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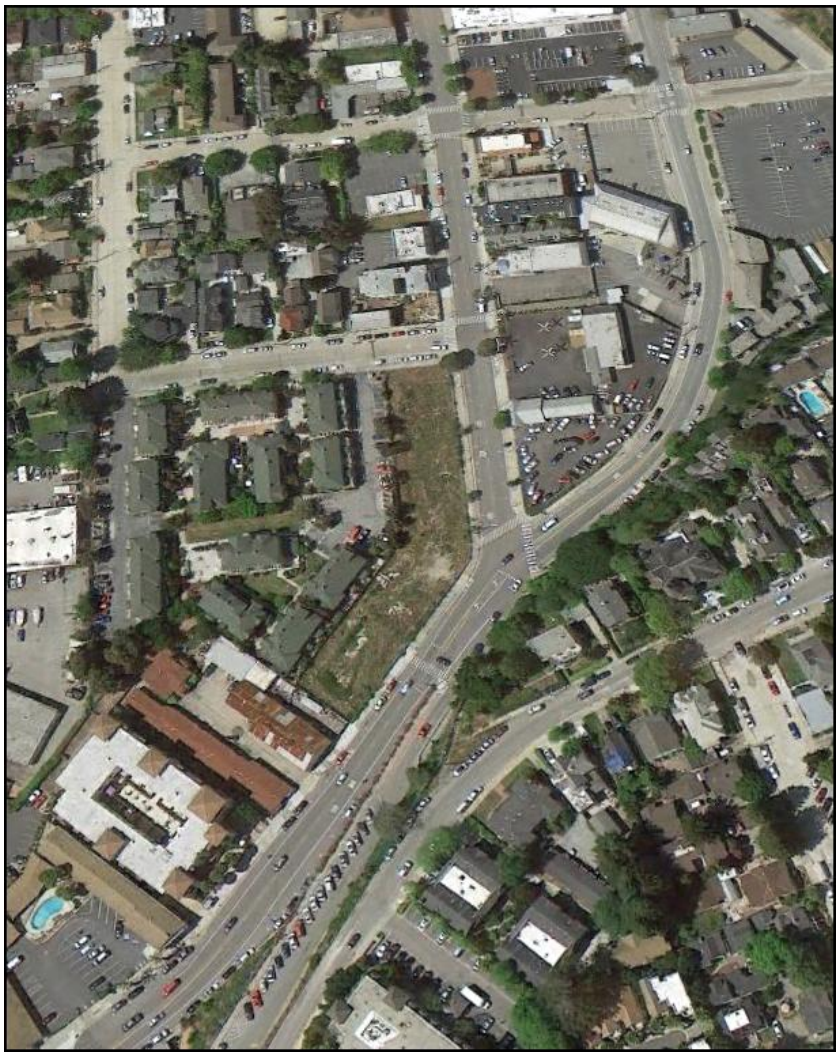

Report

Traffic Impact Study for the Proposed Mixed-Use Development at 555 Pacific Avenue

In The City of Santa Cruz

February 11, 2014

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Introduction and Summary

Introduction

This report presents the results of TJKM's traffic impact analysis for the proposed mixed-use development located at 555 Pacific Avenue in the City of Santa Cruz, California. Currently, the project site is a vacant lot surrounded by commercial and residential land uses to the west and fronted by Pacific Avenue to the east.

The project sponsor is proposing to build 94 Single Room Occupancy (SRO) residential units, 2,600 square feet of restaurant land use (on two pads) and 2,455 square feet of retail land use. According to the project applicant, the single room occupancy units proposed at the project site are small ownership units (SOU) that are rented out initially and in the future based on the market potential, these residential units may be sold individually. The proposed building consists of four levels above the ground and a basement level of private parking for the residential units. The first level (i.e., the ground level) consists of restaurants and retail land use as proposed by the project applicant, Barry Swenson Builder. Levels two through four would consist of studio and one-bedroom apartment SRO units. Figure 1 illustrates the project location and its vicinity. Figure 2 represents the proposed site plan.

Summary

The proposed project is expected to generate 847 weekday daily trips, including 83 trips (51 inbound and 32 outbound) during the weekday p.m. peak hour.

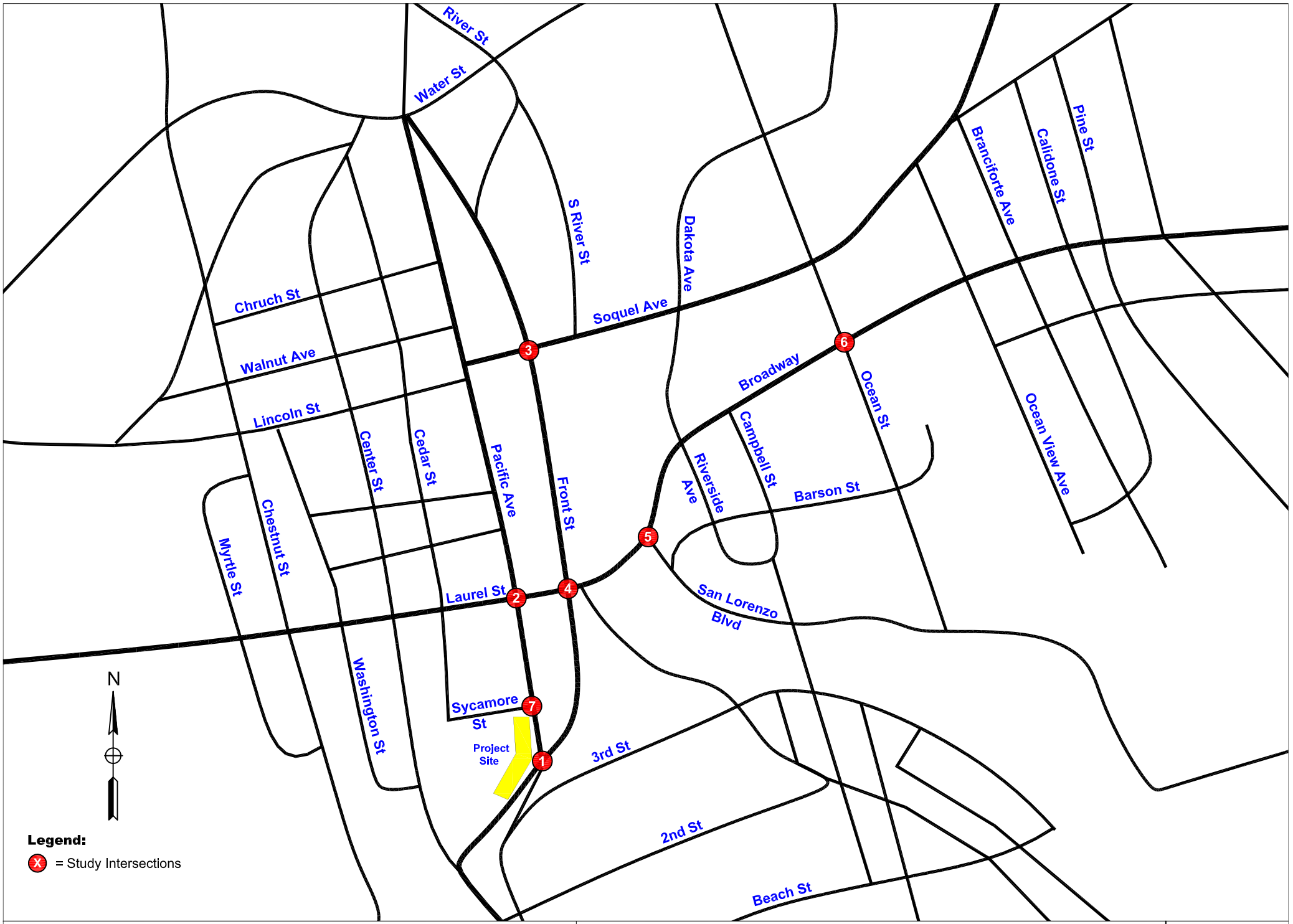
All study intersections are expected to operate at an acceptable level of service of LOS C or better under Existing and Existing plus Project Conditions.

Under future Cumulative with Project Conditions, all study intersections are expected to continue to operate at acceptable level of service conditions.

Under Cumulative Conditions, at the intersection of Pacific Avenue/Front Street, TJKM recommends that the City should consider striping the southbound approach to provide a separate southbound left-turn and right-turn lanes. TJKM also recommends re-designing this acute angled intersection with right angular approaches to shorten the pedestrian crosswalks and thereby reducing the walk time.

TJKM recommends stop sign control and pavement markings on the upward ramp from the basement level where it intersects the ground level egress driveway, and on the egress driveway itself where it intersects Sycamore Street, to improve turn safety at the project site.

To improve the pedestrian safety at the parking exit on Sycamore Street, TJKM recommends installation of "CAUTION VEHICLE EXITING" LED display sign to warn pedestrians of approaching vehicles. It is also recommended to install a reflective speed bump at the exit to slow down the vehicles and install an illuminated sign "WATCH FOR PEDESTRIANS" at the parking egress. In addition, a convex mirror should be considered at the egress to address line of sight issue.



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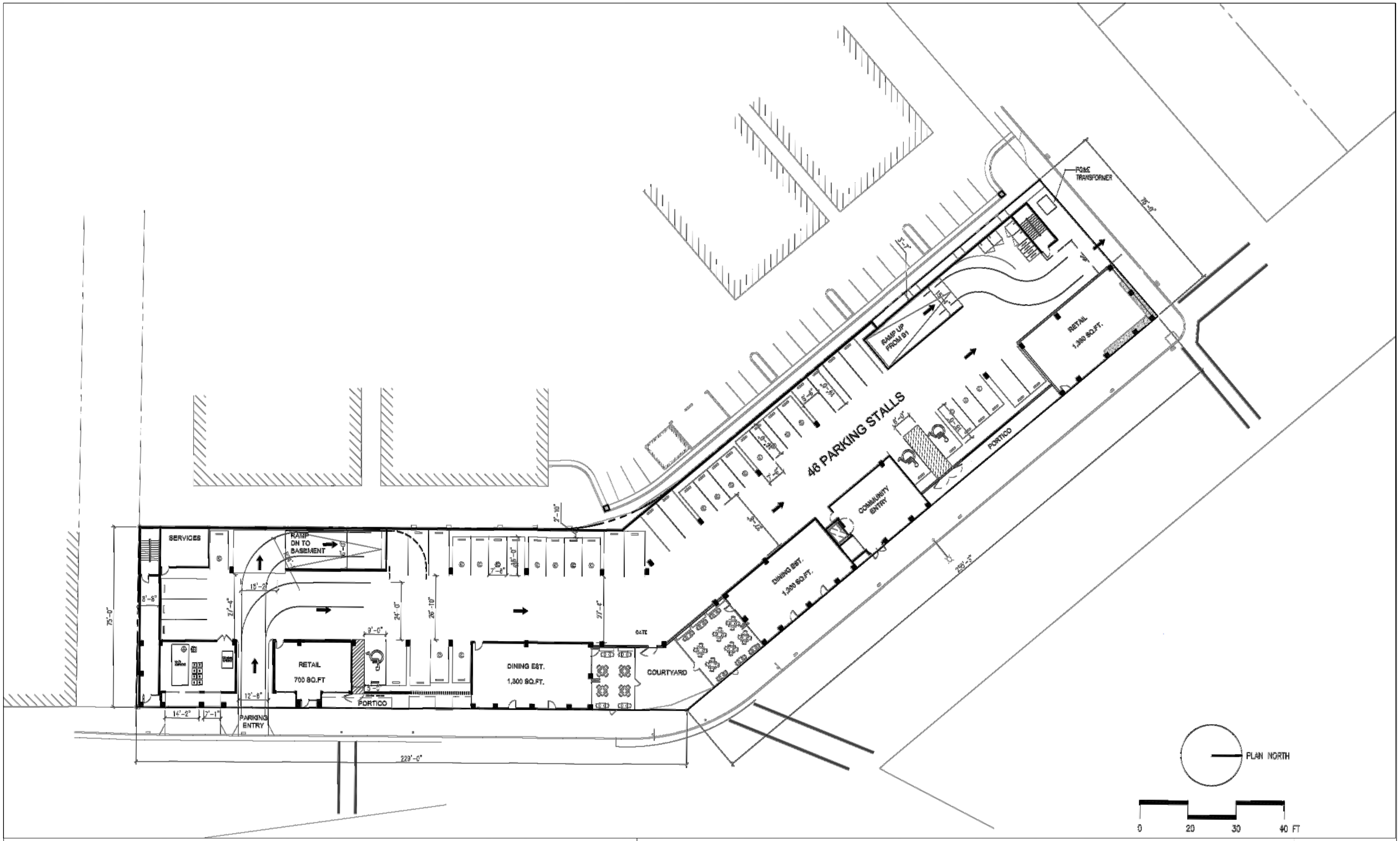
555 Pacific Avenue Traffic Study

Vicinity Map

Figure 1



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555 Pacific Avenue Traffic Study

Proposed Site Plan

Figure 2

Intersection Analysis Methodology

Intersection Analysis Methodology

The following eight intersections were selected by the City staff for the weekday p.m. peak hour traffic analysis:

1. Front Street and Pacific Avenue (One-way Stop Control)
2. Pacific Avenue and Laurel Street (Signal)
3. Front Street and Soquel Avenue (Signal)
4. Front Street and Laurel Street (Signal)
5. Broadway and San Lorenzo Boulevard (Signal)
6. Broadway and Ocean Street (Signal)
7. Pacific Avenue and Sycamore Street (One-way Stop Control)
8. Project Driveway/Sycamore Street (One-way Stop Control) – a future intersection

The following three study scenarios were addressed in this traffic impact study:

1. Existing Conditions
2. Existing Plus Project Conditions
3. Cumulative (General Plan 2030) with Project Conditions

Level of Service Analysis Methodology

The operating conditions at all of the study intersections were evaluated using the 2000 Highway Capacity Manual (HCM) Operations Method contained in TRAFFIX software. Peak hour intersection conditions are reported as average delay in seconds per vehicle with corresponding levels of service (LOS). A level of service rating is a qualitative description of intersection operations, which is reported using an A through F letter rating system to describe travel delay and congestion. Level of Service A indicates free flow conditions with little or no delay and LOS F indicates jammed conditions with excessive delays and long back-ups. The methodology is described in detail in Appendix A.

Significant Impact Criteria

Signalized and Unsignalized Intersections

In brief, the City's level of service standard is LOS D for both signalized and unsignalized intersections. Intersections that are expected to operate below LOS D are considered as impacted and should be considered for mitigation.

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines, City of Santa Cruz plans and policies, Caltrans guidelines and agency and professional standards, a project impact would be considered significant if:

- The project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit OR the project traffic when added to existing conditions would result in the level of service deteriorating below the City standard or would substantially worsen an intersection operating below level of

service D. The City's current level of service standard is LOS D, although the General Plan policies consider accepting a LOS below "D" at major regional intersections where improvements would be prohibitively costly or result in significant, unacceptable environmental impacts;

- The project traffic would change the peak hour level of service of a State Highway roadway segment from acceptable operation to deficient operation with the addition of project-generated traffic;
- If the project substantially increases hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- The project results in inadequate emergency access;
- The project conflicts with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities)

Existing Traffic Conditions

Existing Roadway Network

The proposed project is located at 555 Pacific Avenue in the City of Santa Cruz, and the regional access to the project site is via Highway 1 and Highway 17. Streets near the project site, such as Front Street, Ocean Street, Soquel Avenue and Water Street, connect with Pacific Avenue. The following is the description of roadways of relevance to the project site:

Highway 1 is a north-south state highway within Santa Cruz County, connecting the coastal communities of Santa Cruz, Live Oak, Davenport, Capitola, Aptos and Watsonville. Highway 1 continues northward into San Mateo County and City of San Francisco, and continues southward into Monterey County towards Seaside and Monterey Bay. In Santa Cruz area, Highway 1 is a four-to-six lane freeway east of River Street, a four-lane expressway between River Street and Mission Street, and a four-lane arterial along Mission Street.

Highway 17 is a state highway connecting the cities of San Jose and Santa Cruz. In the project vicinity, Highway 17 is a six-lane freeway between Highway 1 and Pasatiempo Drive, and a four-lane freeway north of Pasatiempo Drive. The speed limit on this highway is 55 miles per hour (mph) between Highway 1 and Pasatiempo Drive, and 65 mph north of Pasatiempo Drive.

Broadway is a two-lane, east-west arterial within eastern Santa Cruz that provides access primarily to residential land uses. This roadway has bike lanes on both the sides along its entirety. The posted speed limit on Broadway is 25 mph.

Ocean Street is a three-to-four lane, north-south arterial in eastern Santa Cruz. It serves as a regional gateway into the beach front from Highway 1 and Highway 17. Ocean Street is a four-lane section for most of its length, with a three lane section between Cliff Drive and Barson Street. The speed limit on this roadway is 25 mph to the south and 30 mph to the north of Water Street.

Soquel Avenue is an east-west arterial that provides regional community access to the City of Santa Cruz downtown area. To the east, this roadway provides regional access to the City via Highway 1. Soquel Drive in the vicinity of the project is primarily fronted by commercial and moderate-size shopping centers. Soquel Avenue is four-lane wide roadway with a speed limit of 25 mph.

Pacific Avenue is a two-lane north-south local street that provides access to the beachfront area located on the southern end. This roadway runs between Mission Street/Water Street to the north and Beach Street to the south. The speed limit on this roadway is 25 mph between Laurel Street and Beach Street and 15 mph between Mission Street and Laurel Street.

Front Street is a two lane north-south roadway that runs between Mission Street to the north and Pacific Avenue to the south. This road primarily fronts commercial and retail land uses with a posted speed limit of 25 mph.

Existing Transit Systems

The public transit provider in Santa Cruz County is the Santa Cruz Metropolitan Transit District (SCMTD). SCMTD operates from four key transit centers and they are located in Santa Cruz, Capitola, Watsonville, and Scotts Valley. Each of these centers operates as a hub for local area transit routes, providing easy connection and quick transfer to multiple transit routing.

SCMTD currently provides regular transit service in the vicinity of the project site. Four transit routes that travel within two blocks of the project site are bus routes 3, 3W, 19 and 20. These routes traverse between various locations throughout Santa Cruz County, including downtown Santa Cruz, the University of California at Santa Cruz (UCSC), Capitola, Aptos, and Watsonville. Bus route 3 and 3W (weekend service) runs along the project site frontage between the route's Downtown Metro center (Pacific Station) and Natural Bridges terminals.

Example Transit Route – SCMTD Bus Route 3 (Source: http://www.scmtd.com)

Bus route 19 runs between the UCSC campus and the Metro center (Pacific Station) via Bay Street, and Bus Route 20 runs between the UCSC campus and the Metro Center via Delaware Avenue through the Westside. In general, the bus routes generally operate between 7:00 AM and late evenings on weekdays. SCMTD bus route maps and schedules related to the project vicinity are provided in Appendix B of this report. The nearest bus stop to the project site is located along Pacific Avenue south of Front Street. Bus stops are also located on both directions of Laurel Street and Broadway (i.e., three blocks north of the project site).

Existing Bicycle and Pedestrian Facilities in Project Vicinity

There are three basic types of bicycle facilities. Each type is described below:

- Bike path (Class I) - A completely separate right-of-way designed for the exclusive use of cyclists and pedestrians, with minimal crossings for motorists. These paths should have a minimum width of 8 feet when two-way travel is required and 5 feet in width to accommodate one-way movement.

- Bike lane (Class II) - A lane on a regular roadway, separated from the motorized vehicle right-of-way by paint striping, designated for the exclusive or semi-exclusive use of bicycles. This type of bike lane allows one-way travel. A minimum width of 5 feet should be provided and adjacent curbside parking avoided where feasible; where curbside parking is allowed adjoining a bike lane, the combined width of the parking and adjacent bike lane should be not less than 13 feet.
- Bike route (Class III) - Provides shared use of the roadway, designated by signs or permanent markings and shared with motorists.

Front Street has Class II bicycle lanes on both sides of the street along its entirety, i.e. between downtown Santa Cruz and Pacific Avenue, which continue along Pacific Avenue from Front Street to Beach Street. Ocean Street has bicycle lanes north of Soquel Avenue, but not near the project site. Soquel Avenue, parallel to and one block north of Broadway, also has bicycle lanes along its entirety, i.e. between downtown Santa Cruz and the east side city limits.

Sidewalks are present along most streets in the vicinity of the project site, including Pacific Avenue, Front Street, Broadway, Ocean Street, and Soquel Avenue. The street and bicycle network near the site and within the City of Santa Cruz as a whole would sufficiently accommodate all pedestrian and bicycle travel to and from the project site. No additional improvements to the pedestrian or bicycle network appear to be necessary as a result of this project.

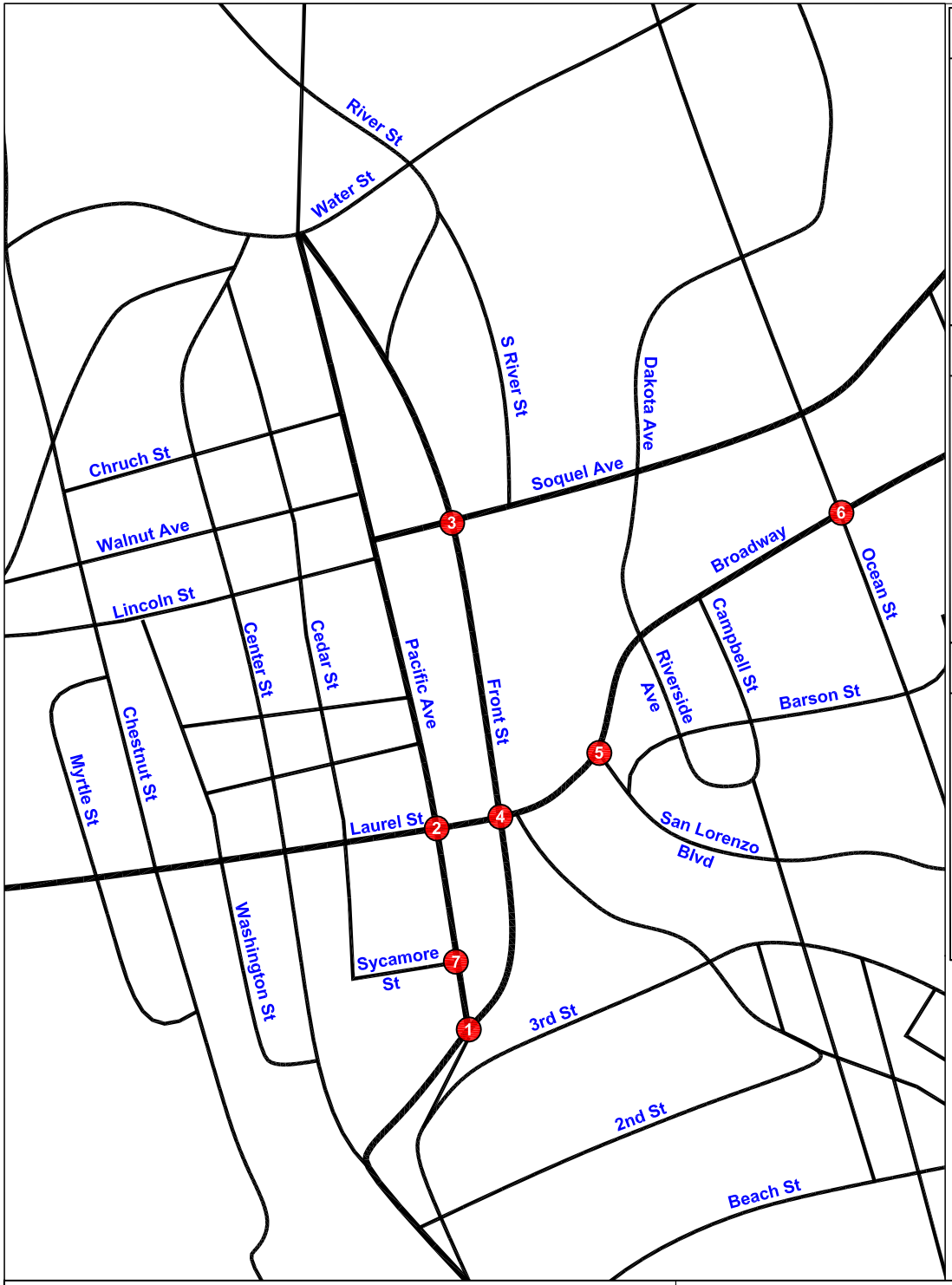
Level of Service Analysis

The p.m. peak hour turning movement counts at the study intersections were conducted during the first half of November 2012. Figure 3 illustrates the p.m. peak hour turning movement volumes for the study intersections and Figure 4 illustrates the existing lane configurations. The raw traffic counts are provided in Appendix B. Table I summarizes the results of the intersection analysis under Existing Conditions. The detailed LOS calculations (TRAFFIX Output) are contained in Appendix C. Under Existing Conditions, all study intersections operate at an acceptable service level (LOS C or better). No improvements appear to be necessary at any of the study intersections.

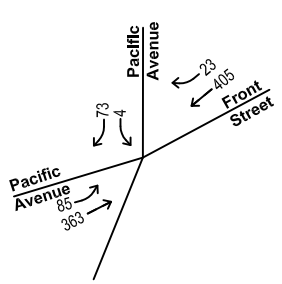
Table I: Intersection LOS – Existing Conditions

ID	*Intersection*	*Control*	*P.M. Peak Hour*	
			Average Delay (sec/veh)	*LOS*
1	Pacific Avenue/Front Street	One-way Stop	12.5	B
2	Pacific Avenue/Laurel Street	Signal	10.3	B
3	Front Street/Soquel Avenue	Signal	17.7	B
4	Front Street/Laurel Street	Signal	25.3	C
5	Broadway/San Lorenzo Boulevard	Signal	15.6	B
6	Broadway/Ocean Street	Signal	25.2	C
7	Pacific Avenue/Sycamore Street	One-way Stop	9.7	A
8	Sycamore Street/Project Driveway	Future*	NA	NA

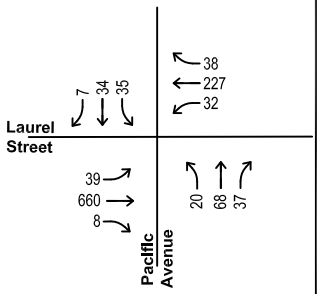
Note: Delay = Overall average intersection delay in seconds for Signalized, or minor street (worst approach) delay for One-way Stop Control intersections; LOS = Level of Service; NA = Not Available



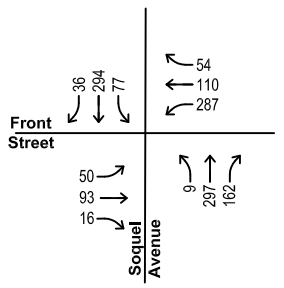
1. Pacific Avenue / Front Street



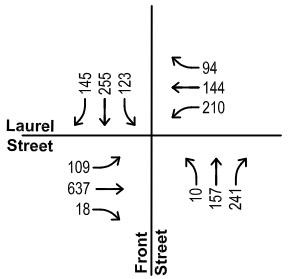
2. Pacific Avenue / Laurel Street



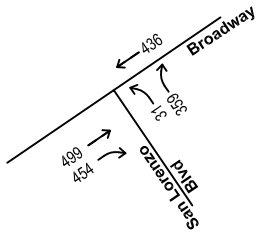
3. Front Street / Soquel Avenue



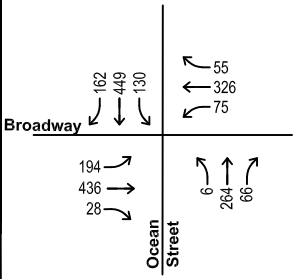
4. Front Street / Laurel Street



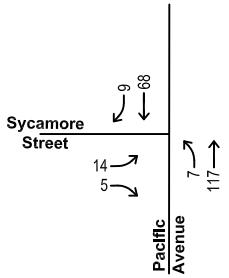
5. Broadway / San Lorenzo Blvd



6. Broadway / Ocean Street



7. Pacific Avenue / Sycamore Street



Legend:

X = Study Intersections

XX = PM Peak Hour Volumes

N

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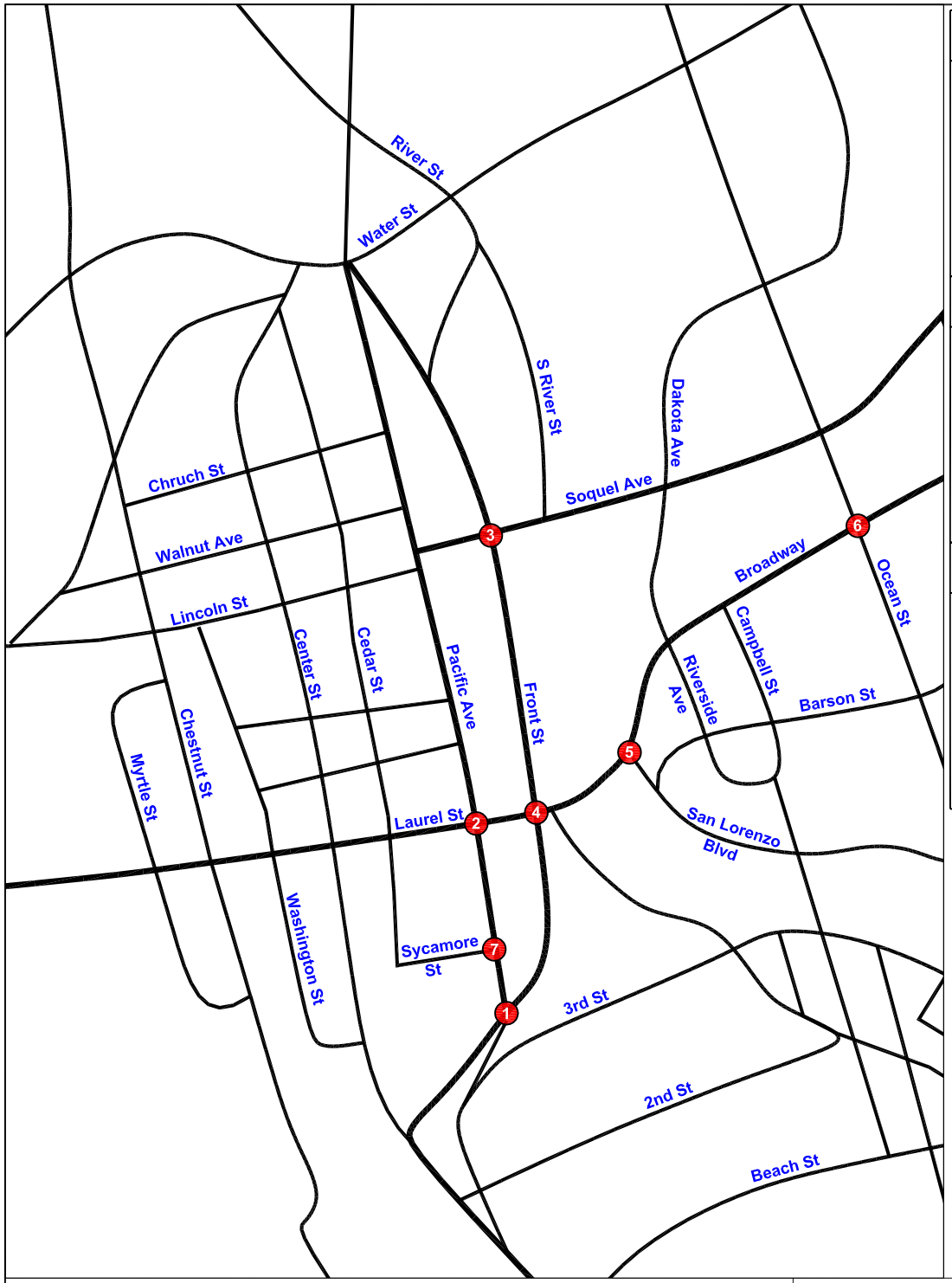
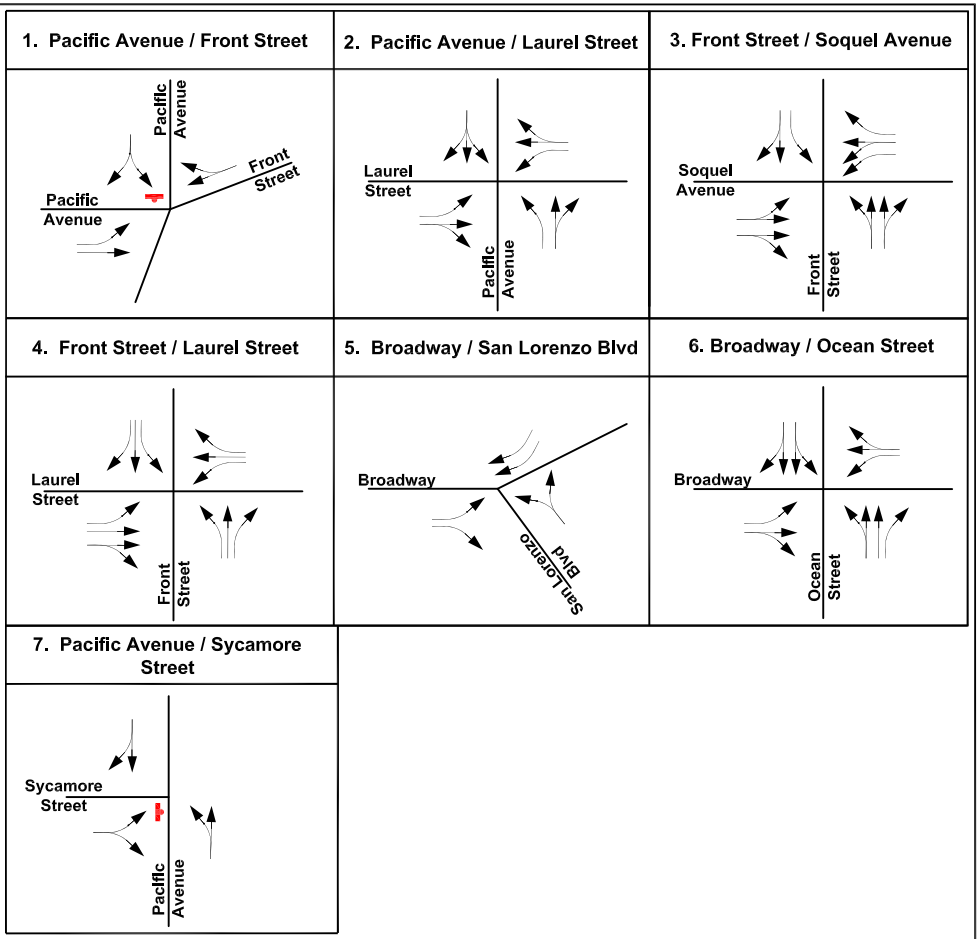
555 Pacific Avenue Traffic Study

Existing Turning Movement Volumes

Figure 3





Legend:

X = Study Intersections

= Stop Sign

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Existing Lane Geometry

Figure 4

Existing plus Project Conditions

This Scenario is identical to the Existing Conditions, but with traffic added to Existing Conditions from the proposed mixed-use development.

The project sponsor is proposing to build 94 single room occupancy residential (SRO) units, 2,600 square feet of restaurant land use (on two pads) and 2,455 square feet of retail land use. The proposed building consists of four levels above the ground and a basement level of private parking for the residential units. The first level (i.e., the ground level) consists of restaurants and retail land use as proposed by the project applicant, Barry Swenson Builder. Levels two through four would consist of studio and one-bedroom apartment SRO units.

Project Trip Generation

The trip generation was estimated based on the City of Santa Cruz trip generation rates that generally utilize data from *Trip Generation,* published by the Institute of Transportation Engineers (ITE). Table II shows the project trip generation estimates for the proposed development. The proposed project is expected to generate a total of 847 daily trips, including 83 trips (51 inbound and 32 outbound) during the p.m. peak hour.

It should be noted that a previously proposed project at the same location was a hotel land use, which was expected to generate 779 daily trips and 48 p.m. peak hour trips. Based on the City staff's recommendation, all of the current proposed project trips were used for the Existing plus Project Conditions traffic analysis. For the Cumulative (General Plan 2030) Conditions, the net difference in p.m. peak hour trips between the current and the previously proposed project were used for traffic impact analysis.

Table II: Project Trip Generation

	Land Use (ITE Code)	***Size***		***Weekday Daily***		***PM Peak Hour (between 4 and 6 p.m.)***					
				Rate	***Trips***	***Rate***	***In %***	***Out %***	***In***	***Out***	***Total***
Current Proposed Project	Single Room Occupancy - SRO Units (220)	94	units	5.50	517	0.61	63	37	36	21	57
	High-Turnover Restaurant (932)	2.600	ksf	108.1	281	9.50	60	40	15	10	25
	Retail (814)	2.455	ksf	42.70	105	2.30	49	51	3	3	6
	Pass-by Trip Reduction (10%)				-37				-2	-1	-3
	Internal Trip Reduction (5%)				-19				-1	-1	-2
	Net Total				***847***				***51***	***32***	***83***
Previously Proposed Project	Hotel (310)	82	Rooms	9.50	779	0.58	51	49	24	23	48

Notes: Source: City of Santa Cruz typical generation rates which are based on ITE Trip Generation Manual. Pass-by trip reduction of 10% in addition to 15% already included in City of Santa Cruz trip generation rates; ksf = Thousand square feet

Project Trip Distribution and Assignment

Trip distribution assumptions for the proposed project were developed based on existing travel patterns, knowledge of the study area and input from the City staff. Traffic from the proposed project is expected to travel to and from the site according to the distribution assumptions shown on Figure 5 and described below:

- 10 percent will travel to/from the north via Pacific Avenue
- 10 percent will travel to/from the north via Front Street
- 20 percent will travel to/from the west via Laurel Street
- 15 percent will travel to/from the east via Broadway
- 15 percent will travel to/from the north via Ocean Street
- 15 percent will travel to/from the east via San Lorenzo Boulevard
- 15 percent will travel to/from the south via Pacific Avenue

Figure 5 also shows the assignment of current proposed project trips to the study intersections.

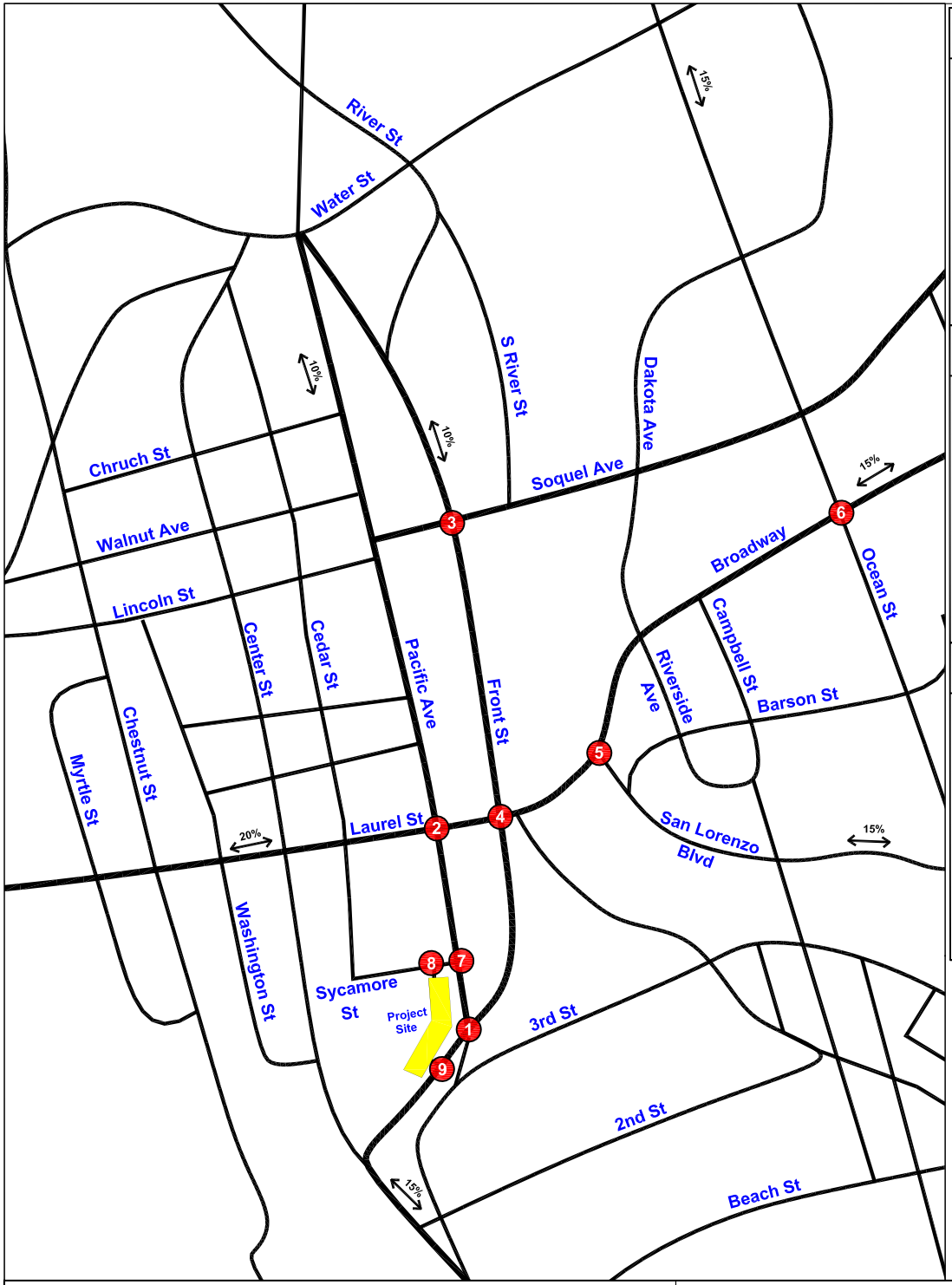
Level of Service Analysis

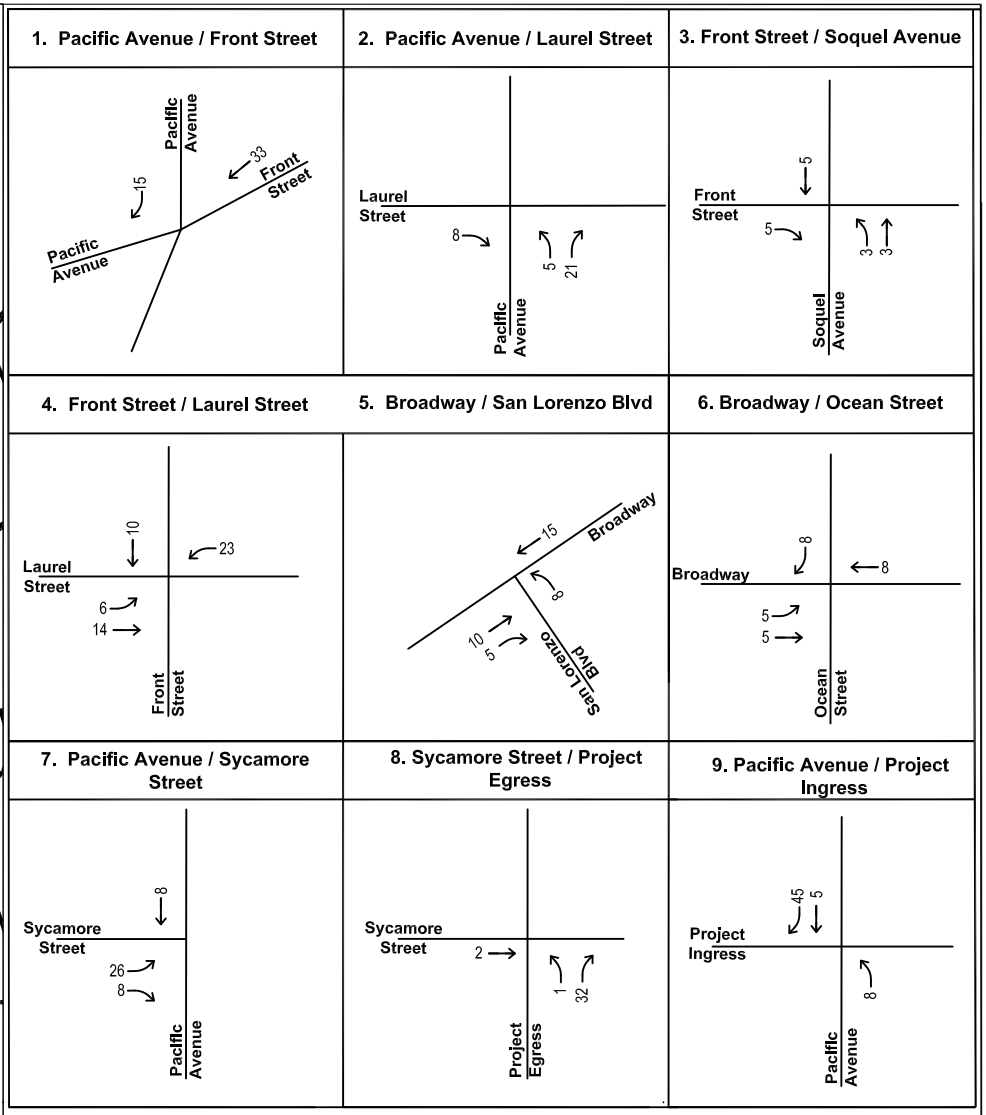
Figure 6 illustrates the Existing plus Project turning movement volumes. The results of the LOS analysis are summarized in Table III and detailed calculations are provided in Appendix D. With the addition of project trips, all the study intersections are expected to continue to operate at acceptable levels of service (LOS C or better). No improvements appear to be necessary at any of the study intersections.

Table III: Intersection LOS – Existing plus Project Conditions

ID	*Intersection*	*Control*	*Existing Conditions P.M. Peak Hour*		*Existing + Project Conditions P.M. Peak Hour*	
			Average Delay (sec/veh)	*LOS*	*Average Delay (sec/veh)*	*LOS*
1	Pacific Avenue/Front Street	One-way Stop Control	12.5	B	13.2	C
2	Pacific Avenue/Laurel Street	Signal	10.3	B	11.0	B
3	Front Street/Soquel Avenue	Signal	17.7	B	17.8	B
4	Front Street/Laurel Street	Signal	25.3	C	25.7	C
5	Broadway/San Lorenzo Boulevard	Signal	15.6	B	15.6	B
6	Broadway/Ocean Street	Signal	25.2	C	25.4	C
7	Pacific Avenue/Sycamore Street	One-way Stop Control	9.7	A	10.1	B
8	Sycamore Street/Project Driveway	One-way Stop Control	NA	NA	8.5	A

Note: Delay = Overall average intersection delay in seconds for Signalized, or minor street (worst approach) delay for One-way Stop Control intersections; LOS = Level of Service; NA = Not Available





Legend:

X = Study Intersections

XX = PM Peak Hour Volumes

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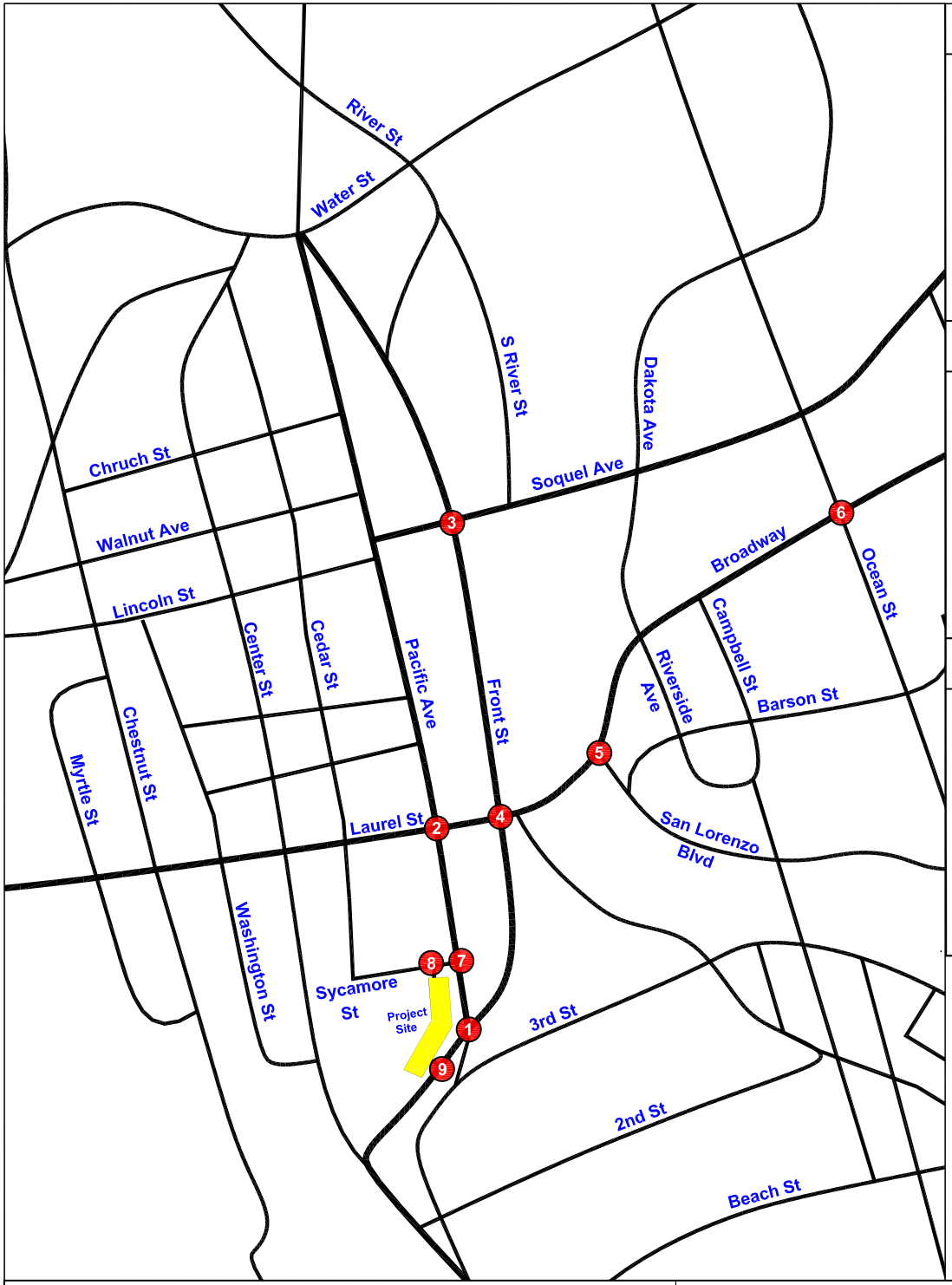
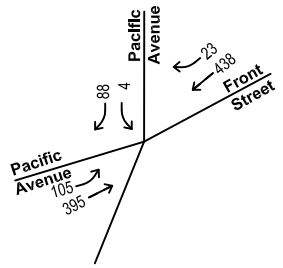
Proposed Project Trip Distribution and Assignment Assumptions

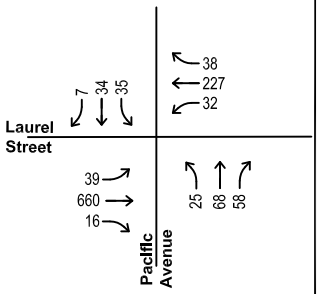
Figure 5



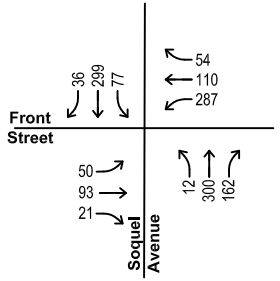
1. Pacific Avenue / Front Street



2. Pacific Avenue / Laurel Street



3. Front Street / Soquel Avenue



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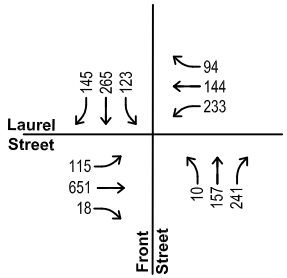
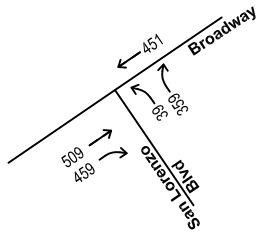


5. Broadway / San Lorenzo Blvd



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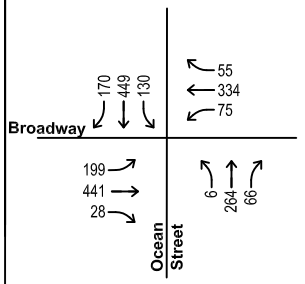
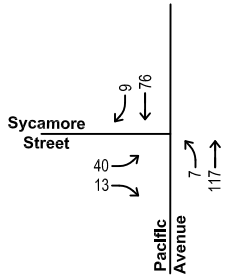
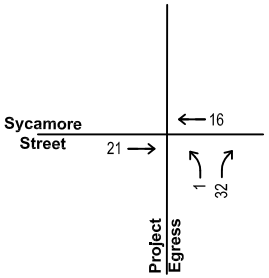


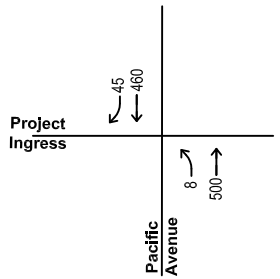
7. Pacific Avenue / Sycamore Street



8. Sycamore Street / Project Egress



9. Pacific Avenue / Project Ingress



Legend:

X = Study Intersections

XX = PM Peak Hour Volumes

N

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555 Pacific Avenue Traffic Study

Existing plus Project Turning Movement Volumes

Figure 6

Project Access and Internal Circulation

The proposed vehicular access to the project site is via a right-in/left-in access (ingress) on Pacific Avenue and an egress only driveway on to Sycamore Street. The parking layout at the ground level and the basement level allows one-way circulation as shown on the project site plan. Considering the peak hour trips, the number of parking spaces and the number of parking levels for the project site, TJKM does not anticipate any access issues such as vehicle delay and/or queuing. Pedestrian access to the site will be via existing sidewalks along the project frontage.

Based on review of the proposed site plan, TJKM recommends stop sign control and pavement markings on the upward ramp from the basement level where it intersects the ground level egress driveway, and on the egress driveway itself where it intersects Sycamore Street, to improve turn safety at the project site. To improve the pedestrian safety at the parking exit on Sycamore Street, TJKM recommends installation of "CAUTION VEHICLE EXITING" LED display sign to warn pedestrians of approaching vehicles. It is also recommended to install a reflective speed bump at the exit to slow down the exiting vehicles and install an illuminated sign "WATCH FOR PEDESTRIANS" at the egress location. In addition, a convex mirror should be considered at the egress to address line of sight issue.

As per AASHTO guidelines, a minimum design turning radius for a passenger car is 24 feet and the site plan shows a turn radius of a minimum 24 feet at every turn path within the parking lot at both the ground and basement levels. In addition, the entry and exit turn radii also meets the basic turn requirements for a passenger car. Based on the information provided by the project applicant, the delivery trucks to the project site are expected to use street level curbside zone as the vertical clearance to the parking lot entrance is approximately 11 feet.

Parking Requirements

The project applicant currently proposes 46 public use parking spaces (ground level) generally meant for the patrons of commercial/retail land uses and 83 private parking spaces (basement level) for the residential land use, for a total inventory of 129 on-site parking spaces available within the project development. Table IV provides a summary of the City of Santa Cruz parking requirements as established per municipal code. The City municipal code requires a minimum of 125 parking spaces and the project applicant proposes a combined total of 129 off-street parking spaces.

Table IV: Summary of Parking Requirements

Land Use Type	*Project Size*	*Unit*	*City of Santa Cruz Parking Requirement*	*City Required Parking Spaces*
Single Room Occupancy (SRO) Units - 300 square feet or more	94	d.u.	1.0 per d.u.	94
Restaurant	2,600	sq. ft.	1 per 120 sq. ft.	22
Retail	2,455	sq. ft.	1 per 250 sq. ft	10
Total required per municipal code				125
Total proposed by the project applicant				129

Notes: d.u. = dwelling units; sq. ft. = square feet
Source: http://www.codepublishing.com/CA/SantaCruz/html/SantaCruz24/SantaCruz2412.html#24.12.240

The City also requires that any new development provide bike racks that would potentially reduce the peak hour trips as part of its Transportation Demand Management (TDM) program. Based on the City's municipal code requirement, a minimum of seven (= 2 + 15% of auto parking requirement)

bike parking spaces for the retail portion and 94 bike parking spaces for the residential portion, a total of 101 spaces are required at the project site. The project applicant plans to provide 113 bike parking spaces within the project site.

Cumulative (General Plan 2030) with Project Conditions

The traffic forecasts for the Cumulative Conditions were developed by modeling the traffic generated by approved and pending developments in the City of Santa Cruz, and planned growth at the University of California – Santa Cruz (UCSC) campus. The Cumulative projects would generate approximately 11,550 trips during the weekday p.m. peak hour.

Cumulative with Project traffic volumes are the sum of Cumulative Conditions (baseline) turning movement volume as provided by the City staff for the study intersections and the net increase in peak hour trips (current versus previously proposed land use) at the project site.

Level of Service Analysis

Figure 7 illustrates the Cumulative Conditions with the Project turning movement volumes. The results of the LOS analysis are summarized in Table V and detailed calculations are provided in Appendix E. Under Cumulative with Project Conditions, all study intersections are expected to continue to operate at acceptable level of service conditions.

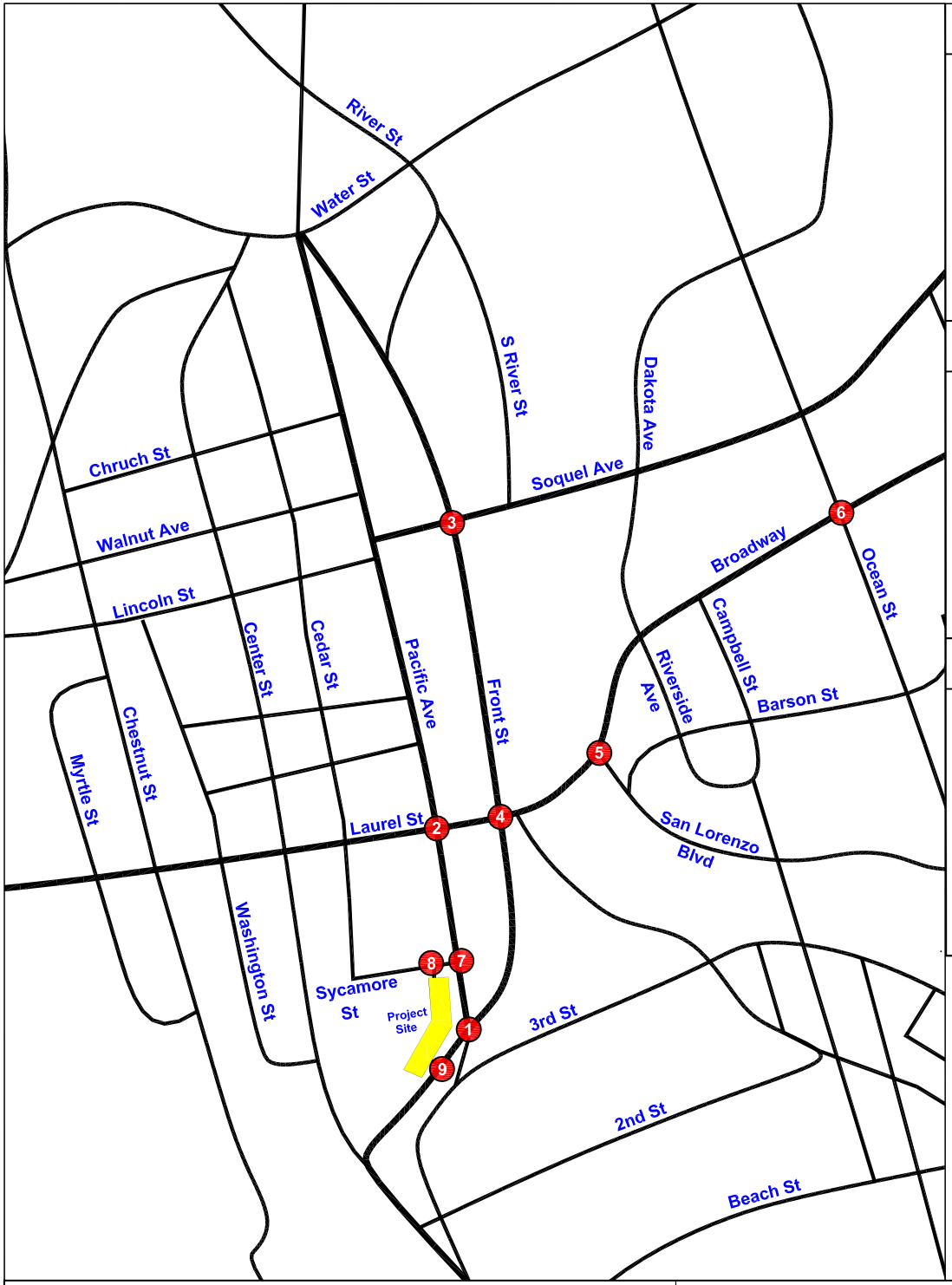
Table V: Intersection LOS – Cumulative (General Plan 2030) with Project Conditions

ID	*Intersection*	*Control*	*P.M. Peak Hour*	
			Average Delay (sec/veh)	*LOS*
1	Pacific Avenue/Front Street	One-way Stop Control	15.8	C
2	Pacific Avenue/Laurel Street	Signal	15.9	B
3	Front Street/Soquel Avenue	Signal	21.9	C
4	Front Street/Laurel Street	Signal	25.2	C
5	Broadway/San Lorenzo Boulevard	Signal	15.9	B
6	Broadway/Ocean Street	Signal	40.2	D
7	Pacific Avenue/Sycamore Street	One-way Stop Control	10.1	B
8	Sycamore Street/Project Driveway	Future*	8.5	A

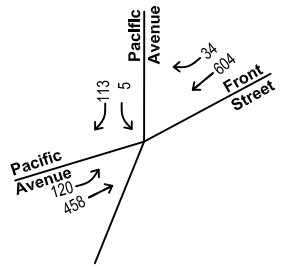
Note: Delay = Overall average intersection delay in seconds for Signalized, or minor street (worst approach) delay for One-way Stop Control intersections; LOS = Level of Service

At the intersection of Pacific Avenue/Front Street, TJKM recommends that the City should consider striping the southbound approach to provide a separate southbound left-turn and right-turn lanes. TJKM also recommends re-designing this acute angled intersection with right angular approaches to shorten the pedestrian crosswalks and thereby reducing the walk time.

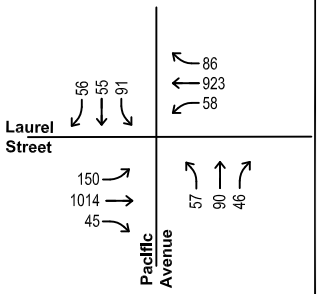
It should be noted that, even with an approximate increase of 17% in traffic volume on Pacific Avenue under Cumulative Conditions from the baseline Existing Conditions, the minor street stop control delay at Sycamore Street remains at 10.1 seconds/vehicle during the p.m. peak hour.



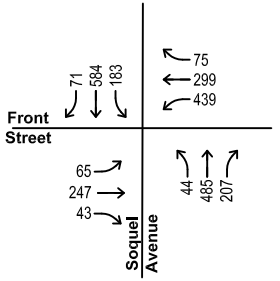
1. Pacific Avenue / Front Street



2. Pacific Avenue / Laurel Street



3. Front Street / Soquel Avenue



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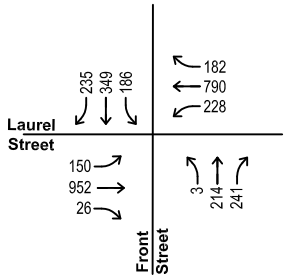
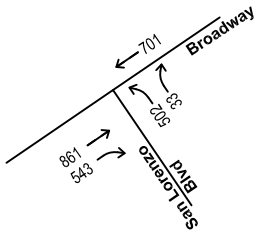
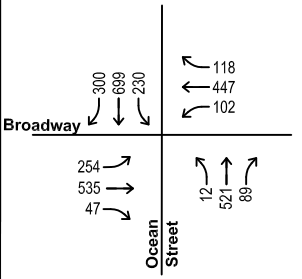


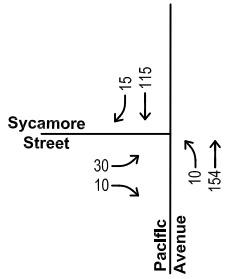
5. Broadway / San Lorenzo Blvd



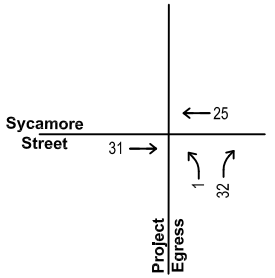
6. Broadway / Ocean Street



7. Pacific Avenue / Sycamore Street



8. Sycamore Street / Project Egress



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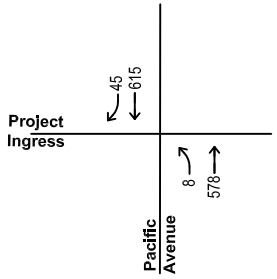


Legend:

X = Study Intersections

XX = PM Peak Hour Volumes

N

Transportation Consultants

SANTA CRUZ

555 Pacific Avenue Traffic Study

Cumulative (GP 2030) with Project Turning Movement Volumes

Figure 7

Conclusions

TJKM has reached the following conclusions regarding the mixed-use development at 555 Pacific Avenue in the City of Santa Cruz:

- The proposed project is expected to generate 847 weekday daily trips, including 83 trips (51 inbound and 32 outbound) during the weekday p.m. peak hour.
- All study intersections are expected to operate at an acceptable level of service of LOS C or better under Existing and Existing plus Project Conditions.
- Under future Cumulative with Project Conditions, all study intersections are expected to continue to operate at acceptable level of service conditions.
- Under Cumulative Conditions, at the intersection of Pacific Avenue/Front Street, TJKM recommends that the City should consider striping the southbound approach to provide a separate southbound left-turn and right-turn lanes. TJKM also recommends re-designing this acute angled intersection with right angular approaches to shorten the pedestrian crosswalks and thereby reducing the walk time.
- TJKM recommends stop sign control and pavement markings on the upward ramp from the basement level where it intersects the ground level egress driveway, and on the egress driveway itself where it intersects Sycamore Street, to improve turn safety at the project site.
- To improve the pedestrian safety at the parking exit on Sycamore Street, TJKM recommends installation of "CAUTION VEHICLE EXITING" LED display sign to warn pedestrians of approaching vehicles. It is also recommended to install a reflective speed bump at the exit to slow down the vehicles and install an illuminated sign "WATCH FOR PEDESTRIANS" at the parking egress. In addition, a convex mirror should be considered at the egress to address line of sight issue.

Study Participants and References

TJKM Personnel

Rich Haygood, P.E., T.E.	Project Manager
Vishnu Gandluru	Project Engineer
Prashanth Dullu	Graphic Designer
Kim Goodrich	Word Processor

Others

Christophe Schneiter, P.E.	City Engineer, City of Santa Cruz
Ron Marquez, P.E.	Marquez Transportation Engineering, Aptos, California
Jon Lee	Barry Swenson Builder
Adam Mayberry	Barry Swenson Builder

References

- City of Santa Cruz, Transportation Impact Study Guidelines, May 1, 2009
- *ITE Trip Generation,* 9th Edition, 2012
- *San Diego Association of Governments (SANDAG) Trip Generation Manual*, 2008
- *Traffic Level of Service Analysis Guidelines: Congestion Management Program*, Santa Clara Valley Transportation Authority, 2003

Appendix A – Level of Service Analysis Methodology

DESCRIPTION OF SIGNALIZED INTERSECTION CAPACITY ANALYSIS
Updated 2000 HCM METHOD

Background

The operations method of intersection capacity analysis found in Chapter 16, "Signalized Intersections," of the *Highway Capacity Manual 2000,* Transportation Research Board, was used for this study. This method is used in most analyses of existing conditions or of future situations in which traffic, geometric, and control parameters were well established by projections and trial designs.

This method addresses the capacity and level of service of intersection approaches, and the level of service of the intersection as a whole. In this method, capacity and level of service are evaluated separately, and are not related to each other in a simple one-to-one fashion. Capacity is evaluated in terms of the ratio of demand flow rate to capacity (volume-to-capacity ratio), while level of service is evaluated on the basis of control delay per vehicle (sec/veh).

The capacity of the intersection as a whole is not addressed by this method; the design and signalization of intersections focuses on the accommodation of the major movements and approaches comprising the intersection. Capacity is, therefore, only meaningful as applied to these major movements and approaches. Capacity analysis results in the computation of volume-to-capacity ratios for individual movements and a composite volume-to-capacity ratio for the sum of critical movements or lane groups within the intersection. The volume-to-capacity ratio is the actual or projected rate of flow on an approach or designated group of lanes during a peak 15-minute interval divided by the capacity of the approach or designated group of lanes.

Level of Service

Level of service is based on the control delay per vehicle for various movements within the intersection. While volume-to-capacity affects delay, there are other parameters that more strongly affect it, such as the quality of progression, length of green phases, cycle lengths, and others. Thus for any given volume-to-capacity ratio, a range of delay values my result, and vice-versa. See the table "Level of Service Criteria for Signalized Intersections" for the relationship between the level of service and stopped delay per vehicle.

Because delay is a complex measure, its relationship to capacity is also complex. It is possible, for example, to have delays in the range of Level of Service F while the volume-to-capacity ratios is below 1.00, perhaps as slow as 0.75-0.85. Very high delays can occur at such volume-to-capacity ratios when some combination of the following conditions exists: the cycle length is long; the lane group in question has a long red time; and/or the signal progression for the subject movement is poor.

The reverse is also possible. A saturated approach or lane group with a volume-to-capacity equal to 1.00 may have low delays if the cycle length is short, and/or the signal progression is favorable for the subject movement. Acceptable delay levels do not automatically ensure that capacity is sufficient. The analysis must consider the results of the capacity analysis module and the level of service module to obtain a complete picture of existing or projected intersection operations.

Thus, the designation of Level of Service *does not* automatically imply that the intersection, approach, or lane group is overloaded, nor does a level of service in the A to E range automatically imply that there is unused capacity available.

The procedures of this methodology require the analysis of both capacity and level of service conditions to fully evaluate the operation of a signalized intersection.

Input Data

The input data necessary to use this methodology are:

- Lane geometrics
- Traffic volumes
- Signal timing
- Vehicle type distribution
- Percent grade
- Pedestrians
- Peak hour factors
- Parking activity
- Arrival type per approach

Reference: *Highway Capacity Manual, Special Report No. 209,* Transportation Research Board, 2000.

Table A-1: Level of Service Criteria for Signalized Intersections

Level of Service	Type of Flow	Delay	Maneuverability	Control Delay/ Vehicle (s/veh)
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase and not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	$\leq$ 10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	> 10-20
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	> 20-35
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result in some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back ups.	> 35-55
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	> 55-80
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with oversaturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	> 80

References: *Highway Capacity Manual, Special Report No. 209*, Transportation Research Board, 2000.
Highway Capacity Manual, Special Report No. 87, Highway Research Board, 1965.
TJKM.

DESCRIPTION OF INTERSECTION CAPACITY ANALYSIS
UNSIGNALIZED 2000 METHOD

Background

The method of unsignalized intersection capacity analysis used in this study is from Chapter 17, "Unsignalized Intersections" of the *Highway Capacity Manual, Special report No. 209,* Transportation Research Board, updated October 2000.

This method applies to two-way STOP sign or YIELD sign controlled intersections (or one-way STOP sign or YIELD sign controlled intersections at three-way intersections). At such intersections, drivers on the minor street are forced to use judgement when selecting gaps in the major flow through which to execute crossings or turning maneuvers. Thus, the capacity of the controlled legs of an intersection is based on three factors:

1. The distribution of gaps in the major street traffic stream.
2. Driver judgement in selecting gaps through which to execute their desired maneuvers.
3. Follow-up time required to move into the front-of-queue position.

It is assumed that gaps in the traffic stream are randomly distributed. For this reason, the methodology will be less reliable in situations in which the conflicting flows are strongly platooned, as would be the case at many urban intersections where the major street is part of a signalized network.

This method assumes that major street traffic is not affected by minor street flows. This assumption is generally good for periods when the operation is smooth and uncongested. (When congestion occurs, it is likely that major street traffic will experience some impedance due to minor street traffic.) Left turns from the major street are assumed to be affected by the opposing major street flow, and minor street traffic is affected by all conflicting movements.

Input Data

The general procedure to calculate the level of service is as follows:

1. Define existing geometric and volume conditions for the intersection under study.
2. Determine the conflicting traffic through which each minor street movement and the major street left-turn must cross.
3. Determine the size of the gap in the conflicting traffic stream needed by vehicles in each movement crossing the conflicting traffic stream.
4. Determine the capacity of the gaps in the major traffic stream to accommodate each of the subject movements that will utilize these gaps.
5. Adjust the capacities found to account for impedance and the use of shared lanes.
6. Estimate the average total delay for each of the subject movements and determine the level of service for each movement and for the intersection.

Gaps are utilized by vehicles in the following priority order:

1. Right turns from the minor street
2. Left turns from the major street
3. Through movements from the minor street
4. Left turns from the minor street

For example, if a left-turning vehicle on the major street and a through vehicle from the minor street are waiting to cross the major traffic stream, the first available gap of acceptable size would be taken by the left-turning vehicle. The minor street through vehicle must wait for the second available gap. In aggregate terms, a large number of such left-turning vehicles could use up so many of the available gaps that minor street through vehicles are severely impeded or unable to make safe crossing movements.

Level of Service

See the following table "Level of Service Criteria for Unsignalized Intersections" for the relationship between delay and level of service.

LEVEL OF SERVICE CRITERIA
FOR UNSIGNALIZED ITNERSECTIONS

Control Delay (s/veh)	Level of Service	Delays
0-10	A	Little or no delay
> 10-15 s/veh	B	Short traffic delays
> 15-25 s/veh	C	Average traffic delays
> 25-35 s/veh	D	Long traffic delays
>35-50 s/veh	E	Very long traffic delays
> 50 s/veh	F	Extreme traffic delay

The level of service criteria for Two-Way STOP controlled intersections is somewhat different from the criteria used in Chapter 16 for signalized intersections. The primary reason for this is the difference that drivers expect a signalized intersection to carry higher traffic volumes than unsignalized intersections. Additionally, several driver behavior conditions combine to make delays at signalized intersections less onerous than at unsignalized intersections.

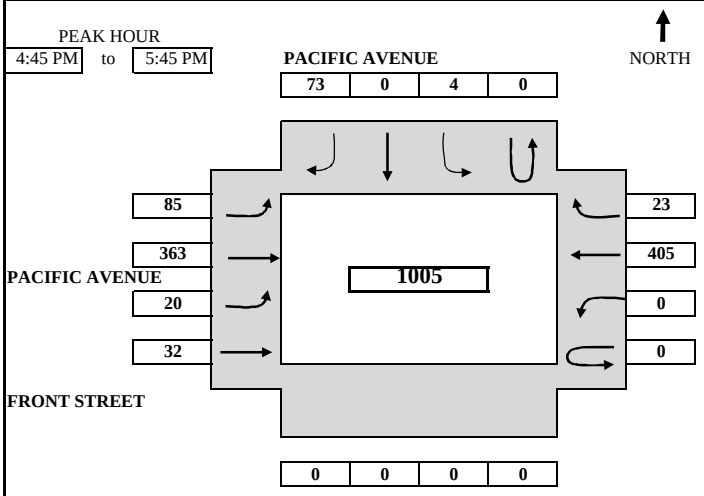
Reference: *Highway Capacity Manual, Special Report 209*, Transportation Research Board, Update October 2000.

Appendix B – Raw Traffic Data and Study Area Transit Maps

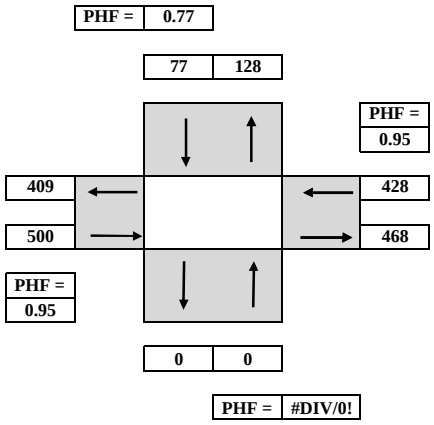
INTERSECTION TURNING MOVEMENT SUMMARY

PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**PACIFIC AVENUE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**FRONT STREET**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-1**

PEAK HOUR 4:45 PM to 5:45 PM



ARRIVAL / DEPARTURE VOLUMES



TIME PERIOD			NORTHBOUND				SOUTHBOUND				PACIFIC AV		FRONT ST		WESTBOUND				TOTAL
From		To	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	LEFT	THRU	LEFT	THRU	U-TURN	LEFT	THRU	RIGHT	
SURVEY DATA																			
4:00 PM	to	4:15 PM						0		19	17	72	3	4			86	6	**207**
4:15 PM	to	4:30 PM						4		37	32	158	14	6			179	8	**438**
4:30 PM	to	4:45 PM						4		51	50	232	21	13			280	16	**667**
4:45 PM	to	5:00 PM						4		76	69	324	26	22			391	18	**930**
5:00 PM	to	5:15 PM						5		99	95	409	31	28			494	21	**1182**
5:15 PM	to	5:30 PM						8		110	115	494	36	40			585	28	**1416**
5:30 PM	to	5:45 PM						8		124	135	595	41	45			685	39	**1672**
5:45 PM	to	6:00 PM						9		133	160	658	44	49			772	42	**1867**
TOTAL BY PERIOD																			
4:00 PM	to	4:15 PM	0	0	0	0	0	0	0	19	17	72	3	4	0	0	86	6	**207**
4:15 PM	to	4:30 PM	0	0	0	0	0	4	0	18	15	86	11	2	0	0	93	2	**231**
4:30 PM	to	4:45 PM	0	0	0	0	0	0	0	14	18	74	7	7	0	0	101	8	**229**
4:45 PM	to	5:00 PM	0	0	0	0	0	0	0	25	19	92	5	9	0	0	111	2	**263**
5:00 PM	to	5:15 PM	0	0	0	0	0	1	0	23	26	85	5	6	0	0	103	3	**252**
5:15 PM	to	5:30 PM	0	0	0	0	0	3	0	11	20	85	5	12	0	0	91	7	**234**
5:30 PM	to	5:45 PM	0	0	0	0	0	0	0	14	20	101	5	5	0	0	100	11	**256**
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HOURLY TOTALS																			
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4:45 PM	to	5:45 PM	0	0	0	0	0	4	0	73	85	363	20	32	0	0	405	23	**1005**
5:00 PM	to	6:00 PM	0	0	0	0	0	5	0	57	91	334	18	27	0	0	381	24	**937**

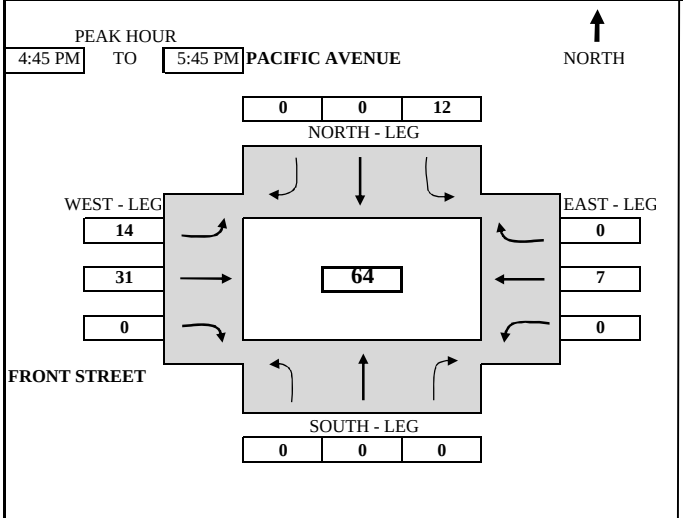
TEL: (510) 232 - 1271 FAX: (510) 232 - 1272

SYNCHRO CVS FILE FORMAT																	
	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	0	0	0	0	4	0	73	85	363	20	32	0	0	405	23	**1005**
PEDESTRIAN																	**24**
BICYCLE																	**64**
PHF BY MOVEMENT	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.33	#DIV/0!	0.73	0.82	0.90	1.00	0.67	#DIV/0!	#DIV/0!	0.91	0.52	OVERALL
PHF BY APPROACH	#DIV/0!				0.77				0.95				0.95				0.96

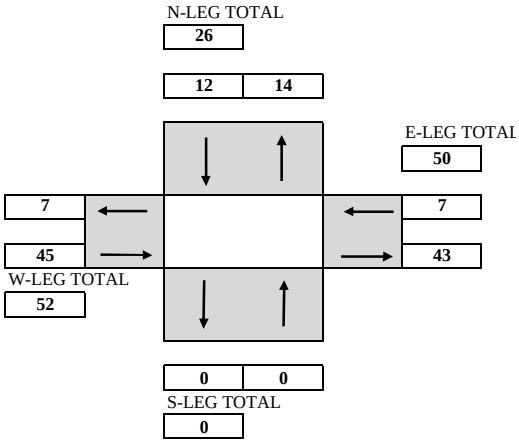
BICYCLE MOVEMENT SUMMARY

PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**PACIFIC AVENUE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH	**FRONT STREET**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-1**

PEAK HOUR 4:45 PM TO 5:45 PM



ARRIVAL / DEPARTURE VOLUMES



TIME	PERIOD		NB (SOUTH - LEG)			SB (NORTH - LEG)			EB (WEST - LEG)			WB (EAST - LEG)			TOTAL
From		To	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	
SURVEY DATA															
4:00 PM	to	4:15 PM	0	0	0	5	0	0	1	7	0	0	3	1	**17**
4:15 PM	to	4:30 PM	0	0	0	6	0	0	5	11	0	0	3	2	**27**
4:30 PM	to	4:45 PM	0	0	0	9	0	0	8	13	0	0	7	2	**39**
4:45 PM	to	5:00 PM	0	0	0	12	0	0	12	21	0	0	9	2	**56**
5:00 PM	to	5:15 PM	0	0	0	16	0	0	17	27	0	0	10	2	**72**
5:15 PM	to	5:30 PM	0	0	0	19	0	0	18	34	0	0	11	2	**84**
5:30 PM	to	5:45 PM	0	0	0	21	0	0	22	44	0	0	14	2	**103**
5:45 PM	to	6:00 PM	0	0	0	22	0	0	25	47	0	0	17	2	**113**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	0	0	0	5	0	0	1	7	0	0	3	1	**17**
4:15 PM	to	4:30 PM	0	0	0	1	0	0	4	4	0	0	0	1	**10**
4:30 PM	to	4:45 PM	0	0	0	3	0	0	3	2	0	0	4	0	**12**
4:45 PM	to	5:00 PM	0	0	0	3	0	0	4	8	0	0	2	0	**17**
5:00 PM	to	5:15 PM	0	0	0	4	0	0	5	6	0	0	1	0	**16**
5:15 PM	to	5:30 PM	0	0	0	3	0	0	1	7	0	0	1	0	**12**
5:30 PM	to	5:45 PM	0	0	0	2	0	0	4	10	0	0	3	0	**19**
5:45 PM	to	6:00 PM	0	0	0	1	0	0	3	3	0	0	3	0	**10**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	0	0	0	12	0	0	12	21	0	0	9	2	**56**
4:15 PM	to	5:15 PM	0	0	0	11	0	0	16	20	0	0	7	1	**55**
4:30 PM	to	5:30 PM	0	0	0	13	0	0	13	23	0	0	8	0	**57**
4:45 PM	to	5:45 PM	0	0	0	12	0	0	14	31	0	0	7	0	**64**
5:00 PM	to	6:00 PM	0	0	0	10	0	0	13	26	0	0	8	0	**57**

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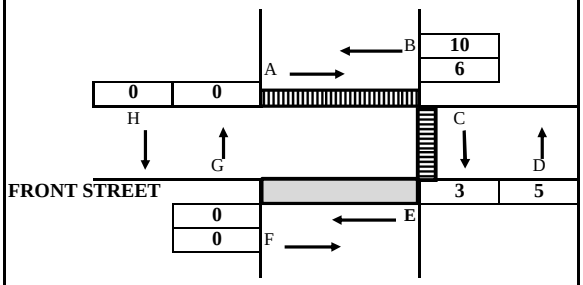
	NBT	SBT	EBT	WBT	TOTAL
BICYCLE	0	12	45	7	**64**

PEDESTRIAN MOVEMENT SUMMARY

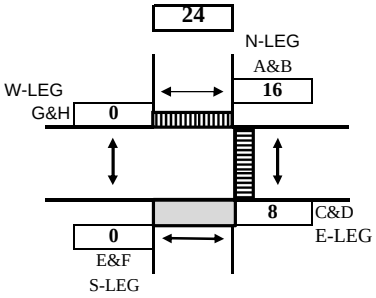
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**
N-S APPROACH:	**PACIFIC AVENUE**	**DAY:**	**TUESDAY**
E-W APPROACH:	**FRONT STREET**	**JURISDICTION:**	**SANTA CRUZ**
SURVEY PERIOD	**4:00 PM TO 6:00 PM**	**FILE:**	**3211084-1**

PEAK HOUR
04:45 PM TO 05:45 PM



PACIFIC AVENUE

PEAK HOUR
TOTAL PEDESTRIAN VOLUMES



TIME PERIOD			NORTH X-WALK		EAST X-WALK		SOUTH X-WALK		WEST X-WALK		
From		**To**	***A***	***B***	***C***	***D***	***E***	***F***	***G***	***H***	***TOTAL***
SURVEY DATA											
04:00 PM	---	04:15 PM	2	0	1	0	0	0	0	0	***3***
04:15 PM	---	04:30 PM	4	3	1	0	0	0	0	0	***8***
04:30 PM	---	04:45 PM	7	3	1	0	0	0	0	0	***11***
04:45 PM	---	05:00 PM	7	4	2	3	0	0	0	0	***16***
05:00 PM	---	05:15 PM	9	8	2	3	0	0	0	0	***22***
05:15 PM	---	05:30 PM	9	11	2	3	0	0	0	0	***25***
05:30 PM	---	05:45 PM	13	13	4	5	0	0	0	0	***35***
05:45 PM	---	06:00 PM	14	14	5	5	0	0	0	0	***38***
TOTAL BY PERIOD											
04:00 PM	---	04:15 PM	2	0	1	0	0	0	0	0	***3***
04:15 PM	---	04:30 PM	2	3	0	0	0	0	0	0	***5***
04:30 PM	---	04:45 PM	3	0	0	0	0	0	0	0	***3***
04:45 PM	---	05:00 PM	0	1	1	3	0	0	0	0	***5***
05:00 PM	---	05:15 PM	2	4	0	0	0	0	0	0	***6***
05:15 PM	---	05:30 PM	0	3	0	0	0	0	0	0	***3***
05:30 PM	---	05:45 PM	4	2	2	2	0	0	0	0	***10***
05:45 PM	---	06:00 PM	1	1	1	0	0	0	0	0	***3***
HOURLY TOTALS											
04:00 PM	---	05:00 PM	7	4	2	3	0	0	0	0	***16***
04:15 PM	---	05:15 PM	7	8	1	3	0	0	0	0	***19***
04:30 PM	---	05:30 PM	5	8	1	3	0	0	0	0	***17***
04:45 PM	---	05:45 PM	6	10	3	5	0	0	0	0	***24***
05:00 PM	---	06:00 PM	7	10	3	2	0	0	0	0	***22***

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	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
PEDESTRIAN	16	0	8	0	**24**

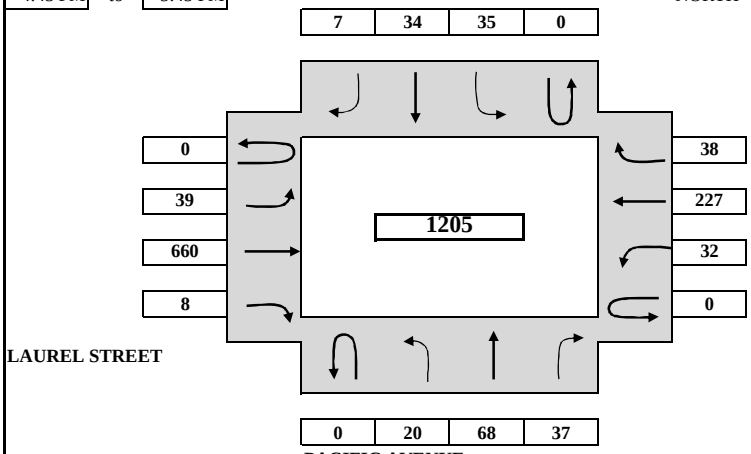
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

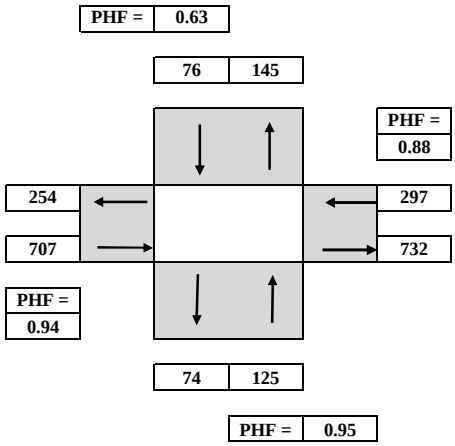
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**PACIFIC AVENUE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**LAUREL STREET**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-2**

PEAK HOUR 4:45 PM to 5:45 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME PERIOD			NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
From		To	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	
SURVEY DATA																			
4:00 PM	to	4:15 PM		11	18	14		13	9	8		7	159	8		8	17	24	**296**
4:15 PM	to	4:30 PM		17	28	20		21	18	11		18	320	12		17	40	45	**567**
4:30 PM	to	4:45 PM		22	43	32		27	26	15		29	462	14		24	71	55	**820**
4:45 PM	to	5:00 PM		26	56	48		40	42	16		43	599	16		38	113	69	**1106**
5:00 PM	to	5:15 PM		31	71	58		45	52	19		50	770	20		41	176	76	**1409**
5:15 PM	to	5:30 PM		34	93	62		51	57	19		61	947	21		52	241	84	**1722**
5:30 PM	to	5:45 PM		42	111	69		62	60	22		68	1122	22		56	298	93	**2025**
5:45 PM	to	6:00 PM		49	124	76		72	64	25		78	1251	25		59	357	102	**2282**
TOTAL BY PERIOD																			
4:00 PM	to	4:15 PM	0	11	18	14	0	13	9	8	0	7	159	8	0	8	17	24	**296**
4:15 PM	to	4:30 PM	0	6	10	6	0	8	9	3	0	11	161	4	0	9	23	21	**271**
4:30 PM	to	4:45 PM	0	5	15	12	0	6	8	4	0	11	142	2	0	7	31	10	**253**
4:45 PM	to	5:00 PM	0	4	13	16	0	13	16	1	0	14	137	2	0	14	42	14	**286**
5:00 PM	to	5:15 PM	0	5	15	10	0	5	10	3	0	7	171	4	0	3	63	7	**303**
5:15 PM	to	5:30 PM	0	3	22	4	0	6	5	0	0	11	177	1	0	11	65	8	**313**
5:30 PM	to	5:45 PM	0	8	18	7	0	11	3	3	0	7	175	1	0	4	57	9	**303**
5:45 PM	to	6:00 PM	0	7	13	7	0	10	4	3	0	10	129	3	0	3	59	9	**257**
HOURLY TOTALS																			
4:00 PM	to	5:00 PM	0	26	56	48	0	40	42	16	0	43	599	16	0	38	113	69	**1106**
4:15 PM	to	5:15 PM	0	20	53	44	0	32	43	11	0	43	611	12	0	33	159	52	**1113**
4:30 PM	to	5:30 PM	0	17	65	42	0	30	39	8	0	43	627	9	0	35	201	39	**1155**
4:45 PM	to	5:45 PM	0	20	68	37	0	35	34	7	0	39	660	8	0	32	227	38	**1205**
5:00 PM	to	6:00 PM	0	23	68	28	0	32	22	9	0	35	652	9	0	21	244	33	**1176**

TEL: (510) 232 - 1271 FAX: (510) 232 - 1272

SYNCHRO CVS FILE FORMAT

	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	20	68	37	0	35	34	7	0	39	660	8	0	32	227	38	**1205**
PEDESTRIAN																	**460**
BICYCLE																	**67**
PHF BY MOVEMENT	#DIV/0!	0.63	0.77	0.58	#DIV/0!	0.67	0.53	0.58	#DIV/0!	0.70	0.93	0.50	#DIV/0!	0.57	0.87	0.68	OVERALL
PHF BY APPROACH	0.95				0.63				0.94				0.88				0.96

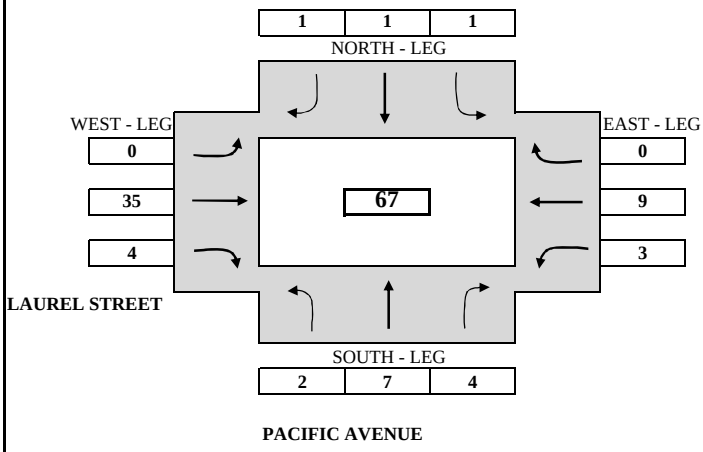
B.A.Y.M.E.T.R.I.C.S.

BICYCLE MOVEMENT SUMMARY

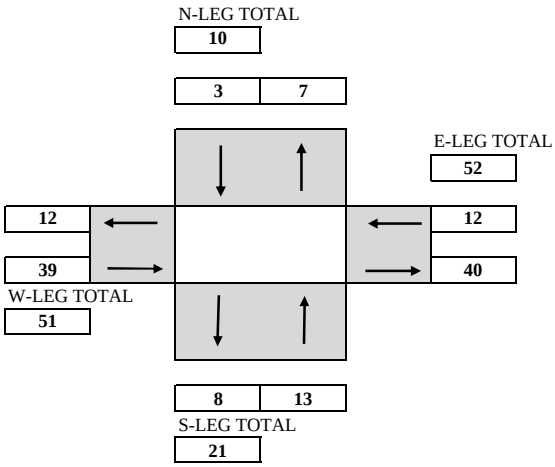
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**PACIFIC AVENUE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**LAUREL STREET**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-2**

PEAK HOUR 4:45 PM TO 5:45 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME	PERIOD		NB (SOUTH - LEG)			SB (NORTH - LEG)			EB (WEST - LEG)			WB (EAST - LEG)			TOTAL
From		To	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	
SURVEY DATA															
4:00 PM	to	4:15 PM	1	2	4	0	1	0	0	4	1	0	1	0	**14**
4:15 PM	to	4:30 PM	1	5	5	0	1	0	0	7	1	2	3	0	**25**
4:30 PM	to	4:45 PM	3	6	8	1	3	1	0	10	1	2	5	2	**42**
4:45 PM	to	5:00 PM	3	6	9	1	3	1	0	15	1	4	9	2	**54**
5:00 PM	to	5:15 PM	3	9	9	1	3	1	0	26	3	4	9	2	**70**
5:15 PM	to	5:30 PM	5	13	11	1	4	1	0	36	4	4	10	2	**91**
5:30 PM	to	5:45 PM	5	13	12	2	4	2	0	45	5	5	14	2	**109**
5:45 PM	to	6:00 PM	6	14	12	2	4	2	0	47	5	5	14	2	**113**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	1	2	4	0	1	0	0	4	1	0	1	0	**14**
4:15 PM	to	4:30 PM	0	3	1	0	0	0	0	3	0	2	2	0	**11**
4:30 PM	to	4:45 PM	2	1	3	1	2	1	0	3	0	0	2	2	**17**
4:45 PM	to	5:00 PM	0	0	1	0	0	0	0	5	0	2	4	0	**12**
5:00 PM	to	5:15 PM	0	3	0	0	0	0	0	11	2	0	0	0	**16**
5:15 PM	to	5:30 PM	2	4	2	0	1	0	0	10	1	0	1	0	**21**
5:30 PM	to	5:45 PM	0	0	1	1	0	1	0	9	1	1	4	0	**18**
5:45 PM	to	6:00 PM	1	1	0	0	0	0	0	2	0	0	0	0	**4**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	3	6	9	1	3	1	0	15	1	4	9	2	**54**
4:15 PM	to	5:15 PM	2	7	5	1	2	1	0	22	2	4	8	2	**56**
4:30 PM	to	5:30 PM	4	8	6	1	3	1	0	29	3	2	7	2	**66**
4:45 PM	to	5:45 PM	2	7	4	1	1	1	0	35	4	3	9	0	**67**
5:00 PM	to	6:00 PM	3	8	3	1	1	1	0	32	4	1	5	0	**59**

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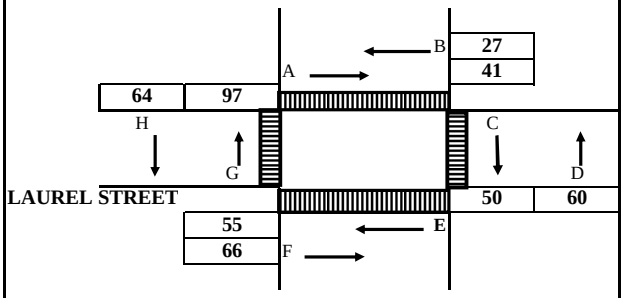
	NBT	SBT	EBT	WBT	TOTAL
BICYCLE	13	3	39	12	**67**

B.A.Y.M.E.T.R.I.C.S.

PEDESTRIAN MOVEMENT SUMMARY

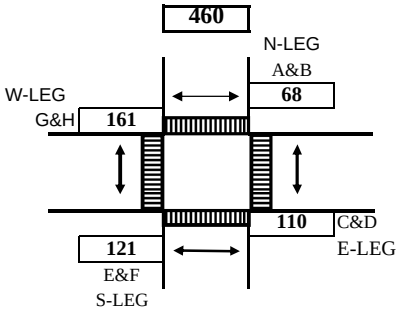
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**
N-S APPROACH:	**PACIFIC AVENUE**	**DAY:**	**TUESDAY**
E-W APPROACH:	**LAUREL STREET**	**JURISDICTION:**	**SANTA CRUZ**
SURVEY PERIOD:	**4:00 PM TO 6:00 PM**	**FILE:**	**3211084-2**

PEAK HOUR
04:45 PM TO 05:45 PM



PACIFIC AVENUE

PEAK HOUR
TOTAL PEDESTRIAN VOLUMES



TIME PERIOD From		To	NORTH X-WALK A	NORTH X-WALK B	EAST X-WALK C	EAST X-WALK D	SOUTH X-WALK E	SOUTH X-WALK F	WEST X-WALK G	WEST X-WALK H	TOTAL
SURVEY DATA											
04:00 PM	---	04:15 PM	18	14	20	26	20	30	36	28	***192***
04:15 PM	---	04:30 PM	41	27	38	47	39	65	76	58	***391***
04:30 PM	---	04:45 PM	60	35	53	65	62	92	108	80	***555***
04:45 PM	---	05:00 PM	73	47	70	85	77	112	143	99	***706***
05:00 PM	---	05:15 PM	85	54	82	100	94	131	170	114	***830***
05:15 PM	---	05:30 PM	96	59	96	113	107	148	190	134	***943***
05:30 PM	---	05:45 PM	101	62	103	125	117	158	205	144	***1,015***
05:45 PM	---	06:00 PM	104	66	107	135	125	165	212	148	***1,062***
TOTAL BY PERIOD											
04:00 PM	---	04:15 PM	18	14	20	26	20	30	36	28	***192***
04:15 PM	---	04:30 PM	23	13	18	21	19	35	40	30	***199***
04:30 PM	---	04:45 PM	19	8	15	18	23	27	32	22	***164***
04:45 PM	---	05:00 PM	13	12	17	20	15	20	35	19	***151***
05:00 PM	---	05:15 PM	12	7	12	15	17	19	27	15	***124***
05:15 PM	---	05:30 PM	11	5	14	13	13	17	20	20	***113***
05:30 PM	---	05:45 PM	5	3	7	12	10	10	15	10	***72***
05:45 PM	---	06:00 PM	3	4	4	10	8	7	7	4	***47***
HOURLY TOTALS											
04:00 PM	---	05:00 PM	73	47	70	85	77	112	143	99	***706***
04:15 PM	---	05:15 PM	67	40	62	74	74	101	134	86	***638***
04:30 PM	---	05:30 PM	55	32	58	66	68	83	114	76	***552***
04:45 PM	---	05:45 PM	41	27	50	60	55	66	97	64	***460***
05:00 PM	---	06:00 PM	31	19	37	50	48	53	69	49	***356***

Tel : (510) 232-1271 ***Fax: (510) 232-1272***

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
PEDESTRIAN	68	121	110	161	**460**

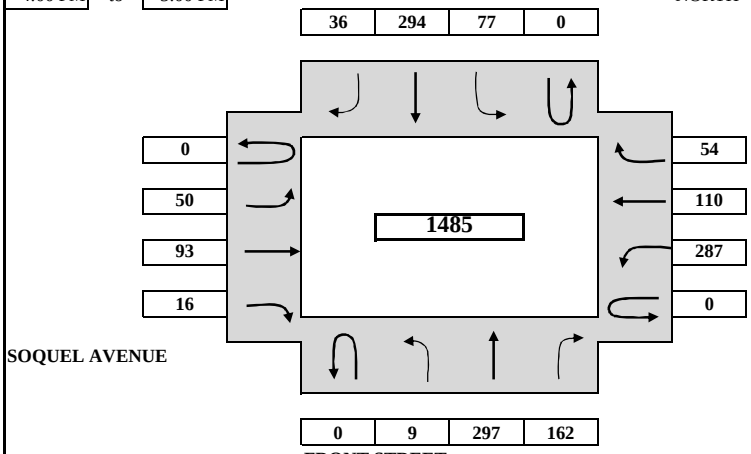
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

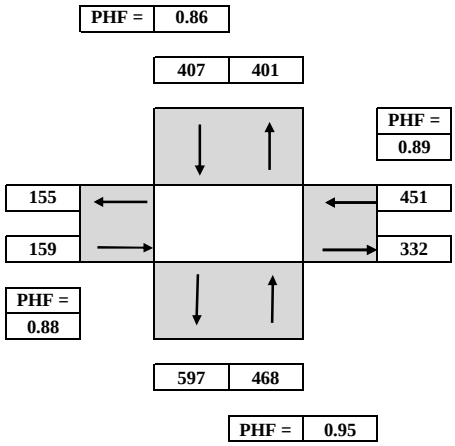
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**FRONT STREET**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**SOQUEL AVENUE**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-3**

PEAK HOUR 4:00 PM to 5:00 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME PERIOD			NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
From		To	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	
SURVEY DATA																			
4:00 PM	to	4:15 PM		3	77	43		28	81	10		12	22	5		74	31	21	**407**
4:15 PM	to	4:30 PM		5	150	80		46	153	14		23	42	8		143	67	29	**760**
4:30 PM	to	4:45 PM		8	231	115		64	230	20		33	75	10		216	81	45	**1128**
4:45 PM	to	5:00 PM		9	297	162		77	294	36		50	93	16		287	110	54	**1485**
5:00 PM	to	5:15 PM		10	348	205		92	372	50		58	129	20		366	132	64	**1846**
5:15 PM	to	5:30 PM		12	431	241		110	449	62		65	166	25		447	160	76	**2244**
5:30 PM	to	5:45 PM		15	490	284		124	512	70		80	196	34		516	185	86	**2592**
5:45 PM	to	6:00 PM		19	568	321		147	569	83		92	223	39		578	208	104	**2951**
TOTAL BY PERIOD																			
4:00 PM	to	4:15 PM	0	3	77	43	0	28	81	10	0	12	22	5	0	74	31	21	**407**
4:15 PM	to	4:30 PM	0	2	73	37	0	18	72	4	0	11	20	3	0	69	36	8	**353**
4:30 PM	to	4:45 PM	0	3	81	35	0	18	77	6	0	10	33	2	0	73	14	16	**368**
4:45 PM	to	5:00 PM	0	1	66	47	0	13	64	16	0	17	18	6	0	71	29	9	**357**
5:00 PM	to	5:15 PM	0	1	51	43	0	15	78	14	0	8	36	4	0	79	22	10	**361**
5:15 PM	to	5:30 PM	0	2	83	36	0	18	77	12	0	7	37	5	0	81	28	12	**398**
5:30 PM	to	5:45 PM	0	3	59	43	0	14	63	8	0	15	30	9	0	69	25	10	**348**
5:45 PM	to	6:00 PM	0	4	78	37	0	23	57	13	0	12	27	5	0	62	23	18	**359**
HOURLY TOTALS																			
4:00 PM	to	5:00 PM	0	9	297	162	0	77	294	36	0	50	93	16	0	287	110	54	**1485**
4:15 PM	to	5:15 PM	0	7	271	162	0	64	291	40	0	46	107	15	0	292	101	43	**1439**
4:30 PM	to	5:30 PM	0	7	281	161	0	64	296	48	0	42	124	17	0	304	93	47	**1484**
4:45 PM	to	5:45 PM	0	7	259	169	0	60	282	50	0	47	121	24	0	300	104	41	**1464**
5:00 PM	to	6:00 PM	0	10	271	159	0	70	275	47	0	42	130	23	0	291	98	50	**1466**

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SYNCHRO CVS FILE FORMAT

	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	9	297	162	0	77	294	36	0	50	93	16	0	287	110	54	**1485**
PEDESTRIAN																	**350**
BICYCLE																	**83**
PHF BY MOVEMENT	#DIV/0!	0.75	0.92	0.86	#DIV/0!	0.69	0.91	0.56	#DIV/0!	0.74	0.70	0.67	#DIV/0!	0.97	0.76	0.64	OVERALL
PHF BY APPROACH	0.95				0.86				0.88				0.89				0.91

B.A.Y.M.E.T.R.I.C.S.

BICYCLE MOVEMENT SUMMARY

PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**FRONT STREET**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**SOQUEL AVENUE**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-3**

PEAK HOUR 4:00 PM TO 5:00 PM

NORTH

NORTH - LEG		
10	11	2

WEST - LEG		EAST - LEG
4		2
16	83	10
2		4

SOQUEL AVENUE

SOUTH - LEG		
0	19	3

FRONT STREET

ARRIVAL / DEPARTURE VOLUMES

N-LEG TOTAL: 48 (23 / 25)

E-LEG TOTAL: 37 (20 / 16 / 22 / 21)

W-LEG TOTAL: 42

S-LEG TOTAL: 39 (17 / 22)

TIME From		TO	PERIOD	NB (SOUTH - LEG) LEFT	NB THRU	NB RIGHT	SB (NORTH - LEG) LEFT	SB THRU	SB RIGHT	EB (WEST - LEG) LEFT	EB THRU	EB RIGHT	WB (EAST - LEG) LEFT	WB THRU	WB RIGHT	TOTAL
SURVEY DATA																
4:00 PM	to	4:15 PM		0	3	1	0	0	3	0	5	1	0	5	0	**18**
4:15 PM	to	4:30 PM		0	10	2	0	4	6	1	5	2	1	6	0	**37**
4:30 PM	to	4:45 PM		0	14	3	2	8	8	3	8	2	2	8	0	**58**
4:45 PM	to	5:00 PM		0	19	3	2	11	10	4	16	2	4	10	2	**83**
5:00 PM	to	5:15 PM		0	22	7	3	16	11	7	20	2	4	16	3	**111**
5:15 PM	to	5:30 PM		0	24	7	7	24	14	11	23	4	5	19	3	**141**
5:30 PM	to	5:45 PM		0	30	7	7	29	15	12	27	4	5	21	4	**161**
5:45 PM	to	6:00 PM		0	33	8	8	36	16	13	30	4	6	23	5	**182**
TOTAL BY PERIOD																
4:00 PM	to	4:15 PM		0	3	1	0	0	3	0	5	1	0	5	0	**18**
4:15 PM	to	4:30 PM		0	7	1	0	4	3	1	0	1	1	1	0	**19**
4:30 PM	to	4:45 PM		0	4	1	2	4	2	2	3	0	1	2	0	**21**
4:45 PM	to	5:00 PM		0	5	0	0	3	2	1	8	0	2	2	2	**25**
5:00 PM	to	5:15 PM		0	3	4	1	5	1	3	4	0	0	6	1	**28**
5:15 PM	to	5:30 PM		0	2	0	4	8	3	4	3	2	1	3	0	**30**
5:30 PM	to	5:45 PM		0	6	0	0	5	1	1	4	0	0	2	1	**20**
5:45 PM	to	6:00 PM		0	3	1	1	7	1	1	3	0	1	2	1	**21**
HOURLY TOTALS																
4:00 PM	to	5:00 PM		0	19	3	2	11	10	4	16	2	4	10	2	**83**
4:15 PM	to	5:15 PM		0	19	6	3	16	8	7	15	1	4	11	3	**93**
4:30 PM	to	5:30 PM		0	14	5	7	20	8	10	18	2	4	13	3	**104**
4:45 PM	to	5:45 PM		0	16	4	5	21	7	9	19	2	3	13	4	**103**
5:00 PM	to	6:00 PM		0	14	5	6	25	6	9	14	2	2	13	3	**99**

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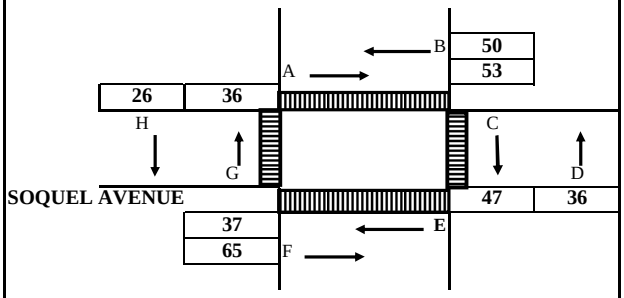
	NBT	SBT	EBT	WBT	TOTAL
BICYCLE	22	23	22	16	**83**

B.A.Y.M.E.T.R.I.C.S.

PEDESTRIAN MOVEMENT SUMMARY

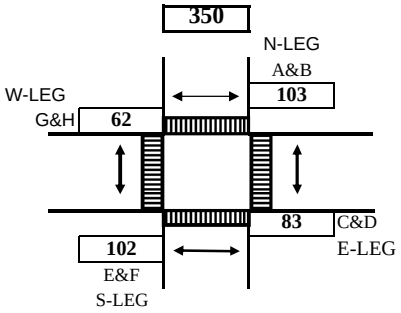
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**
N-S APPROACH:	**FRONT STREET**	**DAY:**	**TUESDAY**
E-W APPROACH:	**SOQUEL AVENUE**	**JURISDICTION:**	**SANTA CRUZ**
SURVEY PERIOD:	**4:00 PM TO 6:00 PM**	**FILE:**	**3211084-3**

PEAK HOUR
04:00 PM TO 05:00 PM



FRONT STREET

PEAK HOUR
TOTAL PEDESTRIAN VOLUMES



TIME PERIOD From		To	NORTH X-WALK A	B	EAST X-WALK C	D	SOUTH X-WALK E	F	WEST X-WALK G	H	TOTAL
SURVEY DATA											
04:00 PM	---	04:15 PM	16	15	9	11	12	21	4	3	***91***
04:15 PM	---	04:30 PM	34	28	30	21	18	31	14	12	***188***
04:30 PM	---	04:45 PM	47	38	39	29	25	44	24	20	***266***
04:45 PM	---	05:00 PM	53	50	47	36	37	65	36	26	***350***
05:00 PM	---	05:15 PM	61	66	58	45	43	75	45	31	***424***
05:15 PM	---	05:30 PM	76	84	67	51	52	88	52	41	***511***
05:30 PM	---	05:45 PM	88	98	74	60	62	100	65	49	***596***
05:45 PM	---	06:00 PM	99	111	80	68	71	108	71	53	***661***
TOTAL BY PERIOD											
04:00 PM	---	04:15 PM	16	15	9	11	12	21	4	3	***91***
04:15 PM	---	04:30 PM	18	13	21	10	6	10	10	9	***97***
04:30 PM	---	04:45 PM	13	10	9	8	7	13	10	8	***78***
04:45 PM	---	05:00 PM	6	12	8	7	12	21	12	6	***84***
05:00 PM	---	05:15 PM	8	16	11	9	6	10	9	5	***74***
05:15 PM	---	05:30 PM	15	18	9	6	9	13	7	10	***87***
05:30 PM	---	05:45 PM	12	14	7	9	10	12	13	8	***85***
05:45 PM	---	06:00 PM	11	13	6	8	9	8	6	4	***65***
HOURLY TOTALS											
04:00 PM	---	05:00 PM	53	50	47	36	37	65	36	26	***350***
04:15 PM	---	05:15 PM	45	51	49	34	31	54	41	28	***333***
04:30 PM	---	05:30 PM	42	56	37	30	34	57	38	29	***323***
04:45 PM	---	05:45 PM	41	60	35	31	37	56	41	29	***330***
05:00 PM	---	06:00 PM	46	61	33	32	34	43	35	27	***311***

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	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
PEDESTRIAN	103	102	83	62	**350**

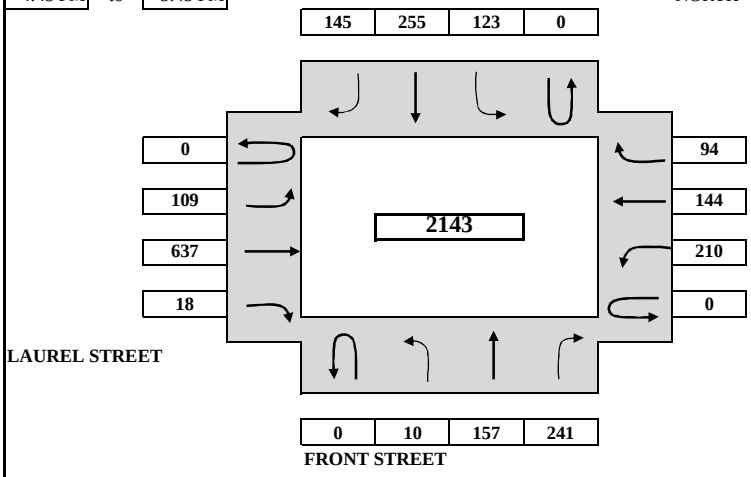
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

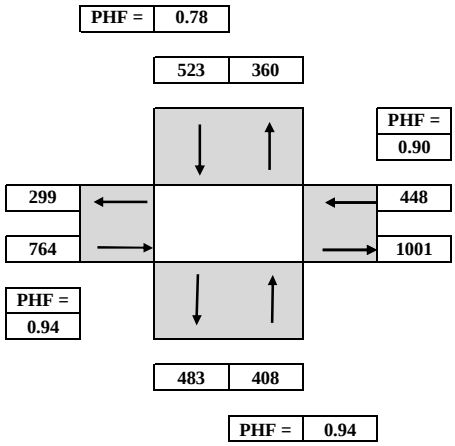
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**FRONT STREET**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**LAUREL STREET**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-4**

PEAK HOUR 4:45 PM to 5:45 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME PERIOD			NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
From		To	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	
SURVEY DATA																			
4:00 PM	to	4:15 PM		1	46	53		31	59	31		28	156	3		51	15	17	**491**
4:15 PM	to	4:30 PM		5	96	101		54	127	62		51	307	8		96	29	53	**989**
4:30 PM	to	4:45 PM		9	147	161		84	194	89		78	441	14		151	42	90	**1500**
4:45 PM	to	5:00 PM		9	193	224		113	284	138		104	572	20		221	63	123	**2064**
5:00 PM	to	5:15 PM		14	225	283		145	343	175		129	741	22		272	96	143	**2588**
5:15 PM	to	5:30 PM		16	262	341		174	395	204		160	907	28		318	149	165	**3119**
5:30 PM	to	5:45 PM		19	304	402		207	449	234		187	1078	32		361	186	184	**3643**
5:45 PM	to	6:00 PM		23	339	459		222	497	263		216	1185	38		403	221	207	**4073**
TOTAL BY PERIOD																			
4:00 PM	to	4:15 PM	0	1	46	53	0	31	59	31	0	28	156	3	0	51	15	17	**491**
4:15 PM	to	4:30 PM	0	4	50	48	0	23	68	31	0	23	151	5	0	45	14	36	**498**
4:30 PM	to	4:45 PM	0	4	51	60	0	30	67	27	0	27	134	6	0	55	13	37	**511**
4:45 PM	to	5:00 PM	0	0	46	63	0	29	90	49	0	26	131	6	0	70	21	33	**564**
5:00 PM	to	5:15 PM	0	5	32	59	0	32	59	37	0	25	169	2	0	51	33	20	**524**
5:15 PM	to	5:30 PM	0	2	37	58	0	29	52	29	0	31	166	6	0	46	53	22	**531**
5:30 PM	to	5:45 PM	0	3	42	61	0	33	54	30	0	27	171	4	0	43	37	19	**524**
5:45 PM	to	6:00 PM	0	4	35	57	0	15	48	29	0	29	107	6	0	42	35	23	**430**
HOURLY TOTALS																			
4:00 PM	to	5:00 PM	0	9	193	224	0	113	284	138	0	104	572	20	0	221	63	123	**2064**
4:15 PM	to	5:15 PM	0	13	179	230	0	114	284	144	0	101	585	19	0	221	81	126	**2097**
4:30 PM	to	5:30 PM	0	11	166	240	0	120	268	142	0	109	600	20	0	222	120	112	**2130**
4:45 PM	to	5:45 PM	0	10	157	241	0	123	255	145	0	109	637	18	0	210	144	94	**2143**
5:00 PM	to	6:00 PM	0	14	146	235	0	109	213	125	0	112	613	18	0	182	158	84	**2009**

TEL: (510) 232 - 1271 FAX: (510) 232 - 1272

SYNCHRO CVS FILE FORMAT

	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	10	157	241	0	123	255	145	0	109	637	18	0	210	144	94	**2143**
PEDESTRIAN																	**243**
BICYCLE																	**103**
PHF BY MOVEMENT	#DIV/0!	0.50	0.85	0.96	#DIV/0!	0.93	0.71	0.74	#DIV/0!	0.88	0.93	0.75	#DIV/0!	0.75	0.68	0.71	OVERALL
PHF BY APPROACH	0.94				0.78				0.94				0.90				0.95

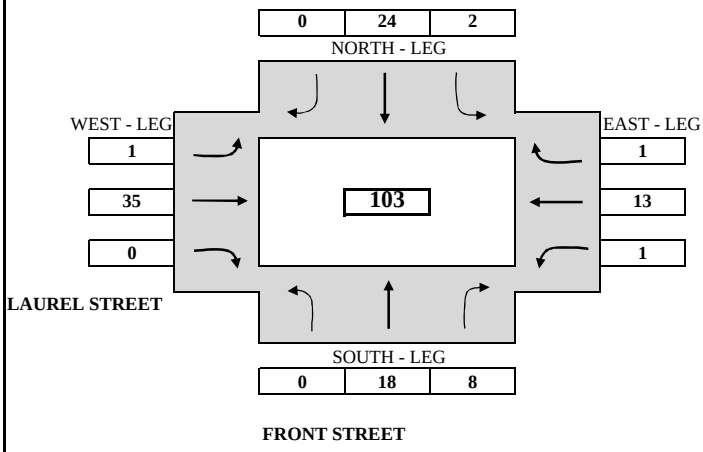
B.A.Y.M.E.T.R.I.C.S.

BICYCLE MOVEMENT SUMMARY

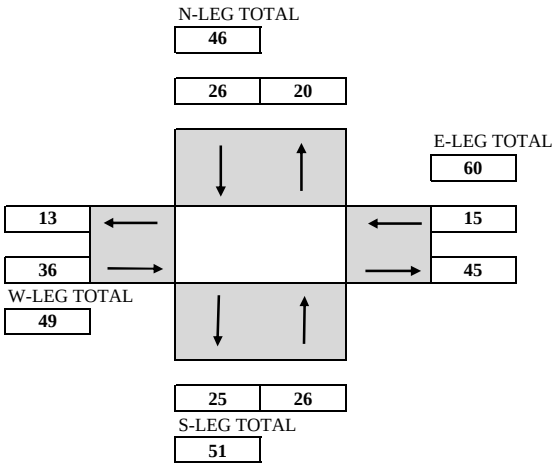
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**FRONT STREET**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**LAUREL STREET**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-4**

PEAK HOUR 4:45 PM TO 5:45 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME	PERIOD		NB (SOUTH - LEG)			SB (NORTH - LEG)			EB (WEST - LEG)			WB (EAST - LEG)			TOTAL
From		To	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	
SURVEY DATA															
4:00 PM	to	4:15 PM	0	3	1	0	0	0	0	6	1	0	4	0	**15**
4:15 PM	to	4:30 PM	0	10	1	0	5	0	0	10	1	0	9	1	**37**
4:30 PM	to	4:45 PM	1	15	3	1	7	1	0	13	3	0	10	1	**55**
4:45 PM	to	5:00 PM	1	19	4	2	11	1	1	20	3	0	16	2	**80**
5:00 PM	to	5:15 PM	1	23	6	3	18	1	1	28	3	0	19	2	**105**
5:15 PM	to	5:30 PM	1	27	10	3	24	1	1	40	3	1	19	2	**132**
5:30 PM	to	5:45 PM	1	33	11	3	31	1	1	48	3	1	23	2	**158**
5:45 PM	to	6:00 PM	1	41	12	3	40	1	1	51	3	1	25	2	**181**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	0	3	1	0	0	0	0	6	1	0	4	0	**15**
4:15 PM	to	4:30 PM	0	7	0	0	5	0	0	4	0	0	5	1	**22**
4:30 PM	to	4:45 PM	1	5	2	1	2	1	0	3	2	0	1	0	**18**
4:45 PM	to	5:00 PM	0	4	1	1	4	0	1	7	0	0	6	1	**25**
5:00 PM	to	5:15 PM	0	4	2	1	7	0	0	8	0	0	3	0	**25**
5:15 PM	to	5:30 PM	0	4	4	0	6	0	0	12	0	1	0	0	**27**
5:30 PM	to	5:45 PM	0	6	1	0	7	0	0	8	0	0	4	0	**26**
5:45 PM	to	6:00 PM	0	8	1	0	9	0	0	3	0	0	2	0	**23**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	1	19	4	2	11	1	1	20	3	0	16	2	**80**
4:15 PM	to	5:15 PM	1	20	5	3	18	1	1	22	2	0	15	2	**90**
4:30 PM	to	5:30 PM	1	17	9	3	19	1	1	30	2	1	10	1	**95**
4:45 PM	to	5:45 PM	0	18	8	2	24	0	1	35	0	1	13	1	**103**
5:00 PM	to	6:00 PM	0	22	8	1	29	0	0	31	0	1	9	0	**101**

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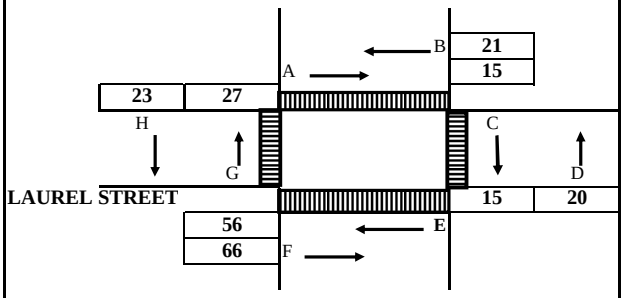
	NBT	SBT	EBT	WBT	TOTAL
BICYCLE	26	26	36	15	**103**

B . A . Y . M . E . T . R . I . C . S .

PEDESTRIAN MOVEMENT SUMMARY

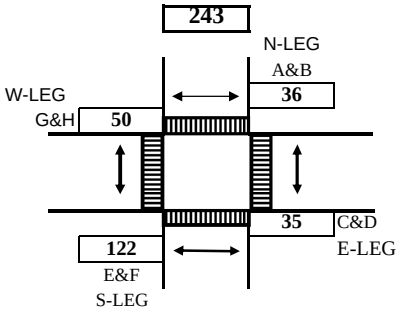
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**
N-S APPROACH:	**FRONT STREET**	**DAY:**	**TUESDAY**
E-W APPROACH:	**LAUREL STREET**	**JURISDICTION:**	**SANTA CRUZ**
SURVEY PERIOD:	**4:00 PM TO 6:00 PM**	**FILE:**	**3211084-4**

PEAK HOUR
04:45 PM TO 05:45 PM



FRONT STREET

PEAK HOUR
TOTAL PEDESTRIAN VOLUMES



TIME PERIOD From		To	NORTH X-WALK A	B	EAST X-WALK C	D	SOUTH X-WALK E	F	WEST X-WALK G	H	TOTAL
SURVEY DATA											
04:00 PM	---	04:15 PM	5	3	6	10	13	20	12	7	***76***
04:15 PM	---	04:30 PM	11	8	11	18	23	35	19	15	***140***
04:30 PM	---	04:45 PM	16	15	14	25	40	54	28	21	***213***
04:45 PM	---	05:00 PM	20	19	21	35	55	70	36	26	***282***
05:00 PM	---	05:15 PM	23	22	25	40	73	86	46	33	***348***
05:15 PM	---	05:30 PM	29	28	27	43	86	105	51	39	***408***
05:30 PM	---	05:45 PM	31	36	29	45	96	120	55	44	***456***
05:45 PM	---	06:00 PM	32	41	32	48	101	126	58	47	***485***
TOTAL BY PERIOD											
04:00 PM	---	04:15 PM	5	3	6	10	13	20	12	7	***76***
04:15 PM	---	04:30 PM	6	5	5	8	10	15	7	8	***64***
04:30 PM	---	04:45 PM	5	7	3	7	17	19	9	6	***73***
04:45 PM	---	05:00 PM	4	4	7	10	15	16	8	5	***69***
05:00 PM	---	05:15 PM	3	3	4	5	18	16	10	7	***66***
05:15 PM	---	05:30 PM	6	6	2	3	13	19	5	6	***60***
05:30 PM	---	05:45 PM	2	8	2	2	10	15	4	5	***48***
05:45 PM	---	06:00 PM	1	5	3	3	5	6	3	3	***29***
HOURLY TOTALS											
04:00 PM	---	05:00 PM	20	19	21	35	55	70	36	26	***282***
04:15 PM	---	05:15 PM	18	19	19	30	60	66	34	26	***272***
04:30 PM	---	05:30 PM	18	20	16	25	63	70	32	24	***268***
04:45 PM	---	05:45 PM	15	21	15	20	56	66	27	23	***243***
05:00 PM	---	06:00 PM	12	22	11	13	46	56	22	21	***203***

Tel : (510) 232-1271 ***Fax: (510) 232-1272***

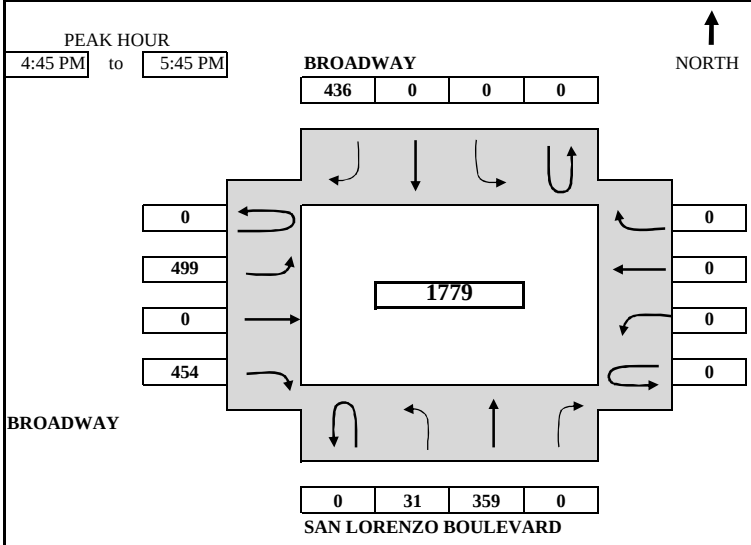
	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
PEDESTRIAN	36	122	35	50	**243**

B.A.Y.M.E.T.R.I.C.S.

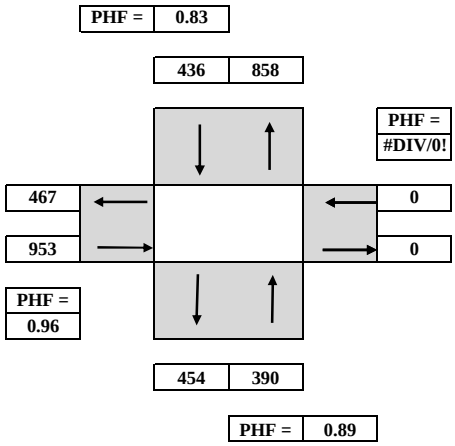
INTERSECTION TURNING MOVEMENT SUMMARY

PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SAN LORENZO BOULEVARD - BROADWAY**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**BROADWAY**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-5**

PEAK HOUR 4:45 PM to 5:45 PM



ARRIVAL / DEPARTURE VOLUMES



TIME PERIOD			NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
From		To	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	
SURVEY DATA																			
4:00 PM	to	4:15 PM		6	78					89		121		118					**412**
4:15 PM	to	4:30 PM		15	168					170		235		224					**812**
4:30 PM	to	4:45 PM		18	252					269		352		331					**1222**
4:45 PM	to	5:00 PM		22	345					366		461		436					**1630**
5:00 PM	to	5:15 PM		36	440					480		594		549					**2099**
5:15 PM	to	5:30 PM		41	522					612		722		668					**2565**
5:30 PM	to	5:45 PM		49	611					705		851		785					**3001**
5:45 PM	to	6:00 PM		59	682					788		962		887					**3378**
TOTAL BY PERIOD																			
4:00 PM	to	4:15 PM	0	6	78	0	0	0	0	89	0	121	0	118	0	0	0	0	**412**
4:15 PM	to	4:30 PM	0	9	90	0	0	0	0	81	0	114	0	106	0	0	0	0	**400**
4:30 PM	to	4:45 PM	0	3	84	0	0	0	0	99	0	117	0	107	0	0	0	0	**410**
4:45 PM	to	5:00 PM	0	4	93	0	0	0	0	97	0	109	0	105	0	0	0	0	**408**
5:00 PM	to	5:15 PM	0	14	95	0	0	0	0	114	0	133	0	113	0	0	0	0	**469**
5:15 PM	to	5:30 PM	0	5	82	0	0	0	0	132	0	128	0	119	0	0	0	0	**466**
5:30 PM	to	5:45 PM	0	8	89	0	0	0	0	93	0	129	0	117	0	0	0	0	**436**
5:45 PM	to	6:00 PM	0	10	71	0	0	0	0	83	0	111	0	102	0	0	0	0	**377**
HOURLY TOTALS																			
4:00 PM	to	5:00 PM	0	22	345	0	0	0	0	366	0	461	0	436	0	0	0	0	**1630**
4:15 PM	to	5:15 PM	0	30	362	0	0	0	0	391	0	473	0	431	0	0	0	0	**1687**
4:30 PM	to	5:30 PM	0	26	354	0	0	0	0	442	0	487	0	444	0	0	0	0	**1753**
4:45 PM	to	5:45 PM	0	31	359	0	0	0	0	436	0	499	0	454	0	0	0	0	**1779**
5:00 PM	to	6:00 PM	0	37	337	0	0	0	0	422	0	501	0	451	0	0	0	0	**1748**

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SYNCHRO CVS FILE FORMAT

	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	31	359	0	0	0	0	436	0	499	0	454	0	0	0	0	**1779**
PEDESTRIAN																	**145**
BICYCLE																	**61**
PHF BY MOVEMENT	#DIV/0!	0.55	0.94	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.83	#DIV/0!	0.94	#DIV/0!	0.95	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	OVERALL
PHF BY APPROACH	0.89				0.83				0.96				#DIV/0!				0.95

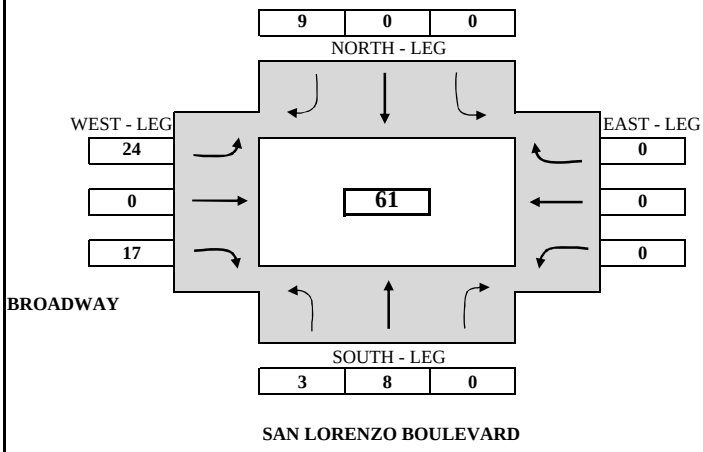
B.A.Y.M.E.T.R.I.C.S.

BICYCLE MOVEMENT SUMMARY

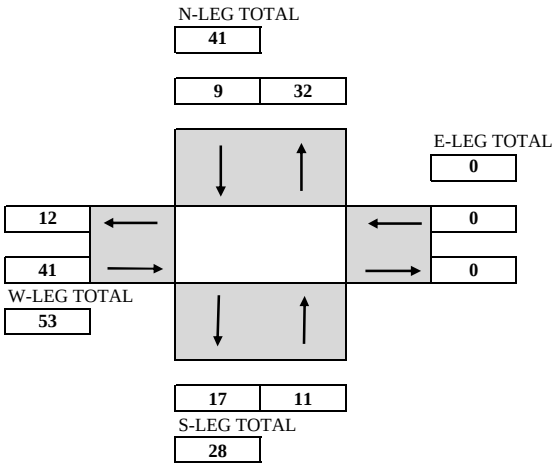
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SAN LORENZO BOULEVARD - BROADWAY**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**BROADWAY**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-5**

PEAK HOUR 4:45 PM TO 5:45 PM **BROADWAY**

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME	PERIOD		NB (SOUTH - LEG)			SB (NORTH - LEG)			EB (WEST - LEG)			WB (EAST - LEG)			TOTAL
From		To	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	
SURVEY DATA															
4:00 PM	to	4:15 PM	0	6	0	0	0	3	3	0	4	0	0	0	**16**
4:15 PM	to	4:30 PM	2	6	0	0	0	5	4	0	6	0	0	0	**23**
4:30 PM	to	4:45 PM	2	8	0	0	0	8	7	0	9	0	0	0	**34**
4:45 PM	to	5:00 PM	3	9	0	0	0	11	12	0	13	0	0	0	**48**
5:00 PM	to	5:15 PM	3	12	0	0	0	12	19	0	16	0	0	0	**62**
5:15 PM	to	5:30 PM	5	13	0	0	0	13	27	0	22	0	0	0	**80**
5:30 PM	to	5:45 PM	5	16	0	0	0	17	31	0	26	0	0	0	**95**
5:45 PM	to	6:00 PM	7	18	0	0	0	17	35	0	27	0	0	0	**104**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	0	6	0	0	0	3	3	0	4	0	0	0	**16**
4:15 PM	to	4:30 PM	2	0	0	0	0	2	1	0	2	0	0	0	**7**
4:30 PM	to	4:45 PM	0	2	0	0	0	3	3	0	3	0	0	0	**11**
4:45 PM	to	5:00 PM	1	1	0	0	0	3	5	0	4	0	0	0	**14**
5:00 PM	to	5:15 PM	0	3	0	0	0	1	7	0	3	0	0	0	**14**
5:15 PM	to	5:30 PM	2	1	0	0	0	1	8	0	6	0	0	0	**18**
5:30 PM	to	5:45 PM	0	3	0	0	0	4	4	0	4	0	0	0	**15**
5:45 PM	to	6:00 PM	2	2	0	0	0	0	4	0	1	0	0	0	**9**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	3	9	0	0	0	11	12	0	13	0	0	0	**48**
4:15 PM	to	5:15 PM	3	6	0	0	0	9	16	0	12	0	0	0	**46**
4:30 PM	to	5:30 PM	3	7	0	0	0	8	23	0	16	0	0	0	**57**
4:45 PM	to	5:45 PM	3	8	0	0	0	9	24	0	17	0	0	0	**61**
5:00 PM	to	6:00 PM	4	9	0	0	0	6	23	0	14	0	0	0	**56**

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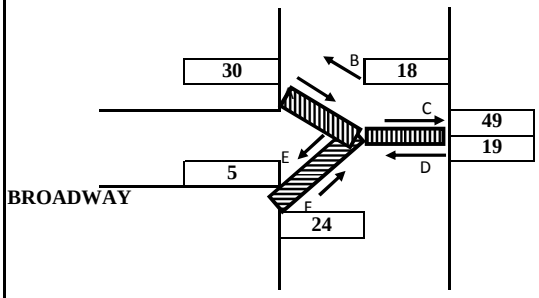
	NBT	SBT	EBT	WBT	TOTAL
BICYCLE	11	9	41	0	**61**

B . A . Y . M . E . T . R . I . C . S .

PEDESTRIAN MOVEMENT SUMMARY

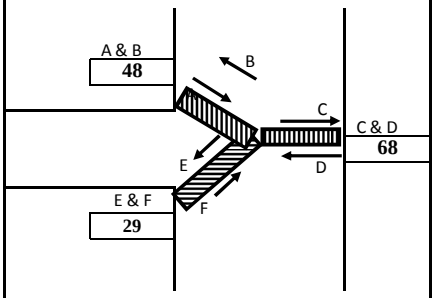
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**
N-S APPROACH:	**SAN LORENZO BOULEVARD - BROADWAY**	**DAY:**	**TUESDAY**
E-W APPROACH:	**BROADWAY**	**JURISDICTION:**	**SANTA CRUZ**
SURVEY PERIOD:	**4:00 PM TO 6:00 PM**	**FILE:**	**3211084-5**

PEAK HOUR
04:45 PM TO 05:45 PM **BROADWAY**



SAN LORENZO BOULEVARD

PEAK HOUR
TOTAL PEDESTRIAN VOLUMES
145



TIME PERIOD			NORTH X-WALK		EAST X-WALK		SOUTH X-WALK		WEST X-WALK		
From		**To**	***A***	***B***	***C***	***D***	***E***	***F***	***G***	***H***	***TOTAL***
SURVEY DATA											
04:00 PM	---	04:15 PM	4	6	6	4	1	6	0	0	***27***
04:15 PM	---	04:30 PM	8	12	13	9	2	10	0	0	***54***
04:30 PM	---	04:45 PM	17	19	23	18	4	14	0	0	***95***
04:45 PM	---	05:00 PM	23	27	34	25	4	18	0	0	***131***
05:00 PM	---	05:15 PM	32	29	46	29	7	24	0	0	***167***
05:15 PM	---	05:30 PM	38	34	58	33	8	33	0	0	***204***
05:30 PM	---	05:45 PM	47	37	72	37	9	38	0	0	***240***
05:45 PM	---	06:00 PM	53	40	80	42	11	41	0	0	***267***
TOTAL BY PERIOD											
04:00 PM	---	04:15 PM	4	6	6	4	1	6	0	0	***27***
04:15 PM	---	04:30 PM	4	6	7	5	1	4	0	0	***27***
04:30 PM	---	04:45 PM	9	7	10	9	2	4	0	0	***41***
04:45 PM	---	05:00 PM	6	8	11	7	0	4	0	0	***36***
05:00 PM	---	05:15 PM	9	2	12	4	3	6	0	0	***36***
05:15 PM	---	05:30 PM	6	5	12	4	1	9	0	0	***37***
05:30 PM	---	05:45 PM	9	3	14	4	1	5	0	0	***36***
05:45 PM	---	06:00 PM	6	3	8	5	2	3	0	0	***27***
HOURLY TOTALS											
04:00 PM	---	05:00 PM	23	27	34	25	4	18	0	0	***131***
04:15 PM	---	05:15 PM	28	23	40	25	6	18	0	0	***140***
04:30 PM	---	05:30 PM	30	22	45	24	6	23	0	0	***150***
04:45 PM	---	05:45 PM	30	18	49	19	5	24	0	0	***145***
05:00 PM	---	06:00 PM	30	13	46	17	7	23	0	0	***136***

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	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
PEDESTRIAN	48	29	0	68	**145**

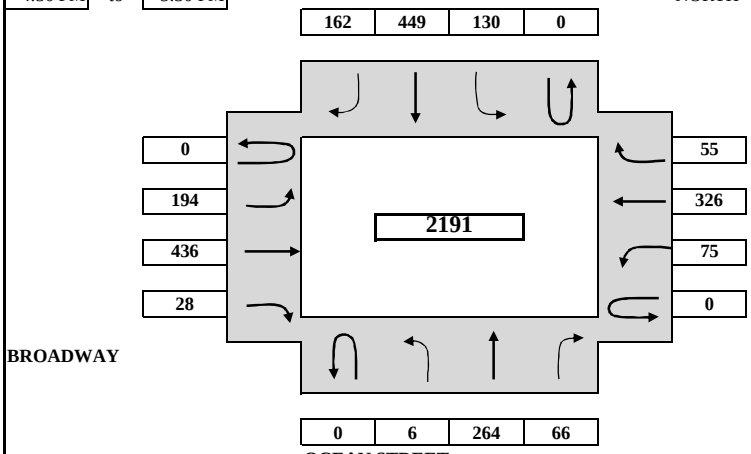
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

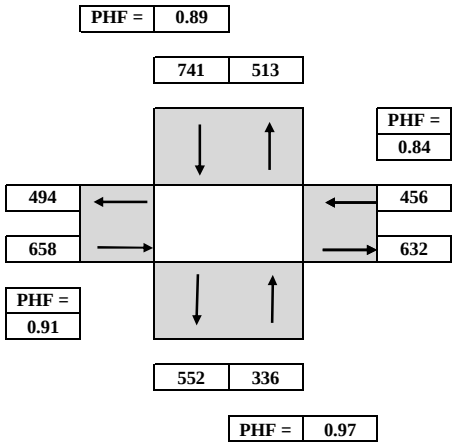
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**OCEAN STREET**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**BROADWAY**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-6**

PEAK HOUR 4:30 PM to 5:30 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME PERIOD			NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
From		To	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	
SURVEY DATA																			
4:00 PM	to	4:15 PM		1	57	20		18	113	29		51	93	7		14	57	20	**480**
4:15 PM	to	4:30 PM		4	124	38		41	234	59		104	174	16		28	116	39	**977**
4:30 PM	to	4:45 PM		4	191	58		63	340	96		149	271	21		45	196	52	**1486**
4:45 PM	to	5:00 PM		6	258	71		99	448	129		196	379	28		60	270	64	**2008**
5:00 PM	to	5:15 PM		8	320	90		131	566	169		249	496	38		85	342	77	**2571**
5:15 PM	to	5:30 PM		10	388	104		171	683	221		298	610	44		103	442	94	**3168**
5:30 PM	to	5:45 PM		12	431	128		190	793	268		353	712	49		115	507	104	**3662**
5:45 PM	to	6:00 PM		12	492	157		230	869	304		399	811	58		134	565	117	**4148**
TOTAL BY PERIOD																			
4:00 PM	to	4:15 PM	0	1	57	20	0	18	113	29	0	51	93	7	0	14	57	20	**480**
4:15 PM	to	4:30 PM	0	3	67	18	0	23	121	30	0	53	81	9	0	14	59	19	**497**
4:30 PM	to	4:45 PM	0	0	67	20	0	22	106	37	0	45	97	5	0	17	80	13	**509**
4:45 PM	to	5:00 PM	0	2	67	13	0	36	108	33	0	47	108	7	0	15	74	12	**522**
5:00 PM	to	5:15 PM	0	2	62	19	0	32	118	40	0	53	117	10	0	25	72	13	**563**
5:15 PM	to	5:30 PM	0	2	68	14	0	40	117	52	0	49	114	6	0	18	100	17	**597**
5:30 PM	to	5:45 PM	0	2	43	24	0	19	110	47	0	55	102	5	0	12	65	10	**494**
5:45 PM	to	6:00 PM	0	0	61	29	0	40	76	36	0	46	99	9	0	19	58	13	**486**
HOURLY TOTALS																			
4:00 PM	to	5:00 PM	0	6	258	71	0	99	448	129	0	196	379	28	0	60	270	64	**2008**
4:15 PM	to	5:15 PM	0	7	263	70	0	113	453	140	0	198	403	31	0	71	285	57	**2091**
4:30 PM	to	5:30 PM	0	6	264	66	0	130	449	162	0	194	436	28	0	75	326	55	**2191**
4:45 PM	to	5:45 PM	0	8	240	70	0	127	453	172	0	204	441	28	0	70	311	52	**2176**
5:00 PM	to	6:00 PM	0	6	234	86	0	131	421	175	0	203	432	30	0	74	295	53	**2140**

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SYNCHRO CVS FILE FORMAT

	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	6	264	66	0	130	449	162	0	194	436	28	0	75	326	55	**2191**
PEDESTRIAN																	**87**
BICYCLE																	**27**
PHF BY MOVEMENT	#DIV/0!	0.75	0.97	0.83	#DIV/0!	0.81	0.95	0.78	#DIV/0!	0.92	0.93	0.70	#DIV/0!	0.75	0.82	0.81	OVERALL
PHF BY APPROACH	0.97				0.89				0.91				0.84				0.92

B.A.Y.M.E.T.R.I.C.S.

BICYCLE MOVEMENT SUMMARY

PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**OCEAN STREET**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**BROADWAY**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-6**

PEAK HOUR 4:30 PM TO 5:30 PM

NORTH

NORTH - LEG: 0 | 1 | 0

WEST - LEG: 0 / 13 / 1

EAST - LEG: 0 / 12 / 0

27

SOUTH - LEG: 0 | 0 | 0

BROADWAY

OCEAN STREET

ARRIVAL / DEPARTURE VOLUMES

N-LEG TOTAL: 1 (1 | 0)

E-LEG TOTAL: 25 (12 / 13)

W-LEG TOTAL: 26 (12 / 14)

S-LEG TOTAL: 2 (2 | 0)

TIME From		PERIOD To	NB (SOUTH - LEG) LEFT	NB THRU	NB RIGHT	SB (NORTH - LEG) LEFT	SB THRU	SB RIGHT	EB (WEST - LEG) LEFT	EB THRU	EB RIGHT	WB (EAST - LEG) LEFT	WB THRU	WB RIGHT	TOTAL
SURVEY DATA															
4:00 PM	to	4:15 PM	0	0	0	0	0	1	1	3	0	0	0	0	**5**
4:15 PM	to	4:30 PM	0	0	0	0	0	1	1	5	0	0	4	2	**13**
4:30 PM	to	4:45 PM	0	0	0	0	0	1	1	7	0	0	9	2	**20**
4:45 PM	to	5:00 PM	0	0	0	0	1	1	1	8	1	0	12	2	**26**
5:00 PM	to	5:15 PM	0	0	0	0	1	1	1	14	1	0	13	2	**33**
5:15 PM	to	5:30 PM	0	0	0	0	1	1	1	18	1	0	16	2	**40**
5:30 PM	to	5:45 PM	0	1	0	0	2	1	1	21	1	0	18	2	**47**
5:45 PM	to	6:00 PM	0	1	0	0	3	1	1	24	3	0	19	2	**54**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	0	0	0	0	0	1	1	3	0	0	0	0	**5**
4:15 PM	to	4:30 PM	0	0	0	0	0	0	0	2	0	0	4	2	**8**
4:30 PM	to	4:45 PM	0	0	0	0	0	0	0	2	0	0	5	0	**7**
4:45 PM	to	5:00 PM	0	0	0	0	1	0	0	1	1	0	3	0	**6**
5:00 PM	to	5:15 PM	0	0	0	0	0	0	0	6	0	0	1	0	**7**
5:15 PM	to	5:30 PM	0	0	0	0	0	0	0	4	0	0	3	0	**7**
5:30 PM	to	5:45 PM	0	1	0	0	1	0	0	3	0	0	2	0	**7**
5:45 PM	to	6:00 PM	0	0	0	0	1	0	0	3	2	0	1	0	**7**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	0	0	0	0	1	1	1	8	1	0	12	2	**26**
4:15 PM	to	5:15 PM	0	0	0	0	1	0	0	11	1	0	13	2	**28**
4:30 PM	to	5:30 PM	0	0	0	0	1	0	0	13	1	0	12	0	**27**
4:45 PM	to	5:45 PM	0	1	0	0	2	0	0	14	1	0	9	0	**27**
5:00 PM	to	6:00 PM	0	1	0	0	2	0	0	16	2	0	7	0	**28**

TEL: (510) 232 - 1271 FAX: (510) 232 - 1272

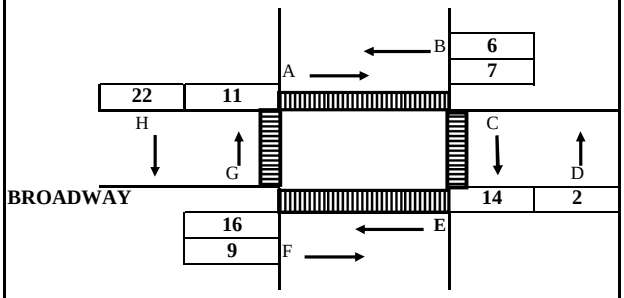
	NBT	SBT	EBT	WBT	TOTAL
BICYCLE	0	1	14	12	**27**

B.A.Y.M.E.T.R.I.C.S.

PEDESTRIAN MOVEMENT SUMMARY

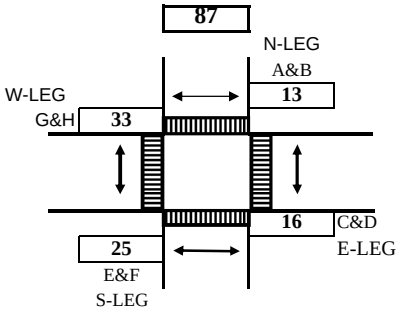
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**
N-S APPROACH:	**OCEAN STREET**	**DAY:**	**TUESDAY**
E-W APPROACH:	**BROADWAY**	**JURISDICTION:**	**SANTA CRUZ**
SURVEY PERIOD:	**4:00 PM TO 6:00 PM**	**FILE:**	**3211084-6**

PEAK HOUR
04:30 PM TO 05:30 PM



OCEAN STREET

PEAK HOUR
TOTAL PEDESTRIAN VOLUMES



TIME PERIOD			NORTH X-WALK		EAST X-WALK		SOUTH X-WALK		WEST X-WALK		
From		**To**	***A***	***B***	***C***	***D***	***E***	***F***	***G***	***H***	***TOTAL***
SURVEY DATA											
04:00 PM	---	04:15 PM	3	0	5	2	2	3	0	1	***16***
04:15 PM	---	04:30 PM	4	1	8	5	2	5	1	5	***31***
04:30 PM	---	04:45 PM	6	2	10	5	6	5	2	10	***46***
04:45 PM	---	05:00 PM	7	7	12	6	11	8	6	17	***74***
05:00 PM	---	05:15 PM	9	7	18	7	15	9	8	20	***93***
05:15 PM	---	05:30 PM	11	7	22	7	18	14	12	27	***118***
05:30 PM	---	05:45 PM	14	8	23	14	21	21	16	34	***151***
05:45 PM	---	06:00 PM	15	8	26	18	21	22	18	34	***162***
TOTAL BY PERIOD											
04:00 PM	---	04:15 PM	3	0	5	2	2	3	0	1	***16***
04:15 PM	---	04:30 PM	1	1	3	3	0	2	1	4	***15***
04:30 PM	---	04:45 PM	2	1	2	0	4	0	1	5	***15***
04:45 PM	---	05:00 PM	1	5	2	1	5	3	4	7	***28***
05:00 PM	---	05:15 PM	2	0	6	1	4	1	2	3	***19***
05:15 PM	---	05:30 PM	2	0	4	0	3	5	4	7	***25***
05:30 PM	---	05:45 PM	3	1	1	7	3	7	4	7	***33***
05:45 PM	---	06:00 PM	1	0	3	4	0	1	2	0	***11***
HOURLY TOTALS											
04:00 PM	---	05:00 PM	7	7	12	6	11	8	6	17	***74***
04:15 PM	---	05:15 PM	6	7	13	5	13	6	8	19	***77***
04:30 PM	---	05:30 PM	7	6	14	2	16	9	11	22	***87***
04:45 PM	---	05:45 PM	8	6	13	9	15	16	14	24	***105***
05:00 PM	---	06:00 PM	8	1	14	12	10	14	12	17	***88***

Tel : (510) 232-1271 ***Fax: (510) 232-1272***

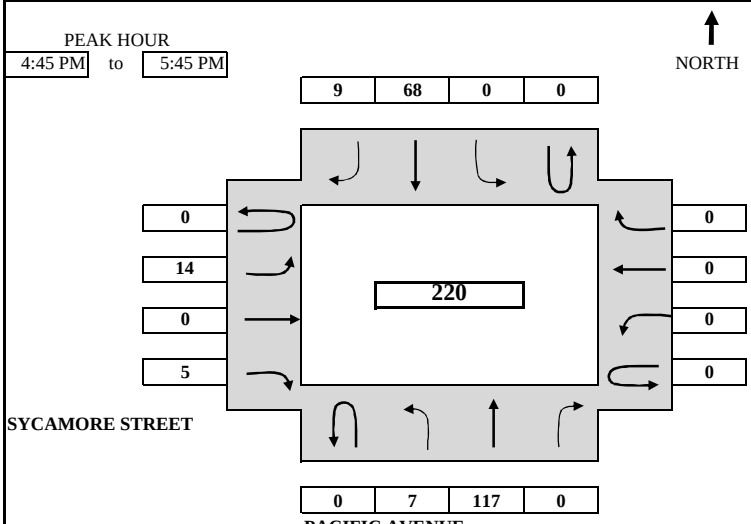
	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
PEDESTRIAN	13	25	16	33	**87**

B.A.Y.M.E.T.R.I.C.S.

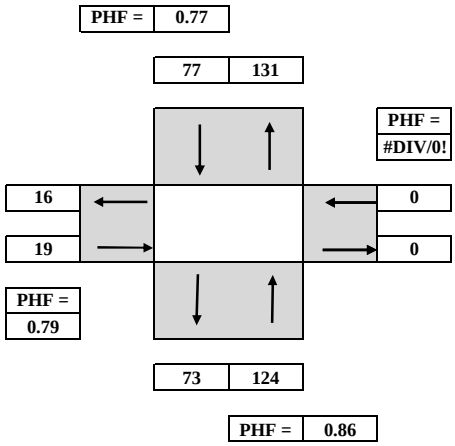
INTERSECTION TURNING MOVEMENT SUMMARY

PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**PACIFIC AVENUE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**SYCAMORE STREET**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-7**

PEAK HOUR 4:45 PM to 5:45 PM



ARRIVAL / DEPARTURE VOLUMES



TIME PERIOD			NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
From		To	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	
SURVEY DATA																			
4:00 PM	to	4:15 PM		1	25				18	3		0		0					**47**
4:15 PM	to	4:30 PM		1	51				38	5		6		2					**103**
4:30 PM	to	4:45 PM		3	84				49	5		7		5					**153**
4:45 PM	to	5:00 PM		3	108				71	8		9		7					**206**
5:00 PM	to	5:15 PM		3	140				92	10		12		7					**264**
5:15 PM	to	5:30 PM		8	167				104	13		16		9					**317**
5:30 PM	to	5:45 PM		10	201				117	14		21		10					**373**
5:45 PM	to	6:00 PM		12	230				125	15		27		12					**421**
TOTAL BY PERIOD																			
4:00 PM	to	4:15 PM	0	1	25	0	0	0	18	3	0	0	0	0	0	0	0	0	**47**
4:15 PM	to	4:30 PM	0	0	26	0	0	0	20	2	0	6	0	2	0	0	0	0	**56**
4:30 PM	to	4:45 PM	0	2	33	0	0	0	11	0	0	1	0	3	0	0	0	0	**50**
4:45 PM	to	5:00 PM	0	0	24	0	0	0	22	3	0	2	0	2	0	0	0	0	**53**
5:00 PM	to	5:15 PM	0	0	32	0	0	0	21	2	0	3	0	0	0	0	0	0	**58**
5:15 PM	to	5:30 PM	0	5	27	0	0	0	12	3	0	4	0	2	0	0	0	0	**53**
5:30 PM	to	5:45 PM	0	2	34	0	0	0	13	1	0	5	0	1	0	0	0	0	**56**
5:45 PM	to	6:00 PM	0	2	29	0	0	0	8	1	0	6	0	2	0	0	0	0	**48**
HOURLY TOTALS																			
4:00 PM	to	5:00 PM	0	3	108	0	0	0	71	8	0	9	0	7	0	0	0	0	**206**
4:15 PM	to	5:15 PM	0	2	115	0	0	0	74	7	0	12	0	7	0	0	0	0	**217**
4:30 PM	to	5:30 PM	0	7	116	0	0	0	66	8	0	10	0	7	0	0	0	0	**214**
4:45 PM	to	5:45 PM	0	7	117	0	0	0	68	9	0	14	0	5	0	0	0	0	**220**
5:00 PM	to	6:00 PM	0	9	122	0	0	0	54	7	0	18	0	5	0	0	0	0	**215**

TEL: (510) 232 - 1271 FAX: (510) 232 - 1272

SYNCHRO CVS FILE FORMAT

	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	7	117	0	0	0	68	9	0	14	0	5	0	0	0	0	**220**
PEDESTRIAN																	**70**
BICYCLE																	**30**
PHF BY MOVEMENT	#DIV/0!	0.35	0.86	#DIV/0!	#DIV/0!	#DIV/0!	0.77	0.75	#DIV/0!	0.70	#DIV/0!	0.63	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	OVERALL
PHF BY APPROACH	0.86				0.77				0.79				#DIV/0!				0.95

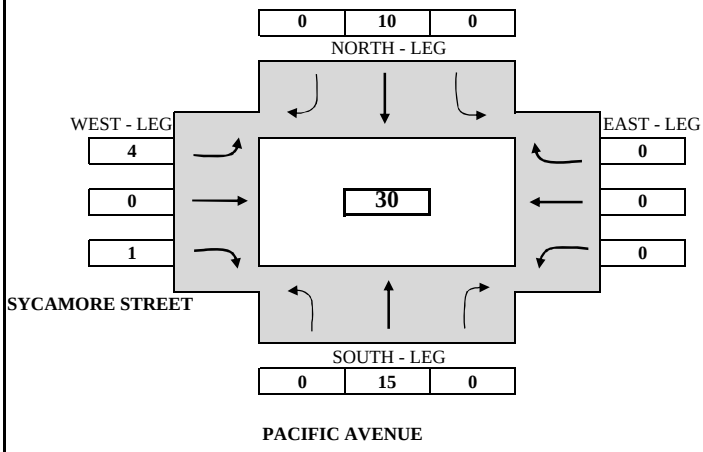
B.A.Y.M.E.T.R.I.C.S.

BICYCLE MOVEMENT SUMMARY

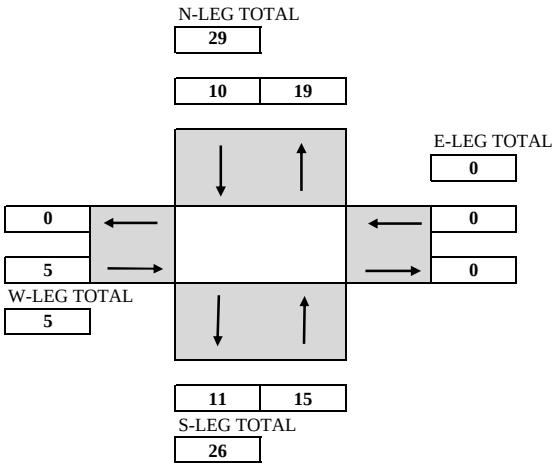
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**	**DAY:**	**TUESDAY**
N-S APPROACH:	**PACIFIC AVENUE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**SYCAMORE STREET**	**JURISDICTION:**	**SANTA CRUZ**	**FILE:**	**3211084-7**

PEAK HOUR 4:45 PM TO 5:45 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME	PERIOD		NB (SOUTH - LEG)			SB (NORTH - LEG)			EB (WEST - LEG)			WB (EAST - LEG)			TOTAL
From		To	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	
SURVEY DATA															
4:00 PM	to	4:15 PM	0	2	0	0	2	1	1	0	1	0	0	0	**7**
4:15 PM	to	4:30 PM	0	7	0	0	2	1	3	0	3	0	0	0	**16**
4:30 PM	to	4:45 PM	0	10	0	0	3	1	4	0	4	0	0	0	**22**
4:45 PM	to	5:00 PM	0	14	0	0	6	1	4	0	4	0	0	0	**29**
5:00 PM	to	5:15 PM	0	20	0	0	8	1	5	0	5	0	0	0	**39**
5:15 PM	to	5:30 PM	0	21	0	0	11	1	7	0	5	0	0	0	**45**
5:30 PM	to	5:45 PM	0	25	0	0	13	1	8	0	5	0	0	0	**52**
5:45 PM	to	6:00 PM	0	28	0	0	14	1	8	0	6	0	0	0	**57**
TOTAL BY PERIOD															
4:00 PM	to	4:15 PM	0	2	0	0	2	1	1	0	1	0	0	0	**7**
4:15 PM	to	4:30 PM	0	5	0	0	0	0	2	0	2	0	0	0	**9**
4:30 PM	to	4:45 PM	0	3	0	0	1	0	1	0	1	0	0	0	**6**
4:45 PM	to	5:00 PM	0	4	0	0	3	0	0	0	0	0	0	0	**7**
5:00 PM	to	5:15 PM	0	6	0	0	2	0	1	0	1	0	0	0	**10**
5:15 PM	to	5:30 PM	0	1	0	0	3	0	2	0	0	0	0	0	**6**
5:30 PM	to	5:45 PM	0	4	0	0	2	0	1	0	0	0	0	0	**7**
5:45 PM	to	6:00 PM	0	3	0	0	1	0	0	0	1	0	0	0	**5**
HOURLY TOTALS															
4:00 PM	to	5:00 PM	0	14	0	0	6	1	4	0	4	0	0	0	**29**
4:15 PM	to	5:15 PM	0	18	0	0	6	0	4	0	4	0	0	0	**32**
4:30 PM	to	5:30 PM	0	14	0	0	9	0	4	0	2	0	0	0	**29**
4:45 PM	to	5:45 PM	0	15	0	0	10	0	4	0	1	0	0	0	**30**
5:00 PM	to	6:00 PM	0	14	0	0	8	0	4	0	2	0	0	0	**28**

TEL: (510) 232 - 1271 FAX: (510) 232 - 1272

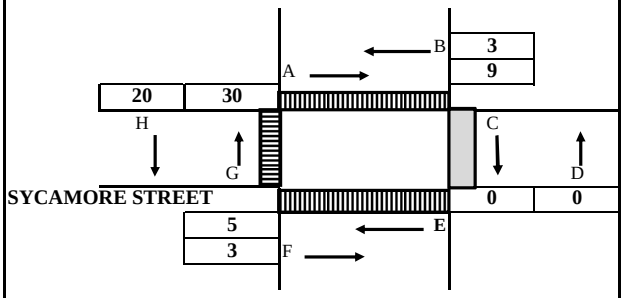
	NBT	SBT	EBT	WBT	TOTAL
BICYCLE	15	10	5	0	**30**

B.A.Y.M.E.T.R.I.C.S.

PEDESTRIAN MOVEMENT SUMMARY

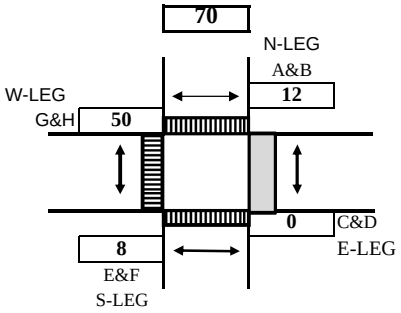
PROJECT:	**PM TRAFFIC COUNTS IN SANTA CRUZ**	**SURVEY DATE:**	**11/13/2012**
N-S APPROACH:	**PACIFIC AVENUE**	**DAY:**	**TUESDAY**
E-W APPROACH:	**SYCAMORE STREET**	**JURISDICTION:**	**SANTA CRUZ**
SURVEY PERIOD:	**4:00 PM TO 6:00 PM**	**FILE:**	**3211084-7**

PEAK HOUR
04:45 PM TO 05:45 PM



PACIFIC AVENUE

PEAK HOUR
TOTAL PEDESTRIAN VOLUMES



TIME PERIOD			NORTH X-WALK		EAST X-WALK		SOUTH X-WALK		WEST X-WALK		
From		To	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*TOTAL*
SURVEY DATA											
04:00 PM	---	04:15 PM	0	0	0	0	0	0	9	8	***17***
04:15 PM	---	04:30 PM	0	0	0	0	0	0	13	17	***30***
04:30 PM	---	04:45 PM	0	0	0	0	1	2	14	28	***45***
04:45 PM	---	05:00 PM	5	1	0	0	3	2	20	36	***67***
05:00 PM	---	05:15 PM	5	1	0	0	4	2	31	39	***82***
05:15 PM	---	05:30 PM	8	1	0	0	4	2	39	44	***98***
05:30 PM	---	05:45 PM	9	3	0	0	6	5	44	48	***115***
05:45 PM	---	06:00 PM	10	5	0	0	7	5	59	53	***139***
TOTAL BY PERIOD											
04:00 PM	---	04:15 PM	0	0	0	0	0	0	9	8	***17***
04:15 PM	---	04:30 PM	0	0	0	0	0	0	4	9	***13***
04:30 PM	---	04:45 PM	0	0	0	0	1	2	1	11	***15***
04:45 PM	---	05:00 PM	5	1	0	0	2	0	6	8	***22***
05:00 PM	---	05:15 PM	0	0	0	0	1	0	11	3	***15***
05:15 PM	---	05:30 PM	3	0	0	0	0	0	8	5	***16***
05:30 PM	---	05:45 PM	1	2	0	0	2	3	5	4	***17***
05:45 PM	---	06:00 PM	1	2	0	0	1	0	15	5	***24***
HOURLY TOTALS											
04:00 PM	---	05:00 PM	5	1	0	0	3	2	20	36	***67***
04:15 PM	---	05:15 PM	5	1	0	0	4	2	22	31	***65***
04:30 PM	---	05:30 PM	8	1	0	0	4	2	26	27	***68***
04:45 PM	---	05:45 PM	9	3	0	0	5	3	30	20	***70***
05:00 PM	---	06:00 PM	5	4	0	0	4	3	39	17	***72***

Tel : (510) 232-1271 ***Fax: (510) 232-1272***

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
PEDESTRIAN	12	8	0	50	**70**

SCMTD.COM

Customer Service (831) 425-8600

All METRO buses are wheelchair accessible, while some bus stops on this route may not be. **NOTA**: *Todos los autobuses de METRO son accesibles en silla de ruedas, pero algunas paradas en ésta ruta no son accesibles.*

All METRO buses are equipped with front bicycle racks that can carry up to three bicycles at a time. **NOTA:** *Todos los autobuses están equipados con portabicicletas en frente que pueden portar hasta tres a la vez.*

Local Santa Cruz Service
Effective / Vigente: Sep. 13, 2012

3 Mission / Beach

Departs	Departs	Departs	Departs	Departs	Arrives
Santa Cruz Metro Lane 2	Bay & Mission	Grandview & Arroyo Seco	De Anza Mobile Home Park	Beach & Pacific	Santa Cruz Metro Center
A	B	C	D	E	A
MONDAY - FRIDAY					
6:50 AM	6:58	7:02	7:10	7:20	7:35
7:50	7:58	8:02	8:10	8:20	8:35
8:50	8:58	9:02	9:10	9:20	9:35
9:50	9:58	10:02	10:10	10:20	10:35
10:50	10:58	11:02	11:10	11:20	11:35
11:50	11:58	**12:02 PM**	**12:10**	**12:20**	**12:35**
12:50	**12:58**	**1:02**	**1:10**	**1:20**	**1:35**
1:50	**1:58**	**2:02**	**2:10**	**2:20**	**2:35**
2:50	**2:58**	**3:02**	**3:10**	**3:20**	**3:35**
3:50	**3:58**	**4:02**	**4:10**	**4:20**	**4:35**
4:50	**4:58**	**5:02**	**5:10**	**5:20**	**5:35**
5:50	**5:58**	**6:02**	**6:10**	**6:20**	**6:35**

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Customer Service (831) 425-8600

All METRO buses are wheelchair accessible, while some bus stops on this route may not be. **NOTA**: *Todos los autobuses de METRO son accesibles en silla de ruedas, pero algunas paradas en ésta ruta no son accesibles.*

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Local Santa Cruz Service
Effective / Vigente: Sep. 13, 2012

3W Mission Weekend

Departs	Departs	Departs	Departs	Departs	Arrives
Santa Cruz Metro Lane 2	Bay & Mission	Grandview & Arroyo Seco	De Anza Mobile Home Park	Bay & Mission	Santa Cruz Metro Center
A	B	C	D	B	A
SATURDAY - SUNDAY					
9:50 AM	9:58	10:02	10:10	10:18	10:35
11:50	11:58	**12:02 PM**	**12:10**	**12:18**	**12:35**
1:50	**1:58**	**2:02**	**2:10**	**2:18**	**2:35**
3:50	**3:58**	**4:02**	**4:10**	**4:18**	**4:35**
5:50	**5:58**	**6:02**	**6:10**	**6:18**	**6:35**

SCMTD.COM

Customer Service (831) 425-8600

All METRO buses are wheelchair accessible, while some bus stops on this route may not be. **NOTA**: *Todos los autobuses de METRO son accesibles en silla de ruedas, pero algunas paradas en ésta ruta no son accesibles.*

All METRO buses are equipped with front bicycle racks that can carry up to three bicycles at a time. **NOTA:** *Todos los autobuses están equipados con portabicicletas en frente que pueden portar hasta tres a la vez.*

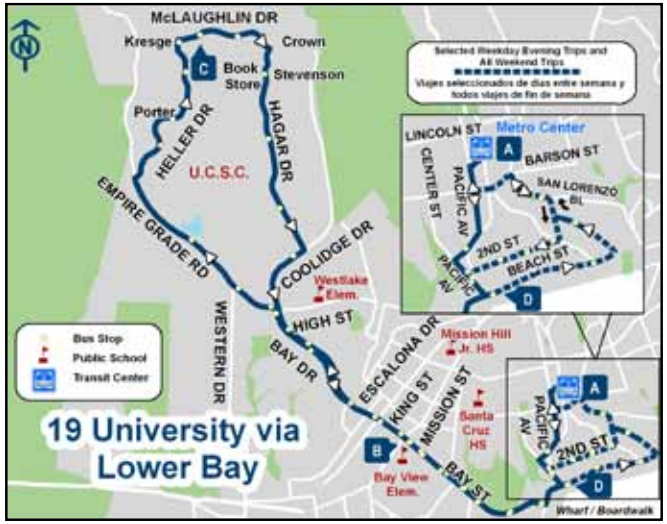
UCSC & Westside Service
Effective / Vigente: Sep. 13, 2012

19 UCSC via Lower Bay

MONDAY - FRIDAY

Departs	Departs	Departs	Departs	Departs	Arrives
Santa Cruz Metro Lane 1	Bay & Mission	Science Hill	Bay & Mission	Beach & Pacific	Santa Cruz Metro Center
A	B	C	B	D	A
7:30 AM	7:37	7:49	7:59	------	8:17
8:30	8:37	8:49	8:59	------	9:17
9:00	9:07	9:19	9:29	------	9:47
9:30	9:37	9:49	9:59	------	10:17
10:00	10:07	10:19	10:29	------	10:47
10:30	10:37	10:49	10:59	------	11:17
11:00	11:07	11:19	11:29	------	11:47
11:30	11:37	11:49	11:59	------	**12:17 PM**
12:00	**12:07**	**12:19**	**12:29**	------	**12:47**
12:30	**12:37**	**12:49**	**12:59**	------	**1:17**
1:00	**1:07**	**1:19**	**1:29**	------	**1:47**
1:30	**1:37**	**1:49**	**1:59**	------	**2:17**
2:00	**2:07**	**2:19**	**2:29**	------	**2:47**
2:30	**2:37**	**2:49**	**2:59**	------	**3:17**
3:00	**3:07**	**3:19**	**3:29**	------	**3:47**
3:30	**3:37**	**3:49**	**3:59**	------	**4:17**
4:00	**4:07**	**4:19**	**4:29**	------	**4:47**
4:30	**4:37**	**4:49**	**4:59**	------	**5:17**
5:00	**5:07**	**5:19**	**5:29**	------	**5:47**
5:30	**5:37**	**5:49**	**5:59**	------	**6:17**
6:00	**6:07**	**6:19**	**6:29**	------	**6:47**
6:30	**6:37**	**6:49**	**6:59**	------	**7:17**
7:30	**7:37**	**7:49**	**7:59**	------	**8:17**
8:30	**8:37**	**8:49**	**8:59**	------	**9:17**
ST 9:30	**9:39**	**9:51**	**10:01**	**10:07**	**10:14**
ST 10:30	**10:39**	**10:51**	**11:01**	**11:07**	**11:14**
ST 11:30	**11:39**	**11:51**	12:01	12:07	12:14

Trips marked "ST" adhere to the UCSC School Term Calendar
Viajes marcados "ST" se adhieren al calendario del término escolar de UCSC



UCSC School Term Calendar is provided on a separate sticker.

El calendario del término escolar de UCSC está en una calcomanía separada.

19 UCSC via Lower Bay

SATURDAY - SUNDAY

Departs	Departs	Departs	Departs	Departs	Arrives
Santa Cruz Metro Lane 1	Bay & Mission	Science Hill	Bay & Mission	Beach & Pacific	Santa Cruz Metro Center
A	B	C	B	D	A
10:00 AM	10:09	10:21	10:31	10:37	10:50
10:30	10:39	10:51	11:01	11:07	11:20
11:00	11:09	11:21	11:31	11:37	11:50
❶ 11:30	11:39	11:51	**12:01 PM**	**12:07**	**12:20**
❶ **12:00**	**12:09**	**12:21**	**12:31**	**12:37**	**12:50**
❶ **12:30**	**12:39**	**12:51**	**1:01**	**1:07**	**1:20**
❶ **1:00**	**1:09**	**1:21**	**1:31**	**1:37**	**1:50**
❶ **1:30**	**1:39**	**1:51**	**2:01**	**2:07**	**2:20**
❶ **2:00**	**2:09**	**2:21**	**2:31**	**2:37**	**2:50**
❶ **2:30**	**2:39**	**2:51**	**3:01**	**3:07**	**3:20**
❶ **3:00**	**3:09**	**3:21**	**3:31**	**3:37**	**3:50**
❶ **3:30**	**3:39**	**3:51**	**4:01**	**4:07**	**4:20**
❶ **4:00**	**4:09**	**4:21**	**4:31**	**4:37**	**4:50**
❶ **4:30**	**4:39**	**4:51**	**5:01**	**5:07**	**5:20**
5:00	**5:09**	**5:21**	**5:31**	**5:37**	**5:50**
5:30	**5:39**	**5:51**	**6:01**	**6:07**	**6:20**
6:00	**6:09**	**6:21**	**6:31**	**6:37**	**6:50**
6:30	**6:39**	**6:51**	**7:01**	**7:07**	**7:20**
7:00	**7:09**	**7:21**	**7:31**	**7:37**	**7:50**

❶ During the summer (mid-June through mid-September) this weekend trip will not serve the Beach-Boardwalk area. For exact dates call SCMTD Customer Service (831)425-8600. ***NOTA:*** *Durante el verano (mediados de junio hasta mediados de septiembre) éste viaje de fin de semana no servirá a la zona de Beach-Boardwalk. Para fechas exactas llame al Servicio al Cliente de SCMTD (831) 425-8600.*

SCMTD.COM

Customer Service (831) 425-8600

All METRO buses are wheelchair accessible, while some bus stops on this route may not be. **NOTA**: *Todos los autobuses de METRO son accesibles en silla de ruedas, pero algunas paradas en ésta ruta no son accesibles.*

All METRO buses are equipped with front bicycle racks that can carry up to three bicycles at a time. **NOTA:** *Todos los autobuses están equipados con portabicicletas en frente que pueden portar hasta tres a la vez.*

UCSC & Westside Service
Effective / Vigente: Sep. 13, 2012

20 UCSC via Westside

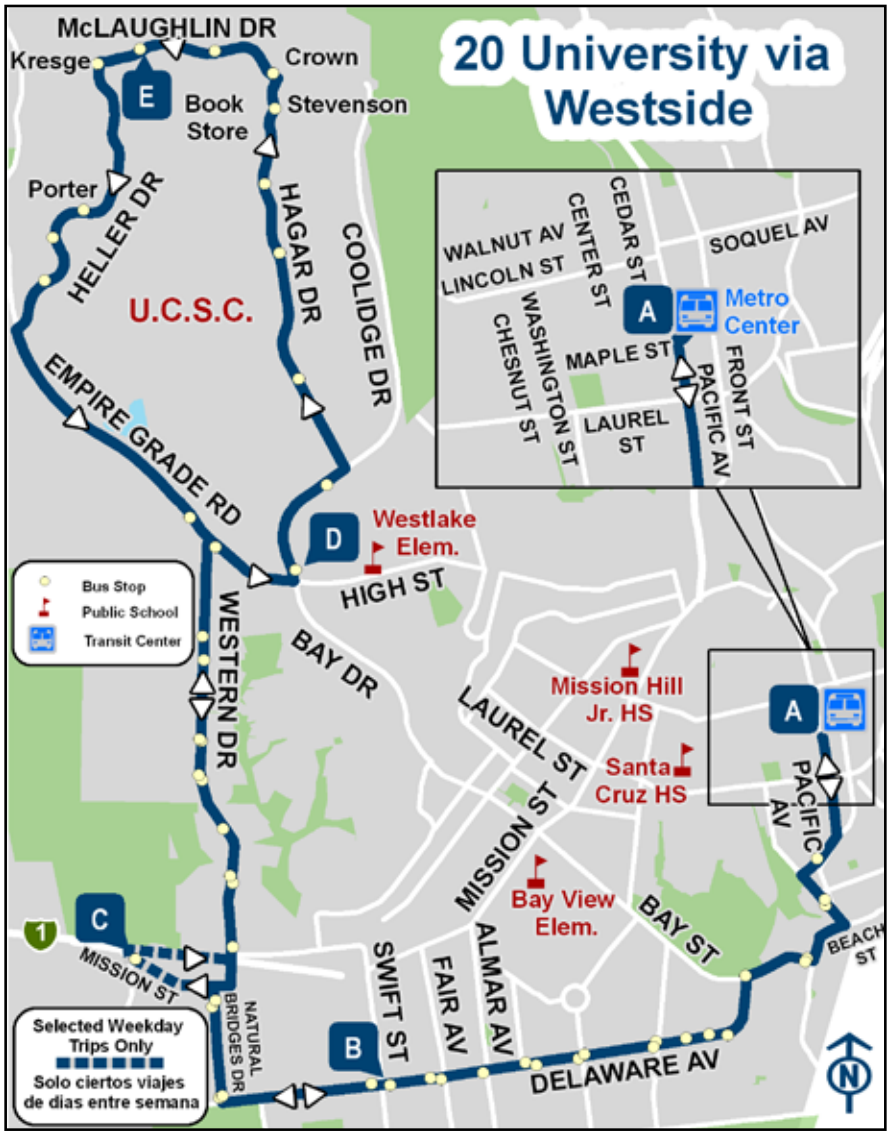
Departs	Departs	Departs	Departs	Departs	Departs	Departs	Departs	Arrives
Santa Cruz Metro Lane 1	Delaware & Swift	Pacific Shores	Bay & High	Science Hill	Bay & High	Pacific Shores	Delaware & Swift	Santa Cruz Metro Center
A	B	C	D	E	D	C	B	A
MONDAY - FRIDAY								
❶ 7:20AM	7:30	------	7:40	7:50	------	7:57	8:03	8:18
❶ 8:20	8:30	8:33	8:43	8:53	------	9:00	9:08	9:20
ST 8:50	9:00	------	9:10	9:20	9:27	------	------	------
❶ 9:20	9:30	------	9:40	9:50	------	------	10:03	10:15
❶ 10:20	10:30	------	10:40	10:50	------	------	11:03	11:15
❶ 11:20	11:30	------	11:40	11:50	------	------	**12:03PM**	**12:15**
12:20	**12:30**	------	**12:40**	**12:50**	------	------	**1:03**	**1:15**
1:20	**1:30**	**1:33**	**1:43**	**1:53**	------	**2:00**	**2:08**	**2:20**
2:20	**2:30**	------	**2:40**	**2:50**	------	------	**3:03**	**3:15**
❶ **3:20**	**3:30**	------	**3:40**	**3:50**	------	------	**4:03**	**4:15**
❶ **4:20**	**4:30**	**4:33**	**4:43**	**4:53**	------	**5:00**	**5:08**	**5:20**
ST ------	------	------	**5:05**	**5:15**	------	------	**5:28**	**5:40**
❶ **5:20**	**5:30**	**5:33**	**5:43**	**5:53**	------	**6:00**	**6:08**	**6:20**
❶ **6:20**	**6:30**	------	**6:40**	**6:50**	------	------	**7:03**	**7:15**
7:20	**7:30**	------	**7:40**	**7:50**	------	------	**8:03**	**8:15**
8:20	**8:30**	------	**8:40**	**8:50**	------	------	**9:03**	**9:15**

Trips marked "ST" adhere to the UCSC School Term Calendar
Viajes marcados "ST" se adhieren al calendario del término escolar de UCSC

❶Route 20D buses run with these trips during the school term to handle overloads. ***NOTA:*** *Autobúses de ruta de 20D corren con éstos viajes durante el término escolar para manejar las sobrecargas.*

20 UCSC via Westside

Departs	Departs	Departs	Departs	Departs	Arrives
Santa Cruz Metro Lane 1	Delaware & Swift	Bay & High	Science Hill	Delaware & Swift	Santa Cruz Metro Center
A	B	D	E	B	A
SATURDAY - SUNDAY					
8:20AM	8:30	8:40	8:50	9:03	9:15
9:20	9:30	9:40	9:50	10:03	10:15
10:20	10:30	10:40	10:50	11:03	11:15
11:20	11:30	11:40	11:50	**12:03PM**	**12:15**
12:20	**12:30**	**12:40**	**12:50**	**1:03**	**1:15**
1:20	**1:30**	**1:40**	**1:50**	**2:03**	**2:15**
2:20	**2:30**	**2:40**	**2:50**	**3:03**	**3:15**
3:20	**3:30**	**3:40**	**3:50**	**4:03**	**4:15**
4:20	**4:30**	**4:40**	**4:50**	**5:03**	**5:15**
5:20	**5:30**	**5:40**	**5:50**	**6:03**	**6:15**
6:20	**6:30**	**6:40**	**6:50**	**7:03**	**7:15**
7:20	**7:30**	**7:40**	**7:50**	**8:03**	**8:15**
8:20	**8:30**	**8:40**	**8:50**	**9:03**	**9:15**



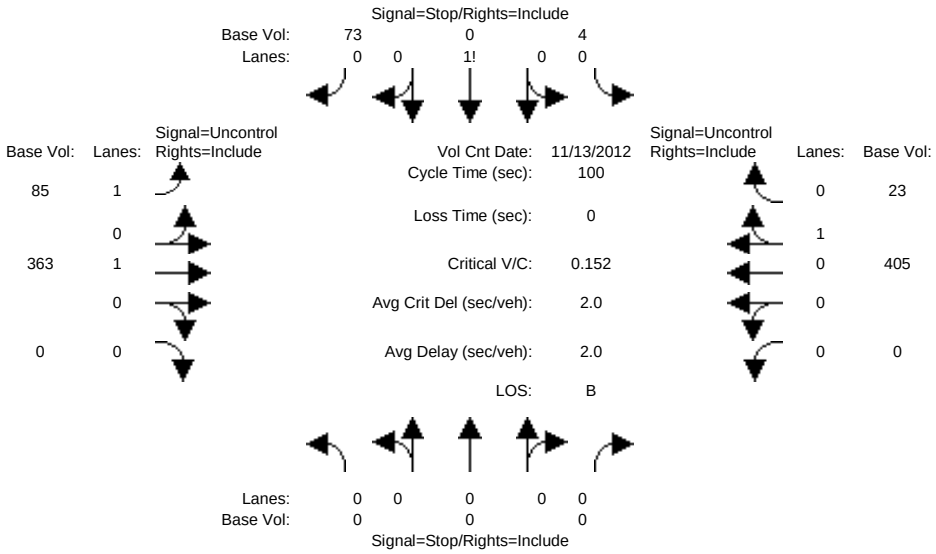
UCSC School Term Calendar is provided on a separate sticker.

El calendario del término escolar de UCSC está en una calcomanía separada.

Appendix C – Level of Service Worksheets: Existing Conditions

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing PM Peak

Intersection #1: Pacific Avenue/ Front Street



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 13 Nov 2012 <<												
Base Vol:	0	0	0	4	0	73	85	363	0	0	405	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	4	0	73	85	363	0	0	405	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.77	0.77	0.77	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	5	0	95	89	382	0	0	426	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	5	0	95	89	382	0	0	426	24
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	999	999	438	451	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	272	245	623	1121	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	255	226	623	1121	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.15	0.08	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	579	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	12.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			12.5			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #1 Pacific Avenue/ Front Street

****

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R

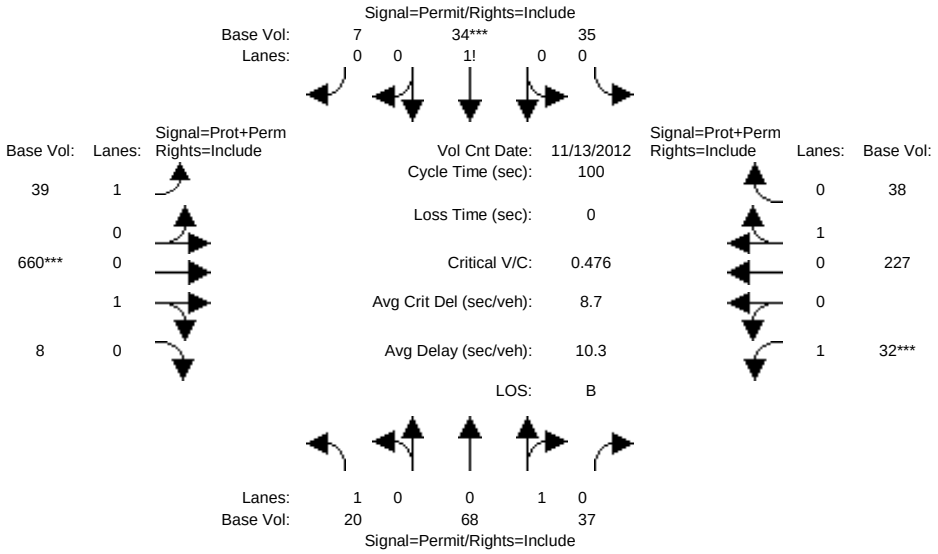
```
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:     0    0     0     4    0    73    85  363     0     0  405    23
ApproachDel:    xxxxxx             12.5           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=77]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=953]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
               Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #1 Pacific Avenue/ Front Street
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:     0    0     0     4    0    73    85  363     0     0  405    23
------------|---------------||---------------||---------------||---------------|
Major Street Volume:              876
Minor Approach Volume:            77
Minor Approach Volume Threshold: 330
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing PM Peak

Intersection #2: Pacific Avenue / Laurel Street

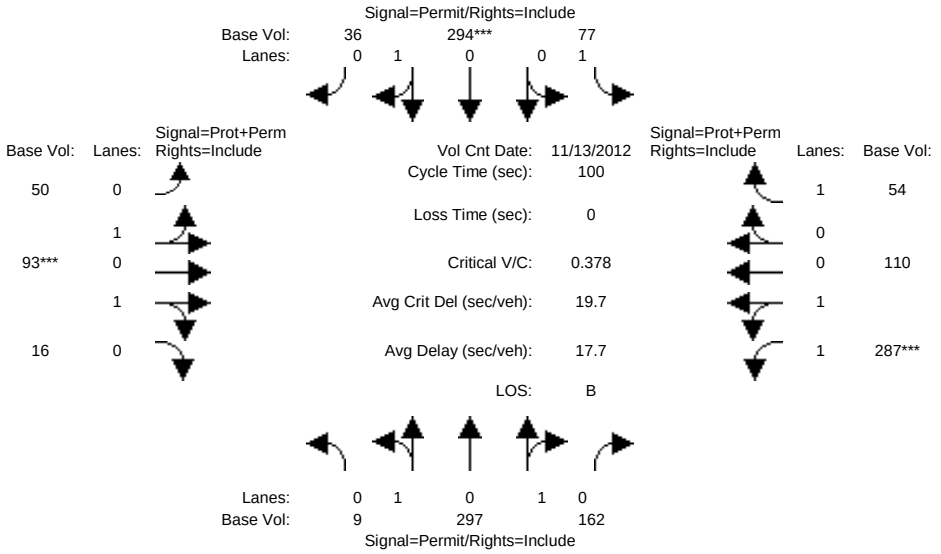


Street Name:	Pacific Avenue						Laurel Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Nov 2012 << 4:45 PM to 5:45 PM												
Base Vol:	20	68	37	35	34	7	39	660	8	32	227	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	68	37	35	34	7	39	660	8	32	227	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.63	0.63	0.63	0.94	0.94	0.94	0.88	0.88	0.88
PHF Volume:	21	72	39	56	54	11	41	702	9	36	258	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	72	39	56	54	11	41	702	9	36	258	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	72	39	56	54	11	41	702	9	36	258	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.95	0.95	0.78	0.78	0.78	0.95	1.00	1.00	0.95	0.98	0.98
Lanes:	1.00	0.65	0.35	0.46	0.45	0.09	1.00	0.99	0.01	1.00	0.86	0.14
Final Sat.:	1651	1165	634	681	662	136	1805	1873	23	1805	1593	267
Capacity Analysis Module:												
Vol/Sat:	0.01	0.06	0.06	0.08	0.08	0.08	0.02	0.37	0.37	0.02	0.16	0.16
Crit Moves:					****			****		****		
Green/Cycle:	0.17	0.17	0.17	0.17	0.17	0.17	0.83	0.79	0.79	0.77	0.73	0.73
Volume/Cap:	0.07	0.36	0.36	0.48	0.48	0.48	0.05	0.48	0.48	0.07	0.22	0.22
Uniform Del:	34.8	36.6	36.6	37.4	37.4	37.4	1.7	3.6	3.6	3.1	4.5	4.5
IncremntDel:	0.1	0.7	0.7	1.4	1.4	1.4	0.0	0.2	0.2	0.1	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	34.9	37.3	37.3	38.8	38.8	38.8	1.7	3.9	3.9	3.1	4.6	4.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.9	37.3	37.3	38.8	38.8	38.8	1.7	3.9	3.9	3.1	4.6	4.6
LOS by Move:	C	D	D	D	D	D	A	A	A	A	A	A
HCM2kAvgQ:	1	3	3	4	4	4	0	8	8	0	3	3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing PM Peak

Intersection #3: Front Street / Soquel Avenue

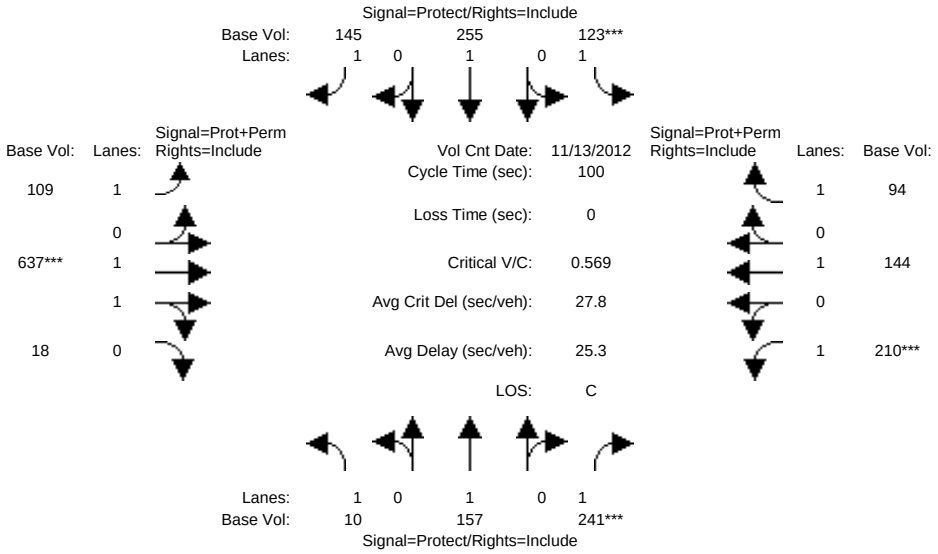


Street Name:	Front Street						Soquel Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Nov 2012 << 4:00 PM TO 5:00 PM												
Base Vol:	9	297	162	77	294	36	50	93	16	287	110	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	297	162	77	294	36	50	93	16	287	110	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.86	0.86	0.86	0.88	0.88	0.88	0.89	0.89	0.89
PHF Volume:	9	313	171	90	342	42	57	106	18	322	124	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	313	171	90	342	42	57	106	18	322	124	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	313	171	90	342	42	57	106	18	322	124	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.85	0.85	0.42	0.98	0.98	0.92	0.92	0.92	0.96	0.97	0.85
Lanes:	0.04	1.27	0.69	1.00	0.89	0.11	0.63	1.17	0.20	1.45	0.55	1.00
Final Sat.:	62	2059	1123	789	1666	204	1101	2049	352	2651	1016	1615
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.11	0.21	0.21	0.05	0.05	0.05	0.12	0.12	0.04
Crit Moves:					****			****		****		
Green/Cycle:	0.54	0.54	0.54	0.54	0.54	0.54	0.27	0.14	0.14	0.46	0.32	0.32
Volume/Cap:	0.28	0.28	0.28	0.21	0.38	0.38	0.20	0.38	0.38	0.32	0.38	0.12
Uniform Del:	12.4	12.4	12.4	11.8	13.2	13.2	32.4	39.3	39.3	16.8	26.2	23.9
IncremntDel:	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.5	0.5	0.1	0.2	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	12.4	12.4	12.4	12.1	13.4	13.4	32.5	39.8	39.8	16.9	26.4	24.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.4	12.4	12.4	12.1	13.4	13.4	32.5	39.8	39.8	16.9	26.4	24.0
LOS by Move:	B	B	B	B	B	B	C	D	D	B	C	C
HCM2kAvgQ:	4	4	4	2	7	7	2	3	3	4	5	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing PM Peak

Intersection #4: Front Street / Laurel Street

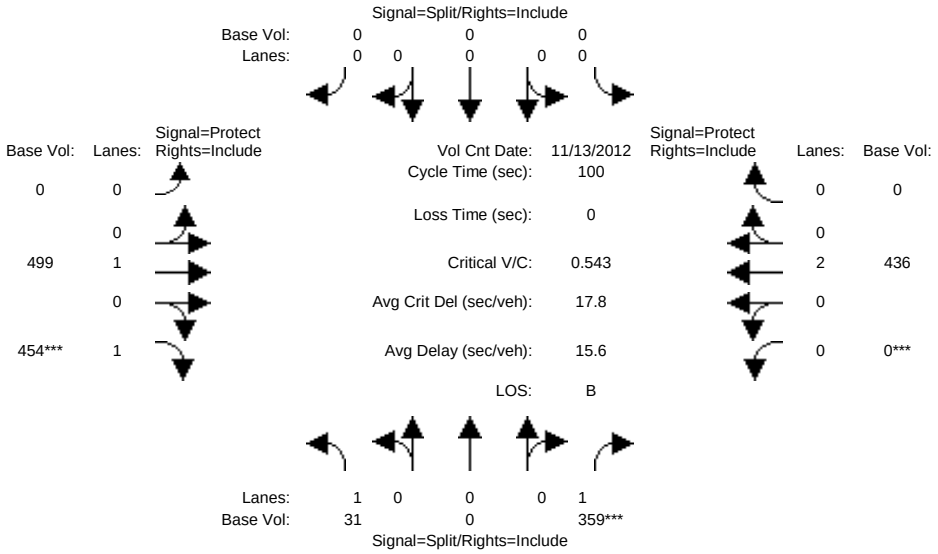


Street Name:	Front Street						Laurel Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Nov 2012 << 4:45 PM TO 5:45 PM												
Base Vol:	10	157	241	123	255	145	109	637	18	210	144	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	157	241	123	255	145	109	637	18	210	144	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.78	0.78	0.78	0.94	0.94	0.94	0.90	0.90	0.90
PHF Volume:	11	167	256	158	327	186	116	678	19	233	160	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	167	256	158	327	186	116	678	19	233	160	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	167	256	158	327	186	116	678	19	233	160	104
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.95	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.95	0.05	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	1805	1900	1615	1805	3497	99	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.16	0.09	0.17	0.12	0.06	0.19	0.19	0.13	0.08	0.06
Crit Moves:			****	****				****		****		
Green/Cycle:	0.01	0.28	0.28	0.15	0.42	0.42	0.57	0.34	0.34	0.55	0.32	0.32
Volume/Cap:	0.41	0.32	0.57	0.57	0.41	0.28	0.15	0.57	0.57	0.43	0.26	0.20
Uniform Del:	48.9	28.5	30.9	39.3	20.5	19.1	10.3	27.0	27.0	13.1	25.1	24.6
IncremntDel:	10.3	0.3	1.7	2.8	0.3	0.2	0.1	0.6	0.6	0.5	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	59.2	28.8	32.6	42.1	20.8	19.4	10.4	27.6	27.6	13.6	25.3	24.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	59.2	28.8	32.6	42.1	20.8	19.4	10.4	27.6	27.6	13.6	25.3	24.8
LOS by Move:	E	C	C	D	C	B	B	C	C	B	C	C
HCM2kAvgQ:	1	4	7	4	7	4	2	9	9	4	3	2

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing PM Peak

Intersection #5: Broadway / San Lorenzo Blvd

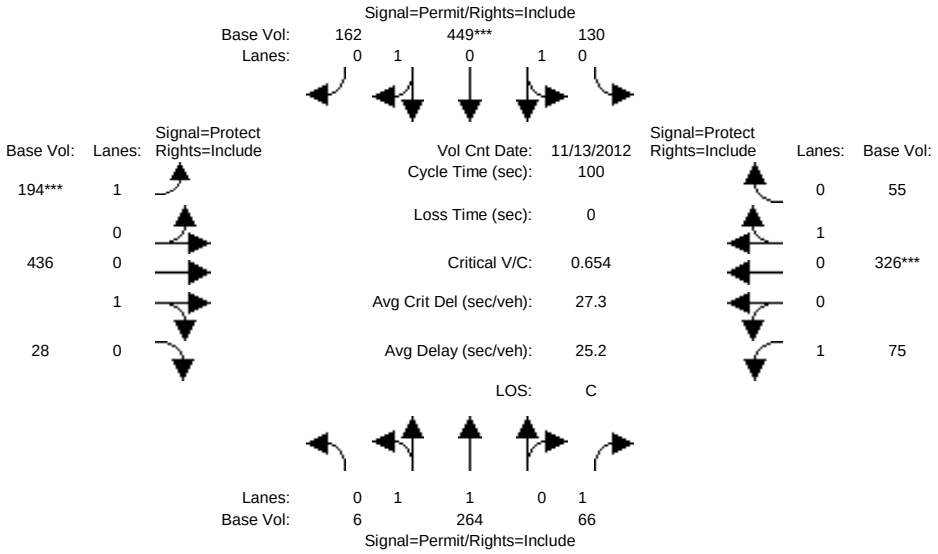


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Nov 2012 << 4:45 PM TO 5:45 PM												
Base Vol:	31	0	359	0	0	0	0	499	454	0	436	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	0	359	0	0	0	0	499	454	0	436	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.83	0.83	0.83	0.96	0.96	0.96	1.00	1.00	1.00
PHF Volume:	35	0	403	0	0	0	0	520	473	0	436	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	0	403	0	0	0	0	520	473	0	436	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	0	403	0	0	0	0	520	473	0	436	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	1.00	0.95	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	2.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	0	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.25	0.00	0.00	0.00	0.00	0.27	0.29	0.00	0.12	0.00
Crit Moves:			****						****	****		
Green/Cycle:	0.46	0.00	0.46	0.00	0.00	0.00	0.00	0.54	0.54	0.00	0.54	0.00
Volume/Cap:	0.04	0.00	0.54	0.00	0.00	0.00	0.00	0.51	0.54	0.00	0.22	0.00
Uniform Del:	14.8	0.0	19.4	0.0	0.0	0.0	0.0	14.6	15.0	0.0	12.0	0.0
IncremntDel:	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.4	0.7	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Delay/Veh:	14.9	0.0	20.2	0.0	0.0	0.0	0.0	15.0	15.7	0.0	12.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.9	0.0	20.2	0.0	0.0	0.0	0.0	15.0	15.7	0.0	12.1	0.0
LOS by Move:	B	A	C	A	A	A	A	B	B	A	B	A
HCM2kAvgQ:	1	0	9	0	0	0	0	10	9	0	4	0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
Existing PM Peak

Intersection #6: Ocean Street / Broadway

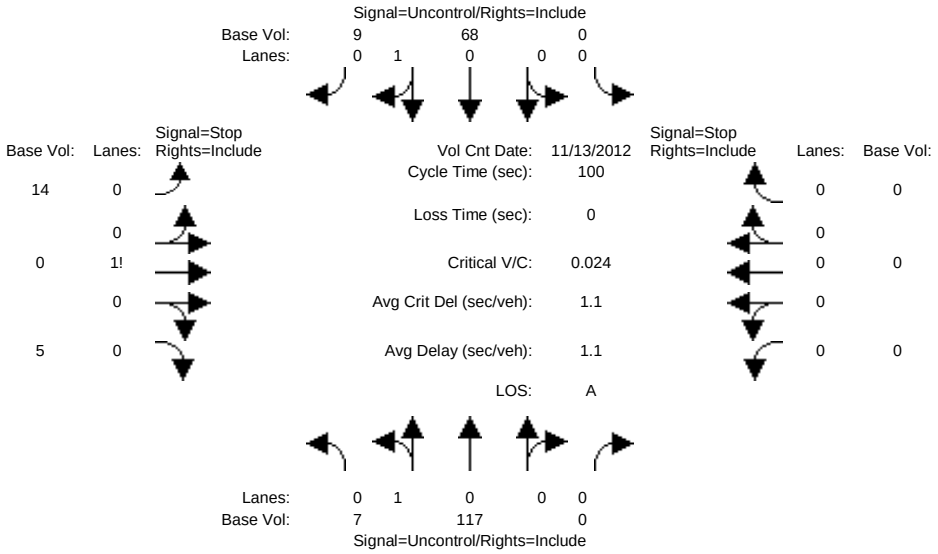


Street Name:	Ocean Street						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Nov 2012 << 4:30 PM TO 5:30 PM												
Base Vol:	6	264	66	130	449	162	194	436	28	75	326	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	264	66	130	449	162	194	436	28	75	326	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84
PHF Volume:	6	272	68	146	504	182	213	479	31	89	388	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	272	68	146	504	182	213	479	31	89	388	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	272	68	146	504	182	213	479	31	89	388	65
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	0.89	0.85	0.75	0.75	0.75	0.95	0.99	0.99	0.95	0.98	0.98
Lanes:	0.04	1.96	1.00	0.35	1.21	0.44	1.00	0.94	0.06	1.00	0.86	0.14
Final Sat.:	75	3318	1615	500	1726	623	1805	1769	114	1805	1590	268
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.04	0.29	0.29	0.29	0.12	0.27	0.27	0.05	0.24	0.24
Crit Moves:					****		****				****	
Green/Cycle:	0.45	0.45	0.45	0.45	0.45	0.45	0.18	0.47	0.47	0.09	0.37	0.37
Volume/Cap:	0.18	0.18	0.09	0.65	0.65	0.65	0.65	0.58	0.58	0.58	0.65	0.65
Uniform Del:	16.7	16.7	16.0	21.6	21.6	21.6	38.1	19.4	19.4	44.0	26.0	26.0
IncremntDel:	0.1	0.1	0.1	1.2	1.2	1.2	4.7	1.0	1.0	5.4	2.3	2.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	16.7	16.7	16.0	22.9	22.9	22.9	42.8	20.4	20.4	49.4	28.3	28.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.7	16.7	16.0	22.9	22.9	22.9	42.8	20.4	20.4	49.4	28.3	28.3
LOS by Move:	B	B	B	C	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	3	1	11	11	11	7	12	12	4	12	12

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing PM Peak

Intersection #7: Pacific Avenue / Sycamore Street



Street Name:	Pacific Avenue						Sycamore Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Volume Module: >> Count Date: 13 Nov 2012 << 4:45 PM to 5:45 PM												
Base Vol:	7	117	0	0	68	9	14	0	5	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	117	0	0	68	9	14	0	5	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.77	0.77	0.77	0.79	0.79	0.79	1.00	1.00	1.00
PHF Volume:	8	136	0	0	88	12	18	0	6	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	136	0	0	88	12	18	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	100	xxxx	xxxxx	xxxx	xxxx	xxxxx	246	246	94	xxxx	xxxx	xxxxx
Potent Cap.:	1505	xxxx	xxxxx	xxxx	xxxx	xxxxx	746	659	968	xxxx	xxxx	xxxxx
Move Cap.:	1505	xxxx	xxxxx	xxxx	xxxx	xxxxx	743	656	968	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	792	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.7			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

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Intersection #7 Pacific Avenue / Sycamore Street

****

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		

```
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  0  1! 0  0    0  0  0  0  0
Initial Vol:    7  117     0     0   68     9    14    0     5     0    0     0
ApproachDel:    xxxxxx           xxxxxx              9.7           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=19]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=220]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
               Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #7 Pacific Avenue / Sycamore Street
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  0  1! 0  0    0  0  0  0  0
Initial Vol:    7  117     0     0   68     9    14    0     5     0    0     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:              201
Minor Approach Volume:            19
Minor Approach Volume Threshold: 647
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
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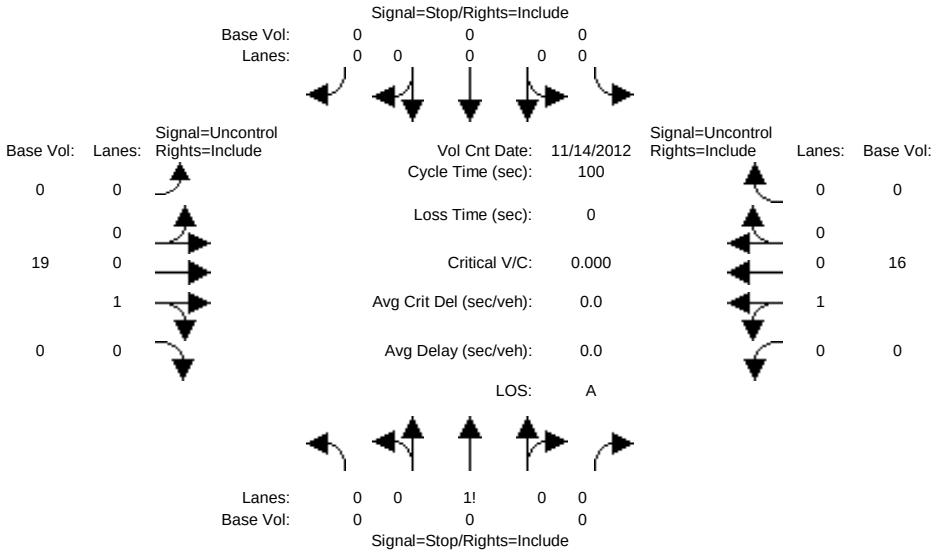
Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing PM Peak

Intersection #8: Sycamore Street/Project Egress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 14 Nov 2012 <<												
Base Vol:	0	0	0	0	0	0	0	19	0	0	16	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	19	0	0	16	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	19	0	0	16	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	19	0	0	16	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	19	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	1065	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	1065	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

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Intersection #8 Sycamore Street/Project Egress

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Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R

```
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  0    0  0  1  0  0    0  0  1  0  0
Initial Vol:    0    0     0     0    0     0     0   19     0     0   16     0
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #8 Sycamore Street/Project Egress

****

Base Volume Alternative: Peak Hour Warrant NOT Met

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  0    0  0  1  0  0    0  0  1  0  0
Initial Vol:    0    0     0     0    0     0     0   19     0     0   16     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             35
Minor Approach Volume:           0
Minor Approach Volume Threshold: 1113
```

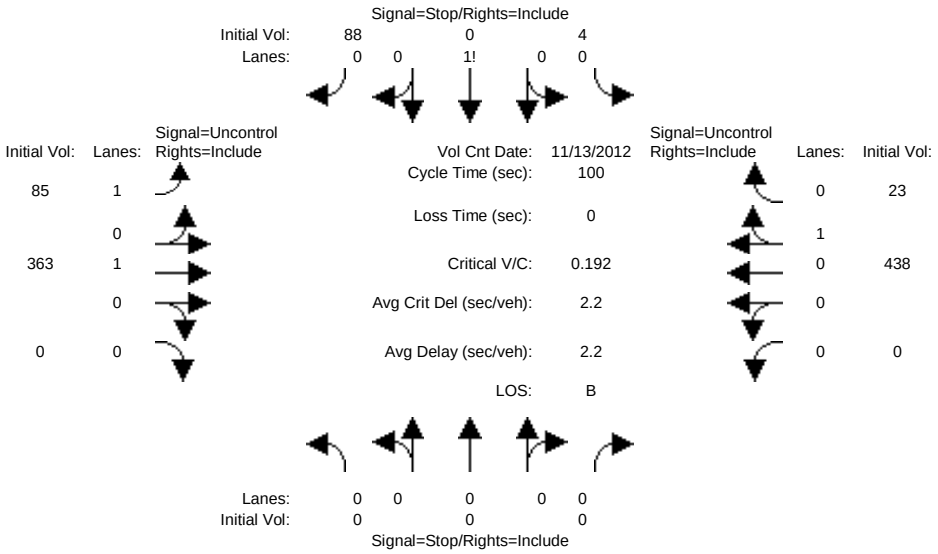
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Appendix D – Level of Service Worksheets: Existing plus Project Conditions

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing + Project PM Peak

Intersection #1: Pacific Avenue/ Front Street



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 13 Nov 2012 <<												
Base Vol:	0	0	0	4	0	73	85	363	0	0	405	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	4	0	73	85	363	0	0	405	23
Added Vol:	0	0	0	0	0	15	0	0	0	0	33	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	4	0	88	85	363	0	0	438	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	0.77	0.77	0.77	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	5	0	114	89	382	0	0	461	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	5	0	114	89	382	0	0	461	24
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1034	1034	473	485	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	259	234	595	1088	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	243	215	595	1088	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.19	0.08	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	560	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	13.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.2			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #1 Pacific Avenue/ Front Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

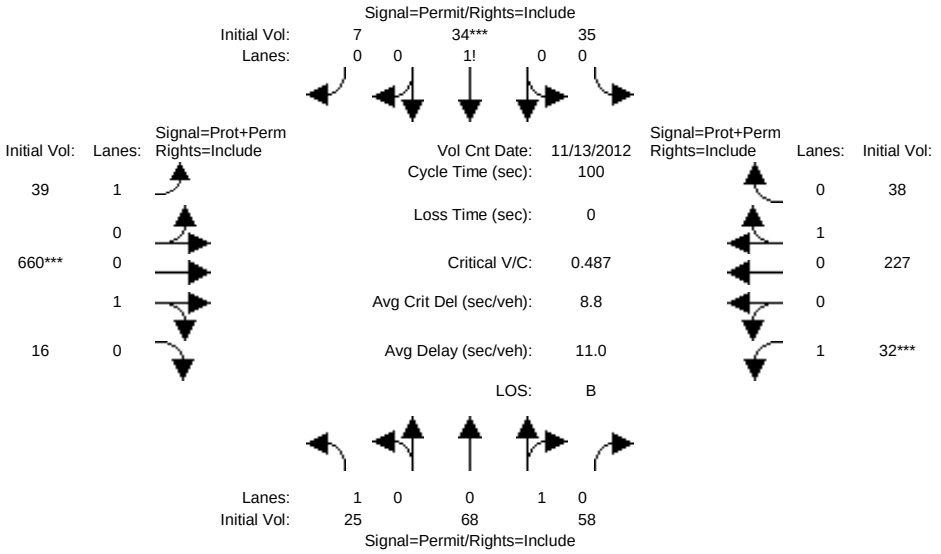
```
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     4    0    88    85  363     0     0  438    23
ApproachDel:    xxxxxx             13.2           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=92]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1001]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #1 Pacific Avenue/ Front Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     4    0    88    85  363     0     0  438    23
------------|---------------||---------------||---------------||---------------|
Major Street Volume:              909
Minor Approach Volume:            92
Minor Approach Volume Threshold: 318
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM Peak

Intersection #2: Pacific Avenue / Laurel Street

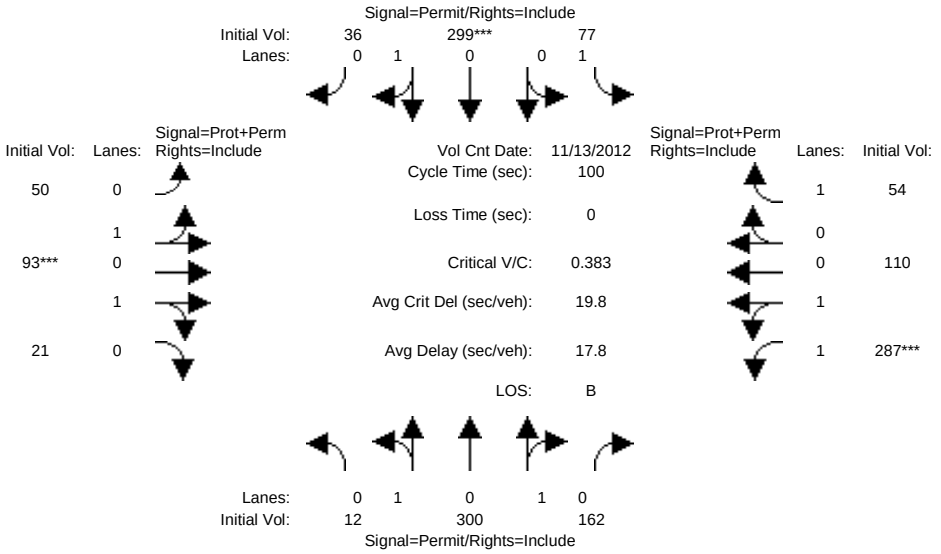


Street Name:	Pacific Avenue						Laurel Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Nov 2012 << 4:45 PM to 5:45 PM												
Base Vol:	20	68	37	35	34	7	39	660	8	32	227	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	68	37	35	34	7	39	660	8	32	227	38
Added Vol:	5	0	21	0	0	0	0	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	68	58	35	34	7	39	660	16	32	227	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.63	0.63	0.63	0.94	0.94	0.94	0.88	0.88	0.88
PHF Volume:	26	72	61	56	54	11	41	702	17	36	258	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	72	61	56	54	11	41	702	17	36	258	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	72	61	56	54	11	41	702	17	36	258	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.93	0.93	0.74	0.74	0.74	0.95	1.00	1.00	0.95	0.98	0.98
Lanes:	1.00	0.54	0.46	0.46	0.45	0.09	1.00	0.98	0.02	1.00	0.86	0.14
Final Sat.:	1634	955	814	643	625	129	1805	1848	45	1805	1593	267
Capacity Analysis Module:												
Vol/Sat:	0.02	0.07	0.07	0.09	0.09	0.09	0.02	0.38	0.38	0.02	0.16	0.16
Crit Moves:					****			****		****		
Green/Cycle:	0.18	0.18	0.18	0.18	0.18	0.18	0.82	0.78	0.78	0.76	0.72	0.72
Volume/Cap:	0.09	0.42	0.42	0.49	0.49	0.49	0.05	0.49	0.49	0.07	0.22	0.22
Uniform Del:	34.4	36.6	36.6	37.0	37.0	37.0	1.8	3.9	3.9	3.3	4.7	4.7
IncremntDel:	0.1	0.9	0.9	1.5	1.5	1.5	0.0	0.3	0.3	0.1	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	34.5	37.5	37.5	38.5	38.5	38.5	1.8	4.1	4.1	3.3	4.8	4.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.5	37.5	37.5	38.5	38.5	38.5	1.8	4.1	4.1	3.3	4.8	4.8
LOS by Move:	C	D	D	D	D	D	A	A	A	A	A	A
HCM2kAvgQ:	1	4	4	4	4	4	0	8	8	0	3	3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM Peak

Intersection #3: Front Street / Soquel Avenue

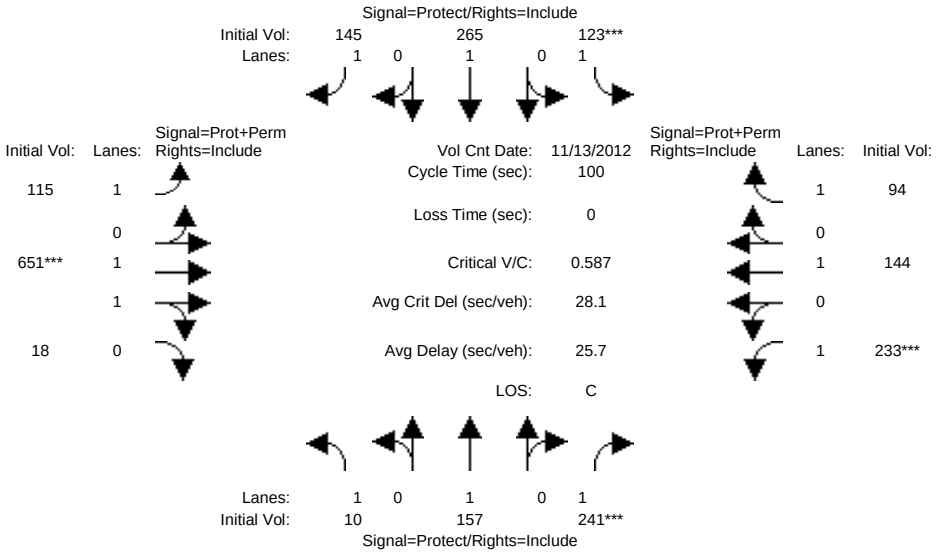


Street Name:	Front Street						Soquel Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Nov 2012 << 4:00 PM TO 5:00 PM												
Base Vol:	9	297	162	77	294	36	50	93	16	287	110	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	297	162	77	294	36	50	93	16	287	110	54
Added Vol:	3	3	0	0	5	0	0	0	5	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	300	162	77	299	36	50	93	21	287	110	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.86	0.86	0.86	0.88	0.88	0.88	0.89	0.89	0.89
PHF Volume:	13	316	171	90	348	42	57	106	24	322	124	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	316	171	90	348	42	57	106	24	322	124	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	316	171	90	348	42	57	106	24	322	124	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.85	0.85	0.41	0.98	0.98	0.92	0.92	0.92	0.96	0.97	0.85
Lanes:	0.05	1.27	0.68	1.00	0.89	0.11	0.61	1.13	0.26	1.45	0.55	1.00
Final Sat.:	82	2049	1106	783	1669	201	1064	1978	447	2651	1016	1615
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.11	0.21	0.21	0.05	0.05	0.05	0.12	0.12	0.04
Crit Moves:					****			****		****		
Green/Cycle:	0.54	0.54	0.54	0.54	0.54	0.54	0.28	0.14	0.14	0.46	0.32	0.32
Volume/Cap:	0.28	0.28	0.28	0.21	0.38	0.38	0.20	0.38	0.38	0.33	0.38	0.12
Uniform Del:	12.3	12.3	12.3	11.8	13.2	13.2	32.1	39.1	39.1	16.9	26.5	24.2
IncremntDel:	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.5	0.5	0.1	0.2	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	12.4	12.4	12.4	12.0	13.4	13.4	32.2	39.6	39.6	17.0	26.7	24.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.4	12.4	12.4	12.0	13.4	13.4	32.2	39.6	39.6	17.0	26.7	24.3
LOS by Move:	B	B	B	B	B	B	C	D	D	B	C	C
HCM2kAvgQ:	4	4	4	2	7	7	2	3	3	4	5	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM Peak

Intersection #4: Front Street / Laurel Street

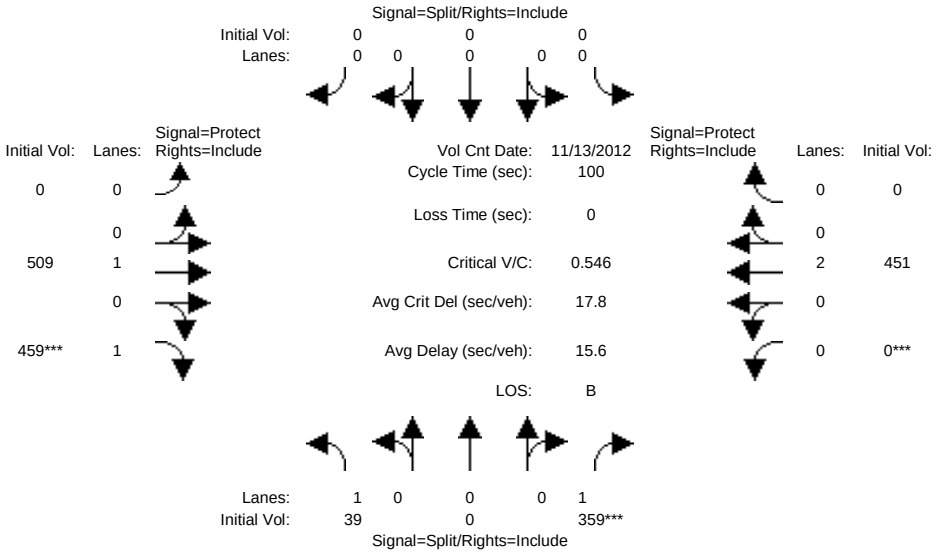


Street Name:	Front Street						Laurel Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Nov 2012 << 4:45 PM TO 5:45 PM												
Base Vol:	10	157	241	123	255	145	109	637	18	210	144	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	157	241	123	255	145	109	637	18	210	144	94
Added Vol:	0	0	0	0	10	0	6	14	0	23	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	157	241	123	265	145	115	651	18	233	144	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.78	0.78	0.78	0.94	0.94	0.94	0.90	0.90	0.90
PHF Volume:	11	167	256	158	340	186	122	693	19	259	160	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	167	256	158	340	186	122	693	19	259	160	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	167	256	158	340	186	122	693	19	259	160	104
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.95	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.95	0.05	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	1805	1900	1615	1805	3499	97	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.16	0.09	0.18	0.12	0.07	0.20	0.20	0.14	0.08	0.06
Crit Moves:			****	****				****		****		
Green/Cycle:	0.01	0.27	0.27	0.15	0.41	0.41	0.58	0.34	0.34	0.57	0.32	0.32
Volume/Cap:	0.44	0.33	0.59	0.59	0.44	0.28	0.16	0.59	0.59	0.46	0.26	0.20
Uniform Del:	49.0	29.2	31.7	39.7	21.5	20.0	9.7	27.4	27.4	12.7	25.1	24.6
IncremntDel:	12.3	0.4	2.1	3.4	0.4	0.2	0.1	0.8	0.8	0.6	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	61.3	29.6	33.7	43.1	21.9	20.2	9.8	28.2	28.2	13.3	25.3	24.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.3	29.6	33.7	43.1	21.9	20.2	9.8	28.2	28.2	13.3	25.3	24.8
LOS by Move:	E	C	C	D	C	C	A	C	C	B	C	C
HCM2kAvgQ:	1	4	8	5	7	4	2	9	9	4	3	2

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM Peak

Intersection #5: Broadway / San Lorenzo Blvd

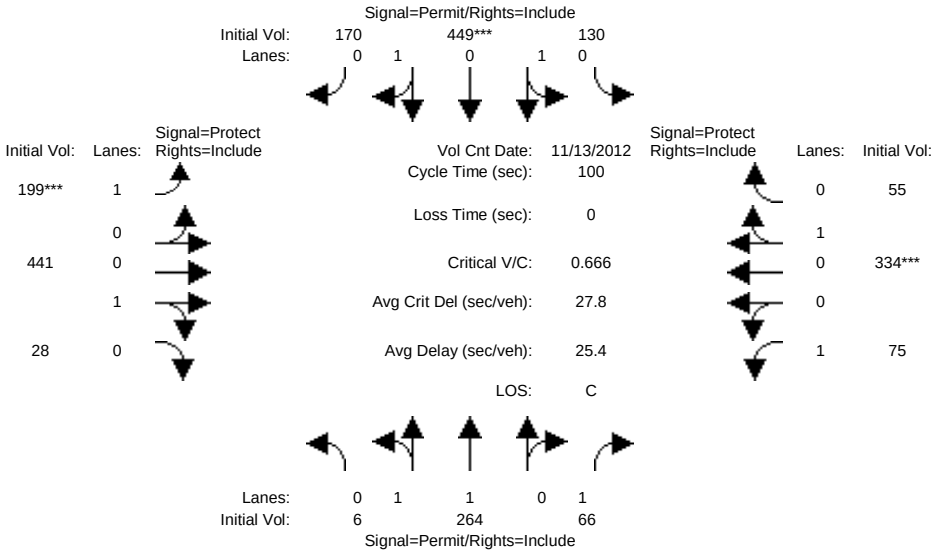


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Nov 2012 << 4:45 PM TO 5:45 PM												
Base Vol:	31	0	359	0	0	0	0	499	454	0	436	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	0	359	0	0	0	0	499	454	0	436	0
Added Vol:	8	0	0	0	0	0	0	10	5	0	15	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	0	359	0	0	0	0	509	459	0	451	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.83	0.83	0.83	0.96	0.96	0.96	1.00	1.00	1.00
PHF Volume:	44	0	403	0	0	0	0	530	478	0	451	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	0	403	0	0	0	0	530	478	0	451	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	0	403	0	0	0	0	530	478	0	451	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	1.00	0.95	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	2.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	0	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.25	0.00	0.00	0.00	0.00	0.28	0.30	0.00	0.12	0.00
Crit Moves:			****						****	****		
Green/Cycle:	0.46	0.00	0.46	0.00	0.00	0.00	0.00	0.54	0.54	0.00	0.54	0.00
Volume/Cap:	0.05	0.00	0.55	0.00	0.00	0.00	0.00	0.51	0.55	0.00	0.23	0.00
Uniform Del:	15.1	0.0	19.6	0.0	0.0	0.0	0.0	14.5	14.9	0.0	12.0	0.0
IncremntDel:	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.4	0.7	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Delay/Veh:	15.1	0.0	20.5	0.0	0.0	0.0	0.0	15.0	15.6	0.0	12.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.1	0.0	20.5	0.0	0.0	0.0	0.0	15.0	15.6	0.0	12.0	0.0
LOS by Move:	B	A	C	A	A	A	A	B	B	A	B	A
HCM2kAvgQ:	1	0	9	0	0	0	0	10	9	0	4	0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM Peak

Intersection #6: Ocean Street / Broadway

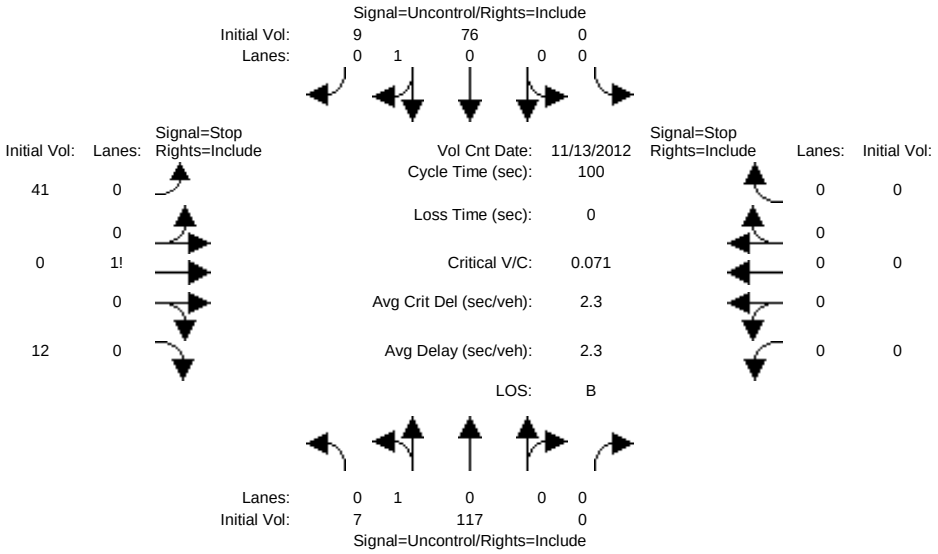


Street Name:	Ocean Street						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Nov 2012 << 4:30 PM TO 5:30 PM												
Base Vol:	6	264	66	130	449	162	194	436	28	75	326	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	264	66	130	449	162	194	436	28	75	326	55
Added Vol:	0	0	0	0	0	8	5	5	0	0	8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	264	66	130	449	170	199	441	28	75	334	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.89	0.89	0.89	0.91	0.91	0.91	0.84	0.84	0.84
PHF Volume:	6	272	68	146	504	191	219	485	31	89	398	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	272	68	146	504	191	219	485	31	89	398	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	272	68	146	504	191	219	485	31	89	398	65
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	0.89	0.85	0.75	0.75	0.75	0.95	0.99	0.99	0.95	0.98	0.98
Lanes:	0.04	1.96	1.00	0.35	1.20	0.45	1.00	0.94	0.06	1.00	0.86	0.14
Final Sat.:	75	3318	1615	494	1706	646	1805	1770	112	1805	1597	263
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.04	0.30	0.30	0.30	0.12	0.27	0.27	0.05	0.25	0.25
Crit Moves:					****		****				****	
Green/Cycle:	0.44	0.44	0.44	0.44	0.44	0.44	0.18	0.47	0.47	0.09	0.37	0.37
Volume/Cap:	0.18	0.18	0.09	0.67	0.67	0.67	0.67	0.58	0.58	0.58	0.67	0.67
Uniform Del:	16.8	16.8	16.1	21.9	21.9	21.9	38.1	19.3	19.3	44.0	26.1	26.1
IncremntDel:	0.1	0.1	0.1	1.4	1.4	1.4	5.1	1.0	1.0	5.5	2.5	2.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	16.9	16.9	16.2	23.3	23.3	23.3	43.2	20.3	20.3	49.6	28.6	28.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.9	16.9	16.2	23.3	23.3	23.3	43.2	20.3	20.3	49.6	28.6	28.6
LOS by Move:	B	B	B	C	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	3	1	12	12	12	7	12	12	4	13	13

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing + Project PM Peak

Intersection #7: Pacific Avenue / Sycamore Street




```
Street Name:          Pacific Avenue                    Sycamore Street
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 13 Nov 2012 << 4:45 PM to 5:45 PM
Base Vol:       7  117     0     0   68     9    14     0     5     0     0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    7  117     0     0   68     9    14     0     5     0     0     0
Added Vol:      0    0     0     0    8     0    26     0     7     0     0     0
Passby Exit:    0    0     0     0    0     0     1     0     0     0     0     0
Initial Fut:    7  117     0     0   76     9    41     0    12     0     0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.86 0.86  0.86  0.77 0.77  0.77  0.79 0.79  0.79  1.00 1.00  1.00
PHF Volume:     8  136     0     0   99    12    52     0    15     0     0     0
Reduct Vol:     0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:    8  136     0     0   99    12    52     0    15     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  110 xxxx xxxxx  xxxx xxxx xxxxx   257  257   105  xxxx xxxx xxxxx
Potent Cap.: 1492 xxxx xxxxx  xxxx xxxx xxxxx   736  651   956  xxxx xxxx xxxxx
Move Cap.:   1492 xxxx xxxxx  xxxx xxxx xxxxx   733  647   956  xxxx xxxx xxxxx
Volume/Cap:  0.01 xxxx  xxxx  xxxx xxxx  xxxx  0.07 0.00  0.02  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    0.0 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  774 xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.3 xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx 10.1 xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     *    B     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx              10.1           xxxxxx
ApproachLOS:         *                *                 B                *
Note: Queue reported is the number of cars per lane.
```

Peak Hour Delay Signal Warrant Report

```
********************************************************************************
Intersection #7 Pacific Avenue / Sycamore Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 1	0 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0
Initial Vol:	7	117	0	0	76	9	41	0	12	0	0	0
ApproachDel:	xxxxxx			xxxxxx			10.1			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=53]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=262]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #7 Pacific Avenue / Sycamore Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 1	0 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0
Initial Vol:	7	117	0	0	76	9	41	0	12	0	0	0

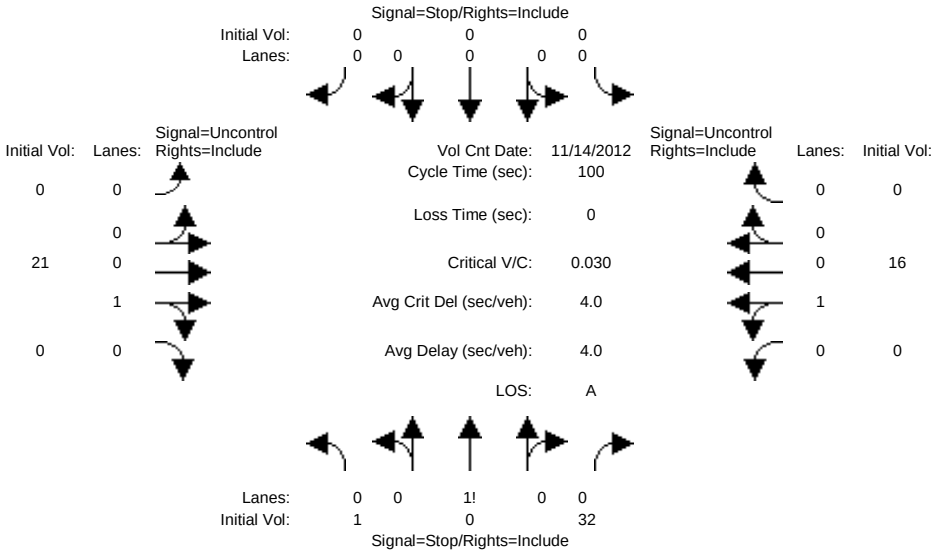
Major Street Volume: 209
Minor Approach Volume: 53
Minor Approach Volume Threshold: 637

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing + Project PM Peak

Intersection #8: Sycamore Street/Project Egress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 14 Nov 2012 <<												
Base Vol:	0	0	0	0	0	0	0	19	0	0	16	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	19	0	0	16	0
Added Vol:	1	0	31	0	0	0	0	2	0	0	0	0
Passby Exit:	0	0	1	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	32	0	0	0	0	21	0	0	16	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	0	32	0	0	0	0	21	0	0	16	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	0	32	0	0	0	0	21	0	0	16	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	37	37	21	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	981	859	1062	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	981	859	1062	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	1060	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	8.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	A	*	*	*	*	*	*	*	*	*	*
ApproachDel:		8.5			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		A			*			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #8 Sycamore Street/Project Egress

****

Future Volume Alternative: Peak Hour Warrant NOT Met

```
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  0  0    0  0  1  0  0
Initial Vol:    1    0    32     0    0     0     0   21     0     0   16     0
ApproachDel:       8.5           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=33]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=70]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

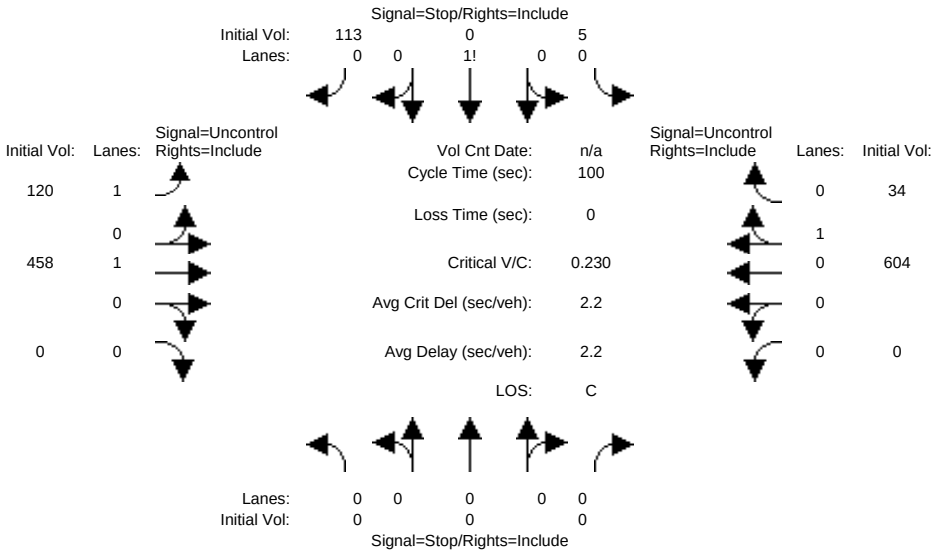
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #8 Sycamore Street/Project Egress
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  0  0    0  0  1  0  0
Initial Vol:    1    0    32     0    0     0     0   21     0     0   16     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:              37
Minor Approach Volume:            33
Minor Approach Volume Threshold: 1099
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


Appendix E – Level of Service Worksheets: Cumulative (General Plan 2030) with Project Conditions

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative (GP 2030) with Project

Intersection #1: Pacific Avenue/ Front Street



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	5	0	106	120	458	0	0	586	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	5	0	106	120	458	0	0	586	34
Added Vol:	0	0	0	0	0	7	0	0	0	0	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	5	0	113	120	458	0	0	604	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	5	0	113	120	458	0	0	604	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	5	0	113	120	458	0	0	604	34
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1319	1319	621	638	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	175	158	491	956	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	158	139	491	956	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.03	0.00	0.23	0.13	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	451	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	15.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			15.8			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #1 Pacific Avenue/ Front Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

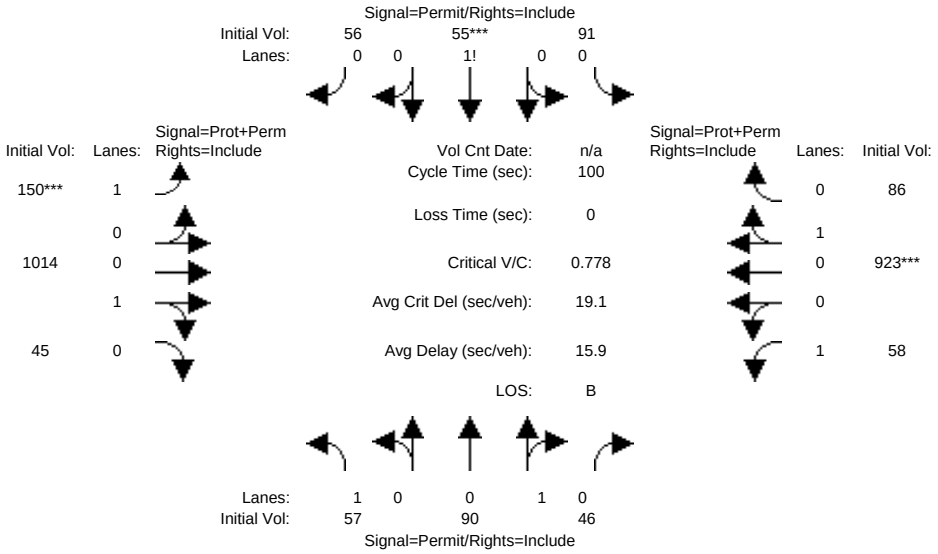
```
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     5    0   113   120  458     0     0  604    34
ApproachDel:    xxxxxx             15.8           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.5]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=118]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1334]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                 Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #1 Pacific Avenue/ Front Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     5    0   113   120  458     0     0  604    34
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             1216
Minor Approach Volume:           118
Minor Approach Volume Threshold: 217
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative (GP 2030) with Project

Intersection #2: Pacific Avenue / Laurel Street

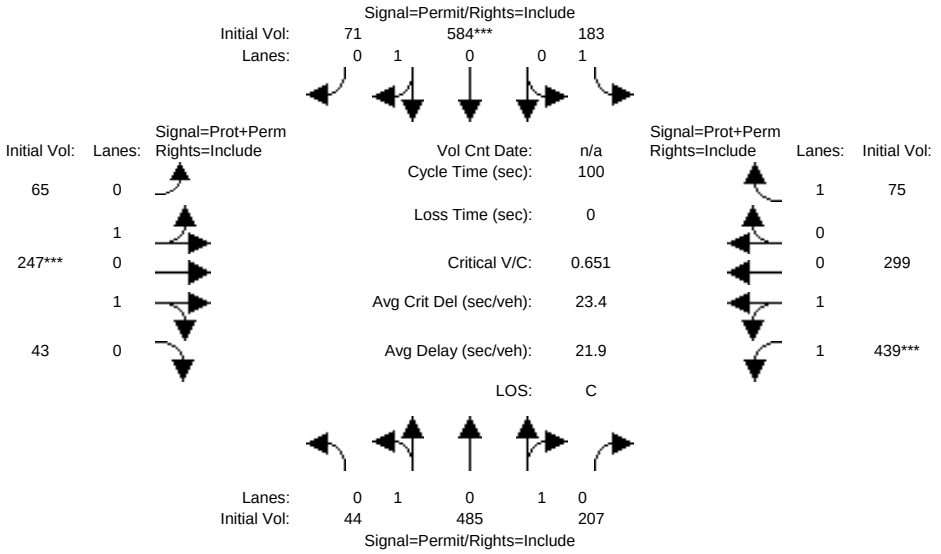


Street Name:	Pacific Avenue						Laurel Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	56	90	40	91	55	56	150	1014	41	58	923	86
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	90	40	91	55	56	150	1014	41	58	923	86
Added Vol:	1	0	6	0	0	0	0	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	90	46	91	55	56	150	1014	45	58	923	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	57	90	46	91	55	56	150	1014	45	58	923	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	90	46	91	55	56	150	1014	45	58	923	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	90	46	91	55	56	150	1014	45	58	923	86
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	0.95	0.95	0.68	0.68	0.68	0.95	0.99	0.99	0.95	0.99	0.99
Lanes:	1.00	0.66	0.34	0.45	0.27	0.28	1.00	0.96	0.04	1.00	0.91	0.09
Final Sat.:	1699	1193	610	580	351	357	1805	1808	80	1805	1715	160
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.08	0.16	0.16	0.16	0.08	0.56	0.56	0.03	0.54	0.54
Crit Moves:					****		****				****	
Green/Cycle:	0.20	0.20	0.20	0.20	0.20	0.20	0.80	0.76	0.76	0.73	0.69	0.69
Volume/Cap:	0.17	0.37	0.37	0.78	0.78	0.78	0.41	0.74	0.74	0.19	0.78	0.78
Uniform Del:	33.0	34.5	34.5	37.8	37.8	37.8	12.7	6.8	6.8	8.2	10.3	10.3
IncremntDel:	0.2	0.6	0.6	13.8	13.8	13.8	0.8	2.1	2.1	0.3	3.1	3.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	33.2	35.1	35.1	51.7	51.7	51.7	13.5	9.0	9.0	8.6	13.4	13.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.2	35.1	35.1	51.7	51.7	51.7	13.5	9.0	9.0	8.6	13.4	13.4
LOS by Move:	C	D	D	D	D	D	B	A	A	A	B	B
HCM2kAvgQ:	2	4	4	8	8	8	2	19	19	1	20	20

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative (GP 2030) with Project

Intersection #3: Front Street / Soquel Avenue

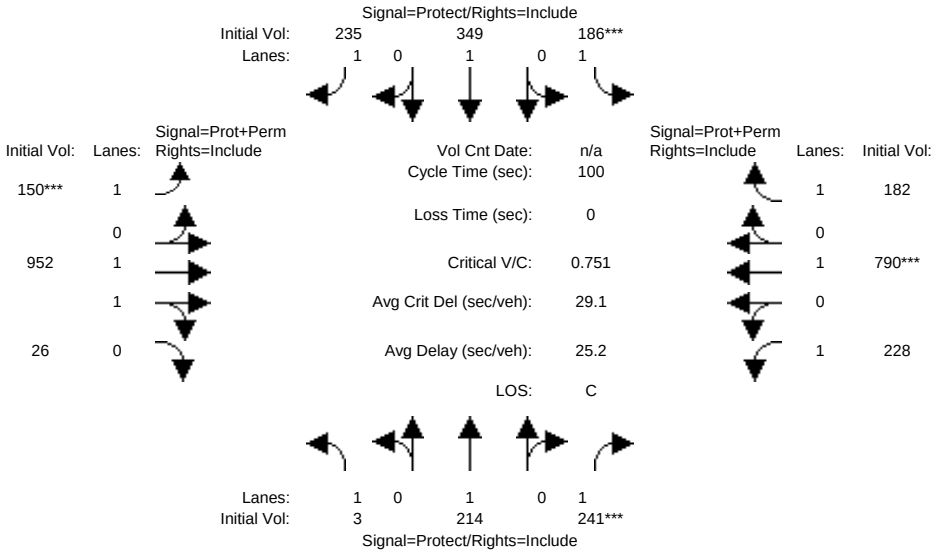


Street Name:	Front Street						Soquel Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	43	484	207	183	581	71	65	247	40	439	299	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	484	207	183	581	71	65	247	40	439	299	75
Added Vol:	1	1	0	0	3	0	0	0	3	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	485	207	183	584	71	65	247	43	439	299	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	485	207	183	584	71	65	247	43	439	299	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	485	207	183	584	71	65	247	43	439	299	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	485	207	183	584	71	65	247	43	439	299	75
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.73	0.73	0.73	0.30	0.98	0.98	0.92	0.92	0.92	0.97	0.97	0.85
Lanes:	0.12	1.32	0.56	1.00	0.89	0.11	0.37	1.39	0.24	1.19	0.81	1.00
Final Sat.:	166	1832	782	561	1667	203	643	2444	426	2195	1495	1615
Capacity Analysis Module:												
Vol/Sat:	0.26	0.26	0.26	0.33	0.35	0.35	0.10	0.10	0.10	0.20	0.20	0.05
Crit Moves:					****			****		****		
Green/Cycle:	0.54	0.54	0.54	0.54	0.54	0.54	0.31	0.16	0.16	0.46	0.31	0.31
Volume/Cap:	0.49	0.49	0.49	0.61	0.65	0.65	0.35	0.65	0.65	0.55	0.65	0.15
Uniform Del:	14.5	14.5	14.5	15.9	16.4	16.4	31.3	39.7	39.7	18.5	30.0	25.2
IncremntDel:	0.3	0.3	0.3	3.5	1.5	1.5	0.2	2.8	2.8	0.5	1.4	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	14.8	14.8	14.8	19.4	18.0	18.0	31.5	42.5	42.5	19.0	31.4	25.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.8	14.8	14.8	19.4	18.0	18.0	31.5	42.5	42.5	19.0	31.4	25.3
LOS by Move:	B	B	B	B	B	B	C	D	D	B	C	C
HCM2kAvgQ:	7	7	7	5	15	15	5	7	7	9	11	2

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative (GP 2030) with Project

Intersection #4: Front Street / Laurel Street

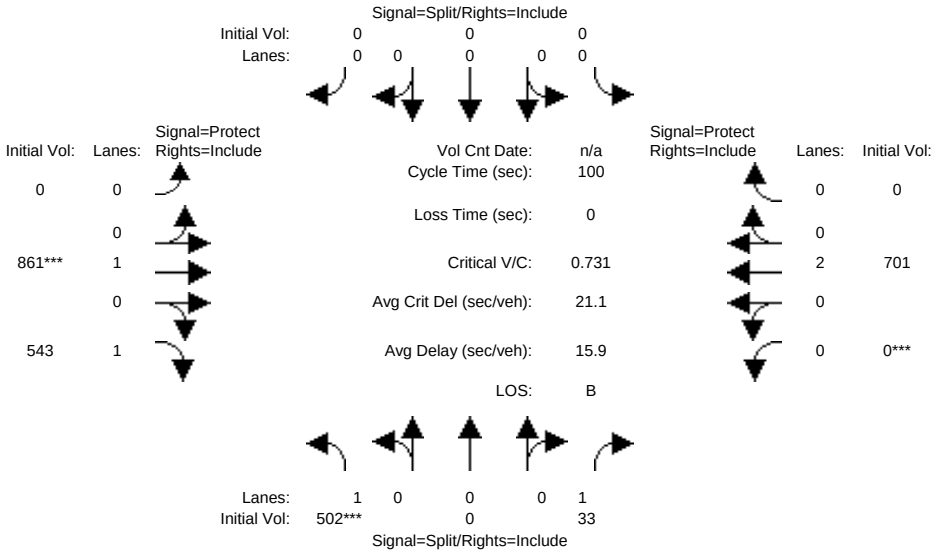


Street Name:	Front Street						Laurel Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	3	214	241	186	344	235	148	948	26	216	790	182
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	214	241	186	344	235	148	948	26	216	790	182
Added Vol:	0	0	0	0	5	0	2	4	0	12	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	214	241	186	349	235	150	952	26	228	790	182
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	214	241	186	349	235	150	952	26	228	790	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	214	241	186	349	235	150	952	26	228	790	182
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	214	241	186	349	235	150	952	26	228	790	182
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.95	0.95	1.00	0.85
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.95	0.05	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	1805	1900	1615	1805	3500	96	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.15	0.10	0.18	0.15	0.08	0.27	0.27	0.13	0.42	0.11
Crit Moves:			****	****			****				****	
Green/Cycle:	0.00	0.20	0.20	0.14	0.33	0.33	0.56	0.45	0.45	0.66	0.55	0.55
Volume/Cap:	0.55	0.57	0.75	0.75	0.55	0.44	0.48	0.60	0.60	0.43	0.75	0.20
Uniform Del:	49.8	36.2	37.7	41.5	27.3	26.0	15.6	20.5	20.5	9.9	17.1	11.2
IncremntDel:	86.5	2.0	9.5	12.1	1.1	0.6	1.2	0.6	0.6	0.6	3.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	136.3	38.2	47.3	53.6	28.3	26.6	16.7	21.1	21.1	10.4	20.1	11.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	136.3	38.2	47.3	53.6	28.3	26.6	16.7	21.1	21.1	10.4	20.1	11.3
LOS by Move:	F	D	D	D	C	C	B	C	C	B	C	B
HCM2kAvgQ:	1	7	9	6	8	5	3	11	11	3	19	3

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative (GP 2030) with Project

Intersection #5: Broadway / San Lorenzo Blvd

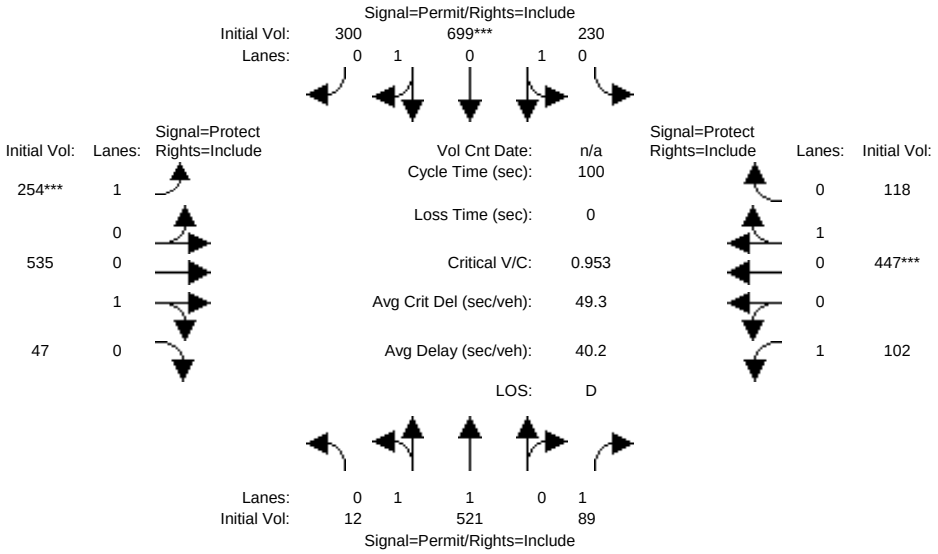


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	498	0	33	0	0	0	0	858	542	0	693	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	498	0	33	0	0	0	0	858	542	0	693	0
Added Vol:	4	0	0	0	0	0	0	3	1	0	8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	502	0	33	0	0	0	0	861	543	0	701	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	502	0	33	0	0	0	0	861	543	0	701	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	502	0	33	0	0	0	0	861	543	0	701	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	502	0	33	0	0	0	0	861	543	0	701	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	1.00	0.85	1.00	0.95	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	2.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1900	1615	0	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.28	0.00	0.02	0.00	0.00	0.00	0.00	0.45	0.34	0.00	0.19	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.38	0.00	0.38	0.00	0.00	0.00	0.00	0.62	0.62	0.00	0.62	0.00
Volume/Cap:	0.73	0.00	0.05	0.00	0.00	0.00	0.00	0.73	0.54	0.00	0.31	0.00
Uniform Del:	26.6	0.0	19.6	0.0	0.0	0.0	0.0	13.2	10.9	0.0	9.0	0.0
IncremntDel:	4.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.6	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Delay/Veh:	30.6	0.0	19.6	0.0	0.0	0.0	0.0	15.6	11.5	0.0	9.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.6	0.0	19.6	0.0	0.0	0.0	0.0	15.6	11.5	0.0	9.1	0.0
LOS by Move:	C	A	B	A	A	A	A	B	B	A	A	A
HCM2kAvgQ:	14	0	1	0	0	0	0	18	9	0	5	0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative (GP 2030) with Project

Intersection #6: Ocean Street / Broadway

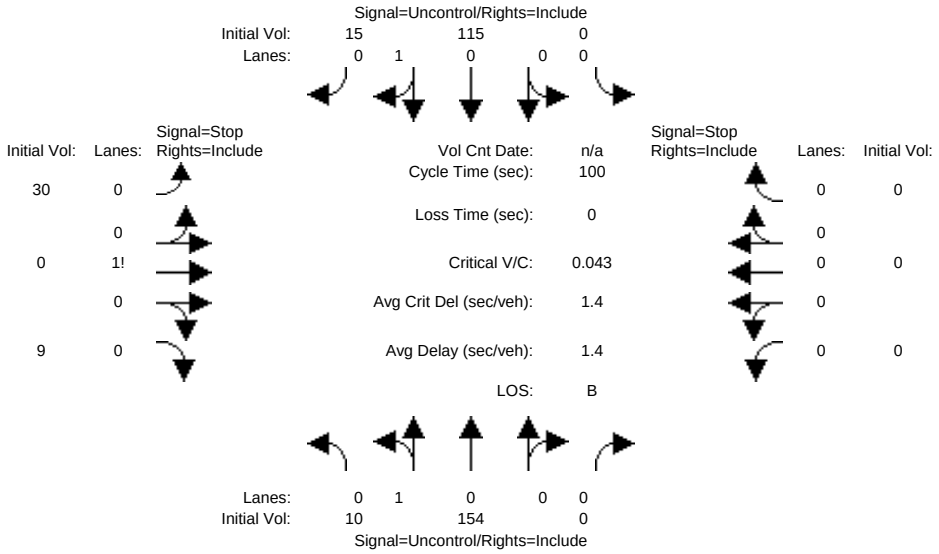


Street Name:	Ocean Street						Broadway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	12	521	89	230	699	296	253	534	47	102	443	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	521	89	230	699	296	253	534	47	102	443	118
Added Vol:	0	0	0	0	0	4	1	1	0	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	521	89	230	699	300	254	535	47	102	447	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	521	89	230	699	300	254	535	47	102	447	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	521	89	230	699	300	254	535	47	102	447	118
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	521	89	230	699	300	254	535	47	102	447	118
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.88	0.85	0.64	0.64	0.64	0.95	0.99	0.99	0.95	0.97	0.97
Lanes:	0.05	1.95	1.00	0.37	1.14	0.49	1.00	0.92	0.08	1.00	0.79	0.21
Final Sat.:	75	3261	1615	455	1382	593	1805	1726	152	1805	1457	385
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.06	0.51	0.51	0.51	0.14	0.31	0.31	0.06	0.31	0.31
Crit Moves:					****		****				****	
Green/Cycle:	0.53	0.53	0.53	0.53	0.53	0.53	0.15	0.40	0.40	0.07	0.32	0.32
Volume/Cap:	0.30	0.30	0.10	0.95	0.95	0.95	0.95	0.78	0.78	0.78	0.95	0.95
Uniform Del:	13.1	13.1	11.7	22.3	22.3	22.3	42.3	26.3	26.3	45.6	33.2	33.2
IncremntDel:	0.1	0.1	0.1	15.3	15.3	15.3	42.3	5.3	5.3	25.5	25.8	25.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	13.2	13.2	11.7	37.6	37.6	37.6	84.6	31.7	31.7	71.1	59.0	59.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.2	13.2	11.7	37.6	37.6	37.6	84.6	31.7	31.7	71.1	59.0	59.0
LOS by Move:	B	B	B	D	D	D	F	C	C	E	E	E
HCM2kAvgQ:	5	5	1	24	24	24	12	17	17	5	22	22

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative (GP 2030) with Project

Intersection #7: Pacific Avenue / Sycamore Street



Street Name:	Pacific Avenue						Sycamore Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Volume Module:												
Base Vol:	10	154	0	0	111	15	23	0	7	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	154	0	0	111	15	23	0	7	0	0	0
Added Vol:	0	0	0	0	4	0	7	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	154	0	0	115	15	30	0	9	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	154	0	0	115	15	30	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	10	154	0	0	115	15	30	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	130	xxxx	xxxxx	xxxx	xxxx	xxxxx	297	297	123	xxxx	xxxx	xxxxx
Potent Cap.:	1468	xxxx	xxxxx	xxxx	xxxx	xxxxx	699	618	934	xxxx	xxxx	xxxxx
Move Cap.:	1468	xxxx	xxxxx	xxxx	xxxx	xxxxx	695	614	934	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	739	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.1			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #7 Pacific Avenue / Sycamore Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0 1!	0 0		0 0 0	0 0	
Initial Vol:	10	154	0	0	115	15	30	0	9	0	0	0
ApproachDel:	xxxxxx			xxxxxx			10.1			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=39]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=333]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #7 Pacific Avenue / Sycamore Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0 1!	0 0		0 0 0	0 0	
Initial Vol:	10	154	0	0	115	15	30	0	9	0	0	0

Major Street Volume: 294
Minor Approach Volume: 39
Minor Approach Volume Threshold: 546

SIGNAL WARRANT DISCLAIMER
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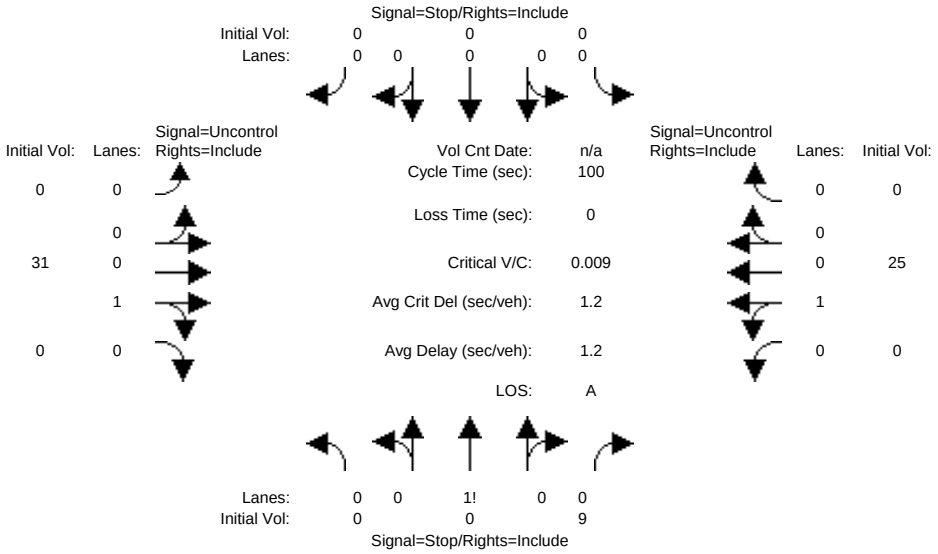
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative (GP 2030) with Project

Intersection #8: Sycamore Street/Project Egress



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	30	0	0	25	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	30	0	0	25	0
Added Vol:	0	0	9	0	0	0	0	1	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	9	0	0	0	0	31	0	0	25	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	9	0	0	0	0	31	0	0	25	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	9	0	0	0	0	31	0	0	25	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	31	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	1049	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	1049	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	8.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	8.5			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #8 Sycamore Street/Project Egress

****

Future Volume Alternative: Peak Hour Warrant NOT Met


```
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  0    0  0  1  0  0    0  0  1  0  0
Initial Vol:    0    0     9     0    0     0     0   31     0     0   25     0
ApproachDel:       8.5           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=9]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=65]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #8 Sycamore Street/Project Egress
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  0    0  0  1  0  0    0  0  1  0  0
Initial Vol:    0    0     9     0    0     0     0   31     0     0   25     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:              56
Minor Approach Volume:            9
Minor Approach Volume Threshold: 988
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
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