %

08-18-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	7	4	1	2	0
01	9	1	4	3	1
02	5	0	1	4	0
03	5	2	1	1	1
04	29	1	6	12	10
05	177	21	32	58	66
06	230	59	57	63	51
07	148	44	40	27	37
08	117	25	23	37	32
09	160	38	29	40	53
10	219	61	57	46	55
11	213	41	45	52	75
12	275	59	86	61	69
13	281	74	66	61	80
14	274	76	71	65	62
15	228	58	49	65	56
16	202	78	60	64	
17					
18					
19					
20					
21					
22					
23					
	2579	Total			

AM Peak Hour Start	05:45
AM Peak Hour Total	245
AM Peak Hour Factor	92.80 %
PM Peak Hour Start	13:45
PM Peak Hour Total	292
PM Peak Hour Factor	91.25 %

Mitron Systems Volume Count Report

Site Name	NB See Canyon RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	8969
Direction	North
Date	8/11/2006
Real Time	16:15
Start Date	8/11/2006
Start Time	17:00
Sample Time	00:15
Operator Number	57
Machine Number	26

Friday, August 11, 2006

08-11-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17	55	14	12	15	14
18	25	3	10	6	6
19	45	15	10	16	4
20	30	6	8	6	10
21	21	4	7	5	5
22	12	4	1	0	7
23	4	2	1	0	1
	192	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	17:00
PM Peak Hour Total	55
PM Peak Hour Factor	91.67 %

08-12-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	3	1	0	1	1
01	2	0	0	0	2
02	2	1	1	0	0
03	1	0	1	0	0
04	1	0	0	0	1
05	3	1	1	1	0
06	1	0	1	0	0
07	12	2	3	3	4
08	21	3	4	8	6
09	14	1	5	3	5
10	31	8	8	7	8
11	36	7	8	16	5
12	45	9	10	14	12
13	49	16	7	12	14
14	75	22	9	20	24
15	77	22	9	18	28
16	92	30	29	19	14
17	44	7	7	22	8
18	26	11	5	4	6
19	19	2	6	4	7
20	23	5	6	8	4
21	9	2	6	1	0
22	18	6	7	2	3
23	5	2	0	2	1
	609	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	39
AM Peak Hour Factor	60.94 %
PM Peak Hour Start	15:45
PM Peak Hour Total	106
PM Peak Hour Factor	88.33 %

08-13-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	0	1	1	0
01	1	0	1	0	0
02	3	1	0	2	0
03	0	0	0	0	0
04	1	0	0	1	0
05	0	0	0	0	0
06	1	0	1	0	0
07	7	1	3	2	1
08	16	7	2	1	6
09	12	4	2	3	3
10	29	6	6	10	7
11	39	14	9	10	6
12	39	12	8	4	15
13	54	8	12	13	21
14	68	16	20	13	19
15	85	35	23	14	13
16	70	19	20	18	13
17	47	8	17	10	12
18	24	3	3	11	7
19	20	7	6	4	3
20	19	3	9	5	2
21	13	3	3	4	3
22	6	1	2	0	3
23	1	1	0	0	0
	557	Total			

AM Peak Hour Start	10:30
AM Peak Hour Total	40
AM Peak Hour Factor	71.43 %
PM Peak Hour Start	14:45
PM Peak Hour Total	91
PM Peak Hour Factor	65.00 %

08-14-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	0	0	0	1
01	1	0	1	0	0
02	3	0	0	2	1
03	0	0	0	0	0
04	0	0	0	0	0
05	0	0	0	0	0
06	13	2	1	0	10
07	26	10	7	4	5
08	26	6	6	5	9
09	21	9	6	4	2
10	32	5	12	4	11
11	43	9	8	9	17
12	44	12	3	14	15
13	49	13	3	21	12
14	45	13	7	20	5
15	68	16	9	18	25
16	61	12	12	15	22
17	52	11	16	19	6
18	46	14	12	5	15
19	29	7	11	4	7
20	30	5	9	11	5
21	16	8	4	2	2
22	5	0	4	0	1
23	4	0	1	2	1
	615	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	43
AM Peak Hour Factor	63.24 %
PM Peak Hour Start	15:00
PM Peak Hour Total	68
PM Peak Hour Factor	68.00 %

Mitron Systems Volume Count Report

Site Name	NB See Canyon RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	8969
Direction	North
Date	8/11/2006
Real Time	16:15
Start Date	8/11/2006
Start Time	17:00
Sample Time	00:15
Operator Number	57
Machine Number	26

Tuesday, August 15, 2006

08-15-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	3	0	1	2	0
02	1	1	0	0	0
03	0	0	0	0	0
04	1	0	0	1	0
05	3	0	0	3	0
06	10	2	2	2	4
07	35	6	9	15	5
08	24	4	2	8	10
09	33	8	9	7	9
10	36	5	9	7	15
11	55	17	13	11	14
12	36	6	7	8	15
13	46	16	14	7	9
14	75	18	14	23	20
15	81	25	21	16	19
16	65	18	17	20	10
17	49	16	13	13	7
18	35	9	9	12	5
19	18	2	5	7	4
20	23	8	5	10	0
21	12	1	5	5	1
22	12	5	4	3	0
23	6	3	1	0	2
	659	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	56
AM Peak Hour Factor	82.35 %
PM Peak Hour Start	14:30
PM Peak Hour Total	89
PM Peak Hour Factor	89.00 %

08-16-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	4	2	0	0	2
02	2	2	0	0	0
03	1	0	1	0	0
04	0	0	0	0	0
05	4	0	3	0	1
06	8	0	3	0	5
07	24	3	6	8	7
08	29	7	9	4	9
09	36	8	14	7	7
10	31	8	14	1	8
11	35	11	10	8	6
12	58	7	17	23	11
13	31	7	9	4	11
14	53	6	15	11	21
15	54	19	10	12	13
16	53	15	13	12	13
17	77	28	13	21	15
18	34	8	11	6	9
19	19	3	9	2	5
20	14	4	4	3	3
21	8	3	4	1	0
22	8	2	3	3	0
23	4	0	4	0	0
	587	Total			

AM Peak Hour Start	08:45
AM Peak Hour Total	38
AM Peak Hour Factor	67.86 %
PM Peak Hour Start	17:00
PM Peak Hour Total	77
PM Peak Hour Factor	68.75 %

08-17-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	0	0	0	1
01	0	0	0	0	0
02	0	0	0	0	0
03	3	1	1	1	0
04	0	0	0	0	0
05	0	0	0	0	0
06	7	0	0	3	4
07	35	11	8	12	4
08	17	7	2	1	7
09	38	11	1	14	12
10	34	3	5	8	18
11	34	6	7	11	10
12	31	9	8	6	8
13	49	9	12	15	13
14	43	12	9	9	13
15	104	24	37	20	23
16	54	11	10	19	14
17	78	20	23	21	14
18	28	9	6	8	5
19	29	9	7	6	7
20	15	2	4	3	6
21	10	2	4	2	2
22	10	4	2	4	0
23	5	4	0	0	1
	625	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	42
AM Peak Hour Factor	58.33 %
PM Peak Hour Start	15:00
PM Peak Hour Total	104
PM Peak Hour Factor	70.27 %

08-18-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	3	1	0	1	1
02	0	0	0	0	0
03	1	0	0	0	1
04	1	0	0	1	0
05	0	0	0	0	0
06	9	0	1	3	5
07	32	8	7	13	4
08	25	6	6	6	7
09	33	4	6	11	12
10	37	6	6	10	15
11	37	7	9	17	4
12	31	6	9	7	9
13	50	12	10	18	10
14	84	19	25	17	23
15	55	10	19	15	11
16	86	23	23	24	16
17	67	18	26	12	11
18	20	11	9		
19					
20					
21					
22					
23					
	571	Total			

AM Peak Hour Start	10:45
AM Peak Hour Total	48
AM Peak Hour Factor	70.59 %
PM Peak Hour Start	16:00
PM Peak Hour Total	86
PM Peak Hour Factor	89.58 %

Mitron Systems Volume Count Report

Site Name	SB SEE CANYON RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9887
Direction	South
Date	8/26/2006
Real Time	16:48
Start Date	8/26/2006
Start Time	17:00
Sample Time	00:15
Operator Number	29
Machine Number	3507

Saturday, August 26, 2006

08-26-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17	56	15	15	9	17
18	41	10	15	11	5
19	20	3	8	0	9
20	8	5	2	0	1
21	17	2	8	2	5
22	4	1	0	2	1
23	4	0	2	0	2
	150	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	17:00
PM Peak Hour Total	56
PM Peak Hour Factor	82.35 %

08-27-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	2	1	0	0	1
05	7	2	0	2	3
06	21	4	1	9	7
07	56	9	13	19	15
08	59	28	10	10	11
09	39	12	9	8	10
10	40	10	8	17	5
11	45	10	13	9	13
12	50	12	15	10	13
13	52	7	20	14	11
14	51	12	14	14	11
15	54	11	19	18	6
16	65	17	17	12	19
17	46	12	10	18	6
18	28	6	4	10	8
19	26	8	4	8	6
20	7	1	5	0	1
21	10	3	6	0	1
22	3	1	0	0	2
23	2	0	1	1	0
	663	Total			

AM Peak Hour Start	07:15
AM Peak Hour Total	75
AM Peak Hour Factor	66.96 %
PM Peak Hour Start	16:00
PM Peak Hour Total	65
PM Peak Hour Factor	85.53 %

08-28-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	1	0	0	1	0
02	0	0	0	0	0
03	2	0	0	2	0
04	1	1	0	0	0
05	9	2	3	2	2
06	21	3	2	6	10
07	74	14	13	20	27
08	53	27	11	13	2
09	30	10	3	8	9
10	39	13	5	10	11
11	35	8	12	7	8
12	42	17	10	7	8
13	56	17	14	7	18
14	36	14	6	5	11
15	52	8	17	17	10
16	56	15	12	7	22
17	39	11	4	10	14
18	29	4	8	8	9
19	18	5	6	4	3
20	8	1	4	2	1
21	3	0	3	0	0
22	3	2	0	1	0
23	1	0	1	0	0
	608	Total			

AM Peak Hour Start	07:15
AM Peak Hour Total	87
AM Peak Hour Factor	80.56 %
PM Peak Hour Start	15:15
PM Peak Hour Total	59
PM Peak Hour Factor	86.76 %

08-29-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	1	0	0	0	1
04	1	0	0	0	1
05	7	0	0	2	5
06	20	3	2	8	7
07	60	17	11	24	8
08	61	17	19	17	8
09	33	8	10	7	8
10	35	5	6	11	13
11	45	14	8	9	14
12	48	14	9	15	10
13	51	12	9	13	17
14	57	22	4	11	20
15	42	3	9	18	12
16	46	18	10	6	12
17	31	4	12	9	6
18	40	9	15	11	5
19	19	6	9	2	2
20	11	5	4	0	2
21	2	1	0	0	1
22	4	0	2	1	1
23	4	2	2	0	0
	618	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	68
AM Peak Hour Factor	70.83 %
PM Peak Hour Start	13:15
PM Peak Hour Total	61
PM Peak Hour Factor	69.32 %

Mitron Systems Volume Count Report

Site Name	SB SEE CANYON RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9887
Direction	South
Date	8/26/2006
Real Time	16:48
Start Date	8/26/2006
Start Time	17:00
Sample Time	00:15
Operator Number	29
Machine Number	3507

Wednesday, August 30, 2006

08-30-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	2	0	0	2	0
02	0	0	0	0	0
03	1	0	0	0	1
04	1	0	0	0	1
05	13	1	2	1	9
06	20	5	1	4	10
07	68	8	6	25	29
08	61	24	13	12	12
09	48	8	13	11	16
10	39	8	11	11	9
11	49	15	9	10	15
12	36	9	6	9	12
13	65	13	15	21	16
14	56	22	8	11	15
15	51	13	14	12	12
16	44	8	13	15	8
17	51	15	12	15	9
18	27	5	12	5	5
19	23	11	6	2	4
20	22	3	2	6	11
21	4	0	0	3	1
22	1	0	0	1	0
23	2	2	0	0	0
	684	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	91
AM Peak Hour Factor	78.45 %
PM Peak Hour Start	13:15
PM Peak Hour Total	74
PM Peak Hour Factor	84.09 %

08-31-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	1	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	3	1	2	0	0
05	6	0	3	1	2
06	12	3	0	4	5
07	52	10	11	15	16
08	55	19	10	13	13
09	40	14	13	9	4
10	38	9	15	5	9
11	37	4	9	9	15
12	54	17	18	15	4
13	72	22	16	18	16
14	63	21	13	14	15
15	48	6	17	17	8
16	65	14	12	28	11
17	54	13	13	18	10
18	48	6	13	12	17
19	26	5	11	8	2
20	14	6	3	1	4
21	3	0	0	3	0
22	10	0	5	4	1
23	0	0	0	0	0
	701	Total			

AM Peak Hour Start	07:15
AM Peak Hour Total	61
AM Peak Hour Factor	80.26 %
PM Peak Hour Start	13:00
PM Peak Hour Total	72
PM Peak Hour Factor	81.82 %

09-01-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	1	1	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	4	3	0	0	1
05	1	0	0	0	1
06	11	4	2	5	0
07	15	2	3	6	4
08	20	8	1	5	6
09	47	12	13	11	11
10	64	16	12	17	19
11	60	22	10	13	15
12	61	16	12	19	14
13	81	25	21	21	14
14	74	18	20	12	24
15	66	14	19	11	22
16	81	26	23	21	11
17	69	9	29	11	20
18	66	6	15	17	28
19	44	16	14	4	10
20	28	8	4	12	4
21	12	6	2	3	1
22	5	0	3	1	1
23	10	1	1	5	3
	821	Total			

AM Peak Hour Start	10:15
AM Peak Hour Total	70
AM Peak Hour Factor	79.55 %
PM Peak Hour Start	15:45
PM Peak Hour Total	92
PM Peak Hour Factor	88.46 %

09-02-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	2	0	0	0
01	1	0	0	0	1
02	0	0	0	0	0
03	0	0	0	0	0
04	4	1	0	2	1
05	1	0	0	0	1
06	10	1	0	6	3
07	5	2	1	0	2
08	17	4	6	4	3
09	38	10	8	5	15
10	33	8	6	10	9
11	39	8	8	13	10
12	64	10	18	14	22
13	64	22	10	20	12
14	81	11	21	27	22
15	77	15	18	25	19
16	82	22	24	23	13
17	50	14	15	17	4
18	37	12	7	6	12
19	25	11	3	5	6
20	6	2	1	3	0
21	14	2	5	5	2
22	11	3	4	1	3
23	4	1	2	0	1
	665	Total			

AM Peak Hour Start	09:45
AM Peak Hour Total	39
AM Peak Hour Factor	65.00 %
PM Peak Hour Start	15:30
PM Peak Hour Total	90
PM Peak Hour Factor	90.00 %

Mitron Systems Volume Count Report

Site Name	SB SEE CANYON RD
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9887
Direction	South
Date	8/26/2006
Real Time	16:48
Start Date	8/26/2006
Start Time	17:00
Sample Time	00:15
Operator Number	29
Machine Number	3507

Sunday, September 03, 2006

09-03-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	2	0	1	0	1
03	2	0	1	1	0
04	2	1	0	0	1
05	2	0	1	0	1
06	6	0	0	5	1
07	10	3	1	4	2
08	23	1	2	7	13
09	36	8	8	5	15
10	50	14	10	13	13
11	49	8	13	15	13
12	81	19	22	24	16
13	58	14	11	9	24
14	67	13	20	11	23
15	59	16	13	14	16
16	79	28	8	21	22
17	45	12	11	10	12
18	35	3	5	11	16
19	39	8	6	14	11
20	18	8	2	3	5
21	7	3	2	2	0
22	0	0	0	0	0
23	3	0	2	1	0
	673	Total			

AM Peak Hour Start	09:45
AM Peak Hour Total	52
AM Peak Hour Factor	86.67 %
PM Peak Hour Start	12:00
PM Peak Hour Total	81
PM Peak Hour Factor	84.38 %

09-04-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	0	0	1	0
01	0	0	0	0	0
02	0	0	0	0	0
03	2	0	1	1	0
04	6	1	0	0	5
05	8	0	3	2	3
06	24	5	2	4	13
07	60	9	13	13	25
08	70	16	30	14	10
09	29	5	10	7	7
10	43	8	17	7	11
11	66	12	18	22	14
12	54	13	12	21	8
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
	363	Total			

AM Peak Hour Start	07:45
AM Peak Hour Total	85
AM Peak Hour Factor	70.83 %
PM Peak Hour Start	12:00
PM Peak Hour Total	54
PM Peak Hour Factor	64.29 %

Mitron Systems Volume Count Report

Site Name	Squire Canyon Rd
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9882
Direction	None
Date	8/26/2006
Real Time	15:32
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	602

2-directional volumes

Saturday, August 26, 2006

08-26-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00					
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16	25	8	8	3	6
17	31	5	6	6	14
18	29	6	7	9	7
19	29	8	7	2	12
20	19	10	4	5	0
21	10	2	2	5	1
22	4	2	0	2	0
23	3	1	1	1	0
	150	Total			

AM Peak Hour Start	
AM Peak Hour Total	
AM Peak Hour Factor	
PM Peak Hour Start	17:45
PM Peak Hour Total	36
PM Peak Hour Factor	64.29 %

08-27-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	5	1	2	1	1
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	6	1	2	1	2
06	13	3	5	2	3
07	26	2	8	6	10
08	25	7	4	9	5
09	21	3	6	5	7
10	27	14	4	5	4
11	39	9	11	7	12
12	33	5	7	7	14
13	26	6	7	6	7
14	43	10	13	11	9
15	30	9	9	5	7
16	26	7	6	7	6
17	40	5	13	10	12
18	29	6	6	10	7
19	27	11	5	7	4
20	15	1	2	5	7
21	14	3	4	2	5
22	11	6	2	1	2
23	2	1	1	0	0
	458	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	39
AM Peak Hour Factor	81.25 %
PM Peak Hour Start	14:00
PM Peak Hour Total	43
PM Peak Hour Factor	82.69 %

08-28-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	3	1	1	1	0
05	4	0	3	0	1
06	9	1	3	1	4
07	34	2	4	17	11
08	39	12	8	11	8
09	29	6	4	6	13
10	34	9	9	7	9
11	28	10	6	3	9
12	24	12	1	6	5
13	38	4	11	13	10
14	37	5	12	11	9
15	30	7	5	10	8
16	33	9	12	5	7
17	50	9	11	13	17
18	21	2	6	8	5
19	23	8	6	4	5
20	10	2	3	3	2
21	11	2	3	3	3
22	6	1	3	0	2
23	2	0	0	1	1
	465	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	48
AM Peak Hour Factor	70.59 %
PM Peak Hour Start	17:00
PM Peak Hour Total	50
PM Peak Hour Factor	73.53 %

08-29-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	3	0	1	2	0
05	2	0	0	0	2
06	18	1	8	3	6
07	40	4	3	17	16
08	35	9	9	7	10
09	33	10	10	4	9
10	18	4	2	6	6
11	31	12	4	3	12
12	25	7	9	6	3
13	25	7	8	7	3
14	33	7	4	7	15
15	31	8	7	9	7
16	49	13	14	10	12
17	50	14	15	10	11
18	26	7	7	5	7
19	28	8	8	9	3
20	15	4	5	3	3
21	10	4	2	3	1
22	9	3	4	0	2
23	4	1	2	1	0
	485	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	51
AM Peak Hour Factor	75.00 %
PM Peak Hour Start	16:30
PM Peak Hour Total	51
PM Peak Hour Factor	85.00 %

Mitron Systems Volume Count Report

Site Name	Squire Canyon Rd
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9882
Direction	None
Date	8/26/2006
Real Time	15:32
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	602

Wednesday, August 30, 2006

08-30-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	4	1	3	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	3	0	2	1	0
05	3	0	0	0	3
06	11	2	6	1	2
07	42	7	4	19	12
08	36	6	9	12	9
09	16	4	3	3	6
10	36	11	5	12	8
11	36	11	10	7	8
12	33	15	6	6	6
13	27	7	11	7	2
14	41	5	14	8	14
15	49	9	6	16	18
16	32	6	14	6	6
17	38	7	10	11	10
18	30	3	6	13	8
19	33	12	7	9	5
20	15	1	6	5	3
21	13	2	6	4	1
22	9	4	2	2	1
23	6	1	2	1	2
	513	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	46
AM Peak Hour Factor	60.53 %
PM Peak Hour Start	15:30
PM Peak Hour Total	54
PM Peak Hour Factor	75.00 %

08-31-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	1	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	5	1	2	1	1
06	10	3	3	0	4
07	33	0	7	13	13
08	30	8	8	7	7
09	23	4	7	5	7
10	28	6	7	5	10
11	34	8	12	4	10
12	30	9	6	7	8
13	34	8	9	11	6
14	35	5	14	6	10
15	42	8	6	11	17
16	42	11	9	8	14
17	46	11	9	14	12
18	39	12	8	9	10
19	30	9	9	7	5
20	21	4	5	5	7
21	19	5	3	6	5
22	14	4	0	5	5
23	8	7	0	0	1
	524	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	42
AM Peak Hour Factor	80.77 %
PM Peak Hour Start	15:30
PM Peak Hour Total	48
PM Peak Hour Factor	70.59 %

09-01-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	1	0	0	0
01	1	0	1	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	3	0	0	0	3
05	1	0	0	1	0
06	6	1	2	1	2
07	10	1	3	2	4
08	25	8	4	5	8
09	27	6	7	8	6
10	28	5	8	10	5
11	39	5	11	13	10
12	37	9	14	9	5
13	39	12	13	6	8
14	40	6	12	10	12
15	51	12	17	12	10
16	46	10	12	7	17
17	40	15	9	9	7
18	27	8	6	5	8
19	21	3	4	10	4
20	23	7	8	3	5
21	19	8	4	4	3
22	13	3	6	2	2
23	6	6	0	0	0
	503	Total			

AM Peak Hour Start	11:00
AM Peak Hour Total	39
AM Peak Hour Factor	75.00 %
PM Peak Hour Start	14:45
PM Peak Hour Total	53
PM Peak Hour Factor	77.94 %

09-02-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	0	0	0	0	0
01	1	0	1	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	0	0	0	0	0
05	4	1	2	1	0
06	6	2	3	1	0
07	6	3	1	1	1
08	23	5	5	5	8
09	21	8	2	4	7
10	35	9	6	10	10
11	26	9	6	6	5
12	31	6	7	10	8
13	25	7	3	5	10
14	39	6	10	12	11
15	49	16	12	11	10
16	25	8	10	4	3
17	32	4	10	8	10
18	24	8	7	2	7
19	28	6	8	6	8
20	24	10	2	5	7
21	17	1	8	3	5
22	12	6	3	3	0
23	0	0	0	0	0
	428	Total			

AM Peak Hour Start	10:00
AM Peak Hour Total	35
AM Peak Hour Factor	87.50 %
PM Peak Hour Start	14:30
PM Peak Hour Total	51
PM Peak Hour Factor	79.69 %

Mitron Systems Volume Count Report

Site Name	Squire Canyon Rd
Jurisdiction	
Study Type	Volume (ch1)
Location Code	9882
Direction	None
Date	8/26/2006
Real Time	15:32
Start Date	8/26/2006
Start Time	16:00
Sample Time	00:15
Operator Number	29
Machine Number	602

Sunday, September 03, 2006

09-03-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	2	1	1	0	0
01	0	0	0	0	0
02	1	1	0	0	0
03	0	0	0	0	0
04	2	0	2	0	0
05	3	1	1	0	1
06	5	1	3	1	0
07	16	6	0	2	8
08	16	0	4	5	7
09	17	1	2	8	6
10	35	10	11	5	9
11	21	4	8	4	5
12	34	10	8	8	8
13	29	8	8	4	9
14	38	12	7	13	6
15	37	6	12	6	13
16	36	9	10	11	6
17	29	9	10	7	3
18	27	4	10	5	8
19	16	6	3	4	3
20	22	6	5	8	3
21	10	4	2	2	2
22	3	1	0	1	1
23	4	2	0	1	1
	403	Total			

AM Peak Hour Start	09:30
AM Peak Hour Total	35
AM Peak Hour Factor	79.55 %
PM Peak Hour Start	15:45
PM Peak Hour Total	43
PM Peak Hour Factor	82.69 %

09-04-06 (Ch1)

HR Begin	HR Total	00-15	15-30	30-45	45-00
00	1	1	0	0	0
01	0	0	0	0	0
02	0	0	0	0	0
03	0	0	0	0	0
04	3	1	1	0	1
05	5	0	1	0	4
06	7	1	3	2	1
07	43	2	10	20	11
08	48	15	16	4	13
09	25	7	6	8	4
10	26	5	6	7	8
11	30	2	10	11	7
12	28	12	5	4	7
13	26	4	3	9	10
14	12	12			
15					
16					
17					
18					
19					
20					
21					
22					
23					
	254	Total			

AM Peak Hour Start	07:30
AM Peak Hour Total	62
AM Peak Hour Factor	77.50 %
PM Peak Hour Start	13:15
PM Peak Hour Total	34
PM Peak Hour Factor	70.83 %

Thursday 8/17/06 AM	NBL	NBT	NBR	NBTrucks	WBL	WBT	WBR	WBTrucks	SBL	SBT	SBR	SBTrucks	EBL	EBT	EBR	EBTrucks
7:00-7:15	0	0	0	0	0	58	7	3	1	0	38	1	19	16	0	2
7:15-7:30	0	0	0	0	0	105	17	4	2	0	82	2	29	30	0	3
7:30-7:45	0	0	0	0	0	143	27	6	6	0	108	2	42	44	0	4
7:45-8:00	0	0	0	0	0	180	45	9	12	0	144	4	58	55	0	4
8:00-8:15	0	0	0	0	0	208	56	12	18	0	164	5	69	74	0	5
8:15-8:30	0	0	0	0	0	235	70	14	24	0	174	7	82	94	0	6
8:30-8:45	0	0	0	0	0	266	78	17	31	0	205	8	94	115	0	11
8:45-9:00	0	0	0	0	0	300	93	20	39	0	238	9	106	126	0	14
Thursday 8/17/06 PM																
4:00-4:15	0	0	0	0	0	34	13	0	11	0	38	0	65	90	0	2
4:15-4:30	0	0	0	0	0	78	24	0	22	0	73	1	105	177	0	2
4:30-4:45	0	0	0	0	0	110	37	1	37	0	93	1	188	267	0	3
4:45-5:00	0	0	0	0	0	145	52	1	55	0	117	1	273	384	0	5
5:00-5:15	0	0	0	0	0	179	63	3	80	0	147	3	335	484	0	5
5:15-5:30	0	0	0	0	0	209	74	4	94	0	168	3	491	643	0	7
5:30-5:45	0	0	0	0	0	242	82	4	103	0	199	3	560	717	0	7
5:45-6:00	0	0	0	0	0	275	96	4	111	0	230	3	607	801	0	9

Intersection: Avila Beach Drive at San Luis Bay Drive

Thursday 04/19/07	NBL	NBT	NBR	NBTrucks	WBL	WBT	WBR	WBTrucks	SBL	SBT	SBR	SBTrucks	EBL	EBT	EBR	EBTrucks
AM																
7:00-7:15			2		11	57								14	0	
7:15-7:30			5		5	63								18	0	
7:30-7:45			3		5	64								13	1	
7:45-8:00			4		4	52								16	0	
8:00-8:15			6		9	31								19	0	
8:15-8:30			4		3	37								21	1	
8:30-8:45			5		8	42								19	0	
8:45-9:00			2		8	37								22	0	
Thursday 04/19/07																
PM																
4:00-4:15			9		3	41								57	0	
4:15-4:30			10		4	46								58	2	
4:30-4:45			8		6	38								111	0	
4:45-5:00			12		4	26								191	0	
5:00-5:15			20		2	37								255	1	
5:15-5:30			18		7	40								274	0	
5:30-5:45			17		4	75								253	0	
5:45-6:00			14		4	36								13	0	

Intersection: Avila Beach Drive at San Miguel Street

Thursday 04/19/07	NBL	NBT	NBR	NBTrucks	WBL	WBT	WBR	WBTrucks	SBL	SBT	SBR	SBTrucks	EBL	EBT	EBR	EBTrucks
AM																
7:00-7:15	4		1		8	51								12	1	
7:15-7:30	5		5		7	56								14	2	
7:30-7:45	1		0		1	62								14	1	
7:45-8:00	3		1		5	44								5	0	
8:00-8:15	1		2		3	29								8	4	
8:15-8:30	4		5		5	32								16	2	
8:30-8:45	4		0		5	36								19	2	
8:45-9:00	4		2		5	37								21	4	
Thursday 04/19/07																
PM																
4:00-4:15	3		8		4	37								49	7	
4:15-4:30	9		11		6	40								49	12	
4:30-4:45	8		6		7	31								105	4	
4:45-5:00	4		9		3	23								182	7	
5:00-5:15	2		11		10	27								244	14	
5:15-5:30	5		5		7	33								269	9	
5:30-5:45	7		11		6	69								242	7	
5:45-6:00	0		6		8	28								107	3	

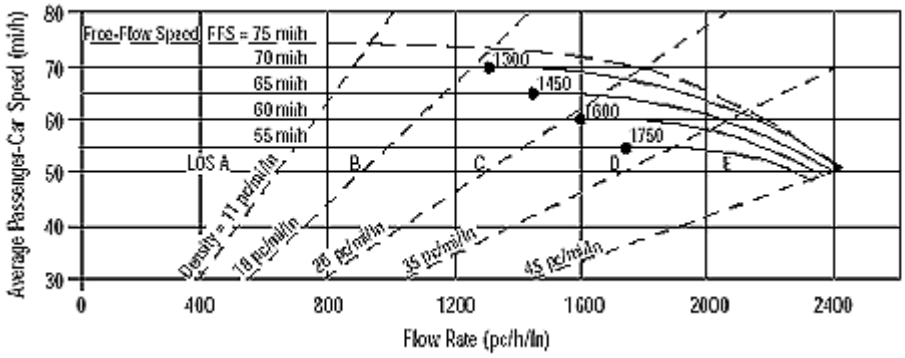
Intersection: Avila Beach Drive at First Street

APPENDIX B

EXISTING CONDITIONS

FREEWAY AND INTERSECTION LEVELS OF SERVICE

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*1/10/2007*
Analysis Time Period	*Non Summer Weekday*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*North of San Luis Bay Drive*
Jurisdiction	*Caltrans*
Analysis Year	*2006*

Project Description Avila Circulation Element Update 06-1052

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4150*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2409*	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

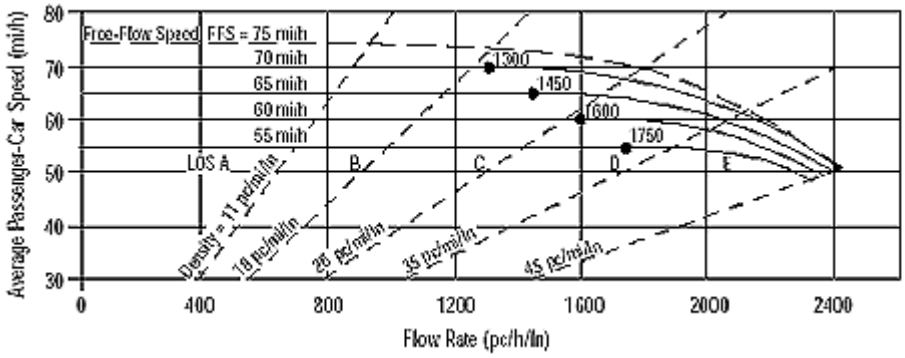
Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*1/10/2007*
Analysis Time Period	*Summer/Holiday Weekend*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*North of San Luis Bay Drive*
Jurisdiction	*Caltrans*
Analysis Year	*2006*

Project Description Avila Circulation Element Update 06-1052

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4333*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2516*	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

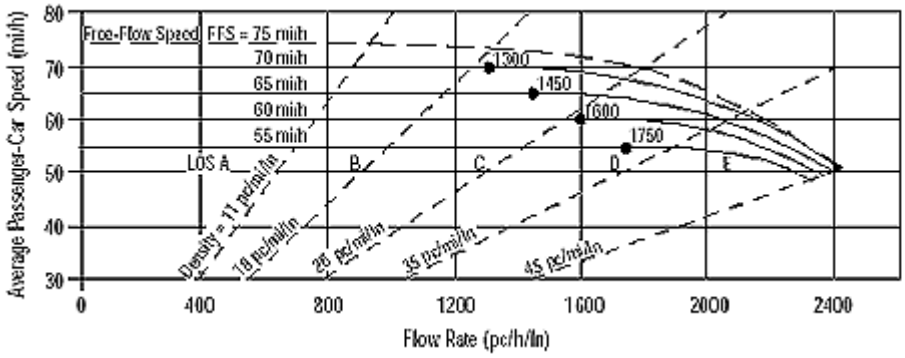
Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*1/10/2007*
Analysis Time Period	*Non Summer Weekday*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*San Luis Bay Dr to Avila Beach*
Jurisdiction	*Caltrans*
Analysis Year	*2006*

Project Description Avila Circulation Element Update 06-1052

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3800*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2206*	pc/h/ln
S	*59.9*	mi/h
D = v_p / S	*36.8*	pc/mi/ln
LOS	*E*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

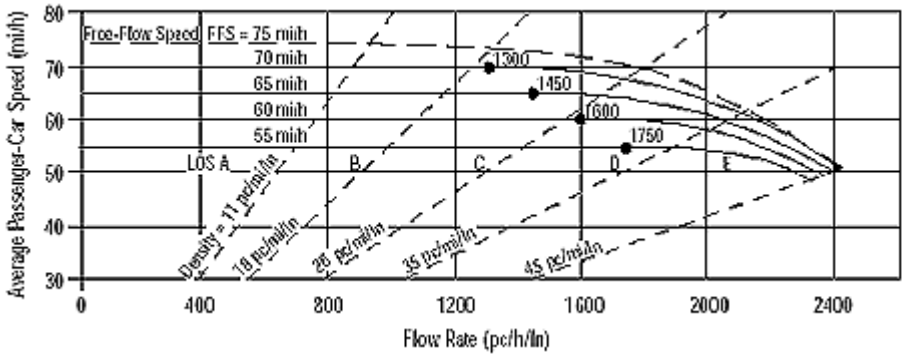
Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*1/10/2007*
Analysis Time Period	*Summer/Holiday Weekend*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*San Luis Bay Dr to Avila Beach*
Jurisdiction	*Caltrans*
Analysis Year	*2006*

Project Description Avila Circulation Element Update 06-1052

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3968*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2304*	pc/h/ln
S	*56.9*	mi/h
D = v_p / S	*40.5*	pc/mi/ln
LOS	*E*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

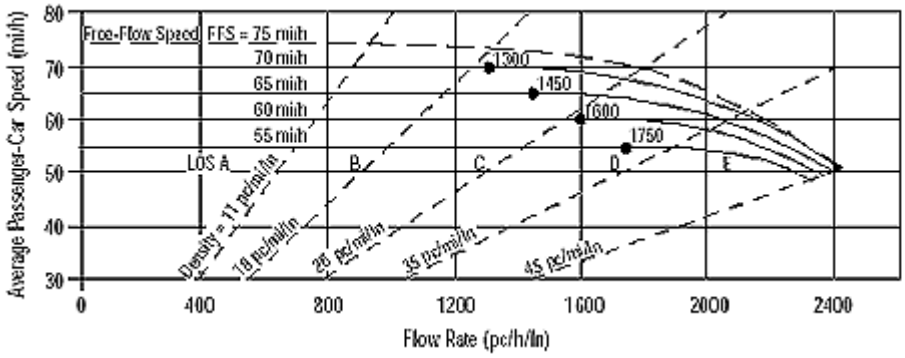
Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*1/10/2007*
Analysis Time Period	*Non Summer Weekday*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*South of Avila Beach Drive*
Jurisdiction	*Caltrans*
Analysis Year	*2006*

Project Description Avila Circulation Element Update 06-1052

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4300*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2496*	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

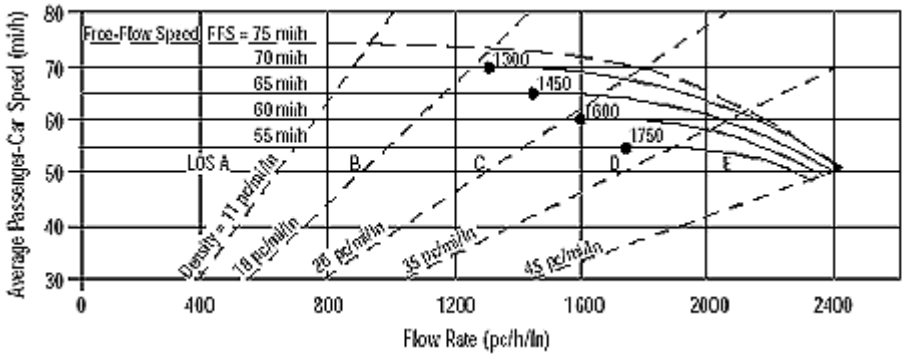
Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*1/10/2007*
Analysis Time Period	*Summer/Holiday Weekend*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*South of Avila Beach Drive*
Jurisdiction	*Caltrans*
Analysis Year	*2006*

Project Description Avila Circulation Element Update 06-1052

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4490*	veh/h	Peak-Hour Factor, PHF	*0.90*	
AADT		veh/day	%Trucks and Buses, P_T	*9*	
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*	
Peak-Hr Direction Prop, D			General Terrain:	*Level*	
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*	
Driver type adjustment	*1.00*		Up/Down %		

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2607*	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*S Leon*	Intersection	*Avila Beach @ San Luis Bay*
Agency/Co.	*TOG Consulting*	Jurisdiction	*County of SLO*
Date Performed	*8/22/2006*	Analysis Year	*2006*
Analysis Time Period	*Existing non summer weekday*		

Project Description *06-1052*

East/West Street: *Avila Beach Drive* | North/South Street: *San Luis Bay Drive*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*314*	*379*			*107*	*41*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*341*	*411*	*0*	*0*	*116*	*44*
Percent Heavy Vehicles	*4*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*0*
Configuration	*L*	*T*				*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*59*		*77*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*64*	*0*	*83*
Percent Heavy Vehicles	*0*	*0*	*0*	*3*	*0*	*3*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*						*LR*	
v (veh/h)	*341*						*147*	
C (m) (veh/h)	*1407*						*281*	
v/c	*0.24*						*0.52*	
95% queue length	*0.95*						*2.82*	
Control Delay (s/veh)	*8.4*						*31.0*	
LOS	*A*						*D*	
Approach Delay (s/veh)	--	--					*31.0*	
Approach LOS	--	--					*D*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*S Leon*	Intersection	*Avila Beach @ San Luis Bay*
Agency/Co.	*TPG Consulting*	Jurisdiction	*County of SLO*
Date Performed	*8/22/2006*	Analysis Year	*2006*
Analysis Time Period	*Existing summer/holiday weeken*		

Project Description *06-1052*

East/West Street: *Avila Beach Drive* | North/South Street: *San Luis Bay Drive*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*328*	*396*			*111*	*42*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*356*	*430*	*0*	*0*	*120*	*45*
Percent Heavy Vehicles	*2*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*1*	*0*	*0*	*1*	*0*
Configuration	*L*	*T*				*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)				*61*		*81*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*66*	*0*	*88*
Percent Heavy Vehicles	*0*	*0*	*0*	*2*	*0*	*2*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*						*LR*	
v (veh/h)	*356*						*154*	
C (m) (veh/h)	*1413*						*264*	
v/c	*0.25*						*0.58*	
95% queue length	*1.00*						*3.37*	
Control Delay (s/veh)	*8.4*						*36.1*	
LOS	*A*						*E*	
Approach Delay (s/veh)	--	--					*36.1*	
Approach LOS	--	--					*E*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach Drive at San Luis*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*6/13/2007*	Analysis Year	*2007*
Analysis Time Period	*Existing non summer weekday*		

Project Description	*06-1052 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *San Luis Street*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*670*	*5*	*30*	*154*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*728*	*5*	*32*	*167*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*1*		*23*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*1*	*0*	*24*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*32*	*1*		*24*			
C (m) (veh/h)		*872*	*274*		*422*			
v/c		*0.04*	*0.00*		*0.06*			
95% queue length		*0.11*	*0.01*		*0.18*			
Control Delay (s/veh)		*9.3*	*18.2*		*14.0*			
LOS		*A*	*C*		*B*			
Approach Delay (s/veh)	--	--	*14.2*					
Approach LOS	--	--	*B*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach Drive at San Luis*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*6/13/2007*	Analysis Year	*2007*
Analysis Time Period	*Existing summer weekend*		

Project Description	*06-1052 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *San Luis Street*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*700*	*5*	*31*	*161*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*760*	*5*	*33*	*174*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*1*		*24*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*1*	*0*	*26*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*33*	*1*		*26*			
C (m) (veh/h)		*848*	*259*		*405*			
v/c		*0.04*	*0.00*		*0.06*			
95% queue length		*0.12*	*0.01*		*0.20*			
Control Delay (s/veh)		*9.4*	*19.0*		*14.5*			
LOS		*A*	*C*		*B*			
Approach Delay (s/veh)	--	--	*14.7*					
Approach LOS	--	--	*B*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach at San Miguel*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*6/13/2007*	Analysis Year	*2007*
Analysis Time Period	*Existing non summer weekday*		

Project Description	*06-1052 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *San Miguel Street*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*645*	*1*	*13*	*137*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*701*	*1*	*14*	*148*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*0*		*44*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*47*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*14*	*0*		*47*			
C (m) (veh/h)		*895*	*313*		*438*			
v/c		*0.02*	*0.00*		*0.11*			
95% queue length		*0.05*	*0.00*		*0.36*			
Control Delay (s/veh)		*9.1*	*16.5*		*14.2*			
LOS		*A*	*C*		*B*			
Approach Delay (s/veh)	--	--	*14.2*					
Approach LOS	--	--	*B*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach at San Miguel*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*6/13/2007*	Analysis Year	*2007*
Analysis Time Period	*Existing summer weekend*		

Project Description *06-1052 Avila Circulation Element*

East/West Street: *Avila Beach Drive*	North/South Street: *San Miguel Street*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*673*	*1*	*14*	*143*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*731*	*1*	*15*	*155*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*0*		*46*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*49*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*15*	*0*		*49*			
C (m) (veh/h)		*873*	*297*		*421*			
v/c		*0.02*	*0.00*		*0.12*			
95% queue length		*0.05*	*0.00*		*0.39*			
Control Delay (s/veh)		*9.2*	*17.1*		*14.7*			
LOS		*A*	*C*		*B*			
Approach Delay (s/veh)	--	--	*14.7*					
Approach LOS	--	--	*B*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach at First*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*6/13/2007*	Analysis Year	*2007*
Analysis Time Period	*Existing non summer weekday*		

Project Description *06-1052 Avila Circulation Element*

East/West Street: *Avila Beach Drive* | North/South Street: *First Street*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*622*	*37*	*20*	*117*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*676*	*40*	*21*	*127*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*18*		*24*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*19*	*0*	*26*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*21*	*19*		*26*			
C (m) (veh/h)		*885*	*316*		*442*			
v/c		*0.02*	*0.06*		*0.06*			
95% queue length		*0.07*	*0.19*		*0.19*			
Control Delay (s/veh)		*9.2*	*17.1*		*13.7*			
LOS		*A*	*C*		*B*			
Approach Delay (s/veh)	--	--	*15.1*					
Approach LOS	--	--	*C*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach at First*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*6/13/2007*	Analysis Year	*2007*
Analysis Time Period	*Existing summer weekend*		

Project Description *06-1052 Avila Circulation Element*

East/West Street: *Avila Beach Drive* | North/South Street: *First Street*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*649*	*39*	*21*	*122*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*705*	*42*	*22*	*132*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*19*		*25*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*20*	*0*	*27*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*22*	*20*		*27*			
C (m) (veh/h)		*861*	*300*		*425*			
v/c		*0.03*	*0.07*		*0.06*			
95% queue length		*0.08*	*0.21*		*0.20*			
Control Delay (s/veh)		*9.3*	*17.9*		*14.0*			
LOS		*A*	*C*		*B*			
Approach Delay (s/veh)	--	--	*15.7*					
Approach LOS	--	--	*C*					

APPENDIX C

EXISTING CONDITIONS

PEAK HOUR SIGNAL WARRANTS

Signal Warrants - Existing

Intersections		Warrant Type	Approach Lanes		Peak Hour Volumes		Meets Warrant
			Major Street	Minor Street	Major Streets[1]	Minor Street[2]	
Avila Beach Drive at San Luis Street	*Non summer*	Rural	1	1	859	24	No
	summer	Rural	1	1	897	25	No
Avila Beach Drive at San Miguel Street	*Non summer*	Rural	1	1	796	44	No
	summer	Rural	1	1	831	46	No
Avila Beach Drive at 1st Street	*Non summer*	Rural	1	1	796	42	No
	summer	Rural	1	1	831	44	No
Avila Beach at San Luis Bay Street 2006	*Non summer*	Rural	1	1	840	136	**Yes**
	summer	Rural	1	1	877	142	**Yes**

Urban = California MUTCD, Figure 4C-3
Rural = California MUTCD, Figure 4C-4

[1] Inlcudes both directions
[2] Includes higher volume direction only

APPENDIX D

CAVE LANDING ROAD FEASIBILITY STUDY

Cave Landing Road - Emergency Access
County of San Luis Obispo, California

Alternative Overview

Based on Fugro's October 17, 2007 Preliminary Geotechnical Report five structures types were considered, evaluated and rated. The structures are a bridge-viaduct, soldier pile wall, retaining wall, mass grading, and a land bridge. The factors considered were, estimated cost, environmental impact, maintenance, and performance. The two key factors being estimated cost and environmental impact. Each factor was given a rating from 1 to 10,
10 being the best. The ratings were then totaled and each structure given an average rating.

The results are as follows:

	Estimated Cost*	Environmental Impact	Maintenance	Performance	Average Rating
Bridge-Viaduct	4	9	9	9	7.75
Solider Pile Wall	5	7	7	8	6.75
Retaining Wall	6	5	8	6	6.25
Mass Grading	6	2	8	8	6.00
Land Bridge	9	7	6	5	6.75

*preliminary estimates attached, based on County and Cal-Trans contract cost data

The Bridge-Viaduct's estimated 2007 cost is the most at $19,022,000.00; its site disturbance is the least due the relatively small amount of peers needed to support the structure. It is virtually maintenance free, and will perform for 80 years.

The Solider Pile Wall 2007 cost is estimated at $17,707,000.00; its site disturbance is moderate, the asphalt roadway and timer lagging will require maintenance, and will perform well.

The retaining walls 2007 cost is estimated at $14,419,000.00; its site disturbance is more than the soldier pile wall, the asphalt roadway will require maintenance and the wall may creep lowering its performance.

The Mass Grading 2007 cost is estimated at $14,960,000; its site disturbance would be very large in comparison to the other alternatives, the asphalt roadway will require maintenance and the re-compacted fill may have settlement problem lowering its performance.

The Land Bridge 2007 cost is the is estimated at $4,134,000.00; its site disturbance is moderate, the asphalt roadway will require maintenance, and the performance is very low due the possibility of total soil failure.

In conclusion, based on environmental impact, performance, and maintenance the Bridge-Viaduct is recommended.

Dan Erdman P.E.
Department of Public Works

Bridge Viaduct
Preliminary Cost Estimate

	Item Description	Approximate Quantity	Unit of Measure	Unit Price	Total Amount
	Bridge	46800	S.F.	$300.00	$14,040,000.00
	Design	Lump Sum	L.S.	$500,000.00	$500,000.00
	Inspection	Lump Sum	L.S.	$500,000.00	$500,000.00
	Environmental	Lump Sum	L.S.	$1,500,000.00	$1,500,000.00
	Administration	Lump Sum	L.S.	$200,000.00	$200,000.00
	Sub Total				$16,540,019.00
	Contingency 15%				$2,481,002.85
	Total in 2007				**$19,021,021.85**
*	**Total in 2012**				**$22,050,577.50**
*	**Total in 2017**				**$25,562,662.82**

* 3% inflation per year

Soldier Pile Wall
Preliminary Cost Estimate

	Item Description	Approximate Quantity	Unit of Measure	Unit Price	Total Amount
	Wall	72000	S.F.	$170.00	$12,240,000.00
	Guardrail	1800	L.F.	$35.00	$63,000.00
	Dike	3600	L.F.	$3.50	$12,600.00
	Drainage	Lump Sum	L.S.	$250,000.00	$250,000.00
	Asphalt Concrete	915	Ton	$90.00	$82,350.00
	Aggregate Base	1250	C.Y.	$40.00	$50,000.00
	Design	Lump Sum	L.S.	$500,000.00	$500,000.00
	Inspection	Lump Sum	L.S.	$500,000.00	$500,000.00
	Environmental	Lump Sum	L.S.	$1,500,000.00	$1,500,000.00
	Administration	Lump Sum	L.S.	$200,000.00	$200,000.00
	Sub Total				$15,397,950.00
	Contingency 15%				$2,309,692.50
	Total in 2007				**$17,707,642.50**
*	**Total in 2012**				**$20,528,010.87**
*	**Total in 2017**				**$23,797,590.80**

* 3% inflation per year

Retaining Wall
Preliminary Cost Estimate

Item Description	Approximate Quantity	Unit of Measure	Unit Price	Total Amount
Concrete	7000	C.Y.	$500.00	$3,500,000.00
Guardrail	1800	L.F.	$35.00	$63,000.00
Excavation	84000	C.Y.	$70.00	$5,880,000.00
Dike	3600	L.F.	$3.50	$12,600.00
Drainage	Lump Sum	L.S.	$250,000.00	$250,000.00
Asphalt Concrete	915	Ton	$90.00	$82,350.00
Aggregate Base	1250	C.Y.	$40.00	$50,000.00
Design	Lump Sum	L.S.	$500,000.00	$500,000.00
Inspection	Lump Sum	L.S.	$500,000.00	$500,000.00
Environmental	Lump Sum	L.S.	$1,500,000.00	$1,500,000.00
Administration	Lump Sum	L.S.	$200,000.00	$200,000.00
Sub Total				$12,537,950.00
Contingency 15%				$1,880,692.50
Total in 2007				**$14,418,642.50**
* **Total in 2012**				**$16,715,158.44**
* **Total in 2017**				**$19,377,449.82**

* 3% inflation per year

Mass Grading
Preliminary Cost Estimate

	Item Description	Approximate Quantity	Unit of Measure	Unit Price	Total Amount
	Excavation	500000	C.Y.	$20.00	$10,000,000.00
	Guardrail	1800	L.F.	$35.00	$63,000.00
	Dike	3600	L.F.	$3.50	$12,600.00
	Drainage	Lump Sum	L.S.	$250,000.00	$250,000.00
	Asphalt Concrete	915	Ton	$90.00	$82,350.00
	Aggregate Base	1250	C.Y.	$40.00	$50,000.00
	Design	Lump Sum	L.S.	$350,000.00	$350,000.00
	Inspection	Lump Sum	L.S.	$500,000.00	$500,000.00
	Environmental	Lump Sum	L.S.	$1,500,000.00	$1,500,000.00
	Administration	Lump Sum	L.S.	$200,000.00	$200,000.00
	Sub Total				$13,007,950.00
	Contingency 15%				$1,951,192.50
	Total in 2007				**$14,959,142.50**
*	**Total in 2012**				**$17,341,746.07**
*	**Total in 2017**				**$20,103,836.63**

* 3% inflation per year

Land Bridge
Preliminary Cost Estimate

Item Description	Approximate Quantity	Unit of Measure	Unit Price	Total Amount
Pile	3,600	L.F.	$200.00	$720,000.00
Excavation	20,000	C.Y.	$20.00	$400,000.00
Guardrail	1,800	L.F.	$35.00	$63,000.00
Drive Pile	72	E.A.	$1,000.00	$72,000.00
Drainage	Lump Sum	L.S.	$250,000.00	$250,000.00
Concrete	1,730	C.Y.	$185.00	$320,050.00
Steel	234,000	L.B.	$1.15	$269,100.00
Design	Lump Sum	L.S.	$200,000.00	$200,000.00
Inspection	Lump Sum	L.S.	$500,000.00	$500,000.00
Environmental	Lump Sum	L.S.	$1,000,000.00	$1,000,000.00
Administration	Lump Sum	L.S.	$200,000.00	$200,000.00
Sub Total				$3,594,150.00
Contingency 15%				$539,122.50
Total in 2007				**$4,133,272.50**
* **Total in 2012**				**$4,791,595.65**
* **Total in 2017**				**$5,554,772.61**

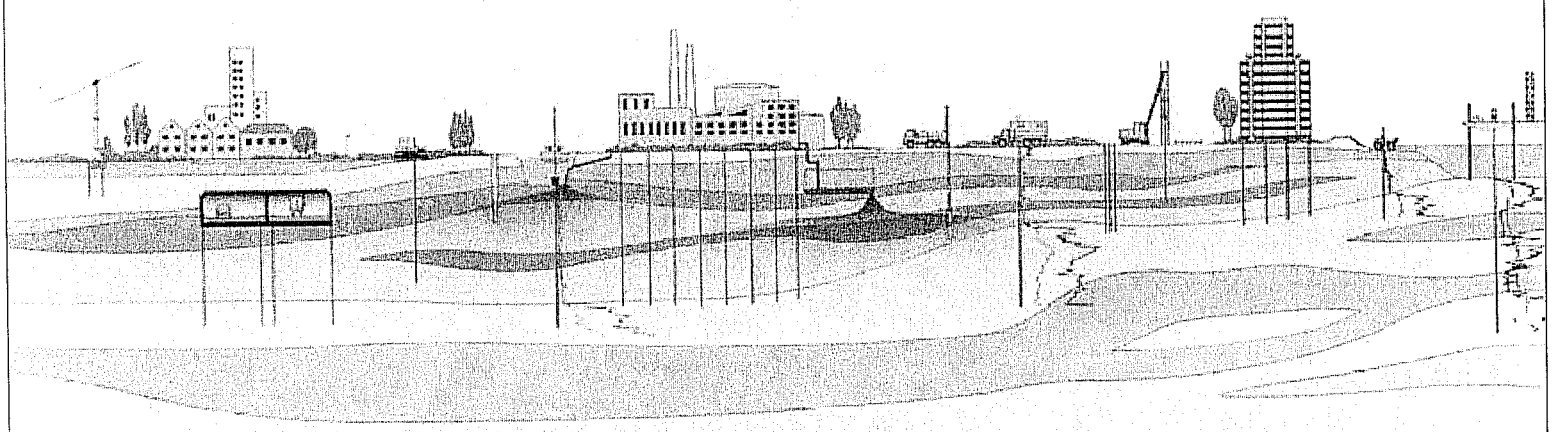
* 3% inflation per year

FUGRO WEST, INC.

PRELIMINARY GEOTECHNICAL REPORT
CAVE LANDING ROAD-BLUFF DRIVE
EMERGENCY ACCESS
SAN LUIS OBISPO COUNTY, CALIFORNIA

Prepared for:
County of San Luis Obispo
Department of Public Works

October 17, 2007



FUGRO WEST, INC.

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October 17, 2007
Project No. 3014.028

County of San Luis Obispo
County Government Center, Room 207
San Luis Obispo, California 93408

Attention: Mr. Dan Erdman

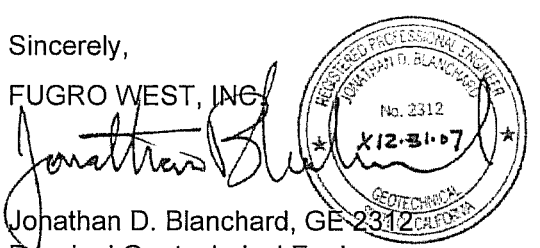
Subject: Preliminary Foundation Report, Cave Landing-Bluff Drive Emergency Access, Avila Beach, San Luis Obispo County, California

Dear Mr. Erdman:

Fugro is pleased to submit this Preliminary Geotechnical Report for the emergency access road improvements at Cave Landing. This report was prepared as authorized by the County Blanket Purchase Order No. 25003625 dated June 26, 2007. The purpose of this report is to provide geotechnical input for the initial planning and structure type selection process to create an emergency access route to connect Cave Landing Road to Bluff Drive in Pismo Beach. This report provides a summary of geotechnical considerations that could impact the project (mainly landsliding), and discusses geotechnical alternatives that could be used to help create the emergency access route based on review of existing data. The active landsliding along the alignment is likely to impact the design of the access route, and result in a relatively complex and expensive design. On the basis of our data and site visit, we have provided a summary of the site geology, subsurface conditions, seismicity, and preliminary foundation considerations.

Please contact the undersigned if you have questions or we can be of additional service.

Sincerely,
FUGRO WEST, INC.



Jonathan D. Blanchard, GE 2312
Principal Geotechnical Engineer

Copies: 4-addressee (1 CD ROM)

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1. PROJECT UNDERSTANDING

The project generally consists of constructing an emergency access route between the existing termini of Cave Landing Road in Avila Beach and Bluff Drive in Pismo Beach. The road will be developed along a coastal route within existing County right-of-way. The location of the site is shown on Plate 1, Vicinity Map.

Cave Landing Road previously extended along the proposed alignment to Bluff Drive. The County has closed the roadway in response to landsliding that impacted the existing route and extended across the right-of-way. The closed portion of the route is approximately 1,600 feet long. This project would reestablish the route to provide emergency access, and would be funded by PG&E for Diablo Canyon. We understand from the County that the route could also be used as a recreational trail for pedestrian and bicycle traffic. The access will be paved and be at least 24 feet wide.

The surrounding terrain generally consists of a marine terrace located along the base of a south-facing hillside and the Pacific Ocean. The route extends along the marine terrace above steep slopes and bluffs that overlook the beach at Pirates Cove. The existing sit grades range from approximately elevation (el.) 166 feet at the parking lot on Cave Landing Road, to approximately el. 194 feet at the high point of the alignment, to el. 125 feet at the cul-de-sac on Bluff Drive. The bluff along the subject route is relatively unstable as a result of active coastal landsliding and erosion. We understand that the County anticipates that structural improvements such as a retaining structure, bridge, or viaduct will be needed to traverse the unstable areas and to mitigate landslide hazards.

2. WORK PERFORMED

2.1 PURPOSE AND SCOPE

The purpose of this report is to provide preliminary geotechnical considerations for the design of an emergency access route that will connect Cave Landing Road to Bluff Drive. As a basis for providing the preliminary geotechnical recommendations presented in this report, we have performed the following scope of work:

1. Visiting the site on August 1, 2007 with Mr. Dan Erdman of the County to observe the alignment and review geologic conditions at the site;
2. Reviewing selected geotechnical information from our in-house files that we previously compiled for the County Planning and Parks Departments regarding the proposed land development and bike trail in this area;
3. Preparing this letter report to provide a summary of the geotechnical conditions at the site, the characteristics of landsliding at the site and how it could impact the project, coastal erosion and estimated retreat, geotechnical alternatives to create the emergency access, and geotechnical considerations for the design of the project. The main alternatives that we evaluated are:

a. Do nothing;
b. Use of retaining structures (such as, gravity, soldier pile, sheet piles, tiebacks, MSE walls, geosynthetics) to retain the slope and provide stability for the roadway;
c. Graded slopes with conventional cut and fill to support the roadway;
d. Slope stabilization with surface and subsurface drains;
e. Provide a bridge or structurally supported roadway across the main landslide areas; or
f. A combination or modification of the above

2.2 PREVIOUS STUDIES

We have reviewed and bee a part of various previous geotechnical studies performed in the project area. The key studies that we reviewed for the project are work by Cotton, Shires & Associates (CSA 2004a, 2004b, 2003). Fugro reviewed the slope stability analyses performed by CSA for the County Planning Department. Fugro (2004, 2005) also provided geotechnical services for the County Parks and Recreation Department to evaluate alternatives for creating a bike and pedestrian trail through the site. CSA performed geologic mapping and slope stability analysis for a residential land development project that was proposed at the Pirates Cove site, and to replace a more limited study performed by GeoSolutions (2003). The GeoSolutions study provides various background geologic maps prepared by England & Associates, the Morro Group, and Cleath & Associates. These studies provide varying interpretations regarding the site geology, faulting, bluff retreat and geotechnical considerations that impact the site.

2.3 GENERAL CONDITIONS

This report is preliminary and is not intended to be used for final design or construction. Fugro prepared the conclusions, recommendations, and professional opinions of this report in accordance with the generally accepted geotechnical principles and practices at this time and location. This warranty is in lieu of all other warranties, either expressed or implied. This report was prepared for the exclusive use of the County of San Luis Obispo and their authorized agents only. It is not intended to address issues or conditions pertinent to other parties or for other uses.

Our characterization of the subsurface and surface conditions is based on observations and explorations performed at specific locations, and the interpolation and extrapolation of data between points of exploration and testing. The boundaries and extent of the subsurface conditions described will vary between points of exploration, and transitions can be gradual. The subsurface soil and groundwater conditions will vary between points of exploration and observation, may change with time, and should be reviewed based on the conditions revealed during design and construction.

3. GEOTECHNICAL CONSIDERATIONS

The following is a summary of the main geotechnical considerations that are likely to impact the design, construction and operation of the emergency access route. The characterization of these considerations is based on review of limited existing information, and will need to be updated for design.

1. The existing County right-of-way along the proposed access road is located on a marine terrace, approximately 120 to 200 feet above the beach at Pirates Cove (see Plate 2). The geologic conditions along the alignment generally consist of surficial soil units of colluvium (Qcol) and terrace deposits (Qt) that overly bedrock units of Obispo Tuff (Tmo, Tmor) and Monterey Formation (Tmm). The marine terrace has been displaced by active landslide deposits (Qls) that extend onto or below the beach at Pirates Cove. The bedrock units exposed along the south-facing hillside upslope of the alignment have been displaced by older landslides (Qoa) and/or faulting. Resistant units of the Obispo Formation (Tmor) crop out south of the access road, and form a prominent point and seacliff (Mallagh Landing) that shelter Pirates Cove from the predominating northwest winter swells.

   The site geology presents a relatively complex geotechnical environment that should be considered in selecting an appropriate design for the access route. The geology, landslide conditions, and bluff retreat are a dynamic coastal environment that will change and will likely need to be continually evaluated relative to slope stability, bluff retreat and coast erosion, earthquakes, and particularly following periods of prolonged or intense rainfall, heavy surf, major storm events, or a combination of these factors.

2. Active landsliding has impacted existing right-of-way along the westerly approximately 600 feet of the alignment. Approximately 20- to 30-foot high, near vertical to steeply sloping scarps associated with the active Pirates Cove Landslide Complex border or encroach into the downslope side of the alignment. The landslide deposits and/or relatively weak bedrock units appear to extend approximately 40 feet or more below the existing ground surface along the right of way. The landslides in this area are active, are likely to continue to migrate upslope, and will likely experience relatively large displacements (10 feet or more) periodically if not mitigated. Tension cracks and smaller scarps are also present upslope of the alignment as shown on Plate 2.

   The design will need to consider mitigation to stabilize or repair the active landsliding to provide the access that can be maintained. The depth and extent of the landslides will likely require a relatively rigorous and costly mitigation to provide reliable access through this portion of the site.

3. East of the active landsliding, the middle third (approximately 600 feet) of the alignment is located at the high point of the site and along the abandoned alignment of Cave Landing Road. The upslope side of the alignment is bordered by older landslides and colluvium deposits. While landsliding in this vicinity does not appear

to be active, grading or excavation that would cut into or undermine the support for the older landslide and colluvium could result in additional slope instability that could impact the access road and slopes upslope of the alignment. Active landsliding (discussed above) and ongoing coastal erosion is encroaching upon the western end of the older landslide deposits, and could eventually remove support from the toe of the older landslides and cause them to reactivate.

Structural or graded slope improvements (if proposed in this area) will need to consider the stability of the hillside in the area of the older landslides and may need to consider mitigation to stabilize the landslides depending on the potential impact that instability of the landslides could have on the proposed access road.

4. The project site is within a dynamic coastal environment. Landslide movements and coastal erosion tend to be episodic events and are likely to occur in response to periods of prolonged or intense rainfall, heavy surf, major storm events, or a combination of these factors. We understand that the project is only considering that the access road would be constructed along the existing County right of way, and therefore moving the access road further away from the coastline to provide a greater setback from the bluff is not an option. The impacts of coastal erosion over the life of the project (next 20 years or more) are likely to be secondary impacts resulting from landsliding as discussed previously in this report.

   Mitigation of coastal erosion and coastal landsliding would be improved by controlling surface drainage; however, aggressive mitigation such as placing rock revetment along the base of the bluff would impact beach access and would likely involve difficult or unfeasible coastal permitting. Beach nourishment, or more passive approaches to mitigating coastal erosion that do not impact beach access, are likely easier to permit; however, the active landsliding that is already occurring above the beach is likely to remain unstable and continue to impact the access road alignment. The concepts presented in this report have therefore focused on improvements that would be performed mainly along the existing right-of-way and away from the beach.

5. Surface drainage is a key element that impacts slope instability and should be considered in the design of the project. The existing surface drainage along the alignment is poorly controlled. There are 3 predominant drainages along the route that discharge into landslide and/or unstable bluff areas: a culvert that discharges into the landslide complex near the gate at the Cave Landing Road parking lot, a culvert that discharges beneath the abandoned Cave Landing Road alignment and into the active landslide mass about midway along the alignment, and a spillway type structure that discharges onto the bluff face near the existing terminus of Bluff Drive. Control of surface drainage is recommended for all of the concepts discussed in this report to direct surface water away from landslide areas and slopes.

6. The groundwater conditions at the site appear complex and are likely influenced by the existing poor surface drainage conditions, faulting within the underlying bedrock, and landsliding. Rising groundwater conditions adversely impact slope stability. Groundwater was reported by CSA (2003) as zones of seepage along joints and shear planes, contacts between geologic units, and along the base of the colluvium

or marine terrace deposits. Groundwater was typically encountered at a depth of approximately 40 feet below the existing ground surface. Springs daylight at various locations along the buff. Groundwater conditions will vary seasonally due to changes in runoff, storm conditions, rainfall, and other factors. The various concepts include provisions for subsurface drainage behind retaining structures or from subhorizontal drains.

7. The site is within a seismically active area, has been impacted by strong ground motion from historical earthquakes, and could be again in the future. Based on review of the Caltrans Seismic Hazard Map (Mualchin 1996) the peak bedrock acceleration for the site is about 0.5g. Mualchin shows several faults near the site that are capable of generating a M6.0 to 7.5 earthquake (such as the Hosgri, Oceano, Santa Maria River-Wilmar Avenue, Los Osos faults). The design of structures should consider the affects of strong ground motion in accordance with applicable design guidelines.

4. PRELMINARY ALTERNATIVES

The following provides a description of the alternatives that were considered to create an emergency access to reconnect the southern terminus of Cave Landing Road in Avila to the northern terminus of Bluff Drive in Shell Beach. These concepts are not intended to be inclusive of all possible alternatives. The most suitable mitigation may be selected for reasons of cost, practical and physical site constraints, aesthetic, simplicity of design or other factors. Various concepts may be better suited for portions of the alignment. The three main segments that should be evaluated are:

1. The western third of the alignment where approximately 600 feet of the alignment is being undermined or impacted by active landslides;
2. The middle third of the alignment where approximately 600 feet of the upslope area is underlain by older landslide and colluvium that are marginally stable and could reactivate if not properly supported by the design and during construction;
3. The eastern third where approximately 600 feet of the existing alignment descends along a relatively constant grade, and active landsliding is occurring downslope of the alignment.

These concepts are provided as a basis for subsequent discussions, and evaluation of structure types or concepts for design. This letter and the attached drawings provide concept-level information and should not be used for final design or construction.

4.1 DO NOTHING

The existing site conditions are summarized on Plate 3. The alignment is potentially unstable as a result of the existing landslide conditions. Active landsliding has impacted the existing alignment, and older landslide deposits are mapped in some areas upslope of the existing alignment. Coastal erosion and poor surface drainage likely contribute to the instability of the site. The existing alignment was closed by the County in response to past landslide

movements. Since the route was closed, no site improvements have been performed to mitigate the landslide, surface drainage, or coastal erosion conditions at the site. Instability of the Pirates Cove Landslide Complex has been most common during periods of severe weather (relatively heavy rainfall and high surf). Instability of the landslide tends to be episodic where: portions of the landslide fail to a more stable condition; the debris from the landslide temporarily buttresses that portion of the slope; and other portions of the slope become unstable.

The main factors that appear to impact the stability of the slope are: coastal erosion along the Pirates Cove Beach that removes material from the toe of the landslide; poor surface drainage and the resistant tuff (that outcrops along the westerly flank of the main landslide) that promote perched groundwater conditions within the landslide complex. The landslide movement and bluff erosion have resulted in the alignment being bordered by relatively steep to near vertical slopes that show evidence of creep that is impacting the existing alignment, and are potentially unstable.

4.2 RETAINING STRUCTURES

4.2.1 Conventional Retaining Wall or Reinforced Earth

This concept would generally consist of constructing the new access road on a retaining wall that is embedded below the existing roadway and landslide deposits. The type of wall could likely vary and consist of either a concrete cantilever retaining wall, a variety of reinforced earth/mechanically stabilized embankment (MSE) systems, or a geogrid reinforced embankment (GRE). The key elements of this system would be to support the retaining wall on stable ground below the depth of the existing landslide deposits, and to retain the head scarp and areas upslope of the existing landslide with the new earth retention system. A concept for supporting the access road using an MSE wall system is presented on Plate 4.

The retaining wall would be relatively high, and would likely need to be embedded about 40 to 50 feet below the existing roadway to provide suitable foundation support for the new retaining wall and extend below the Pirates Cove Landslide Complex. The wall would be designed to support the backslope, upslope of the existing landslide complex. Depending on the stability of the older landslides, this concept may not be feasible where older landslide deposits are mapped upslope of the existing alignment (see Plate 2). Alternative retaining wall types (tieback walls) may need to be used in areas where the existing landslides are mapped upslope of the roadway. The retaining wall would be combined with improved surface and subsurface drainage (similar to the graded slope concept).

The existing active landslide deposits downslope of the retaining wall would not be mitigated, and would need to be reviewed periodically to evaluate whether or not continued landslide movements are undermining the support for the wall. This concept would also need to consider whether or not the temporary back cut could be safely excavated to allow for construction of the wall, or would need to be shored to resist additional landslide movements. If the back cut is potentially unstable, relatively elaborate shoring systems (likely tiebacks) would be needed to support the back cut, provide a safe working area for the excavation, and reduce

the potential for further or reactivation of landslides upslope of the alignment; particularly if there is a potential for groundwater to be present at the time of construction.

4.2.2 Sheetpile

Driving sheet piling for a tieback retaining wall is likely not practical due to the relatively hard driving conditions that would be encountered within the underlying bedrock. The sheet piles would need to be driven approximately 40 to 50 feet below the existing roadway to penetrate below the active landslide deposits. Relatively hard driving conditions would likely limit the depth that sheet piles could be driven below the landslide deposits.

4.2.3 Tieback and/or Soldier Pile Retaining Wall

This concept is similar to the retaining wall concept discussed in the previous section of this report, except that the retaining wall system would include tiebacks and/or deep foundation support to provide additional lateral support for backslope areas that may be prone to landsliding. A soldier pile and tieback type retaining wall could be used to help limit the need for shoring to support the temporary back cut (by using a retaining wall type that can be constructed from the top down and would avoid the need for temporary shoring). This type of wall system may be suitable for portions of the alignment that are likely to be impacted by landsliding because the solider piles and tiebacks can provide greater lateral support than can typically be achieved using a conventional retaining wall or grading. A concept for supporting the access road using a soldier pile and tieback retaining wall is shown on Plate 5.

The base of the lagging should be embedded below the existing landslide deposits to reduce the potential for the lagging to be undermined by erosion and landslide movement downslope of the retaining wall. Excavation downslope of the wall would also be needed to allow for installation of the tiebacks (ground anchors drilled slightly downward into the hillside, and grouted in place).

Typically, timber lagging will provide a relatively free-draining face for the wall. However, additional subsurface drainage may be needed to help relieve hydrostatic pressures within the landslide and potentially unstable slope areas upslope of the retaining wall. Horizontal drains (a gravity well drilled slightly upward into the hillside) can be relatively easily installed along the base of the wall. Horizontal drains are typically drilled and installed using the same equipment that is used to install tiebacks.

4.3 GRADED CUT AND FILL

Conventional grading to mitigate landslides and slope instability typically consists of flattening the slope, buttressing the slope with a shear key, or removal of the landslide. To improve the stability of the access road alignment, grading would be needed to excavate the existing landslide deposits, install subsurface drains, and provide a suitable buttress fill to support the new roadway. A concept for grading the landslide is shown on Plate 6.

Grading could be used to improve the stability of the alignment, and to remove a portion of the landslide downslope of the roadway. Grading would include benching the fill into the underlying stable bedrock to provide an earthen buttress/shear key that would resist landslide movement and support the new roadway. The grading would be combined with improved surface and subsurface drainage. The existing landslide deposits downslope of the new embankment would be left in place. Similar to the MSE wall concept, the existing active landslide deposits downslope of the retaining wall would not be mitigated, and would need to be reviewed periodically to evaluate whether or not continued landslide movements are undermining the support for the fill.

We understand that grading downslope of the alignment (within the Pirates Cove Landslide Complex) can likely not be performed because of the presence of archeological resources. The grading for this concept could be relatively massive compared with other alternatives: 40 to 50 feet deep and extending 100 feet or more across the alignment. The actual size of the excavation would be estimated for design based on slope stability analyses. The concept would also need to consider whether or not the temporary back cut could be safely excavated to allow for construction of the wall, or would need to be shored to resist additional landslide movements. If the back cut is potentially unstable, relatively elaborate shoring systems (likely tiebacks) would be needed to support the back cut, provide a safe working area for the excavation, and reduce the potential for further or reactivation of landslides upslope of the alignment; particularly if there is a potential for groundwater to be present at the time of construction.

4.4 DRAINAGE

The stability of the existing landslide and coastal erosion is likely influenced by the poor surface drainage and local groundwater conditions at the site. Because the existing landslides and areas of the slopes adjacent to the route are potentially unstable already, solely improving the site drainage would likely not be sufficient to protect the new access road from being impacted by slope instability. However, drainage improvements should be provided to better control surface and subsurface water as part of the overall project.

4.4.1 Surface Drainage

Surface drainage improvements should be provided to intercept surface water that is currently flowing into the existing Pirates Cove Landslide Complex or being discharged into unstable bluff areas. Boyle Engineering Corporation (2006) and CSA (2003) have evaluated the existing surface drainage conditions for a bike trail project being evaluated for the San Luis Obispo County Parks and Recreation Department, and for a proposed residential development. During our study with Boyle, it was identified that the outlet points for the surface drainage are of particular interest of the Coast Commission (telephone conference 2007).

The control of surface water is an important factor related to instability of the existing sea cliff and landslides. There are 3 predominant drainages along the route that discharge into landslide and/or unstable bluff areas: a culvert that discharges into the landslide complex near the gate at the Cave Landing Road parking lot, a culvert that discharges beneath the

abandoned Cave Landing Road alignment and into the active landslide mass about midway along the alignment, and a spillway type structure that discharges onto the bluff face near the existing terminus of Bluff Drive. The outlets of all of these drainages are in areas of the most recent landslide activity and movement.

1. Water should not be permitted to run uncontrolled into unstable bluff or landslide areas.
2. Where drainage must run over the seacliff, the drainage should be either carried to the base of the cliff in a solid pipe or lined swale or be directed to more stable areas of the bluff that are underlain by resistant bedrock materials that are less prone to slope instability and erosion.
3. Some surface water could potentially be directed to existing or improved roadway drainage systems along Cave Landing Road.
4. The existing drainage along the abandoned Cave Landing Road is relatively poor, and should be reviewed and improved as needed. The main goal would be to collect and properly control surface water along the route that may be impacting the stability of the seacliff or landslides.
5. If possible, the drainage from the existing spillway type structure on Bluff Drive should be collected and directed to the base of the sea cliff via a solid pipe. Recent erosion and ground cracks are present in this general area.

4.4.2 Subsurface Drainage

Subsurface drainage would be a component of various alternatives discussed in this report. The main purpose of providing subsurface drainage would be to reduce the potential for hydrostatic (water) pressure to build up behind retaining wall structure or buttress fill, and to help lower groundwater levels in landslide or potentially unstable areas. Subsurface drainage improvements are likely to consist of providing subsurface drains in association with the placement of retaining wall backfill or compacted fill, and by horizontal drains bored into the hillside for selected alternatives.

4.5 STRUCTURALLY SUPPORTED ROADWAY

4.5.1 Land Bridge

This concept would generally consist of constructing a pile-supported roadway along the proposed alignment. The roadway would generally consist of a slab-type structure supported on deep foundations. The deep foundations would likely consist of cast-in-drilled hole (CIDH) pile foundations embedded in the underlying bedrock and below any landslide deposits. The CIDH piles would be designed to resist lateral loads associated with earth pressures and potential slope instability, and to support the structural loads from the bridge. The piles would essentially be designed to help retain the soils and rock upslope of the access road, and to support the access road should landslide movement and coastal erosion encroach upon the new access road. Using a relatively large number of closely spaced piles could allow the piles

to act as shear pins and help limit upslope migration of landslides. The concept may need to include tiebacks to help resist landslide movements. The design of a pile supported roadway should consider the potential for the CIDH piles to be exposed in the future, and whether or not the design may require maintenance or evaluation of the structure would be needed.

4.5.2 Viaduct

This concept would be a similar to the concept of the Land Bridge, except that the viaduct would be supported by a single or series of widely spaced foundations. The viaduct would not be designed to retain soil and rock along the alignment (like the land bridge) but rather would be designed to consider that landslides within the soil and rock could either remove or add lateral pressure to the piles. The piles would likely need to be relatively large (perhaps 8 to 12 feet in diameter) to support the viaduct and resist landslide movements. The resulting viaduct would be a relatively large fly-over type structure, constructed above the unstable ground. The concept may need to include tiebacks to help resist landslide movements. A challenge for the design of this foundation system would be that it is relatively difficult to predict future loading associated with landslide movements. Blocks of rock that may be associated with the landsliding (moving with or floating within the landslide), can apply greater pressures than can be predicted using conventional earth pressure theory.

5. ADDITIONAL SERVICES

The conclusions and recommendations of this report are preliminary and are subject to revision during the subsequent phases of the project. Embankment and cut slope inclinations as well as design foundation recommendations and seismic design considerations will be provided based on the results of the design level field exploration, laboratory testing, and additional geotechnical evaluation.

6. REFERENCES

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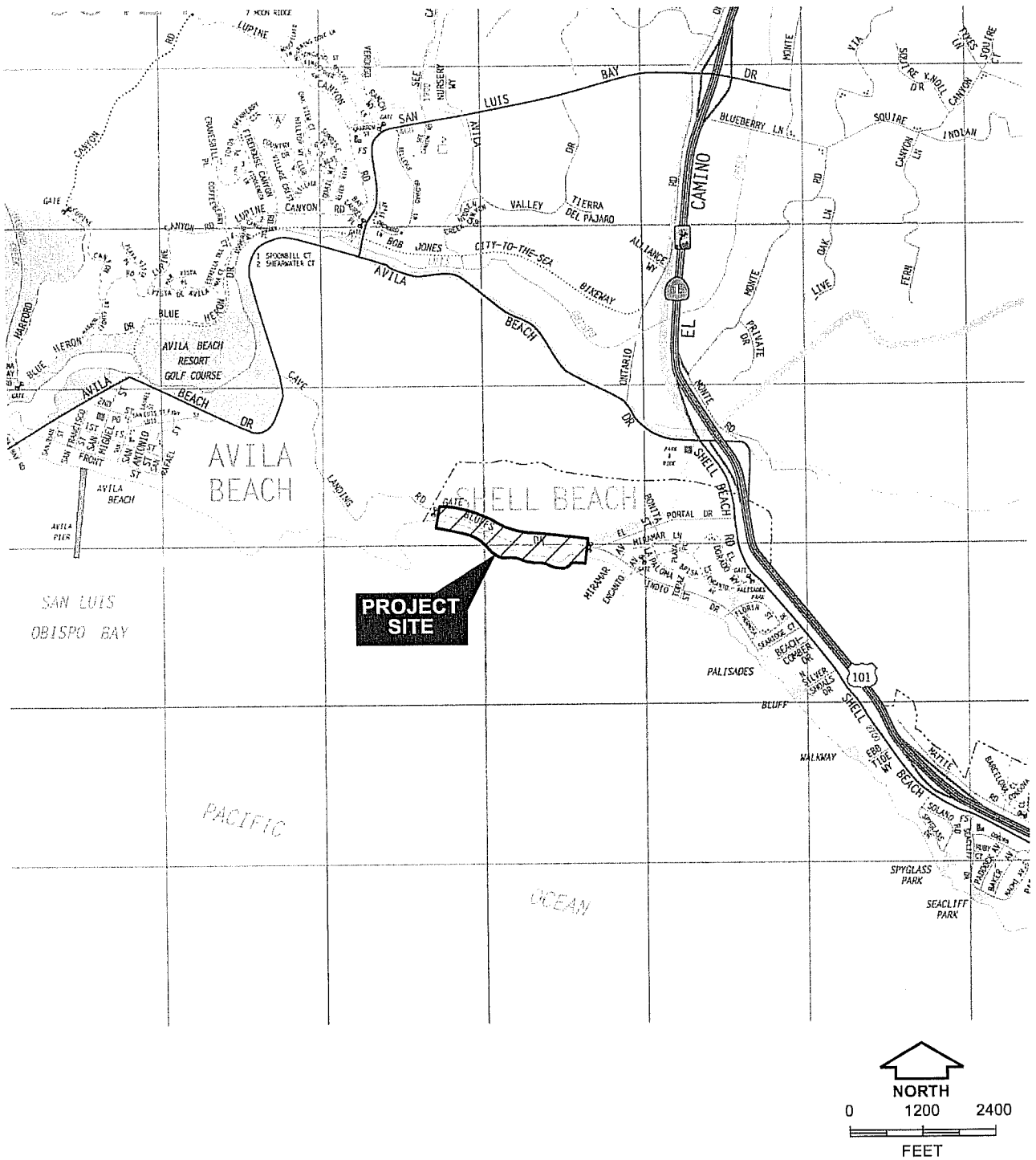
Mualchin, L. (1996), "California Seismic Hazard Map and A Technical Report to Accompany the Caltrans California Seismic Hazard Map 1996 (Based on Maximum Credible Earthquakes), California Department of Transportation Engineering Service Center, Office of Earthquake Engineering, Sacramento, California, June.



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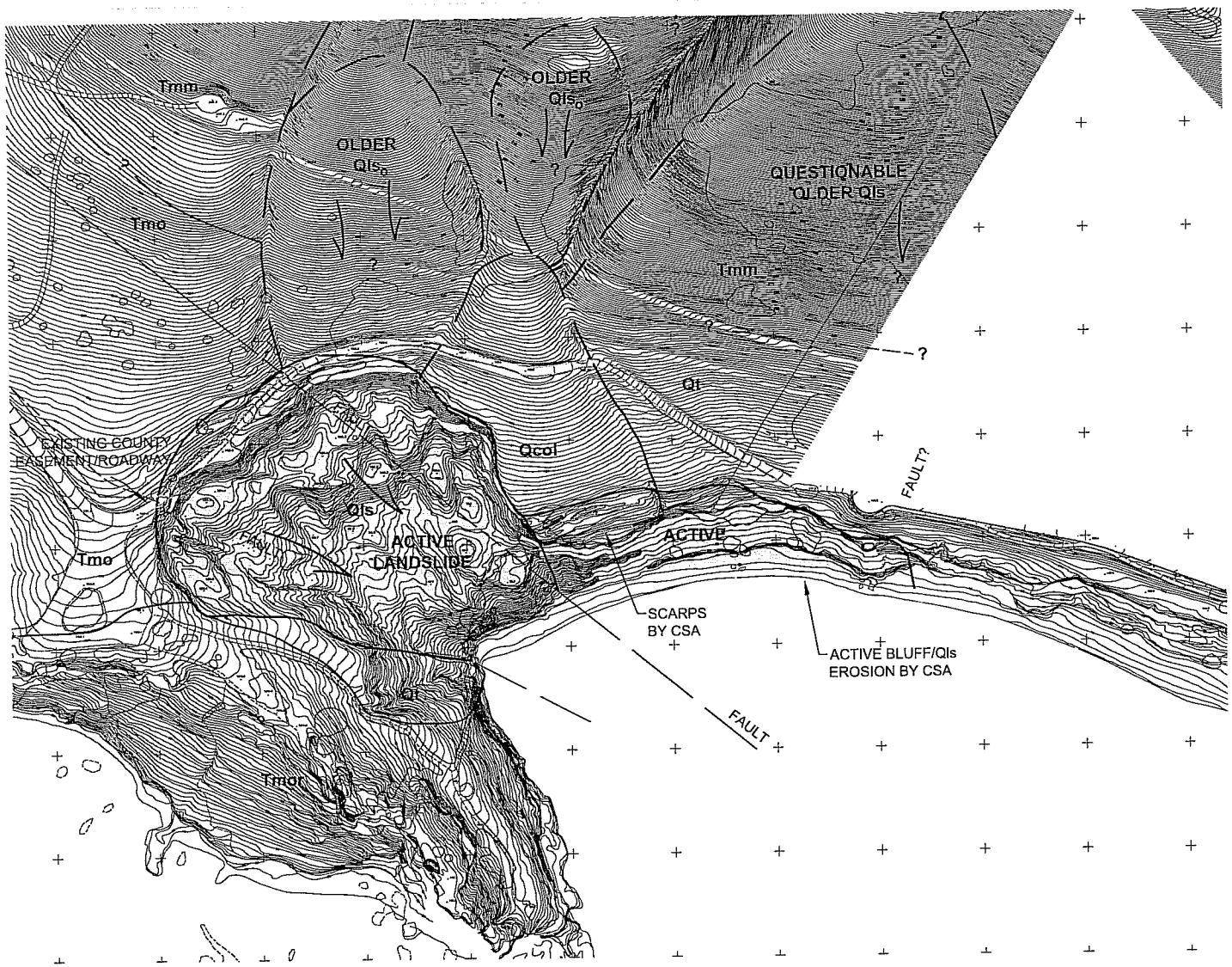
VICINITY MAP
Cave Landing Road - Bluff Drive
Emergency Access
San Luis Obispo County, California

PLATE 1

San Luis Obispo County
Project No. 3014.028



LEGEND

	Active landslide/slope instability
	Geologic contact, dashed where approximate
	Scarps by CSA
	Existing County easement/ roadway
Qcol	Colluvium
Qt	Terrace deposits
Qls_a	Landslide deposits (active)
Qls_o	Landslide deposits (older)
Tmm	Monterey formation -shale
Tmo	Obispo Formation - tuffaceous shale, mudstone, claystone and siltstone
Tmor	Obispo Formation - resistant volcanic tuff

Geology modified from CSA(2003), Fugro(2004)

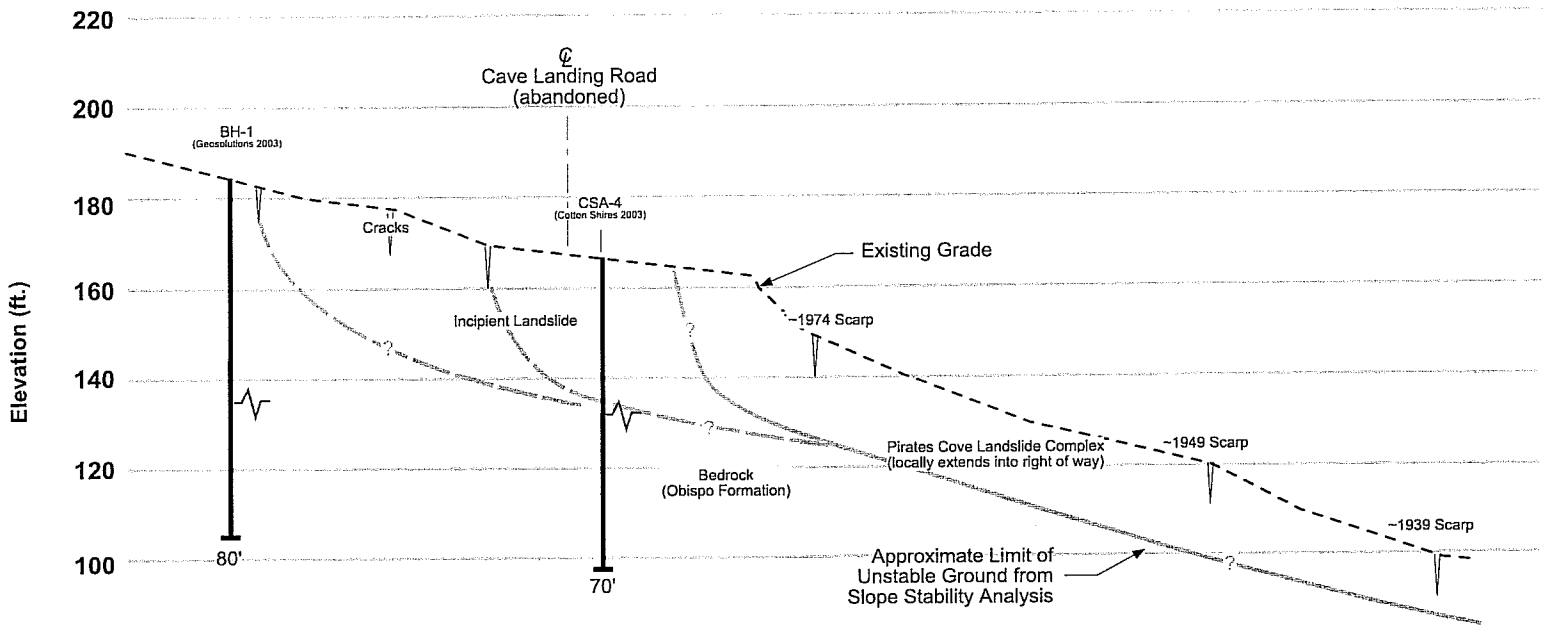
NORTH

0 150 200 400
FEET

SITE PLAN
Cave Landing Road - Bluff Drive
Emergency Access
San Luis Obispo County, California

PLATE 2

BASE MAP SOURCE: Golden State Aerial Surveys, Inc. (photography dated: 5-14-02).



Notes:

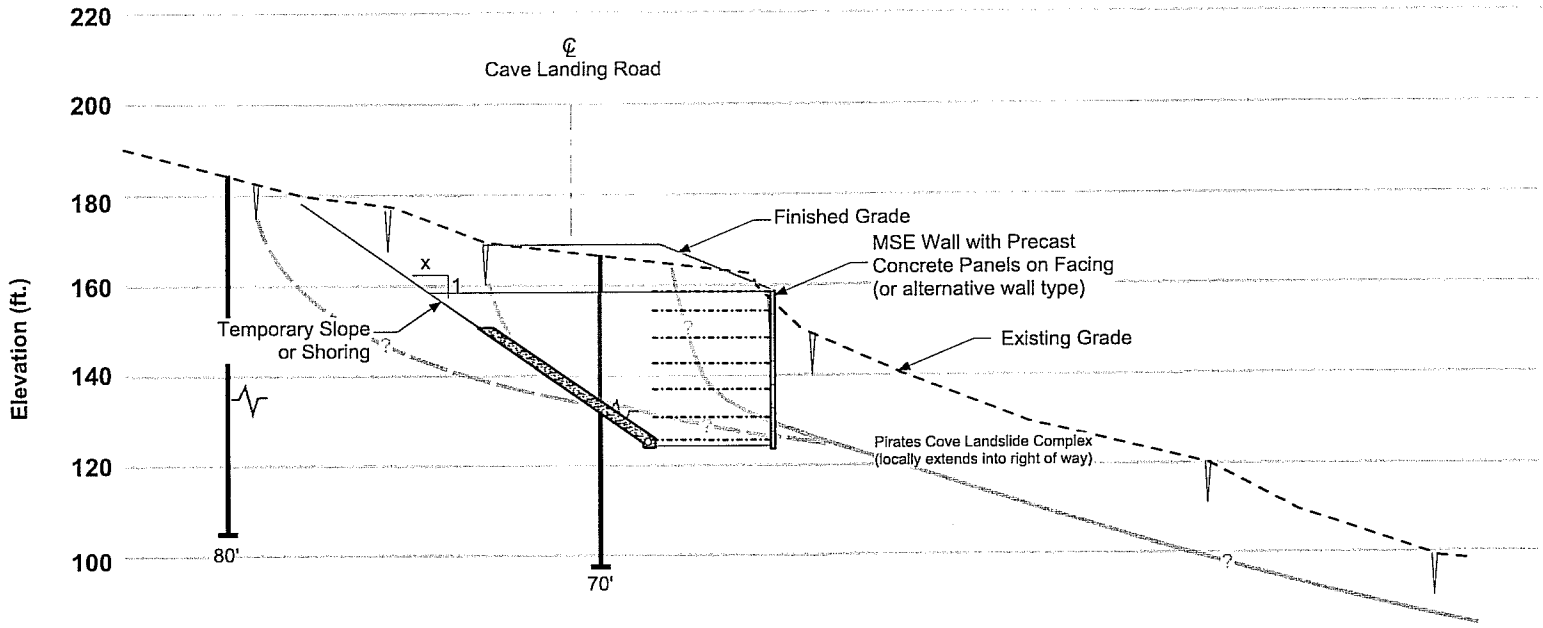
1. Section based on geologic conditions as reported by Cotton Shires (2003), Fugro (2004).
2. Upslope migration of landslide is characterized by Cotton Shires (2003).
3. Existing surface drainage and culverts discharge directly into landslide area.
4. There is no deep boring information within existing landslide from previous geotechnical studies.

Indicates zone of seepage or groundwater encountered

PLATE 3

EXISTING CONDITION
Cave Landing Road - Bluff Drive
Emergency Access
San Luis Obispo County, California

FUGRO



Notes:

1. MSE wall can be proprietary system or designed according to Catrans details. Likely to be built as an equivalent proprietary system.

2. Concept would be similar for concrete or alternative gravity retaining wall systems.

3. Temporary slope is likely to be 1.5:1 or flatter but would need to be estimated from slope stability analysis and/or be supported by shoring.

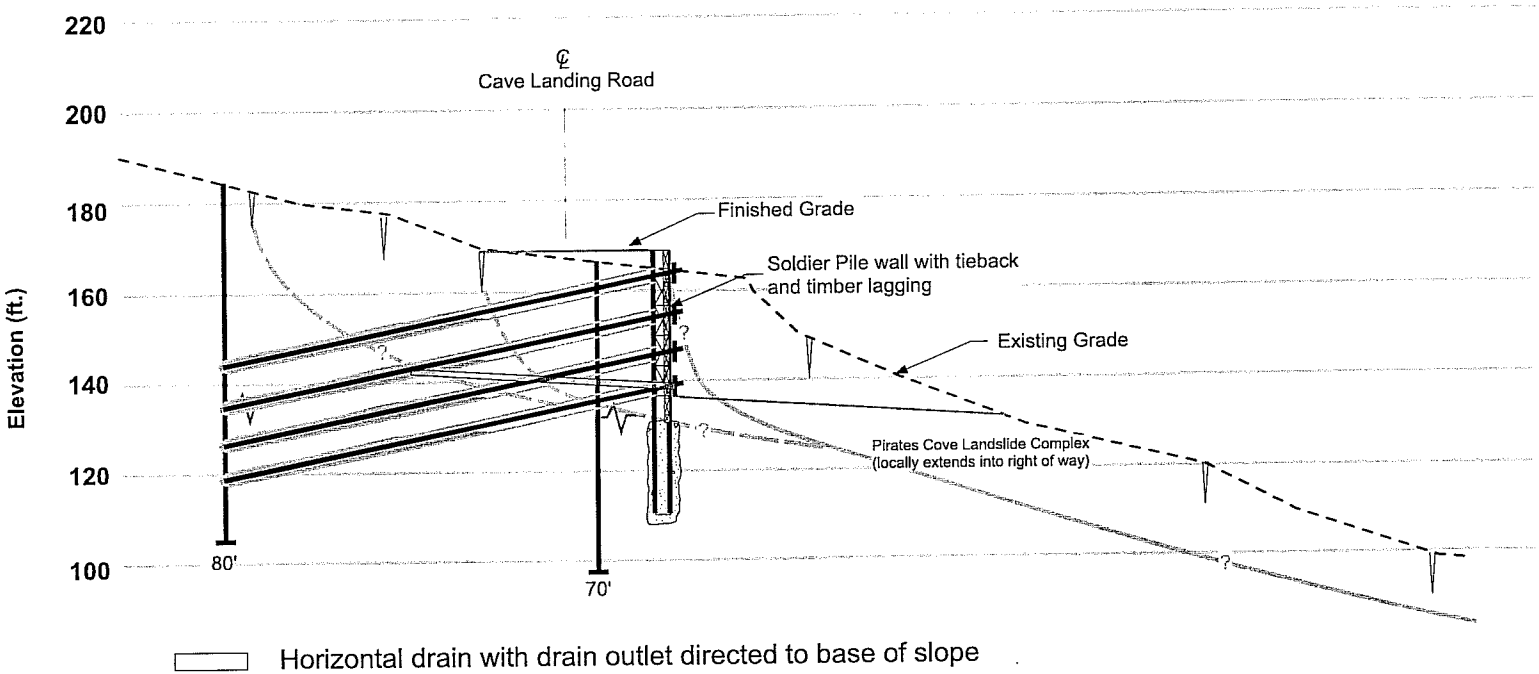
4. Retaining wall should be supported on firm bedrock materials below the depth of the existing landslide deposits.

5. Other surface drainage, landscape and roadway improvements should also be provided.

Conceptual only. All locations and dimensions are approximate. Not for design, estimates, or construction.

RETAINING WALL CONCEPT
Cave Landing Road - Bluff Drive
Emergency Access
San Luis Obispo County, California

PLATE 4



Notes:

1. Retaining wall would consist of drilled shafts spaced 6 to 8 feet oncenter with timber lagging between the piles. Tieback anchors drilled and grouted into the hillside would be installed at the pile locations to provide lateral support. Tiebacks are typically installed about 6 to 12-foot vertical intervals, depending on landslide forces.

2. Once the solider piles are in place, the wall and lagging are constructed from the top down. Temporary slopes and backfill would not be required.

3. The base of the wall and material in front of the wall would need to be removed below the existing landslide deposits to allow for the lagging to be installed.

4. Tiebacks for this type of landslide repair could potentially be more than 100 feet deep and designed for capacities of 100 tons for more.

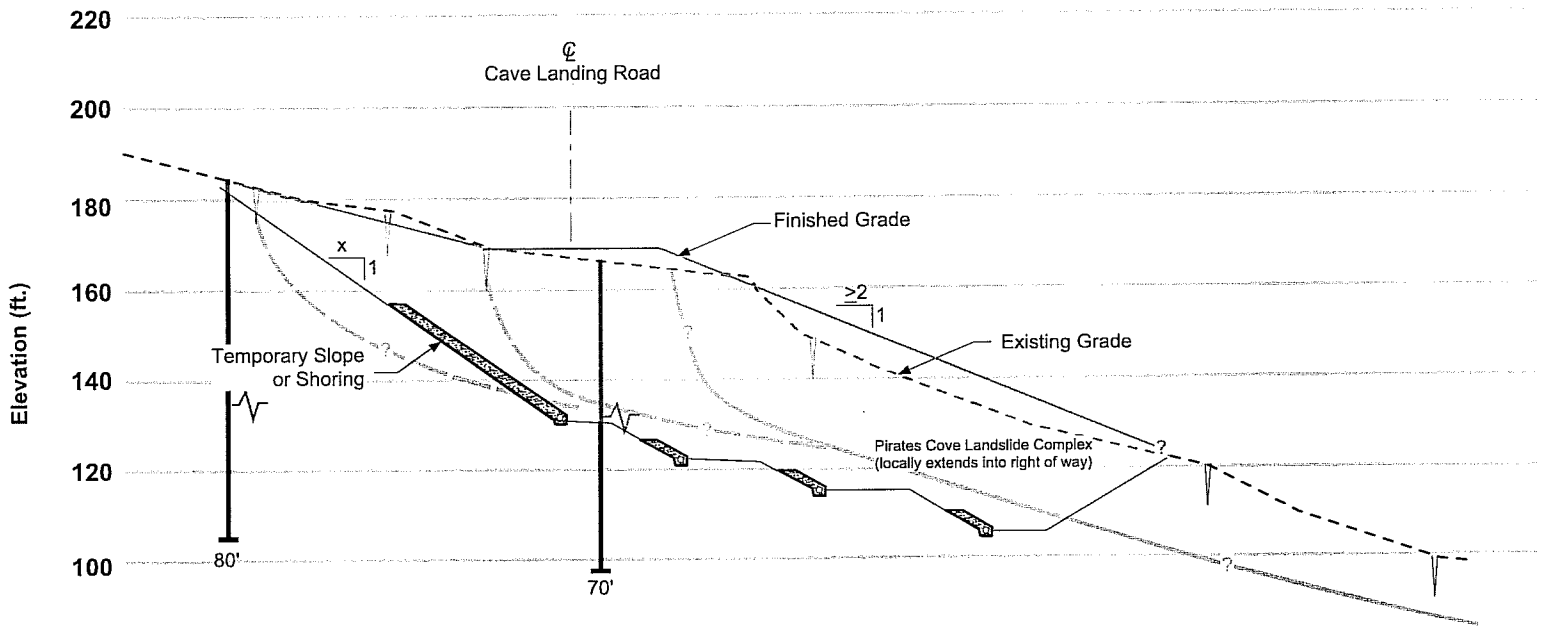
5. Other surface drainage, landscape and roadway improvements should also be provided.

Conceptual only. All locations and dimensions are approximate. Not for design, estimates, or construction.

SOLDIER PILE AND TIEBACK WALL CONCEPT
Cave Landing Road - Bluff Drive
Emergency Access
San Luis Obispo County, California

PLATE 5

TUGRO



Compacted fill

Drainage material with drain outlet directed to base of slope

Notes:

1. Existing landslide and unstable slope materials are removed from below the roadway.

2. The fill is keyed and benched into underlying stable bedrock to provide a buttress/shear key to stabilize the slope below the roadway. Limits would be estimated from slope stability analysis.

3. Temporary slope is likely to be 1.5:1 or flatter but would need to be estimated from slope stability analysis and/or be supported by shoring.

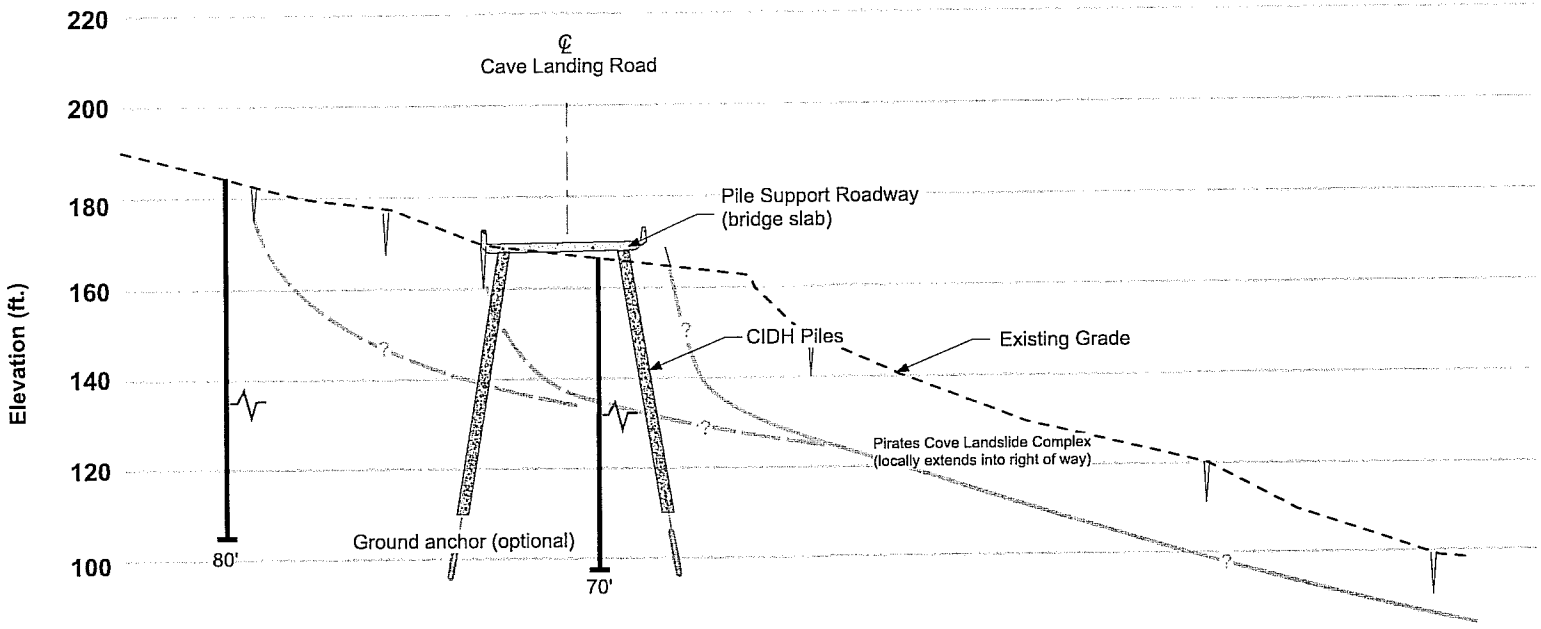
4. Backslope and bench drains should be provided to control subsurface water.

5. Surface drainage should be controlled to direct water away from slopes.

Conceptual only. All locations and dimensions are approximate. Not for design, estimates, or construction.

GRADED CUT AND FILL CONCEPT
Cave Landing Road - Bluff Drive
Emergency Access
San Luis Obispo County, California

PLATE 6



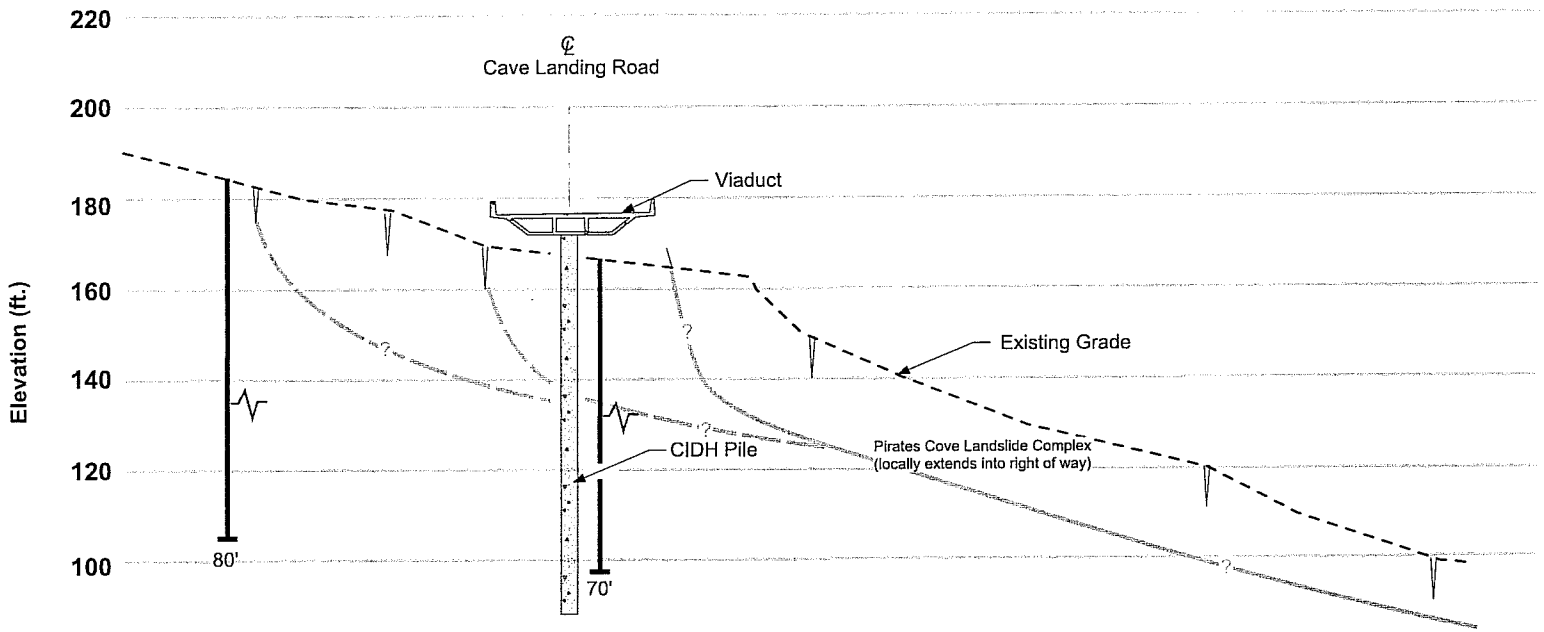
Notes:

1. Structure would consist of a pile supported slab-type roadway.
2. Piles are likely to be drilled shafts/cast-in-drilled hole (CIDH) piles embedded below existing landslide deposits.
3. Piles can be battered and/or provided with ground anchors to help resist lateral forces.
4. Other surface drainage, landscape and roadway improvements should also be provided.

Conceptual only. All locations and dimensions are approximate. Not for design, estimates, or construction.

PLATE 7

LAND BRIDGE CONCEPT
Cave Landing Road - Bluff Drive
Emergency Access
San Luis Obispo County, California



Notes:

1. Structure would consist of an elevated structure supported on deep foundations.
2. Piles are likely to be drilled shafts/cast-in-drilled hole (CIDH) piles embedded existing landslide deposits.
3. Piles would need to be designed to resist lateral forces and loss of support in response to landslide movements.
4. Other surface drainage, landscape and roadway improvements should also be provided.

Conceptual only. All locations and dimensions are approximate. Not for design, estimates, or construction.

PLATE 8

VIADUCT CONCEPT
Cave Landing Road - Bluff Drive
Emergency Access
San Luis Obispo County, California

APPENDIX E

TRAFFIC MODEL PLOTS, METHODOLOGIES AND SOCIOECONOMIC DATA

TRAVEL FORECASTS

Between 1980 and 2000, the population in Avila and the Avila Valley increased from approximately 1,300 to 2,100. Both the County General Plan and the Avila Beach Specific Plan permit further growth. If similar growth patterns persist within the study area in the future, the population is expected to reach approximately 2,400 by build-out of the planned land uses. The need for future transportation improvements will depend upon the intensity and location of this future growth. In 2001 as an initial step in assessment of future transportation needs, a computer traffic forecast model was developed to translate future land uses into projected roadway volumes. This initial forecast model was updated in 2008 by assigning 1,703 total employees in the base-year scenario and 2,235 total employees in the future year. This analysis tool formed the technical basis for identifying potential system deficiencies and possible land use or transportation enhancements. For the purpose of this analysis the term "future" means the date when the planned land uses as defined in the General Plan and Specific Plan are fully constructed.

Avila Traffic Model

The current transportation model is a TP+ software model. The model links land use plans and densities to future traffic projections. Model land uses include residential, single family, multi-family, mobile home, recreational vehicles, and hotels, and employment, retail, service, government, education, and other. Special generators and traffic "gateways" into the Avila area are also represented. The TP+ model was developed/calibrated from existing 2006 (base year) data. A future year, based on the build-out of the Avila Beach Specific Plan and the associated San Luis Obispo County General Plan was also created. For the purposes of this study "build-out" refers to the completion of planned land uses as defined by the adopted County General Plan or Avila Beach Specific Plan. This represents a future condition where all planned residential, commercial and office development is constructed.

Modeling Process

The Avila Traffic Model follows the standard four-step travel demand forecasting process: trip generation, trip distribution, mode choice (not used), and route assignment. The trip generation and distribution models were originally developed by Caltrans and converted to the County's model. The remainder of the modeling process was developed and applied using the TP+ model.

Database

Four databases of information are maintained for use in the model: socio-economic data, roadway network data, traffic counts and a database of codes for street names and districts. Each database contains information for a particular year or time horizon.

Travel Demand

The travel demand forecasting model estimates trip productions and attraction in the trip generation module, zone-to-zone trip origins/destinations in the trip distribution module, and traffic volumes in the trip assignment module. The trip generation model estimates vehicle trips since it has been assumed that modes other than auto are a negligible percentage of the total, and are not included in the modeling process.

The trip generation model estimates the number of trips to and from each zone in the region or gateway, given the population and employment estimates for any particular year, for each of the following three trip purposes:

1) Home Based Work
2) Home Based Other
3) Non-home Based

In addition, internal to external and external to internal trips from the various gateways are also included. External to external trips along SR 101 were also included.

The trip production model applies trip production rates to households by housing type by zone and trip purpose to estimate the number of trips produced. The trip attraction model applies trip attraction rates to employment data by zone and trip purpose to estimate the number of trips attracted.

The trip distribution model links productions and attractions, estimated by the trip generation model, using the physical separation between two zones and the relative attractiveness of the zone. This method of trip distribution uses the gravity model estimation technique. The trip distribution model produces a vehicle trip table for each zone pair in the system by trip purpose.

The trip assignment model estimates the number of vehicles on each roadway segment in the model, given the total number of vehicle trips to and from each Traffic Analysis Zone (TAZ) in the model and the physical characteristics of the road. Volumes are estimated for a 24-hour (daily) period. Figure D-1 shows each TAZ in the Avila area.

Model Applications

The Avila model is a sub-regional model and is designed to meet local planning needs. Local or site-specific planning studies have different requirements and are often not well suited for direct applications of the model. Generally, local planning studies require additional detail beyond the scope of the regional model. However the Avila sub-regional model may be used to develop increment data that can be applied to count data to develop future background volumes. Actual land use or network projects may or may not be in the Avila model and would need to be confirmed prior to use. The transportation professional would then need to determine what adjustments would need to be applied to the resulting future volumes in order to accurately forecast a project's impacts.

There are three other types of model applications that can also provide information necessary for local or site-specific planning studies. These include regional or corridor models, citywide models, and site impact models. There are three types of agencies that share responsibility for developing and maintaining the various models and databases developed. The agencies responsible for developing and maintaining data in the regional model include the regional transportation planning agency, local jurisdictions (cities or counties), and/or Caltrans.

Avila's socio-economic database for build-out of the General Plan was developed using the County's projections for population and employment for Avila and Avila Valley, in conjunction with a variety of other sources. Population estimates were calibrated using 2000 U.S. Census data and then projected out to the base and build-out model years using a growth rate of 1.4 (as determined by the California Department of Finance). Population densities were then developed for each zone based on census block estimates and housing units to help further refine population projections within each TAZ.

Housing unit counts were verified and updated using multiple techniques. Base year unit counts were built from a review of County provide GIS parcel data and current aerials of the area. These numbers were then refined through a combination of field checks and phone calls (to local hotels). County zoning densities were then applied to base year counts, within the parameters of existing Area Plans (including the Avila Beach Specific Plan, the Port San Luis Harbor District Master Plan, the San Luis Bay Area Plan – Coastal and the San Luis Bay Area Plan – Inland), to calculate build-out 2020 unit totals.

Employment counts were verified and updated through a combination of field checks and phone calls. Employment projections for build-out were then calculated based on County zoning, planned projects and all applicable local plans (including the Avila Beach Specific Plan, the Port San Luis Harbor District Master Plan, the San Luis Bay Area Plan – Coastal and the San Luis Bay Area Plan – Inland).

The population and employment estimates were then assigned to the appropriate Traffic Analysis Zone based on the known parameters of the County General Plan the Avila Beach Specific Plan, and the Port San Luis Harbor District Master Plan. The resulting estimates of population and employment make the best use of available data, bounded and controlled by the estimates made by the County for the study area. A copy of the socio-economic data used is included as part of this appendix as Tables E-1 and E-2. Tables E-3 and E-4 show the model input data, by TAZ, for 2006 and 2020, respectively. The 2020 model plot is also included as part of this appendix.

06-1052

Avila Valley Circulation Study
San Luis Obispo County

Figure E1

TRAFFIC ANALYSIS ZONES

TPG Consulting incorporated

Table E-1 Avila Valley Circulation Study

2006 Socio Economic Profile

Zone		POP/HH								EMPLOYMENT						
		Pop	Density	HH	HH	HH	HH	HH	Total	Retail	Service	Govt	Educ	Other	Total	
TAZ	PLNG AREA	POP	POP/HH	SF	MF	MH	RV	H	TOTALHH	RETEMP	SVCEMP	GOVEMP	EDUEMP	OTHEMP	TOTALEMP	
36	San Luis Bay Coastal	18	1.8	-	-	11	41	-	52	51	18	25	-	190	284	Harford Pier
40	San Luis Bay Coastal & Inland	665	1.3	257	117	163	-	30	567	-	45	4	-	31	80	Avila Village
41	San Luis Bay Coastal	80	2.0	7	10	-	-	54	71	82	33	-	-	-	115	Core Commercial
42	San Luis Bay Coastal	46	2.6	8	1	-	-	28	37	1	12	4	-	-	17	
43	San Luis Bay Coastal	-	0.0	-	-	-	-	-	-	-	-	1	-	8	9	Yacht Club & Marine Institute
44	San Luis Bay Coastal	107	1.6	41	21	-	-	31	93	-	13	-	-	-	13	
45	San Luis Bay Coastal	-	2.3	-	-	-	-	-	-	-	-	-	-	-	-	Beach
46	San Luis Bay Coastal	58	1.7	24	20	-	-	-	44	-	-	-	-	-	-	
49	San Luis Bay Coastal & Inland	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	
50	San Luis Bay Coastal & Inland	140	1.9	-	-	-	-	140	140	-	45	-	-	35	80	Golf Course
51	San Luis Bay Coastal	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	Tank Farm Property
53	San Luis Bay Inland	13	2.1	6	-	1	-	-	7	-	-	-	-	-	-	
54	San Luis Bay Coastal & Inland	84	2.2	5	-	-	-	74	79	-	50	-	-	-	50	Sycamore Mineral Springs
55	San Luis Bay Coastal	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	Pirate's Cove
56	San Luis Bay Inland	79	2.9	28	-	2	-	-	30	-	-	-	-	-	-	
57	San Luis Bay Inland	132	3.3	44	-	-	-	-	44	-	2	-	12	-	14	Bellevue-Santa Fe Charter School
58	San Luis Bay Coastal & Inland	10	2.2	5	-	-	-	-	5	-	-	-	-	6	6	
59	San Luis Bay Coastal & Inland	-	1.9	-	-	-	-	-	-	30	-	-	-	-	30	Avila Valley Barn
60	San Luis Bay Inland	14	2.2	7	-	-	-	-	7	23	6	-	-	12	41	
61	San Luis Bay Coastal & Inland	30	1.6	-	-	-	131	30	161	-	40	-	-	-	40	Avila Hot Springs
63	San Luis Bay Inland	188	2.4	86	-	-	-	-	86	-	-	-	-	-	-	
64	San Luis Bay Inland	86	2.5	37	-	1	-	-	38	-	-	-	-	24	24	
65	San Luis Bay Coastal & Inland	5	1.8	3	-	-	-	-	3	-	-	-	-	-	-	Lighthouse
66	San Luis Bay Coastal & Inland	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	
67	San Luis Bay Coastal & Inland	-	2.0	-	-	-	-	-	-	-	900	-	-	-	900	Diablo
68	San Luis Bay Inland	66	2.4	30	-	-	-	-	30	-	-	-	-	-	-	
69	San Luis Bay Inland	57	2.4	20	-	6	-	-	26	-	-	-	-	-	-	
	TOTAL	**1,879**		**608**	**169**	**184**	**172**	**387**	**1,520**	**187**	**1,164**	**34**	**12**	**306**	**1,703**	

Avila Beach Town

SF - Single Family
MF - Multi Family
MH - Mobile Home
RV - Recreation Vehicle
H - Hotel

Table E-2 Avila Valley Circulation Study

2020 Socio Economic Profile

Zone		POP/HH								EMPLOYMENT						
		Pop	Density	HH	HH	HH	HH	HH	Total	Retail	Service	Govt	Educ	Other	Total	
TAZ	PLNG AREA	POP	POP/HH	SF	MF	MH	RV	H	TOTALHH	RETEMP	SVCEMP	GOVEMP	EDUEMP	OTHEMP	TOTALEMP	
36	San Luis Bay Coastal	50	1.8	-	-	-	151	50	201	81	58	35	-	230	404	Harford Pier
40	San Luis Bay Coastal & Inland	690	1.3	278	117	163	-	30	588	-	70	5	-	38	113	Avila Village
41	San Luis Bay Coastal	126	2.0	7	40	-	-	54	101	102	43	-	-	-	145	Core Commercial
42	San Luis Bay Coastal	90	2.6	22	9	-	-	28	59	1	12	4	-	-	17	
43	San Luis Bay Coastal	-	0.0	-	-	-	-	-	-	-	-	3	-	12	15	Yacht Club & Marine Institute
44	San Luis Bay Coastal	206	1.6	45	97	-	-	31	173	-	13	-	-	-	13	
45	San Luis Bay Coastal	-	2.3	-	-	-	-	-	-	-	-	-	-	-	-	Beach
46	San Luis Bay Coastal	103	1.7	29	50	-	-	-	79	-	-	-	-	-	-	
49	San Luis Bay Coastal & Inland	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	
50	San Luis Bay Coastal & Inland	145	1.9	-	3	-	-	140	143	-	50	-	-	40	90	Golf Course
51	San Luis Bay Coastal	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	Tank Farm Property
53	San Luis Bay Inland	29	2.1	14	-	1	-	-	15	-	-	-	-	-	-	
54	San Luis Bay Coastal & Inland	105	2.2	5	-	-	-	95	100	-	65	-	-	-	65	Sycamore Mineral Springs
55	San Luis Bay Coastal	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	Pirate's Cove
56	San Luis Bay Inland	92	2.9	33	-	2	-	-	35	-	-	-	-	-	-	
57	San Luis Bay Inland	138	3.3	46	-	-	-	-	46	-	2	-	15	-	17	Bellevue-Santa Fe Charter School
58	San Luis Bay Coastal & Inland	10	2.2	5	-	-	-	-	5	-	-	-	-	6	6	
59	San Luis Bay Coastal & Inland	3	1.9	2	-	-	-	-	2	35	-	-	-	-	35	Avila Valley Barn
60	San Luis Bay Inland	16	2.2	8	-	-	-	-	8	330	6	-	-	15	351	
61	San Luis Bay Coastal & Inland	30	1.6	-	-	-	131	30	161	-	40	-	-	-	40	Avila Hot Springs
63	San Luis Bay Inland	236	2.4	108	-	-	-	-	108	-	-	-	-	-	-	
64	San Luis Bay Inland	100	2.5	43	-	1	-	-	44	-	-	-	-	24	24	
65	San Luis Bay Coastal & Inland	15	1.8	9	-	-	-	-	9	-	-	-	-	-	-	Lighthouse
66	San Luis Bay Coastal & Inland	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	
67	San Luis Bay Coastal & Inland	-	2.0	-	-	-	-	-	-	-	900	-	-	-	900	Diablo
68	San Luis Bay Inland	111	2.4	51	-	-	-	-	51	-	-	-	-	-	-	
69	San Luis Bay Inland	94	2.4	37	-	6	-	-	43	-	-	-	-	-	-	
TOTAL		**2,391**		**742**	**316**	**173**	**282**	**458**	**1,971**	**549**	**1,259**	**47**	**15**	**365**	**2,235**	

Avila Beach Town

SF - Single Family
MF - Multi Family
MH - Mobile Home
RV - Recreation Vehicle
H - Hotel

Table E-3 Avila Valley Circulation Study

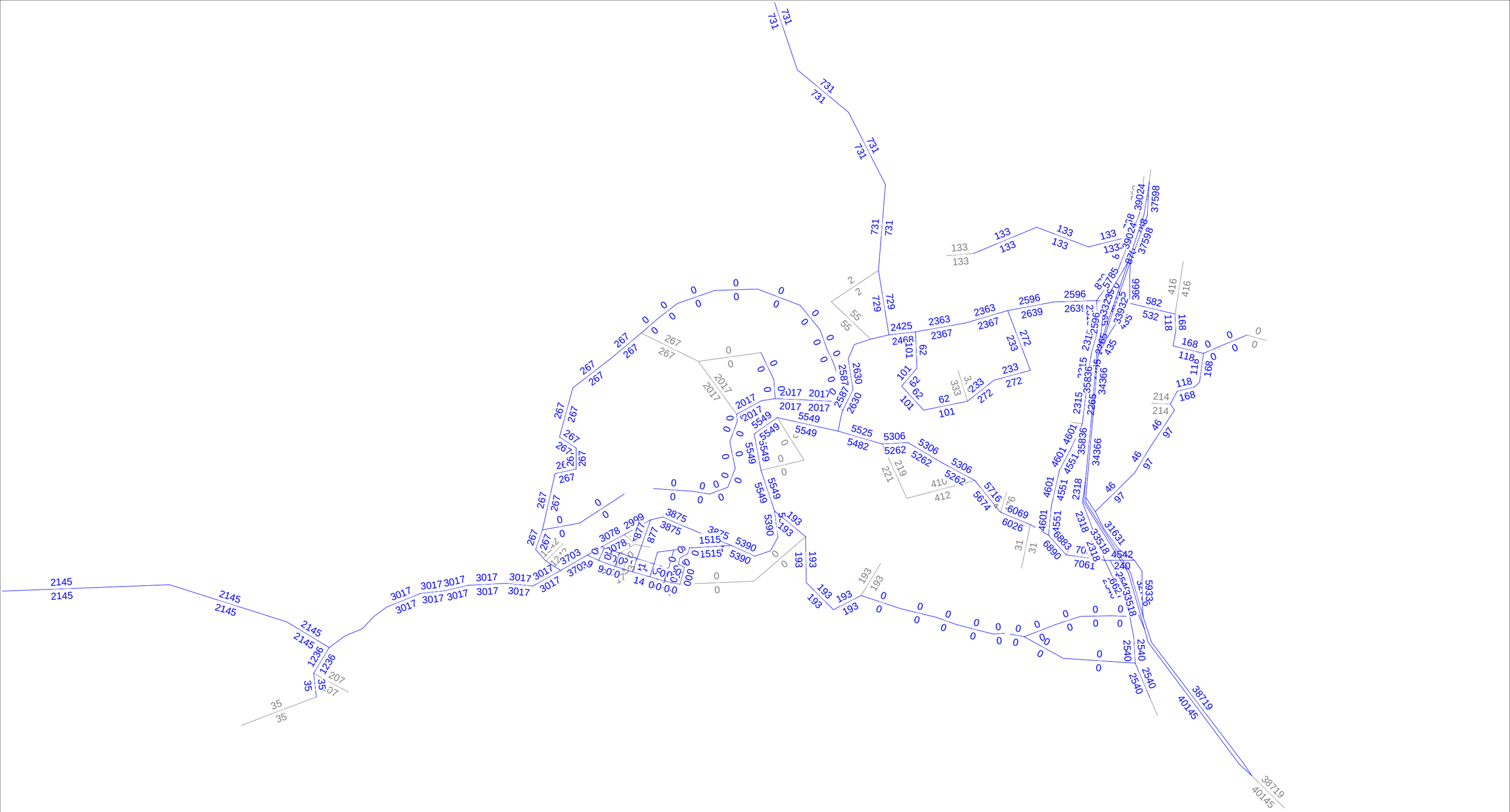
2006 Model Inputs

TAZ	SF	MF	MH	RV	HOTEL	POP	RET	SER	GOV	ED	OTH	GP1	GP2	GP3	GA1	GA2	GA3	SGP1	SGP2	SGP3	SGA1	SGA2	SGA3
36	0	0	11	41	0	18	51	18	25	0	190	0	0	0	0	0	0	0	0	0	0	0	0
40	257	117	163	0	0	665	0	45	4	0	33	0	0	0	0	0	0	0	0	0	0	0	0
41	7	1	0	0	0	80	82	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	8	0	0	0	0	46	1	12	4	0	0	0	0	0	0	0	0	0	200	0	0	200	0
43	0	0	0	0	0	0	0	0	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0
44	41	2	0	0	0	107	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	24	2	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	140	0	45	0	0	35	0	0	0	0	0	0	359	0	0	359	0	0
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53	6	0	1	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	5	0	0	0	0	84	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163	0	0	163	0
56	28	0	2	0	0	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	44	0	0	0	0	132	0	2	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0
58	5	0	0	0	0	10	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
59	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	7	0	0	0	0	14	23	6	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
61	0	0	0	131	0	30	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	86	0	0	0	0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	37	0	1	0	0	86	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0
65	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	350	690	960	350	690	960
68	30	0	0	0	0	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
69	20	0	6	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	0	0	0	0	0	0	0	0	0	0	0	67	437	198	43	276	125	0	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0	0	0	91	597	270	52	336	152	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	289	1879	850	136	1537	695	0	0	0	0	0	0
77	0	0	0	0	0	0	0	0	0	0	0	238	1549	700	303	1971	892	0	0	0	0	0	0
78	0	0	0	0	0	0	0	0	0	0	0	157	1022	462	210	1365	617	0	0	0	0	0	0

Table E-4 Avila Valley Circulation Study

2020 Model Inputs

TAZ	SF	MF	MH	RV	HOTEL	POP	RET	SER	GOV	ED	OTH	GP1	GP2	GP3	GA1	GA2	GA3	SGP1	SGP2	SGP3	SGA1	SGA2	SGA3
36	0	0	0	151	50	50	81	58	35	0	230	0	0	0	0	0	0	0	0	0	0	0	0
40	278	117	163	0	30	690	0	70	5	0	38	0	0	0	0	0	0	0	0	0	0	0	0
41	7	40	0	0	54	126	102	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	22	9	0	0	28	90	1	12	4	0	0	0	0	0	0	0	0	0	220	0	0	220	0
43	0	0	0	0	0	0	0	0	3	0	12	0	0	0	0	0	0	0	0	0	0	0	0
44	45	97	0	0	31	206	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	29	50	0	0	0	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	3	0	0	140	145	0	50	0	0	40	0	0	0	0	0	0	359	0	0	359	0	0
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53	14	0	1	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	5	0	0	0	95	105	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163	0	0	163	0
56	33	0	2	0	0	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	46	0	0	0	0	138	0	2	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0
58	5	0	0	0	0	10	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
59	2	0	0	0	0	3	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	8	0	0	0	0	16	330	6	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
61	0	0	0	131	30	30	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	108	0	0	0	0	236	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	43	0	1	0	0	100	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0
65	9	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	350	690	960	350	690	960
68	51	0	0	0	0	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
69	37	0	6	0	0	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	0	0	0	0	0	0	0	0	0	0	0	67	437	198	43	276	125	0	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0	0	0	91	597	270	52	336	152	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	289	1879	850	136	1537	695	0	0	0	0	0	0
77	0	0	0	0	0	0	0	0	0	0	0	238	1549	700	303	1971	892	0	0	0	0	0	0
78	0	0	0	0	0	0	0	0	0	0	0	157	1022	462	210	1365	617	0	0	0	0	0	0

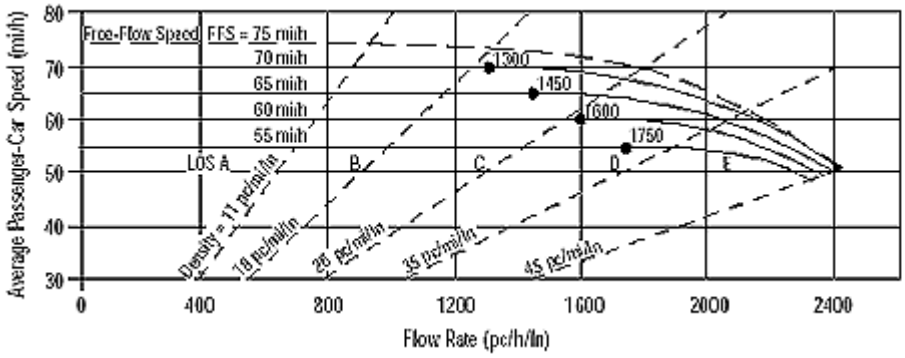


APPENDIX F

FUTURE CONDITIONS

FREEWAY AND INTERSECTION LEVELS OF SERVICE

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*10/30/2008*
Analysis Time Period	*Non Summer Weekday*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*North of San Luis Bay Drive*
Jurisdiction	*Caltrans*
Analysis Year	*2020*

Project Description Avila Circulation Element Update 06-1052.1

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4784*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2777*	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

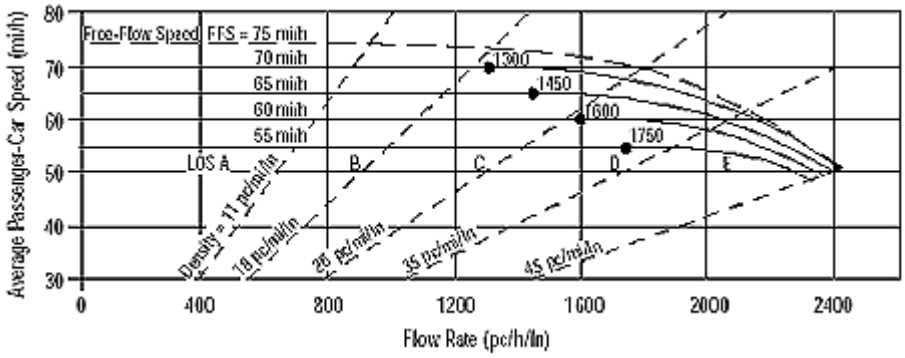
Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*10/30/2008*
Analysis Time Period	*Summer/Holiday Weekend*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*North of San Luis Bay Drive*
Jurisdiction	*Caltrans*
Analysis Year	*2020*

Project Description Avila Circulation Element Update 06-1052.1

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4995*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2900*	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

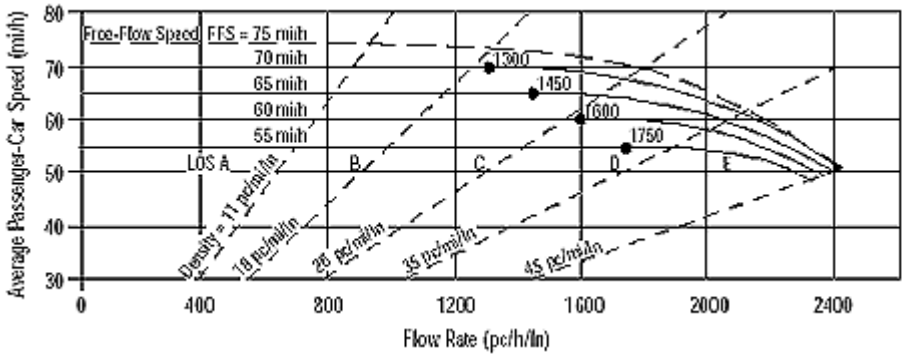
Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*10/30/2008*
Analysis Time Period	*Non Summer Weekday*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*San Luis Bay Dr to Avila Beach*
Jurisdiction	*Caltrans*
Analysis Year	*2020*

Project Description Avila Circulation Element Update 06-1052.1

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4376*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2541*	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

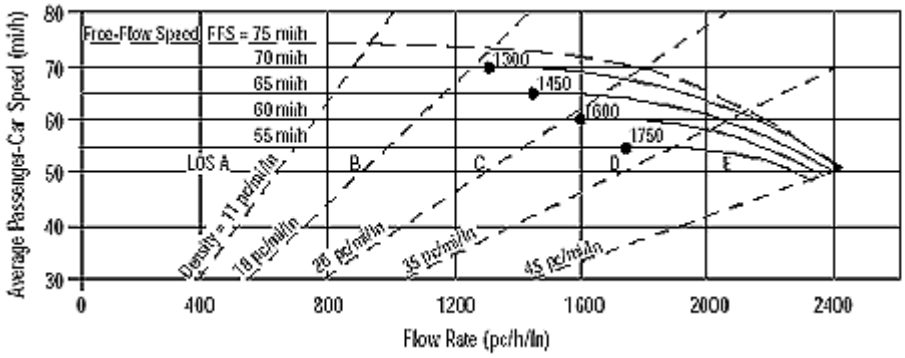
Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*10/30/2008*
Analysis Time Period	*Summer/Holiday Weekend*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*San Luis Bay Dr to Avila Beach*
Jurisdiction	*Caltrans*
Analysis Year	*2020*

Project Description Avila Circulation Element Update 06-1052.1

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4569*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2653*	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

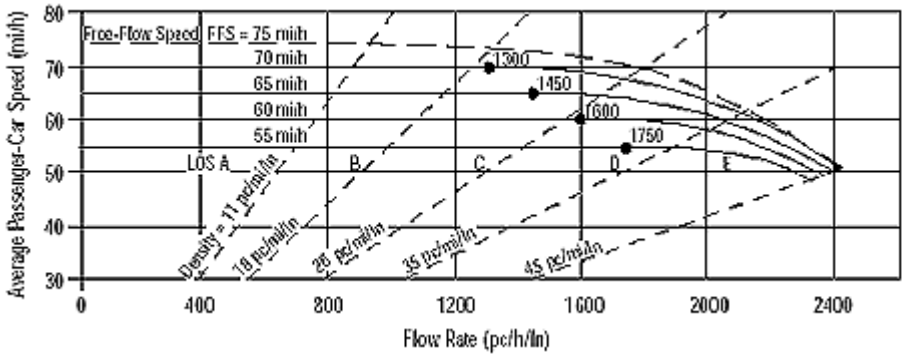
Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*10/30/2008*
Analysis Time Period	*Non Summer Weekday*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*South of Avila Beach Drive*
Jurisdiction	*Caltrans*
Analysis Year	*2020*

Project Description Avila Circulation Element Update 06-1052.1

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4913*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2852*	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

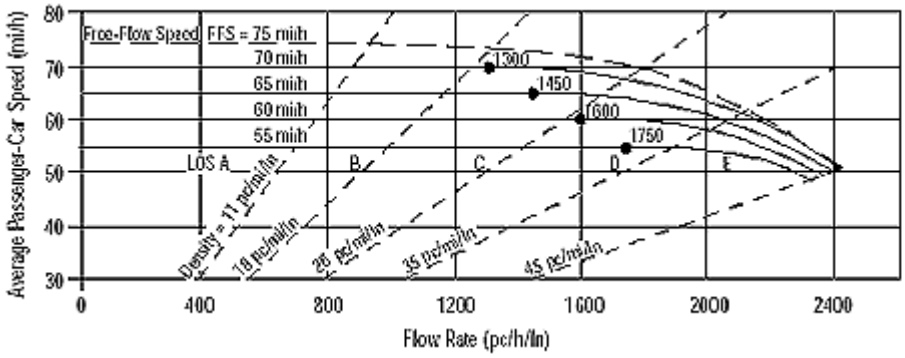
Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	*J. Gormley*
Agency or Company	*TPG Consulting, Inc.*
Date Performed	*10/30/2008*
Analysis Time Period	*Summer/Holiday Weekend*

Site Information

Highway/Direction of Travel	*US 101 North or South*
From/To	*South of Avila Beach Drive*
Jurisdiction	*Caltrans*
Analysis Year	*2020*

Project Description Avila Circulation Element Update 06-1052.1

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5130*	veh/h	Peak-Hour Factor, PHF	*0.90*
AADT		veh/day	%Trucks and Buses, P_T	*9*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
Driver type adjustment	*1.00*		Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.957*

Speed Inputs

Lane Width	*12.0*	ft
Rt-Shoulder Lat. Clearance	*6.0*	ft
Interchange Density	*0.50*	I/mi
Number of Lanes, N	*2*	
FFS (measured)	*70.0*	mi/h
Base free-flow Speed, BFFS		mi/h

Calc Speed Adj and FFS

f_{LW}		mi/h
f_{LC}		mi/h
f_{ID}		mi/h
f_N		mi/h
FFS	*70.0*	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2978*	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h
S		mi/h
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

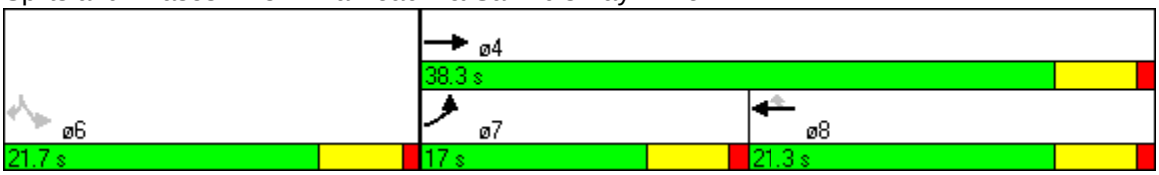
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	15			9	15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				94		56
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30	30		30	
Link Distance (ft)		2816	3296		1488	
Travel Time (s)		64.0	74.9		33.8	
Volume (vph)	256	530	228	85	63	50
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	284	589	253	94	70	56
Lane Group Flow (vph)	284	589	253	94	70	56
Turn Type	Prot			Perm		custom
Protected Phases	7	4	8			
Permitted Phases				8	6	6
Detector Phases	7	4	8	8	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.3	21.3	21.3	21.3	21.3	21.3
Total Split (s)	17.0	38.3	21.3	21.3	21.7	21.7
Total Split (%)	28.3%	63.8%	35.5%	35.5%	36.2%	36.2%
Maximum Green (s)	11.7	33.0	16.0	16.0	16.4	16.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	Min	Min
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	12.7	26.6	14.5	14.5	10.0	10.0
Actuated g/C Ratio	0.28	0.62	0.34	0.34	0.23	0.23
v/c Ratio	0.57	0.51	0.40	0.16	0.17	0.14
Control Delay	20.5	6.1	15.3	4.3	17.2	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.5	6.1	15.3	4.3	17.2	6.9
LOS	C	A	B	A	B	A
Approach Delay		10.8	12.3		12.6	
Approach LOS		B	B		B	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	61	57	54	0	16	0
Queue Length 95th (ft)	145	127	110	24	45	22
Internal Link Dist (ft)		2736	3216		1408	
Turn Bay Length (ft)						
Base Capacity (vph)	534	1290	747	691	658	623
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.46	0.34	0.14	0.11	0.09

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 43.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.57
Intersection Signal Delay: 11.4 Intersection LOS: B
Intersection Capacity Utilization 39.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: Avila Beach & San Luis Bay Drive



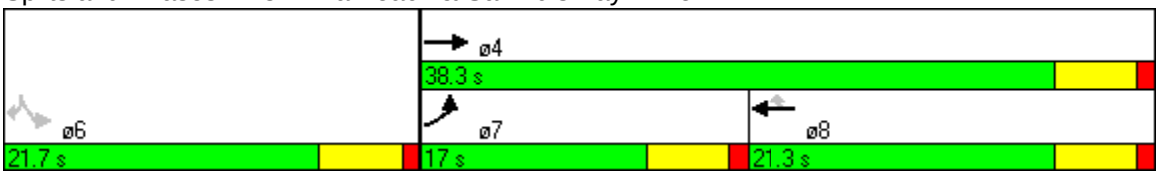
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	15			9	15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				118		48
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30	30		30	
Link Distance (ft)		2816	3296		1488	
Travel Time (s)		64.0	74.9		33.8	
Volume (vph)	245	607	279	106	68	43
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	272	674	310	118	76	48
Lane Group Flow (vph)	272	674	310	118	76	48
Turn Type	Prot			Perm		custom
Protected Phases	7	4	8			
Permitted Phases				8	6	6
Detector Phases	7	4	8	8	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.3	21.3	21.3	21.3	21.3	21.3
Total Split (s)	17.0	38.3	21.3	21.3	21.7	21.7
Total Split (%)	28.3%	63.8%	35.5%	35.5%	36.2%	36.2%
Maximum Green (s)	11.7	33.0	16.0	16.0	16.4	16.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	Min	Min
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	12.6	27.8	15.7	15.7	10.2	10.2
Actuated g/C Ratio	0.27	0.63	0.35	0.35	0.23	0.23
v/c Ratio	0.57	0.58	0.47	0.19	0.19	0.12
Control Delay	21.2	7.0	15.9	4.1	17.8	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.2	7.0	15.9	4.1	17.8	7.1
LOS	C	A	B	A	B	A
Approach Delay		11.1	12.7		13.7	
Approach LOS		B	B		B	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	62	71	69	0	18	0
Queue Length 95th (ft)	140	160	138	27	47	20
Internal Link Dist (ft)		2736	3216		1408	
Turn Bay Length (ft)						
Base Capacity (vph)	518	1286	745	704	643	606
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.52	0.42	0.17	0.12	0.08

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 44.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 11.7 Intersection LOS: B
Intersection Capacity Utilization 42.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: Avila Beach & San Luis Bay Drive



TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach Drive at San Luis*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*10/30/2008*	Analysis Year	*2020*
Analysis Time Period	*2020 non summer weekday*		

Project Description	*06-1052.1 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *San Luis Street*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*713*	*40*	*30*	*187*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*774*	*43*	*32*	*203*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*28*		*23*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*30*	*0*	*24*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*32*	*30*		*24*			
C (m) (veh/h)		*811*	*237*		*387*			
v/c		*0.04*	*0.13*		*0.06*			
95% queue length		*0.12*	*0.43*		*0.20*			
Control Delay (s/veh)		*9.6*	*22.4*		*14.9*			
LOS		*A*	*C*		*B*			
Approach Delay (s/veh)	--	--	*19.1*					
Approach LOS	--	--	*C*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach Drive at San Luis*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*10/30/2008*	Analysis Year	*2020*
Analysis Time Period	*2020 summer weekend*		

Project Description	*06-1052.1 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *San Luis Street*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*765*	*48*	*31*	*202*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*831*	*52*	*33*	*219*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*43*		*24*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*46*	*0*	*26*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*33*	*46*		*26*			
C (m) (veh/h)		*766*	*212*		*357*			
v/c		*0.04*	*0.22*		*0.07*			
95% queue length		*0.13*	*0.80*		*0.23*			
Control Delay (s/veh)		*9.9*	*26.6*		*15.9*			
LOS		*A*	*D*		*C*			
Approach Delay (s/veh)	--	--	*22.7*					
Approach LOS	--	--	*C*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach at San Miguel*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*10/30/2008*	Analysis Year	*2020*
Analysis Time Period	*2020 non summer weekday*		

Project Description	*06-1052.1 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *San Miguel Street*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*690*	*2*	*45*	*183*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*749*	*2*	*48*	*198*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*0*		*78*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*84*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*48*	*0*		*84*			
C (m) (veh/h)		*858*	*240*		*411*			
v/c		*0.06*	*0.00*		*0.20*			
95% queue length		*0.18*	*0.00*		*0.76*			
Control Delay (s/veh)		*9.4*	*20.0*		*16.0*			
LOS		*A*	*C*		*C*			
Approach Delay (s/veh)	--	--	*16.0*					
Approach LOS	--	--	*C*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach at San Miguel*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*10/30/2008*	Analysis Year	*2020*
Analysis Time Period	*2020 summer weekend*		

Project Description	*06-1052.1 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *San Miguel Street*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*735*	*2*	*60*	*207*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*798*	*2*	*65*	*224*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*0*		*94*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*102*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*65*	*0*		*102*			
C (m) (veh/h)		*823*	*201*		*386*			
v/c		*0.08*	*0.00*		*0.26*			
95% queue length		*0.26*	*0.00*		*1.05*			
Control Delay (s/veh)		*9.7*	*22.9*		*17.6*			
LOS		*A*	*C*		*C*			
Approach Delay (s/veh)	--	--	*17.6*					
Approach LOS	--	--	*C*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach at First*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*10/30/2008*	Analysis Year	*2020*
Analysis Time Period	*2020 non summer weekday*		

Project Description *06-1052.1 Avila Circulation Element*

East/West Street: *Avila Beach Drive* | North/South Street: *First Street*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*673*	*38*	*21*	*167*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*731*	*41*	*22*	*181*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*21*		*23*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*22*	*0*	*24*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*22*	*22*		*24*			
C (m) (veh/h)		*843*	*271*		*410*			
v/c		*0.03*	*0.08*		*0.06*			
95% queue length		*0.08*	*0.26*		*0.19*			
Control Delay (s/veh)		*9.4*	*19.5*		*14.3*			
LOS		*A*	*C*		*B*			
Approach Delay (s/veh)	--	--	*16.8*					
Approach LOS	--	--	*C*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach at First*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*County of SLO*
Date Performed	*10/30/2008*	Analysis Year	*2020*
Analysis Time Period	*2020 summer weekend*		

Project Description *06-1052.1 Avila Circulation Element*

East/West Street: *Avila Beach Drive* | North/South Street: *First Street*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*721*	*40*	*23*	*191*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*783*	*43*	*24*	*207*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*1*	*1*	*0*
Configuration			*TR*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*24*		*23*			
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*26*	*0*	*24*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*	*L*		*R*			
v (veh/h)		*24*	*26*		*24*			
C (m) (veh/h)		*805*	*242*		*383*			
v/c		*0.03*	*0.11*		*0.06*			
95% queue length		*0.09*	*0.36*		*0.20*			
Control Delay (s/veh)		*9.6*	*21.7*		*15.0*			
LOS		*A*	*C*		*C*			
Approach Delay (s/veh)	--	--	*18.5*					
Approach LOS	--	--	*C*					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50			50		50		50			
Trailing Detector (ft)	0	0			0		0		0			
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.938				0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3433	1863	0	0	1747	0	1770	0	1583	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3433	1863	0	0	1747	0	1770	0	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					28				5			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		497			494			245			232	
Travel Time (s)		11.3			11.2			5.6			5.3	
Volume (vph)	328	50	0	0	30	26	37	0	5	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	357	54	0	0	33	28	40	0	5	0	0	0
Lane Group Flow (vph)	357	54	0	0	61	0	40	0	5	0	0	0
Turn Type	Prot						custom		custom			
Protected Phases	7	4			8							
Permitted Phases							2		2			
Detector Phases	7	4			8		2		2			
Minimum Initial (s)	4.0	4.0			4.0		4.0		4.0			
Minimum Split (s)	8.5	20.5			20.5		20.5		20.5			
Total Split (s)	20.6	45.5	0.0	0.0	24.9	0.0	24.5	0.0	24.5	0.0	0.0	0.0
Total Split (%)	29.4%	65.0%	0.0%	0.0%	35.6%	0.0%	35.0%	0.0%	35.0%	0.0%	0.0%	0.0%
Maximum Green (s)	16.1	41.0			20.4		20.0		20.0			
Yellow Time (s)	3.5	3.5			3.5		3.5		3.5			
All-Red Time (s)	1.0	1.0			1.0		1.0		1.0			
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Recall Mode	None	C-Max			None		Min		Min			
Walk Time (s)		5.0			5.0		5.0		5.0			
Flash Dont Walk (s)		11.0			11.0		11.0		11.0			
Pedestrian Calls (#/hr)		0			0		0		0			
Act Effct Green (s)	21.7	54.8			27.7		7.2		7.2			
Actuated g/C Ratio	0.31	0.78			0.40		0.10		0.10			
v/c Ratio	0.34	0.04			0.09		0.22		0.03			
Control Delay	13.1	1.5			11.9		31.0		18.0			
Queue Delay	0.0	0.0			0.0		0.0		0.0			
Total Delay	13.1	1.5			11.9		31.0		18.0			
LOS	B	A			B		C		B			
Approach Delay		11.6			11.9							
Approach LOS		B			B							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	15	1			10		16		0			
Queue Length 95th (ft)	40	m6			35		42		9			
Internal Link Dist (ft)		417			414			165			152	
Turn Bay Length (ft)												
Base Capacity (vph)	1185	1458			714		518		467			
Starvation Cap Reductn	0	0			0		0		0			
Spillback Cap Reductn	0	0			0		0		0			
Storage Cap Reductn	0	0			0		0		0			
Reduced v/c Ratio	0.30	0.04			0.09		0.08		0.01			

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 54 (77%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.34
Intersection Signal Delay: 13.2 Intersection LOS: B
Intersection Capacity Utilization 38.9% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: San Luis Bay Drive & US 101 NB ramps

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50			50		50		50			
Trailing Detector (ft)	0	0			0		0		0			
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.937				0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3433	1863	0	0	1745	0	1770	0	1583	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3433	1863	0	0	1745	0	1770	0	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					40				8			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		497			494			245			232	
Travel Time (s)		11.3			11.2			5.6			5.3	
Volume (vph)	454	71	0	0	42	37	52	0	7	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	493	77	0	0	46	40	57	0	8	0	0	0
Lane Group Flow (vph)	493	77	0	0	86	0	57	0	8	0	0	0
Turn Type	Prot						custom		custom			
Protected Phases	7	4			8							
Permitted Phases							2		2			
Detector Phases	7	4			8		2		2			
Minimum Initial (s)	4.0	4.0			4.0		4.0		4.0			
Minimum Split (s)	8.5	20.5			20.5		20.5		20.5			
Total Split (s)	23.4	46.5	0.0	0.0	23.1	0.0	23.5	0.0	23.5	0.0	0.0	0.0
Total Split (%)	33.4%	66.4%	0.0%	0.0%	33.0%	0.0%	33.6%	0.0%	33.6%	0.0%	0.0%	0.0%
Maximum Green (s)	18.9	42.0			18.6		19.0		19.0			
Yellow Time (s)	3.5	3.5			3.5		3.5		3.5			
All-Red Time (s)	1.0	1.0			1.0		1.0		1.0			
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Recall Mode	None	C-Max			None		Min		Min			
Walk Time (s)		5.0			5.0		5.0		5.0			
Flash Dont Walk (s)		11.0			11.0		11.0		11.0			
Pedestrian Calls (#/hr)		0			0		0		0			
Act Effct Green (s)	26.4	54.4			27.9		7.6		7.6			
Actuated g/C Ratio	0.38	0.78			0.40		0.11		0.11			
v/c Ratio	0.38	0.05			0.12		0.30		0.04			
Control Delay	11.8	1.7			12.4		31.8		16.3			
Queue Delay	0.0	0.0			0.0		0.0		0.0			
Total Delay	11.8	1.7			12.4		31.8		16.3			
LOS	B	A			B		C		B			
Approach Delay		10.4			12.4							
Approach LOS		B			B							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	38	6			15		23		0			
Queue Length 95th (ft)	63	m5			45		53		11			
Internal Link Dist (ft)		417			414			165			152	
Turn Bay Length (ft)												
Base Capacity (vph)	1371	1448			721		493		447			
Starvation Cap Reductn	0	0			0		0		0			
Spillback Cap Reductn	0	0			0		0		0			
Storage Cap Reductn	0	0			0		0		0			
Reduced v/c Ratio	0.36	0.05			0.12		0.12		0.02			

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 56 (80%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.38
Intersection Signal Delay: 12.4 Intersection LOS: B
Intersection Capacity Utilization 48.8% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: San Luis Bay Drive & US 101 NB ramps

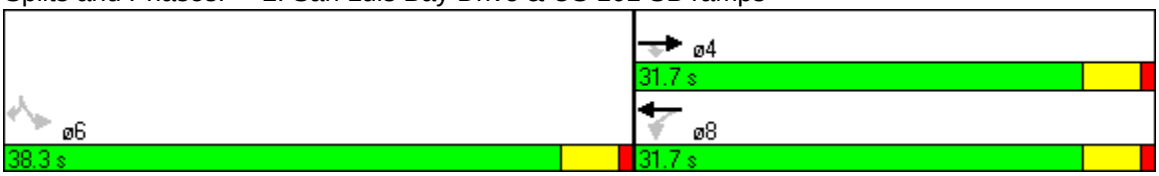
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		50	50	50	50					50		50
Trailing Detector (ft)		0	0	0	0					0		0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	1583	1770	1863	0	0	0	0	1770	0	1583
Flt Permitted				0.628						0.950		
Satd. Flow (perm)	0	1863	1583	1170	1863	0	0	0	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			242									385
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		164			497			186			230	
Travel Time (s)		3.7			11.3			4.2			5.2	
Volume (vph)	0	166	223	30	37	0	0	0	0	212	0	354
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	180	242	33	40	0	0	0	0	230	0	385
Lane Group Flow (vph)	0	180	242	33	40	0	0	0	0	230	0	385
Turn Type			Perm	Perm						custom		custom
Protected Phases		4			8							
Permitted Phases			4	8						6		6
Detector Phases		4	4	8	8					6		6
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0		4.0
Minimum Split (s)		20.5	20.5	20.5	20.5					20.5		20.5
Total Split (s)	0.0	31.7	31.7	31.7	31.7	0.0	0.0	0.0	0.0	38.3	0.0	38.3
Total Split (%)	0.0%	45.3%	45.3%	45.3%	45.3%	0.0%	0.0%	0.0%	0.0%	54.7%	0.0%	54.7%
Maximum Green (s)		27.2	27.2	27.2	27.2					33.8		33.8
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5		3.5
All-Red Time (s)		1.0	1.0	1.0	1.0					1.0		1.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0		3.0
Recall Mode		C-Max	C-Max	C-Max	C-Max					Min		Min
Walk Time (s)		5.0	5.0	5.0	5.0					5.0		5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0					11.0		11.0
Pedestrian Calls (#/hr)		0	0	0	0					0		0
Act Effct Green (s)		47.7	47.7	47.7	47.7					14.3		14.3
Actuated g/C Ratio		0.68	0.68	0.68	0.68					0.20		0.20
v/c Ratio		0.14	0.21	0.04	0.03					0.64		0.61
Control Delay		3.7	0.5	2.0	1.9					33.0		7.2
Queue Delay		1.0	0.7	0.0	0.0					0.0		0.0
Total Delay		4.7	1.2	2.0	1.9					33.0		7.2
LOS		A	A	A	A					C		A
Approach Delay		2.7			1.9							
Approach LOS		A			A							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		19	0	2	2					91		0
Queue Length 95th (ft)		36	3	5	6					141		57
Internal Link Dist (ft)		84			417			106			150	
Turn Bay Length (ft)												
Base Capacity (vph)		1271	1157	798	1271					867		972
Starvation Cap Reductn		863	622	0	0					0		0
Spillback Cap Reductn		0	0	0	0					0		0
Storage Cap Reductn		0	0	0	0					0		0
Reduced v/c Ratio		0.44	0.45	0.04	0.03					0.27		0.40

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 32 (46%), Referenced to phase 4:EBT and 8:WBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 10.5 Intersection LOS: B
Intersection Capacity Utilization 38.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 2: San Luis Bay Drive & US 101 SB ramps



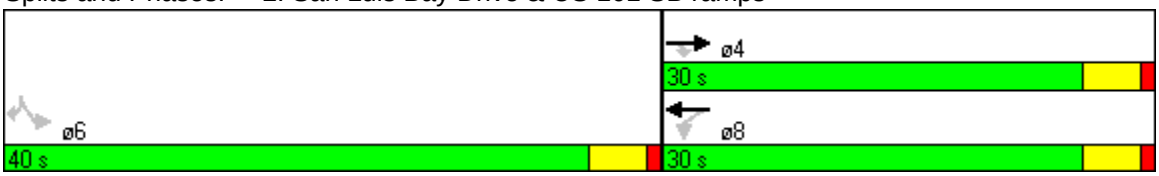
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		50	50	50	50					50		50
Trailing Detector (ft)		0	0	0	0					0		0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1863	1583	1770	1863	0	0	0	0	1770	0	1583
Flt Permitted				0.532						0.950		
Satd. Flow (perm)	0	1863	1583	991	1863	0	0	0	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			336									533
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		164			497			186			230	
Travel Time (s)		3.7			11.3			4.2			5.2	
Volume (vph)	0	230	309	42	52	0	0	0	0	295	0	490
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	250	336	46	57	0	0	0	0	321	0	533
Lane Group Flow (vph)	0	250	336	46	57	0	0	0	0	321	0	533
Turn Type			Perm	Perm						custom		custom
Protected Phases		4			8							
Permitted Phases			4	8						6		6
Detector Phases		4	4	8	8					6		6
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0		4.0
Minimum Split (s)		20.5	20.5	20.5	20.5					20.5		20.5
Total Split (s)	0.0	30.0	30.0	30.0	30.0	0.0	0.0	0.0	0.0	40.0	0.0	40.0
Total Split (%)	0.0%	42.9%	42.9%	42.9%	42.9%	0.0%	0.0%	0.0%	0.0%	57.1%	0.0%	57.1%
Maximum Green (s)		25.5	25.5	25.5	25.5					35.5		35.5
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5		3.5
All-Red Time (s)		1.0	1.0	1.0	1.0					1.0		1.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0		3.0
Recall Mode		C-Max	C-Max	C-Max	C-Max					Min		Min
Walk Time (s)		5.0	5.0	5.0	5.0					5.0		5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0					11.0		11.0
Pedestrian Calls (#/hr)		0	0	0	0					0		0
Act Effct Green (s)		43.7	43.7	43.7	43.7					18.3		18.3
Actuated g/C Ratio		0.62	0.62	0.62	0.62					0.26		0.26
v/c Ratio		0.21	0.30	0.07	0.05					0.69		0.66
Control Delay		5.2	0.7	2.4	2.2					30.7		6.2
Queue Delay		1.1	0.7	0.0	0.0					0.0		0.1
Total Delay		6.3	1.4	2.4	2.2					30.7		6.3
LOS		A	A	A	A					C		A
Approach Delay		3.5			2.3							
Approach LOS		A			A							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		32	0	2	3					124		0
Queue Length 95th (ft)		48	2	6	7					172		57
Internal Link Dist (ft)		84			417			106			150	
Turn Bay Length (ft)												
Base Capacity (vph)		1164	1115	619	1164					910		1073
Starvation Cap Reductn		683	464	0	0					0		0
Spillback Cap Reductn		0	0	0	0					0		46
Storage Cap Reductn		0	0	0	0					0		0
Reduced v/c Ratio		0.52	0.52	0.07	0.05					0.35		0.52

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 40 (57%), Referenced to phase 4:EBT and 8:WBTL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 10.0 Intersection LOS: B
Intersection Capacity Utilization 48.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 2: San Luis Bay Drive & US 101 SB ramps



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.966			0.967			0.863			0.921	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3419	0	3433	3422	0	1770	1608	0	1770	1716	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3419	0	3433	3422	0	1770	1608	0	1770	1716	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		51			49			166			18	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		498			164			319			317	
Travel Time (s)		11.3			3.7			7.3			7.2	
Volume (vph)	18	185	54	156	183	52	53	15	153	51	15	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	201	59	170	199	57	58	16	166	55	16	18
Lane Group Flow (vph)	20	260	0	170	256	0	58	182	0	55	34	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.5	20.5		8.5	20.5		20.5	20.5		8.5	20.5	
Total Split (s)	8.5	20.5	0.0	8.5	20.5	0.0	20.5	30.6	0.0	10.4	20.5	0.0
Total Split (%)	12.1%	29.3%	0.0%	12.1%	29.3%	0.0%	29.3%	43.7%	0.0%	14.9%	29.3%	0.0%
Maximum Green (s)	4.0	16.0		4.0	16.0		16.0	26.1		5.9	16.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		Min	Min		None	Min	
Walk Time (s)		5.0			5.0		5.0	5.0			5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0			11.0	
Pedestrian Calls (#/hr)		0			0		0	0			0	
Act Effct Green (s)	4.5	34.5		4.5	41.3		8.1	12.8		6.3	6.9	
Actuated g/C Ratio	0.06	0.49		0.06	0.59		0.12	0.18		0.09	0.10	
v/c Ratio	0.18	0.15		0.77	0.13		0.28	0.42		0.34	0.18	
Control Delay	34.8	8.7		52.1	5.1		31.2	9.5		36.2	20.7	
Queue Delay	0.0	0.0		0.0	0.4		0.0	0.0		0.0	0.0	
Total Delay	34.8	8.7		52.1	5.5		31.2	9.5		36.2	20.7	
LOS	C	A		D	A		C	A		D	C	
Approach Delay		10.5			24.1			14.7			30.3	
Approach LOS		B			C			B			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	8	23		38	15		23	6		23	6	
Queue Length 95th (ft)	28	48		m#81	34		53	55		55	30	
Internal Link Dist (ft)		418			84			239			237	
Turn Bay Length (ft)												
Base Capacity (vph)	114	1709		221	2037		417	714		162	418	
Starvation Cap Reductn	0	0		0	1334		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.18	0.15		0.77	0.36		0.14	0.25		0.34	0.08	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 64 (91%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 18.8 Intersection LOS: B
Intersection Capacity Utilization 38.2% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: San Luis Bay Drive & Ontario Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.966			0.967			0.863			0.920	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3419	0	3433	3422	0	1770	1608	0	1770	1714	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3419	0	3433	3422	0	1770	1608	0	1770	1714	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		52			48			230			26	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		498			164			319			317	
Travel Time (s)		11.3			3.7			7.3			7.2	
Volume (vph)	25	256	76	217	254	71	73	20	212	71	21	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	278	83	236	276	77	79	22	230	77	23	26
Lane Group Flow (vph)	27	361	0	236	353	0	79	252	0	77	49	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.5	20.5		8.5	20.5		20.5	20.5		8.5	20.5	
Total Split (s)	8.5	20.5	0.0	8.5	20.5	0.0	20.5	29.7	0.0	11.3	20.5	0.0
Total Split (%)	12.1%	29.3%	0.0%	12.1%	29.3%	0.0%	29.3%	42.4%	0.0%	16.1%	29.3%	0.0%
Maximum Green (s)	4.0	16.0		4.0	16.0		16.0	25.2		6.8	16.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		Min	Min		None	Min	
Walk Time (s)		5.0			5.0		5.0	5.0			5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0			11.0	
Pedestrian Calls (#/hr)		0			0		0	0			0	
Act Effct Green (s)	7.1	33.5		4.5	37.0		8.9	11.0		7.0	7.2	
Actuated g/C Ratio	0.10	0.48		0.06	0.53		0.13	0.16		0.10	0.10	
v/c Ratio	0.15	0.22		1.07	0.19		0.35	0.57		0.43	0.25	
Control Delay	30.0	10.2		108.3	8.5		31.6	10.8		37.5	20.2	
Queue Delay	0.0	0.0		0.0	0.8		0.0	0.0		0.2	0.0	
Total Delay	30.0	10.2		108.3	9.3		31.6	10.8		37.7	20.2	
LOS	C	B		F	A		C	B		D	C	
Approach Delay		11.5			49.0			15.7			30.9	
Approach LOS		B			D			B			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	11	37		~59	24		32	9		32	9	
Queue Length 95th (ft)	32	71		m#120	64		66	64		71	37	
Internal Link Dist (ft)		418			84			239			237	
Turn Bay Length (ft)												
Base Capacity (vph)	179	1663		221	1832		417	736		185	424	
Starvation Cap Reductn	0	0		0	1148		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		6	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.15	0.22		1.07	0.52		0.19	0.34		0.43	0.12	

Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 5 (7%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.07
Intersection Signal Delay: 29.6 Intersection LOS: C
Intersection Capacity Utilization 47.1% ICU Level of Service A
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: San Luis Bay Drive & Ontario Road

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach Drive at US 101 NB*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*Caltrans*
Date Performed	*10/30/2008*	Analysis Year	*2020*
Analysis Time Period	*2020 Non Summer*		

Project Description	*06-1052.1 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *US 101 NB ramps*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*20*				*374*	*114*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*21*	*0*	*0*	*0*	*406*	*123*
Percent Heavy Vehicles	*2*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*0*	*0*	*1*	*0*
Configuration	*L*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*10*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*2*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*1*
Configuration						*R*

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*							*R*
v (veh/h)	*21*							*10*
C (m) (veh/h)	*1038*							*595*
v/c	*0.02*							*0.02*
95% queue length	*0.06*							*0.05*
Control Delay (s/veh)	*8.5*							*11.2*
LOS	*A*							*B*
Approach Delay (s/veh)	--	--				*11.2*		
Approach LOS	--	--				*B*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach Drive at US 101 NB*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*Caltrans*
Date Performed	*10/30/08*	Analysis Year	*2020*
Analysis Time Period	*2020 Summer*		

Project Description	*06-1052.1 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *US 101 NB ramps*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	*27*				*518*	*159*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*29*	*0*	*0*	*0*	*563*	*172*
Percent Heavy Vehicles	*2*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*0*	*0*	*1*	*0*
Configuration	*L*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						*10*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*10*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*2*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*1*
Configuration						*R*

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*L*							*R*
v (veh/h)	*29*							*10*
C (m) (veh/h)	*870*							*470*
v/c	*0.03*							*0.02*
95% queue length	*0.10*							*0.07*
Control Delay (s/veh)	*9.3*							*12.8*
LOS	*A*							*B*
Approach Delay (s/veh)	--	--				*12.8*		
Approach LOS	--	--				*B*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach Drive at US 101 SB*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*Caltrans*
Date Performed	*10/30/2008*	Analysis Year	*2020*
Analysis Time Period	*2020 Non Summer*		

Project Description	*06-1052.1 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *US 101 SB on ramp*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*20*	*543*	*2*	*381*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*21*	*590*	*2*	*414*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*1*	*1*	*0*
Configuration		*T*	*R*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration						

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*						
v (veh/h)		*2*						
C (m) (veh/h)		*968*						
v/c		*0.00*						
95% queue length		*0.01*						
Control Delay (s/veh)		*8.7*						
LOS		*A*						
Approach Delay (s/veh)	--	--						
Approach LOS	--	--						

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*J. Gormley*	Intersection	*Avila Beach Drive at US 101 SB*
Agency/Co.	*TPG Consulting, Inc.*	Jurisdiction	*Caltrans*
Date Performed	*10/30/2008*	Analysis Year	*2020*
Analysis Time Period	*2020 Summer*		

Project Description	*06-1052.1 Avila Circulation Element*
East/West Street: *Avila Beach Drive*	North/South Street: *US 101 SB on ramp*
Intersection Orientation: *East-West*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)		*27*	*754*	*3*	*525*	
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*29*	*819*	*3*	*570*	*0*
Percent Heavy Vehicles	*0*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*1*	*1*	*1*	*0*
Configuration		*T*	*R*	*L*	*T*	
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration						

Delay, Queue Length, and Level of Service

Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*L*						
v (veh/h)		*3*						
C (m) (veh/h)		*790*						
v/c		*0.00*						
95% queue length		*0.01*						
Control Delay (s/veh)		*9.6*						
LOS		*A*						
Approach Delay (s/veh)	--	--						
Approach LOS	--	--						

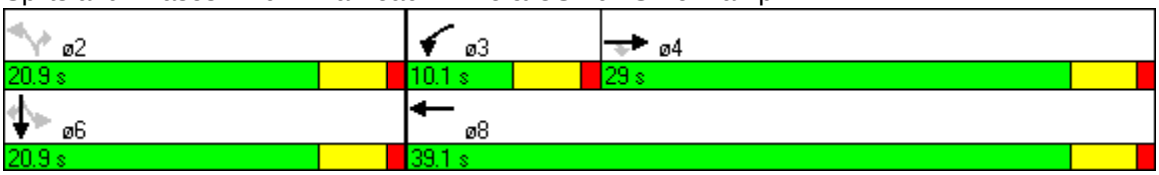
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		50	50	50	50		50		50	50	50	50
Trailing Detector (ft)		0	0	0	0		0		0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			0.850
Flt Protected				0.950			0.950				0.964	
Satd. Flow (prot)	0	1863	1583	1770	1863	0	1770	0	1583	0	1796	1583
Flt Permitted				0.950			0.704				0.964	
Satd. Flow (perm)	0	1863	1583	1770	1863	0	1311	0	1583	0	1796	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			152						74			126
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		134			217			248			254	
Travel Time (s)		3.0			4.9			5.6			5.8	
Volume (vph)	0	439	140	51	330	0	140	0	68	56	18	116
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	477	152	55	359	0	152	0	74	61	20	126
Lane Group Flow (vph)	0	477	152	55	359	0	152	0	74	0	81	126
Turn Type			Perm	Prot			custom		custom	Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases			4				2		2	6		6
Detector Phases		4	4	3	8		2		2	6	6	6
Minimum Initial (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Minimum Split (s)		20.5	20.5	8.5	20.5		20.5		20.5	20.5	20.5	20.5
Total Split (s)	0.0	29.0	29.0	10.1	39.1	0.0	20.9	0.0	20.9	20.9	20.9	20.9
Total Split (%)	0.0%	48.3%	48.3%	16.8%	65.2%	0.0%	34.8%	0.0%	34.8%	34.8%	34.8%	34.8%
Maximum Green (s)		24.5	24.5	5.6	34.6		16.4		16.4	16.4	16.4	16.4
Yellow Time (s)		3.5	3.5	3.5	3.5		3.5		3.5	3.5	3.5	3.5
All-Red Time (s)		1.0	1.0	1.0	1.0		1.0		1.0	1.0	1.0	1.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Recall Mode		None	None	None	None		Min		Min	Min	Min	Min
Walk Time (s)		5.0	5.0		5.0		5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0		11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0		0		0		0	0	0	0
Act Effct Green (s)		15.9	15.9	6.4	18.7		10.9		10.9		10.9	10.9
Actuated g/C Ratio		0.41	0.41	0.14	0.48		0.28		0.28		0.28	0.28
v/c Ratio		0.62	0.21	0.22	0.40		0.42		0.15		0.16	0.24
Control Delay		14.7	3.2	24.2	7.5		18.7		5.9		14.8	5.3
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0
Total Delay		14.7	3.2	24.2	7.5		18.7		5.9		14.8	5.3
LOS		B	A	C	A		B		A		B	A
Approach Delay		11.9			9.7						9.0	
Approach LOS		B			A						A	

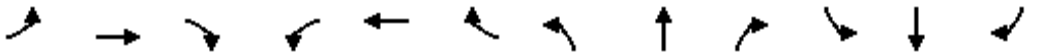
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		51	0	8	35		19		0		10	0
Queue Length 95th (ft)		216	28	48	100		91		25		50	32
Internal Link Dist (ft)		54			137			168			174	
Turn Bay Length (ft)												
Base Capacity (vph)		1007	925	254	1221		523		677		717	708
Starvation Cap Reductn		0	0	0	0		0		0		0	0
Spillback Cap Reductn		0	0	0	0		0		0		0	0
Storage Cap Reductn		0	0	0	0		0		0		0	0
Reduced v/c Ratio		0.47	0.16	0.22	0.29		0.29		0.11		0.11	0.18

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 38.9
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 11.3 Intersection LOS: B
Intersection Capacity Utilization 50.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 6: Avila Beach Drive & US 101 SB off ramp





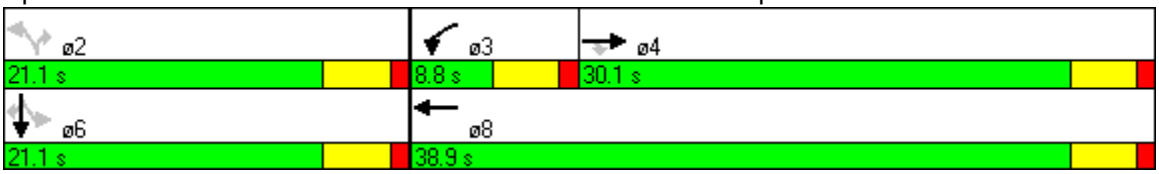
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)		50	50	50	50		50		50	50	50	50
Trailing Detector (ft)		0	0	0	0		0		0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			0.850
Flt Protected				0.950			0.950				0.963	
Satd. Flow (prot)	0	1863	1583	1770	1863	0	1770	0	1583	0	1794	1583
Flt Permitted				0.950			0.685				0.963	
Satd. Flow (perm)	0	1863	1583	1770	1863	0	1276	0	1583	0	1794	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			211						103			174
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		134			217			248			254	
Travel Time (s)		3.0			4.9			5.6			5.8	
Volume (vph)	0	608	194	71	454	0	194	0	95	78	25	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	661	211	77	493	0	211	0	103	85	27	174
Lane Group Flow (vph)	0	661	211	77	493	0	211	0	103	0	112	174
Turn Type			Perm	Prot			custom		custom	Perm		Perm
Protected Phases		4		3	8						6	
Permitted Phases			4				2		2	6		6
Detector Phases		4	4	3	8		2		2	6	6	6
Minimum Initial (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Minimum Split (s)		20.5	20.5	8.5	20.5		20.5		20.5	20.5	20.5	20.5
Total Split (s)	0.0	30.1	30.1	8.8	38.9	0.0	21.1	0.0	21.1	21.1	21.1	21.1
Total Split (%)	0.0%	50.2%	50.2%	14.7%	64.8%	0.0%	35.2%	0.0%	35.2%	35.2%	35.2%	35.2%
Maximum Green (s)		25.6	25.6	4.3	34.4		16.6		16.6	16.6	16.6	16.6
Yellow Time (s)		3.5	3.5	3.5	3.5		3.5		3.5	3.5	3.5	3.5
All-Red Time (s)		1.0	1.0	1.0	1.0		1.0		1.0	1.0	1.0	1.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Recall Mode		None	None	None	None		Min		Min	Min	Min	Min
Walk Time (s)		5.0	5.0		5.0		5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0		11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0		0		0		0	0	0	0
Act Effct Green (s)		21.2	21.2	5.1	25.4		12.9		12.9		12.9	12.9
Actuated g/C Ratio		0.45	0.45	0.10	0.54		0.27		0.27		0.27	0.27
v/c Ratio		0.79	0.26	0.44	0.49		0.61		0.20		0.23	0.31
Control Delay		22.1	2.9	35.7	8.7		25.9		5.5		17.3	5.2
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0
Total Delay		22.1	2.9	35.7	8.7		25.9		5.5		17.3	5.2
LOS		C	A	D	A		C		A		B	A
Approach Delay		17.4			12.4						9.9	
Approach LOS		B			B						A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		184	0	26	79		65		0		31	0
Queue Length 95th (ft)		#377	31	#77	149		127		29		65	38
Internal Link Dist (ft)		54			137			168			174	
Turn Bay Length (ft)												
Base Capacity (vph)		955	914	175	1170		444		618		624	665
Starvation Cap Reductn		0	0	0	0		0		0		0	0
Spillback Cap Reductn		0	0	0	0		0		0		0	0
Storage Cap Reductn		0	0	0	0		0		0		0	0
Reduced v/c Ratio		0.69	0.23	0.44	0.42		0.48		0.17		0.18	0.26

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 47.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 15.2 Intersection LOS: B
Intersection Capacity Utilization 63.3% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Avila Beach Drive & US 101 SB off ramp



APPENDIX G

FUTURE CONDITIONS

PEAK HOUR SIGNAL WARRANTS

Signal Warrants - Future (2020)

Intersections		Warrant Type	Approach Lanes		Peak Hour Volumes		Meets Warrant
			Major Street	Minor Street	Major Streets[1]	Minor Street[2]	
Avila Beach Drive at San Luis Street	*Non summer*	Rural	1	1	970	51	**NO**
	summer	Rural	1	1	1046	67	**NO**
Avila Beach Drive at San Miguel Street	*Non summer*	Rural	1	1	920	78	**NO**
	summer	Rural	1	1	1004	94	**Yes**
Avila Beach Drive at 1st Street	*Non summer*	Rural	1	1	899	44	**NO**
	summer	Rural	1	1	975	47	**NO**
SLB at US 101 NB ramps	*Non summer*	Rural	1	1	434	42	**NO**
	summer	Rural	1	1	604	59	**NO**
SLB at US 101 SB ramps	*Non summer*	Rural	1	1	566	389	**Yes**
	summer	Rural	1	1	785	539	**Yes**
SLB at Ontario	*Non summer*	Rural	1	1	648	221	**Yes**
	summer	Rural	1	1	899	305	**Yes**
Avila at US 101 NB ramps	*Non summer*	Rural	1	1	497	20	No
	summer	Rural	1	1	687	27	No
Avila at US 101 SB on ramp	*Non summer*	Rural	1	1	946	0	No
	summer	Rural	1	1	1309	0	No
Avila at US 101 SB off ramp/Shell Beach road	*Non summer*	Rural	1	1	960	208	**Yes**
	summer	Rural	1	1	1327	289	**Yes**

Urban = California MUTCD, Figure 4C-3
Rural = California MUTCD, Figure 4C-4

[1] Inlcudes both directions
[2] Includes higher volume direction only

APPENDIX H

MITIGATED FUTURE CONDITIONS

INTERSECTION LEVELS OF SERVICE

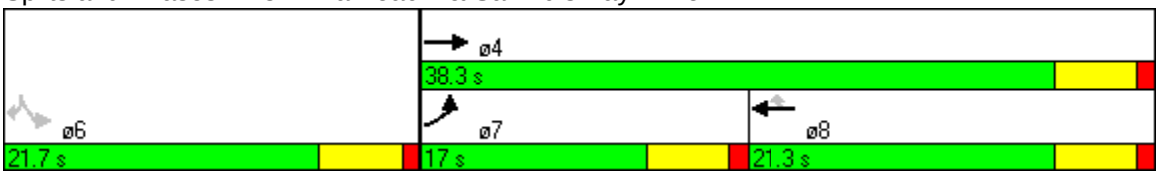
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	15			9	15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				94		56
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30	30		30	
Link Distance (ft)		2816	3296		1488	
Travel Time (s)		64.0	74.9		33.8	
Volume (vph)	256	530	228	85	63	50
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	284	589	253	94	70	56
Lane Group Flow (vph)	284	589	253	94	70	56
Turn Type	Prot			Perm		custom
Protected Phases	7	4	8			
Permitted Phases				8	6	6
Detector Phases	7	4	8	8	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.3	21.3	21.3	21.3	21.3	21.3
Total Split (s)	17.0	38.3	21.3	21.3	21.7	21.7
Total Split (%)	28.3%	63.8%	35.5%	35.5%	36.2%	36.2%
Maximum Green (s)	11.7	33.0	16.0	16.0	16.4	16.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	Min	Min
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	12.7	26.6	14.5	14.5	10.0	10.0
Actuated g/C Ratio	0.28	0.62	0.34	0.34	0.23	0.23
v/c Ratio	0.57	0.51	0.40	0.16	0.17	0.14
Control Delay	20.5	6.1	15.3	4.3	17.2	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.5	6.1	15.3	4.3	17.2	6.9
LOS	C	A	B	A	B	A
Approach Delay		10.8	12.3		12.6	
Approach LOS		B	B		B	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	61	57	54	0	16	0
Queue Length 95th (ft)	145	127	110	24	45	22
Internal Link Dist (ft)		2736	3216		1408	
Turn Bay Length (ft)						
Base Capacity (vph)	534	1290	747	691	658	623
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.46	0.34	0.14	0.11	0.09

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 43.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.57
Intersection Signal Delay: 11.4 Intersection LOS: B
Intersection Capacity Utilization 39.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: Avila Beach & San Luis Bay Drive



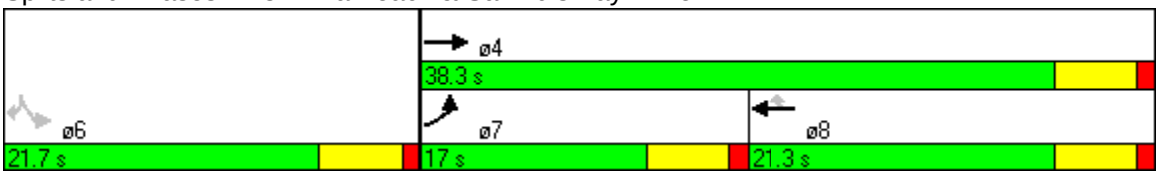
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Turning Speed (mph)	15			9	15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				118		48
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30	30		30	
Link Distance (ft)		2816	3296		1488	
Travel Time (s)		64.0	74.9		33.8	
Volume (vph)	245	607	279	106	68	43
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	272	674	310	118	76	48
Lane Group Flow (vph)	272	674	310	118	76	48
Turn Type	Prot			Perm		custom
Protected Phases	7	4	8			
Permitted Phases				8	6	6
Detector Phases	7	4	8	8	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.3	21.3	21.3	21.3	21.3	21.3
Total Split (s)	17.0	38.3	21.3	21.3	21.7	21.7
Total Split (%)	28.3%	63.8%	35.5%	35.5%	36.2%	36.2%
Maximum Green (s)	11.7	33.0	16.0	16.0	16.4	16.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	Min	Min
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	12.6	27.8	15.7	15.7	10.2	10.2
Actuated g/C Ratio	0.27	0.63	0.35	0.35	0.23	0.23
v/c Ratio	0.57	0.58	0.47	0.19	0.19	0.12
Control Delay	21.2	7.0	15.9	4.1	17.8	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.2	7.0	15.9	4.1	17.8	7.1
LOS	C	A	B	A	B	A
Approach Delay		11.1	12.7		13.7	
Approach LOS		B	B		B	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 50th (ft)	62	71	69	0	18	0
Queue Length 95th (ft)	140	160	138	27	47	20
Internal Link Dist (ft)		2736	3216		1408	
Turn Bay Length (ft)						
Base Capacity (vph)	518	1286	745	704	643	606
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.52	0.42	0.17	0.12	0.08

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 44.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 11.7 Intersection LOS: B
Intersection Capacity Utilization 42.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: Avila Beach & San Luis Bay Drive



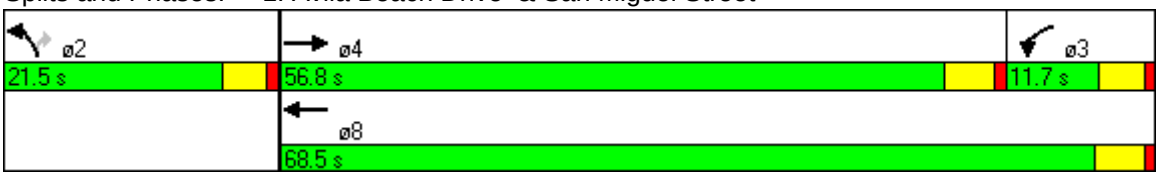
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Turning Speed (mph)		9	15		15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850
Flt Protected			0.950			
Satd. Flow (prot)	1863	0	1770	1863	1863	1583
Flt Permitted			0.950			
Satd. Flow (perm)	1863	0	1770	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						308
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	40			40	30	
Link Distance (ft)	1160			97	738	
Travel Time (s)	19.8			1.7	16.8	
Volume (vph)	690	2	45	183	0	78
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	750	2	49	199	0	85
Lane Group Flow (vph)	752	0	49	199	0	85
Turn Type			Prot			Perm
Protected Phases	4		3	8	2	
Permitted Phases						2
Detector Phases	4		3	8	2	2
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.9		8.5	20.9	20.5	20.5
Total Split (s)	56.8	0.0	11.7	68.5	21.5	21.5
Total Split (%)	63.1%	0.0%	13.0%	76.1%	23.9%	23.9%
Maximum Green (s)	51.9		7.2	63.6	17.0	17.0
Yellow Time (s)	3.9		3.5	3.9	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	Max	Max
Walk Time (s)	5.0			5.0	5.0	5.0
Flash Dont Walk (s)	11.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	57.5		7.3	64.5		17.5
Actuated g/C Ratio	0.64		0.08	0.72		0.19
v/c Ratio	0.63		0.34	0.15		0.15
Control Delay	9.3		40.6	3.9		0.6
Queue Delay	0.0		0.0	0.0		0.0
Total Delay	9.3		40.6	3.9		0.6
LOS	A		D	A		A
Approach Delay	9.3			11.1		
Approach LOS	A			B		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 50th (ft)	273		22	27		0
Queue Length 95th (ft)	111		48	44		0
Internal Link Dist (ft)	1080			17	658	
Turn Bay Length (ft)						
Base Capacity (vph)	1190		151	1335		556
Starvation Cap Reductn	0		0	0		0
Spillback Cap Reductn	0		0	0		0
Storage Cap Reductn	0		0	0		0
Reduced v/c Ratio	0.63		0.32	0.15		0.15

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 63 (70%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63
Intersection Signal Delay: 9.0 Intersection LOS: A
Intersection Capacity Utilization 47.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1: Avila Beach Drive & San Miguel Street



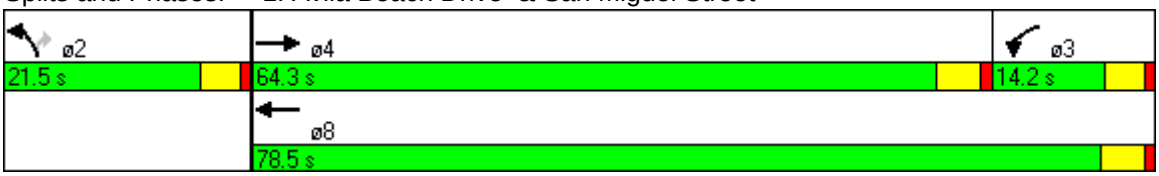
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Turning Speed (mph)		9	15		15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850
Flt Protected			0.950			
Satd. Flow (prot)	1863	0	1770	1863	1863	1583
Flt Permitted			0.950			
Satd. Flow (perm)	1863	0	1770	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						314
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	40			40	30	
Link Distance (ft)	1160			97	738	
Travel Time (s)	19.8			1.7	16.8	
Volume (vph)	735	2	60	207	0	94
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	799	2	65	225	0	102
Lane Group Flow (vph)	801	0	65	225	0	102
Turn Type			Prot			Perm
Protected Phases	4		3	8	2	
Permitted Phases						2
Detector Phases	4		3	8	2	2
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.9		8.5	20.9	20.5	20.5
Total Split (s)	64.3	0.0	14.2	78.5	21.5	21.5
Total Split (%)	64.3%	0.0%	14.2%	78.5%	21.5%	21.5%
Maximum Green (s)	59.4		9.7	73.6	17.0	17.0
Yellow Time (s)	3.9		3.5	3.9	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	Max	Max
Walk Time (s)	5.0			5.0	5.0	5.0
Flash Dont Walk (s)	11.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	63.1		9.4	74.5		17.5
Actuated g/C Ratio	0.63		0.09	0.74		0.18
v/c Ratio	0.68		0.39	0.16		0.19
Control Delay	11.1		44.6	3.4		0.8
Queue Delay	0.0		0.0	0.0		0.0
Total Delay	11.1		44.6	3.4		0.8
LOS	B		D	A		A
Approach Delay	11.1			12.6		
Approach LOS	B			B		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 50th (ft)	329		40	28		0
Queue Length 95th (ft)	143		83	45		0
Internal Link Dist (ft)	1080			17	658	
Turn Bay Length (ft)						
Base Capacity (vph)	1176		181	1388		536
Starvation Cap Reductn	0		0	0		0
Spillback Cap Reductn	0		0	0		0
Storage Cap Reductn	0		0	0		0
Reduced v/c Ratio	0.68		0.36	0.16		0.19

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 70 (70%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 10.6 Intersection LOS: B
Intersection Capacity Utilization 51.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1: Avila Beach Drive & San Miguel Street



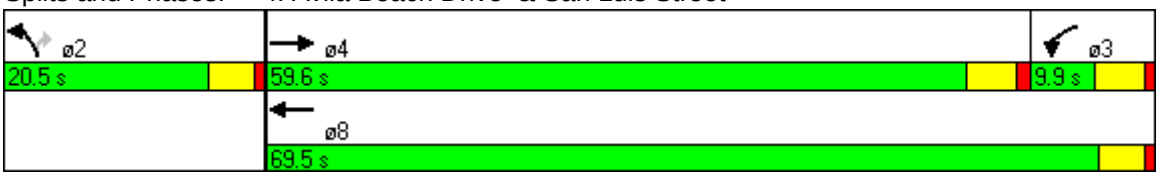
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Turning Speed (mph)		9	15		15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1850	0	1770	1863	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1850	0	1770	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	6					25
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	40			40	30	
Link Distance (ft)	1613			782	251	
Travel Time (s)	27.5			13.3	5.7	
Volume (vph)	713	40	30	187	28	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	775	43	33	203	30	25
Lane Group Flow (vph)	818	0	33	203	30	25
Turn Type			Prot			Perm
Protected Phases	4		3	8	2	
Permitted Phases						2
Detector Phases	4		3	8	2	2
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.9		8.9	20.5	20.5	20.5
Total Split (s)	59.6	0.0	9.9	69.5	20.5	20.5
Total Split (%)	66.2%	0.0%	11.0%	77.2%	22.8%	22.8%
Maximum Green (s)	54.7		5.0	65.0	16.0	16.0
Yellow Time (s)	3.9		3.9	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	Max	Max
Walk Time (s)	5.0			5.0	5.0	5.0
Flash Dont Walk (s)	11.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	59.6		5.9	65.5	16.5	16.5
Actuated g/C Ratio	0.66		0.07	0.73	0.18	0.18
v/c Ratio	0.67		0.28	0.15	0.09	0.08
Control Delay	3.3		46.7	4.0	31.5	13.1
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	3.3		46.7	4.0	31.5	13.1
LOS	A		D	A	C	B
Approach Delay	3.3			10.0	23.2	
Approach LOS	A			B	C	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 50th (ft)	16		18	29	14	0
Queue Length 95th (ft)	20		48	49	38	21
Internal Link Dist (ft)	1533			702	171	
Turn Bay Length (ft)						
Base Capacity (vph)	1226		116	1356	325	311
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.67		0.28	0.15	0.09	0.08

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.67
Intersection Signal Delay: 5.7 Intersection LOS: A
Intersection Capacity Utilization 49.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4: Avila Beach Drive & San Luis Street



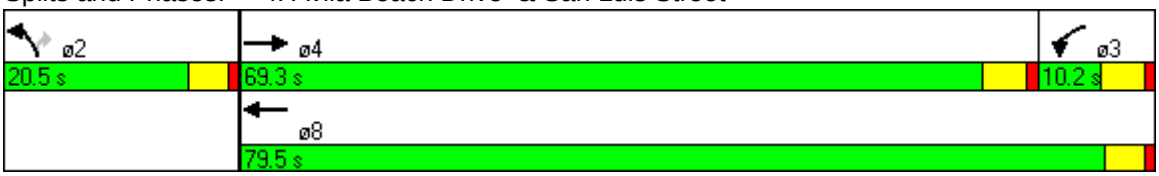
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Turning Speed (mph)		9	15		15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1848	0	1770	1863	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1848	0	1770	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	6					26
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	40			40	30	
Link Distance (ft)	1613			782	251	
Travel Time (s)	27.5			13.3	5.7	
Volume (vph)	765	48	31	202	43	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	832	52	34	220	47	26
Lane Group Flow (vph)	884	0	34	220	47	26
Turn Type			Prot			Perm
Protected Phases	4		3	8	2	
Permitted Phases						2
Detector Phases	4		3	8	2	2
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.9		8.9	20.5	20.5	20.5
Total Split (s)	69.3	0.0	10.2	79.5	20.5	20.5
Total Split (%)	69.3%	0.0%	10.2%	79.5%	20.5%	20.5%
Maximum Green (s)	64.4		5.3	75.0	16.0	16.0
Yellow Time (s)	3.9		3.9	3.5	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	Max	Max
Walk Time (s)	5.0			5.0	5.0	5.0
Flash Dont Walk (s)	11.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	69.4		6.2	75.5	16.5	16.5
Actuated g/C Ratio	0.69		0.06	0.76	0.16	0.16
v/c Ratio	0.69		0.31	0.16	0.16	0.09
Control Delay	3.5		52.6	3.7	37.5	14.3
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	3.5		52.6	3.7	37.5	14.3
LOS	A		D	A	D	B
Approach Delay	3.5			10.2	29.3	
Approach LOS	A			B	C	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 50th (ft)	20		21	32	26	0
Queue Length 95th (ft)	24		53	51	59	23
Internal Link Dist (ft)	1533			702	171	
Turn Bay Length (ft)						
Base Capacity (vph)	1284		110	1407	292	283
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.69		0.31	0.16	0.16	0.09

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 96 (96%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 6.4 Intersection LOS: A
Intersection Capacity Utilization 53.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4: Avila Beach Drive & San Luis Street



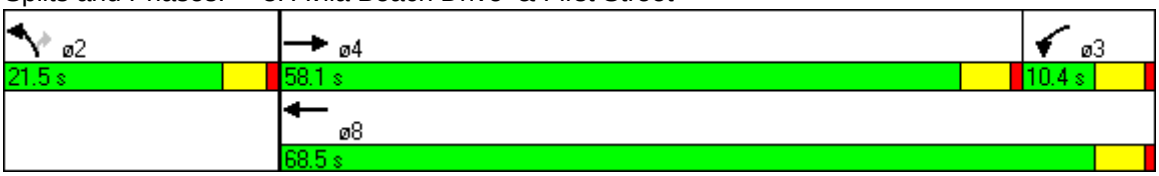
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Turning Speed (mph)		9	15		15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1850	0	1770	1863	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1850	0	1770	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	6					25
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	40			40	30	
Link Distance (ft)	680			1160	740	
Travel Time (s)	11.6			19.8	16.8	
Volume (vph)	673	38	21	167	21	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	732	41	23	182	23	25
Lane Group Flow (vph)	773	0	23	182	23	25
Turn Type			Prot			Perm
Protected Phases	4		3	8	2	
Permitted Phases						2
Detector Phases	4		3	8	2	2
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.9		8.9	20.9	20.5	20.5
Total Split (s)	58.1	0.0	10.4	68.5	21.5	21.5
Total Split (%)	64.6%	0.0%	11.6%	76.1%	23.9%	23.9%
Maximum Green (s)	53.2		5.5	63.6	17.0	17.0
Yellow Time (s)	3.9		3.9	3.9	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	Min	Min
Walk Time (s)	5.0			5.0	5.0	5.0
Flash Dont Walk (s)	11.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	70.6		6.4	74.8	7.2	7.2
Actuated g/C Ratio	0.78		0.07	0.83	0.08	0.08
v/c Ratio	0.53		0.18	0.12	0.16	0.17
Control Delay	6.2		38.6	0.5	40.7	17.9
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	6.2		38.6	0.5	40.7	17.9
LOS	A		D	A	D	B
Approach Delay	6.2			4.8	28.8	
Approach LOS	A			A	C	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 50th (ft)	82		12	2	13	0
Queue Length 95th (ft)	291		36	6	36	24
Internal Link Dist (ft)	600			1080	660	
Turn Bay Length (ft)						
Base Capacity (vph)	1453		126	1548	344	328
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.53		0.18	0.12	0.07	0.08

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 57 (63%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.53
Intersection Signal Delay: 7.0 Intersection LOS: A
Intersection Capacity Utilization 47.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 8: Avila Beach Drive & First Street



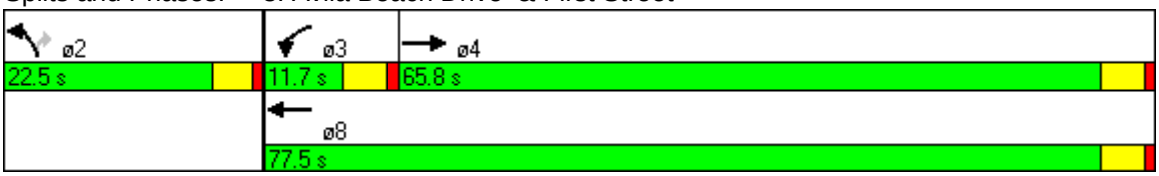
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Turning Speed (mph)		9	15		15	9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1850	0	1770	1863	1770	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	1850	0	1770	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	5					25
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	40			40	30	
Link Distance (ft)	680			1160	740	
Travel Time (s)	11.6			19.8	16.8	
Volume (vph)	721	40	23	191	24	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	784	43	25	208	26	25
Lane Group Flow (vph)	827	0	25	208	26	25
Turn Type			Prot			Perm
Protected Phases	4		3	8	2	
Permitted Phases						2
Detector Phases	4		3	8	2	2
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.9		8.9	20.9	20.5	20.5
Total Split (s)	65.8	0.0	11.7	77.5	22.5	22.5
Total Split (%)	65.8%	0.0%	11.7%	77.5%	22.5%	22.5%
Maximum Green (s)	60.9		6.8	72.6	18.0	18.0
Yellow Time (s)	3.9		3.9	3.9	3.5	3.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	Min	Min
Walk Time (s)	5.0			5.0	5.0	5.0
Flash Dont Walk (s)	11.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	79.3		7.8	84.5	7.5	7.5
Actuated g/C Ratio	0.79		0.08	0.84	0.08	0.08
v/c Ratio	0.56		0.18	0.13	0.20	0.18
Control Delay	7.1		36.1	0.7	46.4	19.3
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	7.1		36.1	0.7	46.4	19.3
LOS	A		D	A	D	B
Approach Delay	7.1			4.5	33.1	
Approach LOS	A			A	C	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Queue Length 50th (ft)	96		13	4	16	0
Queue Length 95th (ft)	381		33	7	42	25
Internal Link Dist (ft)	600			1080	660	
Turn Bay Length (ft)						
Base Capacity (vph)	1467		147	1575	327	313
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.56		0.17	0.13	0.08	0.08

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 68 (68%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 7.8 Intersection LOS: A
Intersection Capacity Utilization 50.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 8: Avila Beach Drive & First Street



APPENDIX I

ROAD IMPROVEMENT ORDER OF MAGNITUDE COSTS

PRELIMINARY ORDER OF MAGNITUDE OPINION OF PROBABLE CONSTRUCTION COSTS

Avila Beach, San Luis Obispo County, CA

San Luis Bay Drive - Widening for Bike Lanes

PREPARED BY: J. TUCKER DATE: 2/28/2007

PROJECT NO. 06-1052

ITEM NAME (DESCRIPTION)	UNIT	QTY	UNIT COST	TOTAL COST
US 101 to Blue Heron Dr. - (7392 LF - See *Notes Below)				
• Demolition (Sawcut/Removal of AC and AC Dike)	LS	1	$69,670.00	$69,670.00
• Signing (Removal and Installation)	LS	1	$13,000.00	$13,000.00
• Striping and Pavement Marking (Installation)	LS	1	$28,190.00	$28,190.00
• Asphalt (3")	Ton	1386	$100.00	$138,600.00
• Aggregate Base (6")	Ton	2679	$40.00	$107,160.00
• Minimum Grading and Compaction	LS	1	$123,200.00	$123,200.00
• AC Berm (Install)	LF	14784	$4.00	$59,136.00
• Guard Rail (Removal and Installation)	LF	739	$25.00	$18,475.00
	COST			$557,431.00
Blue Heron Dr. to Avila Beach Dr. - (158 LF - See *Notes Below)				
• Demolition (Sawcut/Removal of AC and AC Dike)	LS	1	$2,978.00	$2,978.00
• Signing (Removal and Installation)	LS	1	$2,000.00	$2,000.00
• Striping and Pavement Marking (Installation)	LS	1	$3,400.00	$3,400.00
• Asphalt (3")	Ton	30	$100.00	$3,000.00
• Aggregate Base (6")	Ton	58	$40.00	$2,320.00
• Minimum Grading and Compaction	LS	1	$2,633.30	$2,633.30
• AC Berm (Install)	LF	316	$4.00	$1,264.00
• Guard Rail (Removal and Installation)	LF	15	$25.00	$375.00
	COST			$17,970.30
	SUBTOTAL CONSTRUCTION COST			$575,401.30
MOBILIZATION / MISC (3%)				$17,262.04
CLEARING AND GRUBBING (5%)				$28,770.07
CONTINGINCEY (20%)				$115,080.26
ENGINEERING (15%)				$86,310.20
	TOTAL CONSTRUCTION COST			$822,823.86

***Notes:**

All estimates consider roadway widening equally shared on both sides of the roadway.
All costs reflect current rates/estimates, future rates may differ.
All roadways considered existing AC.
All bike lanes considered Class II.
All existing shoulder widths remain unmodified.
All existing striping to remain protected in place.
Impacts to hillsides or creeks not included.
Improvements to existing structures not included.
Drainage facility improvements not included.
Right of way acquisition not included.
Traffic control not included.
Flashing beacon modifications not included.
Utility relocation not Included.
Earthwork not included.

PRELIMINARY ORDER OF MAGNITUDE OPINION OF PROBABLE CONSTRUCTION COSTS

Avila Beach, San Luis Obispo County, CA

Avila Beach Drive - Widening for Bike Lanes

PREPARED BY: J. TUCKER DATE: 2/28/2007

PROJECT NO. 06-1052

ITEM NAME (DESCRIPTION)	UNIT	QTY	UNIT COST	TOTAL COST
US 101 to San Luis Bay Dr - (6653 LF - See *Notes Page 2)				
• Demolition (Sawcut/Removal of AC and AC Dike)	LS	1	$59,713.00	$59,713.00
• Signing (Removal and Installation)	LS	1	$10,000.00	$10,000.00
• Striping and Pavement Marking (Installation)	LS	1	$23,197.00	$23,197.00
• Asphalt (3")	Ton	1248	$100.00	$124,800.00
• Aggregate Base (6")	Ton	2412	$40.00	$96,480.00
• Minimum Grading and Compaction	LS	1	$110,883.33	$110,883.33
• AC Berm (Install)	LF	13306	$4.00	$53,224.00
• Guard Rail (Removal and Installation)	LF	665	$25.00	$16,625.00
	COST			$494,922.33
San Luis Bay Dr. to San Luis St - (5861 LF - See *Notes Page 2)				
• Demolition (Sawcut/Removal of AC and AC Dike)	LS	1	$54,936.00	$54,936.00
• Signing (Removal and Installation)	LS	1	$7,000.00	$7,000.00
• Striping and Pavement Marking (Installation)	LS	1	$19,202.00	$19,202.00
• Asphalt (3")	Ton	1099	$100.00	$109,900.00
• Aggregate Base (6")	Ton	2125	$40.00	$85,000.00
• Minimum Grading and Compaction	LS	1	$97,683.33	$97,683.33
• AC Berm (Install)	LF	11722	$4.00	$46,888.00
• Guard Rail (Removal and Installation)	LF	5861	$25.00	$146,525.00
	COST			$567,134.33
San Luis St to San Miguel St - (1083 LF - See *Notes Page 2)				
• Demolition (Sawcut/Removal of AC and AC Dike)	LS	1	$11,667.00	$11,667.00
• Signing (Removal and Installation)	LS	1	$6,250.00	$6,250.00
• Striping and Pavement Marking (Installation)	LS	1	$5,100.00	$5,100.00
• Asphalt (3")	Ton	203	$100.00	$20,300.00
• Aggregate Base (6")	Ton	393	$40.00	$15,720.00
• Minimum Grading and Compaction	LS	1	$18,050.00	$18,050.00
• Guard Rail (Removal and Installation)	LF	108	$25.00	$2,700.00
	COST			$79,787.00
San Miguel St to Port San Luis - (6705 LF - See *Notes Page 2)				
• Demolition (Sawcut/Removal of AC and AC Dike)	LS	1	$35,016.00	$35,016.00
• Signing (Removal and Installation)	LS	1	$17,200.00	$17,200.00
• Striping and Pavement Marking (Installation)	LS	1	$21,753.00	$21,753.00
• Asphalt (3")	Ton	1257	$100.00	$125,700.00
• Aggregate Base (6")	Ton	2430	$40.00	$97,200.00
• Minimum Grading and Compaction	LS	1	$111,750.00	$111,750.00
• Guard Rail (Removal and Installation)	LF	190	$25.00	$4,750.00
• Concrete Curb, Gutter & Sidewalk (Removal)	LF	900	$5.00	$4,500.00
• Concrete Curb, Gutter & Sidewalk (Installation)	LF	900	$12.00	$10,800.00
• Reconstruction of Curb return and Ramp	LS	1	$3,500.00	$3,500.00
	COST			$432,169.00

PRELIMINARY ORDER OF MAGNITUDE OPINION OF PROBABLE CONSTRUCTION COSTS

Avila Beach, San Luis Obispo County, CA

Avila Beach Drive - Widening for Bike Lanes and Signalized Intersections

PREPARED BY: J. TUCKER DATE: 2/28/2007

PROJECT NO. 06-1052

ITEM NAME (DESCRIPTION)	UNIT	QTY	UNIT COST	TOTAL COST
SUBTOTAL CONSTRUCTION COST				$1,574,012.66
MOBILIZATION / MISC (3%)				$47,220.38
CLEARING AND GRUBBING (5%)				$78,700.63
CONTINGINCEY (20%)				$314,802.53
ENGINEERING (15%)				$236,101.90
TOTAL CONSTRUCTION COST				$2,250,838.10

***Notes:**

All estimates consider roadway widening equally shared on both sides of the roadway.
All costs reflect current rates/estimates, future rates may differ.
All roadways considered existing AC.
All bike lanes considered Class II.
All existing shoulder widths remain unmodified.
All existing striping to remain protected in place.
Impacts to hillsides or creeks not included.
Improvements to existing structures not included.
Drainage facility improvements not included.
Right of way acquisition not included.
Traffic control not included.
Flashing beacon modifications not included.
Utility relocation not Included.
Earthwork not included.

PRELIMINARY ORDER OF MAGNITUDE OPINION OF PROBABLE CONSTRUCTION COSTS

Avila Beach, San Luis Obispo County, CA

Signalize Intersection

PREPARED BY: J. TUCKER DATE: 2/28/2007

PROJECT NO. 06-1052

ITEM NAME (DESCRIPTION)	UNIT	QTY	UNIT COST	TOTAL COST
Avila Beach Dr. & San Luis St.-				
• Signalize Intersection	LS	1	$175,000.00	$175,000.00
SUBTOTAL CONSTRUCTION COST				$175,000.00
CLEARING AND GRUBBING (5%)				$8,750.00
CONTINGENCY (10%)				$17,500.00
ENGINEERING (15%)				$26,250.00
TOTAL CONTINGENCY COST				$52,500.00
TOTAL CONSTRUCTION COST				$227,500.00
Avila Beach Dr. & San Miguel St.-				
• Signalize Intersection	LS	1	$185,000.00	$185,000.00
SUBTOTAL CONSTRUCTION COST				$185,000.00
CLEARING AND GRUBBING (5%)				$9,250.00
CONTINGENCY (10%)				$18,500.00
ENGINEERING (15%)				$27,750.00
TOTAL CONTINGENCY COST				$55,500.00
TOTAL CONSTRUCTION COST				$240,500.00
Avila Beach Dr & First St - (See *Notes Below)				
• Signalization of Intersection	LS	1	$200,000.00	$200,000.00
SUBTOTAL CONSTRUCTION COST				$200,000.00
CLEARING AND GRUBBING (5%)				$10,000.00
CONTINGENCY (10%)				$20,000.00
ENGINEERING (15%)				$30,000.00
TOTAL CONTINGENCY COST				$60,000.00
TOTAL CONSTRUCTION COST				$260,000.00
TOTAL CONSTRUCTION COST				$728,000.00

***Notes:**

All estimates consider roadway widening equally shared on both sides of the roadway.
All costs reflect current rates/estimates, future rates may differ.
All roadways considered existing AC.
All bike lanes considered Class II.
All existing shoulder widths remain unmodified.
All existing striping to remain protected in place.
Impacts to hillsides or creeks not included.
Improvements to existing structures not included.
Drainage facility improvements not included.
Right of way acquisition not included.
Traffic control not included.
Flashing beacon modifications not included.
Utility relocation not Included.
Earthwork not included.

PRELIMINARY ORDER OF MAGNITUDE OPINION OF PROBABLE CONSTRUCTION COSTS

Avila Beach, San Luis Obispo County, CA

Pedestrian Walkway

PREPARED BY: J. TUCKER DATE: 2/28/2007

PROJECT NO. 06-1052

ITEM NAME (DESCRIPTION)	UNIT	QTY	UNIT COST	TOTAL COST
Pedestrian Walkway - Port San Luis To Unocal Pier - (5280 LF - See *Notes Below)				
• Signing (Removal and Installation)	LS	1	$6,250.00	$6,250.00
• Aggregate Base (4")	Ton	821	$40.00	$32,840.00
• AC Dike (Removal)	LF	5280	$2.50	$13,200.00
• Concrete Curb, Gutter and Sidewalk (Installation)	LF	5280	$12.00	$63,360.00
• Minimum Grading and Compaction	LS	1	$88,000.00	$88,000.00
• Lighting and Electrical System Installation	LS	1	$230,000.00	$230,000.00
	COST			$433,650.00
	SUBTOTAL CONSTRUCTION COST			$433,650.00
MOBILIZATION / MISC (3%)				$13,009.50
CLEARING AND GRUBBING (5%)				$21,682.50
CONTINGINCEY (20%)				$86,730.00
ENGINEERING (15%)				$65,047.50
	TOTAL CONSTRUCTION COST			$620,119.50

***Notes:**

All estimates consider roadway widening equally shared on both sides of the roadway.
All costs reflect current rates/estimates, future rates may differ.
All roadways considered existing AC.
All bike lanes considered Class II.
All existing shoulder widths remain unmodified.
All existing striping to remain protected in place.
Impacts to hillsides or creeks not included.
Improvements to existing structures not included.
Drainage facility improvements not included.
Right of way acquisition not included.
Traffic control not included.
Flashing beacon modifications not included.
Utility relocation not Included.
Earthwork not included.

PRELIMINARY ORDER OF MAGNITUDE OPINION OF PROBABLE CONSTRUCTION COSTS

Avila Beach, San Luis Obispo County, CA

100 Stall Intercept Parking Lot

PREPARED BY: J. TUCKER DATE: 2/28/2007

PROJECT NO. 06-1052

ITEM NAME (DESCRIPTION)	UNIT	QTY	UNIT COST	TOTAL COST
100 Stall Intercept Parking Lot - (575' x 65' - See *Notes Below)				
• Signing (Installation)	LS	1	$5,000.00	$5,000.00
• Striping and Pavement Marking (Installation)	LS	1	$30,000.00	$30,000.00
• Asphalt (6")	Ton	1359	$300.00	$407,700.00
• Aggregate Base (10")	Ton	2180	$60.00	$130,800.00
• Minimum Grading and Compaction	LS	1	$65,000.00	$65,000.00
• Concrete Curb & Gutter (Installation)	LF	1280	$7.00	$8,960.00
• Driveway Installation	EA	2	$1,000.00	$2,000.00
• Lighting and Electrical System Installation	LS	1	$115,000.00	$115,000.00
	COST			$764,460.00
	SUBTOTAL CONSTRUCTION COST			$764,460.00
MOBILIZATION / MISC (3%)				$22,933.80
CLEARING AND GRUBBING (5%)				$38,223.00
CONTINGINCEY (20%)				$152,892.00
ENGINEERING (15%)				$114,669.00
	TOTAL CONSTRUCTION COST			$1,093,177.80

***Notes:**

All estimates consider roadway widening equally shared on both sides of the roadway.
All costs reflect current rates/estimates, future rates may differ.
All roadways considered existing AC.
All bike lanes considered Class II.
All existing shoulder widths remain unmodified.
All existing striping to remain protected in place.
Impacts to hillsides or creeks not included.
Improvements to existing structures not included.
Drainage facility improvements not included.
Right of way acquisition not included.
Traffic control not included.
Flashing beacon modifications not included.
Utility relocation not Included.
Earthwork not included.

PRELIMINARY ORDER OF MAGNITUDE OPINION OF PROBABLE CONSTRUCTION COSTS

Avila Beach, San Luis Obispo County, CA

Ontario Road - Widening for Bike Lanes

PREPARED BY: J. TUCKER DATE: 2/28/2007

PROJECT NO. 06-1052

ITEM NAME (DESCRIPTION)	UNIT	QTY	UNIT COST	TOTAL COST
San Luis Bay Dr to Bob Jones Bikeway - (3960 LF - See *Notes Below)				
• Demolition (Sawcut/Removal of AC and AC Dike)	LS	1	$42,312.00	$42,312.00
• Signing (Removal and Installation)	LS	1	$14,000.00	$14,000.00
• Striping and Pavement Marking (Installation)	LS	1	$16,506.00	$16,506.00
• Asphalt (3")	Ton	743	$100.00	$74,300.00
• Aggregate Base (6")	Ton	1435	$40.00	$57,400.00
• Minimum Grading and Compaction	LS	1	$66,000.00	$66,000.00
• AC Berm (Install)	LF	7920	$4.00	$31,680.00
• Guard Rail (Removal and Installation)	LF	396	$25.00	$9,900.00
	COST			$312,098.00
Bob Jones Bikeway to Avila Beach Dr - (1584 LF - See *Notes Below)				
• Demolition (Sawcut/Removal of AC and AC Dike)	LS	1	$17,500.00	$17,500.00
• Signing (Removal and Installation)	LS	1	$5,000.00	$5,000.00
• Striping and Pavement Marking (Installation)	LS	1	$5,677.00	$5,677.00
• Asphalt (3")	Ton	297	$100.00	$29,700.00
• Aggregate Base (6")	Ton	574	$40.00	$22,960.00
• Minimum Grading and Compaction	LS	1	$26,400.00	$26,400.00
• AC Berm (Install)	LF	7920	$4.00	$31,680.00
• Guard Rail (Removal and Installation)	LF	158	$25.00	$3,950.00
	COST			$142,867.00
	SUBTOTAL CONSTRUCTION COST			$454,965.00
MOBILIZATION / MISC (3%)				$13,648.95
CLEARING AND GRUBBING (5%)				$22,748.25
CONTINGINCEY (20%)				$90,993.00
ENGINEERING (15%)				$68,244.75
	TOTAL CONSTRUCTION COST			$650,599.95

***Notes:**

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All costs reflect current rates/estimates, future rates may differ.
All roadways considered existing AC.
All bike lanes considered Class II.
All existing shoulder widths remain unmodified.
All existing striping to remain protected in place.
Impacts to hillsides or creeks not included.
Improvements to existing structures not included.
Drainage facility improvements not included.
Right of way acquisition not included.
Traffic control not included.
Flashing beacon modifications not included.
Utility relocation not Included.
Earthwork not included.