

# Appendix E

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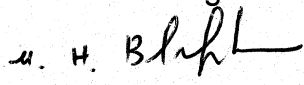
**Traffic Study and LA DOT Letter**

**CITY OF LOS ANGELES**  
INTER-DEPARTMENTAL CORRESPONDENCE

USS Iowa Battleship Relocation  
LA DOT Case No. HRB 11-006

Date: April 5, 2012

To: Christopher D. Cannon, Director of Environmental Management  
Port of Los Angeles

From:   
Muhammad H. Blorfroshan, Transportation Engineer  
Department of Transportation

Subject: **TRAFFIC IMPACT ASSESSMENT FOR THE PROPOSED USS IOWA  
BATTLESHIP RELOCATION PROJECT AT BERTH 87 IN THE PORT  
OF LOS ANGELES**

The Department of Transportation (DOT) has completed its review of the traffic impact analysis prepared by Fehr & Peers Transportation Consultants, dated December 2011, and the subsequent release of the Draft Environmental Impact Report (DEIR) in January 2012, for the proposed relocation of the USS Iowa Battleship to Berth 87 in the Port of Los Angeles. After a careful review of the pertinent data, DOT has determined that the traffic study adequately describes the project-related impacts of the proposed development.

**PROJECT DESCRIPTION**

The proposed project would be completed in two phases. The initial phase (Phase 1) involves the relocation of the USS Iowa battleship from its current location at Suisun Bay in San Francisco, California to Berth 87 in the Port of Los Angeles, California where it will be docked. Upon arrival at Berth 87, the USS Iowa will be restored and prepared for opening as a floating museum. Portions of the battleship will be available to the public for guide tours, special events, and educational programs. Phase 1 of the project is anticipated to be completed and fully occupied for the grand opening on July 4, 2012 (depending on certification of the current EIR). Phase 2 of the project, pending future funding, proposes to include an approximately 33,800 square foot visitor center which will include a museum and education center featuring historic artifacts. This phase of the project is expected to occur 6 to 8 years after the completion of Phase 1.

The project site at Berth 87 is located within the Port of Los Angeles Waterfront Plan area, adjacent to the community of San Pedro, encompassing approximately 4.5 acres of land. The project site contains an existing parking lot and is currently used for temporary cargo and cruise ship docking. Construction during the Phase 1 of the project is minimal.

The traffic study evaluated the traffic impact on the adjacent street system during the weekday PM and weekend mid-day peak hours of traffic which represent the worst overall traffic conditions with the greatest potential for impact for this land use. The traffic analysis also evaluated three future horizon years for traffic forecasts based on projected conditions in the years 2012, 2024 and 2042. The Port of Los Angeles travel demand forecasting model was used to develop the projections for the years 2024 and 2042.

## **DISCUSSION AND FINDINGS**

### **Trip Generation**

Trip generation estimates are based on stabilized annual visitor projections of approximately 386,000 visitors (expected in approximately 10 years after the operations begin). Trip generation was also estimated for the opening year (2012) annual visitor projection of 430,000 visitors. Trip generation was estimated only for the weekday PM peak period (3:00 PM to 6:00 PM) and the Saturday mid-day (11:00 a.m. to 2:00 p.m.) peak hours.

Opening Year attendance (2012) estimates are expected to create an increase of 1,196 daily trips and 110 (25 in/85 out) PM peak hour trips during a regular weekday, and 1,408 daily trips and 256 (133 in/123 out) mid-day peak hour trips during the weekend.

Stabilized Attendance (2024) is expected to create an increase of 1,096 daily trips and 106 (22 in/84 out) PM peak hour trips during a regular weekday, and 1,284 daily trips and 228 (119 in/109 out) mid-day peak hour trips during the weekend.

The trip generation estimates are based on annual visitor projections provided by the Pacific Battleship Center (PBC). Monthly attendance estimates from the PBC were based on actual attendance data at the USS Midway, which were verified by independently analyzing attendance data provided by USS Midway staff. Transportation and parking surveys were conducted at the USS Midway Museum in San Diego, California in mid-July 2011 to confirm assumptions and methodology used to estimate the trips.

In addition, the trip generation estimates were made for the Spring peak months instead of the Summer months to reflect the typical worst-case conditions since cruise ship activity at the World Cruise Center which is adjacent to the proposed project site is much lower during the Summer months.

**Attachment 1** provides a summary of the trip generation calculations.

### **Significant Traffic Impact**

23 intersections near the project vicinity were analyzed for potential significant impacts. Per LADOT Traffic Study Policies and Procedures Revised August 2011, a significant

impact at an intersection is identified as an increase in the Critical Movement Analysis (CMA) Vehicle-to-Capacity (V/C) ratio due to project related traffic, under the thresholds given in **Attachment 2**. Based on this analysis, the project is expected to produce a potentially significant impact at the intersection of Gaffey Street and 1<sup>st</sup> Street for the future 2042 year scenario during the weekend mid-day peak hour period.

A summary description of the volume-to-capacity (V/C) ratios and levels of service (LOS) at the study intersections is presented in **Attachment 3**.

## PROJECT REQUIREMENTS

### A. Gaffey Street and 1<sup>st</sup> Street

The recommended mitigation measure is to re-stripe the eastbound approach and departure on 1<sup>st</sup> Street, to shift the shared/through lane to the curb right-turn lane, creating a dual left-turn lane and a shared through/right-turn lane. Also, modifying the signal phasing for east-west traffic on 1<sup>st</sup> Street by installing lead/lag protected left-turn phases. **This mitigation would be implemented only if the project year 2042 LOS is reached, and only if LADOT accepts such an improvement at that time.** This improvement would fully mitigate the identified impact at this intersection under the 2042 plus project scenario.

All design and construction work shall be performed in accordance to DOT's Design standards, and shall include all applicable work deemed necessary. The applicant's engineer or contractor shall be responsible for contacting DOT's Signal and Geometric Design Sections to arrange a pre-design meeting to finalize the proposed design needed for the improvement.

### B. Parking Analysis

Although, the Project will provide sufficient parking to meet "visitors" demand during most hours of operation, this demand may not be met during the period from 12:00 PM to 2:00 PM on weekends for both opening year and stabilized conditions as shown in **Attachment 4**. Since the parking shortage is estimated to occur during a short period of time, the Project proposes to address this deficiency by providing an off-site parking facility for the employees, or by identifying nearby overflow parking lots or available street parking. A final determination regarding the use of on-street parking to fulfill the Project "visitors" parking requirement should be sought by consultation with the Los Angeles Department of Building and Safety.



**C. Site Access and Internal Circulation**

This determination does not include approval of the project's driveways, internal circulation and parking scheme. Adverse traffic impacts could occur due to access and circulation issues. In order to minimize and prevent last minute building design changes, it is highly imperative that the applicant, prior to the commencement of building or parking layout design efforts, contact DOT for driveway width and internal circulation requirements. This would ensure that such traffic flow considerations are designed and incorporated early into the building and parking layout plans to avoid any unnecessary time delays and potential costs associated with late design changes.

Final DOT approval shall be obtained prior to issuance of any building permits. This should be accomplished by submitting detailed site/driveway plans, at a scale of at least 1" = 40', separately to DOT's Citywide Planning Coordination Section (201 N. Figueroa St., 4<sup>th</sup> Floor, Station 3; 213-482-7024) as soon as possible, but prior to submittal of building plans for plan check to the Department of Building and Safety.

**D. Construction Impacts**

LADOT recommends that a construction worksite traffic control plan be submitted to LADOT Southern District for review and approval prior to the start of any construction work. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. LADOT also recommends that all construction related traffic be restricted to off-peak hours.

If you have any questions, please contact Pedro Ayala of my staff or me at (213) 485-1062.

MHB:pa

**Attachments**

cc: Jacob Haik, Fifteenth Council District  
Kevin Grant, Kerry Cartwright, Port of Los Angeles  
Lawrence Cuaresma, BOE Harbor District Office  
Netai Basu, Fehr & Peers  
Jay Kim, Sean Haeri, Crystal Killian, DOT

TABLE 3A  
TRIP GENERATION ESTIMATES - OPENING YEAR - SPRING SEASON [1][2]

User	Amount	Unit	Daily			PM			Mid-Day		
			In	Out	Total	In	Out	Total	In	Out	Total
<b>Weekday</b>											
Employee	70	employees	90	90	180	0	35	35	N/A		
Visitor	1243	visitors	508	508	1016	25	50	75			
<b>Total</b>			<b>598</b>	<b>598</b>	<b>1196</b>	<b>25</b>	<b>85</b>	<b>110</b>			
<b>Weekend</b>											
Employee	70	employees	90	90	180	N/A			10	0	10
Visitor	1455	visitors	614	614	1228				123	123	246
<b>Total</b>			<b>704</b>	<b>704</b>	<b>1408</b>				<b>133</b>	<b>123</b>	<b>256</b>

TABLE 3B  
TRIP GENERATION ESTIMATES - STABILIZED ATTENDANCE - SPRING SEASON [1][2]

User Type	Amount	Unit	Daily			PM			Mid-Day		
			In	Out	Total	In	Out	Total	In	Out	Total
<b>Weekday</b>											
Employee	80	employees	100	100	200	0	40	40	N/A		
Visitor	1116	visitors	448	448	896	22	44	66			
<b>Total</b>			<b>548</b>	<b>548</b>	<b>1096</b>	<b>22</b>	<b>84</b>	<b>106</b>			
<b>Weekend</b>											
Employee	80	employees	100	100	200	N/A			10	0	10
Visitor	1306	visitors	542	542	1084				109	109	218
<b>Total</b>			<b>642</b>	<b>642</b>	<b>1284</b>				<b>119</b>	<b>109</b>	<b>228</b>

Source: Fehr & Peers, 2011

[1] - Please see attachment A which describes approach, assumptions and methodology used to estimate trip generation

[2] Trip generation for the proposed project was estimated using projections provided by the applicant, Pacific Battleship Center (PBC) and surveys conducted at the USS Midway Museum in San Diego, California

## IV. LEVEL OF SERVICE AND SIGNIFICANT IMPACT ANALYSIS

This section presents an analysis of the existing and future without and with project volumes to determine the potential traffic impacts of the proposed project on the operating conditions of the surrounding street system. The traffic impact analysis compares the projected LOS at each study intersection under existing and future 'plus' project conditions to the existing and future base conditions to estimate the incremental increase in the V/C ratio caused by the proposed project. This provides the information needed to assess the potential impact of the project using significance criteria established by LADOT. Detailed LOS calculations for the proposed project for Existing plus Project and future years 2012, 2024, and 2042 are included in Appendix C.

### CRITERIA FOR DETERMINATION OF SIGNIFICANT TRAFFIC IMPACT

All study intersections are in the City of Los Angeles. Significance criteria established by the City of Los Angeles was used to assess the potential for significant project impacts at the study intersections.

The City of Los Angeles has established threshold criteria to determine significant traffic impact of a proposed project in its jurisdiction. Under the LADOT guidelines, an intersection would be significantly impacted with an increase in V/C ratio equal to or greater than 0.04 for intersections operating at LOS C, equal to or greater than 0.02 for intersections operating at LOS D, and equal to or greater than 0.01 for intersections operating at LOS E or F after the addition of project traffic. Intersections operating at LOS A or B after the addition of the project traffic are not considered significantly impacted regardless of the increase in V/C ratio. The following summarizes the impact criteria:

LOS	Final V/C Ratio	Project-related Increase in V/C
C	>0.700 - 0.800	equal to or greater than 0.040
D	> 0.800 - 0.900	equal to or greater than 0.020
E or F	> 0.900	equal to or greater than 0.010

### LEVEL OF SERVICE ANALYSIS

#### *Existing plus Project Traffic Conditions – Opening Year Attendance*

The resulting existing plus project peak hour traffic volumes with opening year attendance, illustrated in Figure 7, were analyzed to determine the projected existing operating conditions with the addition of the proposed project traffic. The results of the existing plus project – opening year attendance analysis are presented in Table 4. As indicated in the table, all 23 intersections operate at LOS D or better during both peak hours.

#### *Project Intersection Impacts – Existing plus Project – Opening Year Attendance*

To determine whether significant impacts would occur at the study intersections, the existing plus project operating conditions were compared to the existing operating conditions. As shown in Table 4, using the City of Los Angeles criteria for determination of significant impacts, under Existing Conditions with opening year attendance, the proposed project would not result in any significant impacts.

TABLE 4  
EXISTING PLUS PROJECT CONDITIONS LEVEL OF SERVICE RESULTS - IOWA OPENING YEAR ATTENDANCE

	INTERSECTION [1]	PEAK HOUR	Existing		Existing + Project (Opening Year Attendance)				2012 Base		2012 + Project (Opening Year Attendance)			
			V/C	LOS	V/C	LOS	Change	Impact	V/C	LOS	V/C	LOS	Change	Impact
1	Gaffey St & Summerland Ave	PM	0.813	D	0.814	D	0.001	NO	0.823	D	0.823	D	0.000	NO
		WK	0.584	A	0.586	A	0.002	NO	0.593	A	0.593	A	0.000	NO
2	Gaffey St & I-110 Ramps	PM	0.514	A	0.515	A	0.001	NO	0.521	A	0.521	A	0.000	NO
		WK	0.429	A	0.431	A	0.002	NO	0.437	A	0.439	A	0.002	NO
3	Gaffey St & 1st St	PM	0.825	D	0.828	D	0.003	NO	0.835	D	0.838	D	0.003	NO
		WK	0.778	C	0.783	C	0.005	NO	0.790	C	0.794	C	0.004	NO
4	Gaffey St & 5th St	PM	0.634	B	0.634	B	0.000	NO	0.643	B	0.643	B	0.000	NO
		WK	0.674	B	0.675	B	0.001	NO	0.684	B	0.685	B	0.001	NO
5	Gaffey St & 7th St	PM	0.593	A	0.593	A	0.000	NO	0.601	B	0.601	B	0.000	NO
		WK	0.622	B	0.623	B	0.001	NO	0.631	B	0.631	B	0.000	NO
6	Gaffey St & 9th St	PM	0.611	B	0.613	B	0.002	NO	0.621	B	0.621	B	0.000	NO
		WK	0.633	B	0.637	B	0.004	NO	0.647	B	0.650	B	0.003	NO
7	Gaffey St & 22nd St	PM	0.333	A	0.335	A	0.002	NO	0.345	A	0.347	A	0.002	NO
		WK	0.427	A	0.430	A	0.003	NO	0.458	A	0.461	A	0.003	NO
8	Gaffey St & 25th St	PM	0.325	A	0.326	A	0.001	NO	0.331	A	0.332	A	0.001	NO
		WK	0.466	A	0.470	A	0.004	NO	0.480	A	0.483	A	0.003	NO
9	Via Cabrillo Marina & 22nd St	PM	0.080	A	0.080	A	0.000	NO	0.085	A	0.085	A	0.000	NO
		WK	0.122	A	0.123	A	0.001	NO	0.137	A	0.139	A	0.002	NO
11	Harbor Blvd & Swinford St/SR-47 EB Ramps	PM	0.485	A	0.503	A	0.018	NO	0.493	A	0.511	A	0.018	NO
		WK	0.583	A	0.608	B	0.025	NO	0.595	A	0.619	B	0.024	NO
12	Harbor Blvd & O'Farrell St	PM	0.493	A	0.500	A	0.007	NO	0.500	A	0.507	A	0.007	NO
		WK	0.391	A	0.427	A	0.036	NO	0.409	A	0.445	A	0.036	NO
13	Harbor Blvd & 1st St	PM	0.351	A	0.407	A	0.056	NO	0.399	A	0.461	A	0.062	NO
		WK	0.245	A	0.374	A	0.129	NO	0.298	A	0.444	A	0.146	NO
15	Harbor Blvd & 5th St	PM	0.498	A	0.499	A	0.001	NO	0.538	A	0.539	A	0.001	NO
		WK	0.282	A	0.283	A	0.001	NO	0.322	A	0.323	A	0.001	NO
16	Harbor Blvd & 6th St	PM	0.282	A	0.284	A	0.002	NO	0.303	A	0.304	A	0.001	NO
		WK	0.406	A	0.407	A	0.001	NO	0.448	A	0.450	A	0.002	NO
17A	Harbor Blvd & 7th St	PM	0.203	A	0.204	A	0.001	NO	0.208	A	0.209	A	0.001	NO
		WK	0.135	A	0.136	A	0.001	NO	0.151	A	0.153	A	0.002	NO
18	Miner St & 22nd St	PM	0.301	A	0.304	A	0.003	NO	0.304	A	0.307	A	0.003	NO
		WK	0.249	A	0.253	A	0.004	NO	0.251	A	0.255	A	0.004	NO
19	Pacific Ave & Front St	PM	0.212	A	0.212	A	0.000	NO	0.216	A	0.216	A	0.000	NO
		WK	0.225	A	0.226	A	0.001	NO	0.232	A	0.233	A	0.001	NO
20	Pacific Ave & 1st St	PM	0.342	A	0.345	A	0.003	NO	0.347	A	0.350	A	0.003	NO
		WK	0.349	A	0.360	A	0.011	NO	0.353	A	0.364	A	0.011	NO
21	Pacific Ave & 5th St	PM	0.327	A	0.328	A	0.001	NO	0.331	A	0.331	A	0.000	NO
		WK	0.343	A	0.343	A	0.000	NO	0.357	A	0.358	A	0.001	NO
22	Pacific Ave & 7th St	PM	0.341	A	0.342	A	0.001	NO	0.346	A	0.347	A	0.001	NO
		WK	0.382	A	0.383	A	0.001	NO	0.387	A	0.387	A	0.000	NO
23	Pacific Ave & 9th St	PM	0.385	A	0.386	A	0.001	NO	0.391	A	0.391	A	0.000	NO
		WK	0.413	A	0.414	A	0.001	NO	0.423	A	0.424	A	0.001	NO

Source: Fehr & Peers, 2011

Notes: Intersections analyzed using LADOT CMA methodology and significance criteria.

[1] - Significant impact analysis was not conducted for the two unsignalized intersections: Intersections #10 - Harbor Blvd & SR-47 Ramp and Intersection #14 - Harbor Blvd & 3rd St. These intersections were analyzed using Highway Capacity Manual (2000) methodology. Results of the LOS analysis are provided in the appendix.



TABLE 5  
2024 PLUS PROJECT CONDITIONS LEVEL OF SERVICE RESULTS - USS IOWA STABILIZED ATTENDANCE

	INTERSECTION [1]	PEAK HOUR	2024		2024 + Project (Stabilized Attendance)			
			V/C	LOS	V/C	LOS	Change	Impact
1	Gaffey St & Summerland Ave	PM	1.006	F	1.006	F	0.000	NO
		WK	0.732	C	0.732	C	0.000	NO
2	Gaffey St & I-110 Ramps	PM	0.603	B	0.603	B	0.000	NO
		WK	0.500	A	0.502	A	0.002	NO
3	Gaffey St & 1st St	PM	0.918	E	0.920	E	0.002	NO
		WK	0.876	D	0.880	D	0.004	NO
4	Gaffey St & 5th St	PM	0.696	B	0.696	B	0.000	NO
		WK	0.753	C	0.754	C	0.001	NO
5	Gaffey St & 7th St	PM	0.710	C	0.710	C	0.000	NO
		WK	0.710	C	0.711	C	0.001	NO
6	Gaffey St & 9th St	PM	0.809	D	0.811	D	0.002	NO
		WK	0.852	D	0.855	D	0.003	NO
7	Gaffey St & 22nd St	PM	0.580	A	0.583	A	0.003	NO
		WK	0.666	B	0.669	B	0.003	NO
8	Gaffey St & 25th St	PM	0.465	A	0.466	A	0.001	NO
		WK	0.693	B	0.696	B	0.003	NO
9	Via Cabrillo Marina & 22nd St	PM	0.190	A	0.191	A	0.001	NO
		WK	0.308	A	0.309	A	0.001	NO
11	Harbor Blvd & Swinford St/SR-47 EB Ramps	PM	0.504	A	0.517	A	0.013	NO
		WK	0.685	B	0.705	C	0.020	NO
12	Harbor Blvd & O'Farrell St	PM	0.408	A	0.412	A	0.004	NO
		WK	0.459	A	0.480	A	0.021	NO
13	Harbor Blvd & 1st St	PM	0.429	A	0.491	A	0.062	NO
		WK	0.503	A	0.595	A	0.092	NO
15	Harbor Blvd & 5th St	PM	0.562	A	0.562	A	0.000	NO
		WK	0.497	A	0.498	A	0.001	NO
16	Harbor Blvd & 6th St	PM	0.340	A	0.341	A	0.001	NO
		WK	0.402	A	0.403	A	0.001	NO
17A	Harbor Blvd & 7th St	PM	0.447	A	0.447	A	0.000	NO
		WK	0.522	A	0.524	A	0.002	NO
17B	Harbor Blvd & Sampson Way	PM	0.501	A	0.507	A	0.006	NO
		WK	0.586	A	0.597	A	0.011	NO
18	Miner St & 22nd St	PM	0.466	A	0.468	A	0.002	NO
		WK	0.654	B	0.658	B	0.004	NO
19	Pacific Ave & Front St	PM	0.267	A	0.267	A	0.000	NO
		WK	0.289	A	0.291	A	0.001	NO
20	Pacific Ave & 1st St	PM	0.531	A	0.534	A	0.003	NO
		WK	0.535	A	0.547	A	0.011	NO
21	Pacific Ave & 5th St	PM	0.495	A	0.496	A	0.001	NO
		WK	0.530	A	0.531	A	0.001	NO
22	Pacific Ave & 7th St	PM	0.513	A	0.514	A	0.001	NO
		WK	0.547	A	0.548	A	0.001	NO
23	Pacific Ave & 9th St	PM	0.686	B	0.686	B	0.000	NO
		WK	0.753	C	0.755	C	0.002	NO

Source: Fehr & Peers, 2011

Notes: Intersections analyzed using LADOT CMA criteria.

[1] - Significant Impact analysis was not conducted for the two unsignalized intersections: Intersections #10 - Harbor Blvd & SR-47 Ramp and Intersection #14 - Harbor Blvd & 3rd St. These intersections were analyzed using Highway Capacity Manual (2000) methodology. Results of the LOS analysis are provided in the appendix.

**TABLE 6**  
**2042 PLUS PROJECT CONDITIONS LEVEL OF SERVICE RESULTS - USS IOWA STABILIZED ATTENDANCE**

	INTERSECTION [1]	PEAK HOUR	2042		2042 + Project (Stabilized Attendance)			
			V/C	LOS	V/C	LOS	Change	Impact
1	Gaffey St & Summerland Ave	PM	1.064	F	1.064	F	0.000	NO
		WK	0.786	C	0.787	C	0.001	NO
2	Gaffey St & I-110 Ramps	PM	0.629	B	0.631	B	0.002	NO
		WK	0.546	A	0.548	A	0.002	NO
3	Gaffey St & 1st St	PM	0.927	E	0.930	E	0.003	NO
		WK	0.920	E	0.932	E	0.012	YES
4	Gaffey St & 5th St	PM	0.722	C	0.722	C	0.000	NO
		WK	0.795	C	0.795	C	0.000	NO
5	Gaffey St & 7th St	PM	0.733	C	0.733	C	0.000	NO
		WK	0.737	C	0.738	C	0.001	NO
6	Gaffey St & 9th St	PM	0.834	D	0.835	D	0.001	NO
		WK	0.889	D	0.893	D	0.004	NO
7	Gaffey St & 22nd St	PM	0.621	B	0.623	B	0.002	NO
		WK	0.687	B	0.691	B	0.004	NO
8	Gaffey St & 25th St	PM	0.497	A	0.498	A	0.001	NO
		WK	0.742	C	0.746	C	0.004	NO
9	Via Cabrillo Marina & 22nd St	PM	0.192	A	0.192	A	0.000	NO
		WK	0.314	A	0.315	A	0.001	NO
11	Harbor Blvd & Swinford St/SR-47 EB Ramps	PM	0.571	A	0.584	A	0.013	NO
		WK	0.739	C	0.760	C	0.021	NO
12	Harbor Blvd & O'Farrell St	PM	0.445	A	0.460	A	0.015	NO
		WK	0.489	A	0.511	A	0.022	NO
13	Harbor Blvd & 1st St	PM	0.517	A	0.578	A	0.061	NO
		WK	0.605	B	0.698	B	0.093	NO
15	Harbor Blvd & 5th St	PM	0.581	A	0.582	A	0.001	NO
		WK	0.529	A	0.531	A	0.002	NO
16	Harbor Blvd & 6th St	PM	0.508	A	0.509	A	0.001	NO
		WK	0.711	C	0.712	C	0.001	NO
17A	Harbor Blvd & 7th St	PM	0.555	A	0.555	A	0.000	NO
		WK	0.817	D	0.819	D	0.002	NO
17B	Harbor Blvd & Samson Way	PM	0.663	B	0.665	B	0.002	NO
		WK	0.883	D	0.885	D	0.002	NO
18	Miner St & 22nd St	PM	0.500	A	0.501	A	0.001	NO
		WK	0.699	B	0.703	C	0.004	NO
19	Pacific Ave & Front St	PM	0.288	A	0.288	A	0.000	NO
		WK	0.309	A	0.311	A	0.002	NO
20	Pacific Ave & 1st St	PM	0.575	A	0.579	A	0.004	NO
		WK	0.584	A	0.595	A	0.011	NO
21	Pacific Ave & 5th St	PM	0.538	A	0.539	A	0.001	NO
		WK	0.576	A	0.577	A	0.001	NO
22	Pacific Ave & 7th St	PM	0.543	A	0.544	A	0.001	NO
		WK	0.579	A	0.579	A	0.000	NO
23	Pacific Ave & 9th St	PM	0.739	C	0.739	C	0.000	NO
		WK	0.825	D	0.827	D	0.002	NO

Source: Fehr & Peers, 2011

Notes: Intersections analyzed using LADOT CMA methodology and significance criteria.

[1] - Significant Impact analysis was not conducted for the two unsignalized intersections: Intersection #10 - Harbor Blvd & SR-47 Ramp and Intersection #14 - Harbor Blvd & 3rd St. These intersections were analyzed using Highway Capacity Manual (2000) methodology. Results of the LOS analysis are provided in the appendix.

**TABLE 7  
LEVEL OF SERVICE RESULTS WITH PROPOSED MITIGATION**

Scenario	Time of Day	Base Conditions		Project Conditions			Mitigation Conditions			
		V/C	LOS	V/C	LOS	ΔV/C	V/C	LOS	ΔV/C	Significance after Mitigation
<i>1st Street &amp; Gaffey Street</i>										
2042 - Stabilized Attendance	WK	0.92	E	0.932	E	0.012	0.9	E	-0.02	Less-than-Significant

Source: Fehr & Peers, 2012

Notes: Intersections analyzed using LADOT CMA criteria.

**TABLE 8A**  
**ESTIMATE OF OPENING YEAR PARKING DEMAND - WEEKDAY**

Hour	Spaces	Employee Occupied Spaces	Remaining Spaces for Visitors	Visitor Autos	Surplus Spaces	% of Supply Used	Sufficient?	Bus Spaces	Buses Parked	Sufficient?
9:00	300	18	282	25	257	14%	Yes	8	0	Yes
10:00	300	43	257	75	182	39%	Yes	8	4	Yes
11:00	300	58	242	150	92	69%	Yes	8	4	Yes
12:00	300	60	240	200	40	87%	Yes	8	4	Yes
1:00	300	70	230	200	30	90%	Yes	8	4	Yes
2:00	300	70	230	150	80	73%	Yes	8	0	Yes
3:00	300	52	248	100	148	51%	Yes	8	0	Yes
4:00	300	17	283	75	208	31%	Yes	8	0	Yes
5:00	300	0	300	0	300	0%	Yes	8	0	Yes

**TABLE 8B**  
**ESTIMATE OF OPENING YEAR PARKING DEMAND - WEEKEND**

Hour	Spaces	Employee Occupied Spaces	Remaining Spaces for Visitors	Visitor Autos	Surplus Spaces	% of Supply Used	Sufficient?	Bus Spaces	Buses Parked	Sufficient?
9:00	300	18	282	30	252	16%	Yes	8	0	Yes
10:00	300	43	257	91	166	45%	Yes	8	2	Yes
11:00	300	58	242	182	60	80%	Yes	8	4	Yes
12:00	300	60	240	242	-2	101%	No	8	4	Yes
1:00	300	70	230	242	-12	104%	No	8	4	Yes
2:00	300	70	230	182	48	84%	Yes	8	2	Yes
3:00	300	52	248	122	126	58%	Yes	8	0	Yes
4:00	300	17	283	91	192	36%	Yes	8	0	Yes
5:00	300	0	300	0	300	0%	Yes	8	0	Yes

## Notes:

- [1] Analysis assumes visitors remain on site for approximately 2.5 hours  
 [2] Supply is considered sufficient when no more than 90% of spaces are utilized  
 [3] Analysis is for peak month of background traffic, when approximately 9% of annual attendance occurs

Source: Fehr & Peers, 2011



**TABLE 9A**  
**ESTIMATE OF STABILIZED ATTENDANCE PARKING DEMAND - WEEKDAY**

Hour	Spaces	Employee Occupied Spaces	Remaining Spaces for Visitors	Visitor Autos	Surplus Spaces	% of Supply Used	Sufficient?	Bus Spaces	Buses Parked	Sufficient?
9:00	300	21	279	22	257	14%	Yes	8	0	Yes
10:00	300	50	250	66	184	39%	Yes	8	2	Yes
11:00	300	69	231	132	99	67%	Yes	8	4	Yes
12:00	300	70	230	176	54	82%	Yes	8	4	Yes
1:00	300	80	220	176	44	85%	Yes	8	4	Yes
2:00	300	80	220	132	88	71%	Yes	8	0	Yes
3:00	300	60	240	88	152	49%	Yes	8	0	Yes
4:00	300	20	280	66	214	29%	Yes	8	0	Yes
5:00	300	0	300	0	300	0%	Yes	8	0	Yes

**TABLE 9B**  
**ESTIMATE OF STABILIZED ATTENDANCE PARKING DEMAND - WEEKEND**

Hour	Spaces	Employee Occupied Spaces	Remaining Spaces for Visitors	Visitor Autos	Surplus Spaces	% of Supply Used	Sufficient?	Bus Spaces	Buses Parked	Sufficient?
9:00	300	21	279	27	252	16%	Yes	8	0	Yes
10:00	300	50	250	80	170	43%	Yes	8	2	Yes
11:00	300	69	231	160	71	76%	Yes	8	4	Yes
12:00	300	70	230	214	16	95%	No	8	4	Yes
1:00	300	80	220	214	6	98%	No	8	4	Yes
2:00	300	80	220	160	60	80%	Yes	8	2	Yes
3:00	300	60	240	106	134	55%	Yes	8	0	Yes
4:00	300	20	280	80	200	33%	Yes	8	0	Yes
5:00	300	0	300	0	300	0%	Yes	8	0	Yes

## Notes:

[1] Analysis assumes visitors remain on site for approximately 2.5 hours

[2] Supply is considered sufficient when no more than 90% of spaces are utilized

[3] Analysis is for peak month of background traffic, when approximately 9% of annual attendance occurs

Source: Fehr & Peers, 2011

# TRAFFIC STUDY FOR THE USS IOWA PROJECT ENVIRONMENTAL IMPACT REPORT



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Prepared for:  
ICF International

Ref: SM11-2462  
March, 2012

**TRAFFIC STUDY  
FOR THE  
USS IOWA PROJECT  
ENVIRONMENTAL IMPACT REPORT**

March 2012

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## I. INTRODUCTION

Fehr & Peers conducted a traffic study to evaluate the potential traffic impacts of the proposed museum on the historic USS Iowa battleship in the Port of Los Angeles (Port) in Los Angeles, California. This report identifies the base data and assumptions, explains the methodologies used, and summarizes the findings of the study, which was conducted in support of the environmental impact report (EIR) being prepared for the project. The traffic impact analysis conducted for this report includes analysis of existing (Year 2011) conditions, opening year (2012), 2024 and 2042 conditions with the project.

### PROJECT DESCRIPTION

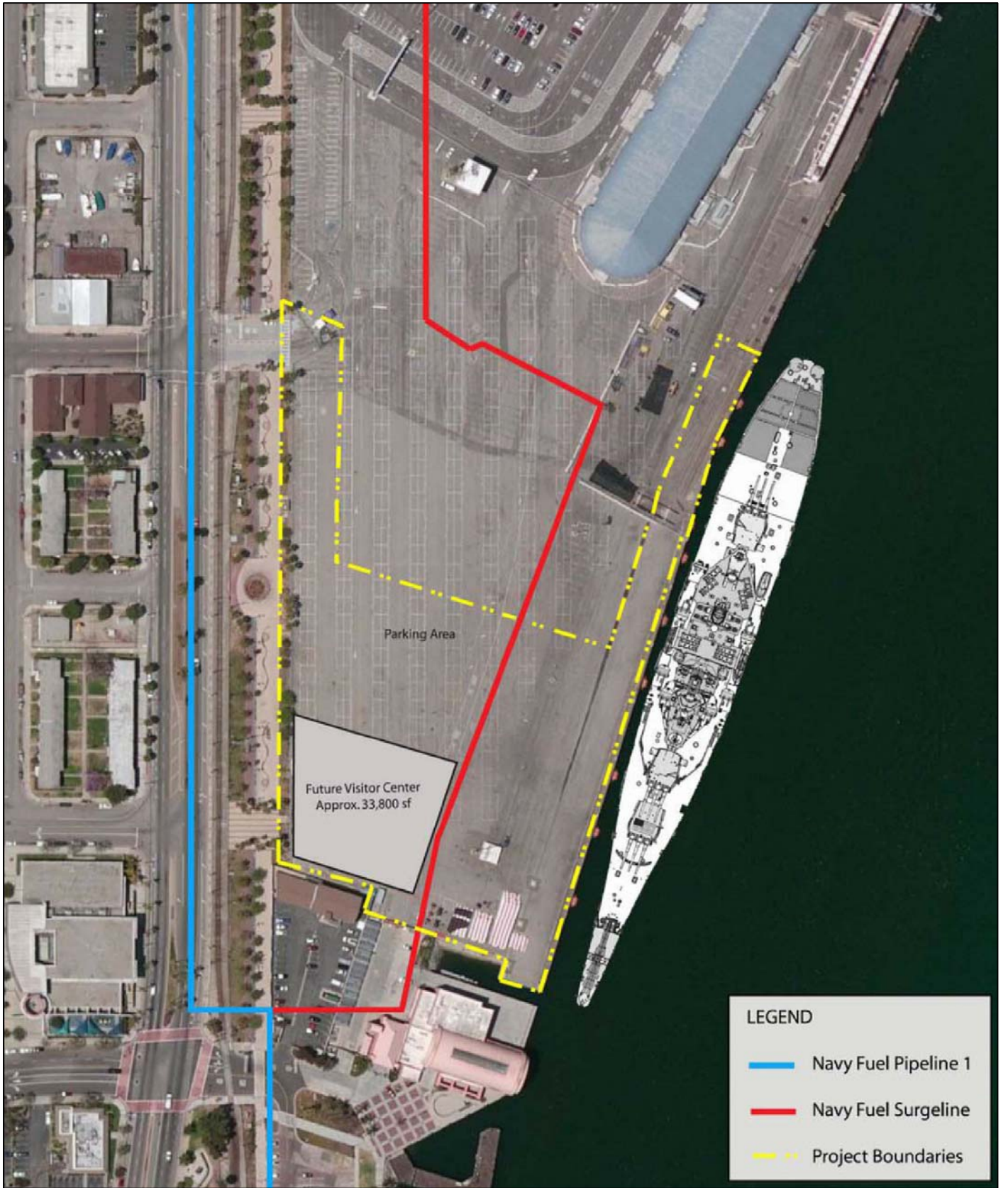
The USS Iowa Project involves the relocation of the USS Iowa battleship from its current location at Suisun Bay, California to Berth 87 in Port of Los Angeles, California, where it will be docked. Sections of the historic battleship will be opened as a museum. A second phase of the project (pending future funding) will include an approximately 33,800-square foot visitor center, which will include a museum and education center featuring historic artifacts, educational programs and food concession areas; ticketing, gift shop, and restroom facilities. Following is a summary of project elements:

- Preparation and transport of USS Iowa from the National Defense Reserve Fleet in Suisun Bay to the Port of Los Angeles;
- Mooring the battleship at Berth 87 in the North Harbor area of Port of Los Angeles;
- Restriping of an existing parking lot for 300 spaces, 10 ADA spaces, and eight bus spaces;
- Delivery and set up of a prefabricated 480-square foot, single-story Office/Ticket Booth;
- Delivery and set-up of two prefabricated Entry Platforms to accommodate access and egress from the Iowa;
- Delivery and set-up of a prefabricated parking kiosk;
- Construction of an approximately two-story 33,800-square foot footprint landside Visitor Center during Phase 2, and;
- Ongoing operations and maintenance.

The project site at Berth 87 is located within the Port's San Pedro Waterfront Plan area, adjacent to the community of San Pedro. The project site at Berth 87 contains an existing parking lot and is currently used for temporary cargo and cruise ship docking. Figure 1 shows the location of the proposed project. As can be seen in Figure 1, the project area is generally bounded by I-110 to the north, 22<sup>nd</sup> Street to the south, Harbor Boulevard to the east, and Gaffey Street to the west.

### STUDY SCOPE

The scope of work for this study was developed in conjunction with the Los Angeles Department of Transportation (LADOT). The base assumptions and technical methodologies were discussed as part of the study approach. The study analyzes potential project-generated traffic impacts on the adjacent street system for two peak hours existing conditions and three future horizon years. The analysis of future year traffic forecasts is based on projected conditions in years 2012, 2024 and 2042 both without and with the



**LEGEND**

- Navy Fuel Pipeline 1
- Navy Fuel Surgeline
- - - Project Boundaries



addition of project traffic. The following traffic scenarios were analyzed for the weekday PM peak hour (between 3:00 and 6:00 PM) and weekend midday peak hour (between 11:00 AM and 3:00 PM):

- Existing (Year 2011) Conditions – The analysis of existing Year 2011 traffic conditions provides a basis for the remainder of the study. The existing conditions analysis includes an assessment of streets, traffic volumes, and operating conditions. The existing traffic conditions are the baseline for assessing the significance of project impacts under the California Environmental Quality Act (CEQA).
- Existing (Year 2011) plus Project Conditions – This is an analysis of existing traffic conditions with traffic expected from the proposed project added to the traffic volumes. This is assessed under stabilized project attendance conditions.
- Cumulative Base Conditions – Future traffic conditions are projected without the proposed project in the opening year 2012 and cumulative conditions in 2024 and 2042. The objective of this phase of analysis is to project future traffic growth and operating conditions that could be expected to result from regional ambient growth and known cumulative projects if the proposed project were not developed. The cumulative base traffic forecasts are used to develop cumulative baseline operating conditions that provide the basis for determining project impacts under CEQA.
- Cumulative plus Project Conditions – This is an analysis of future traffic conditions with traffic expected from the proposed project added to the cumulative base traffic forecasts. Cumulative plus proposed project conditions were developed for years 2012, 2024 and 2042. The objective of this analysis is to develop the traffic forecasts of the proposed project that are then used to identify potential impacts.

The traffic study focuses on weekday PM and weekend midday peak hour traffic because it represents the worst overall traffic conditions with the greatest potential for impact.

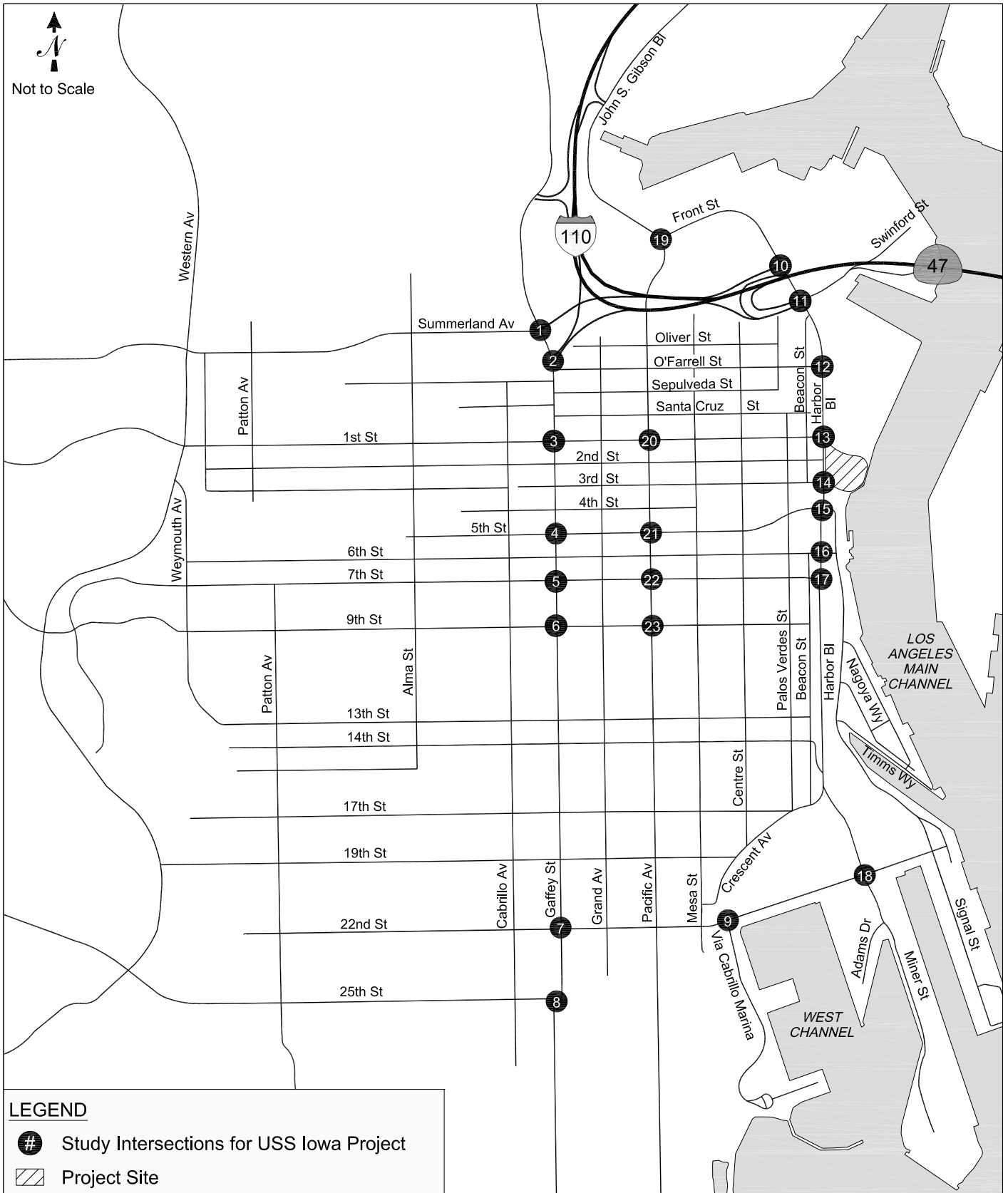
As illustrated in Figure 2, 23 intersections were identified, in consultation with LADOT, for weekday afternoon and weekend midday peak hour analysis as part of the scope of work for this project.

**No. Intersection<sup>1</sup>**

- 1 Gaffey Street & Summerland Avenue
- 2 Gaffey Street & I-110 Ramps
- 3 Gaffey Street & 1<sup>st</sup> Street
- 4 Gaffey Street & 5<sup>th</sup> Street
- 5 Gaffey Street & 7<sup>th</sup> Street
- 6 Gaffey Street & 9<sup>th</sup> Street
- 7 Gaffey Street & 22<sup>nd</sup> Street
- 8 Gaffey Street & 25<sup>th</sup> Street
- 9 Via Cabrillo Marina & 22<sup>nd</sup> Street
- 10 Harbor Boulevard & SR-47 WB Ramps (Unsignalized)
- 11 Harbor Boulevard & Swinford Street/SR-47 EB Ramps

---

<sup>1</sup> Per LADOT traffic study guidelines, a significant impact analysis was not conducted for the unsignalized intersections. A warrant analysis was conducted to determine if any of the unsignalized intersection meet City's signal warrants criteria.



- 12 Harbor Boulevard & O'Farrell Street
- 13 Harbor Boulevard & 1<sup>st</sup> Street
- 14 Harbor Boulevard & 3<sup>rd</sup> Street (Unsignalized)
- 15 Harbor Boulevard & 5<sup>th</sup> Street
- 16 Harbor Boulevard & 6<sup>th</sup> Street
- 17 Harbor Boulevard & 7<sup>th</sup> Street
- 18 Miner Street & 22<sup>nd</sup> Street
- 19 Pacific Avenue & Front Street
- 20 Pacific Avenue & 1<sup>st</sup> Street
- 21 Pacific Avenue & 5<sup>th</sup> Street
- 22 Pacific Avenue & 7<sup>th</sup> Street
- 23 Pacific Avenue & 9<sup>th</sup> Street

## **ORGANIZATION OF REPORT**

This report is divided into chapters, including this introduction. Chapter II describes the existing conditions in the study area including an inventory of the streets, highways, and transit service in the study area, a summary of traffic volumes and an assessment of operating conditions. The methodologies used to develop traffic forecasts for the cumulative base and cumulative plus project and the forecasts themselves are included in Chapter III. Chapter IV presents an assessment of potential intersection traffic impacts generated by the proposed project and presents the mitigation measures to reduce the identified intersection impacts. The results of the regional transportation system analysis are provided in Chapter V. Chapter VI provides an analysis of parking proposed for the project. Chapter VII summarizes the key findings and conclusions of the study. Appendices to this report include details of the technical analysis.

## II. EXISTING CONDITIONS

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the study area. The assessment of conditions relevant to this study includes an inventory of the street and highway systems, traffic volumes on these facilities, and operating conditions at key intersections. A detailed description of these elements is presented in this chapter.

### EXISTING HIGHWAY AND STREET SYSTEM

The project site is in the San Pedro community of the City of Los Angeles. Primary regional access to the project area is provided by the Harbor Freeway (I-110) northwest of the project site and by the Vincent Thomas Bridge and Seaside Avenue (SR-47) northeast of the project site. Year 2009 data from the California Department of Transportation (Caltrans) shows that the average daily traffic (ADT) volume on the Harbor Freeway to the north of Gaffey Street was approximately 66,000 vehicles per day (vpd) and 50,000 vpd on the Vincent Thomas Bridge (*2010 Traffic Volumes on California State Highways*, California Department of Transportation, obtained November 2011). From SR-47, the project site can be accessed via ramps on Harbor Boulevard.

Local access to the project site is provided by a well-defined grid of arterial and collector roads. The primary roadway facilities in the project study area are:

- Gaffey Street – Gaffey Street is classified as a Major Class II Highway that runs north/south in the study area. This arterial provides a connection for local and regional travel from San Pedro to other parts of Los Angeles and the South Bay region. Gaffey Street is a major commercial corridor within San Pedro.
- Pacific Avenue – Pacific Avenue is classified as a Secondary Highway that provides north/south access in San Pedro. It is a major commercial corridor in San Pedro, consisting of strip commercial, auto repair and restaurants. The four-lane roadway terminates in the north at Channel Street, where the roadway continues as John S. Gibson Boulevard. In the south, it terminates near the Pacific Ocean, where it intersects with Shepard Street and Bluff Place.
- Harbor Boulevard/Miner Street – Harbor Boulevard is classified as a Major Class II Highway and provides north/south access along the eastern edge of the San Pedro community. It continues as Front Street north of the site and as Miner Street south of Crescent Avenue.
- Via Cabrillo Marina – Via Cabrillo Marina is classified as a Local Street and provides north/south access along the eastern edge of San Pedro from the Cabrillo Marina. The four-lane divided roadway terminates at 22<sup>nd</sup> Street.
- Summerland Avenue – Summerland Avenue is classified as a Secondary Highway that provides east/west access in San Pedro. It is a two-lane undivided roadway between its terminus to the west at Western Avenue and to the east at its terminus with Gaffey Street/Gaffey Place.
- O'Farrell Street – O'Farrell Street is classified as a Collector Street that provides east/west access in San Pedro. It is a predominantly residential corridor. The two-lane roadway terminates to the east at Harbor Boulevard and in the west terminates at Gaffey Street.

- 1<sup>st</sup> Street – 1<sup>st</sup> Street is classified as a Secondary Highway that provides east/west access in San Pedro. It is a predominantly residential corridor in San Pedro. The two-lane roadway terminates to the east at Harbor Boulevard and in the west terminates at Miraleste Drive.
- 3<sup>rd</sup> Street – 3<sup>rd</sup> Street is classified as a Collector Street that provides east/west access in San Pedro. It is a predominantly residential corridor with one travel lane in each direction. 3<sup>rd</sup> Street terminates to the east at Harbor Boulevard and to the west at South Harbor View Avenue.
- 5<sup>th</sup> Street – 5<sup>th</sup> Street is classified as a Secondary Highway that provides east/west access in San Pedro. 5<sup>th</sup> Street has a mix of commercial and residential land uses. The two-lane undivided roadway terminates to the west at S. Bandini Street and to the east at Harbor Boulevard. 5<sup>th</sup> Street provides access directly to the Port of Los Angeles and the Maritime Museum parking lot.
- 6<sup>th</sup> Street – 6<sup>th</sup> Street is classified as a Local Street that provides east/west access in San Pedro. The two-lane undivided roadway extends from Weymouth Avenue eastbound to Sampson Way. 6<sup>th</sup> Street is predominantly commercial east of Gaffey Street, and residential in nature west of Gaffey Street.
- 7<sup>th</sup> Street – 7<sup>th</sup> Street is classified as a Secondary Highway between Weymouth Avenue and Harbor Boulevard and provides east/west access through the central portion of the community of San Pedro. This roadway starts just east of Western Avenue and terminates at Harbor Boulevard.
- 9<sup>th</sup> Street – 9<sup>th</sup> Street is classified as a Major Class II Highway between Western Avenue and Pacific Avenue, providing east/west access through the central portion of the community of San Pedro. Between Pacific Avenue and Beacon Street, it is classified as a Local Street. This roadway starts west of Western Avenue and terminates at Beacon Street, one block west of Harbor Boulevard.
- 22<sup>nd</sup> Street – 22<sup>nd</sup> Street is classified as a Secondary Highway east of Gaffey Street and as a Local Street west of Gaffey Street. 22<sup>nd</sup> Street has a mix of residential and commercial land uses, and is a two-lane undivided roadway. 22<sup>nd</sup> Street extends from Elanita Drive eastbound to Signal Place.
- 25<sup>th</sup> Street – 25<sup>th</sup> Street is classified as a Major Class II Highway providing east/west access through the southern portion of the community of San Pedro. This roadway starts west of Western Avenue and terminates at Pacific Avenue.

Diagrams of the existing lane configurations at the analyzed intersections are provided in Appendix A.

## EXISTING TRANSIT SERVICE

The project study area is served by bus transit lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro), LADOT, and the Municipal Area Express (MAX) lines. To complement the traditional transit service in the study area, the Port operates the Waterfront Red Car Line, a historic streetcar line. The following transit routes provide service in the project vicinity:

- Metro Line 205 – Metro Line 205 travels along 1<sup>st</sup> Street, Harbor Boulevard, 7<sup>th</sup> Street, Pacific Avenue, and 13<sup>th</sup> Street in the vicinity of the project site. Line 205 provides service between San Pedro and the Metro Green Line Imperial/Wilmington Station with stops in Compton, Carson, and the Willowbrook and Harbor Gateway communities. Line 205 provides service from approximately 5:00 AM to midnight on weekdays, from 5:00 AM to 11:15 PM on weekends and holidays. Bus headways are 30 to 60 minutes on weekdays and 60 minutes on weekends.

- Metro Line 246 – Metro Line 246 operates on Pacific Avenue in the vicinity of the project site. Line 246 provides service between San Pedro and Gardena, where it terminates at the Artesia Transit Center. Line 246 provides service from approximately 4:00 AM to 2:00 AM on weekdays and weekends. Bus headways are 30 to 60 minutes on weekdays and Saturdays, and hourly on Sundays and holidays.
- Metro Line 450 – Metro Line 450 travels along 22<sup>nd</sup> Street, Gaffey Street, 19<sup>th</sup> Street, Pacific Avenue, 1<sup>st</sup> Street, and Harbor Boulevard in the vicinity of the project site. Line 450 provides service between San Pedro and Downtown Los Angeles, with stops in Gardena and Carson. Line 450 provides service from approximately 5:00 AM to 9:00 PM on weekdays and Saturdays and 7:00 AM to 9:00 PM on Sundays and holidays. Line 450 operates at 30- to 60-minute headways on weekdays, 40-minute headways on Saturdays, and 60-minute headways on Sundays and holidays. From San Pedro, this line provides freeway express service via the Harbor Transitway (on I-110) to the 7<sup>th</sup> Street/Metro Center station in downtown Los Angeles.
- Metro Line 550 – Line 550 travels along Gaffey Street, 7<sup>th</sup> Street and 13<sup>th</sup> Street in the study area. It operates from 5:00 AM to 11:45 PM on weekdays, and from 6:00 AM to 11:45 PM on weekends and holidays, with headways of approximately 30- to 60-minute headways on weekdays and 60-minute headways on weekends. This line provides express connection from San Pedro to West Hollywood.
- LADOT Commuter Express Line 142 – Line 142 travels along 7<sup>th</sup> Street in the vicinity of the project site. This line provides service between Ports O' Call in east San Pedro, downtown San Pedro, and the Long Beach Transit Center via the Vincent Thomas Bridge. The line runs from approximately 5:30 AM to 11:30 PM, seven days a week, with frequencies of 25 to 60 minutes.
- DASH San Pedro – This line travels along Gaffey Street, 7<sup>th</sup> Street, and 19<sup>th</sup> Street near the project site. This route provides local service in the community of San Pedro. The line runs from 6:30 AM to 7:30 PM on Monday through Friday, and from 9:00 AM to 6:30 PM on weekends and holidays. Service frequencies are 20 to 30 minutes.
- Waterfront Red Car Line – This local line is a 1.5-mile historic streetcar line connecting the World Cruise Center with attractions along the San Pedro waterfront in the vicinity of the project site. Hours of operation are from 12:00 noon to 9:30 PM Friday through Sunday, with service every 20 minutes. Red Cars also run on mid-week days when cruise ships are in Port.
- MAX Line 3 – This line travels along 9<sup>th</sup> Street and Pacific Avenue in San Pedro. It is a directional express line that brings passengers from the South Bay to the El Segundo and Los Angeles International Airport (LAX) area. The weekday morning northbound route has four buses with frequencies of 20 to 30 minutes starting at 5:20 AM. The afternoon southbound route also has four buses with frequencies of 20 to 30 minutes starting at 5:03 PM.
- MAX Line 3X – This line travels along Pacific Avenue and Gaffey Street near the project site. It is a directional express line that brings passengers from the South Bay to the El Segundo and LAX area. The weekday morning northbound route has four buses with frequencies of approximately 20 minutes starting at 6:00 AM. The afternoon southbound route also has four buses with frequencies of approximately 30 minutes starting at 4:36 PM.



## EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

This section presents the existing peak hour turning movement traffic volumes for the analyzed intersections, describes the methodology used to assess the traffic conditions at each intersection, and analyzes the resulting operating conditions at each, indicating volume-to-capacity (V/C) ratios and level of service (LOS).

### ***Existing Traffic Volumes***

New classified traffic counts were conducted for the weekday evening peak period (between 3:00 and 6:00 PM) and Saturday midday peak period (between 11:00 AM and 2:00 PM) in April 2011. The existing weekday evening and Saturday midday peak hour traffic volumes at the analyzed intersections are presented in Figure 3. Traffic count data sheets are provided in Appendix B.

### ***Level of Service Methodology***

LOS is a qualitative measure used to describe the condition of traffic flow, ranging from excellent “free-flow” conditions at LOS A to overloaded “stop-and-go” conditions at LOS F. LOS D is typically considered to be the minimum acceptable level of service in urban areas.

According to *Traffic Study Policies and Procedures* (LADOT, August 2011), this study is required to use the Critical Movement Analysis (CMA) method of intersection capacity calculation (Transportation Research Circular No. 212, Transportation Research Board, 1980) to analyze the LOS at signalized intersections. The CMA methodology determines the V/C ratio of an intersection based on the number of approach lanes, the traffic signal phasing and the traffic volumes. The CMA worksheet developed by LADOT was used to implement the CMA methodology in this study. The V/C ratio is then used to find the corresponding LOS based on the definitions in Table 1.

Twenty-one of the 23 analyzed intersections are currently controlled by traffic signals. All but two of these intersections are currently controlled by the City’s Automated Traffic Surveillance and Control (ATSAC) system and Adaptive Traffic Control System (ATCS). The intersections of I-110 Eastbound Ramps/Swinford Street & Harbor Boulevard/Front Street and Miner Street & 22<sup>nd</sup> Street currently do not have ATSAC and ATCS installed. In accordance with LADOT procedures, a capacity increase of 7% was applied to reflect the benefits of ATSAC and 3% for ATCS, where applicable.

Two study intersections, Harbor Boulevard & SR-47 Westbound On-Ramp; and Harbor Boulevard & 3<sup>rd</sup> Street, are un-signalized and were analyzed for information purposes using the stop-controlled methodologies from *Highway Capacity Manual* (Transportation Research Board, 2000), which determines the average vehicle delay and the LOS using the relationship. The results of the analysis of these two un-signalized intersections are presented in Appendix D.

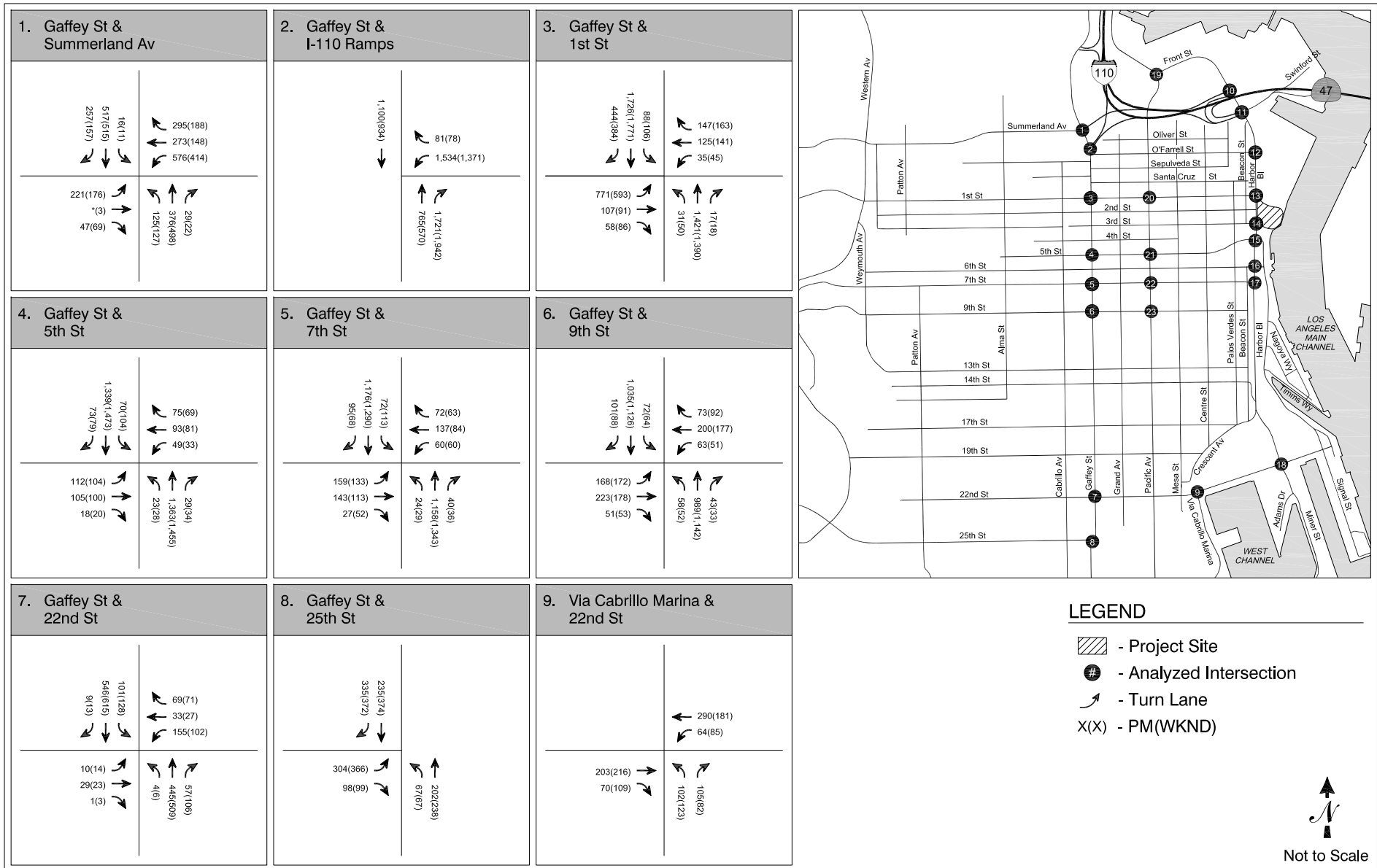
### ***Existing Peak Hour Levels of Service***

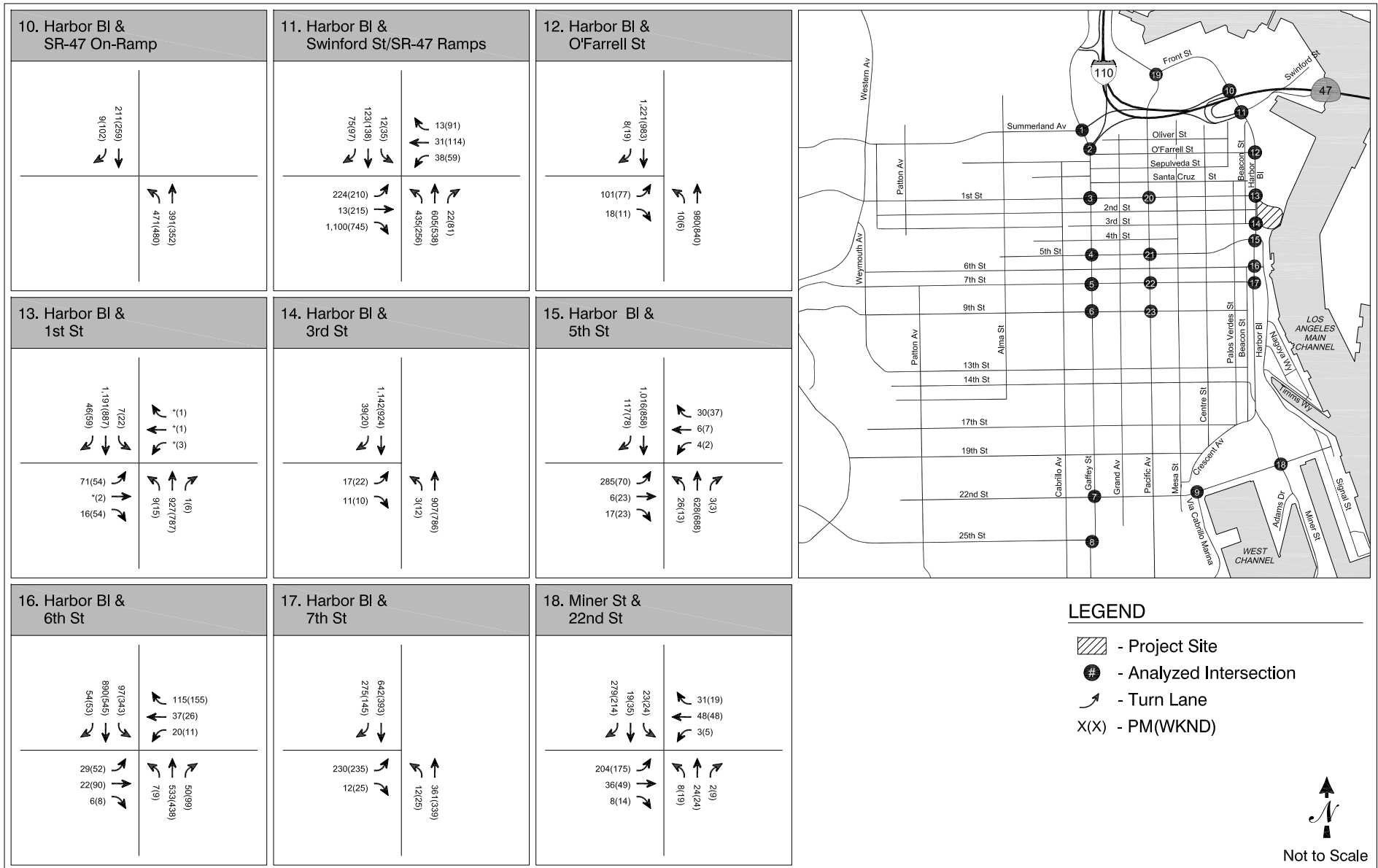
The existing weekday and weekend peak hour turning movement volumes presented in Figure 3 were used in conjunction with the LOS methodology described above to determine existing operating conditions at each of the study intersections. LOS calculation worksheets are included in Appendix C.

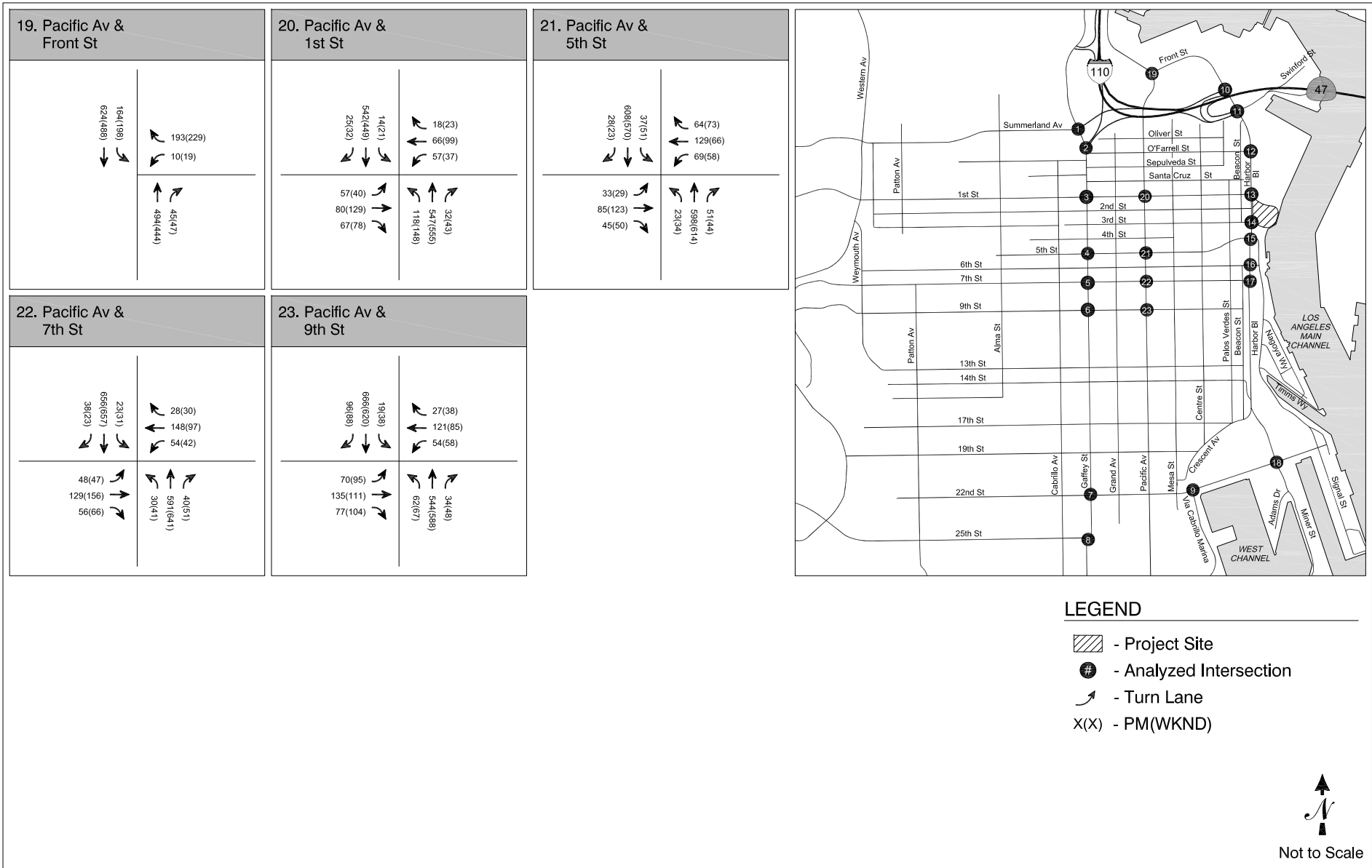
Table 2 summarizes the existing weekday evening and weekend mid-day peak hour V/C ratios and corresponding LOS at each of the study intersections. The results of this analysis indicate that 22 of 23 study intersections are currently operating at acceptable LOS (LOS D or better) during the weekday

morning evening peak hours. The intersection of Gaffey Street & 1<sup>st</sup> Street operates at LOS E during the both of the analyzed peak periods.









**19. Pacific Av & Front St**

<p>154(198) 62(488)</p> <p>↘ ↙</p>	<p>↘ ↙</p> <p>193(229) 10(19)</p>
	<p>↘ ↙</p> <p>45(47) 49(444)</p>

**20. Pacific Av & 1st St**

<p>14(21) 542(449) 25(32)</p> <p>↘ ↙</p>	<p>↘ ↙</p> <p>18(23) 66(99) 57(37)</p>
<p>↘ ↙</p> <p>57(40) 80(129) 67(78)</p>	<p>↘ ↙</p> <p>32(43) 547(555) 118(148)</p>

**21. Pacific Av & 5th St**

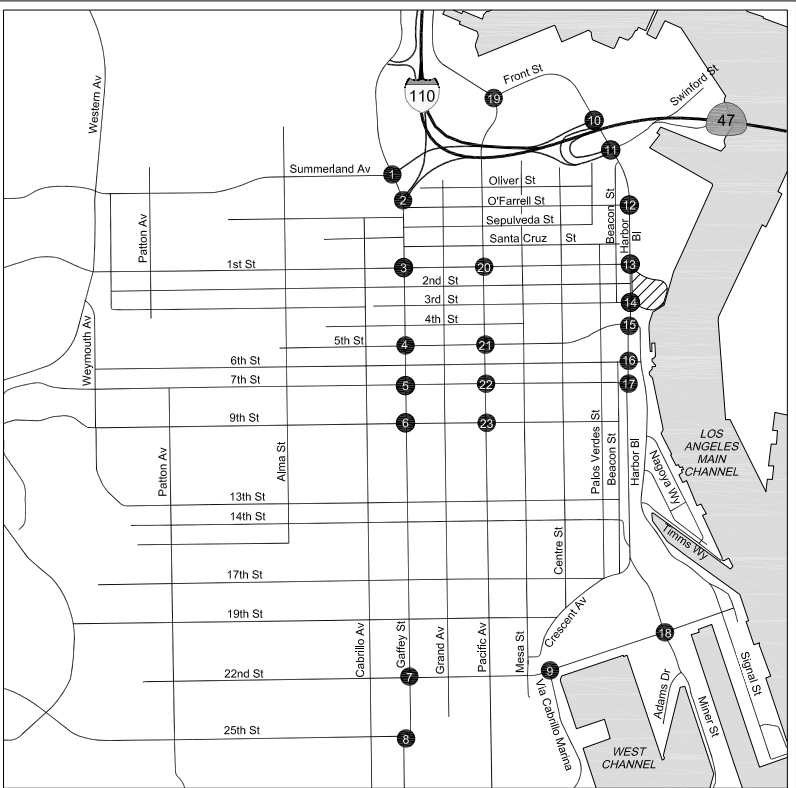
<p>37(51) 608(570) 28(23)</p> <p>↘ ↙</p>	<p>↘ ↙</p> <p>64(73) 129(66) 69(58)</p>
<p>↘ ↙</p> <p>33(29) 85(123) 45(50)</p>	<p>↘ ↙</p> <p>51(44) 598(614) 23(34)</p>

**22. Pacific Av & 7th St**

<p>23(31) 656(657) 38(23)</p> <p>↘ ↙</p>	<p>↘ ↙</p> <p>28(30) 148(97) 54(42)</p>
<p>↘ ↙</p> <p>48(47) 129(156) 56(66)</p>	<p>↘ ↙</p> <p>30(41) 591(641) 40(51)</p>

**23. Pacific Av & 9th St**

<p>19(38) 666(620) 98(88)</p> <p>↘ ↙</p>	<p>↘ ↙</p> <p>27(38) 121(85) 54(58)</p>
<p>↘ ↙</p> <p>70(95) 135(111) 77(104)</p>	<p>↘ ↙</p> <p>34(48) 544(688) 62(67)</p>



**TABLE 1  
LEVEL OF SERVICE DEFINITIONS  
FOR SIGNALIZED INTERSECTIONS**

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

Source: *Transportation Research Circular No. 212, Interim Materials on Highway Capacity*, Transportation Research Board, 1980.

**TABLE 2  
EXISTING CONDITIONS LEVEL OF SERVICE RESULTS**

	INTERSECTION [1]	PEAK HOUR	Existing	
			V/C	LOS
1	Gaffey St & Summerland Ave	PM	0.813	D
		WK	0.584	A
2	Gaffey St & I-110 Ramps	PM	0.514	A
		WK	0.429	A
3	Gaffey St & 1st St	PM	0.825	D
		WK	0.778	C
4	Gaffey St & 5th St	PM	0.634	B
		WK	0.674	B
5	Gaffey St & 7th St	PM	0.593	A
		WK	0.622	B
6	Gaffey St & 9th St	PM	0.611	B
		WK	0.633	B
7	Gaffey St & 22nd St	PM	0.333	A
		WK	0.427	A
8	Gaffey St & 25th St	PM	0.325	A
		WK	0.466	A
9	Via Cabrillo Marina & 22nd St	PM	0.080	A
		WK	0.122	A
11	Harbor Blvd & Swinford St/SR-47 EB Ramps	PM	0.485	A
		WK	0.583	A
12	Harbor Blvd & O'Farrell St	PM	0.493	A
		WK	0.391	A
13	Harbor Blvd & 1st St	PM	0.351	A
		WK	0.245	A
15	Harbor Blvd & 5th St	PM	0.498	A
		WK	0.282	A
16	Harbor Blvd & 6th St	PM	0.282	A
		WK	0.406	A
17A	Harbor Blvd & 7th St	PM	0.203	A
		WK	0.135	A
18	Miner St & 22nd St	PM	0.301	A
		WK	0.249	A
19	Pacific Ave & Front St	PM	0.212	A
		WK	0.225	A
20	Pacific Ave & 1st St	PM	0.342	A
		WK	0.349	A
21	Pacific Ave & 5th St	PM	0.327	A
		WK	0.343	A
22	Pacific Ave & 7th St	PM	0.341	A
		WK	0.382	A
23	Pacific Ave & 9th St	PM	0.385	A
		WK	0.413	A

Source: Fehr & Peers, 2011

Notes: Intersections analyzed using LADOT CMA methodology and significance criteria.

[1] - Significant Impact analysis was not conducted for the two unsignalized intersections: Intersections #10 - Harbor Blvd & SR-47 Ramp and Intersection #14 - Harbor Blvd & 3rd St. These intersections were analyzed using Highway Capacity Manual (2000) methodology. Results of the LOS analysis are provided in the appendix.

### III. TRAFFIC PROJECTIONS

#### PROJECT TRAFFIC VOLUMES

Development of the traffic generation estimates for the proposed project involved a three-step process including traffic generation, trip distribution, and traffic assignment.

##### *Project Traffic Generation*

Trip generation for the proposed project was estimated using information from the applicant (the Pacific Battleship Center, or PBC) that was provided to Port staff. Fehr & Peers conducted transportation and parking surveys at the USS Midway Museum in San Diego in mid-July 2011 to validate the information provided by PBC. In addition, attendance data was obtained from the USS Midway to confirm monthly and daily distribution of visitors. This information included the following:

- Annual Visitor Projections – The USS Iowa is projected to generate an annual visitation of approximately 430,000 visitors in the opening year, which is expected to stabilize to approximately 386,000 visitors approximately 10 years after operations begin.
- Employee Projections – A staff of approximately 70 to 80 employees is planned once the museum is open and visitation levels have stabilized.
- Monthly Visitor Projections – Data from the PBC on annual visitor projections included the estimated monthly distribution of visitors, ranging from a low of approximately 6% of annual attendance in January to approximately 9% of annual attendance in the spring peak months of March and April to a high of approximately 13% in the peak summer month of July.
- Opening Year Daily Distribution for Peak Month – This data provides a distribution of daily visitors in vehicles, visitors in buses, and employees in vehicles.
- Opening Year Hourly Distribution – Estimated weekday and Saturday daily visitor and employee projections were distributed across hours of the day based on expected times of arrival. The surveys at the USS Midway indicate an average vehicle ridership (AVR) of 2.0 for visitors arriving in cars. A total of 60 passengers per bus and an AVR of 1.0 was assumed for employees.

The World Cruise Center typically handles very few cruise ships in the summer months (zero to two cruise ship calls were scheduled in July and August 2011 and 2012). Also, LADOT requires that all traffic counts should generally be conducted when local schools or colleges are in session, on Tuesdays through Thursdays during non-Summer months. Since, during the summer months, a high trip-generating adjacent use has very little activity and traffic in the area does not reflect normal conditions (when schools are in session), trip generation estimates for the spring peak months were considered to represent worst case scenario and were used in this traffic analysis.

The following steps were taken to estimate weekday evening and Saturday midday peak hour trips from the data provided:

1. Per information provided, approximately 9% of the annual visitation will occur in the peak spring months of March and April. This equates to approximately 38,700 visitors during the opening year and 43,740 visitors upon stabilization of attendance.

2. Using the opening year daily distribution (peak month) as a guide and assuming that the percentage distribution for a typical weekday, Saturday and Sunday will remain same, the aforementioned peak month visitation was further distributed by each day of the month across the whole month during the Spring peak. It is estimated that during the opening year, a total of 1,243 visitors are expected to occur on a typical weekday and 1,455 patrons on a typical Saturday. Upon stabilization of the attendance, a total of 1,116 visitors are expected to occur on a typical weekday and 1,306 patrons on a typical Saturday.
3. Assuming that the hourly arrival distribution of visitors (in car and buses) and employees will be similar to the opening year hourly distribution provided, weekday and Saturday daily arrivals were distributed by hour from 8:00 AM to 6:00 PM. Visitors arriving in cars were converted to vehicle trips using an AVR factor of 2.0. Visitors arriving via bus were converted to passenger car equivalent (PCE) trips assuming 60 passengers per bus and every bus equaling to two passenger cars. An AVR factor of 1.0 was used to convert the employees into employee vehicle trips. Since the data only provides arrival information, outbound trips were estimated using the assumption that a typical visitor would stay approximately two hours. All employees were assumed to leave within a 3-hour period from 3:00 to 6:00 PM, with approximately 50% of the employees leaving between the hours of 4:00 and 5:00 PM. On Saturday, approximately 25% of employees were assumed to leave the premises of the project for lunch break, etc.

In 2012, as shown in Table 3A, the project is projected to generate a total of approximately 1,196 daily weekday trips, including approximately 110 trips during the PM peak hour and approximately 1,408 daily weekend trips, including 256 trips during the PM peak hour.

Beginning in 2024, as shown in Table 3B, the project is projected to generate a total of approximately 1,096 daily weekday trips, including approximately 106 trips during the PM peak hour and approximately 1,284 daily weekend trips, including 228 trips during the MD peak hour.

### ***Project Traffic Distribution***

The geographic distribution of trips generated by the proposed project is dependent on characteristics of the street system serving the site, the level of accessibility of routes to and from the proposed project site, the locations of employment and commercial centers to which residents of the project would be drawn, and the geographic distribution of population from which employees and potential patrons of the proposed commercial elements of the project would be drawn. The general distribution pattern used in this study was developed in consultation with LADOT and is illustrated in Figure 4.

### ***Project Traffic Assignment***

The trip generation estimates for the opening year and stabilized conditions summarized in Tables 3A and 3B and the distribution patterns illustrated in Figure 4 were used to assign the project-generated traffic to the local and regional street system. Figures 5 and 6 illustrate the estimated project-generated peak hour traffic volumes at each of the analyzed intersections during a typical weekday evening peak hour and weekend mid-day peak hour, for opening year and stabilized year, respectively.

**TABLE 3A  
TRIP GENERATION ESTIMATES - OPENING YEAR - SPRING SEASON [1][2]**

User	Amount	Unit	Daily			PM			Mid-Day		
			In	Out	Total	In	Out	Total	In	Out	Total
<b>Weekday</b>											
Employee	70	employees	90	90	180	0	35	35	N/A		
Visitor	1243	visitors	508	508	1016	25	50	75			
<b>Total</b>			<b>598</b>	<b>598</b>	<b>1196</b>	<b>25</b>	<b>85</b>	<b>110</b>			
<b>Weekend</b>											
Employee	70	employees	90	90	180	N/A			10	0	10
Visitor	1455	visitors	614	614	1228				123	123	246
<b>Total</b>			<b>704</b>	<b>704</b>	<b>1408</b>				<b>133</b>	<b>123</b>	<b>256</b>

**TABLE 3B  
TRIP GENERATION ESTIMATES - STABILIZED ATTENDANCE - SPRING SEASON [1][2]**

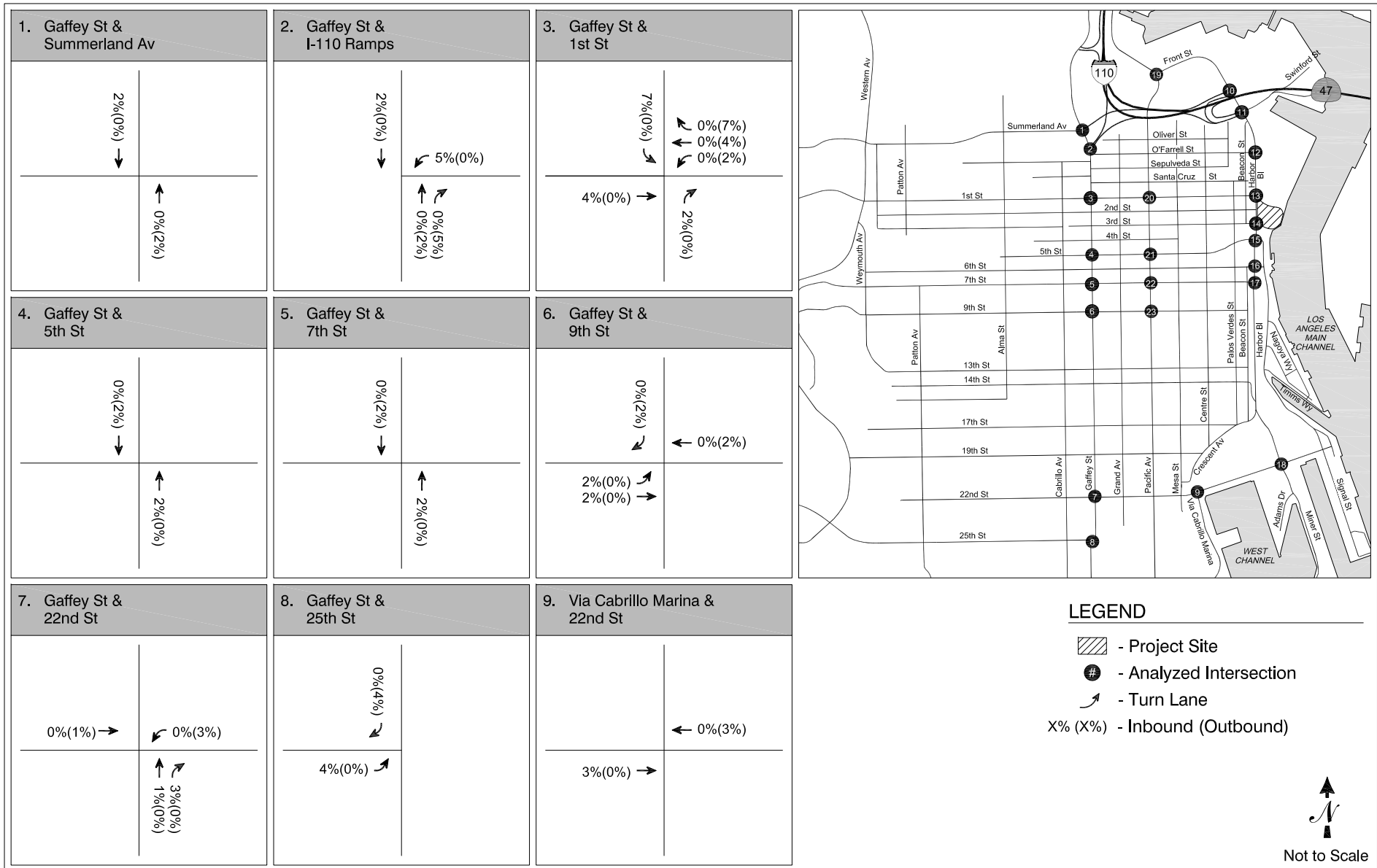
User Type	Amount	Unit	Daily			PM			Mid-Day		
			In	Out	Total	In	Out	Total	In	Out	Total
<b>Weekday</b>											
Employee	80	employees	100	100	200	0	40	40	N/A		
Visitor	1116	visitors	448	448	896	22	44	66			
<b>Total</b>			<b>548</b>	<b>548</b>	<b>1096</b>	<b>22</b>	<b>84</b>	<b>106</b>			
<b>Weekend</b>											
Employee	80	employees	100	100	200	N/A			10	0	10
Visitor	1306	visitors	542	542	1084				109	109	218
<b>Total</b>			<b>642</b>	<b>642</b>	<b>1284</b>				<b>119</b>	<b>109</b>	<b>228</b>

Source: Fehr & Peers, 2011

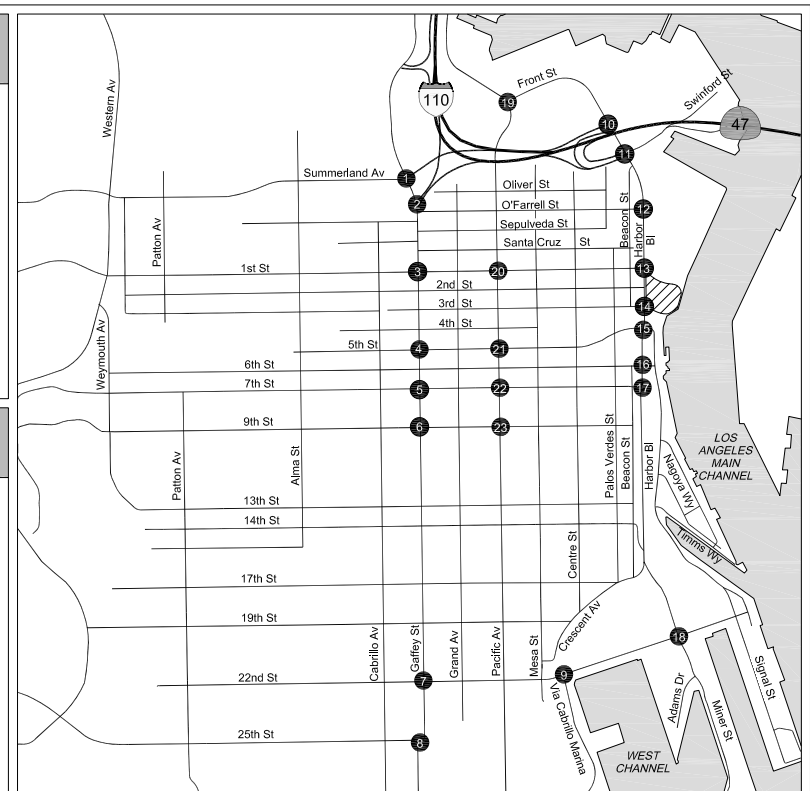
[1] - Please see attachment A which describes approach, assumptions and methodology used to estimate trip generation

[2] Trip generation for the proposed project was estimated using projections provided by the applicant, Pacific Battleship Center (PBC) and surveys conducted at the USS Midway Museum in San Diego, California





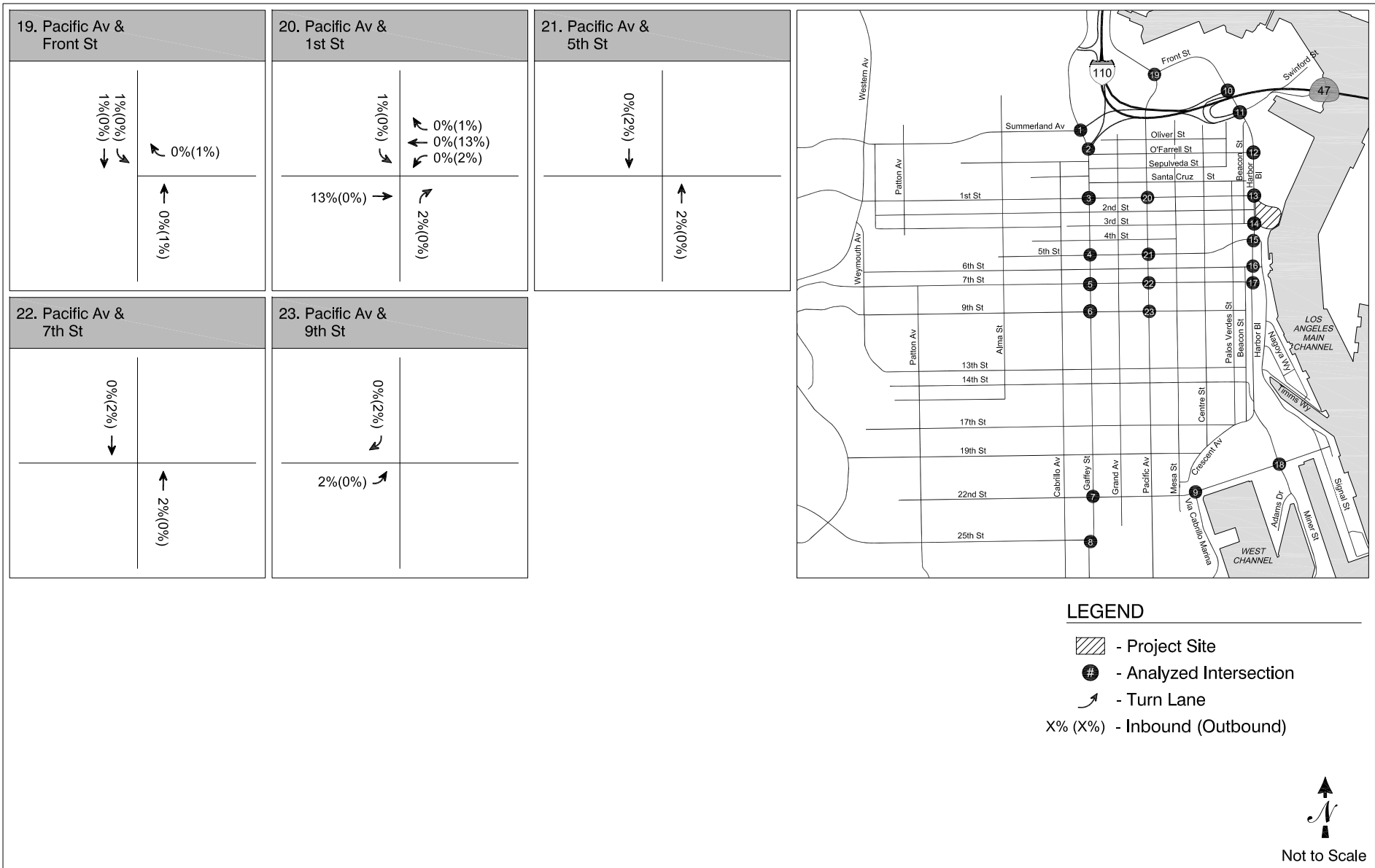
<b>10. Harbor BI &amp; 47 On-Ramp</b>	<b>11. Harbor BI &amp; Swinford St/47 Ramps</b>	<b>12. Harbor BI &amp; O'Farrell St</b>
<p>1%(0%) ↓</p> <hr/> <p>0%(1%) →</p> <p>0%(45%) ↗</p>	<p>1%(0%) ↓</p> <hr/> <p>80%(0%) ↘</p> <p>0%(46%) →</p> <p>0%(35%) ↗</p>	<p>81%(0%) ↓</p> <hr/> <p>0%(18%) ↑</p>
<b>13. Harbor BI &amp; 1st St</b>	<b>14. Harbor BI &amp; 3rd St</b>	<b>15. Harbor BI &amp; 5th St</b>
<p>81%(0%) ↘</p> <p>0%(81%) ↗</p> <p>0%(16%) ↖</p> <p>0%(3%) ↙</p> <hr/> <p>16%(0%) →</p> <p>3%(0%) ↖</p>	<p>0%(3%) ↓</p> <hr/> <p>3%(0%) ↑</p>	<p>0%(3%) ↓</p> <hr/> <p>3%(0%) ↑</p>
<b>16. Harbor BI &amp; 6th St</b>	<b>17. Harbor BI &amp; 7th St</b>	<b>18. Miner St &amp; 22nd St</b>
<p>0%(3%) ↓</p> <hr/> <p>3%(0%) ↑</p>	<p>0%(3%) ↓</p> <hr/> <p>3%(0%) ↑</p>	<p>0%(3%) ↘</p> <hr/> <p>3%(0%) ↗</p>

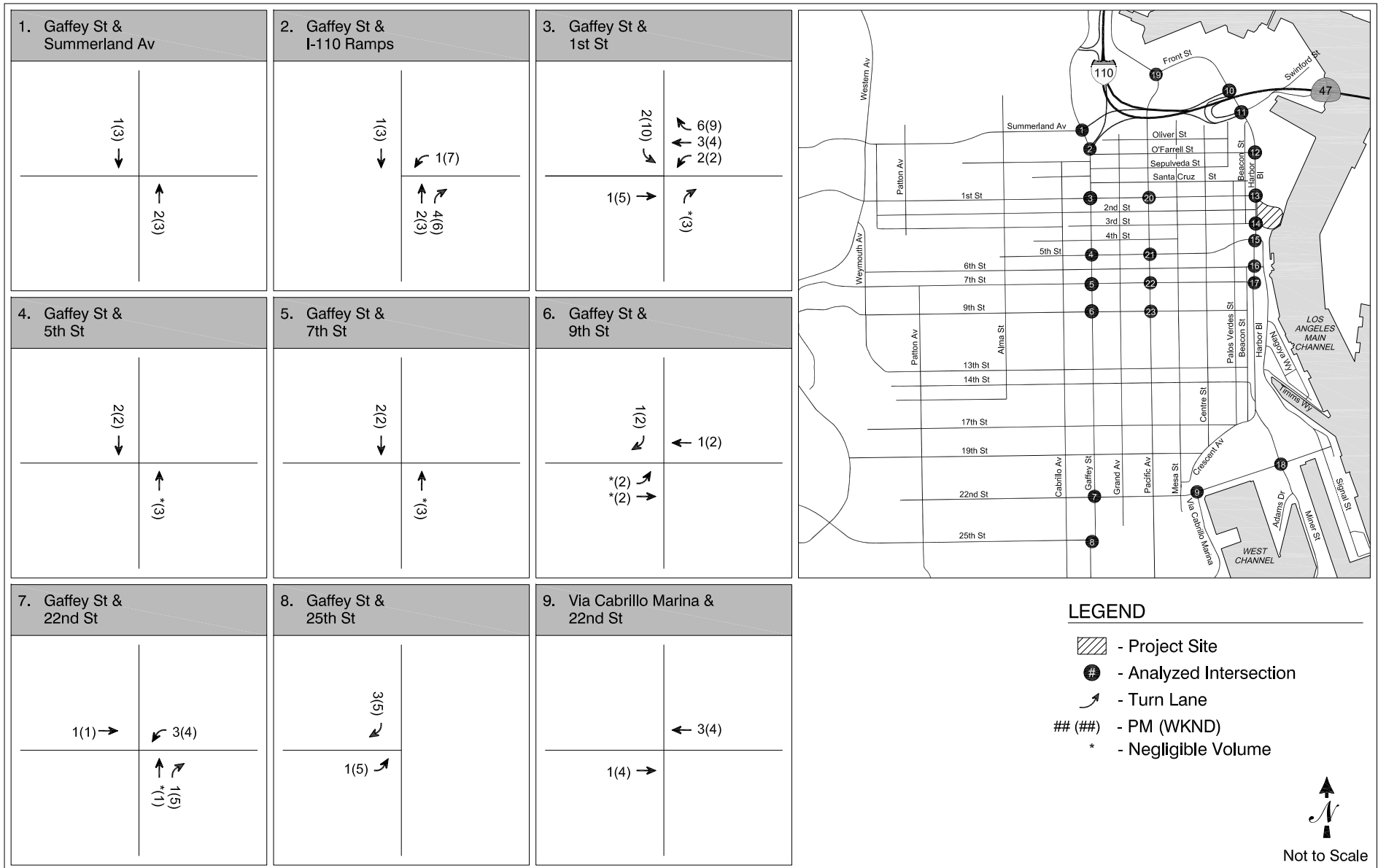


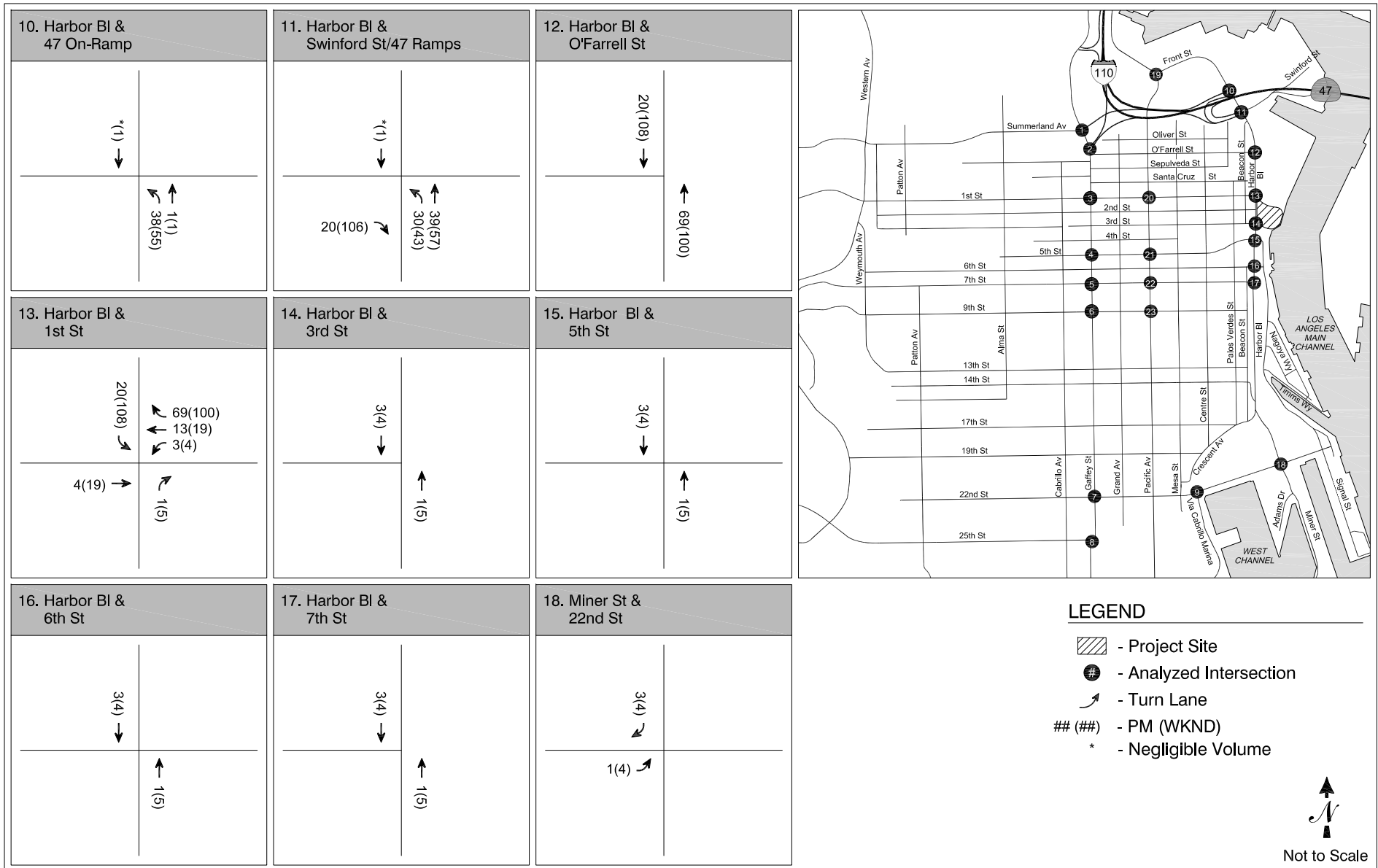
### LEGEND

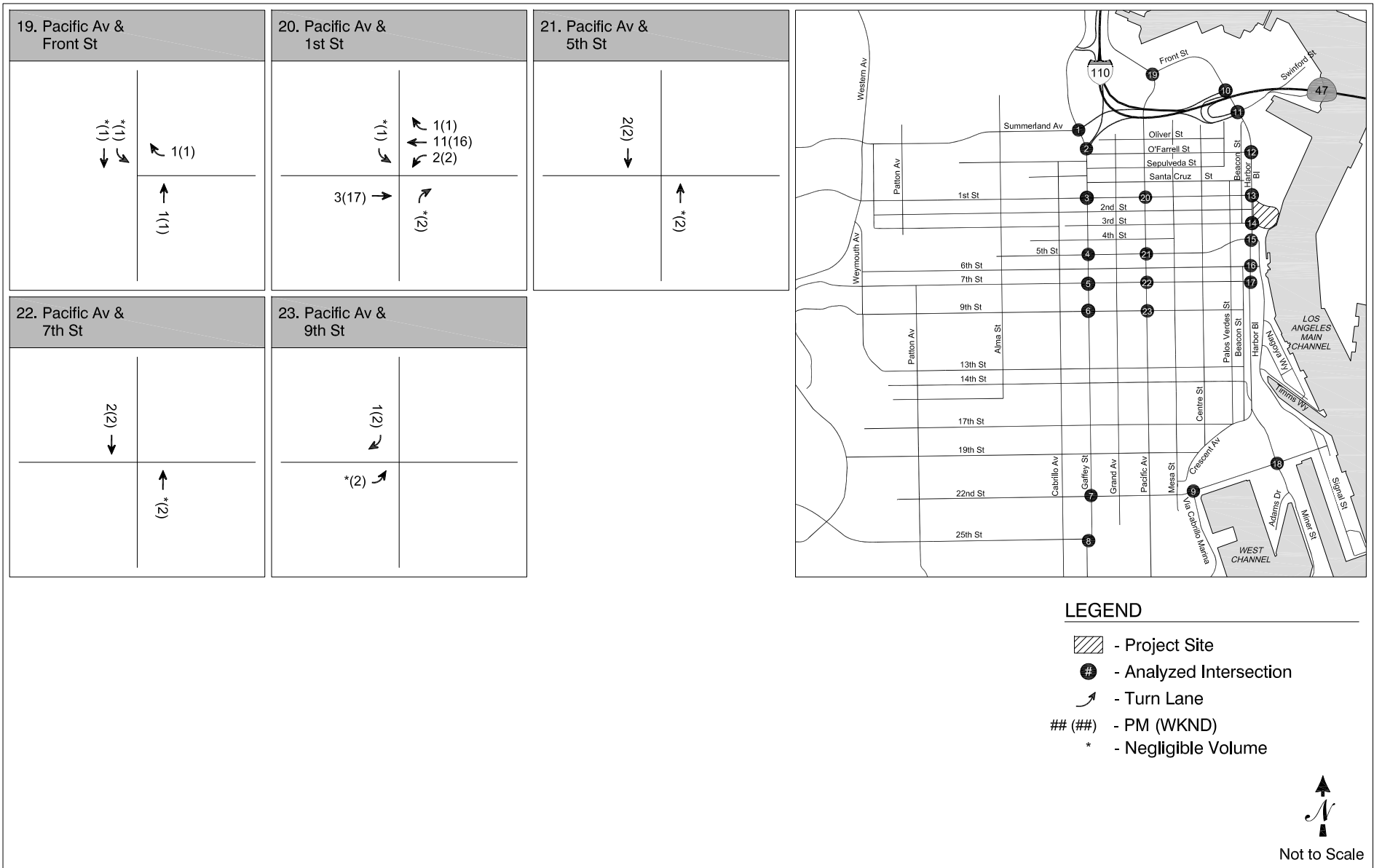
- Project Site
- Analyzed Intersection
- Turn Lane
- X% (X%) - Inbound (Outbound)

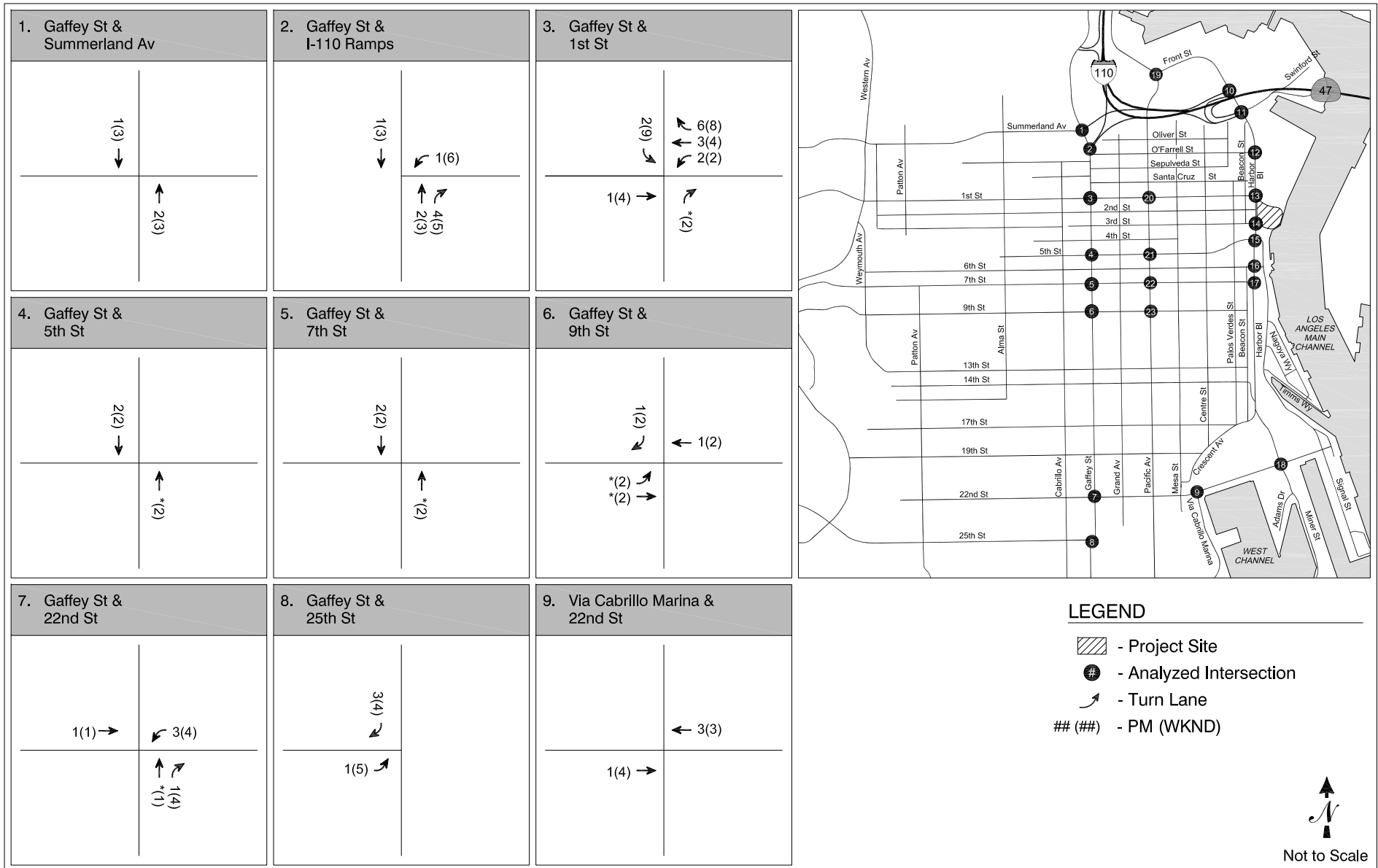


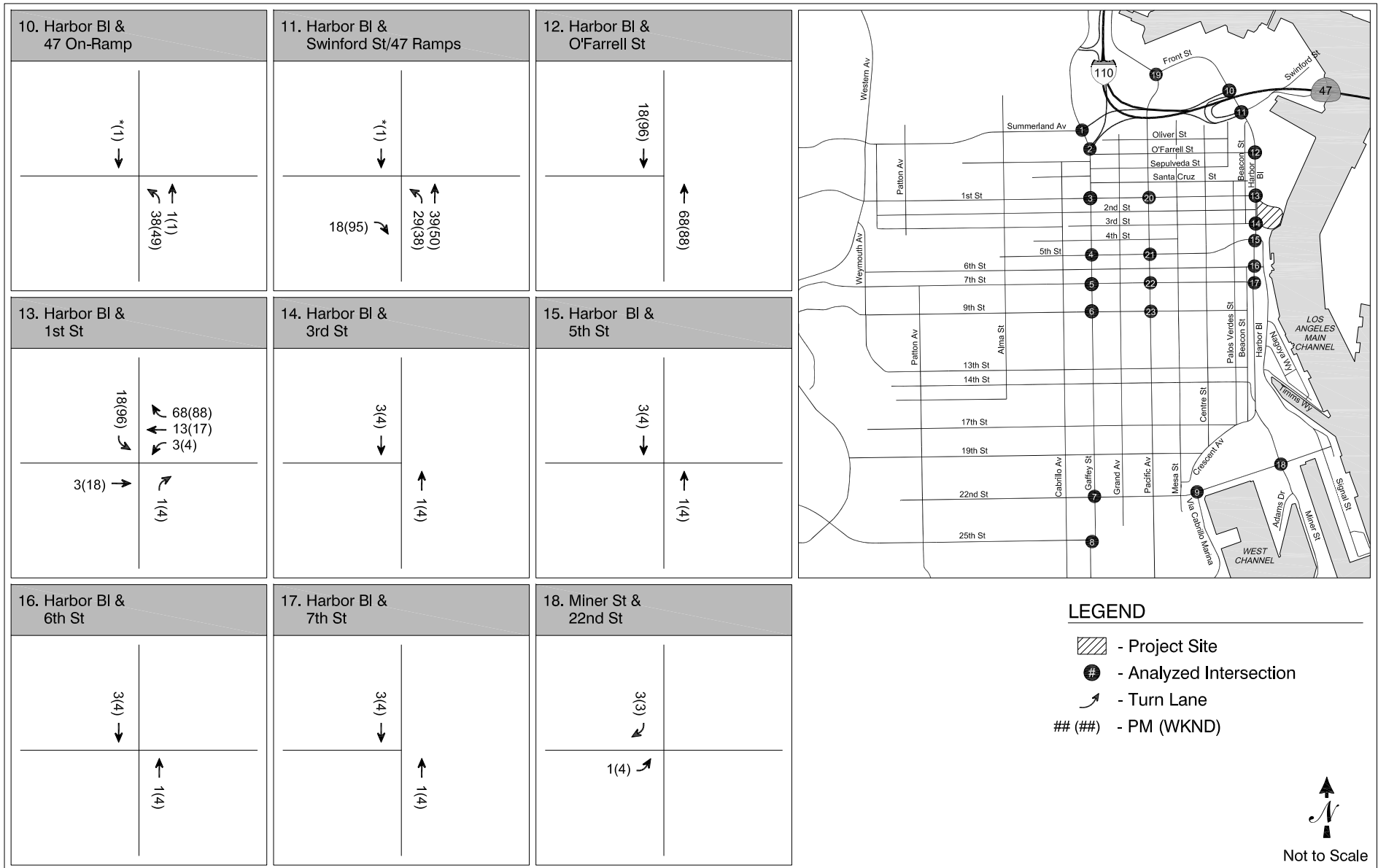




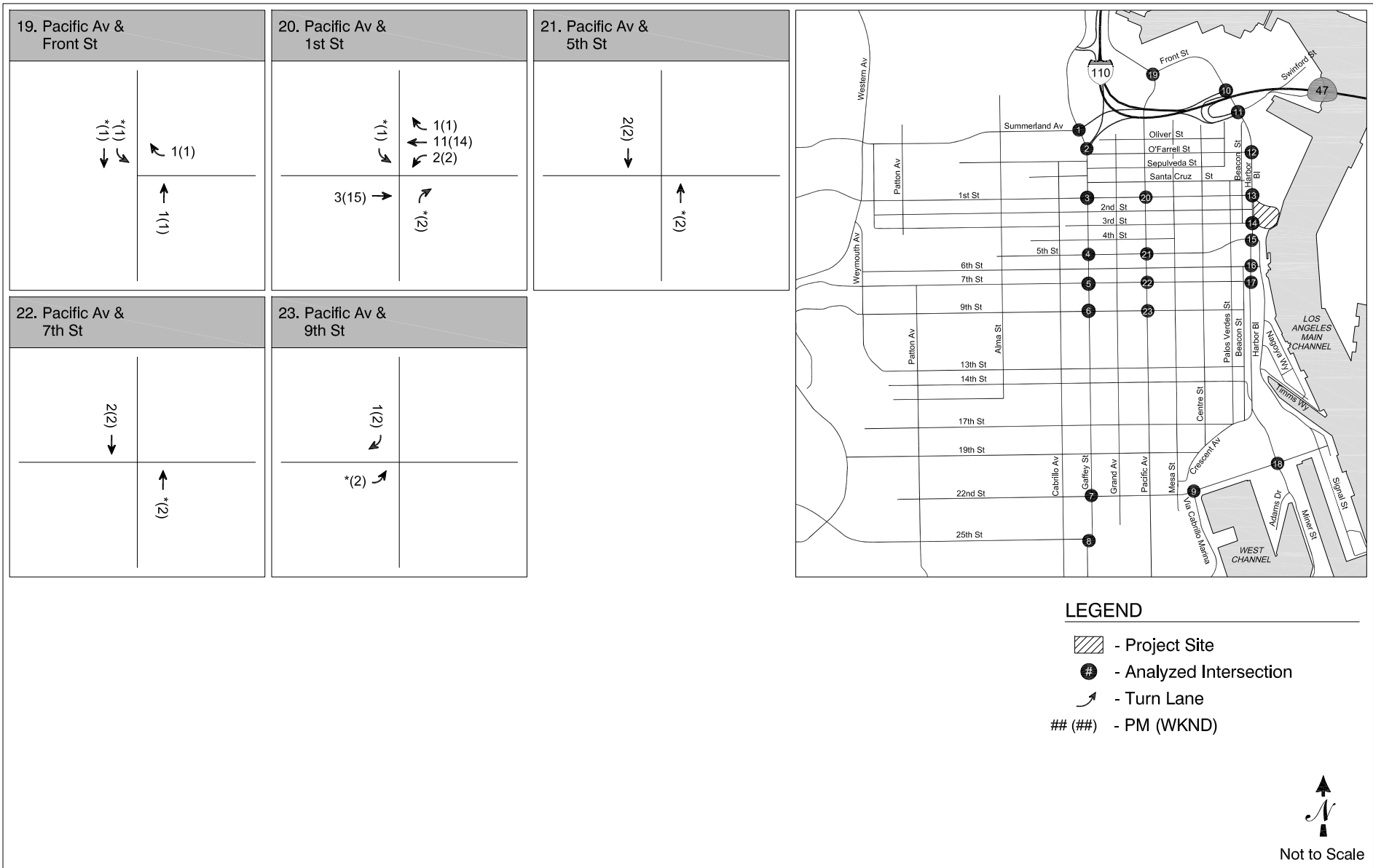












## EXISTING PLUS PROJECT TRAFFIC PROJECTIONS

The proposed project traffic volumes for opening year attendance was added to the 2011 traffic counts to develop the existing plus project traffic volumes. Figure 7 illustrates the resulting projected existing plus project peak hour traffic volumes for a typical weekday PM peak hour and weekend peak hour with opening year attendance.

## FUTURE BASE TRAFFIC VOLUMES

The future base traffic projections reflect the changes to existing traffic conditions that can be expected from three primary sources. The first source is the ambient growth in traffic, which reflects increases in traffic because of regional growth and development. The second source is traffic generated by specific development projects located within, or in the vicinity of, the study area. The third source is roadway or intersection capacity enhancements. These factors are described below.

### ***Areawide Traffic Growth***

#### Year 2012 Scenario

Based on discussions with LADOT, we determined that an ambient growth factor of 1.0% per year should be applied to adjust the existing base year traffic volumes to reflect the effects of regional growth and development for the 2012 project opening year. This adjustment was applied to the base Year 2011 traffic volume data to reflect the effect of ambient growth of 1.0% in year 2012.

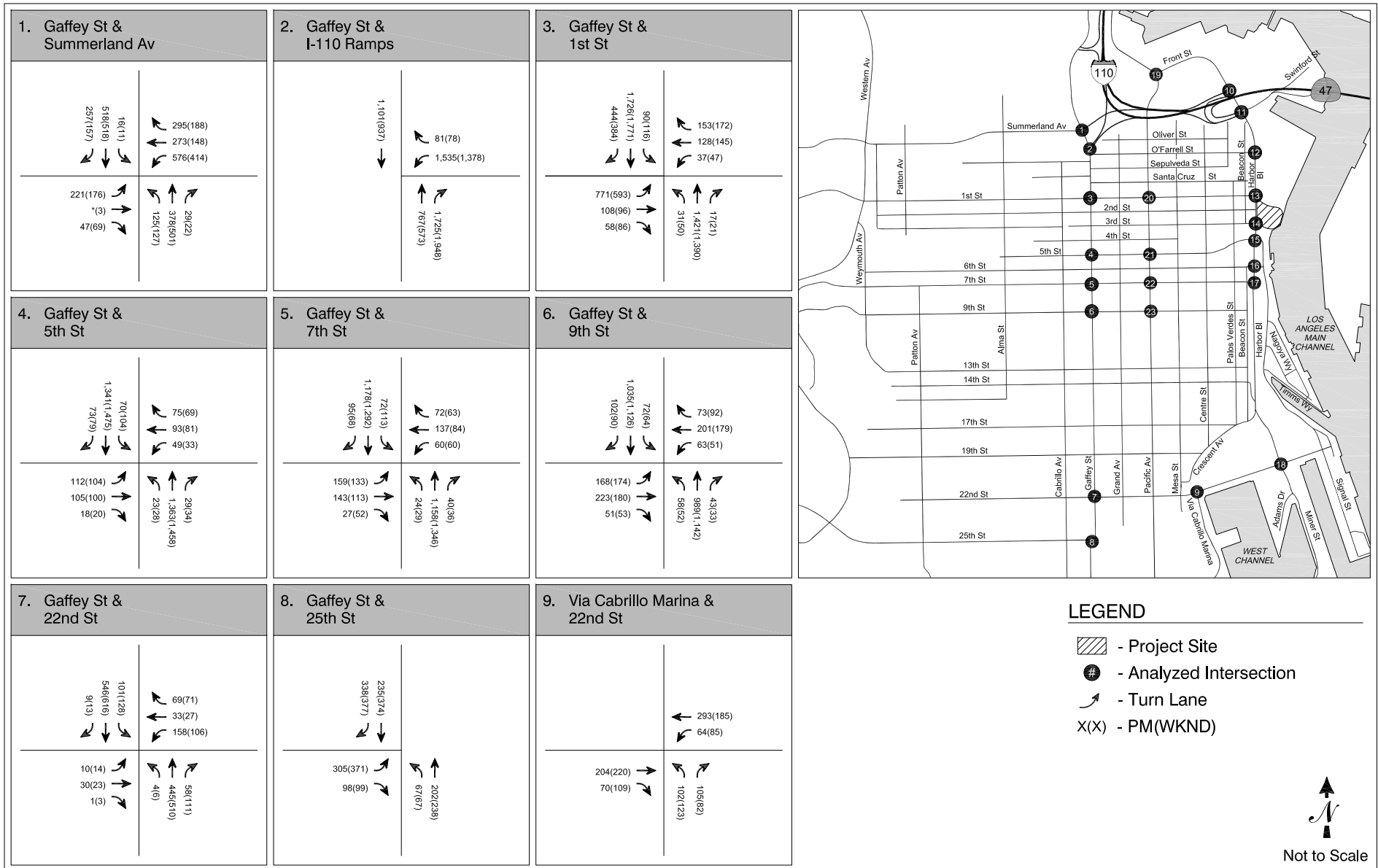
#### Years 2024 and 2042 Scenario

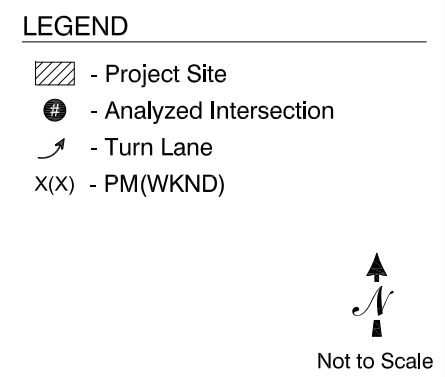
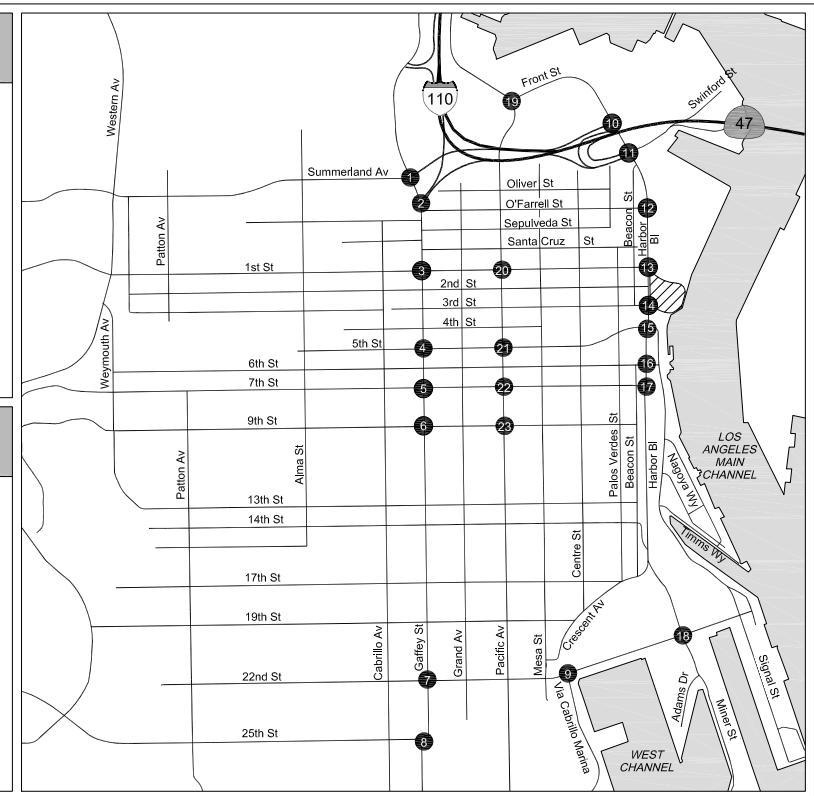
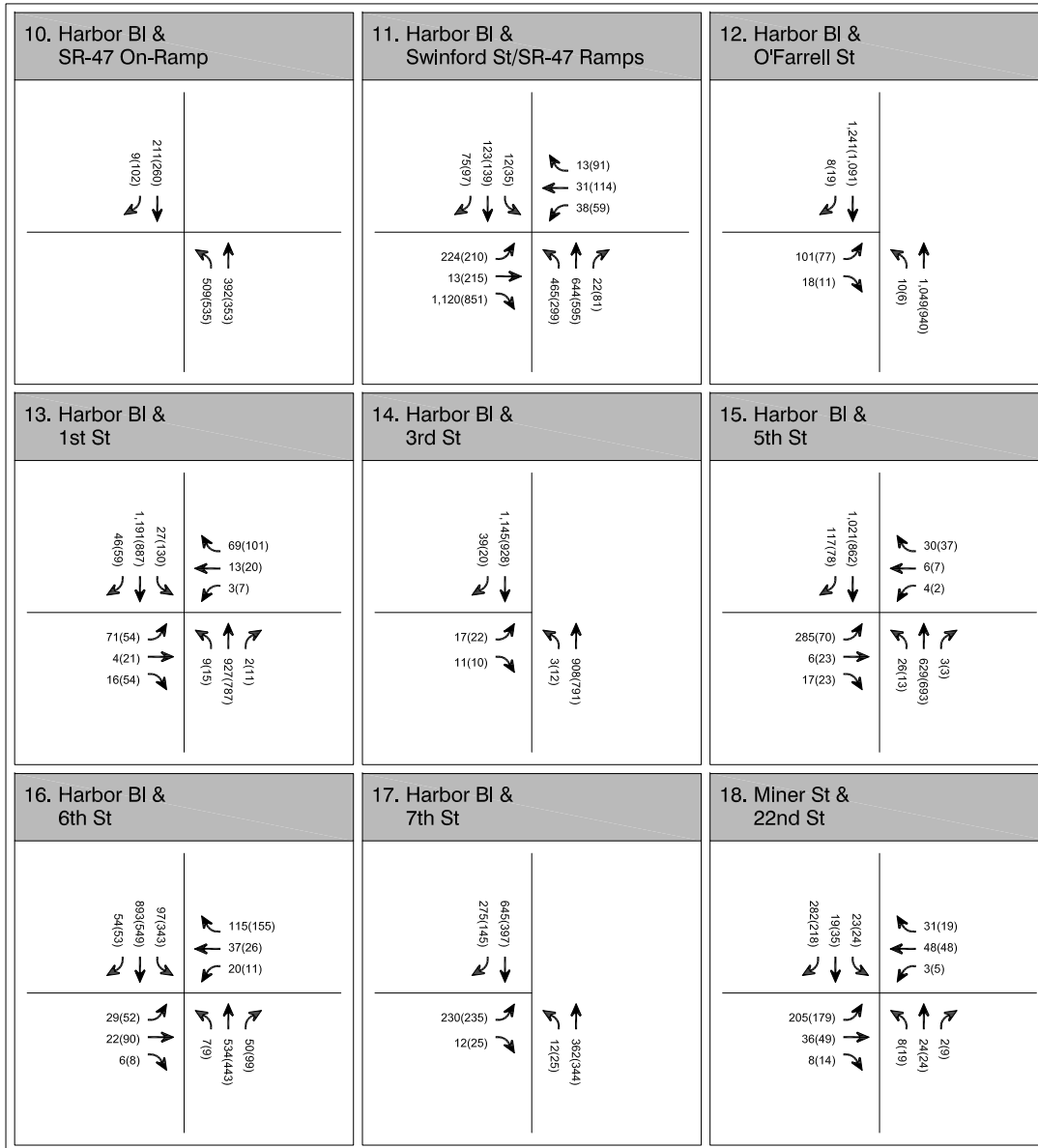
Regional background (ambient) traffic growth was estimated using data from a computerized traffic analysis tool known as the Port Area Travel Demand Model, which includes traffic growth for the port and the local area. Background traffic growth occurs as a result of regional growth in employment, population, schools, and other activities. Related projects are covered by the growth forecasts of the Port Travel Demand Model. Local projects not included in the SCAG Regional Travel Demand Forecasting Model were separately accounted for in the Port Travel Demand Model, such as detailed Ports of Long Beach and Los Angeles projected container and non-container terminal growth and the Wilmington Waterfront.

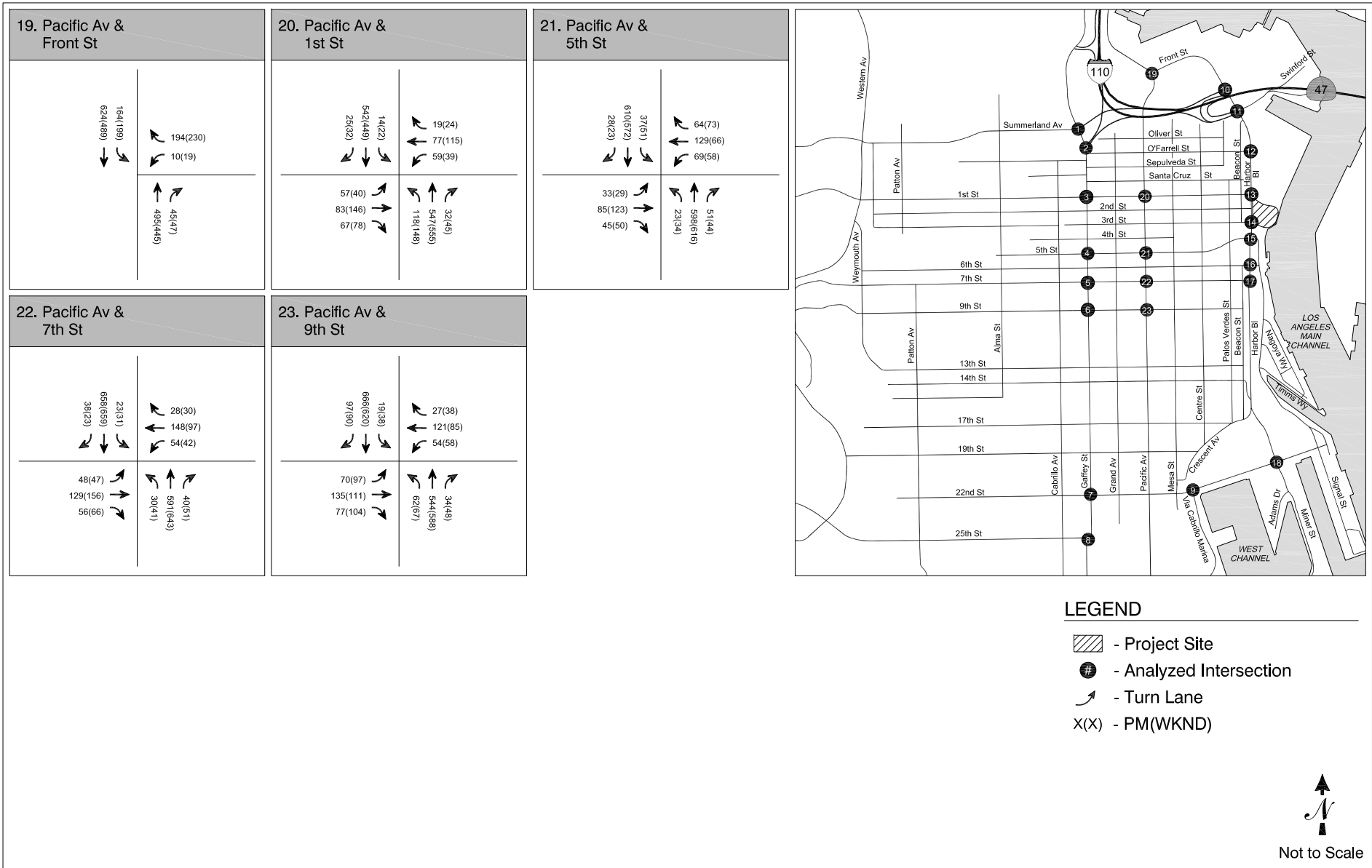
### ***Related Project Traffic Generation and Assignment***

Future base traffic forecasts include the effects of specific cumulative development projects, also called related projects, expected to be built in the vicinity of the proposed project site prior to the proposed project's future years of 2024 and 2042. Appendix E shows the location of related project within the study area. The following projects were included in the related project traffic generation and assignment:

- CRAFTED in San Pedro (Warehouses #9 and #10) – CRAFTED would be located in Warehouses #9 and #10 in San Pedro, near Miner Street & 22<sup>nd</sup> Street, approximately 1.5 miles from the project site. This project would consist of adaptive reuse of the existing warehouses to create a permanent craft marketplace. The building programming would be composed of juried vendor stalls selling handmade wares. The building would also feature concession areas and a demonstration area. CRAFTED would be open throughout the week, with peak activity occurring on weekends.







- City Dock #1 – City Dock #1 would be located at Berths 56-60 and 70-71, near the intersection of Miner Street & Signal Street, approximately 1.5 miles from the project site. This project consists of marine research laboratory, educational, and conference facilities in addition to a research and development business incubator park. There would also be a concession area and small passive uses on the project site.
- San Pedro Waterfront – The San Pedro waterfront transformation is a long-range specific plan for the San Pedro side of the Los Angeles waterfront. It includes redevelopment of Ports O'Call, the primary retail outlet along the waterfront, additional promenades and boat harbors, and several recreational elements. The project is expected to increase utilization of the Waterfront area with adaptive reuse of underutilized buildings and new development opportunities along the waterfront.

### ***Future Baseline Street Improvements***

Per information received from POLA, a future improvement along Harbor Boulevard (expected by year 2024) to the intersection of Harbor Boulevard & 7<sup>th</sup> Street will include a junction with Sampson Way. As part of the San Pedro Waterfront Project: Harbor Boulevard will be re-stripped, and the median is removed/reconstructed as needed to provide three NBT and SBT lanes between the reconstructed Sampson Way/Harbor Boulevard intersection and the WB on-ramp/Front Street intersection. This will result in the removal of parking and the bike lane on the northbound side. However, the existing and planned promenade on the east side of Harbor Boulevard will provide the replacement bike lane. The parking and 5' bike lane on the southbound side, south of O' Farrell Street will be preserved (This is predicated upon 10' interior lanes, with the exception of the outer southbound through lane, adjacent to the bike lane, which would be maintained at 11' in width). North of O'Farrell Street, the parking and parking lane on the southbound side would need to be removed to accommodate the northbound dual left-turn lane. The innermost northbound through lane at the EB off-ramp intersection would become a forced left-turn lane at the SR 47 WB on-ramp. This improvement is projected to be needed by the year 2024. The POLA will monitor operational conditions on an on-going basis to confirm the need and timing for these improvements.

Additionally, the current improvement plan would equip all remaining intersections with ATSAC and install the state-of-the-art Adaptive Traffic Control System (ATCS) as an additional feature of the ATSAC system. In the analysis of future operating conditions, a capacity increase of 10% (0.10 V/C adjustment) was applied to reflect the benefit of ATSAC/ATCS control at all signalized study intersections.

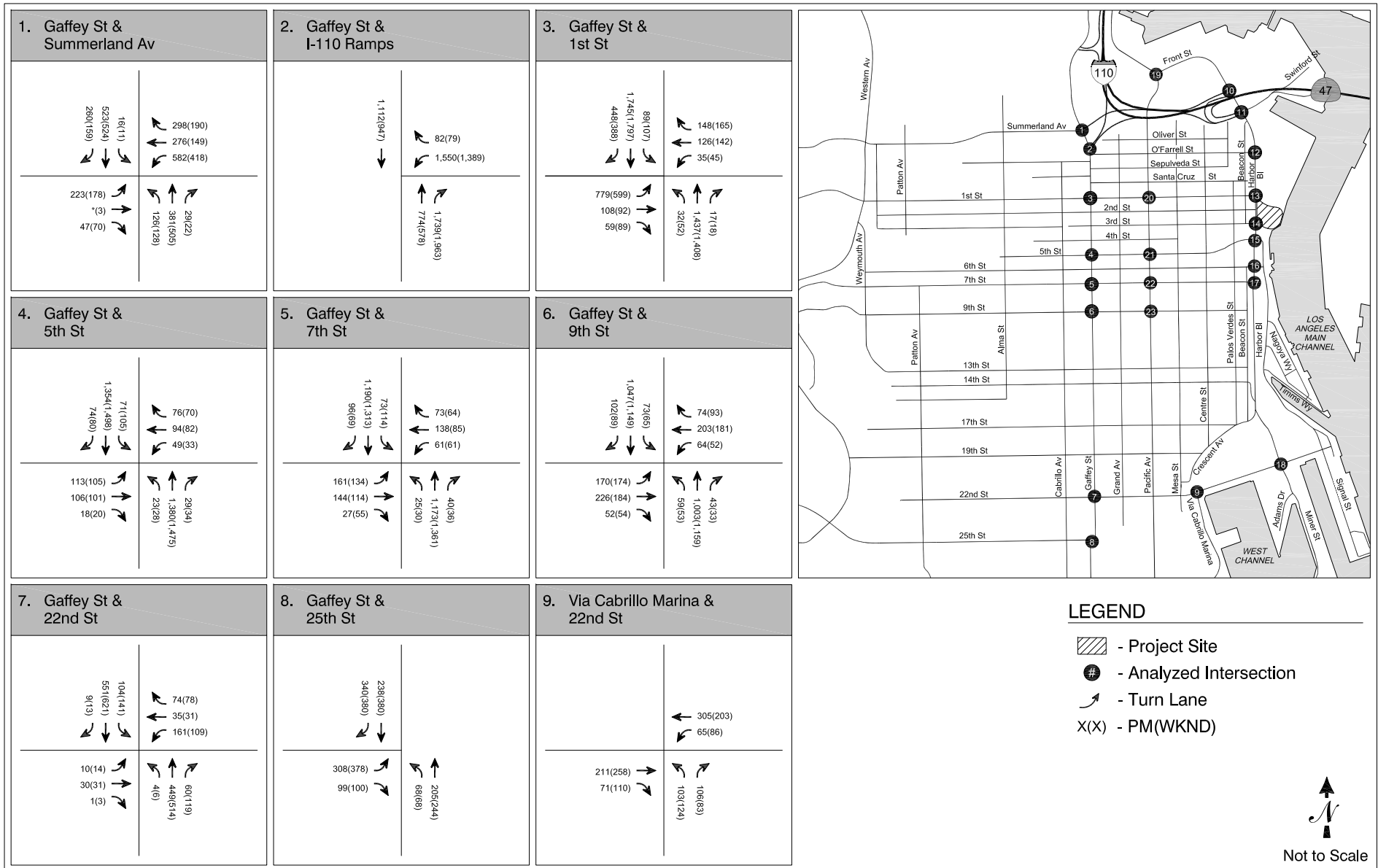
These improvements would result in capacity changes at the specified locations throughout the study area. Future lane geometries are included in Appendix A of this report.

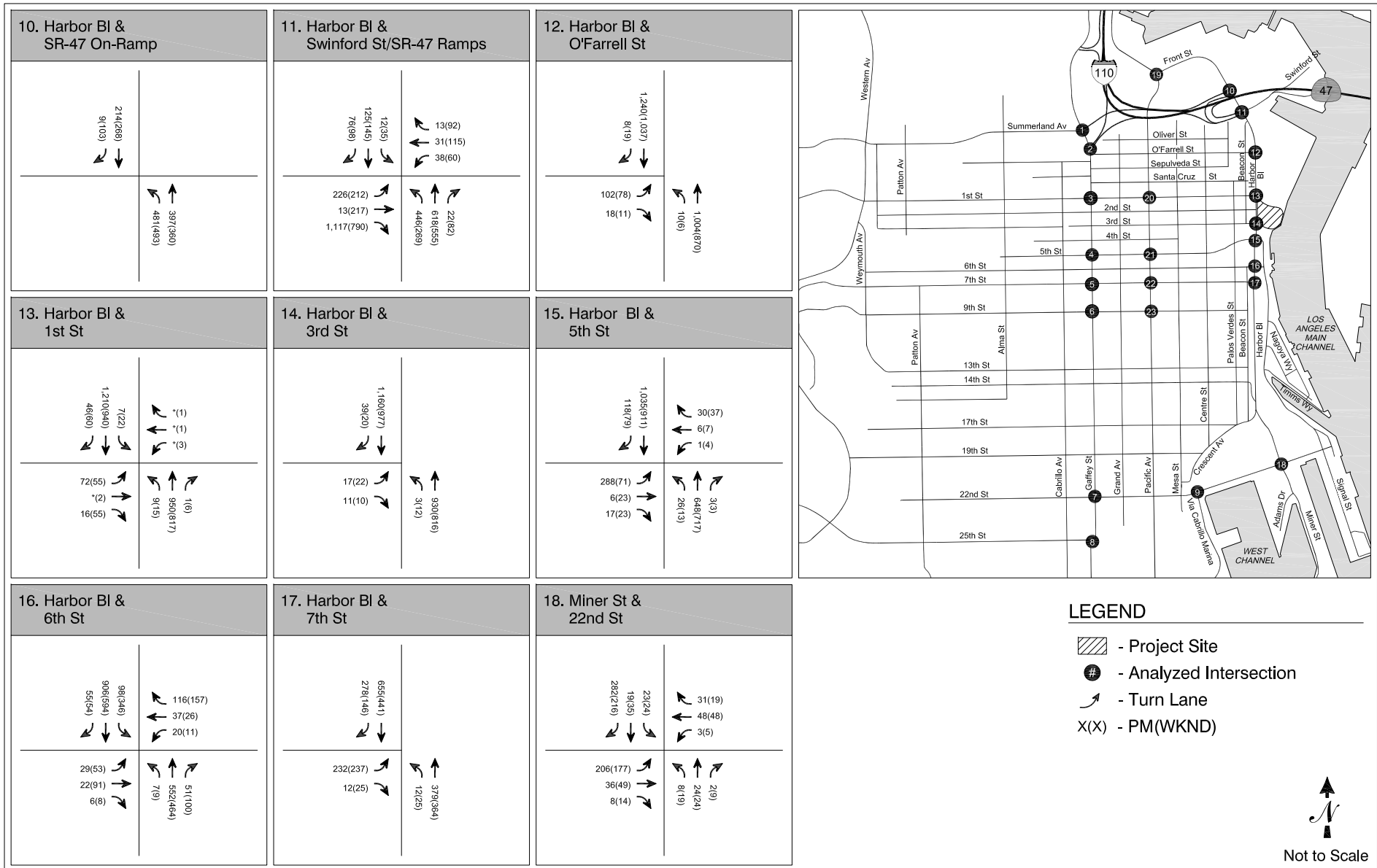
### ***Traffic Assignment***

Using the estimated trip generation and trip distribution patterns described above, traffic generated by the related projects was assigned to the street network.

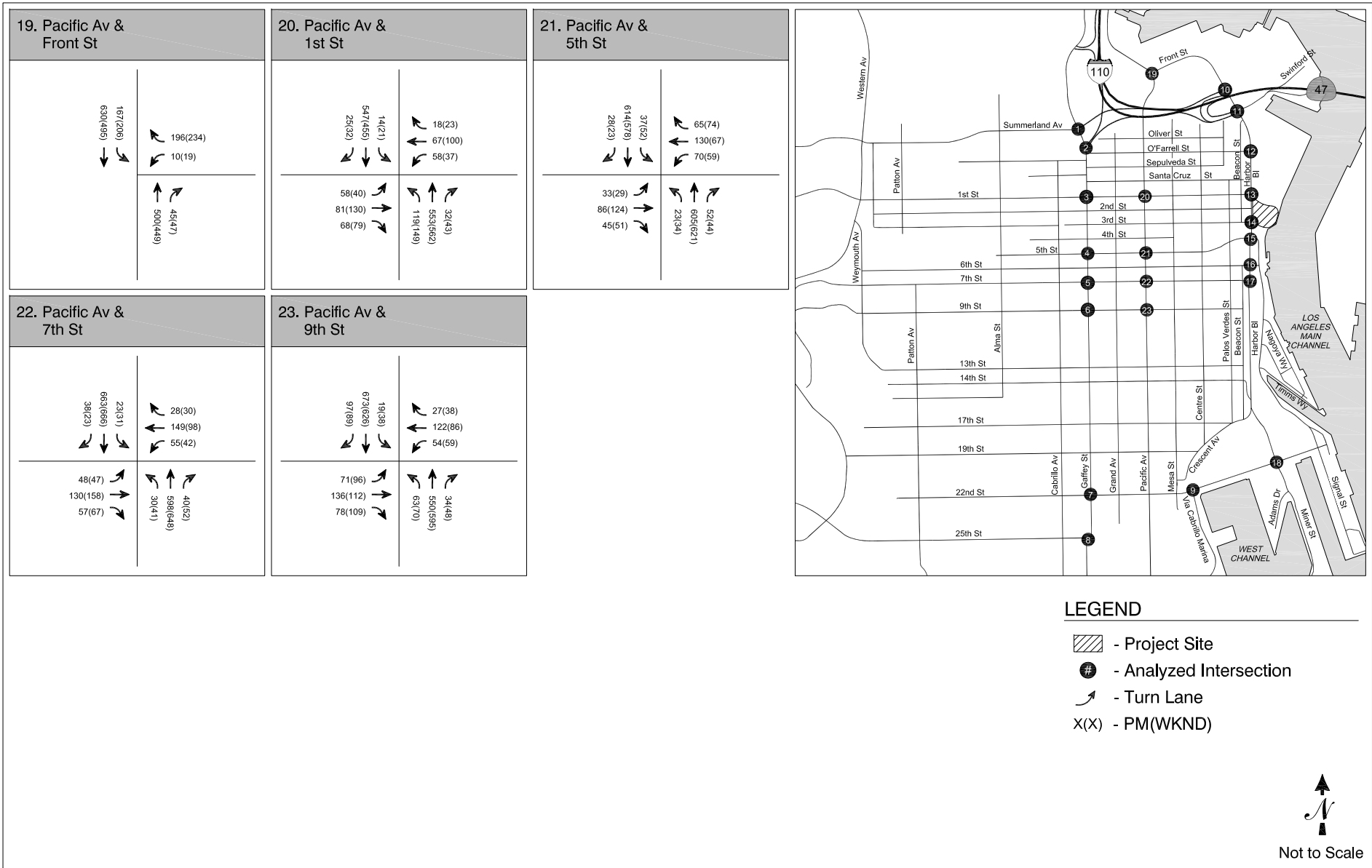
### ***Future Base Traffic Projections***

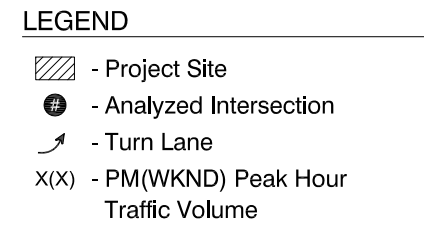
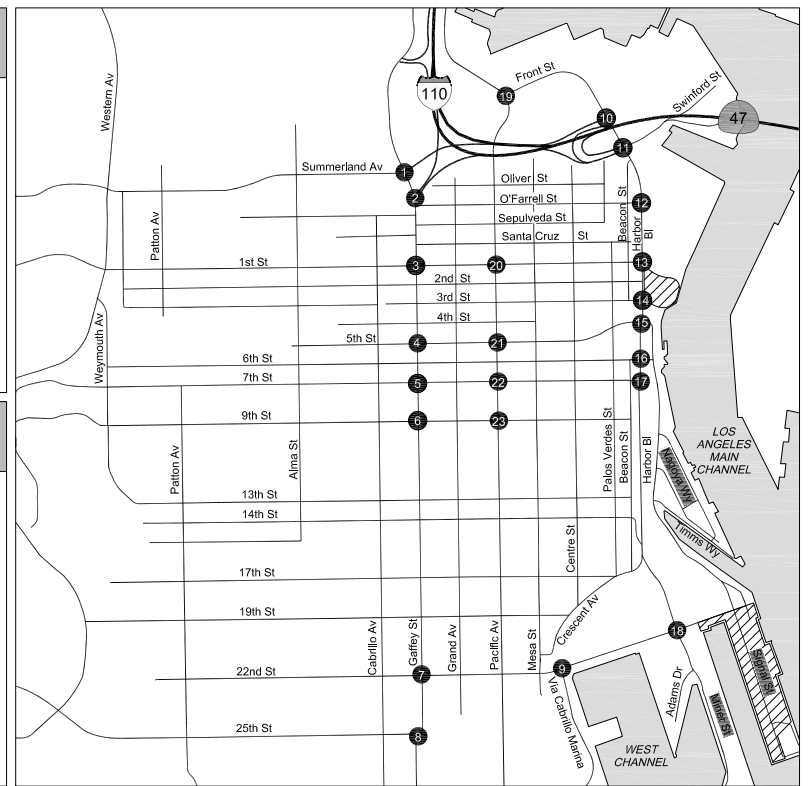
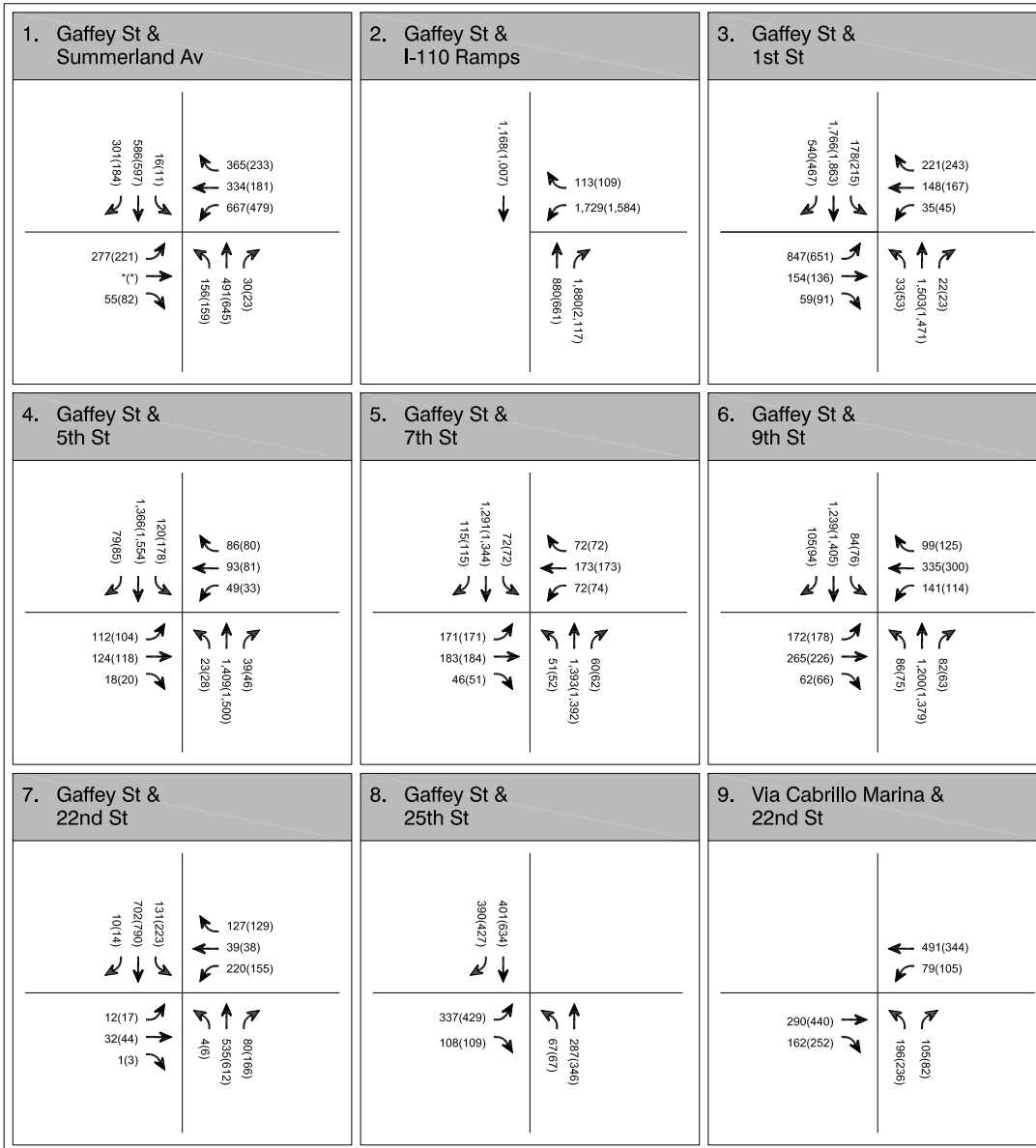
Figures 8, 9, and 10 illustrate the future base for the future Years 2012, 2024, and 2042 at the analyzed intersections for weekday evening peak and weekend afternoon peak hours. The future base traffic conditions represent an estimate of future conditions without development of the proposed project.

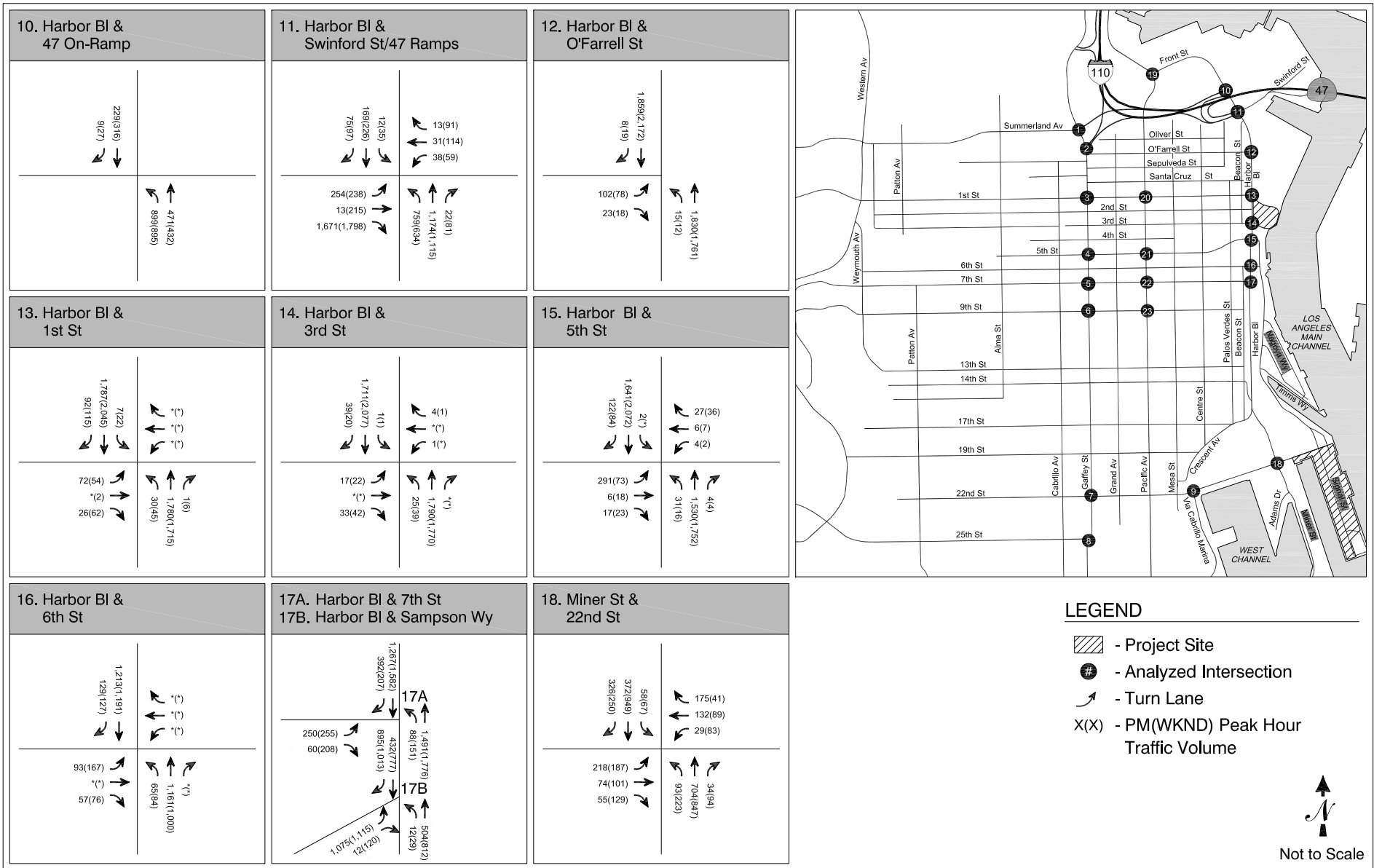


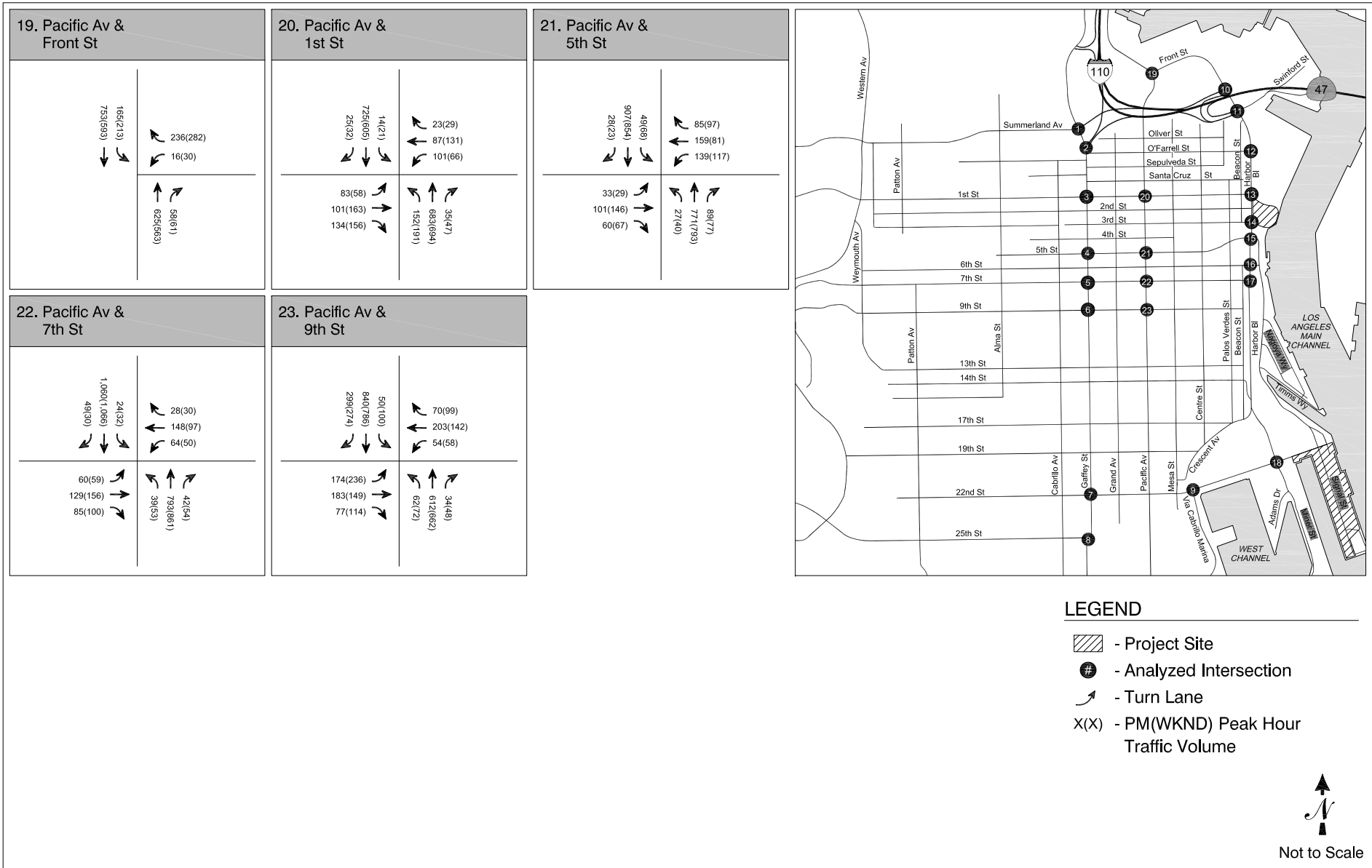






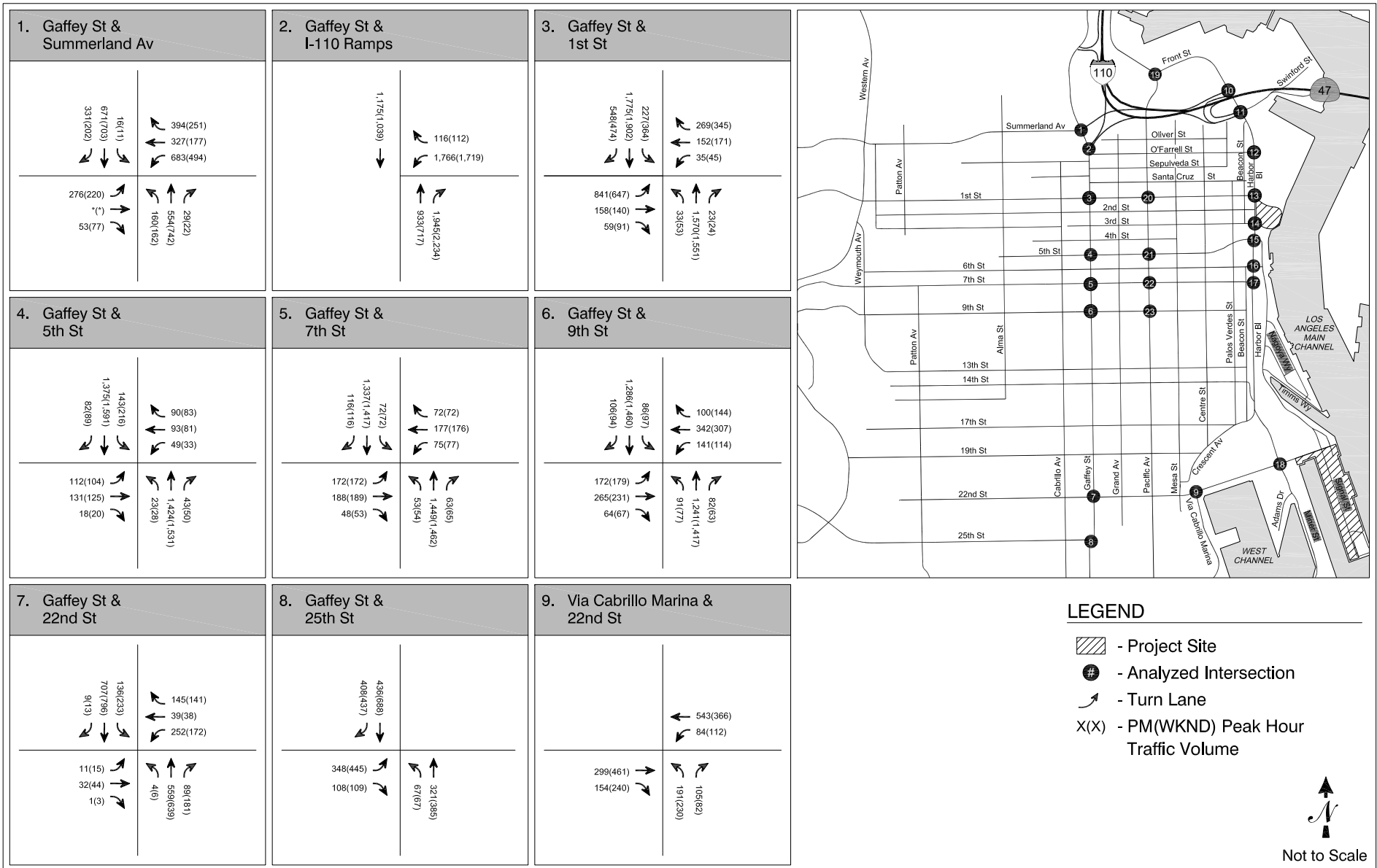


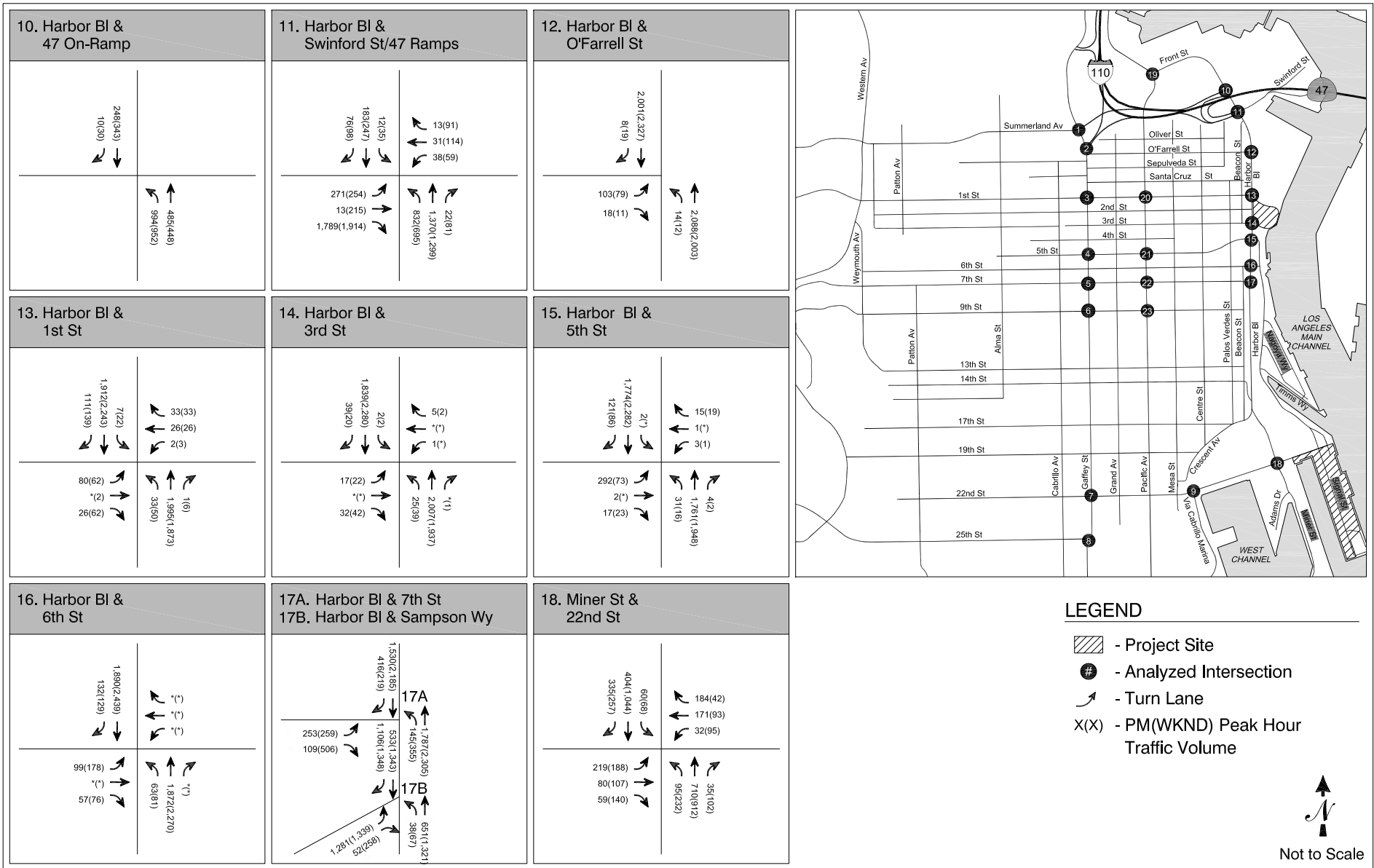


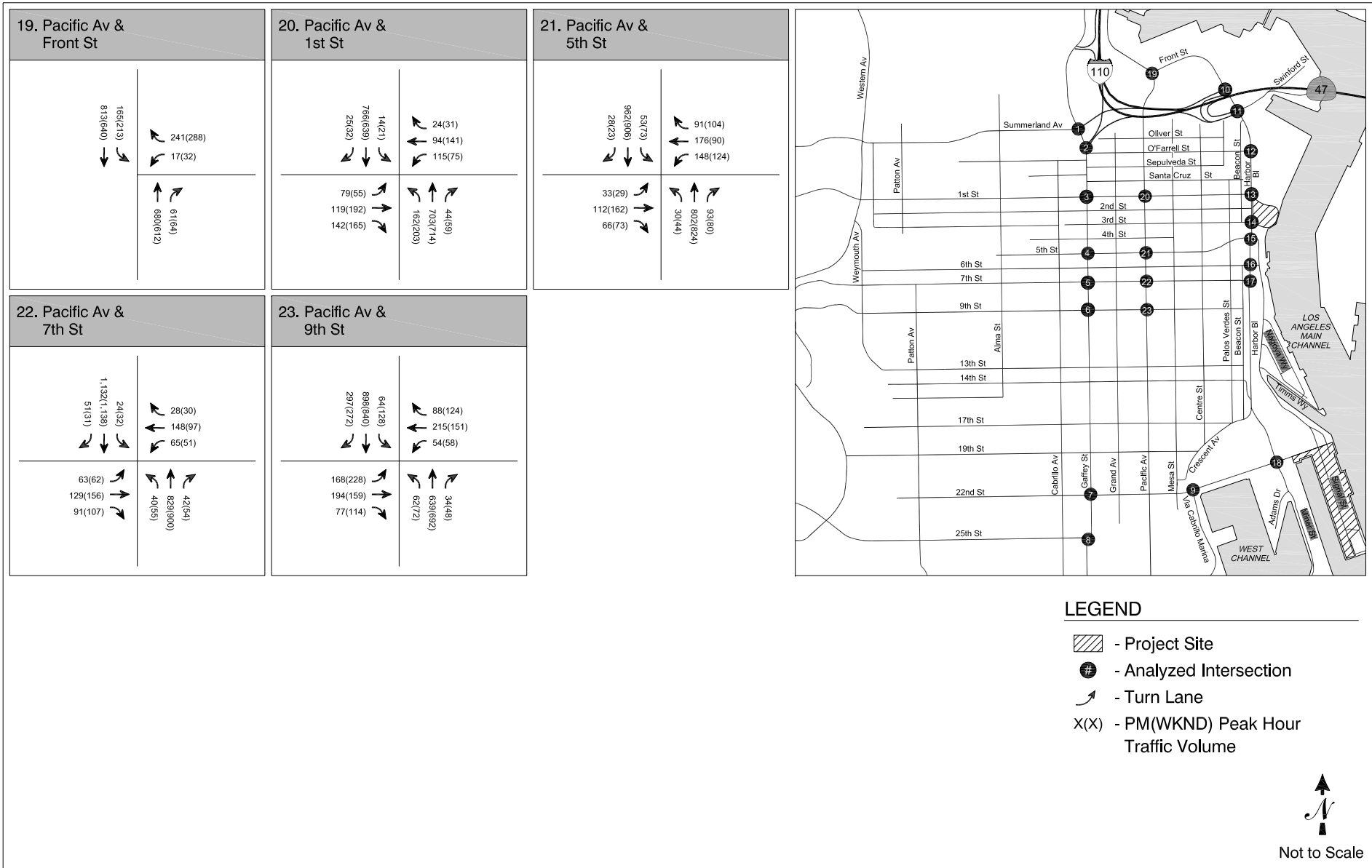


- LEGEND**
- Project Site
  - Analyzed Intersection
  - Turn Lane
  - PM(WKND) Peak Hour Traffic Volume





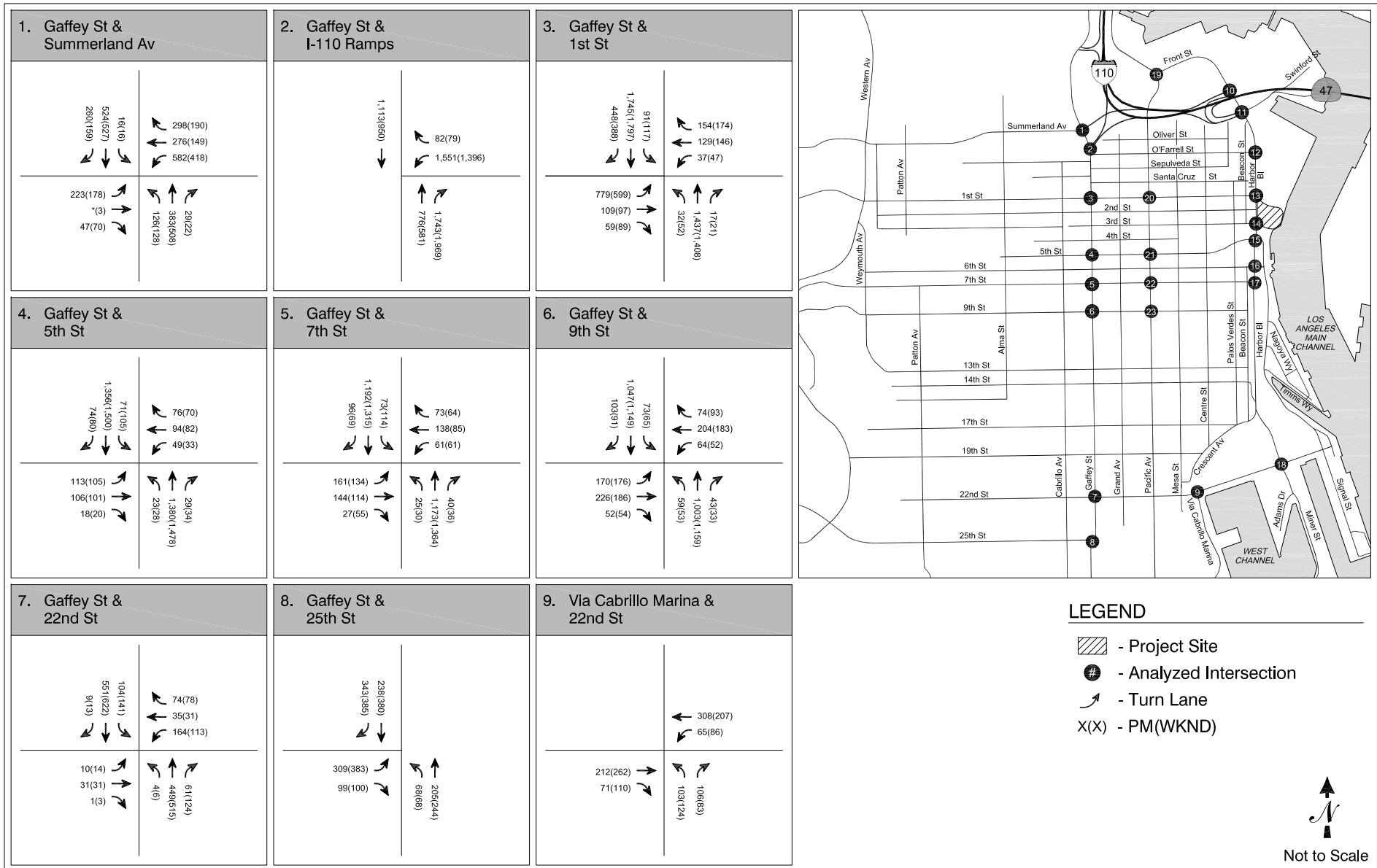


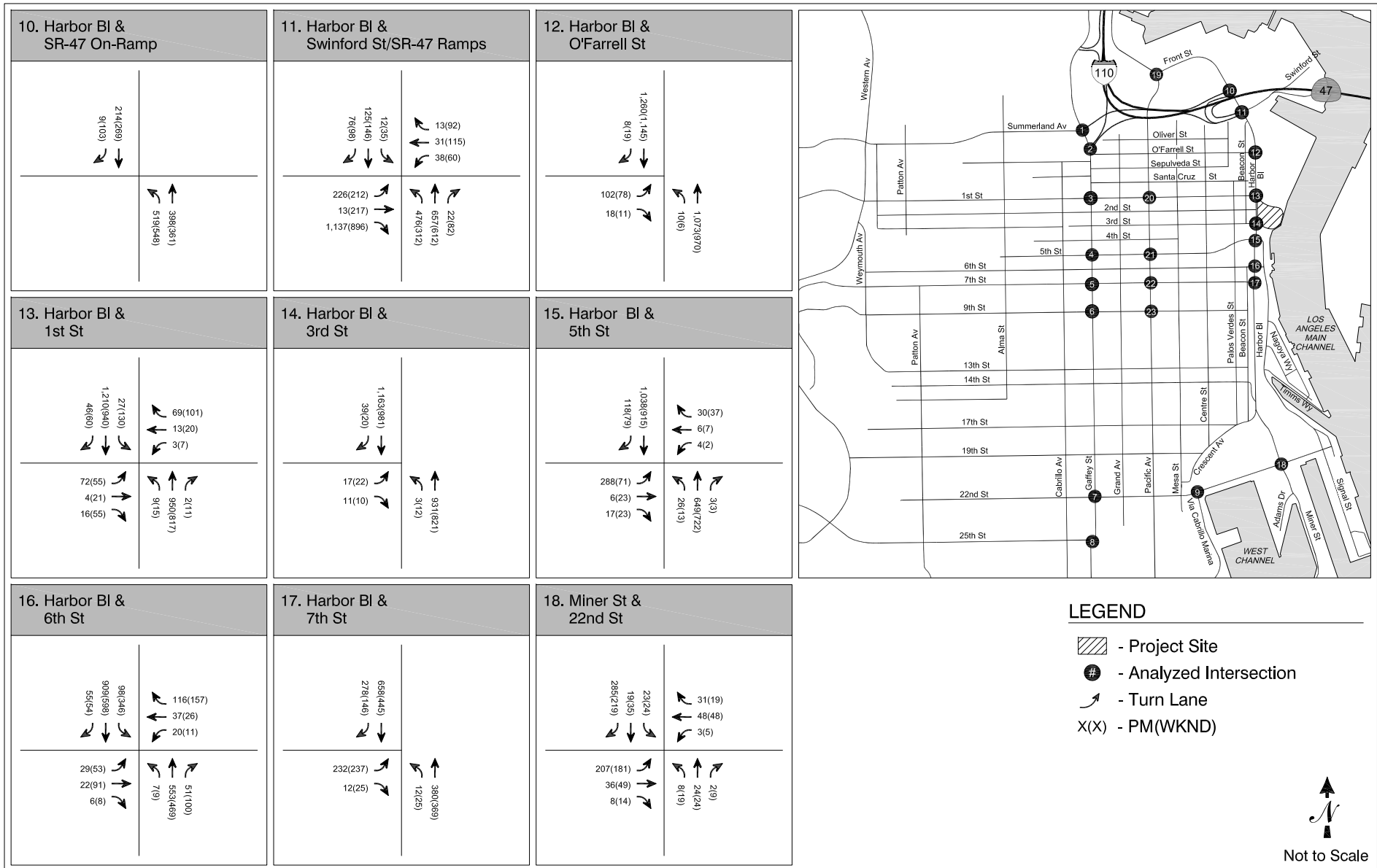


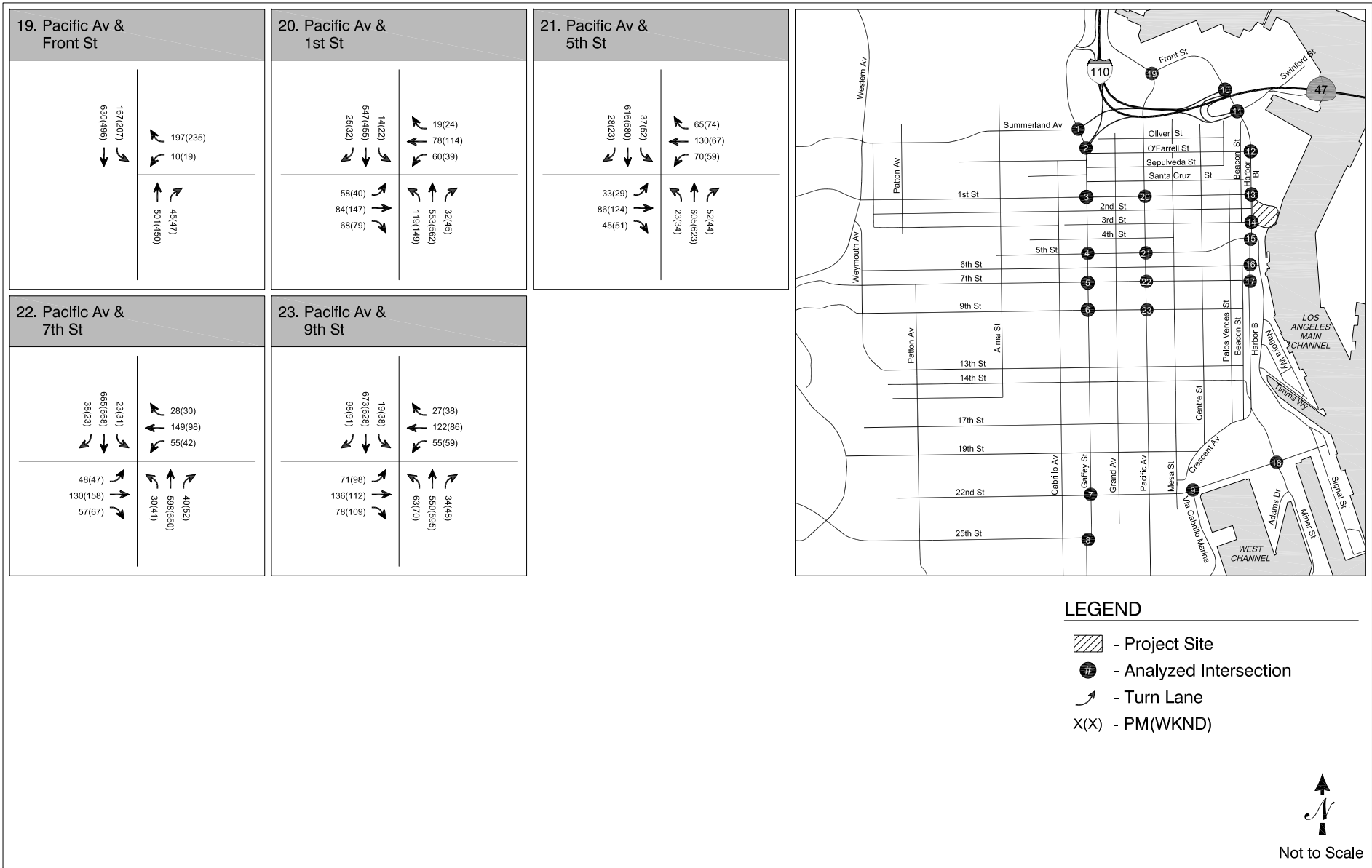
## **FUTURE PLUS PROJECT TRAFFIC PROJECTIONS**

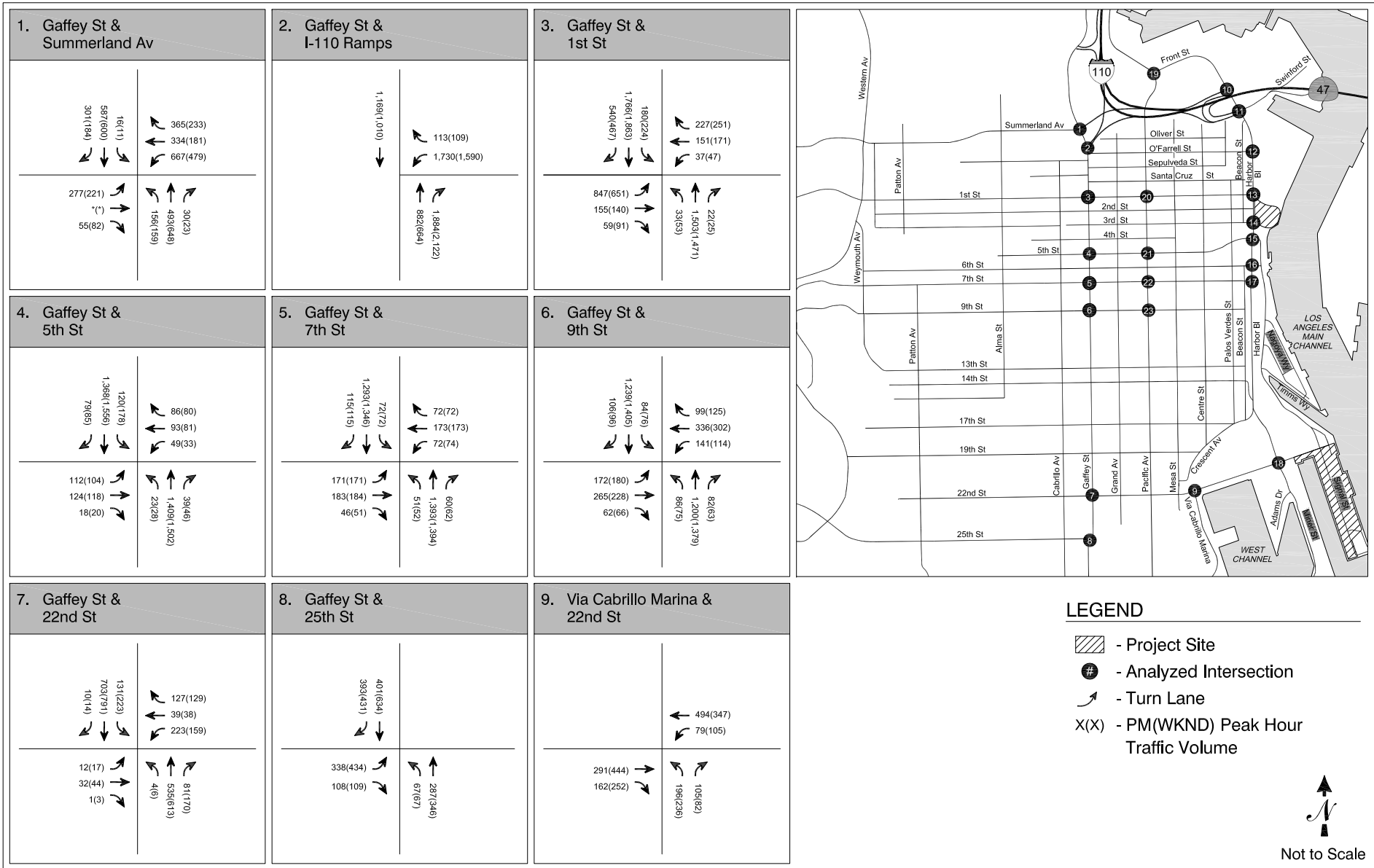
The proposed project traffic volumes were then added to the future base traffic projections to develop the future plus project traffic forecasts for the opening year 2012 and buildout years 2024 and 2042. Figure 11 illustrates the resulting projected future plus project peak hour traffic volumes for a typical weekday PM peak hour and weekend midday peak hour in 2012. Figure 12 illustrates the resulting projected future plus project peak hour traffic volumes for a typical weekday PM peak hour and weekend peak hour in 2024, with the inclusion of project traffic with stabilized attendance. Finally, Figure 13 shows information for 2042. These volumes represent future traffic conditions following completion of the proposed project for the two analysis years.

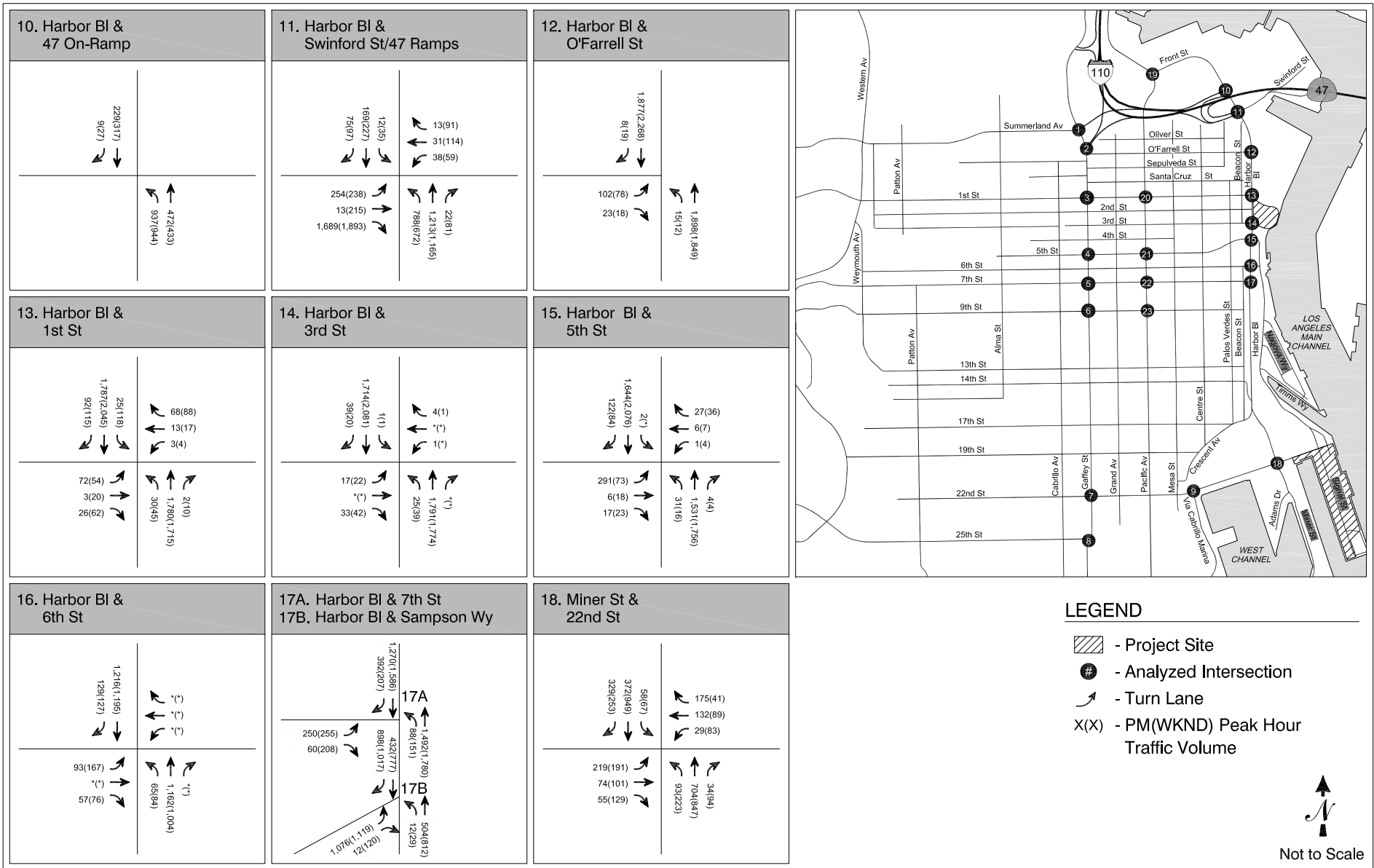


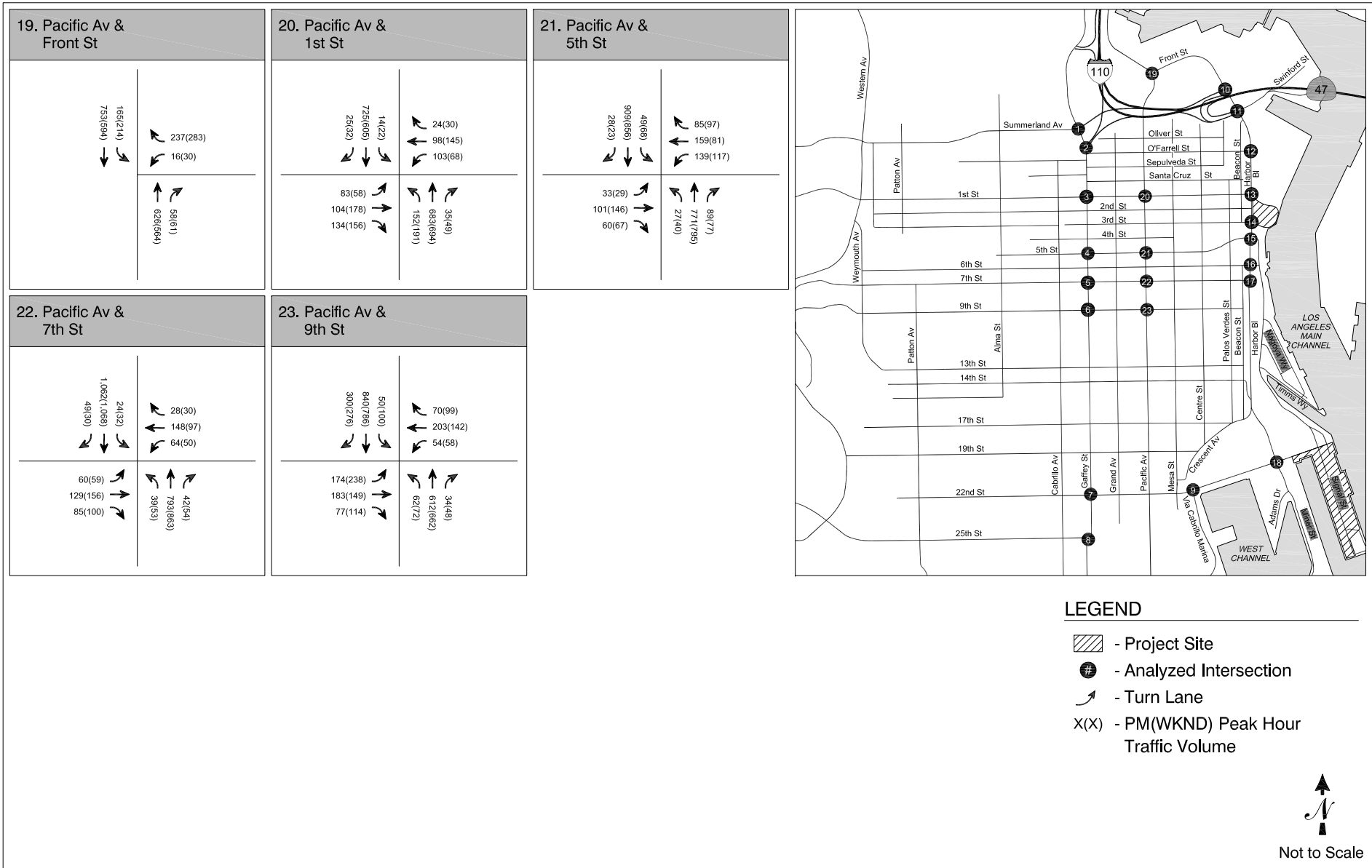






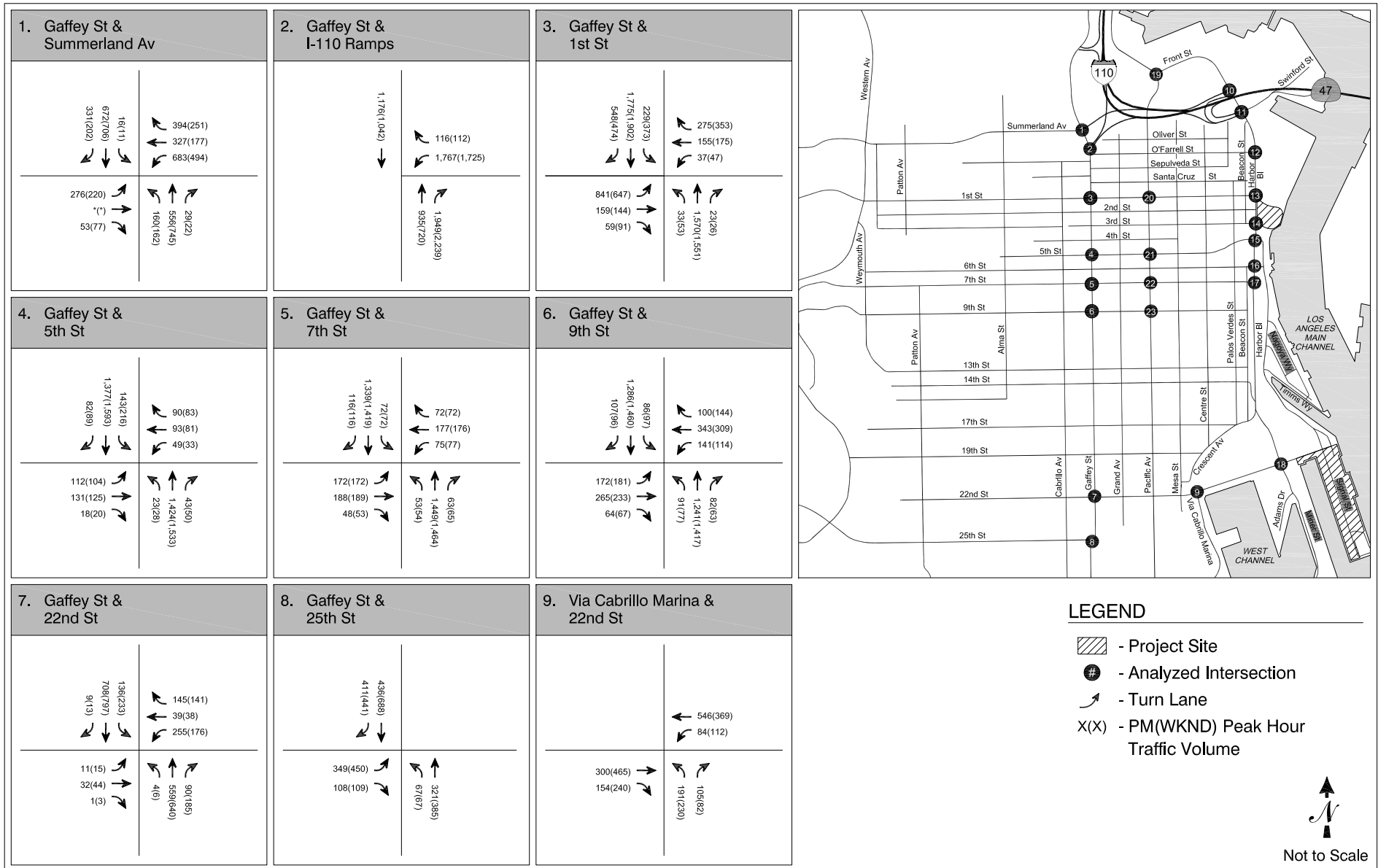


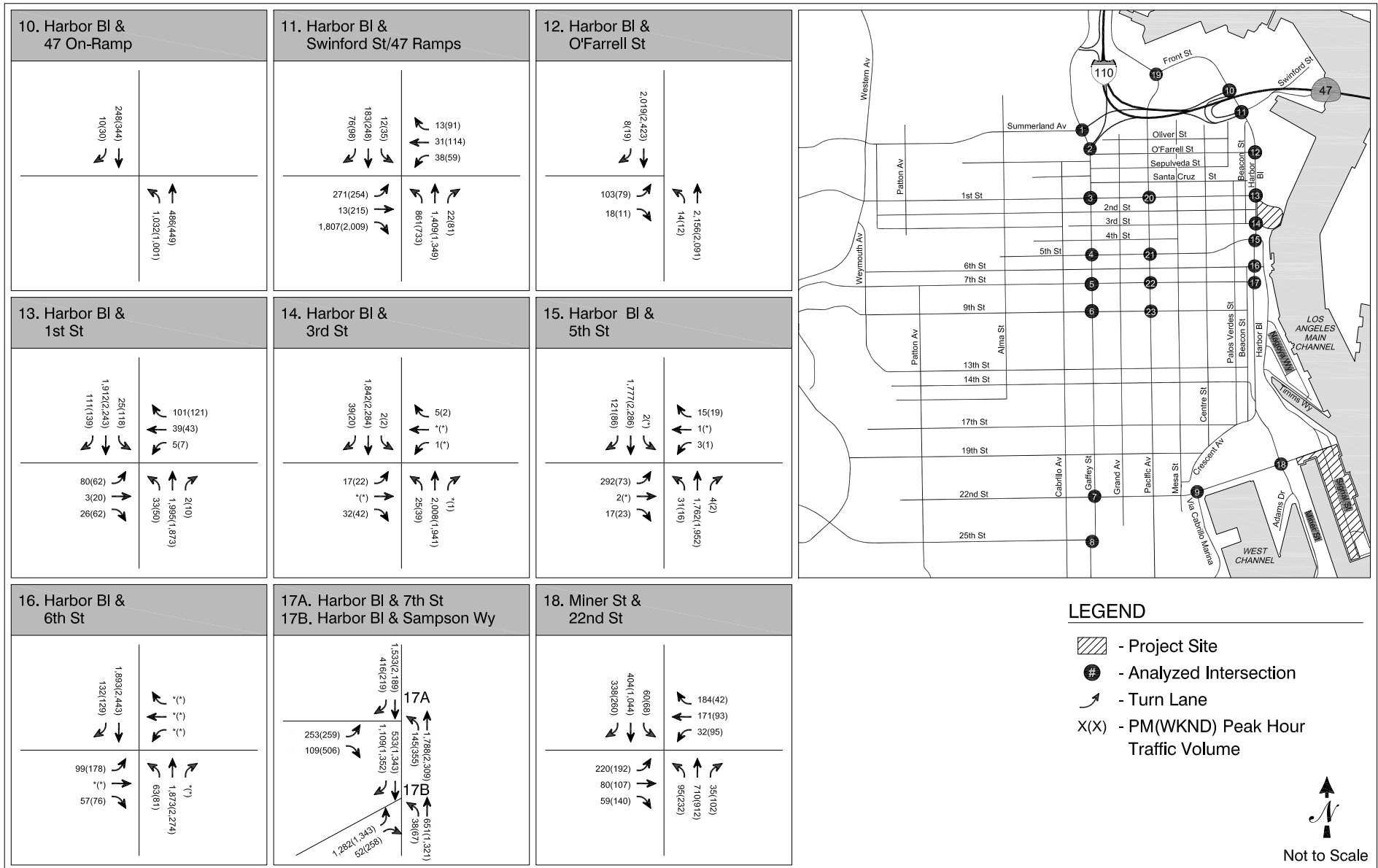




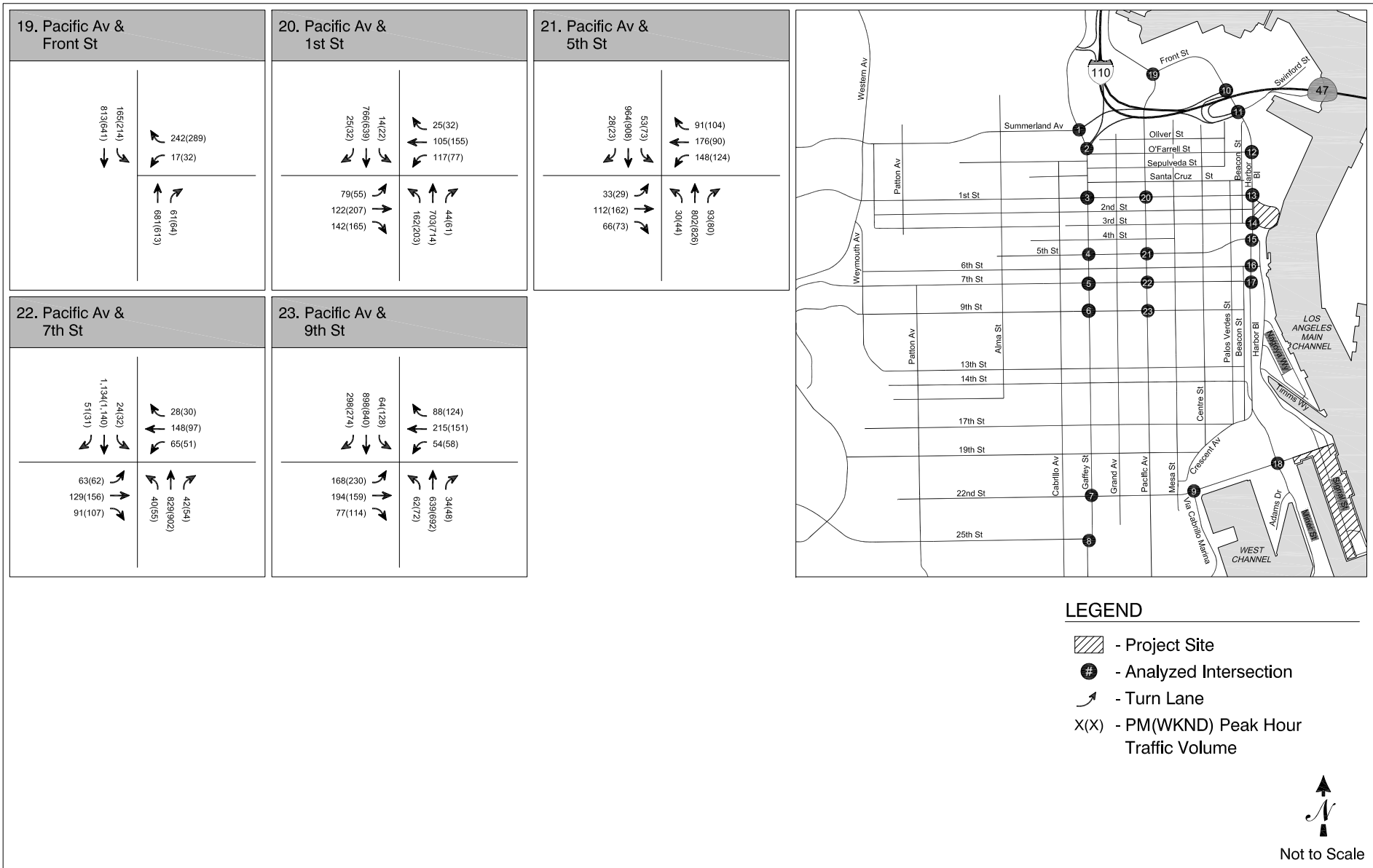
- LEGEND**
- Project Site
  - Analyzed Intersection
  - Turn Lane
  - PM(WKND) Peak Hour Traffic Volume











- LEGEND**
- Project Site
  - Analyzed Intersection
  - Turn Lane
  - PM(WKND) Peak Hour Traffic Volume



### **Future Base (Year 2042) Traffic Conditions**

Future (Year 2042) base traffic projections presented in Figure 10 were analyzed to establish future (year 2042) base operating conditions without the project. As shown in Table 6, 21 of the 23 intersections operate at LOS D or better during both peak hours. The following intersections are projected to operate at LOS E or worse during one or both analyzed peak hours:

- Summerland Avenue & Gaffey Street (weekday PM only)
- 1<sup>st</sup> Street & Gaffey Street (both weekday PM and weekend midday peak hours)

### **Future (Year 2042) plus Project Traffic Conditions**

The resulting future (Year 2042) plus project peak hour traffic volumes, illustrated in Figure 13, were analyzed to project future operating conditions with the addition of the proposed project traffic. As shown in Table 6, the following two intersections operate at LOS E or worse during one or both peak hours:

- Summerland Avenue & Gaffey Street (weekday PM only)
- 1<sup>st</sup> Street & Gaffey Street (both weekday PM and weekend midday peak hours)

### **Project Intersection Impacts Year 2042**

To determine whether significant impacts would occur at the study intersections, the cumulative plus project operating conditions were compared to the cumulative base operating conditions. As shown in Table 6, using the City of Los Angeles criteria for determination of significant impacts, the proposed project would result in a significant impact at the intersection of 1<sup>st</sup> Street & Gaffey Street during the weekend midday peak hour.

## **INTERSECTION MITIGATION MEASURES**

The aforementioned traffic impact analysis determined that the proposed project will result in a significant traffic impact at one study intersection under projected year 2042 conditions. Below is a suggested mitigation that focuses on reducing the project related incremental impact to below significant levels.

### **1<sup>st</sup> Street & Gaffey Street**

The recommended mitigation measure for this intersection is to re-stripe the 1<sup>st</sup> Street eastbound approach and departure, to shift the shared through lane to the curb right-turn lane, yielding a dual-left-turn lane and a shared through/right-turn lane; modifying the east-west phasing to lead/lag protected left-turn phases. This mitigation would be implemented only if the project year 2042 LOS is reached, and only if LADOT accepts such an improvement at that time. The port will monitor this location over time to determine if the projected LOS is reached. This improvement would fully mitigate the identified impact at this location under the 2042 plus project scenario. Table 7 presents the mitigated LOS results for future plus project scenario under which the intersection of Gaffey Street & 1<sup>st</sup> Street was determined to be significantly impacted.

**TABLE 4  
EXISTING PLUS PROJECT CONDITIONS LEVEL OF SERVICE RESULTS - IOWA OPENING YEAR ATTENDANCE**

	INTERSECTION [1]	PEAK HOUR	Existing		Existing + Project (Opening Year Attendance)				2012 Base		2012 + Project (Opening Year Attendance)			
			V/C	LOS	V/C	LOS	Change	Impact	V/C	LOS	V/C	LOS	Change	Impact
1	Gaffey St & Summerland Ave	PM	0.813	D	0.814	D	0.001	NO	0.823	D	0.823	D	0.000	NO
		WK	0.584	A	0.586	A	0.002	NO	0.593	A	0.593	A	0.000	NO
2	Gaffey St & I-110 Ramps	PM	0.514	A	0.515	A	0.001	NO	0.521	A	0.521	A	0.000	NO
		WK	0.429	A	0.431	A	0.002	NO	0.437	A	0.439	A	0.002	NO
3	Gaffey St & 1st St	PM	0.825	D	0.828	D	0.003	NO	0.835	D	0.838	D	0.003	NO
		WK	0.778	C	0.783	C	0.005	NO	0.790	C	0.794	C	0.004	NO
4	Gaffey St & 5th St	PM	0.634	B	0.634	B	0.000	NO	0.643	B	0.643	B	0.000	NO
		WK	0.674	B	0.675	B	0.001	NO	0.684	B	0.685	B	0.001	NO
5	Gaffey St & 7th St	PM	0.593	A	0.593	A	0.000	NO	0.601	B	0.601	B	0.000	NO
		WK	0.622	B	0.623	B	0.001	NO	0.631	B	0.631	B	0.000	NO
6	Gaffey St & 9th St	PM	0.611	B	0.613	B	0.002	NO	0.621	B	0.621	B	0.000	NO
		WK	0.633	B	0.637	B	0.004	NO	0.647	B	0.650	B	0.003	NO
7	Gaffey St & 22nd St	PM	0.333	A	0.335	A	0.002	NO	0.345	A	0.347	A	0.002	NO
		WK	0.427	A	0.430	A	0.003	NO	0.458	A	0.461	A	0.003	NO
8	Gaffey St & 25th St	PM	0.325	A	0.326	A	0.001	NO	0.331	A	0.332	A	0.001	NO
		WK	0.466	A	0.470	A	0.004	NO	0.480	A	0.483	A	0.003	NO
9	Via Cabrillo Marina & 22nd St	PM	0.080	A	0.080	A	0.000	NO	0.085	A	0.085	A	0.000	NO
		WK	0.122	A	0.123	A	0.001	NO	0.137	A	0.139	A	0.002	NO
11	Harbor Blvd & Swinford St/SR-47 EB Ramps	PM	0.485	A	0.503	A	0.018	NO	0.493	A	0.511	A	0.018	NO
		WK	0.583	A	0.608	B	0.025	NO	0.595	A	0.619	B	0.024	NO
12	Harbor Blvd & O'Farrell St	PM	0.493	A	0.500	A	0.007	NO	0.500	A	0.507	A	0.007	NO
		WK	0.391	A	0.427	A	0.036	NO	0.409	A	0.445	A	0.036	NO
13	Harbor Blvd & 1st St	PM	0.351	A	0.407	A	0.056	NO	0.399	A	0.461	A	0.062	NO
		WK	0.245	A	0.374	A	0.129	NO	0.298	A	0.444	A	0.146	NO
15	Harbor Blvd & 5th St	PM	0.498	A	0.499	A	0.001	NO	0.538	A	0.539	A	0.001	NO
		WK	0.282	A	0.283	A	0.001	NO	0.322	A	0.323	A	0.001	NO
16	Harbor Blvd & 6th St	PM	0.282	A	0.284	A	0.002	NO	0.303	A	0.304	A	0.001	NO
		WK	0.406	A	0.407	A	0.001	NO	0.448	A	0.450	A	0.002	NO
17A	Harbor Blvd & 7th St	PM	0.203	A	0.204	A	0.001	NO	0.208	A	0.209	A	0.001	NO
		WK	0.135	A	0.136	A	0.001	NO	0.151	A	0.153	A	0.002	NO
18	Miner St & 22nd St	PM	0.301	A	0.304	A	0.003	NO	0.304	A	0.307	A	0.003	NO
		WK	0.249	A	0.253	A	0.004	NO	0.251	A	0.255	A	0.004	NO
19	Pacific Ave & Front St	PM	0.212	A	0.212	A	0.000	NO	0.216	A	0.216	A	0.000	NO
		WK	0.225	A	0.226	A	0.001	NO	0.232	A	0.233	A	0.001	NO
20	Pacific Ave & 1st St	PM	0.342	A	0.345	A	0.003	NO	0.347	A	0.350	A	0.003	NO
		WK	0.349	A	0.360	A	0.011	NO	0.353	A	0.364	A	0.011	NO
21	Pacific Ave & 5th St	PM	0.327	A	0.328	A	0.001	NO	0.331	A	0.331	A	0.000	NO
		WK	0.343	A	0.343	A	0.000	NO	0.357	A	0.358	A	0.001	NO
22	Pacific Ave & 7th St	PM	0.341	A	0.342	A	0.001	NO	0.346	A	0.347	A	0.001	NO
		WK	0.382	A	0.383	A	0.001	NO	0.387	A	0.387	A	0.000	NO
23	Pacific Ave & 9th St	PM	0.385	A	0.386	A	0.001	NO	0.391	A	0.391	A	0.000	NO
		WK	0.413	A	0.414	A	0.001	NO	0.423	A	0.424	A	0.001	NO

Source: Fehr & Peers, 2011

Notes: Intersections analyzed using LADOT CMA methodology and significance criteria.

[1] - Significant Impact analysis was not conducted for the two unsignalized intersections: Intersections #10 - Harbor Blvd & SR-47 Ramp and Intersection #14 - Harbor Blvd & 3rd St. These intersections were analyzed using Highway Capacity Manual (2000) methodology. Results of the LOS analysis are provided in the appendix.

### ***Future Base (Year 2012) Traffic Conditions***

Future (year 2012) base traffic projections presented in Figure 8 were analyzed to establish future (year 2012) base operating conditions without the project.

### ***Future (Year 2012) plus Project Traffic Conditions***

The resulting 2012 cumulative plus project peak hour traffic volumes, illustrated in Figure 11, were analyzed to determine the projected future operating conditions with the addition of the proposed project traffic. The results of the cumulative plus project analysis are presented in Table 4.

### ***Project Intersection Impacts Year 2012***

To determine whether significant impacts would occur at the study intersections, the 2012 plus project operating conditions were compared to the 2012 base operating conditions. As shown in Table 4, using the City of Los Angeles criteria for determination of significant impacts, the proposed project would not result in any significant impacts.

### ***Future Base (Year 2024) Traffic Conditions***

Future (Year 2024) base traffic projections presented in Figure 9 were analyzed to establish future (Year 2024) base operating conditions without the project. As shown in Table 5, 21 of the 23 intersections operate at LOS D or better during both peak hours. The following intersections are projected to operate at LOS E or worse during one or both analyzed peak hours:

- Summerland Avenue & Gaffey Street (weekday PM only)
- 1<sup>st</sup> Street & Gaffey Street (weekday PM only)

### ***Future (Year 2024) plus Project Traffic Conditions***

The resulting future (year 2024) plus project peak hour traffic volumes, illustrated in Figure 12, were analyzed to project future operating conditions with the addition of the proposed project traffic. As shown in Table 6. As indicated in the table, the following two intersections operate at LOS E or worse during one or both peak hours:

- Summerland Avenue & Gaffey Street (weekday PM only)
- 1<sup>st</sup> Street & Gaffey Street (weekday PM only)

### ***Project Intersection Impacts Year 2024***

To determine whether significant impacts would occur at the study intersections, the future plus project operating conditions were compared to the future base operating conditions. As shown in Table 5, using the City of Los Angeles criteria for determination of significant impacts, the project would not result in a significant impact at any of the analyzed intersections.

**TABLE 5  
2024 PLUS PROJECT CONDITIONS LEVEL OF SERVICE RESULTS - USS IOWA STABILIZED ATTENDANCE**

	INTERSECTION [1]	PEAK HOUR	2024		2024 + Project (Stabilized Attendance)			
			V/C	LOS	V/C	LOS	Change	Impact
1	Gaffey St & Summerland Ave	PM	1.006	F	1.006	F	0.000	NO
		WK	0.732	C	0.732	C	0.000	NO
2	Gaffey St & I-110 Ramps	PM	0.603	B	0.603	B	0.000	NO
		WK	0.500	A	0.502	A	0.002	NO
3	Gaffey St & 1st St	PM	0.918	E	0.920	E	0.002	NO
		WK	0.876	D	0.880	D	0.004	NO
4	Gaffey St & 5th St	PM	0.696	B	0.696	B	0.000	NO
		WK	0.753	C	0.754	C	0.001	NO
5	Gaffey St & 7th St	PM	0.710	C	0.710	C	0.000	NO
		WK	0.710	C	0.711	C	0.001	NO
6	Gaffey St & 9th St	PM	0.809	D	0.811	D	0.002	NO
		WK	0.852	D	0.855	D	0.003	NO
7	Gaffey St & 22nd St	PM	0.580	A	0.583	A	0.003	NO
		WK	0.666	B	0.669	B	0.003	NO
8	Gaffey St & 25th St	PM	0.465	A	0.466	A	0.001	NO
		WK	0.693	B	0.696	B	0.003	NO
9	Via Cabrillo Marina & 22nd St	PM	0.190	A	0.191	A	0.001	NO
		WK	0.308	A	0.309	A	0.001	NO
11	Harbor Blvd & Swinford St/SR-47 EB Ramps	PM	0.504	A	0.517	A	0.013	NO
		WK	0.685	B	0.705	C	0.020	NO
12	Harbor Blvd & O'Farrell St	PM	0.408	A	0.412	A	0.004	NO
		WK	0.459	A	0.480	A	0.021	NO
13	Harbor Blvd & 1st St	PM	0.429	A	0.491	A	0.062	NO
		WK	0.503	A	0.595	A	0.092	NO
15	Harbor Blvd & 5th St	PM	0.562	A	0.562	A	0.000	NO
		WK	0.497	A	0.498	A	0.001	NO
16	Harbor Blvd & 6th St	PM	0.340	A	0.341	A	0.001	NO
		WK	0.402	A	0.403	A	0.001	NO
17A	Harbor Blvd & 7th St	PM	0.447	A	0.447	A	0.000	NO
		WK	0.522	A	0.524	A	0.002	NO
17B	Harbor Blvd & Sampson Way	PM	0.501	A	0.507	A	0.006	NO
		WK	0.586	A	0.597	A	0.011	NO
18	Miner St & 22nd St	PM	0.466	A	0.468	A	0.002	NO
		WK	0.654	B	0.658	B	0.004	NO
19	Pacific Ave & Front St	PM	0.267	A	0.267	A	0.000	NO
		WK	0.289	A	0.291	A	0.001	NO
20	Pacific Ave & 1st St	PM	0.531	A	0.534	A	0.003	NO
		WK	0.535	A	0.547	A	0.011	NO
21	Pacific Ave & 5th St	PM	0.495	A	0.496	A	0.001	NO
		WK	0.530	A	0.531	A	0.001	NO
22	Pacific Ave & 7th St	PM	0.513	A	0.514	A	0.001	NO
		WK	0.547	A	0.548	A	0.001	NO
23	Pacific Ave & 9th St	PM	0.686	B	0.686	B	0.000	NO
		WK	0.753	C	0.755	C	0.002	NO

Source: Fehr & Peers, 2011

Notes: Intersections analyzed using LADOT CMA criteria.

[1] - Significant Impact analysis was not conducted for the two unsignalized intersections: Intersections #10 - Harbor Blvd & SR-47 Ramp and Intersection #14 - Harbor Blvd & 3rd St. These intersections were analyzed using Highway Capacity Manual (2000) methodology. Results of the LOS analysis are provided in the appendix.

### **Future Base (Year 2042) Traffic Conditions**

Future (Year 2042) base traffic projections presented in Figure 10 were analyzed to establish future (year 2042) base operating conditions without the project. As shown in Table 6, 21 of the 23 intersections operate at LOS D or better during both peak hours. The following intersections are projected to operate at LOS E or worse during one or both analyzed peak hours:

- Summerland Avenue & Gaffey Street (weekday PM only)
- 1<sup>st</sup> Street & Gaffey Street (both weekday PM and weekend midday peak hours)

### **Future (Year 2042) plus Project Traffic Conditions**

The resulting future (Year 2042) plus project peak hour traffic volumes, illustrated in Figure 13, were analyzed to project future operating conditions with the addition of the proposed project traffic. As shown in Table 6, the following two intersections operate at LOS E or worse during one or both peak hours:

- Summerland Avenue & Gaffey Street (weekday PM only)
- 1<sup>st</sup> Street & Gaffey Street (both weekday PM and weekend midday peak hours)

### **Project Intersection Impacts Year 2042**

To determine whether significant impacts would occur at the study intersections, the cumulative plus project operating conditions were compared to the cumulative base operating conditions. As shown in Table 6, using the City of Los Angeles criteria for determination of significant impacts, the proposed project would result in a significant impact at the intersection of 1<sup>st</sup> Street & Gaffey Street during the weekend midday peak hour.

## **INTERSECTION MITIGATION MEASURES**

The aforementioned traffic impact analysis determined that the proposed project will result in a significant traffic impact at one study intersection under existing plus project and under two future analysis scenarios, years 2012 and 2042. Below is a suggested mitigation that focuses on reducing the project related incremental impact to below significant levels.

### **1<sup>st</sup> Street & Gaffey Street**

The recommended mitigation measure for this intersection is to re-stripe the 1<sup>st</sup> Street eastbound approach and departure, to shift the shared through lane to the curb right-turn lane, yielding a dual-left-turn lane and a shared through/right-turn lane; modifying the east-west phasing to lead/lag protected left-turn phases. This mitigation would be implemented only if the project year 2042 LOS is reached, and only if LADOT accepts such an improvement at that time. The port will monitor this location over time to determine if the projected LOS is reached. This improvement would fully mitigate the identified impact at this location under the 2042 plus project scenario. Table 7 presents the mitigated LOS results for future plus project scenario under which the intersection of Gaffey Street & 1<sup>st</sup> Street was determined to be significantly impacted.

**TABLE 6  
2042 PLUS PROJECT CONDITIONS LEVEL OF SERVICE RESULTS - USS IOWA STABILIZED ATTENDANCE**

	INTERSECTION [1]	PEAK HOUR	2042		2042 + Project (Stabilized Attendance)			
			V/C	LOS	V/C	LOS	Change	Impact
1	Gaffey St & Summerland Ave	PM	1.064	F	1.064	F	0.000	NO
		WK	0.786	C	0.787	C	0.001	NO
2	Gaffey St & I-110 Ramps	PM	0.629	B	0.631	B	0.002	NO
		WK	0.546	A	0.548	A	0.002	NO
3	Gaffey St & 1st St	PM	0.927	E	0.930	E	0.003	NO
		WK	0.920	E	0.932	E	0.012	YES
4	Gaffey St & 5th St	PM	0.722	C	0.722	C	0.000	NO
		WK	0.795	C	0.795	C	0.000	NO
5	Gaffey St & 7th St	PM	0.733	C	0.733	C	0.000	NO
		WK	0.737	C	0.738	C	0.001	NO
6	Gaffey St & 9th St	PM	0.834	D	0.835	D	0.001	NO
		WK	0.889	D	0.893	D	0.004	NO
7	Gaffey St & 22nd St	PM	0.621	B	0.623	B	0.002	NO
		WK	0.687	B	0.691	B	0.004	NO
8	Gaffey St & 25th St	PM	0.497	A	0.498	A	0.001	NO
		WK	0.742	C	0.746	C	0.004	NO
9	Via Cabrillo Marina & 22nd St	PM	0.192	A	0.192	A	0.000	NO
		WK	0.314	A	0.315	A	0.001	NO
11	Harbor Blvd & Swinford St/SR-47 EB Ramps	PM	0.571	A	0.584	A	0.013	NO
		WK	0.739	C	0.760	C	0.021	NO
12	Harbor Blvd & O'Farrell St	PM	0.445	A	0.460	A	0.015	NO
		WK	0.489	A	0.511	A	0.022	NO
13	Harbor Blvd & 1st St	PM	0.517	A	0.578	A	0.061	NO
		WK	0.605	B	0.698	B	0.093	NO
15	Harbor Blvd & 5th St	PM	0.581	A	0.582	A	0.001	NO
		WK	0.529	A	0.531	A	0.002	NO
16	Harbor Blvd & 6th St	PM	0.508	A	0.509	A	0.001	NO
		WK	0.711	C	0.712	C	0.001	NO
17A	Harbor Blvd & 7th St	PM	0.555	A	0.555	A	0.000	NO
		WK	0.817	D	0.819	D	0.002	NO
17B	Harbor Blvd & Samson Way	PM	0.663	B	0.665	B	0.002	NO
		WK	0.883	D	0.885	D	0.002	NO
18	Miner St & 22nd St	PM	0.500	A	0.501	A	0.001	NO
		WK	0.699	B	0.703	C	0.004	NO
19	Pacific Ave & Front St	PM	0.288	A	0.288	A	0.000	NO
		WK	0.309	A	0.311	A	0.002	NO
20	Pacific Ave & 1st St	PM	0.575	A	0.579	A	0.004	NO
		WK	0.584	A	0.595	A	0.011	NO
21	Pacific Ave & 5th St	PM	0.538	A	0.539	A	0.001	NO
		WK	0.576	A	0.577	A	0.001	NO
22	Pacific Ave & 7th St	PM	0.543	A	0.544	A	0.001	NO
		WK	0.579	A	0.579	A	0.000	NO
23	Pacific Ave & 9th St	PM	0.739	C	0.739	C	0.000	NO
		WK	0.825	D	0.827	D	0.002	NO

Source: Fehr & Peers, 2011

Notes: Intersections analyzed using LADOT CMA methodology and significance criteria.

[1] - Significant Impact analysis was not conducted for the two unsignalized intersections: Intersection #10 - Harbor Blvd & SR-47 Ramp and Intersection #14 - Harbor Blvd & 3rd St. These intersections were analyzed using Highway Capacity Manual (2000) methodology. Results of the LOS analysis are provided in the appendix.

**TABLE 7  
LEVEL OF SERVICE RESULTS WITH PROPOSED MITIGATION**

Scenario	Time of Day	Base Conditions		Project Conditions			Mitigation Conditions			
		V/C	LOS	V/C	LOS	$\Delta$ V/C	V/C	LOS	$\Delta$ V/C	Significance after Mitigation
<i>1st Street &amp; Gaffey Street</i>										
2042 - Stabilized Attendance	WK	0.92	E	0.932	E	0.012	0.9	E	-0.02	Less-than-Significant

Source: Fehr & Peers, 2012

Notes: Intersections analyzed using LADOT CMA criteria.



## IV. CONGESTION MANAGEMENT PROGRAM ANALYSIS

This chapter presents the regional transportation system impact analysis conducted in accordance with the procedures outlined in 2010 Congestion Management Program for Los Angeles County (Metro, October 2010). The CMP requires that when an environmental impact report is prepared for a project, traffic impact analyses be conducted for select regional facilities based on the quantity of project traffic expected to use these facilities.

### REGIONAL TRAFFIC IMPACT ANALYSIS

The CMP guidelines require that the first issue to be addressed is the determination of the geographic scope of the study area. The criteria for determining the study area for CMP arterial monitoring intersections and for freeway monitoring locations are:

- All CMP arterial monitoring intersections where the proposed project will add 50 or more trips during either the AM or PM peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed project will add 150 or more trips, in either direction, during either the AM or PM peak hours.

The CMP traffic impact analysis guidelines establish that a significant project impact occurs when the following threshold is exceeded:

- The proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C 0.02), causing LOS F (V/C > 1.00).
- If the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C 0.02).

#### **Arterial Monitoring Station Analysis**

The CMP arterial monitoring stations nearest to the project study area include:

- Gaffey Street & 9<sup>th</sup> Street (study intersection #6)
- Western Avenue & 9<sup>th</sup> Street

This project would add fewer than 50 vehicle trips through these arterial monitoring stations, so no further analysis of CMP arterial intersections is required and CMP arterial intersection impacts are considered to be less than significant.

#### **Freeway Mainline Monitoring Station Analysis**

This section presents an analysis of potential project impacts on the regional transportation system. This analysis was conducted in accordance with the transportation impact analysis procedures outlined in the CMP. The nearest CMP mainline freeway monitoring location nearest to the project site is: I-110 south of C Street. According to the incremental project trip generation estimates developed in Chapter III and the project only traffic volumes illustrated in Figures 9 and 10, the proposed project is not expected to add sufficient new traffic to exceed the freeway analysis criteria at these locations.

Since incremental project-related traffic in any direction during either peak hour is projected to be less than the minimum criteria of 150 vph, no further CMP freeway analysis is required and CMP freeway impacts are considered to be less than significant.

## **REGIONAL TRANSIT IMPACT ANALYSIS**

Potential increases in transit person trips generated by the proposed project were estimated as follows. Section B.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the projected number of vehicle trips. The CMP requires that the transit impact analysis include local services within ¼ mile of the project and express bus and rail routes within two miles of the project. Potential increases in transit person trips generated by the proposed project were evaluated based on the CMP methodology. This methodology assumes an Average Vehicle Ridership (AVR) factor of 1.4 to estimate the number of person trips to and from the project and then provides guidance regarding the percent of person trips assigned to public transit depending on the type of use (commercial/other; residential) and its proximity to transit services.

There are five fixed-route transit lines (Metro 450, Metro 205, Waterfront Red Car, and the San Pedro Dash) within ¼ mile of the project area. Assuming an average bus seating capacity of 30 or 40 seats, the total number of seats during peak hours is about 530.

The proposed project generates the highest number of trips during a Saturday midday peak hour. Multiplying the Saturday midday peak hour trips by an AVR of 1.4 estimates that the proposed project could generate a total of 358 people trips.

Since the project area does not qualify as a CMP transit center, a CMP multi-modal transportation center, or a CMP transit corridor under Existing (Year 2011) conditions, a factor of 3.5% was applied to person trips generated to estimate transit trips (based on CMP guidelines). The project would therefore generate the following transit trips 12 transit trips or approximately one trip per transit vehicle in the peak hour.

The CMP does not have a threshold for determining the significance of impacts on the transit system, however, at these levels (one trip per transit vehicle in the peak hour), project-related impacts on the regional transit system would not be considered significant.

## V. PARKING

A parking analysis was conducted for the proposed project. A 300-space parking lot would be provided to satisfy the parking demand generated by the proposed project.

### PARKING ANALYSIS

Hourly vehicle trip generation forecasts were developed for the project over the course of the weekday and weekend, as shown in Table 3. It was assumed that visitors would spend approximately two hours at the project before leaving. To develop parking estimates, first the number of employee vehicles at the site were identified from the project trip generation and removed from the parking stock. As stated, this analysis conservatively assumes that all employees will arrive by car and that each one will drive alone. After this, the number of visitor vehicles that would likely be parked on site was applied to the proposed 300-space parking supply. The results are summarized in Tables 8 and 9.

To ensure that the parking supply would be sufficient for circulation and turnover, parking demand was compared to 90% of the available parking supply. So long as less than 90% of parking is needed, there is sufficient supply at the project. In general, the project has sufficient parking supply. The only exception to this is from 12:00 noon to 2:00 PM, on weekends when there is a slight shortage of available spaces for visitors. During the opening year, the number of visitor parking spaces that would be demanded (242) would be greater than the available supply (230 to 240) midday peak period, not accounting for circulation and turnover. The shortage decreases under stabilized conditions, when the 12:00 noon to 2:00 PM visitor parking demand is 95 to 98% of the available supply. Nonetheless, since an additional 10% supply allows for circulation and turnover, the parking supply may be insufficient during the peak period. Because the insufficiency only occurs during a short time, it could be addressed by providing off-site parking for employees, or by identifying nearby overflow lots or street parking.

To provide a conservative analysis of potential project impacts, the traffic study uses baseline traffic count data that reflects the peak traffic conditions in the area, which is during the months when the cruise terminal is active. During this baseline month, approximately 9% of annual visitors would frequent the USS Iowa. In a given summer month, the USS Iowa would have greater patronage – approximately 13% of annual visitors – further increasing parking demand beyond the available supply during the midday peak on weekends. However, during the summer months, no cruise ships call at the Port. Because the project site is adjacent to the World Cruise Center, where there are 2,560 parking spaces,<sup>2</sup> which can be accessed via 1<sup>st</sup> Street & Harbor Boulevard, and parking for both the USS Iowa and the World Cruise Center will be operated by the Port of Los Angeles, overflow parking for the USS Iowa can be accommodated during summer months.

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<sup>2</sup> [http://www.portoflosangeles.org/facilities/world\\_cruise\\_center.asp](http://www.portoflosangeles.org/facilities/world_cruise_center.asp), accessed 11-17-11

**TABLE 8A  
ESTIMATE OF OPENING YEAR PARKING DEMAND - WEEKDAY**

Hour	Spaces	Employee Occupied Spaces	Remaining Spaces for Visitors	Visitor Autos	Surplus Spaces	% of Supply Used	Sufficient?	Bus Spaces	Buses Parked	Sufficient?
9:00	300	18	282	25	257	14%	Yes	8	0	Yes
10:00	300	43	257	75	182	39%	Yes	8	4	Yes
11:00	300	58	242	150	92	69%	Yes	8	4	Yes
12:00	300	60	240	200	40	87%	Yes	8	4	Yes
1:00	300	70	230	200	30	90%	Yes	8	4	Yes
2:00	300	70	230	150	80	73%	Yes	8	0	Yes
3:00	300	52	248	100	148	51%	Yes	8	0	Yes
4:00	300	17	283	75	208	31%	Yes	8	0	Yes
5:00	300	0	300	0	300	0%	Yes	8	0	Yes

**TABLE 8B  
ESTIMATE OF OPENING YEAR PARKING DEMAND - WEEKEND**

Hour	Spaces	Employee Occupied Spaces	Remaining Spaces for Visitors	Visitor Autos	Surplus Spaces	% of Supply Used	Sufficient?	Bus Spaces	Buses Parked	Sufficient?
9:00	300	18	282	30	252	16%	Yes	8	0	Yes
10:00	300	43	257	91	166	45%	Yes	8	2	Yes
11:00	300	58	242	182	60	80%	Yes	8	4	Yes
12:00	300	60	240	242	-2	101%	No	8	4	Yes
1:00	300	70	230	242	-12	104%	No	8	4	Yes
2:00	300	70	230	182	48	84%	Yes	8	2	Yes
3:00	300	52	248	122	126	58%	Yes	8	0	Yes
4:00	300	17	283	91	192	36%	Yes	8	0	Yes
5:00	300	0	300	0	300	0%	Yes	8	0	Yes

Notes:

[1] Analysis assumes visitors remain on site for approximately 2.5 hours

[2] Supply is considered sufficient when no more than 90% of spaces are utilized

[3] Analysis is for peak month of background traffic, when approximately 9% of annual attendance occurs

Source: Fehr & Peers, 2011

**TABLE 9A  
ESTIMATE OF STABILIZED ATTENDANCE PARKING DEMAND - WEEKDAY**

Hour	Spaces	Employee Occupied Spaces	Remaining Spaces for Visitors	Visitor Autos	Surplus Spaces	% of Supply Used	Sufficient?	Bus Spaces	Buses Parked	Sufficient?
9:00	300	21	279	22	257	14%	Yes	8	0	Yes
10:00	300	50	250	66	184	39%	Yes	8	2	Yes
11:00	300	69	231	132	99	67%	Yes	8	4	Yes
12:00	300	70	230	176	54	82%	Yes	8	4	Yes
1:00	300	80	220	176	44	85%	Yes	8	4	Yes
2:00	300	80	220	132	88	71%	Yes	8	0	Yes
3:00	300	60	240	88	152	49%	Yes	8	0	Yes
4:00	300	20	280	66	214	29%	Yes	8	0	Yes
5:00	300	0	300	0	300	0%	Yes	8	0	Yes

**TABLE 9B  
ESTIMATE OF STABILIZED ATTENDANCE PARKING DEMAND - WEEKEND**

Hour	Spaces	Employee Occupied Spaces	Remaining Spaces for Visitors	Visitor Autos	Surplus Spaces	% of Supply Used	Sufficient?	Bus Spaces	Buses Parked	Sufficient?
9:00	300	21	279	27	252	16%	Yes	8	0	Yes
10:00	300	50	250	80	170	43%	Yes	8	2	Yes
11:00	300	69	231	160	71	76%	Yes	8	4	Yes
12:00	300	70	230	214	16	95%	No	8	4	Yes
1:00	300	80	220	214	6	98%	No	8	4	Yes
2:00	300	80	220	160	60	80%	Yes	8	2	Yes
3:00	300	60	240	106	134	55%	Yes	8	0	Yes
4:00	300	20	280	80	200	33%	Yes	8	0	Yes
5:00	300	0	300	0	300	0%	Yes	8	0	Yes

Notes:

[1] Analysis assumes visitors remain on site for approximately 2.5 hours

[2] Supply is considered sufficient when no more than 90% of spaces are utilized

[3] Analysis is for peak month of background traffic, when approximately 9% of annual attendance occurs

Source: Fehr & Peers, 2011

## VI. SUMMARY AND CONCLUSIONS

This study was undertaken to analyze the potential for traffic impacts resulting from the proposed museum on the historic USS Iowa battleship in the Port of Los Angeles (Port) in Los Angeles, California. The key findings and conclusions of the study are summarized below:

- The proposed project involves the relocation of the USS Iowa battleship from its current location at Suisun Bay, California to Berth 87 in Port of Los Angeles, California, where it will be docked. Sections of the historic battleship will be opened as a museum. A second phase of the project (pending future funding) will include an approximately 33,800-square foot visitor center, which will include a museum
- Detailed intersection capacity and operation analyses were conducted at 23 intersections in the vicinity of the project site for weekday evening (4:00 to 6:00 PM) and Saturday midday peak hours (11:00 to 2:00 PM). 22 of the 23 the study intersections currently operating at acceptable LOS (LOS D or better). The intersection of 1<sup>st</sup> Street & Gaffey Street currently operates at LOS E during both the analyzed peak hours.
- Project trip generation estimated were developed using information provided by PBC and transportation and parking surveys conducted at the USS Midway (San Diego). In the opening year 2012, the project will generate a total of approximately 1,196 daily weekday trips, including approximately 110 trips during the PM peak hour and approximately 1,408 daily weekend trips, including 256 trips during the PM peak hour.
- By Year 2024, when visitor patronage has stabilized, the project will generate a total of approximately 1,096 daily weekday trips, including approximately 106 trips during the PM peak hour and approximately 1,284 daily weekend trips, including 228 trips during the PM peak hour.
- The project trip assignments were added to existing weekday PM and Saturday midday peak hour traffic to calculate existing plus project traffic volumes.
- Three future scenarios: Year 2012 (opening year); Year 2024, and Year 2042 were analyzed in the traffic study. Year 2012 base conditions were estimated by adding a 1% growth to the existing traffic volumes. Years 2024 and 2042 base projections were developed using Port Area Travel Demand Model. Specific related project proposed in the vicinity of the project were added on top of the model projection to develop future base line traffic projections. The project traffic volumes were added to the above future base scenarios to calculate future plus project traffic projections.
- Existing plus project, future base and future plus project projections were analyzed using CMA methodology to determine operation conditions at the analyzed intersections.
- Existing plus project LOS results were compared to existing traffic volumes to determine project's incremental impact. Using City of Los Angeles' significant impact criteria, it is determined that the project will not result in any significant impacts.
- Future base LOS results were compared to future plus project LOS results to determine project related incremental impact at the analyzed intersections. Using the significant impact criteria, it is determined that the project will result in a significant impact at the intersection of Gaffey Street &

1<sup>st</sup> Street during Saturday midday peak hour under the future Year 2042 scenario.

- A mitigation measure that provides for an eastbound double left-turn lane and a shared through-right lane, in addition to replacing the split east-west phasing with lead/lag protected left-turn phasing would mitigate the significant impact.
- The project would not result in a CMP-related significant impact at any CMP roadway and transit facilities.
- Overall, the Project will provide sufficient parking to meet the demands of employees and visitors arriving by vehicle. During the period from 12:00 to 2:00 PM on weekends, there may be slightly lower supply available than demand. This can be addressed by providing employee parking at an off-site location, or directing overflow visitors to other parking locations or nearby streets. During the peak attendance months, midday peak parking demand may further exceed the available supply at the USS Iowa; however, the adjacent cruise terminal is generally underutilized during these months and could be used for employee or visitor overflow parking.

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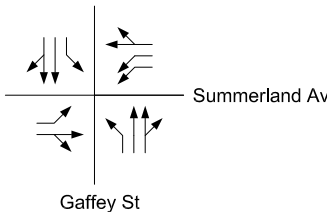
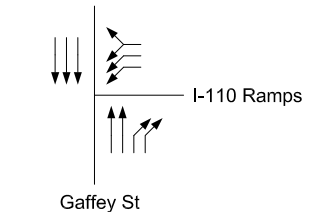
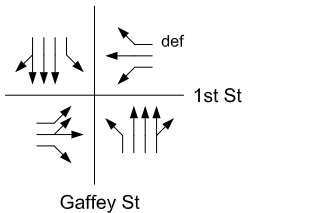
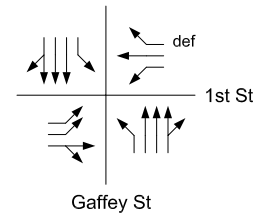
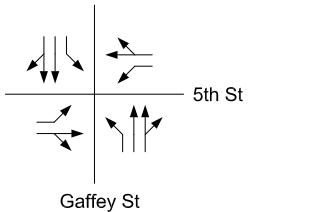
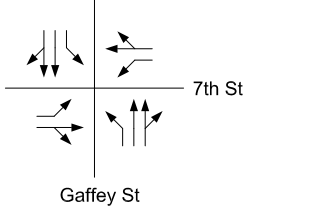
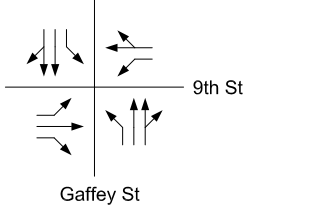
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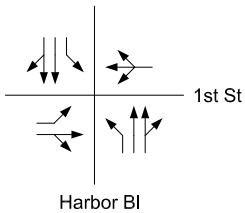
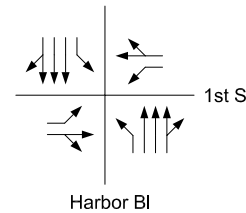
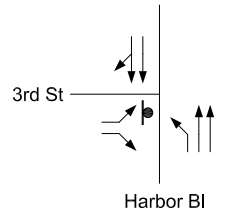
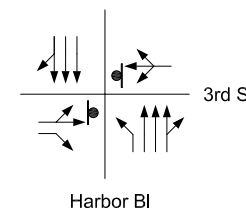
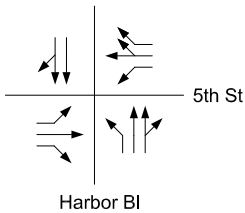
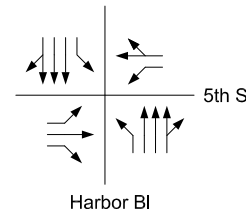
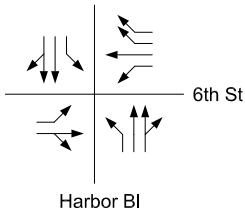
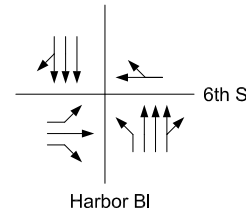
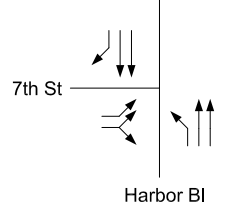
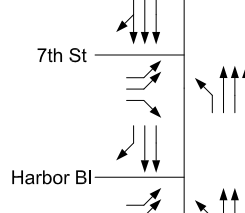
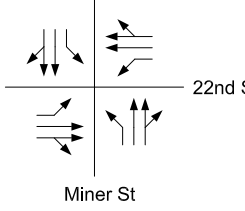
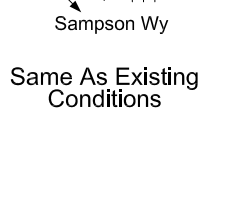
**APPENDIX A:  
INTERSECTION LANE CONFIGURATIONS**

	<u>EXISTING CONDITIONS</u>	<u>2012 CONDITIONS</u>	<u>2024 CONDITIONS</u>	<u>2042 CONDITIONS</u>	<u>PROPOSED MITIGATIONS</u>
1. Gaffey St & Summerland Av		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
2. Gaffey St & I-110 Ramps		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
3. Gaffey St & 1st St		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	 (Mitigation under 2042)
4. Gaffey St & 5th St		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
5. Gaffey St & 7th St		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
6. Gaffey St & 9th St		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions

	<u>EXISTING CONDITIONS</u>	<u>2012 CONDITIONS</u>	<u>2024 CONDITIONS</u>	<u>2042 CONDITIONS</u>	<u>PROPOSED MITIGATIONS</u>
7. Gaffey St & 22nd St		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
8. Gaffey St & 25th St		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
9. Via Cabrillo Marina & 22nd St		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
10. Harbor Bl & SR-47 On-Ramp		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
11. Harbor Bl & Swinford St/SR-47 Ramps		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
12. Harbor Bl & O'Farrell St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions

**LEGEND**  
 Stop Controlled

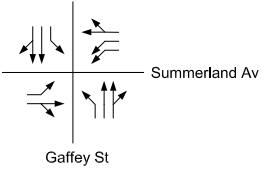
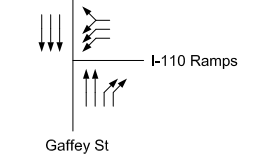
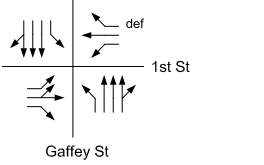
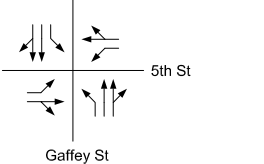
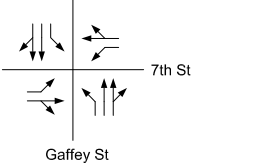
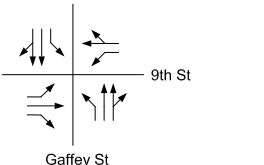
**INTERSECTION LANE CONFIGURATIONS**

	EXISTING CONDITIONS	2012 CONDITIONS	2024 CONDITIONS	2042 CONDITIONS	PROPOSED MITIGATIONS
13. Harbor Bl & 1st St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
14. Harbor Bl & 3rd St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
15. Harbor Bl & 5th St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
16. Harbor Bl & 6th St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
17. Harbor Bl & 7th St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
18. Miner St & 22nd St		Same As Existing Conditions		Same As Existing Conditions	Same As Existing Conditions

**LEGEND**  
 Stop Controlled

	<u>EXISTING CONDITIONS</u>	<u>2012 CONDITIONS</u>	<u>2024 CONDITIONS</u>	<u>2042 CONDITIONS</u>	<u>PROPOSED MITIGATIONS</u>
19. Pacific Av & Front St	<p>Pacific Av</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
20. Pacific Av & 1st St	<p>Pacific Av</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
21. Pacific Av & 5th St	<p>Pacific Av</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
22. Pacific Av & 7th St	<p>Pacific Av</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
23. Pacific Av & 9th St	<p>Pacific Av</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions

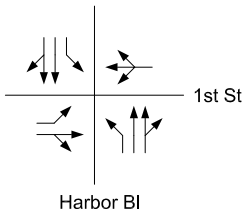
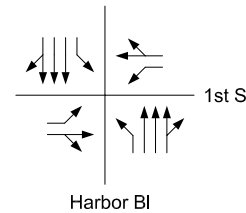
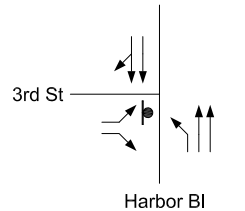
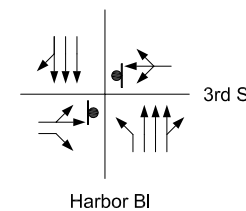
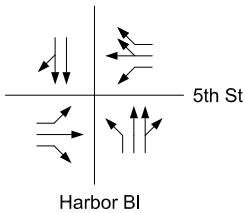
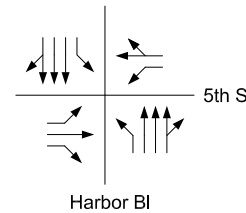
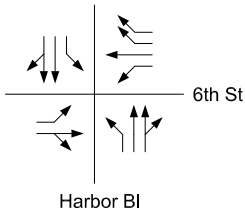
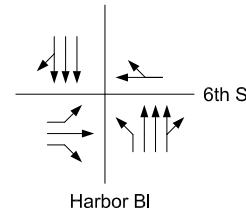
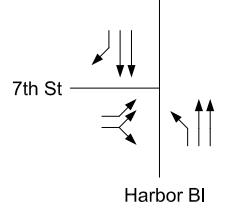
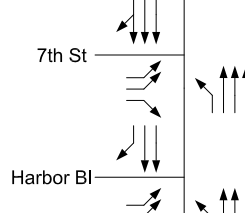
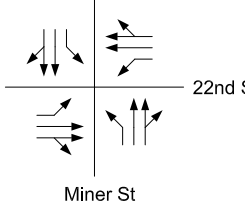
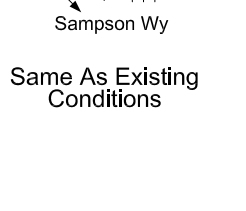
**INTERSECTION LANE CONFIGURATIONS**

	<u>EXISTING CONDITIONS</u>	<u>2012 CONDITIONS</u>	<u>2024 CONDITIONS</u>	<u>2042 CONDITIONS</u>
1. Gaffey St & Summerland Av	 <p>Summerland Av</p> <p>Gaffey St</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
2. Gaffey St & I-110 Ramps	 <p>I-110 Ramps</p> <p>Gaffey St</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
3. Gaffey St & 1st St	 <p>1st St</p> <p>Gaffey St</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
4. Gaffey St & 5th St	 <p>5th St</p> <p>Gaffey St</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
5. Gaffey St & 7th St	 <p>7th St</p> <p>Gaffey St</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
6. Gaffey St & 9th St	 <p>9th St</p> <p>Gaffey St</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions

	<u>EXISTING CONDITIONS</u>	<u>2012 CONDITIONS</u>	<u>2024 CONDITIONS</u>	<u>2042 CONDITIONS</u>	<u>PROPOSED MITIGATIONS</u>
7. Gaffey St & 22nd St		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
8. Gaffey St & 25th St		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
9. Via Cabrillo Marina & 22nd St		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
10. Harbor Bl & SR-47 On-Ramp		Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
11. Harbor Bl & Swinford St/SR-47 Ramps		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
12. Harbor Bl & O'Farrell St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions

**LEGEND**  
 Stop Controlled

**INTERSECTION LANE CONFIGURATIONS**

	<u>EXISTING CONDITIONS</u>	<u>2012 CONDITIONS</u>	<u>2024 CONDITIONS</u>	<u>2042 CONDITIONS</u>	<u>PROPOSED MITIGATIONS</u>
13. Harbor Bl & 1st St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
14. Harbor Bl & 3rd St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
15. Harbor Bl & 5th St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
16. Harbor Bl & 6th St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
17. Harbor Bl & 7th St		Same As Existing Conditions		Same As 2024 Conditions	Same As 2024 Conditions
18. Miner St & 22nd St		Same As Existing Conditions		Same As Existing Conditions	Same As Existing Conditions

**LEGEND**  
 Stop Controlled



	<u>EXISTING CONDITIONS</u>	<u>2012 CONDITIONS</u>	<u>2024 CONDITIONS</u>	<u>2042 CONDITIONS</u>	<u>PROPOSED MITIGATIONS</u>
19. Pacific Av & Front St	<p>Pacific Av</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
20. Pacific Av & 1st St	<p>Pacific Av</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
21. Pacific Av & 5th St	<p>Pacific Av</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
22. Pacific Av & 7th St	<p>Pacific Av</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions
23. Pacific Av & 9th St	<p>Pacific Av</p>	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions	Same As Existing Conditions

**INTERSECTION LANE CONFIGURATIONS**

**APPENDIX B:  
TRAFFIC COUNTS**

# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: CA11\_5140\_001

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Gaffey St			Gaffey St			Summerland Ave			Summerland Ave			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 0	WL 2	WT 0.5	WR 0.5	
3:00 PM	37	103	7	1	145	51	49	2	11	84	35	43	568
3:15 PM	37	99	3	2	126	45	46	1	10	93	35	59	556
3:30 PM	39	115	4	7	132	52	49	2	14	93	46	51	604
3:45 PM	43	92	4	3	111	57	42	2	12	91	24	57	538
4:00 PM	30	83	8	3	134	53	51	2	15	105	51	54	589
4:15 PM	28	88	5	4	139	48	49	0	11	130	60	54	616
4:30 PM	29	89	7	5	130	65	55	0	11	139	72	68	670
4:45 PM	34	93	5	5	130	66	70	0	15	155	67	68	708
5:00 PM	34	106	12	2	118	78	47	0	10	152	74	105	738
5:15 PM	28	105	10	5	149	58	37	2	14	75	47	42	572
5:30 PM	24	74	7	4	136	62	40	2	13	147	74	73	656
5:45 PM	37	90	5	4	144	51	44	1	12	125	64	53	630
<b>TOTAL VOLUMES :</b>	NL 400	NT 1137	NR 77	SL 45	ST 1594	SR 686	EL 579	ET 14	ER 148	WL 1389	WT 649	WR 727	TOTAL 7445
<b>APPROACH %'s :</b>	24.78%	70.45%	4.77%	1.94%	68.56%	29.51%	78.14%	1.89%	19.97%	50.24%	23.47%	26.29%	
<b>PEAK HR START TIME :</b>	415 PM												TOTAL
<b>PEAK HR VOL :</b>	125	376	29	16	517	257	221	0	47	576	273	295	2732
<b>PEAK HR FACTOR :</b>	0.872			0.983			0.788			0.864			0.925

CONTROL : Signalized

# ITM Peak Hour Summary

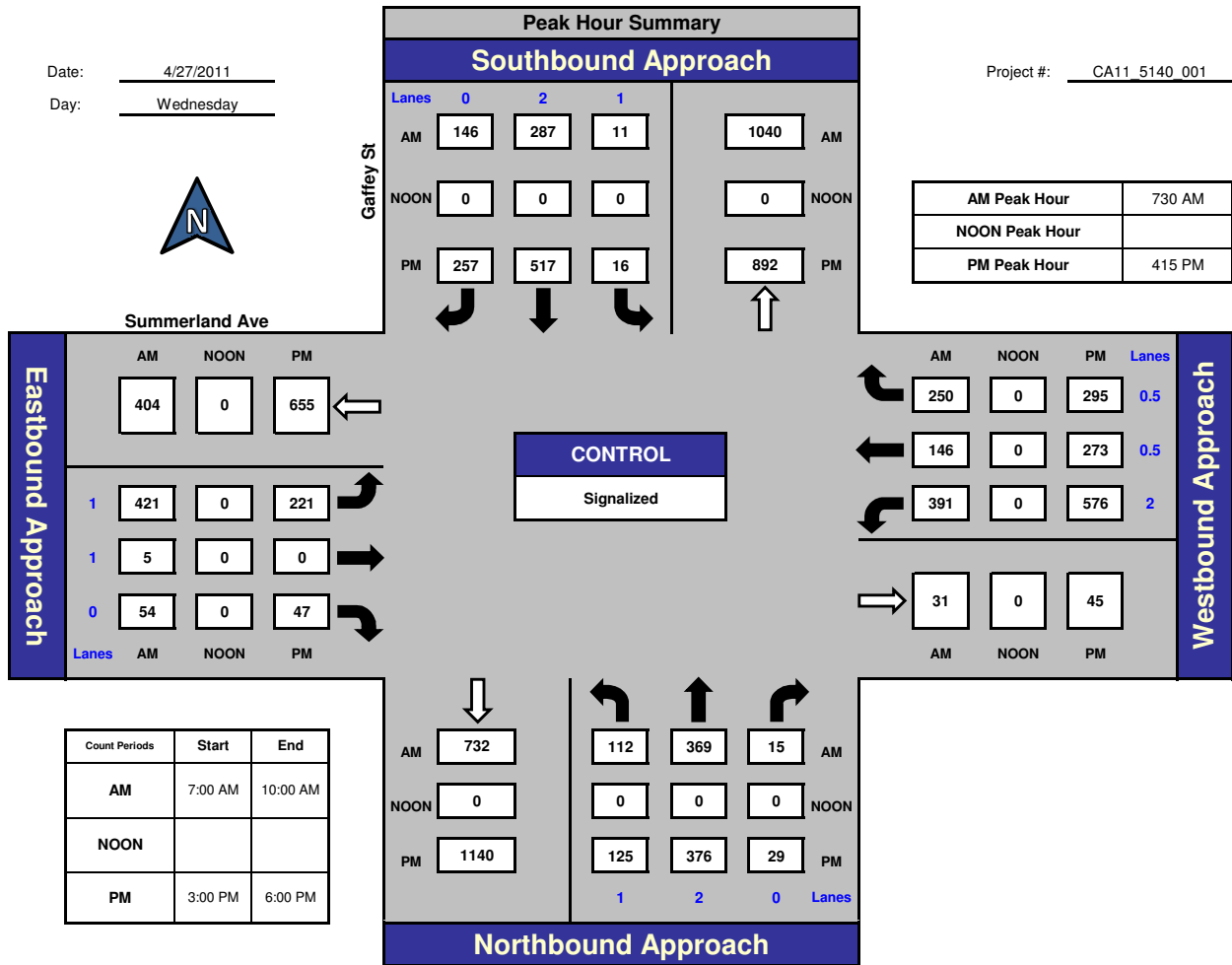


Prepared by:  
National Data & Surveying Services

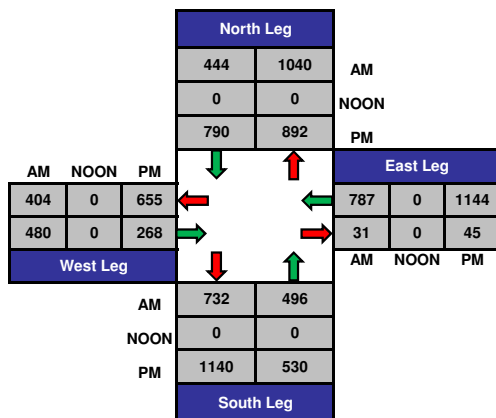
## Gaffey St and Summerland Ave, City of San Pedro

Date: 4/27/2011  
Day: Wednesday

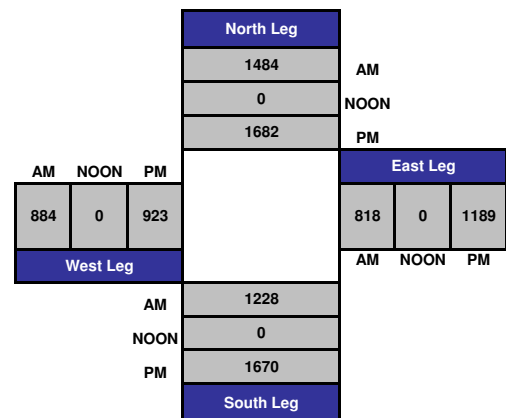
Project #: CA11 5140 001



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_001

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

NOON

NS/EW Streets:	Gaffey St			Gaffey St			Summerland Ave			Summerland Ave			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 0	WL 2	WT 0.5	WR 0.5	
11:00 AM	36	130	4	6	131	33	44	0	16	80	32	32	544
11:15 AM	40	145	7	5	100	27	61	1	12	74	34	48	554
11:30 AM	26	102	4	5	120	39	46	1	19	113	37	47	559
11:45 AM	29	134	7	0	131	33	40	0	13	117	50	60	614
12:00 PM	37	136	8	3	125	48	41	0	24	103	35	34	594
12:15 PM	35	126	3	3	139	37	49	2	13	81	26	47	561
12:30 PM	37	110	10	7	133	29	50	0	12	77	33	37	535
12:45 PM	32	121	5	0	126	38	47	4	14	85	32	38	542
1:00 PM	33	128	16	2	114	35	55	1	19	118	31	42	594
1:15 PM	35	130	2	6	141	32	48	0	26	101	36	37	594
1:30 PM	34	128	18	5	107	24	38	2	13	100	35	33	537
1:45 PM	31	103	5	4	128	37	45	0	13	89	35	35	525
2:00 PM	38	135	6	2	122	49	36	2	13	91	35	33	562
2:15 PM	20	136	5	4	129	50	48	1	19	80	37	30	559
2:30 PM	38	104	6	2	124	31	46	0	16	108	40	40	555
2:45 PM	44	107	8	4	125	41	28	0	15	88	32	31	523
3:00 PM	39	106	6	5	105	49	33	2	16	108	33	42	544
3:15 PM	35	97	10	0	135	40	31	0	18	88	40	42	536
3:30 PM	35	96	6	0	117	39	34	0	9	106	34	42	518
3:45 PM	54	87	6	1	120	32	30	1	23	87	47	35	523
<b>TOTAL VOLUMES :</b>	708	2361	142	64	2472	743	850	17	323	1894	714	785	11073
<b>APPROACH %'s :</b>	22.05%	73.53%	4.42%	1.95%	75.39%	22.66%	71.43%	1.43%	27.14%	55.82%	21.04%	23.14%	
<b>PEAK HR START TIME :</b>	1130 AM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	127	498	22	11	515	157	176	3	69	414	148	188	2328
<b>PEAK HR FACTOR :</b>	0.894			0.954			0.939			0.826			0.948

CONTROL : Signalized

# ITM Peak Hour Summary

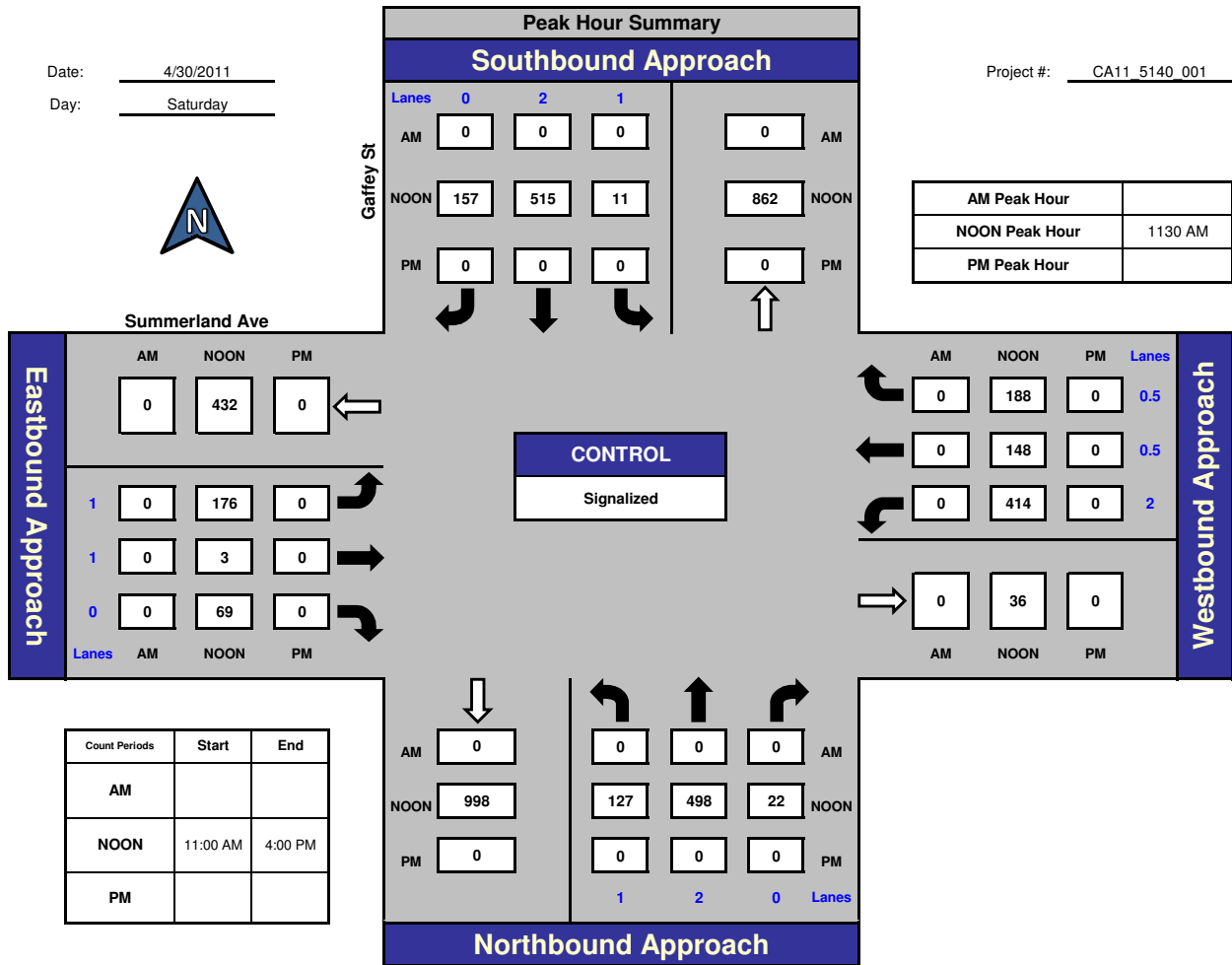


Prepared by:  
National Data & Surveying Services

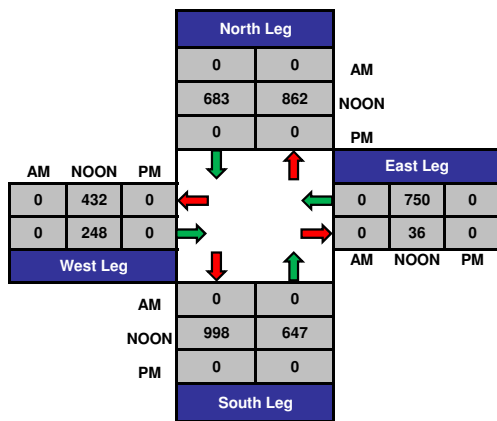
## Gaffey St and Summerland Ave.

Date: 4/30/2011  
Day: Saturday

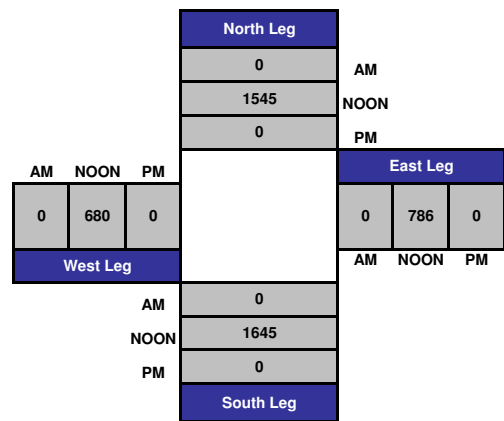
Project #: CA11 5140 001



### Total Ins & Outs



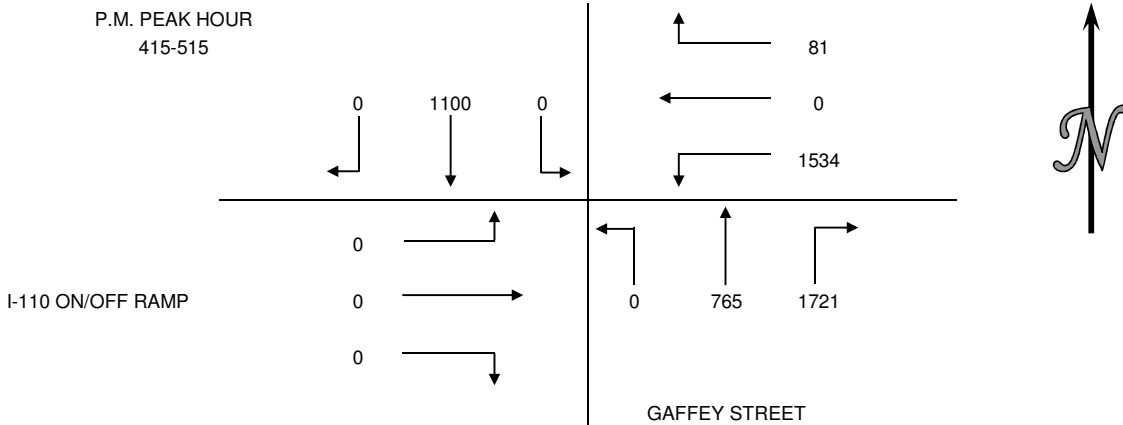
### Total Volume Per Leg



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: WEDNESDAY, APRIL 27, 2011  
 PERIOD: 3:00 PM TO 6:00 PM  
 INTERSECTION: N/S GAFFEY STREET  
 E/W I-110 ON/OFF RAMP

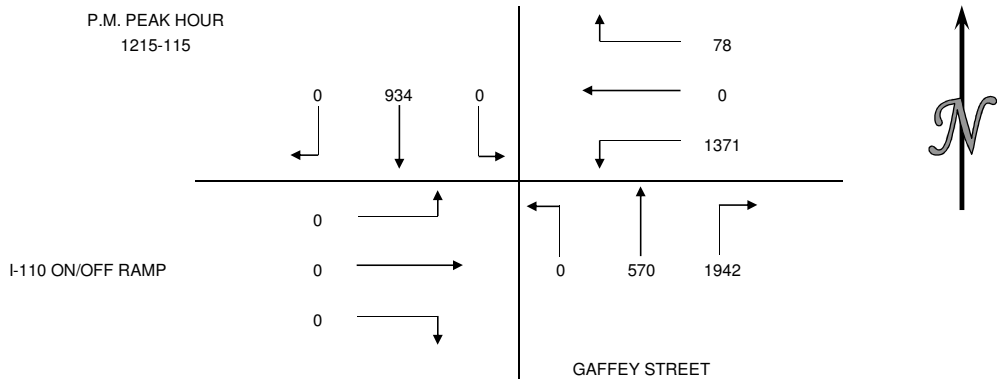
15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	0	255	0	30	0	332	531	160	0	0	0	0	1308
315-330	0	214	0	19	0	329	478	180	0	0	0	0	1220
330-345	0	231	0	25	0	380	478	228	0	0	0	0	1342
345-400	0	221	0	25	0	369	454	190	0	0	0	0	1259
400-415	0	243	0	29	0	350	460	146	0	0	0	0	1228
415-430	0	247	0	17	0	366	416	204	0	0	0	0	1250
430-445	0	306	0	19	0	403	404	233	0	0	0	0	1365
445-500	0	259	0	23	0	351	445	187	0	0	0	0	1265
500-515	0	288	0	22	0	414	456	141	0	0	0	0	1321
515-530	0	240	0	14	0	368	490	129	0	0	0	0	1241
530-545	0	206	0	12	0	363	486	118	0	0	0	0	1185
545-600	0	228	0	9	0	305	397	102	0	0	0	0	1041
HOURLY TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	0	921	0	99	0	1410	1941	758	0	0	0	0	5129
315-415	0	909	0	98	0	1428	1870	744	0	0	0	0	5049
330-430	0	942	0	96	0	1465	1808	768	0	0	0	0	5079
345-445	0	1017	0	90	0	1488	1734	773	0	0	0	0	5102
400-500	0	1055	0	88	0	1470	1725	770	0	0	0	0	5108
415-515	0	1100	0	81	0	1534	1721	765	0	0	0	0	5201
430-530	0	1093	0	78	0	1536	1795	690	0	0	0	0	5192
445-545	0	993	0	71	0	1496	1877	575	0	0	0	0	5012
500-600	0	962	0	57	0	1450	1829	490	0	0	0	0	4788



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: SATURDAY APRIL 30, 2011  
 PERIOD: 11:00 AM TO 4:00 PM  
 INTERSECTION: N/S GAFFEY STREET  
 E/W I-110 ON/OFF RAMP

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1115	0	174	0	37	0	275	363	176	0	0	0	0	1025
1115-1130	0	188	0	40	0	333	402	139	0	0	0	0	1102
1130-1145	0	195	0	38	0	285	449	151	0	0	0	0	1118
1145-1200	0	235	0	10	0	296	472	152	0	0	0	0	1165
1200-1215	0	250	0	24	0	358	427	163	0	0	0	0	1222
1215-1230	0	210	0	15	0	305	491	128	0	0	0	0	1149
1230-1245	0	220	0	21	0	341	513	150	0	0	0	0	1245
1245-100	0	248	0	17	0	341	459	145	0	0	0	0	1210
100-115	0	256	0	25	0	384	479	147	0	0	0	0	1291
115-130	0	221	0	9	0	350	403	133	0	0	0	0	1116
130-145	0	225	0	24	0	393	418	151	0	0	0	0	1211
145-200	0	213	0	36	0	385	401	143	0	0	0	0	1178
200-215	0	237	0	22	0	366	410	121	0	0	0	0	1156
215-230	0	218	0	15	0	347	467	141	0	0	0	0	1188
230-245	0	251	0	19	0	354	454	127	0	0	0	0	1205
245-300	0	240	0	32	0	366	419	118	0	0	0	0	1175
3000-315	0	225	0	29	0	319	449	113	0	0	0	0	1135
315-330	0	221	0	23	0	356	456	127	0	0	0	0	1183
330-345	0	212	0	23	0	381	425	132	0	0	0	0	1173
345-400	0	227	0	16	0	366	479	144	0	0	0	0	0
HOOR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1200	0	792	0	125	0	1189	1686	618	0	0	0	0	4410
1115-1215	0	868	0	112	0	1272	1750	605	0	0	0	0	4607
1130-1230	0	890	0	87	0	1244	1839	594	0	0	0	0	4654
1145-1245	0	915	0	70	0	1300	1903	593	0	0	0	0	4781
1200-100	0	928	0	77	0	1345	1890	586	0	0	0	0	4826
1215-115	0	934	0	78	0	1371	1942	570	0	0	0	0	4895
1230-130	0	945	0	72	0	1416	1854	575	0	0	0	0	4862
1245-145	0	950	0	75	0	1468	1759	576	0	0	0	0	4828
100-200	0	915	0	94	0	1512	1701	574	0	0	0	0	4796
115-215	0	896	0	91	0	1494	1632	548	0	0	0	0	4661
130-230	0	893	0	97	0	1491	1696	556	0	0	0	0	4733
145-245	0	919	0	92	0	1452	1732	532	0	0	0	0	4727
200-300	0	946	0	88	0	1433	1750	507	0	0	0	0	4724
215-315	0	934	0	95	0	1386	1789	499	0	0	0	0	4703
230-330	0	937	0	103	0	1395	1778	485	0	0	0	0	4698
245-345	0	898	0	107	0	1422	1749	490	0	0	0	0	4666
300-400	0	885	0	91	0	1422	1809	516	0	0	0	0	4723

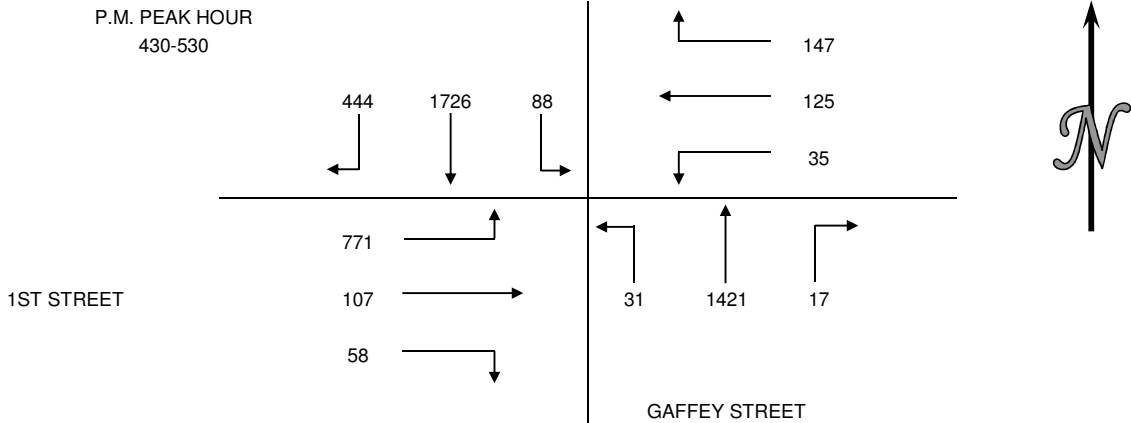




## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: WEDNESDAY, APRIL 27, 2011  
 PERIOD: 3:00 PM TO 6:00 PM  
 INTERSECTION: N/S GAFFEY STREET  
 E/W 1ST STREET

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	86	412	26	40	31	9	4	395	7	13	24	203	1250
315-330	96	443	27	39	48	14	6	406	8	7	24	178	1296
330-345	92	385	27	25	33	14	2	362	8	13	33	170	1164
345-400	101	398	21	31	37	7	4	384	16	10	24	152	1185
400-415	113	411	26	40	32	12	5	374	5	18	43	202	1281
415-430	96	451	22	25	35	8	5	348	5	14	26	174	1209
430-445	122	399	25	35	37	6	1	376	7	13	31	159	1211
445-500	107	422	22	33	30	8	5	364	7	15	20	183	1216
500-515	110	454	15	44	26	14	7	332	8	16	29	223	1278
515-530	105	451	26	35	32	7	4	349	9	14	27	206	1265
530-545	82	414	17	36	30	10	6	370	10	15	26	145	1161
545-600	106	400	19	30	32	11	2	309	2	10	28	162	1111
HOURLY TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	375	1638	101	135	149	44	16	1547	39	43	105	703	4895
315-415	402	1637	101	135	150	47	17	1526	37	48	124	702	4926
330-430	402	1645	96	121	137	41	16	1468	34	55	126	698	4839
345-445	432	1659	94	131	141	33	15	1482	33	55	124	687	4886
400-500	438	1683	95	133	134	34	16	1462	24	60	120	718	4917
415-515	435	1726	84	137	128	36	18	1420	27	58	106	739	4914
430-530	444	1726	88	147	125	35	17	1421	31	58	107	771	4970
445-545	404	1741	80	148	118	39	22	1415	34	60	102	757	4920
500-600	403	1719	77	145	120	42	19	1360	29	55	110	736	4815

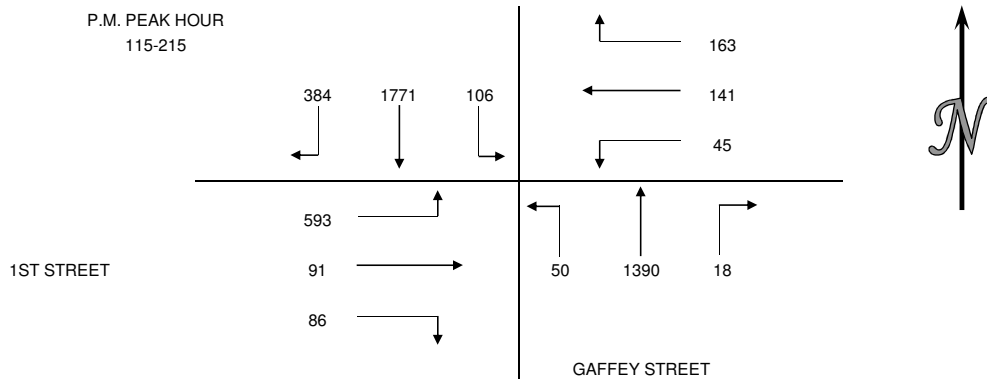


## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: SATURDAY APRIL 30, 2011  
 PERIOD: 11:00 AM TO 4:00 PM  
 INTERSECTION: N/S GAFFEY STREET  
 E/W 1ST STREET

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1115	65	326	23	48	48	9	7	356	14	23	14	146	1079
1115-1130	72	341	23	30	24	9	5	334	9	10	16	143	1016
1130-1145	84	321	27	50	42	12	6	414	9	16	28	159	1168
1145-1200	69	417	20	44	29	15	6	379	12	19	21	146	1177
1200-1215	69	431	26	53	44	15	6	405	13	19	33	161	1275
1215-1230	78	388	26	25	33	11	8	362	6	27	16	135	1115
1230-1245	107	355	19	55	43	9	5	432	8	14	27	136	1210
1245-100	83	449	26	32	24	8	4	377	7	15	22	156	1203
100-115	79	416	38	40	24	7	2	353	8	25	19	145	1156
115-130	87	456	28	32	26	10	6	343	10	22	19	123	1162
130-145	121	460	32	45	41	7	5	363	11	23	26	164	1298
145-200	92	395	18	32	34	11	2	319	13	18	11	142	1087
200-215	84	460	28	54	40	17	5	365	16	23	35	164	1291
215-230	79	380	23	29	37	8	5	339	6	20	19	143	1088
230-245	115	390	29	38	44	8	3	379	14	14	22	141	1197
245-300	97	429	29	35	34	11	6	349	6	16	28	135	1175
3000-315	87	410	25	62	33	12	2	399	15	17	32	123	1217
315-330	80	399	29	52	21	8	6	310	11	11	14	115	1056
330-345	87	382	24	39	30	8	3	388	9	17	13	104	1104
345-400	113	435	38	40	26	13	4	379	9	8	19	143	0

HOOR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1200	290	1405	93	172	143	45	24	1483	44	68	79	594	4440
1115-1215	294	1510	96	177	139	51	23	1532	43	64	98	609	4636
1130-1230	300	1557	99	172	148	53	26	1560	40	81	98	601	4735
1145-1245	323	1591	91	177	149	50	25	1578	39	79	97	578	4777
1200-100	337	1623	97	165	144	43	23	1576	34	75	98	588	4803
1215-115	347	1608	109	152	124	35	19	1524	29	81	84	572	4684
1230-130	356	1676	111	159	117	34	17	1505	33	76	87	560	4731
1245-145	370	1781	124	149	115	32	17	1436	36	85	86	588	4819
100-200	379	1727	116	149	125	35	15	1378	42	88	75	574	4703
115-215	384	1771	106	163	141	45	18	1390	50	86	91	593	4838
130-230	376	1695	101	160	152	43	17	1386	46	84	91	613	4764
145-245	370	1625	98	153	155	44	15	1402	49	75	87	590	4663
200-300	375	1659	109	156	155	44	19	1432	42	73	104	583	4751
215-315	378	1609	106	164	148	39	16	1466	41	67	101	542	4677
230-330	379	1628	112	187	132	39	17	1437	46	58	96	514	4645
245-345	351	1620	107	188	118	39	17	1446	41	61	87	477	4552
300-400	367	1626	116	193	110	41	15	1476	44	53	78	485	4604



# ITM Peak Hour Summary

Prepared by:



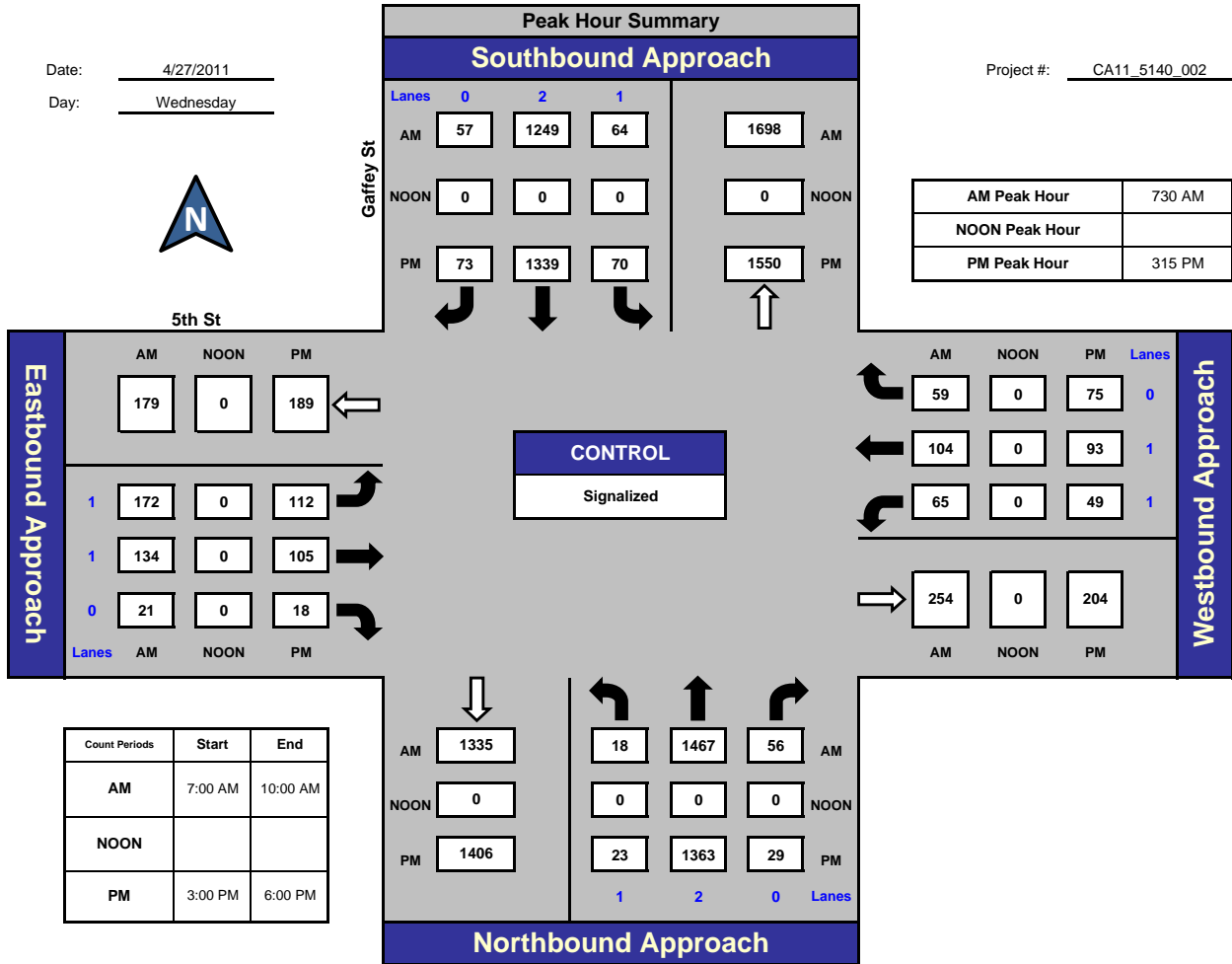
National Data & Surveying Services

## Gaffey St and 5th St, City of San Pedro

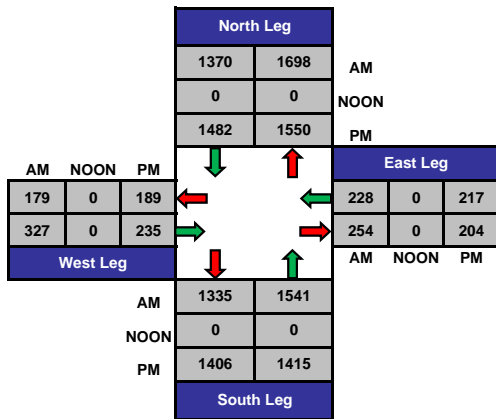
Date: 4/27/2011

Day: Wednesday

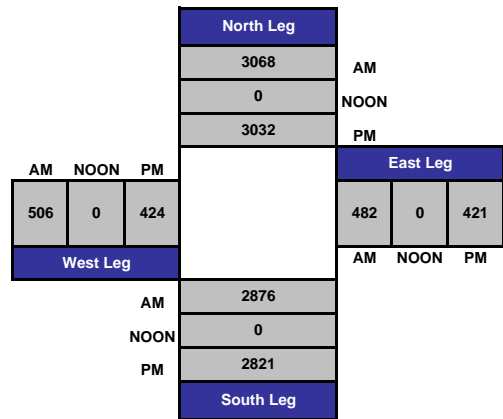
Project #: CA11\_5140\_002



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_002

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

AM

NS/EW Streets:	Gaffey St			Gaffey St			5th St			5th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	1	0	1	1	0	
7:00 AM	1	287	12	16	219	6	46	11	6	10	21	13	648
7:15 AM	3	356	15	15	240	10	43	13	2	12	17	15	741
7:30 AM	5	398	26	19	317	8	66	31	8	25	20	17	940
7:45 AM	7	350	7	14	333	23	41	53	7	17	25	19	896
8:00 AM	2	365	9	12	311	12	40	33	4	15	33	13	849
8:15 AM	4	354	14	19	288	14	25	17	2	8	26	10	781
8:30 AM	5	296	10	16	242	11	21	16	9	5	13	12	656
8:45 AM	4	309	4	13	279	9	17	15	1	11	17	16	695
9:00 AM	3	305	9	10	304	17	16	16	3	4	24	9	720
9:15 AM	4	325	8	9	252	5	15	18	3	5	20	11	675
9:30 AM	2	278	4	12	248	12	16	26	4	7	18	15	642
9:45 AM	1	257	8	18	298	10	16	8	3	6	10	18	653
<b>TOTAL VOLUMES :</b>	41	3880	126	173	3331	137	362	257	52	125	244	168	8896
<b>APPROACH %'s :</b>	1.01%	95.87%	3.11%	4.75%	91.49%	3.76%	53.95%	38.30%	7.75%	23.28%	45.44%	31.28%	
<b>PEAK HR START TIME :</b>	730 AM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	18	1467	56	64	1249	57	172	134	21	65	104	59	3466
<b>PEAK HR FACTOR :</b>	0.898			0.926			0.779			0.919			0.922

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_002

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Gaffey St			Gaffey St			5th St			5th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	1	0	1	1	0	
3:00 PM	5	302	7	24	292	18	31	24	5	17	24	18	767
3:15 PM	4	365	5	19	326	12	30	28	7	14	22	20	852
3:30 PM	7	352	8	15	356	16	28	24	2	12	25	21	866
3:45 PM	4	297	11	20	331	30	26	25	3	13	24	19	803
4:00 PM	8	349	5	16	326	15	28	28	6	10	22	15	828
4:15 PM	5	382	2	16	315	26	30	21	2	5	18	20	842
4:30 PM	1	372	12	16	322	17	26	23	3	14	25	16	847
4:45 PM	4	301	3	6	329	28	30	24	5	9	23	12	774
5:00 PM	3	304	3	12	341	28	37	21	3	14	31	19	816
5:15 PM	4	265	3	27	291	52	31	30	5	12	28	10	758
5:30 PM	5	346	10	22	328	24	33	24	3	11	34	18	858
5:45 PM	6	291	7	15	351	27	24	25	4	6	23	11	790
<b>TOTAL VOLUMES :</b>	56	3926	76	208	3908	293	354	297	48	137	299	199	9801
<b>APPROACH %'s :</b>	1.38%	96.75%	1.87%	4.72%	88.64%	6.65%	50.64%	42.49%	6.87%	21.57%	47.09%	31.34%	
<b>PEAK HR START TIME :</b>	315 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	23	1363	29	70	1339	73	112	105	18	49	93	75	3349
<b>PEAK HR FACTOR :</b>	0.946			0.957			0.904			0.935			0.967

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:



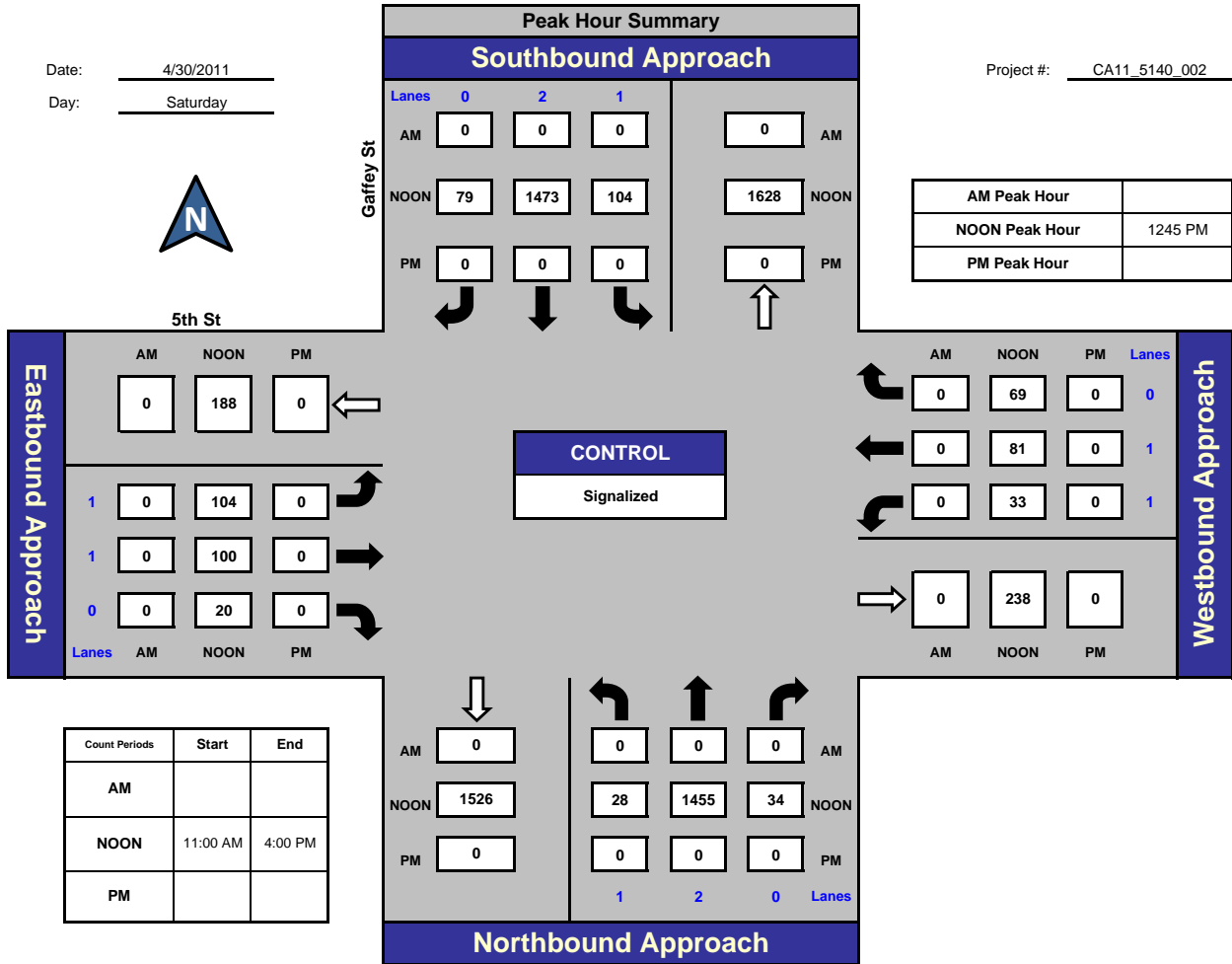
National Data & Surveying Services

## Gaffey St and 5th St

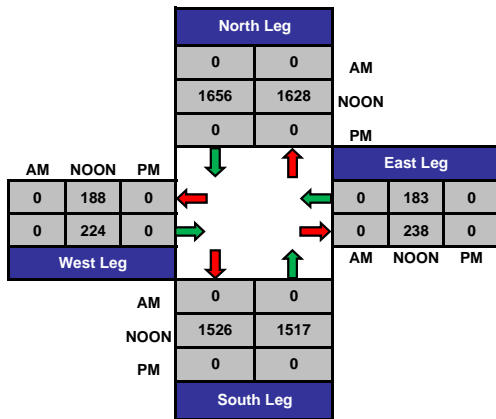
Date: 4/30/2011

Day: Saturday

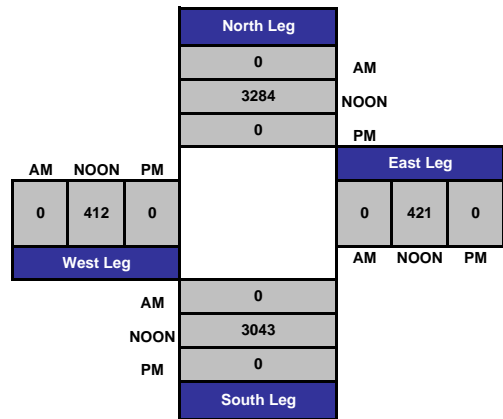
Project #: CA11\_5140\_002



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_002

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

NOON

NS/EW Streets:	Gaffey St			Gaffey St			5th St			5th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	
11:00 AM	6	298	12	24	286	18	22	17	3	10	24	19	739
11:15 AM	4	337	9	23	339	8	15	14	4	13	16	8	790
11:30 AM	3	313	12	24	341	14	24	15	1	19	16	14	796
11:45 AM	7	344	11	23	354	15	19	19	4	12	21	16	845
12:00 PM	5	338	5	28	321	13	34	16	8	10	22	18	818
12:15 PM	5	314	8	36	323	16	27	11	3	5	17	18	783
12:30 PM	4	374	10	33	349	8	23	16	4	8	18	15	862
12:45 PM	6	376	10	22	363	37	35	24	9	6	15	24	927
1:00 PM	4	350	7	23	359	17	17	24	4	7	17	18	847
1:15 PM	6	393	5	28	385	12	28	24	4	12	26	9	932
1:30 PM	12	336	12	31	366	13	24	28	3	8	23	18	874
1:45 PM	12	344	6	20	337	24	18	13	6	5	15	15	815
2:00 PM	8	338	5	24	381	12	25	21	2	11	27	18	872
2:15 PM	11	339	15	26	329	12	16	11	2	13	11	15	800
2:30 PM	14	373	15	21	349	13	24	20	4	10	25	26	894
2:45 PM	9	337	2	27	359	14	32	20	7	11	15	16	849
3:00 PM	11	312	10	20	327	10	28	22	10	10	24	10	794
3:15 PM	3	381	11	15	328	13	24	17	3	5	17	14	831
3:30 PM	11	339	8	25	358	19	19	16	2	19	24	13	853
3:45 PM	3	353	15	16	353	19	32	17	2	10	13	11	844
<b>TOTAL VOLUMES :</b>	144	6889	188	489	6907	307	486	365	85	204	386	315	16765
<b>APPROACH %'s :</b>	1.99%	95.40%	2.60%	6.35%	89.67%	3.99%	51.92%	39.00%	9.08%	22.54%	42.65%	34.81%	
<b>PEAK HR START TIME :</b>	1245 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	28	1455	34	104	1473	79	104	100	20	33	81	69	3580
<b>PEAK HR FACTOR :</b>	0.939			0.974			0.824			0.934			0.960

CONTROL : Signalized

# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_003

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Gaffey St			Gaffey St			7th St			7th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	
3:00 PM	6	266	13	12	263	18	44	41	8	17	38	11	737
3:15 PM	2	302	9	19	287	20	49	46	5	9	34	11	793
3:30 PM	9	313	13	16	319	22	36	33	8	12	41	21	843
3:45 PM	6	227	11	21	287	21	39	36	7	19	40	21	735
4:00 PM	7	316	7	16	283	32	35	28	7	20	22	19	792
4:15 PM	3	301	11	25	264	21	46	41	9	12	25	12	770
4:30 PM	4	303	8	19	292	21	41	31	1	9	19	16	764
4:45 PM	10	261	10	9	290	19	38	31	10	21	34	13	746
5:00 PM	8	256	5	20	290	20	44	34	9	13	39	17	755
5:15 PM	4	246	7	6	267	4	31	41	20	17	55	14	712
5:30 PM	9	287	8	12	296	18	42	43	14	10	31	18	788
5:45 PM	7	251	7	18	305	23	36	40	14	28	43	9	781
<b>TOTAL VOLUMES :</b>	NL 75	NT 3329	NR 109	SL 193	ST 3443	SR 239	EL 481	ET 445	ER 112	WL 187	WT 421	WR 182	TOTAL 9216
<b>APPROACH %'s :</b>	2.13%	94.76%	3.10%	4.98%	88.85%	6.17%	46.34%	42.87%	10.79%	23.67%	53.29%	23.04%	
<b>PEAK HR START TIME :</b>	315 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	24	1158	40	72	1176	95	159	143	27	60	137	72	3163
<b>PEAK HR FACTOR :</b>	0.912		0.940			0.823			0.841			0.938	

CONTROL : Signalized



# ITM Peak Hour Summary

Prepared by:



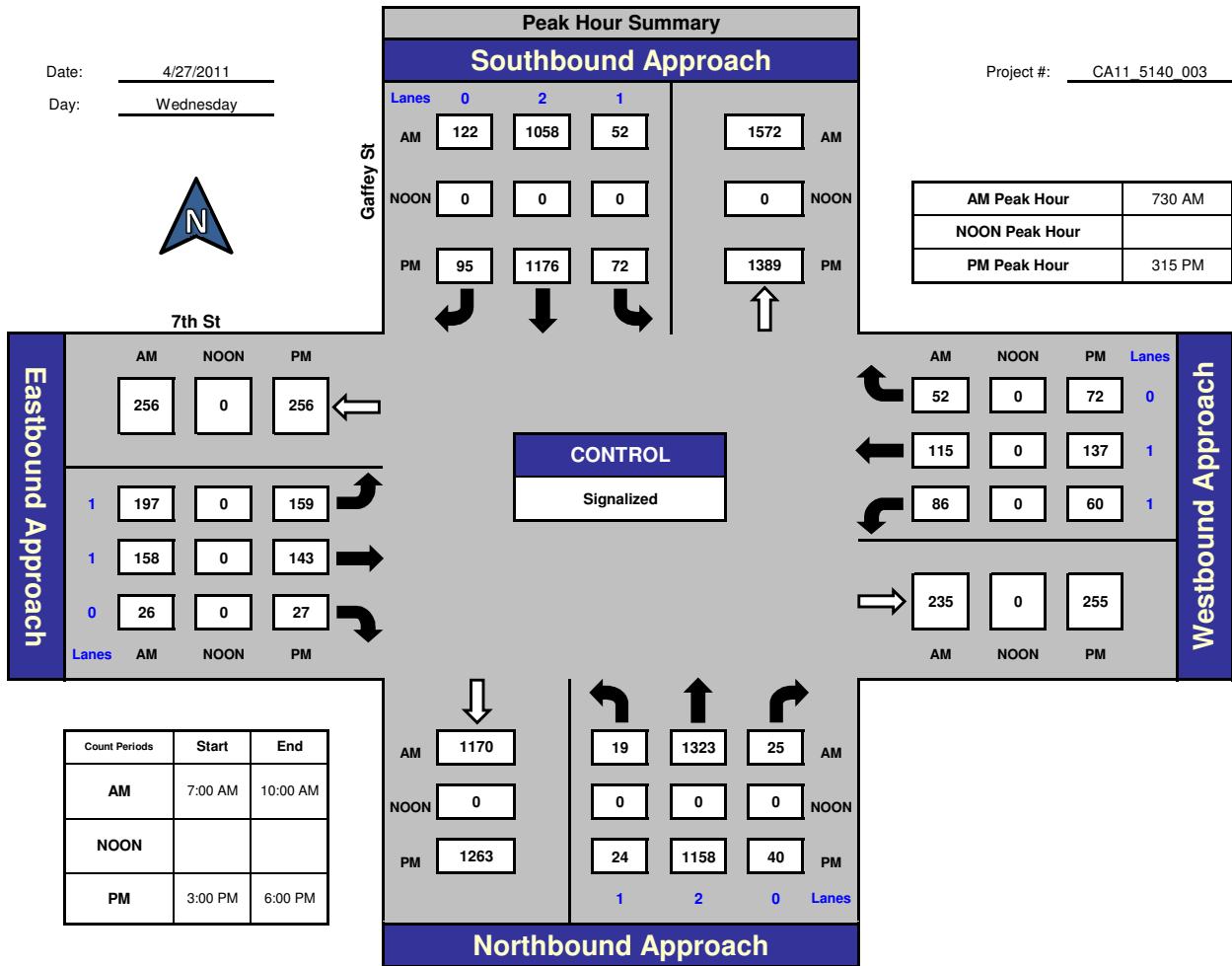
National Data & Surveying Services

## Gaffey St and 7th St, City of San Pedro

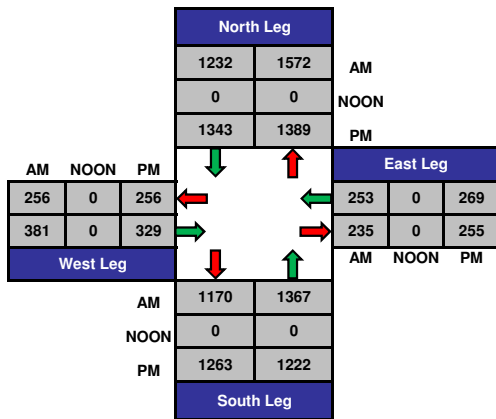
Date: 4/27/2011

Day: Wednesday

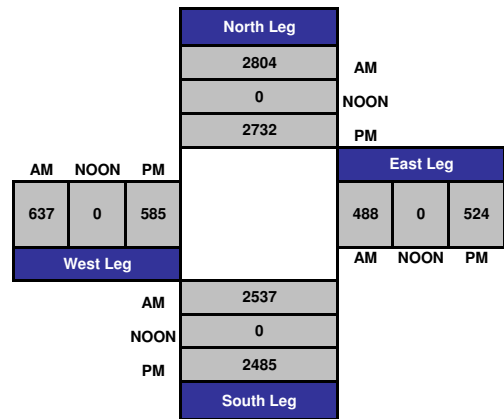
Project #: CA11 5140 003



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_003

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

NOON

NS/EW Streets:	Gaffey St			Gaffey St			7th St			7th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	
11:00 AM	12	314	10	20	285	18	36	35	11	21	31	29	822
11:15 AM	7	331	8	20	289	13	34	26	10	8	27	18	791
11:30 AM	12	335	15	19	284	19	28	23	12	17	33	18	815
11:45 AM	6	324	10	29	308	23	31	33	14	19	32	23	852
12:00 PM	5	282	4	19	299	9	33	33	15	13	28	22	762
12:15 PM	6	295	11	29	294	18	34	27	11	8	23	15	771
12:30 PM	5	347	5	29	301	17	40	28	12	13	23	16	836
12:45 PM	7	325	8	28	311	16	31	28	15	19	19	18	825
1:00 PM	7	335	11	27	341	21	36	35	17	14	24	10	878
1:15 PM	10	336	12	29	337	14	26	22	8	14	18	19	845
1:30 PM	9	290	11	25	321	14	39	24	13	12	22	19	799
1:45 PM	9	302	8	23	316	23	20	33	6	17	15	17	789
2:00 PM	5	291	7	31	327	13	22	24	10	13	36	22	801
2:15 PM	8	285	12	32	316	13	33	35	7	19	30	29	819
2:30 PM	7	321	15	25	297	15	34	19	7	16	22	23	801
2:45 PM	10	284	10	24	321	13	25	23	12	15	22	18	777
3:00 PM	4	254	9	31	289	19	34	25	11	13	18	26	733
3:15 PM	4	336	11	24	314	9	32	14	10	13	18	14	799
3:30 PM	1	302	5	21	339	10	31	12	8	12	19	12	772
3:45 PM	9	315	8	28	316	20	27	32	7	9	26	9	806
<b>TOTAL VOLUMES :</b>	143	6204	190	513	6205	317	626	531	216	285	486	377	16093
<b>APPROACH %'s :</b>	2.19%	94.91%	2.91%	7.29%	88.20%	4.51%	45.59%	38.67%	15.73%	24.83%	42.33%	32.84%	
<b>PEAK HR START TIME :</b>	1230 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	29	1343	36	113	1290	68	133	113	52	60	84	63	3384
<b>PEAK HR FACTOR :</b>	0.983			0.945			0.847			0.924			0.964

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:

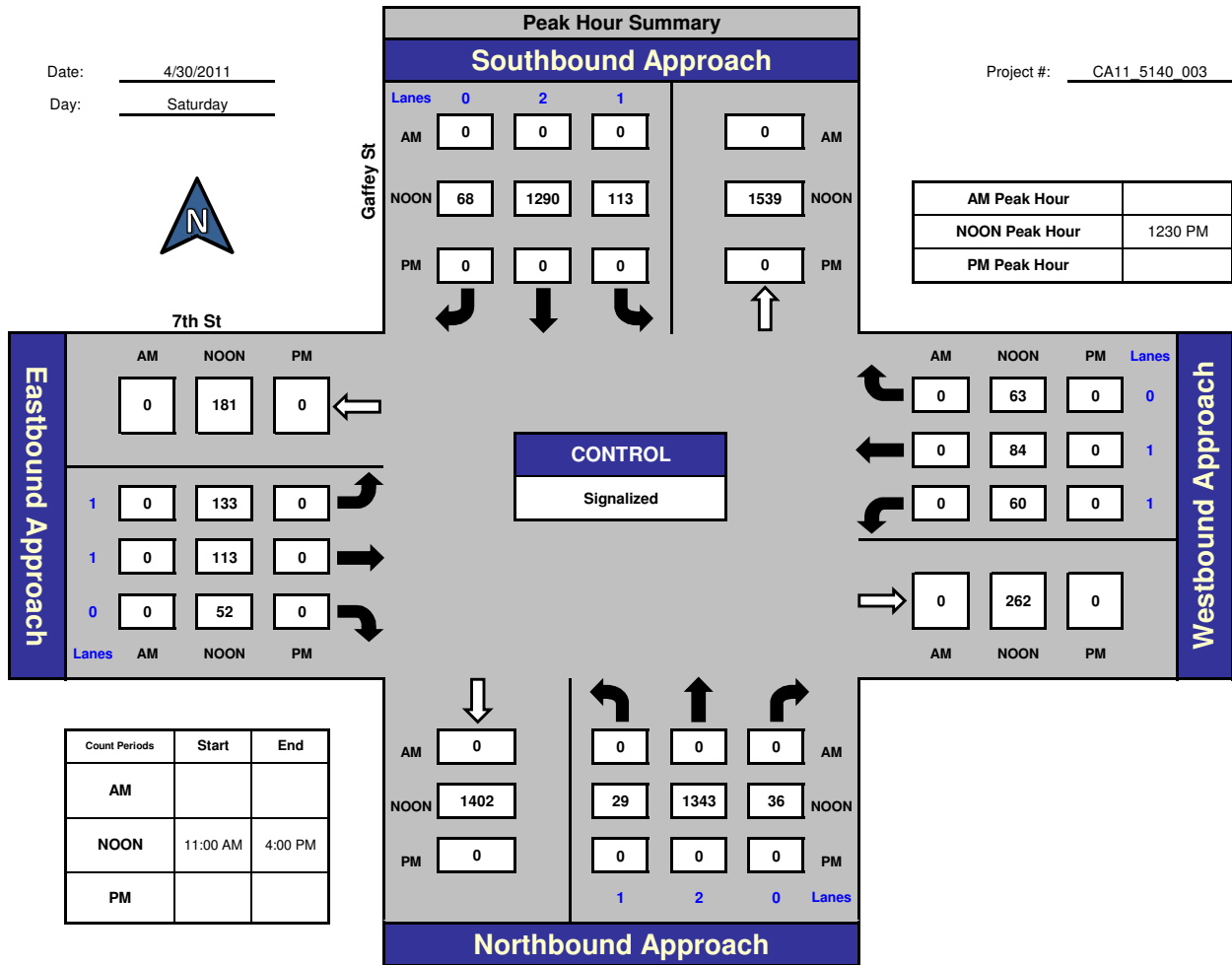


National Data & Surveying Services

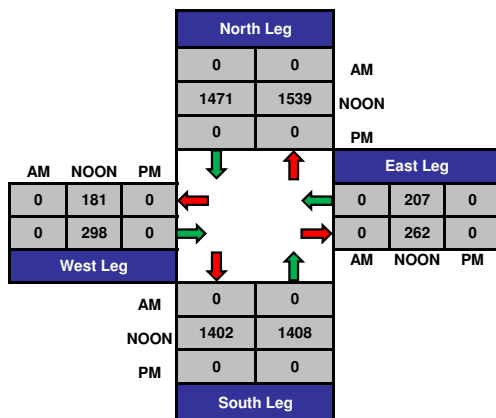
## Gaffey St and 7th St

Date: 4/30/2011  
Day: Saturday

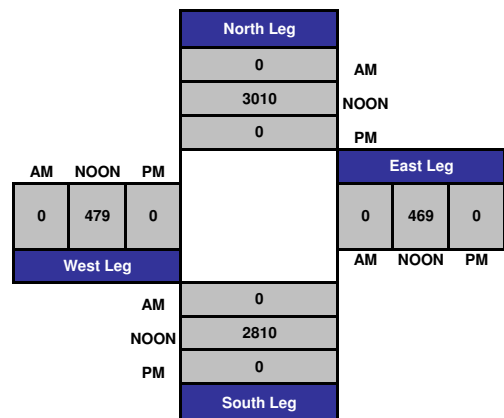
Project #: CA11 5140 003



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: CA11\_5140\_004

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Gaffey St			Gaffey St			9th St			9th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	
3:00 PM	18	268	17	16	259	26	40	57	12	12	57	18	800
3:15 PM	13	241	8	18	253	26	54	64	12	14	53	21	777
3:30 PM	12	258	8	18	269	20	40	52	19	25	31	14	766
3:45 PM	15	222	10	20	254	29	34	50	8	12	59	20	733
4:00 PM	12	245	8	17	259	25	39	53	20	11	47	32	768
4:15 PM	14	267	7	20	234	21	47	52	19	11	45	18	755
4:30 PM	10	248	8	16	264	34	46	46	10	13	48	19	762
4:45 PM	11	207	13	11	271	36	38	53	21	16	65	20	762
5:00 PM	9	247	7	14	239	37	36	46	21	22	59	17	754
5:15 PM	21	223	12	10	172	9	37	74	21	22	52	17	670
5:30 PM	12	237	8	22	279	33	52	70	12	13	54	19	811
5:45 PM	11	227	9	10	291	29	35	59	20	12	46	10	759
<b>TOTAL VOLUMES :</b>	158	2890	115	192	3044	325	498	676	195	183	616	225	9117
<b>APPROACH %'s :</b>	5.00%	91.37%	3.64%	5.39%	85.48%	9.13%	36.38%	49.38%	14.24%	17.87%	60.16%	21.97%	
<b>PEAK HR START TIME :</b>	300 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	58	989	43	72	1035	101	168	223	51	63	200	73	3076
<b>PEAK HR FACTOR :</b>	0.899			0.984			0.850			0.923			0.961

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:



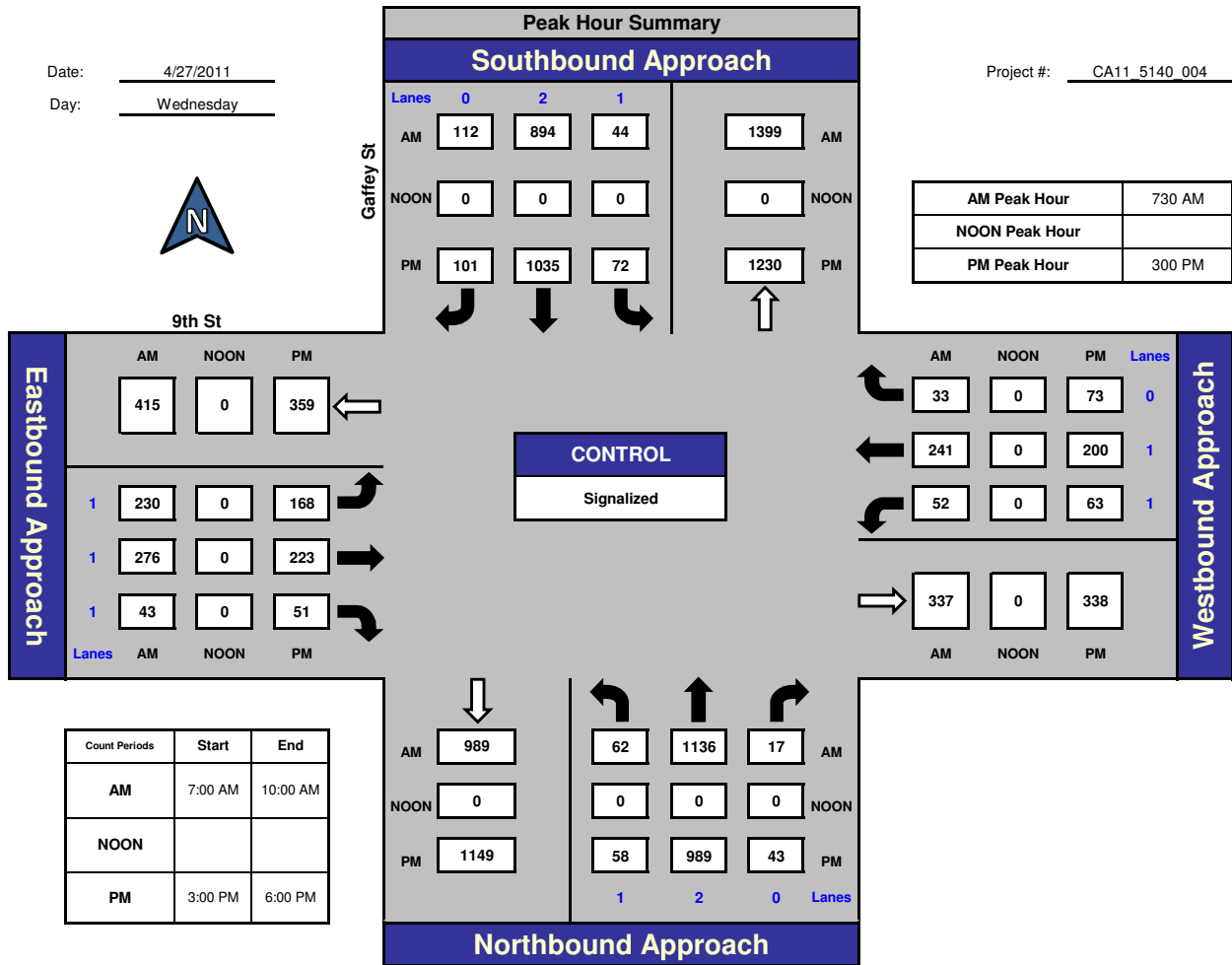
National Data & Surveying Services

## Gaffey St and 9th St, City of San Pedro

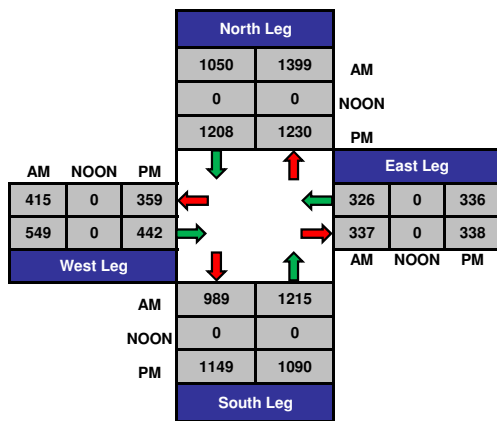
Date: 4/27/2011

Day: Wednesday

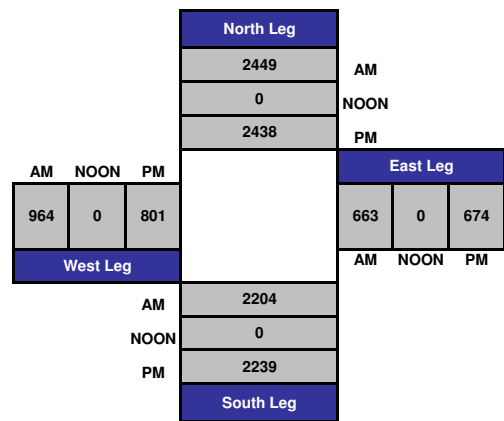
Project #: CA11 5140 004



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_004

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

NOON

NS/EW Streets:	Gaffey St			Gaffey St			9th St			9th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	
11:00 AM	10	255	8	23	262	28	50	45	14	6	54	31	786
11:15 AM	8	276	10	14	261	27	46	37	21	5	46	25	776
11:30 AM	14	289	5	19	240	26	50	41	19	9	40	21	773
11:45 AM	17	266	12	17	262	29	42	37	18	9	48	22	779
12:00 PM	18	258	14	19	273	24	30	43	18	6	42	23	768
12:15 PM	15	267	9	16	265	20	43	41	19	5	40	21	761
12:30 PM	11	273	11	12	271	26	41	43	16	10	43	26	783
12:45 PM	16	281	7	15	269	21	48	45	11	13	41	22	789
1:00 PM	13	298	3	19	289	23	42	47	14	17	49	20	834
1:15 PM	12	290	12	18	297	18	41	43	12	11	44	24	822
1:30 PM	13	264	8	13	277	25	36	44	11	8	29	20	748
1:45 PM	9	232	10	18	301	24	40	44	9	17	46	19	769
2:00 PM	15	267	10	12	306	26	32	39	19	14	42	16	798
2:15 PM	15	274	11	15	290	20	34	38	10	18	38	18	781
2:30 PM	10	286	9	17	262	30	49	44	19	11	37	20	794
2:45 PM	7	245	7	16	292	32	37	36	15	9	44	18	758
3:00 PM	12	227	5	21	250	26	41	38	16	10	30	17	693
3:15 PM	12	272	11	14	285	26	45	34	14	16	33	17	779
3:30 PM	8	255	2	16	279	35	36	40	13	14	30	16	744
3:45 PM	7	273	5	15	282	32	33	45	7	16	37	22	774
TOTAL VOLUMES :	242	5348	169	329	5513	518	816	824	295	224	813	418	15509
APPROACH %'s :	4.20%	92.86%	2.93%	5.17%	86.68%	8.14%	42.17%	42.58%	15.25%	15.40%	55.88%	28.73%	
PEAK HR START TIME :	1230 PM												TOTAL
PEAK HR VOL :	52	1142	33	64	1126	88	172	178	53	51	177	92	3228
PEAK HR FACTOR :	0.977			0.959			0.969			0.930			0.968

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:



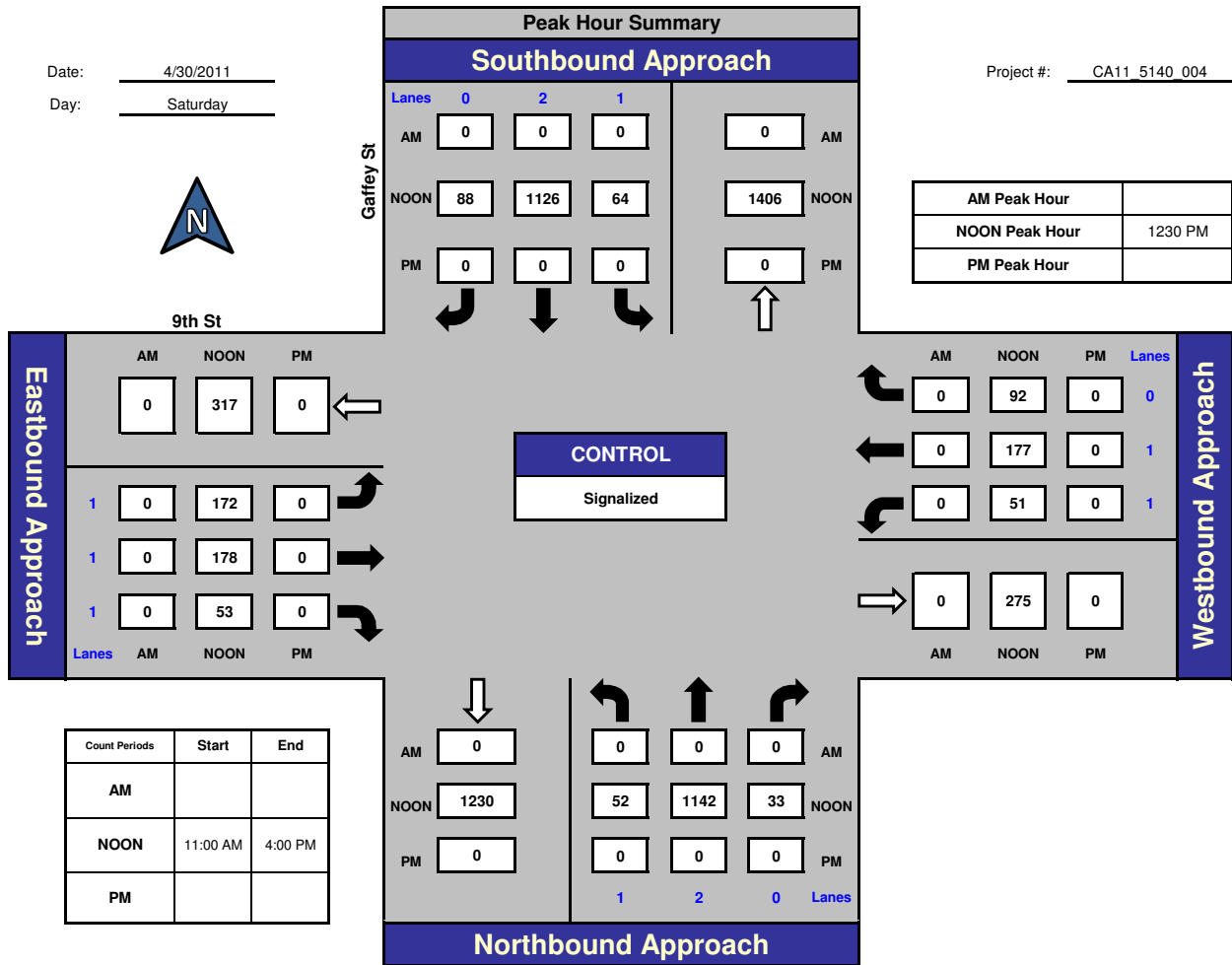
National Data & Surveying Services

## Gaffey St and 9th St

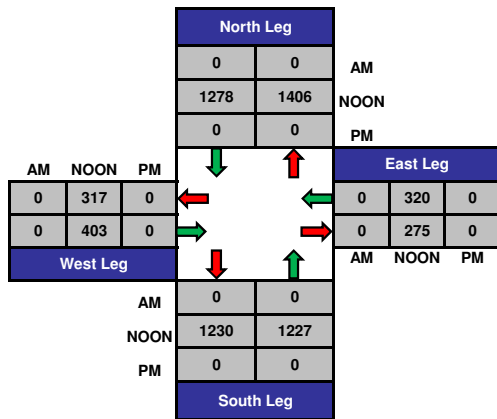
Date: 4/30/2011

Day: Saturday

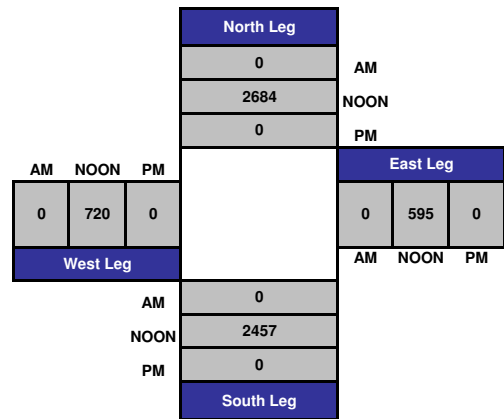
Project #: CA11 5140 004



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_005

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Gaffey St			Gaffey St			22nd St			22nd St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	0	2	0	0	1	0	0	1	0	
3:00 PM	1	133	13	21	110	6	3	4	1	26	11	13	342
3:15 PM	3	147	14	15	109	7	2	6	0	23	7	13	346
3:30 PM	0	120	18	20	103	4	1	6	1	17	6	14	310
3:45 PM	1	138	18	19	110	3	1	4	1	23	7	17	342
4:00 PM	2	140	20	17	133	4	6	7	1	25	4	12	371
4:15 PM	0	126	15	20	123	5	5	4	0	28	4	12	342
4:30 PM	0	148	21	21	127	4	5	2	1	28	6	13	376
4:45 PM	0	118	21	21	125	5	1	6	0	31	6	16	350
5:00 PM	1	100	15	23	122	3	1	8	0	47	8	17	345
5:15 PM	0	126	14	25	138	3	4	4	0	38	5	17	374
5:30 PM	2	114	16	32	135	3	2	9	0	30	8	23	374
5:45 PM	1	105	12	21	151	0	3	8	1	40	12	12	366
<b>TOTAL VOLUMES :</b>	11	1515	197	255	1486	47	34	68	6	356	84	179	4238
<b>APPROACH %'s :</b>	0.64%	87.93%	11.43%	14.26%	83.11%	2.63%	31.48%	62.96%	5.56%	57.51%	13.57%	28.92%	
<b>PEAK HR START TIME :</b>	500 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	4	445	57	101	546	9	10	29	1	155	33	69	1459
<b>PEAK HR FACTOR :</b>	0.904			0.953			0.833			0.892			0.975

CONTROL : Signalized



# ITM Peak Hour Summary

Prepared by:

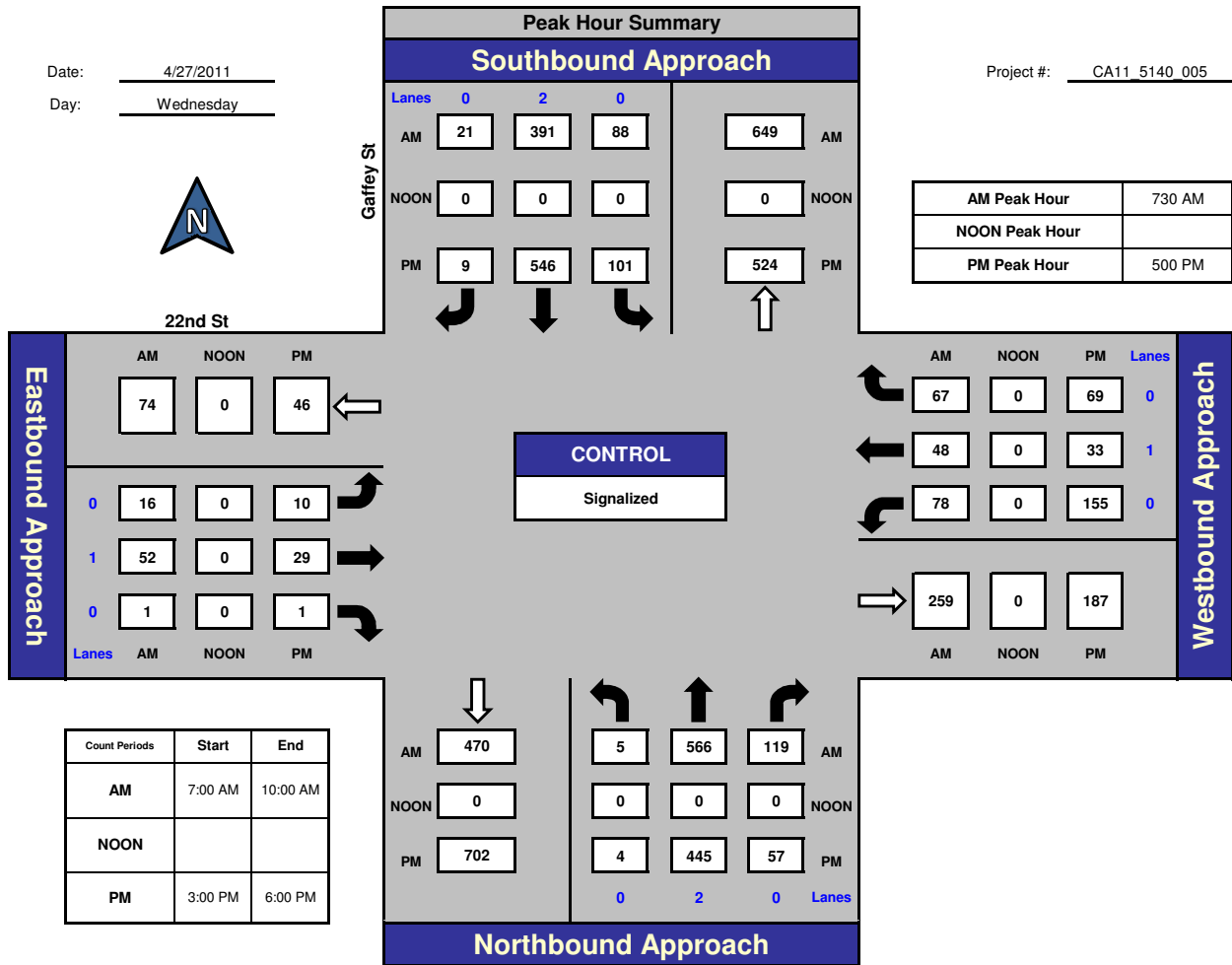


National Data & Surveying Services

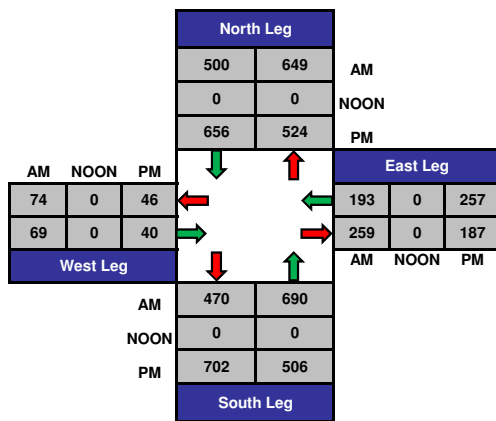
## Gaffey St and 22nd St, City of San Pedro

Date: 4/27/2011  
Day: Wednesday

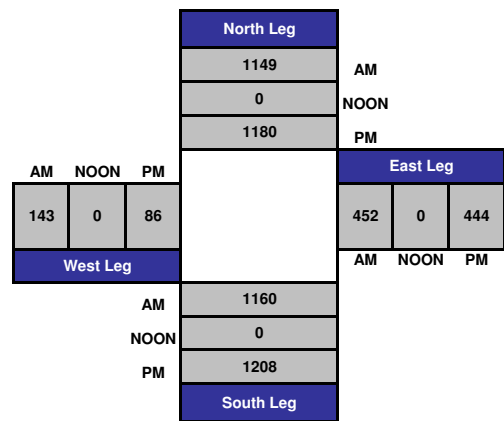
Project #: CA11 5140 005



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_005

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

NOON

NS/EW Streets:	Gaffey St			Gaffey St			22nd St			22nd St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	0	2	0	0	1	0	0	1	0	
11:00 AM	0	121	17	33	133	2	3	1	0	9	4	15	338
11:15 AM	0	115	16	40	148	6	8	3	0	19	0	21	376
11:30 AM	0	135	15	32	130	4	3	3	1	27	5	17	372
11:45 AM	0	136	14	16	142	3	6	3	0	13	3	20	356
12:00 PM	0	135	15	34	164	1	2	8	0	25	2	20	406
12:15 PM	1	138	11	32	138	10	9	7	0	14	4	13	377
12:30 PM	0	163	16	28	121	3	4	8	0	21	6	28	398
12:45 PM	1	134	18	26	159	3	10	5	2	12	4	12	386
1:00 PM	0	143	22	28	134	2	3	2	1	33	6	18	392
1:15 PM	1	160	19	25	142	3	4	4	1	22	6	14	401
1:30 PM	0	150	26	35	156	5	3	8	2	25	7	16	433
1:45 PM	4	101	29	27	149	2	3	3	1	24	7	14	364
2:00 PM	1	122	26	36	157	2	3	3	0	22	6	17	395
2:15 PM	1	136	25	30	153	4	5	9	0	31	7	24	425
2:30 PM	0	145	13	18	160	6	0	6	1	33	1	19	402
2:45 PM	1	133	6	34	153	3	4	8	2	19	7	14	384
3:00 PM	1	116	15	23	148	5	1	8	0	22	6	16	361
3:15 PM	0	135	15	23	144	5	3	3	0	24	0	24	376
3:30 PM	0	162	12	19	139	6	6	2	0	25	10	17	398
3:45 PM	1	146	15	29	143	3	4	5	0	23	5	12	386
<b>TOTAL VOLUMES :</b>	12	2726	345	568	2913	78	84	99	11	443	96	351	7726
<b>APPROACH %'s :</b>	0.39%	88.42%	11.19%	15.96%	81.85%	2.19%	43.30%	51.03%	5.67%	49.78%	10.79%	39.44%	
<b>PEAK HR START TIME :</b>	130 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	6	509	106	128	615	13	14	23	3	102	27	71	1617
<b>PEAK HR FACTOR :</b>	0.882			0.964			0.714			0.806			0.934

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:

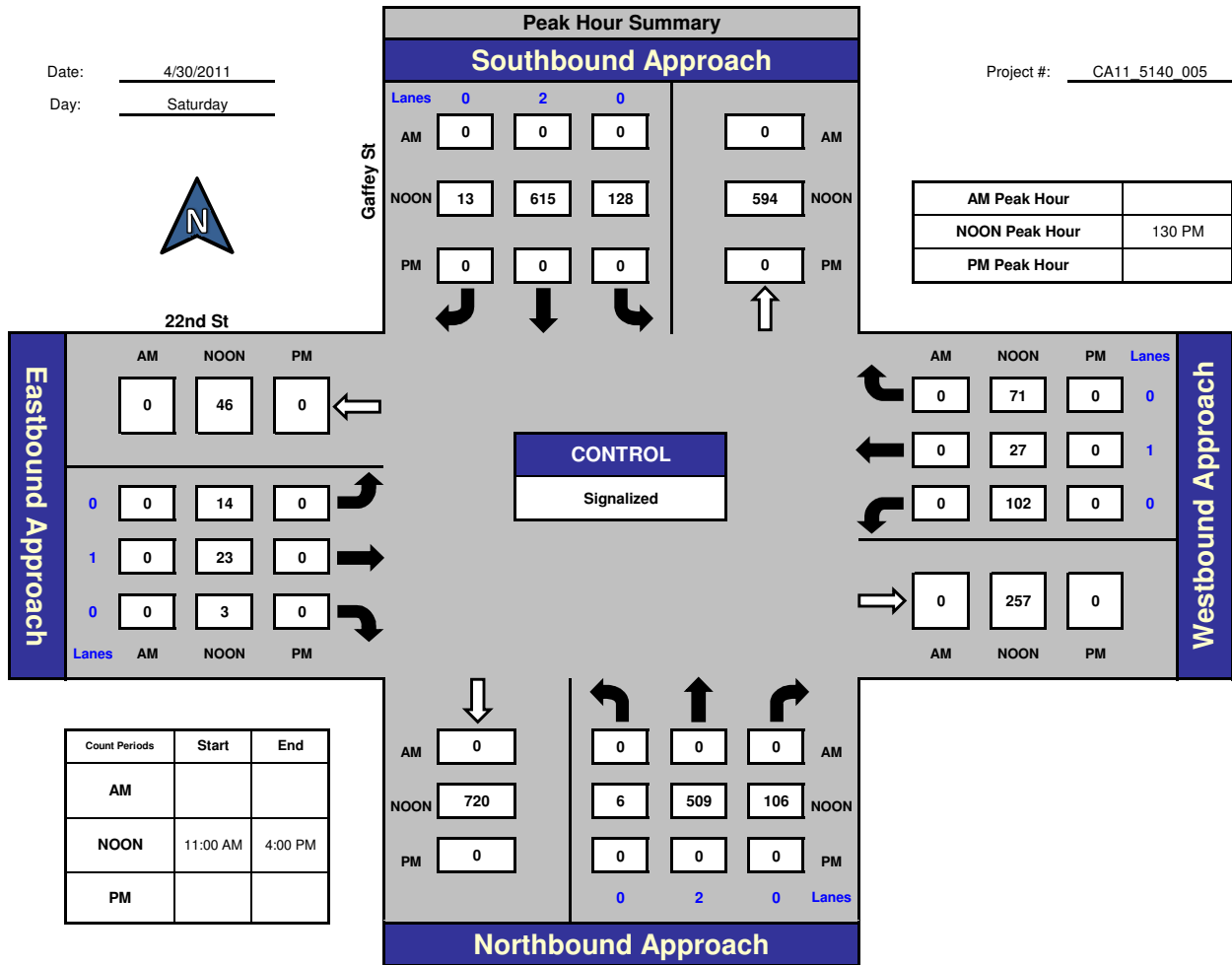


National Data & Surveying Services

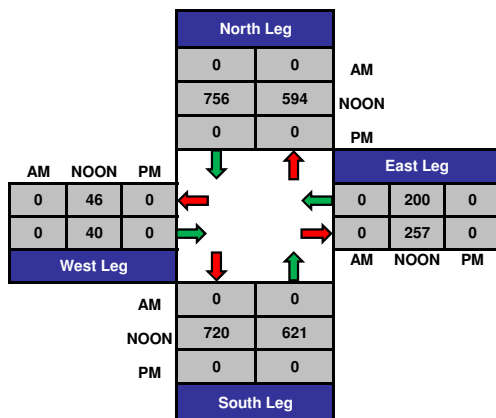
## Gaffey St and 22nd St.

Date: 4/30/2011  
Day: Saturday

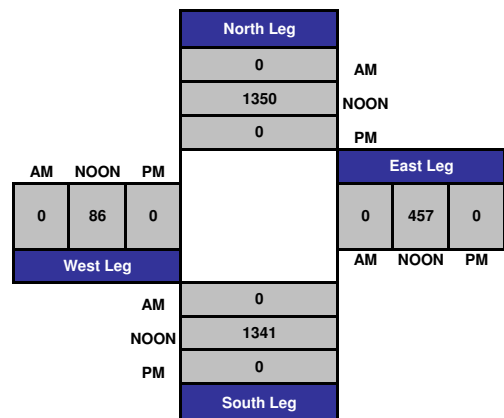
Project #: CA11 5140 005



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

**Project ID:** CA11\_5140\_006

**Day:** WEDNESDAY

**City:** City of San Pedro

**Date:** 04/27/2011

**PM**

NS/EW Streets:	Gaffey St (and Hamilton Dr if possible)			Gaffey St (and Hamilton Dr if possible)			25th St			25th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	1	0	1	1	0	1	0	1	0	1	0	
3:00 PM	11	82	1	8	51	71	67	1	21	1	0	4	318
3:15 PM	15	98	0	9	48	66	59	0	20	0	1	6	322
3:30 PM	20	66	1	4	36	68	56	2	20	0	0	4	277
3:45 PM	16	53	0	6	48	58	94	3	16	0	1	5	300
4:00 PM	11	78	0	8	49	87	79	2	15	0	0	6	335
4:15 PM	15	45	1	7	40	82	90	2	21	0	0	8	311
4:30 PM	13	57	1	11	66	69	92	3	22	0	0	4	338
4:45 PM	10	47	0	4	59	79	81	0	24	1	2	7	314
5:00 PM	22	47	0	3	54	94	63	1	30	1	4	11	330
5:15 PM	22	51	1	7	56	93	68	0	22	0	2	10	332
5:30 PM	13	50	0	7	63	86	76	5	22	0	1	8	331
5:45 PM	14	44	1	6	74	95	63	0	13	1	1	8	320
<b>TOTAL VOLUMES :</b>	182	718	6	80	644	948	888	19	246	4	12	81	3828
<b>APPROACH %'s :</b>	20.09%	79.25%	0.66%	4.78%	38.52%	56.70%	77.02%	1.65%	21.34%	4.12%	12.37%	83.51%	
<b>PEAK HR START TIME :</b>	430 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	67	202	2	25	235	335	304	4	98	2	8	32	1314
<b>PEAK HR FACTOR :</b>	0.916			0.954			0.868			0.656			0.972

**CONTROL :** Signalized; 1-Way Stop (WB)

# ITM Peak Hour Summary

Prepared by:

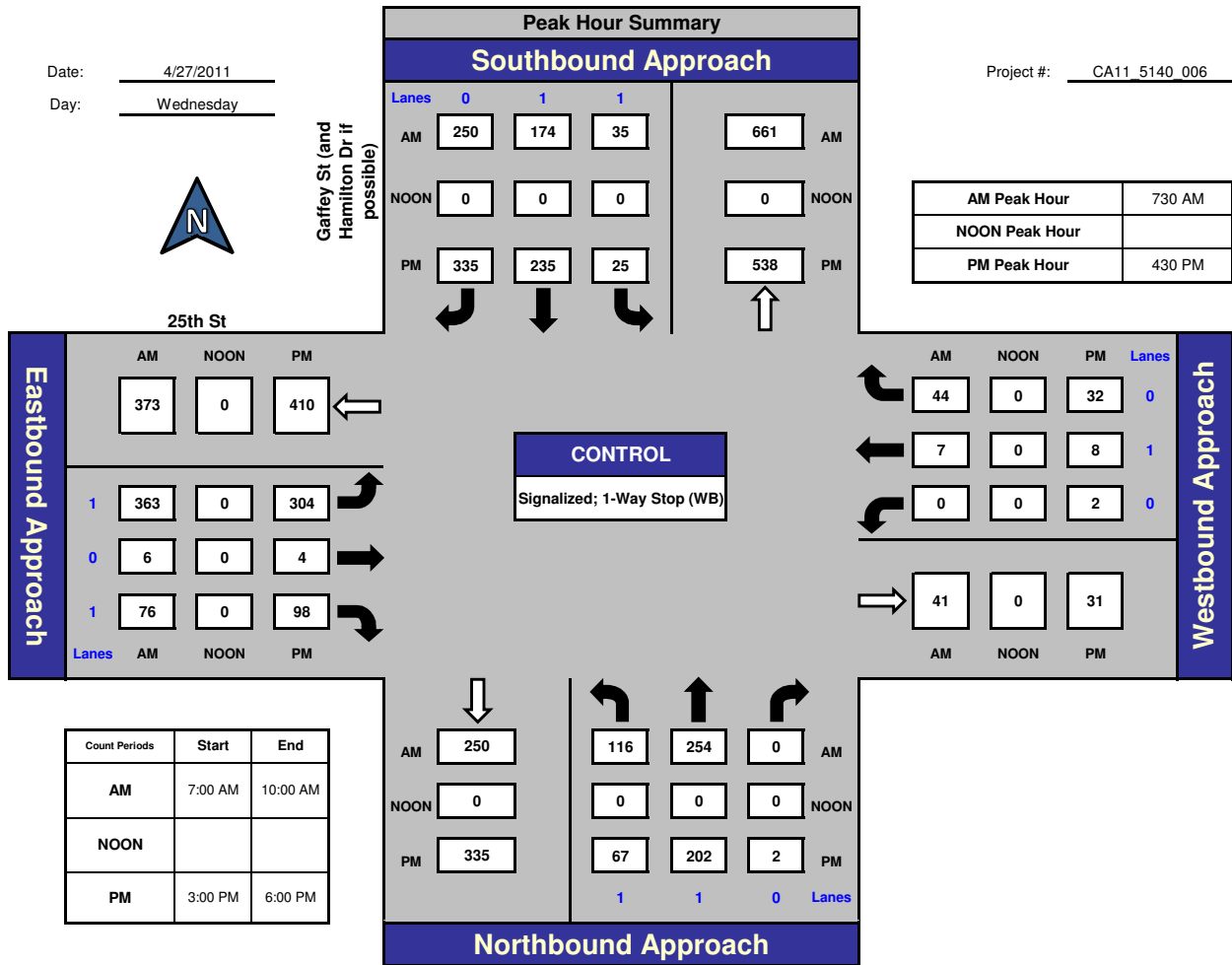


National Data & Surveying Services

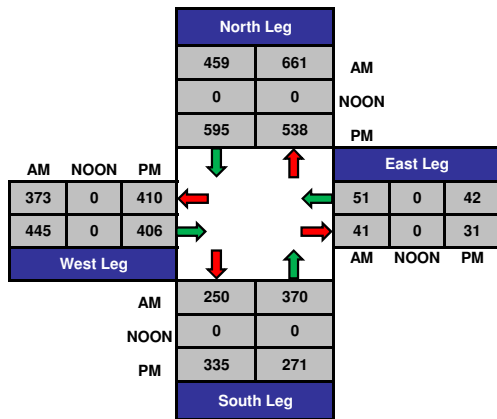
## Gaffey St (and Hamilton Dr if possible) and 25th St, City of San Pedro

Date: 4/27/2011  
Day: Wednesday

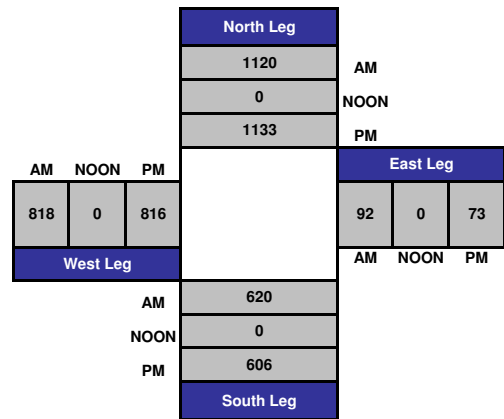
Project #: CA11 5140 006



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_006

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

NOON

NS/EW Streets:	Gaffey St (and Hamilton Dr if possible)			Gaffey St (and Hamilton Dr if possible)			25th St			25th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	1	0	1	1	0	1	0	1	0	1	0	
11:00 AM	24	59	0	5	76	72	69	1	19	0	2	6	333
11:15 AM	31	64	1	6	84	97	74	3	16	0	2	5	383
11:30 AM	27	60	0	4	71	102	66	0	15	0	1	5	351
11:45 AM	25	60	2	7	90	69	83	2	23	0	1	0	362
12:00 PM	20	64	0	8	103	81	80	1	19	0	0	5	381
12:15 PM	35	86	0	5	77	83	76	1	21	1	2	8	395
12:30 PM	12	52	0	9	61	90	104	0	34	0	1	9	372
12:45 PM	16	74	2	6	92	86	69	0	19	0	1	6	371
1:00 PM	24	53	1	9	71	92	82	0	28	0	1	4	365
1:15 PM	20	59	0	6	89	83	92	0	13	0	1	7	370
1:30 PM	22	68	0	7	91	96	82	0	16	0	3	10	395
1:45 PM	26	42	0	6	84	99	76	2	25	0	3	10	373
2:00 PM	26	62	1	7	98	90	86	1	27	0	1	9	408
2:15 PM	13	56	0	6	78	111	86	1	33	0	1	5	390
2:30 PM	16	61	0	6	110	91	105	0	17	0	1	11	418
2:45 PM	12	59	0	12	88	80	89	0	22	0	2	10	374
3:00 PM	14	72	0	10	86	83	70	0	11	0	1	2	349
3:15 PM	15	84	0	12	87	86	80	1	18	0	1	6	390
3:30 PM	27	83	3	16	93	68	111	1	28	0	0	6	436
3:45 PM	21	71	0	6	89	78	91	1	27	0	1	13	398
<b>TOTAL VOLUMES :</b>	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
<b>APPROACH %'s :</b>	426	1289	10	153	1718	1737	1671	15	431	1	26	137	7614
	24.70%	74.72%	0.58%	4.24%	47.62%	48.14%	78.93%	0.71%	20.36%	0.61%	15.85%	83.54%	
<b>PEAK HR START TIME :</b>	200 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	67	238	1	31	374	372	366	2	99	0	5	35	1590
<b>PEAK HR FACTOR :</b>	0.860			0.938			0.957			0.833			0.951

CONTROL : Signalized; 1-Way Stop (WB)

# ITM Peak Hour Summary

Prepared by:



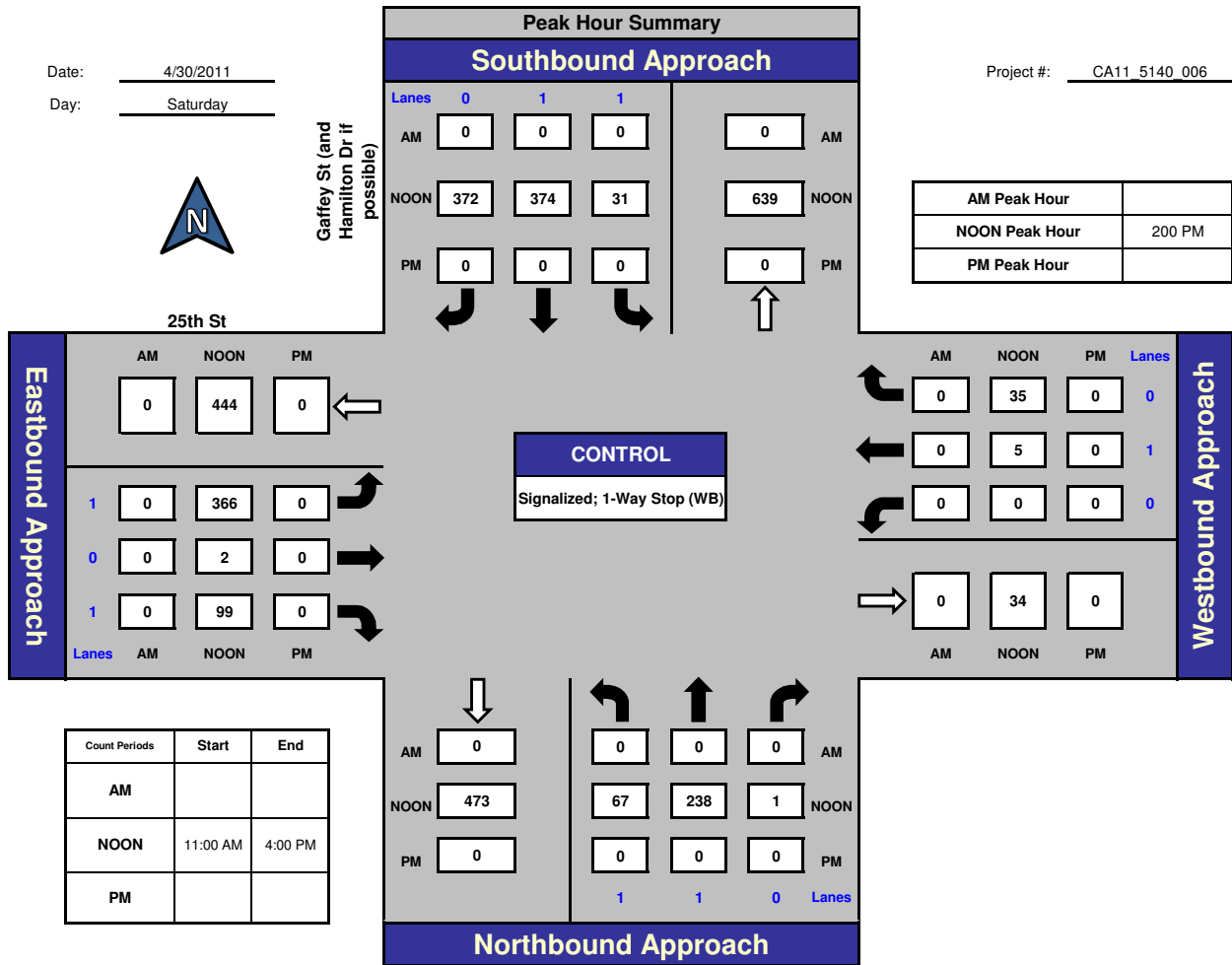
National Data & Surveying Services

## Gaffey St (and Hamilton Dr if possible) and 25th St.

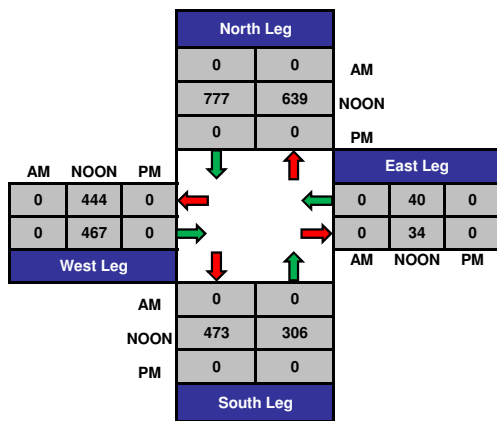
Date: 4/30/2011

Day: Saturday

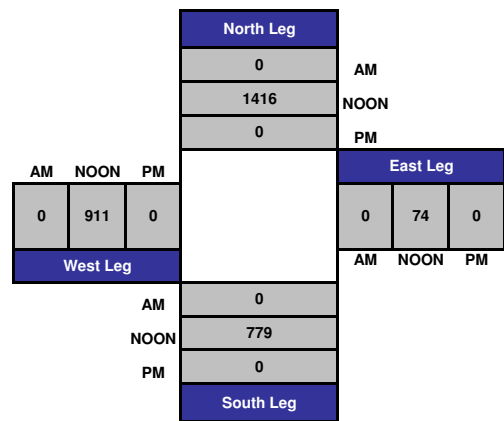
Project #: CA11 5140 006



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: CA11\_5140\_007

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Via Cabrillo Marina			Via Cabrillo Marina			22nd St			22nd St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	0	1	0	1	0	0	2	0	1	2	0	
3:00 PM	11		13					35	19	12	53		143
3:15 PM	19		13					37	12	14	55		150
3:30 PM	19		19					31	13	19	55		156
3:45 PM	16		20					45	14	13	72		180
4:00 PM	14		17					35	12	13	46		137
4:15 PM	22		30					33	21	11	45		162
4:30 PM	17		19					65	17	17	59		194
4:45 PM	23		15					51	17	12	66		184
5:00 PM	43		50					41	23	19	70		246
5:15 PM	19		21					46	13	16	95		210
5:30 PM	16		20					48	8	14	80		186
5:45 PM	12		14					35	14	18	69		162
<b>TOTAL VOLUMES :</b>	231	0	251	0	0	0	0	502	183	178	765	0	2110
<b>APPROACH %'s :</b>	47.93%	0.00%	52.07%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	73.28%	26.72%	18.88%	81.12%	0.00%	
<b>PEAK HR START TIME :</b>	430 PM												TOTAL
<b>PEAK HR VOL :</b>	102	0	105	0	0	0	0	203	70	64	290	0	834
<b>PEAK HR FACTOR :</b>	0.556		0.000			0.832			0.797			0.848	

CONTROL : Signalized



# ITM Peak Hour Summary

Prepared by:

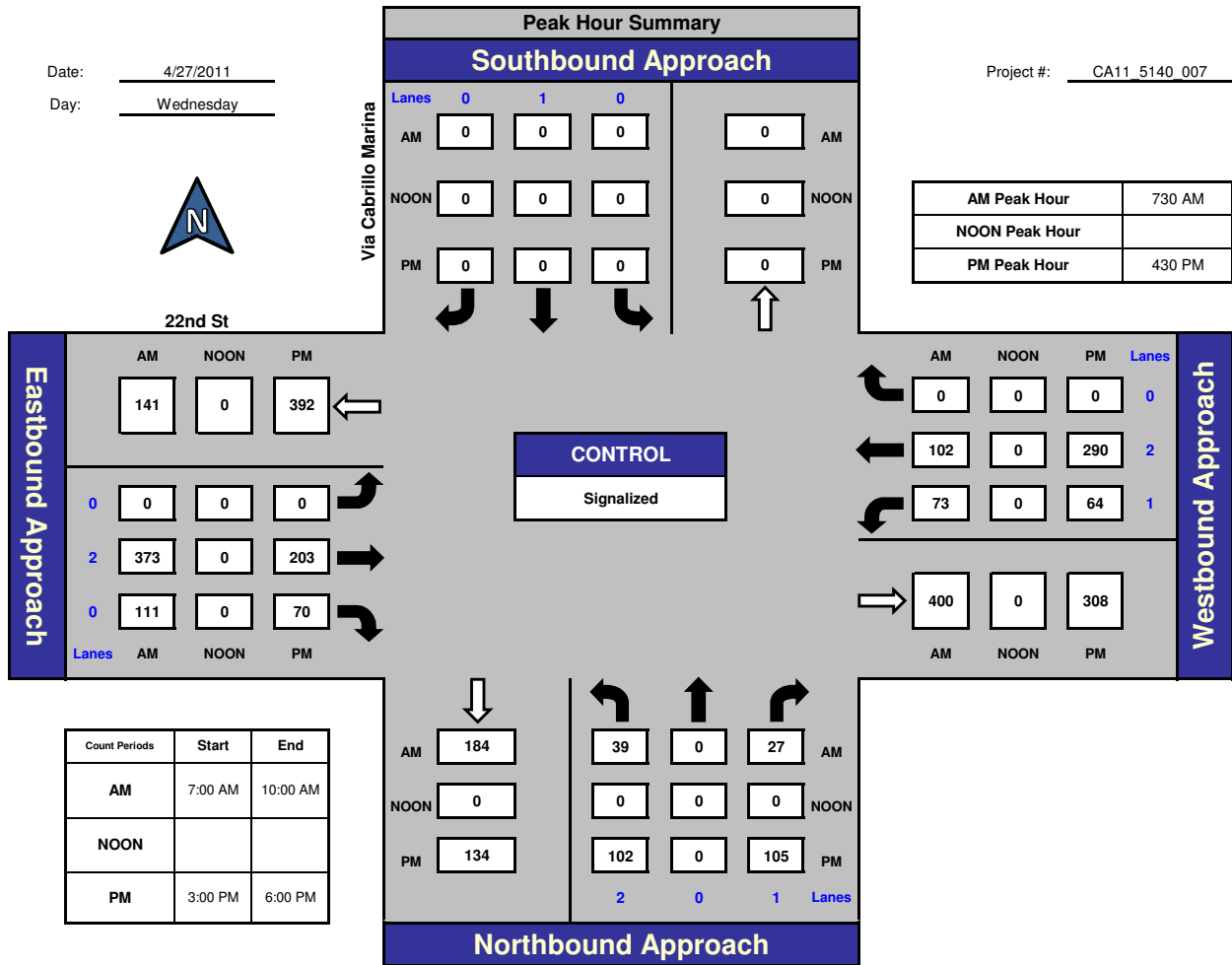


National Data & Surveying Services

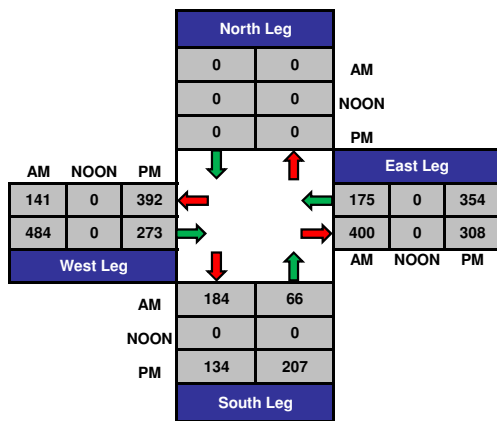
## Via Cabrillo Marina and 22nd St., City of San Pedro

Date: 4/27/2011  
Day: Wednesday

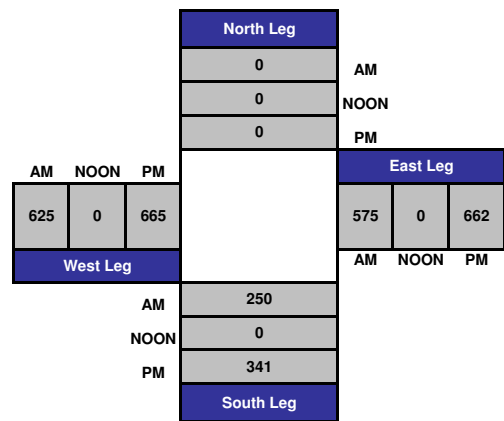
Project #: CA11 5140 007



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_007

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

NOON

NS/EW Streets:	Via Cabrillo Marina			Via Cabrillo Marina			22nd St			22nd St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	0	1	0	1	0	0	2	0	1	2	0	
11:00 AM	22		28					46	35	24	40		195
11:15 AM	23		12					58	20	16	46		175
11:30 AM	29		14					62	31	17	42		195
11:45 AM	40		17					47	33	26	37		200
12:00 PM	36		21					51	29	21	29		187
12:15 PM	42		23					59	26	21	33		204
12:30 PM	18		26					55	34	22	37		192
12:45 PM	36		19					51	22	18	53		199
1:00 PM	27		14					51	27	24	58		201
1:15 PM	28		15					45	23	11	29		151
1:30 PM	30		21					36	29	28	48		192
1:45 PM	26		20					36	24	18	56		180
2:00 PM	27		24					38	24	21	58		192
2:15 PM	28		21					37	15	27	50		178
2:30 PM	19		20					53	16	14	54		176
2:45 PM	24		17					51	16	32	48		188
3:00 PM	20		22					41	23	16	54		176
3:15 PM	36		17					37	27	21	51		189
3:30 PM	26		27					48	32	23	54		210
3:45 PM	15		9					58	22	23	53		180

<b>TOTAL VOLUMES :</b>	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
<b>APPROACH %'s :</b>	552	0	387	0	0	0	0	960	508	423	930	0	3760
	58.79%	0.00%	41.21%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	65.40%	34.60%	31.26%	68.74%	0.00%	

<b>PEAK HR START TIME :</b>	1215 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	123	0	82	0	0	0	0	216	109	85	181	0	796
<b>PEAK HR FACTOR :</b>	0.788			0.000			0.913			0.811			0.975

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:



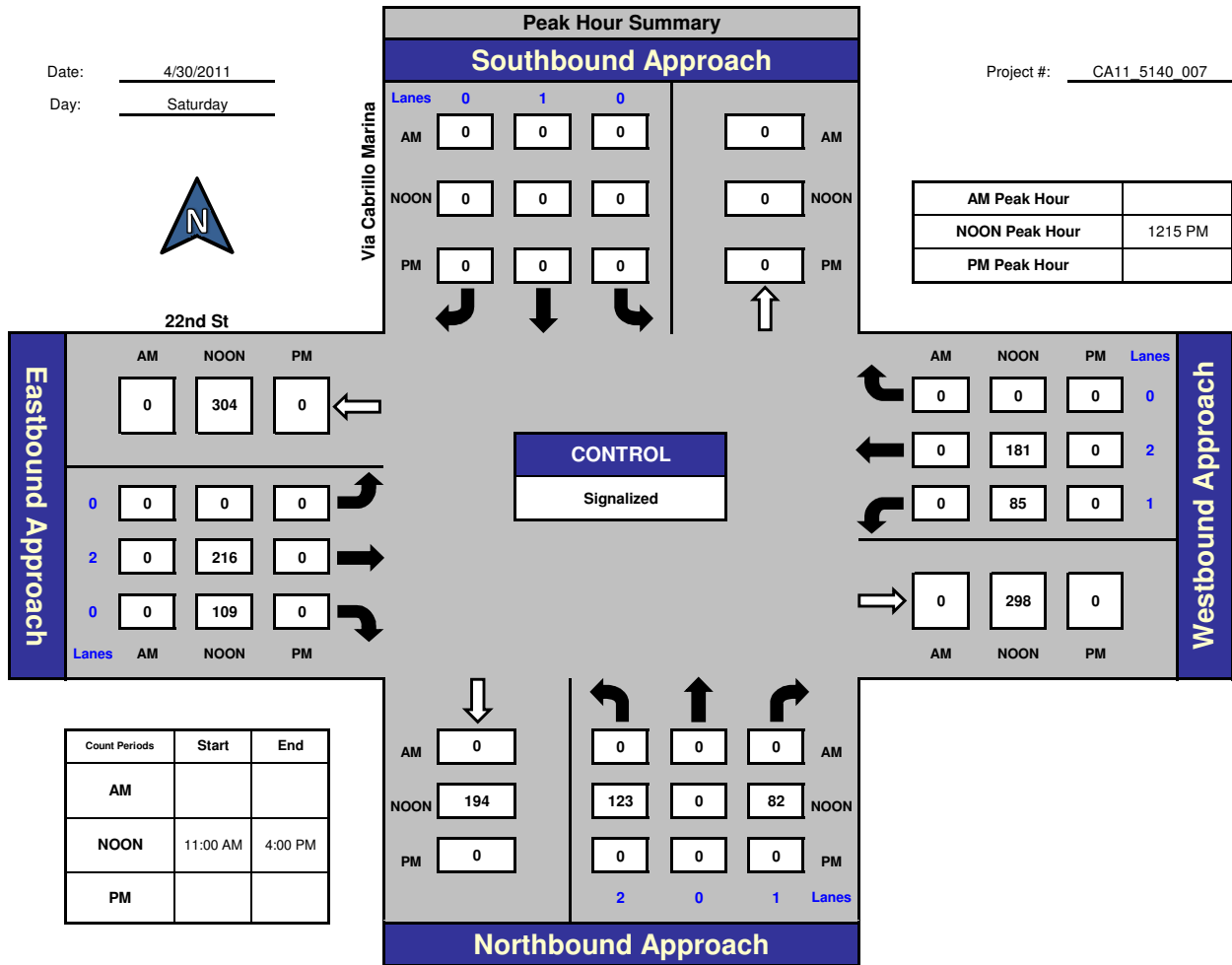
National Data & Surveying Services

## Via Cabrillo Marina and 22nd St.

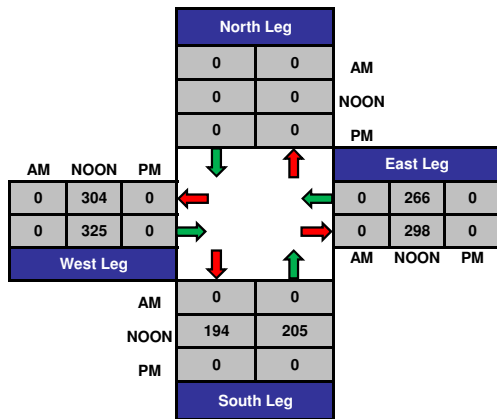
Date: 4/30/2011

Day: Saturday

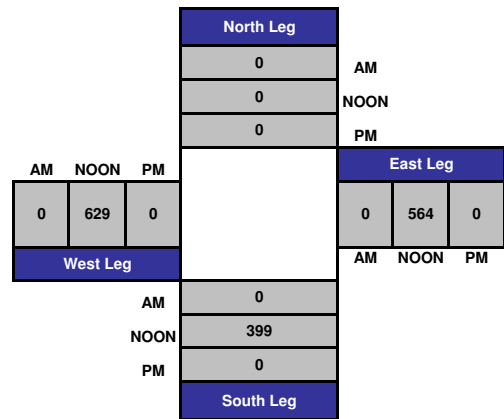
Project #: CA11 5140 007



### Total Ins & Outs



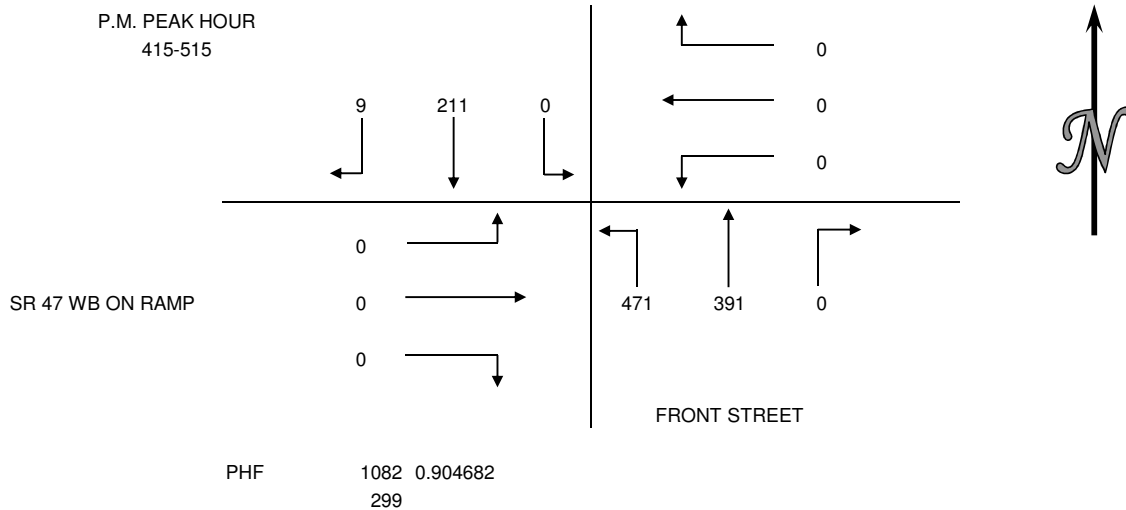
### Total Volume Per Leg



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: WEDNESDAY, APRIL 27, 2011  
 PERIOD: 3:00 PM TO 6:00 PM  
 INTERSECTION: N/S FRONT STREET  
 E/W SR 47 WB ON RAMP

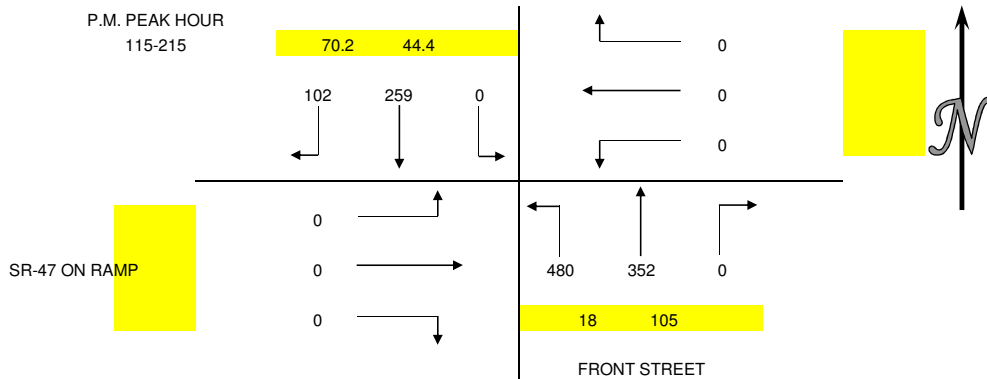
15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	13	45	0	0	0	0	0	74	118	0	0	0	250
315-330	1	49	0	0	0	0	0	86	125	0	0	0	261
330-345	6	53	0	0	0	0	0	100	125	0	0	0	284
345-400	4	61	0	0	0	0	0	84	106	0	0	0	255
400-415	5	55	0	0	0	0	0	96	121	0	0	0	277
415-430	2	52	0	0	0	0	0	83	109	0	0	0	246
430-445	1	55	0	0	0	0	0	92	112	0	0	0	260
445-500	3	54	0	0	0	0	0	105	115	0	0	0	277
500-515	3	50	0	0	0	0	0	111	135	0	0	0	299
515-530	3	42	0	0	0	0	0	96	101	0	0	0	242
530-545	2	37	0	0	0	0	0	86	95	0	0	0	220
545-600	2	36	0	0	0	0	0	70	92	0	0	0	200
HOURLY TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	24	208	0	0	0	0	0	344	474	0	0	0	1050
315-415	16	218	0	0	0	0	0	366	477	0	0	0	1077
330-430	17	221	0	0	0	0	0	363	461	0	0	0	1062
345-445	12	223	0	0	0	0	0	355	448	0	0	0	1038
400-500	11	216	0	0	0	0	0	376	457	0	0	0	1060
415-515	9	211	0	0	0	0	0	391	471	0	0	0	1082
430-530	10	201	0	0	0	0	0	404	463	0	0	0	1078
445-545	11	183	0	0	0	0	0	398	446	0	0	0	1038
500-600	10	165	0	0	0	0	0	363	423	0	0	0	961



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: SATURDAY APRIL 30, 2011  
 PERIOD: 11:00 AM TO 4:00 PM  
 INTERSECTION: N/S FRONT STREET  
 E/W SR-47 ON RAMP

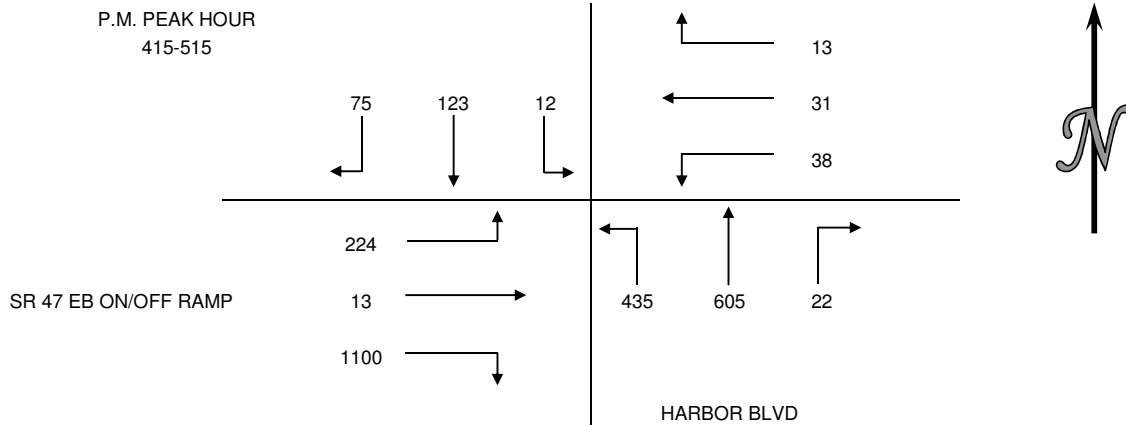
15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1115	10	70	0	0	0	0	0	75	141	0	0	0	296
1115-1130	13	61	0	0	0	0	0	69	113	0	0	0	256
1130-1145	12	72	0	0	0	0	0	61	132	0	0	0	277
1145-1200	43	76	0	0	0	0	0	73	129	0	0	0	321
1200-1215	20	64	0	0	0	0	0	83	122	0	0	0	289
1215-1230	14	47	0	0	0	0	0	69	110	0	0	0	240
1230-1245	14	64	0	0	0	0	0	84	140	0	0	0	302
1245-100	11	49	0	0	0	0	0	81	114	0	0	0	255
100-115	5	55	0	0	0	0	0	74	118	0	0	0	252
115-130	22	79	0	0	0	0	0	95	110	0	0	0	306
130-145	32	63	0	0	0	0	0	82	107	0	0	0	284
145-200	20	57	0	0	0	0	0	84	139	0	0	0	300
200-215	28	60	0	0	0	0	0	91	124	0	0	0	303
215-230	18	55	0	0	0	0	0	59	163	0	0	0	295
230-245	11	40	0	0	0	0	0	58	125	0	0	0	234
245-300	10	36	0	0	0	0	0	74	119	0	0	0	239
3000-315	23	44	0	0	0	0	0	61	124	0	0	0	252
315-330	10	36	0	0	0	0	0	58	112	0	0	0	216
330-345	9	50	0	0	0	0	0	54	107	0	0	0	220
345-400	7	47	0	0	0	0	0	47	116	0	0	0	0
HOOR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1200	78	279	0	0	0	0	0	278	515	0	0	0	1150
1115-1215	88	273	0	0	0	0	0	286	496	0	0	0	1143
1130-1230	89	259	0	0	0	0	0	286	493	0	0	0	1127
1145-1245	91	251	0	0	0	0	0	309	501	0	0	0	1152
1200-100	59	224	0	0	0	0	0	317	486	0	0	0	1086
1215-115	44	215	0	0	0	0	0	308	482	0	0	0	1049
1230-130	52	247	0	0	0	0	0	334	482	0	0	0	1115
1245-145	70	246	0	0	0	0	0	332	449	0	0	0	1097
100-200	79	254	0	0	0	0	0	335	474	0	0	0	1142
115-215	102	259	0	0	0	0	0	352	480	0	0	0	1193
130-230	98	235	0	0	0	0	0	316	533	0	0	0	1182
145-245	77	212	0	0	0	0	0	292	551	0	0	0	1132
200-300	67	191	0	0	0	0	0	282	531	0	0	0	1071
215-315	62	175	0	0	0	0	0	252	531	0	0	0	1020
230-330	54	156	0	0	0	0	0	251	480	0	0	0	941
245-345	52	166	0	0	0	0	0	247	462	0	0	0	927
300-400	49	177	0	0	0	0	0	220	459	0	0	0	905



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: WEDNESDAY, APRIL 27, 2011  
 PERIOD: 3:00 PM TO 6:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W SR 47 EB ON/OFF RAMP

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	33	23	7	18	28	29	11	138	75	205	14	37	618
315-330	22	18	3	9	13	16	14	142	109	196	10	45	597
330-345	24	18	7	13	11	15	12	178	97	220	10	53	658
345-400	31	21	4	9	6	16	10	145	89	271	4	49	655
400-415	26	25	3	3	17	8	11	160	114	242	4	42	655
415-430	19	26	2	5	12	11	5	129	91	285	4	49	638
430-445	22	27	4	0	3	6	6	139	119	248	4	53	631
445-500	17	38	2	6	8	8	5	156	116	269	3	64	692
500-515	17	32	4	2	8	13	6	181	109	298	2	58	730
515-530	6	23	4	4	9	3	7	138	109	256	4	42	605
530-545	17	18	5	0	8	9	3	151	95	275	2	48	631
545-600	6	24	4	1	14	8	4	104	72	244	2	50	533
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	110	80	21	49	58	76	47	603	370	892	38	184	2528
315-415	103	82	17	34	47	55	47	625	409	929	28	189	2565
330-430	100	90	16	30	46	50	38	612	391	1018	22	193	2606
345-445	98	99	13	17	38	41	32	573	413	1046	16	193	2579
400-500	84	116	11	14	40	33	27	584	440	1044	15	208	2616
415-515	75	123	12	13	31	38	22	605	435	1100	13	224	2691
430-530	62	120	14	12	28	30	24	614	453	1071	13	217	2658
445-545	57	111	15	12	33	33	21	626	429	1098	11	212	2658
500-600	46	97	17	7	39	33	20	574	385	1073	10	198	2499

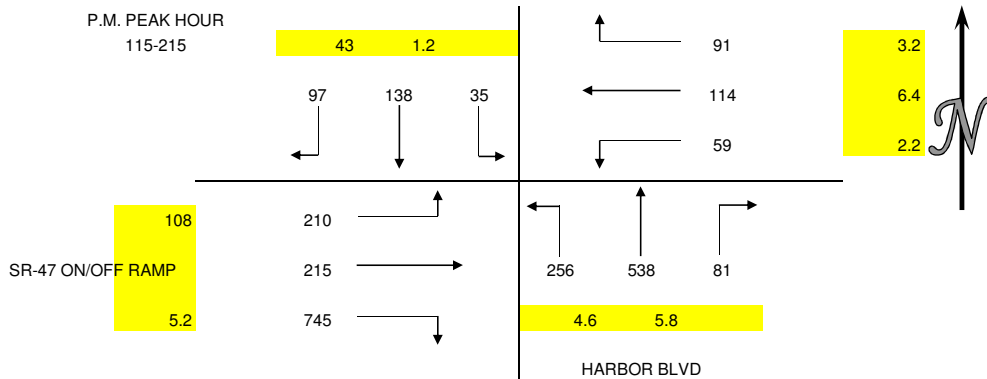


## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: SATURDAY APRIL 30, 2011  
 PERIOD: 11:00 AM TO 4:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W SR-47 ON/OFF RAMP

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1115	20	47	17	62	61	15	16	87	49	116	70	58	618
1115-1130	8	32	10	42	45	24	17	118	76	143	88	47	650
1130-1145	13	40	16	55	30	23	8	94	64	151	83	59	636
1145-1200	17	62	11	27	24	28	28	111	51	177	85	36	657
1200-1215	18	32	18	34	27	15	19	99	55	150	85	53	605
1215-1230	11	26	15	26	27	20	20	116	58	142	89	53	603
1230-1245	12	27	7	33	19	10	31	108	70	158	93	61	629
1245-100	20	34	11	28	21	21	6	129	72	177	86	50	655
100-115	15	32	11	23	23	17	17	103	70	134	94	58	597
115-130	29	34	11	18	36	17	27	136	58	179	58	54	657
130-145	24	33	10	24	26	12	35	111	62	188	78	52	655
145-200	19	37	10	33	31	17	9	141	58	169	53	51	628
200-215	25	34	4	16	21	13	10	150	78	209	26	53	639
215-230	21	44	4	20	9	15	7	148	63	205	31	42	609
230-245	16	22	7	14	19	14	11	141	81	217	18	41	601
245-300	12	18	2	12	11	23	17	138	82	203	17	39	574
3000-315	16	25	6	18	11	13	16	130	72	217	12	28	564
315-330	10	21	4	8	15	17	9	127	72	185	10	35	513
330-345	12	35	6	11	15	12	15	123	71	229	7	28	564
345-400	7	42	4	10	15	16	8	142	72	200	6	24	546

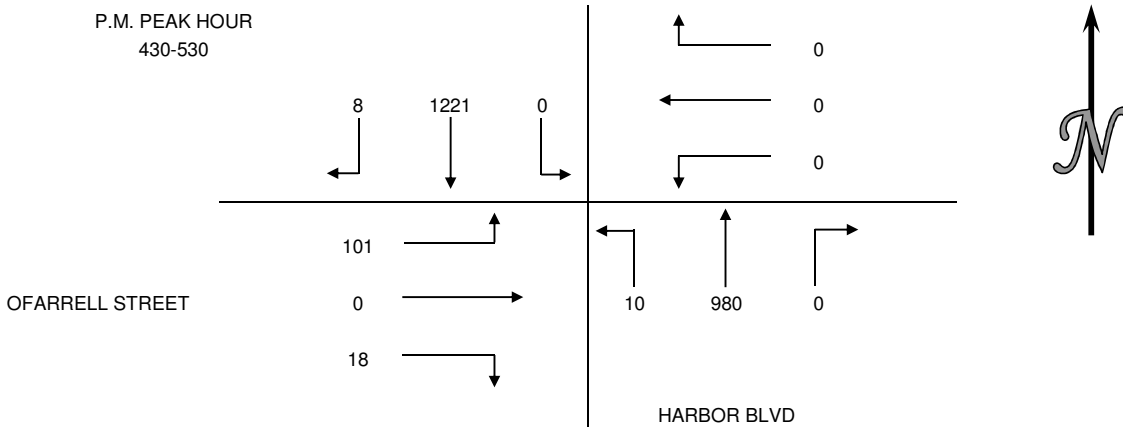
HOOR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1200	58	181	54	186	160	90	69	410	240	587	326	200	2561
1115-1215	56	166	55	158	126	90	72	422	246	621	341	195	2548
1130-1230	59	160	60	142	108	86	75	420	228	620	342	201	2501
1145-1245	58	147	51	120	97	73	98	434	234	627	352	203	2494
1200-100	61	119	51	121	94	66	76	452	255	627	353	217	2492
1215-115	58	119	44	110	90	68	74	456	270	611	362	222	2484
1230-130	76	127	40	102	99	65	81	476	270	648	331	223	2538
1245-145	88	133	43	93	106	67	85	479	262	678	316	214	2564
100-200	87	136	42	98	116	63	88	491	248	670	283	215	2537
115-215	97	138	35	91	114	59	81	538	256	745	215	210	2579
130-230	89	148	28	93	87	57	61	550	261	771	188	198	2531
145-245	81	137	25	83	80	59	37	580	280	800	128	187	2477
200-300	74	118	17	62	60	65	45	577	304	834	92	175	2423
215-315	65	109	19	64	50	65	51	557	298	842	78	150	2348
230-330	54	86	19	52	56	67	53	536	307	822	57	143	2252
245-345	50	99	18	49	52	65	57	518	297	834	46	130	2215
300-400	45	123	20	47	56	58	48	522	287	831	35	115	2187



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: WEDNESDAY, APRIL 27, 2011  
 PERIOD: 3:00 PM TO 6:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W OFARRELL STREET

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	2	249	0	0	0	0	0	221	6	3	0	13	494
315-330	3	284	0	0	0	0	0	220	1	1	0	17	526
330-345	4	254	0	0	0	0	0	227	3	7	0	32	527
345-400	3	239	0	0	0	0	0	231	2	8	0	32	515
400-415	8	258	0	0	0	0	0	263	3	4	0	21	557
415-430	4	281	0	0	0	0	0	215	2	7	0	18	527
430-445	1	328	0	0	0	0	0	255	0	3	0	28	615
445-500	2	282	0	0	0	0	0	217	4	6	0	14	525
500-515	5	331	0	0	0	0	0	251	4	5	0	32	628
515-530	0	280	0	0	0	0	0	257	2	4	0	27	570
530-545	3	315	0	0	0	0	0	228	2	11	0	21	580
545-600	1	240	0	0	0	0	0	174	4	4	0	10	433
HOURLY TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	12	1026	0	0	0	0	0	899	12	19	0	94	2062
315-415	18	1035	0	0	0	0	0	941	9	20	0	102	2125
330-430	19	1032	0	0	0	0	0	936	10	26	0	103	2126
345-445	16	1106	0	0	0	0	0	964	7	22	0	99	2214
400-500	15	1149	0	0	0	0	0	950	9	20	0	81	2224
415-515	12	1222	0	0	0	0	0	938	10	21	0	92	2295
430-530	8	1221	0	0	0	0	0	980	10	18	0	101	2338
445-545	10	1208	0	0	0	0	0	953	12	26	0	94	2303
500-600	9	1166	0	0	0	0	0	910	12	24	0	90	2211



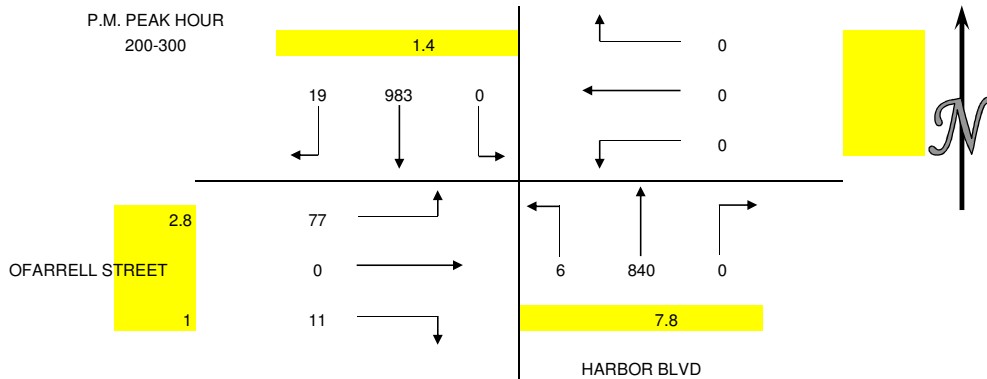


## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: SATURDAY APRIL 30, 2011  
 PERIOD: 11:00 AM TO 4:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W OFARRELL STREET

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1115	2	188	0	0	0	0	0	141	4	6	0	14	355
1115-1130	4	196	0	0	0	0	0	174	2	1	0	21	398
1130-1145	7	212	0	0	0	0	0	155	1	1	0	26	402
1145-1200	5	229	0	0	0	0	0	172	3	4	0	21	434
1200-1215	1	184	0	0	0	0	0	150	1	3	0	10	349
1215-1230	5	186	0	0	0	0	0	172	2	1	0	24	390
1230-1245	1	210	0	0	0	0	0	200	0	2	0	12	425
1245-100	6	224	0	0	0	0	0	199	1	2	0	16	448
100-115	2	194	0	0	0	0	0	182	0	5	0	18	401
115-130	5	248	0	0	0	0	0	201	0	3	0	15	472
130-145	1	226	0	0	0	0	0	194	2	7	0	22	452
145-200	3	201	0	0	0	0	0	178	0	3	0	9	394
200-215	6	246	0	0	0	0	0	215	1	4	0	16	488
215-230	8	260	0	0	0	0	0	195	1	1	0	31	496
230-245	2	245	0	0	0	0	0	208	2	2	0	12	471
245-300	3	232	0	0	0	0	0	222	2	4	0	18	481
3000-315	3	244	0	0	0	0	0	202	4	5	0	19	477
315-330	2	215	0	0	0	0	0	202	1	5	0	14	439
330-345	2	260	0	0	0	0	0	188	1	1	0	13	465
345-400	1	235	0	0	0	0	0	207	2	6	0	11	0

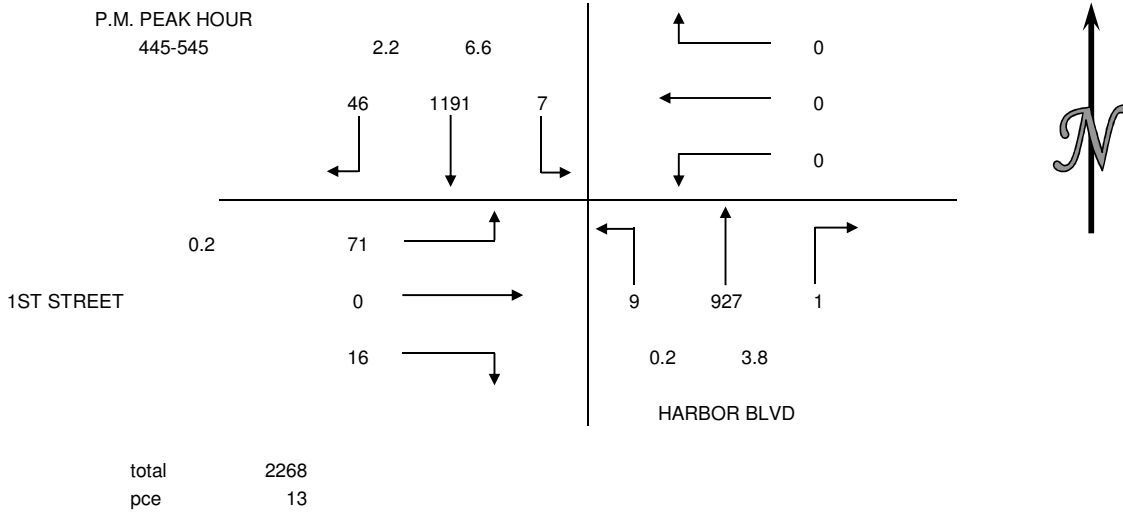
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1200	18	825	0	0	0	0	0	642	10	12	0	82	1589
1115-1215	17	821	0	0	0	0	0	651	7	9	0	78	1583
1130-1230	18	811	0	0	0	0	0	649	7	9	0	81	1575
1145-1245	12	809	0	0	0	0	0	694	6	10	0	67	1598
1200-100	13	804	0	0	0	0	0	721	4	8	0	62	1612
1215-115	14	814	0	0	0	0	0	753	3	10	0	70	1664
1230-130	14	876	0	0	0	0	0	782	1	12	0	61	1746
1245-145	14	892	0	0	0	0	0	776	3	17	0	71	1773
100-200	11	869	0	0	0	0	0	755	2	18	0	64	1719
115-215	15	921	0	0	0	0	0	788	3	17	0	62	1806
130-230	18	933	0	0	0	0	0	782	4	15	0	78	1830
145-245	19	952	0	0	0	0	0	796	4	10	0	68	1849
200-300	19	983	0	0	0	0	0	840	6	11	0	77	1936
215-315	16	981	0	0	0	0	0	827	9	12	0	80	1925
230-330	10	936	0	0	0	0	0	834	9	16	0	63	1868
245-345	10	951	0	0	0	0	0	814	8	15	0	64	1862
300-400	8	954	0	0	0	0	0	799	8	17	0	57	1843



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: WEDNESDAY, APRIL 27, 2011  
 PERIOD: 3:00 PM TO 6:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W 1ST STREET

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	10	249	2	0	0	0	0	219	4	7	0	11	502
315-330	16	201	3	0	0	0	2	208	4	5	0	11	450
330-345	8	228	1	0	0	0	0	215	3	6	0	17	478
345-400	16	281	1	0	0	0	0	203	2	4	0	17	524
400-415	8	290	3	0	0	0	0	235	3	6	0	19	564
415-430	10	266	0	0	0	0	0	195	3	7	0	22	503
430-445	4	274	1	0	0	0	0	222	3	5	0	15	524
445-500	15	295	2	0	0	0	1	248	2	6	0	23	592
500-515	15	320	1	0	0	0	0	240	3	4	0	20	603
515-530	10	262	3	0	0	0	0	227	1	4	0	18	525
530-545	6	314	1	0	0	0	0	212	3	2	0	10	548
545-600	13	265	0	0	0	0	0	176	4	5	0	17	480
HOURLY TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	50	959	7	0	0	0	2	845	13	22	0	56	1954
315-415	48	1000	8	0	0	0	2	861	12	21	0	64	2016
330-430	42	1065	5	0	0	0	0	848	11	23	0	75	2069
345-445	38	1111	5	0	0	0	0	855	11	22	0	73	2115
400-500	37	1125	6	0	0	0	1	900	11	24	0	79	2183
415-515	44	1155	4	0	0	0	1	905	11	22	0	80	2222
430-530	44	1151	7	0	0	0	1	937	9	19	0	76	2244
445-545	46	1191	7	0	0	0	1	927	9	16	0	71	2268
500-600	44	1161	5	0	0	0	0	855	11	15	0	65	2156

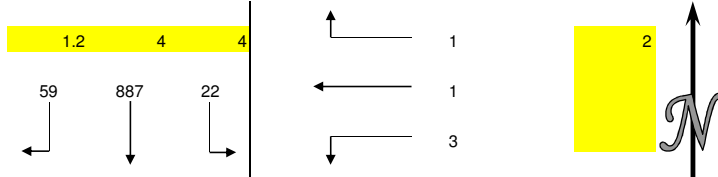


## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: SATURDAY APRIL 30, 2011  
 PERIOD: 11:00 AM TO 4:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W 1ST STREET

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1115	8	150	18	0	1	0	14	137	8	6	5	9	356
1115-1130	6	173	15	0	1	0	9	163	2	10	3	14	396
1130-1145	20	182	11	0	0	0	5	158	6	5	6	5	398
1145-1200	22	217	5	1	0	2	7	140	3	1	1	15	414
1200-1215	8	187	15	0	1	0	12	136	1	15	4	16	395
1215-1230	10	157	4	0	0	0	4	154	3	11	6	13	362
1230-1245	6	198	12	0	1	1	8	194	2	5	3	10	440
1245-100	12	192	9	0	0	0	5	173	2	6	3	12	414
100-115	4	186	10	0	0	0	3	179	2	9	4	20	417
115-130	8	219	6	0	0	1	2	167	5	10	2	10	430
130-145	11	220	2	1	0	0	3	172	6	15	1	16	447
145-200	8	197	7	0	0	0	1	192	5	8	2	13	433
200-215	17	242	7	0	0	3	4	218	6	11	1	8	517
215-230	20	221	6	0	0	0	0	178	3	16	1	12	457
230-245	9	214	4	1	1	0	2	206	3	14	0	18	472
245-300	13	210	5	0	0	0	0	185	3	13	0	16	445
3000-315	13	241	1	0	0	0	0	206	6	8	2	11	488
315-330	10	192	3	1	0	0	0	183	4	17	1	15	426
330-345	16	225	3	0	0	0	0	166	3	8	0	13	434
345-400	10	238	2	0	0	0	1	214	3	16	0	11	0
HOOR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1200	56	722	49	1	2	2	35	598	19	22	15	43	1564
1115-1215	56	759	46	1	2	2	33	597	12	31	14	50	1603
1130-1230	60	743	35	1	1	2	28	588	13	32	17	49	1569
1145-1245	46	759	36	1	2	3	31	624	9	32	14	54	1611
1200-100	36	734	40	0	2	1	29	657	8	37	16	51	1611
1215-115	32	733	35	0	1	1	20	700	9	31	16	55	1633
1230-130	30	795	37	0	1	2	18	713	11	30	12	52	1701
1245-145	35	817	27	1	0	1	13	691	15	40	10	58	1708
100-200	31	822	25	1	0	1	9	710	18	42	9	59	1727
115-215	44	878	22	1	0	4	10	749	22	44	6	47	1827
130-230	56	880	22	1	0	3	8	760	20	50	5	49	1854
145-245	54	874	24	1	1	3	7	794	17	49	4	51	1879
200-300	59	887	22	1	1	3	6	787	15	54	2	54	1891
215-315	55	886	16	1	1	0	2	775	15	51	3	57	1862
230-330	45	857	13	2	1	0	2	780	16	52	3	60	1831
245-345	52	868	12	1	0	0	0	740	16	46	3	55	1793
300-400	49	896	9	1	0	0	1	769	16	49	3	50	1843

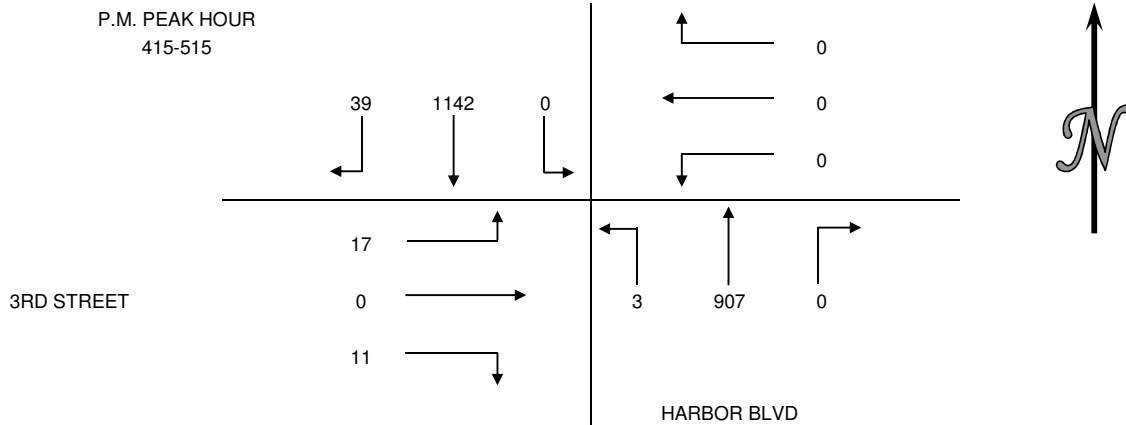
P.M. PEAK HOUR  
200-300



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: WEDNESDAY, APRIL 27, 2011  
 PERIOD: 3:00 PM TO 6:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W 3RD STREET

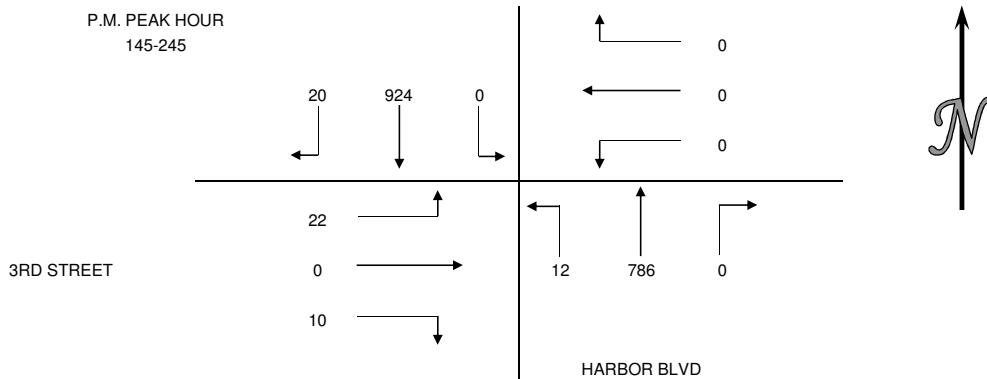
15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	14	245	0	0	0	0	0	212	2	3	0	7	483
315-330	9	213	0	0	0	0	0	212	3	0	0	12	449
330-345	12	241	0	0	0	0	0	224	4	1	0	7	489
345-400	15	249	0	0	0	0	0	193	2	2	0	5	466
400-415	7	256	0	0	0	0	0	239	1	3	0	5	511
415-430	10	288	0	0	0	0	0	210	0	1	0	3	512
430-445	11	258	0	0	0	0	0	237	1	1	0	5	513
445-500	6	276	0	0	0	0	0	209	2	2	0	1	496
500-515	12	320	0	0	0	0	0	251	0	7	0	8	598
515-530	11	273	0	0	0	0	0	205	1	3	0	10	503
530-545	13	255	0	0	0	0	0	215	6	1	0	11	501
545-600	16	263	0	0	0	0	0	185	1	1	0	4	470
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	50	948	0	0	0	0	0	841	11	6	0	31	1887
315-415	43	959	0	0	0	0	0	868	10	6	0	29	1915
330-430	44	1034	0	0	0	0	0	866	7	7	0	20	1978
345-445	43	1051	0	0	0	0	0	879	4	7	0	18	2002
400-500	34	1078	0	0	0	0	0	895	4	7	0	14	2032
415-515	39	1142	0	0	0	0	0	907	3	11	0	17	2119
430-530	40	1127	0	0	0	0	0	902	4	13	0	24	2110
445-545	42	1124	0	0	0	0	0	880	9	13	0	30	2098
500-600	52	1111	0	0	0	0	0	856	8	12	0	33	2072



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: SATURDAY APRIL 30, 2011  
 PERIOD: 11:00 AM TO 4:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W 3RD STREET

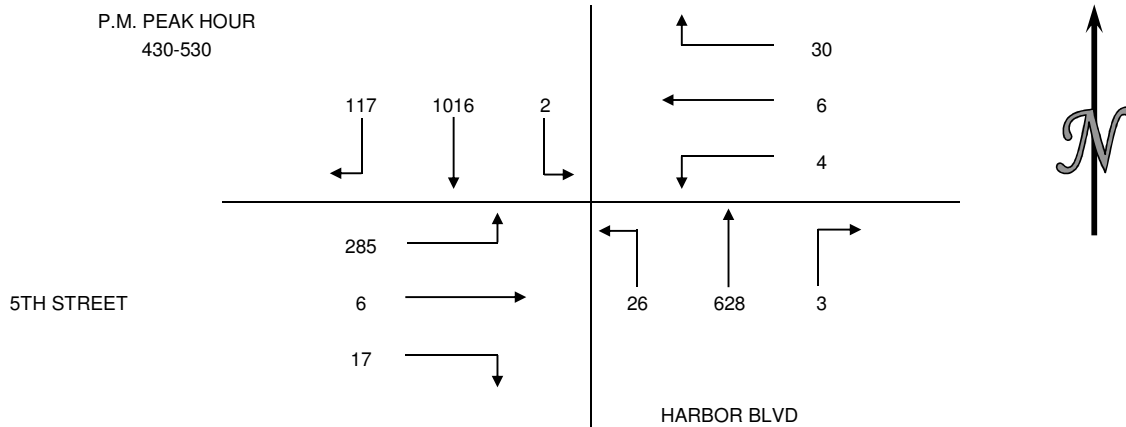
15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1115	4	175	0	0	0	0	0	162	2	2	0	2	347
1115-1130	4	186	0	0	0	0	0	177	0	2	0	5	374
1130-1145	4	180	0	0	0	0	0	164	4	2	0	3	357
1145-1200	2	217	0	0	0	0	0	140	0	4	0	3	366
1200-1215	5	175	0	0	0	0	0	136	4	2	0	7	329
1215-1230	9	165	0	0	0	0	0	122	3	2	0	5	306
1230-1245	4	211	0	0	0	0	0	212	3	0	0	6	436
1245-100	6	202	0	0	0	0	0	181	0	3	0	4	396
100-115	3	202	0	0	0	0	0	192	0	1	0	2	400
115-130	8	224	0	0	0	0	0	139	11	1	0	4	387
130-145	6	203	0	0	0	0	0	189	0	0	0	5	403
145-200	6	232	0	0	0	0	0	194	5	2	0	4	443
200-215	3	231	0	0	0	0	0	175	1	4	0	2	416
215-230	3	204	0	0	0	0	0	182	5	2	0	7	403
230-245	8	257	0	0	0	0	0	235	1	2	0	9	512
245-300	6	233	0	0	0	0	0	185	1	4	0	6	435
3000-315	8	261	0	0	0	0	0	224	1	3	0	3	500
315-330	6	229	0	0	0	0	0	189	2	2	0	3	431
330-345	8	244	0	0	0	0	0	170	2	4	0	6	434
345-400	6	200	0	0	0	0	0	168	3	1	0	9	0
HOOR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1200	14	758	0	0	0	0	0	643	6	10	0	13	1444
1115-1215	15	758	0	0	0	0	0	617	8	10	0	18	1426
1130-1230	20	737	0	0	0	0	0	562	11	10	0	18	1358
1145-1245	20	768	0	0	0	0	0	610	10	8	0	21	1437
1200-100	24	753	0	0	0	0	0	651	10	7	0	22	1467
1215-115	22	780	0	0	0	0	0	707	6	6	0	17	1538
1230-130	21	839	0	0	0	0	0	724	14	5	0	16	1619
1245-145	23	831	0	0	0	0	0	701	11	5	0	15	1586
100-200	23	861	0	0	0	0	0	714	16	4	0	15	1633
115-215	23	890	0	0	0	0	0	697	17	7	0	15	1649
130-230	18	870	0	0	0	0	0	740	11	8	0	18	1665
145-245	20	924	0	0	0	0	0	786	12	10	0	22	1774
200-300	20	925	0	0	0	0	0	777	8	12	0	24	1766
215-315	25	955	0	0	0	0	0	826	8	11	0	25	1850
230-330	28	980	0	0	0	0	0	833	5	11	0	21	1878
245-345	28	967	0	0	0	0	0	768	6	13	0	18	1800
300-400	28	934	0	0	0	0	0	751	8	10	0	21	1752



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: WEDNESDAY, APRIL 27, 2011  
 PERIOD: 3:00 PM TO 6:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W 5TH STREET

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	32	224	0	6	1	3	1	182	4	3	1	36	493
315-330	22	177	2	7	1	2	2	180	5	5	3	41	447
330-345	33	196	1	11	1	0	0	161	1	6	0	33	443
345-400	21	236	0	18	2	0	0	145	7	6	2	58	495
400-415	27	213	0	10	1	0	0	199	6	3	1	48	508
415-430	15	262	0	8	2	0	1	143	1	2	1	35	470
430-445	28	229	0	10	2	0	1	171	5	3	4	70	523
445-500	26	269	0	7	1	0	0	154	3	2	2	61	525
500-515	31	278	1	6	3	4	2	164	3	6	0	83	581
515-530	32	240	1	7	0	0	0	139	15	6	0	71	511
530-545	17	265	0	5	0	0	0	144	3	6	3	66	509
545-600	21	234	3	6	2	0	3	112	8	7	5	50	451
HOURLY TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	108	833	3	42	5	5	3	668	17	20	6	168	1878
315-415	103	822	3	46	5	2	2	685	19	20	6	180	1893
330-430	96	907	1	47	6	0	1	648	15	17	4	174	1916
345-445	91	940	0	46	7	0	2	658	19	14	8	211	1996
400-500	96	973	0	35	6	0	2	667	15	10	8	214	2026
415-515	100	1038	1	31	8	4	4	632	12	13	7	249	2099
430-530	117	1016	2	30	6	4	3	628	26	17	6	285	2140
445-545	106	1052	2	25	4	4	2	601	24	20	5	281	2126
500-600	101	1017	5	24	5	4	5	559	29	25	8	270	2052

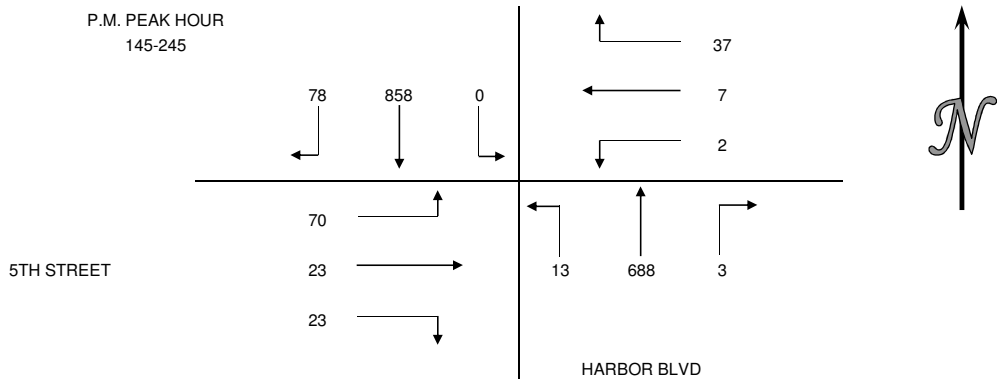


## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: SATURDAY APRIL 30, 2011  
 PERIOD: 11:00 AM TO 4:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W 5TH STREET

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1115	14	165	1	3	0	1	0	139	4	3	1	21	352
1115-1130	21	165	0	3	1	1	3	146	1	1	2	21	365
1130-1145	16	178	1	8	0	0	1	126	6	5	0	21	362
1145-1200	15	209	0	5	0	0	0	114	4	6	5	26	384
1200-1215	6	167	0	5	2	2	1	109	3	5	2	13	315
1215-1230	13	186	1	3	1	2	0	131	4	6	2	17	366
1230-1245	8	195	0	4	3	0	0	155	1	9	3	37	415
1245-100	10	189	1	12	2	2	1	148	5	5	5	30	410
100-115	8	186	0	7	0	3	1	136	6	9	0	24	380
115-130	12	231	1	7	1	0	0	148	15	11	1	17	444
130-145	10	215	1	11	2	0	0	143	4	7	4	17	414
145-200	14	210	0	8	1	1	1	177	1	8	9	20	450
200-215	20	220	0	8	2	0	1	170	4	2	3	18	448
215-230	18	219	0	13	3	1	0	162	4	6	7	14	447
230-245	26	209	0	8	1	0	1	179	4	7	4	18	457
245-300	19	218	0	8	2	0	0	160	4	8	4	17	440
3000-315	22	235	0	11	2	0	0	179	9	9	3	22	492
315-330	20	211	0	13	0	1	1	132	5	14	5	19	421
330-345	25	194	0	8	1	1	0	141	3	6	2	18	399
345-400	16	235	1	6	1	0	1	171	4	5	3	23	0

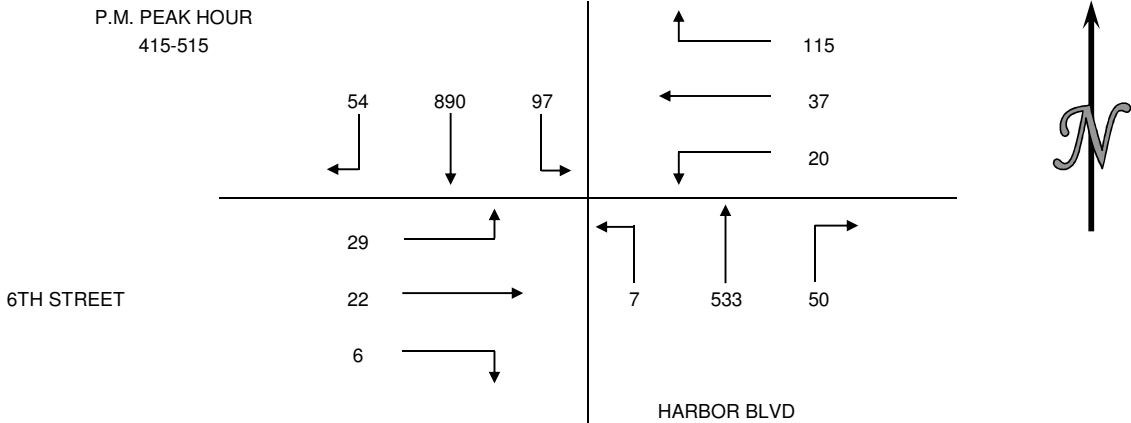
HOOR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1200	66	717	2	19	1	2	4	525	15	15	8	89	1463
1115-1215	58	719	1	21	3	3	5	495	14	17	9	81	1426
1130-1230	50	740	2	21	3	4	2	480	17	22	9	77	1427
1145-1245	42	757	1	17	6	4	1	509	12	26	12	93	1480
1200-100	37	737	2	24	8	6	2	543	13	25	12	97	1506
1215-115	39	756	2	26	6	7	2	570	16	29	10	108	1571
1230-130	38	801	2	30	6	5	2	587	27	34	9	108	1649
1245-145	40	821	3	37	5	5	2	575	30	32	10	88	1648
100-200	44	842	2	33	4	4	2	604	26	35	14	78	1688
115-215	56	876	2	34	6	1	2	638	24	28	17	72	1756
130-230	62	864	1	40	8	2	2	652	13	23	23	69	1759
145-245	78	858	0	37	7	2	3	688	13	23	23	70	1802
200-300	83	866	0	37	8	1	2	671	16	23	18	67	1792
215-315	85	881	0	40	8	1	1	680	21	30	18	71	1836
230-330	87	873	0	40	5	1	2	650	22	38	16	76	1810
245-345	86	858	0	40	5	2	1	612	21	37	14	76	1752
300-400	83	875	1	38	4	2	2	623	21	34	13	82	1778



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: WEDNESDAY, APRIL 27, 2011  
 PERIOD: 3:00 PM TO 6:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W 6TH STREET

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	16	177	40	30	23	2	10	137	1	0	6	8	450
315-330	12	130	32	25	13	2	9	124	0	0	4	13	364
330-345	22	153	29	24	10	4	8	128	2	4	6	14	404
345-400	14	178	30	39	7	8	12	131	1	5	11	9	445
400-415	7	194	29	41	20	18	24	142	3	2	4	5	489
415-430	24	217	22	25	12	5	13	135	0	2	6	5	466
430-445	10	214	26	28	8	5	7	131	5	1	5	10	450
445-500	7	204	26	26	6	3	19	136	1	1	4	5	438
500-515	13	255	23	36	11	7	11	131	1	2	7	9	506
515-530	13	207	23	30	6	5	5	111	1	0	10	5	416
530-545	10	213	31	23	4	6	10	119	1	0	2	4	423
545-600	16	200	17	17	7	6	14	98	4	1	11	3	394
HOURLY TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	64	638	131	118	53	16	39	520	4	9	27	44	1663
315-415	55	655	120	129	50	32	53	525	6	11	25	41	1702
330-430	67	742	110	129	49	35	57	536	6	13	27	33	1804
345-445	55	803	107	133	47	36	56	539	9	10	26	29	1850
400-500	48	829	103	120	46	31	63	544	9	6	19	25	1843
415-515	54	890	97	115	37	20	50	533	7	6	22	29	1860
430-530	43	880	98	120	31	20	42	509	8	4	26	29	1810
445-545	43	879	103	115	27	21	45	497	4	3	23	23	1783
500-600	52	875	94	106	28	24	40	459	7	3	30	21	1739

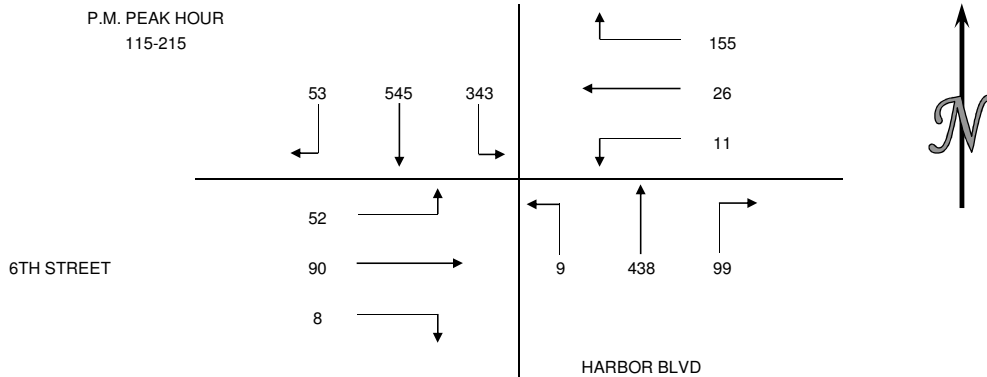




## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: SATURDAY APRIL 30, 2011  
 PERIOD: 11:00 AM TO 4:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W 6TH STREET

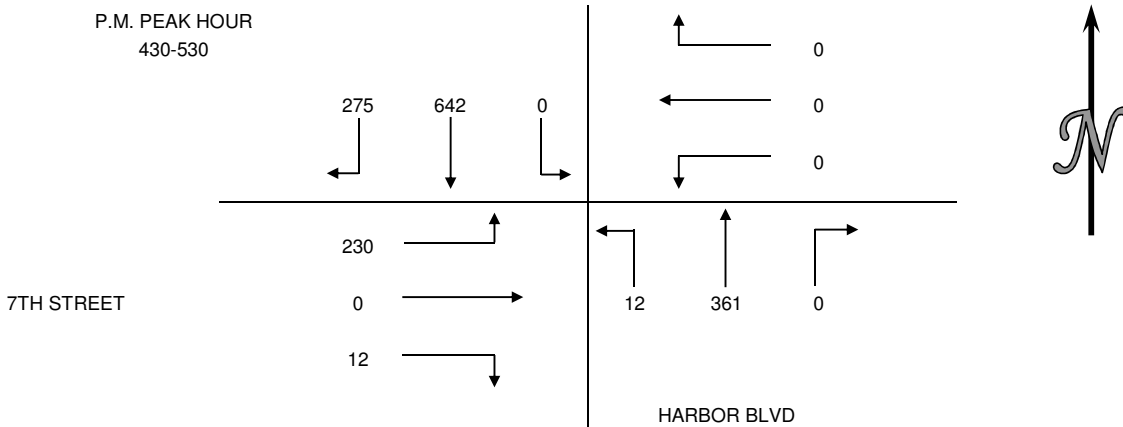
15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1115	17	100	31	17	8	5	15	107	0	2	14	5	321
1115-1130	22	130	42	15	3	2	17	105	0	1	16	11	364
1130-1145	23	114	38	21	5	0	20	119	0	0	10	10	360
1145-1200	20	146	51	22	1	1	12	93	0	1	15	9	371
1200-1215	13	108	52	21	0	1	20	83	9	0	18	13	338
1215-1230	11	115	46	27	7	3	34	93	3	0	13	5	357
1230-1245	16	136	54	21	3	5	25	121	0	2	22	11	416
1245-100	13	112	71	25	14	2	31	106	2	4	24	14	418
100-115	7	107	88	35	6	6	22	112	3	1	23	9	419
115-130	11	145	85	31	2	0	20	96	0	1	27	14	432
130-145	17	147	75	36	12	1	27	115	4	3	28	14	479
145-200	13	115	88	44	2	3	21	113	3	2	19	10	433
200-215	12	138	95	44	10	7	31	114	2	2	16	14	485
215-230	11	134	66	33	8	3	17	96	1	1	23	8	401
230-245	9	128	66	43	14	2	27	143	1	2	16	9	460
245-300	10	127	86	30	2	3	32	121	1	3	23	12	450
3000-315	17	137	80	52	21	2	25	129	2	4	17	9	495
315-330	12	119	86	43	14	2	27	101	3	1	26	10	444
330-345	12	140	70	25	7	3	27	113	3	1	23	8	432
345-400	11	144	77	30	7	3	28	123	1	0	19	7	0
HOOR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1200	82	490	162	75	17	8	64	424	0	4	55	35	1416
1115-1215	78	498	183	79	9	4	69	400	9	2	59	43	1433
1130-1230	67	483	187	91	13	5	86	388	12	1	56	37	1426
1145-1245	60	505	203	91	11	10	91	390	12	3	68	38	1482
1200-100	53	471	223	94	24	11	110	403	14	6	77	43	1529
1215-115	47	470	259	108	30	16	112	432	8	7	82	39	1610
1230-130	47	500	298	112	25	13	98	435	5	8	96	48	1685
1245-145	48	511	319	127	34	9	100	429	9	9	102	51	1748
100-200	48	514	336	146	22	10	90	436	10	7	97	47	1763
115-215	53	545	343	155	26	11	99	438	9	8	90	52	1829
130-230	53	534	324	157	32	14	96	438	10	8	86	46	1798
145-245	45	515	315	164	34	15	96	466	7	7	74	41	1779
200-300	42	527	313	150	34	15	107	474	5	8	78	43	1796
215-315	47	526	298	158	45	10	101	489	5	10	79	38	1806
230-330	48	511	318	168	51	9	111	494	7	10	82	40	1849
245-345	51	523	322	150	44	10	111	464	9	9	89	39	1821
300-400	52	540	313	150	49	10	107	466	9	6	85	34	1821



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: WEDNESDAY, APRIL 27, 2011  
 PERIOD: 3:00 PM TO 6:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W 7TH STREET

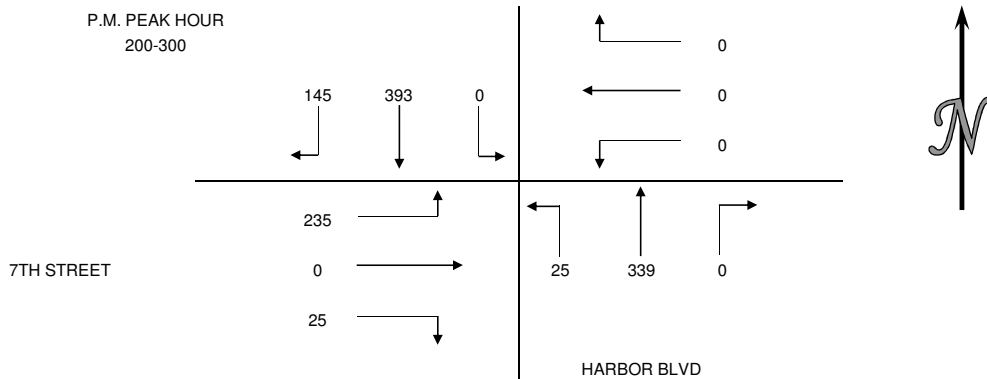
15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-315	66	102	0	0	0	0	0	104	4	3	0	55	334
315-330	43	87	0	0	0	0	0	87	6	4	0	54	281
330-345	51	103	0	0	0	0	0	65	0	4	0	50	273
345-400	64	128	0	0	0	0	0	82	3	5	0	40	322
400-415	62	139	0	0	0	0	0	92	6	6	0	69	374
415-430	60	156	0	0	0	0	0	86	5	4	0	48	359
430-445	64	139	0	0	0	0	0	104	2	2	0	51	362
445-500	84	167	0	0	0	0	0	89	2	1	0	68	411
500-515	65	179	0	0	0	0	0	83	3	3	0	59	392
515-530	62	157	0	0	0	0	0	85	5	6	0	52	367
530-545	70	157	0	0	0	0	0	67	3	4	0	49	350
545-600	63	149	0	0	0	0	0	75	2	3	0	41	333
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
300-400	224	420	0	0	0	0	0	338	13	16	0	199	1210
315-415	220	457	0	0	0	0	0	326	15	19	0	213	1250
330-430	237	526	0	0	0	0	0	325	14	19	0	207	1328
345-445	250	562	0	0	0	0	0	364	16	17	0	208	1417
400-500	270	601	0	0	0	0	0	371	15	13	0	236	1506
415-515	273	641	0	0	0	0	0	362	12	10	0	226	1524
430-530	275	642	0	0	0	0	0	361	12	12	0	230	1532
445-545	281	660	0	0	0	0	0	324	13	14	0	228	1520
500-600	260	642	0	0	0	0	0	310	13	16	0	201	1442



## INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS  
 PROJECT: SAN PEDRO TRAFFIC COUNTS  
 DATE: SATURDAY APRIL 30, 2011  
 PERIOD: 11:00 AM TO 4:00 PM  
 INTERSECTION: N/S HARBOR BLVD  
 E/W 7TH STREET

15 MIN COUNTS													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1115	31	74	0	0	0	0	0	66	3	1	0	32	207
1115-1130	35	90	0	0	0	0	0	79	8	7	0	41	260
1130-1145	41	86	0	0	0	0	0	92	6	6	0	47	278
1145-1200	39	96	0	0	0	0	0	79	3	7	0	50	274
1200-1215	25	75	0	0	0	0	0	66	2	6	0	41	215
1215-1230	30	82	0	0	0	0	0	77	5	4	0	56	254
1230-1245	30	104	0	0	0	0	0	97	9	9	0	35	284
1245-100	41	95	0	0	0	0	0	94	6	10	0	53	299
100-115	24	89	0	0	0	0	0	85	0	5	0	47	250
115-130	46	100	0	0	0	0	0	82	6	8	0	41	283
130-145	45	94	0	0	0	0	0	86	6	9	0	57	297
145-200	36	89	0	0	0	0	0	84	3	1	0	53	266
200-215	42	94	0	0	0	0	0	69	4	7	0	83	299
215-230	29	101	0	0	0	0	0	83	4	3	0	53	273
230-245	29	100	0	0	0	0	0	96	8	6	0	48	287
245-300	45	98	0	0	0	0	0	91	9	9	0	51	303
3000-315	30	100	0	0	0	0	0	92	7	7	0	61	297
315-330	38	102	0	0	0	0	0	72	2	5	0	42	261
330-345	39	101	0	0	0	0	0	92	11	8	0	89	340
345-400	40	92	0	0	0	0	0	103	11	8	0	51	0
HOOR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
1100-1200	146	346	0	0	0	0	0	316	20	21	0	170	1019
1115-1215	140	347	0	0	0	0	0	316	19	26	0	179	1027
1130-1230	135	339	0	0	0	0	0	314	16	23	0	194	1021
1145-1245	124	357	0	0	0	0	0	319	19	26	0	182	1027
1200-100	126	356	0	0	0	0	0	334	22	29	0	185	1052
1215-115	125	370	0	0	0	0	0	353	20	28	0	191	1087
1230-130	141	388	0	0	0	0	0	358	21	32	0	176	1116
1245-145	156	378	0	0	0	0	0	347	18	32	0	198	1129
100-200	151	372	0	0	0	0	0	337	15	23	0	198	1096
115-215	169	377	0	0	0	0	0	321	19	25	0	234	1145
130-230	152	378	0	0	0	0	0	322	17	20	0	246	1135
145-245	136	384	0	0	0	0	0	332	19	17	0	237	1125
200-300	145	393	0	0	0	0	0	339	25	25	0	235	1162
215-315	133	399	0	0	0	0	0	362	28	25	0	213	1160
230-330	142	400	0	0	0	0	0	351	26	27	0	202	1148
245-345	152	401	0	0	0	0	0	347	29	29	0	243	1201
300-400	147	395	0	0	0	0	0	359	31	28	0	243	1203



# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: CA11\_5140\_008

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Miner St			Miner St			22nd St			22nd St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	2	0	1	2	0	
3:00 PM	8	21	2	6	8	46	52	10	2	2	16	15	188
3:15 PM	4	23	0	7	6	40	40	6	1	1	9	7	144
3:30 PM	3	6	0	6	2	42	31	7	4	0	8	6	115
3:45 PM	3	6	0	9	4	60	46	10	5	2	11	9	165
4:00 PM	1	7	1	6	6	68	61	8	1	0	12	9	180
4:15 PM	4	6	1	2	4	83	39	9	1	1	15	9	174
4:30 PM	0	5	0	6	5	68	58	9	1	0	10	4	166
4:45 PM	3	3	1	3	5	68	38	11	4	0	9	3	148
5:00 PM	1	4	1	8	5	84	41	6	5	0	5	8	168
5:15 PM	6	5	2	2	9	70	47	9	2	1	12	8	173
5:30 PM	1	1	0	3	1	81	54	6	2	1	7	3	160
5:45 PM	4	3	1	2	6	71	54	7	1	1	7	2	159
<b>TOTAL VOLUMES :</b>	NL 38	NT 90	NR 9	SL 60	ST 61	SR 781	EL 561	ET 98	ER 29	WL 9	WT 121	WR 83	TOTAL 1940
<b>APPROACH %'s :</b>	27.74%	65.69%	6.57%	6.65%	6.76%	86.59%	81.54%	14.24%	4.22%	4.23%	56.81%	38.97%	
<b>PEAK HR START TIME :</b>	345 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	8	24	2	23	19	279	204	36	8	3	48	31	685
<b>PEAK HR FACTOR :</b>	0.773			0.902			0.886			0.820			0.951

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:

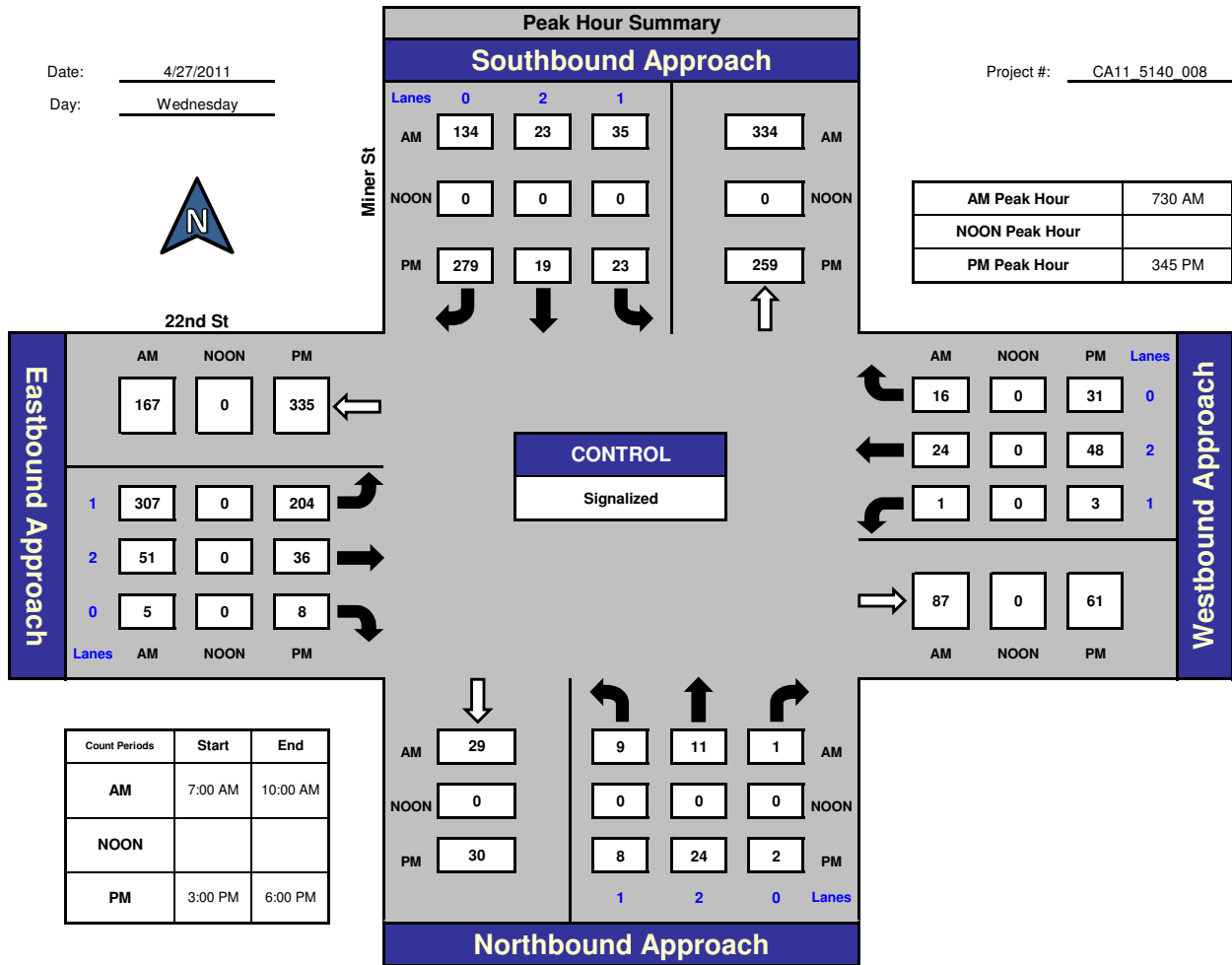


National Data & Surveying Services

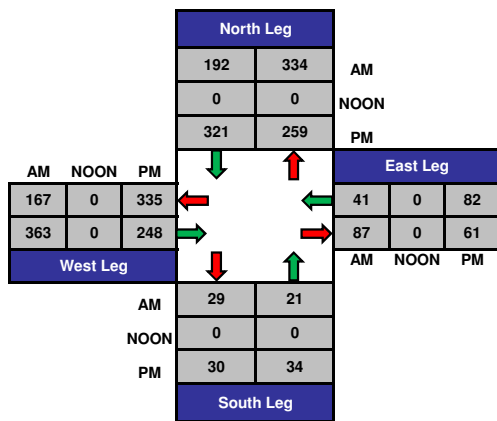
## Miner St and 22nd St, City of San Pedro

Date: 4/27/2011  
Day: Wednesday

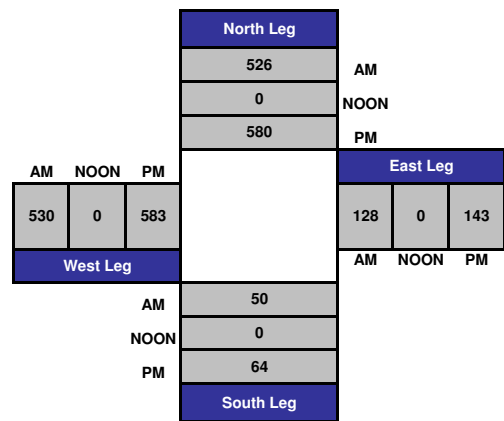
Project #: CA11 5140 008



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_008

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

NOON

NS/EW Streets:	Miner St			Miner St			22nd St			22nd St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	
11:00 AM	4	5	2	1	4	35	58	8	3	0	7	0	127
11:15 AM	2	5	2	3	2	52	37	17	6	0	8	2	136
11:30 AM	0	4	4	2	6	50	51	8	2	1	3	5	136
11:45 AM	2	4	3	5	5	53	40	11	4	1	10	3	141
12:00 PM	6	3	1	3	6	42	42	11	3	0	6	3	126
12:15 PM	1	2	3	8	4	48	55	20	9	0	7	2	159
12:30 PM	5	3	0	4	9	50	63	12	4	2	8	0	160
12:45 PM	7	1	2	7	6	49	40	22	3	1	4	1	143
1:00 PM	3	8	1	6	7	48	50	13	3	1	17	2	159
1:15 PM	5	5	2	8	11	42	38	17	4	1	11	8	152
1:30 PM	7	10	2	5	14	46	37	8	4	1	14	4	152
1:45 PM	5	4	2	9	11	44	48	8	2	0	10	5	148
2:00 PM	6	4	0	2	7	57	45	14	2	0	10	3	150
2:15 PM	6	6	1	5	9	50	43	12	4	1	16	3	156
2:30 PM	5	8	0	1	10	45	47	17	0	2	11	3	149
2:45 PM	6	7	0	7	11	68	41	11	5	0	8	3	167
3:00 PM	4	7	1	9	6	50	49	14	2	1	13	5	161
3:15 PM	4	7	6	5	10	44	36	9	4	1	10	4	140
3:30 PM	5	3	2	3	8	52	49	15	3	3	17	7	167
3:45 PM	7	5	1	5	8	51	38	21	6	1	8	6	157
<b>TOTAL VOLUMES :</b>	90	101	35	98	154	976	907	268	73	17	198	69	2986
<b>APPROACH %'s :</b>	39.82%	44.69%	15.49%	7.98%	12.54%	79.48%	72.68%	21.47%	5.85%	5.99%	69.72%	24.30%	
<b>PEAK HR START TIME :</b>	245 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	19	24	9	24	35	214	175	49	14	5	48	19	635
<b>PEAK HR FACTOR :</b>	0.765			0.794			0.888			0.667			0.951

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:



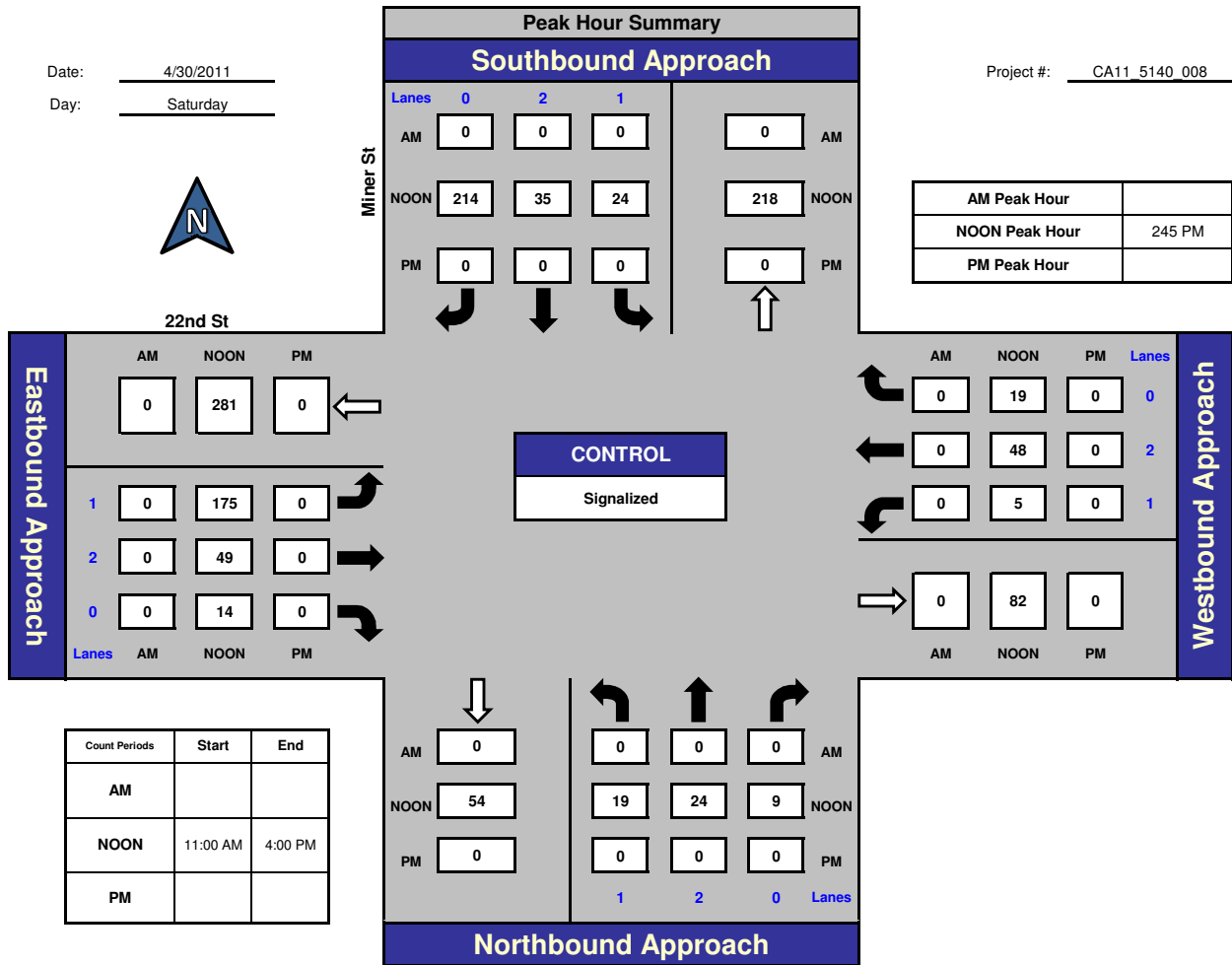
National Data & Surveying Services

## Miner St and 22nd St

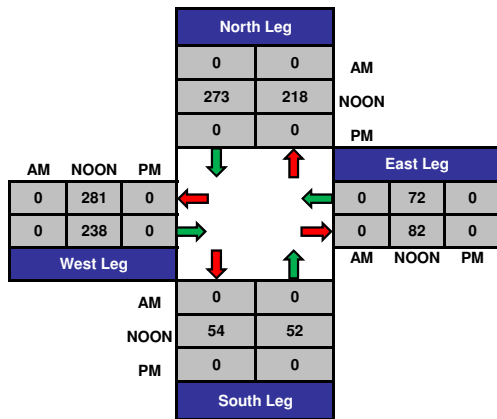
Date: 4/30/2011

Day: Saturday

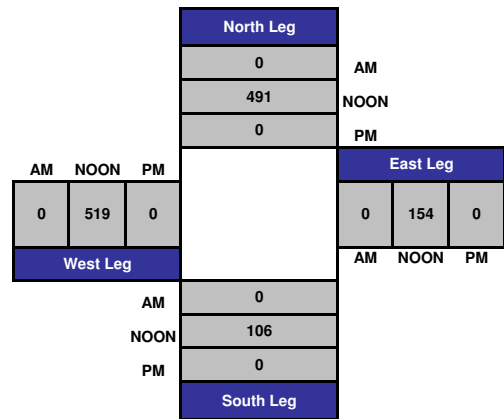
Project #: CA11 5140 008



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: CA11\_5140\_010

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	J Gibson Bl/Pacific Ave			J Gibson Bl/Pacific Ave			Front St			Front St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	1	2	0	0	0	0	1	0	2	
3:00 PM		104	8	24	138					1		78	353
3:15 PM		126	9	25	122					1		55	338
3:30 PM		139	12	37	117					3		72	380
3:45 PM		109	8	38	113					3		53	324
4:00 PM		89	14	53	121					2		50	329
4:15 PM		132	11	54	140					3		43	383
4:30 PM		127	15	35	148					1		43	369
4:45 PM		117	7	24	179					2		46	375
5:00 PM		118	12	51	157					4		61	403
5:15 PM		97	6	28	153					1		43	328
5:30 PM		121	9	30	121					3		43	327
5:45 PM		104	4	26	151					3		35	323
<b>TOTAL VOLUMES :</b>	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
<b>APPROACH %'s :</b>	0	1383	115	425	1660	0	0	0	0	27	0	622	4232
	0.00%	92.32%	7.68%	20.38%	79.62%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	4.16%	0.00%	95.84%	
<b>PEAK HR START TIME :</b>	415 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	494	45	164	624	0	0	0	0	10	0	193	1530
<b>PEAK HR FACTOR :</b>	0.942		0.947			0.000			0.781			0.949	

CONTROL : Signalized



# ITM Peak Hour Summary

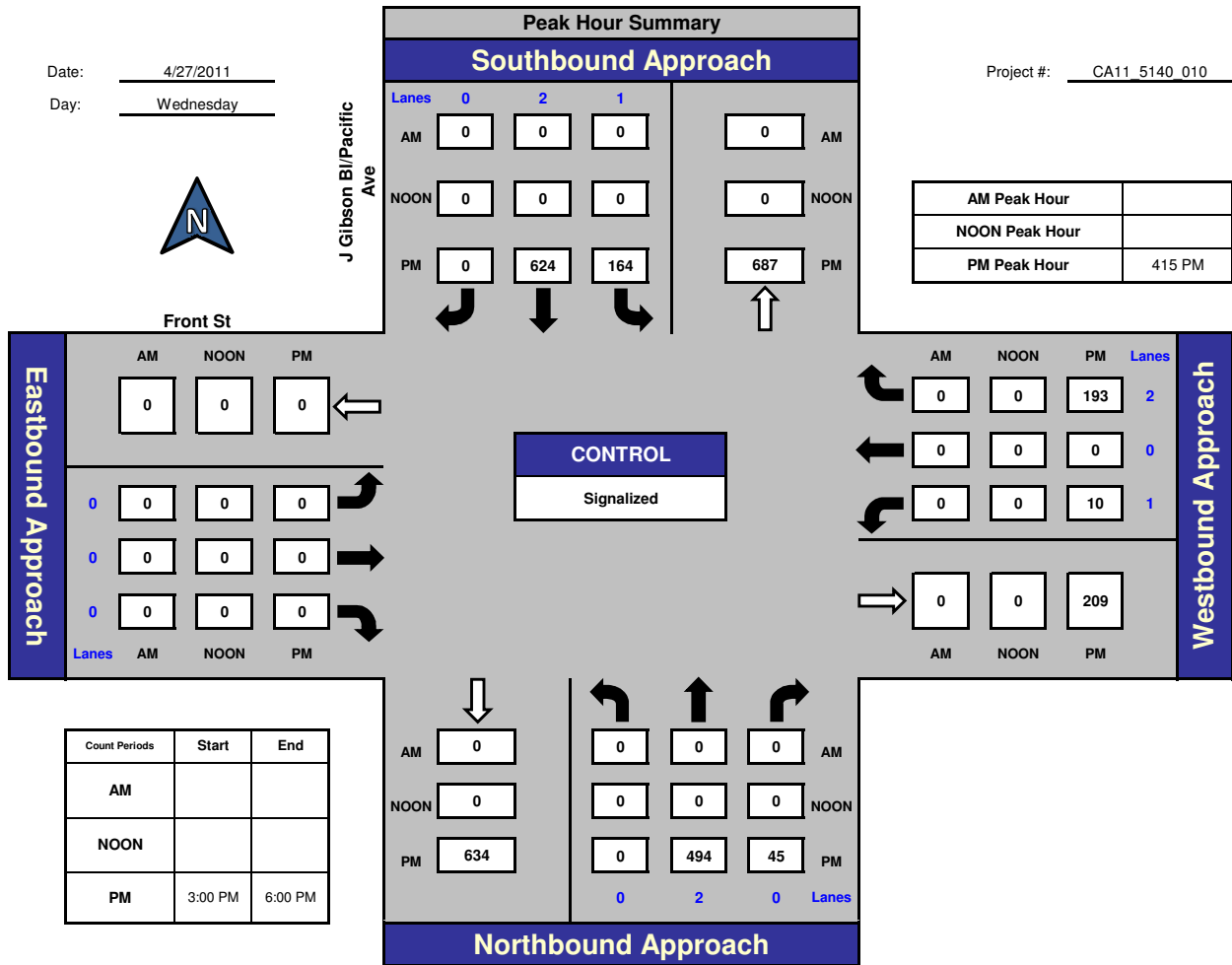


Prepared by:  
National Data & Surveying Services

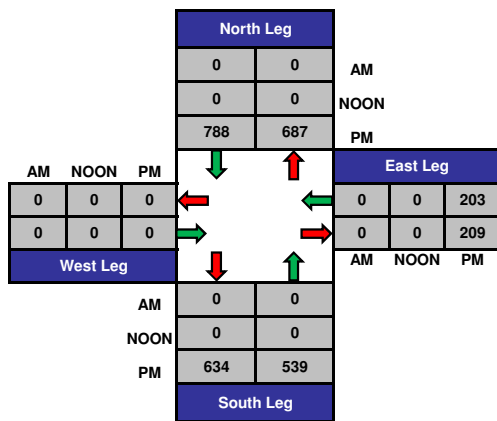
## J Gibson Bl/Pacific Ave and Front St, City of San Pedro

Date: 4/27/2011  
Day: Wednesday

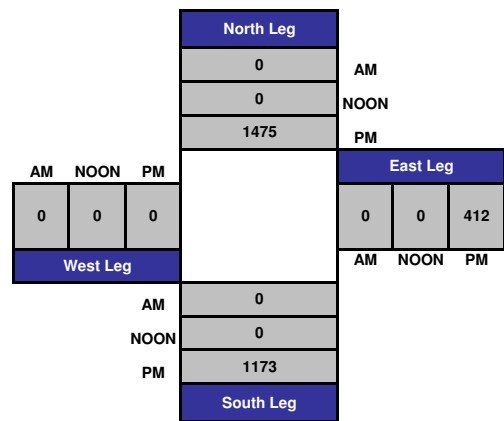
Project #: CA11 5140 010



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_010

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

NOON

NS/EW Streets:	J Gibson Bl/Pacific Ave			J Gibson Bl/Pacific Ave			Front St			Front St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	1	2	0	0	0	0	1	0	2	
11:00 AM		119	8	42	78		0			4	0	50	301
11:15 AM		137	11	41	88		0			4	0	59	340
11:30 AM		134	19	52	108		0			2	0	48	363
11:45 AM		118	24	50	95		0			6	0	78	371
12:00 PM		109	13	50	103		0			6	0	38	319
12:15 PM		112	15	46	115		0			4	0	47	339
12:30 PM		97	17	53	106		2			4	0	44	323
12:45 PM		111	16	72	116		0			3	0	48	366
1:00 PM		125	13	48	127		0			7	0	52	372
1:15 PM		100	10	37	133		0			8	1	69	358
1:30 PM		108	8	41	112		0			1	0	60	330
1:45 PM		105	20	54	102		0			2	0	54	337
2:00 PM		141	13	44	96		0			3	0	63	360
2:15 PM		117	7	32	116		0			2	0	57	331
2:30 PM		132	12	39	123		0			5	0	62	373
2:45 PM		129	9	40	102		0			4	0	62	346
3:00 PM		113	5	33	126		0			1	0	39	317
3:15 PM		114	9	33	102		0			0	0	43	301
3:30 PM		114	7	35	107		0			4	0	52	319
3:45 PM		86	7	32	102		0			0	0	52	279
<b>TOTAL VOLUMES :</b>	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
<b>APPROACH %'s :</b>	0	2321	243	874	2157	0	2	0	0	70	1	1077	6745
	0.00%	90.52%	9.48%	28.84%	71.16%	0.00%	100.00%	0.00%	0.00%	6.10%	0.09%	93.82%	
<b>PEAK HR START TIME :</b>	1245 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	444	47	198	488	0	0	0	0	19	1	229	1426
<b>PEAK HR FACTOR :</b>	0.889		0.912			0.000			0.798			0.958	

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:



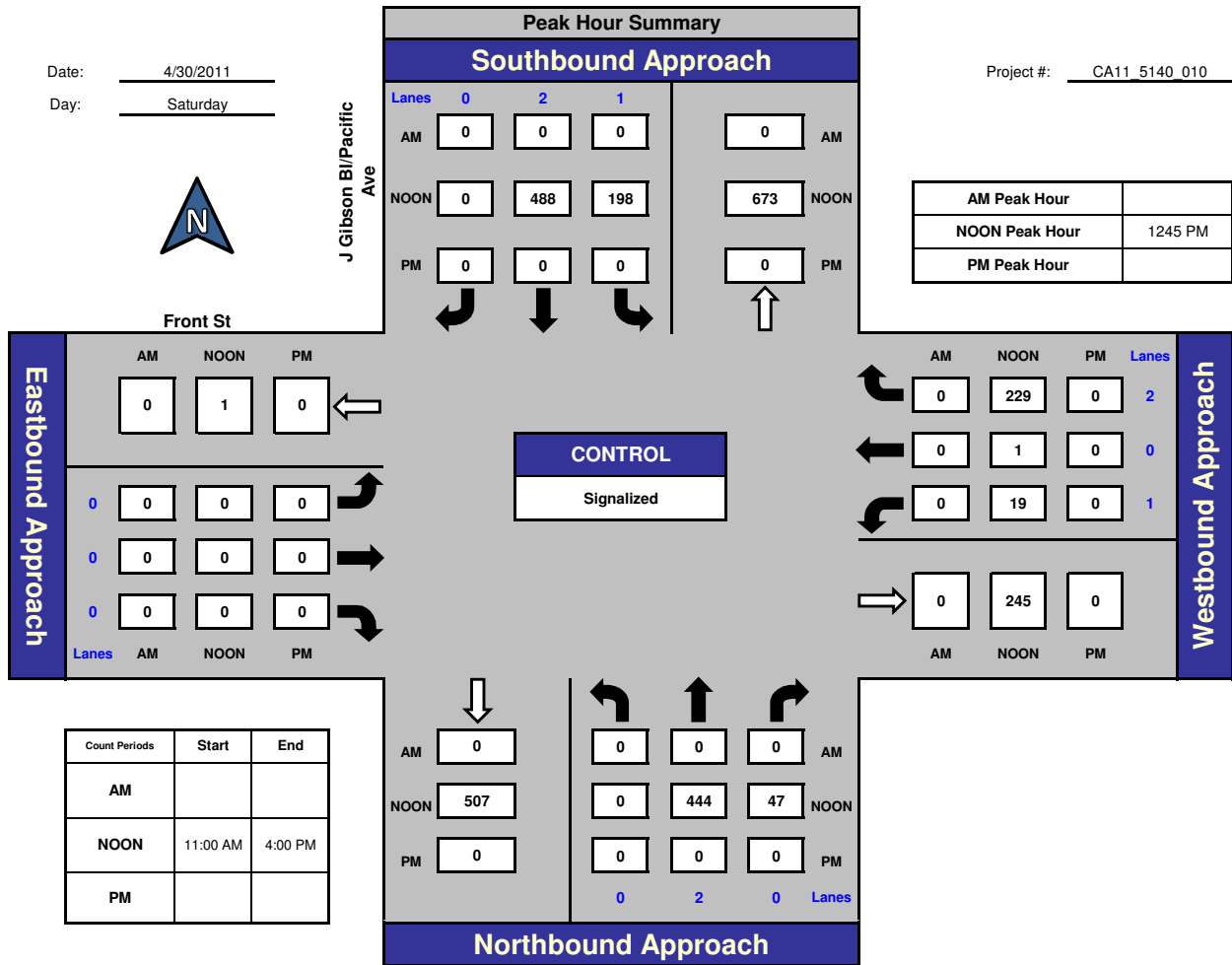
National Data & Surveying Services

## J Gibson Bl/Pacific Ave and Front St.

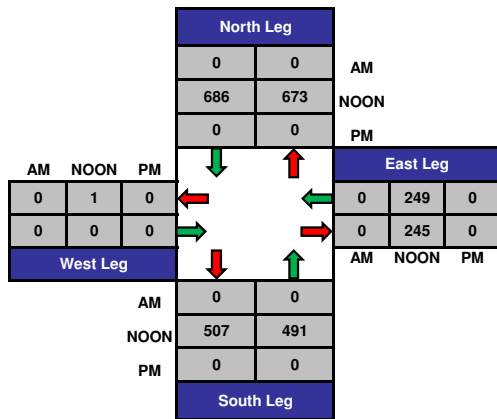
Date: 4/30/2011

Day: Saturday

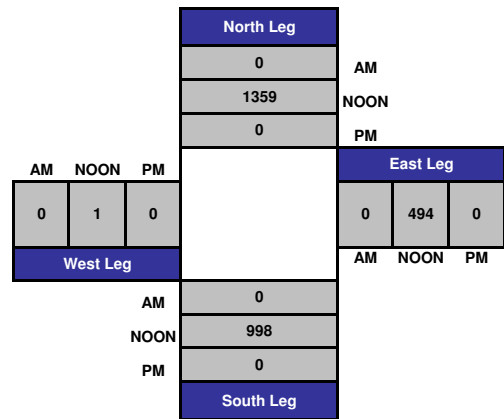
Project #: CA11 5140 010



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: CA11\_5140\_011

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Pacific Ave			Pacific Ave			1st St			1st St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	
3:00 PM	22	139	8	2	131	5	8	20	20	7	24	5	391
3:15 PM	25	139	18	3	113	9	9	22	19	11	26	4	398
3:30 PM	24	139	10	2	107	9	15	18	23	12	21	4	384
3:45 PM	25	109	14	8	116	6	10	18	22	14	17	8	367
4:00 PM	29	113	1	6	106	15	18	18	23	12	23	3	367
4:15 PM	30	147	6	3	119	6	19	24	17	11	16	5	403
4:30 PM	23	137	16	6	120	5	14	15	20	13	16	4	389
4:45 PM	29	123	4	2	162	10	12	19	15	20	20	5	421
5:00 PM	36	140	6	3	141	4	12	22	15	13	14	4	410
5:15 PM	28	111	5	6	137	6	15	24	27	17	18	3	397
5:30 PM	29	118	6	4	115	11	18	19	28	8	14	4	374
5:45 PM	28	109	4	5	133	5	10	19	31	7	17	3	371
<b>TOTAL VOLUMES :</b>	NL 328	NT 1524	NR 98	SL 50	ST 1500	SR 91	EL 160	ET 238	ER 260	WL 145	WT 226	WR 52	TOTAL 4672
<b>APPROACH %'s :</b>	16.82%	78.15%	5.03%	3.05%	91.41%	5.55%	24.32%	36.17%	39.51%	34.28%	53.43%	12.29%	
<b>PEAK HR START TIME :</b>	415 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	118	547	32	14	542	25	57	80	67	57	66	18	1623
<b>PEAK HR FACTOR :</b>	0.952			0.835			0.850			0.783			0.964

CONTROL : Signalized

# ITM Peak Hour Summary

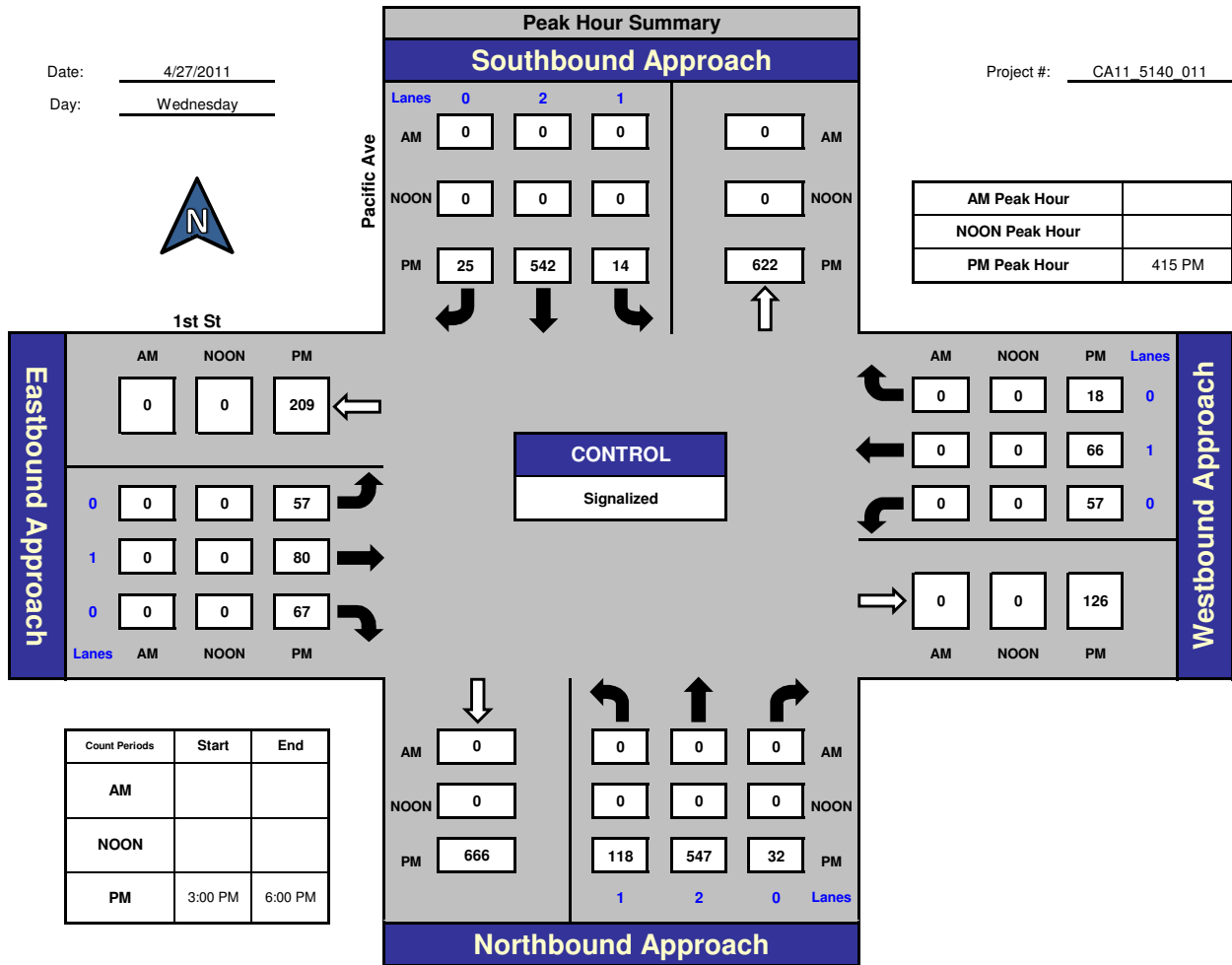


Prepared by:  
National Data & Surveying Services

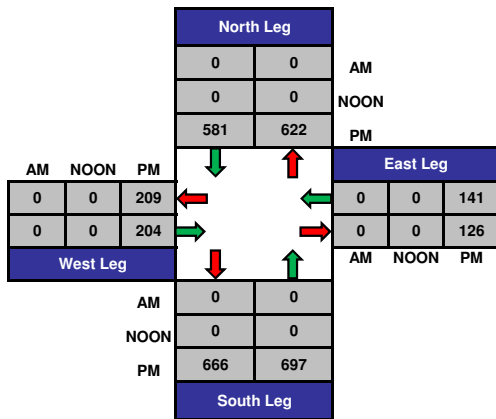
## Pacific Ave and 1st St, City of San Pedro

Date: 4/27/2011  
Day: Wednesday

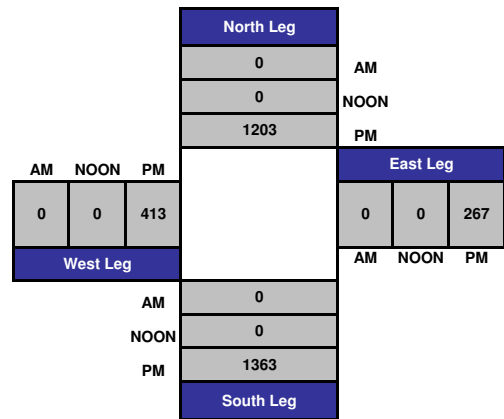
Project #: CA11 5140 011



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_011

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

**NOON**

NS/EW Streets:	Pacific Ave			Pacific Ave			1st St			1st St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	
11:00 AM	29	130	8	4	99	9	2	26	19	10	27	9	372
11:15 AM	39	150	10	6	118	12	9	19	21	12	17	7	420
11:30 AM	31	150	6	4	119	9	12	21	24	26	24	10	436
11:45 AM	25	122	6	1	104	9	14	14	21	9	23	8	356
12:00 PM	28	125	8	6	118	5	7	30	23	11	23	7	391
12:15 PM	25	136	9	4	119	8	11	28	26	17	13	6	402
12:30 PM	38	125	5	3	102	5	11	27	27	7	13	1	364
12:45 PM	31	121	9	3	115	14	7	20	20	11	17	9	377
1:00 PM	35	154	7	11	126	6	5	34	24	8	15	3	428
1:15 PM	20	126	14	2	140	10	9	17	21	9	17	5	390
1:30 PM	30	118	15	3	118	6	11	25	15	10	19	5	375
1:45 PM	35	127	15	5	117	8	9	31	20	13	28	8	416
2:00 PM	43	139	9	7	101	9	14	28	18	4	28	6	406
2:15 PM	34	141	10	3	125	10	11	28	18	9	23	7	419
2:30 PM	36	148	9	6	106	5	6	42	22	11	20	2	413
2:45 PM	32	131	7	4	96	7	11	28	20	9	24	6	375
3:00 PM	47	105	12	7	102	11	11	20	24	17	13	8	377
3:15 PM	44	125	8	4	103	6	6	29	19	7	17	4	372
3:30 PM	25	111	7	12	95	6	15	23	16	13	21	6	350
3:45 PM	31	107	11	2	87	6	8	27	16	10	22	8	335
TOTAL VOLUMES :	658	2591	185	97	2210	161	189	517	414	223	404	125	7774
APPROACH %'s :	19.16%	75.45%	5.39%	3.93%	89.55%	6.52%	16.88%	46.16%	36.96%	29.65%	53.72%	16.62%	
PEAK HR START TIME :	145 PM												TOTAL
PEAK HR VOL :	148	555	43	21	449	32	40	129	78	37	99	23	1654
PEAK HR FACTOR :	0.966			0.909			0.882			0.811			0.987

CONTROL : Signalized

# ITM Peak Hour Summary

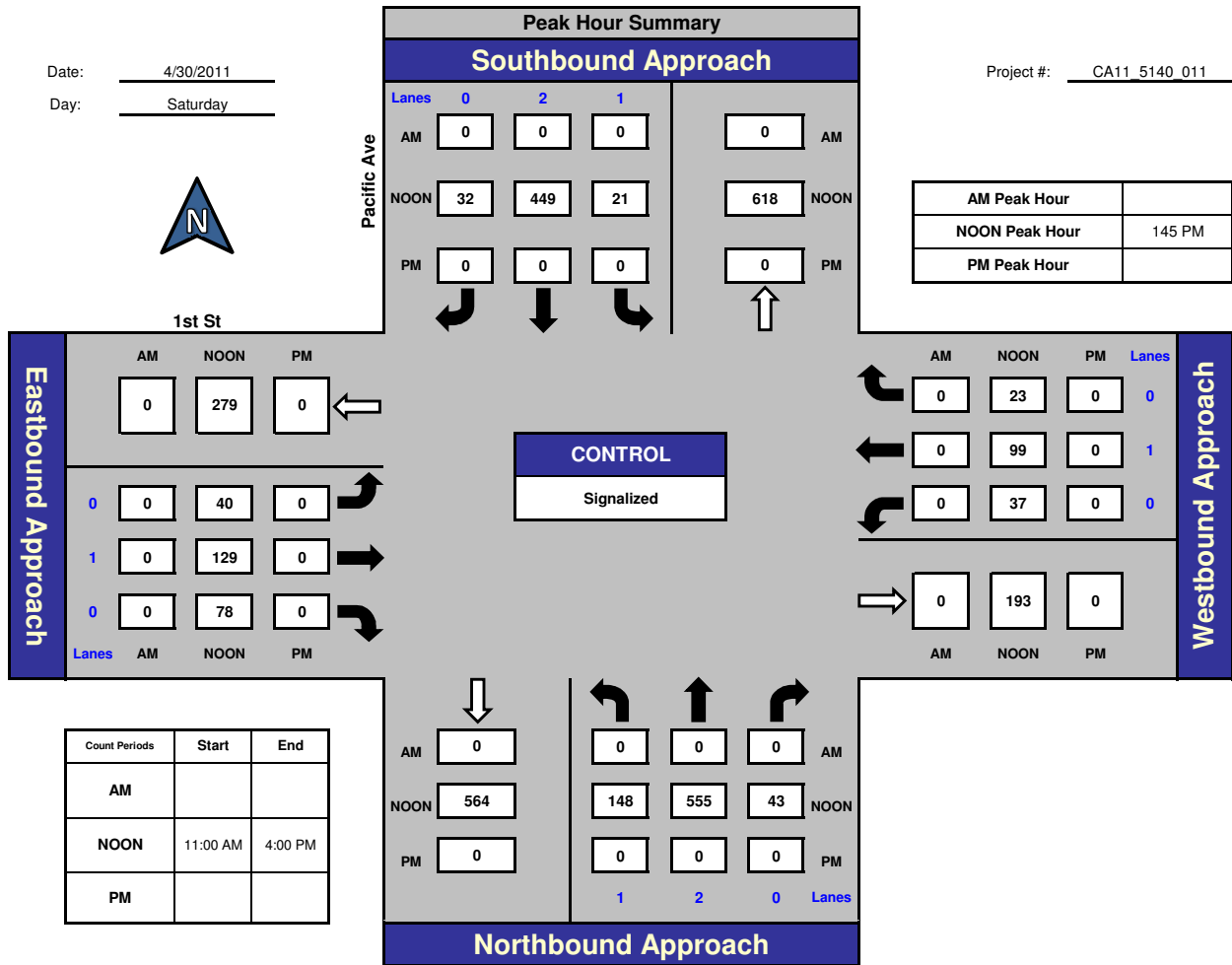


Prepared by:  
National Data & Surveying Services

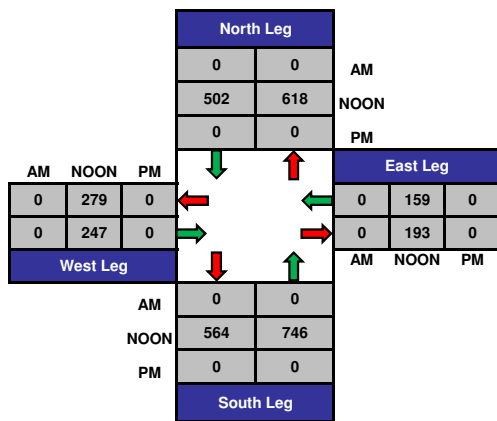
## Pacific Ave and 1st St.

Date: 4/30/2011  
Day: Saturday

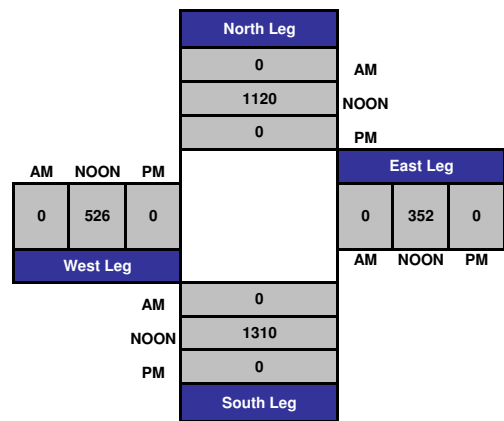
Project #: CA11\_5140\_011



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: CA11\_5140\_012

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Pacific Ave			Pacific Ave			5th St			5th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	0	2	0	0	1	0	0	1	0	
3:00 PM	3	157	11	13	146	7	7	30	10	18	25	14	441
3:15 PM	4	166	15	19	116	5	9	30	13	18	16	19	430
3:30 PM	6	143	17	22	117	4	14	23	9	19	33	16	423
3:45 PM	0	138	11	16	122	7	6	19	15	15	21	10	380
4:00 PM	3	129	13	8	123	6	6	25	7	25	27	15	387
4:15 PM	3	148	10	10	139	6	8	24	9	16	29	16	418
4:30 PM	7	151	11	8	140	10	11	19	9	23	28	11	428
4:45 PM	7	153	17	6	167	5	5	20	13	15	32	13	453
5:00 PM	6	146	13	13	162	7	9	22	14	15	40	24	471
5:15 PM	3	138	12	10	155	6	6	22	7	15	22	18	414
5:30 PM	9	117	12	14	137	5	9	25	8	13	21	14	384
5:45 PM	10	132	20	9	156	4	7	14	11	19	22	16	420
<b>TOTAL VOLUMES :</b>	61	1718	162	148	1680	72	97	273	125	211	316	186	5049
<b>APPROACH %'s :</b>	3.14%	88.51%	8.35%	7.79%	88.42%	3.79%	19.60%	55.15%	25.25%	29.59%	44.32%	26.09%	
<b>PEAK HR START TIME :</b>	415 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	23	598	51	37	608	28	33	85	45	69	129	64	1770
<b>PEAK HR FACTOR :</b>	0.949			0.924			0.906			0.829			0.939

CONTROL : Signalized



# ITM Peak Hour Summary

Prepared by:



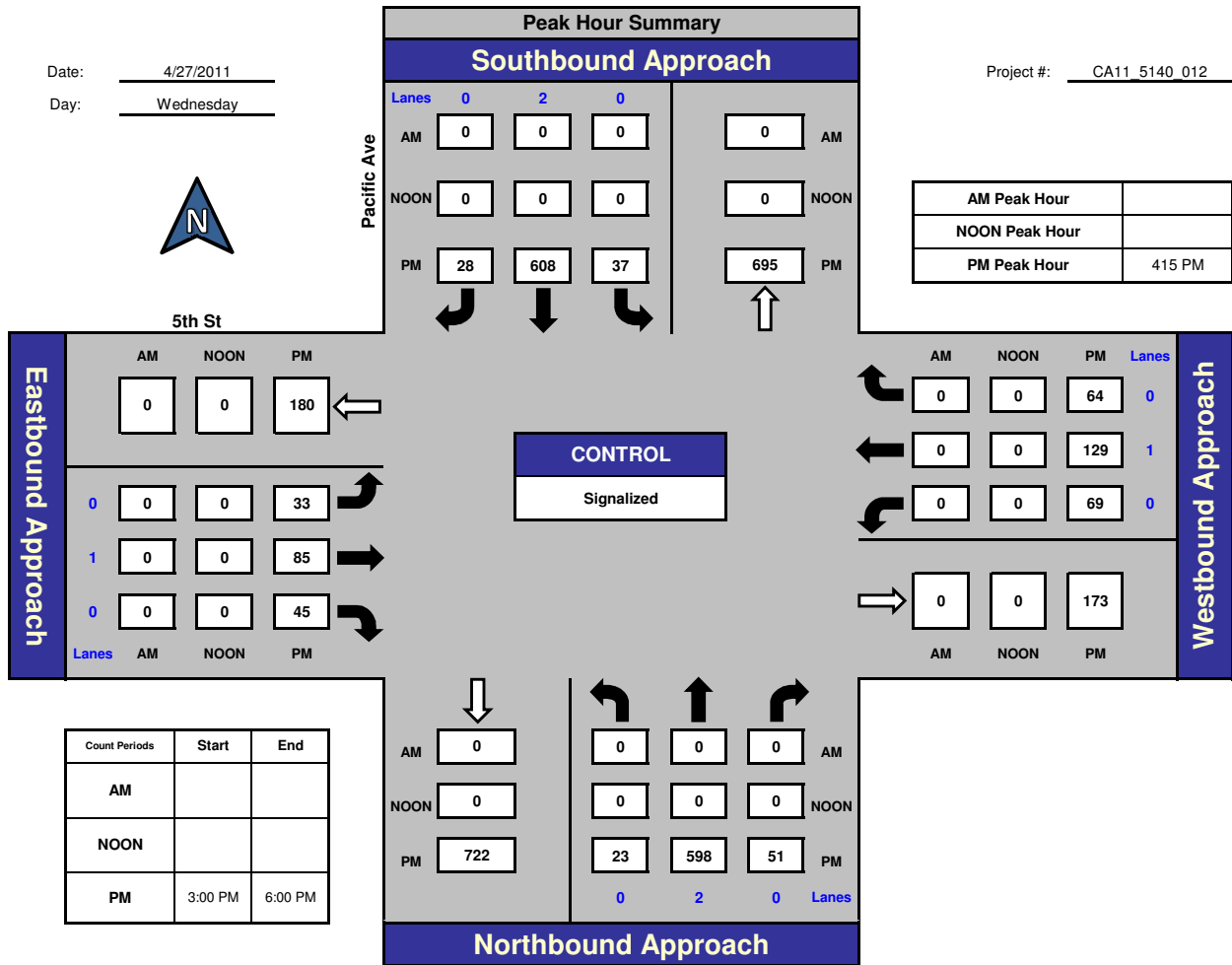
National Data & Surveying Services

## Pacific Ave and 5th St, City of San Pedro

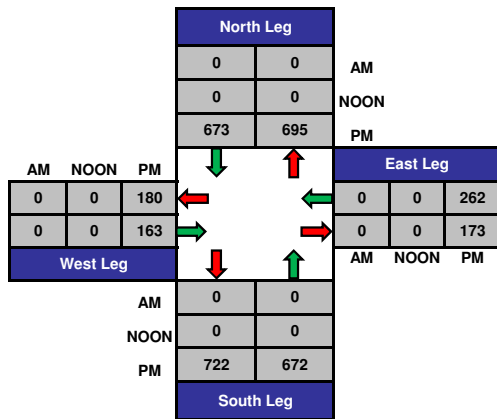
Date: 4/27/2011

Day: Wednesday

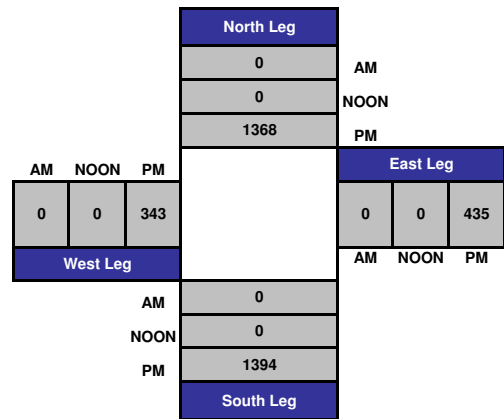
Project #: CA11 5140 012



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_012

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

**NOON**

NS/EW Streets:	Pacific Ave			Pacific Ave			5th St			5th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	0	2	0	0	1	0	0	1	0	
11:00 AM	7	154	14	7	122	5	9	24	12	9	15	12	390
11:15 AM	8	170	13	16	137	6	5	26	8	18	18	14	439
11:30 AM	6	166	15	14	139	7	7	21	6	16	23	16	436
11:45 AM	4	163	15	12	119	6	5	31	18	11	25	14	423
12:00 PM	10	143	13	9	139	11	12	22	15	17	16	10	417
12:15 PM	8	148	11	15	113	8	10	39	15	14	19	17	417
12:30 PM	8	157	7	6	128	6	10	21	7	16	13	16	395
12:45 PM	10	158	12	15	139	3	9	33	13	9	16	19	436
1:00 PM	11	158	9	11	140	10	6	34	9	14	12	16	430
1:15 PM	7	166	12	17	160	5	8	29	11	17	17	17	466
1:30 PM	6	132	11	8	131	5	6	27	17	18	21	21	403
1:45 PM	13	152	17	16	133	6	6	14	6	15	14	22	414
2:00 PM	2	167	13	11	110	8	10	17	8	12	18	24	400
2:15 PM	4	156	13	7	122	6	3	26	11	12	12	12	384
2:30 PM	2	149	6	14	111	3	12	18	9	11	20	18	373
2:45 PM	9	142	6	4	115	6	4	12	3	10	20	13	344
3:00 PM	6	137	7	8	118	4	7	24	3	13	14	7	348
3:15 PM	1	138	8	9	100	3	11	29	9	12	16	17	353
3:30 PM	7	130	11	6	113	5	7	22	3	16	12	9	341
3:45 PM	6	126	13	5	93	7	0	13	4	10	24	8	309
<b>TOTAL VOLUMES :</b>	135	3012	226	210	2482	120	147	482	187	270	345	302	7918
<b>APPROACH %'s :</b>	4.00%	89.30%	6.70%	7.47%	88.26%	4.27%	18.01%	59.07%	22.92%	29.44%	37.62%	32.93%	
<b>PEAK HR START TIME :</b>	1245 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	34	614	44	51	570	23	29	123	50	58	66	73	1735
<b>PEAK HR FACTOR :</b>	0.935			0.885			0.918			0.821			0.931

CONTROL : Signalized

# ITM Peak Hour Summary

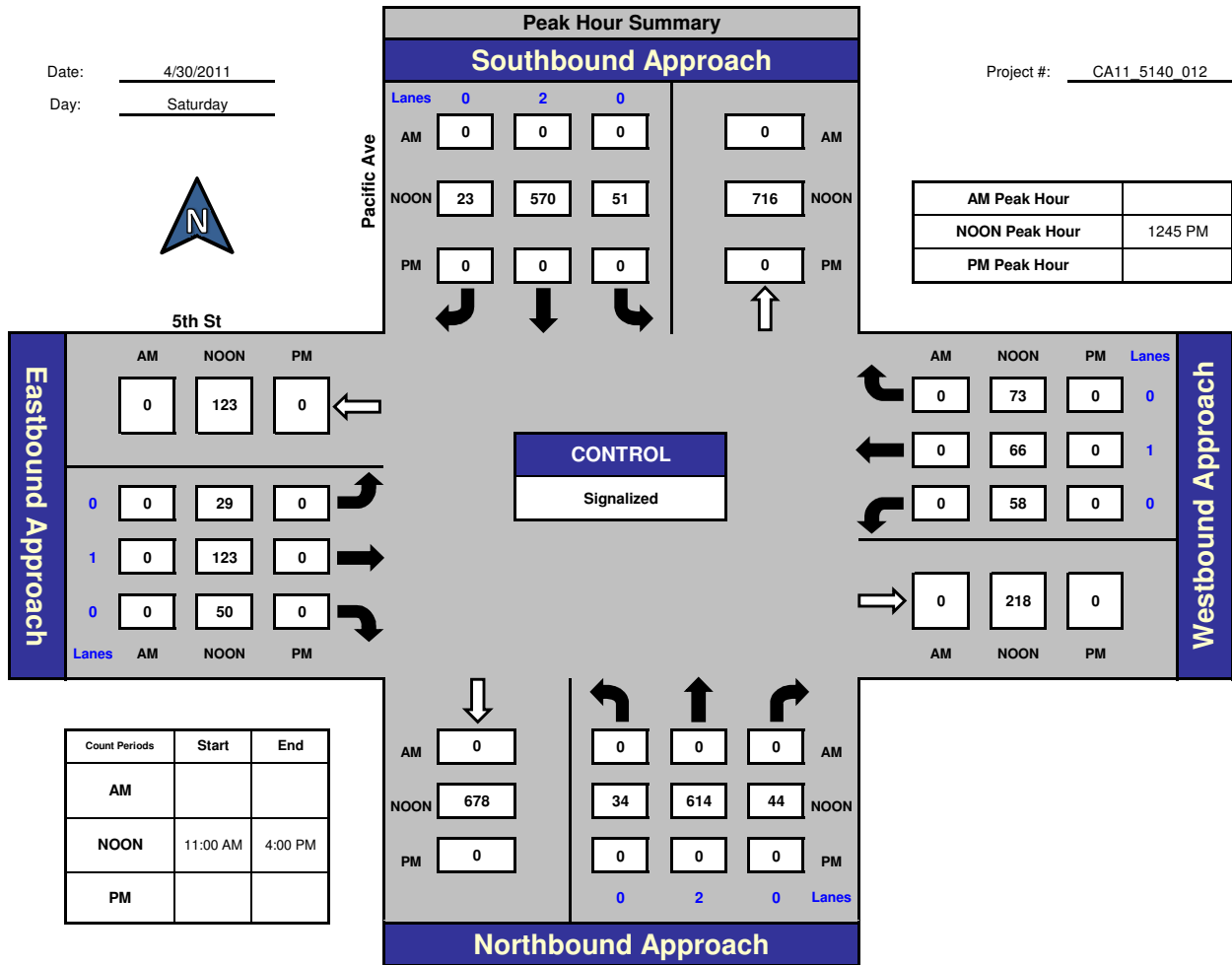


Prepared by:  
National Data & Surveying Services

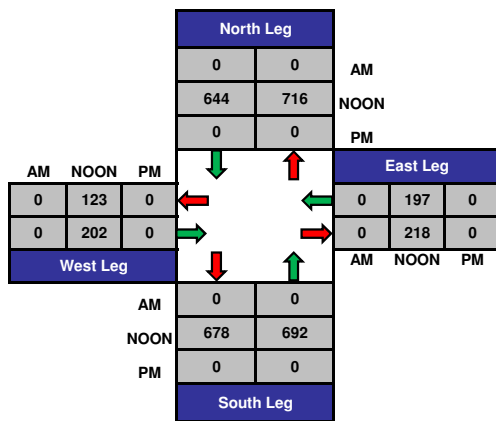
## Pacific Ave and 5th St.

Date: 4/30/2011  
Day: Saturday

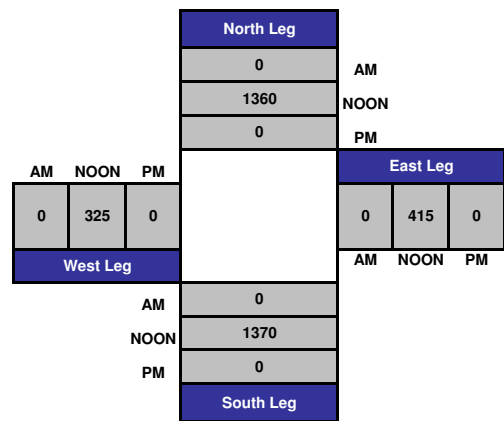
Project #: CA11 5140 012



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: CA11\_5140\_013

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Pacific Ave			Pacific Ave			7th St			7th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	0	2	0	1	1	0	1	1	0	
3:00 PM	11	149	6	9	166	9	7	32	10	16	34	8	457
3:15 PM	13	164	9	5	135	10	16	29	20	10	23	12	446
3:30 PM	7	150	6	3	150	11	17	21	16	8	31	10	430
3:45 PM	6	136	13	3	130	13	12	27	20	14	27	5	406
4:00 PM	7	115	12	13	149	8	14	27	18	19	23	12	417
4:15 PM	6	163	5	5	159	10	18	25	12	14	34	8	459
4:30 PM	9	149	15	5	155	8	15	27	18	12	28	4	445
4:45 PM	7	143	11	8	175	8	5	38	8	12	39	8	462
5:00 PM	8	136	9	5	167	12	10	39	18	16	47	8	475
5:15 PM	10	134	9	5	178	9	12	23	15	8	26	8	437
5:30 PM	8	137	12	1	175	4	11	24	17	20	40	9	458
5:45 PM	10	153	11	12	168	1	5	32	15	23	34	6	470
<b>TOTAL VOLUMES :</b>	102	1729	118	74	1907	103	142	344	187	172	386	98	5362
<b>APPROACH %'s :</b>	5.23%	88.71%	6.05%	3.55%	91.51%	4.94%	21.10%	51.11%	27.79%	26.22%	58.84%	14.94%	
<b>PEAK HR START TIME :</b>	415 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	30	591	40	23	656	38	48	129	56	54	148	28	1841
<b>PEAK HR FACTOR :</b>	0.950			0.938			0.869			0.810			0.969

CONTROL : Signalized

# ITM Peak Hour Summary

Prepared by:



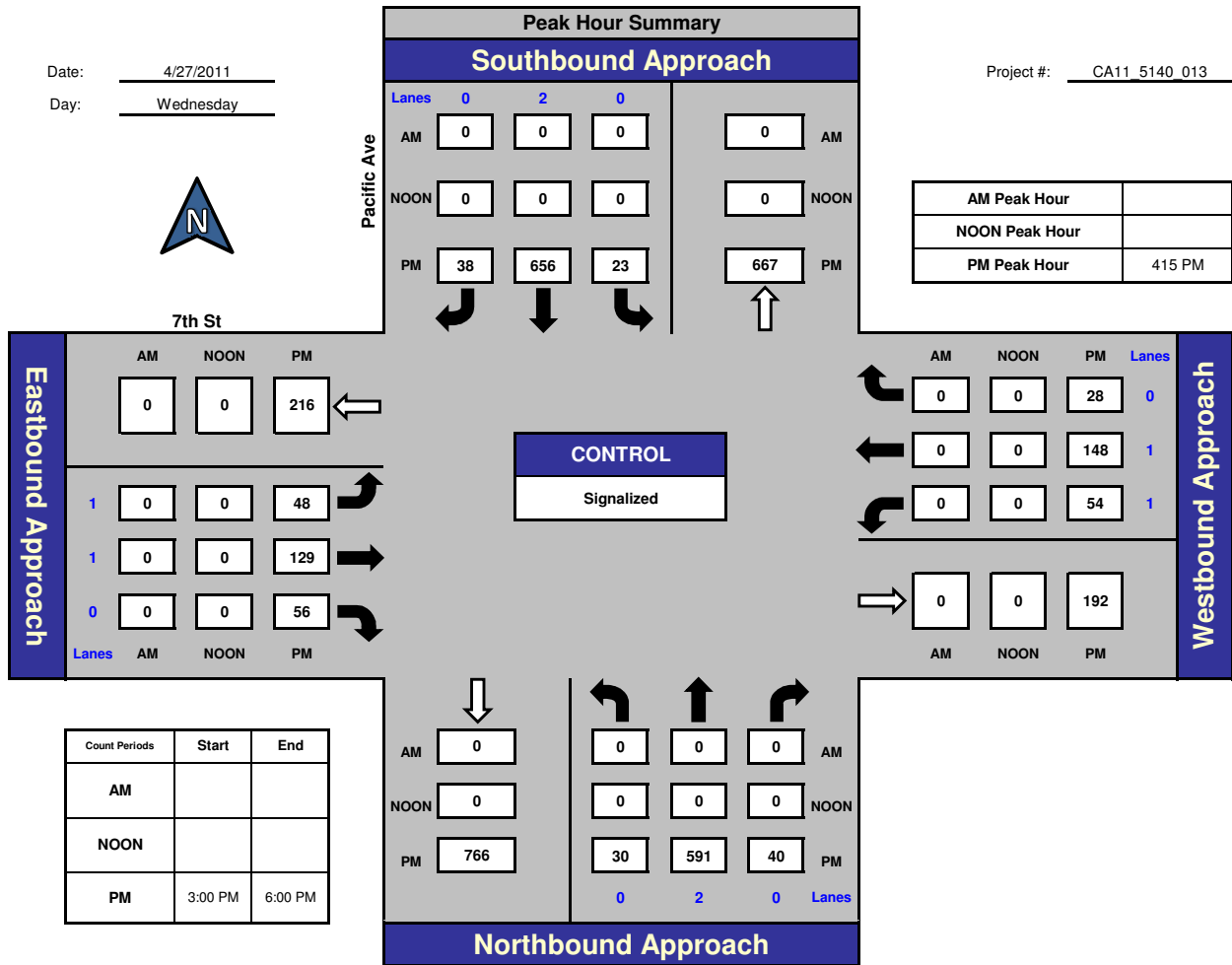
National Data & Surveying Services

## Pacific Ave and 7th St, City of San Pedro

Date: 4/27/2011

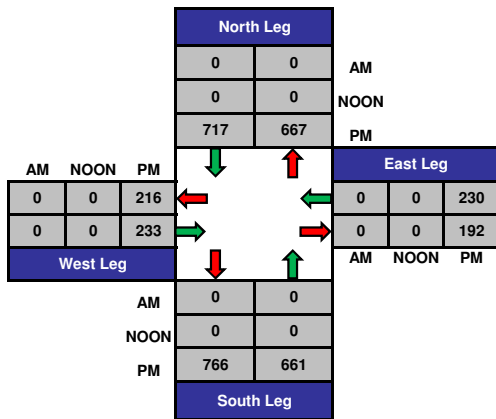
Day: Wednesday

Project #: CA11 5140 013

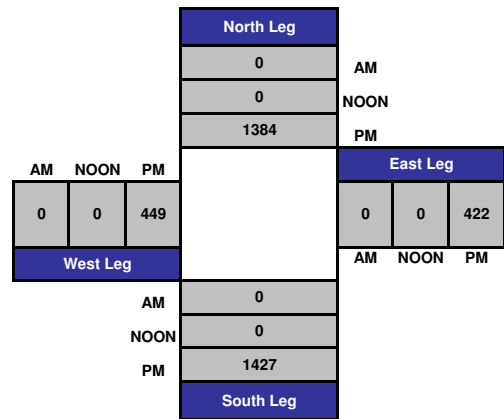


Count Periods	Start	End
AM		
NOON		
PM	3:00 PM	6:00 PM

### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_013

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

**NOON**

NS/EW Streets:	Pacific Ave			Pacific Ave			7th St			7th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	0	2	0	1	1	0	1	1	0	
11:00 AM	7	159	13	5	127	12	13	34	16	9	25	7	427
11:15 AM	8	172	10	2	139	8	12	34	18	7	21	16	447
11:30 AM	11	169	14	11	146	10	13	27	23	5	30	16	475
11:45 AM	11	164	12	7	140	6	14	40	15	16	36	4	465
12:00 PM	8	157	15	8	166	14	10	36	17	9	31	5	476
12:15 PM	6	158	10	4	143	5	11	33	18	10	19	12	429
12:30 PM	6	166	9	9	138	8	10	29	16	7	13	8	419
12:45 PM	7	151	10	5	162	6	18	43	18	7	28	11	466
1:00 PM	12	176	16	8	152	1	5	47	16	10	20	7	470
1:15 PM	11	173	9	8	178	8	14	36	15	10	23	8	493
1:30 PM	11	141	16	10	165	8	10	30	17	15	26	4	453
1:45 PM	3	162	15	7	142	7	11	32	12	16	28	8	443
2:00 PM	8	159	16	4	135	5	7	31	12	9	39	14	439
2:15 PM	10	155	13	8	144	9	11	48	20	21	35	12	486
2:30 PM	10	149	8	5	132	6	9	34	13	15	41	15	437
2:45 PM	11	141	9	4	120	2	11	27	10	15	29	12	391
3:00 PM	11	143	10	2	138	7	6	39	16	10	29	18	429
3:15 PM	4	152	16	3	132	6	10	29	15	7	18	6	398
3:30 PM	1	140	13	3	133	8	5	23	15	9	22	7	379
3:45 PM	6	151	9	3	116	7	11	27	9	9	24	7	379
<b>TOTAL VOLUMES :</b>	162	3138	243	116	2848	143	211	679	311	216	537	197	8801
<b>APPROACH %'s :</b>	4.57%	88.57%	6.86%	3.73%	91.66%	4.60%	17.57%	56.54%	25.90%	22.74%	56.53%	20.74%	
<b>PEAK HR START TIME :</b>	1245 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	41	641	51	31	657	23	47	156	66	42	97	30	1882
<b>PEAK HR FACTOR :</b>	0.898			0.916			0.851			0.918			0.954

CONTROL : Signalized

# ITM Peak Hour Summary

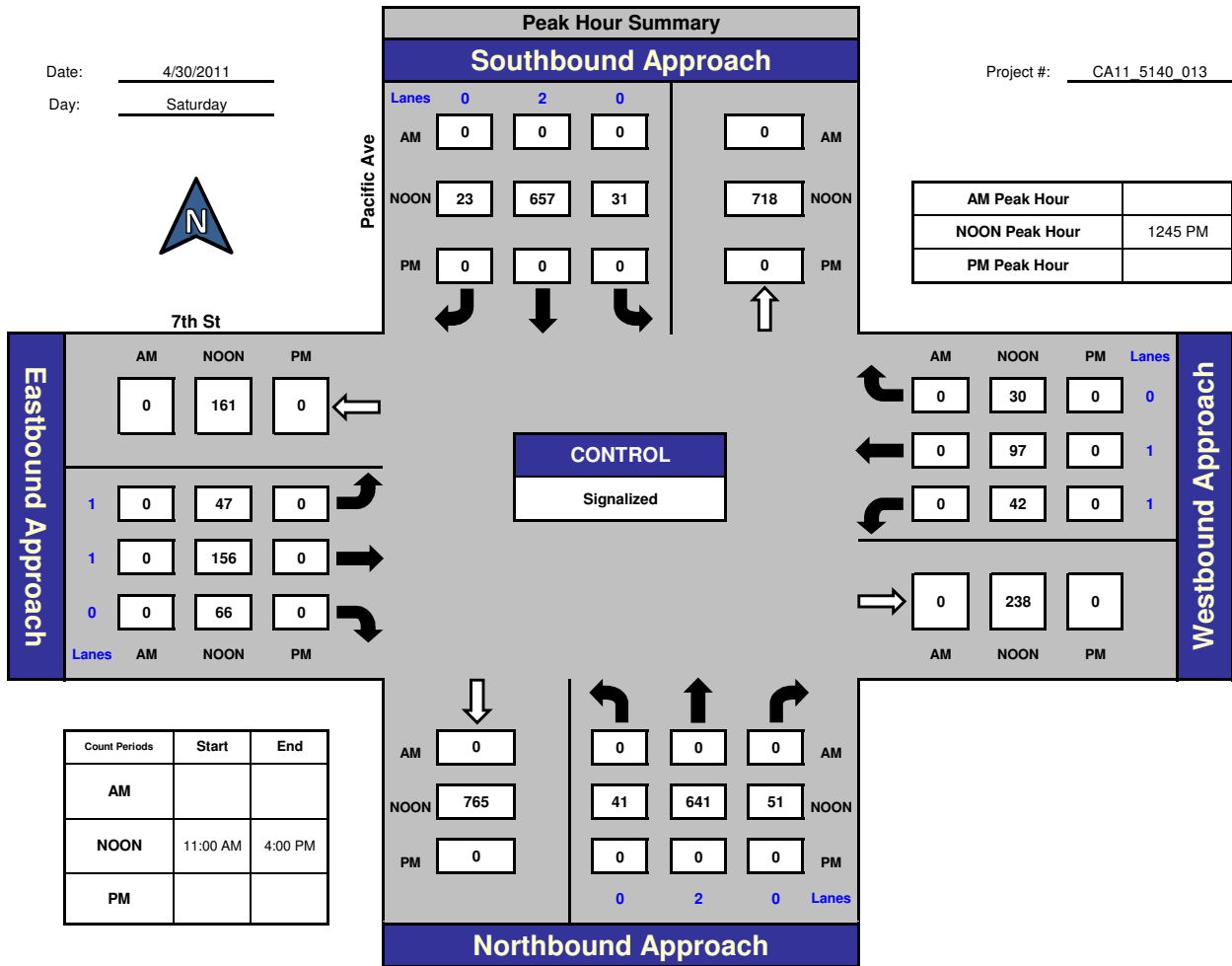


Prepared by:  
National Data & Surveying Services

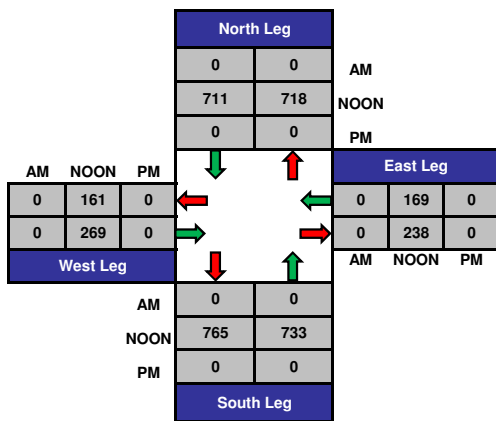
## Pacific Ave and 7th St.

Date: 4/30/2011  
Day: Saturday

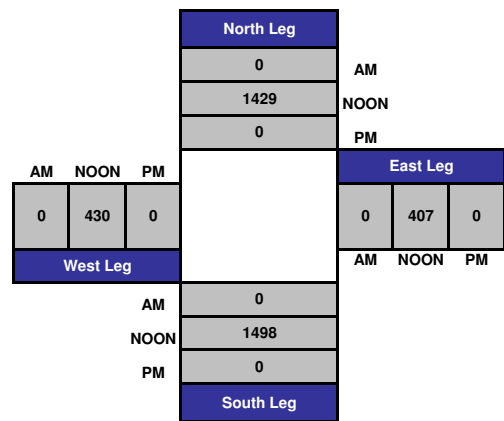
Project #: CA11 5140 013



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

**National Data & Surveying Services**

Project ID: CA11\_5140\_014

Day: WEDNESDAY

City: City of San Pedro

Date: 04/27/2011

PM

NS/EW Streets:	Pacific Ave			Pacific Ave			9th St			9th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	2	0	0	2	0	1	1	0	1	1	0	
3:00 PM	15	141	3	7	150	25	27	25	17	14	36	6	466
3:15 PM	11	147	4	2	144	20	37	29	16	11	29	3	453
3:30 PM	12	134	8	4	148	15	25	37	13	13	24	3	436
3:45 PM	16	116	4	3	145	20	26	25	21	9	29	9	423
4:00 PM	11	129	5	0	163	22	20	40	18	12	26	10	456
4:15 PM	17	138	5	4	143	22	19	35	16	15	28	8	450
4:30 PM	19	137	7	4	155	22	18	31	28	18	38	6	483
4:45 PM	10	144	13	6	156	26	21	36	20	8	30	8	478
5:00 PM	15	129	7	5	179	17	17	38	11	15	25	6	464
5:15 PM	18	134	7	4	176	31	14	30	18	13	28	7	480
5:30 PM	9	122	4	10	168	13	21	36	18	7	28	11	447
5:45 PM	13	138	6	10	178	19	25	36	8	8	29	9	479
<b>TOTAL VOLUMES :</b>	166	1609	73	59	1905	252	270	398	204	143	350	86	5515
<b>APPROACH %'s :</b>	8.98%	87.07%	3.95%	2.66%	85.97%	11.37%	30.96%	45.64%	23.39%	24.70%	60.45%	14.85%	
<b>PEAK HR START TIME :</b>	430 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	62	544	34	19	666	96	70	135	77	54	121	27	1905
<b>PEAK HR FACTOR :</b>	0.958			0.925			0.916			0.815			0.986

CONTROL : Signalized



# ITM Peak Hour Summary

Prepared by:

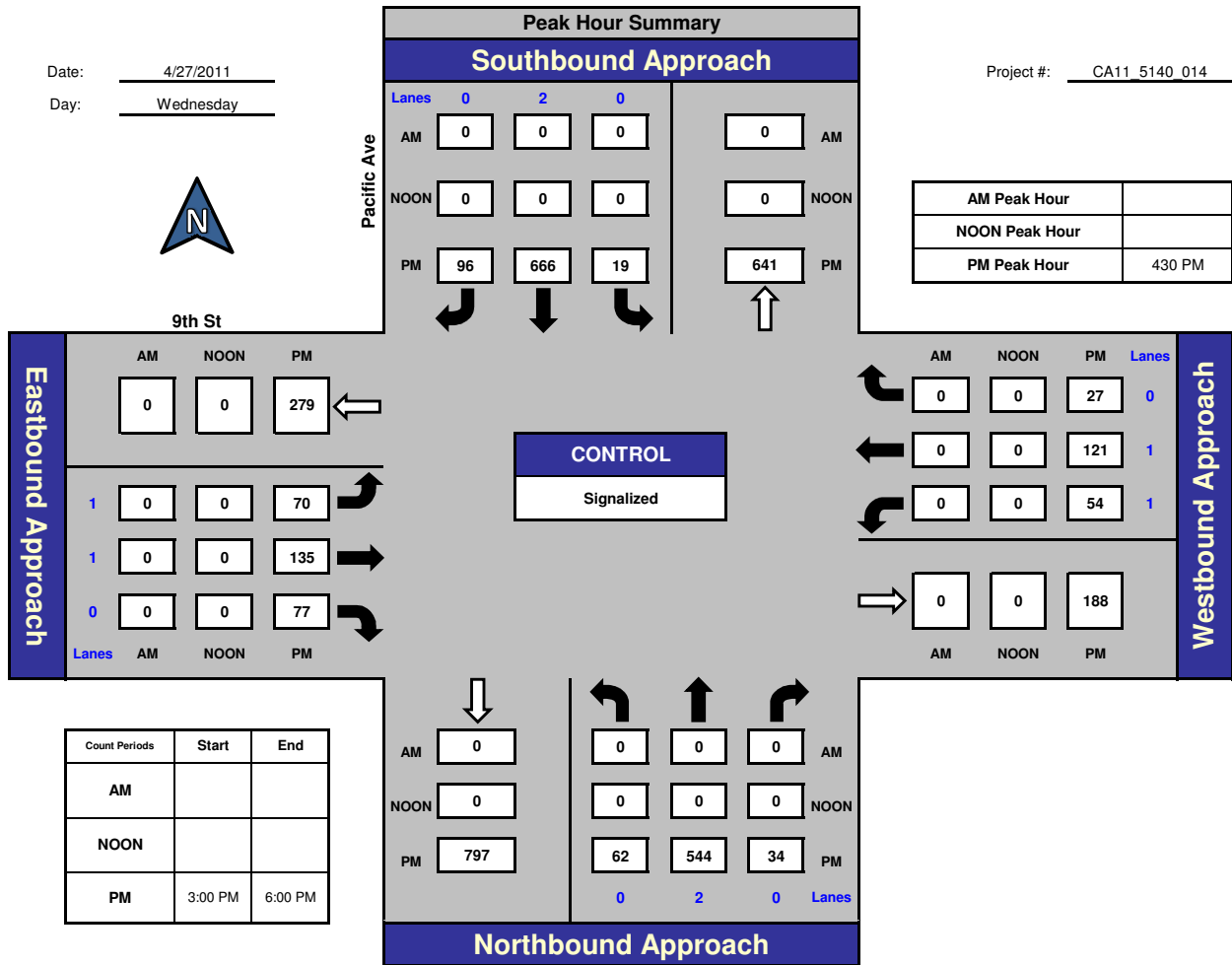


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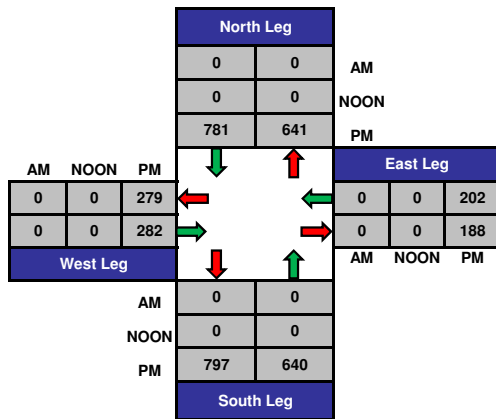
## Pacific Ave and 9th St, City of San Pedro

Date: 4/27/2011  
Day: Wednesday

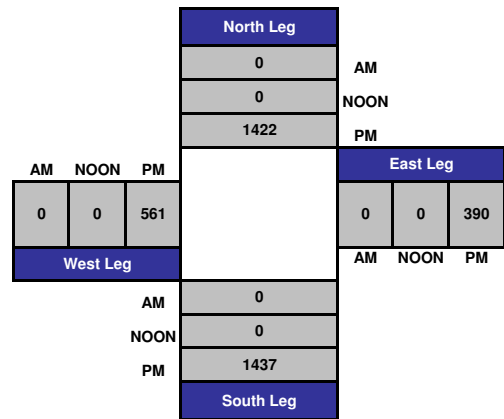
Project #: CA11 5140 014



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

Project ID: CA11\_5140\_014

Day: SATURDAY

City: City of San Pedro

Date: 04/30/2011

NOON

NS/EW Streets:	Pacific Ave			Pacific Ave			9th St			9th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	0	2	0	1	1	0	1	1	0	
11:00 AM	18	148	15	5	138	16	17	27	17	6	19	13	439
11:15 AM	23	143	14	12	129	10	25	35	17	12	36	13	469
11:30 AM	14	172	14	9	128	14	13	26	15	11	23	12	451
11:45 AM	10	150	9	7	126	18	10	25	18	13	32	8	426
12:00 PM	15	147	12	5	132	26	29	26	18	12	24	13	459
12:15 PM	18	146	20	9	127	27	30	26	22	11	25	11	472
12:30 PM	20	143	9	12	148	19	33	28	28	9	21	11	481
12:45 PM	17	134	13	10	162	17	21	31	29	19	22	2	477
1:00 PM	15	153	14	6	142	25	29	24	24	15	19	12	478
1:15 PM	16	157	13	14	158	19	18	24	18	12	22	15	486
1:30 PM	19	144	8	8	158	27	27	32	33	12	22	9	499
1:45 PM	14	147	7	8	136	18	18	31	27	12	30	10	458
2:00 PM	12	134	8	10	127	13	21	30	21	11	26	12	425
2:15 PM	9	133	12	14	131	16	21	27	18	11	43	10	445
2:30 PM	9	140	5	6	113	18	19	22	14	11	20	14	391
2:45 PM	8	124	4	10	123	27	19	20	9	3	27	5	379
3:00 PM	14	138	11	7	130	15	23	23	13	10	25	8	417
3:15 PM	7	151	11	9	142	14	9	21	13	10	20	4	411
3:30 PM	13	110	12	7	124	14	17	27	17	7	18	14	380
3:45 PM	6	134	7	7	127	15	14	24	13	12	33	6	398
<b>TOTAL VOLUMES :</b>	277	2848	218	175	2701	368	413	529	384	219	507	202	8841
<b>APPROACH %'s :</b>	8.29%	85.19%	6.52%	5.39%	83.26%	11.34%	31.15%	39.89%	28.96%	23.60%	54.63%	21.77%	
<b>PEAK HR START TIME :</b>	1245 PM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	67	588	48	38	620	88	95	111	104	58	85	38	1940
<b>PEAK HR FACTOR :</b>	0.945			0.966			0.842			0.923			0.972

CONTROL : Signalized

# ITM Peak Hour Summary

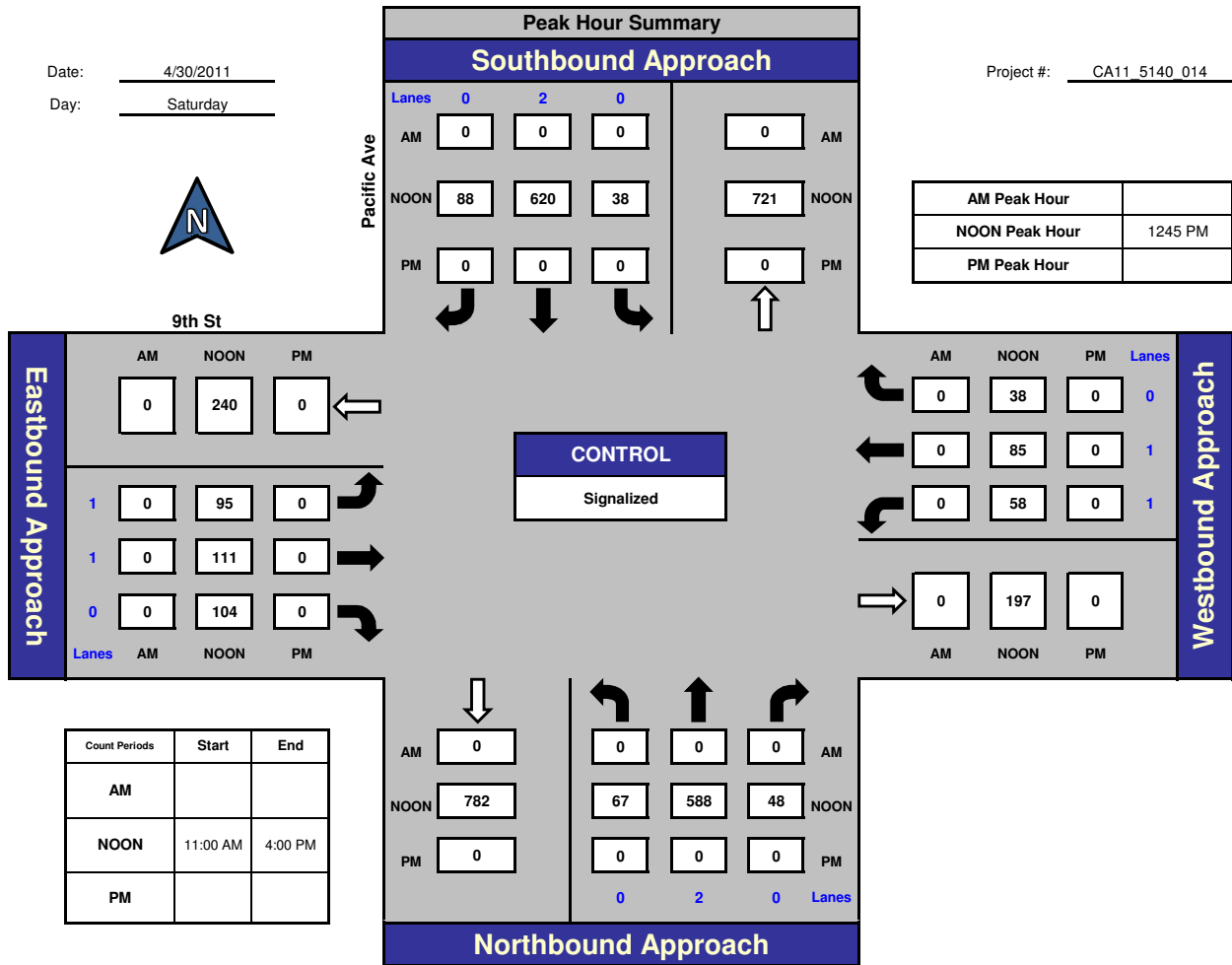


Prepared by:  
National Data & Surveying Services

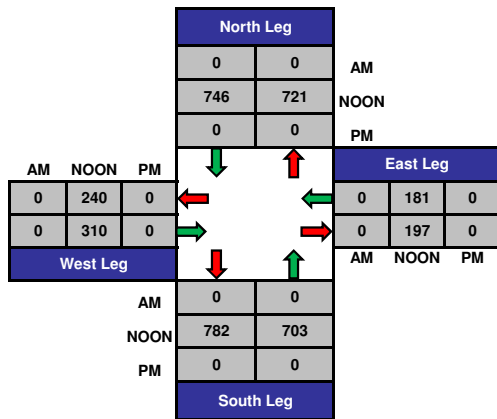
## Pacific Ave and 9th St.

Date: 4/30/2011  
Day: Saturday

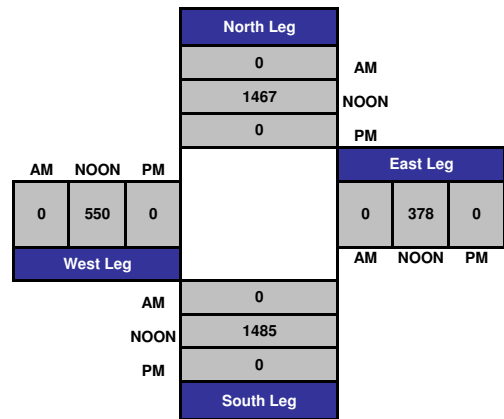
Project #: CA11 5140 014



### Total Ins & Outs



### Total Volume Per Leg



**APPENDIX C:  
LEVEL OF SERVICE WORKSHEETS**

**EXISTING (2011)**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:	Date:
1	East-West Street:	Summerland Av	Projection Year:	2012	Peak Hour:	PM	Reviewed by:	Project:
No. of Phases		3	3		3		3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	0		0		0	
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2	
Override Capacity		0	0		0		0	
		NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0
		EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0			

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street: <b>Gaffey St</b>	Year of Count: <b>2011</b>	Ambient Growth: (%): <b>1</b>	Conducted by:	Date:															
<b>2</b>	East-West Street: <b>I-110 Ramps</b>	Projection Year: <b>2012</b>	Peak Hour: <b>PM</b>	Reviewed by:	Project:															
No. of Phases: <b>2</b> Opposed Ø'ing: N/S-1, E/W-2 or Both-3?: <b>0</b> Right Turns: FREE-1, NRTOR-2 or OLA-3?: NB-- <b>1</b> SB-- <b>0</b> NB-- <b>1</b> SB-- <b>0</b> NB-- <b>1</b> SB-- <b>0</b> NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> ATSAC-1 or ATSAC+ATCS-2?: <b>2</b> Override Capacity: <b>0</b>																				
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	↶ Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Through	765	2	383	2	767	384	1	774	2	387	2	776	2	388	0	776	2	388	
	↷ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Right	1721	2	0	4	1725	0	1	1739	2	0	4	1743	2	0	0	1743	2	0	
	↷ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
↷ Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SOUTHBOUND	↶ Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Through	1100	3	367	1	1101	367	1	1112	3	371	1	1113	3	371	0	1113	3	371	
	↷ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
↷ Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
EASTBOUND	↶ Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
↷ Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
WESTBOUND	↶ Left	1534	2	538	1	1535	539	1	1550	2	544	1	1551	2	544	0	1551	2	544	
	↷ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↷ Right	81	0	538	0	81	539	0	82	0	544	0	82	0	544	0	82	0	544	
	↷ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
↷ Left-Right	1	0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0		
CRITICAL VOLUMES		North-South: 383			North-South: 384			North-South: 387			North-South: 388			North-South: 388			East-West: 544			East-West: 544
		East-West: 538			East-West: 539			East-West: 544			East-West: 544			East-West: 544			SUM: 932			SUM: 932
		SUM: 921			SUM: 923			SUM: 931			SUM: 932			SUM: 932						
VOLUME/CAPACITY (V/C) RATIO:				0.614			0.615			0.621			0.621							
V/C LESS ATSAC/ATCS ADJUSTMENT:				<b>0.514</b>			<b>0.515</b>			<b>0.521</b>			<b>0.521</b>							
LEVEL OF SERVICE (LOS):				<b>A</b>			<b>A</b>			<b>A</b>			<b>A</b>							

### PROJECT IMPACT

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.621**  
 Significant impacted? **NO**                      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
3	East-West Street:	1st St	Projection Year:	2012	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2	2		2		2		2										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	31	1	31	0	31	31	1	32	1	32	0	32	1	32	0	32	1	32
	Left-Through		0						0				0				0		
	Through	1421	2	479	0	1421	479	2	1437	2	485	0	1437	2	485	0	1437	2	485
	Through-Right		1						1				1				1		
	Right	17	0	0	0	17	0	0	17	0	0	0	17	0	0	0	17	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
SOUTHBOUND	Left	88	1	88	2	90	90	0	89	1	89	2	91	1	91	0	91	1	91
	Left-Through		0						0				0				0		
	Through	1726	2	723	0	1726	723	2	1745	2	731	0	1745	2	731	0	1745	2	731
	Through-Right		1						1				1				1		
	Right	444	0	0	0	444	0	0	448	0	0	0	448	0	0	0	448	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
EASTBOUND	Left	771	1	439	0	771	440	0	779	1	444	0	779	1	444	0	779	1	444
	Left-Through		1						1				1				1		
	Through	107	0	439	1	108	440	0	108	0	444	1	109	0	444	0	109	0	444
	Through-Right		0						0				0				0		
	Right	58	1	43	0	58	43	0	59	1	43	0	59	1	43	0	59	1	43
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
WESTBOUND	Left	35	1	35	2	37	37	0	35	1	35	2	37	1	37	0	37	1	37
	Left-Through		0						0				0				0		
	Through	125	1	125	3	128	128	0	126	1	126	3	129	1	129	0	129	1	129
	Through-Right		0						0				0				0		
	Right	147	1	103	6	153	108	0	148	1	104	6	154	1	109	0	154	1	109
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
CRITICAL VOLUMES		North-South: 754 East-West: 564 SUM: 1318	North-South: 754 East-West: 568 SUM: 1322	North-South: 763 East-West: 570 SUM: 1333	North-South: 763 East-West: 573 SUM: 1336	North-South: 763 East-West: 573 SUM: 1336	North-South: 763 East-West: 573 SUM: 1336	North-South: 763 East-West: 573 SUM: 1336	North-South: 763 East-West: 573 SUM: 1336	North-South: 763 East-West: 573 SUM: 1336									
VOLUME/CAPACITY (V/C) RATIO:		0.925	0.928	0.935	0.938	0.938	0.938	0.938	0.938	0.938									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.825	0.828	0.835	0.838	0.838	0.838	0.838	0.838	0.838									
LEVEL OF SERVICE (LOS):		D	D	D	D	D	D	D	D	D									

**PROJECT IMPACT**

Change in v/c due to project: **0.003**      Δv/c after mitigation: **0.003**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2011</b>		Ambient Growth: (%):	<b>1</b>		Conducted by:			Date:						
<b>4</b>	East-West Street:	<b>5th St</b>		Projection Year:	<b>2012</b>		Peak Hour:	<b>PM</b>		Reviewed by:			Project:						
No. of Phases		3		3		3		3		3		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	23	1	23	0	23	23	0	23	1	23	0	23	1	23	0	23	1	23
	Left-Through		0							0				0				0	
	Through	1363	1	696	0	1363	696	3	1380	1	705	0	1380	1	705	0	1380	1	705
	Through-Right		1							1				1				1	
	Right	29	0	0	0	29	0	0	29	0	0	0	29	0	0	0	29	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	70	1	70	0	70	70	0	71	1	71	0	71	1	71	0	71	1	71
	Left-Through		0							0				0				0	
	Through	1339	1	706	2	1341	707	2	1354	1	714	2	1356	1	715	0	1356	1	715
	Through-Right		1							1				1				1	
	Right	73	0	0	0	73	0	0	74	0	0	0	74	0	0	0	74	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	112	1	112	0	112	112	0	113	1	113	0	113	1	113	0	113	1	113
	Left-Through		0							0				0				0	
	Through	105	0	123	0	105	123	0	106	0	124	0	106	0	124	0	106	0	124
	Through-Right		1							1				1				1	
	Right	18	0	0	0	18	0	0	18	0	0	0	18	0	0	0	18	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	49	1	49	0	49	49	0	49	1	49	0	49	1	49	0	49	1	49
	Left-Through		0							0				0				0	
	Through	93	0	168	0	93	168	0	94	0	170	0	94	0	170	0	94	0	170
	Through-Right		1							1				1				1	
	Right	75	0	0	0	75	0	0	76	0	0	0	76	0	0	0	76	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South: 766		North-South: 766		North-South: 776		North-South: 776		North-South: 776		North-South: 776		North-South: 776		North-South: 776		North-South: 776	
		East-West: 280		East-West: 280		East-West: 283		East-West: 283		East-West: 283		East-West: 283		East-West: 283		East-West: 283		East-West: 283	
		SUM: 1046		SUM: 1046		SUM: 1059		SUM: 1059		SUM: 1059		SUM: 1059		SUM: 1059		SUM: 1059		SUM: 1059	
VOLUME/CAPACITY (V/C) RATIO:		0.734		0.734		0.743		0.743		0.743		0.743		0.743		0.743		0.743	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.634		0.634		0.643		0.643		0.643		0.643		0.643		0.643		-0.100	
LEVEL OF SERVICE (LOS):		B		B		B		B		B		B		B		B		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.743**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
5	East-West Street:	7th St	Projection Year:	2012	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	24	1	24	0	24	24	1	25	1	25	0	25	1	25	0	25	1	25
	Left-Through		0						0				0				0		
	Through	1158	1	599	0	1158	599	3	1173	1	607	0	1173	1	607	0	1173	1	607
	Through-Right		1						1				1				1		
	Right	40	0	0	0	40	0	0	40	0	0	0	40	0	0	0	40	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
SOUTHBOUND	Left	72	1	72	0	72	72	0	73	1	73	0	73	1	73	0	73	1	73
	Left-Through		0						0				0				0		
	Through	1176	1	636	2	1178	637	2	1190	1	643	2	1192	1	644	0	1192	1	644
	Through-Right		1						1				1				1		
	Right	95	0	0	0	95	0	0	96	0	0	0	96	0	0	0	96	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
EASTBOUND	Left	159	1	159	0	159	159	0	161	1	161	0	161	1	161	0	161	1	161
	Left-Through		0						0				0				0		
	Through	143	0	170	0	143	170	0	144	0	171	0	144	0	171	0	144	0	171
	Through-Right		1						1				1				1		
	Right	27	0	0	0	27	0	0	27	0	0	0	27	0	0	0	27	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
WESTBOUND	Left	60	1	60	0	60	60	0	61	1	61	0	61	1	61	0	61	1	61
	Left-Through		0						0				0				0		
	Through	137	0	209	0	137	209	0	138	0	211	0	138	0	211	0	138	0	211
	Through-Right		1						1				1				1		
	Right	72	0	0	0	72	0	0	73	0	0	0	73	0	0	0	73	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
CRITICAL VOLUMES		North-South: 671 East-West: 368 SUM: 1039	North-South: 671 East-West: 368 SUM: 1039		North-South: 680 East-West: 372 SUM: 1052				North-South: 680 East-West: 372 SUM: 1052				North-South: 680 East-West: 372 SUM: 1052						
VOLUME/CAPACITY (V/C) RATIO:		0.693	0.693		0.701				0.701				0.701						
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.593	0.593		0.601				0.601				-0.100						
LEVEL OF SERVICE (LOS):		A	A		B				B				A						

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.701**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
6	East-West Street:	9th St	Projection Year:	2012	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	58	1	58	0	58	58	0	59	1	59	0	59	1	59	0	59	1	59
	Left-Through		0							0				0				0	
	Through	989	1	516	0	989	516	4	1003	1	523	0	1003	1	523	0	1003	1	523
	Through-Right		1							1				1				1	
	Right	43	0	0	0	43	0	0	43	0	0	0	43	0	0	0	43	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	72	1	72	0	72	72	0	73	1	73	0	73	1	73	0	73	1	73
	Left-Through		0							0				0				0	
	Through	1035	1	568	0	1035	569	2	1047	1	575	0	1047	1	575	0	1047	1	575
	Through-Right		1							1				1				1	
	Right	101	0	0	1	102	0	0	102	0	0	1	103	0	0	0	103	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	168	1	168	0	168	168	0	170	1	170	0	170	1	170	0	170	1	170
	Left-Through		0							0				0				0	
	Through	223	1	223	0	223	223	1	226	1	226	0	226	1	226	0	226	1	226
	Through-Right		0							0				0				0	
	Right	51	1	22	0	51	22	0	52	1	23	0	52	1	23	0	52	1	23
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	63	1	63	0	63	63	0	64	1	64	0	64	1	64	0	64	1	64
	Left-Through		0							0				0				0	
	Through	200	0	273	1	201	274	1	203	0	277	1	204	0	278	0	204	0	278
	Through-Right		1							1				1				1	
	Right	73	0	0	0	73	0	0	74	0	0	0	74	0	0	0	74	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 626 East-West: 441 SUM: 1067	North-South: 627 East-West: 442 SUM: 1069		North-South: 634 East-West: 447 SUM: 1081				North-South: 634 East-West: 448 SUM: 1082				North-South: 634 East-West: 448 SUM: 1082						
VOLUME/CAPACITY (V/C) RATIO:		0.711	0.713		0.721				0.721				0.721						
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.611	0.613		0.621				0.621				-0.100						
LEVEL OF SERVICE (LOS):		B	B		B				B				A						

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.721**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #: <b>7</b>	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2011</b>		Ambient Growth: (%):	<b>1</b>		Conducted by:			Date:						
	East-West Street:	<b>22nd St</b>		Projection Year:	<b>2012</b>		Peak Hour:	<b>PM</b>		Reviewed by:			Project:						
No. of Phases				<b>2</b>				<b>2</b>				<b>2</b>		<b>0</b>					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				<b>0</b>				<b>0</b>				<b>0</b>		<b>0</b>					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- <b>0</b> SB-- <b>0</b>		NB-- <b>0</b> SB-- <b>0</b>		NB-- <b>0</b> SB-- <b>0</b>		NB-- <b>0</b> SB-- <b>0</b>		NB-- <b>0</b> SB-- <b>0</b>		NB-- <b>0</b> SB-- <b>0</b>		NB-- <b>0</b> SB-- <b>0</b>					
		EB-- <b>0</b> WB-- <b>0</b>		EB-- <b>0</b> WB-- <b>0</b>		EB-- <b>0</b> WB-- <b>0</b>		EB-- <b>0</b> WB-- <b>0</b>		EB-- <b>0</b> WB-- <b>0</b>		EB-- <b>0</b> WB-- <b>0</b>		EB-- <b>0</b> WB-- <b>0</b>					
ATSAC-1 or ATSAC+ATCS-2?				<b>2</b>				<b>2</b>				<b>2</b>		<b>2</b>					
Override Capacity				<b>0</b>				<b>0</b>				<b>0</b>		<b>0</b>					
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	4	0	4	0	4	4	0	4	0	4	0	4	0	4	0	4	4	
	Left-Through		1						1				1				1		
	Through	445	0	255	0	445	256	0	449	0	259	0	449	0	259	0	449	0	259
	Through-Right		1						1				1				1		
	Right	57	0	255	1	58	256	2	60	0	259	1	61	0	259	0	61	0	259
Left-Through-Right		0						0				0				0			
Left-Right		0						0				0				0			
SOUTHBOUND	Left	101	0	101	0	101	101	2	104	0	104	0	104	0	104	0	104	0	104
	Left-Through		1						1				1				1		
	Through	546	0	379	0	546	379	0	551	0	384	0	551	0	384	0	551	0	384
	Through-Right		1						1				1				1		
	Right	9	0	379	0	9	379	0	9	0	384	0	9	0	384	0	9	0	384
Left-Through-Right		0						0				0				0			
Left-Right		0						0				0				0			
EASTBOUND	Left	10	0	10	0	10	10	0	10	0	10	0	10	0	10	0	10	0	10
	Left-Through		0						0				0				0		
	Through	29	0	40	1	30	41	1	30	0	41	1	31	0	42	0	31	0	42
	Through-Right		0						0				0				0		
	Right	1	0	0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0
Left-Through-Right		1						1				1				1			
Left-Right		0						0				0				0			
WESTBOUND	Left	155	0	155	3	158	158	4	161	0	161	3	164	0	164	0	164	0	164
	Left-Through		0						0				0				0		
	Through	33	0	257	0	33	260	2	35	0	270	0	35	0	273	0	35	0	273
	Through-Right		0						0				0				0		
	Right	69	0	0	0	69	0	4	74	0	0	0	74	0	0	0	74	0	0
Left-Through-Right		1						1				1				1			
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 383		North-South: 383		North-South: 388		North-South: 388		North-South: 388		North-South: 388		North-South: 388		North-South: 388			
		East-West: 267		East-West: 270		East-West: 280		East-West: 280		East-West: 283		East-West: 283		East-West: 283		East-West: 283			
		SUM: 650		SUM: 653		SUM: 668		SUM: 668		SUM: 671		SUM: 671		SUM: 671		SUM: 671			
VOLUME/CAPACITY (V/C) RATIO:		0.433		0.435		0.445		0.445		0.447		0.447		0.447		0.447			
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.333		0.335		0.345		0.345		0.347		0.347		0.347		-0.100			
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A			

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.445**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2011</b>		Ambient Growth: (%):	<b>1</b>		Conducted by:			Date:							
<b>8</b>	East-West Street:	<b>25th St</b>		Projection Year:	<b>2012</b>		Peak Hour:	<b>PM</b>		Reviewed by:			Project:							
No. of Phases		3		3		3		3		3		0		0						
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0						
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0						
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2						
Override Capacity		0		0		0		0		0		0		0						
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	67	1	67	0	67	67	0	68	1	68	0	68	1	68	0	68	1	68	
	Left-Through		0							0				0				0		
	Through	202	0	202	0	202	202	1	205	0	205	0	205	0	205	0	205	0	205	
	Through-Right		1							1				1				1		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0		0
Left-Right		0							0				0				0		0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0							0				0				0		
	Through	235	1	235	0	235	235	1	238	1	238	0	238	1	238	0	238	1	238	
	Through-Right		0							0				0				0		
	Right	335	1	183	3	338	186	2	340	1	186	3	343	1	189	0	343	1	189	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
EASTBOUND	Left	304	1	304	1	305	305	1	308	1	308	1	309	1	309	0	309	1	309	
	Left-Through		0							0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0		
	Right	98	1	31	0	98	31	0	99	1	31	0	99	1	31	0	99	1	31	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0							0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right		0							0				0				0		
Left-Right		1							1				1				1			
CRITICAL VOLUMES		North-South:	302	East-West:	304	SUM:	606	North-South:	302	East-West:	305	SUM:	607	North-South:	306	East-West:	309	SUM:	615	
VOLUME/CAPACITY (V/C) RATIO:		0.425		0.426		0.431		0.432		0.432		-0.100								
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.325		0.326		0.331		0.332		-0.100										
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A		

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.431**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Via Cabrillo Marina	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
9	East-West Street:	22nd St	Projection Year:	2012	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 3 SB-- 0 EB-- 0 WB-- 0	NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	102	2	56	0	102	56	0	103	2	57	0	103	2	57	0	103	2	57
	Left-Through		0	0		0	0		0	0	0		0	0	0		0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0	0		0	0		0	0	0		0	0	0		0	0	0
	Right	105	1	41	0	105	41	0	106	1	41	0	106	1	41	0	106	1	41
	Left-Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
	Left-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0	0		0	0		0	0		0	0	0		0	0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
	Left-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0	0		0	0		0	0		0	0	0		0	0	0	0
	Through	203	1	137	1	204	137	6	211	1	141	1	212	1	142	0	212	1	142
	Through-Right		1	0		0	0		0	1	0		0	1	0		0	1	0
	Right	70	0	0	0	70	0	0	71	0	0	0	71	0	0	0	71	0	0
	Left-Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
	Left-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
WESTBOUND	Left	64	1	64	0	64	64	0	65	1	65	0	65	1	65	0	65	1	65
	Left-Through		0	0		0	0		0	0		0	0	0		0	0	0	0
	Through	290	2	145	3	293	147	12	305	2	153	3	308	2	154	0	308	2	154
	Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
	Left-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
CRITICAL VOLUMES		North-South: 56 East-West: 201 SUM: 257	North-South: 56 East-West: 201 SUM: 257	North-South: 56 East-West: 201 SUM: 257	North-South: 57 East-West: 206 SUM: 263	North-South: 57 East-West: 207 SUM: 264	North-South: 57 East-West: 207 SUM: 264	North-South: 57 East-West: 207 SUM: 264	North-South: 57 East-West: 207 SUM: 264										
VOLUME/CAPACITY (V/C) RATIO:		0.180	0.180	0.180	0.185	0.185	0.185	0.185	0.185										
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.080	0.080	0.080	0.085	0.085	0.085	0.085	-0.100										
LEVEL OF SERVICE (LOS):		A	A	A	A	A	A	A	A										

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.185**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Harbor Bl</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>1</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>12</b>	<b>East-West Street:</b>	<b>O'Farrell St</b>	<b>Projection Year:</b>	<b>2012</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		0	0		0		0		0										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	10	1	10	0	10	10	0	10	1	10	0	10	1	10	0	10	1	10
	Left-Through		0						0				0				0		
	Through	980	2	490	69	1049	525	14	1004	2	502	69	1073	2	537	0	1073	2	537
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0						0				0				0		
	Through	1221	2	611	20	1241	621	7	1240	2	620	20	1260	2	630	0	1260	2	630
	Through-Right		0						0				0				0		
	Right	8	1	8	0	8	8	0	8	1	8	0	8	1	8	0	8	1	8
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	101	0	101	0	101	101	0	102	0	102	0	102	0	102	0	102	0	102
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0						0				0				0		
	Right	18	0	119	0	18	119	0	18	0	120	0	18	0	120	0	18	0	120
	Left-Through-Right		0						0				0				0		
Left-Right		1						1				1				1			
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 621 East-West: 119 SUM: 740	North-South: 631 East-West: 119 SUM: 750	North-South: 630 East-West: 120 SUM: 750	North-South: 640 East-West: 120 SUM: 760	North-South: 640 East-West: 120 SUM: 760													
VOLUME/CAPACITY (V/C) RATIO:		0.493	0.500	0.500	0.507	0.507													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.493	0.500	0.500	0.507	0.000													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.007**      Δv/c after mitigation: **-0.500**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street: <b>Harbor Bl</b>	Year of Count: <b>2011</b>	Ambient Growth: (%): <b>1</b>	Conducted by:	Date:														
<b>13</b>	East-West Street: <b>1st St</b>	Projection Year: <b>2012</b>	Peak Hour: <b>PM</b>	Reviewed by:	Project:														
No. of Phases: <b>2</b> Opposed Ø'ing: N/S-1, E/W-2 or Both-3? <b>0</b> Right Turns: FREE-1, NRTOR-2 or OLA-3? <b>0</b> ATCS-1 or ATCS+ATCS-2? <b>2</b> Override Capacity <b>0</b>		NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>														
<b>MOVEMENT</b>		<b>EXISTING CONDITION</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	Left	9	1	9	0	9	9	0	9	1	9	0	9	1	9	0	9	1	9
	Left-Through		0							0				0				0	
	Through	927	1	464	0	927	465	14	950	1	476	0	950	1	476	0	950	1	476
	Through-Right		1							1				1				1	
	Right	1	0	0	1	2	0	0	1	0	0	1	2	0	0	0	2	0	0
<b>SOUTHBOUND</b>	Left	7	1	7	20	27	27	0	7	1	7	20	27	1	27	0	27	1	27
	Left-Through		0							0				0				0	
	Through	1191	2	596	0	1191	596	7	1210	2	605	0	1210	2	605	0	1210	2	605
	Through-Right		0							0				0				0	
	Right	46	1	11	0	46	11	0	46	1	10	0	46	1	10	0	46	1	10
<b>EASTBOUND</b>	Left	71	1	71	0	71	71	0	72	1	72	0	72	1	72	0	72	1	72
	Left-Through		0							0				0				0	
	Through	0	0	16	4	4	20	0	0	0	16	4	4	0	20	0	4	0	20
	Through-Right		1							1				1				1	
	Right	16	0	0	0	16	0	0	16	0	0	0	16	0	0	0	16	0	0
<b>WESTBOUND</b>	Left	0	0	0	3	3	3	0	0	0	0	3	3	0	3	0	3	0	3
	Left-Through		0							0				0				0	
	Through	0	0	0	13	13	85	0	0	0	0	13	13	0	85	0	13	0	85
	Through-Right		0							0				0				0	
	Right	0	0	0	69	69	0	0	0	0	0	69	69	0	0	0	69	0	0
<b>CRITICAL VOLUMES</b>		North-South: 605 East-West: 71 SUM: 676	North-South: 605 East-West: 156 SUM: 761	North-South: 614 East-West: 72 SUM: 686	North-South: 614 East-West: 157 SUM: 771														
<b>VOLUME/CAPACITY (V/C) RATIO:</b>		0.451	0.507	0.499	0.561														
<b>V/C LESS ATCS/ATCS ADJUSTMENT:</b>		<b>0.351</b>	<b>0.407</b>	<b>0.399</b>	<b>-0.100</b>														
<b>LEVEL OF SERVICE (LOS):</b>		<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>														

### PROJECT IMPACT

Change in v/c due to project: **0.062**      Δv/c after mitigation: **-0.499**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl		Year of Count:	2011		Ambient Growth: (%):	1		Conducted by:			Date:						
15	East-West Street:	5th St		Projection Year:	2012		Peak Hour:	PM		Reviewed by:			Project:						
No. of Phases		2		2		3		3		0		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	26	1	26	0	26	26	0	26	1	26	0	26	1	26	0	26	1	26
	Left-Through		0							0				0				0	
	Through	628	1	316	1	629	316	14	648	1	326	1	649	1	326	0	649	1	326
	Through-Right		1							1				1				1	
	Right	3	0	0	0	3	0	0	3	0	0	0	3	0	0	0	3	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	1018	1	568	3	1021	569	7	1035	1	577	3	1038	1	578	0	1038	1	578
	Through-Right		1							1				1				1	
	Right	117	0	0	0	117	0	0	118	0	0	0	118	0	0	0	118	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	285	1	285	0	285	285	0	288	1	288	0	288	1	288	0	288	1	288
	Left-Through		0							0				0				0	
	Through	6	1	6	0	6	6	0	6	1	6	0	6	1	6	0	6	1	6
	Through-Right		0							0				0				0	
	Right	17	1	4	0	17	4	0	17	1	4	0	17	1	4	0	17	1	4
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	4	1	4	0	4	4	0	4	1	4	0	4	1	4	0	4	1	4
	Left-Through		0							0				0				0	
	Through	6	0	18	0	6	18	0	6	0	18	0	6	0	18	0	6	0	18
	Through-Right		1							1				1				1	
	Right	30	1	0	0	30	0	0	30	1	0	0	30	1	0	0	30	1	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 594		North-South: 595		North-South: 603		North-South: 604		North-South: 604		North-South: 604		North-South: 604		North-South: 604		North-South: 604	
		East-West: 303		East-West: 303		East-West: 306		East-West: 306		East-West: 306		East-West: 306		East-West: 306		East-West: 306		East-West: 306	
		SUM: 897		SUM: 898		SUM: 909		SUM: 910		SUM: 910		SUM: 910		SUM: 910		SUM: 910		SUM: 910	
VOLUME/CAPACITY (V/C) RATIO:		0.598		0.599		0.638		0.639		0.639		0.639		0.639		0.639		0.639	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.498		0.499		0.538		0.539		0.539		0.539		0.539		0.539		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.638**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl		Year of Count:	2011		Ambient Growth: (%):	1		Conducted by:			Date:						
16	East-West Street:	6th St		Projection Year:	2012		Peak Hour:	PM		Reviewed by:			Project:						
No. of Phases		3		3		4		4		4		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		2		2		2		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	7	1	7	0	7	7	0	7	1	7	0	7	1	7	0	7	1	7
	Left-Through		0							0				0				0	
	Through	533	1	292	1	534	292	14	552	1	301	1	553	1	302	0	553	1	302
	Through-Right		1							1				1				1	
	Right	50	0	0	0	50	0	0	51	0	0	0	51	0	0	0	51	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	97	1	97	0	97	97	0	98	1	98	0	98	1	98	0	98	1	98
	Left-Through		0							0				0				0	
	Through	890	1	472	3	893	474	7	906	1	481	3	909	1	482	0	909	1	482
	Through-Right		1							1				1				1	
	Right	54	0	0	0	54	0	0	55	0	0	0	55	0	0	0	55	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	29	1	29	0	29	29	0	29	1	29	0	29	1	29	0	29	1	29
	Left-Through		0							0				0				0	
	Through	22	0	28	0	22	28	0	22	0	28	0	22	0	28	0	22	0	28
	Through-Right		1							1				1				1	
	Right	6	0	0	0	6	0	0	6	0	0	0	6	0	0	0	6	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	20	1	20	0	20	20	0	20	1	20	0	20	1	20	0	20	1	20
	Left-Through		0							0				0				0	
	Through	37	1	37	0	37	37	0	37	1	37	0	37	1	37	0	37	1	37
	Through-Right		0							0				0				0	
	Right	115	2	15	0	115	15	0	116	2	15	0	116	2	15	0	116	2	15
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South: 479		North-South: 481		North-South: 488		North-South: 489		North-South: 489		North-South: 489		North-South: 489		North-South: 489		North-South: 489	
		East-West: 66		East-West: 66		East-West: 66		East-West: 66		East-West: 66		East-West: 66		East-West: 66		East-West: 66		East-West: 66	
		SUM: 545		SUM: 547		SUM: 554		SUM: 554		SUM: 555		SUM: 555		SUM: 555		SUM: 555		SUM: 555	
VOLUME/CAPACITY (V/C) RATIO:		0.382		0.384		0.403		0.404		0.404		0.404		0.404		0.404		0.404	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.282		0.284		0.303		0.304		0.304		0.304		0.304		0.304		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.403**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl		Year of Count:	2011		Ambient Growth: (%):	1		Conducted by:			Date:						
	East-West Street:	7th St		Projection Year:	2012		Peak Hour:	PM		Reviewed by:			Project:						
No. of Phases		2		2		2		2		2		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 3	NB-- 0	SB-- 3	NB-- 0	SB-- 3	NB-- 0	SB-- 3	NB-- 0	SB-- 3	NB-- 0	SB-- 3	NB-- 0	SB-- 3				
		EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0				
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	12	1	12	0	12	12	0	12	1	12	12	0	12	1	12	12	0	12
	Left-Through		0							0					0				0
	Through	361	2	181	1	362	181	14	379	2	190	190	1	380	2	190	190	0	380
	Through-Right		0							0					0				0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0					0				0
	Left-Right		0							0					0				0
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0					0				0
	Through	642	2	321	3	645	323	7	655	2	328	328	3	658	2	329	329	0	658
	Through-Right		0							0					0				0
	Right	275	1	154	0	275	154	0	278	1	156	156	0	278	1	156	156	0	278
	Left-Through-Right		0							0					0				0
	Left-Right		0							0					0				0
EASTBOUND	Left	230	1	121	0	230	121	0	232	1	122	122	0	232	1	122	122	0	232
	Left-Through		0							0					0				0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0					0				0
	Right	12	0	121	0	12	121	121	0	12	0	122	122	0	12	0	122	122	0
	Left-Through-Right		0							0					0				0
	Left-Right		1							1					1				1
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0					0				0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0					0				0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0					0				0
	Left-Right		0							0					0				0
CRITICAL VOLUMES		North-South:	333	North-South:	335	North-South:	340	North-South:	341	North-South:	341	North-South:	341	North-South:	341	North-South:	341	North-South:	341
		East-West:	121	East-West:	121	East-West:	122	East-West:	122	East-West:	122	East-West:	122	East-West:	122	East-West:	122	East-West:	122
		SUM:	454	SUM:	456	SUM:	462	SUM:	463	SUM:	463	SUM:	463	SUM:	463	SUM:	463	SUM:	463
VOLUME/CAPACITY (V/C) RATIO:		0.303		0.304		0.308		0.309		0.309		0.309		0.309		0.309		0.309	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.203		0.204		0.208		0.208		0.208		0.209		0.209		0.209		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.308**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Miner St</b>	Year of Count:	<b>2011</b>	Ambient Growth: (%):	<b>1</b>	Conducted by:		Date:												
	East-West Street:	<b>22nd St</b>	Projection Year:	<b>2012</b>	Peak Hour:	<b>PM</b>	Reviewed by:		Project:												
No. of Phases		3	No. of Lanes		3	No. of Phases		3	No. of Lanes		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	Right Turns: FREE-1, NRTOR-2 or OLA-3?		0										
ATSAC-1 or ATSAC+ATCS-2?		0	ATSAC-1 or ATSAC+ATCS-2?		0	ATSAC-1 or ATSAC+ATCS-2?		0	ATSAC-1 or ATSAC+ATCS-2?		0										
Override Capacity		0	Override Capacity		0	Override Capacity		0	Override Capacity		0										
<b>MOVEMENT</b>		<b>EXISTING CONDITION</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
<b>NORTHBOUND</b>	Left	8	1	8	0	8	8	0	8	1	8	0	8	1	8	0	8	1	8		
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through	24	1	13	0	24	13	0	24	1	13	0	24	1	13	0	24	1	13		
	Through-Right	0	1	0	0	1	0	0	1	1	0	0	0	1	1	0	0	1	1	0	
	Right	2	0	0	0	2	0	0	2	0	0	0	2	0	0	0	2	0	0	0	
<b>SOUTHBOUND</b>	Left	23	1	23	0	23	23	0	23	1	23	0	23	1	23	0	23	1	23		
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through	19	1	19	0	19	19	0	19	1	19	0	19	1	19	0	19	1	19		
	Through-Right	0	1	0	0	1	0	0	1	1	0	0	0	1	1	0	0	1	1	0	
	Right	279	0	177	3	282	180	0	282	0	179	3	285	0	182	0	285	0	182	182	
<b>EASTBOUND</b>	Left	204	1	204	1	205	205	0	206	1	206	1	207	1	207	0	207	1	207		
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through	36	1	22	0	36	22	0	36	1	22	0	36	1	22	0	36	1	22		
	Through-Right	0	1	0	0	1	0	0	1	1	0	0	0	1	1	0	0	1	1	0	
	Right	8	0	0	0	8	0	0	8	0	0	0	8	0	0	0	8	0	0	0	
<b>WESTBOUND</b>	Left	3	1	3	0	3	3	0	3	1	3	0	3	1	3	0	3	1	3		
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through	48	1	40	0	48	40	0	48	1	40	0	48	1	40	0	48	1	40		
	Through-Right	0	1	0	0	1	0	0	1	1	0	0	0	1	1	0	0	1	1	0	
	Right	31	0	0	0	31	0	0	31	0	0	0	31	0	0	0	31	0	0	0	
<b>CRITICAL VOLUMES</b>		North-South:	185	North-South:	188	North-South:	187	North-South:	190	North-South:	190	East-West:	244	East-West:	245	East-West:	246	East-West:	247	East-West:	247
		East-West:	244	East-West:	245	East-West:	246	East-West:	247	East-West:	247	SUM:	429	SUM:	433	SUM:	433	SUM:	437	SUM:	437
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			0.301		0.304		0.304		0.304		0.307		0.307		0.307		0.307		0.307		0.307
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			<b>0.301</b>		<b>0.304</b>		<b>0.304</b>		<b>0.304</b>		<b>0.304</b>		<b>0.307</b>		<b>0.307</b>		<b>0.307</b>		<b>0.307</b>		<b>0.000</b>
<b>LEVEL OF SERVICE (LOS):</b>			<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>

### PROJECT IMPACT

Change in v/c due to project: **0.003**      Δv/c after mitigation: **-0.304**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Pacific Ave</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>1</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>20</b>	<b>East-West Street:</b>	<b>Front St</b>	<b>Projection Year:</b>	<b>2012</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 3	NB-- 0 SB-- 0 EB-- 0 WB-- 3		NB-- 0 SB-- 0 EB-- 0 WB-- 3		NB-- 0 SB-- 0 EB-- 0 WB-- 3		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	494	1	270	1	495	270	1	500	1	273	1	501	1	273	0	501	1	273
	Through-Right		1						1				1				1		
	Right	45	0	0	0	45	0	0	45	0	0	0	45	0	0	0	45	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	164	1	164	0	164	164	1	167	1	167	0	167	1	167	0	167	1	167
	Left-Through		0					0				0		0			0		
	Through	624	2	312	0	624	312	0	630	2	315	0	630	2	315	0	630	2	315
	Through-Right		0						0			0		0			0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0					0				0		0			0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	10	1	10	0	10	10	0	10	1	10	0	10	1	10	0	10	1	10
	Left-Through		0					0				0		0			0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	193	2	0	1	194	0	2	197	2	0	1	198	2	0	0	198	2	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES	North-South:	434	North-South:	434	North-South:	440	North-South:	440	North-South:	440	North-South:	440	North-South:	440	North-South:	440	North-South:	440	
	East-West:	10	East-West:	10	East-West:	10	East-West:	10	East-West:	10	East-West:	10	East-West:	10	East-West:	10	East-West:	10	
	SUM:	444	SUM:	444	SUM:	450	SUM:	450	SUM:	450	SUM:	450	SUM:	450	SUM:	450	SUM:	450	
VOLUME/CAPACITY (V/C) RATIO:		0.312		0.312		0.316		0.316		0.316		0.316		0.316		0.316		0.316	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.212		0.212		0.216		0.216		0.216		0.216		0.216		0.216		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.316**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
21	East-West Street:	1st St	Projection Year:	2012	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	118	1	118	0	118	118	0	119	1	119	0	119	1	119	0	119	1	119
	Left-Through		0						0				0				0		
	Through	547	1	290	0	547	290	1	553	1	293	0	553	1	293	0	553	1	293
	Through-Right		1						1				1				1		
	Right	32	0	0	0	32	0	0	32	0	0	0	32	0	0	0	32	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
SOUTHBOUND	Left	14	1	14	0	14	14	0	14	1	14	0	14	1	14	0	14	1	14
	Left-Through		0						0				0				0		
	Through	542	1	284	0	542	284	0	547	1	286	0	547	1	286	0	547	1	286
	Through-Right		1						1				1				1		
	Right	25	0	0	0	25	0	0	25	0	0	0	25	0	0	0	25	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
EASTBOUND	Left	57	0	57	0	57	57	0	58	0	58	0	58	0	58	0	58	0	58
	Left-Through		0						0				0				0		
	Through	80	0	204	3	83	207	0	81	0	207	3	84	0	210	0	84	0	210
	Through-Right		0						0				0				0		
	Right	67	0	0	0	67	0	0	68	0	0	0	68	0	0	0	68	0	0
	Left-Through-Right		1					1				1				1			
	Left-Right		0					0				0				0			
WESTBOUND	Left	57	0	57	2	59	59	0	58	0	58	2	60	0	60	0	60	0	60
	Left-Through		0						0				0				0		
	Through	66	0	141	11	77	155	0	67	0	143	11	78	0	157	0	78	0	157
	Through-Right		0						0				0				0		
	Right	18	0	0	1	19	0	0	18	0	0	1	19	0	0	0	19	0	0
	Left-Through-Right		1					1				1				1			
	Left-Right		0					0				0				0			
CRITICAL VOLUMES		North-South: 402 East-West: 261 SUM: 663	North-South: 402 East-West: 266 SUM: 668	North-South: 405 East-West: 265 SUM: 670	North-South: 405 East-West: 270 SUM: 675	North-South: 405 East-West: 270 SUM: 675	North-South: 405 East-West: 270 SUM: 675	North-South: 405 East-West: 270 SUM: 675	North-South: 405 East-West: 270 SUM: 675	North-South: 405 East-West: 270 SUM: 675									
VOLUME/CAPACITY (V/C) RATIO:		0.442	0.442	0.447	0.450	0.450	0.450	0.450	0.450	0.450									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.342	0.345	0.347	0.350	0.350	0.350	0.350	0.350	-0.100									
LEVEL OF SERVICE (LOS):		A	A	A	A	A	A	A	A	A									

**PROJECT IMPACT**

Change in v/c due to project: **0.003**      Δv/c after mitigation: **-0.447**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Pacific Ave</b>		<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>1</b>	<b>Conducted by:</b>		<b>Date:</b>									
<b>22</b>	<b>East-West Street:</b>	<b>5th St</b>		<b>Projection Year:</b>	<b>2012</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>									
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity		2 0 0 0 2 0	2 0 0 0 2 0	2 0 0 0 2 0	2 0 0 0 2 0	2 0 0 0 2 0	2 0 0 0 2 0	2 0 0 0 2 0	2 0 0 0 2 0	2 0 0 0 2 0	2 0 0 0 2 0								
<b>MOVEMENT</b>		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	↶ Left	23	0	23	0	23	23	0	23	0	23	0	23	0	23	0	23	0	23
	↶ Left-Through		1							1				1			1		
	→ Through	598	0	371	0	598	371	1	605	0	375	0	605	0	375	0	605	0	375
	↷ Through-Right		1							1				1			1		
	→ Right	51	0	371	0	51	371	0	52	0	375	0	52	0	375	0	52	0	375
	↶ Left-Through-Right		0							0				0			0		
	↷ Left-Right		0							0				0			0		
<b>SOUTHBOUND</b>	↷ Left	37	0	37	0	37	37	0	37	0	37	0	37	0	37	0	37	0	37
	↷ Left-Through		1							1				1			1		
	→ Through	608	0	392	2	610	393	0	614	0	395	2	616	0	396	0	616	0	396
	↷ Through-Right		1							1				1			1		
	→ Right	28	0	392	0	28	393	0	28	0	395	0	28	0	396	0	28	0	396
	↷ Left-Through-Right		0							0				0			0		
	↷ Left-Right		0							0				0			0		
<b>EASTBOUND</b>	↶ Left	33	1	33	0	33	33	0	33	1	33	0	33	1	33	0	33	1	33
	↶ Left-Through		0							0				0			0		
	→ Through	85	0	130	0	85	130	0	86	0	131	0	86	0	131	0	86	0	131
	↷ Through-Right		1							1				1			1		
	→ Right	45	0	0	0	45	0	0	45	0	0	0	45	0	0	0	45	0	0
	↶ Left-Through-Right		0							0				0			0		
	↷ Left-Right		0							0				0			0		
<b>WESTBOUND</b>	↷ Left	69	1	69	0	69	69	0	70	1	70	0	70	1	70	0	70	1	70
	↷ Left-Through		0							0				0			0		
	→ Through	129	0	193	0	129	193	0	130	0	195	0	130	0	195	0	130	0	195
	↷ Through-Right		1							1				1			1		
	→ Right	64	0	0	0	64	0	0	65	0	0	0	65	0	0	0	65	0	0
	↷ Left-Through-Right		0							0				0			0		
	↷ Left-Right		0							0				0			0		
<b>CRITICAL VOLUMES</b>		<i>North-South:</i>	415	<i>North-South:</i>	416	<i>North-South:</i>	418	<i>North-South:</i>	419	<i>North-South:</i>	419	<i>North-South:</i>	419	<i>North-South:</i>	419	<i>North-South:</i>	419	<i>North-South:</i>	419
		<i>East-West:</i>	226	<i>East-West:</i>	226	<i>East-West:</i>	228	<i>East-West:</i>	228	<i>East-West:</i>	228	<i>East-West:</i>	228	<i>East-West:</i>	228	<i>East-West:</i>	228	<i>East-West:</i>	228
		<i>SUM:</i>	641	<i>SUM:</i>	642	<i>SUM:</i>	646	<i>SUM:</i>	646	<i>SUM:</i>	647	<i>SUM:</i>	647	<i>SUM:</i>	647	<i>SUM:</i>	647	<i>SUM:</i>	647
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			0.427		0.428		0.431		0.431		0.431		0.431		0.431		0.431		0.431
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			<b>0.327</b>		<b>0.328</b>		<b>0.331</b>		<b>0.331</b>		<b>0.331</b>		<b>0.331</b>		<b>0.331</b>		<b>0.331</b>		<b>-0.100</b>
<b>LEVEL OF SERVICE (LOS):</b>			<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>

### PROJECT IMPACT

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.431**  
 Significant impacted? **NO**                      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
23	East-West Street:	7th St	Projection Year:	2012	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	30	0	30	0	30	30	0	30	0	30	0	30	0	30	0	30	0	30
	Left-Through		1						1			1			1		1		
	Through	591	0	376	0	591	376	1	598	0	379	0	598	0	379	0	598	0	379
	Through-Right		1						1			1			1		1		
	Right	40	0	376	0	40	376	0	40	0	379	0	40	0	379	0	40	0	379
	Left-Through-Right		0						0			0			0		0		
	Left-Right		0						0			0			0		0		
SOUTHBOUND	Left	23	0	23	0	23	23	0	23	0	23	0	23	0	23	0	23	0	23
	Left-Through		1						1			1			1		1		
	Through	656	0	393	2	658	394	0	663	0	397	2	665	0	398	0	665	0	398
	Through-Right		1						1			1			1		1		
	Right	38	0	393	0	38	394	0	38	0	397	0	38	0	398	0	38	0	398
	Left-Through-Right		0						0			0			0		0		
	Left-Right		0						0			0			0		0		
EASTBOUND	Left	48	1	48	0	48	48	0	48	1	48	0	48	1	48	0	48	1	48
	Left-Through		0						0			0			0		0		
	Through	129	0	185	0	129	185	0	130	0	187	0	130	0	187	0	130	0	187
	Through-Right		1						1			1			1		1		
	Right	56	0	0	0	56	0	0	57	0	0	0	57	0	0	0	57	0	0
	Left-Through-Right		0						0			0			0		0		
	Left-Right		0						0			0			0		0		
WESTBOUND	Left	54	1	54	0	54	54	0	55	1	55	0	55	1	55	0	55	1	55
	Left-Through		0						0			0			0		0		
	Through	148	0	176	0	148	176	0	149	0	177	0	149	0	177	0	149	0	177
	Through-Right		1						1			1			1		1		
	Right	28	0	0	0	28	0	0	28	0	0	0	28	0	0	0	28	0	0
	Left-Through-Right		0						0			0			0		0		
	Left-Right		0						0			0			0		0		
CRITICAL VOLUMES		North-South: 423 East-West: 239 SUM: 662	North-South: 424 East-West: 239 SUM: 663	North-South: 427 East-West: 242 SUM: 669	North-South: 428 East-West: 242 SUM: 670	North-South: 428 East-West: 242 SUM: 670	North-South: 428 East-West: 242 SUM: 670												
VOLUME/CAPACITY (V/C) RATIO:		0.441	0.442	0.446	0.447	0.447													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.341	0.342	0.346	0.347	-0.100													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.446**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave		Year of Count:	2011		Ambient Growth: (%):	1		Conducted by:			Date:						
24	East-West Street:	9th St		Projection Year:	2012		Peak Hour:	PM		Reviewed by:			Project:						
No. of Phases		2		2		2		2		2		0							
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	62	0	62	0	62	62	0	63	0	63	0	63	0	63	0	63	0	63
	Left-Through		1							1			1			1		1	
	Through	544	0	413	0	544	413	1	550	0	418	0	550	0	418	0	550	0	418
	Through-Right		1							1			1			1		1	
	Right	34	0	413	0	34	413	0	34	0	418	0	34	0	418	0	34	0	418
Left-Through-Right		0							0				0			0		0	
Left-Right		0							0				0			0		0	
SOUTHBOUND	Left	19	0	19	0	19	19	0	19	0	19	0	19	0	19	0	19	0	19
	Left-Through		1							1			1			1		1	
	Through	666	0	400	0	666	401	0	673	0	404	0	673	0	405	0	673	0	405
	Through-Right		1							1			1			1		1	
	Right	96	0	400	1	97	401	0	97	0	404	1	98	0	405	0	98	0	405
Left-Through-Right		0							0				0			0		0	
Left-Right		0							0				0			0		0	
EASTBOUND	Left	70	1	70	0	70	70	0	71	1	71	0	71	1	71	0	71	1	71
	Left-Through		0							0			0			0		0	
	Through	135	0	212	0	135	212	0	136	0	214	0	136	0	214	0	136	0	214
	Through-Right		1							1			1			1		1	
	Right	77	0	0	0	77	0	0	78	0	0	0	78	0	0	0	78	0	0
Left-Through-Right		0							0				0			0		0	
Left-Right		0							0				0			0		0	
WESTBOUND	Left	54	1	54	0	54	54	0	55	1	55	0	55	1	55	0	55	1	55
	Left-Through		0							0			0			0		0	
	Through	121	0	148	0	121	148	0	122	0	149	0	122	0	149	0	122	0	149
	Through-Right		1							1			1			1		1	
	Right	27	0	0	0	27	0	0	27	0	0	0	27	0	0	0	27	0	0
Left-Through-Right		0							0				0			0		0	
Left-Right		0							0				0			0		0	
CRITICAL VOLUMES		North-South:	462	East-West:	266	SUM:	728	North-South:	463	East-West:	266	SUM:	729	North-South:	467	East-West:	269	SUM:	736
VOLUME/CAPACITY (V/C) RATIO:		0.485		0.486		0.491		0.491		0.491		0.491		0.491		0.491		-0.100	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.385		0.386		0.391		0.391		0.391		0.391		0.391		0.391		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.491**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
1	East-West Street:	Summerland Av	Projection Year:	2012	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	127	1	127	0	127	127	0	128	1	128	0	128	1	128	0	128	1	128
	Left-Through		0							0				0				0	
	Through	498	1	260	3	501	262	2	505	1	264	3	508	1	265	0	508	1	265
	Through-Right		1							1				1				1	
	Right	22	0	0	0	22	0	0	22	0	0	0	22	0	0	0	22	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	11	1	11	0	11	11	0	11	1	11	0	11	1	11	0	11	1	11
	Left-Through		0							0				0				0	
	Through	515	1	336	3	518	338	4	524	1	342	3	527	1	343	0	527	1	343
	Through-Right		1							1				1				1	
	Right	157	0	0	0	157	0	0	159	0	0	0	159	0	0	0	159	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	176	1	176	0	176	176	0	178	1	178	0	178	1	178	0	178	1	178
	Left-Through		0							0				0				0	
	Through	3	0	72	0	3	72	0	3	0	73	0	3	0	73	0	3	0	73
	Through-Right		1							1				1				1	
	Right	69	0	0	0	69	0	0	70	0	0	0	70	0	0	0	70	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	414	2	228	0	414	228	0	418	2	230	0	418	2	230	0	418	2	230
	Left-Through		0							0				0				0	
	Through	148	0	336	0	148	336	0	149	0	339	0	149	0	339	0	149	0	339
	Through-Right		1							1				1				1	
	Right	188	0	0	0	188	0	0	190	0	0	0	190	0	0	0	190	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 463 East-West: 512 SUM: 975	North-South: 465 East-West: 512 SUM: 977	North-South: 470 East-West: 517 SUM: 987	North-South: 471 East-West: 517 SUM: 988	North-South: 471 East-West: 517 SUM: 988													
VOLUME/CAPACITY (V/C) RATIO:		0.684	0.686	0.693	0.693	0.693													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.584	0.586	0.593	0.593	0.593													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.693**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St		Year of Count:	2011		Ambient Growth: (%):	1		Conducted by:			Date:						
2	East-West Street:	I-110 Ramps		Projection Year:	2012		Peak Hour:	WK		Reviewed by:			Project:						
No. of Phases		2		2		2		2		2		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 1	SB-- 0	NB-- 1	SB-- 0	NB-- 1	SB-- 0	NB-- 1	SB-- 0	NB-- 1	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0				
		EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0				
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	570	2	285	3	573	287	2	578	2	289	3	581	2	291	0	581	2	291
	Through-Right		0						0				0				0		
	Right	1942	2	0	6	1948	0	2	1963	2	0	6	1969	2	0	0	1969	2	0
Left-Through-Right		0						0				0				0			
Left-Right		0						0				0				0			
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	934	3	311	3	937	312	4	947	3	316	3	950	3	317	0	950	3	317
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0						0				0				0			
Left-Right		0						0				0				0			
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0						0				0				0			
Left-Right		0						0				0				0			
WESTBOUND	Left	1371	2	483	7	1378	485	4	1389	2	489	7	1396	2	492	0	1396	2	492
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	78	0	483	0	78	485	0	79	0	489	0	79	0	492	0	79	0	492
Left-Through-Right		0						0				0				0			
Left-Right		1						1				1				1			
CRITICAL VOLUMES		North-South:	311	North-South:	312	North-South:	316	North-South:	317	North-South:	317	North-South:	317	North-South:	317	North-South:	317	North-South:	317
		East-West:	483	East-West:	485	East-West:	489	East-West:	492	East-West:	492	East-West:	492	East-West:	492	East-West:	492	East-West:	492
		SUM:	794	SUM:	797	SUM:	805	SUM:	809	SUM:	809	SUM:	809	SUM:	809	SUM:	809	SUM:	809
VOLUME/CAPACITY (V/C) RATIO:		0.529		0.531		0.537		0.539		0.539		0.539		0.539		0.539		0.539	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.429		0.431		0.437		0.437		0.439		0.439		0.439		0.439		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.537**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
3	East-West Street:	1st St	Projection Year:	2012	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2	2		2		2		2										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	50	1	50	0	50	50	1	52	1	52	0	52	1	52	0	52	1	52
	Left-Through		0						0				0				0		
	Through	1390	2	469	0	1390	470	4	1408	2	475	0	1408	2	476	0	1408	2	476
	Through-Right		1						1				1				1		
	Right	18	0	0	3	21	0	0	18	0	0	3	21	0	0	0	21	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
SOUTHBOUND	Left	106	1	106	10	116	116	0	107	1	107	10	117	1	117	0	117	1	117
	Left-Through		0						0				0				0		
	Through	1771	2	718	0	1771	718	8	1797	2	728	0	1797	2	728	0	1797	2	728
	Through-Right		1						1				1				1		
	Right	384	0	0	0	384	0	0	388	0	0	0	388	0	0	0	388	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
EASTBOUND	Left	593	1	342	0	593	345	0	599	1	346	0	599	1	348	0	599	1	329
	Left-Through		1						1				1				1		
	Through	91	0	342	5	96	345	0	92	0	346	5	97	0	348	0	97	0	186
	Through-Right		0						0				0				0		
	Right	86	1	61	0	86	61	2	89	1	63	0	89	1	63	0	89	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
WESTBOUND	Left	45	1	45	2	47	47	0	45	1	45	2	47	1	47	0	47	1	47
	Left-Through		0						0				0				0		
	Through	141	1	141	4	145	145	0	142	1	142	4	146	1	146	0	146	1	146
	Through-Right		0						0				0				0		
	Right	163	1	110	9	172	114	0	165	1	112	9	174	1	116	0	174	1	116
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
CRITICAL VOLUMES		North-South: 768 East-West: 483 SUM: 1251	North-South: 768 East-West: 490 SUM: 1258		North-South: 780 East-West: 488 SUM: 1268		North-South: 780 East-West: 494 SUM: 1274				North-South: 780 East-West: 475 SUM: 1255								
VOLUME/CAPACITY (V/C) RATIO:		0.878	0.883		0.890		0.894				0.881								
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.778	0.783		0.790		0.794				0.781								
LEVEL OF SERVICE (LOS):		C	C		C		C				C								

**PROJECT IMPACT**

Change in v/c due to project: **0.004**      Δv/c after mitigation: **-0.009**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
3	East-West Street:	1st St	Projection Year:	2012	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2	2		2		2		2										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	50	1	50	0	50	50	1	52	1	52	0	52	1	52	0	52	1	52
	Left-Through		0						0				0				0		
	Through	1390	2	469	0	1390	470	4	1408	2	475	0	1408	2	476	0	1408	2	476
	Through-Right		1						1				1				1		
	Right	18	0	0	3	21	0	0	18	0	0	3	21	0	0	0	21	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	106	1	106	10	116	116	0	107	1	107	10	117	1	117	0	117	1	117
	Left-Through		0						0				0				0		
	Through	1771	2	718	0	1771	718	8	1797	2	728	0	1797	2	728	0	1797	2	728
	Through-Right		1						1				1				1		
	Right	384	0	0	0	384	0	0	388	0	0	0	388	0	0	0	388	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	593	1	342	0	593	345	0	599	1	346	0	599	1	348	0	599	1	329
	Left-Through		1						1				1				1		
	Through	91	0	342	5	96	345	0	92	0	346	5	97	0	348	0	97	0	186
	Through-Right		0						0				0				0		
	Right	86	1	61	0	86	61	2	89	1	63	0	89	1	63	0	89	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	45	1	45	2	47	47	0	45	1	45	2	47	1	47	0	47	1	47
	Left-Through		0						0				0				0		
	Through	141	0	304	4	145	317	0	142	0	307	4	146	0	320	0	146	1	146
	Through-Right		1						1				1				0		
	Right	163	0	0	9	172	0	0	165	0	0	9	174	0	0	0	174	1	116
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 768 East-West: 646 SUM: 1414	North-South: 768 East-West: 662 SUM: 1430		North-South: 780 East-West: 653 SUM: 1433				North-South: 780 East-West: 668 SUM: 1448				North-South: 780 East-West: 475 SUM: 1255						
VOLUME/CAPACITY (V/C) RATIO:		0.992	1.004		1.006				1.016				0.881						
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.892	0.904		0.906				0.916				0.781						
LEVEL OF SERVICE (LOS):		D	E		E				E				C						

**PROJECT IMPACT**

Change in v/c due to project: **0.010**      Δv/c after mitigation: **-0.125**  
 Significant impacted? **YES**      Fully mitigated? **YES**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
4	East-West Street:	5th St	Projection Year:	2012	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	28	1	28	0	28	28	0	28	1	28	0	28	1	28	0	28	1	28
	Left-Through		0						0				0				0		
	Through	1455	1	745	3	1458	746	5	1475	1	755	3	1478	1	756	0	1478	1	756
	Through-Right		1						1				1				1		
	Right	34	0	0	0	34	0	0	34	0	0	0	34	0	0	0	34	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
SOUTHBOUND	Left	104	1	104	0	104	104	0	105	1	105	0	105	1	105	0	105	1	105
	Left-Through		0						0				0				0		
	Through	1473	1	776	2	1475	777	10	1498	1	789	2	1500	1	790	0	1500	1	790
	Through-Right		1						1				1				1		
	Right	79	0	0	0	79	0	0	80	0	0	0	80	0	0	0	80	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
EASTBOUND	Left	104	1	104	0	104	104	0	105	1	105	0	105	1	105	0	105	1	105
	Left-Through		0						0				0				0		
	Through	100	0	120	0	100	120	0	101	0	121	0	101	0	121	0	101	0	121
	Through-Right		1						1				1				1		
	Right	20	0	0	0	20	0	0	20	0	0	0	20	0	0	0	20	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
WESTBOUND	Left	33	1	33	0	33	33	0	33	1	33	0	33	1	33	0	33	1	33
	Left-Through		0						0				0				0		
	Through	81	0	150	0	81	150	0	82	0	152	0	82	0	152	0	82	0	152
	Through-Right		1						1				1				1		
	Right	69	0	0	0	69	0	0	70	0	0	0	70	0	0	0	70	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
CRITICAL VOLUMES		North-South: 849 East-West: 254 SUM: 1103	North-South: 850 East-West: 254 SUM: 1104	North-South: 860 East-West: 257 SUM: 1117	North-South: 861 East-West: 257 SUM: 1118	North-South: 861 East-West: 257 SUM: 1118													
VOLUME/CAPACITY (V/C) RATIO:		0.774	0.775	0.784	0.785	0.785													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.674	0.675	0.684	0.685	-0.100													
LEVEL OF SERVICE (LOS):		B	B	B	B	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.784**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
5	East-West Street:	7th St	Projection Year:	2012	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	29	1	29	0	29	29	1	30	1	30	0	30	1	30	0	30	1	30
	Left-Through		0						0				0				0		
	Through	1343	1	690	3	1346	691	5	1361	1	699	3	1364	1	700	0	1364	1	700
	Through-Right		1						1				1				1		
	Right	36	0	0	0	36	0	0	36	0	0	0	36	0	0	0	36	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
SOUTHBOUND	Left	113	1	113	0	113	113	0	114	1	114	0	114	1	114	0	114	1	114
	Left-Through		0						0				0				0		
	Through	1290	1	679	2	1292	680	10	1313	1	691	2	1315	1	692	0	1315	1	692
	Through-Right		1						1				1				1		
	Right	68	0	0	0	68	0	0	69	0	0	0	69	0	0	0	69	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
EASTBOUND	Left	133	1	133	0	133	133	0	134	1	134	0	134	1	134	0	134	1	134
	Left-Through		0						0				0				0		
	Through	113	0	165	0	113	165	0	114	0	169	0	114	0	169	0	114	0	169
	Through-Right		1						1				1				1		
	Right	52	0	0	0	52	0	2	55	0	0	0	55	0	0	0	55	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
WESTBOUND	Left	60	1	60	0	60	60	0	61	1	61	0	61	1	61	0	61	1	61
	Left-Through		0						0				0				0		
	Through	84	0	147	0	84	147	0	85	0	149	0	85	0	149	0	85	0	149
	Through-Right		1						1				1				1		
	Right	63	0	0	0	63	0	0	64	0	0	0	64	0	0	0	64	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
CRITICAL VOLUMES		North-South: 803 East-West: 280 SUM: 1083	North-South: 804 East-West: 280 SUM: 1084	North-South: 813 East-West: 283 SUM: 1096	North-South: 814 East-West: 283 SUM: 1097	North-South: 814 East-West: 283 SUM: 1097	North-South: 814 East-West: 283 SUM: 1097	North-South: 814 East-West: 283 SUM: 1097	North-South: 814 East-West: 283 SUM: 1097	North-South: 814 East-West: 283 SUM: 1097									
VOLUME/CAPACITY (V/C) RATIO:		0.722	0.723	0.731	0.731	0.731	0.731	0.731	0.731	0.731									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.622	0.623	0.631	0.631	0.631	0.631	0.631	0.631	-0.100									
LEVEL OF SERVICE (LOS):		B	B	B	B	B	B	B	B	A									

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.731**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
6	East-West Street:	9th St	Projection Year:	2012	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	52	1	52	0	52	52	0	53	1	53	0	53	1	53	0	53	1	53
	Left-Through		0							0				0				0	
	Through	1142	1	588	0	1142	588	6	1159	1	596	0	1159	1	596	0	1159	1	596
	Through-Right		1							1				1				1	
	Right	33	0	0	0	33	0	0	33	0	0	0	33	0	0	0	33	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	64	1	64	0	64	64	0	65	1	65	0	65	1	65	0	65	1	65
	Left-Through		0							0				0				0	
	Through	1126	1	607	0	1126	608	12	1149	1	619	0	1149	1	620	0	1149	1	620
	Through-Right		1							1				1				1	
	Right	88	0	0	2	90	0	0	89	0	0	2	91	0	0	0	91	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	172	1	172	2	174	174	0	174	1	174	2	176	1	176	0	176	1	176
	Left-Through		0							0				0				0	
	Through	178	1	178	2	180	180	4	184	1	184	2	186	1	186	0	186	1	186
	Through-Right		0							0				0				0	
	Right	53	1	27	0	53	27	0	54	1	28	0	54	1	28	0	54	1	28
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	51	1	51	0	51	51	0	52	1	52	0	52	1	52	0	52	1	52
	Left-Through		0							0				0				0	
	Through	177	0	269	2	179	271	2	181	0	274	2	183	0	276	0	183	0	276
	Through-Right		1							1				1				1	
	Right	92	0	0	0	92	0	0	93	0	0	0	93	0	0	0	93	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 659 East-West: 441 SUM: 1100	North-South: 660 East-West: 445 SUM: 1105		North-South: 672 East-West: 448 SUM: 1120				North-South: 673 East-West: 452 SUM: 1125				North-South: 673 East-West: 452 SUM: 1125						
VOLUME/CAPACITY (V/C) RATIO:		0.733		0.737		0.747				0.750									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.633		0.637		0.647				0.650				-0.100					
LEVEL OF SERVICE (LOS):		B		B		B				B				A					

**PROJECT IMPACT**

Change in v/c due to project: **0.003**      Δv/c after mitigation: **-0.747**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2011</b>		Ambient Growth: (%):	<b>1</b>		Conducted by:			Date:							
<b>8</b>	East-West Street:	<b>25th St</b>		Projection Year:	<b>2012</b>		Peak Hour:	<b>WK</b>		Reviewed by:			Project:							
No. of Phases		3		3		3		3		3		0		0						
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0						
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0						
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2						
Override Capacity		0		0		0		0		0		0		0						
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	67	1	67	0	67	67	0	68	1	68	0	68	1	68	0	68	1	68	
	Left-Through		0							0				0				0		
	Through	238	0	238	0	238	238	4	244	0	244	0	244	0	244	0	244	0	244	
	Through-Right		1							1				1				1		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0		0
Left-Right		0							0				0				0		0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0							0				0				0		
	Through	374	1	374	0	374	374	2	380	1	380	0	380	1	380	0	380	1	380	
	Through-Right		0							0				0				0		
	Right	372	1	189	5	377	192	4	380	1	191	5	385	1	194	0	385	1	194	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
EASTBOUND	Left	366	1	366	5	371	371	8	378	1	378	5	383	1	383	0	383	1	383	
	Left-Through		0							0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0		
	Right	99	1	32	0	99	32	0	100	1	32	0	100	1	32	0	100	1	32	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0							0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right		0							0				0				0		
Left-Right		1							1				1				1			
CRITICAL VOLUMES		North-South:	441	North-South:	441	North-South:	448	North-South:	448	North-South:	448	North-South:	448	North-South:	448	North-South:	448	North-South:	448	
		East-West:	366	East-West:	371	East-West:	378	East-West:	378	East-West:	383	East-West:	383	East-West:	383	East-West:	383	East-West:	383	
		SUM:	807	SUM:	812	SUM:	826	SUM:	826	SUM:	831	SUM:	831	SUM:	831	SUM:	831	SUM:	831	
VOLUME/CAPACITY (V/C) RATIO:		0.566		0.570		0.580		0.580		0.583		0.583		0.583		0.583		0.583		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.466		0.470		0.480		0.480		0.483		0.483		0.483		0.483		-0.100		
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A		

**PROJECT IMPACT**

Change in v/c due to project: **0.003**      Δv/c after mitigation: **-0.580**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Via Cabrillo Marina</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>1</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>9</b>	<b>East-West Street:</b>	<b>22nd St</b>	<b>Projection Year:</b>	<b>2012</b>	<b>Peak Hour:</b>	<b>WK</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 3 SB-- 0 EB-- 0 WB-- 0	NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	123	2	68	0	123	68	0	124	2	68	0	124	2	68	0	124	2	68
	Left-Through		0	0		0	0		0	0	0		0	0		0	0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0	0		0	0		0	0	0		0	0		0	0	0	0
	Right	82	1	0	0	82	0	0	83	1	0	0	83	1	0	0	83	1	0
Left-Through-Right		0	0		0	0		0	0	0		0	0		0	0	0	0	0
Left-Right		0	0		0	0		0	0	0		0	0		0	0	0	0	0
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0	0		0	0		0	0		0	0	0		0	0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0	0
Left-Right		0	0		0	0		0	0		0	0	0		0	0	0	0	0
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0	0		0	0		0	0		0	0	0		0	0	0	0
	Through	216	1	163	4	220	165	40	258	1	184	4	262	1	186	0	262	1	186
	Through-Right		1	0		0	0		0	1		0	0	1		0	0	1	0
	Right	109	0	0	0	109	0	0	110	0	0	0	110	0	0	0	110	0	0
Left-Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0	0
Left-Right		0	0		0	0		0	0		0	0	0		0	0	0	0	0
WESTBOUND	Left	85	1	85	0	85	85	0	86	1	86	0	86	1	86	0	86	1	86
	Left-Through		0	0		0	0		0	0		0	0	0		0	0	0	0
	Through	181	2	91	4	185	93	20	203	2	102	4	207	2	104	0	207	2	104
	Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through-Right		0	0		0	0		0	0		0	0	0		0	0	0	0	0
Left-Right		0	0		0	0		0	0		0	0	0		0	0	0	0	0
CRITICAL VOLUMES		North-South: 68 East-West: 248 SUM: 316	North-South: 68 East-West: 250 SUM: 318	North-South: 68 East-West: 270 SUM: 338	North-South: 68 East-West: 272 SUM: 340	North-South: 68 East-West: 272 SUM: 340													
VOLUME/CAPACITY (V/C) RATIO:		0.222	0.223	0.237	0.239	0.239													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.122	0.123	0.137	0.139	0.139													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.237**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
	East-West Street:	Swinford St / SR-47 EB Ramps	Projection Year:	2012	Peak Hour:	WK	Reviewed by:		Project:										
	No. of Phases	4		4		4		4		4									
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	2		2		2		2		2									
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 3 EB-- 3 WB-- 0		NB-- 0 SB-- 3 EB-- 3 WB-- 0		NB-- 0 SB-- 3 EB-- 3 WB-- 0		NB-- 0 SB-- 3 EB-- 3 WB-- 0		NB-- 0 SB-- 3 EB-- 0 WB-- 0									
	ATSAC-1 or ATSAC+ATCS-2?	2		2		2		2		2									
	Override Capacity	0		0		0		0		0									
MOVEMENT	EXISTING CONDITION		EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	256	2	141	43	299	164	10	269	2	148	43	312	2	172	0	312	2	172
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	538	1	310	57	595	338	12	555	1	319	57	612	1	347	0	612	2	231
	Through-Right	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	81	0	0	0	81	0	0	82	0	0	0	82	0	0	0	82	0	0
SOUTHBOUND	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	35	1	35	0	35	35	0	35	1	35	0	35	1	35	0	35	1	35
	Through	138	2	69	1	139	70	6	145	2	73	1	146	2	73	0	146	2	73
	Through-Right	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	97	1	0	0	97	0	0	98	1	0	0	98	1	0	0	98	1	0
EASTBOUND	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	210	1	210	0	210	210	0	212	1	212	0	212	1	212	0	212	1	212
	Through	215	0	480	0	215	533	0	217	0	504	0	217	0	557	0	217	0	557
	Through-Right	1	1	0	106	851	0	38	790	1	0	106	896	1	0	0	896	1	0
	Right	745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WESTBOUND	Left-Through-Right	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	59	0	59	0	59	59	0	60	0	60	0	60	0	60	0	60	0	60
	Through	114	0	205	0	114	205	0	115	0	207	0	115	0	207	0	115	0	207
	Through-Right	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	91	0	0	0	91	0	0	92	0	0	0	92	0	0	0	92	0	0
CRITICAL VOLUMES	North-South:	345		373	North-South:	738	North-South:	354	North-South:	382	North-South:	266							
	East-West:	685		738	East-West:	1111	East-West:	711	East-West:	764	East-West:	764							
	SUM:	1030		1111	SUM:	1065	SUM:	1146	SUM:	1030									
VOLUME/CAPACITY (V/C) RATIO: V/C LESS ATSAC/ATCS ADJUSTMENT: LEVEL OF SERVICE (LOS):		0.749		0.808		0.775		0.833		0.749									
		0.649		0.708		0.675		0.733		0.649									
		B		C		B		C		B									

EX							
N-S	345	345					
EB	252	210					
WB	205	205					
Sum	802	760					
V/C	0.583	0.553	EX	0.583	0.608	0.025	NO
Less ATC	0.583	0.553	FB	0.595	0.619	0.024	NO
LOS	A	A					
EP							
N-S	373	373					
EB	258	210					
WB	205	205					
Sum	836	788					
V/C	0.608	0.573					
Less ATC	0.608	0.573					
LOS	B	A					
FB							
N-S	354	354					
EB	257	212					
WB	207	207					
Sum	818	773					
V/C	0.595	0.562					
Less ATC	0.595	0.562					
LOS	A	A					
FP Mitigation							
N-S	382	382					
EB	262	212					
WB	207	207					
Sum	851	801					
V/C	0.619	0.583					
Less ATC	0.619	0.583					
LOS	B	A					

**PROJECT IMPACT**

Change in v/c due to project: **0.058**      Δv/c after mitigation: **-0.026**  
 Significant impacted? **YES**                      Fully mitigated? **YES**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl		Year of Count:	2011		Ambient Growth: (%):	1		Conducted by:			Date:						
12	East-West Street:	O'Farrell St		Projection Year:	2012		Peak Hour:	WK		Reviewed by:			Project:						
No. of Phases		2		2		2		2		2		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		0		0		0		0		0		0		0					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	6	1	6	0	6	6	0	6	1	6	0	6	1	6	0	6	1	6
	Left-Through		0							0				0				0	
	Through	840	2	420	100	940	470	22	870	2	435	100	970	2	485	0	970	2	485
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	983	2	492	108	1091	546	44	1037	2	519	108	1145	2	573	0	1145	2	573
	Through-Right		0							0				0				0	
	Right	19	1	19	0	19	19	0	19	1	19	0	19	1	19	0	19	1	19
EASTBOUND	Left	77	0	77	0	77	77	0	78	0	78	0	78	0	78	0	78	0	78
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	11	0	88	0	11	88	0	11	0	89	0	11	0	89	0	11	0	89
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRITICAL VOLUMES		North-South: 498		North-South: 552		North-South: 525		North-South: 579		North-South: 579		North-South: 579		North-South: 579		North-South: 579		North-South: 579	
		East-West: 88		East-West: 88		East-West: 89		East-West: 89		East-West: 89		East-West: 89		East-West: 89		East-West: 89		East-West: 89	
		SUM: 586		SUM: 640		SUM: 614		SUM: 668		SUM: 668		SUM: 668		SUM: 668		SUM: 668		SUM: 668	
VOLUME/CAPACITY (V/C) RATIO:		0.391		0.427		0.409		0.445		0.445		0.445		0.445		0.445		0.445	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.391		0.427		0.409		0.445		0.445		0.445		0.445		0.445		0.445	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.036**      Δv/c after mitigation: **-0.409**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #: <b>13</b>	North-South Street:	<b>Harbor Bl</b>		Year of Count:	<b>2011</b>		Ambient Growth: (%):	<b>1</b>		Conducted by:			Date:						
	East-West Street:	<b>1st St</b>		Projection Year:	<b>2012</b>		Peak Hour:	<b>WK</b>		Reviewed by:			Project:						
No. of Phases				2		2		4		4		0							
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		2		2		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	15	1	15	0	15	15	0	15	1	15	0	15	1	15	0	15	1	15
	Left-Through		0							0				0				0	
	Through	787	1	397	0	787	399	22	817	1	412	0	817	1	414	0	817	1	414
	Through-Right		1							1				1				1	
	Right	6	0	0	5	11	0	0	6	0	0	5	11	0	0	0	11	0	0
SOUTHBOUND	Left	22	1	22	108	130	130	0	22	1	22	108	130	1	130	0	130	1	130
	Left-Through		0							0				0				0	
	Through	887	2	444	0	887	444	44	940	2	470	0	940	2	470	0	940	2	470
	Through-Right		0							0				0				0	
	Right	59	1	32	0	59	32	0	60	1	33	0	60	1	33	0	60	1	33
EASTBOUND	Left	54	1	54	0	54	54	0	55	1	55	0	55	1	55	0	55	1	55
	Left-Through		0							0				0				0	
	Through	2	0	56	19	21	75	0	2	0	57	19	21	0	76	0	21	0	76
	Through-Right		1							1				1				1	
	Right	54	0	0	0	54	0	0	55	0	0	0	55	0	0	0	55	0	0
WESTBOUND	Left	3	0	3	4	7	7	0	3	0	3	4	7	0	7	0	7	0	7
	Left-Through		0							0				0				0	
	Through	1	0	5	19	20	128	0	1	0	5	19	20	0	128	0	20	0	128
	Through-Right		0							0				0				0	
	Right	1	0	0	100	101	0	0	1	0	0	100	101	0	0	0	101	0	0
CRITICAL VOLUMES		North-South: 459		North-South: 529		North-South: 485		North-South: 544		North-South: 544		North-South: 544		North-South: 544		North-South: 544		North-South: 544	
		East-West: 59		East-West: 182		East-West: 62		East-West: 204		East-West: 204		East-West: 204		East-West: 183		East-West: 183		East-West: 183	
		SUM: 518		SUM: 711		SUM: 547		SUM: 748		SUM: 748		SUM: 748		SUM: 727		SUM: 727		SUM: 727	
VOLUME/CAPACITY (V/C) RATIO:		0.345		0.474		0.398		0.544		0.544		0.544		0.544		0.544		0.544	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.245		0.374		0.298		0.444		0.444		0.444		0.444		0.444		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.146**      Δv/c after mitigation: **-0.398**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
15	East-West Street:	5th St	Projection Year:	2012	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		2	2		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	13	1	13	0	13	13	0	13	1	13	0	13	1	13	0	13	1	13
	Left-Through		0							0				0				0	
	Through	688	1	346	5	693	348	22	717	1	360	5	722	1	363	0	722	1	363
	Through-Right		1							1				1				1	
	Right	3	0	0	0	3	0	0	3	0	0	0	3	0	0	0	3	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	858	1	468	4	862	470	44	911	1	495	4	915	1	497	0	915	1	497
	Through-Right		1							1				1				1	
	Right	78	0	0	0	78	0	0	79	0	0	0	79	0	0	0	79	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	70	1	70	0	70	70	0	71	1	71	0	71	1	71	0	71	1	71
	Left-Through		0							0				0				0	
	Through	23	1	23	0	23	23	0	23	1	23	0	23	1	23	0	23	1	23
	Through-Right		0							0				0				0	
	Right	23	1	17	0	23	17	0	23	1	17	0	23	1	17	0	23	1	17
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	2	1	2	0	2	2	0	2	1	2	0	2	1	2	0	2	1	2
	Left-Through		0							0				0				0	
	Through	7	0	22	0	7	22	0	7	0	22	0	7	0	22	0	7	0	22
	Through-Right		1							1				1				1	
	Right	37	1	0	0	37	0	0	37	1	0	0	37	1	0	0	37	1	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 481 East-West: 92 SUM: 573	North-South: 483 East-West: 92 SUM: 575	North-South: 508 East-West: 93 SUM: 601	North-South: 510 East-West: 93 SUM: 603	North-South: 510 East-West: 93 SUM: 603													
VOLUME/CAPACITY (V/C) RATIO:		0.382	0.383	0.422	0.423	0.423													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.282	0.283	0.322	0.323	-0.100													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.422**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
16	East-West Street:	6th St	Projection Year:	2012	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		3	3		4		4		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		2		2		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	9	1	9	0	9	9	0	9	1	9	0	9	1	9	0	9	1	9
	Left-Through		0						0				0				0		
	Through	438	1	269	5	443	271	22	464	1	282	5	469	1	285	0	469	1	285
	Through-Right		1						1				1				1		
	Right	99	0	0	0	99	0	0	100	0	0	0	100	0	0	0	100	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	343	1	343	0	343	343	0	346	1	346	0	346	1	346	0	346	1	346
	Left-Through		0						0				0				0		
	Through	545	1	299	4	549	301	44	594	1	324	4	598	1	326	0	598	1	326
	Through-Right		1						1				1				1		
	Right	53	0	0	0	53	0	0	54	0	0	0	54	0	0	0	54	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	52	1	52	0	52	52	0	53	1	53	0	53	1	53	0	53	1	53
	Left-Through		0						0				0				0		
	Through	90	0	98	0	90	98	0	91	0	99	0	91	0	99	0	91	0	99
	Through-Right		1						1				1				1		
	Right	8	0	0	0	8	0	0	8	0	0	0	8	0	0	0	8	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	11	1	11	0	11	11	0	11	1	11	0	11	1	11	0	11	1	11
	Left-Through		0						0				0				0		
	Through	26	1	26	0	26	26	0	26	1	26	0	26	1	26	0	26	1	26
	Through-Right		0						0				0				0		
	Right	155	2	0	0	155	0	0	157	2	0	0	157	2	0	0	157	2	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 612 East-West: 109 SUM: 721	North-South: 614 East-West: 109 SUM: 723	North-South: 628 East-West: 125 SUM: 753	North-South: 631 East-West: 125 SUM: 756	North-South: 631 East-West: 110 SUM: 741													
VOLUME/CAPACITY (V/C) RATIO:		0.506	0.507	0.548	0.550														
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.406	0.407	0.448	0.450	-0.100													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.548**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl	Year of Count:	2011	Ambient Growth: (%):	1	Conducted by:		Date:										
17	East-West Street:	7th St	Projection Year:	2012	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- 0 SB-- 3	NB-- 0 SB-- 3										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0										
Override Capacity		2	2		2		2		2										
		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	25	1	25	0	25	25	0	25	1	25	0	25	1	25	0	25	1	25
	Left-Through		0							0				0				0	
	Through	339	2	170	5	344	172	22	364	2	182	5	369	2	185	0	369	2	185
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	393	2	197	4	397	199	44	441	2	221	4	445	2	223	0	445	2	223
	Through-Right		0							0				0				0	
	Right	145	1	15	0	145	15	0	146	1	15	0	146	1	15	0	146	1	15
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	235	1	130	0	235	130	0	237	1	131	0	237	1	131	0	237	1	131
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	25	0	130	0	25	130	0	25	0	131	0	25	0	131	0	25	0	131
	Left-Through-Right		0							0				0				0	
	Left-Right		1							1				1				1	
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South: 222		222	North-South: 224		224	North-South: 246		246	North-South: 248		248	North-South: 248		248	North-South: 248		248
		East-West: 130		130	East-West: 130		130	East-West: 131		131	East-West: 131		131	East-West: 131		131	East-West: 131		131
		SUM: 352		352	SUM: 354		354	SUM: 377		377	SUM: 379		379	SUM: 379		379	SUM: 379		379
VOLUME/CAPACITY (V/C) RATIO:				0.235			0.236			0.251			0.253						
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.135			0.136			0.151			0.153						-0.100
LEVEL OF SERVICE (LOS):				A			A			A			A						A

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.251**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #: <b>18</b>	North-South Street:	<b>Miner St</b>	Year of Count:	<b>2011</b>	Ambient Growth: (%):	<b>1</b>	Conducted by:		Date:										
	East-West Street:	<b>22nd St</b>	Projection Year:	<b>2012</b>	Peak Hour:	<b>WK</b>	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		0	0		0		0		0										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	19	1	19	0	19	19	0	19	1	19	0	19	1	19	0	19	1	19
	Left-Through		0							0				0				0	
	Through	24	1	17	0	24	17	0	24	1	17	0	24	1	17	0	24	1	17
	Through-Right		1							1				1				1	
	Right	9	0	0	0	9	0	0	9	0	0	0	9	0	0	0	9	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
SOUTHBOUND	Left	24	1	24	0	24	24	0	24	1	24	0	24	1	24	0	24	1	24
	Left-Through		0							0				0				0	
	Through	35	1	35	0	35	35	0	35	1	35	0	35	1	35	0	35	1	35
	Through-Right		1							1				1				1	
	Right	214	0	127	4	218	129	0	216	0	128	4	220	0	130	0	220	0	130
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
EASTBOUND	Left	175	1	175	4	179	179	0	177	1	177	4	181	1	181	0	181	1	181
	Left-Through		0							0				0				0	
	Through	49	1	32	0	49	32	0	49	1	32	0	49	1	32	0	49	1	32
	Through-Right		1							1				1				1	
	Right	14	0	0	0	14	0	0	14	0	0	0	14	0	0	0	14	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
WESTBOUND	Left	5	1	5	0	5	5	0	5	1	5	0	5	1	5	0	5	1	5
	Left-Through		0							0				0				0	
	Through	48	1	34	0	48	34	0	48	1	34	0	48	1	34	0	48	1	34
	Through-Right		1							1				1				1	
	Right	19	0	0	0	19	0	0	19	0	0	0	19	0	0	0	19	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
CRITICAL VOLUMES		North-South: 146 East-West: 209 SUM: 355	North-South: 148 East-West: 213 SUM: 361	North-South: 147 East-West: 211 SUM: 358	North-South: 149 East-West: 215 SUM: 364	North-South: 149 East-West: 215 SUM: 364													
VOLUME/CAPACITY (V/C) RATIO:		0.249	0.253	0.251	0.255	0.255													
V/C LESS ATSAC/ATCS ADJUSTMENT:		<b>0.249</b>	<b>0.253</b>	<b>0.251</b>	<b>0.255</b>	<b>0.000</b>													
LEVEL OF SERVICE (LOS):		<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>													

**PROJECT IMPACT**

Change in v/c due to project: **0.004**      Δv/c after mitigation: **-0.251**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave		Year of Count:	2011		Ambient Growth: (%):	1		Conducted by:			Date:						
20	East-West Street:	Front St		Projection Year:	2012		Peak Hour:	WK		Reviewed by:			Project:						
No. of Phases		3		3		3		3		3		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0				
		EB-- 0	WB-- 3	EB-- 0	WB-- 3	EB-- 0	WB-- 3	EB-- 0	WB-- 3	EB-- 0	WB-- 3	EB-- 0	WB-- 3	EB-- 0	WB-- 3				
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	444	1	246	1	445	246	1	449	1	248	1	450	1	249	0	450	1	249
	Through-Right		1						1				1				1		
	Right	47	0	0	0	47	0	0	47	0	0	47	0	0	0	47	0	0	
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	198	1	198	1	199	199	6	206	1	206	1	207	1	207	0	207	1	207
	Left-Through		0						0				0				0		
	Through	488	2	244	1	489	245	2	495	2	248	1	496	2	248	0	496	2	248
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	19	1	19	0	19	19	0	19	1	19	0	19	1	19	0	19	1	19
	Left-Through		0						0				0				0		
	Through	1	0	0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	
	Through-Right		0						0				0				0		
	Right	229	2	0	1	230	0	3	234	2	0	1	235	2	0	0	235	2	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South:	444	North-South:	445	North-South:	454	North-South:	456	North-South:	456	North-South:	456	North-South:	456	North-South:	456	North-South:	456
		East-West:	19	East-West:	19	East-West:	19	East-West:	19	East-West:	19	East-West:	19	East-West:	19	East-West:	19	East-West:	19
		SUM:	463	SUM:	464	SUM:	473	SUM:	475	SUM:	475	SUM:	475	SUM:	475	SUM:	475	SUM:	475
VOLUME/CAPACITY (V/C) RATIO:		0.325		0.326		0.332		0.333		0.333		0.333		0.333		0.333		0.333	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.225		0.226		0.232		0.232		0.233		0.233		0.233		0.233		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.332**  
 Significant impacted? **NO**      Fully mitigated? **N/A**





# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b> <b>23</b>	<b>North-South Street:</b> Pacific Ave	<b>Year of Count:</b> 2011	<b>Ambient Growth: (%):</b> 1	<b>Conducted by:</b>	<b>Date:</b>														
	<b>East-West Street:</b> 7th St	<b>Projection Year:</b> 2012	<b>Peak Hour:</b> WK	<b>Reviewed by:</b>	<b>Project:</b>														
No. of Phases: 2 Opposed Ø'ing: N/S-1, E/W-2 or Both-3? 0 Right Turns: FREE-1, NRTOR-2 or OLA-3? 0 ATCS-1 or ATCS+ATCS-2? 2 Override Capacity 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0														
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	41	0	41	0	41	41	0	41	0	41	0	41	0	41	0	41	0	41
	Left-Through		1						1				1				1		
	Through	641	0	428	2	643	429	1	648	0	432	2	650	0	433	0	650	0	433
	Through-Right		1						1				1				1		
	Right	51	0	428	0	51	429	0	52	0	432	0	52	0	433	0	52	0	433
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
SOUTHBOUND	Left	31	0	31	0	31	31	0	31	0	31	0	31	0	31	0	31	0	31
	Left-Through		1						1				1				1		
	Through	657	0	402	2	659	403	2	666	0	407	2	668	0	408	0	668	0	408
	Through-Right		1						1				1				1		
	Right	23	0	402	0	23	403	0	23	0	407	0	23	0	408	0	23	0	408
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
EASTBOUND	Left	47	1	47	0	47	47	0	47	1	47	0	47	1	47	0	47	1	47
	Left-Through		0						0				0				0		
	Through	156	0	222	0	156	222	0	158	0	225	0	158	0	225	0	158	0	225
	Through-Right		1						1				1				1		
	Right	66	0	0	0	66	0	0	67	0	0	0	67	0	0	0	67	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
WESTBOUND	Left	42	1	42	0	42	42	0	42	1	42	0	42	1	42	0	42	1	42
	Left-Through		0						0				0				0		
	Through	97	0	127	0	97	127	0	98	0	128	0	98	0	128	0	98	0	128
	Through-Right		1						1				1				1		
	Right	30	0	0	0	30	0	0	30	0	0	0	30	0	0	0	30	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
<b>CRITICAL VOLUMES</b>		North-South: 459 East-West: 264 SUM: 723	North-South: 460 East-West: 264 SUM: 724	North-South: 463 East-West: 267 SUM: 730	North-South: 464 East-West: 267 SUM: 731	North-South: 464 East-West: 267 SUM: 731													
<b>VOLUME/CAPACITY (V/C) RATIO:</b>		0.482	0.483	0.487	0.487														
<b>V/C LESS ATCS/ATCS ADJUSTMENT:</b>		0.382	0.383	0.387	0.387														
<b>LEVEL OF SERVICE (LOS):</b>		A	A	A	A														

### PROJECT IMPACT

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.487**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Pacific Ave</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>1</b>	<b>Conducted by:</b>		<b>Date:</b>									
<b>24</b>	<b>East-West Street:</b>	<b>9th St</b>	<b>Projection Year:</b>	<b>2012</b>	<b>Peak Hour:</b>	<b>WK</b>	<b>Reviewed by:</b>		<b>Project:</b>									
No. of Phases		2	2		2		2		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2									
Override Capacity		0	0		0		0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	67	0	67	0	67	67	2	70	0	70	70	0	70	0	70	0	70
	Left-Through		1						1	1			1	1			1	1
	Through	588	0	452	0	588	452	1	595	0	462	462	0	595	0	462	0	462
	Through-Right		1						1	1			1	1			1	1
	Right	48	0	452	0	48	452	0	48	0	462	462	0	48	0	462	0	462
	Left-Through-Right		0						0	0			0	0			0	0
	Left-Right		0						0	0			0	0			0	0
SOUTHBOUND	Left	38	0	38	0	38	38	0	38	0	38	38	0	38	0	38	0	38
	Left-Through		1						1	1			1	1			1	1
	Through	620	0	430	0	620	431	2	628	0	435	435	0	628	0	436	0	436
	Through-Right		1						1	1			1	1			1	1
	Right	88	0	430	2	90	431	0	89	0	435	435	2	91	0	436	0	436
	Left-Through-Right		0						0	0			0	0			0	0
	Left-Right		0						0	0			0	0			0	0
EASTBOUND	Left	95	1	95	2	97	97	0	96	1	96	96	2	98	1	98	0	98
	Left-Through		0						0	0			0	0			0	0
	Through	111	0	215	0	111	215	0	112	0	221	221	0	112	0	221	0	221
	Through-Right		1						1	1			1	1			1	1
	Right	104	0	0	0	104	0	4	109	0	0	0	0	109	0	0	0	0
	Left-Through-Right		0						0	0			0	0			0	0
	Left-Right		0						0	0			0	0			0	0
WESTBOUND	Left	58	1	58	0	58	58	0	59	1	59	59	0	59	1	59	0	59
	Left-Through		0						0	0			0	0			0	0
	Through	85	0	123	0	85	123	0	86	0	124	124	0	86	0	124	0	124
	Through-Right		1						1	1			1	1			1	1
	Right	38	0	0	0	38	0	0	38	0	0	0	0	38	0	0	0	0
	Left-Through-Right		0						0	0			0	0			0	0
	Left-Right		0						0	0			0	0			0	0
CRITICAL VOLUMES		North-South: 497 East-West: 273 SUM: 770	North-South: 498 East-West: 273 SUM: 771	North-South: 505 East-West: 280 SUM: 785	North-South: 506 East-West: 280 SUM: 786	North-South: 506 East-West: 280 SUM: 786												
VOLUME/CAPACITY (V/C) RATIO:		0.513	0.514	0.523	0.524													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.413	0.414	0.423	0.424													
LEVEL OF SERVICE (LOS):		A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.523**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



**YEAR 2024**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Gaffey St</b>	Year of Count:	<b>2024</b>	Ambient Growth: (%):	<b>0</b>	Conducted by:		Date:					
<b>1</b>	East-West Street:	<b>Summerland Av</b>	Projection Year:	<b>2024</b>	Peak Hour:	<b>PM</b>	Reviewed by:		Project:					
No. of Phases		3	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	ATSAC-1 or ATSAC+ATCS-2?		2	Override Capacity		0
NB--		0	SB--		0	NB--		0	SB--		0	NB--		0
EB--		0	WB--		0	EB--		0	WB--		0	EB--		0
		2			2			2			2			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
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		0			0			0			0			0
		0												

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street: <b>Gaffey St</b>		Year of Count: <b>2024</b>		Ambient Growth: (%): <b>0</b>		Conducted by:		Date:										
	East-West Street: <b>I-110 Ramps</b>		Projection Year: <b>2024</b>		Peak Hour: <b>PM</b>		Reviewed by:		Project:										
No. of Phases		2		2		2		2		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 1 SB-- 0 EB-- 0 WB-- 0		NB-- 1 SB-- 0 EB-- 0 WB-- 0		NB-- 1 SB-- 0 EB-- 0 WB-- 0		NB-- 1 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2									
Override Capacity		0		0		0		0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	872	2	436	2	874	437	8	880	2	440	2	882	2	441	0	882	2	441
	Through-Right		0						0				0				0		
	Right	1861	2	0	4	1865	0	19	1880	2	0	4	1884	2	0	0	1884	2	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	1166	3	389	1	1167	389	2	1168	3	389	1	1169	3	390	0	1169	3	390
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	1724	2	612	1	1725	613	5	1729	2	614	1	1730	2	614	0	1730	2	614
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	113	0	612	0	113	613	0	113	0	614	0	113	0	614	0	113	0	614
	Left-Through-Right		0						0				0				0		
Left-Right		1						1				1				1			
CRITICAL VOLUMES		North-South:	436		North-South:	437		North-South:		440		North-South:		441		North-South:		441	
		East-West:	612		East-West:	613		East-West:		614		East-West:		614		East-West:		614	
		SUM:	1048		SUM:	1050		SUM:		1054		SUM:		1055		SUM:		1055	
VOLUME/CAPACITY (V/C) RATIO:				0.699		0.700				0.703				0.703					
V/C LESS ATSAC/ATCS ADJUSTMENT:				<b>0.599</b>		<b>0.600</b>				<b>0.603</b>				<b>0.603</b>				<b>-0.100</b>	
LEVEL OF SERVICE (LOS):				<b>A</b>		<b>A</b>				<b>B</b>				<b>B</b>				<b>A</b>	

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.703**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
3	East-West Street:	1st St	Projection Year:	2024	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2	2		2		2		2										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	31	1	31	0	31	31	2	33	1	33	0	33	1	33	0	33	1	33
	Left-Through		0							0				0				0	
	Through	1476	2	499	0	1476	499	27	1503	2	508	0	1503	2	508	0	1503	2	508
	Through-Right		1							1				1				1	
	Right	22	0	0	0	22	0	0	22	0	0	0	22	0	0	0	22	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	178	1	178	2	180	180	0	178	1	178	2	180	1	180	0	180	1	180
	Left-Through		0							0				0				0	
	Through	1758	2	766	0	1758	766	8	1766	2	769	0	1766	2	769	0	1766	2	769
	Through-Right		1							1				1				1	
	Right	540	0	0	0	540	0	0	540	0	0	0	540	0	0	0	540	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	847	1	501	0	847	501	0	847	1	501	0	847	1	501	0	847	1	466
	Left-Through		1							1				1				1	
	Through	154	0	501	1	155	501	0	154	0	501	1	155	0	501	0	155	0	214
	Through-Right		0							0				0				0	
	Right	58	1	43	0	58	43	1	59	1	43	0	59	1	43	0	59	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	35	1	35	2	37	37	0	35	1	35	2	37	1	37	0	37	1	37
	Left-Through		0							0				0				0	
	Through	147	1	147	3	150	150	1	148	1	148	3	151	1	151	0	151	1	151
	Through-Right		0							0				0				0	
	Right	221	1	132	6	227	137	0	221	1	132	6	227	1	137	0	227	1	137
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South: 797 East-West: 648 SUM: 1445	North-South: 797 East-West: 651 SUM: 1448		North-South: 802 East-West: 649 SUM: 1451				North-South: 802 East-West: 652 SUM: 1454				North-South: 802 East-West: 617 SUM: 1419						
VOLUME/CAPACITY (V/C) RATIO:		1.014	1.016		1.018				1.020				0.996						
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.914	0.916		0.918				0.920				0.896						
LEVEL OF SERVICE (LOS):		E	E		E				E				D						

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.022**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b> 4	North-South Street: <b>Gaffey St</b>		Year of Count: <b>2024</b>		Ambient Growth: (%): <b>0</b>		Conducted by:		Date:										
	East-West Street: <b>5th St</b>		Projection Year: <b>2024</b>		Peak Hour: <b>PM</b>		Reviewed by:		Project:										
No. of Phases		3		3		3		3		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0									
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2									
Override Capacity		0		0		0		0		0									
<b>MOVEMENT</b>		<b>EXISTING CONDITION</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	Left	23	1	23	0	23	23	0	23	1	23	0	23	1	23	0	23	1	23
	Left-Through		0							0				0				0	
	Through	1380	1	710	0	1380	710	29	1409	1	724	0	1409	1	724	0	1409	1	724
	Through-Right		1							1				1				1	
	Right	39	0	0	0	39	0	0	39	0	0	0	39	0	0	0	39	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
<b>SOUTHBOUND</b>	Left	120	1	120	0	120	120	0	120	1	120	0	120	1	120	0	120	1	120
	Left-Through		0							0				0				0	
	Through	1358	1	719	2	1360	720	8	1366	1	723	2	1368	1	724	0	1368	1	724
	Through-Right		1							1				1				1	
	Right	79	0	0	0	79	0	0	79	0	0	0	79	0	0	0	79	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
<b>EASTBOUND</b>	Left	112	1	112	0	112	112	0	112	1	112	0	112	1	112	0	112	1	112
	Left-Through		0							0				0				0	
	Through	124	0	142	0	124	142	0	124	0	142	0	124	0	142	0	124	0	142
	Through-Right		1							1				1				1	
	Right	18	0	0	0	18	0	0	18	0	0	0	18	0	0	0	18	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
<b>WESTBOUND</b>	Left	49	1	49	0	49	49	0	49	1	49	0	49	1	49	0	49	1	49
	Left-Through		0							0				0				0	
	Through	93	0	179	0	93	179	0	93	0	179	0	93	0	179	0	93	0	179
	Through-Right		1							1				1				1	
	Right	86	0	0	0	86	0	0	86	0	0	0	86	0	0	0	86	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
<b>CRITICAL VOLUMES</b>		<i>North-South:</i> 830		<i>North-South:</i> 830		<i>North-South:</i> 844		<i>North-South:</i> 844		<i>North-South:</i> 844		<i>North-South:</i> 844		<i>North-South:</i> 844		<i>North-South:</i> 844		<i>North-South:</i> 844	
		<i>East-West:</i> 291		<i>East-West:</i> 291		<i>East-West:</i> 291		<i>East-West:</i> 291		<i>East-West:</i> 291		<i>East-West:</i> 291		<i>East-West:</i> 291		<i>East-West:</i> 291		<i>East-West:</i> 291	
		<i>SUM:</i> 1121		<i>SUM:</i> 1121		<i>SUM:</i> 1135		<i>SUM:</i> 1135		<i>SUM:</i> 1135		<i>SUM:</i> 1135		<i>SUM:</i> 1135		<i>SUM:</i> 1135		<i>SUM:</i> 1135	
<b>VOLUME/CAPACITY (V/C) RATIO:</b>		0.787		0.787		0.796		0.796		0.796		0.796		0.796		0.796		0.796	
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>		<b>0.687</b>		<b>0.687</b>		<b>0.696</b>		<b>0.696</b>		<b>0.696</b>		<b>0.696</b>		<b>0.696</b>		<b>0.696</b>		<b>-0.100</b>	
<b>LEVEL OF SERVICE (LOS):</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>A</b>	

### PROJECT IMPACT

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.796**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Gaffey St</b>	Year of Count:	<b>2024</b>	Ambient Growth: (%):	<b>0</b>	Conducted by:		Date:										
<b>5</b>	East-West Street:	<b>7th St</b>	Projection Year:	<b>2024</b>	Peak Hour:	<b>PM</b>	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	49	1	49	0	49	49	2	51	1	51	0	51	1	51	0	51	1	51
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	1364	1	712	0	1364	712	29	1393	1	727	0	1393	1	727	0	1393	1	727
	Through-Right	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	60	0	0	0	60	0	0	60	0	0	0	60	0	0	0	60	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND	Left	72	1	72	0	72	72	0	72	1	72	0	72	1	72	0	72	1	72
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	1283	1	699	2	1285	700	8	1291	1	703	2	1293	1	704	0	1293	1	704
	Through-Right	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	115	0	0	0	115	0	0	115	0	0	0	115	0	0	0	115	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EASTBOUND	Left	171	1	171	0	171	171	0	171	1	171	0	171	1	171	0	171	1	171
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	183	0	228	0	183	228	0	183	0	229	0	183	0	229	0	183	0	229
	Through-Right	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	45	0	0	0	45	0	1	46	0	0	0	46	0	0	0	46	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WESTBOUND	Left	72	1	72	0	72	72	0	72	1	72	0	72	1	72	0	72	1	72
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	172	0	244	0	172	244	1	173	0	245	0	173	0	245	0	173	0	245
	Through-Right	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	72	0	0	0	72	0	0	72	0	0	0	72	0	0	0	72	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>CRITICAL VOLUMES</b>		North-South: 784 East-West: 415 SUM: 1199	North-South: 784 East-West: 415 SUM: 1199	North-South: 784 East-West: 415 SUM: 1199	North-South: 799 East-West: 416 SUM: 1215	North-South: 799 East-West: 416 SUM: 1215	North-South: 799 East-West: 416 SUM: 1215	North-South: 799 East-West: 416 SUM: 1215	North-South: 799 East-West: 416 SUM: 1215	North-South: 799 East-West: 416 SUM: 1215									
VOLUME/CAPACITY (V/C) RATIO:		0.799	0.799	0.799	0.810	0.810	0.810	0.810	0.810	0.810									
V/C LESS ATSAC/ATCS ADJUSTMENT:		<b>0.699</b>	<b>0.699</b>	<b>0.699</b>	<b>0.710</b>	<b>0.710</b>	<b>0.710</b>	<b>0.710</b>	<b>0.710</b>	<b>-0.100</b>									
LEVEL OF SERVICE (LOS):		<b>B</b>	<b>B</b>	<b>B</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>A</b>	<b>A</b>									

### PROJECT IMPACT

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.810**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2024</b>		Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:						
<b>6</b>	East-West Street:	<b>9th St</b>		Projection Year:	<b>2024</b>		Peak Hour:	<b>PM</b>		Reviewed by:			Project:						
No. of Phases																			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2		2		2		2		2		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
NB--		0		0		0		0		0		0		0					
SB--		0		0		0		0		0		0		0					
EB--		0		0		0		0		0		0		0					
WB--		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION		EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	83	1	83	0	83	83	3	86	1	86	0	86	1	86	0	86	1	86
	Left-Through		0							0				0				0	
	Through	1169	1	626	0	1169	626	31	1200	1	641	0	1200	1	641	0	1200	1	641
	Through-Right		1							1				1				1	
	Right	82	0	0	0	82	0	0	82	0	0	0	82	0	0	0	82	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	84	1	84	0	84	84	0	84	1	84	0	84	1	84	0	84	1	84
	Left-Through		0							0				0				0	
	Through	1230	1	668	0	1230	668	9	1239	1	672	0	1239	1	673	0	1239	1	673
	Through-Right		1							1				1				1	
	Right	105	0	0	1	106	0	0	105	0	0	1	106	0	0	0	106	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	172	1	172	0	172	172	0	172	1	172	0	172	1	172	0	172	1	172
	Left-Through		0							0				0				0	
	Through	263	1	263	0	263	263	2	265	1	265	0	265	1	265	0	265	1	265
	Through-Right		0							0				0				0	
	Right	61	1	20	0	61	20	1	62	1	19	0	62	1	19	0	62	1	19
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	141	1	141	0	141	141	0	141	1	141	0	141	1	141	0	141	1	141
	Left-Through		0							0				0				0	
	Through	330	0	429	1	331	430	5	335	0	434	1	336	0	435	0	336	0	435
	Through-Right		1							1				1				1	
	Right	99	0	0	0	99	0	0	99	0	0	0	99	0	0	0	99	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South:	751	North-South:	751	North-South:	758	North-South:	758	North-South:	759	North-South:	759	North-South:	759	North-South:	759	North-South:	759
		East-West:	601	East-West:	602	East-West:	606	East-West:	606	East-West:	607	East-West:	607	East-West:	607	East-West:	607	East-West:	607
		SUM:	1352	SUM:	1353	SUM:	1364	SUM:	1364	SUM:	1366	SUM:	1366	SUM:	1366	SUM:	1366	SUM:	1366
VOLUME/CAPACITY (V/C) RATIO:		0.901		0.902			0.909				0.911								
V/C LESS ATSAC/ATCS ADJUSTMENT:		<b>0.801</b>		<b>0.802</b>			<b>0.809</b>				<b>0.811</b>				<b>-0.100</b>				
LEVEL OF SERVICE (LOS):		<b>D</b>		<b>D</b>			<b>D</b>				<b>D</b>				<b>A</b>				

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.909**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:									
7	East-West Street:	22nd St	Projection Year:	2024	Peak Hour:	PM	Reviewed by:		Project:									
No. of Phases		2	2		2		2		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2									
Override Capacity		0	0		0		0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	4	0	4	0	4	4	0	4	0	4	4	0	4	0	4	0	4
	Left-Through		1						1				1				1	
	Through	535	0	312	0	535	312	0	535	0	316	316	0	535	0	316	0	316
	Through-Right		1						1				1				1	
	Right	72	0	312	1	73	312	8	80	0	316	316	1	81	0	316	0	316
	Left-Through-Right		0						0				0				0	
	Left-Right		0						0				0				0	
SOUTHBOUND	Left	122	0	122	0	122	122	9	131	0	131	131	0	131	0	131	0	131
	Left-Through		1						1				1				1	
	Through	702	0	600	1	703	601	0	702	0	618	619	1	703	0	619	0	619
	Through-Right		1						1				1				1	
	Right	10	0	600	0	10	601	0	10	0	618	618	0	10	0	619	0	619
	Left-Through-Right		0						0				0				0	
	Left-Right		0						0				0				0	
EASTBOUND	Left	12	0	12	0	12	12	0	12	0	12	12	0	12	0	12	0	12
	Left-Through		0						0				0				0	
	Through	29	0	42	0	29	42	3	32	0	45	45	0	32	0	45	0	45
	Through-Right		0						0				0				0	
	Right	1	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0
	Left-Through-Right		1						1				1				1	
	Left-Right		0						0				0				0	
WESTBOUND	Left	193	0	193	3	196	196	27	220	0	220	223	3	223	0	223	0	223
	Left-Through		0						0				0				0	
	Through	33	0	321	0	33	324	6	39	0	386	389	0	39	0	389	0	389
	Through-Right		0						0				0				0	
	Right	95	0	0	0	95	0	32	127	0	0	0	0	127	0	0	0	0
	Left-Through-Right		1						1				1				1	
	Left-Right		0						0				0				0	
CRITICAL VOLUMES		North-South: 604 East-West: 333 SUM: 937	North-South: 605 East-West: 336 SUM: 941	North-South: 622 East-West: 398 SUM: 1020	North-South: 623 East-West: 401 SUM: 1024	North-South: 623 East-West: 401 SUM: 1024												
VOLUME/CAPACITY (V/C) RATIO:		0.625	0.627	0.680	0.683													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.525	0.527	0.580	0.583													
LEVEL OF SERVICE (LOS):		A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.003**      Δv/c after mitigation: **-0.680**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street: <b>Gaffey St</b>	Year of Count: <b>2024</b>	Ambient Growth: (%): <b>0</b>	Conducted by:	Date:														
<b>8</b>	East-West Street: <b>25th St</b>	Projection Year: <b>2024</b>	Peak Hour: <b>PM</b>	Reviewed by:	Project:														
No. of Phases: <b>3</b> Opposed Ø'ing: N/S-1, E/W-2 or Both-3? <b>0</b> Right Turns: FREE-1, NRTOR-2 or OLA-3? <b>0</b> ATCS-1 or ATCS+ATCS-2? <b>2</b> Override Capacity <b>0</b>		NB-- <b>0</b> SB-- <b>0</b> EB-- <b>3</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>3</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>3</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>3</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>													
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	67	1	67	0	67	67	0	67	1	67	0	67	1	67	0	67	1	67
	Left-Through		0							0				0				0	
	Through	284	0	284	0	284	284	3	287	0	287	0	287	0	287	0	287	0	287
	Through-Right		1							1				1				1	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	395	1	395	0	395	395	6	401	1	401	0	401	1	401	0	401	1	401
	Through-Right		0							0				0				0	
	Right	370	1	204	3	373	207	20	390	1	222	3	393	1	224	0	393	1	224
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	332	1	332	1	333	333	5	337	1	337	1	338	1	338	0	338	1	338
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	108	1	41	0	108	41	0	108	1	41	0	108	1	41	0	108	1	41
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		1							1				1				1		
CRITICAL VOLUMES		North-South: 462	East-West: 332	SUM: 794	North-South: 462	East-West: 333	SUM: 795	North-South: 468	East-West: 337	SUM: 805	North-South: 468	East-West: 338	SUM: 806	North-South: 468	East-West: 338	SUM: 806			
VOLUME/CAPACITY (V/C) RATIO:		0.557		0.558		0.565		0.566											
V/C LESS ATCS/ATCS ADJUSTMENT:		<b>0.457</b>		<b>0.458</b>		<b>0.465</b>		<b>0.466</b>		<b>-0.100</b>									
LEVEL OF SERVICE (LOS):		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>									

### PROJECT IMPACT

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.565**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Via Cabrillo Marina</b>	<b>Year of Count:</b>	<b>2024</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>											
<b>9</b>	<b>East-West Street:</b>	<b>22nd St</b>	<b>Projection Year:</b>	<b>2024</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>											
No. of Phases		3	3		3		3		0											
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0											
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 3 SB-- 0 EB-- 0 WB-- 0	NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0											
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2											
Override Capacity		0	0		0		0		0											
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	Left	196	2	108	0	196	108	0	196	2	108	0	196	2	108	0	196	2	108	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	105	1	26	0	105	26	0	105	1	26	0	105	1	26	0	105	1	26	
SOUTHBOUND	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EASTBOUND	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WESTBOUND	Left-Through	267	1	215	1	268	215	23	290	1	226	1	291	1	227	0	291	1	227	
	Through	162	0	0	0	162	0	0	162	0	0	0	162	0	0	0	162	0	0	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CRITICAL VOLUMES	Left	79	1	79	0	79	79	0	79	1	79	0	79	1	79	0	79	1	79	
	Left-Through	409	2	205	3	412	206	82	491	2	246	3	494	2	247	0	494	2	247	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUME/CAPACITY (V/C) RATIO: V/C LESS ATSAC/ATCS ADJUSTMENT: LEVEL OF SERVICE (LOS):	North-South:	108	North-South:		108	North-South:		108	North-South:		108	North-South:		108	North-South:		108	North-South:		108
	East-West:	294	East-West:		294	East-West:		305	East-West:		306	East-West:		306	East-West:		306	East-West:		306
	SUM:	402	SUM:		402	SUM:		413	SUM:		414	SUM:		414	SUM:		414	SUM:		414
VOLUME/CAPACITY (V/C) RATIO:		0.282		0.282		0.290		0.291		0.291		0.291		0.291		0.291		0.291		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.182		0.182		0.190		0.190		0.191		0.191		0.191		0.191		-0.100		
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A		

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.290**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>VS #:</b>	<b>North-South Street:</b>	<b>Harbor Bl</b>	<b>Year of Count:</b>	<b>2024</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>11</b>	<b>East-West Street:</b>	<b>Swinford St / SR-47 EB Ramps</b>	<b>Projection Year:</b>	<b>2024</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>										
	<b>No. of Phases</b>	<b>4</b>	<b>Opposed Ø'ing: N/S-1, E/W-2 or Both-3?</b>	<b>2</b>	<b>NB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>	<b>NB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>							
	<b>Right Turns: FREE-1, NRTOR-2 or OLA-3?</b>	<b>0</b>	<b>NB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>	<b>NB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>							
	<b>ATSAC-1 or ATSAC+ATCS-2?</b>	<b>2</b>	<b>EB--</b>	<b>3</b>	<b>WB--</b>	<b>0</b>	<b>EB--</b>	<b>3</b>	<b>WB--</b>	<b>0</b>	<b>EB--</b>	<b>3</b>	<b>WB--</b>	<b>0</b>					
	<b>Override Capacity</b>	<b>0</b>																	
	<b>MOVEMENT</b>	<b>EXISTING CONDITION</b>	<b>EXISTING PLUS PROJECT</b>	<b>FUTURE CONDITION W/O PROJECT</b>	<b>FUTURE CONDITION W/ PROJECT</b>	<b>FUTURE W/ PROJECT W/ MITIGATION</b>													
		<b>Volume</b>	<b>No. of Lanes</b>	<b>Lane Volume</b>	<b>Project Traffic</b>	<b>Total Volume</b>	<b>Lane Volume</b>	<b>Added Volume</b>	<b>Total Volume</b>	<b>No. of Lanes</b>	<b>Lane Volume</b>	<b>Added Volume</b>	<b>Total Volume</b>	<b>No. of Lanes</b>	<b>Lane Volume</b>				
<b>NORTHBOUND</b>	Left	706	2	388	29	735	404	53	759	2	417	29	788	2	433				
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Through	1028	2	350	39	1067	363	146	1174	2	399	39	1213	2	412				
	Through-Right	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Right	22	0	0	0	22	0	0	22	0	0	0	22	0	0				
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
<b>SOUTHBOUND</b>	Left	12	1	12	0	12	12	0	12	1	12	0	12	1	12				
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Through	166	2	80	0	166	80	3	169	2	81	0	169	2	81				
	Through-Right	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Right	75	0	0	0	75	0	0	75	0	0	0	75	0	0				
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
<b>EASTBOUND</b>	Left	254	1	254	0	254	254	0	254	1	254	0	254	1	254				
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Through	13	0	824	0	13	833	0	13	0	842	0	13	0	851				
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Right	1635	1	0	18	1653	0	36	1671	1	0	18	1689	1	0				
	Left-Through-Right	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
<b>WESTBOUND</b>	Left	38	0	38	0	38	38	0	38	0	38	0	38	0	38				
	Left-Through	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Through	31	0	44	0	31	44	0	31	0	44	0	31	0	44				
	Through-Right	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Right	13	0	0	0	13	0	0	13	0	0	0	13	0	0				
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	<b>CRITICAL VOLUMES</b>	<b>North-South:</b>	<b>468</b>	<b>East-West:</b>	<b>868</b>	<b>SUM:</b>	<b>1336</b>	<b>North-South:</b>	<b>484</b>	<b>East-West:</b>	<b>877</b>	<b>SUM:</b>	<b>1361</b>	<b>North-South:</b>	<b>498</b>	<b>East-West:</b>	<b>886</b>	<b>SUM:</b>	<b>1384</b>
	<b>VOLUME/CAPACITY (V/C) RATIO:</b>		<b>0.972</b>		<b>0.990</b>		<b>1.007</b>		<b>1.025</b>		<b>1.025</b>		<b>1.025</b>		<b>0.925</b>		<b>0.925</b>		<b>0.925</b>
	<b>V/C LESS ATSC/ATCS ADJUSTMENT:</b>		<b>0.872</b>		<b>0.890</b>		<b>0.907</b>		<b>0.925</b>		<b>0.925</b>		<b>0.925</b>		<b>0.925</b>		<b>0.925</b>		<b>0.925</b>
	<b>LEVEL OF SERVICE (LOS):</b>		<b>D</b>		<b>D</b>		<b>E</b>		<b>E</b>		<b>E</b>		<b>E</b>		<b>E</b>		<b>E</b>		<b>E</b>

	Scenario	Scenario Change	Impact?
FB	0.504	0.517	0.012 NO

FB		
N-S	411	411
EB	376	254
WB	44	44
Sum	831	709
V/C	0.604	0.516
Less ATC	0.504	0.416
LOS	A	A
FP Mitigation		
N-S	424	424
EB	380	254
WB	44	44
Sum	848	722
V/C	0.617	0.525
Less ATC	0.517	0.425
LOS	A	A

**PROJECT IMPACT**  
 Change in v/c due to project: **0.018**    Δv/c after mitigation: **0.018**  
 Significant impacted? **YES**    Fully mitigated? **NO**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street: <b>Harbor Bl</b>	Year of Count: <b>2024</b>	Ambient Growth: (%): <b>0</b>	Conducted by:	Date:																
<b>12</b>	East-West Street: <b>O'Farrell St</b>	Projection Year: <b>2024</b>	Peak Hour: <b>PM</b>	Reviewed by:	Project:																
No. of Phases: <b>2</b> Opposed Ø'ing: N/S-1, E/W-2 or Both-3? <b>0</b> Right Turns: FREE-1, NRTOR-2 or OLA-3? <b>0</b> ATCS-1 or ATCS+ATCS-2? <b>2</b> Override Capacity <b>0</b>		NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>																
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION						
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume			
NORTHBOUND	Left	15	1	15	0	15	15	0	15	1	15	0	15	1	15	0	15	1	15		
	Left-Through		0							0				0				0			
	Through	1630	3	543	68	1698	566	200	1830	3	610	68	1898	3	633	0	1898	3	633		
	Through-Right		0							0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0							0				0				0			
	Through	1819	2	609	18	1837	615	40	1859	2	622	18	1877	2	628	0	1877	2	628		
	Through-Right		1							1				1				1			
	Right	8	0	0	0	8	0	0	8	0	0	0	8	0	0	0	8	0	0		
EASTBOUND	Left	102	0	102	0	102	102	0	102	0	102	0	102	0	102	0	102	0	102		
	Left-Through		0							0				0				0			
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through-Right		0							0				0				0			
	Right	23	0	125	0	23	125	0	23	0	125	0	23	0	125	0	23	0	125		
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0							0				0				0			
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through-Right		0							0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
CRITICAL VOLUMES		North-South: 624	East-West: 125		SUM: 749		North-South: 630	East-West: 125		SUM: 755		North-South: 637	East-West: 125		SUM: 762		North-South: 643	East-West: 125		SUM: 768	
VOLUME/CAPACITY (V/C) RATIO:		0.499		0.503		0.508		0.512		0.512		0.512		0.512		0.512		0.512		0.512	
V/C LESS ATCS/ATCS ADJUSTMENT:		<b>0.399</b>		<b>0.403</b>		<b>0.408</b>		<b>0.412</b>		<b>0.412</b>		<b>0.412</b>		<b>0.412</b>		<b>0.412</b>		<b>0.412</b>		<b>0.412</b>	
LEVEL OF SERVICE (LOS):		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>	

### PROJECT IMPACT

Change in v/c due to project: **0.004**      Δv/c after mitigation: **0.004**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street: <b>Harbor Bl</b>		Year of Count: <b>2024</b>	Ambient Growth: (%): <b>0</b>	Conducted by:	Date:																
<b>13</b>	East-West Street: <b>1st St</b>		Projection Year: <b>2024</b>	Peak Hour: <b>PM</b>	Reviewed by:	Project:																
No. of Phases: <b>4</b> Opposed Ø'ing: N/S-1, E/W-2 or Both-3? <b>2</b> Right Turns: FREE-1, NRTOR-2 or OLA-3? <b>0</b> ATCSAC-1 or ATCSAC+ATCS-2? <b>2</b> Override Capacity <b>0</b>		NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>																
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION						
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume			
NORTHBOUND	Left	29	1	29	0	29	29	1	30	1	30	0	30	1	30	0	30	1	30			
	Left-Through		0							0				0				0				
	Through	1581	2	527	0	1581	528	199	1780	2	594	0	1780	2	594	0	1780	2	594			
	Through-Right		1							1				1				1				
	Right	1	0	0	1	2	0	0	1	0	0	1	2	0	0	0	2	0	0			
SOUTHBOUND	Left	7	1	7	18	25	25	0	7	1	7	18	25	1	25	0	25	1	25			
	Left-Through		0							0				0				0				
	Through	1748	2	613	0	1748	613	39	1787	2	626	0	1787	2	626	0	1787	3	470			
	Through-Right		1							1				1				1				
	Right	92	0	0	0	92	0	0	92	0	0	0	92	0	0	0	92	0	0			
EASTBOUND	Left	72	1	72	0	72	72	0	72	1	72	0	72	1	72	0	72	1	72			
	Left-Through		0							0				0				0				
	Through	0	0	26	3	3	29	0	0	0	26	3	3	0	29	0	3	0	29			
	Through-Right		1							1				1				1				
	Right	26	0	0	0	26	0	0	26	0	0	0	26	0	0	0	26	0	0			
WESTBOUND	Left	0	0	0	3	3	3	0	0	0	0	3	3	0	3	0	3	0	3			
	Left-Through		0							0				0				0				
	Through	0	0	0	13	13	84	0	0	0	0	13	13	0	84	0	13	0	84			
	Through-Right		0							0				0				0				
	Right	0	0	0	68	68	0	0	0	0	0	68	68	0	0	0	68	0	0			
CRITICAL VOLUMES		North-South: 642	East-West: 72			SUM: 714			North-South: 642	East-West: 156			SUM: 798			North-South: 656	East-West: 156			SUM: 812		
VOLUME/CAPACITY (V/C) RATIO:		0.519			0.580			0.529				0.591				0.517						
V/C LESS ATCSAC/ATCS ADJUSTMENT:		<b>0.419</b>			<b>0.480</b>			<b>0.429</b>				<b>0.491</b>				<b>0.417</b>						
LEVEL OF SERVICE (LOS):		<b>A</b>			<b>A</b>			<b>A</b>				<b>A</b>				<b>A</b>						

### PROJECT IMPACT

Change in v/c due to project: **0.062**      Δv/c after mitigation: **-0.012**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b> <b>15</b>	North-South Street: <b>Harbor Bl</b>		Year of Count: <b>2024</b>		Ambient Growth: (%): <b>0</b>		Conducted by:		Date:										
	East-West Street: <b>5th St</b>		Projection Year: <b>2024</b>		Peak Hour: <b>PM</b>		Reviewed by:		Project:										
No. of Phases		3		3		3		3		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0									
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2									
Override Capacity		0		0		0		0		0									
<b>MOVEMENT</b>		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	↵ Left	31	1	31	0	31	31	0	31	1	31	0	31	1	31	0	31	1	31
	↵ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	→ Through	1331	2	445	1	1332	445	199	1530	2	511	1	1531	2	512	0	1531	2	512
	→ Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	→ Right	4	0	0	0	4	0	0	4	0	0	0	4	0	0	0	4	0	0
	↵↵ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SOUTHBOUND</b>	↵ Left	2	1	2	0	2	2	0	2	1	2	0	2	1	2	0	2	1	2
	↵ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	→ Through	1602	2	575	3	1605	576	39	1641	2	588	3	1644	2	589	0	1644	2	589
	→ Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	→ Right	122	0	0	0	122	0	0	122	0	0	0	122	0	0	0	122	0	0
	↵↵ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>EASTBOUND</b>	↵ Left	291	1	291	0	291	291	0	291	1	291	0	291	1	291	0	291	1	291
	↵ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	→ Through	6	1	6	0	6	6	0	6	1	6	0	6	1	6	0	6	1	6
	→ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	→ Right	17	1	2	0	17	2	0	17	1	2	0	17	1	2	0	17	1	2
	↵↵ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>WESTBOUND</b>	↵ Left	4	1	4	0	4	4	0	4	1	4	0	4	1	4	0	4	1	4
	↵ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	→ Through	6	0	33	0	6	33	0	6	0	33	0	6	0	33	0	6	0	33
	→ Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	→ Right	27	0	0	0	27	0	0	27	0	0	0	27	0	0	0	27	0	0
	↵↵ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>CRITICAL VOLUMES</b>		North-South:	606	North-South:	607	North-South:	619	North-South:	620	North-South:	620	East-West:	324	East-West:	324	East-West:	324	East-West:	324
		East-West:	324	East-West:	324	East-West:	324	East-West:	324	East-West:	324	SUM:	930	SUM:	931	SUM:	943	SUM:	944
		SUM:	930	SUM:	931	SUM:	943	SUM:	944	SUM:	944	SUM:	944	SUM:	944	SUM:	944	SUM:	944
<b>VOLUME/CAPACITY (V/C) RATIO:</b>		0.653		0.653		0.662		0.662		0.662		0.662		0.662		0.662		0.662	
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>		0.553		0.553		0.562		0.562		0.562		0.562		0.562		0.562		-0.100	
<b>LEVEL OF SERVICE (LOS):</b>		A		A		A		A		A		A		A		A		A	

### PROJECT IMPACT

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.662**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b> <b>16</b>	North-South Street: <b>Harbor Bl</b>		Year of Count: <b>2024</b>		Ambient Growth: (%): <b>0</b>		Conducted by:		Date:										
	East-West Street: <b>6th St</b>		Projection Year: <b>2024</b>		Peak Hour: <b>PM</b>		Reviewed by:		Project:										
No. of Phases		4		4		4		4		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2		2		2		2		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2									
Override Capacity		0		0		0		0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
<b>NORTHBOUND</b>	Left	65	1	65	0	65	65	0	65	1	65	0	65	1	65	0	65	1	65
	Left-Through		0						0				0				0		
	Through	962	2	321	1	963	321	199	1161	2	387	1	1162	2	387	0	1162	2	387
	Through-Right		1						1				1				1		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
<b>SOUTHBOUND</b>	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0						0				0				0		
	Through	1174	2	434	3	1177	435	39	1213	2	447	3	1216	2	448	0	1216	2	448
	Through-Right		1						1				1				1		
	Right	129	0	0	0	129	0	0	129	0	0	0	129	0	0	0	129	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
<b>EASTBOUND</b>	Left	93	1	93	0	93	93	0	93	1	93	0	93	1	93	0	93	1	93
	Left-Through		0						0				0				0		
	Through	0	0	57	0	0	57	0	0	0	57	0	0	0	57	0	0	0	57
	Through-Right		1						1				1				1		
	Right	57	0	0	0	57	0	0	57	0	0	0	57	0	0	0	57	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
<b>WESTBOUND</b>	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		1						1				1				1		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
<b>CRITICAL VOLUMES</b>		North-South: 499 East-West: 93 SUM: 592		North-South: 500 East-West: 93 SUM: 593		North-South: 512 East-West: 93 SUM: 605		North-South: 513 East-West: 93 SUM: 606		North-South: 513 East-West: 93 SUM: 606									
VOLUME/CAPACITY (V/C) RATIO:		0.431		0.431		0.440		0.441		0.441									
V/C LESS ATSAC/ATCS ADJUSTMENT:		<b>0.331</b>		<b>0.331</b>		<b>0.340</b>		<b>0.341</b>		<b>-0.100</b>									
LEVEL OF SERVICE (LOS):		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>									

### PROJECT IMPACT

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.440**  
 Significant impacted? **NO**                      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Harbor Blvd</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>									
<b>17A</b>	<b>East-West Street:</b>	<b>7th St</b>	<b>Projection Year:</b>	<b>2024</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>IOWA 2024 CB</b>								
No. of Phases		3	3		3		3		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 3 WB-- 0	NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2									
Override Capacity		0	0		0		0		0									
MOVEMENT	YEAR 2024 CONDITIONS			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	88	1	88		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0
	Through	1,491	3	497		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0
	Right	0	0	0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0
	Left-Right		0			0		0		0		0		0		0		0
SOUTHBOUND	Left	0	0	0		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0
	Through	1,267	2	553		0		0		0		0		0		0		0
	Through-Right		1			0		0		0		0		0		0		0
	Right	392	0	0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0
	Left-Right		0			0		0		0		0		0		0		0
EASTBOUND	Left	250	2	138		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0
	Through	0	0	0		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0
	Right	60	1	0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0
	Left-Right		0			0		0		0		0		0		0		0
WESTBOUND	Left	0	0	0		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0
	Through	0	0	0		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0
	Right	0	0	0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0
	Left-Right		0			0		0		0		0		0		0		0
CRITICAL VOLUMES		North-South: 641 East-West: 138 SUM: 779	North-South: 0 East-West: 0 SUM: 0		North-South: 0 East-West: 0 SUM: 0				North-South: 0 East-West: 0 SUM: 0				North-South: 0 East-West: 0 SUM: 0					
VOLUME/CAPACITY (V/C) RATIO:		0.547	0.000		0.000				0.000				0.000					
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.447	-0.100		-0.100				-0.100				-0.100					
LEVEL OF SERVICE (LOS):		A	A		A				A				A					

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Harbor Blvd</b>	Year of Count:	2011	Ambient Growth: (%):	0	Conducted by:		Date:												
<b>17B</b>	East-West Street:	<b>Sampson Way</b>	Projection Year:	2024	Peak Hour:	PM	Reviewed by:		Project:	IOWA 2024 CB											
No. of Phases		2	2		2		2		0												
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0												
Right Turns: FREE-1, NRTOR-2 or OLA-3?		3	3		3		3		3												
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2												
Override Capacity		0	0		0		0		0												
<b>MOVEMENT</b>		YEAR 2024 CONDITIONS			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
<b>NORTHBOUND</b>	↵ Left	12	2	7		0														0	
	↵ Left-Through		0			0														0	
	→ Through	504	2	252		0														0	
	→ Through-Right		0			0														0	
	→ Right	0	0	0		0															0
	↘ Left-Through-Right		0				0														0
<b>SOUTHBOUND</b>	↵ Left	0	0	0		0														0	
	↵ Left-Through		0			0														0	
	→ Through	432	2	216		0														0	
	→ Through-Right		0			0														0	
	→ Right	895	1	304		0														0	
	↘ Left-Through-Right		0				0													0	
<b>EASTBOUND</b>	↵ Left	1,075	2	591		0														0	
	↵ Left-Through		0			0														0	
	→ Through	0	0	0		0														0	
	→ Through-Right		0			0														0	
	→ Right	12	1	9		0														0	
	↘ Left-Through-Right		0				0													0	
<b>WESTBOUND</b>	↵ Left	0	0	0		0														0	
	↵ Left-Through		0			0														0	
	→ Through	0	0	0		0														0	
	→ Through-Right		0			0														0	
	→ Right	0	0	0		0														0	
	↘ Left-Through-Right		0				0													0	
<b>CRITICAL VOLUMES</b>		North-South:	311	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	0	
		East-West:	591	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	0	
		SUM:	902	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	0	
VOLUME/CAPACITY (V/C) RATIO:			0.601		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	0.000	
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.501		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100	-0.100	
LEVEL OF SERVICE (LOS):			A		A		A		A		A		A		A		A		A	A	

### PROJECT IMPACT

Change in v/c due to project:	0.000	Δv/c after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Harbor Blvd</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>17A</b>	<b>East-West Street:</b>	<b>7th St</b>	<b>Projection Year:</b>	<b>2024</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>2024 WITH PROJECT</b>									
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 3 WB-- 0	NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
<b>MOVEMENT</b>		<b>YEAR 2024 CONDITIONS</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	Left	88	1	88		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	1,492	3	497		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	0
<b>SOUTHBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	1,270	2	554		0		0		0		0		0		0		0	
	Through-Right		1			0		0		0		0		0		0		0	
	Right	392	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	0
<b>EASTBOUND</b>	Left	250	2	138		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	60	1	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	0
<b>WESTBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	0
<b>CRITICAL VOLUMES</b>		<i>North-South:</i> 642 <i>East-West:</i> 138 <i>SUM:</i> 780	<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0				<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0				<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0						
<b>VOLUME/CAPACITY (V/C) RATIO:</b>		0.547		0.000		0.000				0.000				0.000					
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>		0.447		-0.100		-0.100				-0.100				-0.100					
<b>LEVEL OF SERVICE (LOS):</b>		A		A		A				A				A					

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Harbor Blvd</b>	Year of Count:	<b>2011</b>	Ambient Growth: (%):	<b>0</b>	Conducted by:		Date:											
<b>17B</b>	East-West Street:	<b>Sampson Way</b>	Projection Year:	<b>2024</b>	Peak Hour:	<b>PM</b>	Reviewed by:		Project:	<b>2024 WITH PROJECT</b>										
No. of Phases		2	2		2		2		0											
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0											
Right Turns: FREE-1, NRTOR-2 or OLA-3?		3	3		3		3		3											
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2											
Override Capacity		0	0		0		0		0											
MOVEMENT		YEAR 2024 CONDITIONS			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	12	1	12		0		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0		0
	Through	504	2	252		0		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0		0
	Right	0	0	0		0		0		0		0		0		0		0		0
SOUTHBOUND	Left-Through-Right		0			0		0		0		0		0		0		0		0
	Left-Right		0			0		0		0		0		0		0		0		0
	Left	0	0	0		0		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0		0
	Through	432	2	216		0		0		0		0		0		0		0		0
EASTBOUND	Through-Right		0			0		0		0		0		0		0		0		0
	Right	898	1	306		0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0		0
	Left-Right		0			0		0		0		0		0		0		0		0
	Left	1,076	2	592		0		0		0		0		0		0		0		0
WESTBOUND	Left-Through		0			0		0		0		0		0		0		0		0
	Through		0	0		0		0		0		0		0		0		0		0
	Through-Right		0	0		0		0		0		0		0		0		0		0
	Right	0	0	0		0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0		0
CRITICAL VOLUMES	North-South:	318		0	North-South:	0		0	North-South:	0		0	North-South:	0		0	North-South:	0		0
	East-West:	592		0	East-West:	0		0	East-West:	0		0	East-West:	0		0	East-West:	0		0
	SUM:	910		0	SUM:	0		0	SUM:	0		0	SUM:	0		0	SUM:	0		0
VOLUME/CAPACITY (V/C) RATIO:			0.607			0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:			<b>0.507</b>			<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>
LEVEL OF SERVICE (LOS):			<b>A</b>			<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>

### PROJECT IMPACT

Change in v/c due to project:	<b>0.000</b>	Δv/c after mitigation:	<b>0.000</b>
Significant impacted?	<b>NO</b>	Fully mitigated?	<b>N/A</b>

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Miner St</b>	Year of Count:	<b>2024</b>	Ambient Growth: (%):	<b>0</b>	Conducted by:		Date:											
	East-West Street:	<b>22nd St</b>	Projection Year:	<b>2024</b>	Peak Hour:	<b>PM</b>	Reviewed by:		Project:											
No. of Phases		3	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	ATSAC-1 or ATSAC+ATCS-2?		2	Override Capacity		0						
NB--		0	SB--		0	NB--		0	SB--		0	NB--		0						
EB--		0	WB--		0	EB--		0	WB--		0	EB--		0						
		0			0			0			0			0						
		2			2			2			2			2						
		0			0			0			0			0						
<b>MOVEMENT</b>		<b>EXISTING CONDITION</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
<b>NORTHBOUND</b>	Left	93	1	93	0	93	93	0	93	1	93	0	93	1	93	0	93	1	93	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	704	1	369	0	704	369	0	704	1	369	0	704	1	369	0	704	1	369	
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	34	0	0	0	34	0	0	34	0	0	0	34	0	0	0	34	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>SOUTHBOUND</b>	Left	29	1	29	0	29	29	29	58	1	58	0	58	1	58	0	58	1	58	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	372	1	349	0	372	351	0	372	1	351	0	372	1	351	0	372	1	351	
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	326	0	0	3	329	0	0	326	0	0	3	329	0	0	0	329	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>EASTBOUND</b>	Left	218	1	218	1	219	219	0	218	1	218	1	219	1	219	0	219	1	219	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	61	1	58	0	61	58	13	74	1	65	0	74	1	65	0	74	1	65	
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	55	0	0	0	55	0	0	55	0	0	0	55	0	0	0	55	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>WESTBOUND</b>	Left	29	1	29	0	29	29	0	29	1	29	0	29	1	29	0	29	1	29	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	73	1	56	0	73	56	59	132	1	132	0	132	1	132	0	132	1	132	
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	39	0	0	0	39	0	136	175	0	146	0	175	0	146	0	175	0	146	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>CRITICAL VOLUMES</b>		North-South:	442	North-South:	444	North-South:	442	North-South:	444	North-South:	444	North-South:	444	North-South:	444	North-South:	444	North-South:	444	
		East-West:	274	East-West:	275	East-West:	364	East-West:	365	East-West:	365	East-West:	365	East-West:	365	East-West:	365	East-West:	365	
		SUM:	716	SUM:	719	SUM:	806	SUM:	809	SUM:	809	SUM:	809	SUM:	809	SUM:	809	SUM:	809	
VOLUME/CAPACITY (V/C) RATIO:		0.502	V/C LESS ATSAC/ATCS ADJUSTMENT:		0.505	LEVEL OF SERVICE (LOS):		0.566	A		0.568		A		-0.100		A			

### PROJECT IMPACT

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.566**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	Pacific Ave	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:												
<b>20</b>	East-West Street:	Front St	Projection Year:	2024	Peak Hour:	PM	Reviewed by:		Project:												
No. of Phases		3	3		3		3		0												
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0												
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	0		0		0		0												
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2												
Override Capacity		0	0		0		0		0												
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0						0				0				0				
	Through	623	1	341	1	624	341	2	625	1	342	1	626	1	342	0	626	1	342	0	
	Through-Right		1							1				1				1			
	Right	58	0	0	0	58	0	0	58	0	0	0	58	0	0	0	58	0	0	0	
	Left-Through-Right		0							0				0				0			
Left-Right		0							0				0				0				
SOUTHBOUND	Left	164	1	164	0	164	164	1	165	1	165	0	165	1	165	0	165	1	165	0	
	Left-Through		0						0				0				0				
	Through	752	2	376	0	752	376	1	753	2	377	0	753	2	377	0	753	2	377	0	
	Through-Right		0							0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right		0							0				0				0			
Left-Right		0							0				0				0				
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0				
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right		0							0				0				0			
Left-Right		0							0				0				0				
WESTBOUND	Left	16	1	16	0	16	16	0	16	1	16	0	16	1	16	0	16	1	16	0	
	Left-Through		0						0				0				0				
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0			
	Right	232	2	0	1	233	0	4	236	2	0	1	237	2	0	0	237	2	0	0	
	Left-Through-Right		0							0				0				0			
Left-Right		0							0				0				0				
CRITICAL VOLUMES		North-South:	505	North-South:	505	North-South:	507	North-South:	507	North-South:	507	North-South:	507	North-South:	507	North-South:	507	North-South:	507	North-South:	507
		East-West:	16	East-West:	16	East-West:	16	East-West:	16	East-West:	16	East-West:	16	East-West:	16	East-West:	16	East-West:	16	East-West:	16
		SUM:	521	SUM:	521	SUM:	523	SUM:	523	SUM:	523	SUM:	523	SUM:	523	SUM:	523	SUM:	523	SUM:	523
VOLUME/CAPACITY (V/C) RATIO:			0.366		0.366		0.367		0.367		0.367		0.367		0.367		0.367		0.367		0.367
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.266		0.266		0.267		0.267		0.267		0.267		0.267		0.267		0.267		-0.100
LEVEL OF SERVICE (LOS):			A		A		A		A		A		A		A		A		A		A

### PROJECT IMPACT

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.367**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	Pacific Ave	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:					
<b>21</b>	East-West Street:	1st St	Projection Year:	2024	Peak Hour:	PM	Reviewed by:		Project:					
No. of Phases		2	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	ATSAC-1 or ATSAC+ATCS-2?		2	Override Capacity		0
NB--		0	SB--		0	NB--		0	SB--		0	NB--		0
EB--		0	WB--		0	EB--		0	WB--		0	EB--		0
		2			2			2			2			2
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
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		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
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		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
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		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
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		0			0			0			0			0
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		0			0			0			0			0
		0			0			0			0			0
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		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0			0			0			0
		0			0									

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
22	East-West Street:	5th St	Projection Year:	2024	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	27	0	27	0	27	27	0	27	0	27	0	27	0	27	0	27	0	27
	Left-Through		1						1				1				1		
	Through	769	0	483	0	769	483	2	771	0	484	0	771	0	484	0	771	0	484
	Through-Right		1						1				1				1		
	Right	89	0	483	0	89	483	0	89	0	484	0	89	0	484	0	89	0	484
Left-Through-Right		0						0				0				0			
Left-Right		0						0				0				0			
SOUTHBOUND	Left	49	0	49	0	49	49	0	49	0	49	0	49	0	49	0	49	0	49
	Left-Through		1						1				1				1		
	Through	906	0	565	2	908	566	1	907	0	566	2	909	0	567	0	909	0	567
	Through-Right		1						1				1				1		
	Right	28	0	565	0	28	566	0	28	0	566	0	28	0	567	0	28	0	567
Left-Through-Right		0						0				0				0			
Left-Right		0						0				0				0			
EASTBOUND	Left	33	1	33	0	33	33	0	33	1	33	0	33	1	33	0	33	1	33
	Left-Through		0						0				0				0		
	Through	101	0	161	0	101	161	0	101	0	161	0	101	0	161	0	101	0	161
	Through-Right		1						1				1				1		
	Right	60	0	0	0	60	0	0	60	0	0	0	60	0	0	0	60	0	0
Left-Through-Right		0						0				0				0			
Left-Right		0						0				0				0			
WESTBOUND	Left	139	1	139	0	139	139	0	139	1	139	0	139	1	139	0	139	1	139
	Left-Through		0						0				0				0		
	Through	159	0	244	0	159	244	0	159	0	244	0	159	0	244	0	159	0	244
	Through-Right		1						1				1				1		
	Right	85	0	0	0	85	0	0	85	0	0	0	85	0	0	0	85	0	0
Left-Through-Right		0						0				0				0			
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 592 East-West: 300 SUM: 892	North-South: 593 East-West: 300 SUM: 893	North-South: 593 East-West: 300 SUM: 893	North-South: 594 East-West: 300 SUM: 894	North-South: 594 East-West: 300 SUM: 894	North-South: 594 East-West: 300 SUM: 894	North-South: 594 East-West: 300 SUM: 894	North-South: 594 East-West: 300 SUM: 894	North-South: 594 East-West: 300 SUM: 894									
VOLUME/CAPACITY (V/C) RATIO:		0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.495	0.495	0.495	0.495	0.495	0.495	0.495	0.495	-0.100									
LEVEL OF SERVICE (LOS):		A	A	A	A	A	A	A	A	A									

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.595**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b> <b>23</b>	North-South Street: <b>Pacific Ave</b>	Year of Count: <b>2024</b>	Ambient Growth: (%): <b>0</b>	Conducted by:		Date:												
	East-West Street: <b>7th St</b>	Projection Year: <b>2024</b>	Peak Hour: <b>PM</b>	Reviewed by:		Project:												
No. of Phases: <b>2</b> Opposed Ø'ing: N/S-1, E/W-2 or Both-3?: <b>0</b> Right Turns: FREE-1, NRTOR-2 or OLA-3?: NB-- <b>0</b> SB-- <b>0</b> NB-- <b>0</b> SB-- <b>0</b> NB-- <b>0</b> SB-- <b>0</b> NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> ATSAC-1 or ATSAC+ATCS-2?: <b>2</b> Override Capacity: <b>0</b>																		
<b>MOVEMENT</b>	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	↵ Left	39	0	39	0	39	0	39	0	39	0	39	0	39	0	39	0	39
	↵↔ Left-Through	791	1	534	2	793	1	535	0	793	1	535	0	793	1	535	0	535
	↔ Through	42	1	534	0	42	0	534	0	42	0	534	0	42	0	534	0	534
	↗ Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↗↔ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SOUTHBOUND</b>	↘ Left	24	0	24	0	24	0	24	0	24	0	24	0	24	0	24	0	24
	↘↔ Left-Through	1059	1	602	2	1061	1	603	0	1062	1	604	0	1062	1	604	0	604
	↔ Through	49	1	602	0	49	0	602	0	49	0	602	0	49	0	602	0	602
	↙ Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↙↔ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>EASTBOUND</b>	↘ Left	60	1	60	0	60	0	60	1	60	0	60	1	60	0	60	1	60
	↘↔ Left-Through	129	0	214	0	129	0	214	0	129	0	214	0	129	0	214	0	214
	↔ Through	85	1	0	0	85	0	0	1	0	0	85	1	0	0	85	1	0
	↙ Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↙↔ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>WESTBOUND</b>	↘ Left	64	1	64	0	64	0	64	1	64	0	64	1	64	0	64	1	64
	↘↔ Left-Through	148	0	176	0	148	0	176	0	148	0	176	0	148	0	176	0	176
	↔ Through	28	1	0	0	28	0	0	1	0	0	28	1	0	0	28	1	0
	↙ Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↙↔ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>CRITICAL VOLUMES</b>		North-South: 641 East-West: 278 SUM: 919	North-South: 642 East-West: 278 SUM: 920	North-South: 642 East-West: 278 SUM: 920	North-South: 643 East-West: 278 SUM: 921	North-South: 643 East-West: 278 SUM: 921												
VOLUME/CAPACITY (V/C) RATIO:		0.613	0.613	0.613	0.614													
V/C LESS ATSAC/ATCS ADJUSTMENT:		<b>0.513</b>	<b>0.513</b>	<b>0.513</b>	<b>0.514</b>													
LEVEL OF SERVICE (LOS):		<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>													

### PROJECT IMPACT

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.613**  
 Significant impacted? **NO**                      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
24	East-West Street:	9th St	Projection Year:	2024	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	62	0	62	0	62	62	0	62	0	62	0	62	0	62	0	62	0	62
	Left-Through		1						1				1				1		
	Through	610	0	508	0	610	508	2	612	0	509	0	612	0	509	0	612	0	509
	Through-Right		1						1				1				1		
	Right	34	0	508	0	34	508	0	34	0	509	0	34	0	509	0	34	0	509
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
SOUTHBOUND	Left	50	0	50	0	50	50	0	50	0	50	0	50	0	50	0	50	0	50
	Left-Through		1						1				1				1		
	Through	839	0	669	0	839	670	1	840	0	670	0	840	0	670	0	840	0	670
	Through-Right		1						1				1				1		
	Right	299	0	669	1	300	670	0	299	0	670	1	300	0	670	0	300	0	670
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
EASTBOUND	Left	174	1	174	0	174	174	0	174	1	174	0	174	1	174	0	174	1	174
	Left-Through		0						0				0				0		
	Through	183	0	260	0	183	260	0	183	0	260	0	183	0	260	0	183	0	260
	Through-Right		1						1				1				1		
	Right	77	0	0	0	77	0	0	77	0	0	0	77	0	0	0	77	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
WESTBOUND	Left	54	1	54	0	54	54	0	54	1	54	0	54	1	54	0	54	1	54
	Left-Through		0						0				0				0		
	Through	204	0	274	0	204	274	-1	203	0	273	0	203	0	273	0	203	0	273
	Through-Right		1						1				1				1		
	Right	70	0	0	0	70	0	0	70	0	0	0	70	0	0	0	70	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
CRITICAL VOLUMES		North-South: 731 East-West: 448 SUM: 1179	North-South: 732 East-West: 448 SUM: 1180	North-South: 732 East-West: 447 SUM: 1179	North-South: 732 East-West: 447 SUM: 1179	North-South: 732 East-West: 447 SUM: 1179	North-South: 732 East-West: 447 SUM: 1179	North-South: 732 East-West: 447 SUM: 1179	North-South: 732 East-West: 447 SUM: 1179	North-South: 732 East-West: 447 SUM: 1179									
VOLUME/CAPACITY (V/C) RATIO:		0.786	0.787	0.786	0.786	0.786	0.786	0.786	0.786	0.786									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.686	0.687	0.686	0.686	0.686	0.686	0.686	0.686	-0.100									
LEVEL OF SERVICE (LOS):		B	B	B	B	B	B	B	B	A									

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.786**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2024</b>		Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:						
<b>1</b>	East-West Street:	<b>Summerland Av</b>		Projection Year:	<b>2024</b>		Peak Hour:	<b>WK</b>		Reviewed by:			Project:						
No. of Phases																			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?																			
Right Turns: FREE-1, NRTOR-2 or OLA-3?																			
ATSAC-1 or ATSAC+ATCS-2?																			
Override Capacity																			
		3		3		3		3		3		0		0					
		0		0		0		0		0		0		0					
NB--		0		0		0		0		0		0		0					
SB--		0		0		0		0		0		0		0					
EB--		0		0		0		0		0		0		0					
WB--		0		0		0		0		0		0		0					
		2		2		2		2		2		2		2					
		0		0		0		0		0		0		0					
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	159	1	159	0	159	159	0	159	1	159	0	159	1	159	0	159	1	159
	Left-Through		0							0				0				0	
	Through	640	1	332	3	643	333	5	645	1	334	3	648	1	336	0	648	1	336
	Through-Right		1							1				1				1	
	Right	23	0	0	0	23	0	0	23	0	0	0	23	0	0	0	23	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	11	1	11	0	11	11	0	11	1	11	0	11	1	11	0	11	1	11
	Left-Through		0							0				0				0	
	Through	586	1	385	3	589	387	11	597	1	391	3	600	1	392	0	600	1	392
	Through-Right		1							1				1				1	
	Right	184	0	0	0	184	0	0	184	0	0	0	184	0	0	0	184	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	221	1	221	0	221	221	0	221	1	221	0	221	1	221	0	221	1	221
	Left-Through		0							0				0				0	
	Through	0	0	82	0	0	82	0	0	0	82	0	0	0	82	0	0	0	82
	Through-Right		1							1				1				1	
	Right	82	0	0	0	82	0	0	82	0	0	0	82	0	0	0	82	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	479	2	263	0	479	263	0	479	2	263	0	479	2	263	0	479	2	263
	Left-Through		0							0				0				0	
	Through	181	0	414	0	181	414	0	181	0	414	0	181	0	414	0	181	0	414
	Through-Right		1							1				1				1	
	Right	233	0	0	0	233	0	0	233	0	0	0	233	0	0	0	233	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 544		North-South: 546		North-South: 550		North-South: 551		North-South: 551		North-South: 551		North-South: 551		North-South: 551		North-South: 551	
		East-West: 635		East-West: 635		East-West: 635		East-West: 635		East-West: 635		East-West: 635		East-West: 635		East-West: 635		East-West: 635	
		SUM: 1179		SUM: 1181		SUM: 1185		SUM: 1186		SUM: 1186		SUM: 1186		SUM: 1186		SUM: 1186		SUM: 1186	
VOLUME/CAPACITY (V/C) RATIO:		0.827		0.829		0.832		0.832		0.832		0.832		0.832		0.832		0.832	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.727		0.729		0.732		0.732		0.732		0.732		0.732		0.732		-0.100	
LEVEL OF SERVICE (LOS):		C		C		C		C		C		C		C		C		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.832**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
2	East-West Street:	I-110 Ramps	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 1 SB-- 0 EB-- 0 WB-- 0	NB-- 1 SB-- 0 EB-- 0 WB-- 0	NB-- 1 SB-- 0 EB-- 0 WB-- 0	NB-- 1 SB-- 0 EB-- 0 WB-- 0	NB-- 1 SB-- 0 EB-- 0 WB-- 0	NB-- 1 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	656	2	328	3	659	330	5	661	2	331	3	664	2	332	0	664	2	332
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	2109	2	0	5	2114	0	8	2117	2	0	5	2122	2	0	0	2122	2	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	996	3	332	3	999	333	11	1007	3	336	3	1010	3	337	0	1010	3	337
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
WESTBOUND	Left	1570	2	560	6	1576	562	14	1584	2	564	6	1590	2	566	0	1590	2	566
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	109	0	560	0	109	562	0	109	0	564	0	109	0	566	0	109	0	566
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Right	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0		
CRITICAL VOLUMES		North-South: 332 East-West: 560 SUM: 892	North-South: 333 East-West: 562 SUM: 895	North-South: 336 East-West: 564 SUM: 900	North-South: 337 East-West: 566 SUM: 903	North-South: 337 East-West: 566 SUM: 903													
VOLUME/CAPACITY (V/C) RATIO:		0.595	0.597	0.600	0.602														
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.495	0.497	0.500	0.502														
LEVEL OF SERVICE (LOS):		A	A	A	A														

### PROJECT IMPACT

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.600**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #: <b>3</b>	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2024</b>		Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:						
	East-West Street:	<b>1st St</b>		Projection Year:	<b>2024</b>		Peak Hour:	<b>WK</b>		Reviewed by:			Project:						
No. of Phases		3		3		3		3		3		3		3					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2		2		2		2		2		2		2					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	51	1	51	0	51	51	2	53	1	53	0	53	1	53	0	53	1	53
	Left-Through		0							0				0				0	
	Through	1458	2	494	0	1458	494	13	1471	2	498	0	1471	2	499	0	1471	2	499
	Through-Right		1							1				1				1	
	Right	23	0	0	2	25	0	0	23	0	0	2	25	0	0	0	25	0	0
Left-Through-Right		0								0				0				0	
Left-Right		0								0				0				0	
SOUTHBOUND	Left	215	1	215	9	224	224	0	215	1	215	9	224	1	224	0	224	1	224
	Left-Through		0							0				0				0	
	Through	1837	2	768	0	1837	768	26	1863	2	777	0	1863	2	777	0	1863	2	777
	Through-Right		1							1				1				1	
	Right	467	0	0	0	467	0	0	467	0	0	0	467	0	0	0	467	0	0
Left-Through-Right		0								0				0				0	
Left-Right		0								0				0				0	
EASTBOUND	Left	651	1	394	0	651	396	0	651	1	394	0	651	1	396	0	651	1	396
	Left-Through		1							1				1				1	
	Through	136	0	394	4	140	396	0	136	0	394	4	140	0	396	0	140	0	396
	Through-Right		0							0				0				0	
	Right	87	1	62	0	87	62	4	91	1	65	0	91	1	65	0	91	1	65
Left-Through-Right		0								0				0				0	
Left-Right		0								0				0				0	
WESTBOUND	Left	45	1	45	2	47	47	0	45	1	45	2	47	1	47	0	47	1	47
	Left-Through		0							0				0				0	
	Through	167	1	167	4	171	171	0	167	1	167	4	171	1	171	0	171	1	171
	Through-Right		0							0				0				0	
	Right	243	1	136	8	251	139	0	243	1	136	8	251	1	139	0	251	1	139
Left-Through-Right		0								0				0				0	
Left-Right		0								0				0				0	
CRITICAL VOLUMES		North-South: 819		North-South: 819		North-South: 830		North-South: 830		North-South: 830		North-South: 830		North-South: 830		North-South: 830		North-South: 830	
		East-West: 561		East-West: 567		East-West: 561		East-West: 561		East-West: 567		East-West: 567		East-West: 567		East-West: 567		East-West: 567	
		SUM: 1380		SUM: 1386		SUM: 1391		SUM: 1391		SUM: 1397		SUM: 1397		SUM: 1397		SUM: 1397		SUM: 1397	
VOLUME/CAPACITY (V/C) RATIO:		0.968		0.973		0.976		0.976		0.980		0.980		0.980		0.980		0.980	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.868		0.873		0.876		0.876		0.880		0.880		0.880		0.880		0.880	
LEVEL OF SERVICE (LOS):		D		D		D		D		D		D		D		D		D	

**PROJECT IMPACT**

Change in v/c due to project: **0.004**      Δv/c after mitigation: **0.004**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
4	East-West Street:	5th St	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	28	1	28	0	28	28	0	28	1	28	0	28	1	28	0	28	1	28
	Left-Through		0						0				0				0		
	Through	1485	1	766	2	1487	767	15	1500	1	773	2	1502	1	774	0	1502	1	774
	Through-Right		1						1				1				1		
	Right	46	0	0	0	46	0	0	46	0	0	0	46	0	0	0	46	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	178	1	178	0	178	178	0	178	1	178	0	178	1	178	0	178	1	178
	Left-Through		0						0				0				0		
	Through	1524	1	805	2	1526	806	30	1554	1	820	2	1556	1	821	0	1556	1	821
	Through-Right		1						1				1				1		
	Right	85	0	0	0	85	0	0	85	0	0	0	85	0	0	0	85	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	104	1	104	0	104	104	0	104	1	104	0	104	1	104	0	104	1	104
	Left-Through		0						0				0				0		
	Through	118	0	138	0	118	138	0	118	0	138	0	118	0	138	0	118	0	138
	Through-Right		1						1				1				1		
	Right	20	0	0	0	20	0	0	20	0	0	0	20	0	0	0	20	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	33	1	33	0	33	33	0	33	1	33	0	33	1	33	0	33	1	33
	Left-Through		0						0				0				0		
	Through	81	0	161	0	81	161	0	81	0	161	0	81	0	161	0	81	0	161
	Through-Right		1						1				1				1		
	Right	80	0	0	0	80	0	0	80	0	0	0	80	0	0	0	80	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 944 East-West: 265 SUM: 1209	North-South: 945 East-West: 265 SUM: 1210	North-South: 951 East-West: 265 SUM: 1216	North-South: 952 East-West: 265 SUM: 1217	North-South: 952 East-West: 265 SUM: 1217	North-South: 952 East-West: 265 SUM: 1217												
VOLUME/CAPACITY (V/C) RATIO:		0.848	0.849	0.853	0.854	0.854													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.748	0.749	0.753	0.754	-0.100													
LEVEL OF SERVICE (LOS):		C	C	C	C	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.853**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
5	East-West Street:	7th St	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	49	1	49	0	49	49	3	52	1	52	0	52	1	52	0	52	1	52
	Left-Through		0							0				0				0	
	Through	1377	1	720	2	1379	721	15	1392	1	727	2	1394	1	728	0	1394	1	728
	Through-Right		1							1				1				1	
	Right	62	0	0	0	62	0	0	62	0	0	0	62	0	0	0	62	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	72	1	72	0	72	72	0	72	1	72	0	72	1	72	0	72	1	72
	Left-Through		0							0				0				0	
	Through	1314	1	715	2	1316	716	30	1344	1	730	2	1346	1	731	0	1346	1	731
	Through-Right		1							1				1				1	
	Right	115	0	0	0	115	0	0	115	0	0	0	115	0	0	0	115	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	171	1	171	0	171	171	0	171	1	171	0	171	1	171	0	171	1	171
	Left-Through		0							0				0				0	
	Through	184	0	229	0	184	229	0	184	0	235	0	184	0	235	0	184	0	235
	Through-Right		1							1				1				1	
	Right	45	0	0	0	45	0	6	51	0	0	0	51	0	0	0	51	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	74	1	74	0	74	74	0	74	1	74	0	74	1	74	0	74	1	74
	Left-Through		0							0				0				0	
	Through	173	0	245	0	173	245	0	173	0	245	0	173	0	245	0	173	0	245
	Through-Right		1							1				1				1	
	Right	72	0	0	0	72	0	0	72	0	0	0	72	0	0	0	72	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 792 East-West: 416 SUM: 1208	North-South: 793 East-West: 416 SUM: 1209		North-South: 799 East-West: 416 SUM: 1215				North-South: 800 East-West: 416 SUM: 1216				North-South: 800 East-West: 416 SUM: 1216						
VOLUME/CAPACITY (V/C) RATIO:		0.805	0.806		0.810				0.811				0.811						
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.705	0.706		0.710				0.711				-0.100						
LEVEL OF SERVICE (LOS):		C	C		C				C				A						

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.810**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
6	East-West Street:	9th St	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	0		0		0		0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	75	1	75	0	75	75	0	75	1	75	0	75	1	75	0	75	1	75
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	1361	1	712	0	1361	712	18	1379	1	721	0	1379	1	721	0	1379	1	721
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Right	63	0	0	0	63	0	0	63	0	0	0	63	0	0	0	63	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND	Left	76	1	76	0	76	76	0	76	1	76	0	76	1	76	0	76	1	76
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	1369	1	732	0	1369	733	36	1405	1	750	0	1405	1	751	0	1405	1	751
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Right	94	0	0	2	96	0	0	94	0	0	2	96	0	0	0	96	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
EASTBOUND	Left	178	1	178	2	180	180	0	178	1	178	2	180	1	180	0	180	1	180
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	216	1	216	2	218	218	10	226	1	226	2	228	1	228	0	228	1	228
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Right	65	1	28	0	65	28	1	66	1	29	0	66	1	29	0	66	1	29
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
WESTBOUND	Left	114	1	114	0	114	114	0	114	1	114	0	114	1	114	0	114	1	114
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	296	0	421	2	298	423	4	300	0	425	2	302	0	427	0	302	0	427
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Right	125	0	0	0	125	0	0	125	0	0	0	125	0	0	0	125	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
CRITICAL VOLUMES		North-South: 807 East-West: 599 SUM: 1406	North-South: 808 East-West: 603 SUM: 1411	North-South: 825 East-West: 603 SUM: 1428	North-South: 826 East-West: 607 SUM: 1433	North-South: 826 East-West: 607 SUM: 1433													
VOLUME/CAPACITY (V/C) RATIO:		0.937	0.941	0.952	0.955														
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.837	0.841	0.852	0.855														
LEVEL OF SERVICE (LOS):		D	D	D	A														

### PROJECT IMPACT

Change in v/c due to project: **0.003**      Δv/c after mitigation: **-0.952**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street: <b>Gaffey St</b>	Year of Count: <b>2024</b>	Ambient Growth: (%): <b>0</b>	Conducted by:	Date:														
<b>7</b>	East-West Street: <b>22nd St</b>	Projection Year: <b>2024</b>	Peak Hour: <b>WK</b>	Reviewed by:	Project:														
No. of Phases: <b>2</b> Opposed Ø'ing: N/S-1, E/W-2 or Both-3? <b>0</b> Right Turns: FREE-1, NRTOR-2 or OLA-3? <b>0</b> ATCSAC-1 or ATCSAC+ATCS-2? <b>2</b> Override Capacity <b>0</b>		NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>	NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b>														
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	6	0	6	0	6	6	0	6	0	6	0	6	0	6	0	6	0	6
	Left-Through		1						1				1				1		
	Through	612	0	384	1	613	387	0	612	0	401	1	613	0	404	0	613	0	404
	Through-Right		1						1				1				1		
	Right	132	0	384	4	136	387	34	166	0	401	4	170	0	404	0	170	0	404
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
SOUTHBOUND	Left	187	0	187	0	187	187	36	223	0	223	0	223	0	223	0	223	0	223
	Left-Through		1						1				1				1		
	Through	790	0	776	1	791	777	0	790	0	804	1	791	0	805	0	791	0	805
	Through-Right		1						1				1				1		
	Right	14	0	776	0	14	777	0	14	0	0	0	14	0	0	0	14	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
EASTBOUND	Left	17	0	17	0	17	17	0	17	0	17	0	17	0	17	0	17	0	17
	Left-Through		0						0				0				0		
	Through	23	0	43	0	23	43	21	44	0	64	0	44	0	64	0	44	0	64
	Through-Right		0						0				0				0		
	Right	3	0	0	0	3	0	0	3	0	0	0	3	0	0	0	3	0	0
	Left-Through-Right		1					1				1				1			
	Left-Right		0					0				0				0			
WESTBOUND	Left	139	0	139	4	143	143	16	155	0	155	4	159	0	159	0	159	0	159
	Left-Through		0						0				0				0		
	Through	27	0	277	0	27	281	11	38	0	322	0	38	0	326	0	38	0	326
	Through-Right		0						0				0				0		
	Right	111	0	0	0	111	0	18	129	0	0	0	129	0	0	0	129	0	0
	Left-Through-Right		1					1				1				1			
	Left-Right		0					0				0				0			
CRITICAL VOLUMES		North-South: 782		782	North-South: 783		783	North-South: 810		810	North-South: 811		811	North-South: 811		811	North-South: 811		811
		East-West: 294		294	East-West: 298		298	East-West: 339		339	East-West: 343		343	East-West: 343		343	East-West: 343		343
		SUM: 1076		1076	SUM: 1081		1081	SUM: 1149		1149	SUM: 1154		1154	SUM: 1154		1154	SUM: 1154		1154
VOLUME/CAPACITY (V/C) RATIO:				0.717			0.721			0.766			0.769			0.769			0.769
V/C LESS ATCSAC/ATCS ADJUSTMENT:				<b>0.617</b>			<b>0.621</b>			<b>0.666</b>			<b>0.669</b>			<b>0.669</b>			<b>-0.100</b>
LEVEL OF SERVICE (LOS):				<b>B</b>			<b>B</b>			<b>B</b>			<b>B</b>			<b>B</b>			<b>A</b>

### PROJECT IMPACT

Change in v/c due to project: **0.003**      Δv/c after mitigation: **-0.766**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
8	East-West Street:	25th St	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 3 WB-- 0	NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	67	1	67	0	67	67	0	67	1	67	0	67	1	67	0	67	1	67
	Left-Through		0						0				0				0		
	Through	335	0	335	0	335	335	11	346	0	346	0	346	0	346	0	346	0	346
	Through-Right		1						1				1				1		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0						0				0				0		
	Through	629	1	629	0	629	629	5	634	1	634	0	634	1	634	0	634	1	634
	Through-Right		0						0				0				0		
	Right	416	1	213	4	420	215	11	427	1	213	4	431	1	214	0	431	1	214
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	406	1	406	5	411	411	23	429	1	429	5	434	1	434	0	434	1	434
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0						0				0				0		
	Right	109	1	42	0	109	42	0	109	1	42	0	109	1	42	0	109	1	42
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		1						1				1				1			
CRITICAL VOLUMES		North-South: 696 East-West: 406 SUM: 1102	North-South: 696 East-West: 411 SUM: 1107	North-South: 701 East-West: 429 SUM: 1130	North-South: 701 East-West: 434 SUM: 1135	North-South: 701 East-West: 434 SUM: 1135													
VOLUME/CAPACITY (V/C) RATIO:		0.773	0.777	0.793	0.796														
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.673	0.677	0.693	0.696														
LEVEL OF SERVICE (LOS):		B	B	B	B														

**PROJECT IMPACT**

Change in v/c due to project: **0.003**      Δv/c after mitigation: **-0.793**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Via Cabrillo Marina	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
9	East-West Street:	22nd St	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 3 SB-- 0 EB-- 0 WB-- 0	NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	236	2	130	0	236	130	0	236	2	130	0	236	2	130	0	236	2	130
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	82	1	0	0	82	0	0	82	1	0	0	82	1	0	0	82	1	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	333	1	293	4	337	295	107	440	1	346	4	444	1	348	0	444	1	348
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Right	252	0	0	0	252	0	0	252	0	0	0	252	0	0	0	252	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WESTBOUND	Left	105	1	105	0	105	105	0	105	1	105	0	105	1	105	0	105	1	105
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	294	2	147	3	297	149	50	344	2	172	3	347	2	174	0	347	2	174
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRITICAL VOLUMES		North-South: 130 East-West: 398 SUM: 528	North-South: 130 East-West: 400 SUM: 530	North-South: 130 East-West: 451 SUM: 581	North-South: 130 East-West: 453 SUM: 583	North-South: 130 East-West: 453 SUM: 583	North-South: 130 East-West: 453 SUM: 583	North-South: 130 East-West: 453 SUM: 583	North-South: 130 East-West: 453 SUM: 583	North-South: 130 East-West: 453 SUM: 583									
VOLUME/CAPACITY (V/C) RATIO:		0.371	0.372	0.408	0.409	0.409	0.409	0.409	0.409	0.409									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.271	0.272	0.308	0.309	0.309	0.309	0.309	0.309	-0.100									
LEVEL OF SERVICE (LOS):		A	A	A	A	A	A	A	A	A									

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.408**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street: <b>Harbor Bl</b>	Year of Count: <b>2024</b>	Ambient Growth: (%): <b>0</b>	Conducted by:	Date:																
<b>12</b>	East-West Street: <b>O'Farrell St</b>	Projection Year: <b>2024</b>	Peak Hour: <b>WK</b>	Reviewed by:	Project:																
No. of Phases: <b>2</b> Opposed Ø'ing: N/S-1, E/W-2 or Both-3?: <b>0</b> Right Turns: FREE-1, NRTOR-2 or OLA-3?: NB-- <b>0</b> SB-- <b>0</b> NB-- <b>0</b> SB-- <b>0</b> NB-- <b>0</b> SB-- <b>0</b> NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> ATSAC-1 or ATSAC+ATCS-2?: <b>2</b> Override Capacity: <b>0</b>																					
<b>MOVEMENT</b>		<b>EXISTING CONDITION</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
<b>NORTHBOUND</b>	Left	12	1	12	0	12	12	0	12	1	12	0	12	1	12	0	12	1	12		
	Left-Through		0							0				0				0			
	Through	1708	3	569	88	1796	599	53	1761	3	587	88	1849	3	616	0	1849	3	616		
	Through-Right		0							0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>SOUTHBOUND</b>	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0							0				0				0			
	Through	2038	2	686	96	2134	718	134	2172	2	730	96	2268	2	762	0	2268	2	762		
	Through-Right		1							1				1				1			
	Right	19	0	0	0	19	0	0	19	0	0	0	19	0	0	0	19	0	0	0	
<b>EASTBOUND</b>	Left	78	0	78	0	78	78	0	78	0	78	0	78	0	78	0	78	0	78		
	Left-Through		0							0				0				0			
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through-Right		0							0				0				0			
	Right	18	0	96	0	18	96	0	18	0	96	0	18	0	96	0	18	0	96		
<b>WESTBOUND</b>	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0							0				0				0			
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through-Right		0							0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>CRITICAL VOLUMES</b>		North-South: 698	East-West: 96		SUM: 794		North-South: 730	East-West: 96		SUM: 826		North-South: 742	East-West: 96		SUM: 838		North-South: 774	East-West: 96		SUM: 870	
<b>VOLUME/CAPACITY (V/C) RATIO:</b>		0.529		0.551		0.559		0.580		0.580		0.580		0.580		0.580		0.580		0.580	
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>		<b>0.429</b>		<b>0.451</b>		<b>0.459</b>		<b>0.480</b>		<b>0.480</b>		<b>0.480</b>		<b>0.480</b>		<b>0.480</b>		<b>0.480</b>		<b>0.480</b>	
<b>LEVEL OF SERVICE (LOS):</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>	

### PROJECT IMPACT

Change in v/c due to project: **0.021**      Δv/c after mitigation: **0.021**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
13	East-West Street:	1st St	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		4	4		4		4		4										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2	2		2		2		2										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	45	1	45	0	45	45	0	45	1	45	0	45	1	45	0	45	1	45
	Left-Through		0						0				0				0		
	Through	1663	2	556	0	1663	558	52	1715	2	574	0	1715	2	575	0	1715	2	575
	Through-Right		1						1				1				1		
	Right	6	0	0	4	10	0	0	6	0	0	4	10	0	0	0	10	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	22	1	22	96	118	118	0	22	1	22	96	118	1	118	0	118	1	118
	Left-Through		0						0				0				0		
	Through	1912	2	676	0	1912	676	133	2045	2	720	0	2045	2	720	0	2045	3	540
	Through-Right		1						1				1				1		
	Right	115	0	0	0	115	0	0	115	0	0	0	115	0	0	0	115	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	54	1	54	0	54	54	0	54	1	54	0	54	1	54	0	54	1	54
	Left-Through		0						0				0				0		
	Through	2	0	64	18	20	82	0	2	0	64	18	20	0	82	0	20	0	82
	Through-Right		1						1				1				1		
	Right	62	0	0	0	62	0	0	62	0	0	0	62	0	0	0	62	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	0	0	0	4	4	4	0	0	0	0	4	4	0	4	0	4	0	4
	Left-Through		0						0				0				0		
	Through	0	0	0	17	17	109	0	0	0	0	17	17	0	109	0	17	0	109
	Through-Right		0						0				0				0		
	Right	0	0	0	88	88	0	0	0	0	0	88	88	0	0	0	88	0	0
	Left-Through-Right		1						1				1				1		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 721 East-West: 64 SUM: 785	North-South: 721 East-West: 191 SUM: 912	North-South: 765 East-West: 64 SUM: 829	North-South: 765 East-West: 191 SUM: 956	North-South: 693 East-West: 191 SUM: 884													
VOLUME/CAPACITY (V/C) RATIO:		0.571	0.663	0.603	0.695	0.643													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.471	0.563	0.503	0.595	0.543													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.092**      Δv/c after mitigation: **0.040**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b> <b>15</b>	North-South Street: <b>Harbor Bl</b>		Year of Count: <b>2024</b>		Ambient Growth: (%): <b>0</b>		Conducted by:		Date:											
	East-West Street: <b>5th St</b>		Projection Year: <b>2024</b>		Peak Hour: <b>WK</b>		Reviewed by:		Project:											
No. of Phases		3		3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0										
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2										
Override Capacity		0		0		0		0		0										
<b>MOVEMENT</b>		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
<b>NORTHBOUND</b>	↔	Left	16	1	16	0	16	16	0	16	1	16	0	16	1	16	0	16	1	16
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↔	Through	1700	2	568	4	1704	569	52	1752	2	585	4	1756	2	587	0	1756	2	587
	↔	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	↔	Right	4	0	0	0	4	0	0	4	0	0	0	4	0	0	0	4	0	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SOUTHBOUND</b>	↔	Left	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Through	1939	2	674	4	1943	676	133	2072	2	719	4	2076	2	720	0	2076	2	720
	↔	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	↔	Right	84	0	0	0	84	0	0	84	0	0	0	84	0	0	0	84	0	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>EASTBOUND</b>	↔	Left	73	1	73	0	73	73	0	73	1	73	0	73	1	73	0	73	1	73
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Through	18	1	18	0	18	18	0	18	1	18	0	18	1	18	0	18	1	18
	↔	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Right	23	1	15	0	23	15	0	23	1	15	0	23	1	15	0	23	1	15
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>WESTBOUND</b>	↔	Left	2	1	2	0	2	2	0	2	1	2	0	2	1	2	0	2	1	2
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Through	7	0	43	0	7	43	0	7	0	43	0	7	0	43	0	7	0	43
	↔	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	↔	Right	36	0	0	0	36	0	0	36	0	0	0	36	0	0	0	36	0	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>CRITICAL VOLUMES</b>		North-South:	690	North-South:		692	North-South:		735	North-South:		736	North-South:		736	North-South:		736		
		East-West:	116	East-West:		116	East-West:		116	East-West:		116	East-West:		116	East-West:		116		
		SUM:	806	SUM:		808	SUM:		851	SUM:		852	SUM:		852	SUM:		852		
<b>VOLUME/CAPACITY (V/C) RATIO:</b>				0.566				0.567				0.597				0.598				
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>				<b>0.466</b>				<b>0.467</b>				<b>0.497</b>				<b>0.498</b>		<b>-0.100</b>		
<b>LEVEL OF SERVICE (LOS):</b>				<b>A</b>				<b>A</b>				<b>A</b>				<b>A</b>		<b>A</b>		

### PROJECT IMPACT

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.597**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl		Year of Count:	2024		Ambient Growth: (%):	0		Conducted by:			Date:							
16	East-West Street:	6th St		Projection Year:	2024		Peak Hour:	WK		Reviewed by:			Project:							
No. of Phases		4		4		4		4		4		0								
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2		2		2		2		2		0								
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0								
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2								
Override Capacity		0		0		0		0		0		0								
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	84	1	84	0	84	84	0	84	1	84	0	84	1	84	0	84	1	84	
	Left-Through		0							0				0				0		
	Through	948	2	316	4	952	317	52	1000	2	333	4	1004	2	335	0	1004	2	335	
	Through-Right		1							1				1				1		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0		0
Left-Right		0							0				0				0		0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0							0				0				0		
	Through	1058	2	395	4	1062	396	133	1191	2	439	4	1195	2	441	0	1195	2	441	
	Through-Right		1							1				1				1		
	Right	127	0	0	0	127	0	0	127	0	0	0	127	0	0	0	127	0	0	
	Left-Through-Right		0							0				0				0		0
Left-Right		0							0				0				0		0	
EASTBOUND	Left	167	1	167	0	167	167	0	167	1	167	0	167	1	167	0	167	1	167	
	Left-Through		0							0				0				0		
	Through	0	0	76	0	0	76	0	0	0	76	0	0	0	76	0	0	0	76	
	Through-Right		1							1				1				1		
	Right	76	0	0	0	76	0	0	76	0	0	0	76	0	0	0	76	0	0	
	Left-Through-Right		0							0				0				0		0
Left-Right		0							0				0				0		0	
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0							0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		1							1				1				1		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right		0							0				0				0		0
Left-Right		0							0				0				0		0	
CRITICAL VOLUMES		North-South:	479	North-South:	480	North-South:	523	North-South:	525	North-South:	525	North-South:	525	North-South:	525	North-South:	525	North-South:	525	
		East-West:	167	East-West:	167	East-West:	167	East-West:	167	East-West:	167	East-West:	167	East-West:	167	East-West:	167	East-West:	167	
		SUM:	646	SUM:	647	SUM:	690	SUM:	692	SUM:	692	SUM:	692	SUM:	692	SUM:	692	SUM:	692	
VOLUME/CAPACITY (V/C) RATIO:		0.470		0.471		0.502		0.503		0.503		0.503		0.503		0.503		0.503		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.370		0.371		0.402		0.402		0.403		0.403		0.403		0.403		-0.100		
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A		

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.502**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Harbor Blvd</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>17A</b>	<b>East-West Street:</b>	<b>7th St</b>	<b>Projection Year:</b>	<b>2024</b>	<b>Peak Hour:</b>	<b>SAT</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>IOWA 2024 CB</b>									
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		3										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 3 WB-- 0	NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
<b>MOVEMENT</b>		<b>YEAR 2024 CONDITIONS</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	Left	151	1	151		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	1,776	3	592		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	
<b>SOUTHBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	1,582	2	596		0		0		0		0		0		0		0	
	Through-Right		1			0		0		0		0		0		0		0	
	Right	207	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	
<b>EASTBOUND</b>	Left	255	2	140		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	208	1	57		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	
<b>WESTBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	
<b>CRITICAL VOLUMES</b>		North-South: 747 East-West: 140 SUM: 887	North-South: 0 East-West: 0 SUM: 0		North-South: 0 East-West: 0 SUM: 0				North-South: 0 East-West: 0 SUM: 0				North-South: 0 East-West: 0 SUM: 0						
<b>VOLUME/CAPACITY (V/C) RATIO:</b>		0.622	0.000		0.000				0.000				0.000						
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>		0.522	-0.100		-0.100				-0.100				-0.100						
<b>LEVEL OF SERVICE (LOS):</b>		A	A		A				A				A						

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Harbor Blvd</b>	Year of Count:	2011	Ambient Growth: (%):	0	Conducted by:		Date:												
<b>17B</b>	East-West Street:	<b>Sampson Way</b>	Projection Year:	2024	Peak Hour:	SAT	Reviewed by:		Project:	IOWA 2024 CB											
No. of Phases		2	2		2		2		0												
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0												
Right Turns: FREE-1, NRTOR-2 or OLA-3?		3	3		3		3		3												
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2												
Override Capacity		0	0		0		0		0												
<b>MOVEMENT</b>		YEAR 2024 CONDITIONS			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
<b>NORTHBOUND</b>	Left	29	2	16		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	812	2	406		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0		0	
<b>SOUTHBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	777	2	389		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	1,013	1	400		0		0		0		0		0		0		0		0	
<b>EASTBOUND</b>	Left	1,115	2	613		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	120	1	112		0		0		0		0		0		0		0		0	
<b>WESTBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0		0	
<b>CRITICAL VOLUMES</b>		North-South:	416	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0
		East-West:	613	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0
		SUM:	1029	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			0.686		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			0.586		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100
<b>LEVEL OF SERVICE (LOS):</b>			A		A		A		A		A		A		A		A		A		A

### PROJECT IMPACT

Change in v/c due to project:	0.000	Δv/c after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Harbor Blvd</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>									
<b>17A</b>	<b>East-West Street:</b>	<b>7th St</b>	<b>Projection Year:</b>	<b>2024</b>	<b>Peak Hour:</b>	<b>SAT</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>2024 WITH PROJECT</b>								
No. of Phases		3	3		3		3		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 3 WB-- 0	NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2									
Override Capacity		0	0		0		0		0									
MOVEMENT	YEAR 2024 CONDITIONS			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	151	1	151		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0
	Through	1,780	3	593		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0
	Right	0	0	0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0
SOUTHBOUND	Left	0	0	0		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0
	Through	1,586	2	598		0		0		0		0		0		0		0
	Through-Right		1			0		0		0		0		0		0		0
	Right	207	0	0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0
EASTBOUND	Left	255	2	140		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0
	Through	0	0	0		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0
	Right	208	1	57		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0
WESTBOUND	Left	0	0	0		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0
	Through	0	0	0		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0
	Right	0	0	0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0
CRITICAL VOLUMES		North-South: 749 East-West: 140 SUM: 889		North-South: 0 East-West: 0 SUM: 0		North-South: 0 East-West: 0 SUM: 0		North-South: 0 East-West: 0 SUM: 0		North-South: 0 East-West: 0 SUM: 0		North-South: 0 East-West: 0 SUM: 0		North-South: 0 East-West: 0 SUM: 0		North-South: 0 East-West: 0 SUM: 0		North-South: 0 East-West: 0 SUM: 0
VOLUME/CAPACITY (V/C) RATIO:		0.624		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.524		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Harbor Blvd</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>									
<b>17B</b>	<b>East-West Street:</b>	<b>Sampson Way</b>	<b>Projection Year:</b>	<b>2024</b>	<b>Peak Hour:</b>	<b>SAT</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>2024 WITH PROJECT</b>								
No. of Phases		2	2		2		2		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0		NB-- 0 SB-- 3 EB-- 0 WB-- 0		NB-- 0 SB-- 3 EB-- 0 WB-- 0		NB-- 0 SB-- 3 EB-- 0 WB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2									
Override Capacity		0	0		0		0		0									
MOVEMENT	YEAR 2024 CONDITIONS			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	29	1	29		0				0				0				0
	Left-Through		0			0				0				0				0
	Through	812	2	406		0				0				0				0
	Through-Right		0			0				0				0				0
	Right	0	0	0		0				0				0				0
	Left-Through-Right		0			0				0				0				0
	Left-Right		0			0				0				0				0
SOUTHBOUND	Left	0	0	0		0				0				0				0
	Left-Through		0			0				0				0				0
	Through	777	2	389		0				0				0				0
	Through-Right		0			0				0				0				0
	Right	1,017	1	402		0				0				0				0
	Left-Through-Right		0			0				0				0				0
	Left-Right		0			0				0				0				0
EASTBOUND	Left	1,119	2	615		0				0				0				0
	Left-Through		0			0				0				0				0
	Through	0	0	0		0				0				0				0
	Through-Right		0			0				0				0				0
	Right	120	1	106		0				0				0				0
	Left-Through-Right		0			0				0				0				0
	Left-Right		0			0				0				0				0
WESTBOUND	Left	0	0	0		0				0				0				0
	Left-Through		0			0				0				0				0
	Through	0	0	0		0				0				0				0
	Through-Right		0			0				0				0				0
	Right	0	0	0		0				0				0				0
	Left-Through-Right		0			0				0				0				0
	Left-Right		0			0				0				0				0
CRITICAL VOLUMES		North-South: 431 East-West: 615 SUM: 1046	North-South: 0 East-West: 0 SUM: 0		North-South: 0 East-West: 0 SUM: 0				North-South: 0 East-West: 0 SUM: 0				North-South: 0 East-West: 0 SUM: 0					
VOLUME/CAPACITY (V/C) RATIO:		0.697	0.000		0.000				0.000				0.000					
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.597	-0.100		-0.100				-0.100				-0.100					
LEVEL OF SERVICE (LOS):		A	A		A				A				A					

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Miner St	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
18	East-West Street:	22nd St	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	0		0		0		0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	223	1	223	0	223	223	0	223	1	223	0	223	1	223	0	223	1	223
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	847	1	471	0	847	471	0	847	1	471	0	847	1	471	0	847	1	471
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Right	94	0	0	0	94	0	0	94	0	0	0	94	0	0	0	94	0	0
SOUTHBOUND	Left	30	1	30	0	30	30	37	67	1	67	0	67	1	67	0	67	1	67
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	949	1	600	0	949	601	0	949	1	600	0	949	1	601	0	949	1	601
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Right	250	0	0	3	253	0	0	250	0	0	3	253	0	0	0	253	0	0
EASTBOUND	Left	187	1	187	4	191	191	0	187	1	187	4	191	1	191	0	191	1	191
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	85	1	85	0	85	85	16	101	1	101	0	101	1	101	0	101	1	101
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Right	129	0	18	0	129	18	0	129	0	18	0	129	0	18	0	129	0	18
WESTBOUND	Left	83	1	83	0	83	83	0	83	1	83	0	83	1	83	0	83	1	83
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	82	1	53	0	82	53	7	89	1	65	0	89	1	65	0	89	1	65
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Right	24	0	0	0	24	0	17	41	0	0	0	41	0	0	0	41	0	0
CRITICAL VOLUMES		North-South:	823	North-South:	824	North-South:	823	North-South:	824	North-South:	824	North-South:	824	North-South:	824	North-South:	824	North-South:	824
		East-West:	240	East-West:	244	East-West:	252	East-West:	256	East-West:	256	East-West:	256	East-West:	256	East-West:	256	East-West:	256
		SUM:	1063	SUM:	1068	SUM:	1075	SUM:	1080	SUM:	1080	SUM:	1080	SUM:	1080	SUM:	1080	SUM:	1080
VOLUME/CAPACITY (V/C) RATIO:			0.746		0.749		0.754		0.758		0.758		0.758		0.758		0.758		0.758
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.646		0.649		0.654		0.658		0.658		0.658		0.658		0.658		-0.100
LEVEL OF SERVICE (LOS):			B		B		B		B		B		B		B		B		A

### PROJECT IMPACT

Change in v/c due to project: 0.004      Δv/c after mitigation: -0.754  
 Significant impacted? NO      Fully mitigated? N/A

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	Pacific Ave	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:												
<b>20</b>	East-West Street:	Front St	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:												
No. of Phases		3	3		3		3		0												
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0												
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	0		0		0		0												
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2												
Override Capacity		0	0		0		0		0												
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0						0				0				0			0	
	Through	560	1	311	1	561	311	3	563	1	312	1	564	1	313	0	564	1	313	0	
	Through-Right		1							1				1				1			1
	Right	61	0	0	0	61	0	0	61	0	0	0	61	0	0	0	61	0	0	0	0
	Left-Through-Right		0							0				0				0			0
	Left-Right		0							0				0				0			0
SOUTHBOUND	Left	198	1	198	1	199	199	15	213	1	213	1	214	1	214	0	214	1	214	0	
	Left-Through		0							0				0				0			0
	Through	588	2	294	1	589	295	5	593	2	297	1	594	2	297	0	594	2	297	0	
	Through-Right		0							0				0				0			0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0			0
	Left-Right		0							0				0				0			0
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0							0				0				0			0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0			0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0			0
	Left-Right		0							0				0				0			0
WESTBOUND	Left	30	1	30	0	30	30	0	30	1	30	0	30	1	30	0	30	1	30	0	
	Left-Through		0							0				0				0			0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0			0
	Right	275	2	0	1	276	0	7	282	2	0	1	283	2	0	0	283	2	0	0	0
	Left-Through-Right		0							0				0				0			0
	Left-Right		0							0				0				0			0
CRITICAL VOLUMES		North-South:	509	North-South:	510	North-South:	525	North-South:	527	North-South:	527	North-South:	527	North-South:	527	North-South:	527	North-South:	527	North-South:	527
		East-West:	30	East-West:	30	East-West:	30	East-West:	30	East-West:	30	East-West:	30	East-West:	30	East-West:	30	East-West:	30	East-West:	30
		SUM:	539	SUM:	540	SUM:	555	SUM:	557	SUM:	557	SUM:	557	SUM:	557	SUM:	557	SUM:	557	SUM:	557
VOLUME/CAPACITY (V/C) RATIO:			0.378		0.379		0.389		0.391		0.391		0.391		0.391		0.391		0.391		0.391
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.278		0.279		0.289		0.291		0.291		0.291		0.291		0.291		0.291		-0.100
LEVEL OF SERVICE (LOS):			A		A		A		A		A		A		A		A		A		A

### PROJECT IMPACT

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.389**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:										
21	East-West Street:	1st St	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	191	1	191	0	191	191	0	191	1	191	0	191	1	191	0	191	1	191
	Left-Through		0						0				0				0		
	Through	691	1	369	0	691	370	3	694	1	371	0	694	1	372	0	694	1	372
	Through-Right		1						1				1				1		
	Right	47	0	0	2	49	0	0	47	0	0	2	49	0	0	0	49	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
SOUTHBOUND	Left	21	1	21	1	22	22	0	21	1	21	1	22	1	22	0	22	1	22
	Left-Through		0						0				0				0		
	Through	600	1	316	0	600	316	5	605	1	319	0	605	1	319	0	605	1	319
	Through-Right		1						1				1				1		
	Right	32	0	0	0	32	0	0	32	0	0	0	32	0	0	0	32	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
EASTBOUND	Left	58	0	58	0	58	58	0	58	0	58	0	58	0	58	0	58	0	58
	Left-Through		0						0				0				0		
	Through	163	0	377	15	178	392	0	163	0	377	15	178	0	392	0	178	0	392
	Through-Right		0						0				0				0		
	Right	156	0	0	0	156	0	0	156	0	0	0	156	0	0	0	156	0	0
	Left-Through-Right		1						1				1				1		
	Left-Right		0						0				0				0		
WESTBOUND	Left	66	0	66	2	68	68	0	66	0	66	2	68	0	68	0	68	0	68
	Left-Through		0						0				0				0		
	Through	131	0	226	14	145	243	0	131	0	226	14	145	0	243	0	145	0	243
	Through-Right		0						0				0				0		
	Right	29	0	0	1	30	0	0	29	0	0	1	30	0	0	0	30	0	0
	Left-Through-Right		1						1				1				1		
	Left-Right		0						0				0				0		
CRITICAL VOLUMES		North-South: 507 East-West: 443 SUM: 950	North-South: 507 East-West: 460 SUM: 967	North-South: 510 East-West: 443 SUM: 953	North-South: 510 East-West: 460 SUM: 970	North-South: 510 East-West: 460 SUM: 970	North-South: 510 East-West: 460 SUM: 970												
VOLUME/CAPACITY (V/C) RATIO:		0.633	0.645	0.635	0.647	0.647													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.533	0.545	0.535	0.547	-0.100													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.012**      Δv/c after mitigation: **-0.635**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Pacific Ave</b>	<b>Year of Count:</b>	<b>2024</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>22</b>	<b>East-West Street:</b>	<b>5th St</b>	<b>Projection Year:</b>	<b>2024</b>	<b>Peak Hour:</b>	<b>WK</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	40	0	40	0	40	40	0	40	0	40	0	40	0	40	0	40	0	40
	Left-Through		1						1				1				1		
	Through	790	0	514	2	792	515	3	793	0	515	2	795	0	516	0	795	0	516
	Through-Right		1						1				1				1		
	Right	77	0	514	0	77	515	0	77	0	515	0	77	0	516	0	77	0	516
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	68	0	68	0	68	68	0	68	0	68	0	68	0	68	0	68	0	68
	Left-Through		1						1				1				1		
	Through	849	0	572	2	851	573	5	854	0	575	2	856	0	576	0	856	0	576
	Through-Right		1						1				1				1		
	Right	23	0	572	0	23	573	0	23	0	575	0	23	0	576	0	23	0	576
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	29	1	29	0	29	29	0	29	1	29	0	29	1	29	0	29	1	29
	Left-Through		0						0				0				0		
	Through	146	0	213	0	146	213	0	146	0	213	0	146	0	213	0	146	0	213
	Through-Right		1						1				1				1		
	Right	67	0	0	0	67	0	0	67	0	0	0	67	0	0	0	67	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	117	1	117	0	117	117	0	117	1	117	0	117	1	117	0	117	1	117
	Left-Through		0						0				0				0		
	Through	81	0	178	0	81	178	0	81	0	178	0	81	0	178	0	81	0	178
	Through-Right		1						1				1				1		
	Right	97	0	0	0	97	0	0	97	0	0	0	97	0	0	0	97	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 612 East-West: 330 SUM: 942	North-South: 613 East-West: 330 SUM: 943	North-South: 615 East-West: 330 SUM: 945	North-South: 616 East-West: 330 SUM: 946	North-South: 616 East-West: 330 SUM: 946													
VOLUME/CAPACITY (V/C) RATIO:		0.628	0.629	0.630	0.631	0.631													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.528	0.529	0.530	0.531	-0.100													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.630**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Pacific Ave</b>	<b>Year of Count:</b>	<b>2024</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>23</b>	<b>East-West Street:</b>	<b>7th St</b>	<b>Projection Year:</b>	<b>2024</b>	<b>Peak Hour:</b>	<b>WK</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	53	0	53	0	53	53	0	53	0	53	0	53	0	53	0	53	0	53
	Left-Through		1						1				1				1		
	Through	858	0	615	2	860	616	3	861	0	617	2	863	0	618	0	863	0	618
	Through-Right		1						1				1				1		
	Right	54	0	615	0	54	616	0	54	0	617	0	54	0	618	0	54	0	618
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	32	0	32	0	32	32	0	32	0	32	0	32	0	32	0	32	0	32
	Left-Through		1						1				1				1		
	Through	1061	0	610	2	1063	611	5	1066	0	612	2	1068	0	613	0	1068	0	613
	Through-Right		1						1				1				1		
	Right	30	0	610	0	30	611	0	30	0	612	0	30	0	613	0	30	0	613
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	59	1	59	0	59	59	0	59	1	59	0	59	1	59	0	59	1	59
	Left-Through		0						0				0				0		
	Through	156	0	256	0	156	256	0	156	0	256	0	156	0	256	0	156	0	256
	Through-Right		1						1				1				1		
	Right	100	0	0	0	100	0	0	100	0	0	0	100	0	0	0	100	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	50	1	50	0	50	50	0	50	1	50	0	50	1	50	0	50	1	50
	Left-Through		0						0				0				0		
	Through	97	0	127	0	97	127	0	97	0	127	0	97	0	127	0	97	0	127
	Through-Right		1						1				1				1		
	Right	30	0	0	0	30	0	0	30	0	0	0	30	0	0	0	30	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 663 East-West: 306 SUM: 969	North-South: 664 East-West: 306 SUM: 970	North-South: 665 East-West: 306 SUM: 971	North-South: 666 East-West: 306 SUM: 972	North-South: 666 East-West: 306 SUM: 972	North-South: 666 East-West: 306 SUM: 972												
VOLUME/CAPACITY (V/C) RATIO:		0.646	0.647	0.647	0.648	0.648													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.546	0.547	0.547	0.548	-0.100													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.647**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave	Year of Count:	2024	Ambient Growth: (%):	0	Conducted by:		Date:									
24	East-West Street:	9th St	Projection Year:	2024	Peak Hour:	WK	Reviewed by:		Project:									
No. of Phases		2	2		2		2		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2									
Override Capacity		0	0		0		0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	67	0	67	0	67	67	5	72	0	72	72	0	72	0	72	0	72
	Left-Through		1							1			1				1	
	Through	659	0	555	0	659	555	3	662	0	571	571	0	662	0	571	0	571
	Through-Right		1							1			1				1	
	Right	48	0	555	0	48	555	0	48	0	571	571	0	48	0	571	0	571
	Left-Through-Right		0							0			0				0	
	Left-Right		0							0			0				0	
SOUTHBOUND	Left	100	0	100	0	100	100	0	100	0	100	100	0	100	0	100	0	100
	Left-Through		1							1			1				1	
	Through	781	0	728	0	781	729	5	786	0	730	731	0	786	0	731	0	731
	Through-Right		1							1			1				1	
	Right	274	0	728	2	276	729	0	274	0	730	731	2	276	0	731	0	731
	Left-Through-Right		0							0			0				0	
	Left-Right		0							0			0				0	
EASTBOUND	Left	236	1	236	2	238	238	0	236	1	236	236	2	238	1	238	0	238
	Left-Through		0							0			0				0	
	Through	150	0	254	0	150	254	-1	149	0	263	263	0	149	0	263	0	263
	Through-Right		1							1			1				1	
	Right	104	0	0	0	104	0	10	114	0	0	0	0	114	0	0	0	0
	Left-Through-Right		0							0			0				0	
	Left-Right		0							0			0				0	
WESTBOUND	Left	58	1	58	0	58	58	0	58	1	58	58	0	58	1	58	0	58
	Left-Through		0							0			0				0	
	Through	143	0	242	0	143	242	-1	142	0	241	241	0	142	0	241	0	241
	Through-Right		1							1			1				1	
	Right	99	0	0	0	99	0	0	99	0	0	0	0	99	0	0	0	0
	Left-Through-Right		0							0			0				0	
	Left-Right		0							0			0				0	
CRITICAL VOLUMES		North-South: 795 East-West: 478 SUM: 1273	North-South: 796 East-West: 480 SUM: 1276	North-South: 802 East-West: 477 SUM: 1279	North-South: 803 East-West: 479 SUM: 1282	North-South: 803 East-West: 479 SUM: 1282	North-South: 803 East-West: 479 SUM: 1282	North-South: 803 East-West: 479 SUM: 1282	North-South: 803 East-West: 479 SUM: 1282	North-South: 803 East-West: 479 SUM: 1282								
VOLUME/CAPACITY (V/C) RATIO:		0.849	0.851	0.853	0.855	0.855	0.855	0.855	0.855	0.855								
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.749	0.751	0.753	0.755	0.755	0.755	0.755	0.755	-0.100								
LEVEL OF SERVICE (LOS):		C	C	C	C	C	C	C	C	A								

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.853**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

**YEAR 2042**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Gaffey St</b>	Year of Count:	<b>2042</b>	Ambient Growth: (%):	<b>0</b>	Conducted by:		Date:										
<b>1</b>	East-West Street:	<b>Summerland Av</b>	Projection Year:	<b>2042</b>	Peak Hour:	<b>PM</b>	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	0		0		0		0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
<b>MOVEMENT</b>		<b>EXISTING CONDITION</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	Left	160	1	160	0	160	160	0	160	1	160	0	160	1	160	0	160	1	160
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	546	1	288	2	548	289	8	554	1	292	2	556	1	293	0	556	1	293
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Right	29	0	0	0	29	0	0	29	0	0	0	29	0	0	0	29	0	0
<b>SOUTHBOUND</b>	Left	16	1	16	0	16	16	0	16	1	16	0	16	1	16	0	16	1	16
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	668	1	500	1	669	500	3	671	1	501	1	672	1	502	0	672	1	502
	Through-Right	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	331	0	0	0	331	0	0	331	0	0	0	331	0	0	0	331	0	0
<b>EASTBOUND</b>	Left	276	1	276	0	276	276	0	276	1	276	0	276	1	276	0	276	1	276
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	0	0	53	0	0	53	0	0	0	53	0	0	0	53	0	0	0	53
	Through-Right	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	53	0	0	0	53	0	0	53	0	0	0	53	0	0	0	53	0	0
<b>WESTBOUND</b>	Left	683	2	376	0	683	376	0	683	2	376	0	683	2	376	0	683	2	376
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	327	0	721	0	327	721	0	327	0	721	0	327	0	721	0	327	0	721
	Through-Right	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	Right	394	0	0	0	394	0	0	394	0	0	0	394	0	0	0	394	0	0
<b>CRITICAL VOLUMES</b>		North-South:	660	North-South:	660	North-South:	661	North-South:	662	North-South:	662	East-West:	997	East-West:	997	East-West:	997	East-West:	997
		East-West:	997	East-West:	997	East-West:	997	East-West:	997	East-West:	997	SUM:	1657	SUM:	1657	SUM:	1659	SUM:	1659
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			1.163		1.163		1.164		1.164		1.164		1.164		1.164		1.164		1.164
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			<b>1.063</b>		<b>1.063</b>		<b>1.064</b>		<b>1.064</b>		<b>1.064</b>		<b>1.064</b>		<b>1.064</b>		<b>1.064</b>		<b>-0.100</b>
<b>LEVEL OF SERVICE (LOS):</b>			<b>F</b>		<b>F</b>		<b>F</b>		<b>F</b>		<b>F</b>		<b>F</b>		<b>F</b>		<b>F</b>		<b>A</b>

### PROJECT IMPACT

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-1.164**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Gaffey St</b>	Year of Count:	<b>2042</b>	Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:										
	East-West Street:	<b>I-110 Ramps</b>	Projection Year:	<b>2042</b>	Peak Hour:	<b>PM</b>		Reviewed by:			Project:										
No. of Phases		2	2		2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	0		0		0		0		0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2		2										
Override Capacity		0	0		0		0		0		0										
<b>MOVEMENT</b>		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
<b>NORTHBOUND</b>	↔ Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Through	925	2	463	2	927	464	8	933	2	467	2	935	2	468	0	935	2	468	0	
	↔ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔ Right	1926	2	0	4	1930	0	19	1945	2	0	4	1949	2	0	0	1949	2	0	0	
	↔ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
↔ Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>SOUTHBOUND</b>	↔ Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Through	1173	3	391	1	1174	391	2	1175	3	392	1	1176	3	392	0	1176	3	392	0	
	↔ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔ Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
↔ Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>EASTBOUND</b>	↔ Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
↔ Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>WESTBOUND</b>	↔ Left	1761	2	626	1	1762	626	5	1766	2	627	1	1767	2	628	0	1767	2	628	0	
	↔ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔ Right	116	0	626	0	116	626	0	116	0	627	0	116	0	628	0	116	0	628	0	
	↔ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
↔ Left-Right	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0			
<b>CRITICAL VOLUMES</b>		North-South:	463	North-South:	464	North-South:	467	North-South:	468	North-South:	468	North-South:	468	North-South:	468	East-West:	626	East-West:	628	East-West:	628
		East-West:	626	East-West:	626	East-West:	627	East-West:	628	East-West:	628	East-West:	628	East-West:	628	SUM:	1089	SUM:	1094	SUM:	1096
		SUM:	1089	SUM:	1090	SUM:	1094	SUM:	1096	SUM:	1096	SUM:	1096	SUM:	1096						
VOLUME/CAPACITY (V/C) RATIO:		0.726		0.727		0.729		0.731		0.731		0.731		0.731		0.731		0.731		0.731	
V/C LESS ATSAC/ATCS ADJUSTMENT:		<b>0.626</b>		<b>0.627</b>		<b>0.629</b>		<b>0.631</b>		<b>0.631</b>		<b>0.631</b>		<b>0.631</b>		<b>0.631</b>		<b>0.631</b>		<b>-0.100</b>	
LEVEL OF SERVICE (LOS):		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>A</b>	

### PROJECT IMPACT

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.729**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2042	Ambient Growth: (%):	0	Conducted by:		Date:										
3	East-West Street:	1st St	Projection Year:	2042	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2	2		2		2		2										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	31	1	31	0	31	31	2	33	1	33	0	33	1	33	0	33	1	33
	Left-Through		0							0				0				0	
	Through	1543	2	522	0	1543	522	27	1570	2	531	0	1570	2	531	0	1570	2	531
	Through-Right		1							1				1				1	
	Right	23	0	0	0	23	0	0	23	0	0	0	23	0	0	0	23	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	227	1	227	2	229	229	0	227	1	227	2	229	1	229	0	229	1	229
	Left-Through		0							0				0				0	
	Through	1767	2	772	0	1767	772	8	1775	2	774	0	1775	2	774	0	1775	2	774
	Through-Right		1							1				1				1	
	Right	548	0	0	0	548	0	0	548	0	0	0	548	0	0	0	548	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	841	1	500	0	841	500	0	841	1	500	0	841	1	500	0	841	1	500
	Left-Through		1							1				1				1	
	Through	158	0	500	1	159	500	0	158	0	500	1	159	0	500	0	159	0	500
	Through-Right		0							0				0				0	
	Right	58	1	43	0	58	43	1	59	1	43	0	59	1	43	0	59	1	43
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	35	1	35	2	37	37	0	35	1	35	2	37	1	37	0	37	1	37
	Left-Through		0							0				0				0	
	Through	151	1	151	3	154	154	1	152	1	152	3	155	1	155	0	155	1	155
	Through-Right		0							0				0				0	
	Right	269	1	156	6	275	161	0	269	1	156	6	275	1	161	0	275	1	161
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South: 803 East-West: 656 SUM: 1459	North-South: 803 East-West: 661 SUM: 1464		North-South: 807 East-West: 656 SUM: 1463				North-South: 807 East-West: 661 SUM: 1468				North-South: 807 East-West: 661 SUM: 1468						
VOLUME/CAPACITY (V/C) RATIO:		1.024	1.027		1.027				1.030				1.030						
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.924	0.927		0.927				0.930				0.930						
LEVEL OF SERVICE (LOS):		E	E		E				E				E						

**PROJECT IMPACT**

Change in v/c due to project: **0.003**      Δv/c after mitigation: **0.003**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2042	Ambient Growth: (%):	0	Conducted by:		Date:										
4	East-West Street:	5th St	Projection Year:	2042	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	23	1	23	0	23	23	0	23	1	23	0	23	1	23	0	23	1	23
	Left-Through		0							0				0				0	
	Through	1395	1	719	0	1395	719	29	1424	1	734	0	1424	1	734	0	1424	1	734
	Through-Right		1							1				1				1	
	Right	43	0	0	0	43	0	0	43	0	0	0	43	0	0	0	43	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	143	1	143	0	143	143	0	143	1	143	0	143	1	143	0	143	1	143
	Left-Through		0							0				0				0	
	Through	1367	1	725	2	1369	726	8	1375	1	729	2	1377	1	730	0	1377	1	730
	Through-Right		1							1				1				1	
	Right	82	0	0	0	82	0	0	82	0	0	0	82	0	0	0	82	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	112	1	112	0	112	112	0	112	1	112	0	112	1	112	0	112	1	112
	Left-Through		0							0				0				0	
	Through	131	0	149	0	131	149	0	131	0	149	0	131	0	149	0	131	0	149
	Through-Right		1							1				1				1	
	Right	18	0	0	0	18	0	0	18	0	0	0	18	0	0	0	18	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	49	1	49	0	49	49	0	49	1	49	0	49	1	49	0	49	1	49
	Left-Through		0							0				0				0	
	Through	93	0	183	0	93	183	0	93	0	183	0	93	0	183	0	93	0	183
	Through-Right		1							1				1				1	
	Right	90	0	0	0	90	0	0	90	0	0	0	90	0	0	0	90	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 862 East-West: 295 SUM: 1157	North-South: 862 East-West: 295 SUM: 1157		North-South: 877 East-West: 295 SUM: 1172				North-South: 877 East-West: 295 SUM: 1172				North-South: 877 East-West: 295 SUM: 1172						
VOLUME/CAPACITY (V/C) RATIO:		0.812	0.812		0.822				0.822				0.822						
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.712	0.712		0.722				0.722				-0.100						
LEVEL OF SERVICE (LOS):		C	C		C				C				A						

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.822**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2042</b>		Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:						
<b>5</b>	East-West Street:	<b>7th St</b>		Projection Year:	<b>2042</b>		Peak Hour:	<b>PM</b>		Reviewed by:			Project:						
No. of Phases																			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2		2		2		2		2		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	51	1	51	0	51	51	2	53	1	53	0	53	1	53	0	53	1	53
	Left-Through		0							0				0				0	
	Through	1420	1	742	0	1420	742	29	1449	1	756	0	1449	1	756	0	1449	1	756
	Through-Right		1							1				1				1	
	Right	63	0	0	0	63	0	0	63	0	0	0	63	0	0	0	63	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	72	1	72	0	72	72	0	72	1	72	0	72	1	72	0	72	1	72
	Left-Through		0							0				0				0	
	Through	1329	1	723	2	1331	724	8	1337	1	727	2	1339	1	728	0	1339	1	728
	Through-Right		1							1				1				1	
	Right	116	0	0	0	116	0	0	116	0	0	0	116	0	0	0	116	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	172	1	172	0	172	172	0	172	1	172	0	172	1	172	0	172	1	172
	Left-Through		0							0				0				0	
	Through	188	0	235	0	188	235	0	188	0	236	0	188	0	236	0	188	0	236
	Through-Right		1							1				1				1	
	Right	47	0	0	0	47	0	1	48	0	0	0	48	0	0	0	48	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	75	1	75	0	75	75	0	75	1	75	0	75	1	75	0	75	1	75
	Left-Through		0							0				0				0	
	Through	176	0	248	0	176	248	1	177	0	249	0	177	0	249	0	177	0	249
	Through-Right		1							1				1				1	
	Right	72	0	0	0	72	0	0	72	0	0	0	72	0	0	0	72	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South: 814		North-South: 814		North-South: 814		North-South: 828		North-South: 828		North-South: 828		North-South: 828		North-South: 828		North-South: 828	
		East-West: 420		East-West: 420		East-West: 420		East-West: 421		East-West: 421		East-West: 421		East-West: 421		East-West: 421		East-West: 421	
		SUM: 1234		SUM: 1234		SUM: 1234		SUM: 1249		SUM: 1249		SUM: 1249		SUM: 1249		SUM: 1249		SUM: 1249	
VOLUME/CAPACITY (V/C) RATIO:		0.823		0.823		0.823		0.833		0.833		0.833		0.833		0.833		0.833	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.723		0.723		0.723		0.733		0.733		0.733		0.733		0.733		-0.100	
LEVEL OF SERVICE (LOS):		C		C		C		C		C		C		C		C		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.833**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2042	Ambient Growth: (%):	0	Conducted by:		Date:										
6	East-West Street:	9th St	Projection Year:	2042	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	88	1	88	0	88	88	3	91	1	91	0	91	1	91	0	91	1	91
	Left-Through		0						0				0				0		
	Through	1210	1	646	0	1210	646	31	1241	1	662	0	1241	1	662	0	1241	1	662
	Through-Right		1						1				1				1		
	Right	82	0	0	0	82	0	0	82	0	0	0	82	0	0	0	82	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	86	1	86	0	86	86	0	86	1	86	0	86	1	86	0	86	1	86
	Left-Through		0						0				0				0		
	Through	1277	1	692	0	1277	692	9	1286	1	696	0	1286	1	697	0	1286	1	697
	Through-Right		1						1				1				1		
	Right	106	0	0	1	107	0	0	106	0	0	1	107	0	0	0	107	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	172	1	172	0	172	172	0	172	1	172	0	172	1	172	0	172	1	172
	Left-Through		0						0				0				0		
	Through	263	1	263	0	263	263	2	265	1	265	0	265	1	265	0	265	1	265
	Through-Right		0						0				0				0		
	Right	63	1	19	0	63	19	1	64	1	19	0	64	1	19	0	64	1	19
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	141	1	141	0	141	141	0	141	1	141	0	141	1	141	0	141	1	141
	Left-Through		0						0				0				0		
	Through	337	0	437	1	338	438	5	342	0	442	1	343	0	443	0	343	0	443
	Through-Right		1						1				1				1		
	Right	100	0	0	0	100	0	0	100	0	0	0	100	0	0	0	100	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 780 East-West: 609 SUM: 1389	North-South: 780 East-West: 610 SUM: 1390	North-South: 787 East-West: 614 SUM: 1401	North-South: 788 East-West: 615 SUM: 1403	North-South: 788 East-West: 615 SUM: 1403	North-South: 788 East-West: 615 SUM: 1403	North-South: 788 East-West: 615 SUM: 1403	North-South: 788 East-West: 615 SUM: 1403	North-South: 788 East-West: 615 SUM: 1403									
VOLUME/CAPACITY (V/C) RATIO:		0.926	0.927	0.934	0.935	0.935	0.935	0.935	0.935	0.935									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.826	0.827	0.834	0.835	0.835	0.835	0.835	0.835	-0.100									
LEVEL OF SERVICE (LOS):		D	D	D	D	D	D	D	D	A									

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.934**  
 Significant impacted? **NO**      Fully mitigated? **N/A**





# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2042</b>		Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:						
<b>8</b>	East-West Street:	<b>25th St</b>		Projection Year:	<b>2042</b>		Peak Hour:	<b>PM</b>		Reviewed by:			Project:						
No. of Phases		3		3		3		3		3		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0					
		EB-- 3 WB-- 0		EB-- 3 WB-- 0		EB-- 3 WB-- 0		EB-- 3 WB-- 0		EB-- 3 WB-- 0		EB-- 3 WB-- 0		EB-- 3 WB-- 0					
		2		2		2		2		2		2		2					
		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	67	1	67	0	67	67	0	67	1	67	0	67	1	67	0	67	1	67
	Left-Through		0							0				0				0	
	Through	318	0	318	0	318	318	3	321	0	321	0	321	0	321	0	321	0	321
	Through-Right		1							1				1				1	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	430	1	430	0	430	430	6	436	1	436	0	436	1	436	0	436	1	436
	Through-Right		0							0				0				0	
	Right	388	1	217	3	391	219	20	408	1	234	3	411	1	237	0	411	1	237
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	343	1	343	1	344	344	5	348	1	348	1	349	1	349	0	349	1	349
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	108	1	41	0	108	41	0	108	1	41	0	108	1	41	0	108	1	41
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		1							1				1				1		
CRITICAL VOLUMES		North-South: 497		North-South: 497		North-South: 503		North-South: 503		North-South: 503		North-South: 503		North-South: 503		North-South: 503		North-South: 503	
		East-West: 343		East-West: 344		East-West: 348		East-West: 348		East-West: 349		East-West: 349		East-West: 349		East-West: 349		East-West: 349	
		SUM: 840		SUM: 841		SUM: 851		SUM: 851		SUM: 852		SUM: 852		SUM: 852		SUM: 852		SUM: 852	
VOLUME/CAPACITY (V/C) RATIO:		0.589		0.590		0.597		0.597		0.598		0.598		0.598		0.598		0.598	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.489		0.490		0.497		0.497		0.498		0.498		0.498		0.498		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.597**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Via Cabrillo Marina</b>	<b>Year of Count:</b>	<b>2042</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>9</b>	<b>East-West Street:</b>	<b>22nd St</b>	<b>Projection Year:</b>	<b>2042</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 3 SB-- 0 EB-- 0 WB-- 0	NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 3 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	191	2	105	0	191	105	0	191	2	105	0	191	2	105	0	191	2	105
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	105	1	21	0	105	21	0	105	1	21	0	105	1	21	0	105	1	21
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	276	1	215	1	277	216	23	299	1	227	1	300	1	227	0	300	1	227
	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
	Right	154	0	0	0	154	0	0	154	0	0	0	154	0	0	0	154	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WESTBOUND	Left	84	1	84	0	84	84	0	84	1	84	0	84	1	84	0	84	1	84
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	461	2	231	3	464	232	82	543	2	272	3	546	2	273	0	546	2	273
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRITICAL VOLUMES		North-South: 105 East-West: 299 SUM: 404	North-South: 105 East-West: 300 SUM: 405	North-South: 105 East-West: 311 SUM: 416	North-South: 105 East-West: 311 SUM: 416	North-South: 105 East-West: 311 SUM: 416	North-South: 105 East-West: 311 SUM: 416	North-South: 105 East-West: 311 SUM: 416	North-South: 105 East-West: 311 SUM: 416	North-South: 105 East-West: 311 SUM: 416									
VOLUME/CAPACITY (V/C) RATIO:		0.284	0.284	0.292	0.292	0.292	0.292	0.292	0.292	0.292									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.184	0.184	0.192	0.192	0.192	0.192	0.192	0.192	-0.100									
LEVEL OF SERVICE (LOS):		A	A	A	A	A	A	A	A	A									

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.292**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Harbor Bl</b>		Year of Count:	<b>2042</b>		Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:							
	East-West Street:	<b>O'Farrell St</b>		Projection Year:	<b>2042</b>		Peak Hour:	<b>PM</b>		Reviewed by:			Project:							
No. of Phases				<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>						
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>						
Right Turns: FREE-1, NRTOR-2 or OLA-3?				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>						
ATSAC-1 or ATSAC+ATCS-2?				<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>						
Override Capacity				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>						
<b>MOVEMENT</b>		<b>EXISTING CONDITION</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
<b>NORTHBOUND</b>	Left	14	1	14	0	14	14	0	14	1	14	0	14	1	14	0	14	1	14	
	Left-Through		0						0				0				0			
	Through	1888	3	629	68	1956	652	200	2088	3	696	68	2156	3	719	0	2156	3	719	
	Through-Right		0						0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0			
<b>SOUTHBOUND</b>	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0			
	Through	1961	2	656	18	1979	662	40	2001	2	670	18	2019	2	676	0	2019	2	676	
	Through-Right		1						0				0				0			
	Right	8	0	0	0	8	0	0	8	0	0	0	8	0	0	0	8	0	0	0
	Left-Through-Right		0						0				0				0			
Left-Right		0							0				0				0			
<b>EASTBOUND</b>	Left	103	0	103	0	103	103	0	103	0	103	0	103	0	103	0	103	0	103	
	Left-Through		0						0				0				0			
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0			
	Right	18	0	121	0	18	121	0	18	0	121	0	18	0	121	0	18	0	121	
	Left-Through-Right		0						0				0				0			
Left-Right		1							1				1				1			
<b>WESTBOUND</b>	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0			
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right		0						0				0				0			
Left-Right		0							0				0				0			
<b>CRITICAL VOLUMES</b>		<i>North-South:</i>		670	<i>North-South:</i>		676	<i></i>												

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl	Year of Count:	2042	Ambient Growth: (%):	0	Conducted by:		Date:										
13	East-West Street:	1st St	Projection Year:	2042	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		4	4		4		4		2										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2	2		2		2		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	0									
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	32	1	32	0	32	32	1	33	1	33	0	33	1	33	0	33	1	33
	Left-Through		0						0				0				0		
	Through	1796	2	599	0	1796	599	199	1995	2	665	0	1995	2	666	0	1995	2	666
	Through-Right		1						1				1				1		
	Right	1	0	0	1	2	0	0	1	0	0	1	2	0	0	0	2	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
SOUTHBOUND	Left	7	1	7	18	25	25	0	7	1	7	18	25	1	25	0	25	1	25
	Left-Through		0						0				0				0		
	Through	1873	2	661	0	1873	661	39	1912	2	674	0	1912	2	674	0	1912	3	506
	Through-Right		1						1				1				1		
	Right	111	0	0	0	111	0	0	111	0	0	0	111	0	0	0	111	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
EASTBOUND	Left	80	1	80	0	80	80	0	80	1	80	0	80	1	80	0	80	1	80
	Left-Through		0						0				0				0		
	Through	0	0	26	3	3	29	0	0	0	26	3	3	0	29	0	3	0	29
	Through-Right		1						1				1				1		
	Right	26	0	0	0	26	0	0	26	0	0	0	26	0	0	0	26	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
WESTBOUND	Left	2	0	2	3	5	5	0	2	0	2	3	5	0	5	0	5	0	5
	Left-Through		0						0				0				0		
	Through	26	0	61	13	39	145	0	26	0	61	13	39	0	145	0	39	0	145
	Through-Right		0						0				0				0		
	Right	33	0	0	68	101	0	0	33	0	0	68	101	0	0	0	101	0	0
	Left-Through-Right		1						1				1				1		
	Left-Right		0						0				0				0		
CRITICAL VOLUMES		North-South: 693 East-West: 141 SUM: 834	North-South: 693 East-West: 225 SUM: 918	North-South: 707 East-West: 141 SUM: 848	North-South: 707 East-West: 225 SUM: 932	North-South: 691 East-West: 225 SUM: 916													
VOLUME/CAPACITY (V/C) RATIO:		0.607	0.668	0.617	0.678	0.611													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.507	0.568	0.517	0.578	0.511													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.061**      Δv/c after mitigation: **-0.006**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b> <b>15</b>	North-South Street: <b>Harbor Bl</b>		Year of Count: <b>2042</b>		Ambient Growth: (%): <b>0</b>		Conducted by:		Date:										
	East-West Street: <b>5th St</b>		Projection Year: <b>2042</b>		Peak Hour: <b>PM</b>		Reviewed by:		Project:										
No. of Phases		3		3		3		3		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0									
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2									
Override Capacity		0		0		0		0		0									
<b>MOVEMENT</b>		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	↵ Left	31	1	31	0	31	31	0	31	1	31	0	31	1	31	0	31	1	31
	↵ Left-Through		0						0				0				0		
	→ Through	1562	2	522	1	1563	522	199	1761	2	588	1	1762	2	589	0	1762	2	589
	→ Through-Right		1						1				1				1		
	→ Right	4	0	0	0	4	0	0	4	0	0	0	4	0	0	0	4	0	0
	↵↗ Left-Through-Right		0							0				0				0	
↵↘ Left-Right		0							0				0				0		
<b>SOUTHBOUND</b>	↵ Left	2	1	2	0	2	2	0	2	1	2	0	2	1	2	0	2	1	2
	↵ Left-Through		0						0				0				0		
	→ Through	1735	2	619	3	1738	620	39	1774	2	632	3	1777	2	633	0	1777	2	633
	→ Through-Right		1						1				1				1		
	→ Right	121	0	0	0	121	0	0	121	0	0	0	121	0	0	0	121	0	0
	↵↗ Left-Through-Right		0							0				0				0	
↵↘ Left-Right		0							0				0				0		
<b>EASTBOUND</b>	↵ Left	292	1	292	0	292	292	0	292	1	292	0	292	1	292	0	292	1	292
	↵ Left-Through		0						0				0				0		
	→ Through	2	1	2	0	2	2	0	2	1	2	0	2	1	2	0	2	1	2
	→ Through-Right		0						0				0				0		
	→ Right	17	1	2	0	17	2	0	17	1	2	0	17	1	2	0	17	1	2
	↵↗ Left-Through-Right		0							0				0				0	
↵↘ Left-Right		0							0				0				0		
<b>WESTBOUND</b>	↵ Left	3	1	3	0	3	3	0	3	1	3	0	3	1	3	0	3	1	3
	↵ Left-Through		0						0				0				0		
	→ Through	1	0	16	0	1	16	0	1	0	16	0	1	0	16	0	1	0	16
	→ Through-Right		1						1				1				1		
	→ Right	15	0	0	0	15	0	0	15	0	0	0	15	0	0	0	15	0	0
	↵↗ Left-Through-Right		0							0				0				0	
↵↘ Left-Right		0							0				0				0		
<b>CRITICAL VOLUMES</b>		<i>North-South:</i>	650	<i>North-South:</i>	651	<i>North-South:</i>	663	<i>North-South:</i>	664			<i>North-South:</i>	664			<i>North-South:</i>	664		
		<i>East-West:</i>	308	<i>East-West:</i>	308	<i>East-West:</i>	308	<i>East-West:</i>	308			<i>East-West:</i>	308			<i>East-West:</i>	308		
		<i>SUM:</i>	958	<i>SUM:</i>	959	<i>SUM:</i>	971	<i>SUM:</i>	972			<i>SUM:</i>	972			<i>SUM:</i>	972		
VOLUME/CAPACITY (V/C) RATIO:		0.672		0.673		0.681		0.682		0.682		0.682		0.682		0.682		0.682	
V/C LESS ATSAC/ATCS ADJUSTMENT:		<b>0.572</b>		<b>0.573</b>		<b>0.581</b>		<b>0.581</b>		<b>0.582</b>		<b>0.582</b>		<b>0.582</b>		<b>0.582</b>		<b>-0.100</b>	
LEVEL OF SERVICE (LOS):		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>	

### PROJECT IMPACT

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.681**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl		Year of Count:	2042		Ambient Growth: (%):	0		Conducted by:			Date:												
16	East-West Street:	6th St		Projection Year:	2042		Peak Hour:	PM		Reviewed by:			Project:												
No. of Phases		4		4		4		4		4		0		0											
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2		2		2		2		2		0		0											
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0											
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2											
Override Capacity		0		0		0		0		0		0		0											
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION									
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume						
NORTHBOUND	Left	63	1	63	0	63	63	0	63	1	63	0	63	1	63	0	63	1	63						
	Left-Through		0							0				0				0							
	Through	1673	2	558	1	1674	558	199	1872	2	624	1	1873	2	624	0	1873	2	624						
	Through-Right		1							1				1				1							
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
	Left-Through-Right		0							0				0				0							
Left-Right		0							0				0				0								
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
	Left-Through		0							0				0				0							
	Through	1851	2	661	3	1854	662	39	1890	2	674	3	1893	2	675	0	1893	2	675						
	Through-Right		1							1				1				1							
	Right	132	0	0	0	132	0	0	132	0	0	0	132	0	0	0	132	0	0						
	Left-Through-Right		0							0				0				0							
Left-Right		0							0				0				0								
EASTBOUND	Left	99	1	99	0	99	99	0	99	1	99	0	99	1	99	0	99	1	99						
	Left-Through		0							0				0				0							
	Through	0	0	57	0	0	57	0	0	0	57	0	0	0	57	0	0	0	57						
	Through-Right		1							1				1				1							
	Right	57	0	0	0	57	0	0	57	0	0	0	57	0	0	0	57	0	0						
	Left-Through-Right		0							0				0				0							
Left-Right		0							0				0				0								
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
	Left-Through		0							0				0				0							
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
	Through-Right		1							1				1				1							
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
	Left-Through-Right		0							0				0				0							
Left-Right		0							0				0				0								
CRITICAL VOLUMES		North-South:	724	East-West:	99	SUM:	823	North-South:	725	East-West:	99	SUM:	824	North-South:	737	East-West:	99	SUM:	836	North-South:	738	East-West:	99	SUM:	837
VOLUME/CAPACITY (V/C) RATIO:		0.599		0.599		0.608		0.609		0.608		0.609		0.609		0.609		0.609		0.609		0.609			
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.499		0.499		0.508		0.508		0.508		0.509		0.509		0.509		0.509		0.509		-0.100			
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A		A		A			

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.608**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Harbor Blvd</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>												
<b>17A</b>	<b>East-West Street:</b>	<b>7th St</b>	<b>Projection Year:</b>	<b>2042</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>IOWA 2042 CB</b>											
No. of Phases		3	3		3		3		0												
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0												
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 3 WB-- 0	NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0												
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2												
Override Capacity		0	0		0		0		0												
<b>MOVEMENT</b>		<b>YEAR 2042 CONDITIONS</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
<b>NORTHBOUND</b>	Left	145	1	145		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	1,787	3	596		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
<b>SOUTHBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	1,530	2	649		0		0		0		0		0		0		0		0	
	Through-Right		1			0		0		0		0		0		0		0		0	
	Right	416	0	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
<b>EASTBOUND</b>	Left	253	2	139		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	109	1	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
<b>WESTBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
<b>CRITICAL VOLUMES</b>		<i>North-South:</i> 794 <i>East-West:</i> 139 <i>SUM:</i> 933		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0	
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			0.655		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			<b>0.555</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>
<b>LEVEL OF SERVICE (LOS):</b>			<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Harbor Blvd</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>											
<b>17B</b>	<b>East-West Street:</b>	<b>Sampson Way</b>	<b>Projection Year:</b>	<b>2042</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>IOWA 2042 CB</b>										
No. of Phases		2	2		2		2		0											
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0											
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0		NB-- 0 SB-- 3 EB-- 0 WB-- 0		NB-- 0 SB-- 3 EB-- 0 WB-- 0		NB-- 0 SB-- 3 EB-- 0 WB-- 0											
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2											
Override Capacity		0	0		0		0		0											
<b>MOVEMENT</b>		<b>YEAR 2042 CONDITIONS</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
<b>NORTHBOUND</b>	Left	38	1	38		0		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0		0
	Through	651	2	326		0		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0		0
	Right	0	0	0		0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0		0
	Left-Right		0			0		0		0		0		0		0		0		0
<b>SOUTHBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0		0
	Through	533	2	267		0		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0		0
	Right	1,106	1	401		0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0		0
	Left-Right		0			0		0		0		0		0		0		0		0
<b>EASTBOUND</b>	Left	1,281	2	705		0		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0		0
	Through	0	0	0		0		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0		0
	Right	52	1	33		0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0		0
	Left-Right		0			0		0		0		0		0		0		0		0
<b>WESTBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0		0
	Left-Through		0			0		0		0		0		0		0		0		0
	Through	0	0	0		0		0		0		0		0		0		0		0
	Through-Right		0			0		0		0		0		0		0		0		0
	Right	0	0	0		0		0		0		0		0		0		0		0
	Left-Through-Right		0			0		0		0		0		0		0		0		0
	Left-Right		0			0		0		0		0		0		0		0		0
<b>CRITICAL VOLUMES</b>		<i>North-South:</i> 439 <i>East-West:</i> 705 <i>SUM:</i> 1144	<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0	<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0	<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0	<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0	<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0	<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0	<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0											
<b>VOLUME/CAPACITY (V/C) RATIO:</b>		0.763	0.000	0.000	0.000	0.000	0.000	0.000	0.000											
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>		<b>0.663</b>	<b>-0.100</b>	<b>-0.100</b>	<b>-0.100</b>	<b>-0.100</b>	<b>-0.100</b>	<b>-0.100</b>	<b>-0.100</b>											
<b>LEVEL OF SERVICE (LOS):</b>		<b>B</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>											

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Harbor Blvd</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>												
<b>17A</b>	<b>East-West Street:</b>	<b>7th St</b>	<b>Projection Year:</b>	<b>2042</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>2042 WITH PROJECT</b>											
No. of Phases		3	3		3		3		0												
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0												
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 3 WB-- 0	NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 3 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0												
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2												
Override Capacity		0	0		0		0		0												
<b>MOVEMENT</b>		<b>YEAR 2042 CONDITIONS</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
<b>NORTHBOUND</b>	Left	145	1	145		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	1,788	3	596		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
<b>SOUTHBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	1,533	2	650		0		0		0		0		0		0		0		0	
	Through-Right		1			0		0		0		0		0		0		0		0	
	Right	416	0	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
<b>EASTBOUND</b>	Left	253	2	139		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	109	1	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
<b>WESTBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
<b>CRITICAL VOLUMES</b>		<i>North-South:</i> 795 <i>East-West:</i> 139 <i>SUM:</i> 934		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0		<i>North-South:</i> 0 <i>East-West:</i> 0 <i>SUM:</i> 0	
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			0.655		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			<b>0.555</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>
<b>LEVEL OF SERVICE (LOS):</b>			<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Harbor Blvd</b>	<b>Year of Count:</b>	<b>2011</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>												
<b>17B</b>	<b>East-West Street:</b>	<b>Sampson Way</b>	<b>Projection Year:</b>	<b>2042</b>	<b>Peak Hour:</b>	<b>PM</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>2042 WITH PROJECT</b>											
No. of Phases		2	2		2		2		0												
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0												
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 3 EB-- 0 WB-- 0	NB-- 0 SB-- 3 EB-- 0 WB-- 0		NB-- 0 SB-- 3 EB-- 0 WB-- 0		NB-- 0 SB-- 3 EB-- 0 WB-- 0		NB-- 0 SB-- 3 EB-- 0 WB-- 0												
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2												
Override Capacity		0	0		0		0		0												
<b>MOVEMENT</b>		<b>YEAR 2042 CONDITIONS</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
<b>NORTHBOUND</b>	Left	38	1	38		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	651	2	326		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
	Left-Right		0			0		0		0		0		0		0		0		0	
<b>SOUTHBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	533	2	267		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	1,109	1	404		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
	Left-Right		0			0		0		0		0		0		0		0		0	
<b>EASTBOUND</b>	Left	1,282	2	705		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	52	1	33		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
	Left-Right		0			0		0		0		0		0		0		0		0	
<b>WESTBOUND</b>	Left	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0		0	
	Left-Right		0			0		0		0		0		0		0		0		0	
<b>CRITICAL VOLUMES</b>		<i>North-South:</i>	442	<i>North-South:</i>	0	<i>North-South:</i>	0	<i>North-South:</i>	0	<i>North-South:</i>	0	<i>North-South:</i>	0	<i>North-South:</i>	0	<i>North-South:</i>	0	<i>North-South:</i>	0	<i>North-South:</i>	0
		<i>East-West:</i>	705	<i>East-West:</i>	0	<i>East-West:</i>	0	<i>East-West:</i>	0	<i>East-West:</i>	0	<i>East-West:</i>	0	<i>East-West:</i>	0	<i>East-West:</i>	0	<i>East-West:</i>	0	<i>East-West:</i>	0
		<i>SUM:</i>	1147	<i>SUM:</i>	0	<i>SUM:</i>	0	<i>SUM:</i>	0	<i>SUM:</i>	0	<i>SUM:</i>	0	<i>SUM:</i>	0	<i>SUM:</i>	0	<i>SUM:</i>	0	<i>SUM:</i>	0
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			0.765		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			<b>0.665</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>		<b>-0.100</b>
<b>LEVEL OF SERVICE (LOS):</b>			<b>B</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Miner St	Year of Count:	2042	Ambient Growth: (%):	0	Conducted by:		Date:										
18	East-West Street:	22nd St	Projection Year:	2042	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	95	1	95	0	95	95	0	95	1	95	0	95	1	95	0	95	1	95
	Left-Through		0						0				0				0		
	Through	710	1	373	0	710	373	0	710	1	373	0	710	1	373	0	710	1	373
	Through-Right		1						1				1				1		
	Right	35	0	0	0	35	0	0	35	0	0	0	35	0	0	0	35	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
SOUTHBOUND	Left	31	1	31	0	31	31	29	60	1	60	0	60	1	60	0	60	1	60
	Left-Through		0						0				0				0		
	Through	404	1	370	0	404	371	0	404	1	371	0	404	1	371	0	404	1	371
	Through-Right		1						1				1				1		
	Right	335	0	0	3	338	0	0	335	0	0	3	338	0	0	0	338	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
EASTBOUND	Left	219	1	219	1	220	220	0	219	1	219	1	220	1	220	0	220	1	220
	Left-Through		0						0				0				0		
	Through	67	1	63	0	67	63	13	80	1	70	0	80	1	70	0	80	1	70
	Through-Right		1						1				1				1		
	Right	59	0	0	0	59	0	0	59	0	0	0	59	0	0	0	59	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
WESTBOUND	Left	32	1	32	0	32	32	0	32	1	32	0	32	1	32	0	32	1	32
	Left-Through		0						0				0				0		
	Through	112	1	80	0	112	80	59	171	1	171	0	171	1	171	0	171	1	171
	Through-Right		1						1				1				1		
	Right	48	0	0	0	48	0	136	184	0	154	0	184	0	154	0	184	0	154
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
CRITICAL VOLUMES		North-South: 465 East-West: 299 SUM: 764	North-South: 466 East-West: 300 SUM: 766	North-South: 465 East-West: 390 SUM: 855	North-South: 466 East-West: 391 SUM: 857	North-South: 465 East-West: 391 SUM: 857	North-South: 466 East-West: 391 SUM: 857	North-South: 466 East-West: 391 SUM: 857	North-South: 466 East-West: 391 SUM: 857	North-South: 466 East-West: 391 SUM: 857									
VOLUME/CAPACITY (V/C) RATIO:		0.536	0.538	0.600	0.601	0.601	0.601	0.601	0.601	0.601									
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.436	0.438	0.500	0.501	0.501	0.501	0.501	0.501	-0.100									
LEVEL OF SERVICE (LOS):		A	A	A	A	A	A	A	A	A									

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.600**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave		Year of Count:	2042		Ambient Growth: (%):	0		Conducted by:			Date:						
20	East-West Street:	Front St		Projection Year:	2042		Peak Hour:	PM		Reviewed by:			Project:						
No. of Phases		3		3		3		3		3		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0						0				0				0		
	Through	678	1	370	1	679	370	2	680	1	371	1	681	1	371	0	681	1	371
	Through-Right		1						1				1				1		
	Right	61	0	0	0	61	0	0	61	0	0	0	61	0	0	0	61	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	164	1	164	0	164	164	1	165	1	165	0	165	1	165	0	165	1	165
	Left-Through		0						0				0				0		
	Through	812	2	406	0	812	406	1	813	2	407	0	813	2	407	0	813	2	407
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	17	1	17	0	17	17	0	17	1	17	0	17	1	17	0	17	1	17
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0						0				0				0		
	Right	237	2	0	1	238	0	4	241	2	0	1	242	2	0	0	242	2	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 534		North-South: 534		North-South: 536		North-South: 536		North-South: 536		North-South: 536		North-South: 536		North-South: 536		North-South: 536	
		East-West: 17		East-West: 17		East-West: 17		East-West: 17		East-West: 17		East-West: 17		East-West: 17		East-West: 17		East-West: 17	
		SUM: 551		SUM: 551		SUM: 553		SUM: 553		SUM: 553		SUM: 553		SUM: 553		SUM: 553		SUM: 553	
VOLUME/CAPACITY (V/C) RATIO:		0.387		0.387		0.388		0.388		0.388		0.388		0.388		0.388		0.388	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.287		0.287		0.288		0.288		0.288		0.288		0.288		0.288		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.388**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave	Year of Count:	2042	Ambient Growth: (%):	0	Conducted by:		Date:										
21	East-West Street:	1st St	Projection Year:	2042	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	162	1	162	0	162	162	0	162	1	162	0	162	1	162	0	162	1	162
	Left-Through		0							0				0				0	
	Through	701	1	373	0	701	373	2	703	1	374	0	703	1	374	0	703	1	374
	Through-Right		1							1				1				1	
	Right	44	0	0	0	44	0	0	44	0	0	0	44	0	0	0	44	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
SOUTHBOUND	Left	14	1	14	0	14	14	0	14	1	14	0	14	1	14	0	14	1	14
	Left-Through		0							0				0				0	
	Through	765	1	395	0	765	395	1	766	1	396	0	766	1	396	0	766	1	396
	Through-Right		1							1				1				1	
	Right	25	0	0	0	25	0	0	25	0	0	0	25	0	0	0	25	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
EASTBOUND	Left	79	0	79	0	79	79	0	79	0	79	0	79	0	79	0	79	0	79
	Left-Through		0							0				0				0	
	Through	119	0	340	3	122	343	0	119	0	340	3	122	0	343	0	122	0	343
	Through-Right		0							0				0				0	
	Right	142	0	0	0	142	0	0	142	0	0	0	142	0	0	0	142	0	0
	Left-Through-Right		1						1				1				1		
	Left-Right		0						0				0				0		
WESTBOUND	Left	115	0	115	2	117	117	0	115	0	115	2	117	0	117	0	117	0	117
	Left-Through		0							0				0				0	
	Through	94	0	233	11	105	247	0	94	0	233	11	105	0	247	0	105	0	247
	Through-Right		0							0				0				0	
	Right	24	0	0	1	25	0	0	24	0	0	1	25	0	0	0	25	0	0
	Left-Through-Right		1						1				1				1		
	Left-Right		0						0				0				0		
CRITICAL VOLUMES		North-South: 557 East-West: 455 SUM: 1012	North-South: 557 East-West: 460 SUM: 1017	North-South: 558 East-West: 455 SUM: 1013	North-South: 558 East-West: 460 SUM: 1018	North-South: 558 East-West: 460 SUM: 1018	North-South: 558 East-West: 460 SUM: 1018												
VOLUME/CAPACITY (V/C) RATIO:		0.675	0.678	0.675	0.679	0.679													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.575	0.578	0.575	0.579	-0.100													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.004**      Δv/c after mitigation: **-0.675**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	<b>Pacific Ave</b>		Year of Count:	<b>2042</b>		Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:						
<b>22</b>	East-West Street:	<b>5th St</b>		Projection Year:	<b>2042</b>		Peak Hour:	<b>PM</b>		Reviewed by:			Project:						
No. of Phases				2		2		2		2		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0					
		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0					
ATSAC-1 or ATSAC+ATCS-2?				2		2		2		2		2		2					
Override Capacity				0		0		0		0		0		0					
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	30	0	30	0	30	30	0	30	0	30	0	30	0	30	0	30	0	30
	Left-Through		1						1			1		1		1		1	
	Through	800	0	507	0	800	507	2	802	0	508	0	802	0	508	0	802	0	508
	Through-Right		1						1			1		1		1		1	
	Right	93	0	507	0	93	507	0	93	0	508	0	93	0	508	0	93	0	508
	Left-Through-Right		0						0			0		0		0		0	
Left-Right		0						0			0		0		0		0		0
SOUTHBOUND	Left	53	0	53	0	53	53	0	53	0	53	0	53	0	53	0	53	0	53
	Left-Through		1						1			1		1		1		1	
	Through	961	0	601	2	963	602	1	962	0	601	2	964	0	602	0	964	0	602
	Through-Right		1						1			1		1		1		1	
	Right	28	0	601	0	28	602	0	28	0	601	0	28	0	602	0	28	0	602
	Left-Through-Right		0						0			0		0		0		0	
Left-Right		0						0			0		0		0		0		0
EASTBOUND	Left	33	1	33	0	33	33	0	33	1	33	0	33	1	33	0	33	1	33
	Left-Through		0						0			0		0		0		0	
	Through	112	0	178	0	112	178	0	112	0	178	0	112	0	178	0	112	0	178
	Through-Right		1						1			1		1		1		1	
	Right	66	0	0	0	66	0	0	66	0	0	0	66	0	0	0	66	0	0
	Left-Through-Right		0						0			0		0		0		0	
Left-Right		0						0			0		0		0		0		0
WESTBOUND	Left	148	1	148	0	148	148	0	148	1	148	0	148	1	148	0	148	1	148
	Left-Through		0						0			0		0		0		0	
	Through	176	0	267	0	176	267	0	176	0	267	0	176	0	267	0	176	0	267
	Through-Right		1						1			1		1		1		1	
	Right	91	0	0	0	91	0	0	91	0	0	0	91	0	0	0	91	0	0
	Left-Through-Right		0						0			0		0		0		0	
Left-Right		0						0			0		0		0		0		0
CRITICAL VOLUMES		North-South: 631		631		North-South: 632		632		North-South: 631		631		North-South: 632		632		North-South: 632	
		East-West: 326		326		East-West: 326		326		East-West: 326		326		East-West: 326		326		East-West: 326	
		SUM: 957		957		SUM: 958		958		SUM: 957		957		SUM: 958		958		SUM: 958	
VOLUME/CAPACITY (V/C) RATIO:		0.638		0.638		0.638		0.638		0.638		0.638		0.638		0.638		0.638	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.538		0.538		0.539		0.539		0.538		0.538		0.539		0.539		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.638**  
 Significant impacted? **NO**      Fully mitigated? **N/A**





# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	Pacific Ave	Year of Count:	2042	Ambient Growth: (%):	0	Conducted by:		Date:										
<b>24</b>	East-West Street:	9th St	Projection Year:	2042	Peak Hour:	PM	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	0		0		0		0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
<b>MOVEMENT</b>		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	Left	62	0	62	0	62	62	0	62	0	62	0	62	0	62	0	62	0	62
	Left-Through	1	1	2	0	2	2	1	1	1	1	1	2	1	2	1	2	1	2
	Through	637	0	522	0	637	522	2	639	0	523	0	639	0	523	0	639	0	523
	Through-Right	1	1	2	0	2	2	1	1	1	1	1	2	1	2	1	2	1	2
	Right	34	0	522	0	34	522	0	34	0	523	0	34	0	523	0	34	0	523
<b>SOUTHBOUND</b>	Left	64	0	64	0	64	64	0	64	0	64	0	64	0	64	0	64	0	64
	Left-Through	1	1	2	0	2	2	1	1	1	1	1	2	1	2	1	2	1	2
	Through	897	0	725	0	897	726	1	898	0	726	0	898	0	726	0	898	0	726
	Through-Right	1	1	2	0	2	2	1	1	1	1	1	2	1	2	1	2	1	2
	Right	297	0	725	1	298	726	0	297	0	726	1	298	0	726	0	298	0	726
<b>EASTBOUND</b>	Left	168	1	168	0	168	168	0	168	1	168	0	168	1	168	0	168	1	168
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	194	0	271	0	194	271	0	194	0	271	0	194	0	271	0	194	0	271
	Through-Right	1	1	2	0	2	2	1	1	1	1	1	2	1	2	1	2	1	2
	Right	77	0	0	0	77	0	0	77	0	0	0	77	0	0	0	77	0	0
<b>WESTBOUND</b>	Left	54	1	54	0	54	54	0	54	1	54	0	54	1	54	0	54	1	54
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	216	0	304	0	216	304	-1	215	0	303	0	215	0	303	0	215	0	303
	Through-Right	1	1	2	0	2	2	1	1	1	1	1	2	1	2	1	2	1	2
	Right	88	0	0	0	88	0	0	88	0	0	0	88	0	0	0	88	0	0
<b>CRITICAL VOLUMES</b>		North-South:	787	North-South:	788	North-South:	788	North-South:	788	North-South:	788	North-South:	788	North-South:	788	North-South:	788	North-South:	788
		East-West:	472	East-West:	472	East-West:	471	East-West:	471	East-West:	471	East-West:	471	East-West:	471	East-West:	471	East-West:	471
		SUM:	1259	SUM:	1260	SUM:	1259	SUM:	1259	SUM:	1259	SUM:	1259	SUM:	1259	SUM:	1259	SUM:	1259
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			0.839		0.840		0.839		0.839		0.839		0.839		0.839		0.839		0.839
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			<b>0.739</b>		<b>0.740</b>		<b>0.739</b>		<b>0.739</b>		<b>0.739</b>		<b>0.739</b>		<b>0.739</b>		<b>0.739</b>		<b>-0.100</b>
<b>LEVEL OF SERVICE (LOS):</b>			<b>C</b>		<b>C</b>		<b>C</b>		<b>C</b>		<b>C</b>		<b>C</b>		<b>C</b>		<b>C</b>		<b>A</b>

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.839**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2042</b>		Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:						
<b>1</b>	East-West Street:	<b>Summerland Av</b>		Projection Year:	<b>2042</b>		Peak Hour:	<b>WK</b>		Reviewed by:			Project:						
No. of Phases		3		3		3		3		3		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	162	1	162	0	162	162	0	162	1	162	0	162	1	162	0	162	1	162
	Left-Through		0							0				0				0	
	Through	737	1	380	3	740	381	5	742	1	382	3	745	1	384	0	745	1	384
	Through-Right		1							1				1				1	
	Right	22	0	0	0	22	0	0	22	0	0	0	22	0	0	0	22	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	11	1	11	0	11	11	0	11	1	11	0	11	1	11	0	11	1	11
	Left-Through		0							0				0				0	
	Through	692	1	447	3	695	449	11	703	1	453	3	706	1	454	0	706	1	454
	Through-Right		1							1				1				1	
	Right	202	0	0	0	202	0	0	202	0	0	0	202	0	0	0	202	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	220	1	220	0	220	220	0	220	1	220	0	220	1	220	0	220	1	220
	Left-Through		0							0				0				0	
	Through	0	0	77	0	0	77	0	0	0	77	0	0	0	77	0	0	0	77
	Through-Right		1							1				1				1	
	Right	77	0	0	0	77	0	0	77	0	0	0	77	0	0	0	77	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	494	2	272	0	494	272	0	494	2	272	0	494	2	272	0	494	2	272
	Left-Through		0							0				0				0	
	Through	177	0	428	0	177	428	0	177	0	428	0	177	0	428	0	177	0	428
	Through-Right		1							1				1				1	
	Right	251	0	0	0	251	0	0	251	0	0	0	251	0	0	0	251	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 609		North-South: 611		North-South: 615		North-South: 616		North-South: 616		North-South: 616		North-South: 616		North-South: 616		North-South: 616	
		East-West: 648		East-West: 648		East-West: 648		East-West: 648		East-West: 648		East-West: 648		East-West: 648		East-West: 648		East-West: 648	
		SUM: 1257		SUM: 1259		SUM: 1263		SUM: 1264		SUM: 1264		SUM: 1264		SUM: 1264		SUM: 1264		SUM: 1264	
VOLUME/CAPACITY (V/C) RATIO:		0.882		0.884		0.886		0.886		0.887		0.887		0.887		0.887		0.887	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.782		0.784		0.786		0.786		0.787		0.787		0.787		0.787		-0.100	
LEVEL OF SERVICE (LOS):		C		C		C		C		C		C		C		C		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.886**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Gaffey St</b>	<b>Year of Count:</b>	<b>2042</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>2</b>	<b>East-West Street:</b>	<b>I-110 Ramps</b>	<b>Projection Year:</b>	<b>2042</b>	<b>Peak Hour:</b>	<b>WK</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 1 SB-- 0 EB-- 0 WB-- 0	NB-- 1 SB-- 0 EB-- 0 WB-- 0		NB-- 1 SB-- 0 EB-- 0 WB-- 0		NB-- 1 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	712	2	356	3	715	358	5	717	2	359	3	720	2	360	0	720	2	360
	Through-Right		0						0				0				0		
	Right	2226	2	0	5	2231	0	8	2234	2	0	5	2239	2	0	0	2239	2	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	1028	3	343	3	1031	344	11	1039	3	346	3	1042	3	347	0	1042	3	347
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0					0				0				0			
	Left-Right		0					0				0				0			
WESTBOUND	Left	1705	2	606	6	1711	608	14	1719	2	610	6	1725	2	612	0	1725	2	612
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	112	0	606	0	112	608	0	112	0	610	0	112	0	612	0	112	0	612
	Left-Through-Right		0					0				0				0			
	Left-Right		1					1				1				1			
CRITICAL VOLUMES		North-South: 356 East-West: 606 SUM: 962	North-South: 358 East-West: 608 SUM: 966	North-South: 359 East-West: 610 SUM: 969	North-South: 360 East-West: 612 SUM: 972	North-South: 360 East-West: 612 SUM: 972													
VOLUME/CAPACITY (V/C) RATIO:		0.641	0.644	0.646	0.648														
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.541	0.544	0.546	0.548														
LEVEL OF SERVICE (LOS):		A	A	A	A														

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.646**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St		Year of Count:	2042		Ambient Growth: (%):	0		Conducted by:			Date:						
	East-West Street:	1st St		Projection Year:	2042		Peak Hour:	WK		Reviewed by:			Project:						
No. of Phases		3		3		3		3		3		3		3					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2		2		2		2		2		2		2					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	51	1	51	0	51	51	2	53	1	53	0	53	1	53	0	53	1	53
	Left-Through		0							0				0				0	
	Through	1538	2	521	0	1538	521	13	1551	2	525	0	1551	2	526	0	1551	2	526
	Through-Right		1							1				1				1	
	Right	24	0	0	2	26	0	0	24	0	0	2	26	0	0	0	26	0	0
Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0		
SOUTHBOUND	Left	364	1	364	9	373	373	0	364	1	364	9	373	1	373	0	373	1	373
	Left-Through		0							0				0				0	
	Through	1876	2	783	0	1876	783	26	1902	2	792	0	1902	2	792	0	1902	2	792
	Through-Right		1							1				1				1	
	Right	474	0	0	0	474	0	0	474	0	0	0	474	0	0	0	474	0	0
Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0		
EASTBOUND	Left	647	1	394	0	647	396	0	647	1	394	0	647	1	396	0	647	2	356
	Left-Through		1							1				1				0	
	Through	140	0	394	4	144	396	0	140	0	394	4	144	0	396	0	144	0	0
	Through-Right		0							0				0				0	
	Right	87	1	62	0	87	62	4	91	1	65	0	91	1	65	0	91	1	65
Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0		
WESTBOUND	Left	45	1	45	2	47	47	0	45	1	45	2	47	1	47	0	47	1	47
	Left-Through		0							0				0				0	
	Through	171	1	171	4	175	175	0	171	1	171	4	175	1	175	0	175	1	175
	Through-Right		0							0				0				0	
	Right	345	1	163	8	353	167	0	345	1	163	8	353	1	167	0	353	1	167
Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 885		North-South: 894		North-South: 889		North-South: 899		North-South: 899		North-South: 899		North-South: 899		North-South: 899		North-South: 899	
		East-West: 565		East-West: 571		East-West: 565		East-West: 565		East-West: 571		East-West: 571		East-West: 571		East-West: 571		East-West: 531	
		SUM: 1450		SUM: 1465		SUM: 1454		SUM: 1470		SUM: 1470		SUM: 1470		SUM: 1470		SUM: 1470		SUM: 1430	
VOLUME/CAPACITY (V/C) RATIO:		1.018		1.028		1.020		1.032		1.032		1.032		1.032		1.032		1.004	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.918		0.928		0.920		0.932		0.932		0.932		0.932		0.932		0.904	
LEVEL OF SERVICE (LOS):		E		E		E		E		E		E		E		E		E	

**PROJECT IMPACT**

Change in v/c due to project: **0.012**      Δv/c after mitigation: **-0.016**  
 Significant impacted? **YES**      Fully mitigated? **YES**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Gaffey St</b>	<b>Year of Count:</b>	<b>2042</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>4</b>	<b>East-West Street:</b>	<b>5th St</b>	<b>Projection Year:</b>	<b>2042</b>	<b>Peak Hour:</b>	<b>WK</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		3	3		3		3		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	28	1	28	0	28	28	0	28	1	28	0	28	1	28	0	28	1	28
	Left-Through		0						0				0				0		
	Through	1516	1	783	2	1518	784	15	1531	1	791	2	1533	1	792	0	1533	1	792
	Through-Right		1						1				1				1		
	Right	50	0	0	0	50	0	0	50	0	0	0	50	0	0	0	50	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	216	1	216	0	216	216	0	216	1	216	0	216	1	216	0	216	1	216
	Left-Through		0						0				0				0		
	Through	1561	1	825	2	1563	826	30	1591	1	840	2	1593	1	841	0	1593	1	841
	Through-Right		1						1				1				1		
	Right	89	0	0	0	89	0	0	89	0	0	0	89	0	0	0	89	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	104	1	104	0	104	104	0	104	1	104	0	104	1	104	0	104	1	104
	Left-Through		0						0				0				0		
	Through	125	0	145	0	125	145	0	125	0	145	0	125	0	145	0	125	0	145
	Through-Right		1						1				1				1		
	Right	20	0	0	0	20	0	0	20	0	0	0	20	0	0	0	20	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	33	1	33	0	33	33	0	33	1	33	0	33	1	33	0	33	1	33
	Left-Through		0						0				0				0		
	Through	81	0	164	0	81	164	0	81	0	164	0	81	0	164	0	81	0	164
	Through-Right		1						1				1				1		
	Right	83	0	0	0	83	0	0	83	0	0	0	83	0	0	0	83	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 999 East-West: 268 SUM: 1267	North-South: 1000 East-West: 268 SUM: 1268	North-South: 1007 East-West: 268 SUM: 1275	North-South: 1008 East-West: 268 SUM: 1276	North-South: 1008 East-West: 268 SUM: 1276	North-South: 1008 East-West: 268 SUM: 1276												
VOLUME/CAPACITY (V/C) RATIO:		0.889	0.890	0.895	0.895														
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.789	0.790	0.795	0.795														
LEVEL OF SERVICE (LOS):		C	C	C	C														

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.895**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b> <b>5</b>	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2042</b>		Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:						
	East-West Street:	<b>7th St</b>		Projection Year:	<b>2042</b>		Peak Hour:	<b>WK</b>		Reviewed by:			Project:						
No. of Phases				<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>		<b>0</b>							
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>							
Right Turns: FREE-1, NRTOR-2 or OLA-3?				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>							
ATSAC-1 or ATSAC+ATCS-2?				<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>							
Override Capacity				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>							
<b>MOVEMENT</b>		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
<b>NORTHBOUND</b>	↶ Left	51	1	51	0	51	51	3	54	1	54	0	54	1	54	0	54	1	54
	↶ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↷ Through	1447	1	756	2	1449	757	15	1462	1	764	2	1464	1	765	0	1464	1	765
	↷ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↷ Right	65	0	0	0	65	0	0	65	0	0	0	65	0	0	0	65	0	0
	↷ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
↷ Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>SOUTHBOUND</b>	↷ Left	72	1	72	0	72	72	0	72	1	72	0	72	1	72	0	72	1	72
	↷ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↷ Through	1387	1	752	2	1389	753	30	1417	1	767	2	1419	1	768	0	1419	1	768
	↷ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↷ Right	116	0	0	0	116	0	0	116	0	0	0	116	0	0	0	116	0	0
	↷ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
↷ Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>EASTBOUND</b>	↷ Left	172	1	172	0	172	172	0	172	1	172	0	172	1	172	0	172	1	172
	↷ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↷ Through	189	0	236	0	189	236	0	189	0	242	0	189	0	242	0	189	0	242
	↷ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↷ Right	47	0	0	0	47	0	6	53	0	0	0	53	0	0	0	53	0	0
	↷ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
↷ Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>WESTBOUND</b>	↷ Left	77	1	77	0	77	77	0	77	1	77	0	77	1	77	0	77	1	77
	↷ Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↷ Through	176	0	248	0	176	248	0	176	0	248	0	176	0	248	0	176	0	248
	↷ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↷ Right	72	0	0	0	72	0	0	72	0	0	0	72	0	0	0	72	0	0
	↷ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
↷ Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>CRITICAL VOLUMES</b>		North-South:		828	North-South:		829	North-South:		836	North-South:		837	North-South:		837	North-South:		837
		East-West:		420	East-West:		420	East-West:		420	East-West:		420	East-West:		420	East-West:		420
		SUM:		1248	SUM:		1249	SUM:		1256	SUM:		1257	SUM:		1257	SUM:		1257
VOLUME/CAPACITY (V/C) RATIO:				0.832		0.833		0.837		0.838		0.838		0.838		0.838		0.838	
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.732		0.733		0.737		0.738		0.738		0.738		0.738		-0.100	
LEVEL OF SERVICE (LOS):				C		C		C		C		C		C		C		A	

### PROJECT IMPACT

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.837**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Gaffey St	Year of Count:	2042	Ambient Growth: (%):	0	Conducted by:		Date:										
6	East-West Street:	9th St	Projection Year:	2042	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	77	1	77	0	77	77	0	77	1	77	0	77	1	77	0	77	1	77
	Left-Through		0						0				0				0		
	Through	1399	1	731	0	1399	731	18	1417	1	740	0	1417	1	740	0	1417	1	740
	Through-Right		1						1				1				1		
	Right	63	0	0	0	63	0	0	63	0	0	0	63	0	0	0	63	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	97	1	97	0	97	97	0	97	1	97	0	97	1	97	0	97	1	97
	Left-Through		0						0				0				0		
	Through	1424	1	759	0	1424	760	36	1460	1	777	0	1460	1	778	0	1460	1	778
	Through-Right		1						1				1				1		
	Right	94	0	0	2	96	0	0	94	0	0	2	96	0	0	0	96	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	179	1	179	2	181	181	0	179	1	179	2	181	1	181	0	181	1	181
	Left-Through		0						0				0				0		
	Through	221	1	221	2	223	223	10	231	1	231	2	233	1	233	0	233	1	233
	Through-Right		0						0				0				0		
	Right	66	1	28	0	66	28	1	67	1	29	0	67	1	29	0	67	1	29
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	114	1	114	0	114	114	0	114	1	114	0	114	1	114	0	114	1	114
	Left-Through		0						0				0				0		
	Through	303	0	447	2	305	449	4	307	0	451	2	309	0	453	0	309	0	453
	Through-Right		1						1				1				1		
	Right	144	0	0	0	144	0	0	144	0	0	0	144	0	0	0	144	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 836 East-West: 626 SUM: 1462	North-South: 837 East-West: 630 SUM: 1467	North-South: 854 East-West: 630 SUM: 1484	North-South: 855 East-West: 634 SUM: 1489	North-South: 855 East-West: 634 SUM: 1489													
VOLUME/CAPACITY (V/C) RATIO:			0.975	0.978	0.989	0.993													
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.875	0.878	0.889	0.893													
LEVEL OF SERVICE (LOS):			D	D	D	D													

**PROJECT IMPACT**

Change in v/c due to project: **0.004**      Δv/c after mitigation: **-0.989**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Gaffey St</b>	<b>Year of Count:</b>	<b>2042</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>7</b>	<b>East-West Street:</b>	<b>22nd St</b>	<b>Projection Year:</b>	<b>2042</b>	<b>Peak Hour:</b>	<b>WK</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		2	2		2		2		0										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	6	0	6	0	6	6	0	6	0	6	0	6	0	6	0	6	0	6
	Left-Through		1						1				1				1		
	Through	639	0	405	1	640	408	0	639	0	422	1	640	0	425	0	640	0	425
	Through-Right		1		4	151	408	34	181	0	422	4	185	0	425	0	185	0	425
	Right	147	0	405															
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
SOUTHBOUND	Left	197	0	197	0	197	197	36	233	0	233	0	233	0	233	0	233	0	233
	Left-Through		1						1				1				1		
	Through	796	0	799	1	797	799	0	796	0	809	1	797	0	810	0	797	0	810
	Through-Right		1						1				1				1		
	Right	13	0	799	0	13	799	0	13	0	0	0	13	0	0	0	13	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
EASTBOUND	Left	15	0	15	0	15	15	0	15	0	15	0	15	0	15	0	15	0	15
	Left-Through		0						0				0				0		
	Through	23	0	41	0	23	41	21	44	0	62	0	44	0	62	0	44	0	62
	Through-Right		0						0				0				0		
	Right	3	0	0	0	3	0	0	3	0	0	0	3	0	0	0	3	0	0
	Left-Through-Right		1						1				1				1		
	Left-Right		0						0				0				0		
WESTBOUND	Left	156	0	156	4	160	160	16	172	0	172	4	176	0	176	0	176	0	176
	Left-Through		0						0				0				0		
	Through	27	0	306	0	27	310	11	38	0	351	0	38	0	355	0	38	0	355
	Through-Right		0						0				0				0		
	Right	123	0	0	0	123	0	18	141	0	0	0	141	0	0	0	141	0	0
	Left-Through-Right		1						1				1				1		
	Left-Right		0						0				0				0		
CRITICAL VOLUMES		North-South: 805 East-West: 321 SUM: 1126	North-South: 805 East-West: 325 SUM: 1130	North-South: 815 East-West: 366 SUM: 1181	North-South: 816 East-West: 370 SUM: 1186	North-South: 816 East-West: 370 SUM: 1186													
VOLUME/CAPACITY (V/C) RATIO:		0.751	0.753	0.787	0.791	0.791													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.651	0.653	0.687	0.691	0.691													
LEVEL OF SERVICE (LOS):		B	B	B	B	B													

**PROJECT IMPACT**

Change in v/c due to project: **0.004**      Δv/c after mitigation: **-0.787**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	<b>Gaffey St</b>		Year of Count:	<b>2042</b>		Ambient Growth: (%):	<b>0</b>		Conducted by:			Date:							
<b>8</b>	East-West Street:	<b>25th St</b>		Projection Year:	<b>2042</b>		Peak Hour:	<b>WK</b>		Reviewed by:			Project:							
No. of Phases		3		3		3		3		3		0		0						
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0						
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0					
		EB-- 3	WB-- 0	EB-- 3	WB-- 0	EB-- 3	WB-- 0	EB-- 3	WB-- 0	EB-- 3	WB-- 0	EB-- 3	WB-- 0	EB-- 3	WB-- 0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2						
Override Capacity		0		0		0		0		0		0		0						
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	Left	67	1	67	0	67	67	0	67	1	67	0	67	1	67	0	67	1	67	
	Left-Through		0							0				0				0		
	Through	374	0	374	0	374	374	11	385	0	385	0	385	0	385	0	385	0	385	
	Through-Right		1							1				1				1		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0		0
Left-Right		0							0				0				0		0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0							0				0				0		
	Through	683	1	683	0	683	683	5	688	1	688	0	688	1	688	0	688	1	688	
	Through-Right		0							0				0				0		
	Right	426	1	215	4	430	217	11	437	1	215	4	441	1	216	0	441	1	216	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0		0	
EASTBOUND	Left	422	1	422	5	427	427	23	445	1	445	5	450	1	450	0	450	1	450	
	Left-Through		0							0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0		
	Right	109	1	42	0	109	42	0	109	1	42	0	109	1	42	0	109	1	42	
	Left-Through-Right		0							0				0				0		
Left-Right		0							0				0				0		0	
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0							0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0							0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0		
Left-Right		1							1				1				1		1	
CRITICAL VOLUMES		North-South:	750	North-South:	750	North-South:	755	North-South:	755	North-South:	755	North-South:	755	North-South:	755	North-South:	755	North-South:	755	
		East-West:	422	East-West:	427	East-West:	445	East-West:	445	East-West:	450	East-West:	450	East-West:	450	East-West:	450	East-West:	450	
		SUM:	1172	SUM:	1177	SUM:	1200	SUM:	1200	SUM:	1205	SUM:	1205	SUM:	1205	SUM:	1205	SUM:	1205	
VOLUME/CAPACITY (V/C) RATIO:		0.822		0.826		0.842		0.842		0.846		0.846		0.846		0.846		0.846		
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.722		0.726		0.742		0.742		0.746		0.746		0.746		0.746		-0.100		
LEVEL OF SERVICE (LOS):		C		C		C		C		C		C		C		C		A		

**PROJECT IMPACT**

Change in v/c due to project: **0.004**      Δv/c after mitigation: **-0.842**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street:	<b>Via Cabrillo Marina</b>	Year of Count:	<b>2042</b>	Ambient Growth: (%):	<b>0</b>	Conducted by:		Date:					
	East-West Street:	<b>22nd St</b>	Projection Year:	<b>2042</b>	Peak Hour:	<b>WK</b>	Reviewed by:		Project:					
No. of Phases		3	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	ATSAC-1 or ATSAC+ATCS-2?		2	Override Capacity		0
NB--		3	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		3	SB--		0	EB--		0
WB--		0	NB--		3	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0	NB--		0	EB--		0	WB--		0	NB--		0
NB--		0	SB--		0	EB--		0	WB--		0	NB--		0
EB--		0	WB--		0	NB--		0	SB--		0	EB--		0
WB--		0												



# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street: <b>Harbor Bl</b>	Year of Count: <b>2042</b>	Ambient Growth: (%): <b>0</b>	Conducted by:	Date:																
<b>12</b>	East-West Street: <b>O'Farrell St</b>	Projection Year: <b>2042</b>	Peak Hour: <b>WK</b>	Reviewed by:	Project:																
No. of Phases: <b>2</b> Opposed Ø'ing: N/S-1, E/W-2 or Both-3?: <b>0</b> Right Turns: FREE-1, NRTOR-2 or OLA-3?: NB-- <b>0</b> SB-- <b>0</b> NB-- <b>0</b> SB-- <b>0</b> NB-- <b>0</b> SB-- <b>0</b> NB-- <b>0</b> SB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> EB-- <b>0</b> WB-- <b>0</b> ATSAC-1 or ATSAC+ATCS-2?: <b>2</b> Override Capacity: <b>0</b>																					
<b>MOVEMENT</b>		<b>EXISTING CONDITION</b>			<b>EXISTING PLUS PROJECT</b>			<b>FUTURE CONDITION W/O PROJECT</b>				<b>FUTURE CONDITION W/ PROJECT</b>				<b>FUTURE W/ PROJECT W/ MITIGATION</b>					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
<b>NORTHBOUND</b>	Left	12	1	12	0	12	12	0	12	1	12	0	12	1	12	0	12	1	12		
	Left-Through		0							0				0				0			
	Through	1950	3	650	88	2038	679	53	2003	3	668	88	2091	3	697	0	2091	3	697		
	Through-Right		0							0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>SOUTHBOUND</b>	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0							0				0				0			
	Through	2193	2	737	96	2289	769	134	2327	2	782	96	2423	2	814	0	2423	2	814		
	Through-Right		1							1				1				1			
	Right	19	0	0	0	19	0	0	19	0	0	0	19	0	0	0	19	0	0		
<b>EASTBOUND</b>	Left	79	0	79	0	79	79	0	79	0	79	0	79	0	79	0	79	0	79		
	Left-Through		0							0				0				0			
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through-Right		0							0				0				0			
	Right	11	0	90	0	11	90	0	11	0	90	0	11	0	90	0	11	0	90		
<b>WESTBOUND</b>	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Left-Through		0							0				0				0			
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Through-Right		0							0				0				0			
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>CRITICAL VOLUMES</b>		North-South: 749	East-West: 90		SUM: 839		North-South: 781	East-West: 90		SUM: 871		North-South: 794	East-West: 90		SUM: 884		North-South: 826	East-West: 90		SUM: 916	
<b>VOLUME/CAPACITY (V/C) RATIO:</b>		0.559		0.581		0.589		0.611		0.611		0.611		0.611		0.611		0.611		0.611	
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>		<b>0.459</b>		<b>0.481</b>		<b>0.489</b>		<b>0.511</b>		<b>0.511</b>		<b>0.511</b>		<b>0.511</b>		<b>0.511</b>		<b>0.511</b>		<b>0.511</b>	
<b>LEVEL OF SERVICE (LOS):</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>	

### PROJECT IMPACT

Change in v/c due to project: **0.022**      Δv/c after mitigation: **0.022**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl	Year of Count:	2042	Ambient Growth: (%):	0	Conducted by:		Date:										
13	East-West Street:	1st St	Projection Year:	2042	Peak Hour:	WK	Reviewed by:		Project:										
No. of Phases		4	4		4		4		2										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2	2		2		2		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	50	1	50	0	50	50	0	50	1	50	0	50	1	50	0	50	1	50
	Left-Through		0						0				0				0		
	Through	1821	2	609	0	1821	610	52	1873	2	626	0	1873	2	628	0	1873	2	628
	Through-Right		1						1				1				1		
	Right	6	0	0	4	10	0	0	0	0	0	4	10	0	0	0	10	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
SOUTHBOUND	Left	22	1	22	96	118	118	0	22	1	22	96	118	1	118	0	118	1	118
	Left-Through		0						0				0				0		
	Through	2110	2	750	0	2110	750	133	2243	2	794	0	2243	2	794	0	2243	3	596
	Through-Right		1						1				1				1		
	Right	139	0	0	0	139	0	0	139	0	0	0	139	0	0	0	139	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
EASTBOUND	Left	62	1	62	0	62	62	0	62	1	62	0	62	1	62	0	62	1	62
	Left-Through		0						0				0				0		
	Through	2	0	64	18	20	82	0	2	0	64	18	20	0	82	0	20	0	82
	Through-Right		1						1				1				1		
	Right	62	0	0	0	62	0	0	62	0	0	0	62	0	0	0	62	0	0
	Left-Through-Right		0						0				0				0		
	Left-Right		0						0				0				0		
WESTBOUND	Left	3	0	3	4	7	7	0	3	0	3	4	7	0	7	0	7	0	7
	Left-Through		0						0				0				0		
	Through	26	0	62	17	43	171	0	26	0	62	17	43	0	171	0	43	0	171
	Through-Right		0						0				0				0		
	Right	33	0	0	88	121	0	0	33	0	0	88	121	0	0	0	121	0	0
	Left-Through-Right		1						1				1				1		
	Left-Right		0						0				0				0		
CRITICAL VOLUMES		North-South: 800 East-West: 126 SUM: 926	North-South: 800 East-West: 253 SUM: 1053	North-South: 844 East-West: 126 SUM: 970	North-South: 844 East-West: 253 SUM: 1097	North-South: 746 East-West: 233 SUM: 979													
VOLUME/CAPACITY (V/C) RATIO:		0.673	0.766	0.705	0.798	0.653													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.573	0.666	0.605	0.698	0.553													
LEVEL OF SERVICE (LOS):		A	B	B	B	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.093**      Δv/c after mitigation: **-0.052**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl		Year of Count:	2042		Ambient Growth: (%):	0		Conducted by:			Date:						
15	East-West Street:	5th St		Projection Year:	2042		Peak Hour:	WK		Reviewed by:			Project:						
No. of Phases		3		3		3		3		3		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	16	1	16	0	16	16	0	16	1	16	0	16	1	16	0	16	1	16
	Left-Through		0							0				0				0	
	Through	1896	2	633	4	1900	634	52	1948	2	650	4	1952	2	651	0	1952	2	651
	Through-Right		1							1				1				1	
	Right	2	0	0	0	2	0	0	2	0	0	0	2	0	0	0	2	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Left-Through		0							0				0				0	
	Through	2149	2	745	4	2153	746	133	2282	2	789	4	2286	2	791	0	2286	2	791
	Through-Right		1							1				1				1	
	Right	86	0	0	0	86	0	0	86	0	0	0	86	0	0	0	86	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	73	1	73	0	73	73	0	73	1	73	0	73	1	73	0	73	1	73
	Left-Through		0							0				0				0	
	Through	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	Through-Right		0							0				0				0	
	Right	23	1	15	0	23	15	0	23	1	15	0	23	1	15	0	23	1	15
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	1	1	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1
	Left-Through		0							0				0				0	
	Through	0	0	19	0	0	19	0	0	0	19	0	0	0	19	0	0	0	19
	Through-Right		1							1				1				1	
	Right	19	0	0	0	19	0	0	19	0	0	0	19	0	0	0	19	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 761		North-South: 762		North-South: 805		North-South: 807		North-South: 807		North-South: 807		North-South: 807		North-South: 807		North-South: 807	
		East-West: 92		East-West: 92		East-West: 92		East-West: 92		East-West: 92		East-West: 92		East-West: 92		East-West: 92		East-West: 92	
		SUM: 853		SUM: 854		SUM: 897		SUM: 899		SUM: 899		SUM: 899		SUM: 899		SUM: 899		SUM: 899	
VOLUME/CAPACITY (V/C) RATIO:		0.599		0.599		0.629		0.631		0.631		0.631		0.631		0.631		0.631	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.499		0.499		0.529		0.531		0.531		0.531		0.531		0.531		-0.100	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **-0.629**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Bl		Year of Count:	2042		Ambient Growth: (%):	0		Conducted by:			Date:						
16	East-West Street:	6th St		Projection Year:	2042		Peak Hour:	WK		Reviewed by:			Project:						
No. of Phases		4		4		4		4		4		0		0					
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		2		2		2		2		2		0		0					
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0					
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2					
Override Capacity		0		0		0		0		0		0		0					
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	81	1	81	0	81	81	0	81	1	81	0	81	1	81	0	81	1	81
	Left-Through		0							0				0				0	
	Through	2218	2	739	4	2222	741	52	2270	2	757	4	2274	2	758	0	2274	2	758
	Through-Right		1							1				1				1	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	2306	2	812	4	2310	813	133	2439	2	856	4	2443	2	857	0	2443	2	857
	Through-Right		1							1				1				1	
	Right	129	0	0	0	129	0	0	129	0	0	0	129	0	0	0	129	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	178	1	178	0	178	178	0	178	1	178	0	178	1	178	0	178	1	178
	Left-Through		0							0				0				0	
	Through	0	0	76	0	0	76	0	0	0	76	0	0	0	76	0	0	0	76
	Through-Right		1							1				1				1	
	Right	76	0	0	0	76	0	0	76	0	0	0	76	0	0	0	76	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		1							1				1				1	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South:	893	North-South:	894	North-South:	937	North-South:	938	North-South:	938	North-South:	938	North-South:	938	North-South:	938	North-South:	938
		East-West:	178	East-West:	178	East-West:	178	East-West:	178	East-West:	178	East-West:	178	East-West:	178	East-West:	178	East-West:	178
		SUM:	1071	SUM:	1072	SUM:	1115	SUM:	1116	SUM:	1116	SUM:	1116	SUM:	1116	SUM:	1116	SUM:	1116
VOLUME/CAPACITY (V/C) RATIO:		0.779		0.780		0.811		0.812		0.812		0.812		0.812		0.812		0.812	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.679		0.680		0.711		0.711		0.712		0.712		0.712		0.712		-0.100	
LEVEL OF SERVICE (LOS):		B		B		C		C		C		C		C		C		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.811**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Blvd		Year of Count:	2011	Ambient Growth: (%):	0	Conducted by:		Date:									
17A	East-West Street:	7th St		Projection Year:	2042	Peak Hour:	SAT	Reviewed by:		Project:	IOWA 2042 CB								
No. of Phases		3		3		3		3		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0								
		EB-- 3	WB-- 0	EB-- 3	WB-- 0	EB-- 3	WB-- 0	EB-- 3	WB-- 0	EB-- 0	WB-- 0								
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2									
Override Capacity		0		0		0		0		0									
MOVEMENT		YEAR 2042 CONDITIONS			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	355	1	355		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	2,305	3	768		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0			0				0			0		0	
SOUTHBOUND	Left	0	0	0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	2,185	2	801		0		0		0		0		0		0		0	
	Through-Right		1			0		0		0		0		0		0		0	
	Right	219	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0			0			0		0		0		0	
EASTBOUND	Left	259	2	142		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	506	1	151		0		0		0		0		0		0		0	
	Left-Through-Right		0			0			0			0		0		0		0	
WESTBOUND	Left	0	0	0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0			0			0		0		0		0	
CRITICAL VOLUMES		North-South:	1156	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0
		East-West:	151	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0
		SUM:	1307	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0
VOLUME/CAPACITY (V/C) RATIO:		0.917		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.817		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100	
LEVEL OF SERVICE (LOS):		D		A		A		A		A		A		A		A		A	

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Blvd	Year of Count:	2011	Ambient Growth: (%):	0	Conducted by:		Date:														
17A	East-West Street:	7th St	Projection Year:	2042	Peak Hour:	SAT	Reviewed by:		Project:	2042 WITH PROJECT													
No. of Phases		3	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	Right Turns: FREE-1, NRTOR-2 or OLA-3?		0	ATSAC-1 or ATSAC+ATCS-2?		2	Override Capacity		0									
NB--		0	SB--		0	EB--		3	WB--		0	NB--		0	SB--		0	EB--		0	WB--		0
YEAR 2042 CONDITIONS		EXISTING PLUS PROJECT		FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION											
MOVEMENT		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume				
NORTHBOUND	Left	355	1	355			0				0				0				0				
	Left-Through		0				0				0				0				0				
	Through	2,309	3	770			0				0				0				0				
	Through-Right		0				0				0				0				0				
	Right	0	0	0			0					0				0				0			
	Left-Through-Right		0				0					0				0				0			
SOUTHBOUND	Left	0	0	0			0				0				0				0				
	Left-Through		0				0				0				0				0				
	Through	2,189	2	803			0				0				0				0				
	Through-Right		1				0				0				0				0				
	Right	219	0	0			0				0				0				0				
	Left-Through-Right		0				0				0				0				0				
EASTBOUND	Left	259	2	142			0				0				0				0				
	Left-Through		0				0				0				0				0				
	Through	0	0	0			0				0				0				0				
	Through-Right		0				0				0				0				0				
	Right	506	1	151			0				0				0				0				
	Left-Through-Right		0				0				0				0				0				
WESTBOUND	Left	0	0	0			0				0				0				0				
	Left-Through		0				0				0				0				0				
	Through	0	0	0			0				0				0				0				
	Through-Right		0				0				0				0				0				
	Right	0	0	0			0				0				0				0				
	Left-Through-Right		0				0				0				0				0				
CRITICAL VOLUMES		North-South:	1158	East-West:	151	SUM:	1309	North-South:	0	East-West:	0	SUM:	0	North-South:	0	East-West:	0	SUM:	0				
VOLUME/CAPACITY (V/C) RATIO:		0.919		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000					
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.819		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100					
LEVEL OF SERVICE (LOS):		D		A		A		A		A		A		A		A		A					

### PROJECT IMPACT

Change in v/c due to project:	0.000	Δv/c after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Blvd		Year of Count:	2011	Ambient Growth: (%):	0	Conducted by:		Date:									
17B	East-West Street:	Sampson Way		Projection Year:	2042	Peak Hour:	SAT	Reviewed by:		Project:	IOWA 2042 CB								
No. of Phases		2		2		2		2		0									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 3	NB-- 0	SB-- 3	NB-- 0	SB-- 3	NB-- 0	SB-- 3	NB-- 0	SB-- 3								
		EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0								
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2									
Override Capacity		0		0		0		0		0									
MOVEMENT		YEAR 2042 CONDITIONS			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	67	1	67		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	1,321	2	661		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	
	Left-Right		0			0		0		0		0		0		0		0	
SOUTHBOUND	Left	0	0	0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	1,343	2	672		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	1,348	1	612		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	
	Left-Right		0			0		0		0		0		0		0		0	
EASTBOUND	Left	1,339	2	736		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	258	1	225		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	
	Left-Right		0			0		0		0		0		0		0		0	
WESTBOUND	Left	0	0	0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0	
	Left-Through-Right		0			0		0		0		0		0		0		0	
	Left-Right		0			0		0		0		0		0		0		0	
CRITICAL VOLUMES		North-South: 739		North-South: 0		North-South: 0		North-South: 0		North-South: 0		North-South: 0							
		East-West: 736		East-West: 0		East-West: 0		East-West: 0		East-West: 0		East-West: 0							
		SUM: 1475		SUM: 0		SUM: 0		SUM: 0		SUM: 0		SUM: 0							
VOLUME/CAPACITY (V/C) RATIO:		0.983		0.000		0.000		0.000		0.000		0.000							
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.883		-0.100		-0.100		-0.100		-0.100		-0.100							
LEVEL OF SERVICE (LOS):		D		A		A		A		A		A							

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **0.000**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Harbor Blvd	Year of Count:	2011	Ambient Growth: (%):	0	Conducted by:		Date:												
17B	East-West Street:	Sampson Way	Projection Year:	2042	Peak Hour:	SAT	Reviewed by:		Project:	2042 WITH PROJECT											
No. of Phases		2	2		2		2		0												
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0												
Right Turns: FREE-1, NRTOR-2 or OLA-3?		3	3		3		3		3												
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2												
Override Capacity		0	0		0		0		0												
MOVEMENT		YEAR 2042 CONDITIONS			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	Left	67	1	67		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	1,321	2	661		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0				0		0		0		0		0		0		0		0
SOUTHBOUND	Left	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	1,343	2	672		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	1,352	1	613		0		0		0		0		0		0		0		0	
	Left-Through-Right		0				0		0		0		0		0		0		0		0
EASTBOUND	Left	1,343	2	739		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	258	1	225		0		0		0		0		0		0		0		0	
	Left-Through-Right		0				0		0		0		0		0		0		0		0
WESTBOUND	Left	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through		0			0		0		0		0		0		0		0		0	
	Through	0	0	0		0		0		0		0		0		0		0		0	
	Through-Right		0			0		0		0		0		0		0		0		0	
	Right	0	0	0		0		0		0		0		0		0		0		0	
	Left-Through-Right		0				0		0		0		0		0		0		0		0
CRITICAL VOLUMES		North-South:	739	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0	North-South:	0
		East-West:	739	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0	East-West:	0
		SUM:	1478	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0	SUM:	0
VOLUME/CAPACITY (V/C) RATIO:			0.985		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.885		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100		-0.100
LEVEL OF SERVICE (LOS):			D		A		A		A		A		A		A		A		A		A

### PROJECT IMPACT

Change in v/c due to project:	0.000	Δv/c after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street: <b>Miner St</b>		Year of Count: <b>2042</b>		Ambient Growth: (%): <b>0</b>		Conducted by:		Date:												
	East-West Street: <b>22nd St</b>		Projection Year: <b>2042</b>		Peak Hour: <b>WK</b>		Reviewed by:		Project:												
No. of Phases			3		3		3		3												
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0		0		0		0												
Right Turns: FREE-1, NRTOR-2 or OLA-3?			0		0		0		0												
ATSAC-1 or ATSAC+ATCS-2?			2		2		2		2												
Override Capacity			0		0		0		0												
<b>MOVEMENT</b>			EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
			Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
<b>NORTHBOUND</b>	↔	Left	232	1	232	0	232	232	0	232	1	232	0	232	1	232	0	232	1	232	
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Through	912	1	507	0	912	507	0	912	1	507	0	912	1	507	0	912	1	507	
	↔	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	↔	Right	102	0	0	0	102	0	0	0	0	0	102	0	0	0	102	0	0	0	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>SOUTHBOUND</b>	↔	Left	31	1	31	0	31	31	37	68	1	68	0	68	1	68	0	68	1	68	
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Through	1044	1	651	0	1044	652	0	1044	1	651	0	1044	1	652	0	1044	1	652	
	↔	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	↔	Right	257	0	0	3	260	0	0	0	0	0	260	0	0	0	260	0	0	0	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>EASTBOUND</b>	↔	Left	188	1	188	4	192	192	0	188	1	188	4	192	1	192	0	192	1	192	
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Through	91	1	91	0	91	91	16	107	1	107	0	107	1	107	0	107	1	107	
	↔	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	↔	Right	140	0	24	0	140	24	0	140	0	24	0	140	0	24	0	140	0	0	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>WESTBOUND</b>	↔	Left	95	1	95	0	95	95	0	95	1	95	0	95	1	95	0	95	1	95	
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Through	86	1	56	0	86	56	7	93	1	68	0	93	1	68	0	93	1	68	
	↔	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
	↔	Right	25	0	0	0	25	0	0	17	0	0	0	42	0	0	0	42	0	0	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>CRITICAL VOLUMES</b>			North-South: 883			North-South: 884			North-South: 883			North-South: 884			North-South: 884			North-South: 884			
			East-West: 244			East-West: 248			East-West: 256			East-West: 260			East-West: 260			East-West: 260			
			SUM: 1127			SUM: 1132			SUM: 1139			SUM: 1144			SUM: 1144			SUM: 1144			
VOLUME/CAPACITY (V/C) RATIO:			0.791		0.794		0.799		0.803		0.803		0.803		0.803		0.803		0.803		
V/C LESS ATSAC/ATCS ADJUSTMENT:			<b>0.691</b>		<b>0.694</b>		<b>0.699</b>		<b>0.703</b>		<b>0.703</b>		<b>0.703</b>		<b>0.703</b>		<b>0.703</b>		<b>-0.100</b>		
LEVEL OF SERVICE (LOS):			<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>C</b>		<b>C</b>		<b>C</b>		<b>C</b>		<b>A</b>		

### PROJECT IMPACT

Change in v/c due to project: **0.004**      Δv/c after mitigation: **-0.799**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Pacific Ave</b>	<b>Year of Count:</b>	<b>2042</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>20</b>	<b>East-West Street:</b>	<b>Front St</b>	<b>Projection Year:</b>	<b>2042</b>	<b>Peak Hour:</b>	<b>WK</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 3	NB-- 0 SB-- 0 EB-- 0 WB-- 3		NB-- 0 SB-- 0 EB-- 0 WB-- 3		NB-- 0 SB-- 0 EB-- 0 WB-- 3		NB-- 0 SB-- 0 EB-- 0 WB-- 3										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	609	1	337	1	610	337	3	612	1	338	1	613	1	339	0	613	1	339
	Through-Right		1						1				1				1		
	Right	64	0	0	0	64	0	0	64	0	0	0	64	0	0	0	64	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	198	1	198	1	199	199	15	213	1	213	1	214	1	214	0	214	1	214
	Left-Through		0						0			0		0			0		
	Through	635	2	318	1	636	318	5	640	2	320	1	641	2	321	0	641	2	321
	Through-Right		0						0			0		0			0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	32	1	32	0	32	32	0	32	1	32	0	32	1	32	0	32	1	32
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right		0						0				0				0		
	Right	281	2	0	1	282	0	7	288	2	0	1	289	2	0	0	289	2	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 535 East-West: 32 SUM: 567	North-South: 536 East-West: 32 SUM: 568	North-South: 551 East-West: 32 SUM: 583	North-South: 553 East-West: 32 SUM: 585														
VOLUME/CAPACITY (V/C) RATIO:		0.398	0.399	0.409	0.411														
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.298	0.299	0.309	0.311														
LEVEL OF SERVICE (LOS):		A	A	A	A														

**PROJECT IMPACT**

Change in v/c due to project: **0.002**      Δv/c after mitigation: **0.002**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Pacific Ave</b>	<b>Year of Count:</b>	<b>2042</b>	<b>Ambient Growth: (%):</b>	<b>0</b>	<b>Conducted by:</b>		<b>Date:</b>										
<b>21</b>	<b>East-West Street:</b>	<b>1st St</b>	<b>Projection Year:</b>	<b>2042</b>	<b>Peak Hour:</b>	<b>WK</b>	<b>Reviewed by:</b>		<b>Project:</b>										
No. of Phases		2	2		2		2		2										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	203	1	203	0	203	203	0	203	1	203	0	203	1	203	0	203	1	203
	Left-Through		0						0				0				0		
	Through	711	1	385	0	711	386	3	714	1	387	0	714	1	388	0	714	1	388
	Through-Right		1						1				1				1		
	Right	59	0	0	2	61	0	0	59	0	0	2	61	0	0	0	61	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
SOUTHBOUND	Left	21	1	21	1	22	22	0	21	1	21	1	22	1	22	0	22	1	22
	Left-Through		0						0				0				0		
	Through	634	1	333	0	634	333	5	639	1	336	0	639	1	336	0	639	1	336
	Through-Right		1						1				1				1		
	Right	32	0	0	0	32	0	0	32	0	0	0	32	0	0	0	32	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	55	0	55	0	55	55	0	55	0	55	0	55	0	55	0	55	1	55
	Left-Through		0						0				0				0		
	Through	192	0	412	15	207	427	0	192	0	412	15	207	0	427	0	207	0	372
	Through-Right		0						0				0				0		1
	Right	165	0	0	0	165	0	0	165	0	0	0	165	0	0	0	165	0	0
	Left-Through-Right		1						1				1				1		
Left-Right		0						0				0				0			
WESTBOUND	Left	75	0	75	2	77	77	0	75	0	75	2	77	0	77	0	77	1	77
	Left-Through		0						0				0				0		
	Through	141	0	247	14	155	264	0	141	0	247	14	155	0	264	0	155	0	187
	Through-Right		0						0				0				0		1
	Right	31	0	0	1	32	0	0	31	0	0	1	32	0	0	0	32	0	0
	Left-Through-Right		1						1				1				1		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 536 East-West: 487 SUM: 1023	North-South: 536 East-West: 504 SUM: 1040	North-South: 539 East-West: 487 SUM: 1026	North-South: 539 East-West: 504 SUM: 1043	North-South: 539 East-West: 449 SUM: 988													
VOLUME/CAPACITY (V/C) RATIO:		0.682	0.693	0.684	0.695	0.659													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.582	0.593	0.584	0.595	0.559													
LEVEL OF SERVICE (LOS):		A	A	A	A	A													

**PROJECT IMPACT**

Change in v/c due to project: **0.011**      Δv/c after mitigation: **-0.025**  
 Significant impacted? **NO**      Fully mitigated? **N/A**

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	North-South Street: <b>Pacific Ave</b>		Year of Count: <b>2042</b>		Ambient Growth: (%): <b>0</b>		Conducted by:		Date:													
	East-West Street: <b>5th St</b>		Projection Year: <b>2042</b>		Peak Hour: <b>WK</b>		Reviewed by:		Project:													
No. of Phases		2		2		2		2		0												
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0												
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0												
		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0												
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2												
Override Capacity		0		0		0		0		0												
<b>MOVEMENT</b>		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION						
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume			
<b>NORTHBOUND</b>	↵ Left	44	0	44	0	44	44	0	44	0	44	0	44	0	44	0	44	0	44			
	↵ Left-Through	821	1	539	2	823	540	3	824	1	540	2	826	1	541	0	826	1	541			
	↵ Through	80	1	539	0	80	540	0	80	1	540	0	80	1	541	0	80	1	541			
	↵ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	↵ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>SOUTHBOUND</b>	↵ Left	73	0	73	0	73	73	0	73	0	73	0	73	0	73	0	73	0	73			
	↵ Left-Through	901	1	608	2	903	609	5	906	1	611	2	908	1	612	0	908	1	612			
	↵ Through	23	1	608	0	23	609	0	23	1	611	0	23	1	612	0	23	1	612			
	↵ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	↵ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>EASTBOUND</b>	↵ Left	29	1	29	0	29	29	0	29	1	29	0	29	1	29	0	29	1	29			
	↵ Left-Through	162	0	235	0	162	235	0	162	0	235	0	162	0	235	0	162	0	235			
	↵ Through	73	1	0	0	73	0	0	73	1	0	0	73	1	0	0	73	1	0			
	↵ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	↵ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>WESTBOUND</b>	↵ Left	124	1	124	0	124	124	0	124	1	124	0	124	1	124	0	124	1	124			
	↵ Left-Through	90	0	194	0	90	194	0	90	0	194	0	90	0	194	0	90	0	194			
	↵ Through	104	1	0	0	104	0	0	104	1	0	0	104	1	0	0	104	1	0			
	↵ Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	↵ Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>CRITICAL VOLUMES</b>		North-South: 652	652		North-South: 653	653		North-South: 655	655		North-South: 656	656		North-South: 656	656		East-West: 359	359		East-West: 359	359	
		East-West: 359	359		East-West: 359	359		East-West: 359	359		East-West: 359	359		East-West: 359	359		SUM: 1015	1015		SUM: 1015	1015	
		SUM: 1011	1011		SUM: 1012	1012		SUM: 1014	1014		SUM: 1015	1015		SUM: 1015	1015							
<b>VOLUME/CAPACITY (V/C) RATIO:</b>		0.674		0.675		0.676		0.677		0.677		0.677		0.677		0.677						
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>		0.574		0.575		0.576		0.577		0.577		0.577		0.577		0.577						
<b>LEVEL OF SERVICE (LOS):</b>		A		A		A		A		A		A		A		A						

**PROJECT IMPACT**

Change in v/c due to project: **0.001**      Δv/c after mitigation: **-0.676**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Pacific Ave		Year of Count:	2042		Ambient Growth: (%):	0		Conducted by:			Date:												
23	East-West Street:	7th St		Projection Year:	2042		Peak Hour:	WK		Reviewed by:			Project:												
No. of Phases		2		2		2		2		2		0		0											
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0											
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0		0		0											
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2		2		2											
Override Capacity		0		0		0		0		0		0		0											
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION									
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume						
NORTHBOUND	Left	55	0	55	0	55	55	0	55	0	55	0	55	0	55	0	55	0	55						
	Left-Through		1							1				1				1							
	Through	897	0	641	2	899	642	3	900	0	642	2	902	0	643	0	902	0	643						
	Through-Right		1							1				1				1							
	Right	54	0	641	0	54	642	0	54	0	642	0	54	0	643	0	54	0	643						
Left-Through-Right		0							0				0				0								
Left-Right		0							0				0				0								
SOUTHBOUND	Left	32	0	32	0	32	32	0	32	0	32	0	32	0	32	0	32	0	32						
	Left-Through		1							1				1				1							
	Through	1133	0	646	2	1135	647	5	1138	0	649	2	1140	0	650	0	1140	0	650						
	Through-Right		1							1				1				1							
	Right	31	0	646	0	31	647	0	31	0	649	0	31	0	650	0	31	0	650						
Left-Through-Right		0							0				0				0								
Left-Right		0							0				0				0								
EASTBOUND	Left	62	1	62	0	62	62	0	62	1	62	0	62	1	62	0	62	1	62						
	Left-Through		0							0				0				0							
	Through	156	0	263	0	156	263	0	156	0	263	0	156	0	263	0	156	0	263						
	Through-Right		1							1				1				1							
	Right	107	0	0	0	107	0	0	107	0	0	0	107	0	0	0	107	0	0						
Left-Through-Right		0							0				0				0								
Left-Right		0							0				0				0								
WESTBOUND	Left	51	1	51	0	51	51	0	51	1	51	0	51	1	51	0	51	1	51						
	Left-Through		0							0				0				0							
	Through	97	0	127	0	97	127	0	97	0	127	0	97	0	127	0	97	0	127						
	Through-Right		1							1				1				1							
	Right	30	0	0	0	30	0	0	30	0	0	0	30	0	0	0	30	0	0						
Left-Through-Right		0							0				0				0								
Left-Right		0							0				0				0								
CRITICAL VOLUMES		North-South:	701	East-West:	314	SUM:	1015	North-South:	702	East-West:	314	SUM:	1016	North-South:	704	East-West:	314	SUM:	1018	North-South:	705	East-West:	314	SUM:	1019
VOLUME/CAPACITY (V/C) RATIO:		0.677		0.677		0.677		0.679		0.679		0.679		0.679		0.679		0.679		0.679		0.679			
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.577		0.577		0.577		0.579		0.579		0.579		0.579		0.579		0.579		0.579		-0.100			
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A		A		A			

**PROJECT IMPACT**

Change in v/c due to project: **0.000**      Δv/c after mitigation: **-0.679**  
 Significant impacted? **NO**      Fully mitigated? **N/A**



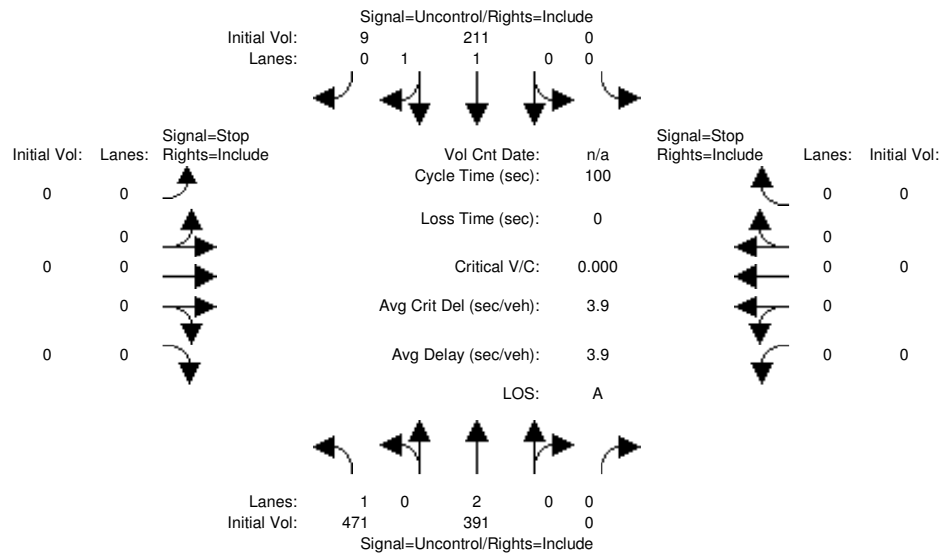
**APPENDIX D:  
UNSIGNALIZED LEVEL OF SERVICE WORKSHEETS**

**EXISTING (2011)**

SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
EX

Intersection #10: Harbor/SR-47



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:	471	391	0	0	211	9	0	0	0	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:	471	391	0	0	211	9	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	471	391	0	0	211	9	0	0	0	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:	471	391	0	0	211	9	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	471	391	0	0	211	9	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	220	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	1361	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	1361	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	0.35	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.6	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	9.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	471 391 0	0 211 9	0 0 0 0	0 0 0 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).

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	471 391 0	0 211 9	0 0 0 0	0 0 0 0
Major Street Volume:	1082			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	258			

SIGNAL WARRANT DISCLAIMER

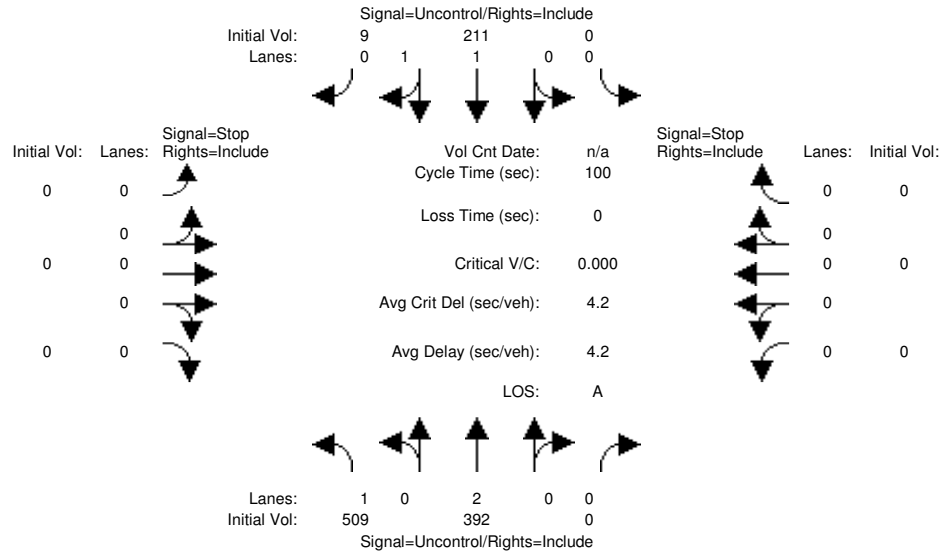
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
EP

Intersection #10: Harbor/SR-47



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:	509	392	0	0	211	9	0	0	0	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:	509	392	0	0	211	9	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	509	392	0	0	211	9	0	0	0	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:	509	392	0	0	211	9	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	509	392	0	0	211	9	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	220	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Potent Cap.:	1361	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Move Cap.:	1361	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Volume/Cap:	0.37	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Control Del:	9.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	509 392 0	0 211 9	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	509 392 0	0 211 9	0 0 0 0	0 0 0 0
Major Street Volume:	1121			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	245			

SIGNAL WARRANT DISCLAIMER

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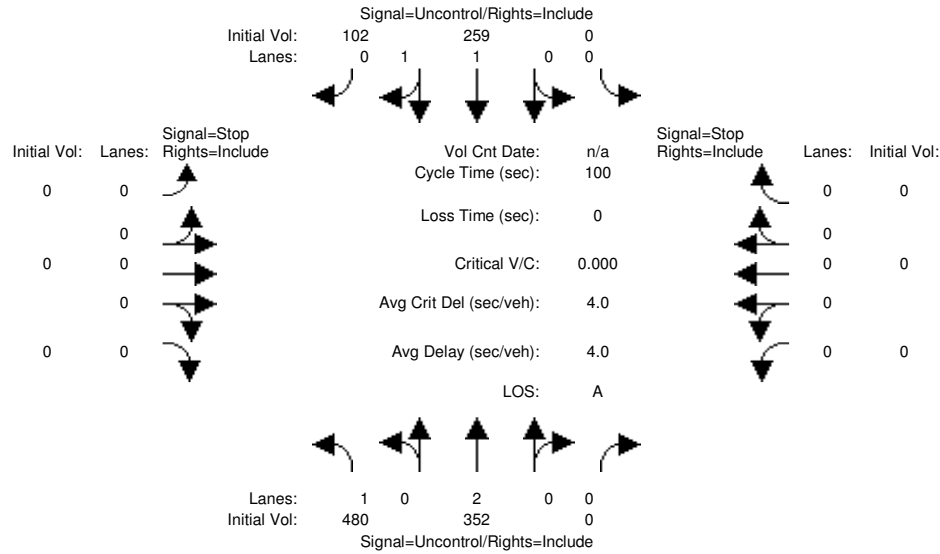
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
EXSAT

Intersection #10: Harbor/SR-47



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:	480	352	0	0	259	102	0	0	0	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:	480	352	0	0	259	102	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	480	352	0	0	259	102	0	0	0	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:	480	352	0	0	259	102	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	480	352	0	0	259	102	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	361	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx
Potent Cap.:	1209	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx
Move Cap.:	1209	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx
Volume/Cap:	0.40	xxxx	xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Level Of Service Module:												
2Way95thQ:	1.9	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx
Control Del:	9.9	xxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
SharedQueue:	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	480 352 0	0 259 102	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	480 352 0	0 259 102	0 0 0 0	0 0 0 0
Major Street Volume:	1193			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	224			

SIGNAL WARRANT DISCLAIMER

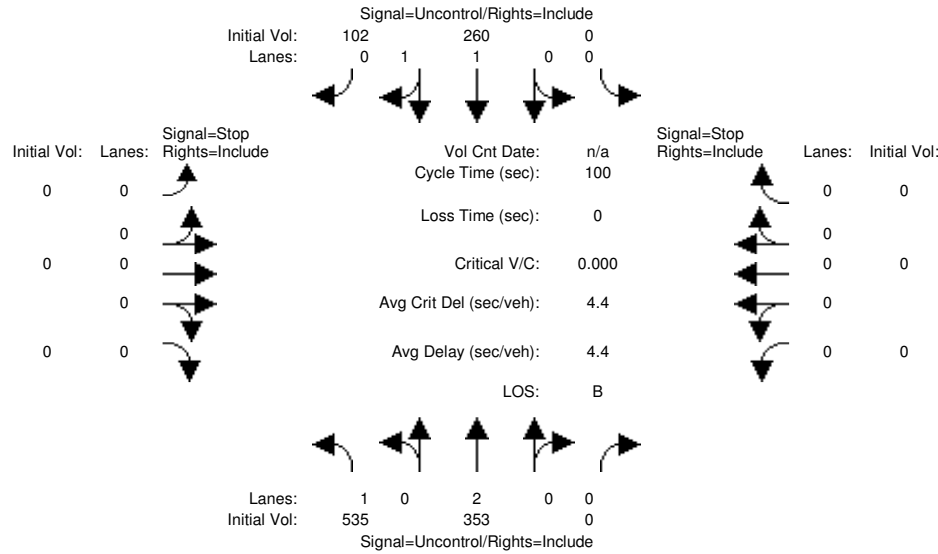
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
EPSAT

Intersection #10: Harbor/SR-47



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:	535	353	0	0	260	102	0	0	0	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:	535	353	0	0	260	102	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	535	353	0	0	260	102	0	0	0	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:	535	353	0	0	260	102	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	535	353	0	0	260	102	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	362	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Potent Cap.:	1208	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Move Cap.:	1208	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Volume/Cap:	0.44	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	2.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Control Del:	10.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	535 353 0	0 260 102	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

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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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	535 353 0	0 260 102	0 0 0 0	0 0 0 0
Major Street Volume:	1250			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	208			

SIGNAL WARRANT DISCLAIMER

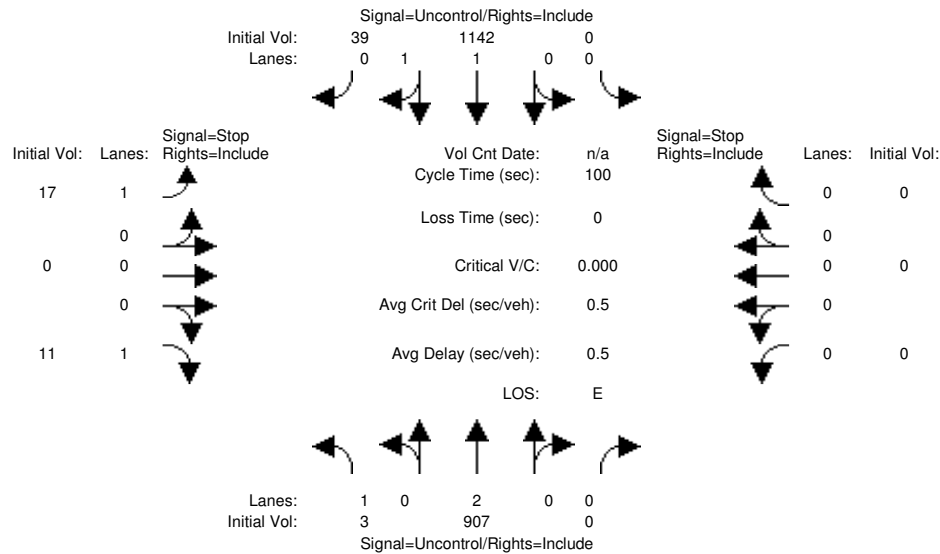
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
EX

Intersection #14: Harbor/3rd



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:	3	907	0	0	1142	39	17	0	11	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:	3	907	0	0	1142	39	17	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	907	0	0	1142	39	17	0	11	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:	3	907	0	0	1142	39	17	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	907	0	0	1142	39	17	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	1181	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1621	xxxx	591	xxxx	xxxx	xxxxxx
Potent Cap.:	599	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	96	xxxx	456	xxxx	xxxx	xxxxxx
Move Cap.:	599	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	95	xxxx	456	xxxx	xxxx	xxxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.18	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.6	xxxx	0.1	xxxx	xxxx	xxxxxx
Control Del:	11.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	50.8	xxxx	13.1	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	F	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			36.0			xxxxxxx		
ApproachLOS:	*			*			E			*		

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

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	3 907 0	0 1142 39	17 0 11	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	36.0	xxxxxx

Approach[eastbound][lanes=2][control=Stop Sign]  
 Signal Warrant Rule #1: [vehicle-hours=0.3]  
 FAIL - Vehicle-hours less than 5 for two or more lane approach.  
 Signal Warrant Rule #2: [approach volume=28]  
 FAIL - Approach volume less than 150 for two or more lane approach.  
 Signal Warrant Rule #3: [approach count=3][total volume=2119]  
 SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

-----  
 SIGNAL WARRANT DISCLAIMER  
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 Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*  
 Intersection #14 Harbor/3rd  
 \*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	3 907 0	0 1142 39	17 0 11	0 0 0 0
Major Street Volume:	2091			
Minor Approach Volume:	28			
Minor Approach Volume Threshold:	57 [less than minimum of 150]			

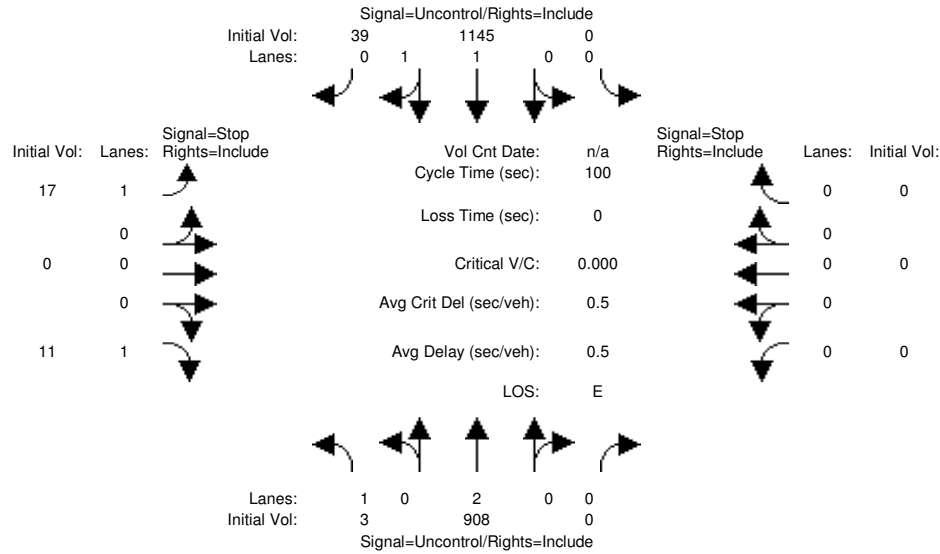
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 SIGNAL WARRANT DISCLAIMER  
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
EP

Intersection #14: Harbor/3rd



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:	3	908	0	0	1145	39	17	0	11	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:	3	908	0	0	1145	39	17	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	908	0	0	1145	39	17	0	11	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:	3	908	0	0	1145	39	17	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	908	0	0	1145	39	17	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	1184	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1625	xxxx	592	xxxx	xxxx	xxxxxx
Potent Cap.:	597	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	95	xxxx	454	xxxx	xxxx	xxxxxx
Move Cap.:	597	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	95	xxxx	454	xxxx	xxxx	xxxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.18	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.6	xxxx	0.1	xxxx	xxxx	xxxxxx
Control Del:	11.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	51.1	xxxx	13.1	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	F	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			36.2			xxxxxxx		
ApproachLOS:	*			*			E			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #14 Harbor/3rd

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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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	3 908 0	0 1145 39	17 0 11	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	36.2	xxxxxx

Approach[eastbound][lanes=2][control=Stop Sign]  
 Signal Warrant Rule #1: [vehicle-hours=0.3]  
 FAIL - Vehicle-hours less than 5 for two or more lane approach.  
 Signal Warrant Rule #2: [approach volume=28]  
 FAIL - Approach volume less than 150 for two or more lane approach.  
 Signal Warrant Rule #3: [approach count=3][total volume=2123]  
 SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

-----  
 SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	3 908 0	0 1145 39	17 0 11	0 0 0 0

Major Street Volume: 2095  
 Minor Approach Volume: 28  
 Minor Approach Volume Threshold: 56 [less than minimum of 150]

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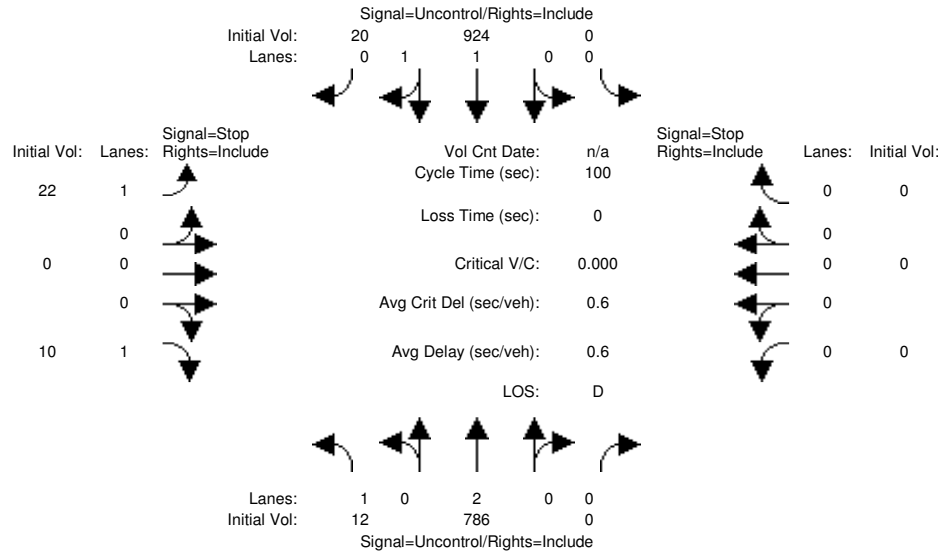
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
EXSAT

Intersection #14: Harbor/3rd



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:	12	786	0	0	924	20	22	0	10	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:	12	786	0	0	924	20	22	0	10	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	786	0	0	924	20	22	0	10	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:	12	786	0	0	924	20	22	0	10	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	786	0	0	924	20	22	0	10	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	944	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1351	xxxx	472	xxxx	xxxx	xxxxxx
Potent Cap.:	735	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	144	xxxx	544	xxxx	xxxx	xxxxxx
Move Cap.:	735	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	142	xxxx	544	xxxx	xxxx	xxxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.15	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.5	xxxx	0.1	xxxx	xxxx	xxxxxx
Control Del:	10.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	34.9	xxxx	11.7	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	D	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			27.7			xxxxxxx		
ApproachLOS:	*			*			D			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #14 Harbor/3rd

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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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	12 786 0	0 924 20	22 0 10	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	27.7	xxxxxx

Approach[eastbound][lanes=2][control=Stop Sign]  
 Signal Warrant Rule #1: [vehicle-hours=0.2]  
 FAIL - Vehicle-hours less than 5 for two or more lane approach.  
 Signal Warrant Rule #2: [approach volume=32]  
 FAIL - Approach volume less than 150 for two or more lane approach.  
 Signal Warrant Rule #3: [approach count=3][total volume=1774]  
 SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

-----  
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 Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*  
 Intersection #14 Harbor/3rd  
 \*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	12 786 0	0 924 20	22 0 10	0 0 0 0
Major Street Volume:	1742			
Minor Approach Volume:	32			
Minor Approach Volume Threshold:	135 [less than minimum of 150]			

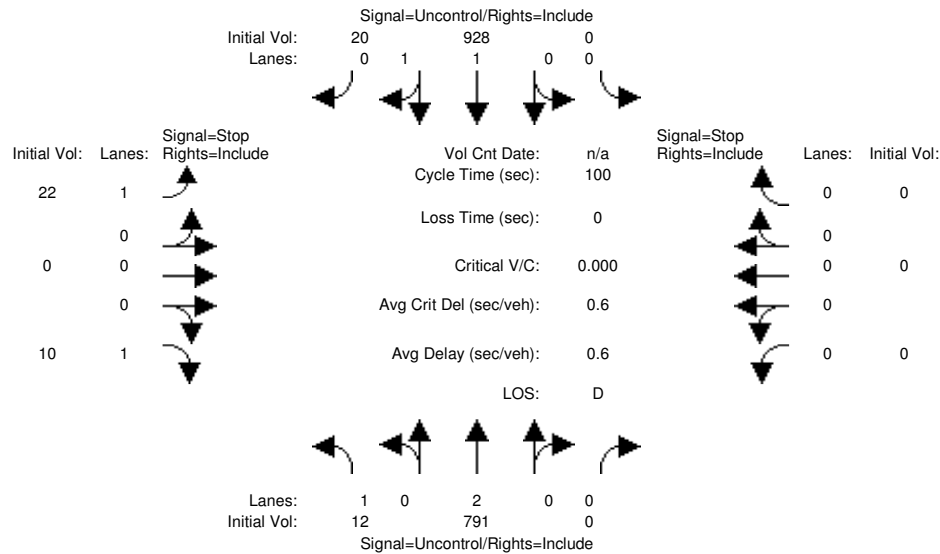
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
EPSAT

Intersection #14: Harbor/3rd



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:	12	791	0	0	928	20	22	0	10	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:	12	791	0	0	928	20	22	0	10	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	791	0	0	928	20	22	0	10	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:	12	791	0	0	928	20	22	0	10	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	791	0	0	928	20	22	0	10	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	948	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	1358	xxxx	474	xxxx	xxxx	xxxxxx
Potent Cap.:	732	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	143	xxxx	542	xxxx	xxxx	xxxxxx
Move Cap.:	732	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	141	xxxx	542	xxxx	xxxx	xxxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.16	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.5	xxxx	0.1	xxxx	xxxx	xxxxxx
Control Del:	10.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	35.2	xxxx	11.8	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	E	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			27.9			xxxxxxx		
ApproachLOS:	*			*			D			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #14 Harbor/3rd

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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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	12 791 0	0 928 20	22 0 10	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	27.9	xxxxxx

Approach[eastbound][lanes=2][control=Stop Sign]  
 Signal Warrant Rule #1: [vehicle-hours=0.2]  
 FAIL - Vehicle-hours less than 5 for two or more lane approach.  
 Signal Warrant Rule #2: [approach volume=32]  
 FAIL - Approach volume less than 150 for two or more lane approach.  
 Signal Warrant Rule #3: [approach count=3][total volume=1783]  
 SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

-----  
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 Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*  
 Intersection #14 Harbor/3rd  
 \*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	12 791 0	0 928 20	22 0 10	0 0 0 0
Major Street Volume:	1751			
Minor Approach Volume:	32			
Minor Approach Volume Threshold:	133 [less than minimum of 150]			

-----  
 SIGNAL WARRANT DISCLAIMER  
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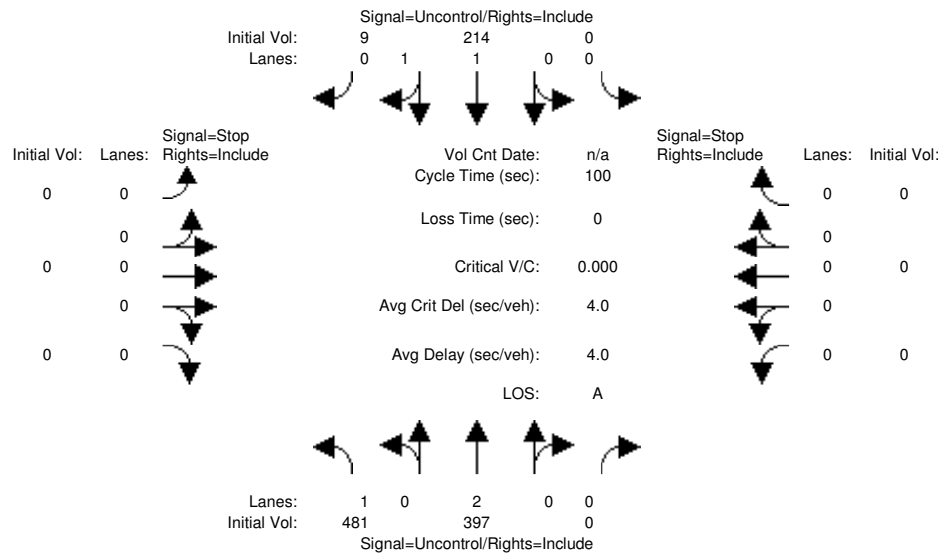
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**YEAR 2012**

SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2012NP

Intersection #10: Harbor/SR-47



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:	481	397	0	0	214	9	0	0	0	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:	481	397	0	0	214	9	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	481	397	0	0	214	9	0	0	0	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:	481	397	0	0	214	9	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	481	397	0	0	214	9	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	223	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	1358	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	1358	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	0.35	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.6	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	9.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	481 397 0	0 214 9	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

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Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*

Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	481 397 0	0 214 9	0 0 0 0	0 0 0 0
Major Street Volume:	1101			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	252			

SIGNAL WARRANT DISCLAIMER

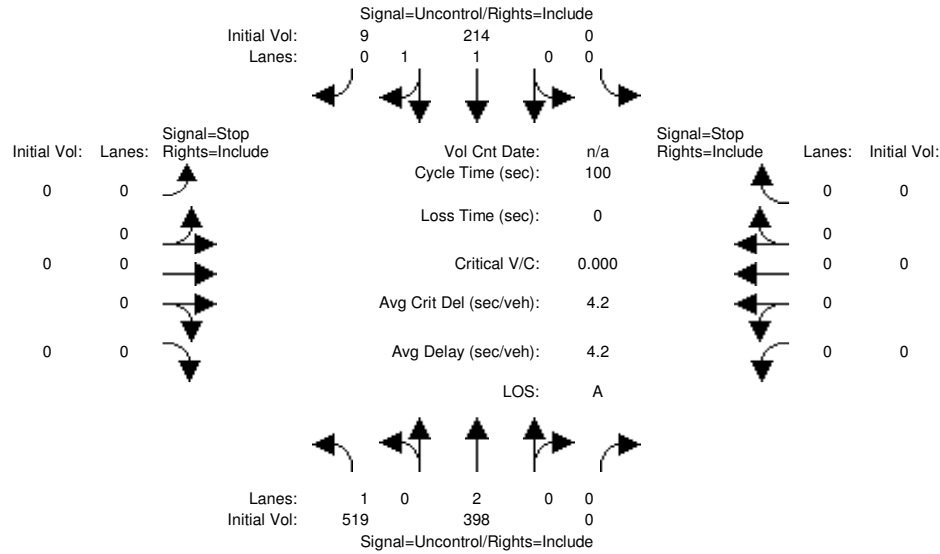
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2012P

Intersection #10: Harbor/SR-47



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:	519	398	0	0	214	9	0	0	0	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:	519	398	0	0	214	9	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	519	398	0	0	214	9	0	0	0	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:	519	398	0	0	214	9	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	519	398	0	0	214	9	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	223	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Potent Cap.:	1358	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Move Cap.:	1358	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Volume/Cap:	0.38	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Control Del:	9.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	519 398 0	0 214 9	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	519 398 0	0 214 9	0 0 0 0	0 0 0 0
Major Street Volume:	1140			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	240			

SIGNAL WARRANT DISCLAIMER

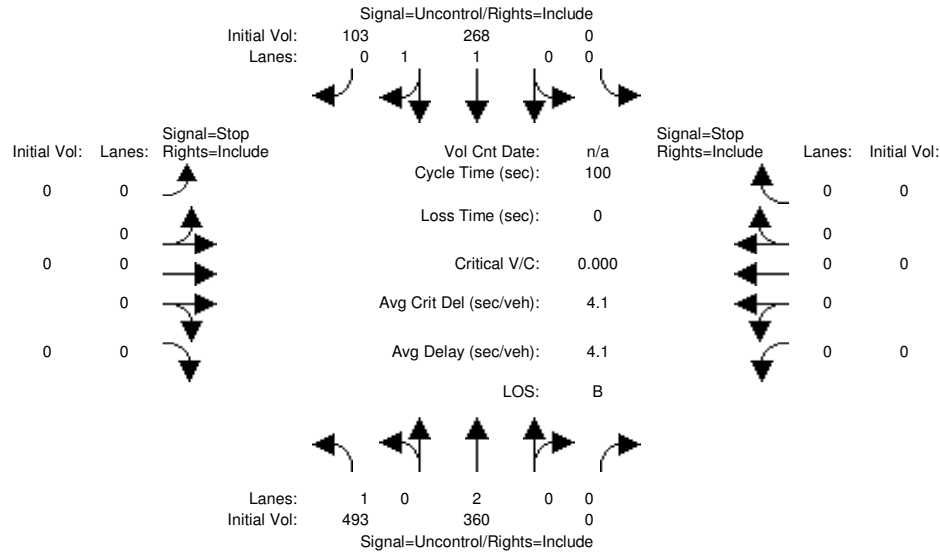
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2012NPSAT

Intersection #10: Harbor/SR-47



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:	493	360	0	0	268	103	0	0	0	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:	493	360	0	0	268	103	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	493	360	0	0	268	103	0	0	0	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:	493	360	0	0	268	103	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	493	360	0	0	268	103	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	371	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Potent Cap.:	1199	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Move Cap.:	1199	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Volume/Cap:	0.41	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	2.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Control Del:	10.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	493 360 0	0 268 103	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	493 360 0	0 268 103	0 0 0 0	0 0 0 0
Major Street Volume:	1224			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	215			

SIGNAL WARRANT DISCLAIMER

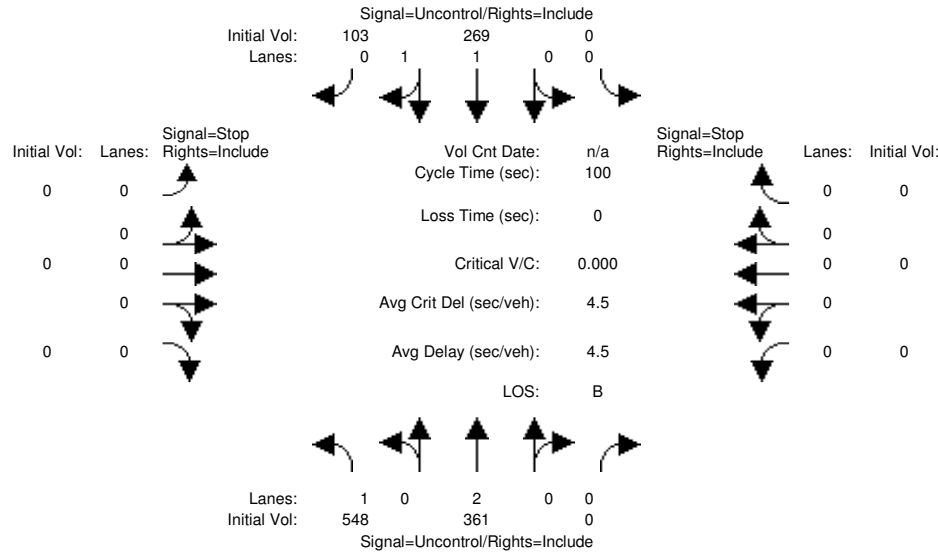
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2012PSAT

Intersection #10: Harbor/SR-47



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:	548	361	0	0	269	103	0	0	0	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:	548	361	0	0	269	103	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	548	361	0	0	269	103	0	0	0	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:	548	361	0	0	269	103	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	548	361	0	0	269	103	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	372	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Potent Cap.:	1198	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Move Cap.:	1198	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Volume/Cap:	0.46	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	2.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Control Del:	10.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	548 361 0	0 269 103	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	548 361 0	0 269 103	0 0 0 0	0 0 0 0
Major Street Volume:	1281			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	200			

SIGNAL WARRANT DISCLAIMER

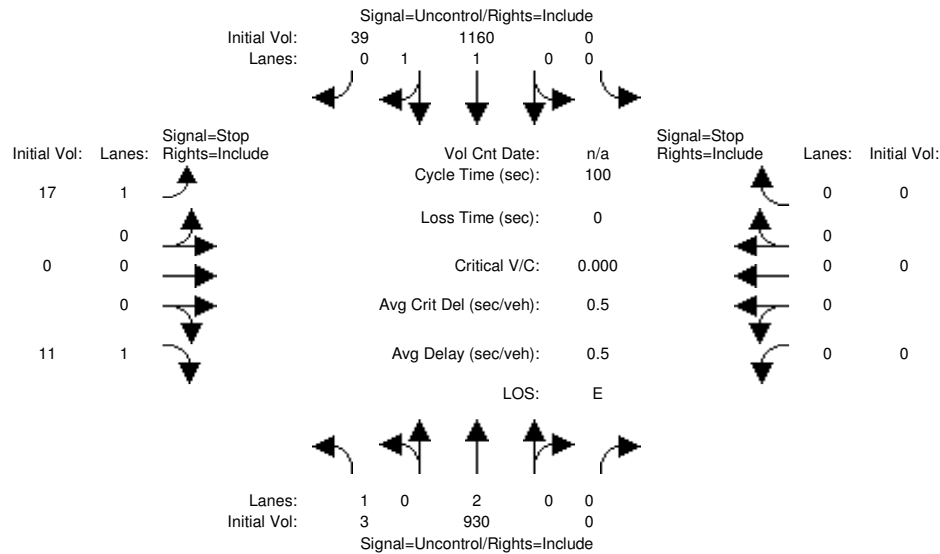
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2012NP

Intersection #14: Harbor/3rd



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:	3	930	0	0	1160	39	17	0	11	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:	3	930	0	0	1160	39	17	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	930	0	0	1160	39	17	0	11	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:	3	930	0	0	1160	39	17	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	930	0	0	1160	39	17	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	1199	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1651	xxxx	600	xxxx	xxxx	xxxxxx
Potent Cap.:	589	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	91	xxxx	449	xxxx	xxxx	xxxxxx
Move Cap.:	589	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	91	xxxx	449	xxxx	xxxx	xxxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.19	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.6	xxxx	0.1	xxxx	xxxx	xxxxxx
Control Del:	11.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	53.4	xxxx	13.2	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	F	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			37.6			xxxxxxx		
ApproachLOS:	*			*			E			*		

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

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	3 930 0	0 1160 39	17 0 11	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	37.6	xxxxxx

Approach[eastbound][lanes=2][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=0.3]  
FAIL - Vehicle-hours less than 5 for two or more lane approach.  
Signal Warrant Rule #2: [approach volume=28]  
FAIL - Approach volume less than 150 for two or more lane approach.  
Signal Warrant Rule #3: [approach count=3][total volume=2160]  
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*

Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	3 930 0	0 1160 39	17 0 11	0 0 0 0

Major Street Volume: 2132  
Minor Approach Volume: 28  
Minor Approach Volume Threshold: 49 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

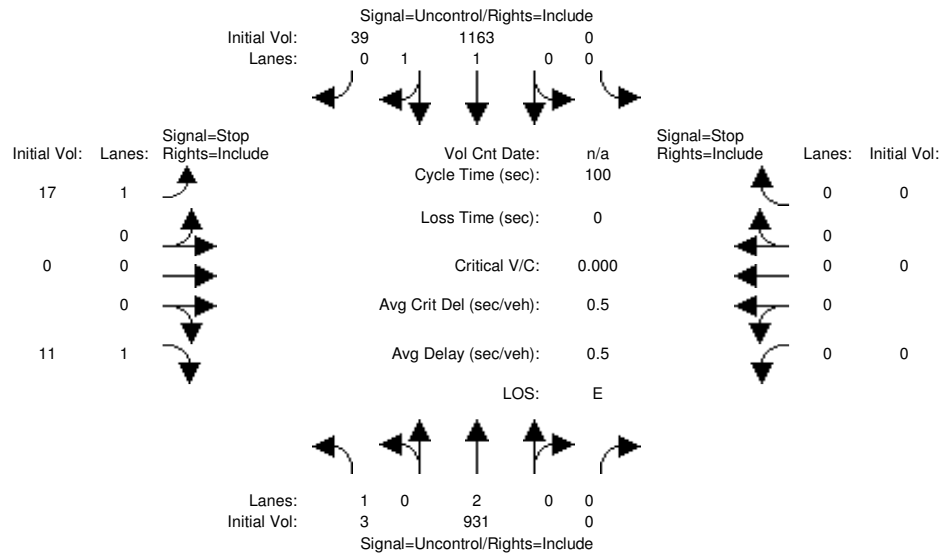
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2012P

Intersection #14: Harbor/3rd



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:	3	931	0	0	1163	39	17	0	11	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:	3	931	0	0	1163	39	17	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	931	0	0	1163	39	17	0	11	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:	3	931	0	0	1163	39	17	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	931	0	0	1163	39	17	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	1202	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1654	xxxx	601	xxxx	xxxx	xxxxxx
Potent Cap.:	588	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	91	xxxx	448	xxxx	xxxx	xxxxxx
Move Cap.:	588	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	91	xxxx	448	xxxx	xxxx	xxxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.19	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.6	xxxx	0.1	xxxx	xxxx	xxxxxx
Control Del:	11.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	53.7	xxxx	13.2	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	F	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			37.8			xxxxxxx		
ApproachLOS:	*			*			E			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #14 Harbor/3rd

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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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	3 931 0	0 1163 39	17 0 11	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	37.8	xxxxxx

Approach[eastbound][lanes=2][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=0.3]  
FAIL - Vehicle-hours less than 5 for two or more lane approach.  
Signal Warrant Rule #2: [approach volume=28]  
FAIL - Approach volume less than 150 for two or more lane approach.  
Signal Warrant Rule #3: [approach count=3][total volume=2164]  
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	3 931 0	0 1163 39	17 0 11	0 0 0 0

Major Street Volume: 2136  
Minor Approach Volume: 28  
Minor Approach Volume Threshold: 48 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

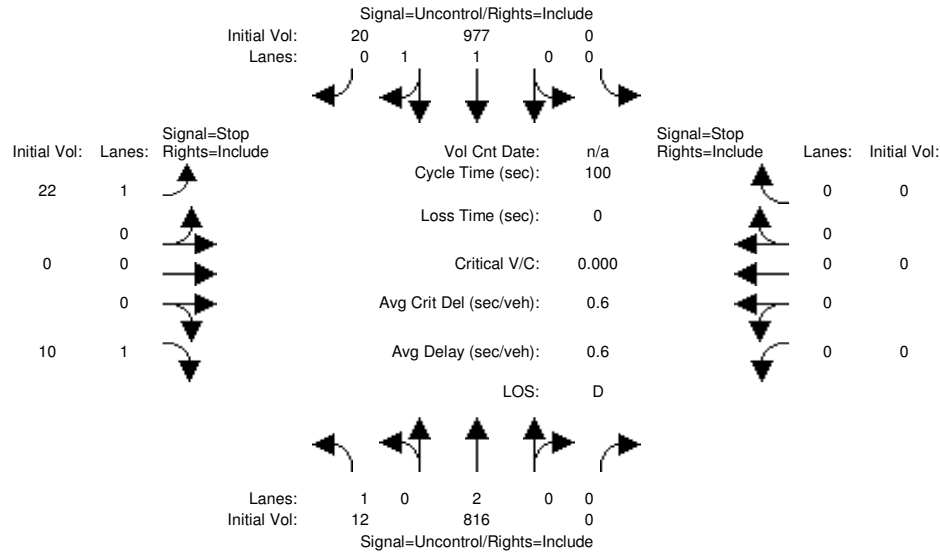
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2012NPSAT

Intersection #14: Harbor/3rd



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:	12	816	0	0	977	20	22	0	10	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:	12	816	0	0	977	20	22	0	10	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	816	0	0	977	20	22	0	10	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:	12	816	0	0	977	20	22	0	10	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	816	0	0	977	20	22	0	10	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	997	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1419	xxxx	499	xxxx	xxxx	xxxxxx
Potent Cap.:	702	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	130	xxxx	523	xxxx	xxxx	xxxxxx
Move Cap.:	702	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	128	xxxx	523	xxxx	xxxx	xxxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.17	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.6	xxxx	0.1	xxxx	xxxx	xxxxxx
Control Del:	10.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	38.8	xxxx	12.0	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	E	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			30.4			xxxxxxx		
ApproachLOS:	*			*			D			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #14 Harbor/3rd

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Future Volume Alternative: Peak Hour Warrant NOT Met

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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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	12 816 0	0 977 20	22 0 10	0 0 0
ApproachDel:	xxxxxx	xxxxxx	30.4	xxxxxx

Approach[eastbound][lanes=2][control=Stop Sign]  
 Signal Warrant Rule #1: [vehicle-hours=0.3]  
 FAIL - Vehicle-hours less than 5 for two or more lane approach.  
 Signal Warrant Rule #2: [approach volume=32]  
 FAIL - Approach volume less than 150 for two or more lane approach.  
 Signal Warrant Rule #3: [approach count=3][total volume=1857]  
 SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

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 SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	12 816 0	0 977 20	22 0 10	0 0 0

Major Street Volume: 1825  
 Minor Approach Volume: 32  
 Minor Approach Volume Threshold: 115 [less than minimum of 150]

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 SIGNAL WARRANT DISCLAIMER

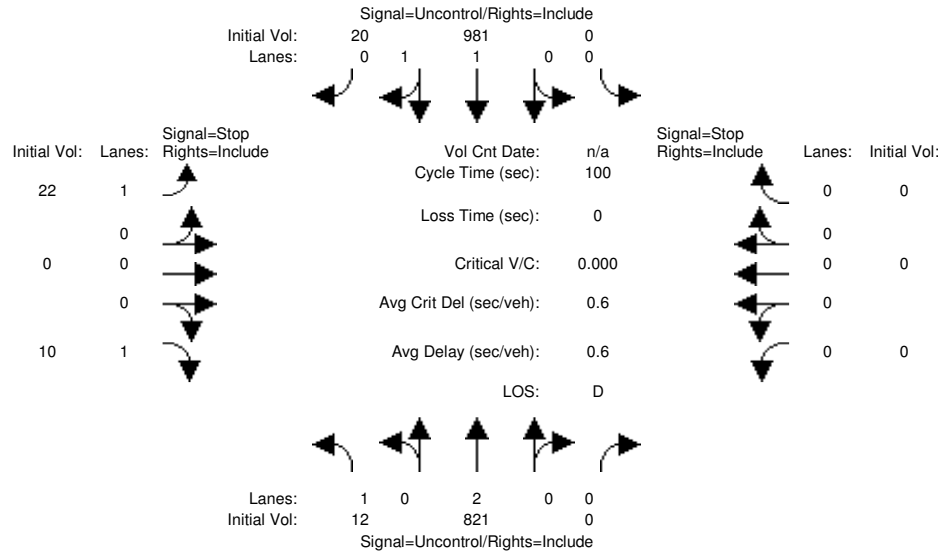
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2012PSAT

Intersection #14: Harbor/3rd



Approach:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	12	821	0	0	981	20	22	0	10	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:	12	821	0	0	981	20	22	0	10	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	821	0	0	981	20	22	0	10	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:	12	821	0	0	981	20	22	0	10	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	821	0	0	981	20	22	0	10	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	1001	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1426	xxxx	501	xxxx	xxxx	xxxxxx
Potent Cap.:	700	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	129	xxxx	521	xxxx	xxxx	xxxxxx
Move Cap.:	700	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	127	xxxx	521	xxxx	xxxx	xxxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.17	xxxx	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.6	xxxx	0.1	xxxx	xxxx	xxxxxx
Control Del:	10.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	39.2	xxxx	12.0	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	E	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			30.7		xxxxxx			
ApproachLOS:	*			*			D		*			*

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

Peak Hour Delay Signal Warrant Report

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Intersection #14 Harbor/3rd

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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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	12 821 0	0 981 20	22 0 10	0 0 0
ApproachDel:	xxxxxx	xxxxxx	30.7	xxxxxx

Approach[eastbound][lanes=2][control=Stop Sign]  
 Signal Warrant Rule #1: [vehicle-hours=0.3]  
 FAIL - Vehicle-hours less than 5 for two or more lane approach.  
 Signal Warrant Rule #2: [approach volume=32]  
 FAIL - Approach volume less than 150 for two or more lane approach.  
 Signal Warrant Rule #3: [approach count=3][total volume=1866]  
 SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

-----  
 SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #14 Harbor/3rd

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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:	1 0 2 0 0	0 0 1 1 0	1 0 0 0 1	0 0 0 0 0
Initial Vol:	12 821 0	0 981 20	22 0 10	0 0 0

Major Street Volume: 1834  
 Minor Approach Volume: 32  
 Minor Approach Volume Threshold: 113 [less than minimum of 150]

-----  
 SIGNAL WARRANT DISCLAIMER

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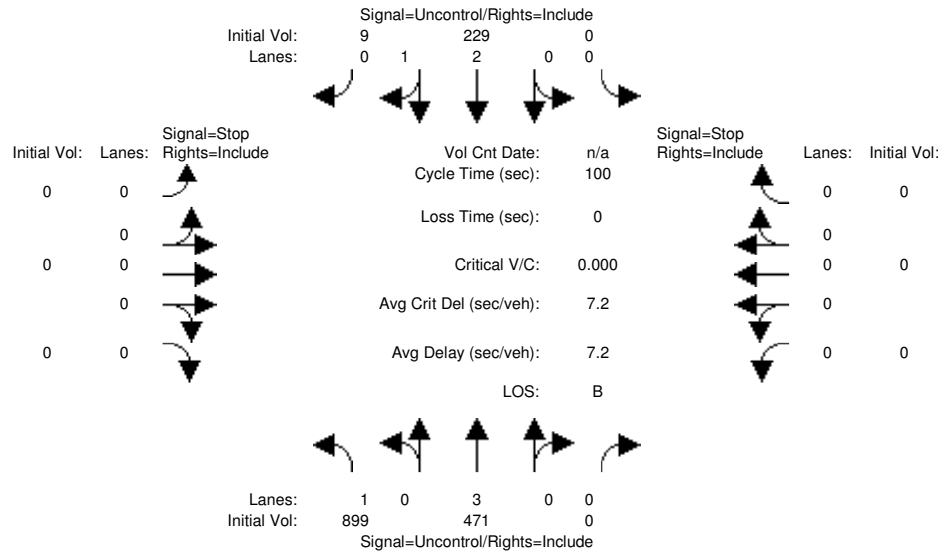
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**YEAR 2024**

SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2024NP

Intersection #10: Harbor/SR-47



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:	899	471	0	0	229	9	0	0	0	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:	899	471	0	0	229	9	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	899	471	0	0	229	9	0	0	0	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:	899	471	0	0	229	9	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	899	471	0	0	229	9	0	0	0	0	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	238	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	1341	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	1341	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	0.67	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	5.5	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	13.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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 Intersection #10 Harbor/SR-47  
 \*\*\*\*\*  
 Future Volume Alternative: Peak Hour Warrant NOT Met  
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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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	899 471 0	0 229 9	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	899 471 0	0 229 9	0 0 0 0	0 0 0 0
Major Street Volume:	1608			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	121			

SIGNAL WARRANT DISCLAIMER

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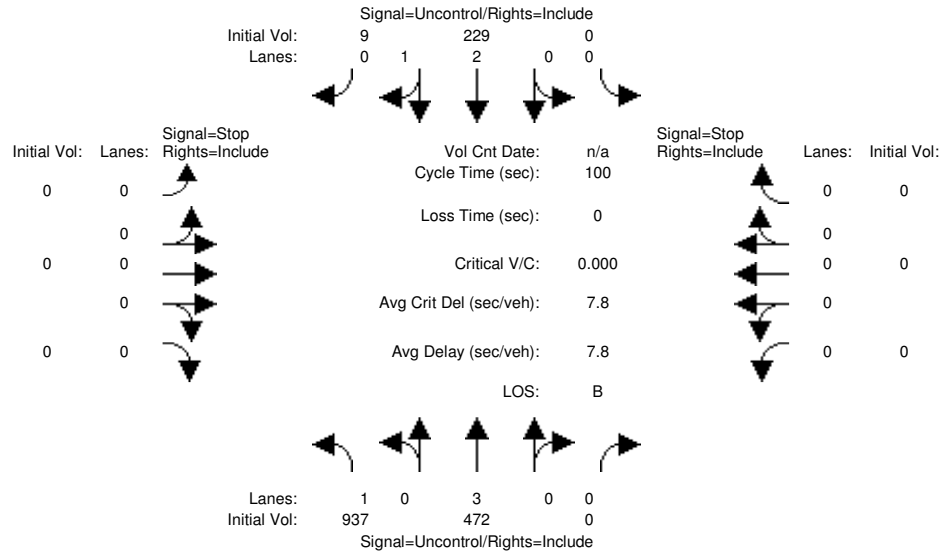
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2024P

Intersection #10: Harbor/SR-47



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:	937	472	0	0	229	9	0	0	0	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:	937	472	0	0	229	9	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	937	472	0	0	229	9	0	0	0	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:	937	472	0	0	229	9	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	937	472	0	0	229	9	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	238	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	1341	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	1341	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	0.70	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	6.2	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	13.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
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 #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	937 472 0	0 229 9	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	937 472 0	0 229 9	0 0 0 0	0 0 0 0
Major Street Volume:	1647			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	113			

SIGNAL WARRANT DISCLAIMER

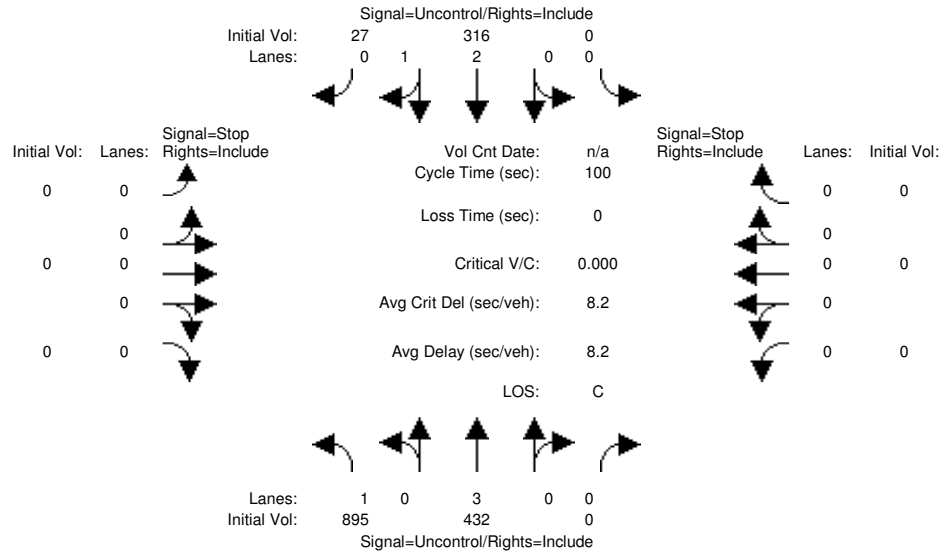
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2024NPSAT

Intersection #10: Harbor/SR-47



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:	895	432	0	0	316	27	0	0	0	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:	895	432	0	0	316	27	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	895	432	0	0	316	27	0	0	0	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:	895	432	0	0	316	27	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	895	432	0	0	316	27	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	343	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Potent Cap.:	1227	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Move Cap.:	1227	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Volume/Cap:	0.73	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	6.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Control Del:	15.4	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	C	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	895 432 0	0 316 27	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	895 432 0	0 316 27	0 0 0 0	0 0 0 0
Major Street Volume:	1670			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	108			

SIGNAL WARRANT DISCLAIMER

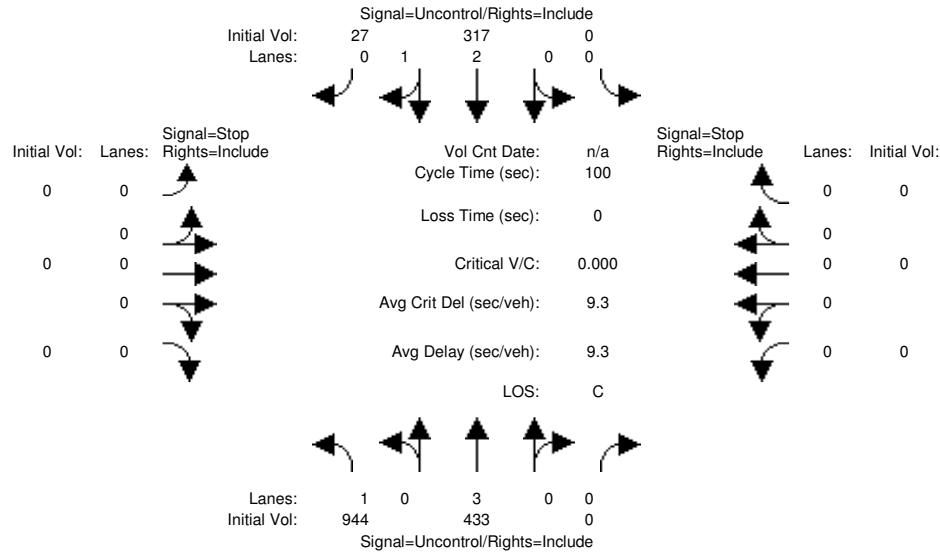
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2024PSAT

Intersection #10: Harbor/SR-47



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:	944	433	0	0	317	27	0	0	0	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:	944	433	0	0	317	27	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	944	433	0	0	317	27	0	0	0	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:	944	433	0	0	317	27	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	944	433	0	0	317	27	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	344	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Potent Cap.:	1226	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Move Cap.:	1226	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Volume/Cap:	0.77	xxxx	xxxx	xxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Level Of Service Module:												
2Way95thQ:	8.2	xxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Control Del:	17.0	xxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
LOS by Move:	C	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
SharedQueue:	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	944 433 0	0 317 27	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	944 433 0	0 317 27	0 0 0 0	0 0 0 0
Major Street Volume:	1721			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	98 [less than minimum of 100]			

SIGNAL WARRANT DISCLAIMER

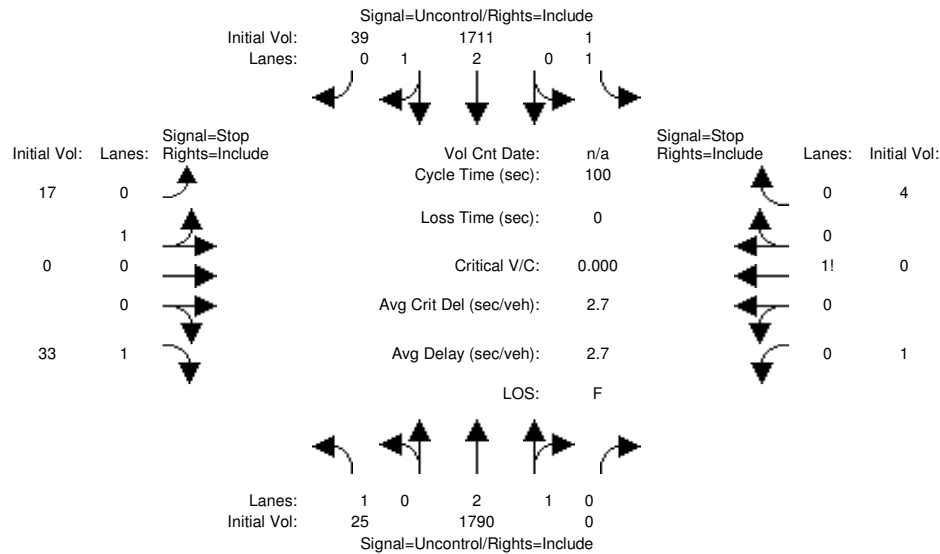
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2024NP

Intersection #14: Harbor/3rd



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:	25	1790	0	1	1711	39	17	0	33	1	0	4
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:	25	1790	0	1	1711	39	17	0	33	1	0	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	1790	0	1	1711	39	17	0	33	1	0	4
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:	25	1790	0	1	1711	39	17	0	33	1	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	25	1790	0	1	1711	39	17	0	33	1	0	4
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1750	xxxx	xxxxxx	1790	xxxx	xxxxxx	2379	3573	590	2412	3592	597
Potent Cap.:	363	xxxx	xxxxxx	350	xxxx	xxxxxx	19	6	456	18	6	451
Move Cap.:	363	xxxx	xxxxxx	350	xxxx	xxxxxx	17	5	456	15	5	451
Volume/Cap:	0.07	xxxx	xxxx	0.00	xxxx	xxxx	0.98	0.00	0.07	0.07	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxxx
Control Del:	15.6	xxxx	xxxxxx	15.3	xxxx	xxxxxx	xxxxxx	xxxx	13.5	xxxxxx	xxxx	xxxxxx
LOS by Move:	C	*	*	C	*	*	*	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	17	xxxx	xxxxxx	xxxxx	68	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2.5	xxxx	xxxxxx	xxxxxx	0.2	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	508.0	xxxx	xxxxxx	xxxxxx	62.5	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	F	*
ApproachDel:	xxxxxxx			xxxxxxx			181.6			62.5		
ApproachLOS:	*			*			F			F		

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

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 1! 0 0
Initial Vol:	25 1790 0	1 1711 39	17 0 33	1 0 4
ApproachDel:	xxxxxx	xxxxxx	181.6	62.5

```

-----|-----|-----|-----|-----|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=2.5]
    FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=50]
    FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=3621]
    SUCCEED - Total volume greater than or equal to 800 for intersection
                with four or more approaches.
    
```

```

-----|-----|-----|-----|-----|
Approach[westbound][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=5]
    FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=3621]
    SUCCEED - Total volume greater than or equal to 800 for intersection
                with four or more approaches.
    
```

```

-----|-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
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"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).
    
```

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #14 Harbor/3rd
*****
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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 1! 0 0
Initial Vol:	25 1790 0	1 1711 39	17 0 33	1 0 4

```

-----|-----|-----|-----|-----|
Major Street Volume:          3566
Minor Approach Volume:        50
Minor Approach Volume Threshold: -173 [less than minimum of 150]
    
```

```

-----|-----|-----|-----|-----|
SIGNAL WARRANT DISCLAIMER
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"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).
    
```

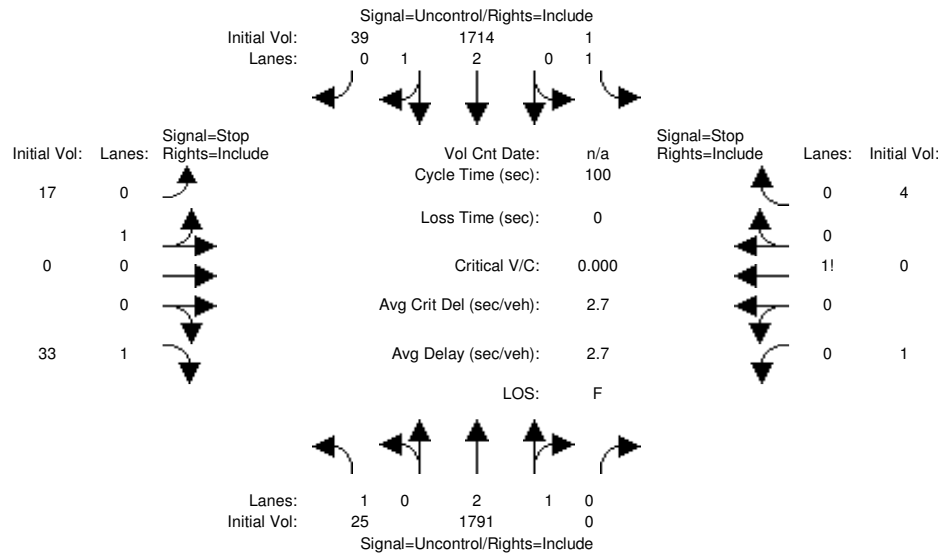
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2024P

Intersection #14: Harbor/3rd



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:	25	1791	0	1	1714	39	17	0	33	1	0	4
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:	25	1791	0	1	1714	39	17	0	33	1	0	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	1791	0	1	1714	39	17	0	33	1	0	4
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:	25	1791	0	1	1714	39	17	0	33	1	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	25	1791	0	1	1714	39	17	0	33	1	0	4
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1753	xxxx	xxxxx	1791	xxxx	xxxxx	2383	3577	591	2414	3596	597
Potent Cap.:	362	xxxx	xxxxx	350	xxxx	xxxxx	18	6	455	17	6	451
Move Cap.:	362	xxxx	xxxxx	350	xxxx	xxxxx	17	5	455	15	5	451
Volume/Cap:	0.07	xxxx	xxxx	0.00	xxxx	xxxx	0.98	0.00	0.07	0.07	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx
Control Del:	15.7	xxxx	xxxxx	15.3	xxxx	xxxxx	xxxxxx	xxxx	13.5	xxxxxx	xxxx	xxxxxx
LOS by Move:	C	*	*	C	*	*	*	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	17	xxxx	xxxxx	xxxxx	67	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2.5	xxxx	xxxxxx	xxxxxx	0.2	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	512.4	xxxx	xxxxxx	xxxxxx	62.7	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	F	*
ApproachDel:	xxxxxxx			xxxxxxx			183.1			62.7		
ApproachLOS:	*			*			F			F		

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

Peak Hour Delay Signal Warrant Report

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Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 1! 0 0
Initial Vol:	25 1791 0	1 1714 39	17 0 33	1 0 4
ApproachDel:	xxxxxx	xxxxxx	183.1	62.7

```

Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=2.5]
  FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=50]
  FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=3625]
  SUCCEED - Total volume greater than or equal to 800 for intersection
  with four or more approaches.

```

```

Approach[westbound][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=5]
  FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=3625]
  SUCCEED - Total volume greater than or equal to 800 for intersection
  with four or more approaches.

```

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 1! 0 0
Initial Vol:	25 1791 0	1 1714 39	17 0 33	1 0 4

```

Major Street Volume:          3570
Minor Approach Volume:        50
Minor Approach Volume Threshold: -173 [less than minimum of 150]

```

SIGNAL WARRANT DISCLAIMER

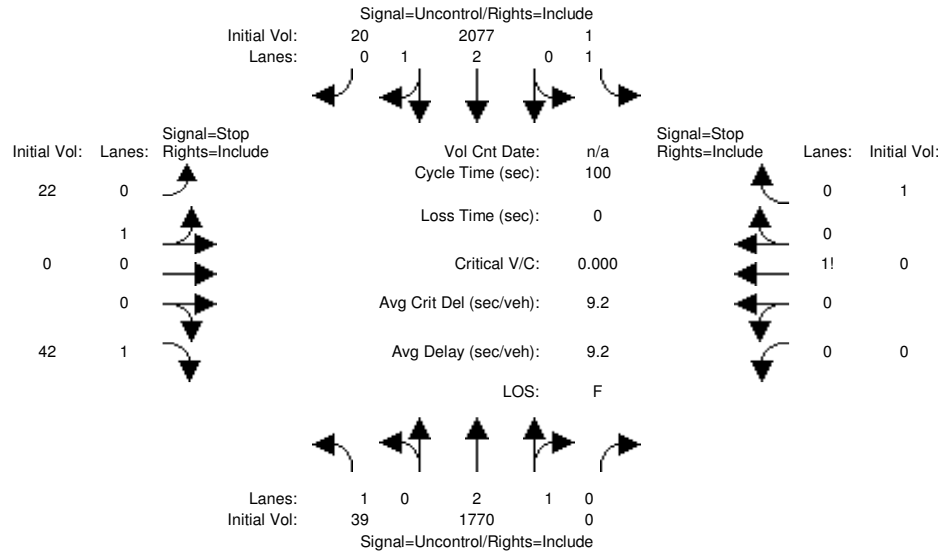
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2024NPSAT

Intersection #14: Harbor/3rd



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:	39	1770	0	1	2077	20	22	0	42	0	0	1
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:	39	1770	0	1	2077	20	22	0	42	0	0	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	1770	0	1	2077	20	22	0	42	0	0	1
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:	39	1770	0	1	2077	20	22	0	42	0	0	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	39	1770	0	1	2077	20	22	0	42	0	0	1
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	xxxxxx	xxxx	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	xxxxxx	xxxx	3.3
Capacity Module:												
Cnflct Vol:	2097	xxxx	xxxxxx	1770	xxxx	xxxxxx	2757	3937	702	xxxx	xxxx	590
Potent Cap.:	266	xxxx	xxxxxx	357	xxxx	xxxxxx	9	3	385	xxxx	xxxx	456
Move Cap.:	266	xxxx	xxxxxx	357	xxxx	xxxxxx	8	3	385	xxxx	xxxx	456
Volume/Cap:	0.15	xxxx	xxxx	0.00	xxxx	xxxx	2.63	0.00	0.11	xxxx	xxxx	0.00
Level Of Service Module:												
2Way95thQ:	0.5	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	0.4	xxxx	xxxx	0.0
Control Del:	20.8	xxxx	xxxxxx	15.1	xxxx	xxxxxx	xxxxxx	xxxx	15.5	xxxxxx	xxxx	12.9
LOS by Move:	C	*	*	C	*	*	*	*	C	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	8	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
SharedQueue:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	3.8	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	1601	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			560.6			12.9		
ApproachLOS:	*			*			F			B		

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

Peak Hour Delay Signal Warrant Report

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Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 0 0 1
Initial Vol:	39 1770 0	1 2077 20	22 0 42	0 0 0 1
ApproachDel:	xxxxxx	xxxxxx	560.6	12.9

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=2][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=10.0]  
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.  
Signal Warrant Rule #2: [approach volume=64]  
FAIL - Approach volume less than 150 for two or more lane approach.  
Signal Warrant Rule #3: [approach count=4][total volume=3972]  
SUCCEED - Total volume greater than or equal to 800 for intersection  
with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][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=1]  
FAIL - Approach volume less than 100 for one lane approach.  
Signal Warrant Rule #3: [approach count=4][total volume=3972]  
SUCCEED - Total volume greater than or equal to 800 for intersection  
with four or more approaches.

-----|-----|-----|-----|-----|

SIGNAL WARRANT DISCLAIMER  
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"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).

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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]

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Intersection #14 Harbor/3rd  
\*\*\*\*\*  
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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 0 0 1
Initial Vol:	39 1770 0	1 2077 20	22 0 42	0 0 0 1

-----|-----|-----|-----|-----|

Major Street Volume: 3907  
Minor Approach Volume: 64  
Minor Approach Volume Threshold: -212 [less than minimum of 150]

-----|-----|-----|-----|-----|

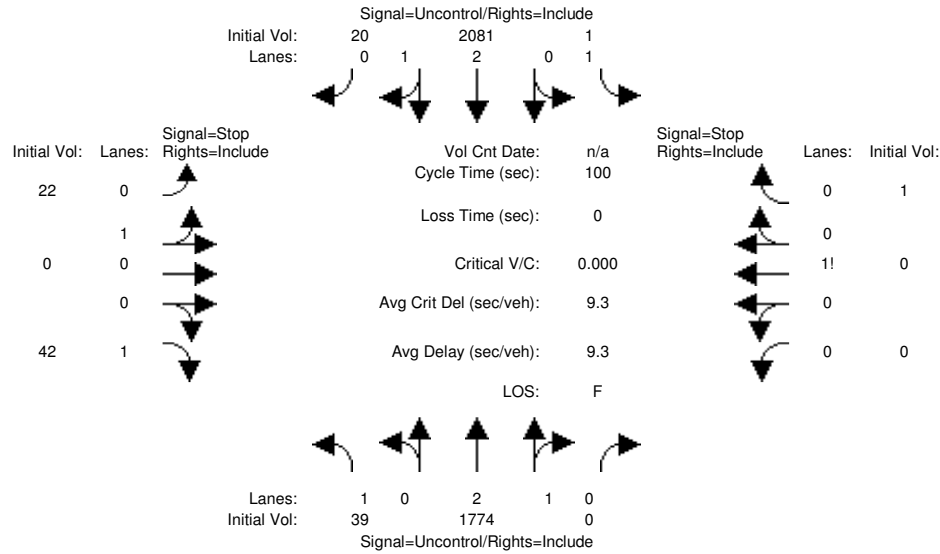
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2024PSAT

Intersection #14: Harbor/3rd



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:	39	1774	0	1	2081	20	22	0	42	0	0	1
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:	39	1774	0	1	2081	20	22	0	42	0	0	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	1774	0	1	2081	20	22	0	42	0	0	1
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:	39	1774	0	1	2081	20	22	0	42	0	0	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	39	1774	0	1	2081	20	22	0	42	0	0	1
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	xxxxxx	xxxx	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	xxxxxx	xxxx	3.3
Capacity Module:												
Cnflct Vol:	2101	xxxx	xxxxxx	1774	xxxx	xxxxxx	2762	3945	704	xxxx	xxxx	591
Potent Cap.:	266	xxxx	xxxxxx	355	xxxx	xxxxxx	9	3	384	xxxx	xxxx	455
Move Cap.:	266	xxxx	xxxxxx	355	xxxx	xxxxxx	8	3	384	xxxx	xxxx	455
Volume/Cap:	0.15	xxxx	xxxx	0.00	xxxx	xxxx	2.65	0.00	0.11	xxxx	xxxx	0.00
Level Of Service Module:												
2Way95thQ:	0.5	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	0.4	xxxx	xxxx	0.0
Control Del:	20.9	xxxx	xxxxxx	15.2	xxxx	xxxxxx	xxxxxx	xxxx	15.5	xxxxxx	xxxx	12.9
LOS by Move:	C	*	*	C	*	*	*	*	C	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	8	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
SharedQueue:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	3.9	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	1621	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			567.3			12.9		
ApproachLOS:	*			*			F			B		

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

Peak Hour Delay Signal Warrant Report

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Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 0 0 1
Initial Vol:	39 1774 0	1 2081 20	22 0 42	0 0 1
ApproachDel:	xxxxxx	xxxxxx	567.3	12.9

-----|-----|-----|-----|-----|  
 Approach[eastbound][lanes=2][control=Stop Sign]  
 Signal Warrant Rule #1: [vehicle-hours=10.1]  
 SUCCEED - Vehicle-hours >= 5 for two or more lane approach.  
 Signal Warrant Rule #2: [approach volume=64]  
 FAIL - Approach volume less than 150 for two or more lane approach.  
 Signal Warrant Rule #3: [approach count=4][total volume=3980]  
 SUCCEED - Total volume greater than or equal to 800 for intersection  
 with four or more approaches.

-----|-----|-----|-----|-----|  
 Approach[westbound][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=1]  
 FAIL - Approach volume less than 100 for one lane approach.  
 Signal Warrant Rule #3: [approach count=4][total volume=3980]  
 SUCCEED - Total volume greater than or equal to 800 for intersection  
 with four or more approaches.

-----|-----|-----|-----|-----|  
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 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]

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Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 0 0 1
Initial Vol:	39 1774 0	1 2081 20	22 0 42	0 0 1

-----|-----|-----|-----|-----|  
 Major Street Volume: 3915  
 Minor Approach Volume: 64  
 Minor Approach Volume Threshold: -213 [less than minimum of 150]

-----|-----|-----|-----|-----|  
 SIGNAL WARRANT DISCLAIMER  
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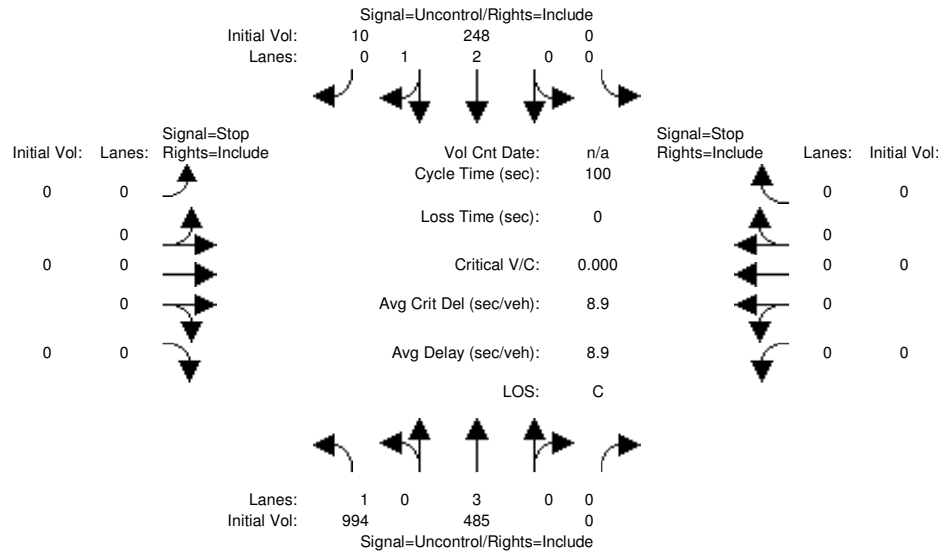
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**YEAR 2042**

SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2042NP

Intersection #10: Harbor/SR-47



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:	994	485	0	0	248	10	0	0	0	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:	994	485	0	0	248	10	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	994	485	0	0	248	10	0	0	0	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:	994	485	0	0	248	10	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	994	485	0	0	248	10	0	0	0	0	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	258	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	1318	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	1318	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	0.75	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	7.7	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	15.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	C	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #10 Harbor/SR-47

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

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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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	994 485 0	0 248 10	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	994 485 0	0 248 10	0 0 0 0	0 0 0 0
Major Street Volume:	1737			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	95 [less than minimum of 100]			

SIGNAL WARRANT DISCLAIMER

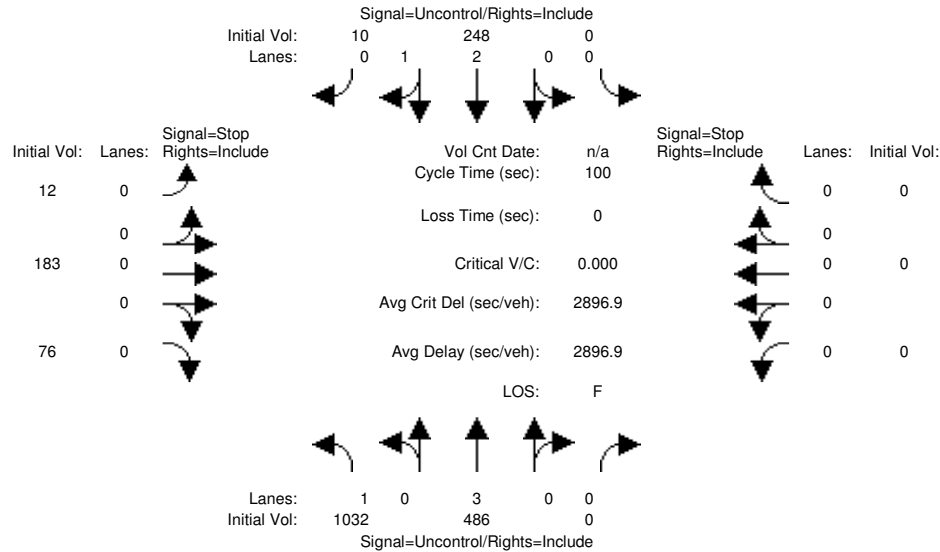
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2042P

Intersection #10: Harbor/SR-47



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:	1032	486	0	0	248	10	12	183	76	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:	1032	486	0	0	248	10	12	183	76	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1032	486	0	0	248	10	12	183	76	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:	1032	486	0	0	248	10	12	183	76	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1032	486	0	0	248	10	12	183	76	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	6.5	6.9	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	4.0	3.3	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	258	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2479	2803	88	xxxx	xxxx	xxxxxx
Potent Cap.:	1318	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	25	19	960	xxxx	xxxx	xxxxxx
Move Cap.:	1318	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	9	4	960	xxxx	xxxx	xxxxxx
Volume/Cap:	0.78	xxxx	xxxx	xxxx	xxxx	xxxx	1.3545	3.0	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	8.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	16.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	C	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxx	6	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	36.0	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			F			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant 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:	1 0 3 0 0	0 0 2 1 0	0 0 1! 0 0	0 0 0 0 0
Initial Vol:	1032 486 0	0 248 10	12 183 76	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

Approach[eastbound][lanes=1][control=Stop Sign]  
 Signal Warrant Rule #1: [vehicle-hours=1642.4]  
 SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.  
 Signal Warrant Rule #2: [approach volume=271]  
 SUCCEED - Approach volume greater than or equal to 100 for one lane approach.  
 Signal Warrant Rule #3: [approach count=3][total volume=2047]  
 SUCCEED - Total volume greater than or equal to 650 for intersection  
 with less than four approaches.

-----  
 SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*  
 Intersection #10 Harbor/SR-47  
 \*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant 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:	1 0 3 0 0	0 0 2 1 0	0 0 1! 0 0	0 0 0 0 0
Initial Vol:	1032 486 0	0 248 10	12 183 76	0 0 0 0

Major Street Volume: 1776  
 Minor Approach Volume: 271  
 Minor Approach Volume Threshold: 87 [less than minimum of 100]

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 SIGNAL WARRANT DISCLAIMER

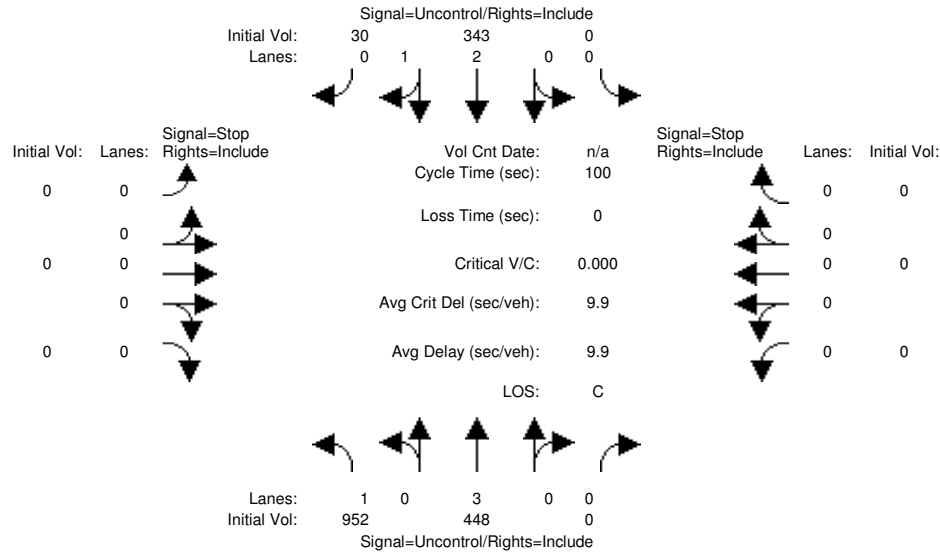
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2042NPSAT

Intersection #10: Harbor/SR-47



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:	952	448	0	0	343	30	0	0	0	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:	952	448	0	0	343	30	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	952	448	0	0	343	30	0	0	0	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:	952	448	0	0	343	30	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	952	448	0	0	343	30	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	373	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	1197	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	1197	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	0.80	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	9.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	18.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	C	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	952 448 0	0 343 30	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	952 448 0	0 343 30	0 0 0 0	0 0 0 0
Major Street Volume:	1773			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	88 [less than minimum of 100]			

SIGNAL WARRANT DISCLAIMER

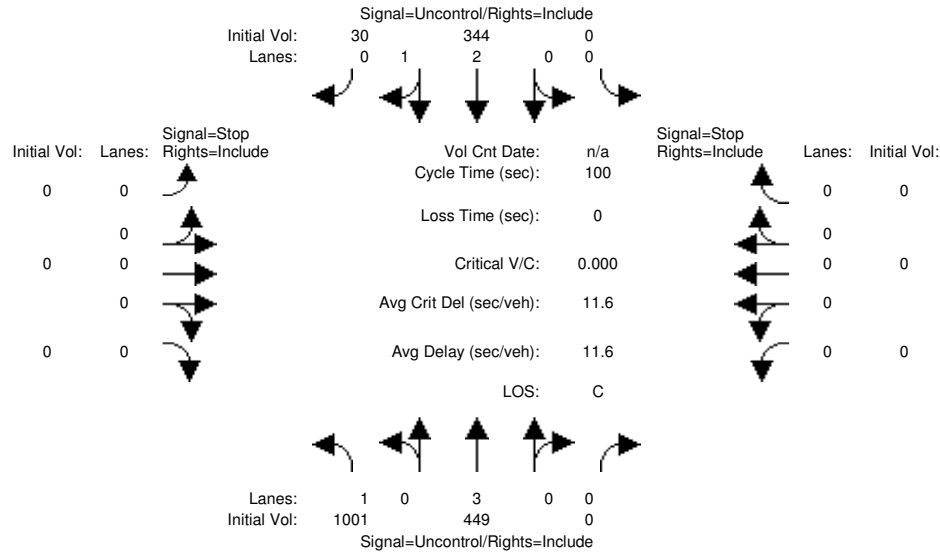
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2042PSAT

Intersection #10: Harbor/SR-47



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:	1001	449	0	0	344	30	0	0	0	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:	1001	449	0	0	344	30	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1001	449	0	0	344	30	0	0	0	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:	1001	449	0	0	344	30	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1001	449	0	0	344	30	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	374	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Potent Cap.:	1196	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Move Cap.:	1196	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Volume/Cap:	0.84	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	10.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Control Del:	21.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	C	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	1001 449 0	0 344 30	0 0 0 0	0 0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #10 Harbor/SR-47

\*\*\*\*\*

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:	1 0 3 0 0	0 0 2 1 0	0 0 0 0 0	0 0 0 0 0
Initial Vol:	1001 449 0	0 344 30	0 0 0 0	0 0 0 0
Major Street Volume:	1824			
Minor Approach Volume:	0			
Minor Approach Volume Threshold:	78 [less than minimum of 100]			

SIGNAL WARRANT DISCLAIMER

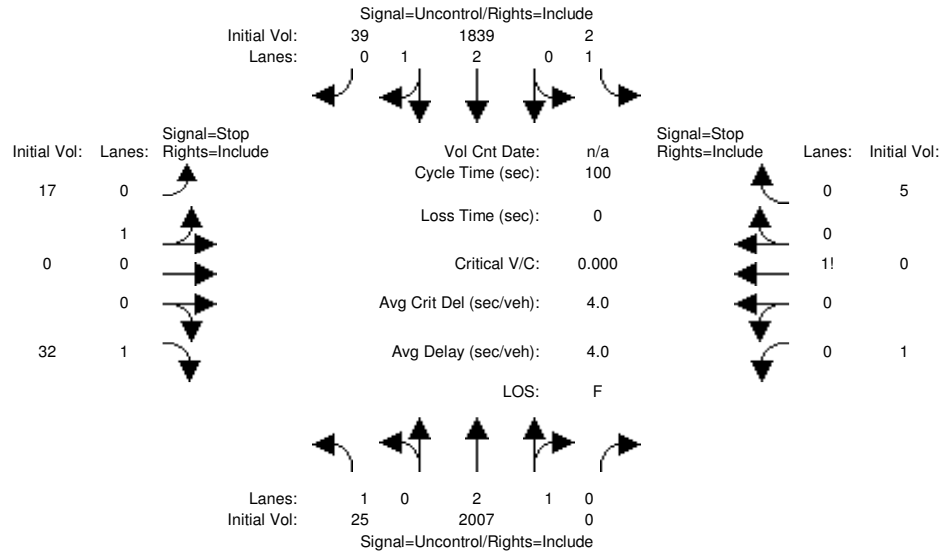
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2042NP

Intersection #14: Harbor/3rd



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:	25	2007	0	2	1839	39	17	0	32	1	0	5
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:	25	2007	0	2	1839	39	17	0	32	1	0	5
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	2007	0	2	1839	39	17	0	32	1	0	5
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:	25	2007	0	2	1839	39	17	0	32	1	0	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	25	2007	0	2	1839	39	17	0	32	1	0	5
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1878	xxxx	xxxxx	2007	xxxx	xxxxx	2582	3920	633	2674	3939	669
Potent Cap.:	324	xxxx	xxxxx	289	xxxx	xxxxx	13	3	428	11	3	405
Move Cap.:	324	xxxx	xxxxx	289	xxxx	xxxxx	12	3	428	10	3	405
Volume/Cap:	0.08	xxxx	xxxx	0.01	xxxx	xxxx	1.42	0.00	0.07	0.10	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx
Control Del:	17.0	xxxx	xxxxx	17.6	xxxx	xxxxx	xxxxxx	xxxx	14.1	xxxxxx	xxxx	xxxxxx
LOS by Move:	C	*	*	C	*	*	*	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12	xxxx	xxxxxx	xxxxx	51	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2.9	xxxx	xxxxxx	xxxxxx	0.4	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	846.7	xxxx	xxxxxx	xxxxxx	84.6	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	F	*
ApproachDel:	xxxxxxx			xxxxxxx			302.9			84.6		
ApproachLOS:	*			*			F			F		

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

Peak Hour Delay Signal Warrant Report

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Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 1! 0 0
Initial Vol:	25 2007 0	2 1839 39	17 0 32	1 0 5
ApproachDel:	xxxxxx	xxxxxx	302.9	84.6

-----|-----|-----|-----|-----|  
Approach[eastbound][lanes=2][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=4.1]  
FAIL - Vehicle-hours less than 5 for two or more lane approach.  
Signal Warrant Rule #2: [approach volume=49]  
FAIL - Approach volume less than 150 for two or more lane approach.  
Signal Warrant Rule #3: [approach count=4][total volume=3967]  
SUCCEED - Total volume greater than or equal to 800 for intersection  
with four or more approaches.

-----|-----|-----|-----|-----|  
Approach[westbound][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=6]  
FAIL - Approach volume less than 100 for one lane approach.  
Signal Warrant Rule #3: [approach count=4][total volume=3967]  
SUCCEED - Total volume greater than or equal to 800 for intersection  
with four or more approaches.

-----|-----|-----|-----|-----|  
SIGNAL WARRANT DISCLAIMER  
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a traffic signal in the future. Intersections that exceed this warrant  
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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]

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Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 1! 0 0
Initial Vol:	25 2007 0	2 1839 39	17 0 32	1 0 5

-----|-----|-----|-----|-----|  
Major Street Volume: 3912  
Minor Approach Volume: 49  
Minor Approach Volume Threshold: -213 [less than minimum of 150]

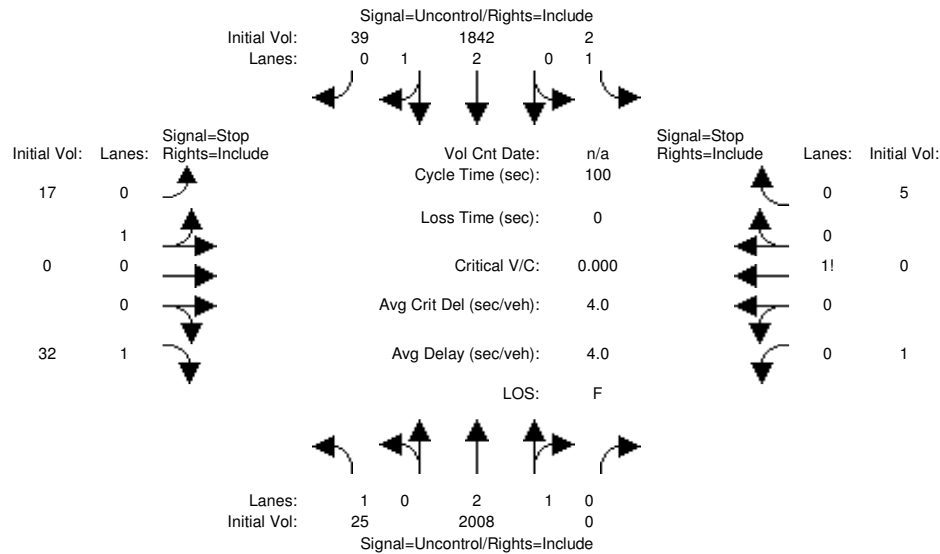
-----|-----|-----|-----|-----|  
SIGNAL WARRANT DISCLAIMER  
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"indicator" of the likelihood of an unsignalized intersection warranting  
a traffic signal in the future. Intersections that exceed this warrant  
are probably more likely to meet one or more of the other volume based  
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2042P

Intersection #14: Harbor/3rd



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:	25	2008	0	2	1842	39	17	0	32	1	0	5
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:	25	2008	0	2	1842	39	17	0	32	1	0	5
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	2008	0	2	1842	39	17	0	32	1	0	5
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:	25	2008	0	2	1842	39	17	0	32	1	0	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	25	2008	0	2	1842	39	17	0	32	1	0	5
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1881	xxxx	xxxxxx	2008	xxxx	xxxxxx	2585	3924	634	2676	3943	669
Potent Cap.:	323	xxxx	xxxxxx	289	xxxx	xxxxxx	13	3	427	11	3	405
Move Cap.:	323	xxxx	xxxxxx	289	xxxx	xxxxxx	12	3	427	9	3	405
Volume/Cap:	0.08	xxxx	xxxx	0.01	xxxx	xxxx	1.43	0.00	0.07	0.11	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxxx
Control Del:	17.1	xxxx	xxxxxx	17.6	xxxx	xxxxxx	xxxxxx	xxxx	14.1	xxxxxx	xxxx	xxxxxx
LOS by Move:	C	*	*	C	*	*	*	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	12	xxxx	xxxxxx	xxxxx	51	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2.9	xxxx	xxxxxx	xxxxxx	0.4	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	853.5	xxxx	xxxxxx	xxxxxx	84.9	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	F	*
ApproachDel:	xxxxxxx			xxxxxxx			305.3			84.9		
ApproachLOS:	*			*			F			F		

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

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 1! 0 0
Initial Vol:	25 2008 0	2 1842 39	17 0 32	1 0 5
ApproachDel:	xxxxxx	xxxxxx	305.3	84.9

-----|-----|-----|-----|-----|  
 Approach[eastbound][lanes=2][control=Stop Sign]  
 Signal Warrant Rule #1: [vehicle-hours=4.2]  
 FAIL - Vehicle-hours less than 5 for two or more lane approach.  
 Signal Warrant Rule #2: [approach volume=49]  
 FAIL - Approach volume less than 150 for two or more lane approach.  
 Signal Warrant Rule #3: [approach count=4][total volume=3971]  
 SUCCEED - Total volume greater than or equal to 800 for intersection  
 with four or more approaches.

-----|-----|-----|-----|-----|  
 Approach[westbound][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=6]  
 FAIL - Approach volume less than 100 for one lane approach.  
 Signal Warrant Rule #3: [approach count=4][total volume=3971]  
 SUCCEED - Total volume greater than or equal to 800 for intersection  
 with four or more approaches.

-----|-----|-----|-----|-----|  
 SIGNAL WARRANT DISCLAIMER  
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 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).

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 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 #14 Harbor/3rd  
 \*\*\*\*\*  
 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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 1! 0 0
Initial Vol:	25 2008 0	2 1842 39	17 0 32	1 0 5

-----|-----|-----|-----|-----|  
 Major Street Volume: 3916  
 Minor Approach Volume: 49  
 Minor Approach Volume Threshold: -213 [less than minimum of 150]

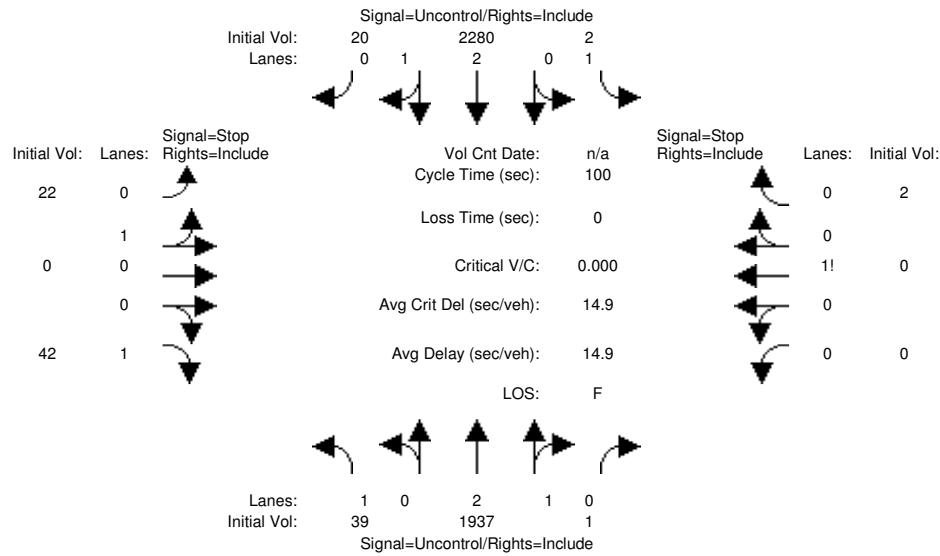
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2042NPSAT

Intersection #14: Harbor/3rd



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:	39	1937	1	2	2280	20	22	0	42	0	0	2
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:	39	1937	1	2	2280	20	22	0	42	0	0	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	1937	1	2	2280	20	22	0	42	0	0	2
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:	39	1937	1	2	2280	20	22	0	42	0	0	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	39	1937	1	2	2280	20	22	0	42	0	0	2
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	xxxxxx	xxxx	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	xxxxxx	xxxx	3.3
Capacity Module:												
Cnflct Vol:	2300	xxxx	xxxxxx	1938	xxxx	xxxxxx	3018	4310	770	xxxx	xxxx	646
Potent Cap.:	222	xxxx	xxxxxx	307	xxxx	xxxxxx	6	2	348	xxxx	xxxx	419
Move Cap.:	222	xxxx	xxxxxx	307	xxxx	xxxxxx	5	1	348	xxxx	xxxx	419
Volume/Cap:	0.18	xxxx	xxxx	0.01	xxxx	xxxx	4.33	0.00	0.12	xxxx	xxxx	0.00
Level Of Service Module:												
2Way95thQ:	0.6	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	0.4	xxxx	xxxx	0.0
Control Del:	24.6	xxxx	xxxxxx	16.8	xxxx	xxxxxx	xxxxxx	xxxx	16.8	xxxxxx	xxxx	13.6
LOS by Move:	C	*	*	C	*	*	*	*	C	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	5	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	2856	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			992.9			13.6		
ApproachLOS:	*			*			F			B		

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

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 0 0 1
Initial Vol:	39 1937 1	2 2280 20	22 0 42	0 0 2
ApproachDel:	xxxxxx	xxxxxx	992.9	13.6

-----|-----|-----|-----|-----|  
 Approach[eastbound][lanes=2][control=Stop Sign]  
 Signal Warrant Rule #1: [vehicle-hours=17.7]  
 SUCCEED - Vehicle-hours >= 5 for two or more lane approach.  
 Signal Warrant Rule #2: [approach volume=64]  
 FAIL - Approach volume less than 150 for two or more lane approach.  
 Signal Warrant Rule #3: [approach count=4][total volume=4345]  
 SUCCEED - Total volume greater than or equal to 800 for intersection  
 with four or more approaches.

-----|-----|-----|-----|-----|  
 Approach[westbound][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=2]  
 FAIL - Approach volume less than 100 for one lane approach.  
 Signal Warrant Rule #3: [approach count=4][total volume=4345]  
 SUCCEED - Total volume greater than or equal to 800 for intersection  
 with four or more approaches.

-----|-----|-----|-----|-----|  
 SIGNAL WARRANT DISCLAIMER  
 This peak hour signal warrant analysis should be considered solely as an  
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 signal warrant (such as the 4-hour or 8-hour warrants).

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 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 #14 Harbor/3rd  
 \*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 0 0 1
Initial Vol:	39 1937 1	2 2280 20	22 0 42	0 0 2

-----|-----|-----|-----|-----|  
 Major Street Volume: 4279  
 Minor Approach Volume: 64  
 Minor Approach Volume Threshold: -251 [less than minimum of 150]

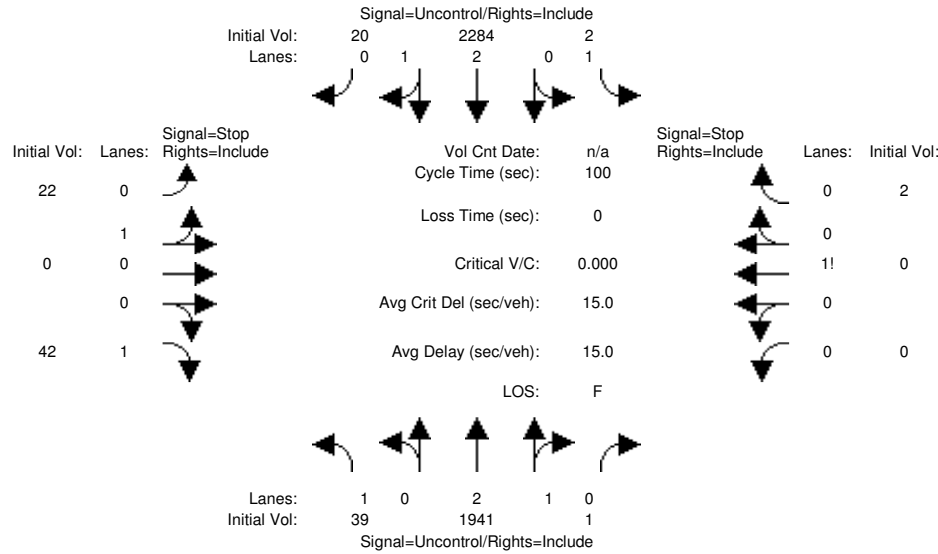
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SM11-2462  
USS IOWA IN SAN PEDRO

Level Of Service Computation Report  
2000 HCM Unsignalized (Future Volume Alternative)  
2042PSAT

Intersection #14: Harbor/3rd



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:	39	1941	1	2	2284	20	22	0	42	0	0	2
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:	39	1941	1	2	2284	20	22	0	42	0	0	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	1941	1	2	2284	20	22	0	42	0	0	2
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:	39	1941	1	2	2284	20	22	0	42	0	0	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	39	1941	1	2	2284	20	22	0	42	0	0	2
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	xxxxxx	xxxx	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	xxxxxx	xxxx	3.3
Capacity Module:												
Cnflct Vol:	2304	xxxx	xxxxxx	1942	xxxx	xxxxxx	3023	4318	771	xxxx	xxxx	648
Potent Cap.:	221	xxxx	xxxxxx	306	xxxx	xxxxxx	6	2	347	xxxx	xxxx	418
Move Cap.:	221	xxxx	xxxxxx	306	xxxx	xxxxxx	5	1	347	xxxx	xxxx	418
Volume/Cap:	0.18	xxxx	xxxx	0.01	xxxx	xxxx	4.37	0.00	0.12	xxxx	xxxx	0.00
Level Of Service Module:												
2Way95thQ:	0.6	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	0.4	xxxx	xxxx	0.0
Control Del:	24.7	xxxx	xxxxxx	16.8	xxxx	xxxxxx	xxxxxx	xxxx	16.8	xxxxxx	xxxx	13.7
LOS by Move:	C	*	*	C	*	*	*	*	C	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	5	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared Queue:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	4.1	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd ConDel:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	2889	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			1004.2			13.7		
ApproachLOS:	*			*			F			B		

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

Peak Hour Delay Signal Warrant Report

\*\*\*\*\*

Intersection #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 0 0 1
Initial Vol:	39 1941 1	2 2284 20	22 0 42	0 0 2
ApproachDel:	xxxxxx	xxxxxx	1004.2	13.7

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=2][control=Stop Sign]  
Signal Warrant Rule #1: [vehicle-hours=17.9]  
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.  
Signal Warrant Rule #2: [approach volume=64]  
FAIL - Approach volume less than 150 for two or more lane approach.  
Signal Warrant Rule #3: [approach count=4][total volume=4353]  
SUCCEED - Total volume greater than or equal to 800 for intersection  
with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][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=2]  
FAIL - Approach volume less than 100 for one lane approach.  
Signal Warrant Rule #3: [approach count=4][total volume=4353]  
SUCCEED - Total volume greater than or equal to 800 for intersection  
with four or more approaches.

-----|-----|-----|-----|-----|

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signal warrant (such as the 4-hour or 8-hour warrants).

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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 #14 Harbor/3rd

\*\*\*\*\*

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:	1 0 2 1 0	1 0 2 1 0	0 1 0 0 1	0 0 0 0 1
Initial Vol:	39 1941 1	2 2284 20	22 0 42	0 0 2

-----|-----|-----|-----|-----|

Major Street Volume: 4287  
Minor Approach Volume: 64  
Minor Approach Volume Threshold: -252 [less than minimum of 150]

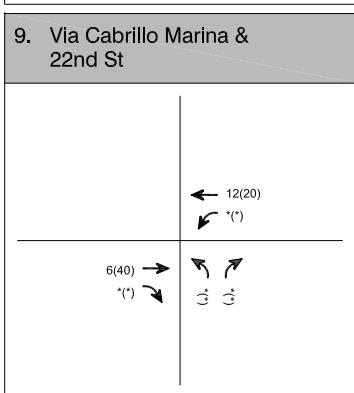
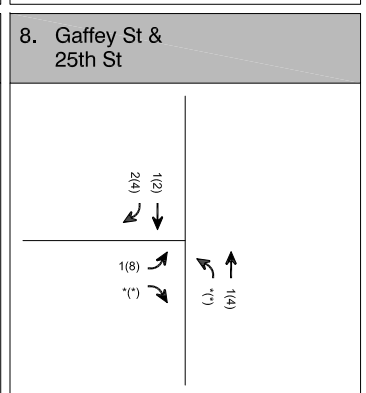
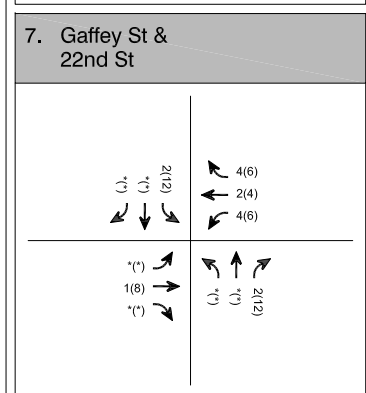
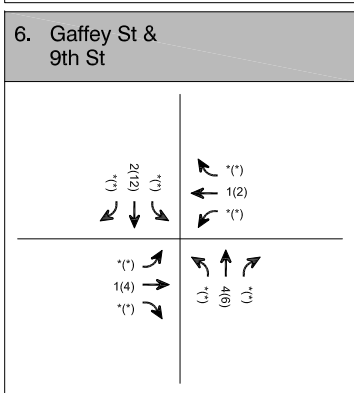
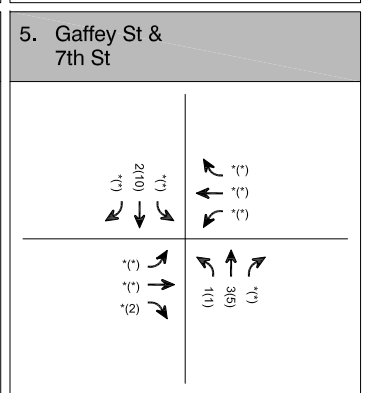
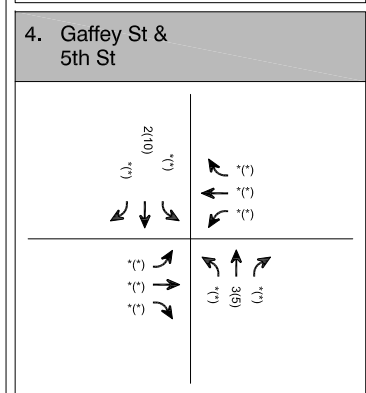
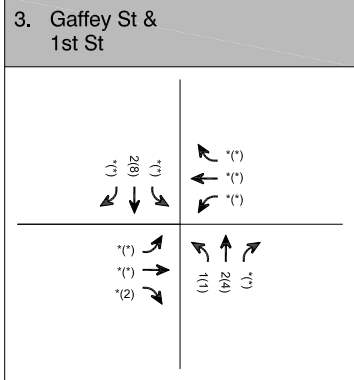
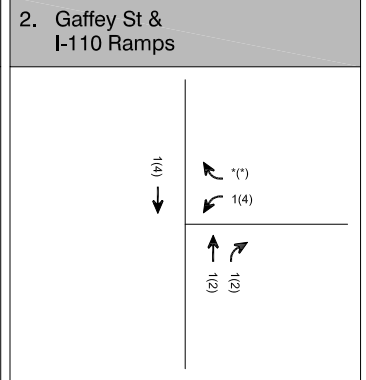
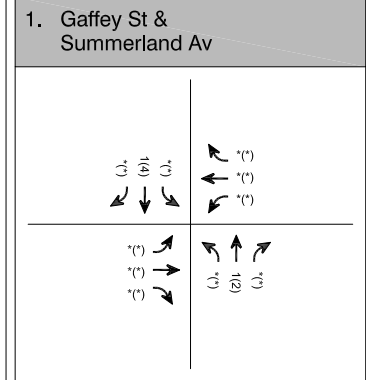
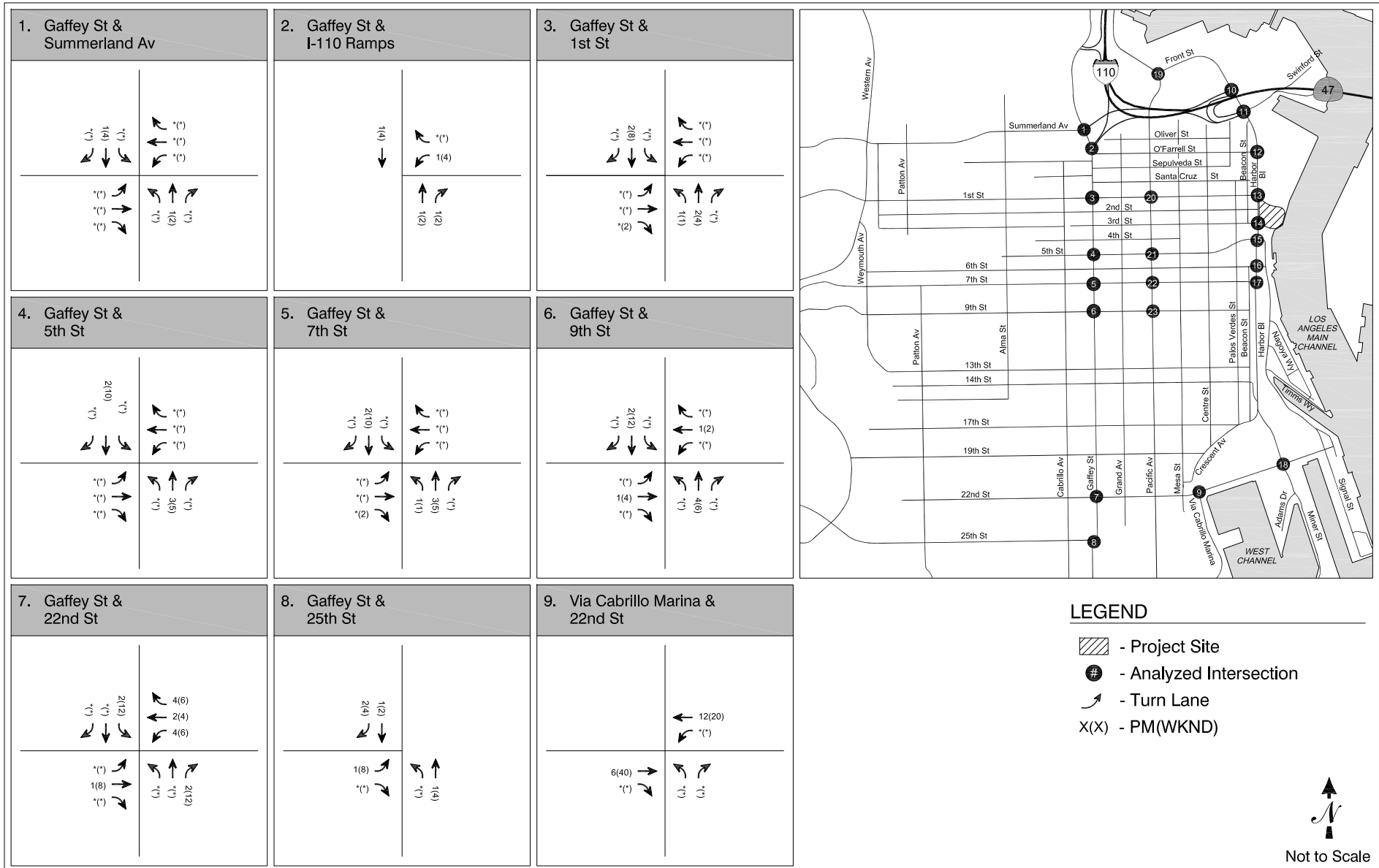
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**APPENDIX E:  
RELATED PROJECT VOLUMES (OPENING YEAR)**



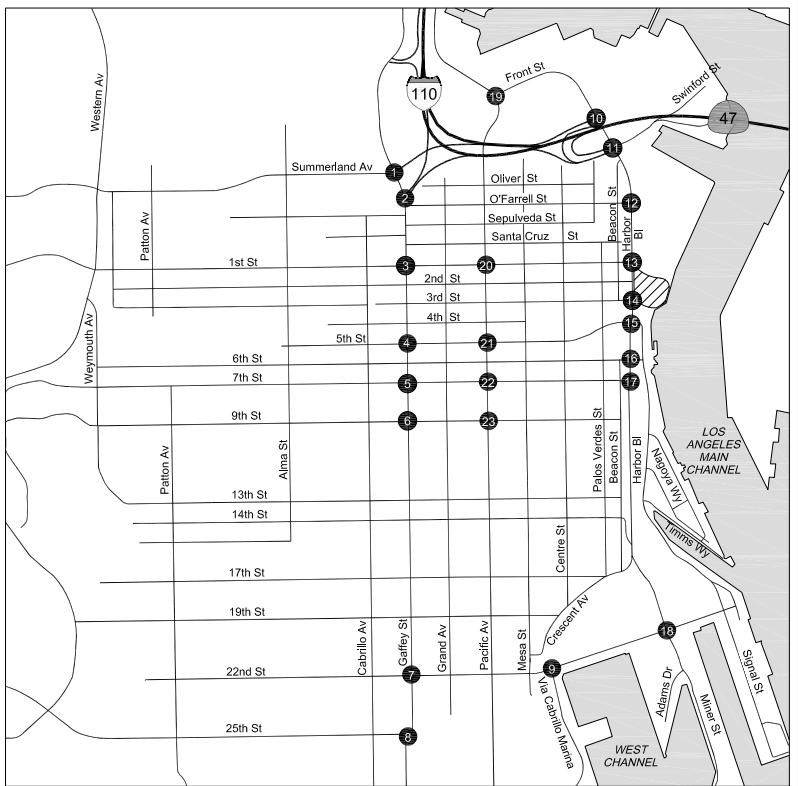


**LEGEND**

- Project Site
- Analyzed Intersection
- Turn Lane
- PM(WKND)

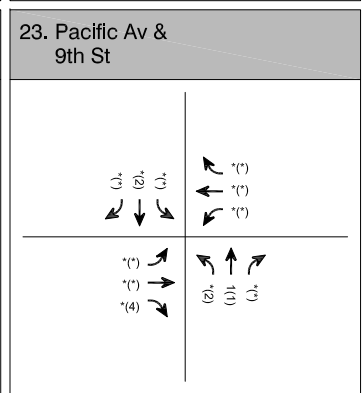
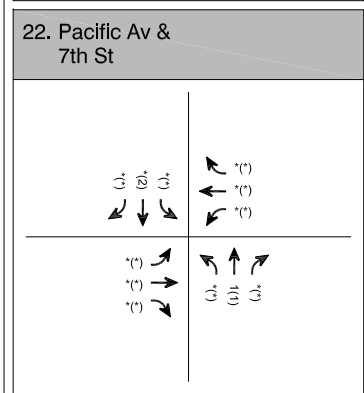
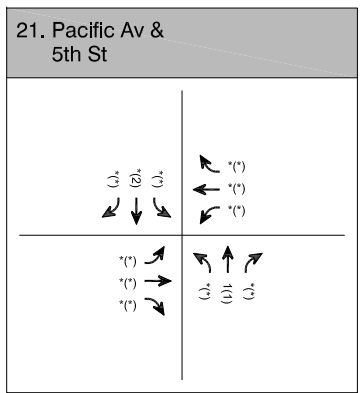
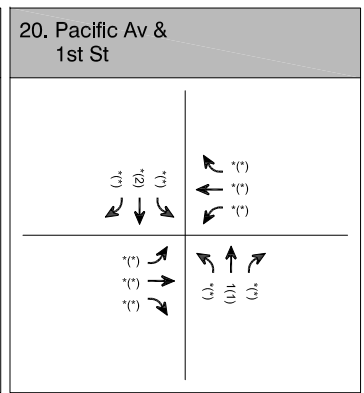
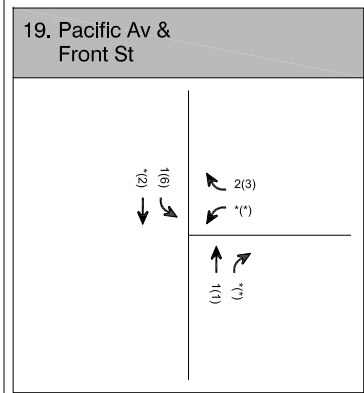
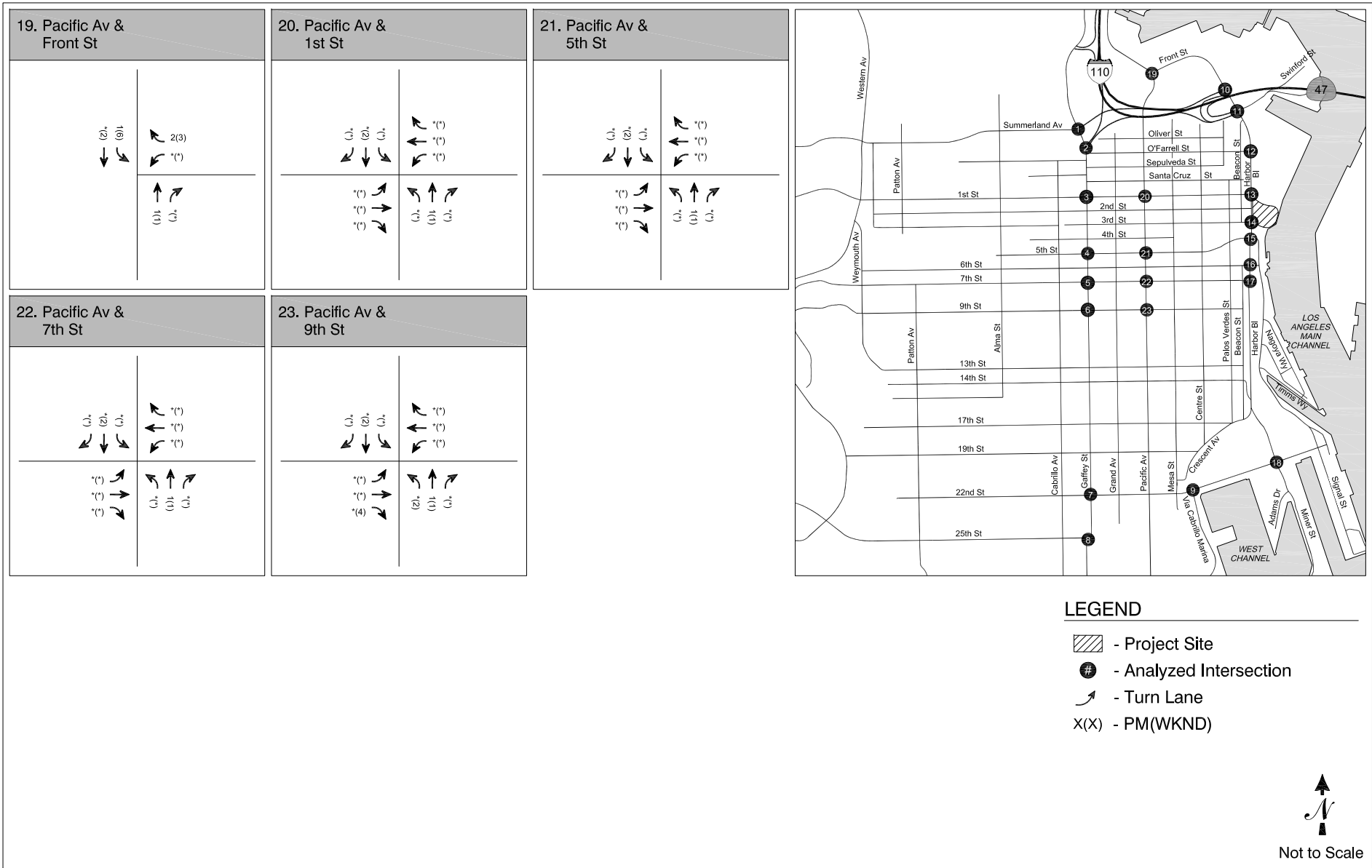


<p><b>10. Harbor BI &amp; 47 On-Ramp</b></p>	<p><b>11. Harbor BI &amp; Swinford St/47 Ramps</b></p>	<p><b>12. Harbor BI &amp; O'Farrell St</b></p>
<p><b>13. Harbor BI &amp; 1st St</b></p>	<p><b>14. Harbor BI &amp; 3rd St</b></p>	<p><b>15. Harbor BI &amp; 5th St</b></p>
<p><b>16. Harbor BI &amp; 6th St</b></p>	<p><b>17. Harbor BI &amp; 7th St</b></p>	<p><b>18. Miner St &amp; 22nd St</b></p>



- LEGEND**
- Project Site
  - Analyzed Intersection
  - Turn Lane
  - PM(WKND)





**LEGEND**

- Project Site
- Analyzed Intersection
- Turn Lane
- PM(WKND)

