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TRAFFIC IMPACT STUDY REPORT

TRAFFIC STUDY
FOR THE
SAN PEDRO WATERFRONT PROJECT
ENVIRONMENTAL IMPACT STATEMENT/
ENVIRONMENTAL IMPACT REPORT

MAY 2008

PREPARED FOR

JONES & STOKES

PREPARED BY

FEHR & PEERS

KAKU ASSOCIATES

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FEHR & PEERS/KAKU ASSOCIATES
201 Santa Monica Boulevard, Suite 500
Santa Monica, California 90401
(310) 458-9916

Ref: LA06-1825

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EXECUTIVE SUMMARY

Fehr & Peers/Kaku Associates conducted a study to analyze the potential traffic and parking impacts of the proposed San Pedro Waterfront Project (proposed Project) in the Port of Los Angeles in Los Angeles, California. Traffic impacts were analyzed for the project buildout year 2015 and the horizon year 2037. The analysis considered seven future scenarios at an equal level of detail. The seven project alternatives are the proposed Project and six alternatives, including a reduced project alternative (Alternative 3), a No Federal Action alternative (Alternative 5), and a No Project alternative (Alternative 6). Traffic operating conditions calculated for the proposed Project and six alternatives were compared against California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) baseline operating conditions to assess potential traffic and parking impacts. The following summarizes the results of this analysis:

- Project Description – The proposed Project would modify or expand the land uses in the project area, including public waterfront and open space areas, commercial development and cruise ship facilities, and make improvements to the existing transportation and parking facilities. The proposed Project elements fall into along three general categories: harbors, promenade and open space; new development and existing tenants; and transportation improvements. The key project elements include the construction of a new Outer Harbor cruise terminal and two cruise ship berths, the redevelopment and expansion of Ports O' Call to a total of 300,000 square feet (sf) of retail and restaurant uses, a new 75,000 sf conference center, reuse of Warehouses No. 9 and 10, and various new parks and a waterfront promenade.

- Project Alternatives – Alternatives 1 through 5 are similar in design to the proposed Project but differ slightly with certain project elements. Alternative 1 would vary the location of cruise ship berths within the project site. Alternative 2 is generally similar to the proposed Project except that it would locate cruise passenger parking for the Outer Harbor terminal at the Outer Harbor itself, rather than at the Inner Harbor as proposed under the project. Alternative 3 is the reduced project alternative. Alternative 4 would not build the North Harbor or Outer Harbor cruise facilities. Alternative 5 is the development scenario that could occur without any federal approval (NEPA baseline). This No Federal Action alternative does not include any waterside improvements, but does propose to redevelop Ports O' Call, reuse Warehouses No. 9 and 10, and develop the parks and other various landside improvements similar to the proposed Project. Alternative 6 (CEQA baseline) is the No Project scenario and does not include any of the new development proposed as part of the project.

- Project Location and Study Area – The San Pedro Waterfront Project is located within the Port of Los Angeles in the San Pedro community of the City of Los Angeles. It is approximately 24 miles south of downtown Los Angeles and is adjacent to the Los Angeles Harbor, which feeds into the Pacific Ocean. The project area comprises approximately 400 acres and generally encompasses the land and water areas between Los Angeles Harbor's Main Channel to the east and Harbor Boulevard to the west, from the Vincent Thomas Bridge to the north to Cabrillo Beach to the south.

  The study area, selected in consultation with the Los Angeles Department of Transportation (LADOT), is bounded by the Harbor's Main Channel to the east, Western Avenue to the west, Front Street to the north and 25th Street to the south. A total of 36 intersections and two street segments were selected for evaluation. The study area, study intersections and study street segments are illustrated in Figure ES-1.

  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.

- Existing and Future Baseline Conditions – The study examined 36 intersections in the vicinity of the project site in the weekday morning and afternoon peak hours and in the weekend midday peak hour in two horizon years. In addition, the study evaluated the potential for neighborhood traffic intrusion impacts on two local street segments near the project. Existing level of service (LOS) analysis that indicated that four of the 36 study intersections are currently operating at poor LOS (LOS E or F) during one or more analyzed peak hours.

  CEQA and NEPA baseline operating conditions were developed for 2015 and 2037. For the CEQA baseline, six intersections in 2015 and eight intersections in 2037 are projected to operate at poor LOS (LOS E or worse). For the NEPA baseline, eight intersections in 2015 and 10 intersections in 2037 are projected to operate at poor levels of service (LOS E or worse).

- Proposed Project and Project Alternative Trip Generation – In 2015 the proposed Project and Alternatives 1 through 5 are estimated to generate between 7,570 and 18,350 net new daily weekday trips, including approximately 473 to 1,108 trips during the a.m. peak hour and 618 to 1,313 trips during the p.m. peak hour, and between 7,441 and 17,861 net new weekend daily trips, including 671 to 1,917 during the weekend midday peak hour.

  In 2037 the proposed Project and Alternatives 1 through 5 are estimated to generate between 9,901 and 22,679 net new daily weekday trips, including approximately 710 to 1,550 trips during the a.m. peak hour and 684 to 1,435 trips during the p.m. peak hour, and between 9,772 and 22,190 net new weekend daily trips, including 934 to 2,406 during the weekend midday peak hour.

  Table ES-1 summarizes the net new trips generated by the proposed Project and Alternatives 1 through 5 for 2015 and 2037 compared to the No Project baseline (Alternative 6).

- Traffic Impact Analysis – The proposed Project and alternatives were found to result in potentially significant traffic impacts at between six and 12 intersections in 2015 and between eight and 17 intersections in 2037 under CEQA. Significant traffic impacts under NEPA were fewer and smaller when compared to those identified under CEQA, but the proposed Project and alternatives would result in potentially significant impacts at between zero and 10 intersections in 2015 and between zero and 16 intersections in 2037 under NEPA.

  Table ES-2 provides a summary of the CEQA and NEPA impacts by intersection for each project alternative in 2015. Similarly, Table ES-3 provides a summary of the CEQA and NEPA impacts by intersection for each project alternative in 2037.

- Proposed Intersection Mitigation – Where feasible, mitigation measures are suggested for the 17 impacted intersections. The suggested mitigations are focused on reducing the identified traffic impacts to less than significant levels.

  5. Gaffey Street & 9th Street – The mitigation measure for this intersection includes modifying the southbound approach to provide one left-turn lane, two through lanes and one though/right-turn lane. The prohibition of parking during the morning and afternoon peak periods on Gaffey Street in both the northbound and southbound directions north of 9th Street would be needed to implement this mitigation measure. While no feasible measures have been identified to address the impact at this location during the weekend midday peak hour, this intersection is projected to operate at an acceptable level of service under all scenarios (LOS D or better) in the weekend midday peak hour.

  6. Gaffey Street & 7th Street – The mitigation measure for this intersection includes prohibiting parking on Gaffey Street during the morning and afternoon peak periods to allow for an additional through lane in both the northbound and southbound directions. While no feasible measures have been identified to address the impact at this location during the weekend midday peak hour, this intersection is projected to operate at an acceptable level of service under all scenarios (LOS D or better) in the weekend midday peak hour.

  7. Gaffey Street & 6th Street – The mitigation measure for this intersection includes installing a traffic signal and prohibiting parking on Gaffey Street during the morning and afternoon peak periods to allow for an additional through lane both northbound and southbound.

  8. Gaffey Street & 5th Street – The mitigation measure for this intersection includes prohibiting parking on Gaffey Street during the morning and afternoon peak periods to allow for an additional through lane both northbound and southbound. No feasible measures have been identified to address the impact at this location during the weekend midday peak hour.

  9. Gaffey Street & 1st Street – Because of existing physical constraints, no feasible measures have been identified that would mitigate the identified impact under any of the future scenarios.

20. Miner Street & 22nd Street – The mitigation measure for this intersection includes modifying the northbound and southbound approaches to provide one left-turn lane, one through lane and one though/right-turn lane.

21. Harbor Boulevard/Miner Street & Crescent Drive – Because of existing physical constraints, no feasible measures were identified that would mitigate the identified impact under any of the future scenarios.

22. Harbor Boulevard & 7th Street – The mitigation measure for this intersection includes reconfiguring the eastbound approach to provide two left-turn lanes, one through lane onto Sampson Way and one shared through/right-turn lane, and prohibiting parking on the north side of 7th Street between Harbor Boulevard and Palos Verdes Street and on the south side of 7th Street between Harbor Boulevard and Beacon Street.

23. Harbor Boulevard & 6th Street – The mitigation measure for this intersection includes prohibiting parking on Harbor Boulevard and configuring the roadway to provide three southbound lanes, resulting in two through lanes and one shared through/right-turn lane.

24. Harbor Boulevard & 5th Street – The mitigation measure for this intersection includes prohibiting parking on Harbor Boulevard and configuring the roadway to provide three southbound lanes, resulting in one left-turn lane, two through lanes and one shared through/right-turn lane.

25. Harbor Boulevard & 1st Street – The mitigation measure for this intersection includes prohibiting parking on Harbor Boulevard and configuring the roadway to provide three lanes both northbound and southbound. This intersection is projected to operate at an acceptable LOS (LOS C or better) under all scenarios with the proposed mitigation measure in place.

26. Harbor Boulevard & Swinford Street/SR 47 Eastbound Ramps – The mitigation for this intersection involves restriping the westbound (Swinford Street) approach to provide an additional lane. The westbound approach would be configured with one left-turn lane, one through lane, and one right-turn lane.

27. Front Street & SR 47 Westbound Ramps – Because of physical constraints, no feasible measures were identified that would mitigate the identified impact under any of the future scenarios. This intersection is projected to operate at an acceptable LOS under all scenarios (LOS D or better).

28. Harbor Boulevard & Gulch Road – Because of existing physical constraints, no feasible measures were identified that would mitigate the identified impact under any of the future scenarios.

29. Harbor Boulevard & O'Farrell Street – The mitigation measure for this intersection includes prohibiting parking on Harbor Boulevard and configuring the roadway to provide three lanes both northbound and southbound.

30. Harbor Boulevard & 3rd Street – The mitigation measure for this intersection includes installing a traffic signal at this intersection, prohibiting parking on Harbor Boulevard and configuring the roadway to provide three lanes both northbound and southbound.

34. Gaffey Street & 13th Street – The mitigation measure for this intersection includes modifying the eastbound and westbound approaches to provide one left-turn lane and one shared through/right-turn lane each.

- Effectiveness of Mitigation Measures – In 2015, the identified significant impacts at seven of the 12 impacted intersections could be fully mitigated with capacity increases resulting from lane reconfiguration, restriping or parking restrictions. The significant impacts at one of the 12 impacted intersections could be partially mitigated with these measures. For four of the 12 impacted intersections, no feasible measures were identified that would fully mitigate the significant impact under any of the future scenarios.

  In 2037, the identified significant impacts at five of the 17 impacted intersections could be fully mitigated with capacity increases resulting from lane reconfiguration, restriping or parking restrictions. The significant impacts at eight of the 17 impacted intersections could be partially mitigated with these measures. For four of the 17 impacted intersections, no feasible measures were identified that would fully mitigate the significant impact under any of the future scenarios.

  Table ES-4 provides a summary of the remaining CEQA and NEPA impacts by impacted intersection for each project alternative after mitigation in 2015. Similarly, Table ES-5 provides a summary of the remaining CEQA and NEPA impacts by impacted intersection for each project alternative after mitigation in 2037.

- Neighborhood Street Segment Analysis – An analysis was conducted to determine the potential for project impacts on two local residential streets in neighborhoods near the project site:

  1. Santa Cruz Street between Grand Avenue and Pacific Avenue
  2. 17th Street between Center Street and Palos Verdes Street

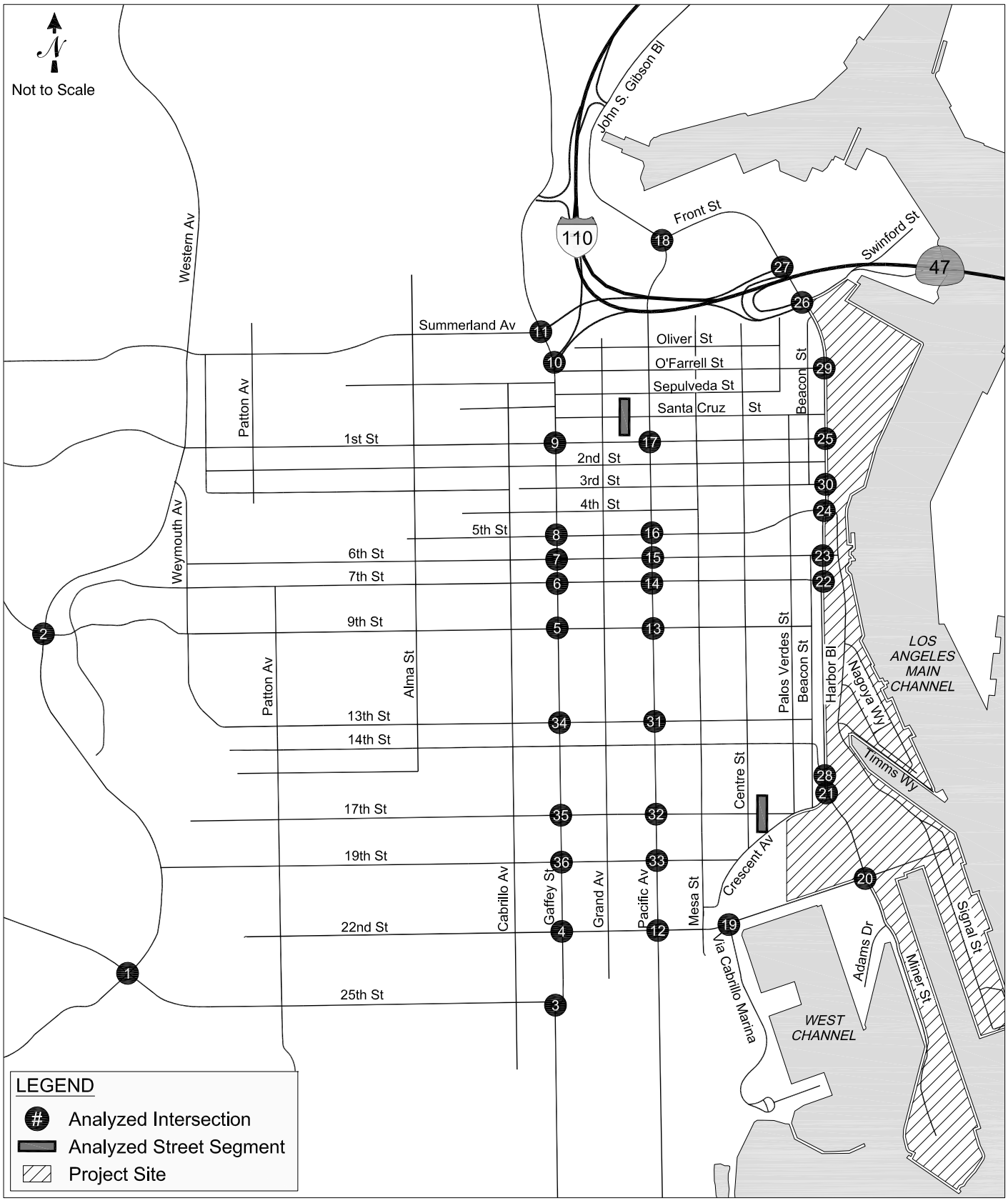
  A significant street segment impact is projected at 17th Street between Centre Street and Palos Verdes Street under CEQA for the proposed Project and for Alternatives 1 and 2. No feasible mitigation measures that would fully eliminate the potential for impacts at this street segment were identified, and this impact is considered significant and unavoidable.

- Congestion Management Program (CMP) Analysis – No significant CMP arterial, CMP freeway or transit impacts are anticipated under the proposed Project or alternatives for either the buildout or horizon year. No mitigation measures would therefore be required. The regional traffic impact analysis studied two CMP arterial intersection locations and four freeway mainline locations. The regional transit impact analysis considered all accessible transit routes in the immediate vicinity of the project site.

- Parking Analysis – The ability of the parking supply proposed under the project and alternatives to meet the applicable requirements of the Los Angeles Municipal Code was

assessed. In addition, the estimated parking need under each future scenario was compared to the proposed parking supply. The project and Alternative 2 would each provide more than sufficient parking to meet the Code requirement and to satisfy the estimated parking need in 2015 and 2037. Alternatives 1, 3, 4 and 5 would each meet the Code parking requirement and satisfy the estimated parking need in 2015. Each of these alternatives would be between 162 and 701 spaces short of the projected 2037 parking need, resulting in a potentially significant parking impact in the long term. Specific recommendations were made to mitigate these shortfalls.

- Waterfront Red Car Expansion Grade Crossing Analysis – The realignment and extension of the Waterfront Red Car streetcar would create numerous new grade crossings where conflicts with vehicular traffic and pedestrians would be possible. Total system mileage would increase from 1.5 miles to 4.6 miles and the number of stations would increase from four to 16. The plans for this project component are being further developed and, as design continues, consideration should be given to minimizing potential conflicts to ensure the maximum safety and convenience. Specific recommendations were made for grade crossings at streets and intersections, for track crossovers within streets and for pedestrian circulation in the vicinity of stations.



FEHR & PEERS
KAKU ASSOCIATES

STUDY AREA AND LOCATION OF ANALYZED INTERSECTIONS AND STREET SEGMENTS

FIGURE ES-1

TABLE ES-1
FUTURE BASELINE AND NET NEW TRIP GENERATION BY PROJECT ALTERNATIVE AND ANALYSIS YEAR

Project Alternative	Year	Weekday			Weekend	
		Daily	AM Peak Hour	PM Peak Hour	Daily	Peak Hour
Baseline trips generated by project site						
Alternative 6 - No Project	2015	17,658	1,172	829	17,772	1,964
	2037	21,168	1,511	926	21,282	2,356
Net increase in trips over baseline						
Proposed Project	2015	18,350	1,108	1,313	17,861	1,917
	2037	22,679	1,550	1,435	22,190	2,406
Alternative 1	2015	14,306	686	1,189	13,836	1,456
	2037	16,637	923	1,255	16,167	1,718
Alternative 2	2015	17,958	1,019	1,288	17,469	1,860
	2037	22,135	1,423	1,403	21,646	2,326
Alternative 3	2015	7,570	473	618	7,441	671
	2037	9,901	710	684	9,772	934
Alternative 4	2015	13,269	597	1,168	13,158	1,375
	2037	13,269	597	1,168	13,158	1,375
Alternative 5 - No Federal Action	2015	13,808	585	1,180	13,355	1,387
	2037	13,808	585	1,180	13,355	1,387

TABLE ES-2
SIGNIFICANT TRAFFIC IMPACTS - PROPOSED PROJECT AND PROJECT ALTERNATIVES (2015)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	PROPOSED PROJECT (YEAR 2015)		ALTERNATIVE 1 (YEAR 2015)		ALTERNATIVE 2 (YEAR 2015)		ALTERNATIVE 3 (YEAR 2015)		ALTERNATIVE 4 (YEAR 2015)		Alternative 5 (Year 2015)
			NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	CEQA
5	Gaffey St & 9th St	AM											
		PM											
		WKND		X				X					
7	Gaffey St & 6th St [a]	AM	X	X			X	X					
		PM											
		WKND		X		X		X					
8	Gaffey St & 5th St	AM		X			X	X					
		PM											
		WKND											
9	Gaffey St & 1st St	AM		X		X		X		X		X	X
		PM											
		WKND		X		X		X		X		X	X
21	Miner St & Crescent Ave [a]	AM			X	X	X	X	X	X			
		PM			X	X	X	X	X	X			
		WKND					X	X					
22	Harbor Bl & 7th St	AM					X	X	X	X			
		PM			X	X	X	X					
		WKND	X	X				X	X	X		X	X
24	Harbor Bl & 5th St	AM											
		PM	X	X		X	X	X		X		X	X
		WKND					X	X					
25	Harbor Bl & 1st St	AM	X	X	X	X	X	X		X			
		PM											
		WKND	X	X		X	X	X				X	X
26	Harbor Bl & Swinford St/SR-47 EB Ramps	AM	X	X			X	X					
		PM											
		WKND	X	X									
28	Harbor Bl & Gulch Rd [b]	AM							X	X			
		PM			X	X	X	X	X	X			
		WKND					X	X					
29	Harbor Bl & O'Farrell St	AM	X	X			X	X					
		PM	X	X		X	X	X		X		X	X
		WKND	X	X	X	X	X	X		X		X	X
30	Harbor Bl & 3rd St [a]	AM	X	X	X	X	X	X	X	X			
		PM	X	X		X	X	X		X		X	X
		WKND	X	X	X	X	X	X		X		X	X
Total Impacted Intersections:			7	10	6	9	10	12	4	8	0	6	6

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE ES-3
SIGNIFICANT TRAFFIC IMPACTS - PROPOSED PROJECT & PROJECT ALTERNATIVES (2037)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	PROPOSED PROJECT (YEAR 2037)		ALTERNATIVE 1 (YEAR 2037)		ALTERNATIVE 2 (YEAR 2037)		ALTERNATIVE 3 (YEAR 2037)		ALTERNATIVE 4 (YEAR 2037)		Alternative 5 (Year 2037)
			NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	CEQA
5	Gaffey St &	AM	X	X			X	X					
	9th St	PM		X		X		X				X	X
		WKND		X		X		X		X		X	X
6	Gaffey St &	AM						X					
	7th St	PM											
		WKND		X				X					
7	Gaffey St &	AM	X	X		X	X	X		X			
	6th St [a]	PM						X					
		WKND	X	X		X	X	X		X		X	X
8	Gaffey St &	AM	X	X			X	X					
	5th St	PM											
		WKND		X		X		X					
9	Gaffey St &	AM	X	X		X		X		X		X	X
	1st St	PM		X				X					
		WKND	X	X		X	X	X		X		X	X
20	Miner St &	AM	X	X									
	22nd St	PM											
		WKND					X	X					
21	Miner St &	AM	X	X	X	X	X	X	X	X			
	Crescent Ave [a]	PM			X	X	X	X	X	X			
		WKND			X	X	X	X	X	X			
22	Harbor Bl &	AM	X	X			X	X	X	X			
	7th St	PM			X	X	X	X	X	X			
		WKND	X	X		X	X	X	X	X		X	X
23	Harbor Bl &	AM											
	6th St	PM											
		WKND	X	X			X	X					
24	Harbor Bl &	AM					X	X					
	5th St	PM	X	X		X	X	X		X		X	X
		WKND	X	X	X	X	X	X					
25	Harbor Bl &	AM	X	X	X	X	X	X	X	X		X	X
	1st St	PM	X	X		X	X	X				X	X
		WKND	X	X	X	X	X	X		X		X	X
26	Harbor Bl &	AM	X	X	X		X	X	X				
	Swinford St/SR-47 EB Ramps	PM	X	X			X	X					
		WKND	X	X			X						
27	Harbor Bl &	AM	X	X	X		X	X	X				
	SR-47 WB On Ramp	PM											
		WKND	X	X		X	X	X					
28	Harbor Bl &	AM							X	X			
	Gulch Rd [b]	PM			X	X	X	X	X	X			
		WKND			X	X	X	X	X	X			
29	Harbor Bl &	AM	X	X		X	X	X		X		X	X
	O'Farrell St	PM	X	X	X	X	X	X		X		X	X
		WKND	X	X	X	X	X	X		X		X	X
30	Harbor Bl &	AM	X	X	X	X	X	X	X	X		X	X
	3rd St [a]	PM	X	X	X	X	X	X		X		X	X
		WKND	X	X	X	X	X	X		X		X	X
34	Gaffey St &	AM	X	X			X	X					
	13th St	PM											
		WKND											
Total Impacted Intersections:			15	16	9	12	16	17	7	10	0	8	8

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE ES-4
SIGNIFICANT TRAFFIC IMPACTS - AFTER MITIGATIONS (2015)

INT #	INTERSECTION	PEAK HOUR	PROPOSED PROJECT		ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3		ALTERNATIVE 4		ALTERNATIVE 5
			NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	CEQA
5	Gaffey St & 9th St	AM											
		PM											
		WKND		X				X					
7	Gaffey St & 6th St	AM											
		PM											
		WKND											
8	Gaffey St & 5th St	AM											
		PM											
		WKND											
9	Gaffey St & 1st St	AM		X		X		X		X		X	X
		PM											
		WKND		X		X		X		X		X	X
21	Miner St & Crescent Ave [a]	AM			X	X	X	X	X	X			
		PM			X	X	X	X	X	X			
		WKND					X	X					
22	Harbor Bl & 7th St	AM							X	X			
		PM											
		WKND		X					X	X			
24	Harbor Bl & 5th St	AM											
		PM											
		WKND											
25	Harbor Bl & 1st St	AM											
		PM											
		WKND											
26	Harbor Bl & Swinford St/SR-47 EB Ramps	AM											
		PM											
		WKND											
28	Harbor Bl & Gulch Rd [b]	AM							X	X			
		PM			X	X	X	X	X	X			
		WKND					X	X					
29	Harbor Bl & O'Farrell St	AM											
		PM											
		WKND											
30	Harbor Bl & 3rd St	AM											
		PM											
		WKND											
Total Impacted Intersections:			0	3	2	3	2	4	3	4	0	1	1

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE ES-5
SIGNIFICANT TRAFFIC IMPACTS - AFTER MITIGATIONS (2037)

INT #	INTERSECTION	PEAK HOUR	PROPOSED PROJECT		ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3		ALTERNATIVE 4		ALTERNATIVE 5
			NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	CEQA
5	Gaffey St & 9th St	AM	X	X			X	X					
		PM											
		WKND		X		X		X		X		X	X
6	Gaffey St & 7th St	AM											
		PM											
		WKND		X				X					
7	Gaffey St & 6th St	AM											
		PM											
		WKND											
8	Gaffey St & 5th St	AM											
		PM											
		WKND		X		X		X					
9	Gaffey St & 1st St	AM	X	X		X		X		X		X	X
		PM		X				X					
		WKND	X	X		X	X	X		X		X	X
20	Miner St & 22nd St	AM											
		PM											
		WKND											
21	Miner St & Crescent Ave [a]	AM	X	X	X	X	X	X	X	X			
		PM			X	X	X	X	X	X			
		WKND			X	X	X	X	X	X			
22	Harbor Bl & 7th St	AM	X	X			X	X	X	X			
		PM			X	X	X	X					
		WKND	X	X				X	X	X		X	X
23	Harbor Bl & 6th St	AM											
		PM											
		WKND					X	X					
24	Harbor Bl & 5th St	AM					X	X					
		PM											
		WKND	X	X			X	X					
25	Harbor Bl & 1st St	AM		X				X					
		PM											
		WKND						X					
26	Harbor Bl & Swinford St/SR-47 EB Ramps	AM	X				X						
		PM											
		WKND	X										
27	Harbor Bl & SR-47 WB On Ramp	AM	X	X	X		X	X	X				
		PM											
		WKND	X	X		X	X	X					
28	Harbor Bl & Gulch Rd [b]	AM							X	X			
		PM			X	X	X	X	X	X			
		WKND			X	X	X	X	X	X			
29	Harbor Bl & O'Farrell St	AM											
		PM											
		WKND											
30	Harbor Bl & 3rd St	AM											
		PM											
		WKND											
34	Gaffey St & 13th St	AM											
		PM											
		WKND											
Total Impacted Intersections:			7	9	4	7	9	11	4	5	0	3	3

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

I. INTRODUCTION

Fehr & Peers/Kaku Associates conducted a traffic study to evaluate the potential traffic impacts of the proposed San Pedro Waterfront Project (proposed Project) within 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 as part of the environmental impact statement/environmental impact report (EIS/EIR) being prepared for the project. The traffic impact analysis conducted for this report includes analysis of both 2015 (project buildout) and 2037 (end of proposed lease period for cruise terminals) conditions with the project. Six project alternatives, including the No Federal Action and No Project alternative are fully analyzed for traffic impacts, in addition to the analysis of the proposed Project.

PROJECT DESCRIPTION

The San Pedro Waterfront Project is within the Port in the San Pedro community of the City of Los Angeles. It is approximately 24 miles south of downtown Los Angeles and is adjacent to the Los Angeles Harbor, which feeds from the Pacific Ocean. The project area comprises approximately 400 acres along the western boundary of the Port adjacent to the community of San Pedro. The project boundaries generally encompass the land and water areas between Los Angeles Harbor's Main Channel to the east and Harbor Boulevard to the west, from the Vincent Thomas Bridge to the north to Cabrillo Beach to the south. For the traffic impact analysis, a study area was developed in coordination with the Los Angeles Department of Transportation (LADOT) that included intersections on the basis of their location in relation to the project site and the potential for project-related traffic to use them. The study area extends throughout the San Pedro community and is bounded by the Harbor's Main Channel to the east, Western Avenue to the west, Front Street to the north, and 25th Street to the south. Figure 1 illustrates the project site and study areas. All report figures and tables are provided at the end of this report.

The proposed Project would modify or expand the land uses in the project area, including public waterfront and open space areas, commercial development and cruise ship facilities, and make improvements to the existing transportation and parking facilities.

Project Elements

The proposed Project elements fall into along three general categories, including:

- Harbors, promenade and open space
- New development and existing tenants
- Transportation improvements

The detailed project elements in each of these larger land use categories are described below. Figure 1 offers an overview of the elements included in the proposed Project. Figures 2 through 4 provide detailed views of areas of Figure 1. Figure 2 shows the Inner Harbor cruise terminal, the North Harbor, the Downtown Harbor and 7th Street Harbor project elements. Figure 3 shows Ports O' Call project elements and the San Pedro Park. Figure 4 shows City Dock #1 and the Outer Harbor project elements.

Harbors, Promenade and Open Space

The proposed Project includes the development of three new harbors, including the North Harbor, the Downtown Harbor, and 7th Street Harbor. The proposed Project also includes new public open spaces that consist of promenade areas, plazas, parks, and landscape and hardscape areas. The key components of each of these elements are described in greater detail below.

North Harbor. The North Harbor would include a 5.7-acre water cut at Berths 87-90 that would accommodate tugboats and visiting historic and naval vessels. The S.S. Lane Victory, a functioning World War II Victory ship that acts as a floating museum, would also be relocated to this area. The harbor cut would extend from the existing water's edge to approximately 50 feet east of the Harbor Boulevard parkway improvements. Construction of the North Harbor would

displace a temporary cruise ship berth at Berths 87-90 occasionally used by embarking and disembarking cruise passengers.

Downtown Harbor. The Downtown Harbor includes a 1.9-acre water cut to accommodate the Los Angeles Maritime Institute's Top Sail Youth Program vessels, Harbor vessels and other visiting ships. The water cut would move the existing water's edge approximately 160 feet to the west of the existing Main Channel. The existing wharf at Berth 86 would be modified to provide access to the new harbor. Relocation of the existing uses in this area, including the temporary facility for the Top Sail Youth Program and surface parking, would be required.

7th Street Harbor/7th Street Pier. The 7th Street Harbor includes a 0.36-acre water cut for visiting vessels adjacent to the Los Angeles Maritime Museum. The new harbor would feature the 7th Street Pier, which would become the public dock for short-term berthing of visiting vessels. Construction would involve demolition of the porte cochere at the existing Acapulco restaurant, removal of existing surface parking, and demolition of approximately 12 marina slips and a portion of the floating dock (4,000 square feet [sf]). Existing marina slips would be replaced as part of the Cabrillo Marina Phase II project.

Town Square. The Town Square would comprise approximately 0.8 acres in front of the historic San Pedro Municipal Ferry Building (now the Los Angeles Maritime Museum) at the foot of 6th Street and would incorporate a portion of the downtown promenade, bus drop-off areas, and surface parking (14 spaces). The Town Square would be able to be closed to vehicular traffic for special events in the plaza. Demolition of the existing street (6th Street), sidewalks, and surface parking would be required.

Downtown Water Feature. The 12,000 sf downtown water feature would be adjacent to the Town Square and would include an interactive water component. The interactive water feature would be designed to complement the civic setting of the adjacent San Pedro City Hall Building and the Town Square and simulate the extension of the 7th Street Harbor to the San Pedro City Hall Building.

John S. Gibson, Jr. Park. John S. Gibson, Jr. Park is an existing 1.6-acre park east of Harbor Boulevard near 5th Street. The proposed improvements would be designed to enhance

pedestrian access to and throughout the John S. Gibson, Jr. Park and the memorials and to position the park as an integral element in the Downtown Harbor district.

Waterfront Promenade. The proposed Project would feature an approximately 30-foot wide continuous promenade extending along the waterfront throughout the entire project area. The promenade would include a boardwalk, railing, lighting, pedestrian signage, landscaping and seating. The promenade components would further develop the California Coastal Trail along the San Pedro Waterfront, providing signage and linking open spaces and points of interest. The promenade would run along the edges of the proposed new harbors and would be constructed over the water at many locations along its alignment.

Pedestrian and Waterfront Access Linkages. One of the key features of the proposed Project is enhanced public access to the waterfront. These linkages would include a safe direct pedestrian crossing at Harbor Boulevard and Swinford Street and a new pedestrian bridge at 13th Street between Harbor Boulevard and Sampson Way. The pedestrian bridge would be constructed over the proposed Waterfront Red Car maintenance facility at the bluff to provide access to Ports O' Call. Pedestrian crossings and access to the waterfront would also be provided at 1st, 3rd, 5th, 6th and 7th Streets.

Fishermen's Park. The proposed Fishermen's Park would encompass approximately six acres within Ports o' Call and would be designed as an integral feature of the commercial development proposed for Ports O' Call under this project. Fishermen's Park would be designed to accommodate Ports O' Call visitors, encourage harbor/main channel viewing, allow for picnicking and host special events. It would incorporate landscaping, walkways, outdoor furniture, lighting, signage, a water feature, and an amphitheater with lawn seating for 500 people. Parking for Fishermen's Park would be shared with the Ports O' Call commercial development. The precise location of the proposed park within Ports O' Call is currently unknown, but details will be developed during a future design phase for the entire Ports O' Call area. Because of the location of the existing Jankovich & Son, Inc. Fueling Station, assessment of the park in this EIS/EIR assumes that the park could be adjacent to or near the Jankovich operations.

Outer Harbor Park. The proposed Outer Harbor Park would encompass approximately six acres at the Outer Harbor and would be designed as an integral feature and complementary to the secure operations of the proposed Outer Harbor Cruise Terminal. The Outer Harbor Park would

be designed to maximize harbor views, facilitate public access to the water's edge, encourage special events, and segregate park visitors from the secure areas of the proposed Outer Harbor Terminal, consistent with the security plan required to operate the Outer Harbor Cruise Terminal. The Outer Harbor Park would incorporate landscaping, walkways, lighting, signage, and outdoor furniture. The Outer Harbor Park would include 60 parking spaces and would incorporate access to the proposed Waterfront Red Car Line station proposed as part of the Waterfront Red Car Line extension to the Outer Harbor. Portions of the Outer Harbor Park would be on the roof of the Outer Harbor Cruise Terminal to maximize public access to the water's edge and harbor views.

San Pedro Park. The proposed San Pedro Park would encompass 18 acres north of 22nd Street and south of Crescent Avenue. The proposed San Pedro Park would be designed to expand on and to complement the 22nd Street Landing Park approved under the Waterfront Enhancements Project. San Pedro Park would be designed to foster waterfront gatherings, host special civic and cultural events, encourage recreation, and allow for children's play areas. San Pedro Park would be designed as a typical "central park" for the San Pedro Waterfront, incorporating all of the park elements and program spaces associated with central parks and design details specific to the San Pedro Waterfront. San Pedro Park would be designed to include an informal amphitheater for harbor viewing and hosting waterfront events and concerts with lawn seating for approximately 3,000 people. San Pedro Park would include botanical and culturally-themed gardens, an overlook for harbor viewing, a sculpture garden, public art, water features, promenades, children's play areas, picnic areas and an expansive lawn to host special events, including movies/theater/performances in the park. San Pedro Park would incorporate landscaping, walkways, lighting, signage and outdoor furniture.

San Pedro Park would provide 500 parking spaces and incorporate access to the proposed Waterfront Red Car Line station at 22nd Street & Miner Street proposed as part of the Waterfront Red Car Line realignment associated with the Sampson Way improvements proposed under this project.

Reuse of Warehouses Nos. 9 and 10. Warehouse No. 9 would be reused for either recreational or community-serving commercial uses and would be incorporated as an integral element of San Pedro Park. Warehouse No. 9 is 70,000 sf and is assumed to provide 35,000 sf of retail and 35,000 sf of warehouse space. A mercado has been one suggested use for the retail component.

Warehouse No. 10 is 87,500 sf and would be converted to an indoor parking facility with approximately 200 spaces.

New Development and Existing Tenants

The proposed Project includes new development opportunities for commercial and maritime-related uses, relocation and/or renewal of existing tenant leases, expansion of the cruise ship facilities, and provision of associated parking facilities. Each of the project components is described in additional detail below.

Cruise Ship Facilities – Berths and Terminals. The proposed Project would include upgrading the existing Berths 45-47 for use as a cruise ship berth in the Outer Harbor to accommodate the berthing of 1,250-foot vessels. These berths would replace the cruise ship berth occasionally used at Berths 87-90 that would be displaced by construction of the North Harbor water cut. The proposed Project would also include the construction at Berths 49-50 of a second cruise ship berth able to accommodate 1,250-foot vessels in the Outer Harbor.

The proposed Project would include construction of two new, two-story, up to 200,000 sf (total combined size) Outer Harbor cruise ship terminals designed to accommodate the simultaneous berthing of two 1,250-foot cruise vessels at Berths 45-47 and Berths 49-50 and satisfy the security requirements essential to operate a cruise terminal. The Outer Harbor Cruise Terminal would incorporate the proposed Outer Harbor Park as an integral feature complementary to the secure operations of the Outer Harbor Cruise Terminal. Park visitors would remain outside the secure areas of the cruise terminal.

Ships are expected to stay in the Port for approximately 12 hours per call. Weekends will remain the key days for the operations of cruise ships, and Fehr & Peers/Kaku Associates assumed in the traffic analysis that four ships per day will call on the Port on Fridays, Saturdays, Sundays and Mondays. Midweek, cruise ship calls to the Port will be continue to be inconsistent and difficult to project.

Cruise Ship Facilities – Parking for Cruise Ships. The proposed upgrades to Berths 45-47 and the construction of a new cruise berth and terminal facility at Berths 49-50 in the Outer Harbor

would require additional parking facilities to accommodate the increase in cruise passengers. Parking for the combined cruise ship facilities would be in the Inner and Outer Harbors.

Inner Harbor Parking (Berths 91-93) would provide approximately 4,200 parking spaces in surface lots and in two-story (three-level) structures at the existing World Cruise Center. Parking for all cruise passengers at Berths 45-47 and Berths 49-50 who travel by private vehicle would be located within the Inner Harbor structures, and those passengers would be shuttled to and from the Outer Harbor. The newer cruise ships calling at the Outer Harbor would require between 17 and 20 parking shuttles per vessel, each accommodating approximately 50 passengers plus luggage.

Approximately 400 non-passenger surface parking spaces would be dedicated to cruise facilities in the Outer Harbor (Berths 46-50) area. These spaces would be for longshoremen, terminal operators, administrative staff, Customs and Border Patrol personnel, as well as Port Police. As discussed, the passenger parking for the Outer Harbor Cruise Terminals would be provided in the Inner Harbor, and passengers would be shuttled to and from the Outer Harbor Cruise Terminals.

Ports O' Call Redevelopment – Development. The proposed Project would provide opportunities for redeveloping and expanding the existing development in Ports O' Call Village. Ports O' Call currently contains approximately 150,000 sf of commercial retail and restaurant uses, of which two-thirds is assumed to be occupied. The proposed Project would allow for a total of 300,000 sf of development at this location, approximately 125,000 sf for restaurant uses and approximately 175,000 sf for commercial uses. Ports O' Call would also include a new 75,000 sf conference center, which would contain approximately 37,500 sf of usable conference space. Therefore, when completed, the Ports O' Call area would have a total of 375,000 sf of commercial, retail, restaurant, and conference space.

Ports O' Call Redevelopment – Parking. The expansion and new development at Ports O' Call would require adequate parking. Parking would be provided at a number of locations in the Port and near Ports O' Call. The following parking areas would not be available to cruise ship passengers and would be dedicated to Ports O' Call:

- Approximately 400 surface spaces at Berths 78-83 would also be dedicated to the Downtown Harbor area

- Approximately 1,652 spaces in four multi-level parking structures constructed at the bluff site (height of the structures would be limited to the top of the bluffs, with vehicular access on both Harbor Boulevard and on Sampson Way)
- Approximately 330 existing surface spaces at Berths 73-77
- 256 spaces in a new surface parking lot proposed at 22nd Street & Sampson Way

The proposed Project would improve access between Ports O' Call and the Waterfront Red Car Line by providing stations at 7th Street and 13th Street to encourage the sharing of waterfront parking resources and to reduce vehicle trips between on-site destinations.

Southern Pacific Railyard Demolition. The Southern Pacific (SP) Railyard currently comprises approximately seven acres between 7th Street and the SP Slip at the bottom of the bluff east of Harbor Boulevard. The proposed Project would remove the SP Railyard to allow for the proposed bluff site parking structures.

Waterfront Red Car Maintenance Facility. The proposed Waterfront Red Car maintenance facility would be approximately 17,600 sf, and would be in the existing bluff railyard at a location north of 13th Street. An exterior service yard of approximately 20,000 sf adjacent to the building would be required as a wash-down area for streetcars. Upon completion of this new facility, the existing temporary Waterfront Red Car maintenance facility at 22nd Street & Miner Street would be removed. Parking for the Waterfront Red Car maintenance facility would be combined with the parking for Ports O' Call.

Ralph J. Scott Fireboat Museum. The Ralph J. Scott Fireboat Museum would comprise an approximately 10,000 sf site within a multi-level display structure approximately 50 feet high. The proposed structure would be built on the south side of existing Fire Station No. 112 and would be incorporated into the existing pile-supported plaza. Parking for the Ralph J. Scott Fireboat Museum would be in a surface parking lot adjacent to Acapulco restaurant.

Demolition of Westway Terminal. The proposed Project includes the demolition of the 14.3-acre Westway Terminal at Berths 70-71. Westway currently uses the SP Railyard, which is proposed for removal under this project. Current occupancy and operations by Westway is expected to cease no later than February 23, 2009. A future use has not yet been determined for

the site and, for the purpose of this analysis, the development of a Research and Development office park on the site is assumed.

Tugboats. The proposed Project includes lease renewals and the construction of new 10,000 sf buildings around the North Harbor for both Crowley and Millennium tugboat operations. The tugboats would be berthed in the proposed North Harbor. Parking for the tugboat operations would be accessed from 1st Street.

Los Angeles Maritime Institute. The proposed Project includes lease renewal and the reuse of the Crowley building (a two-story 5,200 sf building with an outdoor carport) in the Downtown Harbor area for the Los Angeles Maritime Institute. Parking for the Los Angeles Maritime Institute would be in the North Harbor area.

S.S. Lane Victory. The proposed Project involves relocation of the S.S. Lane Victory from Berth 95 to the North Harbor water cut. A new 10,000 sf building would be constructed in the North Harbor area to support the S.S. Lane Victory visitors' center, and the lease would be renewed for this operation. Parking for the S.S. Lane Victory would be in the North Harbor area.

Jankovich & Son, Inc. Fueling Station. The existing lease for the Jankovich & Son, Inc. Fueling Station, which expires in 2007, is proposed for renewal for a term of up to 20 years. Existing fuel tanks would be upgraded, and the type of commodities and tank capacities would be modified to comply with the Port Risk Management Plan. A temporary tank farm would need to be established during the upgrades of the storage tanks, which would likely be adjacent to the existing facility within Ports O' Call. This fueling station provides service to tugboats and other shipping operations within the harbor, including alternative fuels in accordance with the San Pedro Bay Clean Air Action Plan (CAAP).

Mike's Main Channel Fueling Station. Mike's Main Channel Fueling Station, located near the Municipal Fish Market, would also receive a lease renewal in its in existing location for 10 years. This fueling station provides service to tugboats and other shipping operations within the harbor, including alternative fuels in accordance with the CAAP.

Catalina Express. The proposed Project would include the permanent relocation of the Catalina Express Terminal berthing facilities from Berth 96 to the current location of the S.S. Lane Victory

at Berth 95. Vehicular access to this project component would be unchanged. Parking for Catalina Express would include approximately 700 spaces beneath the Vincent Thomas Bridge and 300 spaces in the proposed parking structures adjacent to the Inner Harbor Cruise Terminal.

Transportation Improvements

The proposed Project involves a series of transportation improvements, including expansion of existing roadways, intersection, landscape and parking improvements, and the realignment and expansion of the Waterfront Red Car Line. Each of these components is described below.

Expansion and Realignment of Sampson Way. Sampson Way would be expanded to two lanes in each direction and would curve near the wholesale fish market to meet with 22nd Street in its westward alignment east of Miner Street. The Waterfront Red Car Line would be relocated to the east side of the expanded and realigned Sampson Way. In the vicinity of 13th Street, the alignment would transition from the east side Sampson Way to the west side. The proposed Waterfront Red Car extension is discussed separately below. Sampson Way would be accessed from 7th Street, as described below.

7th Street & Sampson Way Intersection Improvements. The proposed Project would include an enhanced intersection at Sampson Way & 7th Street to provide improved access to and along the waterfront. The current access to Sampson Way via 5th Street and 6th Street would no longer be possible. East of Harbor Boulevard, 6th Street would provide local access to a 14-space surface parking lot and a bus drop-off area in the Town Square area in front of the Los Angeles Maritime Museum.

Harbor Boulevard. Harbor Boulevard would remain in place at its current capacity with two lanes in each direction. Landscaping and hardscape improvements are proposed along the west side of Harbor Boulevard south of 7th Street, as well as in the median of Harbor Boulevard starting at the Swinford Street intersection, and would extend south to 22nd Street. The Waterfront Red Car line would be side-running along the east side of Harbor Boulevard and then transition to Sampson Way at 7th Street.

Surface Parking Adjacent to Acapulco Restaurant and the Downtown Harbor. A 138-space surface parking lot would be constructed adjacent to Acapulco restaurant to serve restaurant patrons and existing and future Downtown Harbor uses. Access to this parking lot would be provided by the realigned Sampson Way.

Waterfront Red Car Extension. The Waterfront Red Car Line would be realigned and extended from its existing terminus near the intersection of 22nd Street & Miner Street along three branches:

- City Dock No. 1 extension adjacent to Warehouse No. 1
- Outer Harbor/Cruise Ship Terminal extension along Miner Street
- Cabrillo Beach/Marina extension along Via Cabrillo Marina and Shoshonean Way

The northern end of the Waterfront Red Car Line would remain in its current location south of Swinford Street. It would operate in a side-running alignment for most of the proposed extensions. Between 5th Street and 7th Street, the Waterfront Red Car would operate on a single-track, 16-foot section adjacent to the eastern edge of Harbor Boulevard and outside of the traveled roadway. In the vicinity of 13th Street, the alignment would transition from the east side Sampson Way to the west side. The Outer Harbor/Cruise Ship Terminal extension on Miner Street south of 22nd Street would operate in a center-running alignment. The Cabrillo Beach/Marina extension would operate primarily on a single-track, 16-foot section adjacent to the western edges of Via Cabrillo Marina and Shoshonean Way outside of the traveled roadways.

PROJECT ALTERNATIVES

As part of the joint EIS/EIR process, full consideration must be given to each of the identified project alternatives. Seven alternatives, including the proposed Project, the No Project California Environmental Quality Act (CEQA) Baseline (Alternative 6), the No Federal Action Baseline (Alternative 5) and four alternative development scenarios, are assessed at an equal level of detail in this report. The proposed Project is described in detail above. This section describes the other six alternatives. The descriptions focus on how each project alternative deviates from the proposed Project for purposes of the traffic impact analysis.

Alternative 1

Alternative 1 is an alternative development scenario with some elements that are the same as the proposed Project and some that are different. Figure 5 shows a proposed concept plan for this alternative. Under Alternative 1, the following new development and existing tenant project elements would differ from the proposed Project:

Cruise Ship Facilities – Berths and Terminals. Alternative 1 would reduce the number of cruise berths in the Inner Harbor from three to two, due to the construction of the North Harbor. The existing terminal at Berth 91 would be demolished, and a new 200,000 sf terminal would be developed to serve Berths 87 and 91. Alternative 1 also includes one new 1,250-foot berth in the Outer Harbor with a new terminal facility of approximately 100,000 sf.

Cruise Ship Facilities – Parking for Cruise Ships. Parking at the Inner Harbor (Berths 91-93) would consist of 3,325 spaces in new two-story (three-level) parking structures and surface lots. This parking would be dedicated to the Inner and Outer Harbor Cruise Terminals and to the Catalina Express Terminal. Parking for all cruise passengers at the Outer Harbor terminal who travel by private vehicle would be in the Inner Harbor structures, and those passengers would be shuttled to and from the Outer Harbor. The Outer Harbor parking would consist of 200 surface parking spaces dedicated to non-passenger uses for the Outer Harbor cruise activities.

Waterfront Red Car Museum and Maintenance Facility. The Waterfront Red Car Museum and maintenance facility would both be at Warehouse No. 1 under Alternative 1, as opposed to the museum being outside of the project area and the maintenance facility at the 13th Street bluff site in the project area, as they would be under the proposed Project.

Jankovich & Son, Inc. and Mike's Main Channel Fueling Stations. The Jankovich & Son, Inc. and Mike's Main Channel fueling stations would relocate to Berth 240 on Terminal Island and would receive 20-year lease renewals there.

The following transportation improvement project elements would change under Alternative 1, when compared to the proposed Project:

Harbor Boulevard. South of 7th Street/Sampson Way, Harbor Boulevard would be reduced to one lane southbound. The northbound roadway would be reduced to one lane and would cul-de-sac at 13th Street. A new at-grade roadway with one lane in each direction would be constructed from Crescent Street & Harbor Boulevard to Sampson Way.

Alternative 2

Alternative 2 is an alternative development scenario with some elements that are the same as the proposed Project and some that are different. Figure 6 shows a proposed concept plan for this alternative. The following new development and existing tenant project elements would change under Alternative 2, when compared to the proposed Project:

Cruise Ship Facilities – Parking for Cruise Ships. Inner Harbor parking at Berths 91-93 would consist of 3,100 spaces in a new two-story (three-level) structure. This parking would be dedicated to the Catalina Express Terminal and Inner and Outer Harbor Cruise Terminal facilities. Outer Harbor parking would consist of 1,500 new parking spaces in a one-story (two-level) structure. The six-acre Outer Harbor Park would be on top of the parking structure and at ground level to provide waterfront access separate from the cruise facilities.

Jankovich & Son, Inc. Fueling Station. As in Alternative 1, the Jankovich & Son, Inc. Fueling Station would relocate to Berth 240 on Terminal Island and would have 20-year lease renewal.

The following transportation improvement project elements would change under Alternative 2, as compared to the proposed Project:

Harbor Boulevard. Under Alternative 2, Harbor Boulevard would be modified as it would be under Alternative 1. South of 7th Street/Sampson Way, Harbor Boulevard would be reduced to one lane southbound. The northbound roadway would be reduced to one lane and would cul-de-sac at 13th Street. A new at-grade roadway with one lane in each direction would be constructed from Crescent Street & Harbor Boulevard to Sampson Way.

Alternative 3 – Reduced Project

In general, Alternative 3 is reduced in scale compared to the proposed Project and the other development scenario alternatives. Figure 7 shows a proposed concept plan for this alternative.

The following new development and existing tenant project elements would change under Alternative 3, as compared to the proposed Project:

Cruise Ship Facilities – Berths and Terminals. Only one new 1,250-foot cruise berth would be located in the Outer Harbor (rather than two, as proposed under the project). A terminal of approximately 100,000 sf would be constructed in the Outer Harbor. The Outer Harbor Cruise Terminal would incorporate the proposed Outer Harbor Park as an integral feature complementary to the secure operations of the Outer Harbor Cruise Terminal; park visitors would be separated from the secure areas of the cruise terminal. The Outer Harbor Cruise Terminal would be designed to accommodate public access from the proposed Waterfront Red Car Line extension to the Outer Harbor.

Cruise Ship Facilities – Parking for Cruise Ships. Inner Harbor parking at Berths 91-93 would consist of 3,325 spaces in new three-level structure covering 9.4 acres. This parking would be dedicated to the Catalina Express Terminal and Inner and Outer Harbor Cruise Terminals. Additionally, Outer Harbor parking would consist of 200 surface parking spaces dedicated to non-passenger use, as in Alternative 1.

Ports O' Call Redevelopment – Development. Alternative 3 would include the demolition and redevelopment of 40,000 sf of the existing 150,000 sf of visitor-serving commercial development in Ports O' Call. Additionally, 37,500 sf of new commercial development would be constructed at Ports O' Call (reduced from 150,000 sf under the proposed Project). Alternative 3 would not include a 75,000 of conference center. Therefore, total development for Alternative 3 at Ports O' Call would be 187,500 sf (reduced from 375,000 sf under the proposed Project). This analysis assumes that approximately 78,100 sf would be developed for restaurant uses, and approximately 109,400 sf would be developed for commercial uses.

Ports O' Call Redevelopment – Parking. The existing parking at Berths 78-83 and 73-77 would serve all Ports O' Call and Downtown Harbor uses, with the existing parking lot at 22nd

Street & Sampson Way serving as overflow parking as needed. Alternative 3 does not include parking structures at the bluff site.

Waterfront Red Car Museum. Alternative 3 would locate the Waterfront Red Car museum on the east side of Harbor Boulevard at 7th Street.

The following transportation improvements project elements would change under Alternative 3, as compared to the proposed Project:

Harbor Boulevard. Harbor Boulevard would be reduced to one lane in each direction south of 7th Street, with a greenbelt in the median. Crescent Street would not be extended to Sampson Way as proposed under Alternatives 1 and 2.

Alternative 4

Alternative 4 is an alternative development scenario with some elements that are the same as the proposed Project and some that are different. Figure 8 shows a proposed concept plan for this alternative. The following new development and existing tenant project elements would change under Alternative 4, as compared to the proposed Project:

North Harbor. No North Harbor element is included under this alternative.

Cruise Ship Facilities – Berths and Terminals. Alternative 4 would keep the three existing cruise ship berths in the Inner Harbor and the existing terminal. The existing terminal at Berth 91 would be demolished, and a new 200,000 sf terminal to serve Berths 91 and 87 would be developed, as in Alternative 1. No new cruise ship berths or terminals would be located in the Outer Harbor. Therefore, Alternative 4 would be a reduction of two berths in the Outer Harbor, as compared to the proposed Project, and a reduction of one berth overall.

Cruise Ship Facilities – Parking for Cruise Ships. The Inner Harbor parking would be at Berths 91-93 and would consist of 3,525 spaces in a new three-level structure. This parking would be dedicated to Catalina Express Terminal and Inner Harbor Cruise Terminals.

Outer Harbor Parking. Approximately 60 surface parking spaces would be added to support the six-acre Outer Harbor Park.

Crowley and Millennium Tugboats. The Crowley and Millennium Tugboat operations would be relocated to Berths 70-71 (the existing Westway Terminal site) since the North Harbor would not be developed as part of Alternative 4. The existing building at the Westway Terminal would be converted for office uses for the tugboat operations, and an additional building or expansion of the existing building may be required to accommodate the tugboat operations at this location.

Los Angeles Maritime Institute. The Los Angeles Maritime Institute would remain in its existing location and would not be relocated to the North Harbor.

S.S. Lane Victory. The S.S. Lane Victory would be relocated to Ports O' Call rather than to the North Harbor since this alternative does not include the development of the North Harbor.

Waterfront Red Car Museum. The Waterfront Red Car Museum would be at 13th Street at the bluff site, along with the maintenance facility.

Jankovich & Son, Inc. and Mike's Main Channel Fueling Stations. The Jankovich & Son, Inc. and Mike's Main Channel fueling stations would relocate to Berth 240 on Terminal Island and would receive a 20-year lease renewal at that location.

None of the transportation improvements project elements would change under Alternative 4, as compared to the proposed Project.

Alternative 5 – No Federal Action (National Environmental Policy Act [NEPA] Baseline)

The No Federal Action alternative eliminates all of the project elements that would require a federal permit, including the North Harbor, Downtown Harbor, 7th Street Harbor, 7th Street Pier, improvements to the Outer Harbor, and waterfront promenade. Figure 9 shows a proposed concept plan for this alternative. The following new development and existing tenant project elements would change under Alternative 5, as compared to the proposed Project:

Cruise Ship Facilities – Berths and Terminals. The three existing cruise berths in the Inner Harbor at the existing terminal would remain. None of the wharf work proposed as part of project or other alternatives would occur under Alternative 5. The existing terminal at Berth 91 would be demolished, and a new 200,000 sf terminal would be developed to serve Berths 91 and 87. Alternative 5 does not include a new cruise ship berth in the Outer Harbor. Therefore, Alternative 5 would be a reduction of two berths in the Outer Harbor, as compared to the proposed Project, and a reduction of one berth overall.

Cruise Ship Facilities – Parking for Cruise Ships. Alternative 5 includes Inner Harbor parking at Berths 91-93, which would consist of 3,525 spaces in new three-level structure. This parking would be dedicated to the Catalina Express Terminal and Inner Cruise Terminals as in Alternative 3.

Outer Harbor Parking. Like Alternative 4, this alternative would provide approximately 60 surface parking spaces to support the six-acre Outer Harbor Park.

Crowley and Millennium Tugboats. The Crowley and Millennium Tugboat operations would be relocated to Berths 70-71 (the existing Westway Terminal site) since the North Harbor would not be developed as part of Alternative 5. The existing building at Westway Terminal would be converted for office uses for the tugboat operations, and an additional building or expansion of the existing building may be required to accommodate the tugboat operations at this location.

Los Angeles Maritime Institute. The Los Angeles Maritime Institute would remain in its existing location and would not be relocated to the North Harbor.

S.S. Lane Victory. Since Alternative 5 does not include the development of the North Harbor, the S.S. Lane Victory would be relocated to Ports O' Call.

None of the transportation improvements project elements would change under Alternative 5, as compared to the proposed Project.

Alternative 6 – No Project

Alternative 6 would not allow implementation of the proposed Project or other physical improvements associated with the proposed Project. Figure 10 shows a proposed concept plan for this alternative. The anticipated growth in the size of cruise vessels is assumed to occur, but no new cruise facilities would be built. Related Port projects such as the Waterfront Enhancements Project and reasonably foreseeable actions, such as the demolition of Westway Terminal, would occur even if the proposed Project is not approved. No transportation improvements would be implemented.

Proposed Project and Alternatives 1 to 6 Comparison

A summary of the proposed Project and each alternative is presented in Table 1. This table allows for an easy comparison of each project element across all project alternatives.

STUDY SCOPE

The scope of work for this study was developed in conjunction with LADOT. The base assumptions and technical methodologies were discussed as part of the study approach. A Memorandum of Understanding (MOU) was executed acknowledging the City's requirements for this traffic impact analysis.

The study analyzes potential project-generated traffic impacts on the adjacent street system for three peak hours in two future horizon years. The analysis of future year traffic forecasts is based on projected conditions in year 2015 (project buildout) and 2037 (end of proposed lease period for cruise terminals) both without and with the addition of the project traffic. The following traffic scenarios were analyzed for the weekday a.m. peak hour (between 7:00 and 9:00 a.m.), weekday p.m. peak hour (between 4:00 and 6:00 p.m.), and weekend midday peak hour (between 1:00 and 5:00 p.m.):

- Existing Conditions – The analysis of existing Year 2007 traffic conditions intends to provide a basis for the remainder of the study. The existing conditions analysis includes an assessment of streets, traffic volumes, and operating conditions.

- Cumulative Base Conditions – Future traffic conditions are projected without the proposed Project in the project buildout year 2015 and the horizon year 2037 (the No Project Alternative, Alternative 6). 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 neither the proposed Project nor any of the project alternatives were developed. The cumulative base traffic forecasts are used to develop CEQA baseline operating conditions that provide the basis for determining significant project impacts under CEQA.

- Cumulative plus Project (or Alternative) 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 the project buildout Year 2015 and the horizon Year 2037. This analysis was also conducted for Alternatives 1 to 5. Alternative 5 traffic forecasts are used as the NEPA baseline operating conditions that provide the basis for determining significant project impacts under NEPA. The objective of this phase of analysis is to develop the traffic forecasts of the proposed Project and alternatives that are then used to identify potential impacts.

The study examined 36 intersections near the project site in each of the three peak hours and two horizon years. In addition, the study evaluated the potential for neighborhood traffic intrusion impacts on two local street segments near the project. The study intersections are listed below and illustrated in Figure 11. They were selected in consultation with LADOT on the basis of their location in relation to the project site and the potential for project-related traffic to use them.

1. Western Avenue & 25th Street
2. Western Avenue & 9th Street
3. Gaffey Street & 25th Street
4. Gaffey Street & 22nd Street
5. Gaffey Street & 9th Street
6. Gaffey Street & 7th Street
7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
10. Gaffey Street & I-110 ramps
11. Gaffey Street & Summerland Avenue
12. Pacific Avenue & 22nd Street
13. Pacific Avenue & 9th Street
14. Pacific Avenue & 7th Street
15. Pacific Avenue & 6th Street

16. Pacific Avenue & 5th Street
17. Pacific Avenue & 1st Street
18. Pacific Avenue & Front Street
19. Via Cabrillo Marina & 22nd Street
20. Miner Street & 22nd Street
21. Harbor Boulevard/Miner Street & Crescent Avenue
22. Harbor Boulevard & 7th Street
23. Harbor Boulevard & 6th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
27. Harbor Boulevard & SR 47 westbound on-ramp
28. Harbor Boulevard & Gulch Road
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street
31. Pacific Avenue & 13th Street
32. Pacific Avenue & 17th Street
33. Pacific Avenue & 19th Street
34. Gaffey Street & 13th Street
35. Gaffey Street & 17th Street
36. Gaffey Street & 19th Street

Two street segments, also illustrated in Figure 11, were analyzed for potential neighborhood traffic impacts:

1. Santa Cruz Street west of Pacific Avenue
2. 17th Street east of Centre Street

ORGANIZATION OF REPORT

This report is divided into nine chapters, including this introduction. Chapter II describes the existing conditions in the study area including an inventory of the streets, highways, and transit service, 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 cumulative plus alternative scenarios 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 alternatives under both CEQA and NEPA. Mitigation measures to reduce the identified intersection impacts with development of the proposed Project or project alternatives are presented and assessed in Chapter V. Chapter VI presents an assessment of potential neighborhood impacts as a result of the proposed Project or project alternatives. The results of the regional transportation system analysis are provided in Chapter VII. Chapter VIII provides an analysis of parking proposed for the project and alternatives. A detailed discussion and qualitative analysis of grade crossing issues associated with the proposed Red Car realignment and expansion is presented in Chapter IX. For the convenience of the user, all figures and tables prepared for this report are presented after Chapter IX, with the figures first, followed by the tables. Appendices to this report include details of the technical analysis.

II. EXISTING CONDITIONS

As part of this analysis for the San Pedro Waterfront Project EIS/EIR, 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.

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 2006 data from the California Department of Transportation (Caltrans) shows that the average daily traffic (ADT) volume on the Harbor Freeway to the north of Channel Street was approximately 89,000 vehicles per day (vpd), and the ADT on the Vincent Thomas Bridge was approximately 47,500 vpd. Access to the site from I-110 is provided via the freeway terminus at Gaffey Street and at the Harbor Boulevard interchange. 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 – Harbor Boulevard is classified as a Major Class II Highway and provides north-south access to the San Pedro Waterfront project area and along the eastern edge of the San Pedro community. Harbor Boulevard forms the western edge of the project site. It continues as Front Street north of the site and as Miner Street south of Crescent Avenue.

- 7th Street – 7th 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.

- 9th Street – 9th 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.

- 25th Street – 25th 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.

- Western Avenue – Western Avenue is classified as a Major Class II Highway providing north-south access through the western portion of the community of San Pedro. This scenic roadway starts near the ocean at Paseo Del Mar and continues northward through much of the Los Angeles region.

Table 2 provides a description of these streets, summarizing their physical characteristics in the study area. Diagrams of the existing lane configurations at the analyzed intersections are provided in Appendix A.

EXISTING TRANSIT SERVICE

The San Pedro community is served by bus transit lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro), LADOT, the Municipal Area Express (MAX) lines, the Palos Verdes Peninsula Transit Authority (PVPTA). To complement the traditional transit service in the study area and provide additional mobility for residents and visitors, the Port operates the San Pedro Electric Trolley, a rubber-tired trolley, and the Waterfront Red Car Line, a historic streetcar line. The following transit routes provide service in the project vicinity:

- Metro Line 445 – Line 445 travels along Harbor Boulevard, 1st Street, Pacific Avenue, 22nd Street and 19th Street in the vicinity of the project site. Line 445 provides service from approximately 5:00 a.m. to 8:40 p.m. on weekdays, and from 6:00 a.m. to 8:40 p.m. on weekends and holidays. Bus headways are 30 to 60 minutes on weekdays and 60 minutes on weekends. From San Pedro, this line provides freeway express service via the Harbor Transitway (on I-110) to the Patsaouras Transit Plaza at Union Station in downtown Los Angeles.

- Metro Lines 446/447 – Line 446 operates on Pacific Avenue in the vicinity of the project site. Line 447 operates on Front Street, Harbor Boulevard, 7th Street, and Gaffey Street in the project area. Between San Pedro and downtown Los Angeles, both lines operate with the same route, providing freeway express service via the Harbor Transitway to the Patsaouras Transit Plaza at Union Station in downtown Los Angeles. Both lines provide service from approximately 4:30 a.m. to 1:30 a.m. seven days a week, with headways from 10 to 60 minutes on weekdays and 30 to 60 minutes on weekends.

- Metro Line 550 – Line 550 travels along Gaffey Street, 7th Street and 13th Street in the study area. It operates from 5:00 a.m. to 11:45 p.m. on weekdays, and from 6:00 a.m. to 11:45 p.m. on weekends and holidays, with headways of approximately 30 minutes to one hour. This line provides express connection from San Pedro to West Hollywood.

- LADOT Commuter Express Line 142 – Line 142 travels along 7th 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 a.m. to 11:30 p.m., seven days a week, with frequencies of 25 to 60 minutes.

- DASH San Pedro – This line travels along Gaffey Street, 1st Street, Centre Street and 7th Street near the project site. This route provides local service in the community of San Pedro. The line runs from 6:30 a.m. to 7:30 p.m. on Mondays through Saturdays, and from 7:00 a.m. to 7:00 p.m. on Sundays and holidays. Service frequencies are 20 to 30 minutes.

- The San Pedro Electric Trolley – The Trolley travels along 6th Street and Harbor Boulevard in the vicinity of the project site. The Trolley operates on Fridays through Mondays with a frequency of 15 minutes. It operates between 10:00 a.m. and 6:00 p.m.

- 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 10:00 a.m. to 6:00 p.m. Friday through Monday, 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 9th Street, Gaffey Street, 11th 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 a.m. The afternoon southbound route also has four buses with frequencies of 20 to 30 minutes starting at 5:03 p.m.

- 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 a.m. The afternoon southbound route also has four buses with frequencies of approximately 30 minutes starting at 4:36 p.m.

- PVPTA Line 225 – This line operates along 9th Street and Weymouth Avenue at the western edge of the study area, connecting San Pedro with the Palos Verdes Peninsula. Northbound buses operate between 6:00 a.m. and 2:30 p.m., with headways of approximately 60 minutes. Southbound buses operate between 7:15 a.m. and 7:15 p.m. also with headways of approximately 60 minutes.

- PVPTA Green Line – This line operates on Western Avenue north of 9th Street on the periphery of the project site. The hours of operation are from approximately 6:00 a.m. to 6:00 p.m., with no service provided between 9:00 a.m. and 1:30 p.m. The line operates with headways of 10 to 50 minutes.

EXISTING COMMERCIAL RAIL FACILITIES

The Port is served by an extensive commercial rail network, linking port operations to both the region and the rest of the country. Limited freight rail activity occurs in the project site on the line that runs along the east side of Harbor Boulevard. This track is shared with the Waterfront Red Car Line, but at different times of the day.

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 traffic counts were conducted for the weekday morning peak period (between 7:00 and 10:00 a.m.), the weekday afternoon peak period (between 3:00 and 6:00 p.m.), and the weekend midday peak period (between 1:00 and 5:00 p.m.) in October 2007 (Intersections 1 through 28) and in January and February 2008 (Intersections 29 through 36). The 36 study intersections are shown in Figure 11. The existing weekday a.m., weekday p.m. and weekend midday peak hour traffic volumes at the analyzed intersections are presented in Figure 12. 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.

A variety of standard methodologies is available to analyze LOS. According to *Traffic Study Policies and Procedures* (LADOT, March 2002), this study is required to use the Critical Movement Analysis (CMA) method of intersection capacity calculation (Transportation Research Board, 1980) to analyze 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 CalcaDB software package 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 3.

Thirty-one of the 36 analyzed intersections are currently controlled by traffic signals. All but two of the 31 signalized study intersections are currently controlled by the City's Automated Traffic Surveillance and Control (ATSAC) system in the San Pedro sub-system. The intersections of Villa Cabrillo Marina & 22nd Street and Miner Street & 22nd Street are the exceptions. In accordance with LADOT procedures, a capacity increase of 7% (0.07 V/C adjustment) was applied to reflect the benefits of ATSAC control at these intersections.

Four study intersections are unsignalized and were analyzed using the "Two-Way Stop" methodology from *Highway Capacity Manual* (Transportation Research Board, 2000), which determines the average vehicle delay and the LOS using the relationship indicated in Table 4. The intersections of Gaffey Street & 6th Street (Intersection 7), Harbor Boulevard/Miner Street & Crescent Avenue (Intersection 21), Harbor Boulevard & SR 47 westbound on-ramp (Intersection 27), and Harbor Boulevard & 3rd Street (Intersection 29) were analyzed using the "Two-Way Stop" methodology. The intersection of Harbor Boulevard & Gulch Road (Intersection 28) was analyzed using the "All-Way Stop" methodology from *Highway Capacity Manual* to determine V/C ratio and corresponding LOS.

Because LADOT's criteria does not address the significant impact thresholds for unsignalized intersections, consultation with LADOT determined that unsignalized intersections could be assessed for impacts by analyzing these locations with a capacity of 1,200 vehicles per hour (vph) in CalcaDB and then using the significant impact criteria established for signalized intersections to measure the incremental change in V/C ratio.

Existing Peak Hour Levels of Service

The existing weekday and weekend peak hour turning movement volumes presented in Appendix B 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 5 summarizes the existing weekday morning, weekday afternoon and weekend midday peak hour V/C ratios and corresponding LOS at each of the study intersections. The results of this analysis indicate that 32 of the 36 study intersections are currently operating at acceptable levels of service (LOS D or better) during the weekday a.m., weekday p.m. and weekend midday peak hours. The following four intersections operate at LOS E or F during one or more of the analyzed peak hours:

7. Gaffey Street & 6th Street
9. Gaffey Street & 1st Street

11. Gaffey Street & Summerland Avenue
30. Harbor Boulevard & 3rd Street

III. FUTURE TRAFFIC PROJECTIONS

Estimates of future traffic conditions both with and without the proposed Project were necessary to evaluate the potential impact of the proposed Project on the local street system. The cumulative base traffic scenario represents future traffic conditions without the addition of the proposed Project, while the cumulative plus project or cumulative plus project alternative scenario represents future traffic conditions with the development of the proposed Project or alternatives. The development of these future traffic scenarios is described in this chapter.

CUMULATIVE BASE TRAFFIC VOLUMES

The cumulative base traffic projections normally 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 in or near the study area. The third source is roadway or intersection capacity enhancements. These factors are described below.

Future Baseline Street Improvements

Several key roadway improvements in or near the study area are expected to be completed by 2015. These improvements, which are the result of funded local or regional capital improvement programs or as mitigation for ongoing or entitled related projects, would result in capacity changes at the specified locations throughout the study area. The related transportation projects include:

- Equipping all signalized study intersections with the ATSAC and Adaptive Traffic Control System (ATCS) system. Information from LADOT indicates that all signalized intersections in the study area will be equipped with both ATSAC and ATCS by 2015. ATCS is an enhancement to the ATSAC and uses a personal computer-based traffic signal control software program that provides fully traffic-adaptive signal control based on real-time traffic conditions. ATCS allows for the automatic adjustment to the traffic signal timing strategy and control pattern in response to current traffic demands by allowing ATCS to control all three critical components of traffic signal timing simultaneously, namely

cycle length, phase split and offset. In the analysis of future operating conditions, a capacity increase of 10% (0.10 V/C adjustment) was applied to reflect the benefits of ATSAC/ATCS control at all signalized study intersections.

- Restriping of Gaffey Street & 1st Street (Intersection 9) would add an additional westbound approach lane. The westbound approach would provide one left-turn lane, one through lane, and one right-turn lane. The eastbound approach would be restriped to provide two exclusive left-turn lanes and a shared through/right-turn lane. This improvement is identified as a mitigation measure for the Harbor Police and Charter School project.

- Restriping of Miner Street & 22nd Street (Intersection 22) would add a northbound approach lane. The northbound approach would provide one left-turn lane, one through lane and one right-turn lane. This improvement is associated with the Cabrillo Marina Phase II project.

- Constructing a new interchange to and from westbound SR 47/I-110 that curves north of the Vincent Thomas Bridge, connecting to Front Street just south of Knoll Drive and opposite the driveway used by the China Shipping terminal. This Port of Los Angeles improvement would provide on-ramp and off-ramp access from SR 47 and would eliminate the existing "U-Turn" ramp connection from westbound SR 47 onto Harbor Boulevard (Intersection 26) and relocate the existing eastbound on-ramp from Harbor Boulevard (Intersection 27). The improvement includes the installation of a traffic signal at the new intersection with protected left-turn phasing for the northbound approach and an overlapping right-turn phase for the eastbound approach (westbound SR 47 off-ramp). The westbound approach (China Shipping driveway) would be configured as a single shared lane, and the eastbound approach would be configured to provide one shared through/left-turn lane and two right-turn lanes. The northbound approach would be configured to provide two left-turn lanes and one through lane and the southbound approach to provide two through lanes and one right-turn lane.

- Restriping of the Harbor Boulevard off-ramp from SR 47 would add an additional right-turn lane (Intersection 26). This Port of Los Angeles improvement would restripe the eastbound approach (the off-ramp from eastbound SR 47 to Harbor Boulevard) to provide a shared left-turn/through lane and two right-turn lanes.

- Widening of northbound Harbor Boulevard at SR 47 ramps/Swinford Street would provide an additional left-turn lane to eastbound SR 47 (Intersection 26). This Port of Los Angeles widening improvement would occur on Port, Caltrans or City property and the roadway would be restriped.

Areawide Traffic Growth

Based on *Congestion Management Program for Los Angeles County* (Metro, July 22, 2004), (CMP) and following discussions with LADOT as part of the MOU process, it was determined that an ambient growth factor of 0.65% per year should be applied to adjust the existing base year traffic volumes to reflect the effects of regional growth and development for the 2015 buildout year and 2037 horizon year. This adjustment was applied to the base Year 2007 traffic volume data to reflect the effect of ambient growth of 5.2% by the Year 2015 and 19.5% by the Year 2037.

The growth in traffic volumes resulting from ambient growth were added to the existing traffic volumes to develop future traffic forecasts without any cumulative project growth for the buildout year 2015 and horizon year 2037. Figure 13 illustrates the resulting projected future volumes with only the ambient growth factor applied for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2015. Figure 14 illustrates the resulting projected future volumes with only the ambient growth factor applied for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2037.

Related Project Traffic Generation and Assignment

Cumulative base traffic forecasts include the effects of specific cumulative development projects, also called related projects, expected to be completed in the vicinity of the proposed Project site prior to the buildout date of the proposed Project. The list of related projects was based on data from LADOT and from the Community Redevelopment Agency of the City of Los Angeles (CRA/LA), as well as a review of other recent traffic studies conducted for projects in the vicinity. A total of 26 cumulative projects were identified in the study area. They are listed in Table 6 and their locations are illustrated in Figure 15.

Trip Generation. Trip generation estimates for the related projects were calculated using either data in previous traffic studies or the trip generation rates contained in *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003). Table 6 presents the resulting trip generation estimates. These projections are conservative in that they may not in every case account for either the existing uses to be removed or the possible use of non-motorized travel modes (transit, walking, etc.). In 2015, cumulative projects in the study area are projected to generate approximately 3,373 trips during the a.m. peak hour, 4,140 trips during the p.m. peak hour, and

4,635 trips during the weekend midday peak hour. Because of increased use of on-dock rail (and decreased use of trucks) at the shipping container terminals in the study area, cumulative project trip generation is decline by 2037. In 2037, cumulative projects in the study area are projected to generate approximately 3,255 trips during the a.m. peak hour, 3,730 trips during the p.m. peak hour, and 4,329 trips during the weekend midday peak hour.

Trip Distribution. The geographic distribution of the traffic generated by the cumulative projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which employees and potential patrons of proposed commercial developments are drawn, the locations of employment and commercial centers to which residents of residential projects would be drawn, and the location of the projects in relation to the surrounding street system. If available, trip distribution from a cumulative project's traffic study was used in this analysis. When trip distribution was not available for a cumulative project, it was estimated based on the factors described above.

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. Figures 16 and 17 illustrate the estimated cumulative project-generated peak hour traffic volumes at each of the analyzed intersections during a typical weekday a.m. peak hour, weekday p.m. peak hour, and weekend midday peak hour in 2015 and 2037, respectively.

Cumulative Base Traffic Projections

Figures 18 and 19 illustrate the cumulative base Year 2015 and Year 2037 weekday a.m., weekday p.m. and weekend midday peak hour traffic volumes at the analyzed intersections. The cumulative base traffic conditions represent an estimate of future conditions without development of the proposed Project or Alternatives 1 through 5 in 2015 and 2037.

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 rates and equations from *Trip Generation, 7th Edition* and other sources were used to develop trip generation estimates for the proposed Project. The methodology used and trip generation rates for each land use were approved by LADOT as part of the MOU process. The rates used for each land use can be found in Appendix D. The trip generation estimates for each proposed land use are summarized in Table 7 for Year 2015 and Table 8 for Year 2037. When a land use proposed as part of the project had an associated trip generation rate in *Trip Generation, 7th Edition*, that rate was used. For those land uses without standard trip generation rates, data from empirical studies and other trip generation sources was used to develop rates specific to the proposed Project:

- Cruise ship trip generation rates were developed specifically for this study. Vehicle turning movement count data by vehicle type was collected at all entrances and exits to the World Cruise Center (the Inner Harbor Cruise Terminal at the Port) on Friday, January 11, 2008, when two cruise ships were present. The data was then analyzed and trip generation rates were developed per passenger capacity. Appendix D contains raw and compiled data used to develop trip generation rates.

- Museum trip generation rates for the S.S. Lane Victory and Ralph J. Scott Fireboat museums were obtained from *Autry National Center Traffic Study* (Fehr & Peers/Kaku Associates, February 2007). Museum rates are not available from *Trip Generation, 7th Edition.* The Autry National Center is in Los Angeles and focuses on the American West. The recent data collection effort and proximity to the project site suggested this would be appropriate for the museums in this study.

- Trip generation rates for the public open space project elements, including the Waterfront Promenade, Town Square, Fishermen's Park, San Pedro Park, and Outer Harbor Park were obtained from the City Park land use in *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (San Diego Association of Governments, April 2002).

- Conference facility trip generation rates were developed based on assumptions regarding its use, including an average vehicle ridership (AVR) of 2.0, 75% of attendees arriving during the given peak hour, a staff equivalent of 10% of attendees, and two 300-person events on weekdays and one 100-person event on weekends.

- Because no trip generation rate exists in *Trip Generation, 7th Edition* for a mercado, but the land use is retail in nature, we assumed that the mercado land use generates half as many trips as Specialty Retail (ITE Land Use 814).

A 15% internal capture credit was applied to trips generated by existing and projected Ports O' Call retail and restaurant development. This credit was approved by LADOT and should be

considered conservative because internal credits reflect the tendency of users of one land use to visit other land uses within the project. For example, Ports O' Call visitors may dine at a restaurant and patronize a nearby retail shop during the same trip. Internal trip capture is a key characteristic of a multi-use development such as Ports O' Call.

Pass-by trip reduction credits were not taken for the project's commercial components. Although this is a suggested practice as part of the use of the ITE data, these credits were not applied in this analysis because of the location of the project site in the context of the surrounding roadway system. This was done to ensure that the traffic generation was not underestimated, which could result in inadequate future roadway capacities.

Transit trip reduction credits were also not applied to any of the proposed land uses in the project site. Transit credits account for those project-related trips that may be made by public transportation and the resulting reduction in vehicle trips. Although limited transit service is available near the project site, the proposed Project's land uses are not conducive to public transit use, such as cruise ship activity, and a conservative approach was used in this analysis.

Finally, the proposed Project site contains several existing uses that would be redeveloped, relocated, reconfigured, or removed as a result of the proposed Project. The S.S. Lane Victory, Crowley and Millennium Tugboat offices, and Los Angeles Maritime Institute would be relocated. The Inner Harbor cruise ship terminal would be reconfigured and redeveloped to provide additional passenger amenities and to handle larger ships. Ports O' Call would be redeveloped. Some marina docking slips would be removed in the Downtown Harbor area and at Ports O' Call and relocated within the Cabrillo Marina Phase II project. Crescent Warehouse would vacate Warehouses No. 9 and 10. Estimates were made of the number of trips generated by these different land uses using *Trip Generation, 7th Edition* and other sources as described above. The trips to be credited against the proposed Project as a result of redevelopment, relocation, reconfiguration, or removal of project site uses are summarized in Table 9 for Year 2015 and Table 10 for Year 2037.

In 2015, as shown in Table 7, after taking credit for trips generated by the land uses being redeveloped, relocated, reconfigured, or removed and including internal capture credits for the Ports O' Call commercial and retail trip generation estimates, the project is projected to generate a net increase of approximately 18,350 daily weekday trips, including approximately

1,108 trips during the a.m. peak hour and 1,313 trips during the p.m. peak hour, and 17,861 weekend daily trips, including 1,917 during the weekend midday peak hour.

In 2037, as shown in Table 8, using the same methodology as described above to apply credits against the total number of trips generated by project components, the proposed Project is projected to generate a net increase of approximately 22,679 daily weekday trips, including approximately 1,550 trips during the a.m. peak hour and 1,435 trips during the p.m. peak hour, and 22,190 weekend daily trips, including 2,406 during the weekend midday peak hour. The project is proposed to be constructed by 2015; the estimated growth in trips between 2015 and 2037 is chiefly the result of the anticipated increase in the size of cruise ship vessels.

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 20.

Project Traffic Assignment

The trip generation estimates summarized in Tables 7 and 8 for 2015 and 2037, respectively, and the distribution pattern illustrated in Figure 20, were used to assign the project-generated traffic to the local and regional street system. Figures 21 and 22 illustrate the estimated project-generated peak hour traffic volumes at each of the analyzed intersections during a typical weekday a.m. peak hour, weekday p.m. peak hour, and weekend midday peak hour in 2015 and 2037, respectively.

CUMULATIVE PLUS PROJECT TRAFFIC PROJECTIONS

The proposed Project traffic volumes were then added to the cumulative base traffic projections to develop the cumulative plus project traffic forecasts for the buildout year 2015 and horizon year 2037. Figure 23 illustrates the resulting projected cumulative plus project peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2015. Figure 24 illustrates the resulting projected cumulative plus project peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2037. These volumes represent future traffic conditions following completion of the proposed Project for the two analysis years.

PROJECT ALTERNATIVES TRAFFIC VOLUMES

Seven alternatives, including the proposed Project, the No Federal Action alternative (Alternative 5), the No Project alternative (Alternative 6), and four alternative development scenarios, are assessed at an equal level of detail in this report. This section describes the development of projected traffic volumes for Alternatives 1 through 6 for the buildout Year 2015 and the horizon Year 2037.

Alternative 1 Traffic Volumes

Development of the traffic generation estimates for Alternative 1 involved a three-step process including traffic generation, trip distribution, and traffic assignment, like the process used for the proposed Project. The trip generation estimates for each proposed land use are summarized in Table 11 for Year 2015 and Table 12 for Year 2037.

In Year 2015, as shown in Table 11, after taking credit for trips generated by the land uses being redeveloped, relocated, reconfigured, or removed and including the internal capture credits, Alternative 1 is projected to generate a net increase of approximately 14,306 daily weekday trips, including approximately 686 trips during the a.m. peak hour and 1,189 trips during the p.m. peak hour, and 13,836 weekend daily trips, including 1,456 during the weekend midday peak hour.

In Year 2037, as shown in Table 12, using the same methodology as described above to apply credits against the total number of trips generated by project components, Alternative 1 is projected to generate a net increase of approximately 16,637 daily weekday trips, including approximately 923 trips during the a.m. peak hour and 1,255 trips during the p.m. peak hour, and 16,167 weekend daily trips, including 1,718 during the weekend midday peak hour.

The trip generation estimates and distribution pattern were used to assign the Alternative 1-generated traffic to the local and regional street system. Figures 25 (Year 2015) and 26 (Year 2037) illustrate the estimated Alternative 1-generated peak hour traffic volumes at each of the analyzed intersections during a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour.

The Alternative 1 traffic volumes were then added to the cumulative base traffic projections to develop the cumulative plus Alternative 1 traffic forecasts for the buildout year 2015 and horizon year 2037. Figure 27 illustrates the resulting projected cumulative plus Alternative 1 peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2015. Figure 28 illustrates the resulting projected cumulative plus Alternative 1 peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2037. These volumes represent future traffic conditions following completion of Alternative 1 for the two analysis years.

Alternative 2 Traffic Volumes

Development of the traffic generation estimates for Alternative 2 involved a three-step process including traffic generation, trip distribution, and traffic assignment, like the process used for the proposed Project. The trip generation estimates for each proposed land use are summarized in Table 13 for Year 2015 and Table 14 for Year 2037.

In Year 2015, as shown in Table 13, taking credit for trips generated by the land uses being redeveloped, relocated, reconfigured, or removed and including the internal capture credits, Alternative 2 is projected to generate a net increase of approximately 17,958 daily weekday trips, including approximately 1,019 trips during the a.m. peak hour and 1,288 trips during the

p.m. peak hour, and 17,469 weekend daily trips, including 1,860 during the weekend midday peak hour.

In Year 2037, as shown in Table 14, using the same methodology as described above to apply credits against the total number of trips generated by project components, Alternative 2 is projected to generate a net increase of approximately 22,135 daily weekday trips, including approximately 1,423 trips during the a.m. peak hour and 1,403 trips during the p.m. peak hour, and 21,646 weekend daily trips, including 2,326 during the weekend midday peak hour.

The trip generation estimates and distribution pattern were used to assign the Alternative 2-generated traffic to the local and regional street system. Figures 29 (Year 2015) and 30 (Year 2037) illustrate the estimated Alternative 2-generated peak hour traffic volumes at each of the analyzed intersections during a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour.

The Alternative 2 traffic volumes were then added to the cumulative base traffic projections to develop the cumulative plus Alternative 2 traffic forecasts for the buildout year 2015 and horizon year 2037. Figure 31 illustrates the resulting projected cumulative plus Alternative 2 peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour, and weekend midday peak hour in 2015. Figure 32 illustrates the resulting projected cumulative plus Alternative 2 peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2037. These volumes represent future traffic conditions following completion of Alternative 2 for the two analysis years.

Alternative 3 Traffic Volumes

Development of the traffic generation estimates for Alternative 3 involved a three-step process including traffic generation, trip distribution, and traffic assignment, like the process used for the proposed Project. The trip generation estimates for each proposed land use are summarized in Table 15 for Year 2015 and Table 16 for Year 2037.

In Year 2015, as shown in Table 15, taking credit for trips generated by the land uses being redeveloped, relocated, reconfigured, or removed and including the internal capture credits,

Alternative 3 is projected to generate a net increase of approximately 7,570 daily weekday trips, including approximately 473 trips during the a.m. peak hour and 618 trips during the p.m. peak hour, and 7,741 weekend daily trips, including 671 during the weekend midday peak hour.

In Year 2037, as shown in Table 16, using the same methodology as described above to apply credits against the total number of trips generated by project components, Alternative 3 is projected to generate a net increase of approximately 9,901 daily weekday trips, including approximately 710 trips during the a.m. peak hour and 684 trips during the p.m. peak hour, and 9,772 weekend daily trips, including 934 during the weekend midday peak hour.

The trip generation estimates and distribution pattern were used to assign the Alternative 3-generated traffic to the local and regional street system. Figures 33 (Year 2015) and 34 (Year 2037) illustrate the estimated Alternative 3-generated peak hour traffic volumes at each of the analyzed intersections during a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour.

The Alternative 3 traffic volumes were then added to the cumulative base traffic projections to develop the cumulative plus Alternative 3 traffic forecasts for the buildout year 2015 and horizon year 2037. Figure 35 illustrates the resulting projected cumulative plus Alternative 3 peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2015. Figure 36 illustrates the resulting projected cumulative plus Alternative 3 peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2037. These volumes represent future traffic conditions following completion of Alternative 3 for the two analysis years.

Alternative 4 Traffic Volumes

Development of the traffic generation estimates for Alternative 4 involved a three-step process including traffic generation, trip distribution, and traffic assignment, like the process used for the proposed Project. The trip generation estimates for each proposed land use are summarized in Table 17 for Year 2015 and Table 18 for Year 2037.

In Years 2015 and 2037, as shown in Tables 17 and 18, taking credit for trips generated by the land uses being redeveloped, relocated, reconfigured, or removed and including the internal capture credits, Alternative 4 is projected to generate a net increase of approximately 13,629 daily weekday trips, including approximately 597 trips during the a.m. peak hour and 1,168 trips during the p.m. peak hour, and 13,158 weekend daily trips, including 1,375 during the weekend midday peak hour. Net new trip generation is the same in both horizon years because cruise ship activity is projected at the same level in this alternative and in the No Project alternative.

The trip generation estimates and distribution pattern were used to assign the Alternative 4-generated traffic to the local and regional street system. Figures 37 (Year 2015) and 38 (Year 2037) illustrate the estimated Alternative 4-generated peak hour traffic volumes at each of the analyzed intersections during a typical weekday a.m. peak hour, weekday p.m. peak hour, and weekend midday peak hour.

The Alternative 4 traffic volumes were then added to the cumulative base traffic projections to develop the cumulative plus Alternative 4 traffic forecasts for the buildout Year 2015 and horizon Year 2037. Figure 39 illustrates the resulting projected cumulative plus Alternative 4 peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2015. Figure 40 illustrates the resulting projected cumulative plus Alternative 4 peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2037. These volumes represent future traffic conditions following completion of Alternative 4 for the two analysis years.

Alternative 5 Traffic Volumes

Development of the traffic generation estimates for Alternative 5, the No Federal Action project alternative, involved a three-step process including traffic generation, trip distribution, and traffic assignment, like the process used for the proposed Project. The trip generation estimates for

each proposed land use are summarized in Table 19 for Year 2015 and Table 20 for Year 2037. This project alternative represents the baseline scenario used in determining the significance of project impacts under NEPA. The No Federal Action alternative allows any proposed growth that does not require federal approval to occur.

In Years 2015 and 2037, as shown in Tables 19 and 20, taking credit for trips generated by the land uses being redeveloped, relocated, reconfigured, or removed and including the internal capture credits, Alternative 5 is projected to generate a net increase of approximately 13,808 daily weekday trips, including approximately 585 trips during the a.m. peak hour and 1,180 trips during the p.m. peak hour, and 13,355 weekend daily trips, including 1,387 during the weekend midday peak hour. Net new trip generation is the same in both horizon years because cruise ship activity is projected at the same level in this alternative and in the No Project alternative.

The trip generation estimates and distribution pattern were used to assign the Alternative 5-generated traffic to the local and regional street system. Figures 41 (Year 2015) and 42 (Year 2037) illustrate the estimated Alternative 5-generated peak hour traffic volumes at each of the analyzed intersections during a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour.

The Alternative 5 traffic volumes were then added to the cumulative base traffic projections to develop the cumulative plus Alternative 5 traffic forecasts for the buildout year 2015 and horizon year 2037. Figure 43 illustrates the resulting projected cumulative plus Alternative 5 peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2015. Figure 44 illustrates the resulting projected cumulative plus Alternative 5 peak hour traffic volumes for a typical weekday a.m. peak hour, weekday p.m. peak hour and weekend midday peak hour in 2037. These volumes represent future traffic conditions following completion of Alternative 5 for the two analysis years.

Alternative 6 (No Project) Traffic Volumes

Alternative 6 considers what would be reasonably allowed to occur on the project site without development of any proposed Project elements. The only activity reasonably expected to occur is an increase in average cruise ship size and the demolition of the Westway Liquid Bulk Terminal. This alternative is the No Project alternative. It is considered the CEQA baseline alternative for the purpose of the traffic impact analysis. Trips generated under the No Project or CEQA baseline scenario are illustrated in Tables 7 and 8 for 2015 and 2037, respectively. These are baseline trips and should not be considered as new trips. For this reason, traffic projections for Alternative 6 are the same as the cumulative base traffic projections developed in this chapter and shown in Figures 18 and 19 for 2015 and 2037, respectively.

IV. TRAFFIC IMPACT ANALYSIS

This section presents an analysis of the projected future volumes to determine the potential impacts of the proposed Project and project alternatives on the operating conditions of the surrounding street system. The traffic impact analysis compares the projected LOS at each study intersection under cumulative plus project conditions to the CEQA and NEPA baseline conditions to estimate the incremental increase in the V/C ratio caused by the proposed Project or project alternatives. This provides the information needed to assess the potential impact of the project under CEQA and NEPA using significance criteria established by LADOT. Detailed LOS calculations for the CEQA baseline, NEPA baseline, proposed Project and project alternatives for the Years 2015 and 2037 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.

City of Los Angeles Significance Criteria

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

CEQA BASELINE (ALTERNATIVE 6) OPERATING CONDITIONS

To develop CEQA baseline operating conditions for 2015, the cumulative base (without project) traffic volumes shown in Figure 18 were analyzed using the LOS methodologies described in Chapter II to project future levels of service at the study intersections for the weekday a.m., weekday p.m. and weekend midday peak hours. This analysis assumed completion of the related projects described in Chapter III as well as regional traffic growth. Table 21 summarizes the 2015 CEQA baseline LOS at the study intersections. As indicated in the table, 31 of the 36 study intersections are projected to operate at LOS D or better during the morning and/or afternoon peak hours. The following five intersections are projected to operate at LOS E or F during one or more of the peak hours:

7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps

CEQA baseline operating conditions were also developed for 2037. Using the same methodology described above, 2037 traffic volumes shown in Figure 19 were analyzed to project future levels of service at the study intersections for the weekday a.m., weekday p.m., and weekend midday peak hours. Table 22 summarizes the 2037 CEQA baseline LOS at the study intersections. As indicated in the table, 29 of the 36 study intersections are projected to operate at LOS D or better during the analyzed peak hours. The following seven intersections are projected to operate at LOS E or worse during one or more of the peak hours:

5. Gaffey Street & 9th Street
7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
34. Gaffey Street & 13th Street

NEPA BASELINE (ALTERNATIVE 5) OPERATING CONDITIONS

To develop NEPA baseline operating conditions for 2015 the cumulative plus Alternative 5 (No Federal Action) traffic volumes shown in Figure 43 were analyzed using the LOS methodologies described in Chapter II to project future levels of service at the study intersections for the weekday a.m., weekday p.m. and weekend midday peak hours. This analysis assumed completion of the related projects described in Chapter III as well as regional traffic growth as estimated by the CMP. Table 21 summarizes the 2015 NEPA baseline LOS at the study intersections. As indicated in the table, 30 of the 36 study intersections are projected to operate at LOS D or better during the morning and/or afternoon peak hours. The following six intersections are projected to operate at LOS E or worse during one or more of the peak hours:

7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street

NEPA baseline operating conditions were also developed for 2037. Using the methodology described above, 2037 traffic volumes shown in Figure 44 were analyzed to project future levels of service at the study intersections for the weekday a.m., weekday p.m. and weekend midday peak hours. Table 22 summarizes the 2037 NEPA baseline LOS at the study intersections. As indicated in the table, 27 of the 36 study intersections are projected to operate at LOS D or better

during the analyzed peak hours. The following nine intersections are projected to operate at LOS E or F during one or more of the peak hours:

5. Gaffey Street & 9th Street
7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street
34. Gaffey Street & 13th Street

PROPOSED PROJECT TRAFFIC IMPACT ANALYSIS

Cumulative plus Project Traffic Conditions Year 2015

The resulting cumulative plus project peak hour traffic volumes, illustrated in Figure 23, 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 23. As indicated in the table, 29 of the 36 study intersections are projected to operate at LOS D or better during the morning and/or afternoon peak hours. The following seven intersections are projected to operate at LOS E or worse during one or more of the peak hours:

7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

during the analyzed peak hours. The following nine intersections are projected to operate at LOS E or F during one or more of the peak hours:

5. Gaffey Street & 9th Street
7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street
34. Gaffey Street & 13th Street

PROPOSED PROJECT TRAFFIC IMPACT ANALYSIS

Cumulative plus Project Traffic Conditions Year 2015

The resulting cumulative plus project peak hour traffic volumes, illustrated in Figure 23, 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 23. As indicated in the table, 29 of the 36 study intersections are projected to operate at LOS D or better during the analyzed peak hours. The following seven intersections are projected to operate at LOS E or worse during one or more of the peak hours:

7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

11. Gaffey Street & Summerland Avenue
22. Harbor Boulevard & 7th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street
34. Gaffey Street & 13th Street

Project Intersection Impacts Year 2037

To determine whether significant impacts would occur at the study intersections under CEQA and NEPA, the cumulative plus project operating conditions were compared to the CEQA and NEPA baseline operating conditions. As shown in Table 24, using the City of Los Angeles criteria for determination of significant impacts, in 2037 the proposed Project would result in significant traffic impacts under CEQA at 16 intersections and at 15 intersections under NEPA during one or more peak hours. The impact compared to each baseline is noted in parentheses.

5. Gaffey Street & 9th Street (CEQA/NEPA)
6. Gaffey Street & 7th Street (CEQA)
7. Gaffey Street & 6th Street (CEQA/NEPA)
8. Gaffey Street & 5th Street (CEQA/NEPA)
9. Gaffey Street & 1st Street (CEQA/NEPA)
20. Miner Street & 22nd Street (CEQA/NEPA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
22. Harbor Boulevard & 7th Street (CEQA/NEPA)
23. Harbor Boulevard & 6th Street (CEQA/NEPA)
24. Harbor Boulevard & 5th Street (CEQA/NEPA)
25. Harbor Boulevard & 1st Street (CEQA/NEPA)
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps (CEQA/NEPA)
27. Harbor Boulevard & SR 47 westbound on-ramp (CEQA/NEPA)
29. Harbor Boulevard & O'Farrell Street (CEQA/NEPA)

30. Harbor Boulevard & 3rd Street (CEQA/NEPA)
34. Gaffey Street & 13th Street (CEQA/NEPA)

ALTERNATIVE 1 TRAFFIC IMPACT ANALYSIS

Cumulative plus Alternative 1 Traffic Conditions Year 2015

The resulting cumulative plus Alternative 1 peak hour traffic volumes, illustrated in Figure 27, were analyzed to project future operating conditions with the addition of the project alternative traffic. The results of the cumulative plus Alternative 1 analysis are presented in Table 25. As indicated in the table, 30 of the 36 study intersections are projected to operate at LOS D or better during the analyzed peak hours. The following six intersections are projected to operate at LOS E or F during one or more of the peak hours:

7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

Alternative 1 Intersection Impacts Year 2015

To determine whether significant impacts would occur at the study intersections under CEQA and NEPA, the cumulative plus Alternative 1 operating conditions were compared to the CEQA and NEPA baseline operating conditions. As shown in Table 25, using the City of Los Angeles criteria for determination of significant impacts, in 2015 Alternative 1 would result in significant traffic impacts under CEQA at nine intersections and at six intersections under NEPA during one or more peak hours. The impact compared to each baseline is noted in parentheses.

7. Gaffey Street & 6th Street (CEQA)
9. Gaffey Street & 1st Street (CEQA)

21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
22. Harbor Boulevard & 7th Street (CEQA/NEPA)
24. Harbor Boulevard & 5th Street (CEQA)
25. Harbor Boulevard & 1st Street (CEQA/NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)
29. Harbor Boulevard & O'Farrell Street (CEQA/NEPA)
30. Harbor Boulevard & 3rd Street (CEQA/NEPA)

Cumulative plus Alternative 1 Traffic Conditions Year 2037

The resulting cumulative plus Alternative 1 peak hour traffic volumes, illustrated in Figure 28, were analyzed to project future operating conditions with the addition of the project alternative traffic. The results of the cumulative plus Alternative 1 analysis are presented in Table 26. As indicated in the table, 24 of the 36 study intersections are projected to operate at LOS D or better during the morning and/or afternoon peak hours. The following 12 intersections are projected to operate at LOS E or F during one or more of the peak hours:

5. Gaffey Street & 9th Street
7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
21. Harbor Boulevard/Miner Street & Crescent Avenue
25. Harbor Boulevard & 1st Street
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
28. Harbor Boulevard & Gulch Road
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street
34. Gaffey Street & 13th Street

Alternative 1 Intersection Impacts Year 2037

To determine whether significant impacts would occur at the study intersections under CEQA and NEPA, the cumulative plus Alternative 1 operating conditions were compared to the CEQA and NEPA baseline operating conditions. As shown in Table 26, using the City of Los Angeles criteria for determination of significant impacts, in 2037 Alternative 1 would result in significant traffic impacts under CEQA at 12 intersections and at nine intersections under NEPA during one or more peak hours. The impact compared to each baseline is noted in parentheses.

5. Gaffey Street & 9th Street (CEQA)
7. Gaffey Street & 6th Street (CEQA)
8. Gaffey Street & 5th Street (CEQA)
9. Gaffey Street & 1st Street (CEQA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
22. Harbor Boulevard & 7th Street (CEQA/NEPA)
24. Harbor Boulevard & 5th Street (NEPA/CEQA)
25. Harbor Boulevard & 1st Street (CEQA/NEPA)
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps (NEPA)
27. Harbor Boulevard & SR 47 westbound on-ramp (CEQA/NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)
29. Harbor Boulevard & O'Farrell Street (CEQA/NEPA)
30. Harbor Boulevard & 3rd Street (CEQA/NEPA)

ALTERNATIVE 2 TRAFFIC IMPACT ANALYSIS

Cumulative plus Alternative 2 Traffic Conditions Year 2015

The resulting cumulative plus Alternative 2 peak hour traffic volumes, illustrated in Figure 31, were analyzed to project future operating conditions with the addition of the project alternative traffic. The results of the cumulative plus Alternative 2 analysis are presented in Table 27. As indicated in the table, 28 of the 36 study intersections are projected to operate at LOS D or better during the analyzed peak hours. The following eight intersections are projected to operate at LOS E or F during one or more of the peak hours:

7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
21. Harbor Boulevard/Miner Street & Crescent Avenue
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

Alternative 2 Intersection Impacts Year 2015

To determine whether significant impacts would occur at the study intersections under CEQA and NEPA, the cumulative plus Alternative 2 operating conditions were compared to the CEQA and NEPA baseline operating conditions. As shown in Table 27, using the City of Los Angeles criteria for determination of significant impacts, in 2015 Alternative 2 would result in significant traffic impacts under CEQA at 12 intersections and at 10 intersections under NEPA during one or more peak hours. The impact compared to each baseline is noted in parentheses.

5. Gaffey Street & 9th Street (CEQA)
7. Gaffey Street & 6th Street (CEQA/NEPA)
8. Gaffey Street & 5th Street (CEQA/NEPA)
9. Gaffey Street & 1st Street (CEQA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
22. Harbor Boulevard & 7th Street (CEQA/NEPA)
24. Harbor Boulevard & 5th Street (CEQA/NEPA)
25. Harbor Boulevard & 1st Street (CEQA/NEPA)
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps (CEQA/NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)
29. Harbor Boulevard & O'Farrell Street (CEQA/NEPA)
30. Harbor Boulevard & 3rd Street (CEQA/NEPA)

Cumulative plus Alternative 2 Traffic Conditions Year 2037

The resulting cumulative plus Alternative 2 peak hour traffic volumes, illustrated in Figure 32, were analyzed to project future operating conditions with the addition of the project alternative traffic. The results of the cumulative plus Alternative 2 analysis are presented in Table 28. As indicated in the table, 22 of the 36 study intersections are projected to operate at LOS D or better during the analyzed peak hours. The following 14 intersections are projected to operate at LOS E or F during one or more of the peak hours:

5. Gaffey Street & 9th Street
7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
21. Harbor Boulevard/Miner Street & Crescent Avenue
22. Harbor Boulevard & 7th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
28. Harbor Boulevard & Gulch Road
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street
34. Gaffey Street & 13th Street

Alternative 2 Intersection Impacts Year 2037

To determine whether significant impacts would occur at the study intersections under CEQA and NEPA, the cumulative plus Alternative 2 operating conditions were compared to the CEQA and NEPA baseline operating conditions. As shown in Table 28, using the City of Los Angeles criteria for determination of significant impacts, in 2037 Alternative 2 would result in significant traffic impacts under CEQA at 17 intersections and at 16 intersections under NEPA during one or more peak hours. The impact compared to each baseline is noted in parentheses.

5. Gaffey Street & 9th Street (CEQA/NEPA)
6. Gaffey Street & 7th Street (CEQA)
7. Gaffey Street & 6th Street (CEQA/NEPA)
8. Gaffey Street & 5th Street (CEQA/NEPA)
9. Gaffey Street & 1st Street (CEQA/NEPA)
20. Miner Street & 22nd Street (CEQA/NEPA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
22. Harbor Boulevard & 7th Street (CEQA/NEPA)
23. Harbor Boulevard & 6th Street (CEQA/NEPA)
24. Harbor Boulevard & 5th Street (CEQA/NEPA)
25. Harbor Boulevard & 1st Street (CEQA/NEPA)
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps (CEQA/NEPA)
27. Harbor Boulevard & SR 47 westbound on-ramp (CEQA/NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)
29. Harbor Boulevard & O'Farrell Street (CEQA/NEPA)
30. Harbor Boulevard & 3rd Street (CEQA/NEPA)
34. Gaffey Street & 13th Street (CEQA/NEPA)

ALTERNATIVE 3 TRAFFIC IMPACT ANALYSIS

Cumulative plus Alternative 3 Traffic Conditions Year 2015

The resulting cumulative plus Alternative 3 peak hour traffic volumes, illustrated in Figure 35, were analyzed to project future operating conditions with the addition of the project alternative traffic. The results of the cumulative plus Alternative 3 analysis are presented in Table 29. As indicated in the table, 32 of the 36 study intersections are projected to operate at LOS D or better during the analyzed peak hours. The following four intersections are projected to operate at LOS E or F during one or more of the peak hours:

8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
22. Harbor Boulevard & 7th Street

Alternative 3 Intersection Impacts Year 2015

To determine whether significant impacts would occur at the study intersections under CEQA and NEPA, the cumulative plus Alternative 3 operating conditions were compared to the CEQA and NEPA baseline operating conditions. As shown in Table 29, using the City of Los Angeles criteria for determination of significant impacts, in 2015 Alternative 3 would result in significant traffic impacts under CEQA at eight intersections and at four intersections under NEPA during one or more peak hours. The impact compared to each baseline is noted in parentheses.

9. Gaffey Street & 1st Street (CEQA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
22. Harbor Boulevard & 7th Street (CEQA/NEPA)
24. Harbor Boulevard & 5th Street (CEQA)
25. Harbor Boulevard & 1st Street (CEQA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)
29. Harbor Boulevard & O'Farrell Street (CEQA)
30. Harbor Boulevard & 3rd Street (CEQA/NEPA)

Cumulative plus Alternative 3 Traffic Conditions Year 2037

The resulting cumulative plus Alternative 3 peak hour traffic volumes, illustrated in Figure 36, were analyzed to project future operating conditions with the addition of the project alternative traffic. The results of the cumulative plus Alternative 3 analysis are presented in Table 30. As indicated in the table, 25 of the 36 study intersections are projected to operate at LOS D or better during the analyzed peak hours. The following 11 intersections are projected to operate at LOS E or F during one or more of the peak hours:

5. Gaffey Street & 9th Street
7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
21. Harbor Boulevard/Miner Street & Crescent Avenue

22. Harbor Boulevard & 7th Street
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
28. Harbor Boulevard & Gulch Road
29. Harbor Boulevard & O'Farrell Street
34. Gaffey Street & 13th Street

Alternative 3 Intersection Impacts Year 2037

To determine whether significant impacts would occur at the study intersections under CEQA and NEPA, the cumulative plus Alternative 3 operating conditions were compared to the CEQA and NEPA baseline operating conditions. As shown in Table 30, using the City of Los Angeles criteria for determination of significant impacts, in 2037 Alternative 3 would result in significant traffic impacts under CEQA at 10 intersections and at seven intersections under NEPA during one or more peak hours. The impact compared to each baseline is noted in parentheses.

5. Gaffey Street & 9th Street (CEQA)
7. Gaffey Street & 6th Street (CEQA)
9. Gaffey Street & 1st Street (CEQA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
22. Harbor Boulevard & 7th Street (CEQA/NEPA)
24. Harbor Boulevard & 5th Street (CEQA)
25. Harbor Boulevard & 1st Street (CEQA/NEPA)
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps (NEPA)
27. Harbor Boulevard & SR 47 westbound on-ramp (NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)
29. Harbor Boulevard & O'Farrell Street (CEQA)
30. Harbor Boulevard & 3rd Street (CEQA/NEPA)

ALTERNATIVE 4 TRAFFIC IMPACT ANALYSIS

Cumulative plus Alternative 4 Traffic Conditions Year 2015

The resulting cumulative plus Alternative 4 peak hour traffic volumes, illustrated in Figure 39, were analyzed to project future operating conditions with the addition of the project alternative traffic. The results of the cumulative plus Alternative 4 analysis are presented in Table 31. As indicated in the table, 30 of the 36 study intersections are projected to operate at LOS D or better during the analyzed peak hours. The following six intersections are projected to operate at LOS E or F during one or more of the peak hours:

7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street

Alternative 4 Intersection Impacts Year 2015

To determine whether significant impacts would occur at the study intersections under CEQA and NEPA, the cumulative plus Alternative 4 operating conditions were compared to the CEQA and NEPA baseline operating conditions. As shown in Table 31, using the City of Los Angeles criteria for determination of significant impacts, in 2015 Alternative 4 would result in significant traffic impacts under CEQA at six intersections and at zero intersections under NEPA during one or more peak hours. The impact compared to each baseline is noted in parentheses.

9. Gaffey Street & 1st Street (CEQA)
22. Harbor Boulevard & 7th Street (CEQA)
24. Harbor Boulevard & 5th Street (CEQA)
25. Harbor Boulevard & 1st Street (CEQA)

29. Harbor Boulevard & O'Farrell Street (CEQA)
30. Harbor Boulevard & 3rd Street (CEQA)

Cumulative plus Alternative 4 Traffic Conditions Year 2037

The resulting cumulative plus Alternative 4 peak hour traffic volumes, illustrated in Figure 40, were analyzed to project future operating conditions with the addition of the project alternative traffic. The results of the cumulative plus Alternative 4 analysis are presented in Table 32. As indicated in the table, 27 of the 36 study intersections are projected to operate at LOS D or better during the analyzed peak hours. The following nine intersections are projected to operate at LOS E or F during one or more of the peak hours:

5. Gaffey Street & 9th Street
7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
9. Gaffey Street & 1st Street
11. Gaffey Street & Summerland Avenue
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street
34. Gaffey Street & 13th Street

Alternative 4 Intersection Impacts Year 2037

To determine whether significant impacts would occur at the study intersections under CEQA and NEPA, the cumulative plus Alternative 4 operating conditions were compared to the CEQA and NEPA baseline operating conditions. As shown in Table 32, using the City of Los Angeles criteria for determination of significant impacts, in 2037 Alternative 4 would result in significant traffic impacts under CEQA at eight intersections and at zero intersections under NEPA during one or more peak hours. The impact compared to each baseline is noted in parentheses.

5. Gaffey Street & 9th Street (CEQA)
7. Gaffey Street & 6th Street (CEQA)
9. Gaffey Street & 1st Street (CEQA)
22. Harbor Boulevard & 7th Street (CEQA)
24. Harbor Boulevard & 5th Street (CEQA)
25. Harbor Boulevard & 1st Street (CEQA)
29. Harbor Boulevard & O'Farrell Street (CEQA)
30. Harbor Boulevard & 3rd Street (CEQA)

ALTERNATIVE 5 TRAFFIC IMPACT ANALYSIS

Alternative 5 is the No Federal Action alternative, which is the same as the NEPA baseline. Therefore, by definition, Alternative 5 would not generate significant impacts under NEPA. This analysis focuses on the potential impacts under CEQA.

Cumulative plus Alternative 5 Traffic Conditions Year 2015

The projected future operating conditions under Alternative 5 are represented by the 2015 NEPA baseline operating conditions discussed above.

Alternative 5 Intersection Impacts Year 2015

To determine whether significant impacts would occur at the study intersections under CEQA, the cumulative plus Alternative 5 operating conditions were compared to the CEQA baseline operating conditions. Because Alternative 5 is identical to the NEPA baseline, by definition no project impacts would occur under NEPA. As shown in Table 33, using the City of Los Angeles criteria for determination of significant impacts, in 2015 Alternative 5 would result in significant traffic impacts under CEQA at the following six intersections during one or more peak hours:

9. Gaffey Street & 1st Street
22. Harbor Boulevard & 7th Street

24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

Cumulative plus Alternative 5 Traffic Conditions Year 2037

The projected future operating conditions under Alternative 5 are represented by the 2037 NEPA baseline operating conditions discussion above.

Alternative 5 Intersection Impacts Year 2037

To determine whether significant impacts would occur at the study intersections under CEQA, the cumulative plus Alternative 5 operating conditions were compared to the CEQA baseline operating conditions. Because Alternative 5 is identical to the NEPA baseline, by definition no project impacts would occur under NEPA. As shown in Table 34, using the City of Los Angeles criteria for determination of significant impacts, in 2037 Alternative 5 would result in significant traffic impacts under CEQA at the following eight intersections during one or more peak hours:

5. Gaffey Street & 9th Street
7. Gaffey Street & 6th Street
9. Gaffey Street & 1st Street
22. Harbor Boulevard & 7th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

ALTERNATIVE 6 TRAFFIC IMPACT ANALYSIS

Alternative 6 is the No Project Alternative, which is the same as the CEQA baseline. Therefore, by definition, Alternative 6 would not generate significant impacts under CEQA. Further, Alternative 6 would not generate any significant impacts under NEPA. The NEPA baseline includes the development of the project components that do not any require federal action. As such, it would generate an increase in trips relative to Alternative 6, which assumes no growth. Because Alternative 6 would generate less traffic than Alternative 5, no impact would occur under NEPA.

TRAFFIC IMPACT ANALYSIS SUMMARY

The proposed Project and alternatives were found to result in potentially significant traffic impacts at between six and 12 intersections in 2015 and between eight and 17 intersections in 2037 under CEQA. Significant traffic impacts under NEPA were fewer and smaller when compared to the CEQA determination, but the proposed Project and alternatives would result in potentially significant impacts at between zero and 10 intersections in 2015 and between zero and 16 intersections in 2037 under NEPA. A summary comparison of potentially significant project impacts under CEQA and NEPA is presented in Table 35 for Year 2015 and in Table 36 for Year 2037.

V. INTERSECTION MITIGATION PROGRAM

The traffic impact analysis presented in Chapter IV determined that the proposed Project and alternatives (Alternatives 1 through 5) would result in significant impacts at up to 17 of the study intersections under CEQA and up to 16 intersections under NEPA by the Year 2037. Potential mitigation measures to address these impacts are discussed in this chapter.

INTERSECTION MITIGATION MEASURES

Project mitigation measures are suggested in this section for the 17 intersections at which impacts were identified in Chapter IV. The suggested mitigations are focused on reducing the identified traffic impacts to less than significant levels.

5. Gaffey Street & 9th Street – The mitigation measure for this intersection includes modifying the southbound approach to provide one left-turn lane, two through lanes and one though/right-turn lane. The prohibition of parking during the morning and afternoon peak periods on Gaffey Street both northbound and southbound north of 9th Street would be needed to implement this mitigation measure and would complement the mitigation proposed for the intersection of Gaffey Street and 7th Street. This prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Gaffey Street north of 9th Street. Observations conducted during the analyzed peak hours showed that approximately 11 vehicles were parked on-street at locations that would be affected by the weekday peak period parking prohibition. This improvement would fully mitigate the identified impact at this location during the future weekday p.m. peak hour. No feasible measures have been identified to address the impact at this location during the weekday a.m. or weekend midday peak hour. This intersection is projected to operate at an acceptable level of service under all scenarios (LOS D or better) in the weekend midday peak hour.

6. Gaffey Street & 7th Street – The mitigation measure for this intersection includes prohibiting parking on Gaffey Street during the morning and afternoon peak periods to allow for an additional through lane both northbound and southbound. This prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Gaffey Street north of 9th Street. Observations conducted during the analyzed peak hours showed that approximately 11 vehicles were parked on-street at locations that would be affected by the weekday peak period parking prohibition. Thus, these vehicles would have to park elsewhere in the vicinity if the measure were implemented. This improvement would fully mitigate the identified impact at this location under the future weekday a.m. scenario. While no feasible measures have been identified

to address the impact at this location during the weekend midday peak hour, this intersection is projected to operate at an acceptable level of service under all scenarios (LOS D or better) in the weekend midday peak hour.

7. Gaffey Street & 6th Street – The mitigation measure for this intersection includes installing a traffic signal and prohibiting parking on Gaffey Street during the morning and afternoon peak periods to allow for an additional through lane both northbound and southbound. The peak period parking prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Gaffey Street north of 9th Street. Observations conducted during the analyzed peak hours showed that approximately 11 vehicles were parked on-street at locations that would be affected by the weekday peak period parking prohibition. Thus, these vehicles would have to park elsewhere in the vicinity if the measure were implemented. This improvement would fully mitigate the identified impact at this location under each of the future scenarios.

8. Gaffey Street & 5th Street – The mitigation measure for this intersection includes prohibiting parking on Gaffey Street during the morning and afternoon peak periods to allow for an additional through lane both northbound and southbound. This prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Gaffey Street north of 9th Street. Observations conducted during the analyzed peak hours showed that approximately 11 vehicles were parked on-street at locations that would be affected by the weekday peak period parking prohibition. Thus, these vehicles would have to park elsewhere in the vicinity if the measure were implemented. This improvement would fully mitigate the identified impact at this location under the future weekday a.m. scenario. No feasible measures have been identified to address the impact at this location during the weekend midday peak hour.

9. Gaffey Street & 1st Street – At the intersection of Gaffey Street & 1st Street, because of existing physical constraints, no feasible measures have been identified that would mitigate the identified impact under any of the future scenarios.

20. Miner Street & 22nd Street – The mitigation measure for this intersection includes modifying the northbound and southbound approaches to provide one left-turn lane, one through lane and one though/right-turn lane. This improvement would fully mitigate the identified impact at this location under each of the future scenarios.

21. Harbor Boulevard/Miner Street & Crescent Drive – Because of existing physical constraints at the intersection of Harbor Boulevard/Miner Street & Crescent Drive, no feasible measures were identified that would mitigate the identified impact under any of the future scenarios.

22. Harbor Boulevard & 7th Street – The mitigation measure for this intersection includes reconfiguring the eastbound approach to provide two left-turn lanes, one through lane onto Sampson Way and one through/right-turn lane, and prohibiting parking on the north side of 7th Street between Harbor Boulevard and Palos Verdes Street (three metered spaces plus a loading zone) and on the south side of 7th Street between Harbor Boulevard and Beacon Street (two metered spaces). Observations conducted during the analyzed peak hours showed that approximately four vehicles (three metered spaces and one loading zone space) were parked on-street at locations that would be affected by the removal of on-street parking on 7th Street. Thus, these vehicles would have to park elsewhere in the

vicinity if the mitigation measure were implemented. This improvement would partially mitigate the impact for the proposed Project and all project alternatives.

23. Harbor Boulevard & 6th Street – The mitigation measure for this intersection includes prohibiting parking on Harbor Boulevard and configuring the roadway to provide three southbound lanes, resulting in two through lanes and one shared through/right-turn lane. This prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Harbor Boulevard north of 7th Street. Observations conducted during the analyzed peak hours showed that approximately 34 vehicles were parked on-street at locations that would be affected by the removal of on-street parking on Harbor Boulevard. Thus, these vehicles would have to park elsewhere in the vicinity if it were implemented. The existing on-street bicycle lanes may need to be removed to accommodate the additional travel lane on southbound Harbor Boulevard. This improvement would fully mitigate the identified impact at this location under the proposed Project for each of the future scenarios and would partially mitigate the impact for each scenario under Alternative 2.

24. Harbor Boulevard & 5th Street – The mitigation measure for this intersection includes prohibiting parking on Harbor Boulevard and configuring the roadway to provide three southbound lanes, resulting in one left-turn lane, two through lanes and one shared through/right-turn lane. This prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Harbor Boulevard north of 7th Street. Observations conducted during the analyzed peak hours showed that approximately 34 vehicles were parked on-street at locations that would be affected by the removal of on-street parking on Harbor Boulevard. Thus, these vehicles would have to park elsewhere in the vicinity if the measure were implemented. The existing on-street bicycle lanes may need to be removed to accommodate the additional travel lane on southbound Harbor Boulevard. This improvement would fully mitigate the identified impact at this location under Alternatives 1, 3, 4 and 5 for each of the future scenarios and partially mitigate the identified impact under the proposed Project and Alternative 2.

25. Harbor Boulevard & 1st Street – The mitigation measure for this intersection includes prohibiting parking on Harbor Boulevard and configuring the roadway to provide three lanes both northbound and southbound. This prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Harbor Boulevard north of 7th Street. Observations conducted during the analyzed peak hours showed that approximately 34 vehicles were parked on-street at locations that would be affected by the removal of on-street parking on Harbor Boulevard. Thus, these vehicles would have to park elsewhere in the vicinity if the measure were implemented. The existing on-street bicycle lanes may need to be removed to accommodate the additional travel lanes on Harbor Boulevard. This improvement would fully mitigate the identified impact at this location under each of the future scenarios except for the weekday a.m. impact under the proposed project and Alternative 2, and the weekend midday impact under Alternative 2. This intersection is projected to operate at an acceptable LOS (LOS C or better) under all scenarios with the proposed mitigation measure in place.

26. Harbor Boulevard & Swinford Street/SR 47 Eastbound Ramps – The mitigation for this intersection involves restriping the westbound (Swinford Street) approach to provide an additional lane. The westbound approach would be configured with one left–turn lane, one through lane, and one right-turn lane. This improvement would fully mitigate the

impact there under Alternatives 1 and 3 and would partially mitigate the impact under the proposed Project and under Alternative 2.

27. Front Street & SR 47 Westbound Ramps – At the intersection of Front Street & SR 47 Ramps, because of physical constraints, no feasible measures were identified that would mitigate the identified impact under any of the future scenarios. This intersection is projected to operate at an acceptable LOS under all scenarios (LOS D or better).

28. Harbor Boulevard & Gulch Road – Because of existing physical constraints at the intersection of Harbor Boulevard & Gulch Road, no feasible measures were identified that would mitigate the identified impact under any of the future scenarios.

29. Harbor Boulevard & O'Farrell Street – The mitigation measure for this intersection includes prohibiting parking on Harbor Boulevard and configuring the roadway to provide three lanes both northbound and southbound. This prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Harbor Boulevard north of 7th Street. Observations conducted during the analyzed peak hours showed that approximately 34 vehicles were parked on-street at locations that would be affected by the removal of on-street parking on Harbor Boulevard. Thus, these vehicles would have to park elsewhere in the vicinity if the measure were implemented. The existing on-street bicycle lanes may need to be removed to accommodate the additional travel lanes on Harbor Boulevard. This improvement would fully mitigate the identified impact at this location under each of the future scenarios.

30. Harbor Boulevard & 3rd Street – The mitigation measure for this intersection includes installing a traffic signal at this intersection, prohibiting parking on Harbor Boulevard and configuring the roadway to provide three lanes both northbound and southbound. This prohibition is identified in the current San Pedro Community Plan as a potential measure to improve traffic flow on Harbor Boulevard north of 7th Street. Observations conducted during the analyzed peak hours showed that approximately 34 vehicles were parked on-street at locations that would be affected by the removal of on-street parking on Harbor Boulevard. Thus, these vehicles would have to park elsewhere in the vicinity if the measure were implemented. The existing on-street bicycle lanes may need to be removed to accommodate the additional travel lanes on Harbor Boulevard. This improvement would fully mitigate the identified impact at this location under each of the future scenarios.

34. Gaffey Street & 13th Street – The mitigation measure for this intersection includes modifying the eastbound and westbound approaches to provide one left-turn lane and one shared through/right-turn lane each. This reconfiguration would result in the loss of approximately six on-street parking spaces observed to be in use during the analyzed peak hours. This improvement would fully mitigate the identified impact at this location under each of the future scenarios.

Signal Warrant Analysis

The two stop-controlled intersections of Gaffey Street and 6th Street (Intersection #7) and Harbor Boulevard and 3rd Street (Intersection #30) were analyzed with the signal warrant methodology

outlined in *Manual on Uniform Traffic Control Devices* (MUTCD) (Federal Highway Administration, 2003). The MUTCD outlines a number of warrants based on such factors as intersection traffic volumes, pedestrian volumes and crash experience, among others. This analysis focuses on the peak hour volume warrants.

Under future traffic volumes with project Alternative 3, both of the analyzed intersections meet peak hour signal warrants based on traffic volumes in 2015. Detailed worksheets are available in Appendix E. Alternative 3 is the least intense project alternative and generates the fewest number of trips among all project alternatives in 2015 and 2037. This analysis can therefore conclude that, under all future analysis scenarios (the proposed Project and Alternatives 1, 2, 3, 4 and 5), this location would meet peak hour signal warrant based on traffic volumes in 2015 or 2037. Alternative 6, the No Project alternative, was not analyzed as part of the signal warrant analysis because this alternative is the baseline to which the development project alternatives are compared.

The decrease in V/C at the two intersections with the introduction of traffic signals reduces each impact to below a significant level. The signal warrant analysis confirms the suitability of introducing traffic signals at these two locations under the proposed Project or alternatives.

EFFECTIVENESS OF POTENTIAL MITIGATION MEASURES

The number of successful mitigations varies by project alternative and analysis year. This section itemizes the effectiveness of each proposed mitigation measure on the impacted intersections for the proposed Project and each build alternative in 2015 and 2037. The effectiveness of each proposed measure can be understood in terms of fully mitigating or partially mitigating identified impacts. For the proposed Project and Alternatives 1 through 5, intersections with no feasible mitigation measures are also identified.

PROPOSED PROJECT TRAFFIC MITIGATION MEASURES

Effectiveness of Mitigation Measures for Year 2015

In 2015 the proposed Project would result in significant traffic impacts under CEQA at 10 intersections and at seven intersections under NEPA during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following seven intersections:

7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

The intersection mitigation measures proposed above would partially mitigate the impacts at the following intersection. The remaining impacts are considered significant and unavoidable. The remaining impact compared to each baseline is noted in parentheses:

22. Harbor Boulevard & 7th Street (CEQA)

At the following intersections, no feasible mitigations measures were identified. These impacts are therefore considered significant and unavoidable. For these intersections, the impact compared to each baseline is noted in parentheses:

5. Gaffey Street & 9th Street (CEQA)
9. Gaffey Street & 1st Street (CEQA)

Effectiveness of Mitigation Measures for Year 2037

In 2037 the proposed Project would result in significant traffic impacts under CEQA at 16 intersections and at 15 intersections under NEPA during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following six intersections:

7. Gaffey Street & 6th Street
20. Miner Street & 22nd Street
23. Harbor & 6th Street
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street
34. Gaffey Street & 13th Street

The intersection mitigation measures proposed above would partially mitigate the impacts at the following seven intersections. The remaining impacts are considered significant and unavoidable. For each intersection, the remaining impact compared to each baseline is noted in parentheses:

5. Gaffey Street & 9th Street (CEQA/NEPA)
8. Gaffey Street & 5th Street (CEQA)
22. Harbor Boulevard & 7th Street (CEQA/NEPA)
24. Harbor Boulevard & 5th Street (CEQA/NEPA)
25. Harbor Boulevard & 1st Street (CEQA)
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps (NEPA)

At the following four intersections, no mitigation measures were identified to fully mitigate the project impacts, which would therefore be considered significant and unavoidable. For each intersection, the impact compared to each baseline is noted in parentheses:

6. Gaffey Street & 7th Street (CEQA)
9. Gaffey Street & 1st Street (CEQA/NEPA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
27. Harbor Boulevard & SR 47 westbound on-ramp (CEQA/NEPA)

ALTERNATIVE 1 TRAFFIC MITIGATION MEASURES

Effectiveness of Mitigation Measures for Year 2015

In 2015 Alternative 1 would result in significant traffic impacts under CEQA at nine intersections and at six intersections under NEPA during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following six intersections:

7. Gaffey Street & 6th Street
22. Harbor Boulevard & 7th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

At the following three intersections, no feasible mitigations measures were identified. These impacts are therefore considered significant and unavoidable. For each intersection, the impact compared to each baseline is noted in parentheses:

9. Gaffey Street & 1st Street (CEQA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)

Effectiveness of Mitigation Measures for Year 2037

In 2037, Alternative 1 would result in significant traffic impacts under CEQA at 12 intersections and at nine intersections under NEPA during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following six intersections:

7. Gaffey Street & 6th Street
24. Harbor Boulevard & 5th Street

25. Harbor Boulevard & 1st Street
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

The intersection mitigation measures proposed above would partially mitigate the impacts at the following three intersections. The remaining impacts are considered significant and unavoidable. For each intersection, the remaining impact compared to each baseline is noted in parentheses:

5. Gaffey Street & 9th Street (CEQA)
22. Harbor Boulevard & 7th Street (CEQA/NEPA)

At the following five intersections, no mitigation measures were identified to fully mitigate the project impacts, which would therefore be considered significant and unavoidable. For each intersection, the impact compared to each baseline is noted in parentheses:

8. Gaffey Street & 5th Street (CEQA)
9. Gaffey Street & 1st Street (CEQA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
27. Harbor Boulevard & SR 47 westbound on-ramp (CEQA/NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)

ALTERNATIVE 2 TRAFFIC MITIGATION MEASURES

Effectiveness of Mitigation Measures for Year 2015

In 2015, Alternative 2 would result in significant traffic impacts under CEQA at 12 intersections and at 10 intersections under NEPA during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following eight intersections:

7. Gaffey Street & 6th Street
8. Gaffey Street & 5th Street

22. Harbor Boulevard & 7th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

At the following four intersections, no mitigation measures were identified to fully mitigate the project impacts, which would therefore be considered significant and unavoidable. For each intersection, the impact compared to each baseline is noted in parentheses:

5. Gaffey Street & 9th Street (CEQA)
9. Gaffey Street & 1st Street (CEQA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)

Effectiveness of Mitigation Measures for Year 2037

In 2037, Alternative 2 would result in significant traffic impacts at 17 intersections under CEQA and at 16 intersections under NEPA during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following five intersections:

7. Gaffey Street & 6th Street
20. Miner Street & 22nd Street
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street
34. Gaffey Street & 13th Street

The intersection mitigation measures proposed above would partially mitigate the impacts at the following eight intersections. The remaining impacts are considered significant and unavoidable. For each intersection, the remaining impact compared to each baseline is noted in parentheses:

5. Gaffey Street & 9th Street (CEQA/NEPA)
6. Gaffey Street & 7th Street (CEQA)
9. Gaffey Street & 5th Street (CEQA)
22. Harbor Boulevard & 7th Street (CEQA/NEPA)
23. Harbor Boulevard & 6th Street (CEQA/NEPA)
24. Harbor Boulevard & 5th Street (CEQA/NEPA)
25. Harbor Boulevard & 1st Street (CEQA)
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps (NEPA)

At the following four intersections, no mitigation measures were identified to fully mitigate the project impacts, which would therefore be considered significant and unavoidable. For each intersection, the impact compared to each baseline is noted in parentheses:

9. Gaffey Street & 1st Street (CEQA/NEPA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
27. Harbor Boulevard & SR 47 westbound on-ramp (CEQA/NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)

ALTERNATIVE 3 TRAFFIC MITIGATION MEASURES

Effectiveness of Mitigation Measures for Year 2015

In 2015, Alternative 3 would result in significant traffic impacts under CEQA at eight intersections and at four intersections under NEPA during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following four intersections:

24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

The intersection mitigation measures proposed above would partially mitigate the impacts at the following intersection. The remaining impacts are considered significant and unavoidable. The remaining impact compared to each baseline is noted in parentheses:

22. Harbor Boulevard & 7th Street (CEQA/NEPA)

At the following three intersections, no mitigation measures were identified to fully mitigate the project impacts, which would therefore be considered significant and unavoidable. For each intersection, the impact compared to each baseline is noted in parentheses:

9. Gaffey Street & 1st Street (CEQA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)

Effectiveness of Mitigation Measures for Year 2037

In 2037, Alternative 3 would result in significant traffic impacts under CEQA at 10 intersections and at seven intersections under NEPA during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following six intersections:

7. Gaffey Street & 6th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
26. Harbor Boulevard & Swinford Street/SR 47 eastbound ramps
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

The intersection mitigation measures proposed above would partially mitigate the impacts at the following intersection. The remaining impacts are considered significant and unavoidable. For the intersection, the remaining impact compared to each baseline is noted in parentheses:

22. Harbor Boulevard & 7th Street (CEQA/NEPA)

At the following five intersections, no mitigation measures were identified to fully mitigate the project impacts, which would therefore be considered significant and unavoidable. For each intersection, the impact compared to each baseline is noted in parentheses:

5. Gaffey Street & 9th Street (CEQA)
9. Gaffey Street & 1st Street (CEQA)
21. Harbor Boulevard/Miner Street & Crescent Avenue (CEQA/NEPA)
27. Harbor Boulevard & SR 47 westbound on-ramp (NEPA)
28. Harbor Boulevard & Gulch Road (CEQA/NEPA)

ALTERNATIVE 4 TRAFFIC MITIGATION MEASURES

Effectiveness of Mitigation Measures for Year 2015

In 2015, Alternative 4 would result in significant traffic impacts under CEQA at six intersections during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following five intersections:

22. Harbor Boulevard & 7th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

At the following intersection, no mitigation measures were identified to fully mitigate the project impacts, which would therefore be considered significant and unavoidable:

9. Gaffey Street & 1st Street (CEQA)

Effectiveness of Mitigation Measures for Year 2037

In 2037, Alternative 4 would result in significant traffic impacts under CEQA at eight intersections during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following five intersections:

7. Gaffey Street & 6th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

The intersection mitigation measures proposed above would partially mitigate the impacts at the following two intersections. The remaining impacts are considered significant and unavoidable:

5. Gaffey Street & 9th Street (CEQA)
22. Harbor Boulevard & 7th Street (CEQA)

At the following intersection, no mitigation measures were identified to fully mitigate the project impacts, which would therefore be considered significant and unavoidable.

9. Gaffey Street & 1st Street (CEQA)

ALTERNATIVE 5 TRAFFIC MITIGATION MEASURES

Effectiveness of Mitigation Measures for Year 2015

In 2015, Alternative 5 would result in significant traffic impacts under CEQA at six intersections during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following five intersections:

22. Harbor Boulevard & 7th Street
24. Harbor Boulevard & 5th Street

25. Harbor Boulevard & 1st Street
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

At the following intersection, no mitigation measures were identified to fully mitigate the project impacts, which would therefore be considered significant and unavoidable:

9. Gaffey Street & 1st Street (CEQA)

Effectiveness of Mitigation Measures for Year 2037

In 2037, Alternative 5 would result in significant traffic impacts under CEQA at eight intersections during one or more peak hours. The intersection mitigation measures proposed above would reduce impacts to below significant levels at the following five intersections:

7. Gaffey Street & 6th Street
24. Harbor Boulevard & 5th Street
25. Harbor Boulevard & 1st Street
29. Harbor Boulevard & O'Farrell Street
30. Harbor Boulevard & 3rd Street

The intersection mitigation measures proposed above would partially mitigate the impacts at the following two intersections. The remaining impacts are considered significant and unavoidable:

5. Gaffey Street & 9th Street (CEQA)
22. Harbor Boulevard & 7th Street (CEQA)

At the following intersection, no mitigation measures were identified to fully mitigate the project impacts, which would therefore be considered significant and unavoidable.

9. Gaffey Street & 1st Street (CEQA)

ALTERNATIVE 6 TRAFFIC MITIGATION MEASURES

Alternative 6 would not generate significant impacts under CEQA or NEPA. Therefore, no mitigation measures are required for Alternative 6.

SUMMARY OF MITIGATION MEASURE EFFECTIVENESS

Projected LOS at the impacted intersections with the proposed mitigations for the proposed Project and Alternatives 1 through 5 are shown in Tables 37 and 38 for 2015 and 2037, respectively. To better understand the effectiveness of the proposed mitigations and to complement the text above, the remaining impacts after mitigation by alternative are summarized in Tables 39 and 40 for 2015 and 2037, respectively.

In 2015, the identified significant impacts at seven of the 12 impacted intersections could be fully mitigated with capacity increases resulting from lane reconfiguration, restriping or parking restrictions. The significant impacts at one of the 12 impacted intersections could be partially mitigated with these measures. This partial mitigation tally includes full mitigation under certain scenarios and partial mitigation under others. For four of the 12 impacted intersections, no feasible measures were identified that would fully mitigate the significant impact under any of the future scenarios.

In 2037, the identified significant impacts at five of the 17 impacted intersections could be fully mitigated with capacity increases resulting from lane reconfiguration, restriping or parking restrictions. The significant impacts at eight of the 17 impacted intersections could be partially mitigated with these measures. This partial mitigation tally includes intersections that could be fully mitigated under certain scenarios and partially mitigated or not mitigated under others. For four of the 17 impacted intersections, no feasible measures were identified that would fully mitigate the significant impact under any of the future scenarios.

Appendix A illustrates the change in intersection lane configurations and operations as a result of the proposed improvements. Detailed LOS calculations for the impacted intersections as a result of mitigation are included in Appendix C for the proposed Project and project alternatives for the Years 2015 and 2037.

VI. NEIGHBORHOOD STREET SEGMENT ANALYSIS

This chapter presents the results of an analysis conducted to determine the potential for project impacts on local residential streets in neighborhoods near the project site. The analysis was conducted on two street segments to the west of the project, which are illustrated in Figure 1:

1. Santa Cruz Street between Grand Avenue and Pacific Avenue
2. 17th Street between Centre Street and Palos Verdes Street

The residential street segment analysis compares the projected daily traffic at the two street segments under cumulative plus project conditions to the CEQA and NEPA baseline conditions to estimate the incremental change in daily traffic caused by the proposed Project or project alternatives. This provides the information needed to assess the potential impact of the project under CEQA and NEPA using significance criteria established by LADOT.

DAILY TRAFFIC PROJECTIONS

24-hour machine counts were conducted on these two street segments in January 2008. Because the base year of this analysis is 2007, ADT volumes were scaled down by 0.65% per year for one year to reflect 2007 conditions. Future daily traffic volumes were projected in a manner similar to the peak hour analysis of the study intersections, including both ambient growth through 2015 or 2037, as well as anticipated traffic from related projects.

For the proposed Project and Alternatives 1 through 5, daily project trips were assigned to the street network based on the trip distribution patterns presented in Chapter III and were added to the future no project projections to obtain future plus project projections.

NEIGHBORHOOD STREET IMPACTS

Under the City of Los Angeles guidelines, a project impact on a local residential street would be considered significant if the projected increase in daily traffic volumes is as follows:

Projected Average Daily Traffic with Project (Final ADT)	Project-Related Increase in ADT
0 to 999	16% or more of final ADT
1,000 or more	12% or more of final ADT
2,000 or more	10% or more of final ADT
3,000 or more	8% or more of final ADT

Daily traffic volumes for both the existing and projected future conditions for the proposed Project and Alternatives 1 through 5 are summarized in Tables 41 (2015) and Table 42 (2037). As shown, application of the appropriate significance criteria for neighborhood traffic impacts indicates that the 17th Street segment would be significantly impacted under the following project alternatives when compared to the CEQA baseline:

2015

- Alternative 1
- Alternative 2

2037

- Proposed Project
- Alternative 1
- Alternative 2

Neither street segment is impacted when compared to the NEPA baseline.

NEIGHBORHOOD MITIGATION MEASURES

The significant neighborhood traffic impact identified at 17th Street between Centre Street and Palos Verdes Street occurs primarily because of its utility to locally-based traffic generated from non-cruise-related land uses at the project site, rather than from regional cut-through traffic, which primarily travels on arterials and collectors rather than local streets.

Short of the permanent closure of the affected street segment, which would not be acceptable since they serve adjacent land uses and carry substantial traffic volumes, no mitigation measures exist that would fully eliminate the addition of significant or adverse traffic volumes to this segment of 17th Street. Therefore, under the proposed Project (in 2037) and Alternatives 1 and 2 (in 2015 and in 2037), this would be considered a significant and unavoidable impact under CEQA.

VII. CONGESTION MANAGEMENT PROGRAM ANALYSIS

This section presents an analysis of potential impacts on the regional transportation system. This analysis was conducted in accordance with the procedures outlined in the CMP. The CMP requires that, when an EIR is prepared for a project, traffic and transit impact analyses be conducted for select regional facilities based on the quantity of project traffic expected to use those 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 a.m. or p.m. 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 a.m. or p.m. peak hours.

Significant Traffic Impact Criteria

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

- The proposed Project increase traffic demand on a CMP facility by 2% of capacity (V/C ≥ 0.02), causing LOS F (V/C > 1.00); or 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 two CMP arterial monitoring stations in the project study area are also study intersections:

- Western Avenue & 9th Street (Intersection 2) – The proposed Project and project alternatives (Alternatives 1 through 6) are expected to add up to approximately 30 weekday peak hour trips in 2015 and up to approximately 35 weekday peak hour trips in 2037.

- Gaffey Street & 9th Street (Intersection 5) – The proposed Project and project alternatives (Alternatives 1 through 6) are expected to add up to approximately 95 weekday peak hour trips in 2015 and up to approximately 135 weekday peak hour trips in 2037.

At the intersection of Gaffey Street & 9th Street, the project is expected to add more than 50 vehicle trips during the a.m. and p.m. peak hours in 2015 and 2037. Operating conditions at this intersection were developed in Chapter IV for the proposed Project and all project alternatives. In 2015, the CMP intersection is projected to operate at LOS D or better under the proposed Project and Alternatives 1 through 6. In 2037, the CMP intersection is projected to operate at LOS E or better under the proposed Project and Alternatives 1 through 5.

The development under the proposed Project or project alternative scenarios would not be considered to have a regionally significant impact, regardless of the increase in V/C ratio, if the analyzed facility were projected to operate at LOS E or better after the addition of project traffic. Because the intersection is expected to operate at LOS E or better in 2037, the proposed Project and all analyzed alternatives are not expected to significantly impact any of the CMP arterial monitoring stations according to the criteria set forth by the CMP.

Freeway Mainline Monitoring Station Analysis

The regional setting of the project site within the freeway network and the regional nature of certain project land uses suggested that the following four CMP freeway mainline monitoring locations assessed for potential impacts:

Interstate 110 CMP Freeway Mainline Monitoring Stations

- South of C Street (post mile 2.77)
- At Manchester Boulevard (post mile 15.86)

Interstate 405 CMP Freeway Mainline Monitoring Stations

- South of I-110 at Carson Scales (post mile 11.90)
- North of Inglewood Boulevard (post mile 18.63)

Freeway mainline segment LOS was determined based on V/C ratios and the definitions shown in Table 43. In accordance with values established in *Highway Capacity Manual*, an LOS E service capacity of approximately 2,200 vehicles per hour per lane (vphpl) was used for freeway mixed-flow lanes. For the purposes of this analysis, auxiliary and high-occupancy vehicle (HOV) lanes were analyzed as the equivalent of half of a mixed-flow lane. A regional growth factor (0.65% per year) was applied to forecast cumulative base freeway volumes in 2015 and 2037.

Based on the trip distribution estimates developed for the proposed Project, the following percentages of cruise and non-cruise traffic were estimated to pass through each of the four monitoring locations for use in this analysis:

- 62% of non-cruise traffic and 80% of cruise traffic on I-110 south of C Street
- 10% of non-cruise traffic and 15% of cruise traffic on I-110 at Manchester Boulevard
- 5% of non-cruise traffic and 10% of cruise traffic on I-405 south of I-110 at Carson Scales
- 15% of non-cruise traffic and 25% of cruise traffic on I-405 north of Inglewood Boulevard

Tables 44 through 55 summarize the significant impact analysis under CEQA and NEPA for the analyzed freeway mainline segments with the proposed Project and Alternatives 1 to 5 for 2015 and 2037, respectively. As shown in the tables, neither the proposed Project nor Alternatives 1 through 5 are expected to generate significant freeway mainline segment impacts under CEQA or NEPA for either of the analyzed years.

NEPA freeway mainline analysis is not shown in all tables. For Alternative 3 in 2015, no impact analysis was conducted under NEPA because NEPA freeway baseline traffic volumes are higher

than Alternative 3 in 2015. NEPA freeway baseline traffic volumes are roughly equal to Alternative 4 traffic volumes and no analysis was conducted under NEPA because no impacts would occur. Alternative 5 is also the NEPA freeway baseline and no analysis was conducted under NEPA because, by definition, no impacts would occur.

Alternative 6 is not expected to generate a net increase in traffic relative to the proposed Project or alternatives and thus does not meet CMP criteria for freeway traffic impact analysis. No CMP freeway mainline analysis was required for Alternative 6.

REGIONAL TRANSIT IMPACT ANALYSIS

Potential increases in transit person trips generated by the proposed Project were estimated as follows. Section D.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed Project based on the projected number of vehicle trips. This methodology assumes an AVR factor of 1.4 in order to estimate the number of person trips to and from the project and then provides guidance regarding the percent of person trips assigned to public transit depending on the type of use (commercial/residential) and the proximity to transit service. The nearest designated CMP transit corridor is the Harbor Freeway Corridor. Since the project site is outside the one-quarter mile boundary from these services, the CMP guidelines estimate that approximately 3.5% of the project person trips may use public transit to travel to and from the site. Because cruise ship passengers are unlikely to arrive or depart via public transit, the transit impact analysis only considers the person trips expected to result from the increase in commercial, recreational, cultural and business-oriented activity.

As discussed in Chapter III and shown in Table 7, the proposed Project is expected to generate a net increase in approximately 611 vehicle trips during the morning peak hour and 1,180 vehicle trips during the afternoon peak hour as a result of the commercial, recreational, cultural and business-oriented project elements. Because the project does not propose a change in these elements between 2015 and 2037, this net increase applies to both analysis periods. Applying an AVR of 1.4 to the number of vehicle trips results in an estimated 855 and 1,652 person trips in the morning and the afternoon peak hours, respectively. Finally, assuming the 3.5% transit mode split suggested in the CMP, this results in approximately 30 new transit

person trips in the morning and 58 new transit person trips in the afternoon peak hours that the proposed Project would add to the transit lines providing service in the vicinity of the project site.

As discussed in Chapter II, there are seven bus lines that provide service in the vicinity of the project site, two that provide service on the periphery, a local community circulator, and the Waterfront Red Car streetcar. Based on the existing operating schedules for these transit lines, we estimated that a total of 12 buses in the a.m. peak hour and 12 buses in the p.m. peak hour serve the vicinity of the project. This results in the conclusion that the project could add, on average, approximately three person trips per bus in the a.m. peak hour and five person trips per bus in the p.m. peak hour in 2015 and 2037. Five persons per bus represent the equivalent of slightly more than 12% of the capacity of a typical 40-passenger bus. At this level of activity, project-related impacts to the regional transit system would be considered less than significant in either 2015 or 2037.

A similar methodology was applied to the project alternatives. As the proposed Project represents the “worst-case” scenario in the number of trips generated as a result of commercial, recreational, cultural and business-oriented activity, it can be concluded that Alternatives 1 through 5 would not generate significant transit-related impacts, according to the results of the proposed Project regional transit system analysis.

VIII. PARKING ANALYSIS

This chapter analyzes the ability of the proposed parking supply under the proposed Project and project alternatives to satisfy applicable City of Los Angeles Municipal Code (Code) requirements. The analysis compared the proposed parking supply under each scenario to the code requirements to assess its ability to satisfy these requirements for projected 2015 and for 2037 conditions.

The proposed Project would be served by a total of 9,076 existing and new parking spaces in a combination of surface lots and parking structures, as summarized in Table 56 and described below:

- Approximately 700 (existing) spaces in a surface parking lot beneath the Vincent Thomas Bridge for Catalina Express and Island Helicopters
- Approximately 4,200 spaces in surface and structured parking adjacent to the Inner Harbor Cruise Terminals to serve passengers and service vehicles at the Inner Harbor and Outer Harbor Cruise Terminals, including 300 spaces to supplement the 700-space surface parking lot beneath the Vincent Thomas Bridge for Catalina Express and Island Helicopters
- 40 spaces in a surface parking lot adjacent to 1st Street & Harbor Boulevard to serve Crowley and Millennium Tugboat operations
- Approximately 132 spaces in a surface parking lot adjacent to 3rd Street & Harbor Boulevard to serve the Los Angeles Maritime Institute and the S.S. Lane Victory
- 20 (existing) spaces in a surface parking lot adjacent to 5th Street & Harbor Boulevard to serve Los Angeles Fire Station #112
- 14 spaces in a surface parking lot adjacent to 6th Street & Harbor Boulevard to serve the Los Angeles Maritime Museum and the S.S. Lane Victory
- Approximately 138 spaces in a surface parking lot adjacent to Acapulco restaurant to serve that restaurant, the Los Angeles Maritime Museum and the Ralph J. Scott Historic Fireboat Museum

- Approximately 2,638 parking spaces to serve development in the Ports O' Call area, including 1,652 structured parking spaces on the west side of Sampson Way, 330 surface spaces at Berths 73 - 77, 400 spaces at Berths 78 - 83 and 256 spaces at San Pedro Park

- 30 (existing) parking spaces to serve Jankovich & Son, Inc. Fueling Station south of Ports O' Call

- Four (existing) parking spaces to serve Mike's Main Channel Fueling Station near the Municipal Fish Market

- Approximately 756 spaces in a surface lot adjacent to San Pedro Park to serve the park and supplemental parking for development in the Ports O' Call area

- Approximately 200 covered parking spaces in the existing Warehouse No. 10, which would be converted to this use

- Approximately 400 spaces in a surface lot adjacent to the Outer Harbor Cruise Terminals to serve that use

- 60 spaces in a surface lot adjacent to the Outer Harbor Park to serve that use.

CODE PARKING ANALYSIS – PROPOSED PROJECT

The analysis of potential parking impacts that may be associated with the proposed Project was conducted for the project and Alternatives 1 through 5 in 2015 and in 2037. While the proposed Project or project alternatives are expected to be constructed by 2015, projected conditions in 2037 were also assessed because of the anticipated increase in the size of cruise vessels, which would increase the parking demand for that use. A project would be considered to have a significant impact with regard to parking if the projected parking demand were not met by the supply of parking spaces provided by the project.

This analysis was based on the parking requirements defined in Section 12.21.A.4 of the Code. The Code generally requires that "there shall be at least one automobile parking space for each 500 square feet of combined floor area contained within all the office, business, commercial, research and development buildings, and manufacturing or industrial buildings on any lot." Different parking ratios are generally required for warehouses, restaurants, retail stores, and places of assembly, such as the proposed conference center. Because the project site lies within a designated State Enterprise Zone, the minimum parking requirements for the retail and restaurant uses proposed as part of the project or project alternatives is reduced from the

general requirement to one space per 500 sf. This analysis assumes that the existing parking supply serving the three uses that lie within the project area but will not be physically altered as part of the project (Fire Station #112, Jankovich & Son, Inc. Fueling Station and Mike's Main Channel Fueling Station) is sufficient to meet the Code requirement. Applying the relevant standards to each component of the proposed Project results in a total parking requirement of 2,996 spaces, as shown in Table 56. The number of parking spaces proposed by the project more than satisfies the Code requirement.

Estimates of future parking need, separate from the Code requirements, were made during the project development process. For some existing uses that would be maintained, such as the Los Angeles Maritime Museum and Acapulco restaurant, these estimates were based on the existing parking supply near those uses. These estimates also included the provision of parking at a ratio of either five or 10 spaces per acre for the proposed new parks and projections of peak month parking demand at the cruise terminals developed by Bermello-Ajamil & Partners, Inc. on the basis of past utilization data from the existing Los Angeles World Cruise Center. As shown in Table 56, the total estimated parking need is 7,719 spaces in 2015 and 8,997 spaces in 2037. The proposed parking supply of 9,076 spaces exceeds the estimated 2015 parking need by 1,357 spaces and exceeds the estimated 2037 parking need by 79 spaces. Thus, the proposed Project would not have a significant parking impact.

CODE PARKING ANALYSIS – ALTERNATIVE 1

The parking analysis for Alternative 1 was conducted in a manner similar to that for the proposed Project. Alternative 1 differs from the proposed Project in that it would locate three cruise berths at the Inner Harbor and one at the Outer Harbor, would relocate Jankovich & Son, Inc. Fueling Station and Mike's Main Channel Fueling Station to Berth 240 (on the east side of the Main Channel) and would locate the Waterfront Red Car Maintenance Facility and Museum at Warehouse No. 1. As with the proposed Project, the parking for cruise passengers would be at the Inner Harbor. Under Alternative 1, parking for the Waterfront Red Car Maintenance Facility and Museum would be provided at both the site of that facility in Warehouse No. 1 and in the parking supply in the Ports O' Call area.

As shown in Table 57, the total Code requirement for Alternative 1 would be slightly higher than that identified for the proposed Project, 3,196 spaces, and the total number of parking spaces

that would be provided under Alternative 1 (8,027 spaces) would more than satisfy the Code requirement. Given the distance between Warehouse No. 1, however, where the Waterfront Red Car Maintenance Facility and Museum would be located and the Ports O' Call area, it may be necessary to obtain a variance to allow some of the parking for those uses to be provided in the Ports O' Call area. If possible, all of the parking for those uses should be located adjacent to them on City Dock No. 1.

The total estimated parking need for Alternative 1, as shown in Table 57, is 7,797 spaces in 2015 and 8,928 spaces in 2037. The proposed parking supply of 8,027 spaces exceeds the estimated 2015 parking need by 430 spaces but would be 701 spaces less than the estimated 2037 parking need, resulting in a potentially significant parking impact in 2037.

The projected shortfall is largely the result of the projected increase in the amount of parking needed to support the anticipated level of activity at the cruise terminals. Given the need to provide secure, dedicated parking for that use, the size of the parking structure in the Inner Harbor proposed under Alternative 1 should be increased by approximately 650 spaces in order to meet the anticipated long-term parking need for that use. The remainder of the projected shortfall (approximately 50 spaces) appears related to the parking need identified for the Los Angeles Maritime Museum (112 spaces). Given the close proximity of this museum to a projected parking surplus in the Ports O' Call area, the parking demand for that facility not accommodated in the immediately adjacent parking lots is expected to be accommodated in the Ports O' Call area. With the addition of approximately 650 parking spaces for at the cruise terminal, Alternative 1 would not have a significant parking impact.

CODE PARKING ANALYSIS – ALTERNATIVE 2

The parking analysis for Alternative 2 was conducted in a manner similar to that for the proposed Project. Alternative 2 differs from the proposed Project in that it would locate 1,100 passenger parking spaces for the two Outer Harbor cruise berths at the Outer Harbor and 650 passenger parking spaces for those berths at the Inner Harbor. It would also relocate Jankovich & Son, Inc. Fueling Station to Berth 240 (on the east side of the Main Channel). As with the proposed Project, the parking for cruise passengers at the Inner Harbor cruise berths would be at the Inner Harbor.

As shown in Table 58, the total Code requirement for Alternative 2 would be the same as that identified for the proposed Project, 2,996 spaces, and the total number of parking spaces that would be provided under Alternative 2 (9,076 spaces) would more than satisfy the Code requirement.

The total estimated parking need for Alternative 2, as shown in Table 58, is 7,719 spaces in 2015 and 8,997 spaces in 2037. The proposed parking supply of 9,076 spaces exceeds the estimated 2015 parking need by 1,357 spaces and exceeds the estimated 2037 parking need by 79 spaces. Thus, Alternative 2 would not have a significant parking impact.

CODE PARKING ANALYSIS – ALTERNATIVE 3

The parking analysis for Alternative 3 was conducted in a manner similar to that for the proposed Project. Alternative 3, the reduced project alternative, differs from the proposed Project in that it would result in three (rather than four) cruise berths. As with the proposed Project, the parking for cruise passengers at the Inner Harbor cruise berths would be at the Inner Harbor. A total of 187,500 sf of retail and restaurant development would occur in the Ports O' Call area. No conference center would be constructed under this alternative. The proposed Waterfront Red Car Museum would be at 7th Street.

As shown in Table 59, the total Code requirement for Alternative 2 would be the same as that identified for the proposed Project, 1,425 spaces, and the total number of parking spaces that would be provided under Alternative 3 (6,863 spaces) would more than satisfy the Code requirement.

The total estimated parking need for Alternative 3, as shown in Table 59, is 6,381 spaces in 2015 and 7,512 spaces in 2037. The proposed parking supply of 6,863 spaces exceeds the estimated 2015 parking need by 482 spaces but would be 649 spaces less than the estimated 2037 parking need, resulting in a potentially significant parking impact in 2037.

The projected shortfall is the result of the projected increase in the amount of parking needed to support the anticipated level of activity at the cruise terminals. Given the need to provide

secure, dedicated parking for that use, the size of the parking structures serving the cruise terminals proposed under Alternative 3 should be increased by approximately 649 spaces in order to meet the anticipated parking need for that use. With this measure, Alternative 3 would not have a significant parking impact.

CODE PARKING ANALYSIS – ALTERNATIVE 4

The parking analysis for Alternative 4 was conducted in a manner similar to that for the proposed Project. Alternative 4 differs from the proposed Project in that it would locate cruise berths only in the Inner Harbor and would construct approximately 200,000 sf of additional terminal facilities at Berth 91. Because the proposed North Harbor would not be constructed under this alternative, the S.S. Lane Victory would be relocated to the Ports O' Call area and the Crowley and Millennium Tugboat operations would be relocated to Berths 70 - 71. The proposed Waterfront Red Car Museum would be adjacent to the proposed Waterfront Red Car Maintenance Facility west of Sampson Way near 13th Street. Jankovich & Son, Inc. Fueling Station and Mike's Main Channel Fueling Station would be relocated to Berth 240 (on the east side of the Main Channel).

As shown in Table 60, the total Code requirement for Alternative 4 would be 2,996 spaces, and the total number of parking spaces that would be provided under Alternative 4 (8,021 spaces) would more than satisfy the Code requirement.

The total estimated parking need for Alternative 4, as shown in Table 60, is 7,494 spaces in 2015 and 8,183 spaces in 2037. The proposed parking supply of 8,021 spaces exceeds the estimated 2015 parking need by 527 spaces but would be 162 spaces less than the estimated 2037 parking need, resulting in a potentially significant parking impact in 2037.

The projected shortfall is largely the result of the projected increase in the amount of parking needed to support the anticipated level of activity at the cruise terminals. Given the need to provide secure, dedicated parking for that use, the size of the parking structure in the Inner Harbor proposed under Alternative 4 should be increased by approximately 162 spaces in order to meet the anticipated long-term parking need for that use. The remainder of the projected shortfall (57 spaces) appears related to the parking need identified for the Los Angeles Maritime Museum (112 spaces). Given the close proximity of this museum to a projected parking surplus

in the Ports O' Call area, the parking demand for that facility not accommodated in the immediately adjacent parking lots is expected to be accommodated in the Ports O' Call area. With the addition of approximately 162 parking spaces for at the cruise terminal, Alternative 4 would not have a significant parking impact.

CODE PARKING ANALYSIS – ALTERNATIVE 5

The parking analysis for Alternative 5 was conducted in a manner similar to that for the proposed Project. Alternative 5 differs from the proposed Project in that it would locate cruise berths only in the Inner Harbor and would construct approximately 200,000 sf of additional terminal facilities at Berth 91. None of the proposed harbor cuts and dredging activities proposed as part of the project would occur under this alternative. The S.S. Lane Victory would be relocated to the Ports O' Call area and the Crowley and Millennium Tugboat operations would be relocated to Berths 70-71.

As shown in Table 61, the total Code requirement for Alternative 5 would be 2,996 spaces, and the total number of parking spaces that would be provided under Alternative 5 (7,909 spaces) would more than satisfy the Code requirement.

The total estimated parking need for Alternative 5, as shown in Table 61, is 7,396 spaces in 2015 and 8,085 spaces in 2037. The proposed parking supply of 7,909 spaces exceeds the estimated 2015 parking need by 513 spaces but would be 176 spaces less than the estimated 2037 parking need, resulting in a potentially significant parking impact in 2037.

The projected shortfall is largely the result of the projected increase in the amount of parking needed to support the anticipated level of activity at the cruise terminals. Given the need to provide secure, dedicated parking for that use, the size of the parking structure in the Inner Harbor proposed under Alternative 5 should be increased by approximately 176 spaces in order to meet the anticipated long-term parking need for that use. The remainder of the projected shortfall (71 spaces) appears related to the parking need identified for the Los Angeles Maritime Museum (112 spaces). Given the close proximity of this museum to a projected parking surplus in the Ports O' Call area, the parking demand for that facility not accommodated in the immediately adjacent parking lots is expected to be accommodated in the Ports O' Call area.

With the addition of approximately 176 parking spaces at the cruise terminal, Alternative 5 would not have a significant parking impact.

SUMMARY OF CODE PARKING ANALYSIS

The ability of the parking supply proposed under the project and alternatives to meet the applicable requirements of the Los Angeles Municipal Code was assessed. In addition, the estimated parking need under each future scenario was compared to the proposed parking supply. The proposed Project and Alternative 2 would each provide more than sufficient parking to meet the Code requirement and to satisfy the estimated parking need in 2015 and 2037. Alternatives 1, 3, 4 and 5 would each meet the Code parking requirement and satisfy the estimated parking need in 2015. These alternatives, however, would be between 162 and 701 spaces short of the projected 2037 parking need, resulting in a potentially significant parking impact in the long term. Specific recommendations were made to increase the proposed parking supply as mitigation for these projected shortfalls.

IX. WATERFRONT RED CAR EXPANSION GRADE CROSSING ISSUES

The existing Waterfront Red Car is a historic streetcar line established in 2003 and links many destinations along the San Pedro waterfront. It functions as an amenity to the existing attractions in the area and is primarily used by visitors for pleasure trips rather than by commuters. The proposed San Pedro Waterfront project includes the expansion of the Waterfront Red Car to serve additional destinations in the project area. The expansion would realign portions of the existing line and extend it in the southern project area along three new branch lines to City Dock No. 1, to the Outer Harbor and to Cabrillo Beach. This low-speed streetcar would continue to fulfill the function it does today, albeit within a more vibrant environment. The proposed Waterfront Red Car expansion is depicted in the context of the overall proposed Project in Figures 1 through 4. The proposed alignment and station locations are illustrated in more detail in Figures 45 and 46.

This chapter discusses the existing and proposed systems and identifies specific qualitative safety and circulation issues associated with implementation of this project component. This analysis is based in part on information on the proposed expansion contained in *Waterfront Red Car Line Expansion Feasibility Study* (Wilson & Company, November 26, 2007). The design of this component of the proposed San Pedro Waterfront project is currently being refined. The proposed Waterfront Red Car component of the San Pedro Waterfront project is identical in the proposed Project and in the Alternatives 1 through 5. Alternative 6, the No Project Alternative, does not include any changes to the existing Waterfront Red Car.

EXISTING CONDITIONS

The existing Waterfront Red Car line is approximately 1.5 miles long and includes four stations. The station locations are: Swinford Street/Cruise Center, 6th Street/Downtown, Sampson Way/Ports O' Call, and 22nd & Miner Street. The existing line runs along the east side of Harbor

Boulevard between Swinford Street and 22nd Street. Although this streetcar line currently shares its tracks with freight trains, which operate at different times of the day, freight service will be discontinued in 2009, and the existing alignment can then be modified. Three grade crossings are gated along the line: on 1st Street, on 5th Street and on 6th Street.

The Waterfront Red Car currently operates one-car trains on 20-minute headways in each direction Fridays through Mondays from 10:00 a.m. to 6:00 p.m. Additional service is provided on mid-week days when cruise ships are present and for extended hours during special events. Average daily ridership normally ranges from approximately 250 to 450 passengers. On peak days well over 1,000 passengers have been accommodated. Annual ridership averaged almost 100,000 passengers per year from 2003 to 2006. Over 90% of the riders responding to a user survey conducted in 2007 said that they were visitors who rode for personal interest or for sightseeing purposes. The remaining respondents said they rode the Waterfront Red Car for transportation purposes.

PROPOSED CONDITIONS

The proposed Project would modify the existing alignment and construct three new branch lines in the southern project area. The total system would be expanded from 1.5 miles to 4.6 miles. The four existing high-platform stations would be removed and the 16 new stations would have low platforms to allow street-level boarding and better integration into the streetscape. Replica Waterfront Red Cars capable of carrying 88 passengers each would be used. Operating speeds would be low, as they currently are, and they would operate as street cars under traffic signal control. Average travel speeds are estimated at 7 miles per hour, and maximum speeds would be 25 miles per hour or less. Service is planned to be provided on 20-minute headways on each line. Future ridership is estimated at approximately 450 passengers per day per mile, or about 2,000 passengers per day. The proposed expansion of the Waterfront Red Car line includes the four segments discussed individually below.

Harbor Boulevard/Sampson Way Segment

This segment would include a 1.7-mile realignment of the existing Waterfront Red Car line from Swinford Street to Miner Street. This segment would be mostly double-tracked and would be in its current side-running alignment from Swinford Street to south of 7th Street, where it would continue along the east side of the realigned Sampson Way. Between 5th Street and 7th Street adjacent to John S. Gibson Park, a 16-foot wide single track section would be constructed. At approximately 13th Street, it would cross over to the west side of Sampson Way and continue in a side-running alignment along the north side of 22nd Street. A wye would be located at Miner Street & Sampson Way/22nd Street to provide connections to the Outer Harbor and Cabrillo Beach/Marina extensions. In the vicinity of 13th Street, under the proposed Project and Alternatives 2 through 5, a siding would connect these tracks to the proposed Waterfront Red Car Maintenance Facility on the west side of Sampson Way. Seven stations are proposed along this segment:

- Swinford Street/Cruise Center Station (relocated)
- 1st Street Station (new)
- 5th Street Station (new, replacing the existing 6th Street/Downtown Station)
- 7th Street Station (new)
- Sampson Way/Ports O' Call Station (relocated to the vicinity of 13th Street)
- Sampson Way & Signal Street Station (new)
- 22nd Street & Miner Street Station (relocated)

Cabrillo Beach/Marina Extension

This 1.5-mile single-track segment would extend from the intersection of 22nd Street & Minor Street to the parking lot adjacent to Cabrillo Beach. It would be located in a side-running alignment on the north side of 22nd Street and on the west side of Via Cabrillo Marina and along the west side of Shoshonean Road. This segment would terminate southeast of the Cabrillo Marine Aquarium. Four new stations are proposed along this segment:

- 22nd Street Landing Station
- 22nd Street/Via Cabrillo Marina Station

- Cabrillo Marina Hotel Station
- Aquarium/Beach Station (terminal station)

Outer Harbor/Cruise Ship Terminal Extension

This 0.75-mile segment would extend from the intersection of 22nd Street & Minor Street to the proposed Outer Harbor cruise ship terminal. It would extend the double-track segment from Harbor Boulevard/Sampson Way southward in a center-running alignment along Miner Street and would include two new stations:

- Cabrillo Marina East Station
- Outer Harbor Station (terminal station)

City Dock No. 1 Extension

This 0.6-mile spur would extend from the proposed Sampson Way & Signal Street station to Warehouse One. South of the proposed Sampson Way & Signal Street station, this single-track segment would transition from the double-track segment within Sampson Way to a side-running alignment on the west side of Signal Street. South of the proposed Mid-Point Station, it would transition to side-running on the east side of Signal Street and terminate within Warehouse One. This extension would include three new stations:

- Signal Street/22nd Street Station
- Mid-Point Station
- Warehouse One Station (terminal station)

GRADE CROSSING ISSUES AND RECOMMENDATIONS

The realignment and extension of the Waterfront Red Car would create numerous new grade crossings where conflicts with vehicular traffic and pedestrians would be possible. The overall system would be 4.6 miles long and would include 16 new or relocated stations. As stated

above, plans for this component of the project are currently being refined. As the plans for this project component are further developed, consideration should be given to minimizing potential conflicts to ensure the maximum safety and convenience. This section documents several issue areas of concern and makes specific recommendations that should be considered as the design continues and appropriate engineering studies are conducted.

The California Public Utilities Commission (CPUC) has regulatory authority over rail operations and grade crossings throughout the state. This component of the proposed San Pedro Waterfront project is subject to approval or modification by that entity. CPUC General Order 143-B states that in cases where Light Rail Vehicle (LRV) travel is upon streets, all intersections must be controlled by traffic signals or other approved devices. Part 10 of the MUTCD provides specific standards and guidance on the design of traffic controls for highway-light rail transit (LRT) grade crossings. It allows for the use of traffic signal control at intersections, rather than automatic gates, when streetcar operating speeds are below 35 miles per hour (Section 10D.03).

GRADE CROSSINGS AT STREETS AND INTERSECTIONS

The proposed Waterfront Red Car realignment and extension would consist of both side-running and center-running segments. The project proposes to include "minimal use of crossing gates at roadway crossings off of shared right of ways, with traffic signals used instead." The movements of the train would occur within the context of the overall traffic patterns on the surrounding streets, with few locations being provided with traffic signal pre-emption or separate signal phases. This approach has been used in other cities such as San Francisco and Portland.

Alignment

Under all project alternatives, the proposed Waterfront Red Car alignment would primarily be side-running. Where the streetcar alignment would be side-running, cross streets would be controlled by existing or new traffic signals. This includes the existing signals at 1st Street and 22nd Street, as well as the modified intersection at 3rd Street. While the proposed Project does

not specifically include the signalization of Harbor Boulevard & 3rd Street, this is recommended to allow for the control of conflicting traffic movements. Traffic signals at these locations should have protected left-turn phases and, potentially, active "No Right Turn" signs to allow these movements from streets parallel to the tracks to be held when a train is approaching or present. On the streets that approach the rail line perpendicularly, such as 1st Street, 5th Street, 6th Street or Miner Street, the stop bars and vehicle detection loops on the intersection legs where the rail line would lie should be placed in advance of the tracks to prevent motorists from stopping on the tracks. Automatic crossing gates may also be necessary to fully protect the crossings that lie adjacent to parallel streets.

The proposed streetcar alignment would be center-running only on Miner Street south of 22nd Street to the Outer Harbor cruise terminal and Outer Harbor Park. A small number of low-volume service driveways would cross this alignment. Traffic signals and/or crossing gates would not be required to control conflicting traffic movements.

Access to Parking

The proposed alignment would be crossed by both existing and proposed driveways serving the adjacent uses. These include surface parking lots and parking structures along Sampson Way near the Ports O' Call development, parking lots serving the existing and planned park space north of 22nd Street, and parking facilities serving the planned Cabrillo Marina expansion and Outer Harbor cruise terminal on the west side of Miner Street. One way to address safety concerns at these locations would be to prohibit all left-turn movements across the tracks. Alternatively, it may be acceptable to reduce streetcar operating speeds at these locations and to install appropriate active warning signs or other devices to alert motorists to the possible presence of oncoming streetcars.

Under the proposed Project, four separate parking structures with a total of 1,652 parking spaces would be constructed on the west side of Sampson Way and surface parking lots with approximately 730 parking spaces would be located on the east side of Sampson Way. As proposed, each of these parking areas serving the Ports O' Call development would be fully accessible from Sampson Way, resulting in at least four potential conflict points along Sampson Way. The feasibility of combining the lower levels of the proposed parking structures should be

explored, as this could reduce the number of driveways on Sampson Way and could yield both a greater number of parking spaces than is currently estimated and improve the operational efficiency of the structured parking supply. It may be possible to locate a main access to the surface parking lots on the east side of Sampson Way to create a four-legged intersection there, which could be signalized to reduce conflicts.

The proposed intersection of Crescent Avenue & Sampson Way (under Alternatives 1 and 2 only) and the reconfigured intersection of Signal Street & Sampson Way may need to be controlled by traffic signals, given the presence of the streetcar line within Sampson Way and the wye where the City Dock No. 1 line would transition from Sampson Way onto Signal Street.

Grade Crossings at Track Crossovers within Streets

The proposed Waterfront Red Car alignment includes several locations where the tracks would cross over the adjoining streets. These would occur on Sampson Way near 13th Street and at Signal Way, on Signal Way itself and at the intersections of Miner Street & Sampson Way/22nd Street and Via Cabrillo Marina & 22nd Street. In addition to these in-street track crossovers, the proposed alignment of the Cabrillo Beach/Marina extension would run through an existing parking lot at its southern terminus.

Given the projected traffic volumes on Sampson Way, a four-lane street, installation of half-signals at the two proposed track crossover locations there should be considered to ensure safe operations between vehicular and streetcar traffic.

The proposed track crossovers on 22nd Street at Miner Street and at Via Cabrillo Marina would lie within those signalized intersections. These traffic signals may each need to be re-timed to include a street car phase for turning and crossing streetcars, along with possible transit signal priority phasing. At the intersection of 22nd Street & Via Cabrillo Marina, train movements may be able to coincide with the westbound left-turn and northbound right-turn movements.

The track crossover for proposed as part of the City Dock No. 1 extension would occur south of the proposed Mid-Point station. While no specific development of the surrounding area is

currently proposed, installation of a half-signal should be considered to limit the potential for conflicts there.

The southern portion of the proposed Cabrillo Beach extension would lie within the parking lot serving the Cabrillo Marine Aquarium and Cabrillo Beach, presenting unique design challenges. The affected areas of the parking lots may need to be reconfigured to accommodate the dynamic envelope of the streetcar, avoiding the potential for parked cars to overhang onto the rail line and to ensure that it has adequate clearance to operate safely. The existing parking lots in this area currently provide approximately 285 spaces, including approximately 110 oversized spaces for vehicles with attached boat trailers. In the event that the reconfiguration of these parking lots to accommodate this streetcar extension results in a loss of available parking, it could be considered significant unless that loss can be offset through reconfiguration or expansion of parking elsewhere in the vicinity. To the extent possible, the southern portion of this extension should be designed to minimize disruption to the existing parking lots. The feasibility and desirability of aligning the southern segment of this extension behind the Cabrillo Marine Aquarium should be investigated, as it could avoid or minimize conflicts with the existing parking lots in the area.

PEDESTRIAN ISSUES AND OTHER CONSIDERATIONS

At this time, individual station ridership has not been projected. The Waterfront Red Car Line Expansion Feasibility Study includes planning-level estimates that suggest typical daily system-wide ridership of approximately 2,000 passengers per day, or an average of approximately 125 passengers per day per station. Above-average activity would be expected at certain stations.

At all proposed stations, likely pedestrian travel patterns should be identified, and the pavement markings and signage in station areas should be designed to clearly direct pedestrians to the desired routes. At some locations, it may be necessary to construct new sidewalks to allow for the orderly movement of pedestrians. At the Cabrillo Marina East station, the only proposed median station, pedestrians should be channeled to marked mid-block street crossings to allow them to cross the street safely. Installation of fences along the alignment should be considered to prevent pedestrians from jaywalking across the tracks at uncontrolled locations, such as on Sampson Way in the Ports O' Call area and near the Cabrillo Marine Aquarium.

As part of the proposed project, a pedestrian bridge is proposed between Harbor Boulevard and Sampson Way near 13th Street to improve local access to the Ports O' Call area. As depicted in the figures illustrating the proposed Project, that bridge would terminate near the planned Sampson Way/Ports O' Call station and directly opposite the main vehicular driveway serving the surface parking lots on east side of Sampson Way. The location of the main Ports O' Call surface parking lot driveway should be shifted to a point north of this station to improve pedestrian safety there, as most of the traffic on Sampson Way would be coming from and going to the north. This driveway could be located opposite one of the driveways serving the proposed parking structures on the west side of Sampson Way, as discussed above. Within the Ports O' Call surface parking lots, clear pedestrian paths should be provided from the foot of the proposed pedestrian bridge.

REFERENCES

2006 Traffic Volumes on California State Highways, California Department of Transportation, http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm, accessed February 2008.

Alternative Comparison of Cruise Ship Operations for Port of Los Angeles, Bermello-Ajamil & Partners, Inc., February 7, 2008.

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

Highway Capacity Manual, Transportation Research Board, 2000.

Los Angeles Municipal Code, Section 12.21.A.4, City of Los Angeles, http://www.amlegal.com/los_angeles_ca/, accessed February 2008.

Manual on Uniform Traffic Control Devices, Federal Highway Administration, 2003.

Port of Los Angeles Baseline Transportation Study, Meyer, Mohaddes Associates, Inc, April 2004.

San Pedro Community Plan, City of Los Angeles, Department of City Planning, adopted 1999.

Traffic Study Policies and Procedures, Los Angeles Department of Transportation, March 2002.

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

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

Waterfront Red Car Line Expansion Feasibility Study, Wilson & Company, November 26, 2007.

LIST OF PREPARERS

Dick S. Kaku, Principal in Charge

Netai Basu, AICP, Project Manager

Steve Crosley, Project Planner

Michael Kennedy, Project Planner

Chris Sheffer, Project Engineer

Jaclyn Dupre, Project Graphics Technician

Leah Ramos, Editor

FIGURES

Source: Port of Los Angeles, April 18, 2008

Not to Scale

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PROPOSED PROJECT STUDY AREA AND SITE PLAN

FIGURE 1

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INNER HARBOR, NORTH HARBOR, DOWNTOWN HARBOR AND 7TH STREET HARBOR SITE PLAN (PROPOSED PROJECT)

FIGURE 2

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PORTS O'CALL AND SAN PEDRO PARK SITE PLAN (PROPOSED PROJECT)

FIGURE 3

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CITY DOCK #1 AND OUTER HARBOR SITE PLAN (PROPOSED PROJECT)

FIGURE 4

Source: Port of Los Angeles, April 18, 2008

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ALTERNATIVE 1 STUDY AREA AND SITE PLAN

FIGURE 5

Source: Port of Los Angeles, April 18, 2008

Not to Scale

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ALTERNATIVE 2 STUDY AREA AND SITE PLAN

FIGURE 6

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ALTERNATIVE 3 STUDY AREA AND SITE PLAN

FIGURE 7

Source: Port of Los Angeles, April 18, 2008

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ALTERNATIVE 4 STUDY AREA AND SITE PLAN

FIGURE 8

Source: Port of Los Angeles, April 18, 2008

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Not to Scale

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ALTERNATIVE 5 STUDY AREA AND SITE PLAN

FIGURE 9

Source: Port of Los Angeles, March 11, 2008

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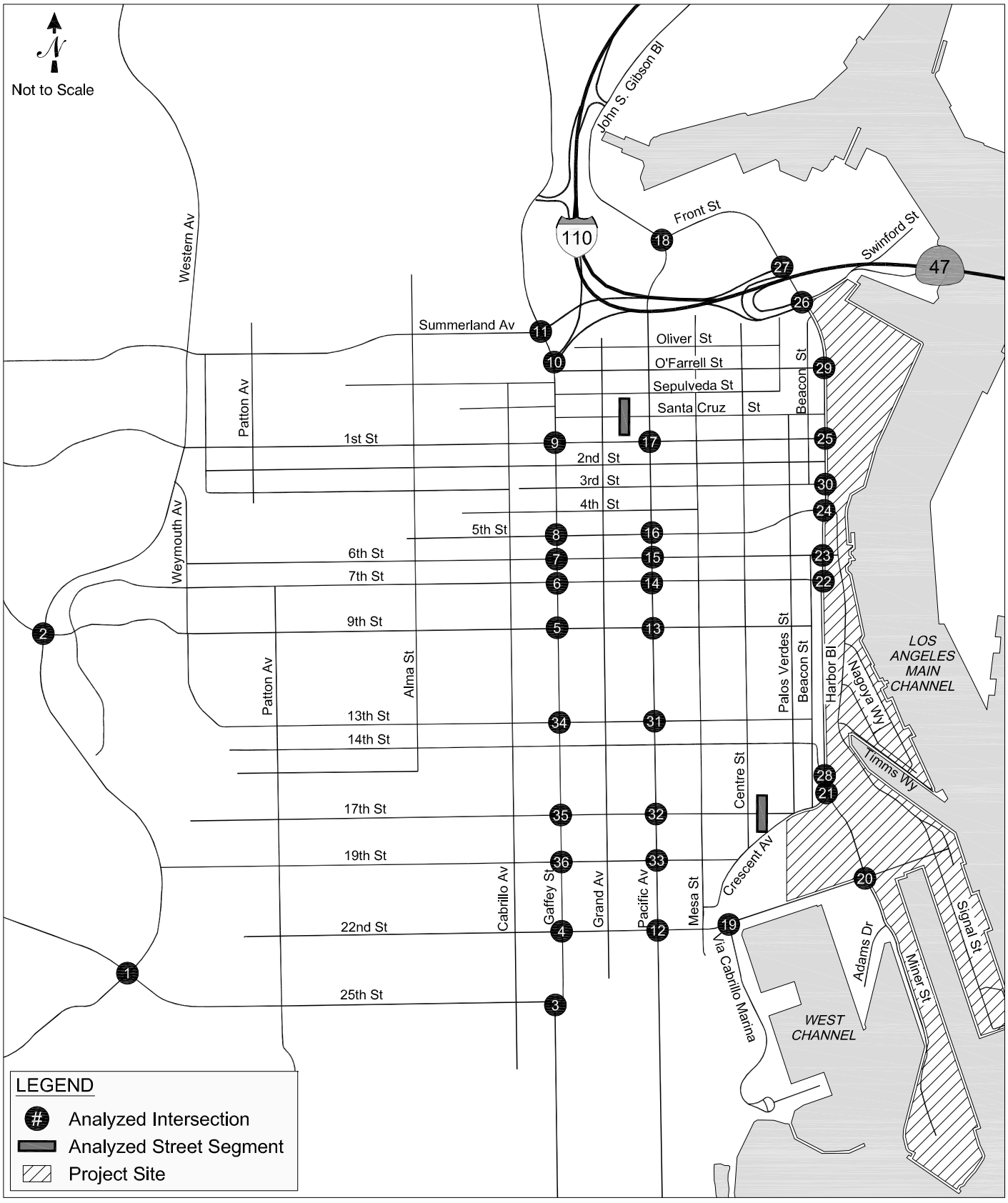
ALTERNATIVE 6 STUDY AREA AND SITE PLAN

FIGURE 10



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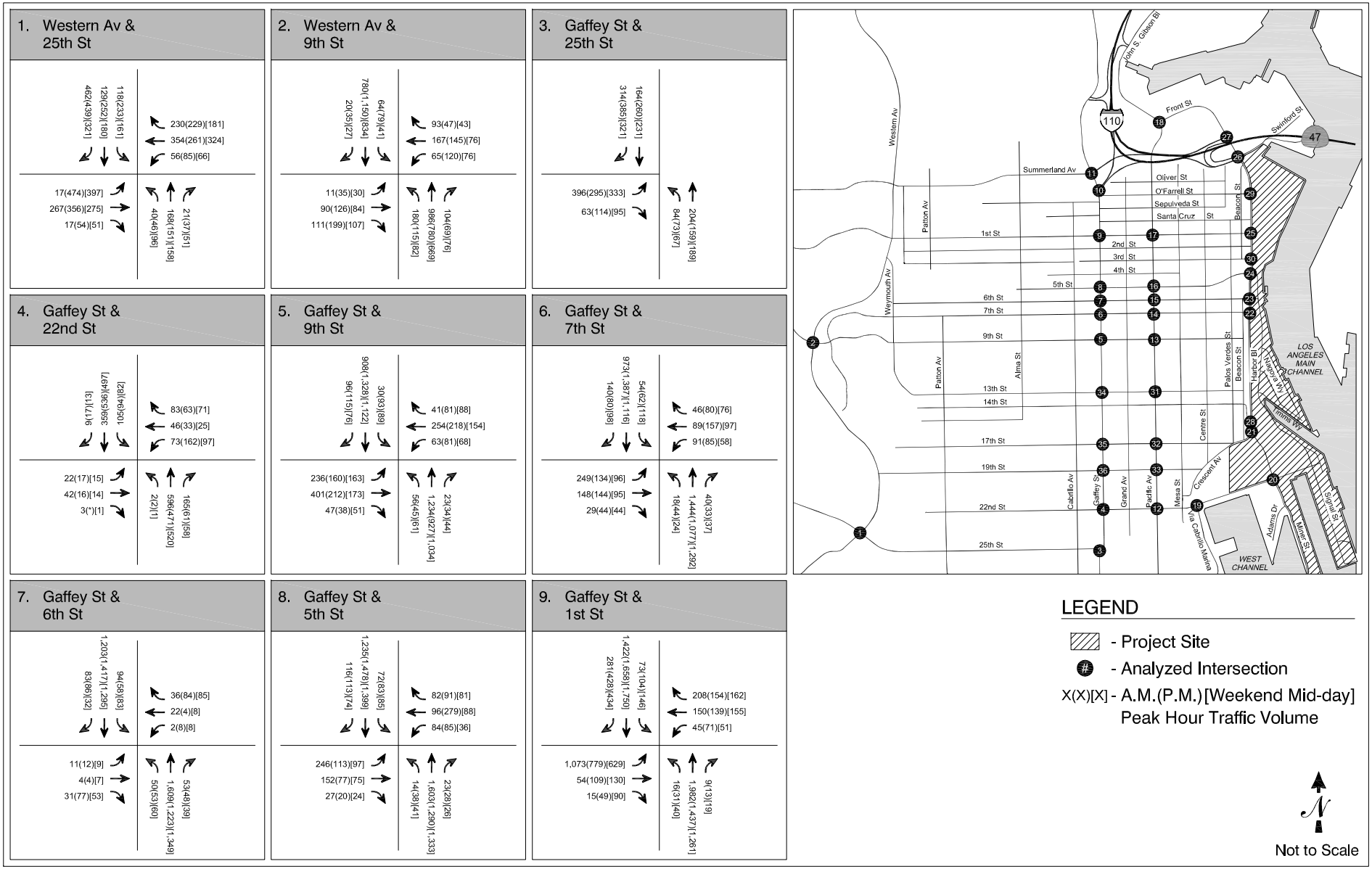
LOCATION OF ANALYZED INTERSECTIONS

FIGURE 11



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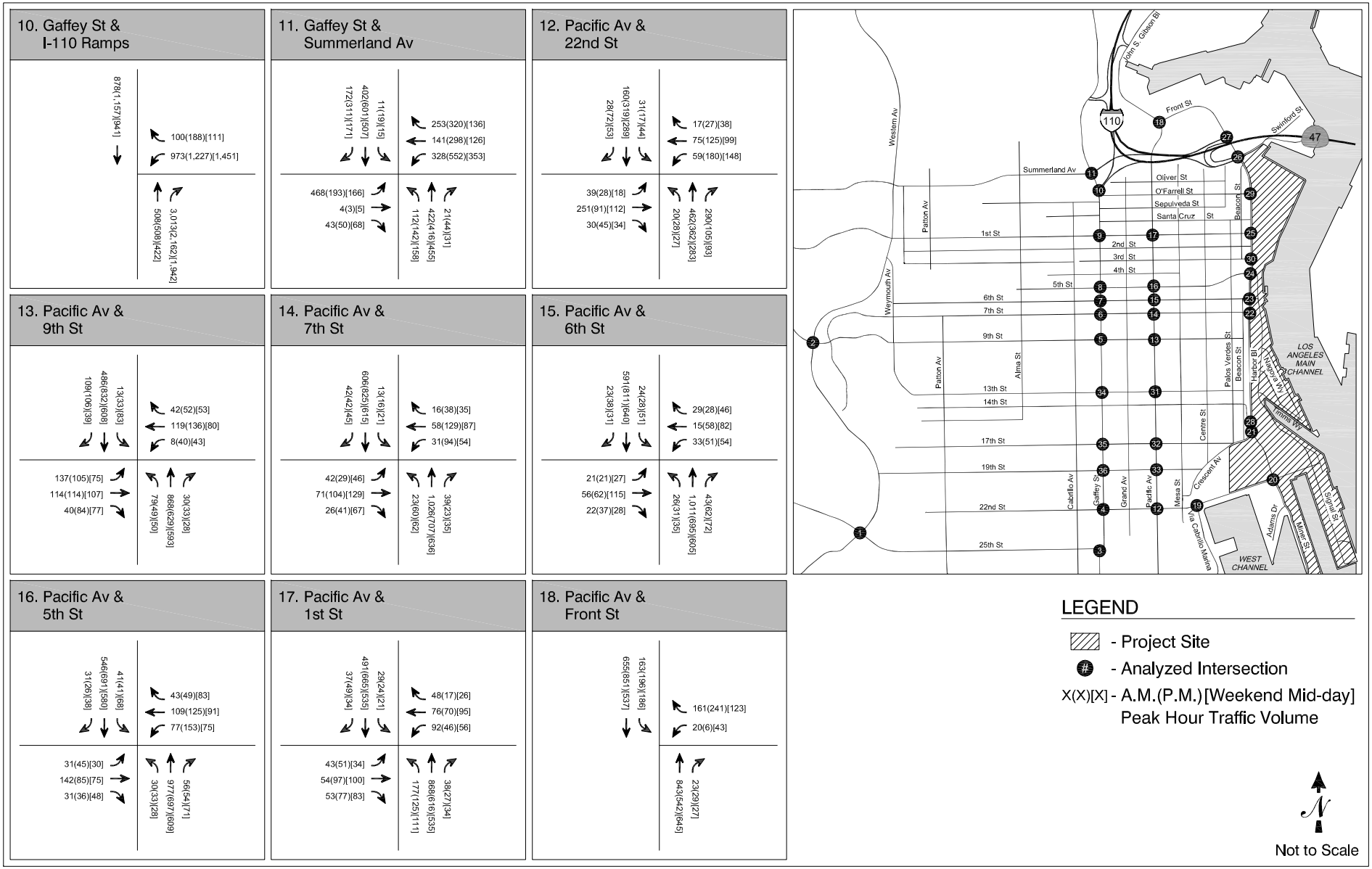
EXISTING PEAK HOUR TRAFFIC VOLUMES

FIGURE 12



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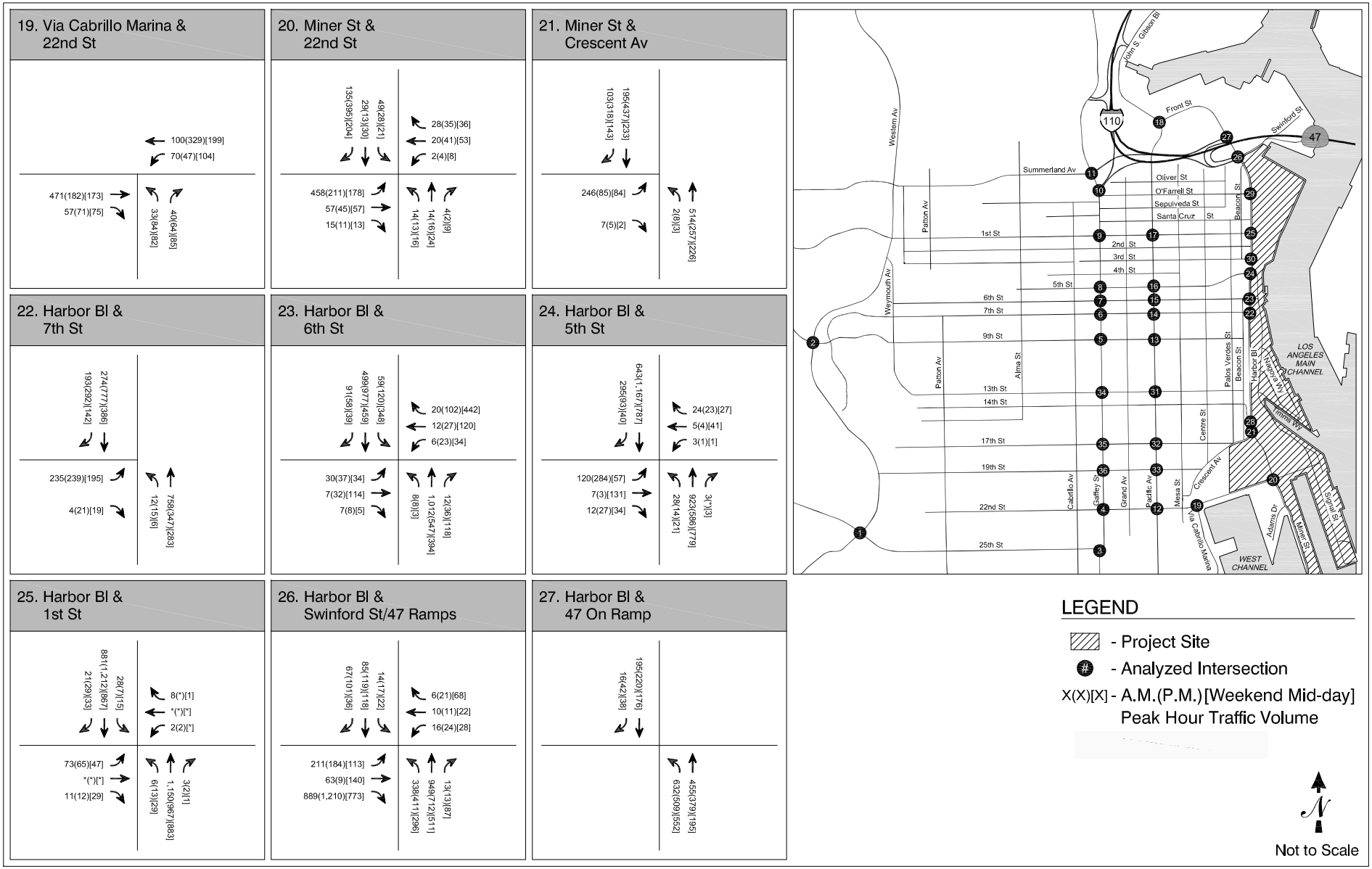
EXISTING PEAK HOUR TRAFFIC VOLUMES

FIGURE 12 (CONT.)



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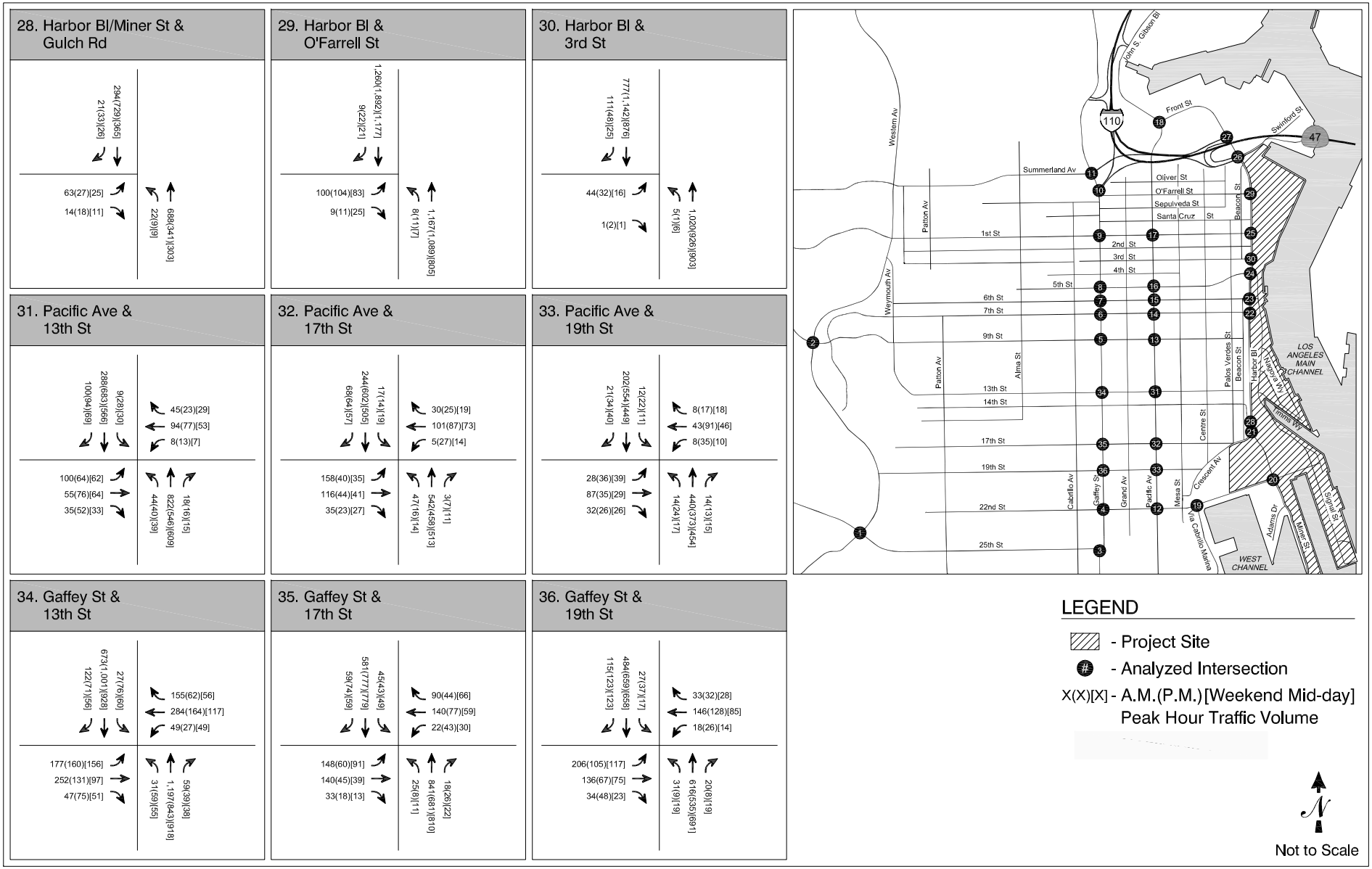
EXISTING PEAK HOUR TRAFFIC VOLUMES

FIGURE 12 (CONT.)



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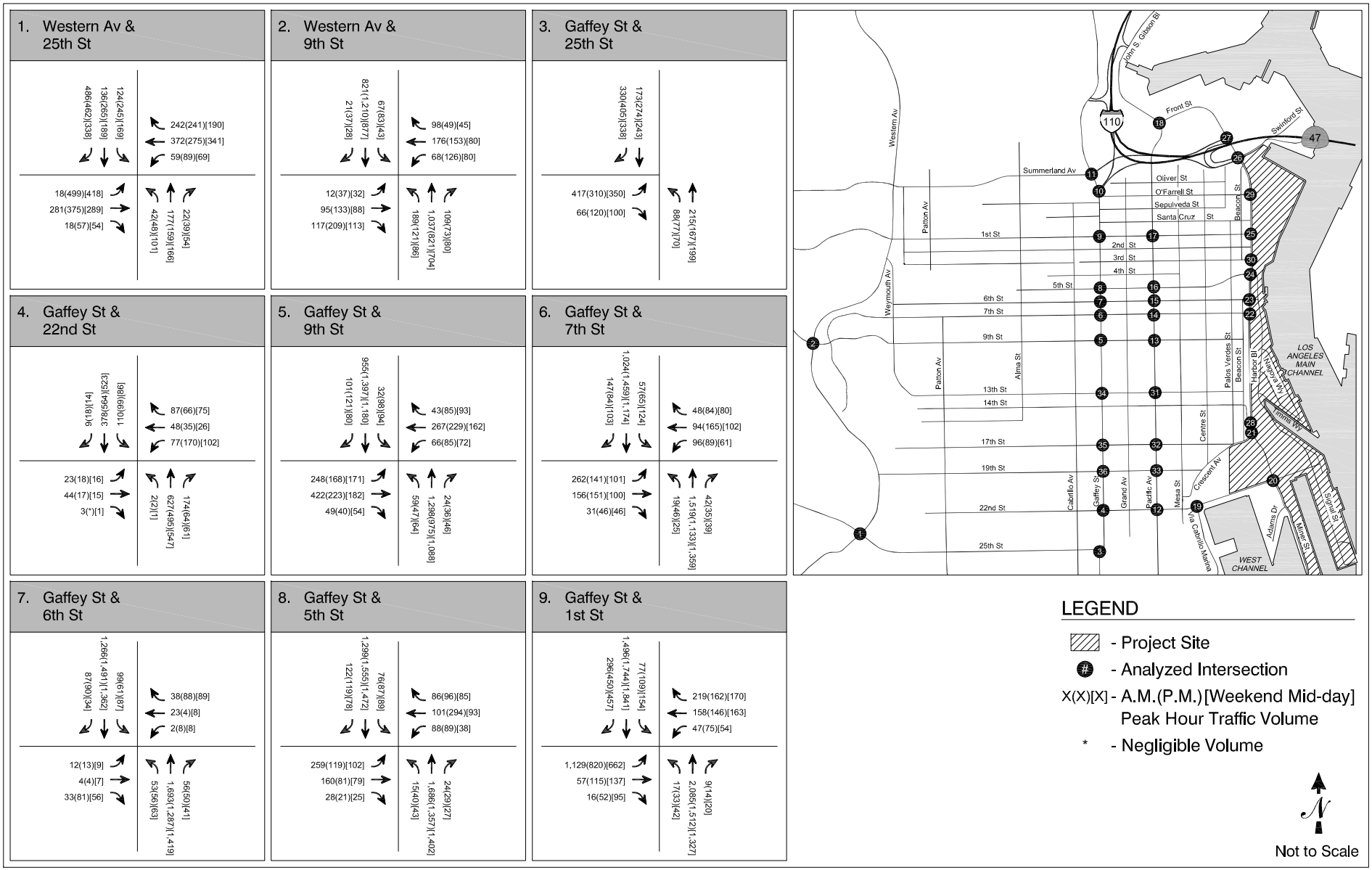
EXISTING PEAK HOUR TRAFFIC VOLUMES

FIGURE 12 (CONT.)



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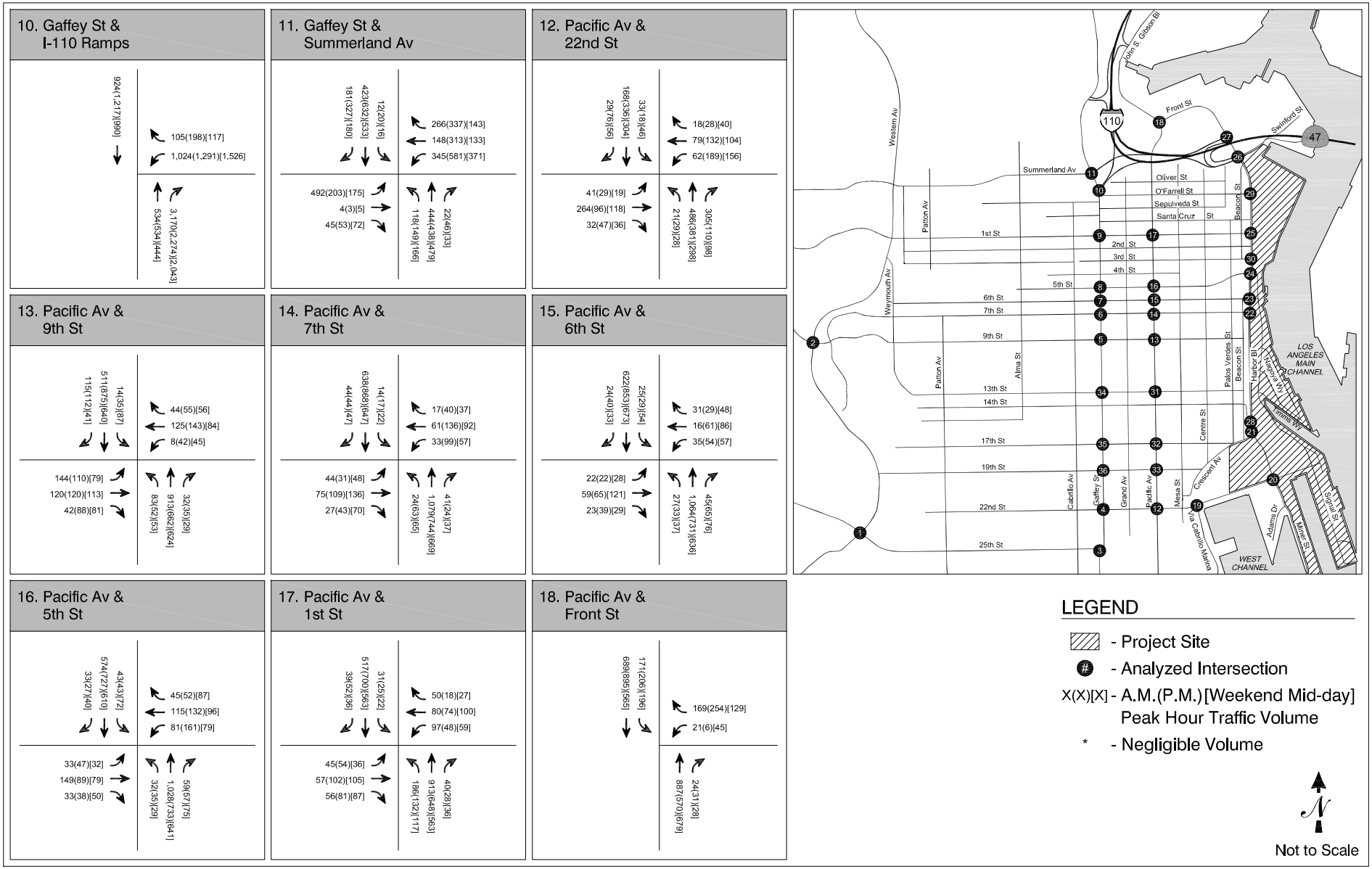
FUTURE TRAFFIC VOLUMES WITH AMBIENT GROWTH - 2015

FIGURE 13



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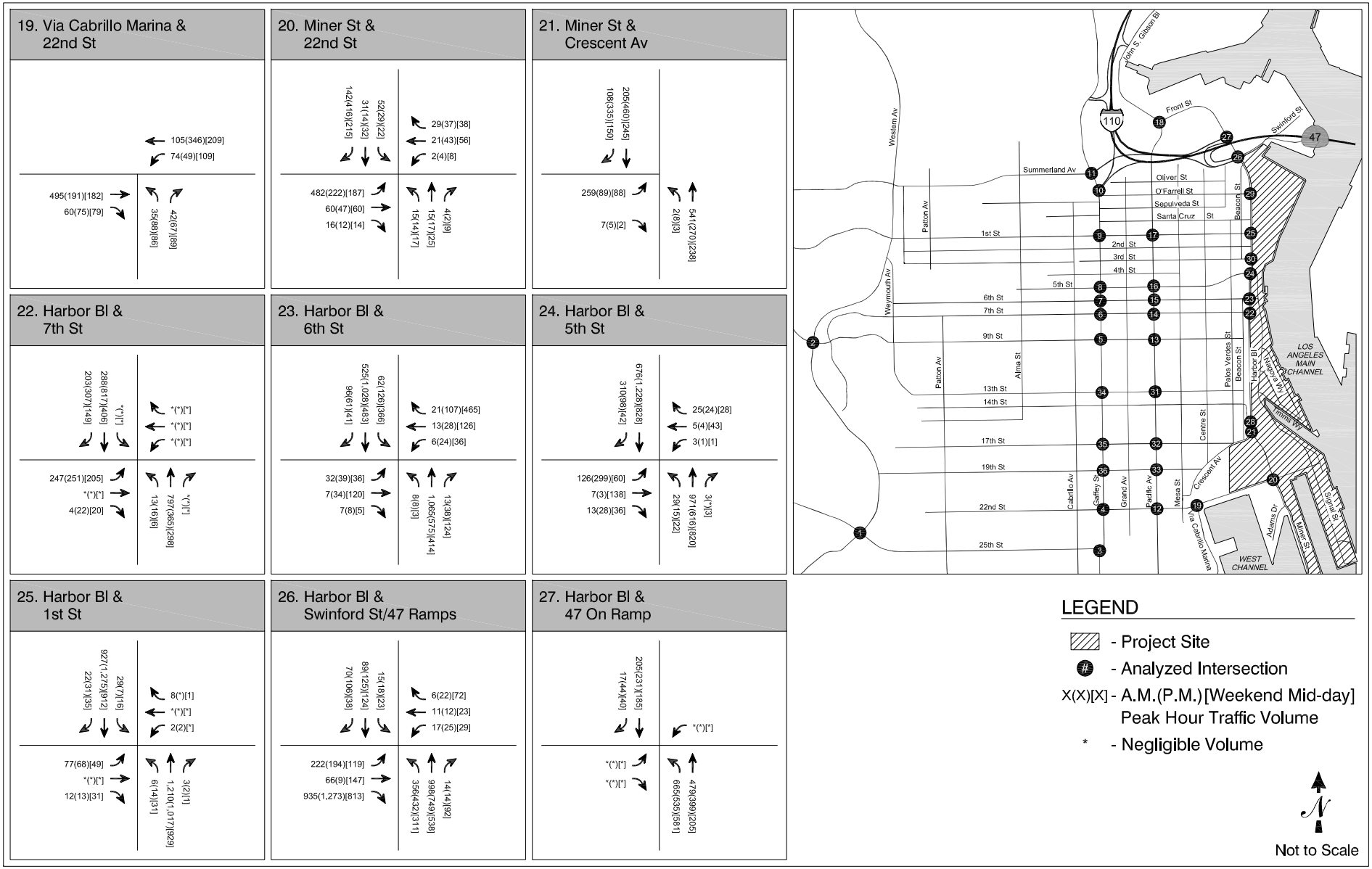
FUTURE TRAFFIC VOLUMES WITH AMBIENT GROWTH - 2015

FIGURE 13 (CONT.)



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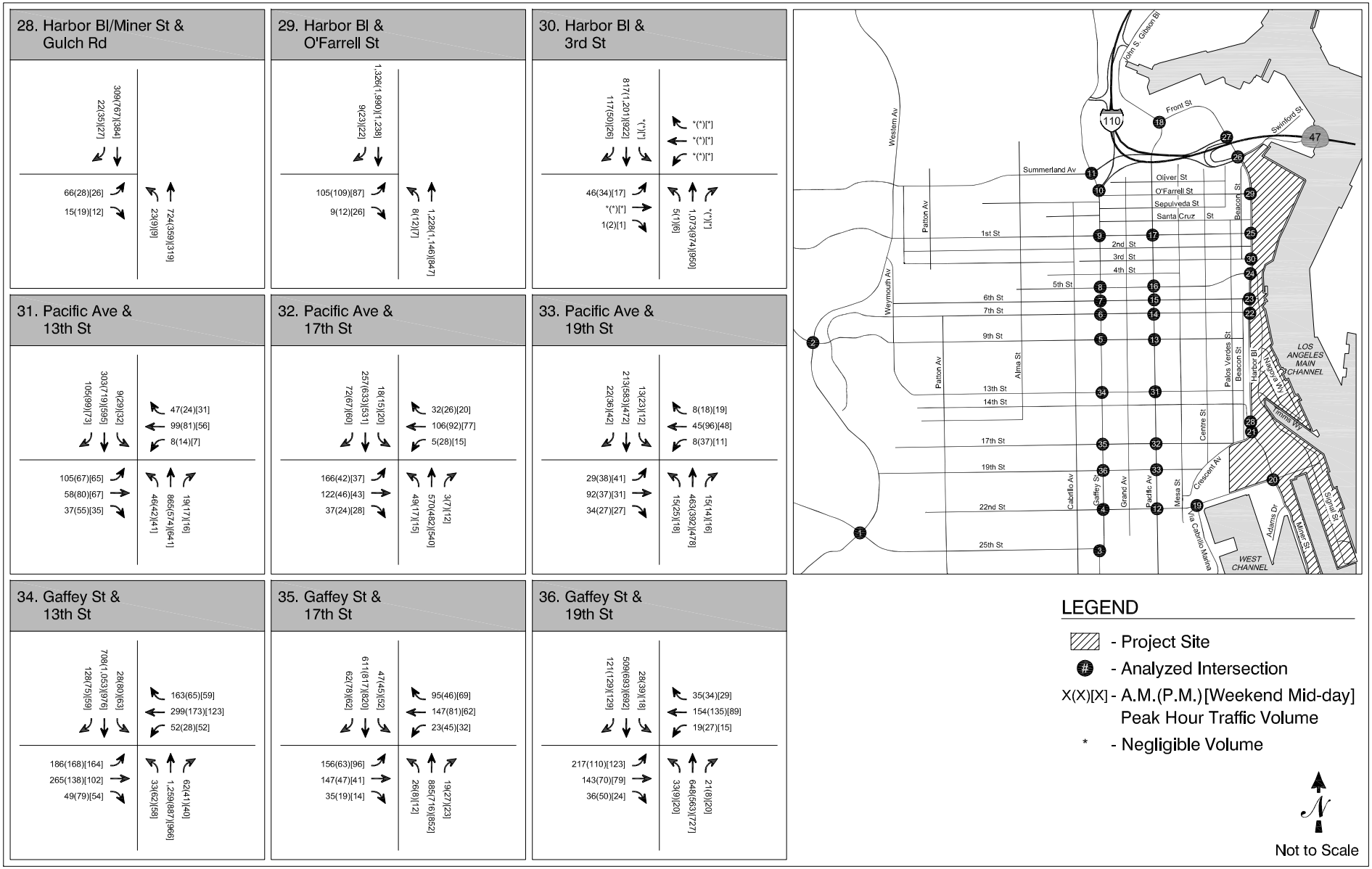
FUTURE TRAFFIC VOLUMES WITH AMBIENT GROWTH - 2015

FIGURE 13 (CONT.)



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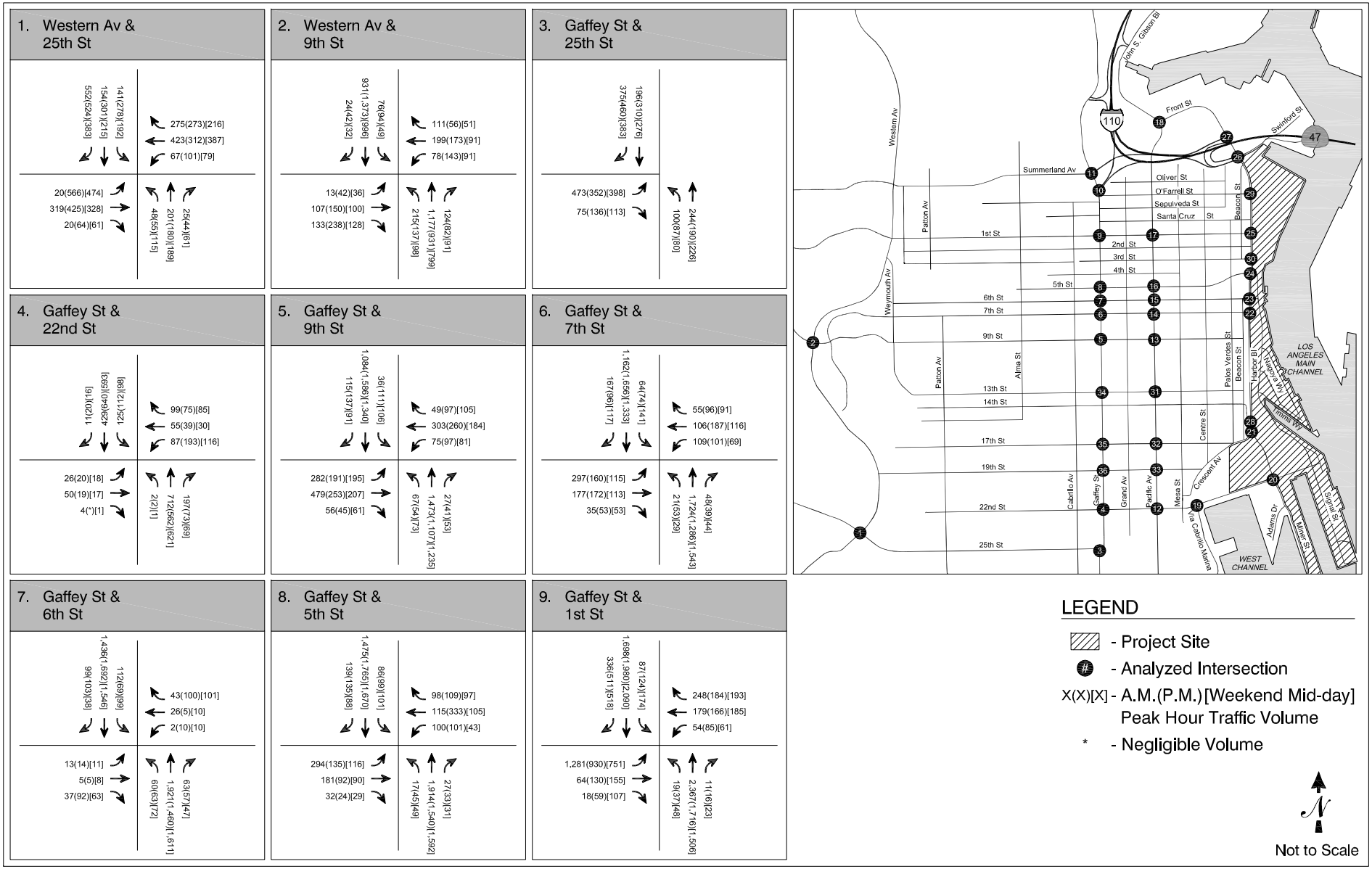
FUTURE TRAFFIC VOLUMES WITH AMBIENT GROWTH - 2015

FIGURE 13 (CONT.)



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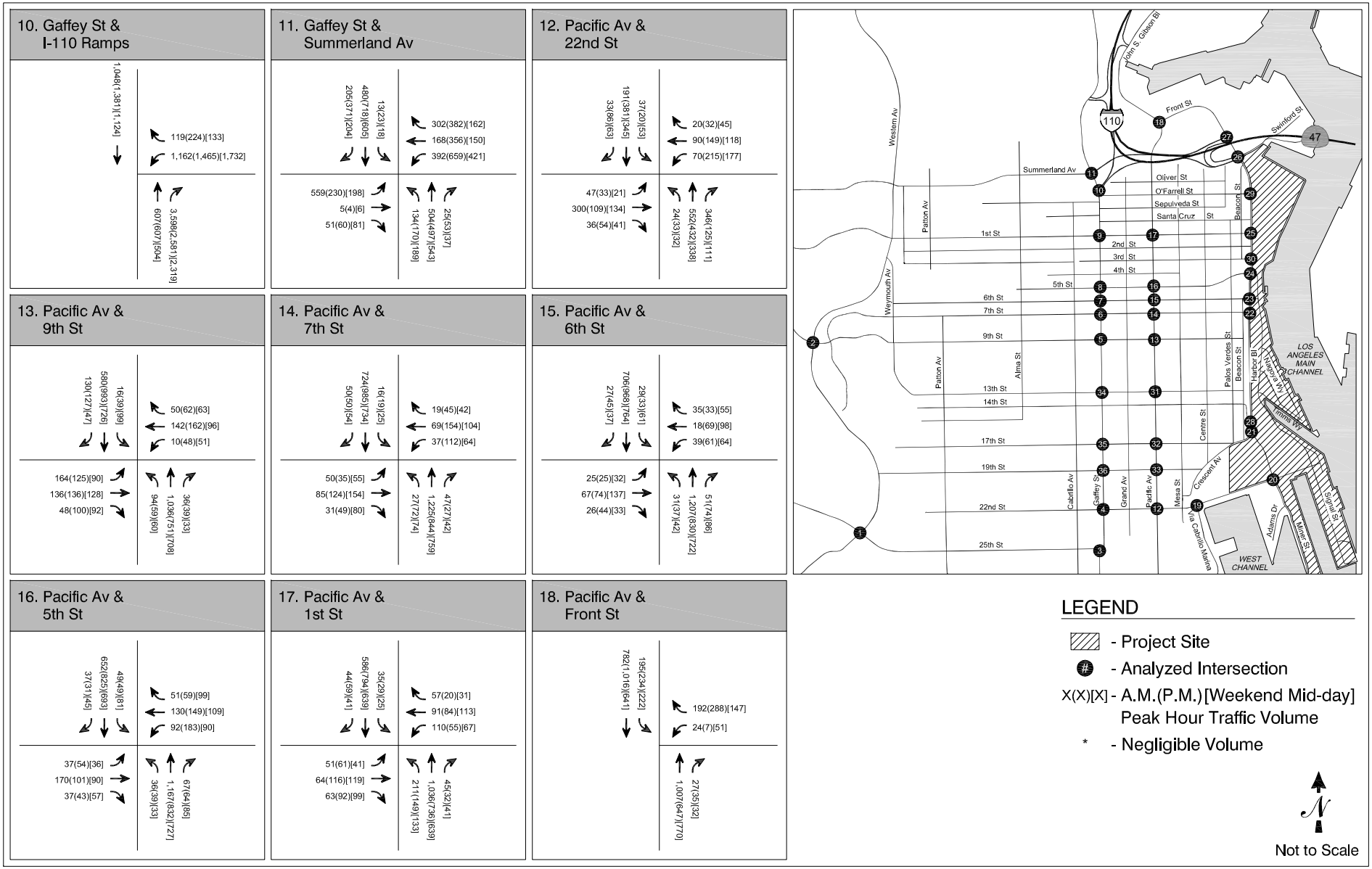
FUTURE TRAFFIC VOLUMES WITH AMBIENT GROWTH - 2037

FIGURE 14



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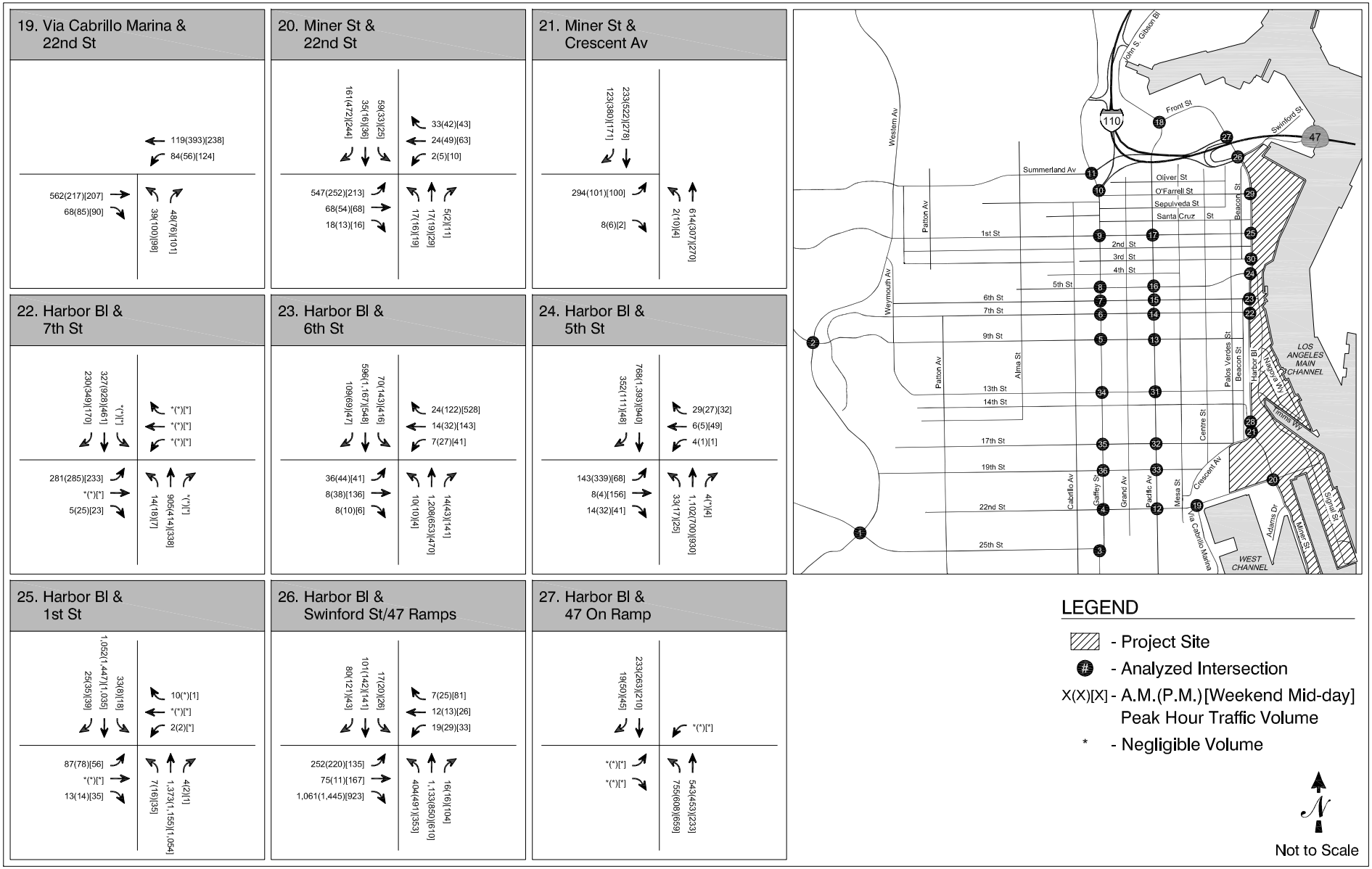
FUTURE TRAFFIC VOLUMES WITH AMBIENT GROWTH - 2037

FIGURE 14 (CONT.)



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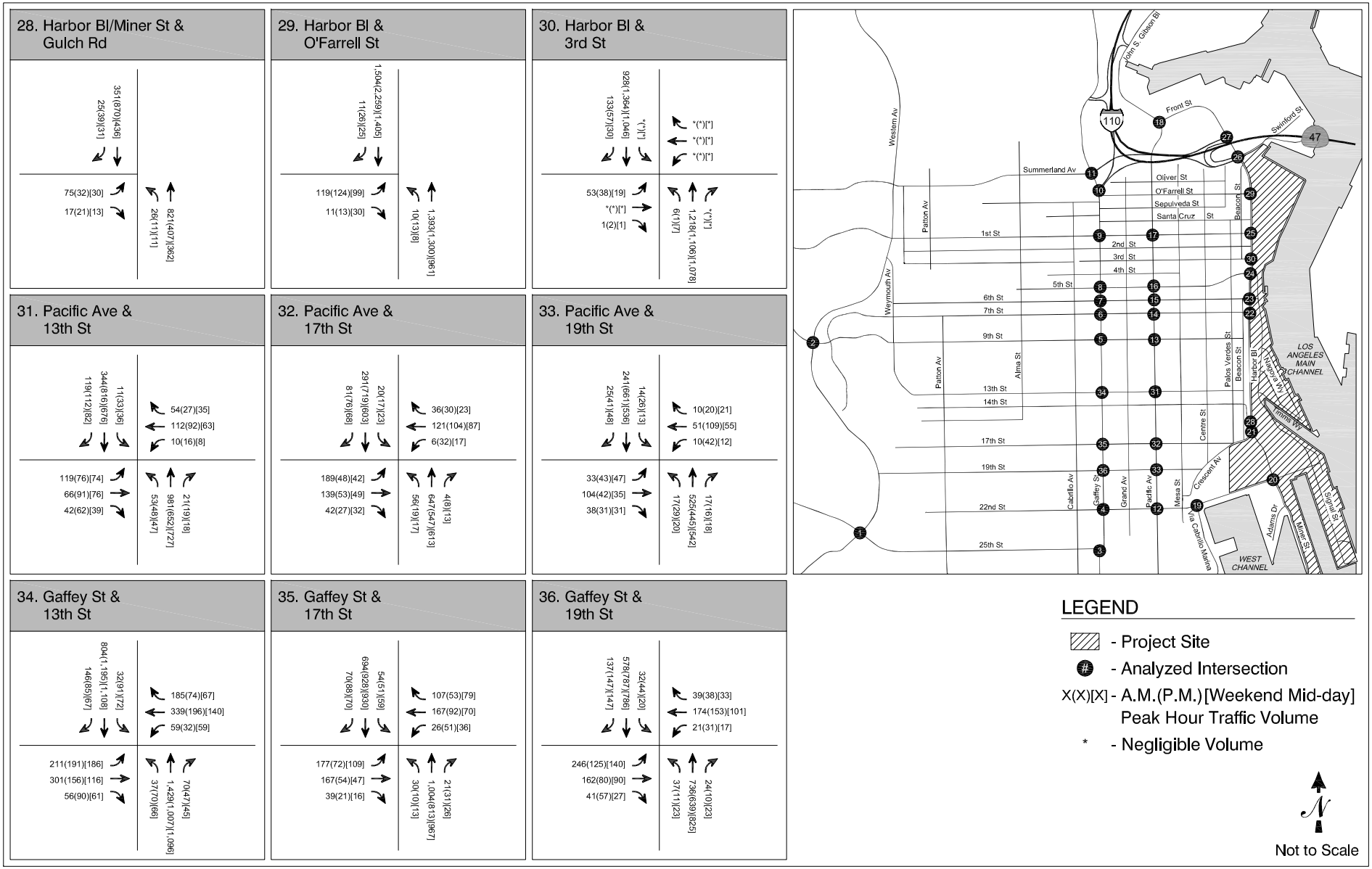
FUTURE TRAFFIC VOLUMES WITH AMBIENT GROWTH - 2037

FIGURE 14 (CONT.)



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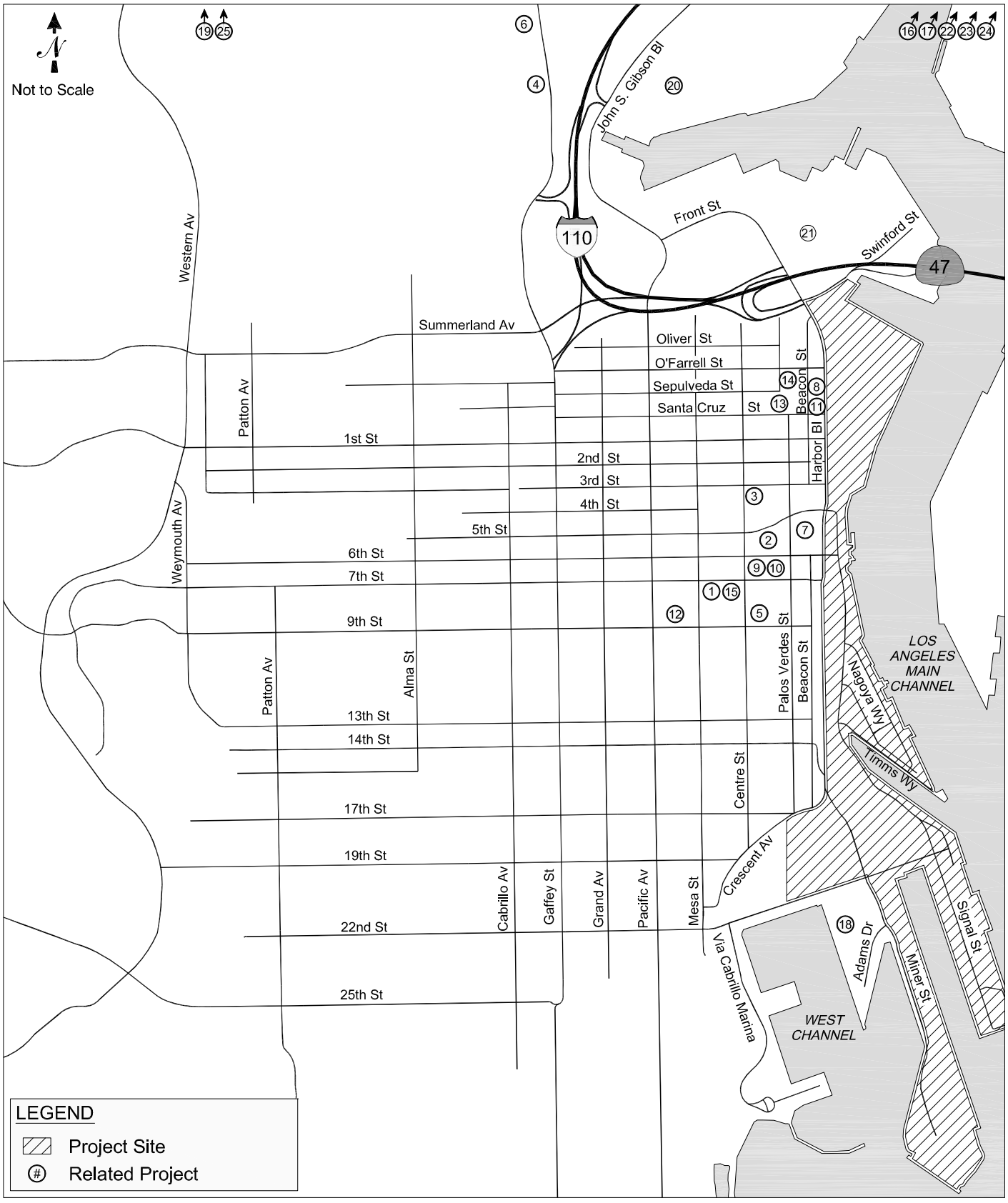
FUTURE TRAFFIC VOLUMES WITH AMBIENT GROWTH - 2037

FIGURE 14 (CONT.)



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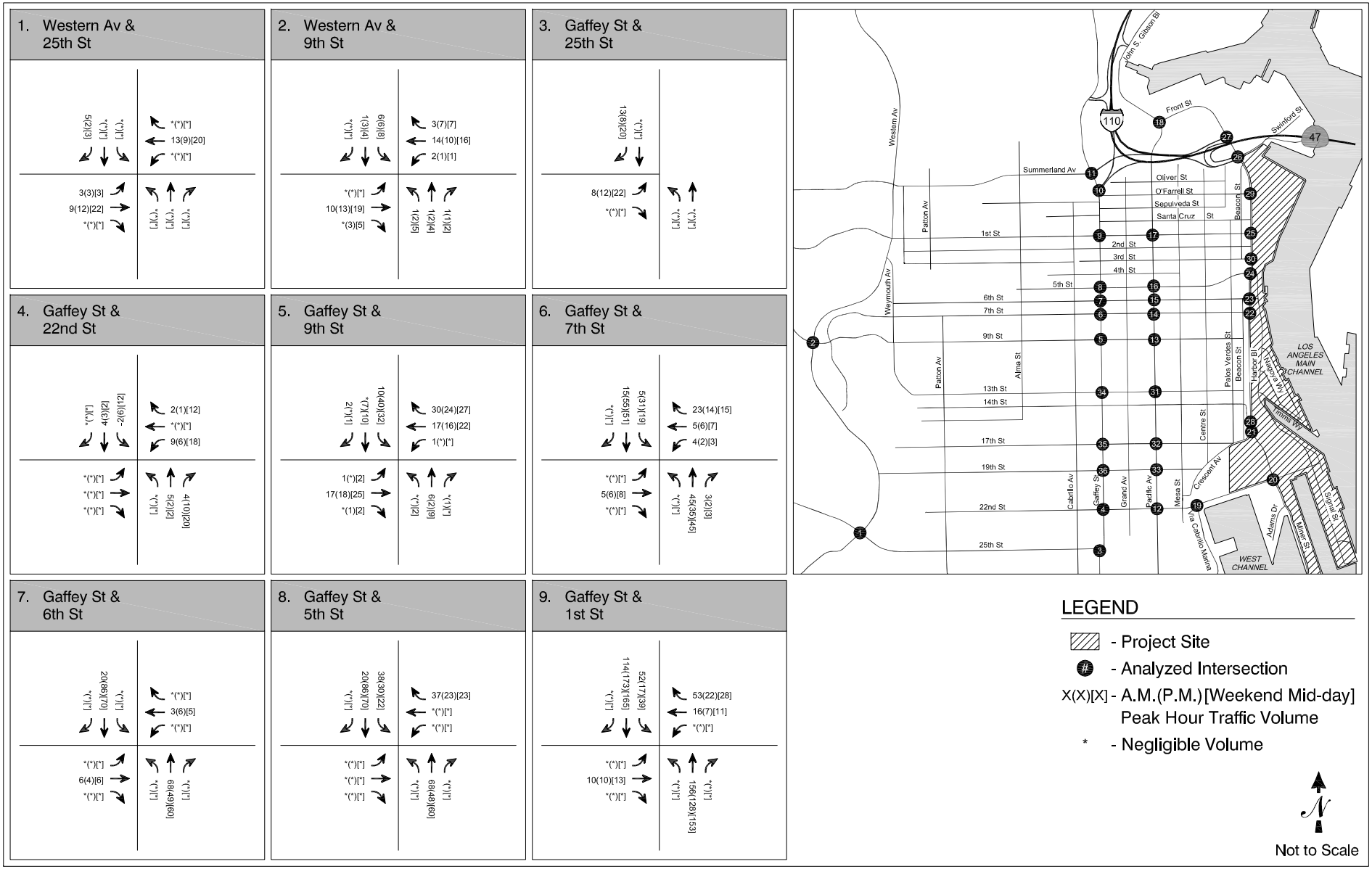
LOCATION OF RELATED PROJECTS

FIGURE 15



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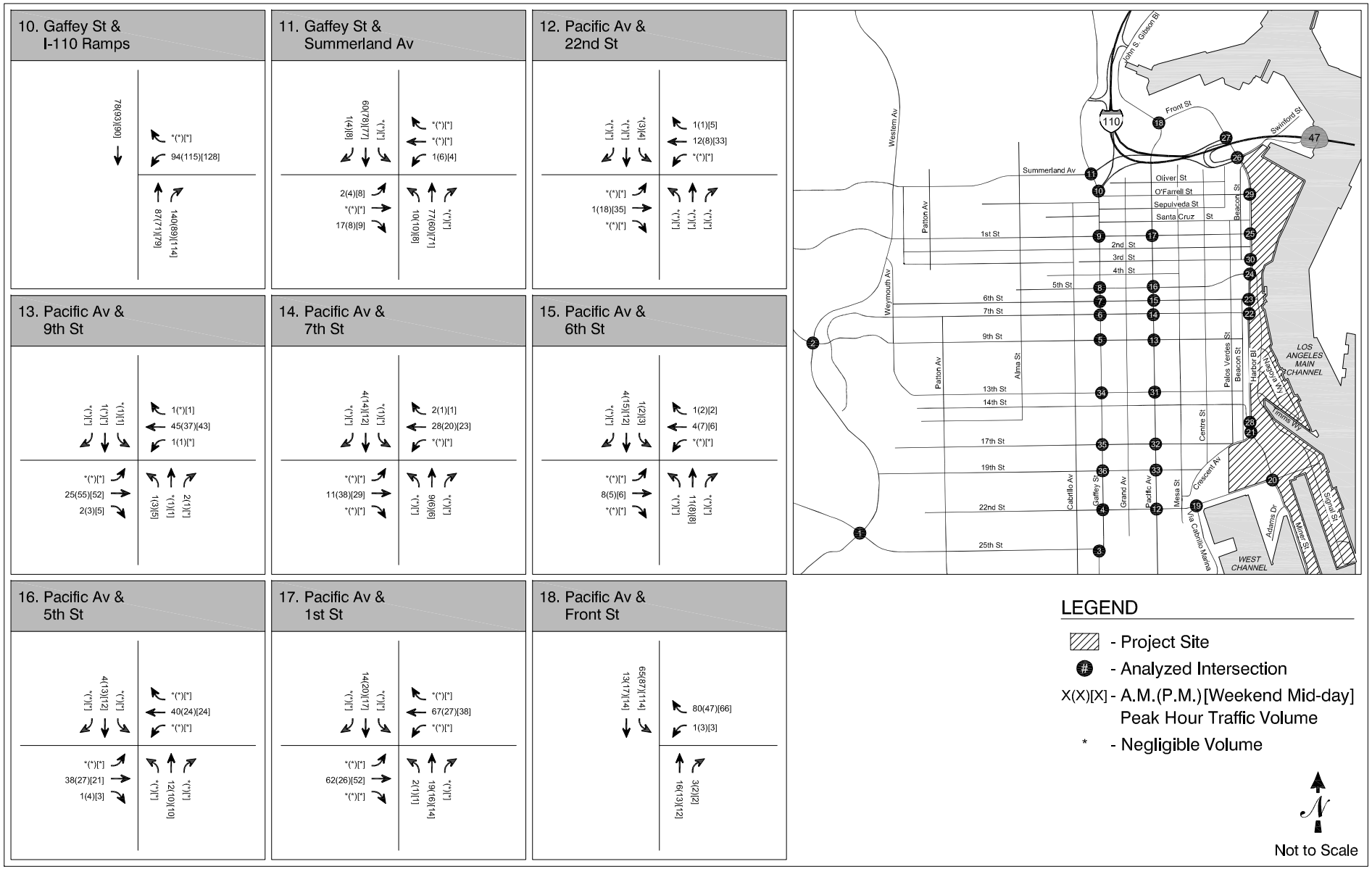
CUMULATIVE (RELATED) PROJECT ONLY TRIP GENERATION - 2015

FIGURE 16



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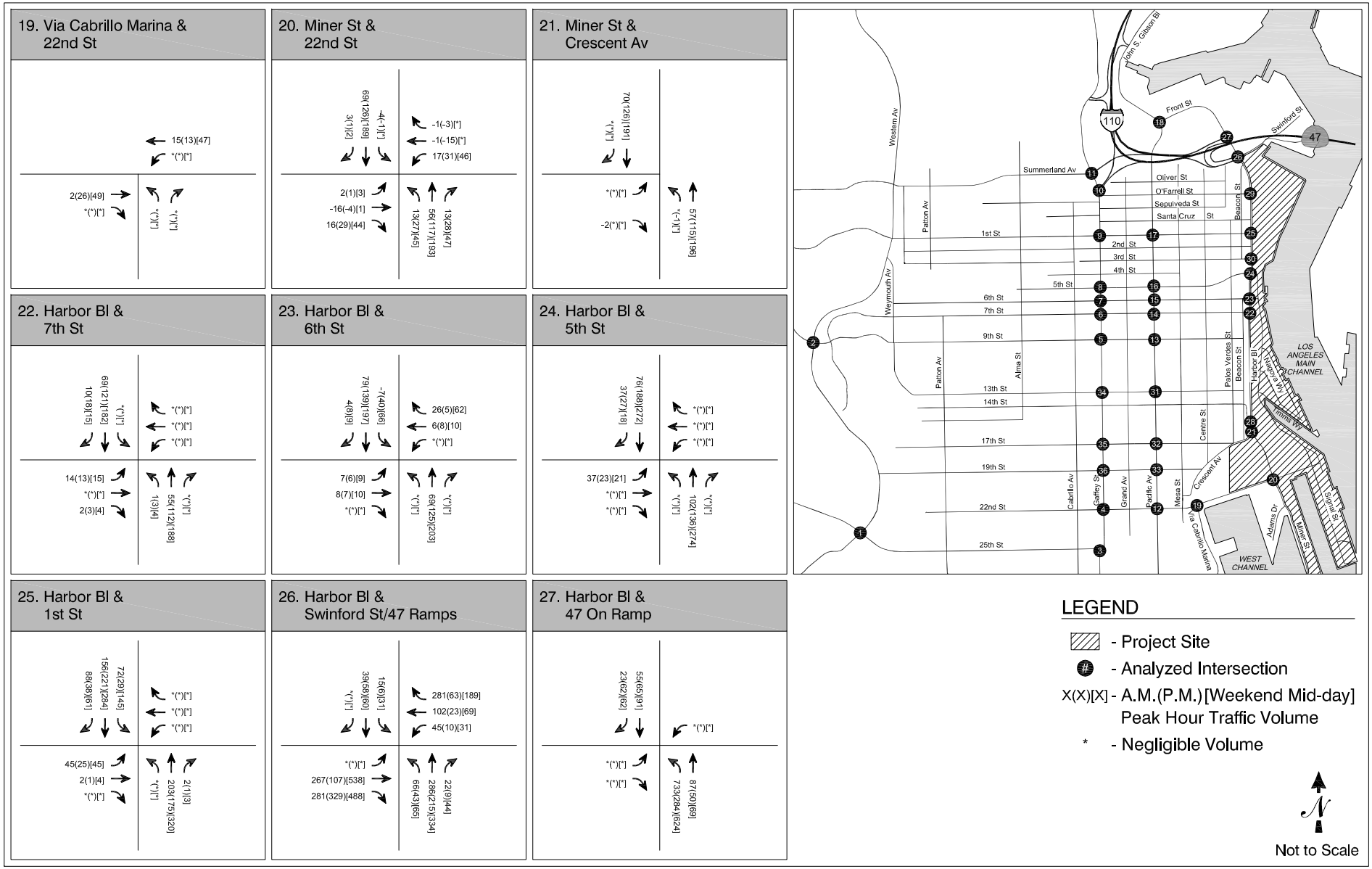
CUMULATIVE (RELATED) PROJECT ONLY TRIP GENERATION - 2015

FIGURE 16 (CONT.)



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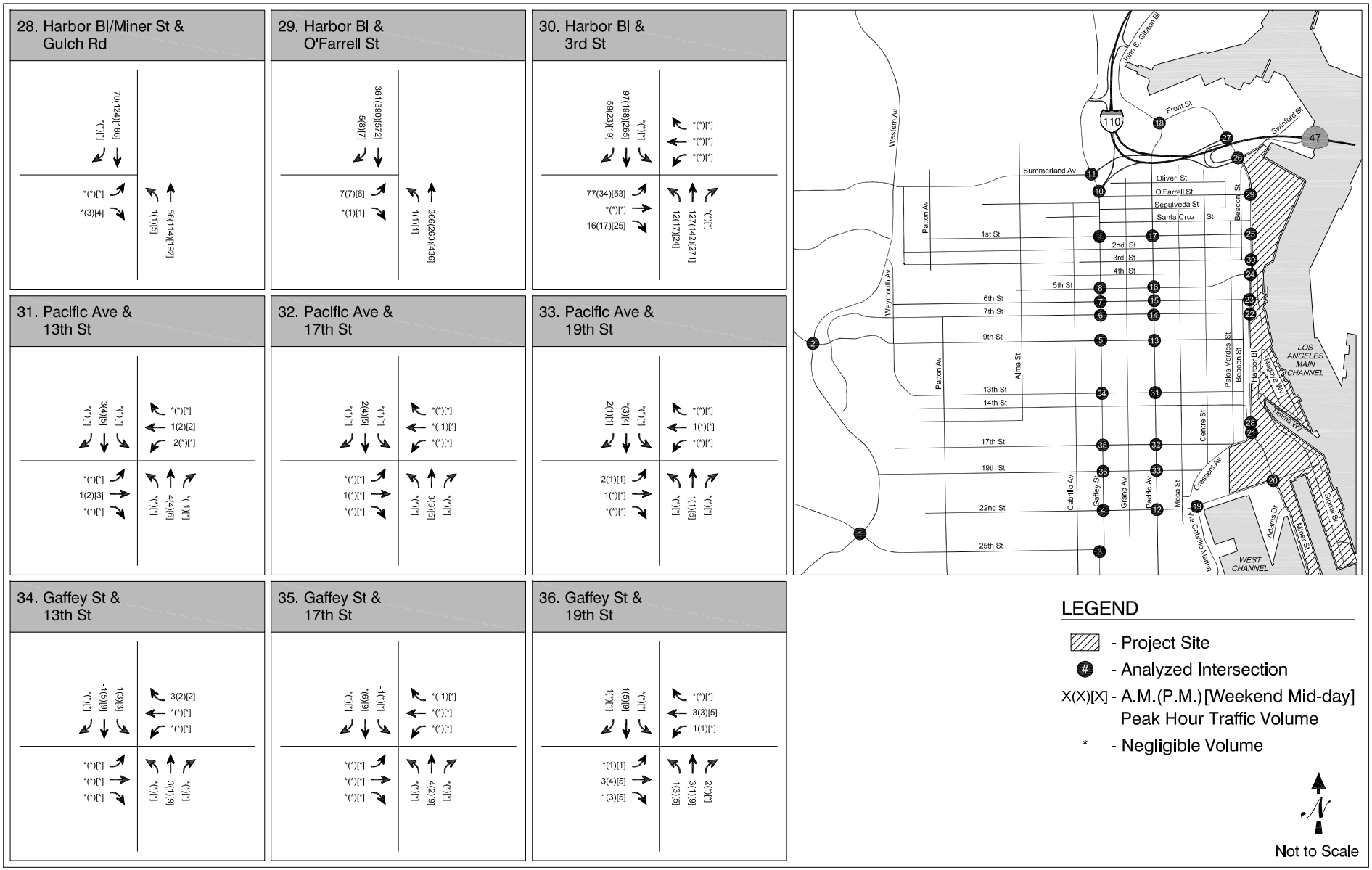
CUMULATIVE (RELATED) PROJECT ONLY TRIP GENERATION - 2015

FIGURE 16 (CONT.)



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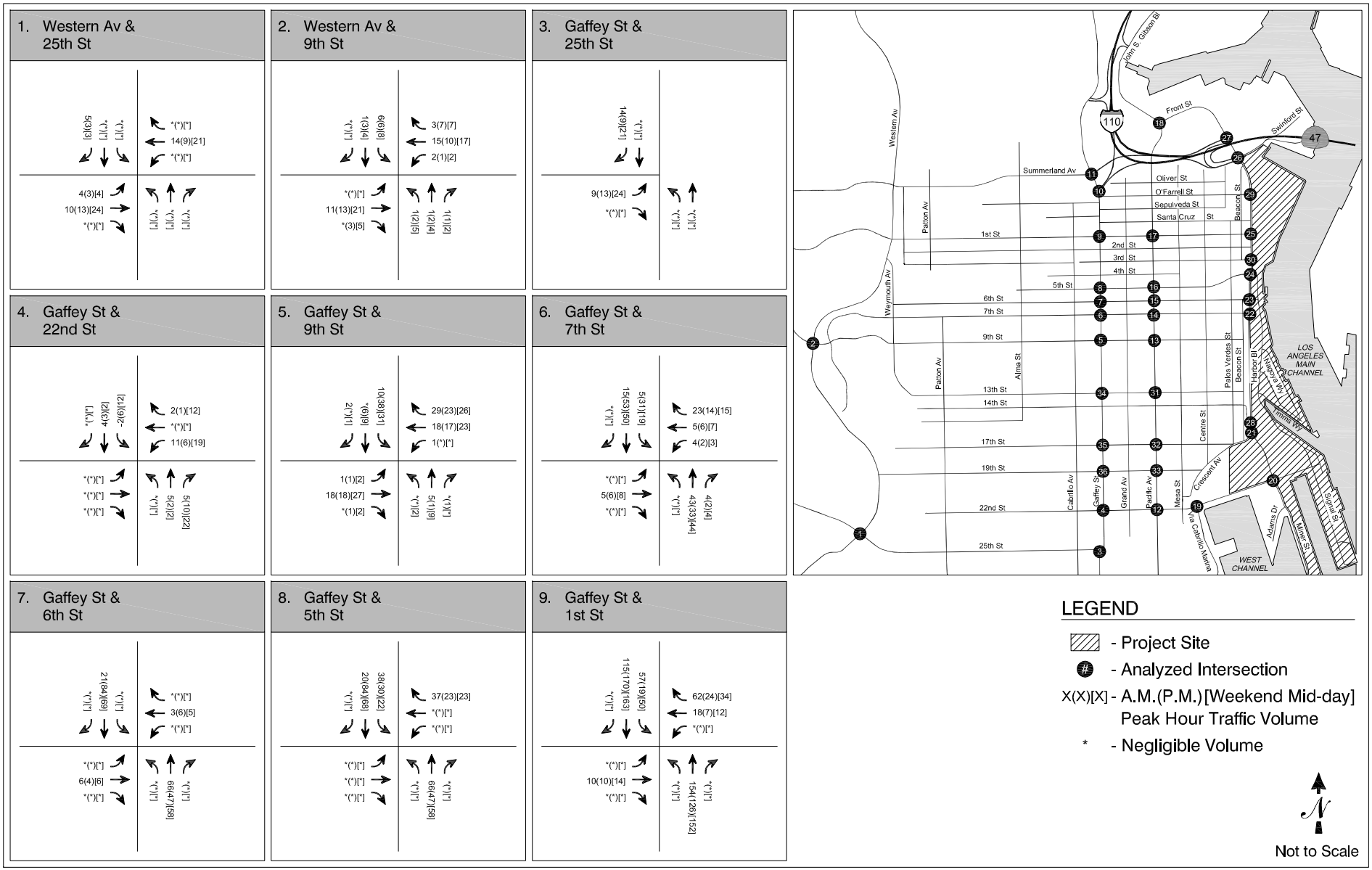
CUMULATIVE (RELATED) PROJECT ONLY TRIP GENERATION - 2015

FIGURE 16 (CONT.)



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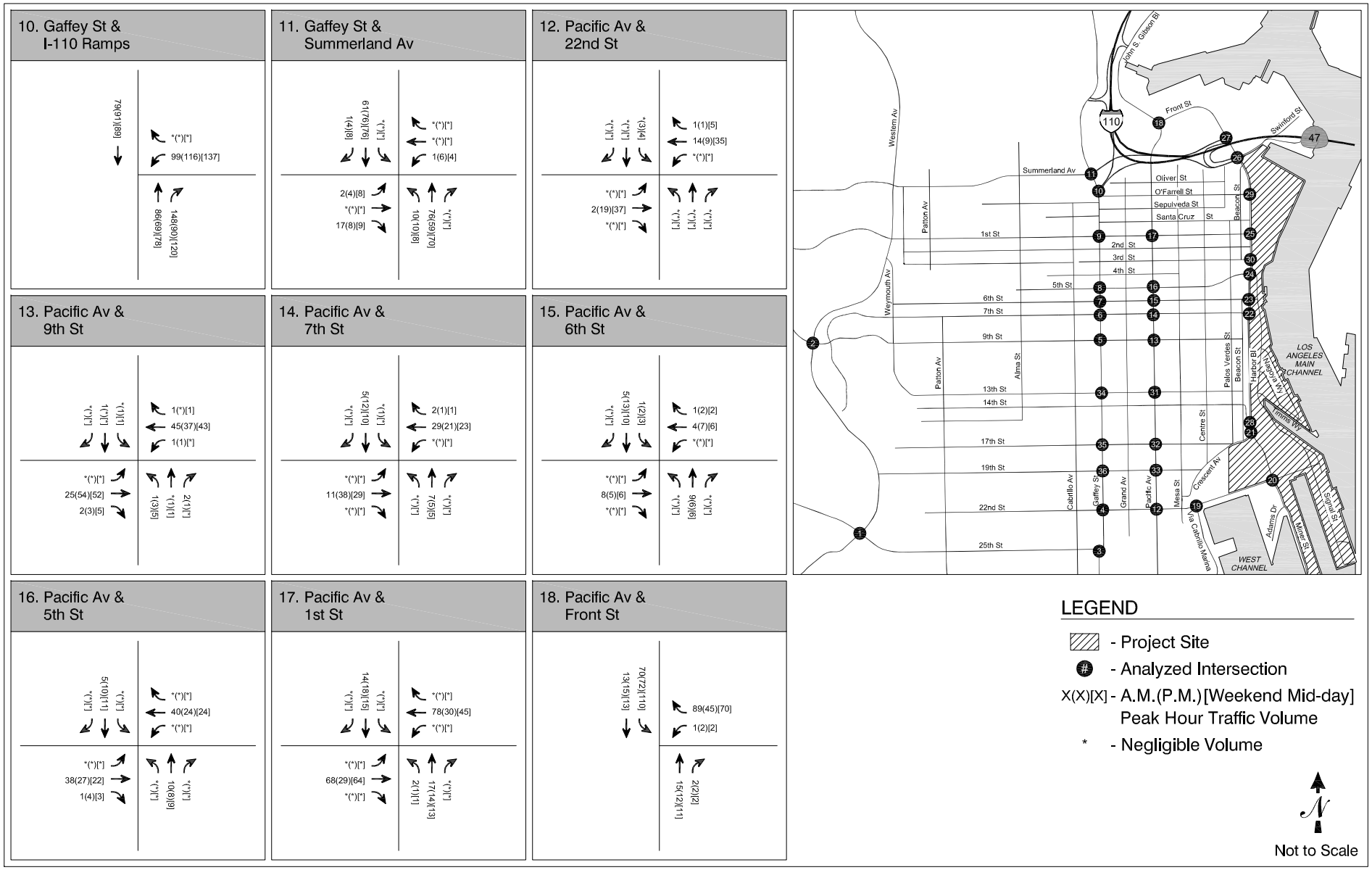
CUMULATIVE (RELATED) PROJECT ONLY TRIP GENERATION - 2037

FIGURE 17



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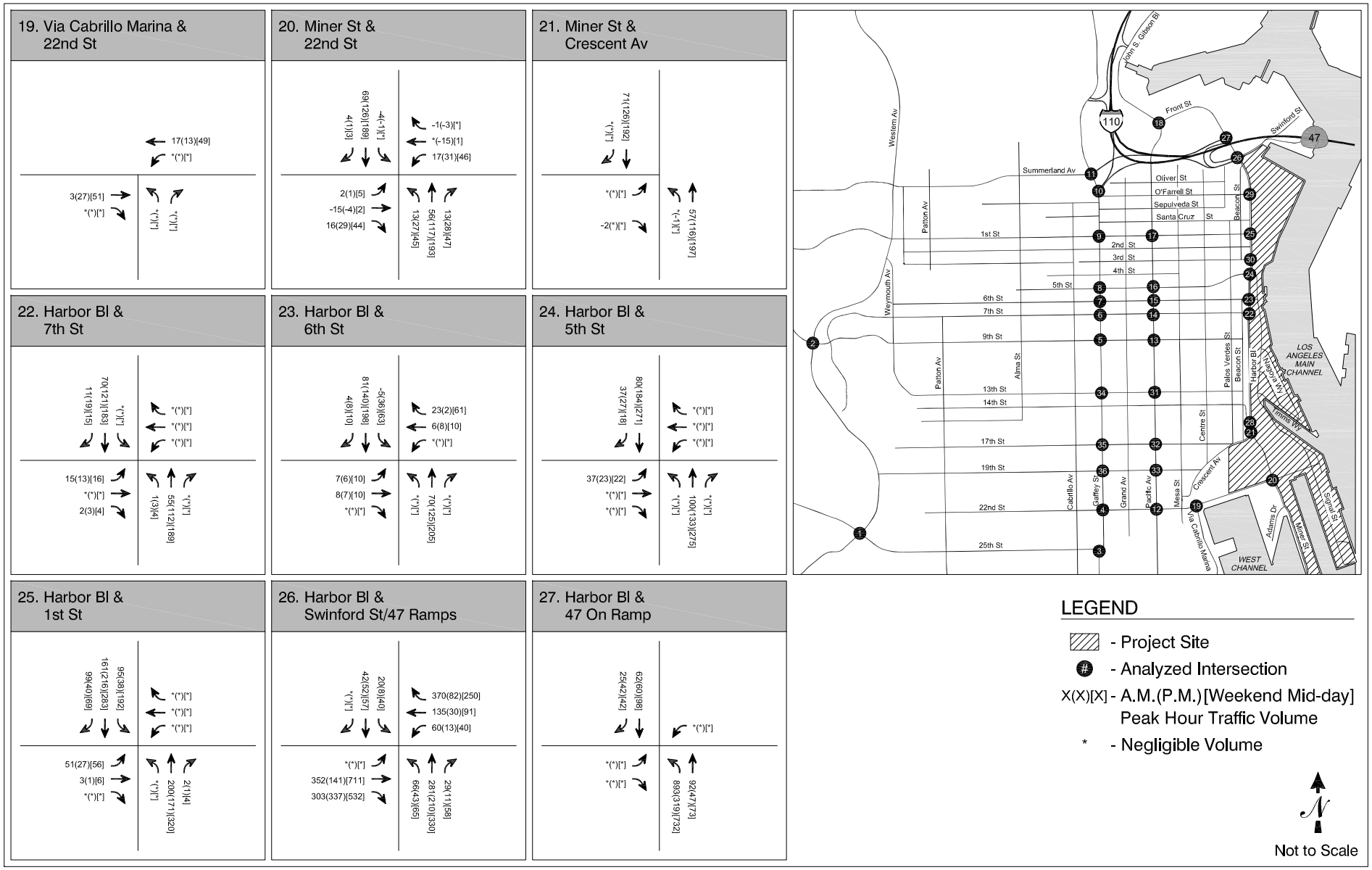
CUMULATIVE (RELATED) PROJECT ONLY TRIP GENERATION - 2037

FIGURE 17 (CONT.)



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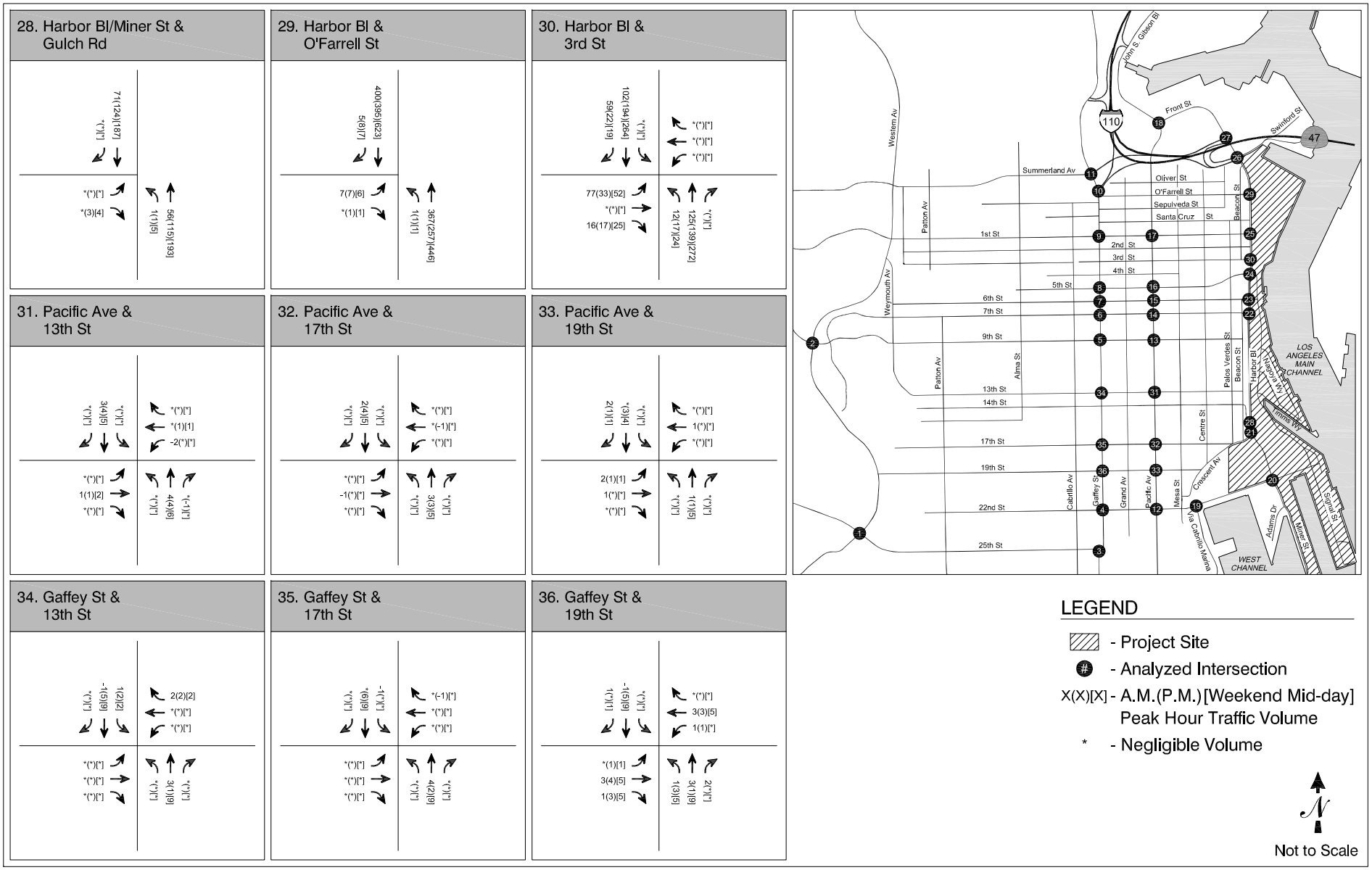
CUMULATIVE (RELATED) PROJECT ONLY TRIP GENERATION - 2037

FIGURE 17 (CONT.)



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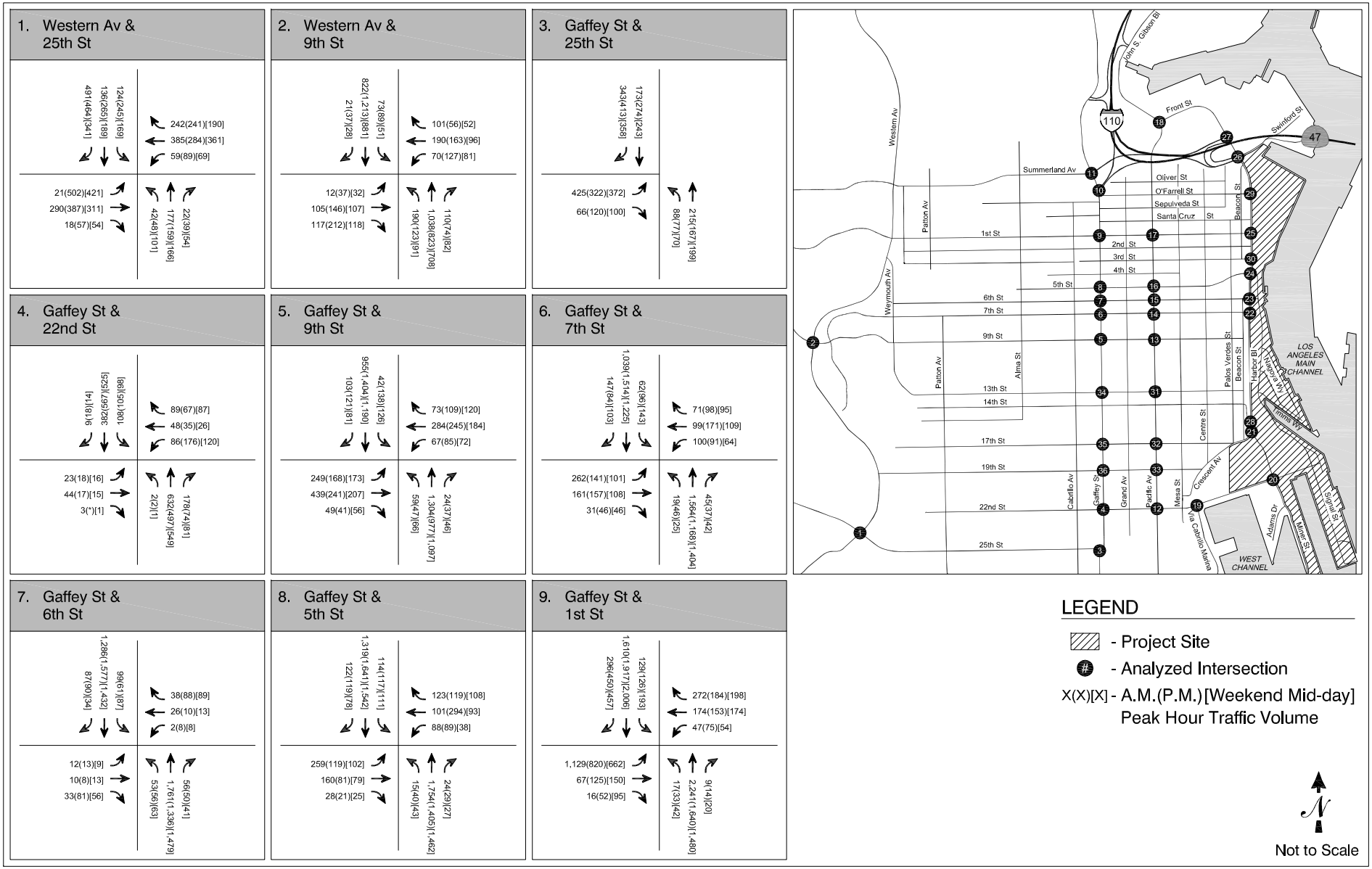
CUMULATIVE (RELATED) PROJECT ONLY TRIP GENERATION - 2037

FIGURE 17 (CONT.)



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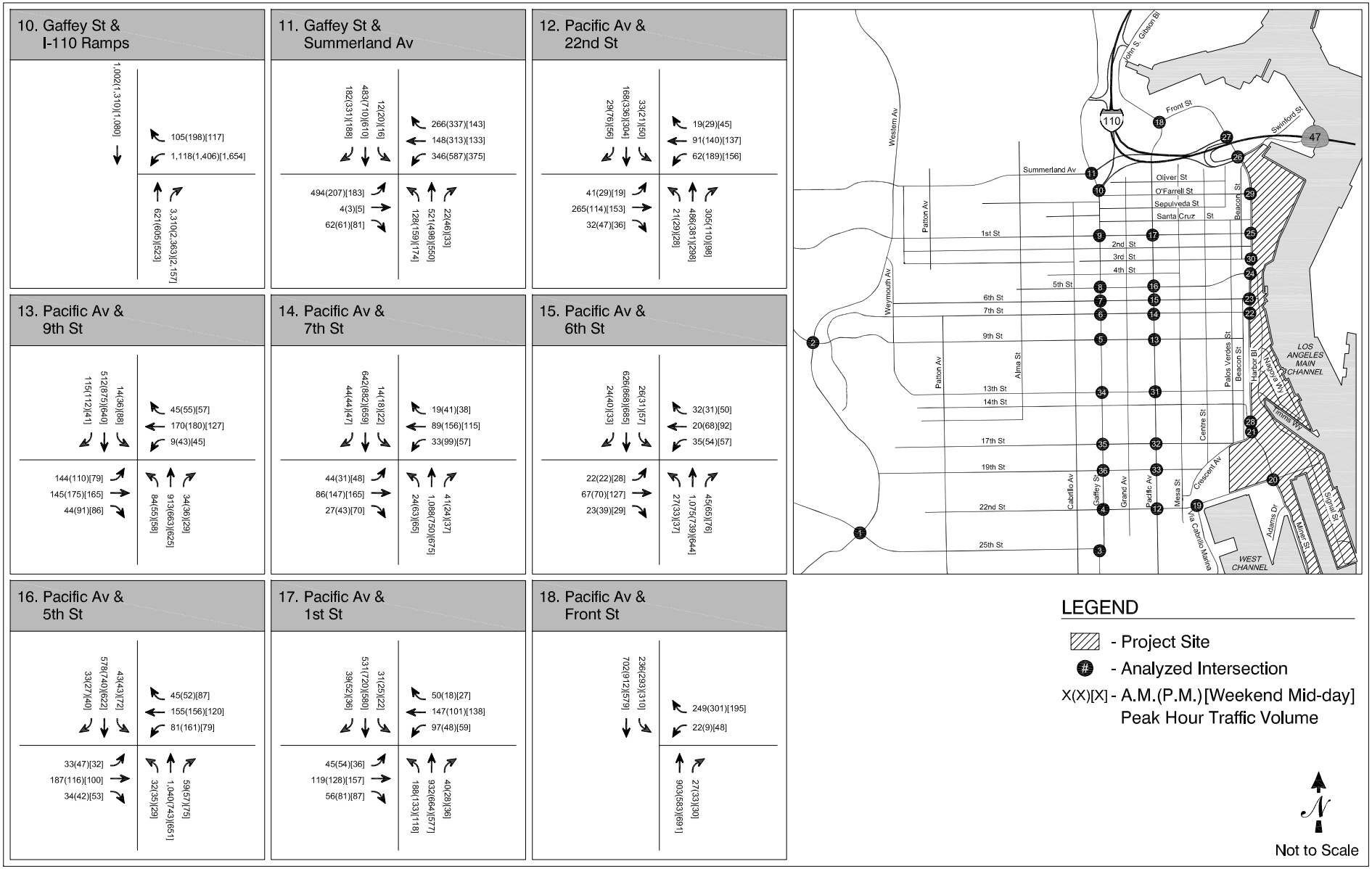
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 6 (NO PROJECT, CEQA BASELINE) - 2015

FIGURE 18



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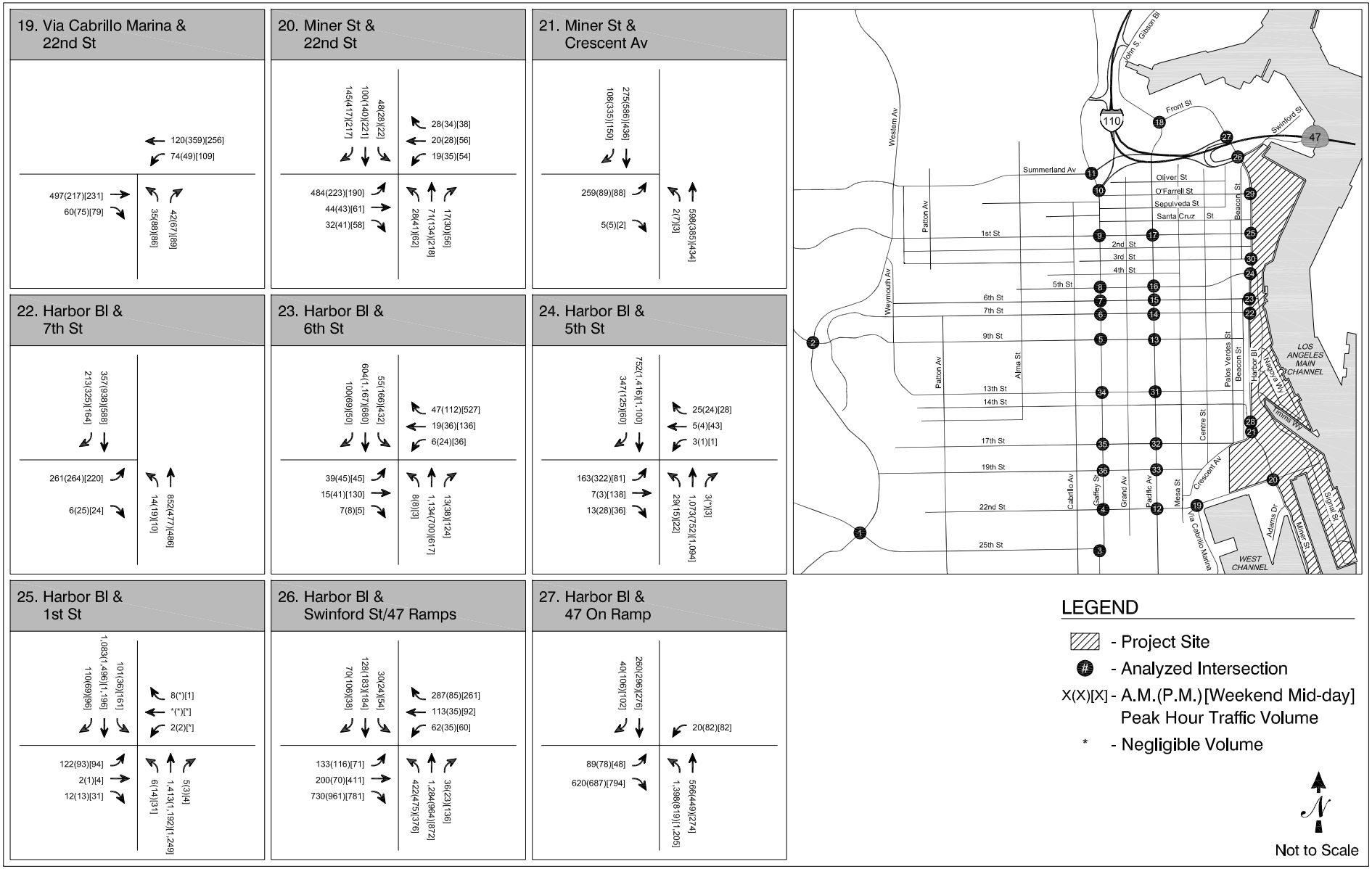
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 6 (NO PROJECT, CEQA BASELINE) - 2015

FIGURE 18 (CONT.)



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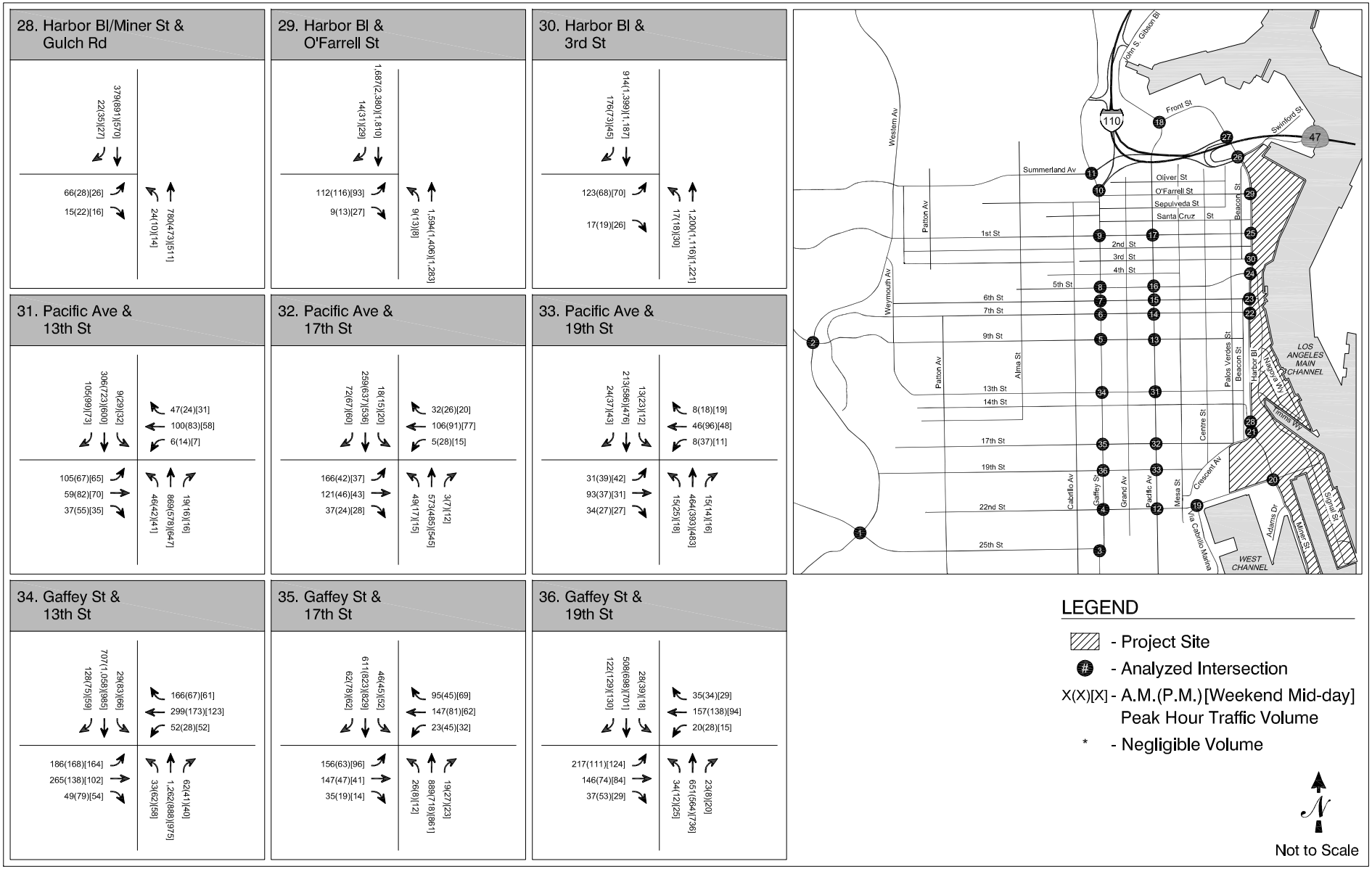
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 6 (NO PROJECT, CEQA BASELINE) - 2015

FIGURE 18 (CONT.)



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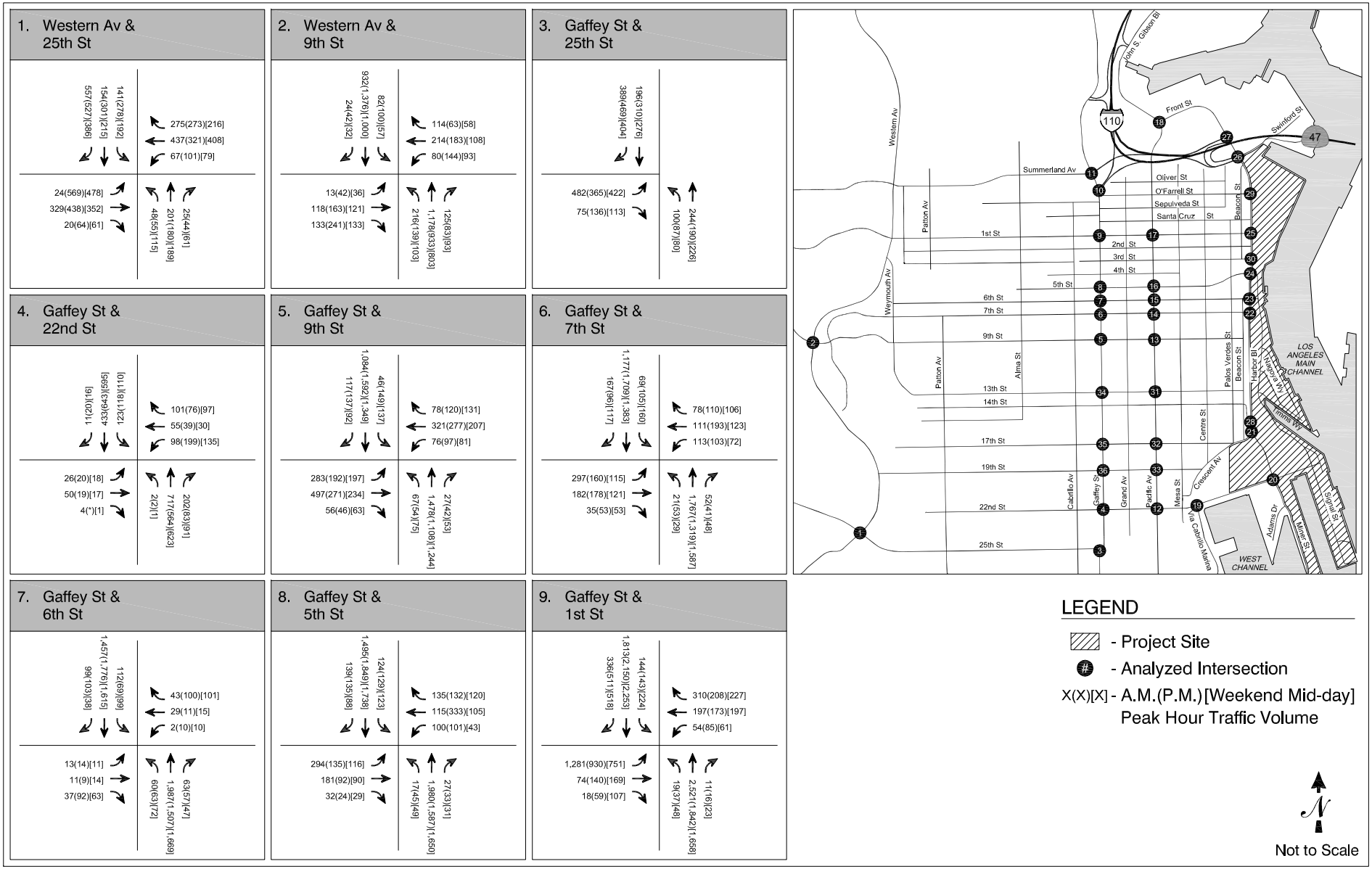
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 6 (NO PROJECT, CEQA BASELINE) - 2015

FIGURE 18 (CONT.)



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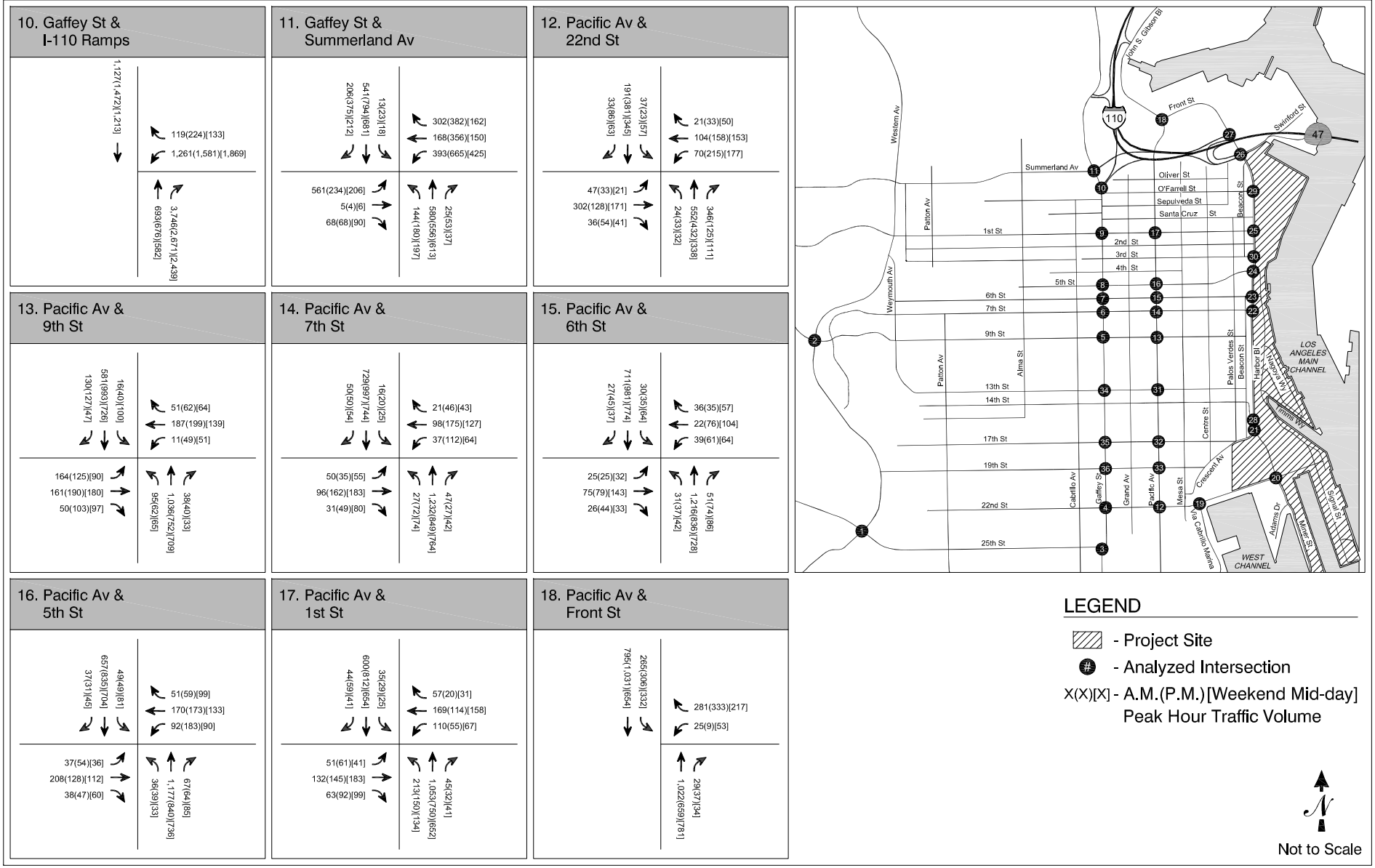
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 6 (NO PROJECT, CEQA BASELINE) - 2037

FIGURE 19



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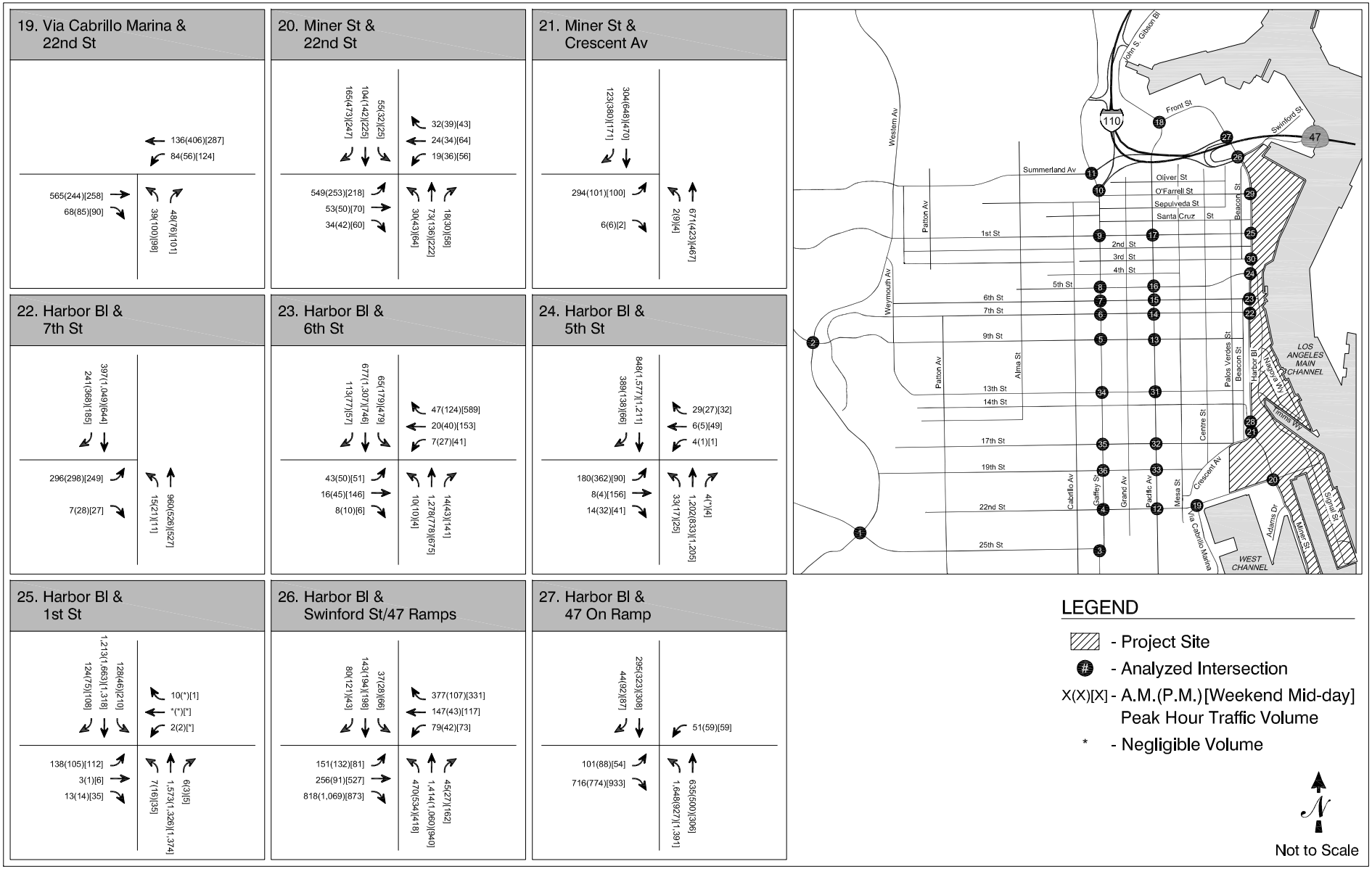
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 6 (NO PROJECT, CEQA BASELINE) - 2037

FIGURE 19 (CONT.)



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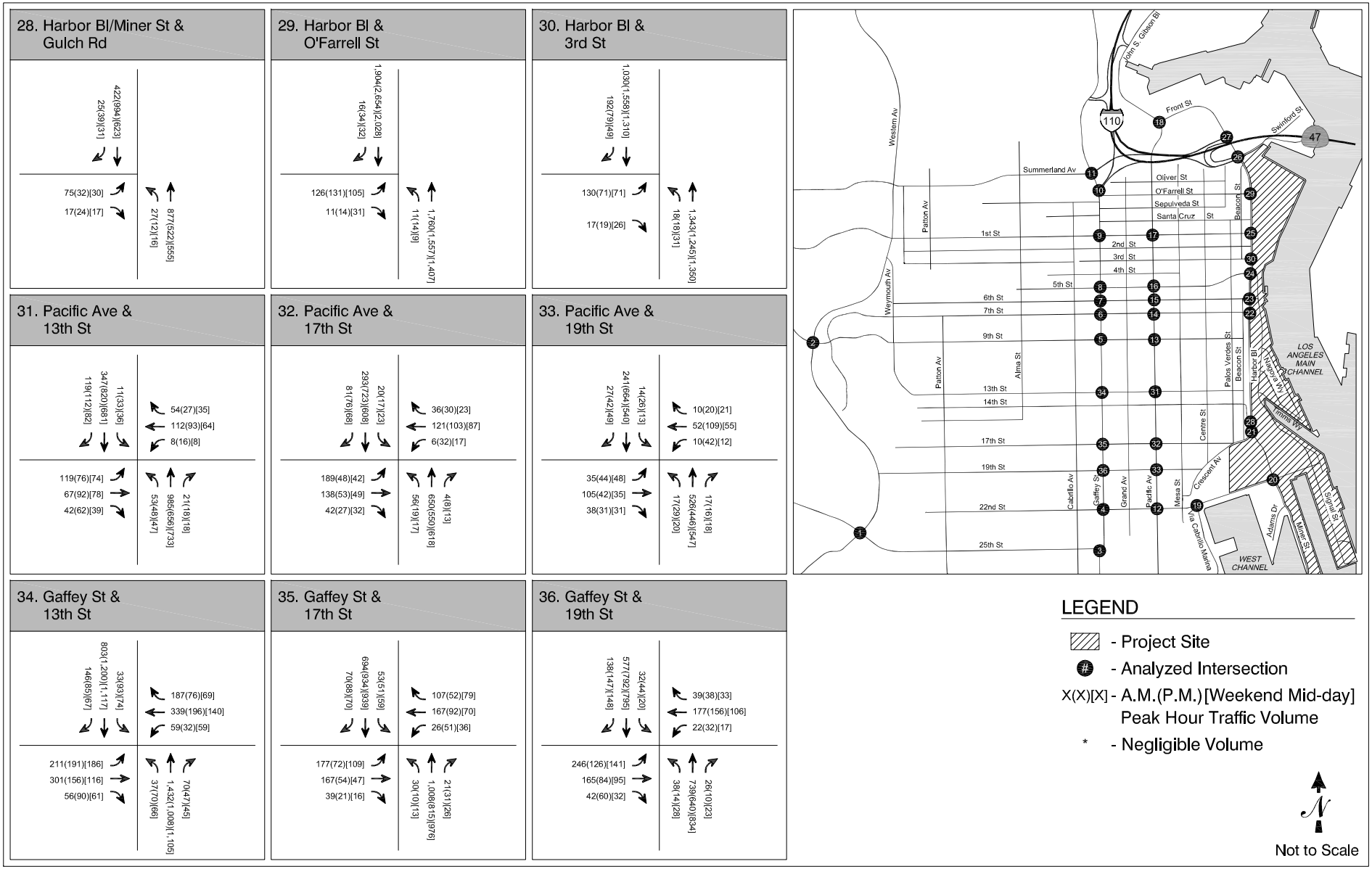
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 6 (NO PROJECT, CEQA BASELINE) - 2037

FIGURE 19 (CONT.)



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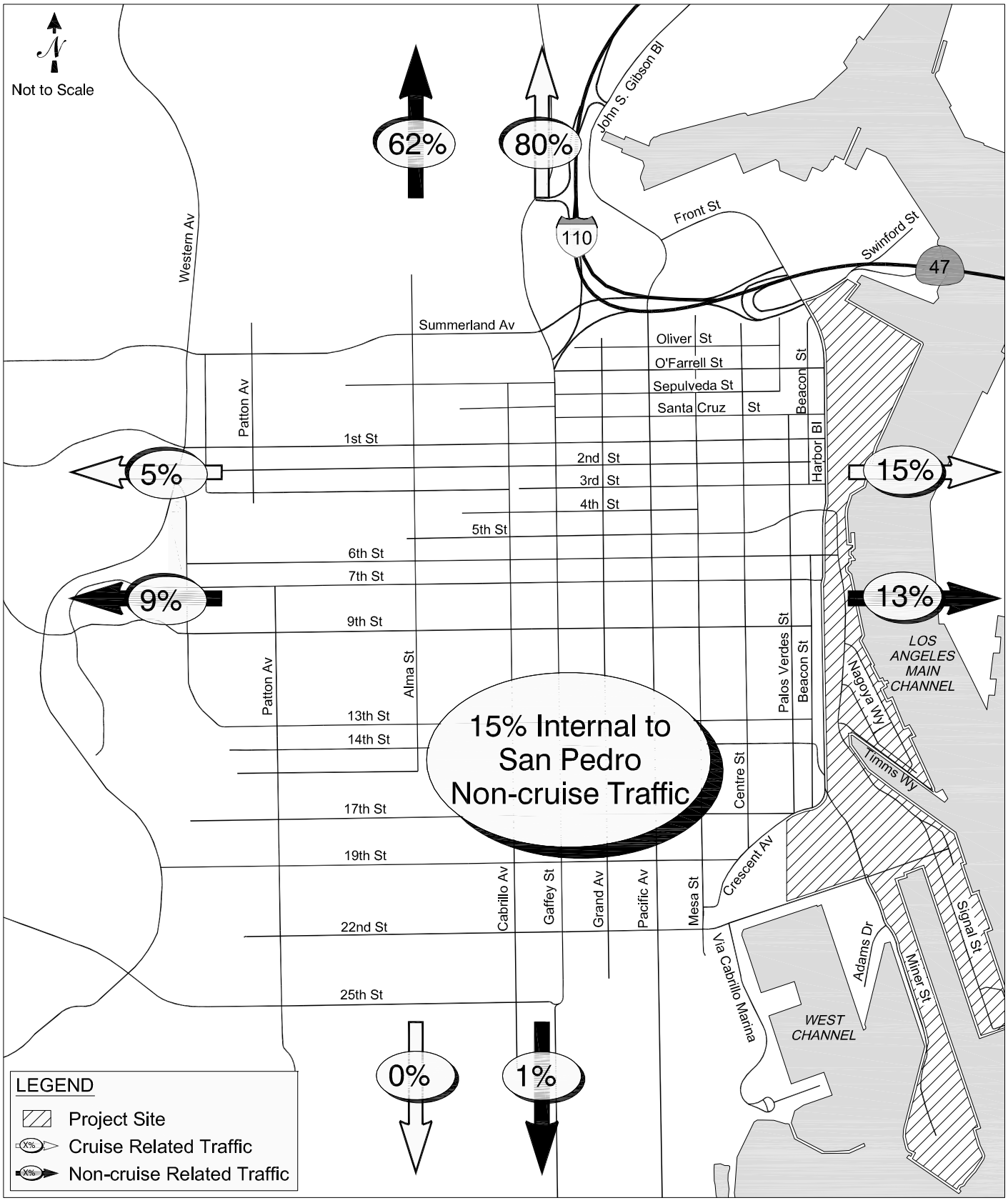
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 6 (NO PROJECT, CEQA BASELINE) - 2037

FIGURE 19 (CONT.)



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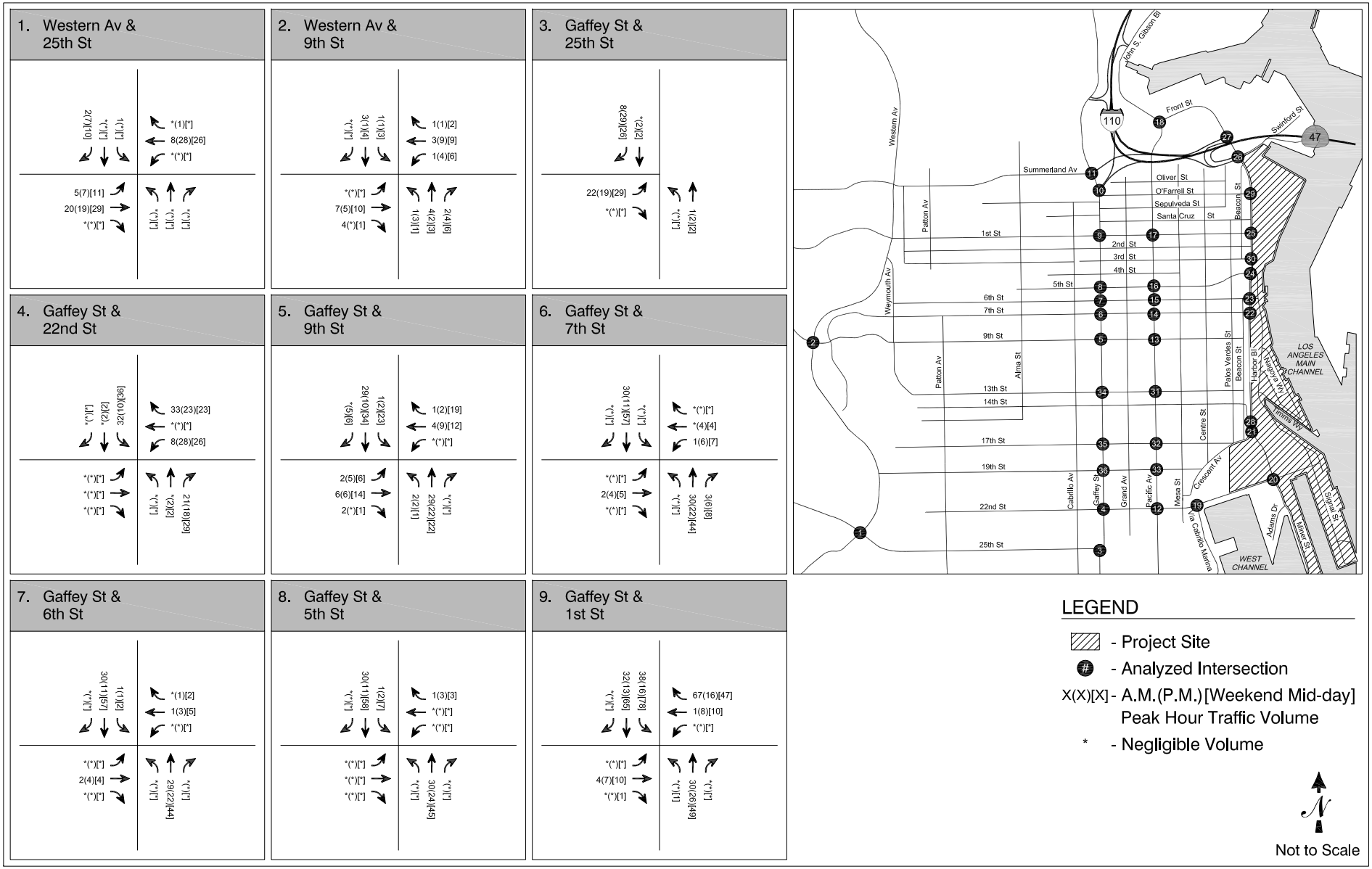
GENERALIZED PROJECT TRIP DISTRIBUTION

FIGURE 20



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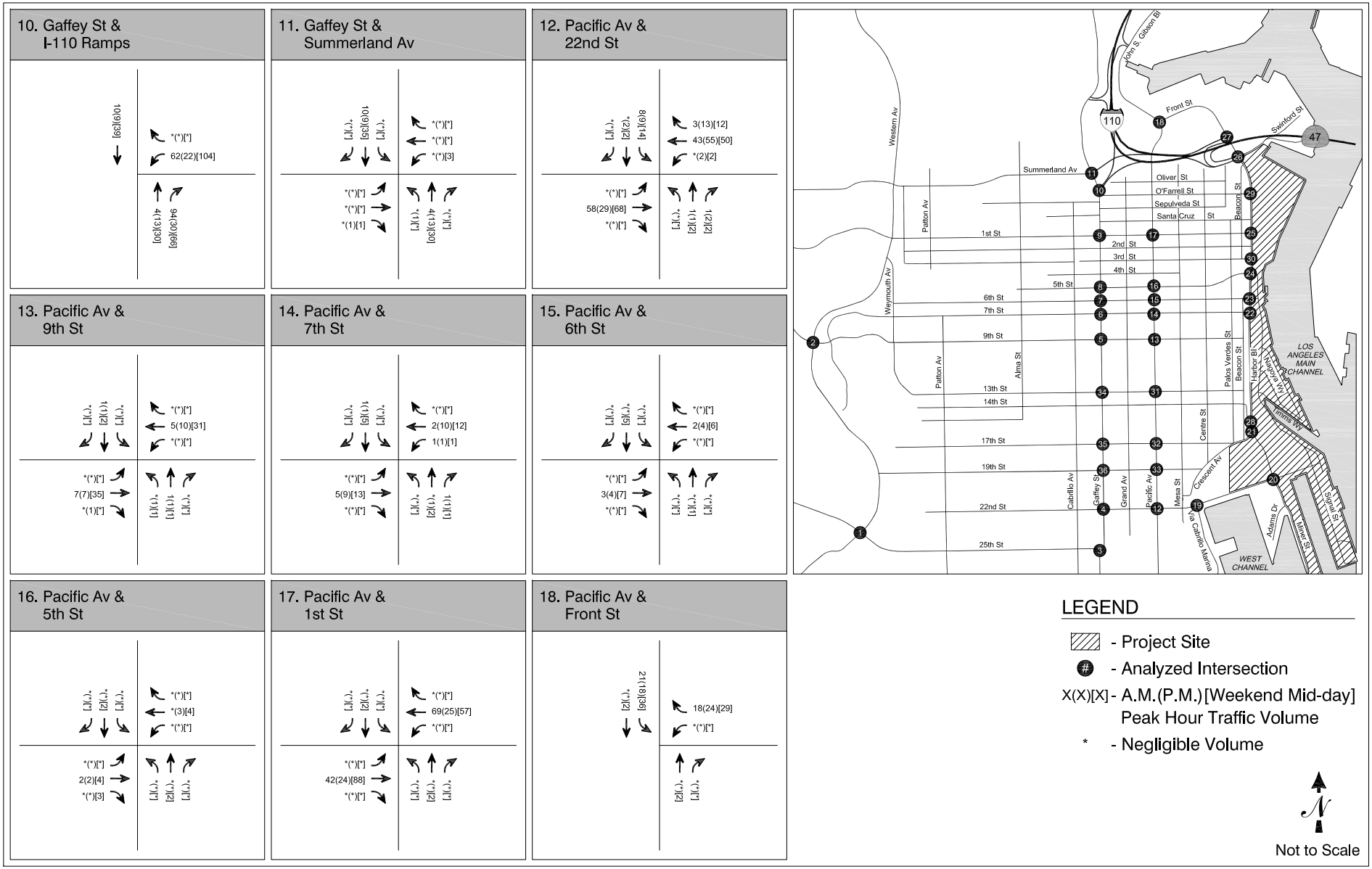
PROJECT ONLY TRAFFIC VOLUMES - 2015

FIGURE 21



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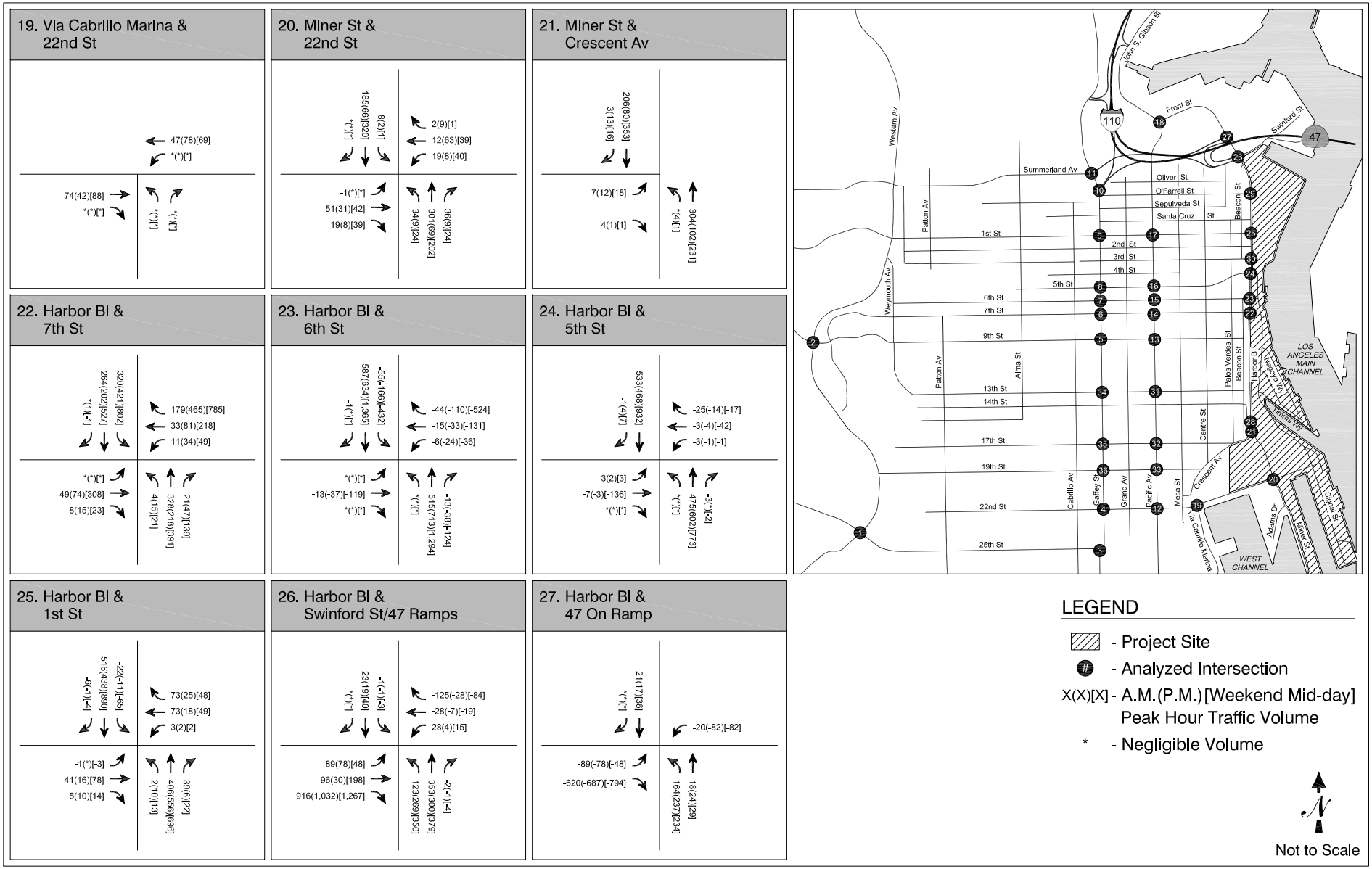
PROJECT ONLY TRAFFIC VOLUMES - 2015

FIGURE 21 (CONT.)



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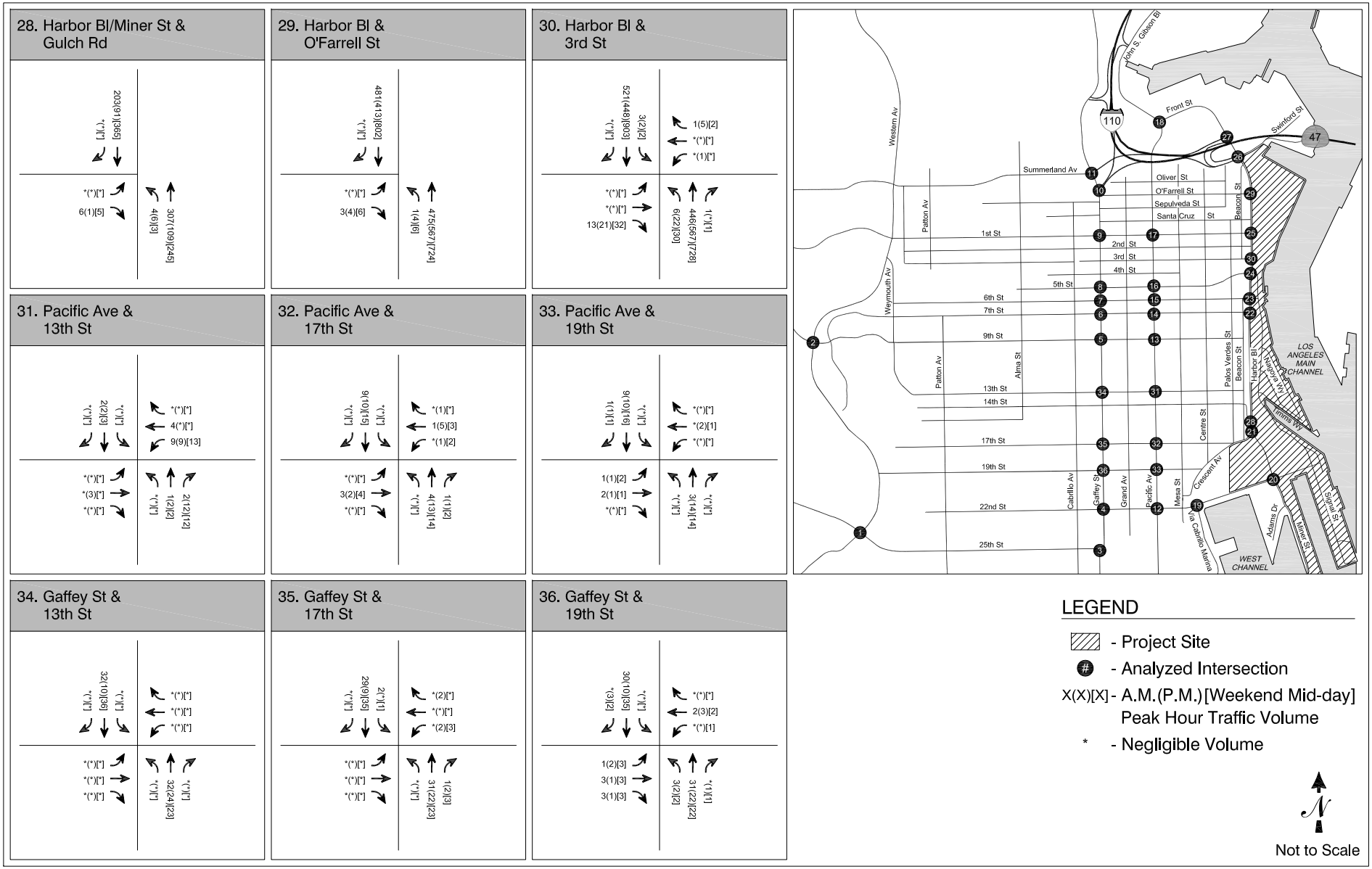
PROJECT ONLY TRAFFIC VOLUMES - 2015

FIGURE 21 (CONT.)



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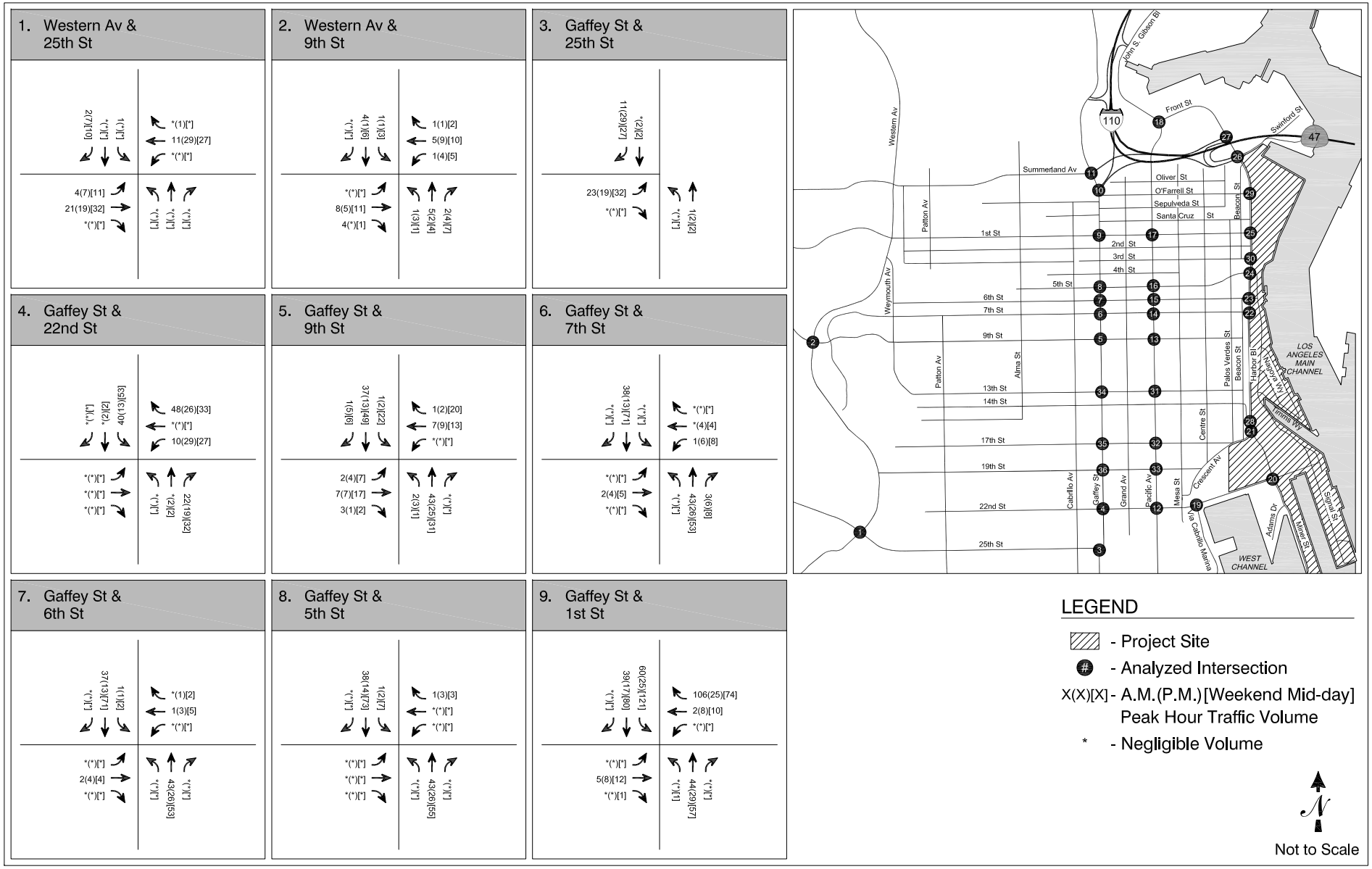
PROJECT ONLY TRAFFIC VOLUMES - 2015

FIGURE 21 (CONT.)



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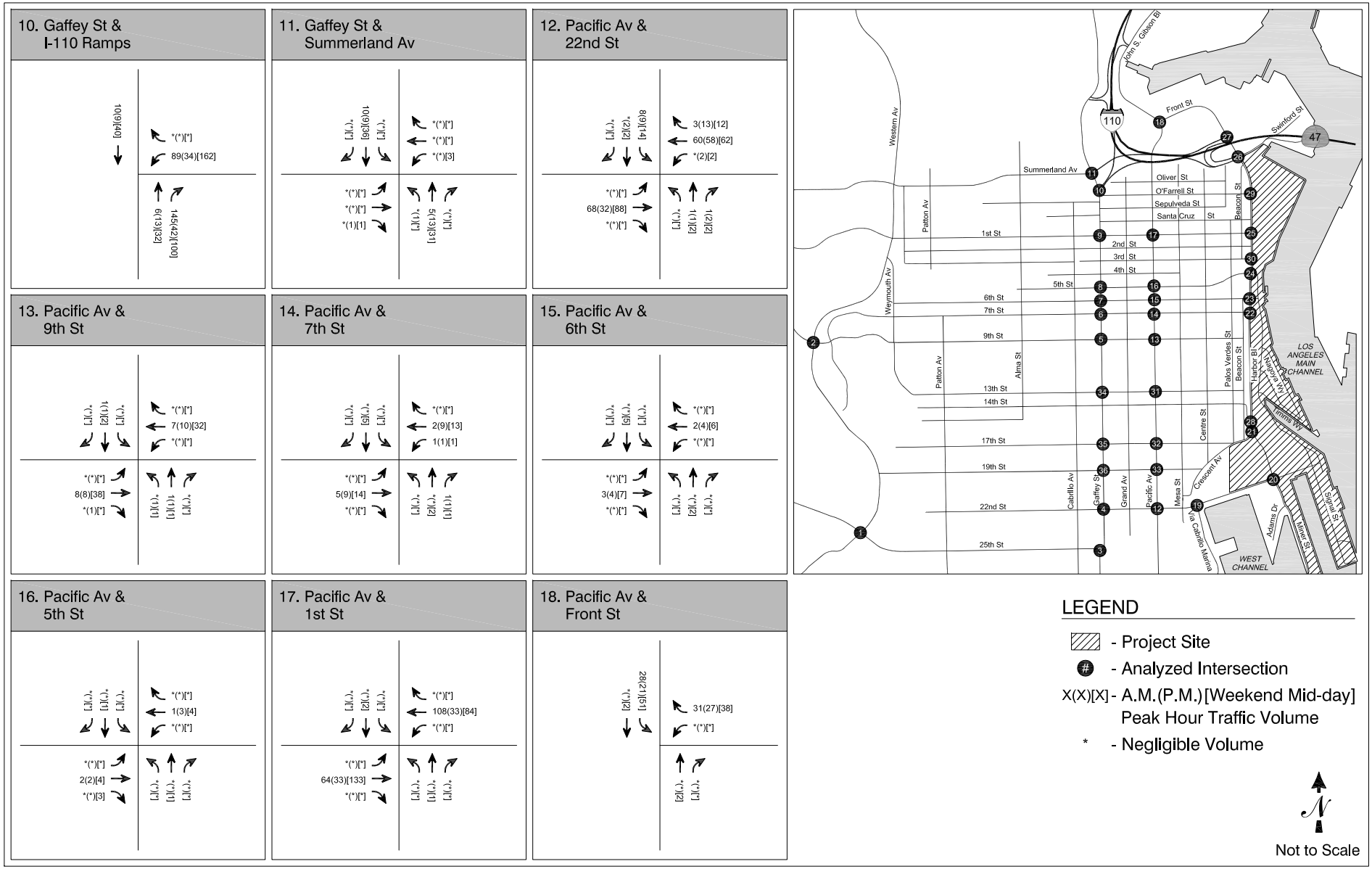
PROJECT ONLY TRAFFIC VOLUMES - 2037

FIGURE 22



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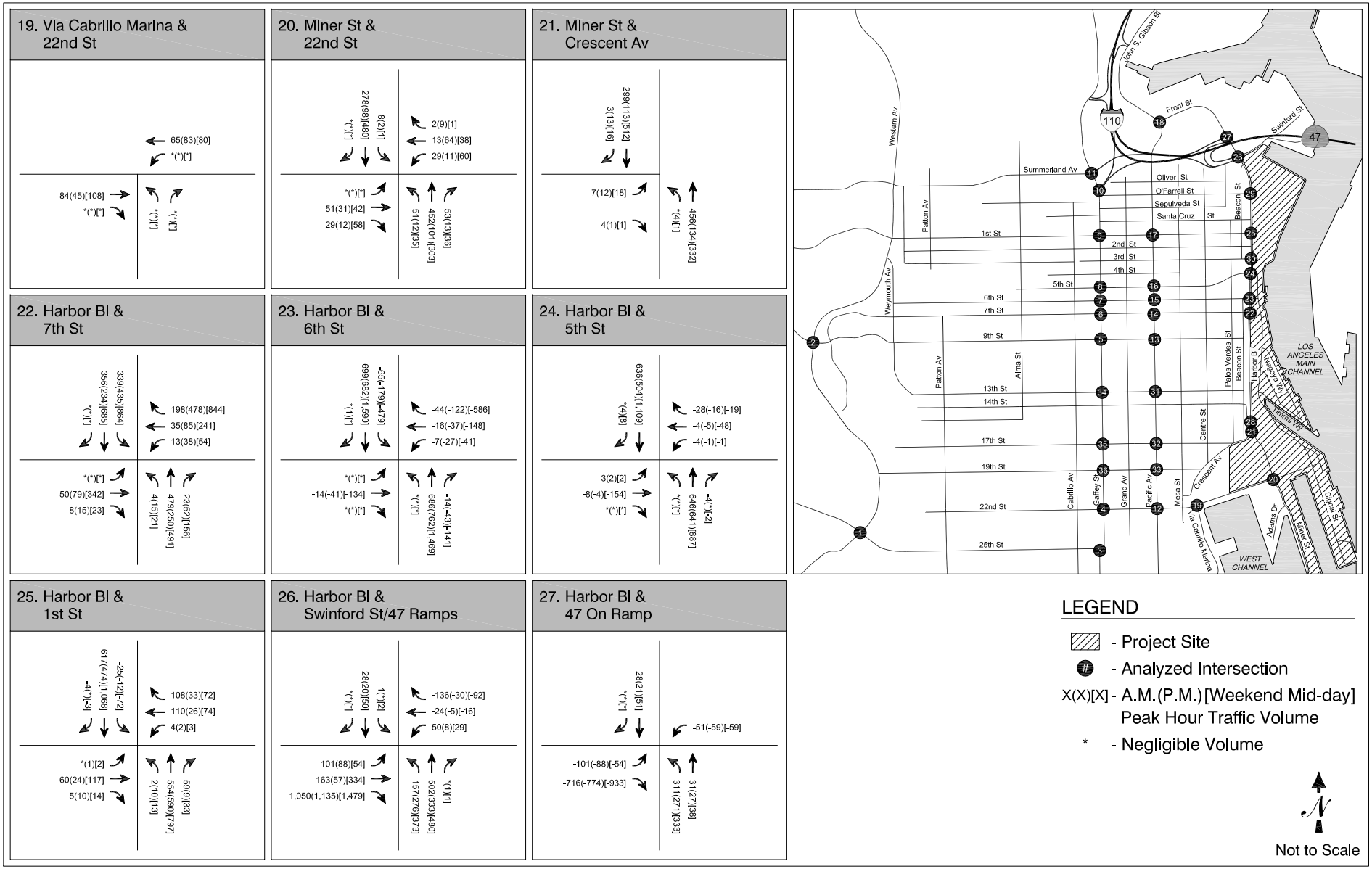
PROJECT ONLY TRAFFIC VOLUMES - 2037

FIGURE 22 (CONT.)



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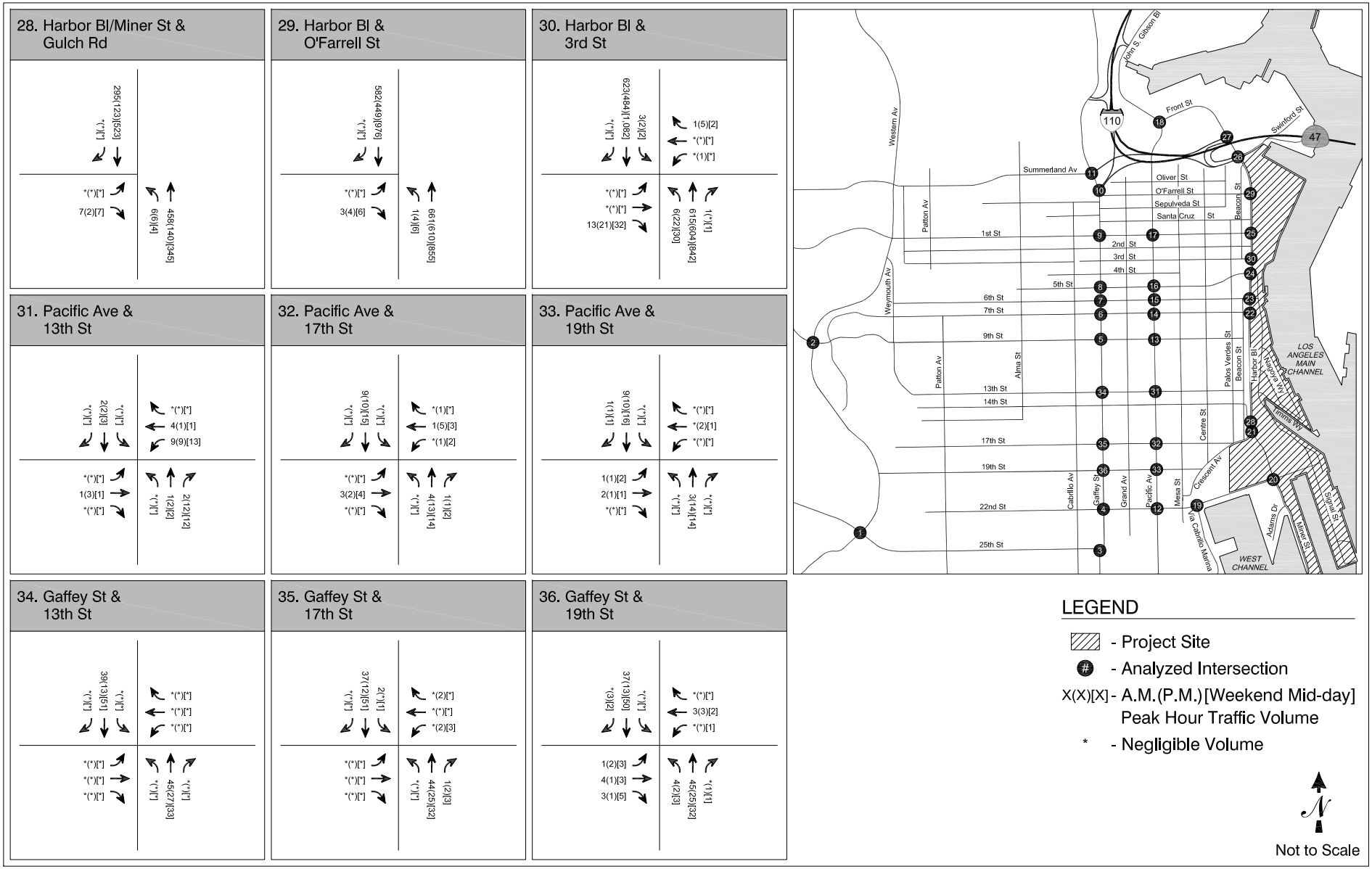
PROJECT ONLY TRAFFIC VOLUMES - 2037

FIGURE 22 (CONT.)



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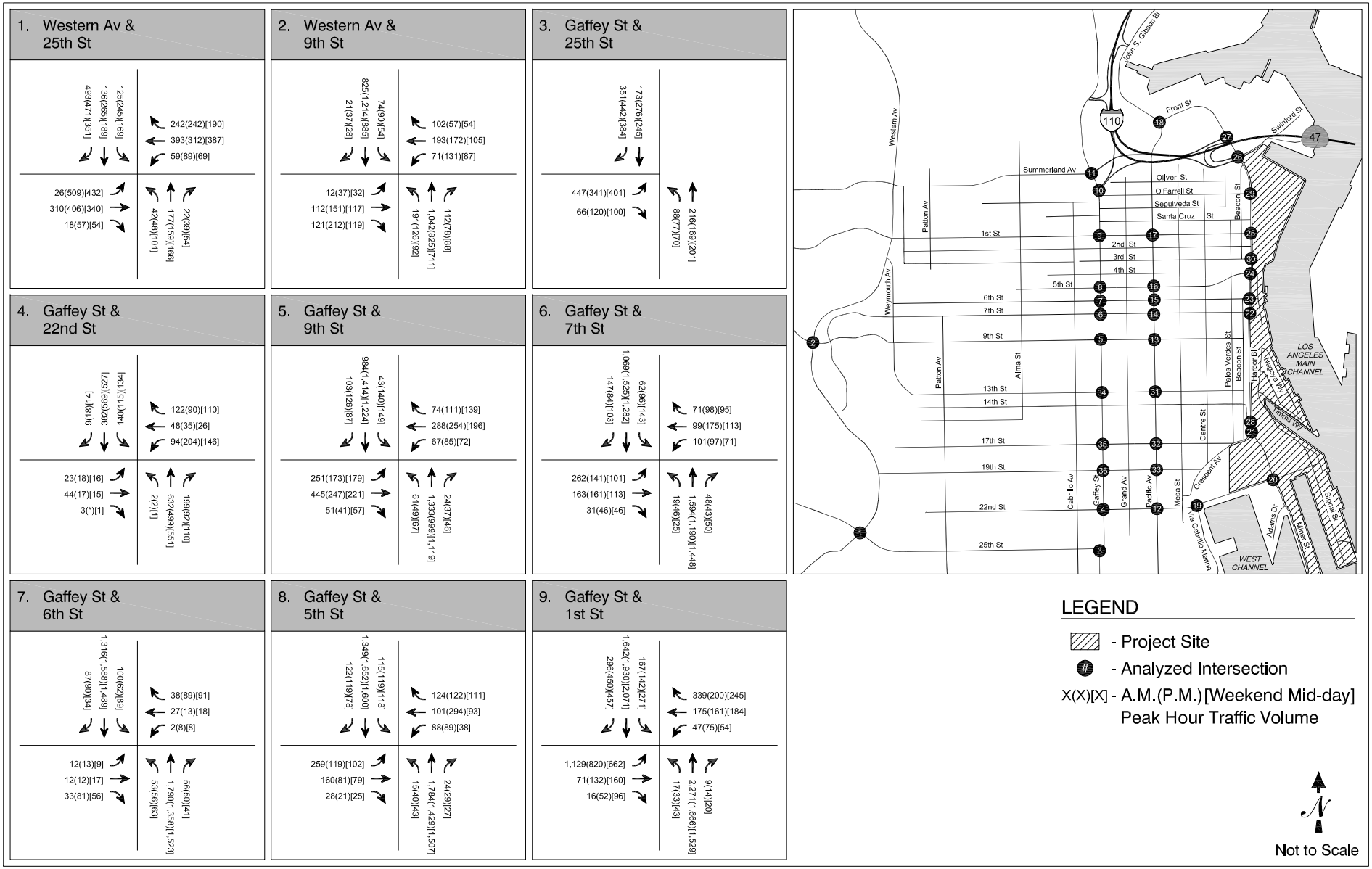
PROJECT ONLY TRAFFIC VOLUMES - 2037

FIGURE 22 (CONT.)



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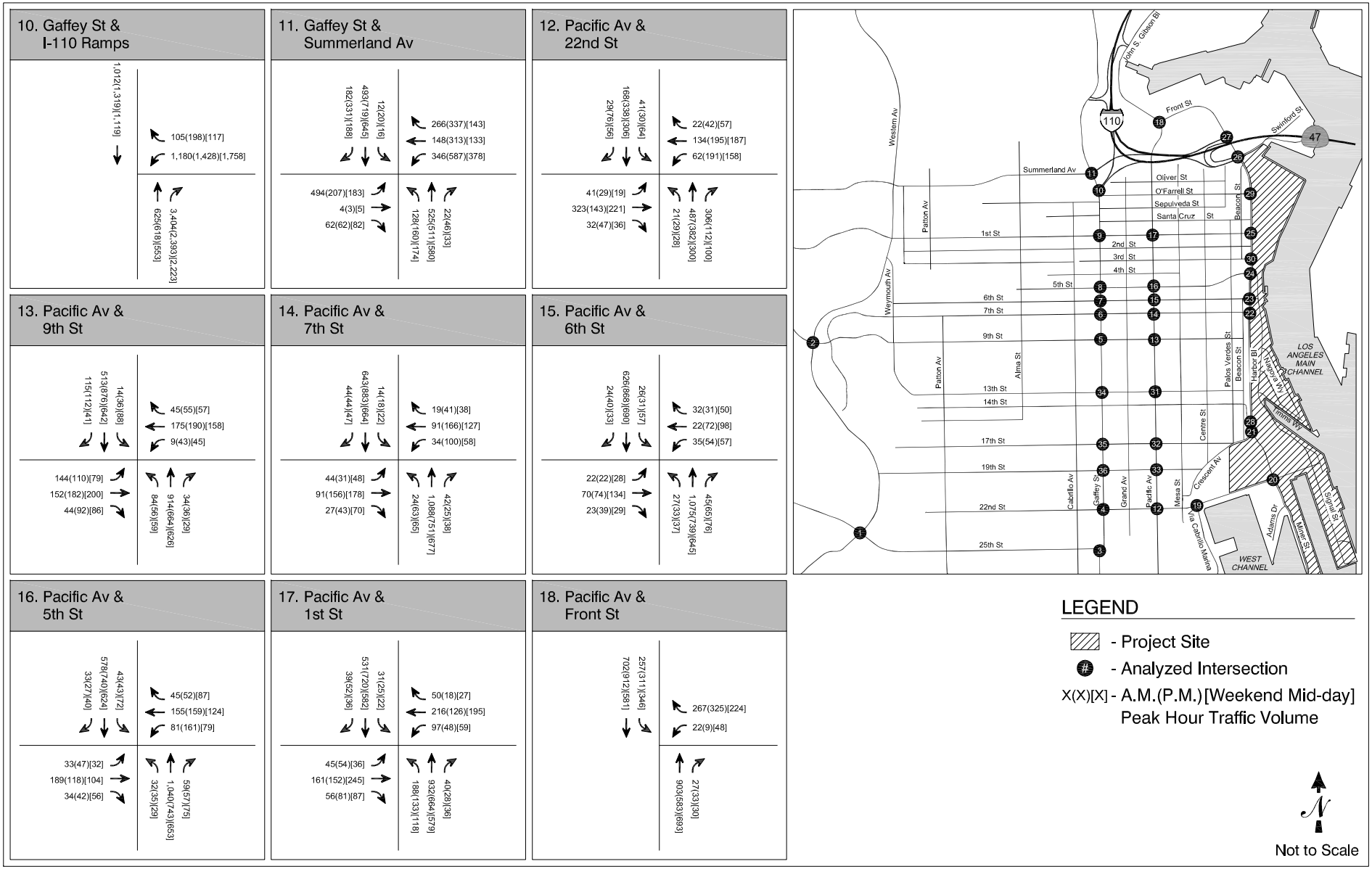
FUTURE TRAFFIC VOLUMES WITH PROPOSED PROJECT - 2015

FIGURE 23



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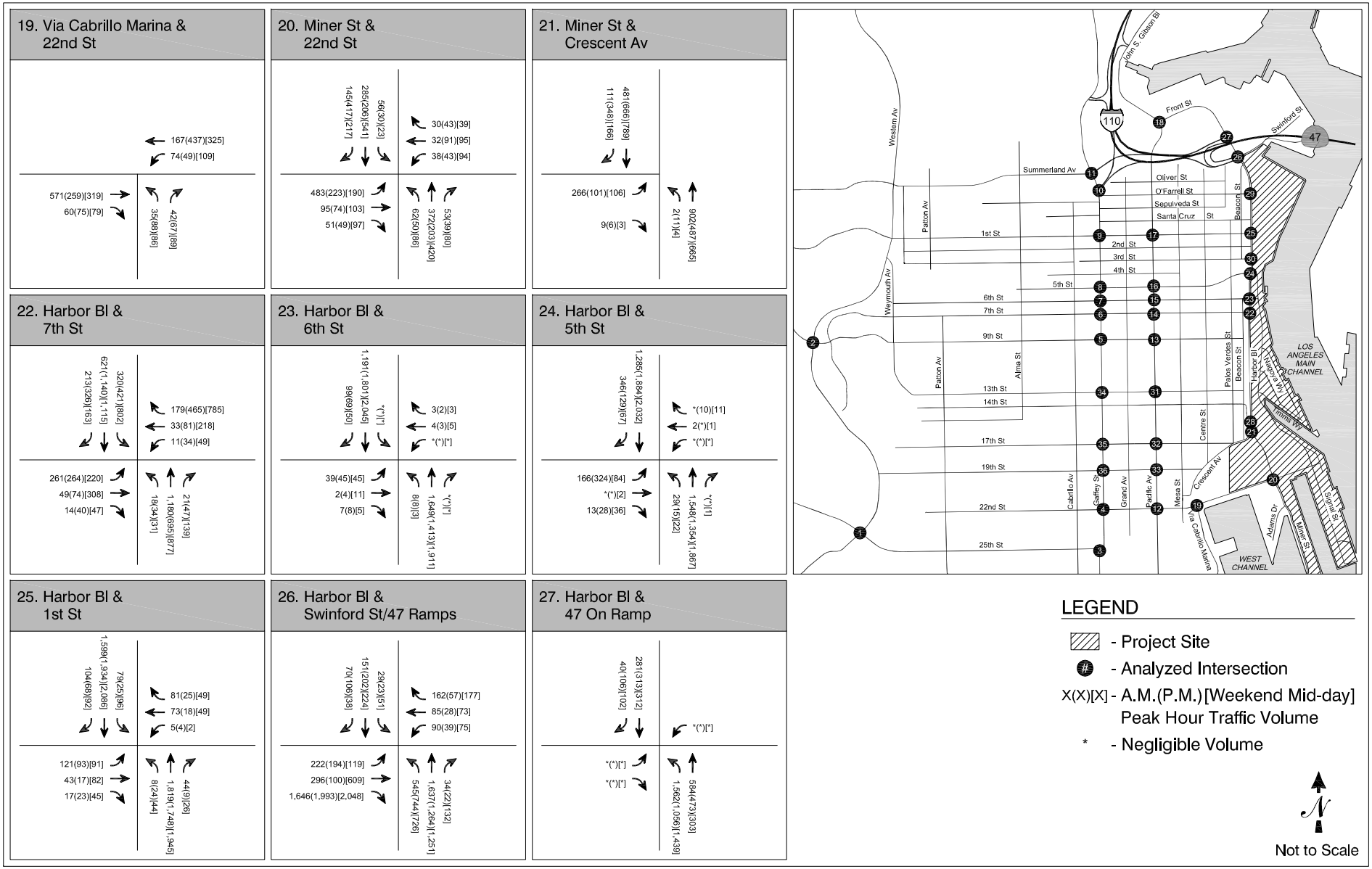
FUTURE TRAFFIC VOLUMES WITH PROPOSED PROJECT - 2015

FIGURE 23 (CONT.)



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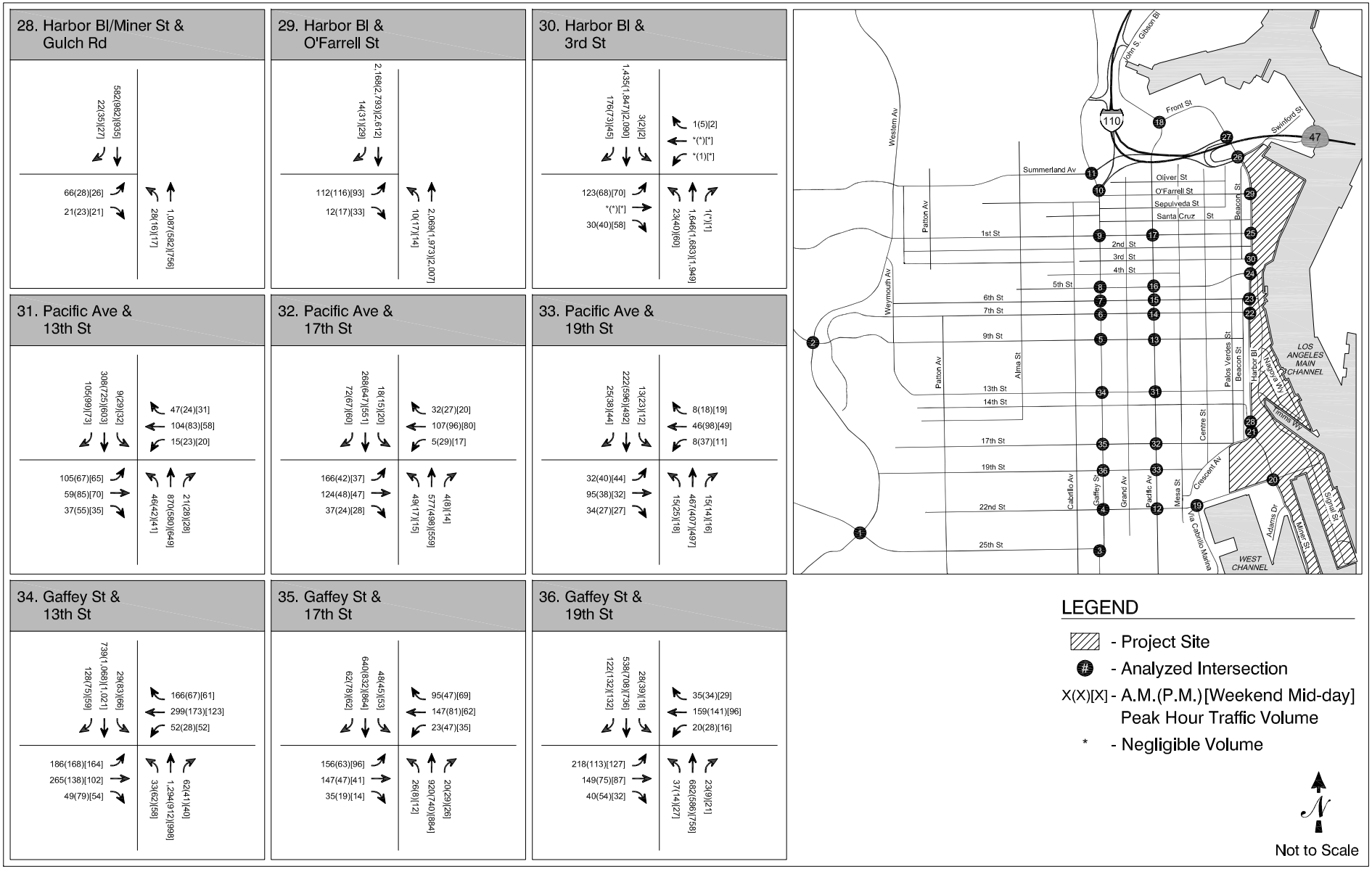
FUTURE TRAFFIC VOLUMES WITH PROPOSED PROJECT - 2015

FIGURE 23 (CONT.)



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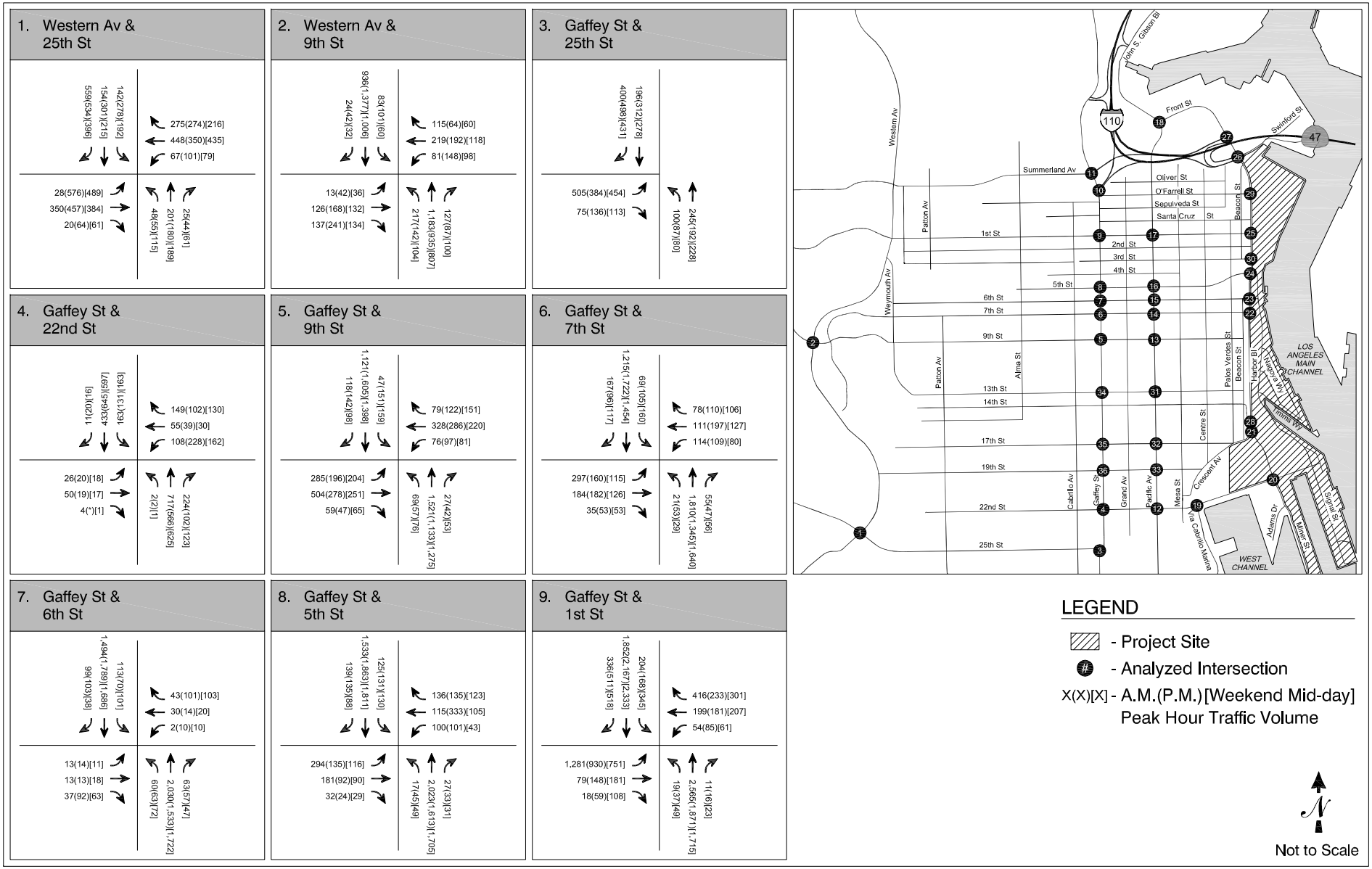
FUTURE TRAFFIC VOLUMES WITH PROPOSED PROJECT - 2015

FIGURE 23 (CONT.)



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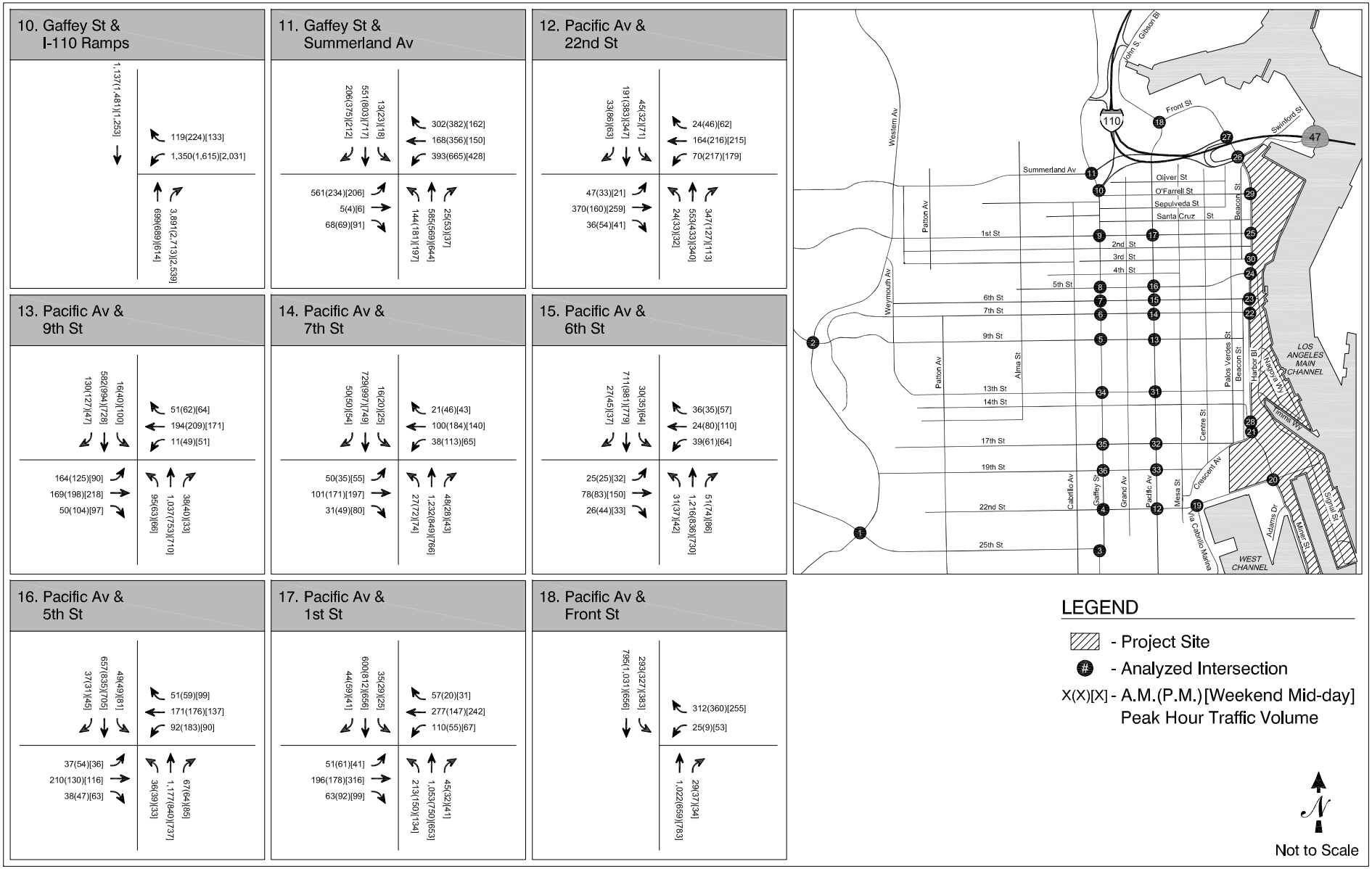
FUTURE TRAFFIC VOLUMES WITH PROPOSED PROJECT - 2037

FIGURE 24



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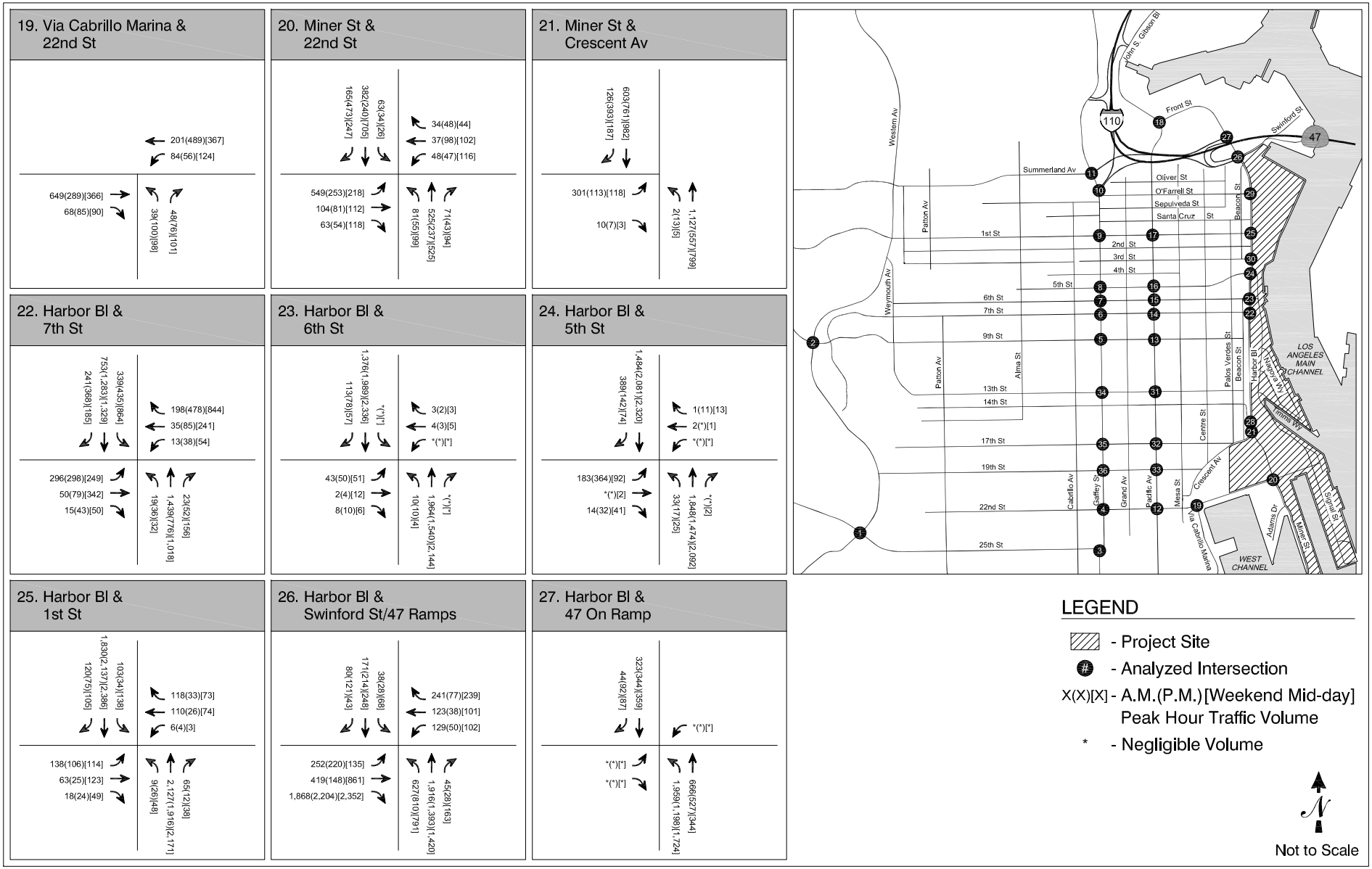
FUTURE TRAFFIC VOLUMES WITH PROPOSED PROJECT - 2037

FIGURE 24 (CONT.)



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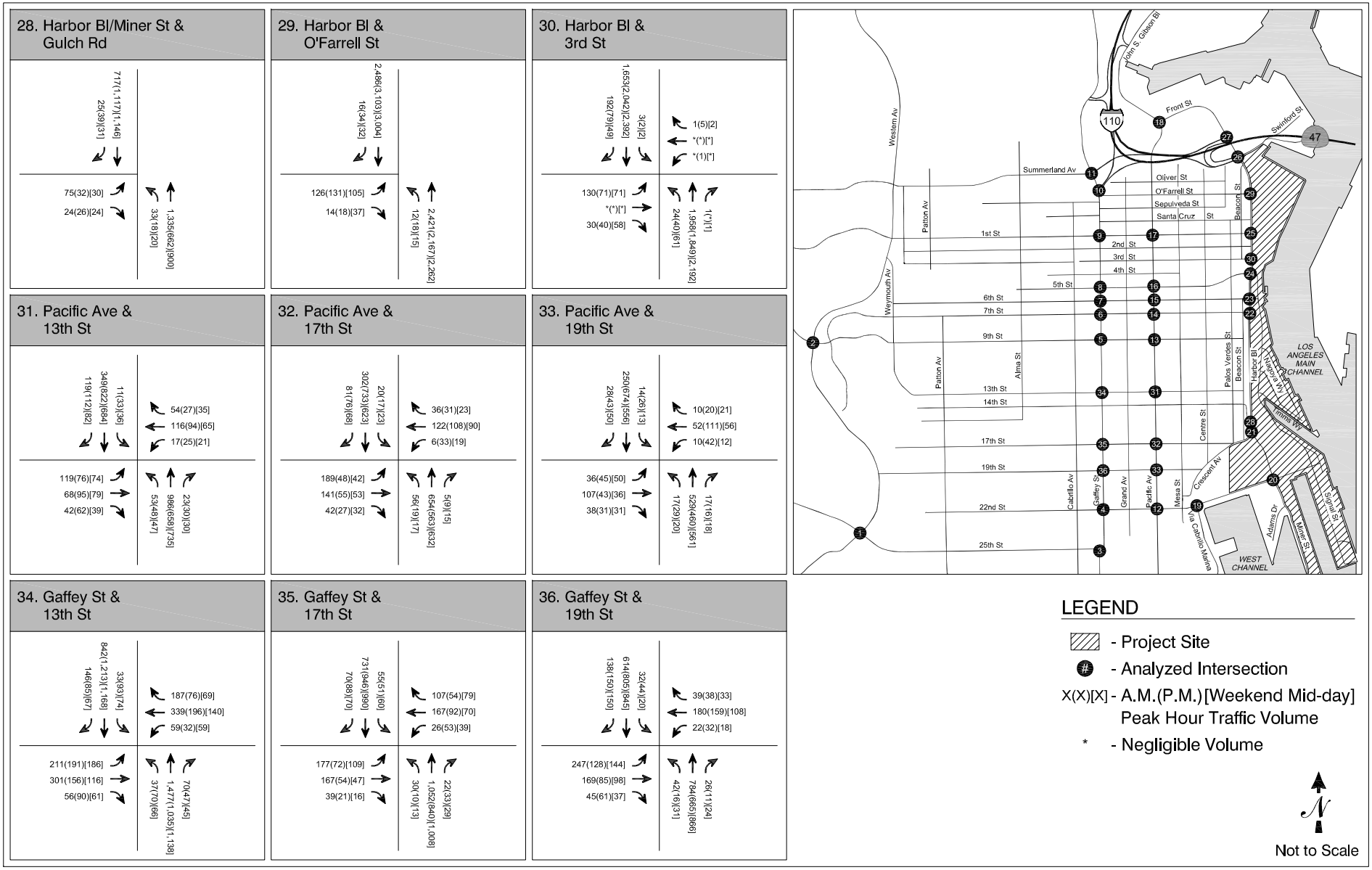
FUTURE TRAFFIC VOLUMES WITH PROPOSED PROJECT - 2037

FIGURE 24 (CONT.)



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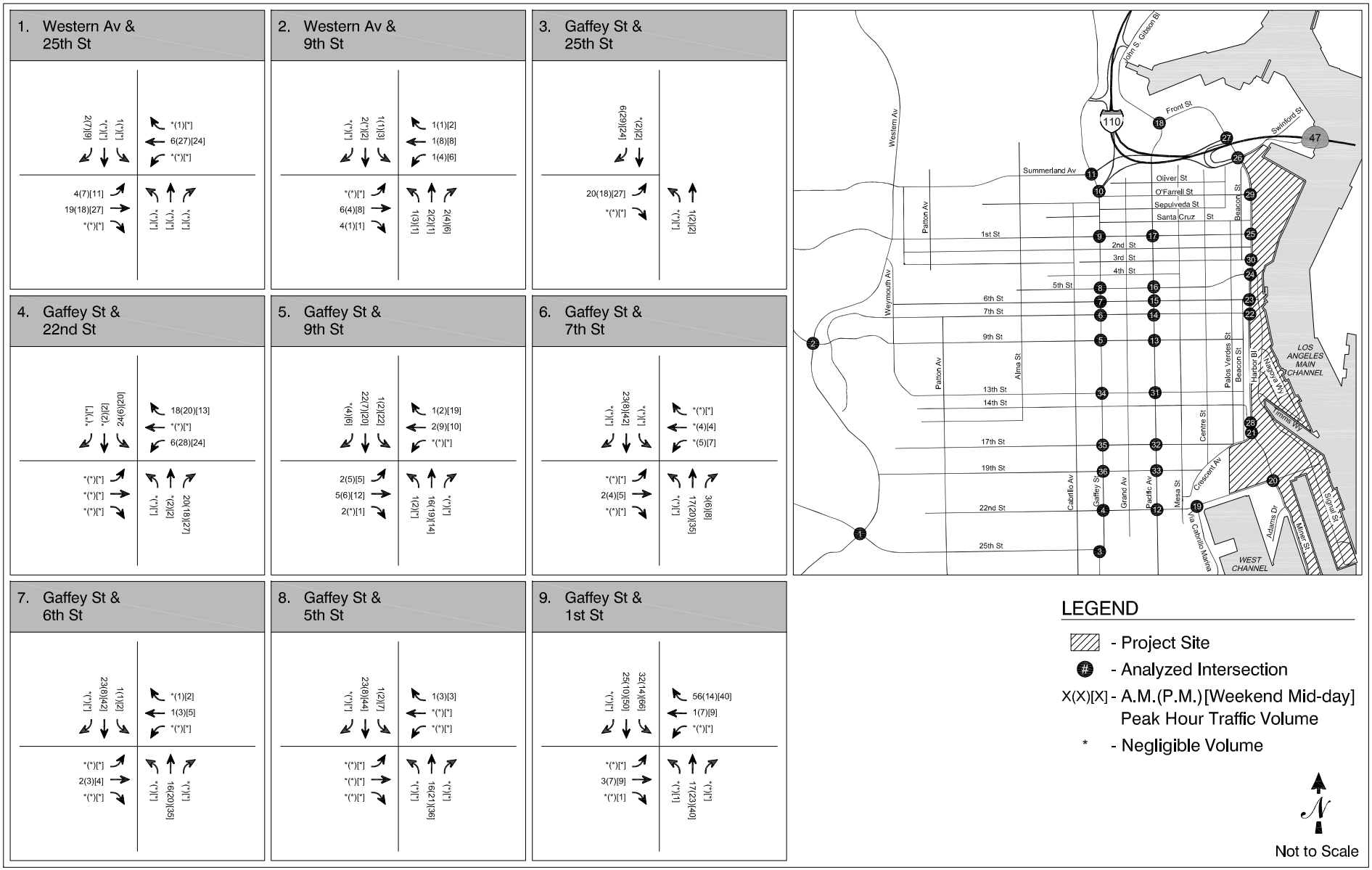
FUTURE TRAFFIC VOLUMES WITH PROPOSED PROJECT - 2037

FIGURE 24 (CONT.)



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ALTERNATIVE 1 ONLY TRAFFIC VOLUMES - 2015

FIGURE 25

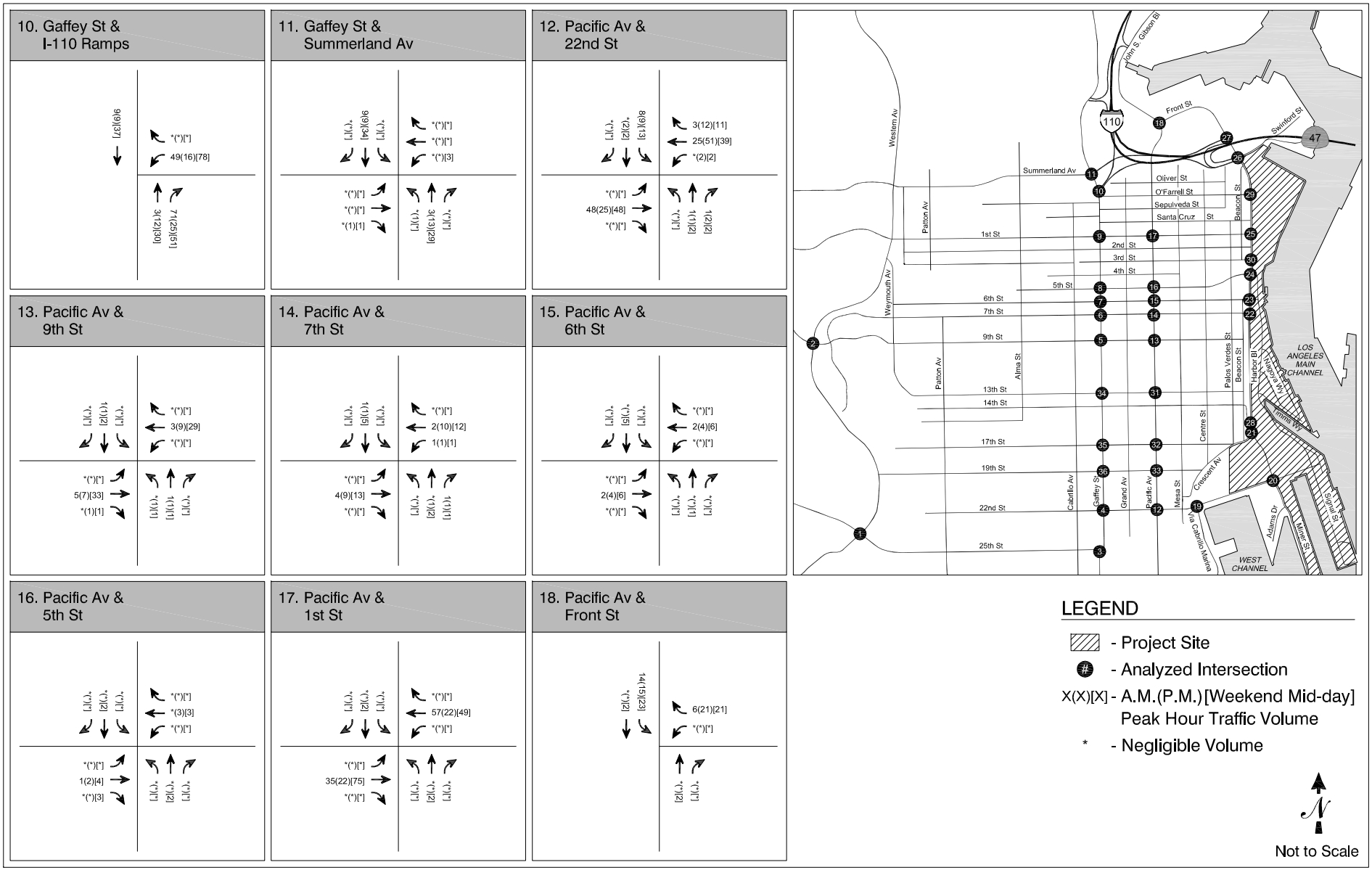

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FIGURE 25 (CONT.)

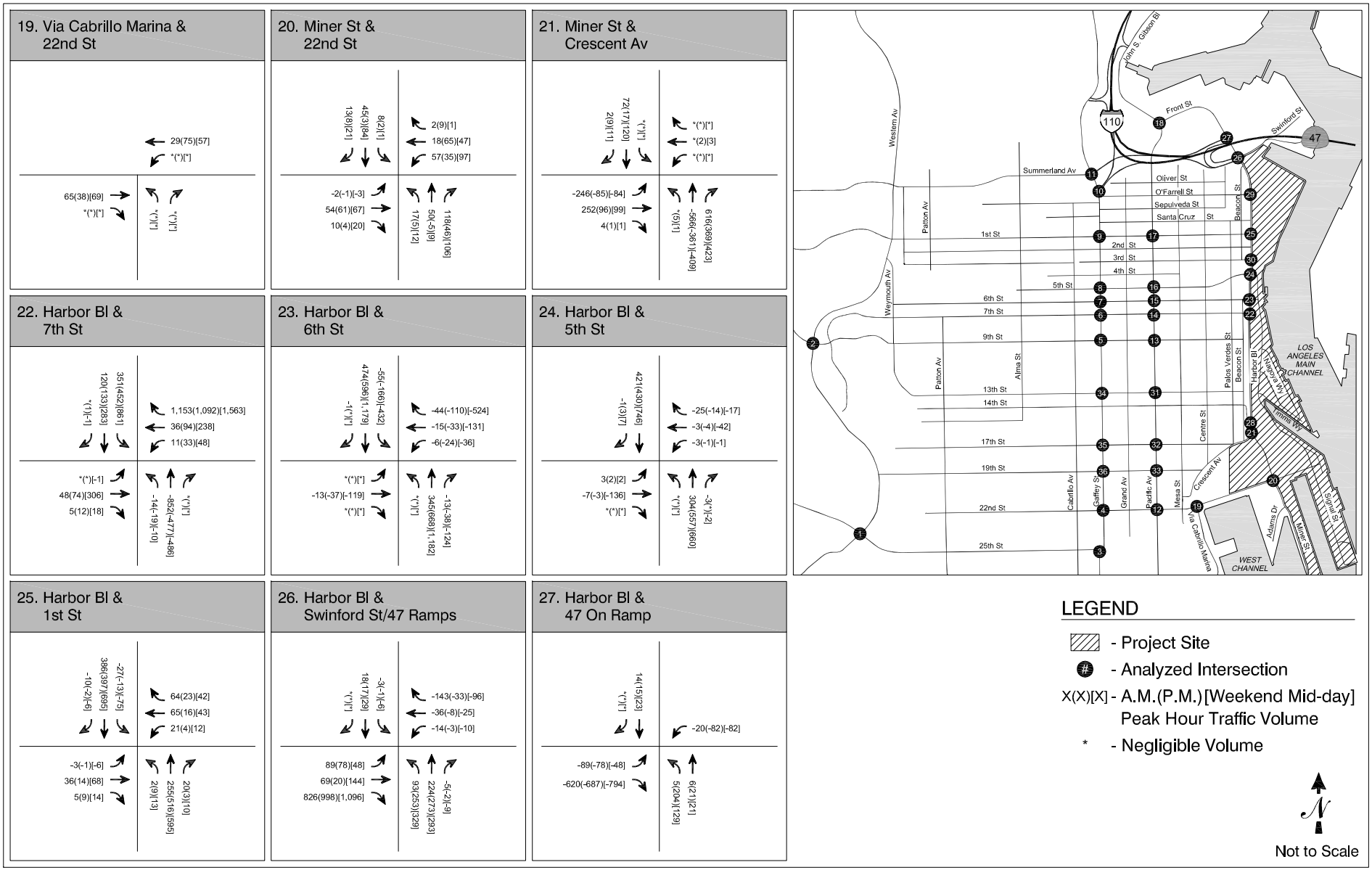

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FIGURE 25 (CONT.)

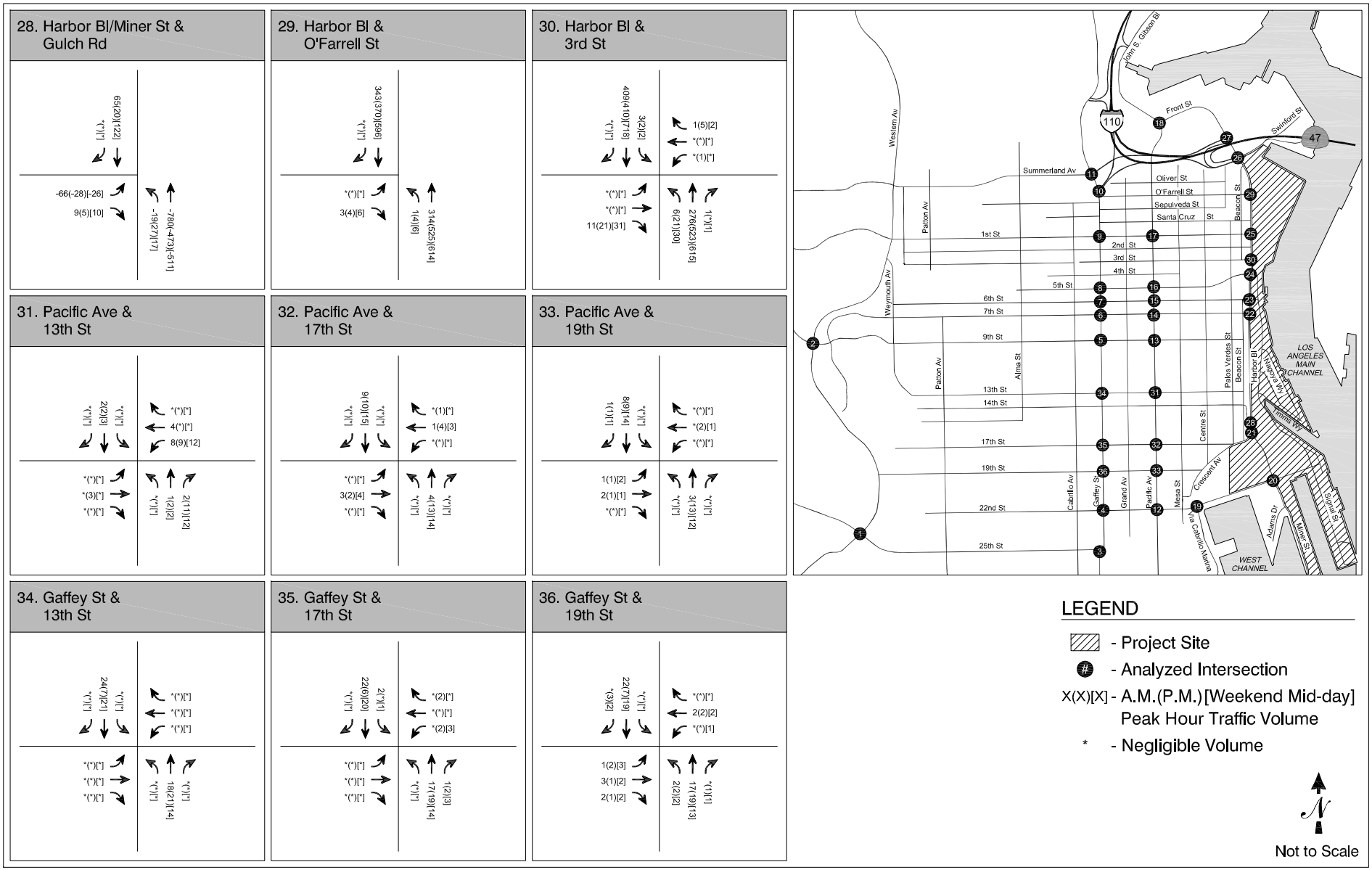

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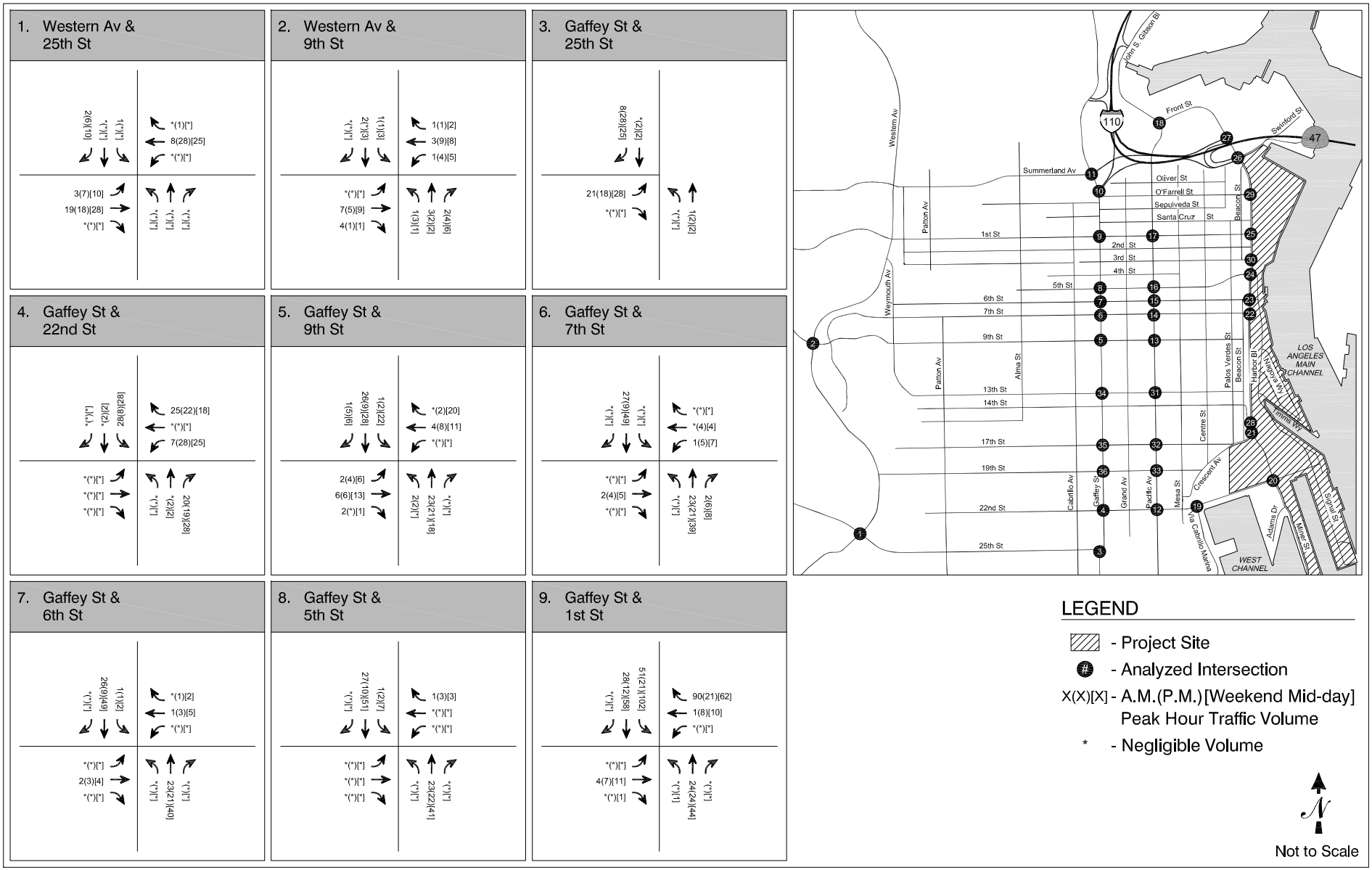
FIGURE 25 (CONT.)



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ALTERNATIVE 1 ONLY TRAFFIC VOLUMES - 2037

FIGURE 26

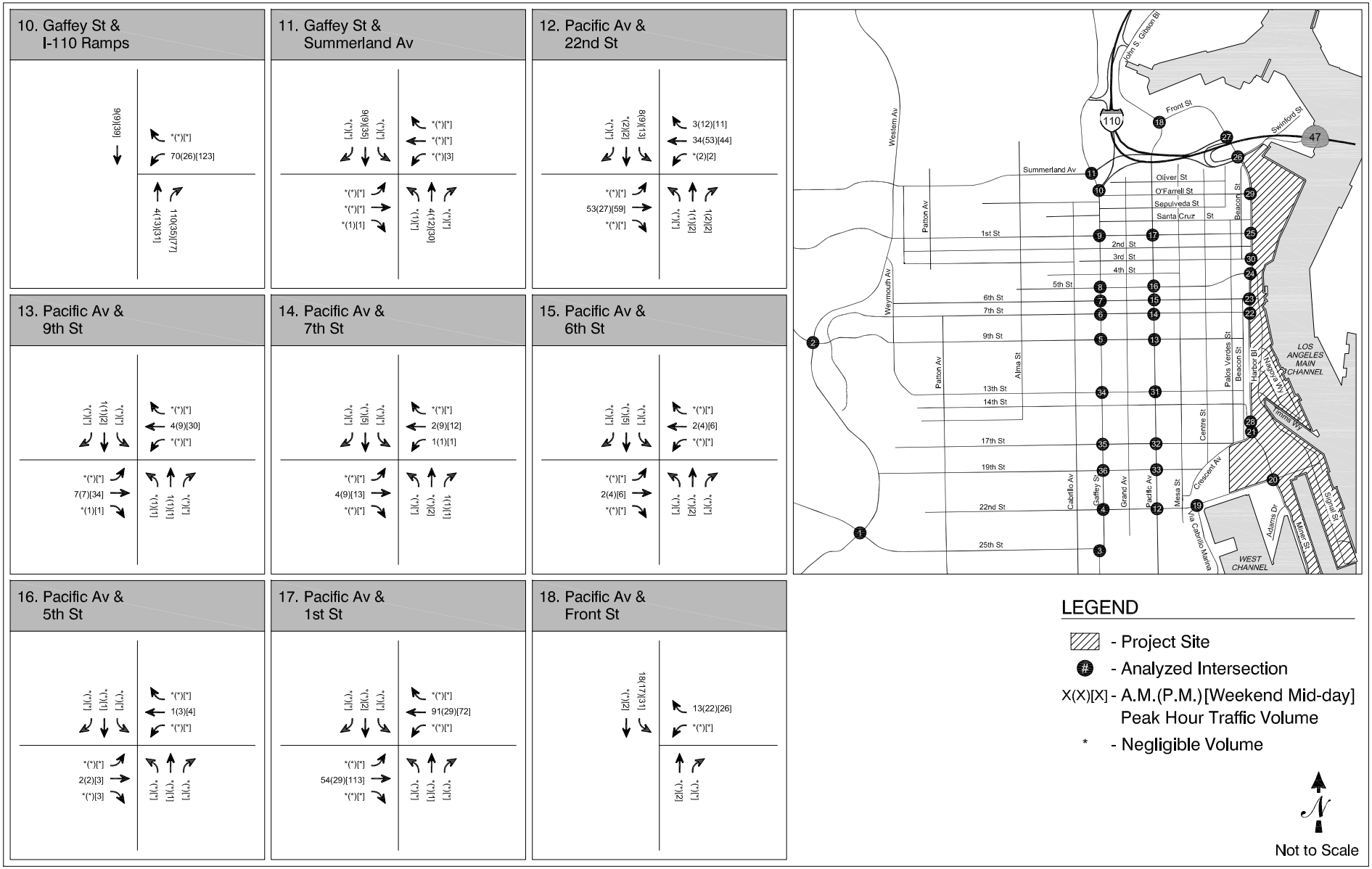

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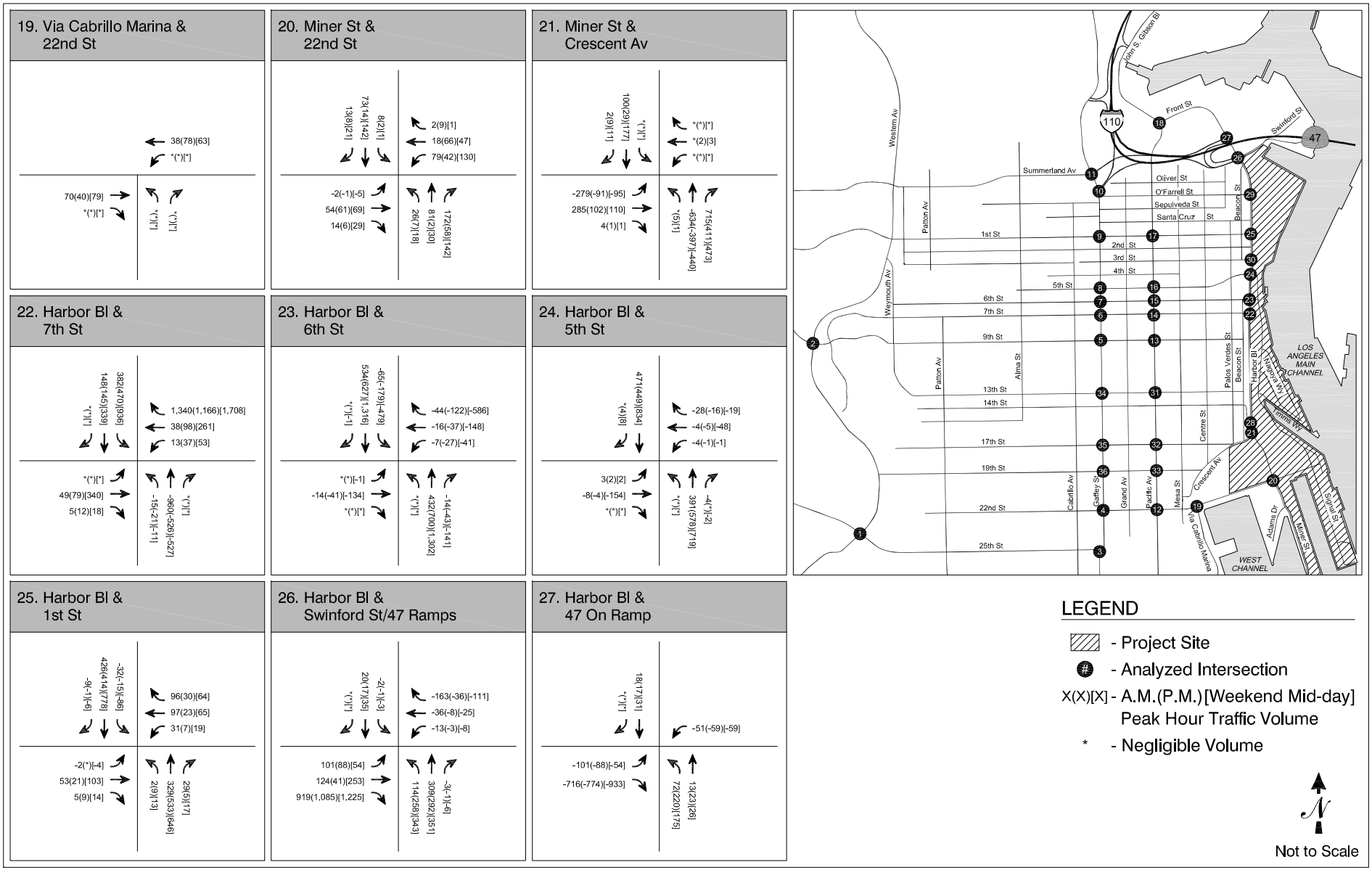
FIGURE 26 (CONT.)



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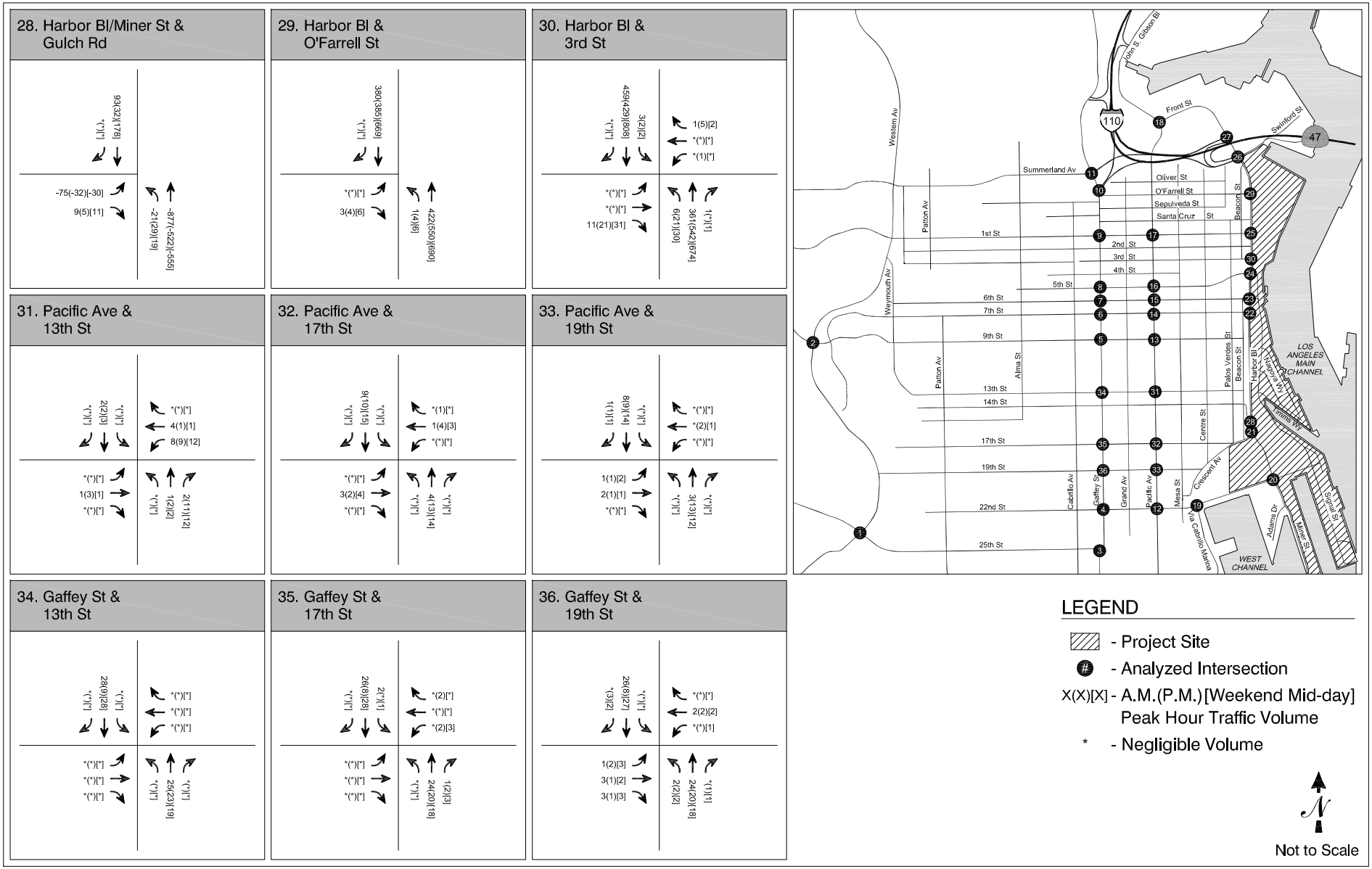
ALTERNATIVE 1 ONLY TRAFFIC VOLUMES - 2037

FIGURE 26 (CONT.)



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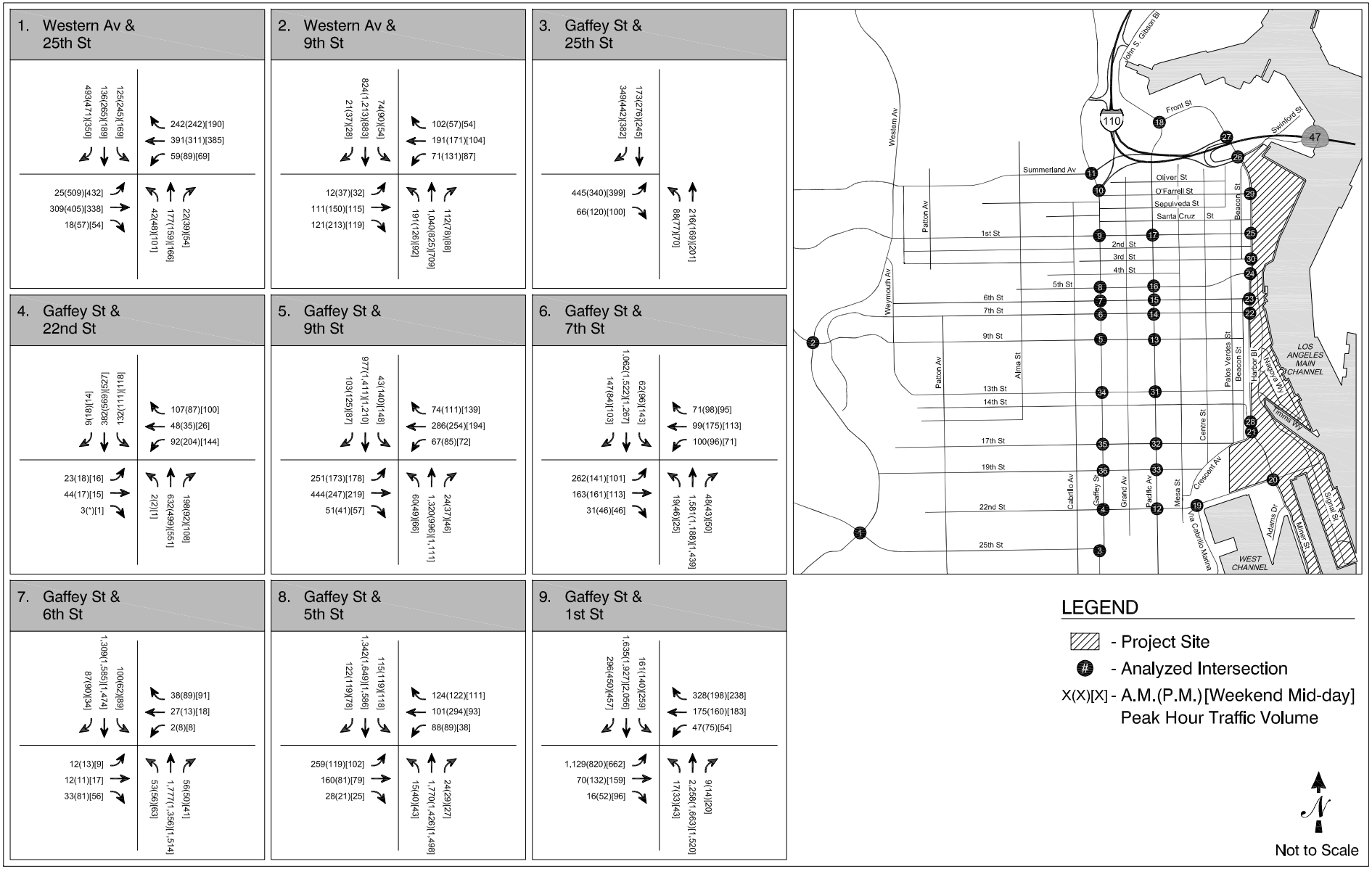
ALTERNATIVE 1 ONLY TRAFFIC VOLUMES - 2037

FIGURE 26 (CONT.)



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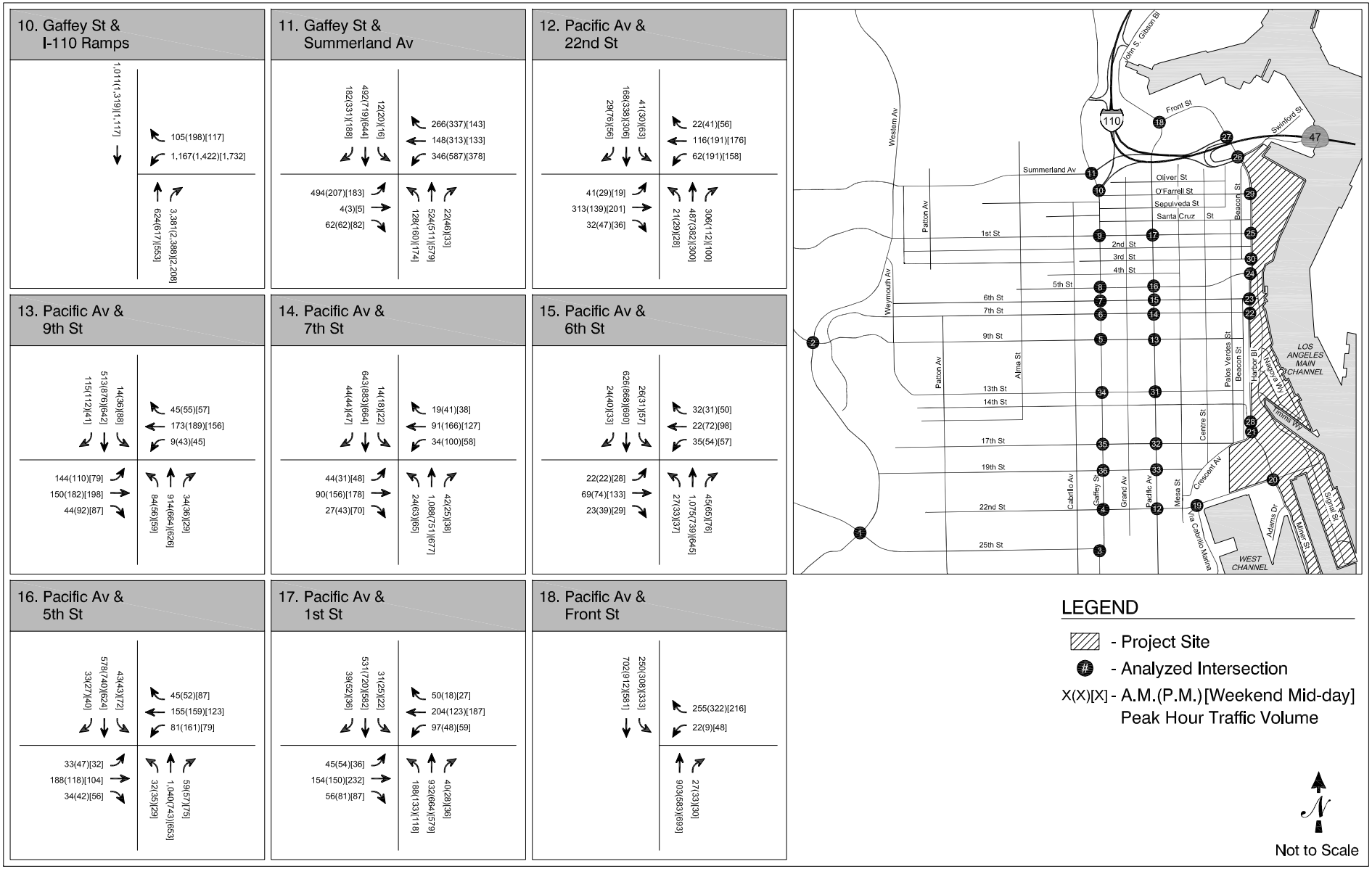
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 1 - 2015

FIGURE 27



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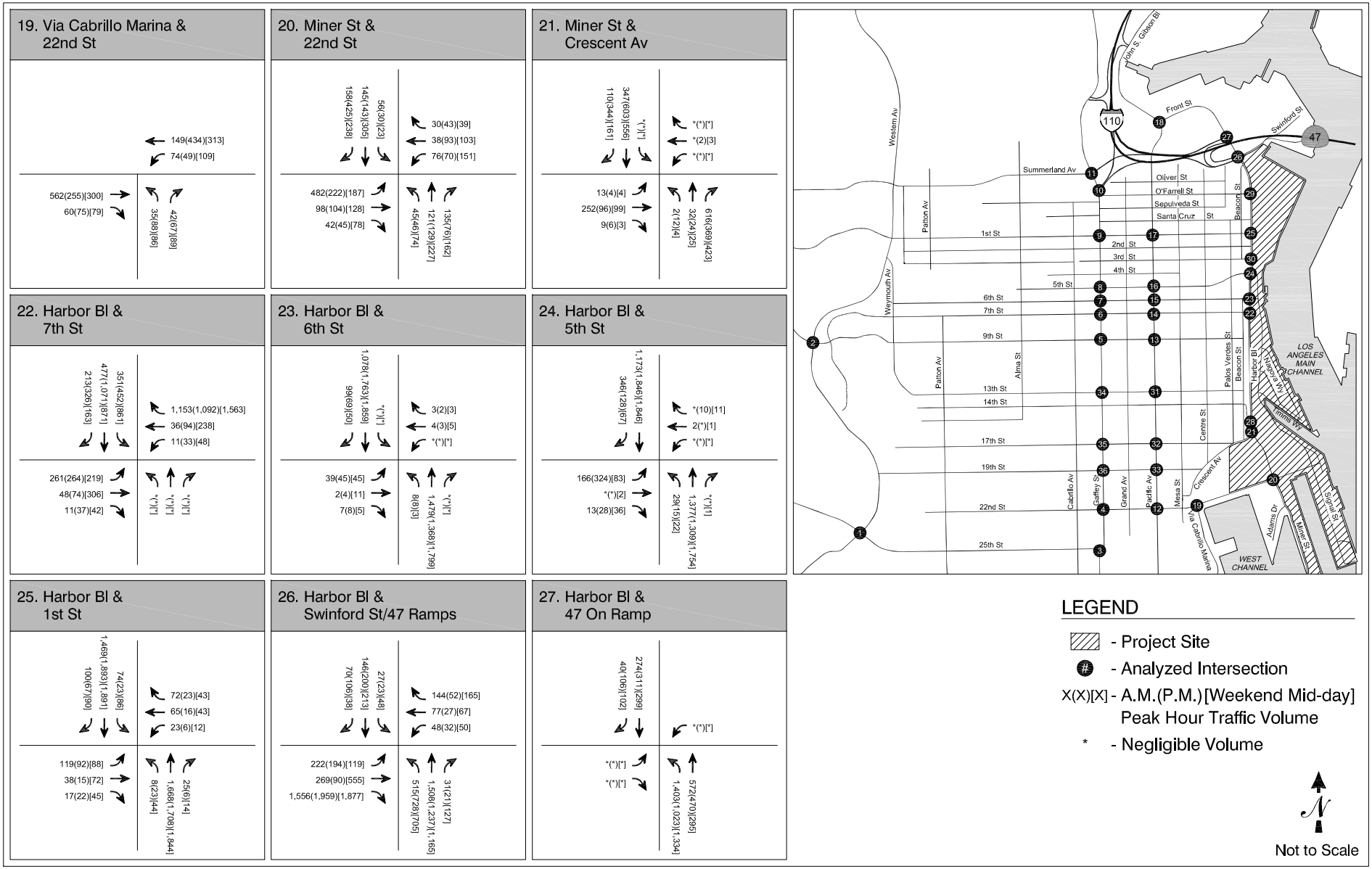
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 1 - 2015

FIGURE 27 (CONT.)



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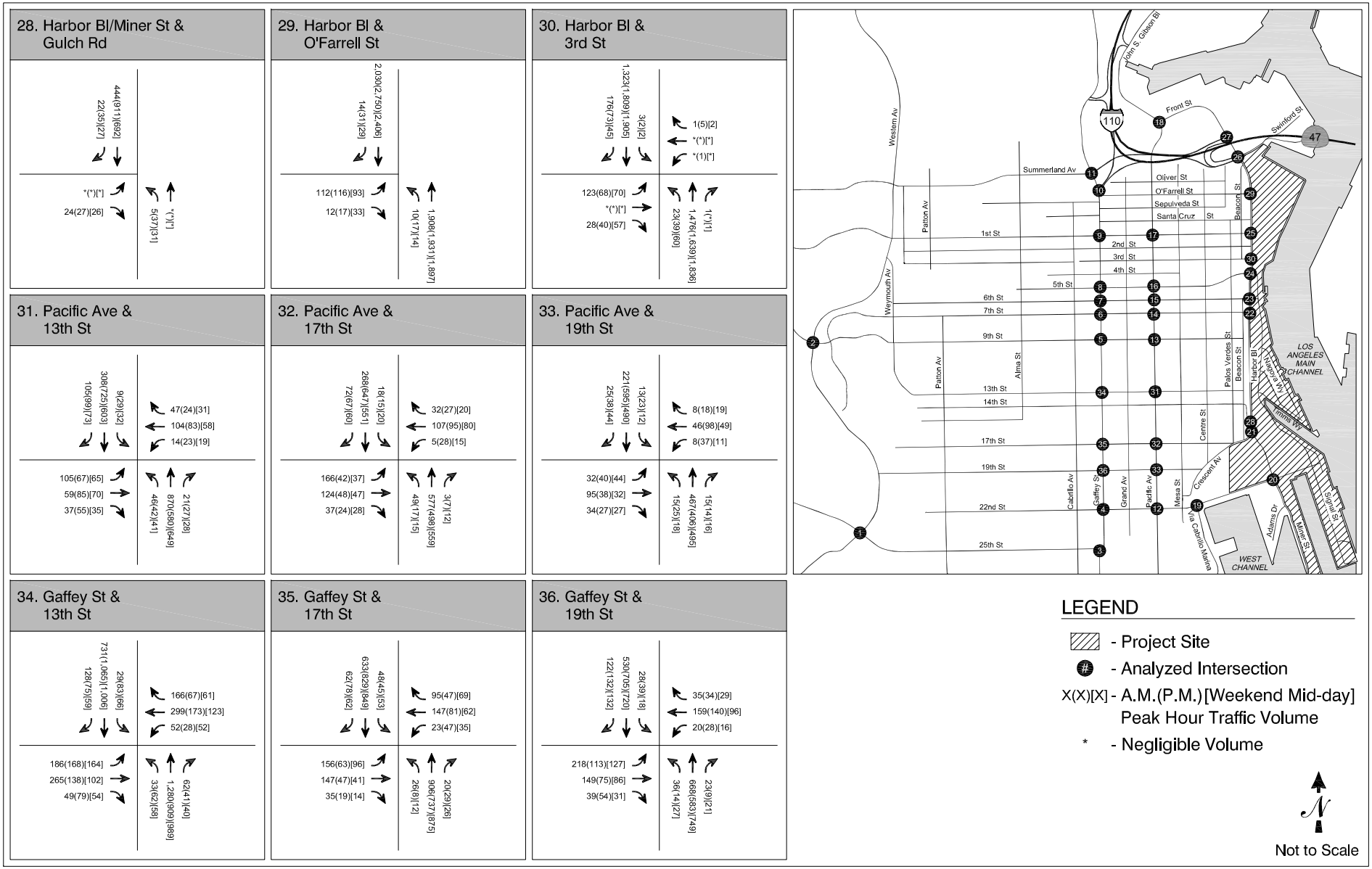
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 1 - 2015

FIGURE 27 (CONT.)



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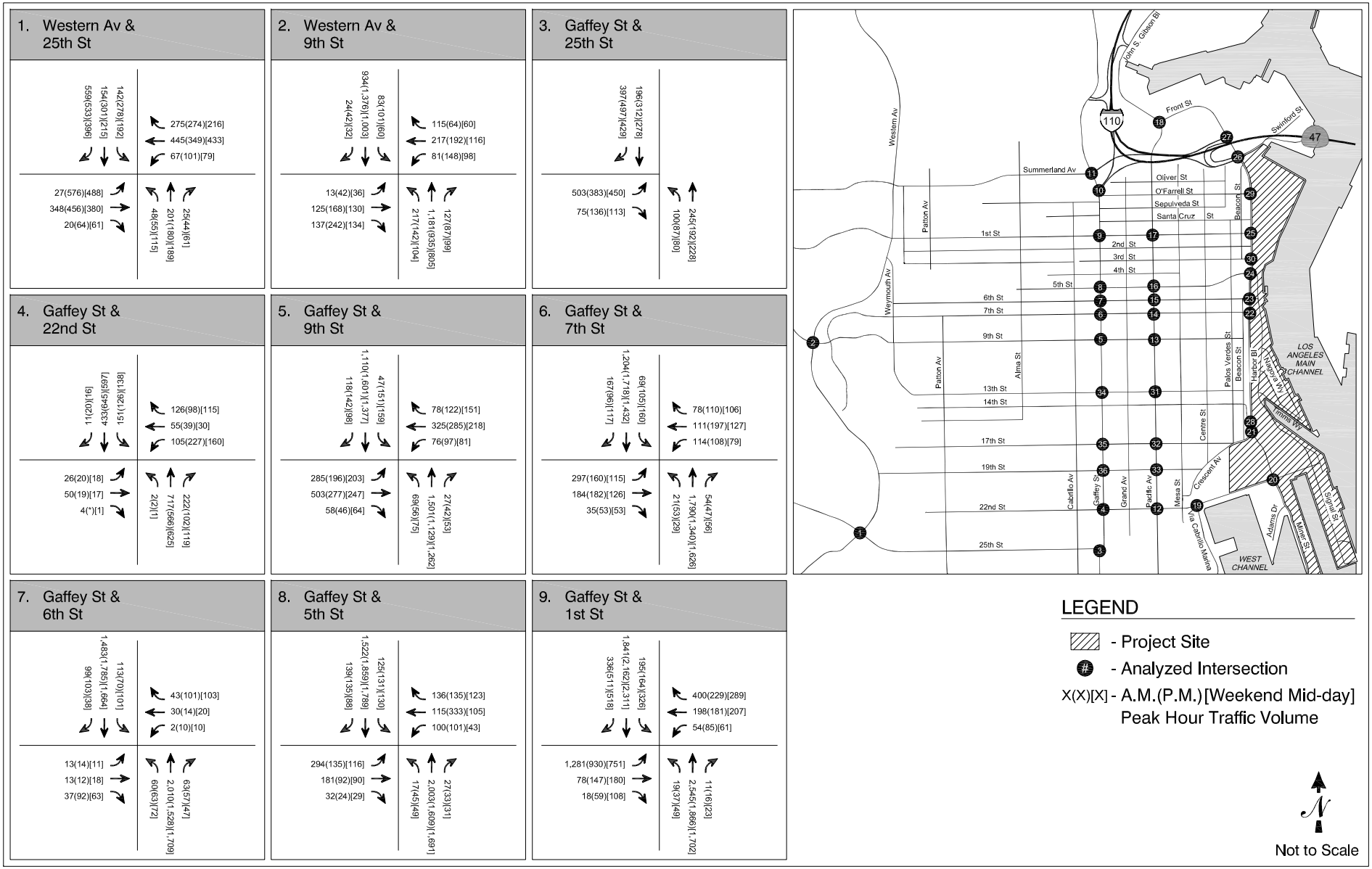
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 1 - 2015

FIGURE 27 (CONT.)



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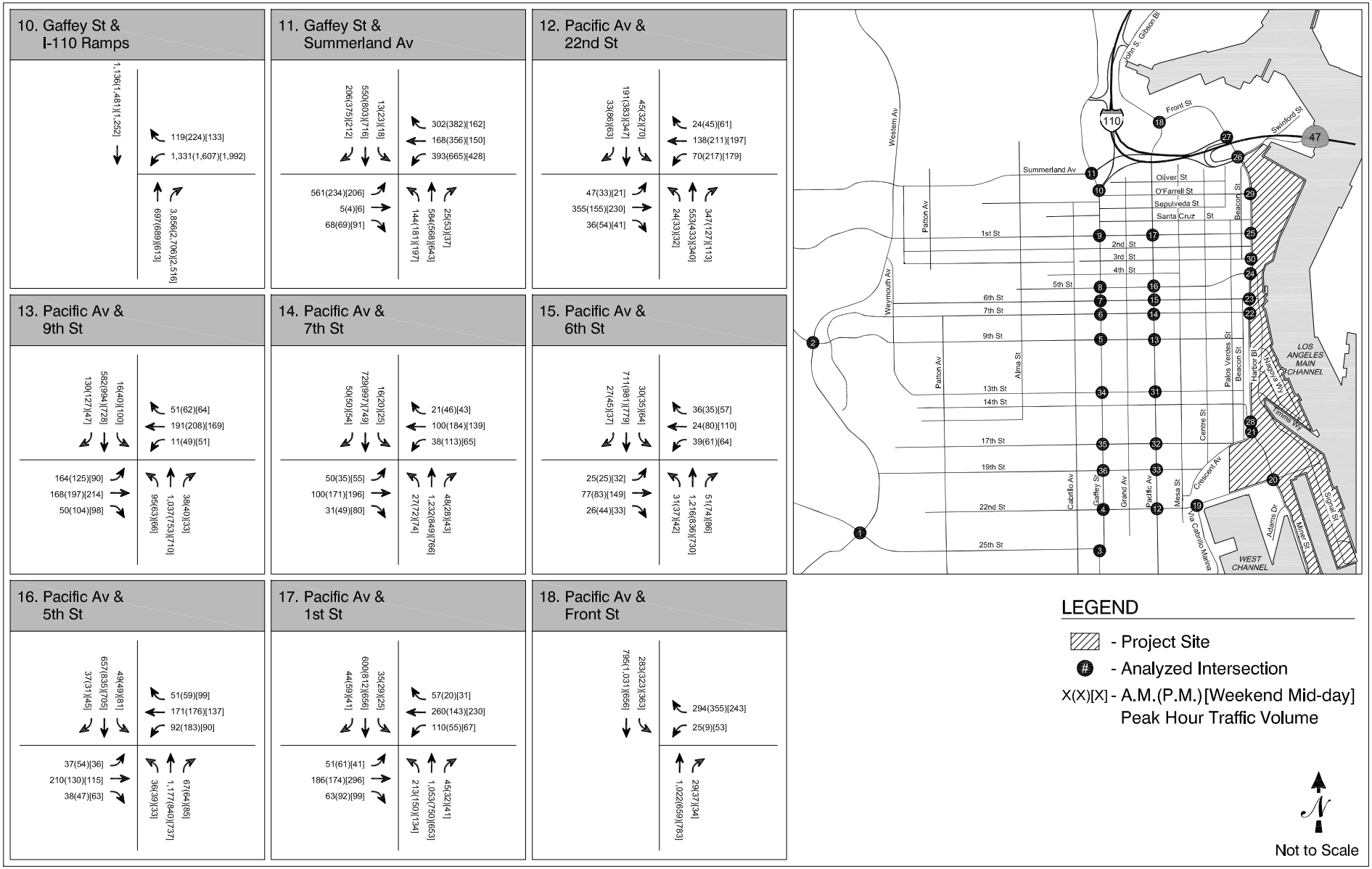
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 1 - 2037

FIGURE 28



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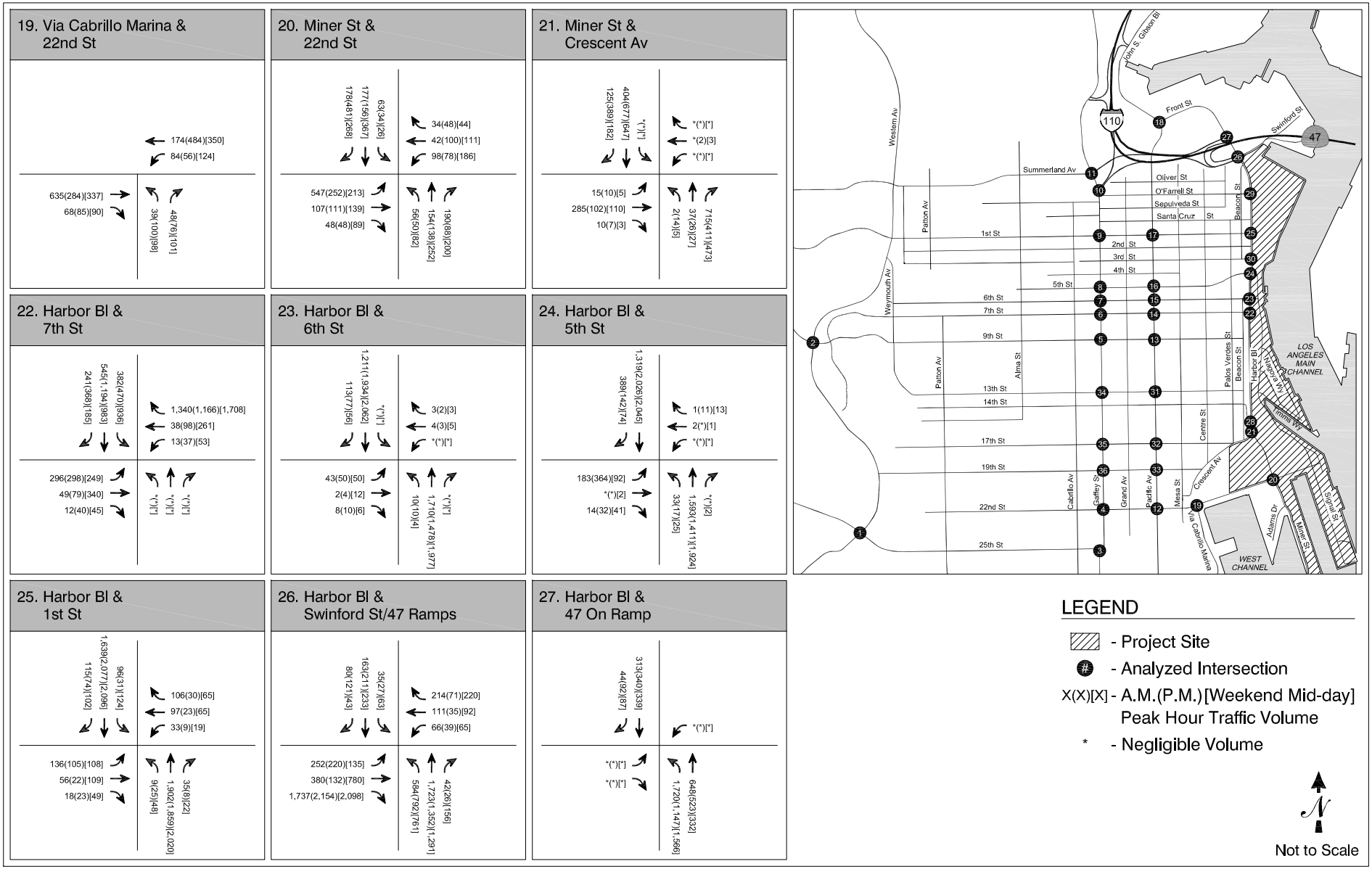
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 1 - 2037

FIGURE 28 (CONT.)



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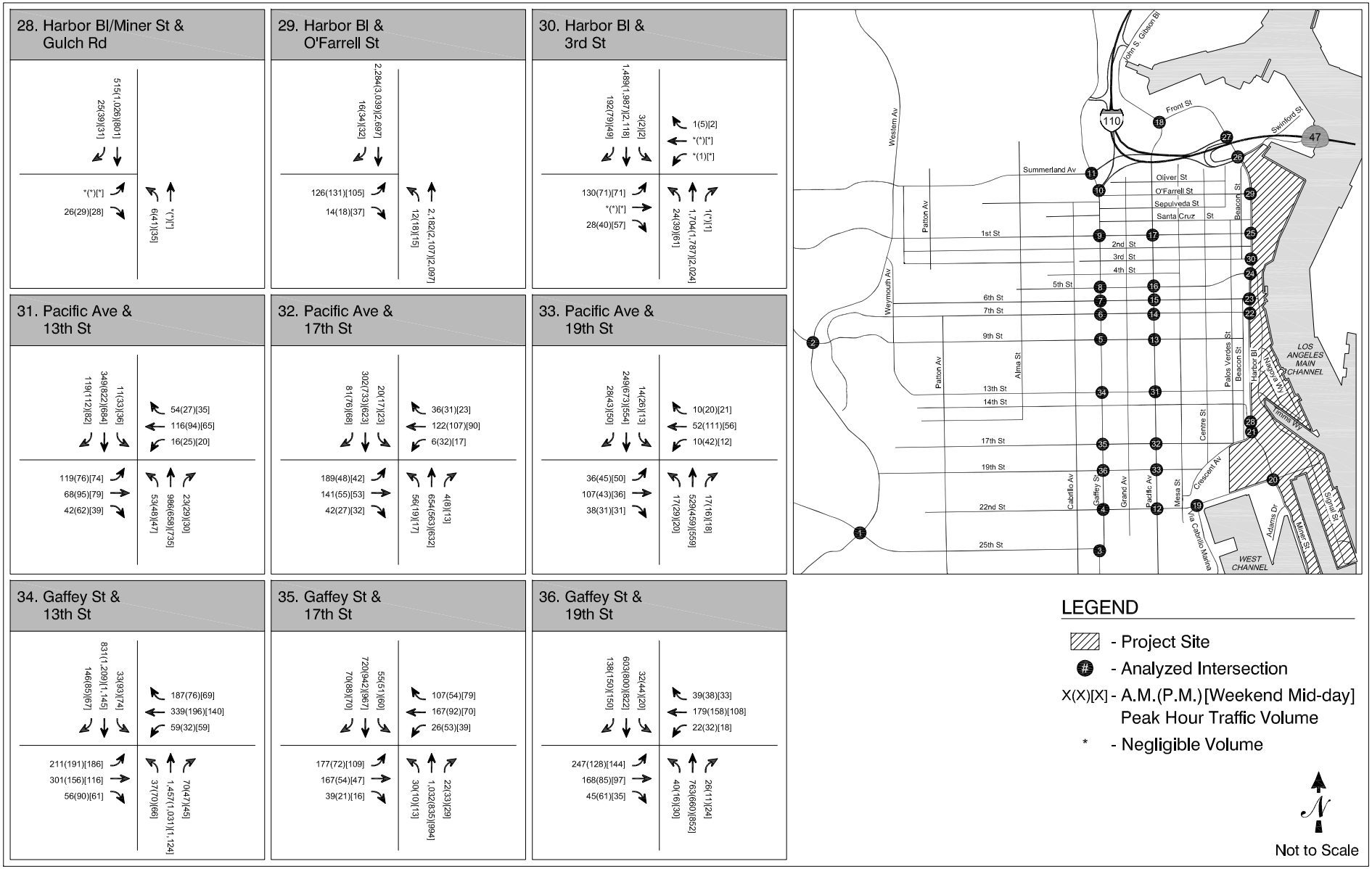
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 1 - 2037

FIGURE 28 (CONT.)



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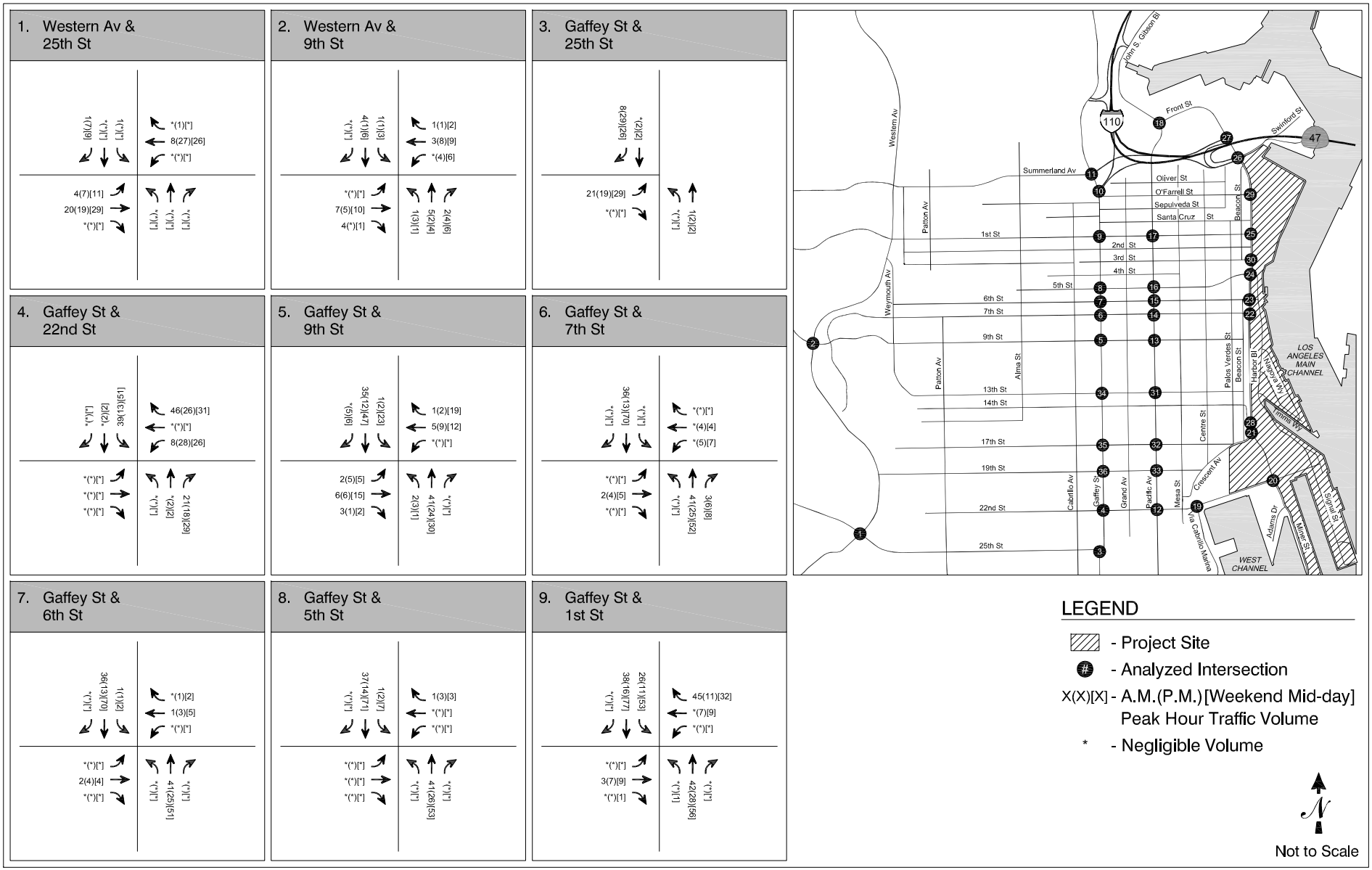
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 1 - 2037

FIGURE 28 (CONT.)



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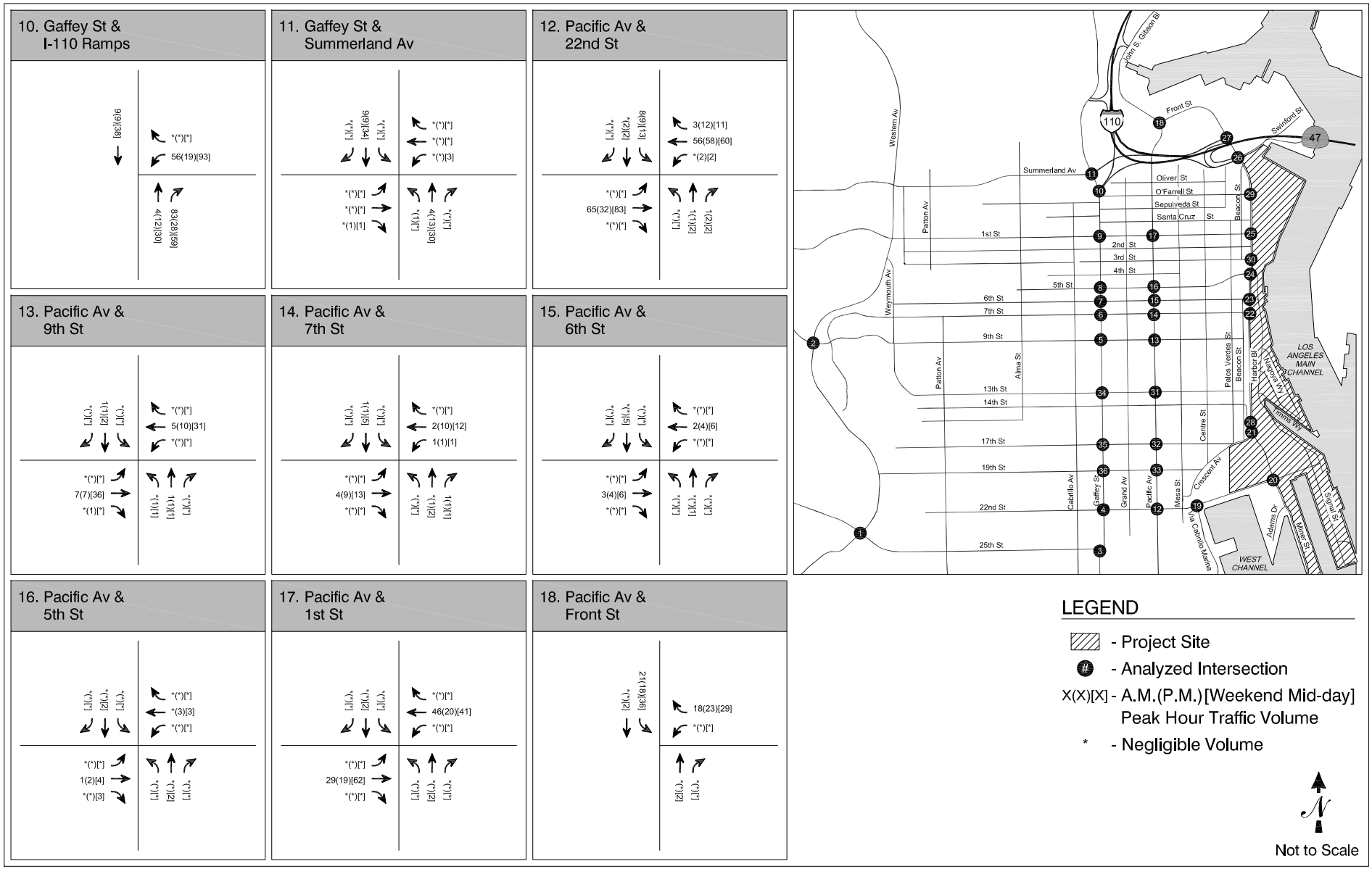
ALTERNATIVE 2 ONLY TRAFFIC VOLUMES - 2015

FIGURE 29



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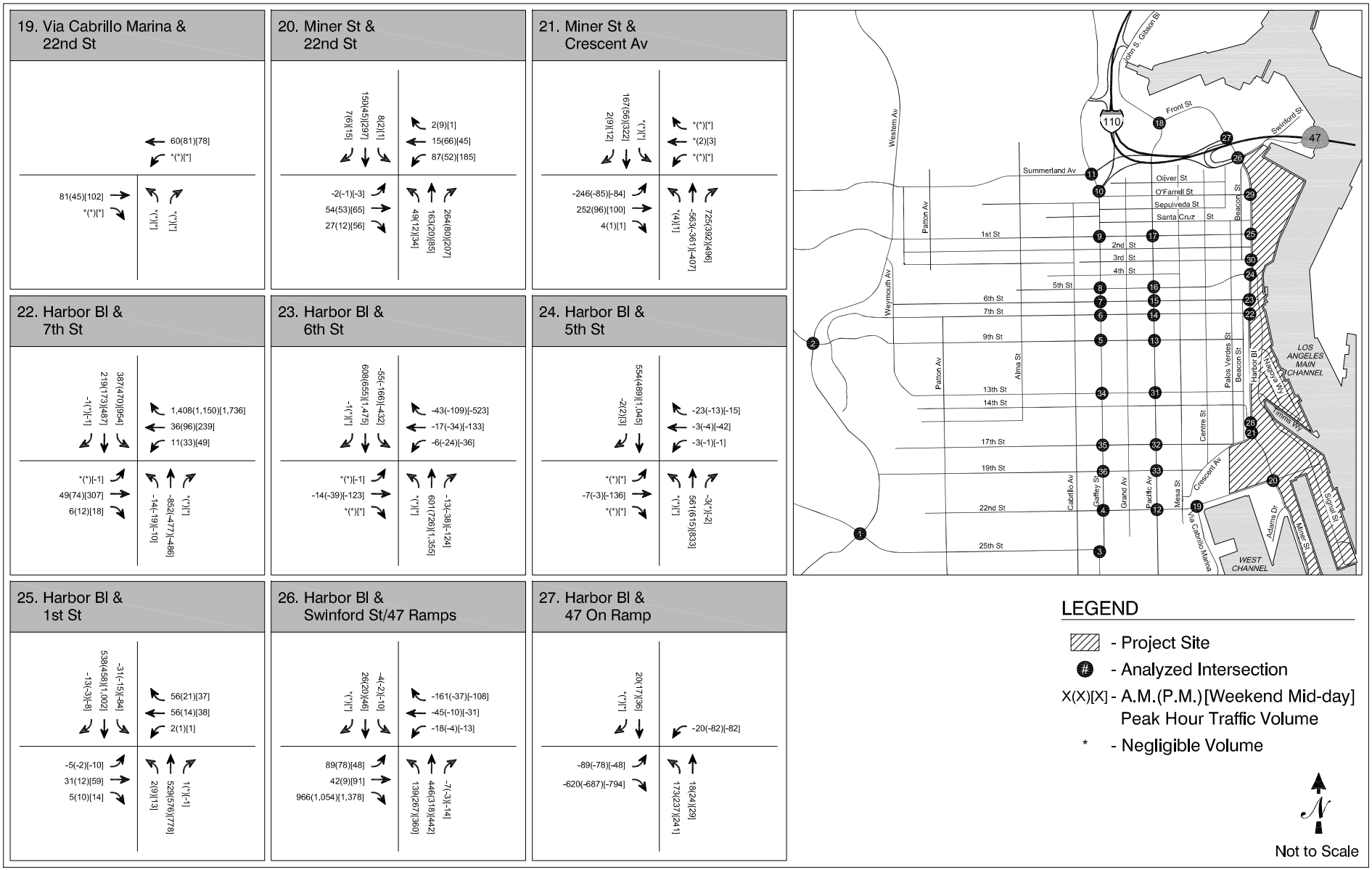
ALTERNATIVE 2 ONLY TRAFFIC VOLUMES - 2015

FIGURE 29 (CONT.)



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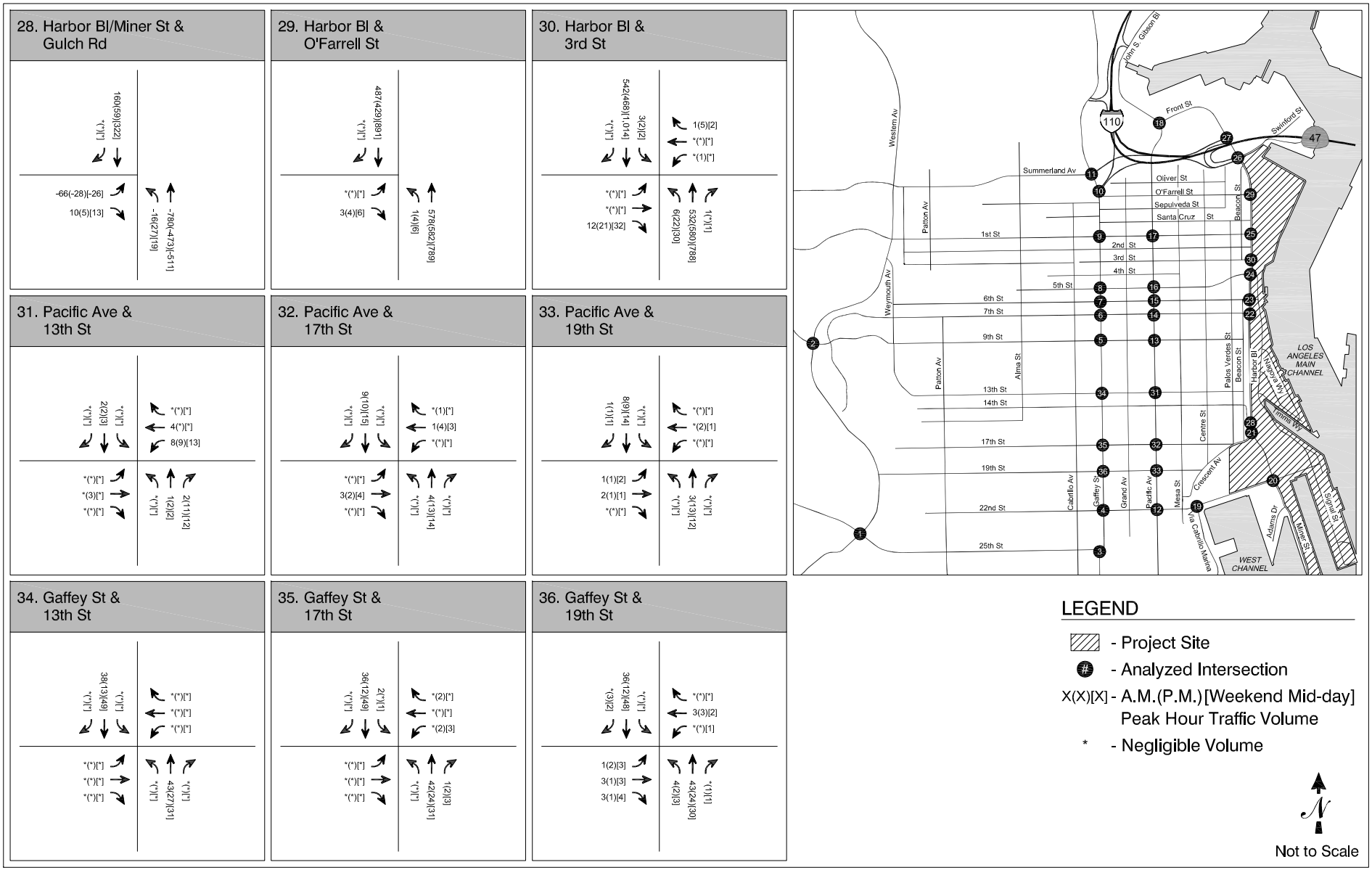
ALTERNATIVE 2 ONLY TRAFFIC VOLUMES - 2015

FIGURE 29 (CONT.)



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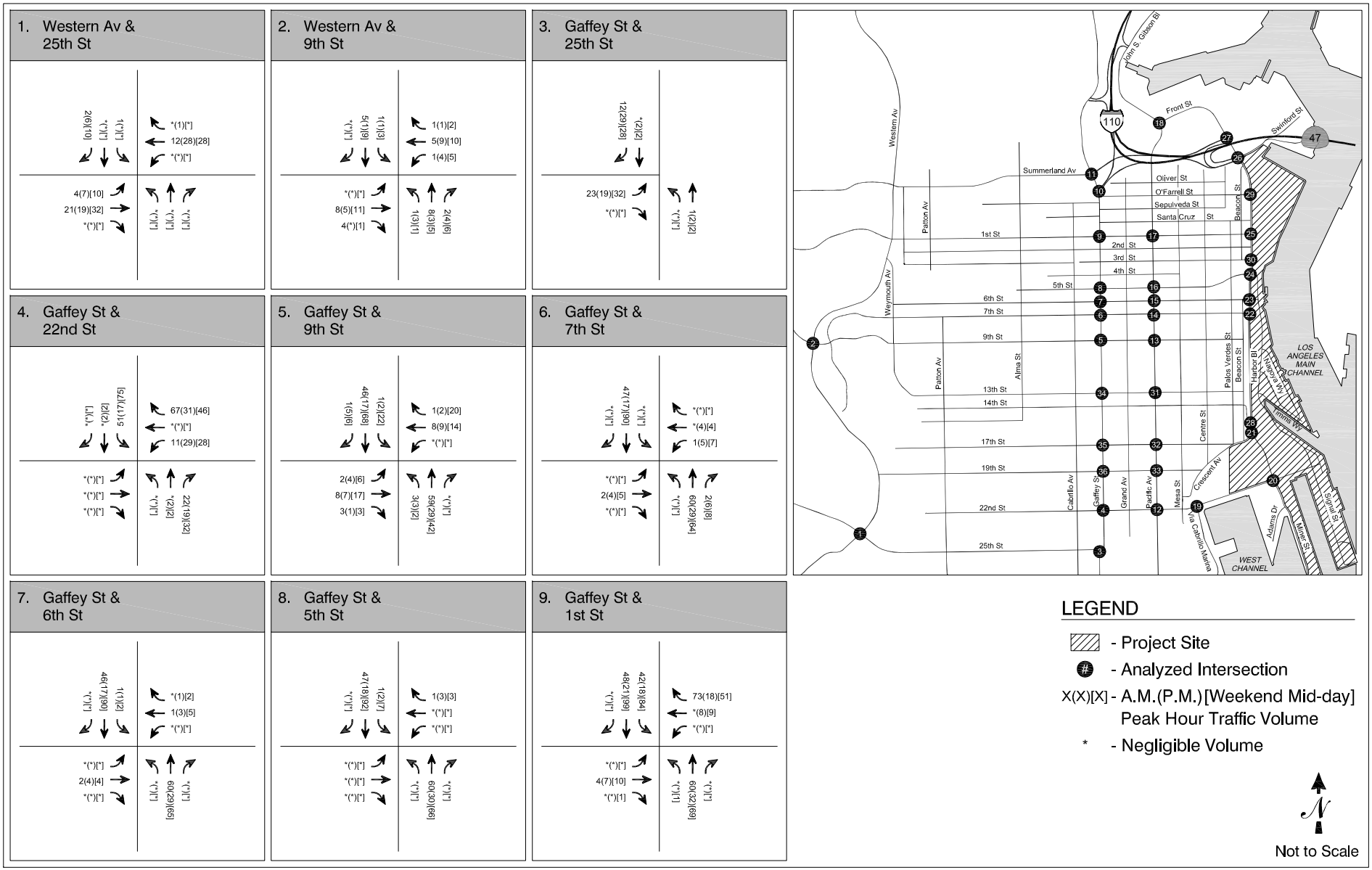
ALTERNATIVE 2 ONLY TRAFFIC VOLUMES - 2015

FIGURE 29 (CONT.)



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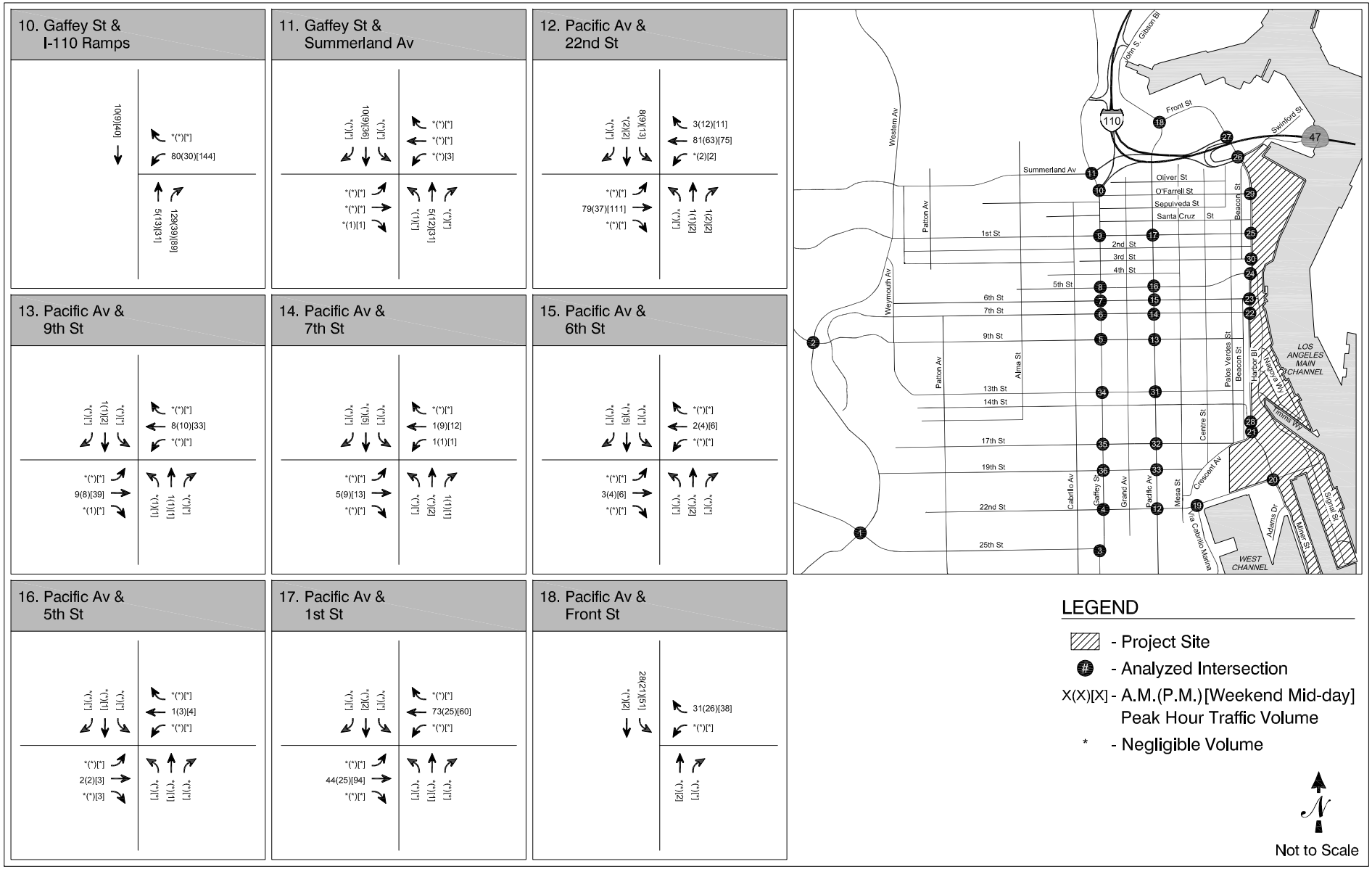
ALTERNATIVE 2 ONLY TRAFFIC VOLUMES - 2037

FIGURE 30



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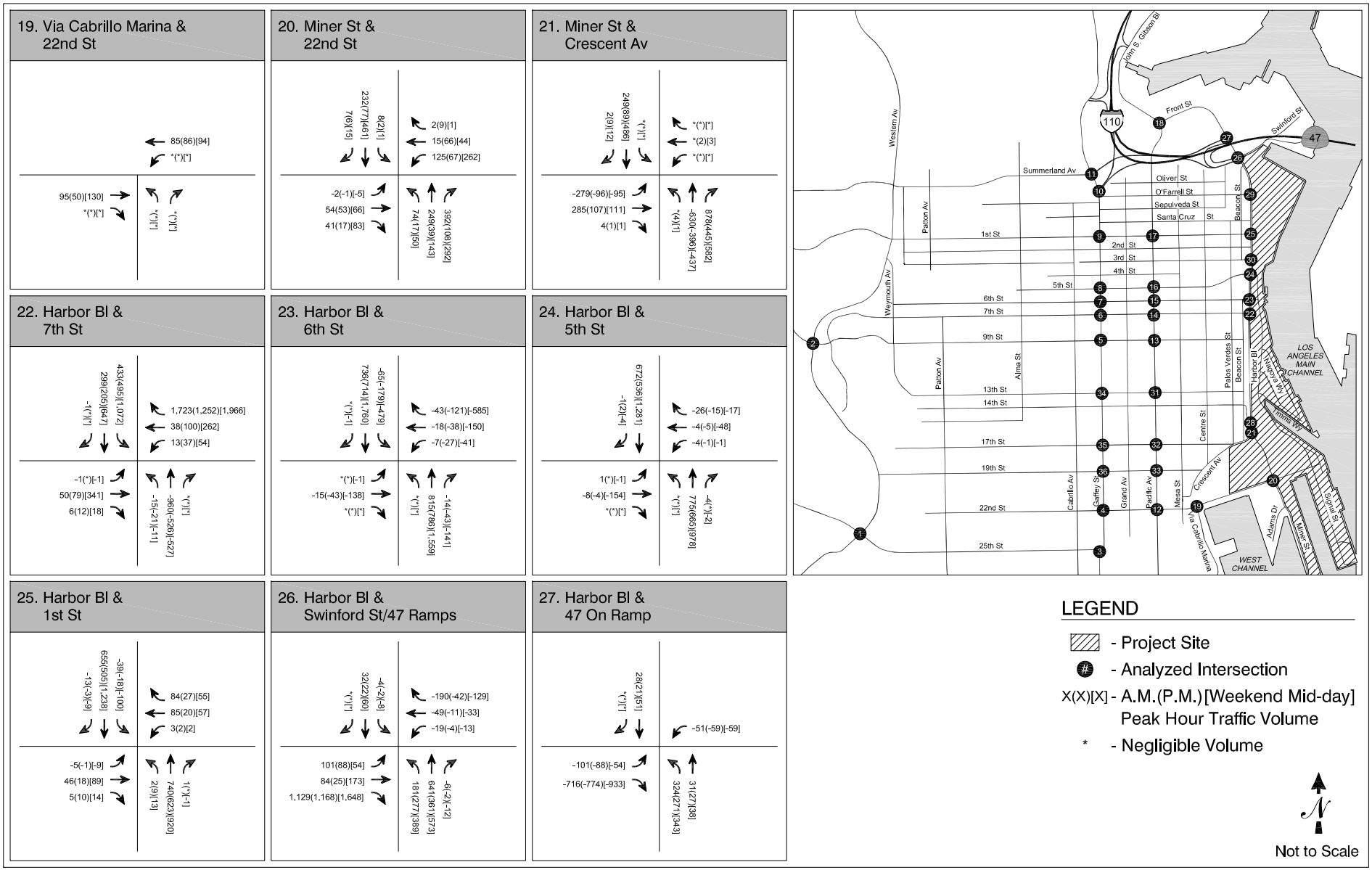
ALTERNATIVE 2 ONLY TRAFFIC VOLUMES - 2037

FIGURE 30 (CONT.)



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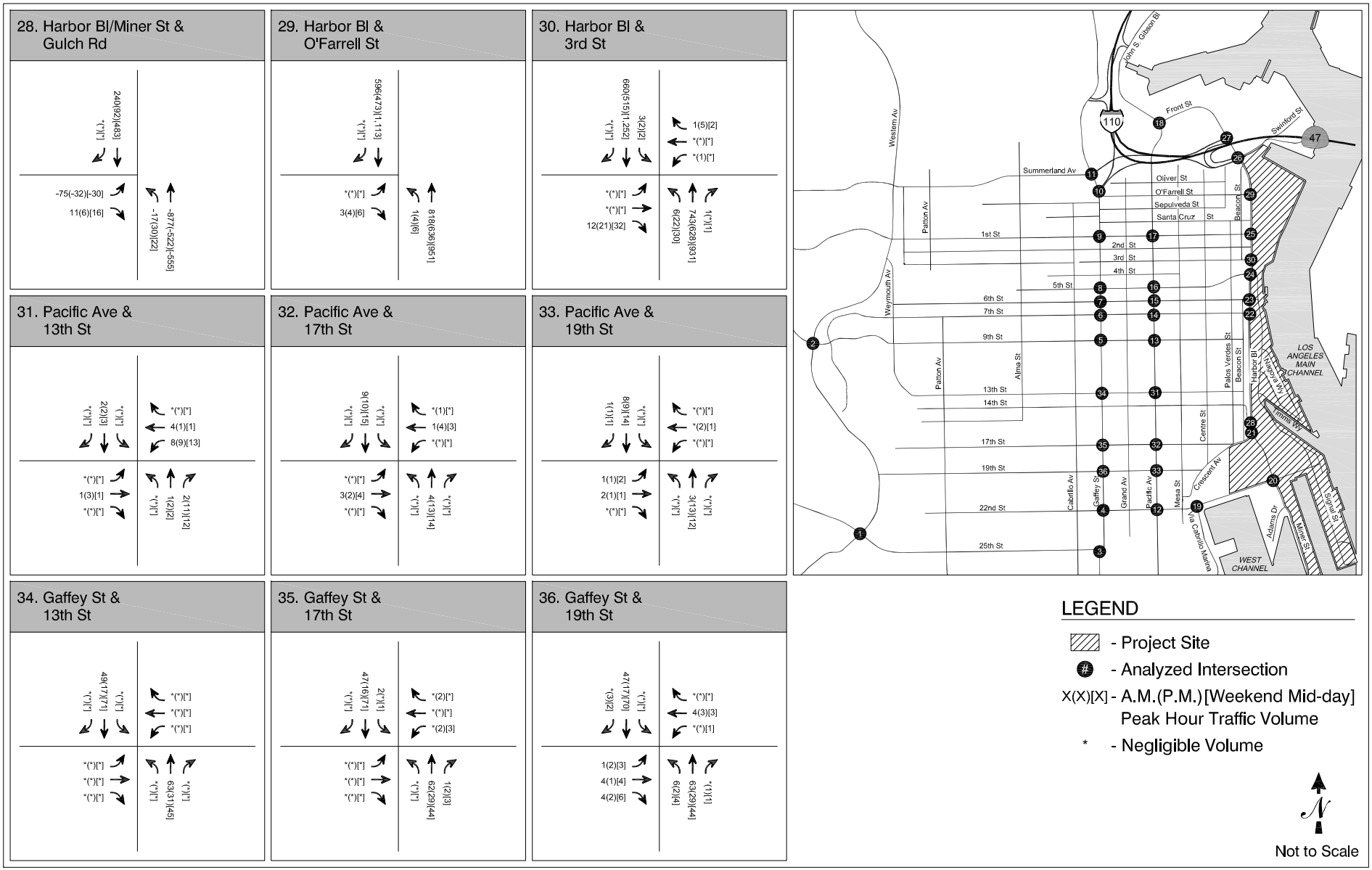
ALTERNATIVE 2 ONLY TRAFFIC VOLUMES - 2037

FIGURE 30 (CONT.)



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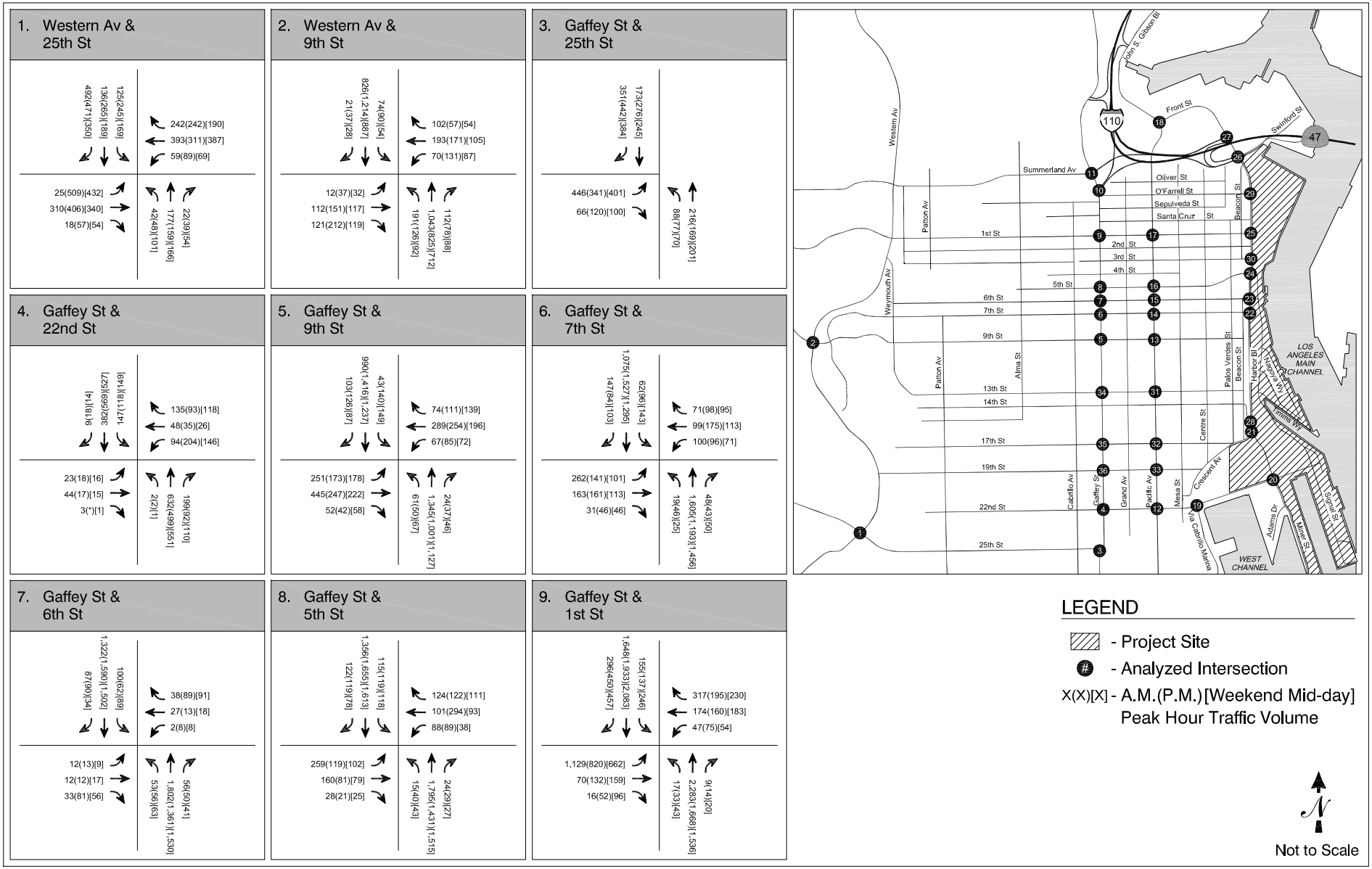
ALTERNATIVE 2 ONLY TRAFFIC VOLUMES - 2037

FIGURE 30 (CONT.)



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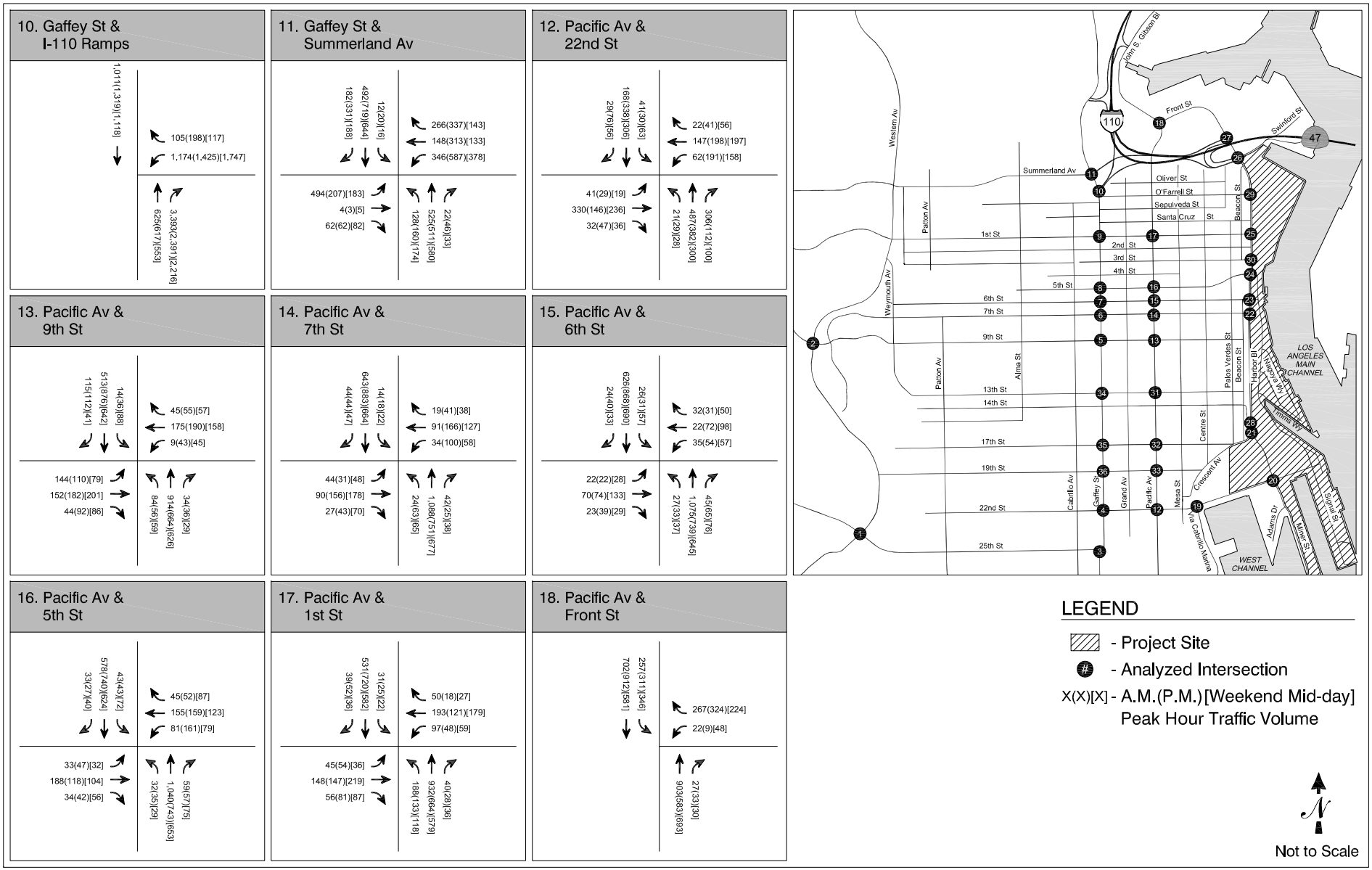
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 2 - 2015

FIGURE 31



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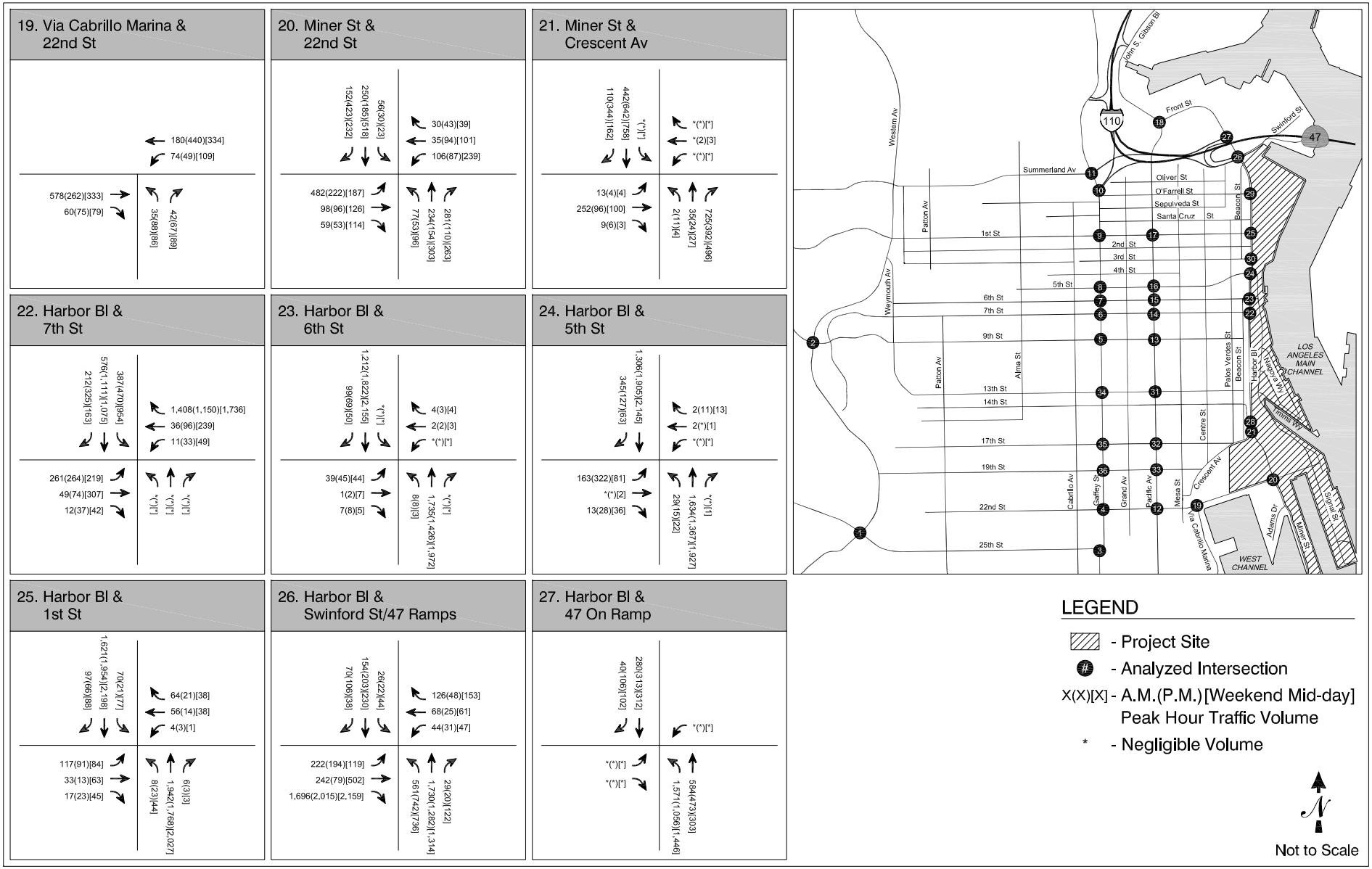
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 2 - 2015

FIGURE 31 (CONT.)



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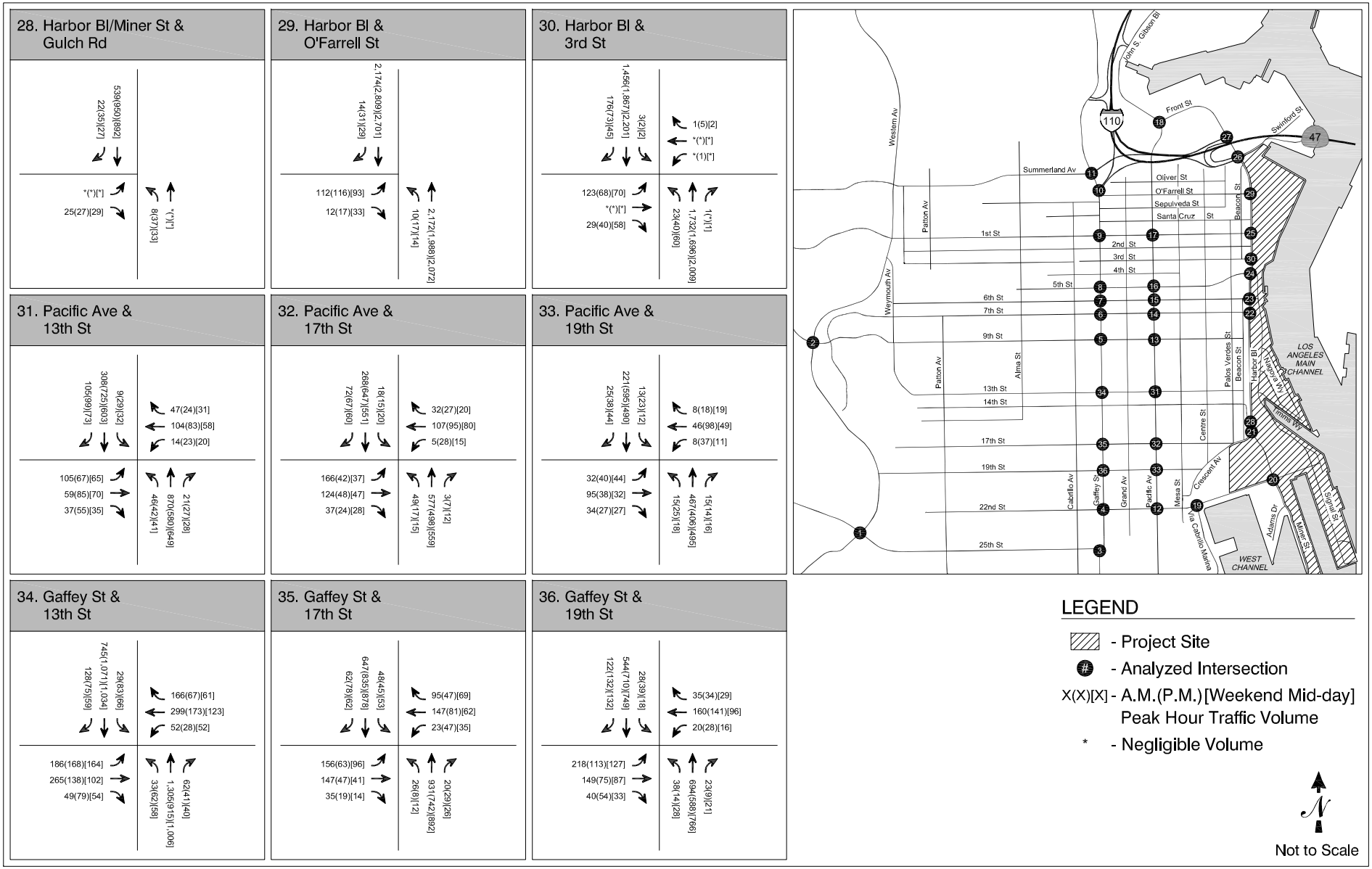
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 2 - 2015

FIGURE 31 (CONT.)



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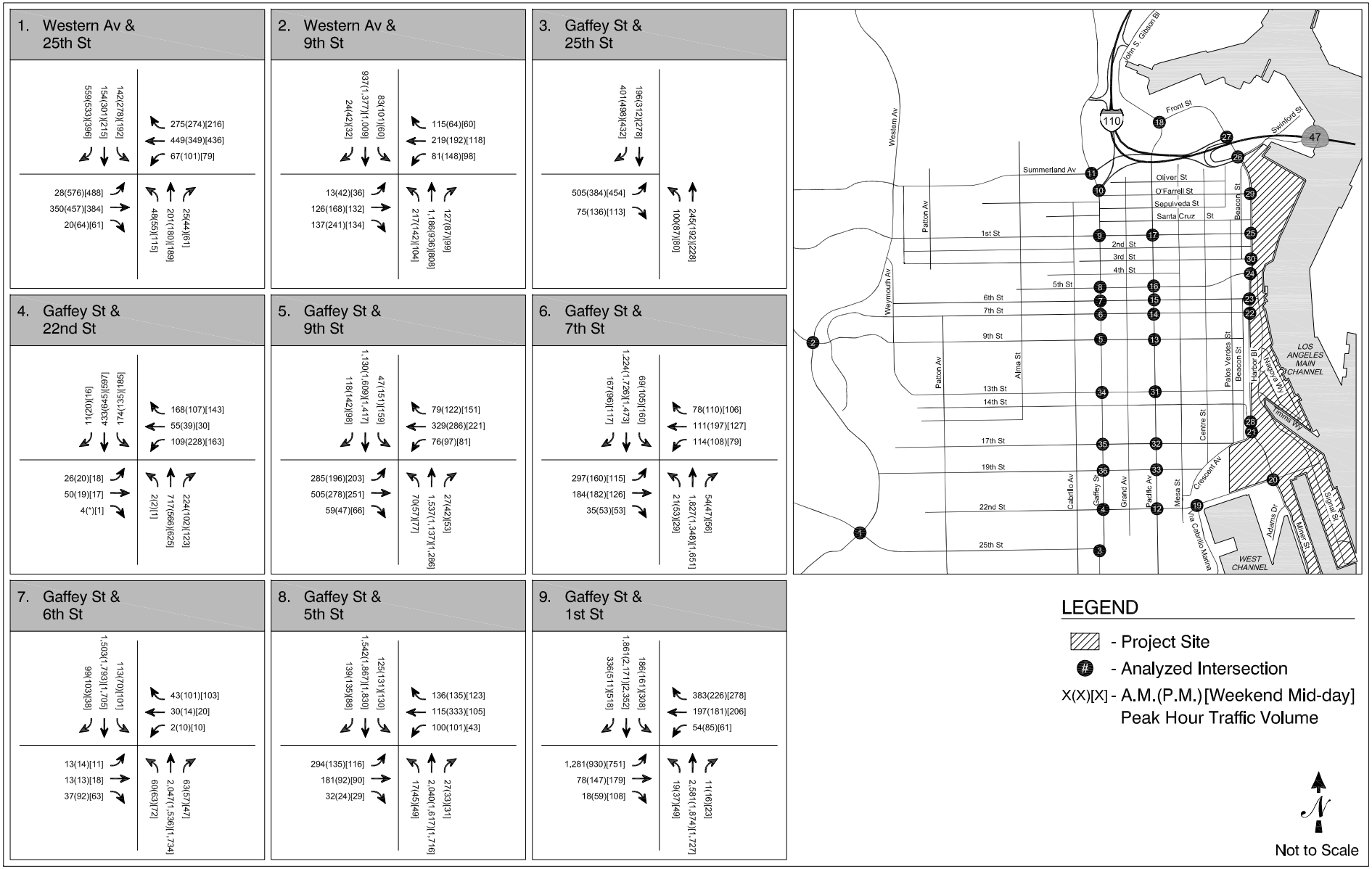
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 2 - 2015

FIGURE 31 (CONT.)



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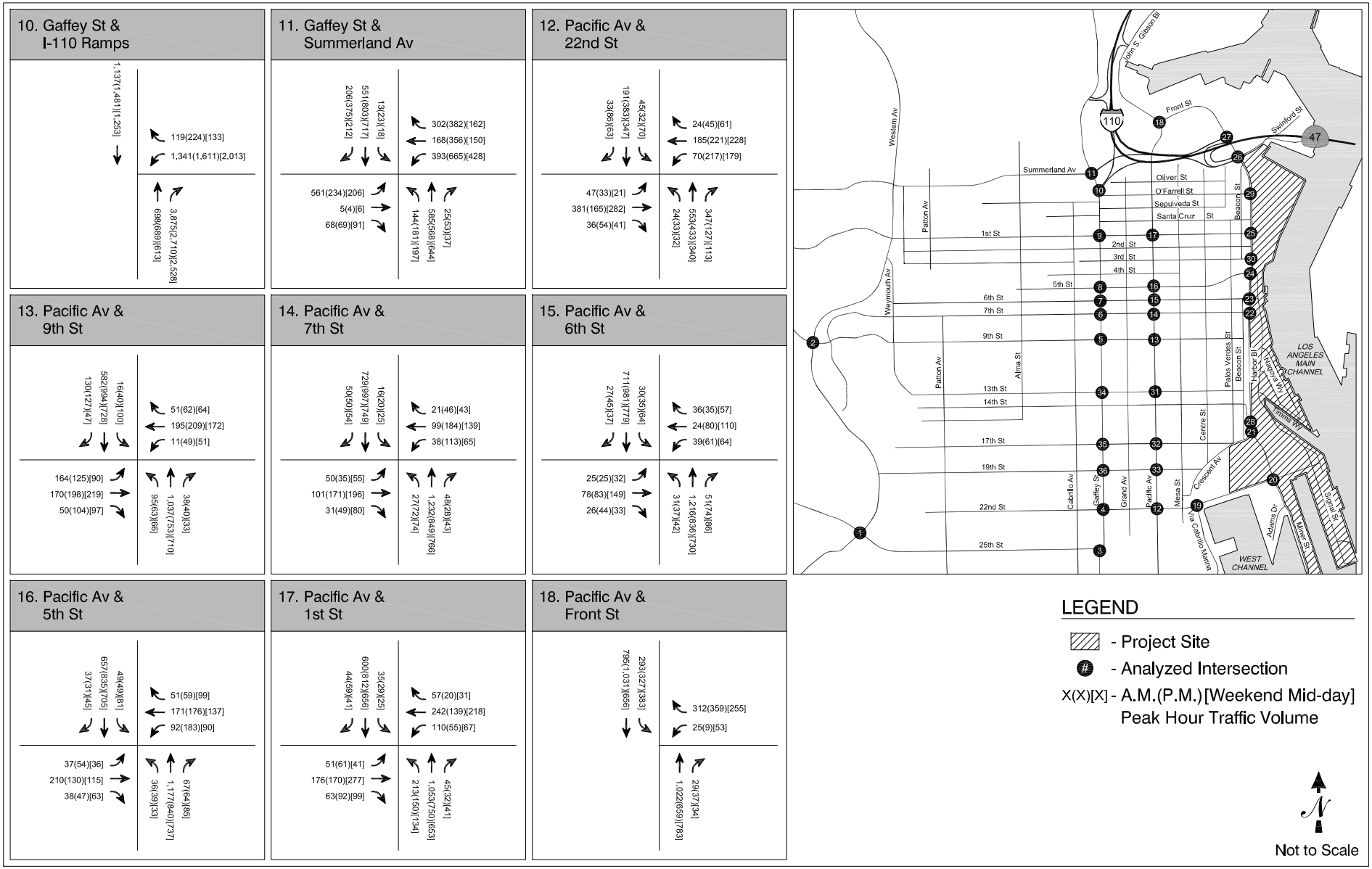
KAKU ASSOCIATES

FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 2 - 2037

FIGURE 32



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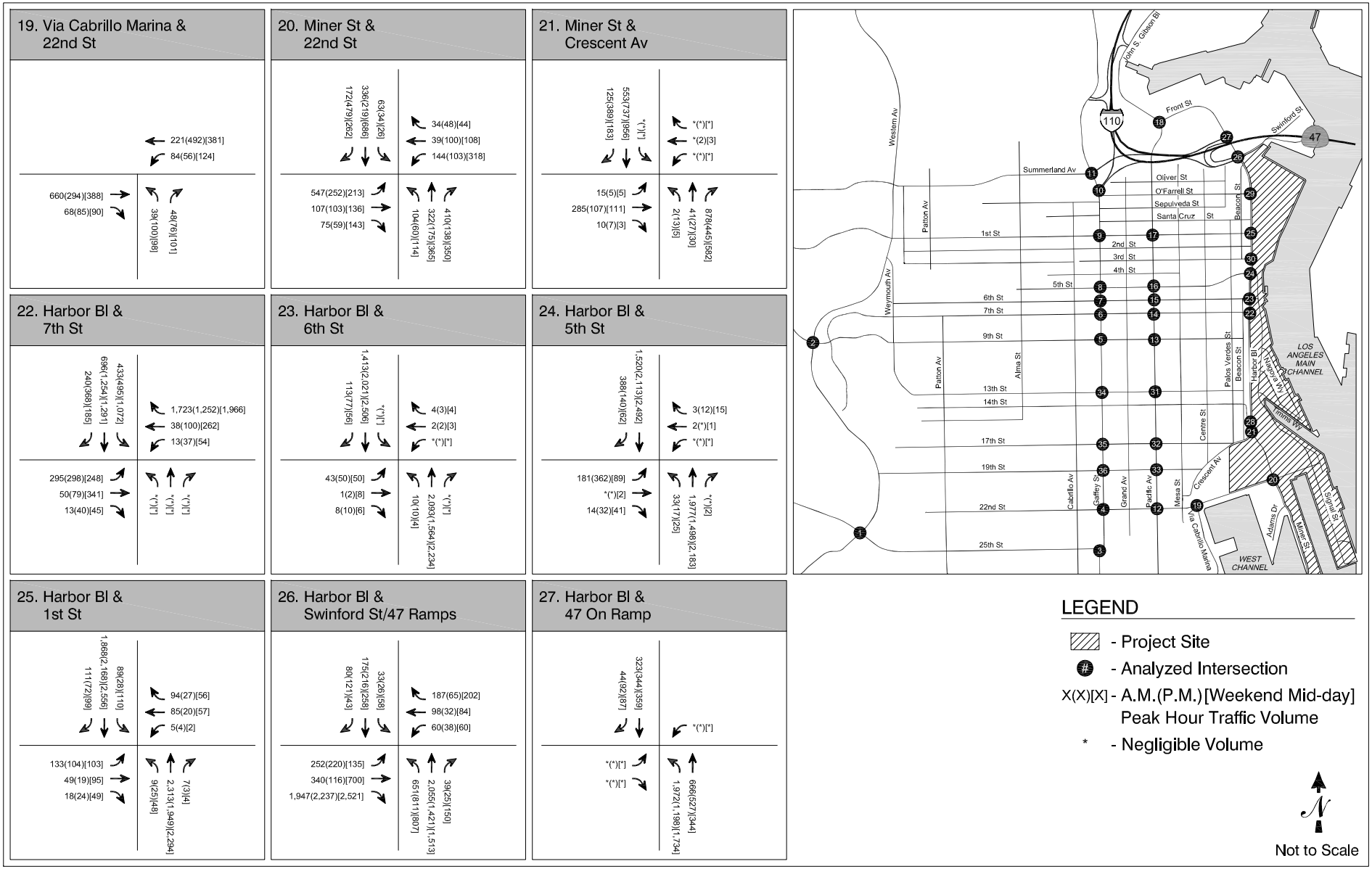
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 2 - 2037

FIGURE 32 (CONT.)



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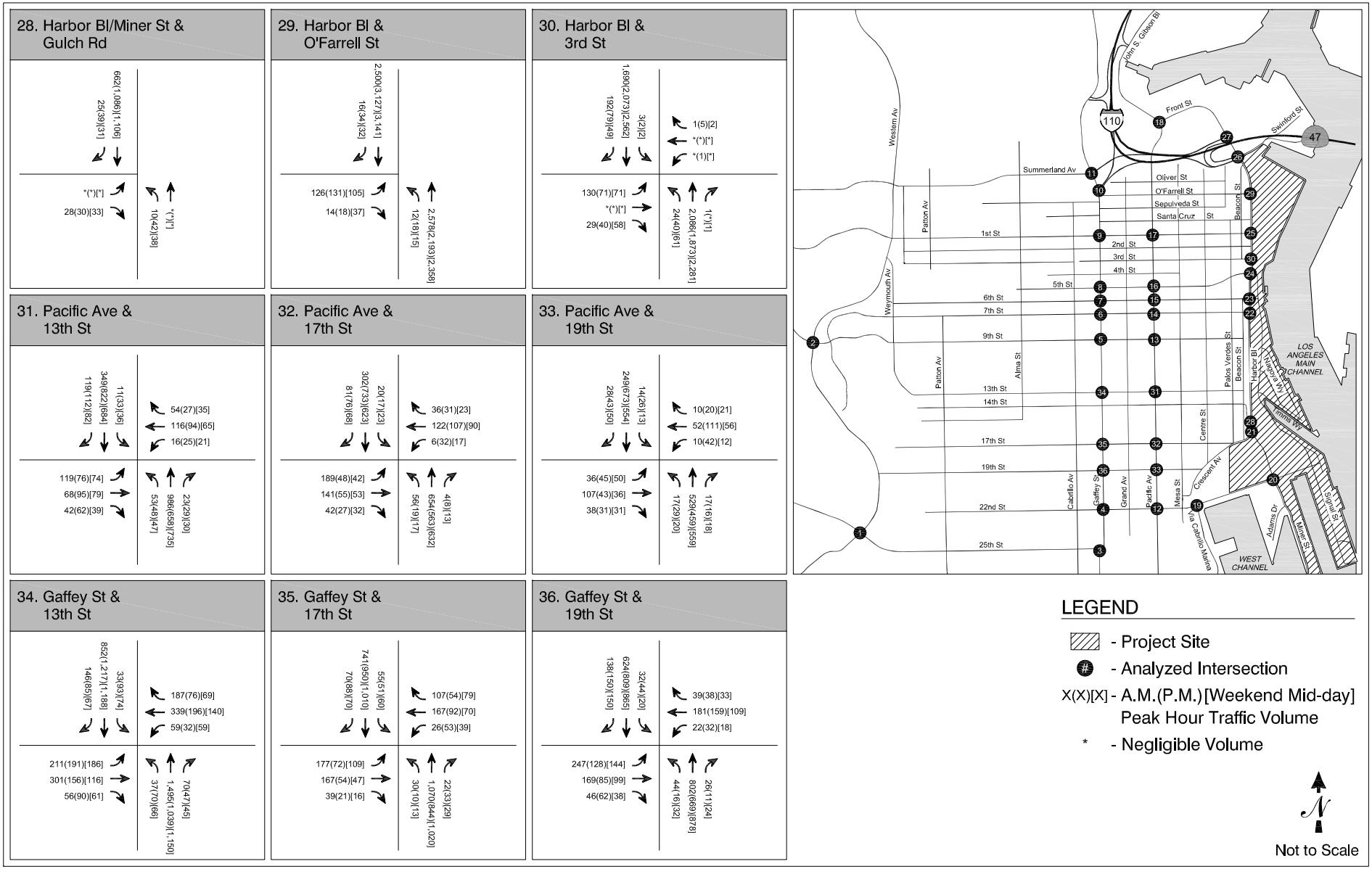
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 2 - 2037

FIGURE 32 (CONT.)



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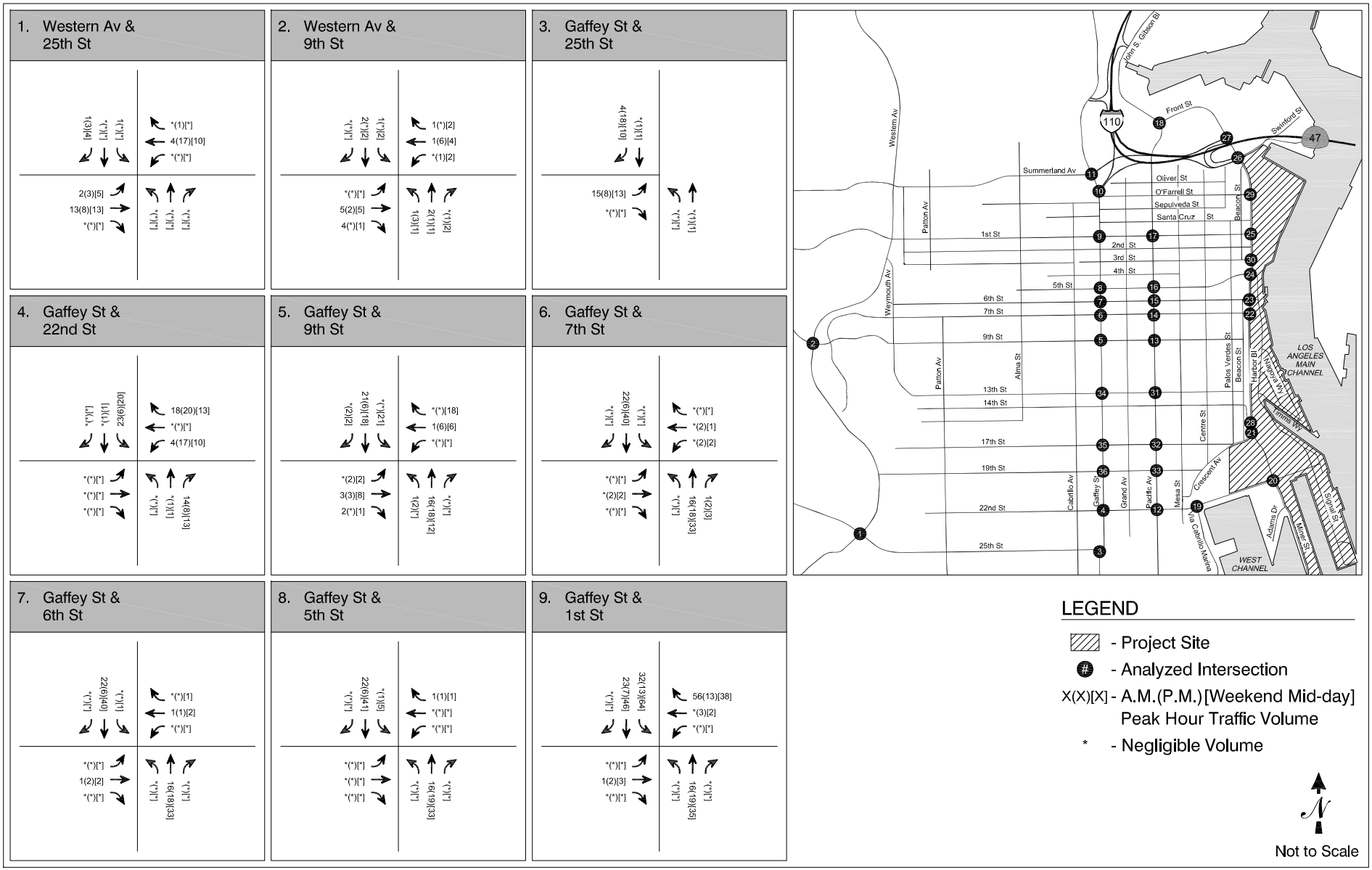
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 2 - 2037

FIGURE 32 (CONT.)



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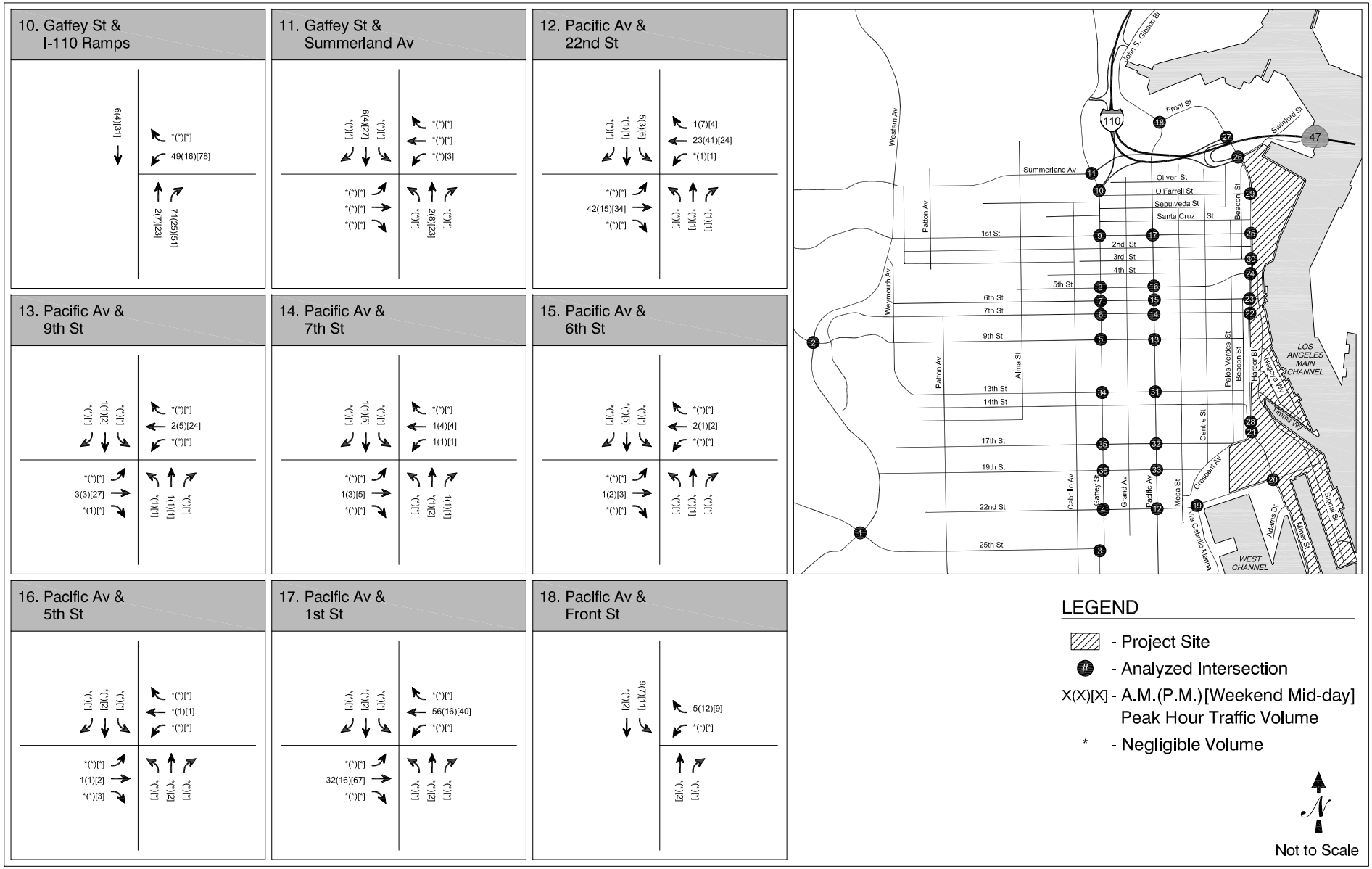
ALTERNATIVE 3 ONLY TRAFFIC VOLUMES - 2015

FIGURE 33



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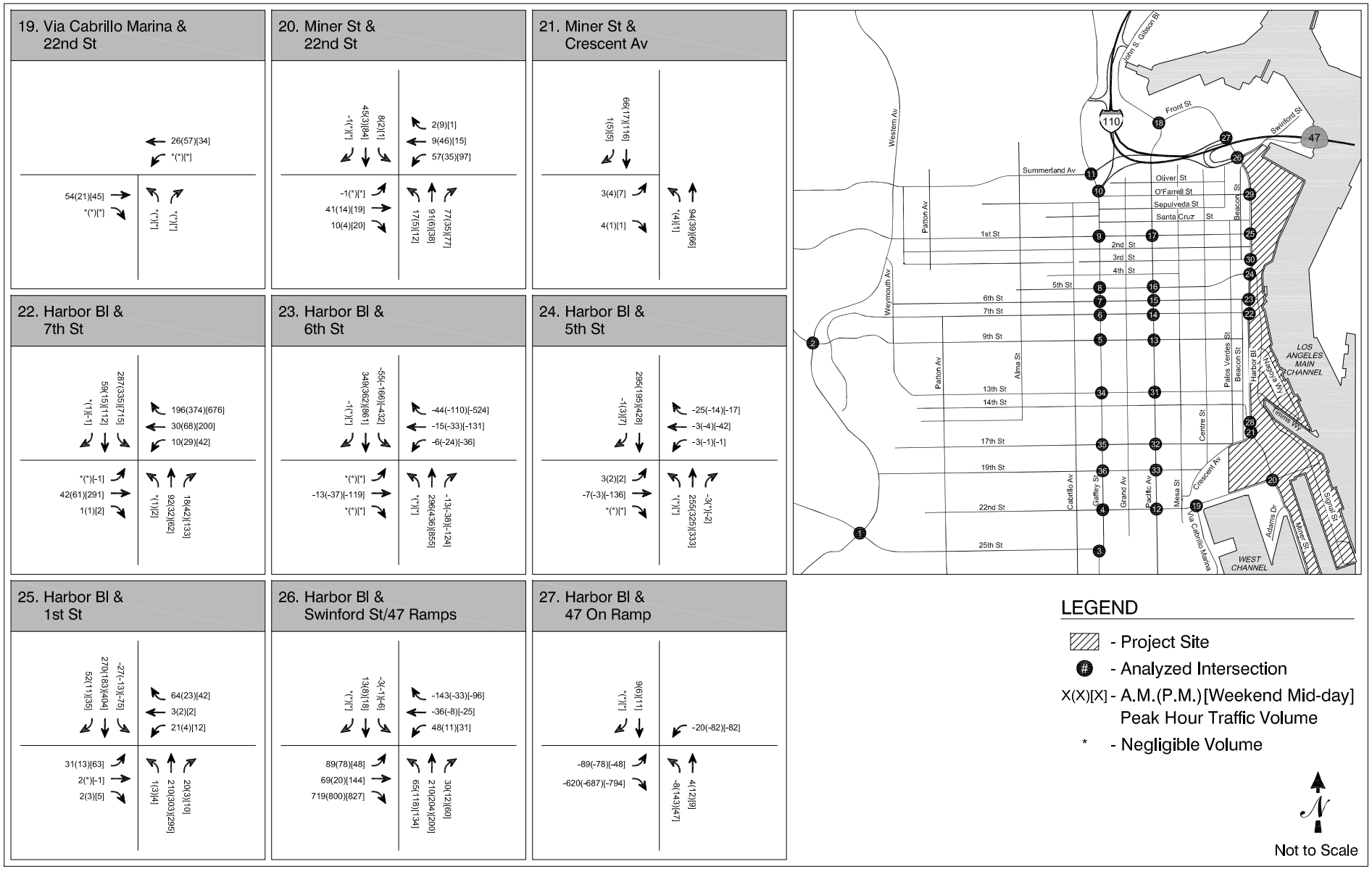
ALTERNATIVE 3 ONLY TRAFFIC VOLUMES - 2015

FIGURE 33 (CONT.)



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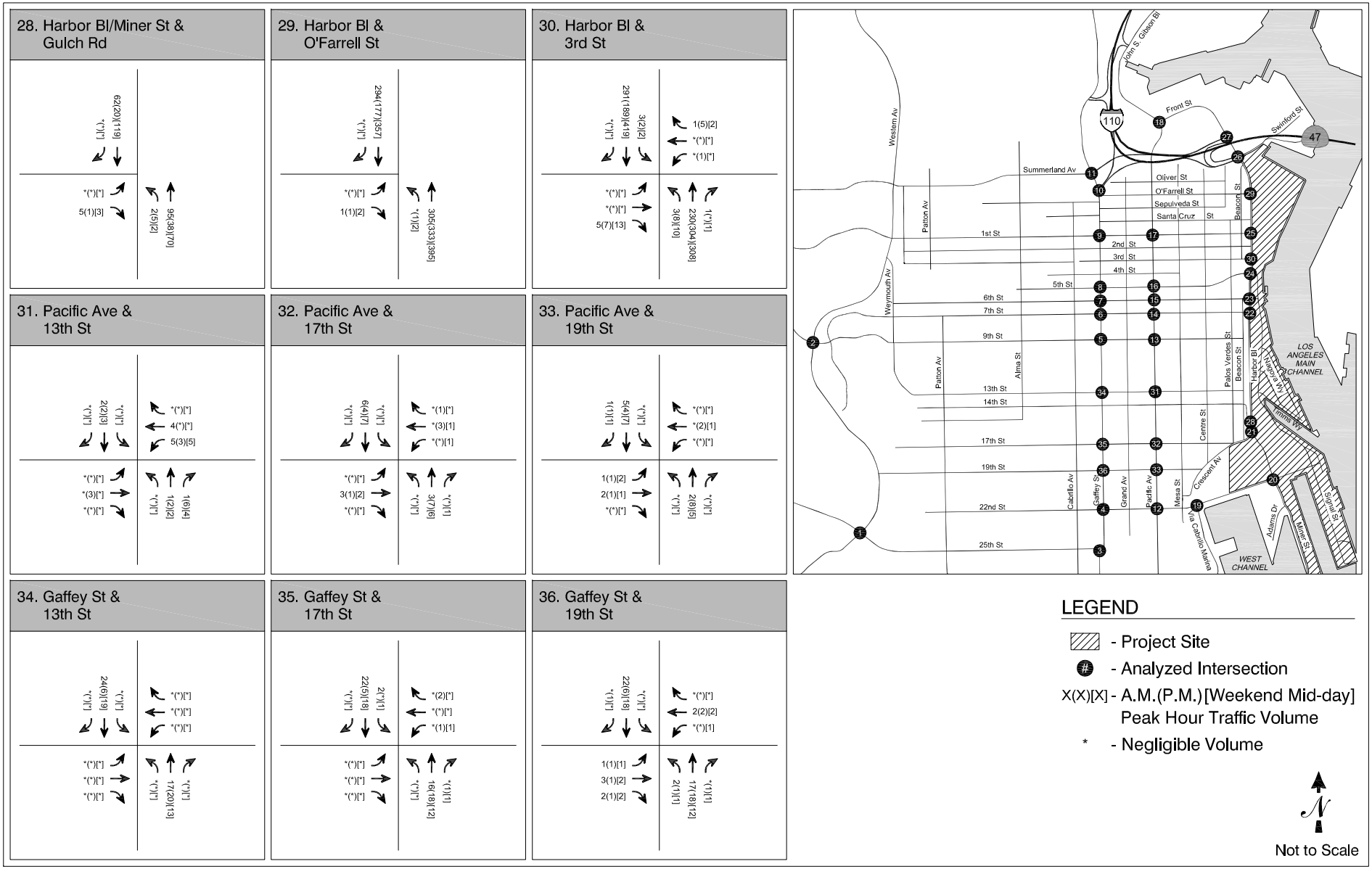
ALTERNATIVE 3 ONLY TRAFFIC VOLUMES - 2015

FIGURE 33 (CONT.)



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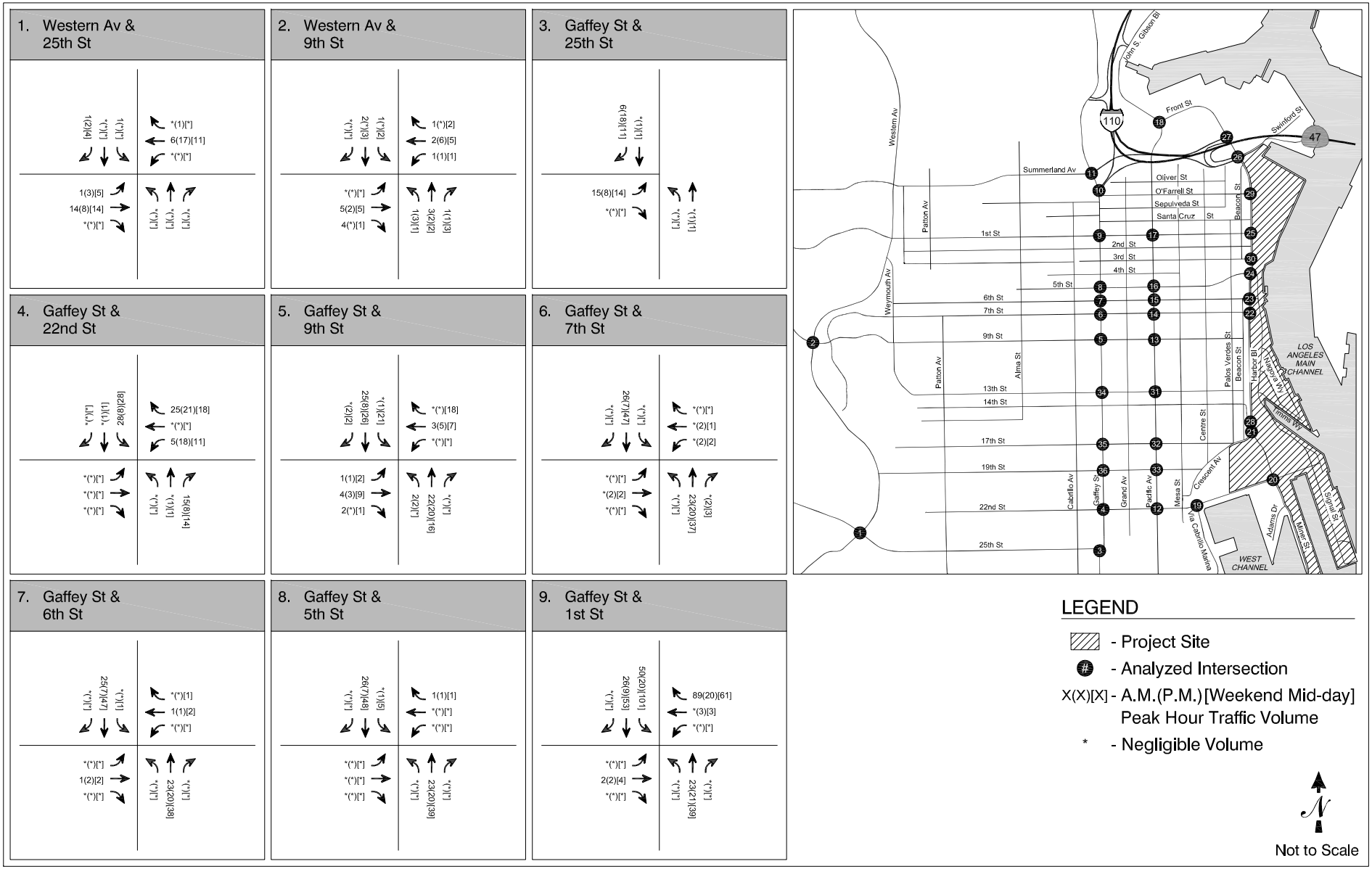
ALTERNATIVE 3 ONLY TRAFFIC VOLUMES - 2015

FIGURE 33 (CONT.)



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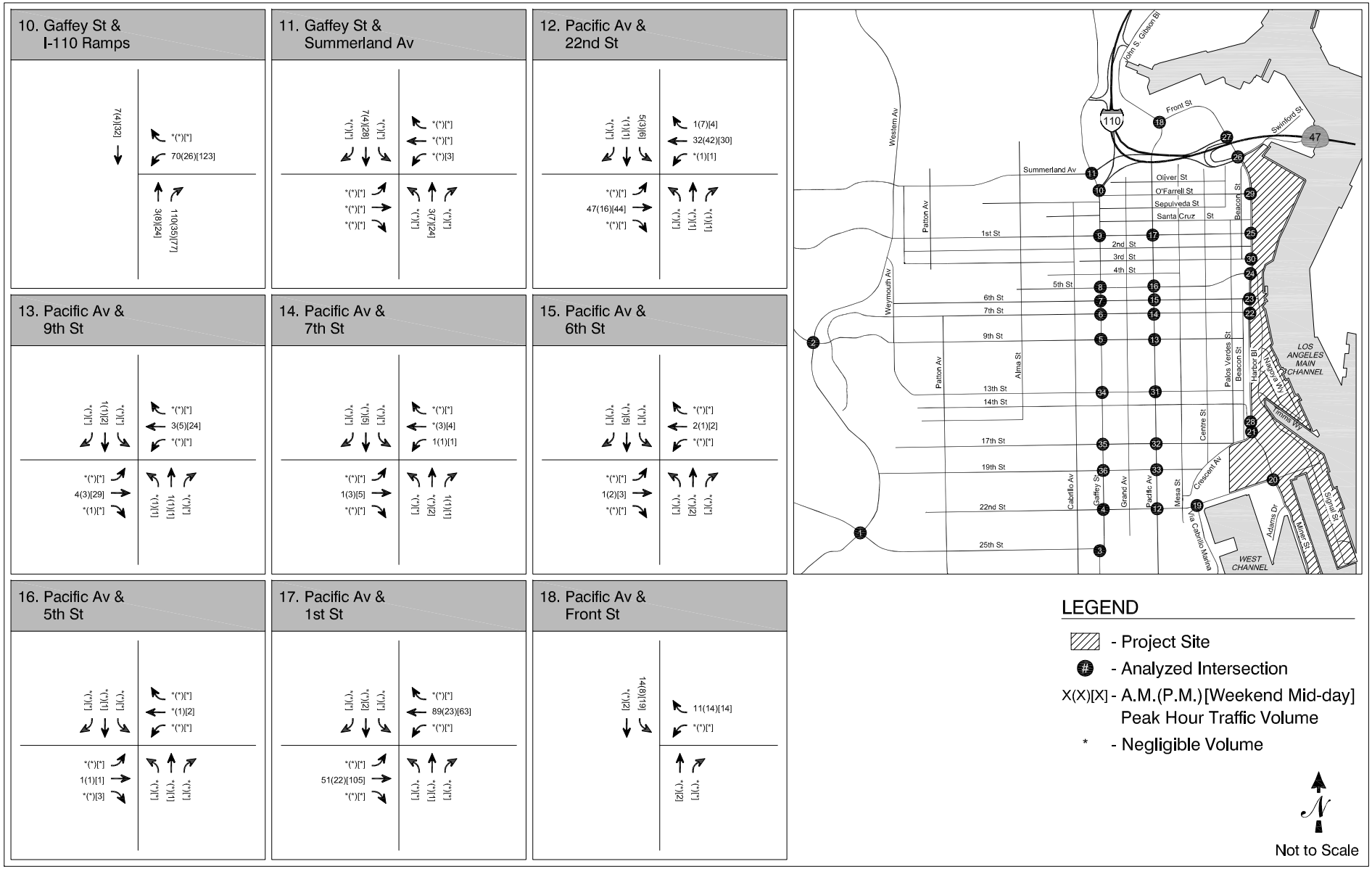
ALTERNATIVE 3 ONLY TRAFFIC VOLUMES - 2037

FIGURE 34



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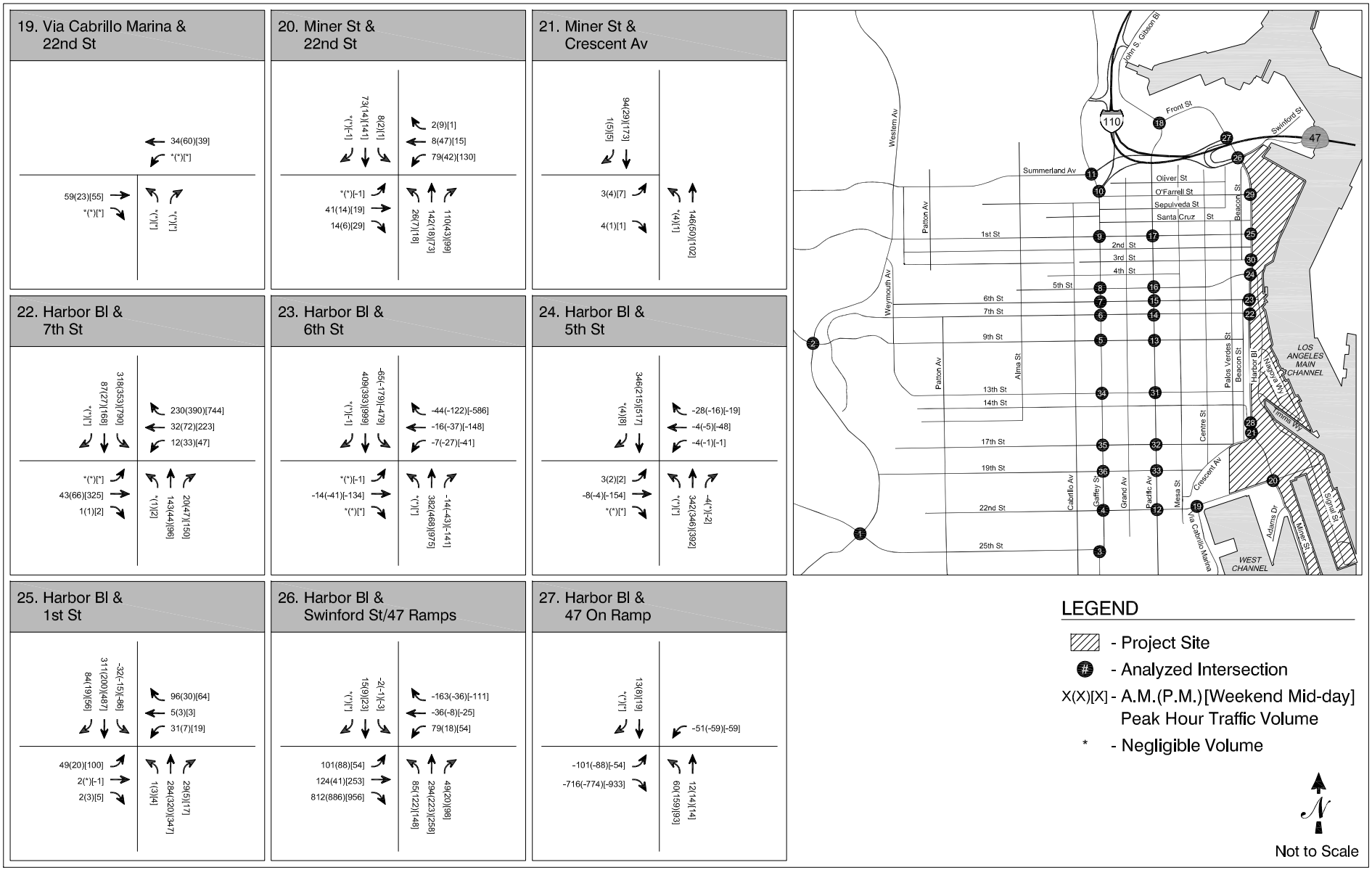
ALTERNATIVE 3 ONLY TRAFFIC VOLUMES - 2037

FIGURE 34 (CONT.)



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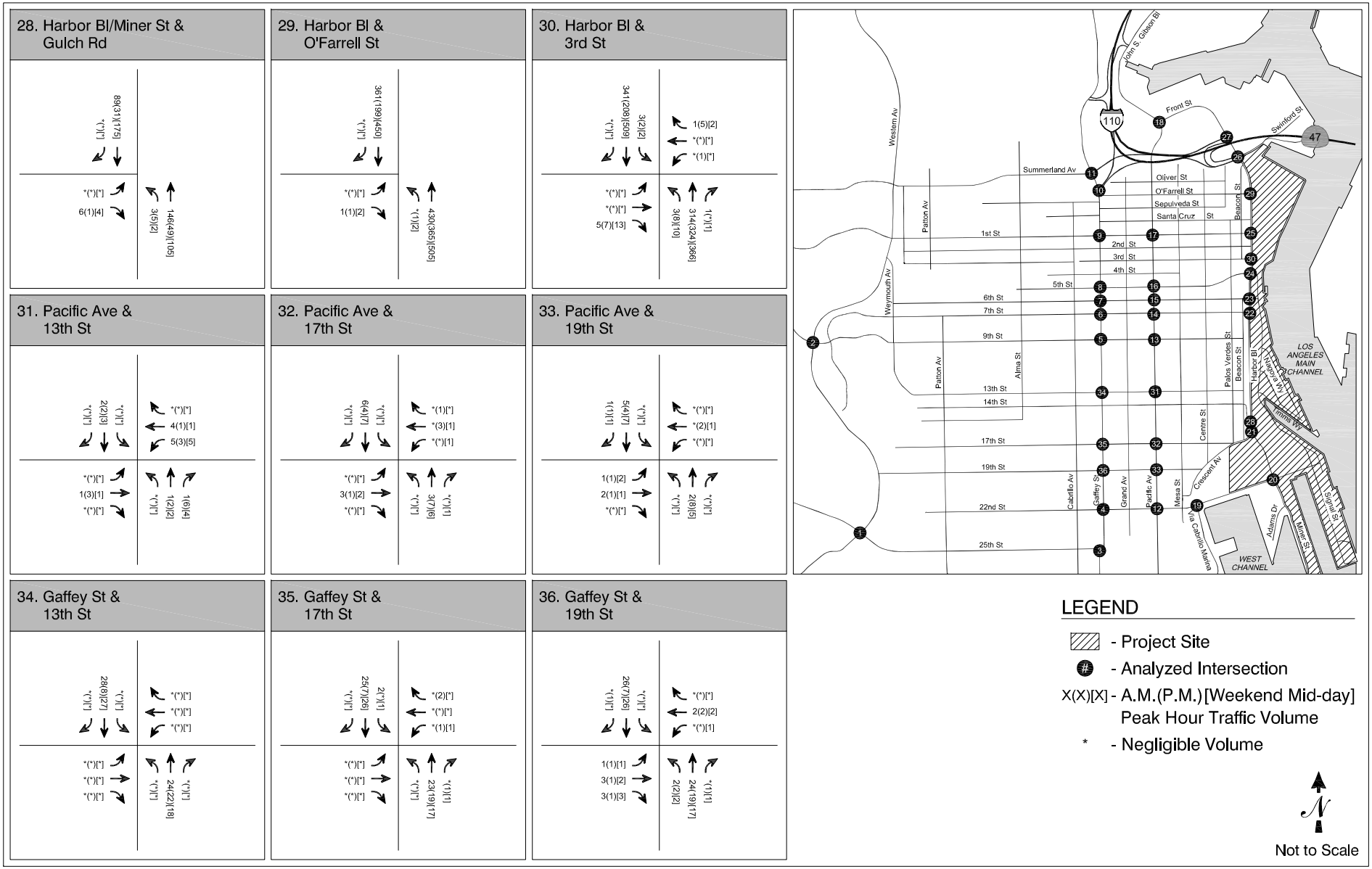
ALTERNATIVE 3 ONLY TRAFFIC VOLUMES - 2037

FIGURE 34 (CONT.)



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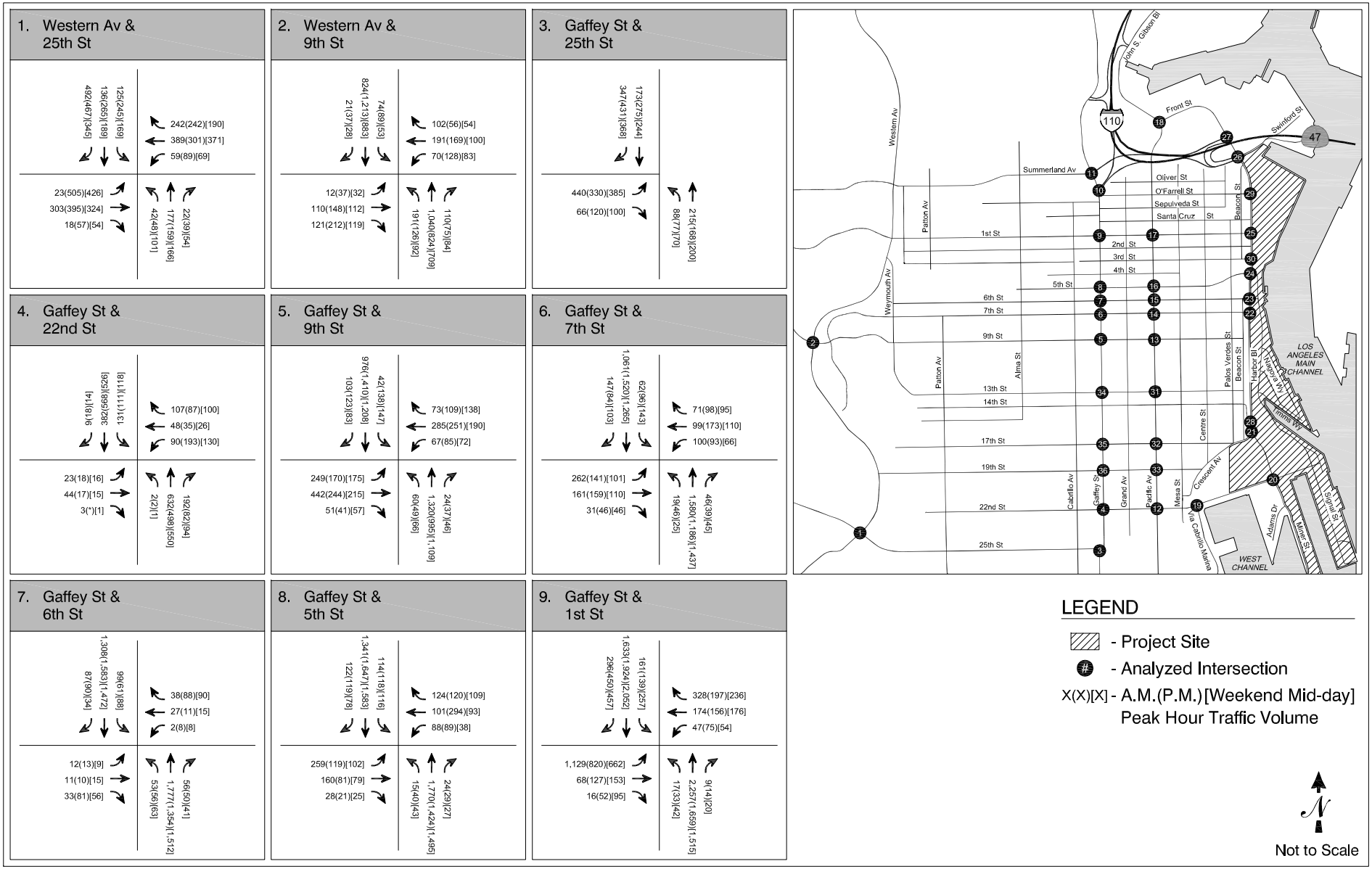
ALTERNATIVE 3 ONLY TRAFFIC VOLUMES - 2037

FIGURE 34 (CONT.)



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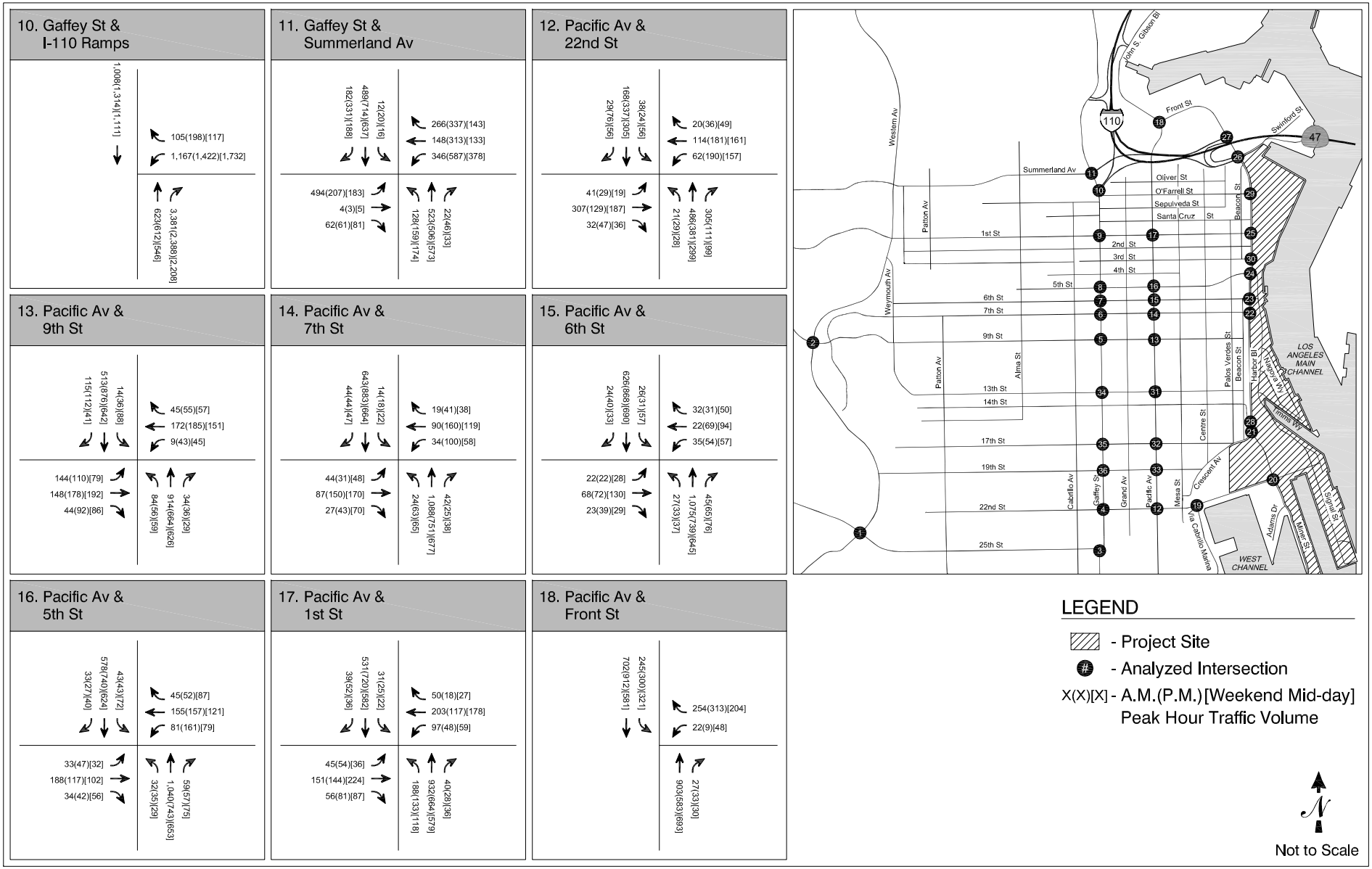
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 3 - 2015

FIGURE 35



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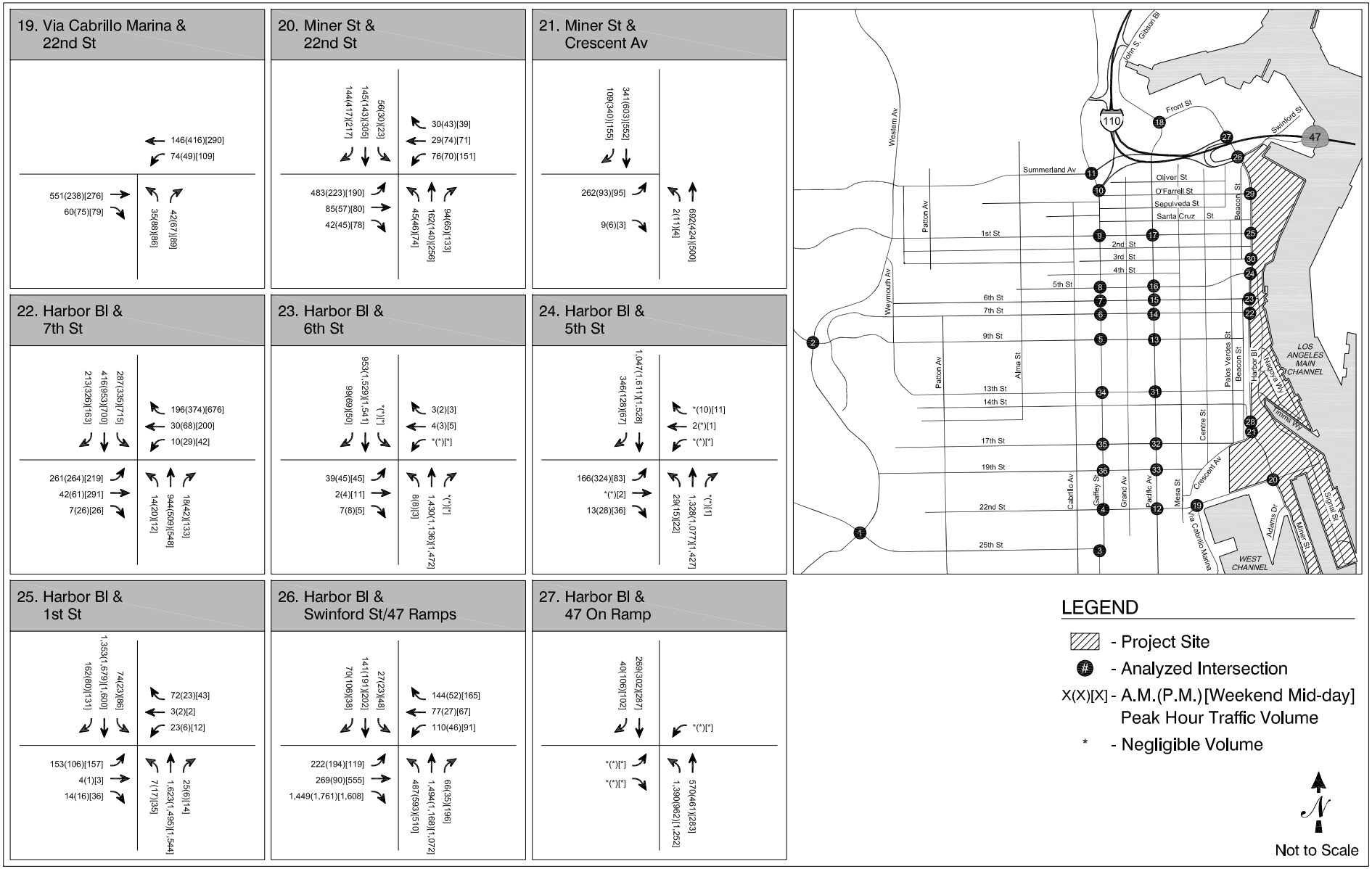
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 3 - 2015

FIGURE 35 (CONT.)



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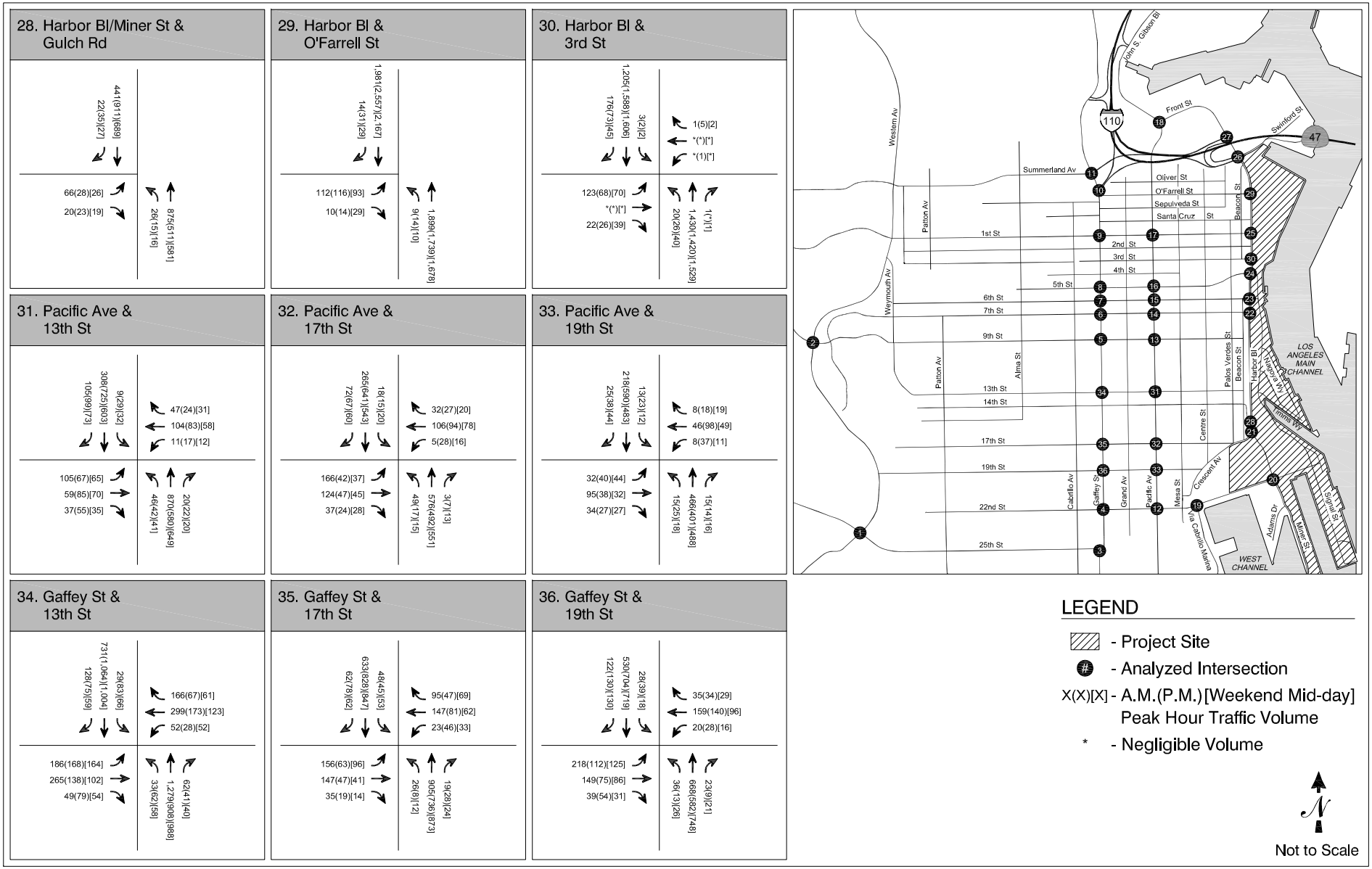
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 3 - 2015

FIGURE 35 (CONT.)



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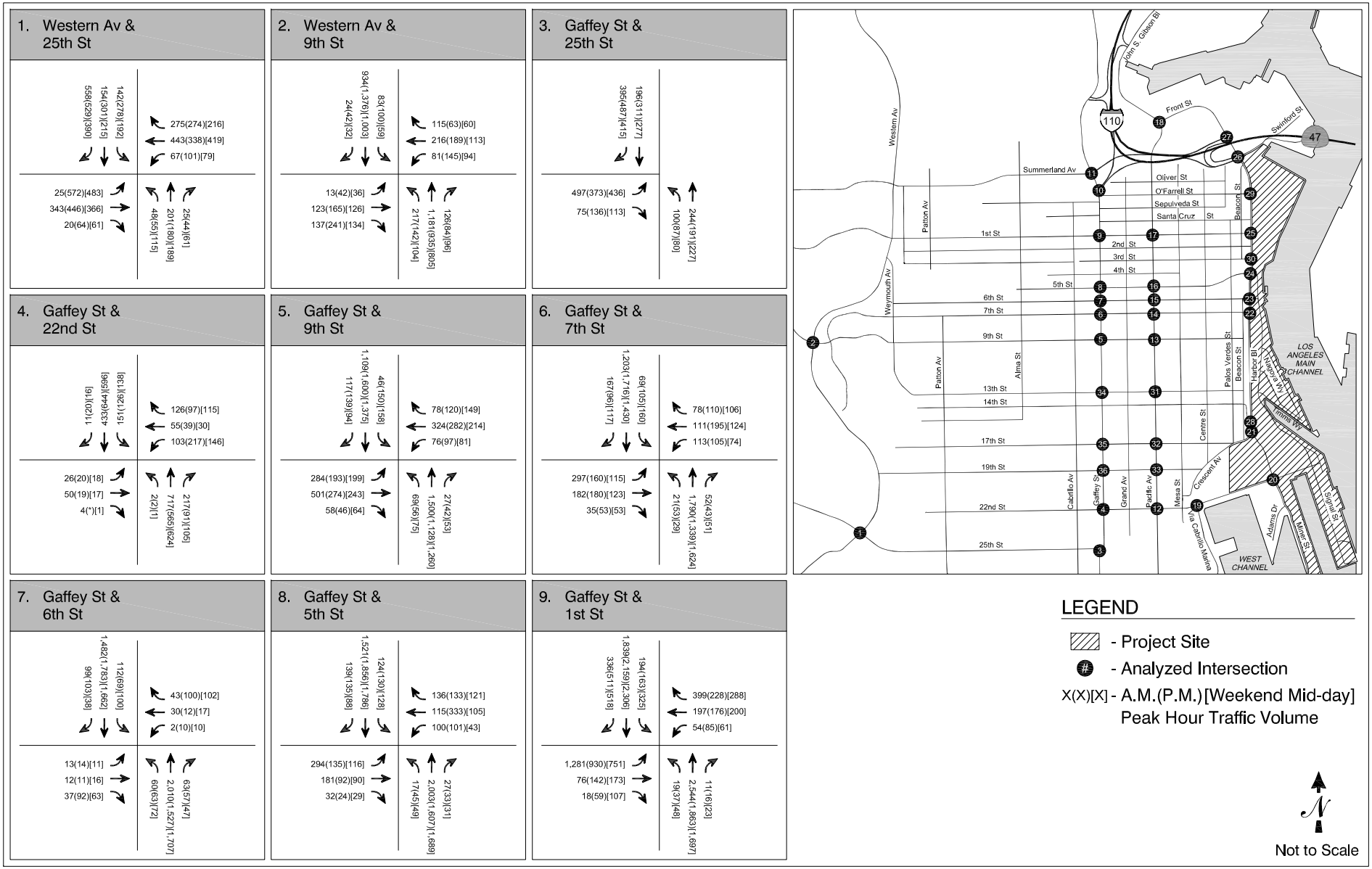
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 3 - 2015

FIGURE 35 (CONT.)



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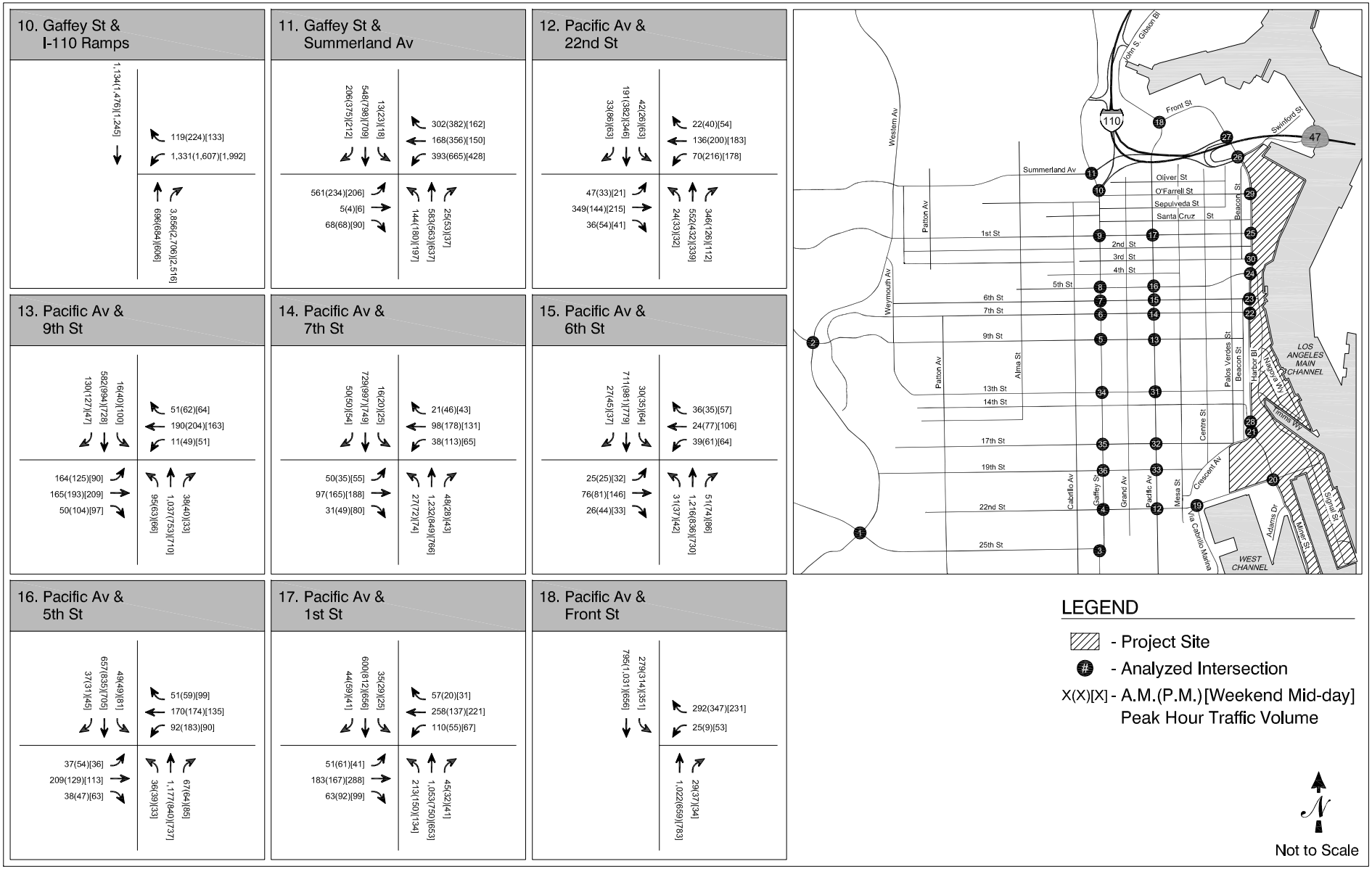
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 3 - 2037

FIGURE 36



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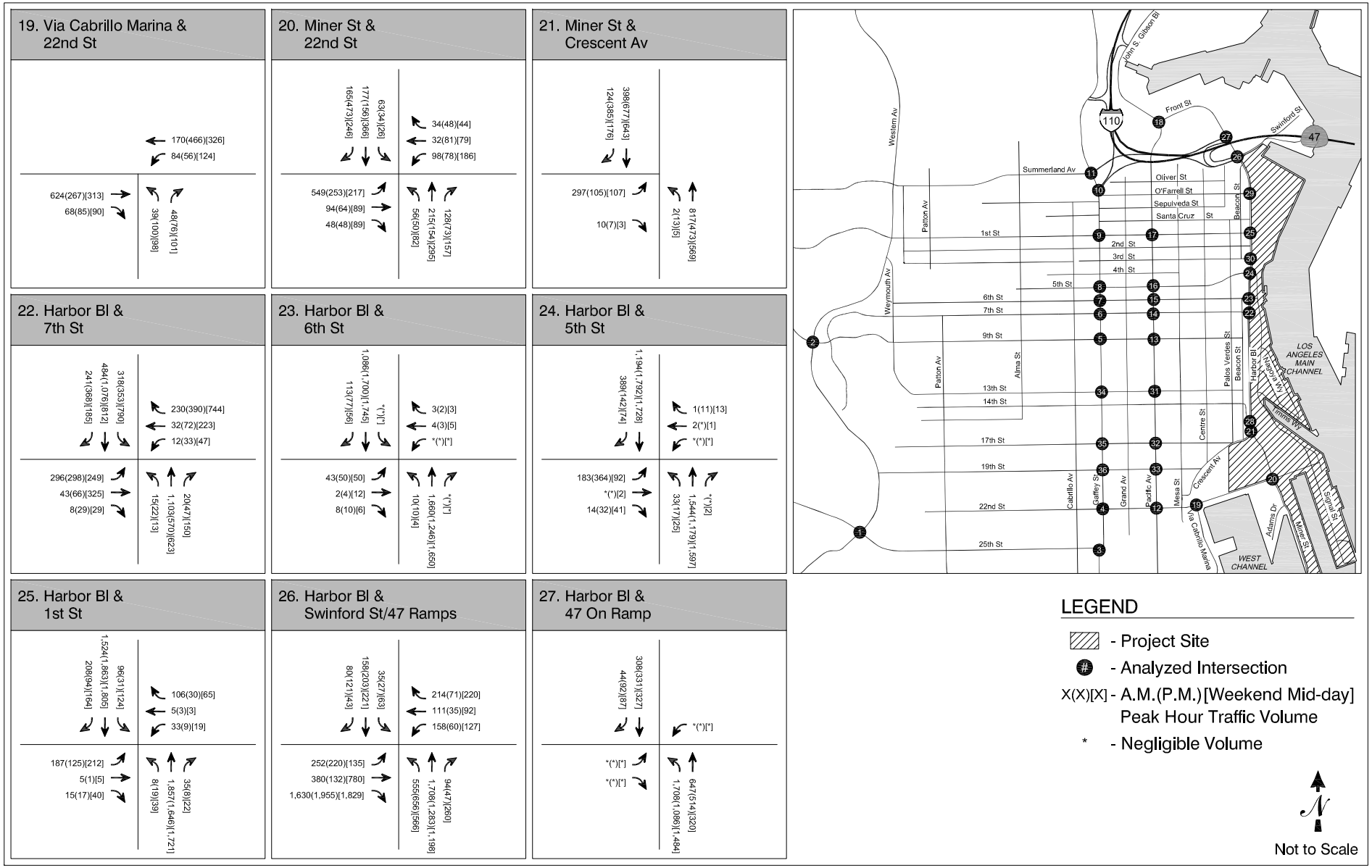
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 3 - 2037

FIGURE 36 (CONT.)



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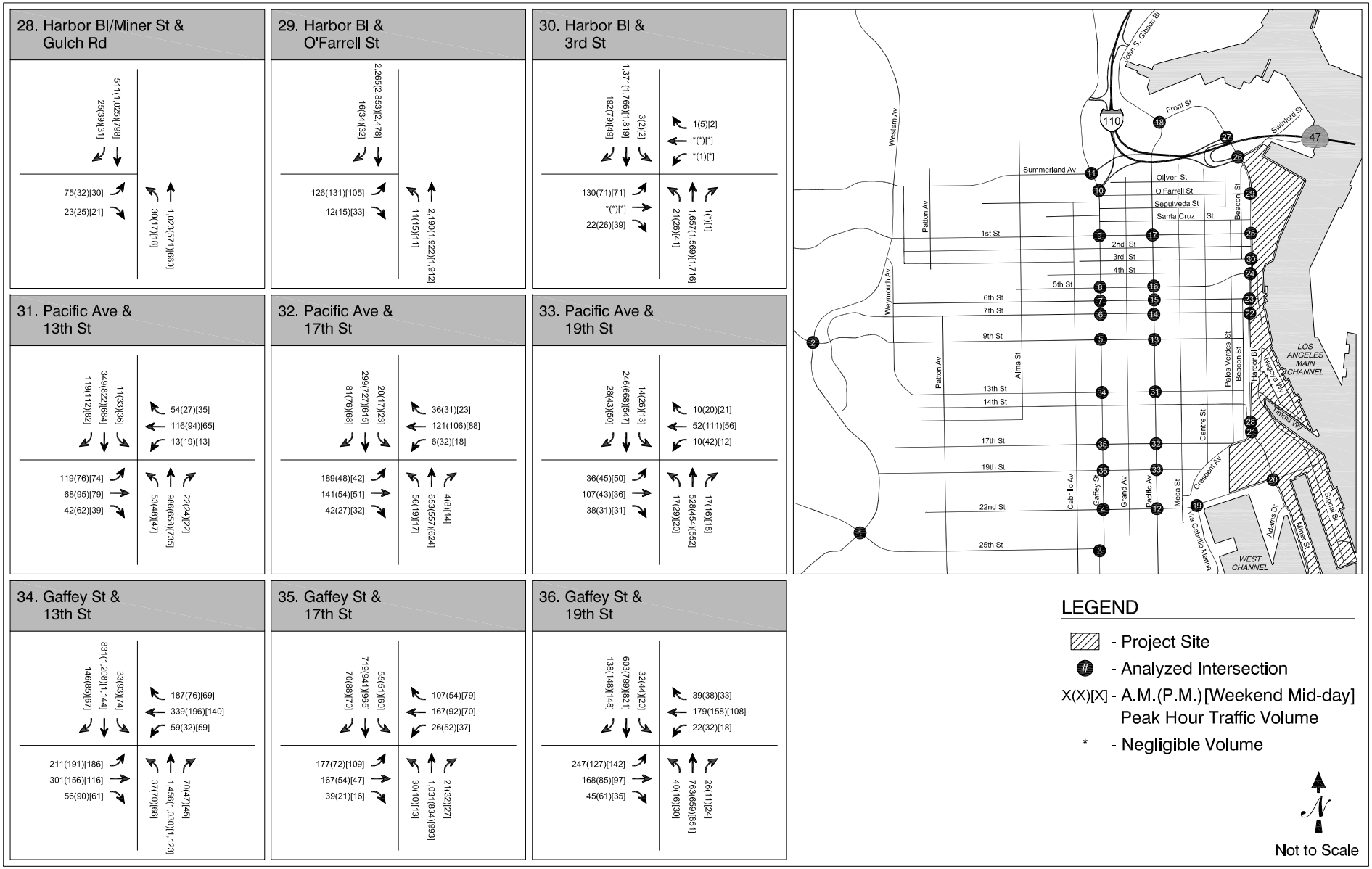
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 3 - 2037

FIGURE 36 (CONT.)



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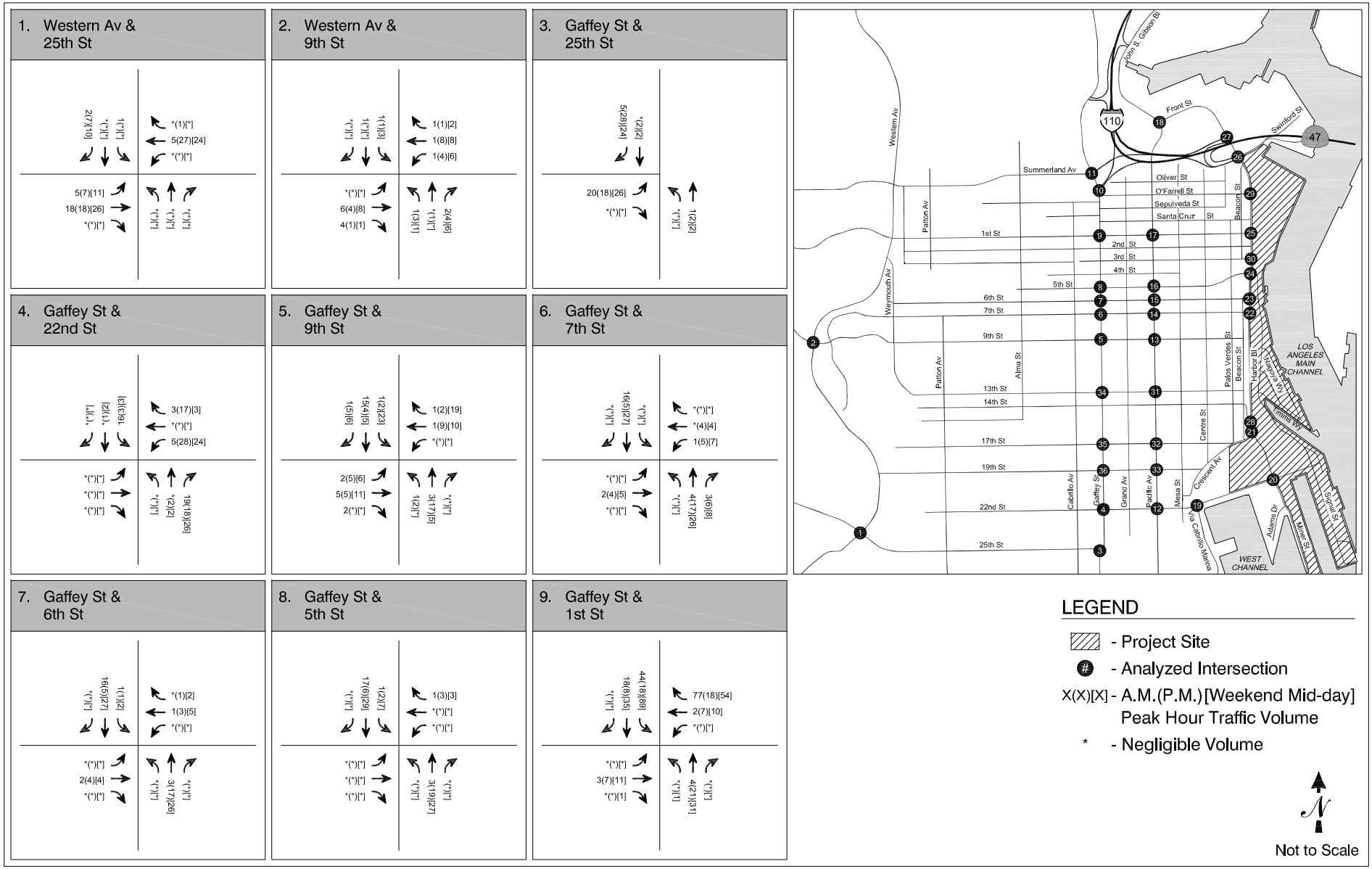
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 3 - 2037

FIGURE 36 (CONT.)



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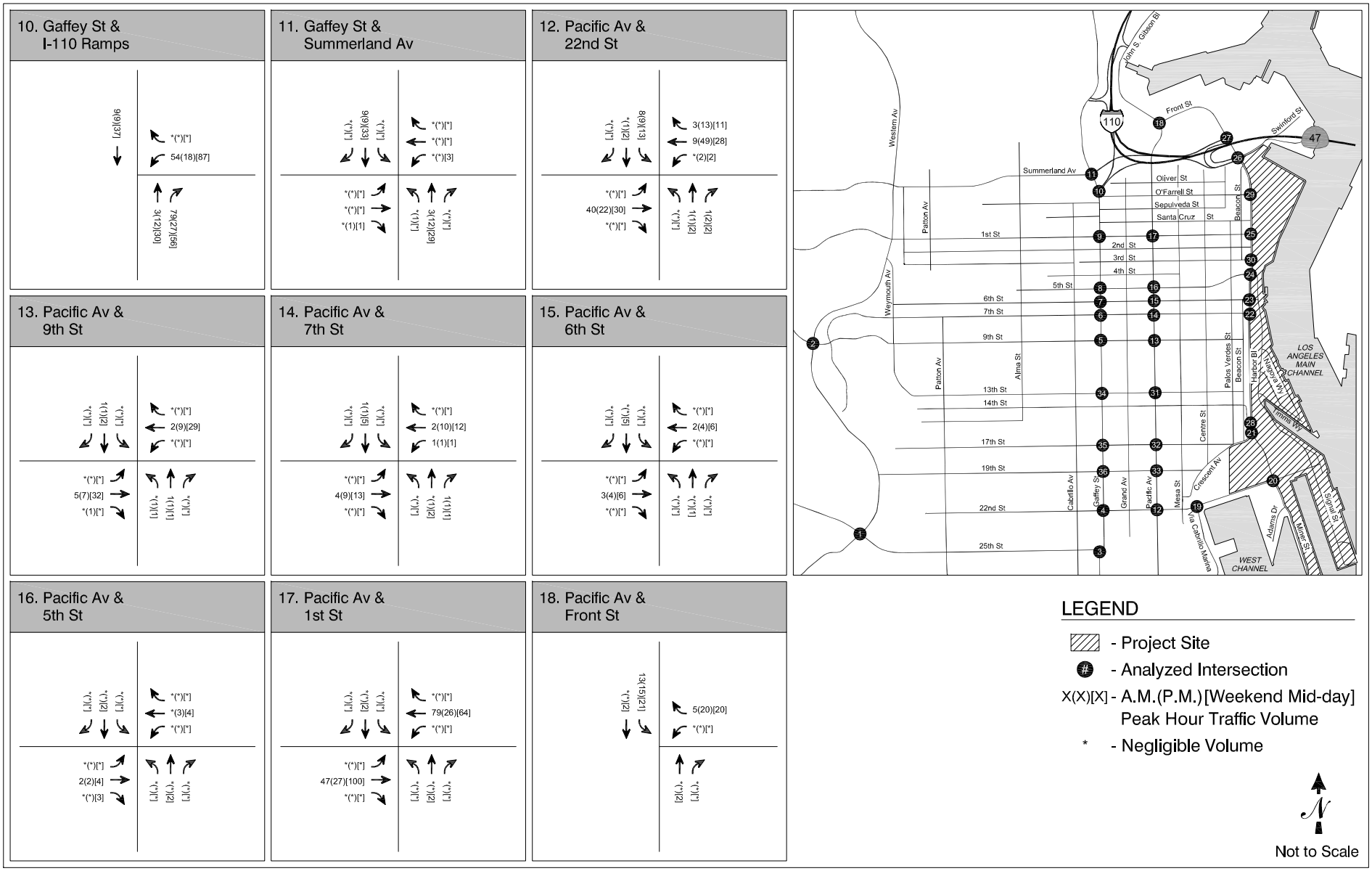
ALTERNATIVE 4 ONLY TRAFFIC VOLUMES - 2015

FIGURE 37



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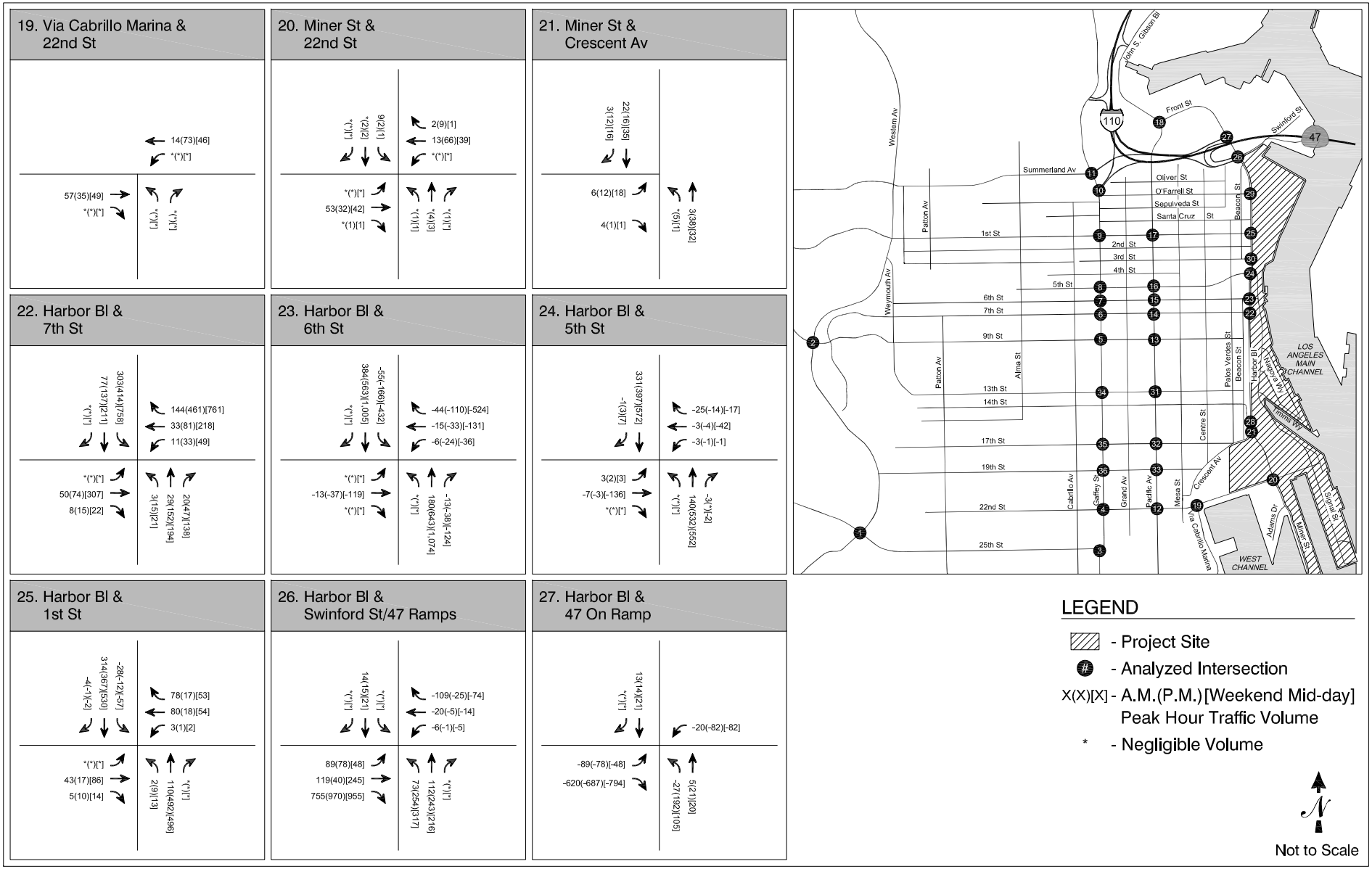
ALTERNATIVE 4 ONLY TRAFFIC VOLUMES - 2015

FIGURE 37 (CONT.)



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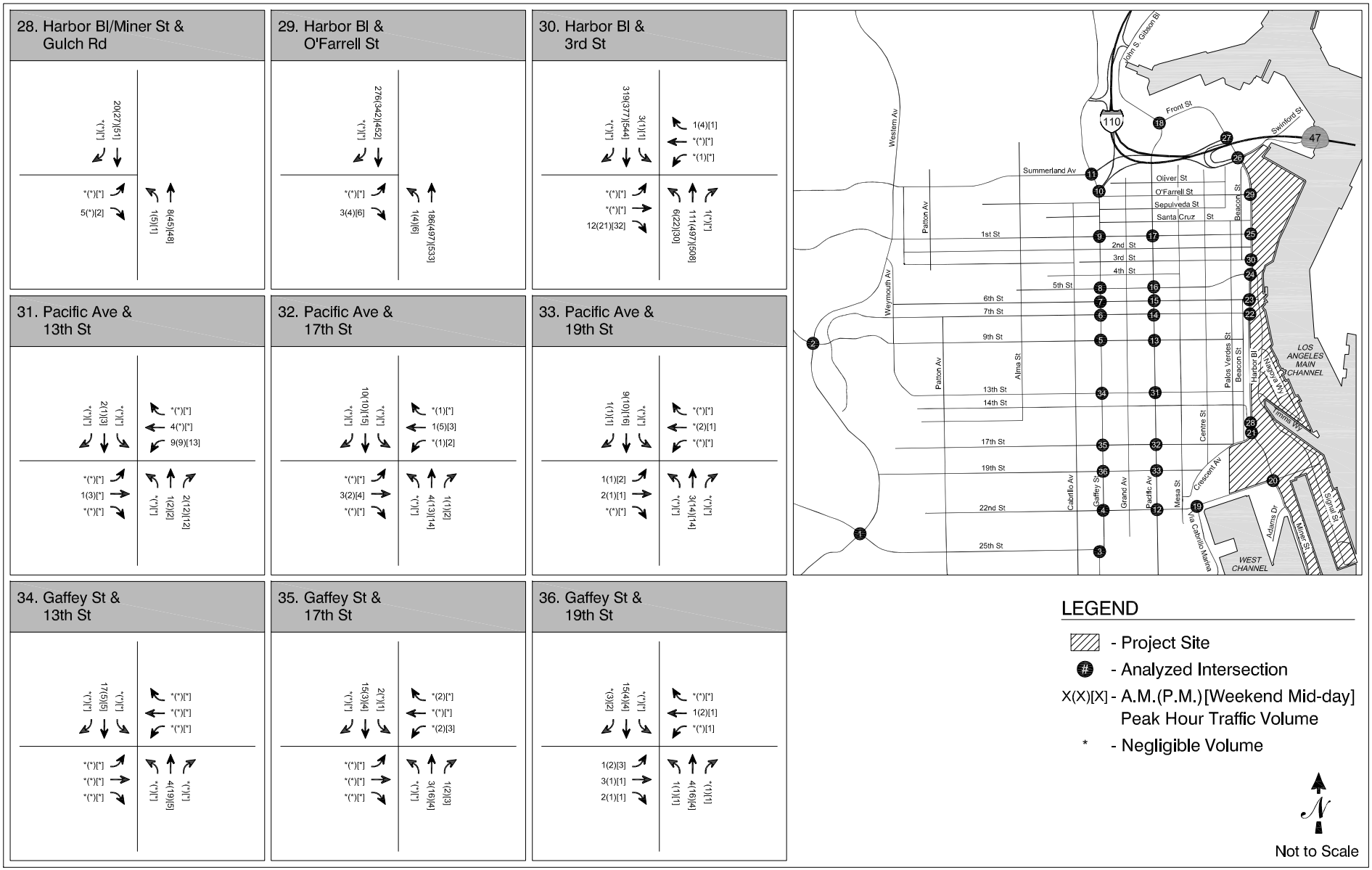
ALTERNATIVE 4 ONLY TRAFFIC VOLUMES - 2015

FIGURE 37 (CONT.)



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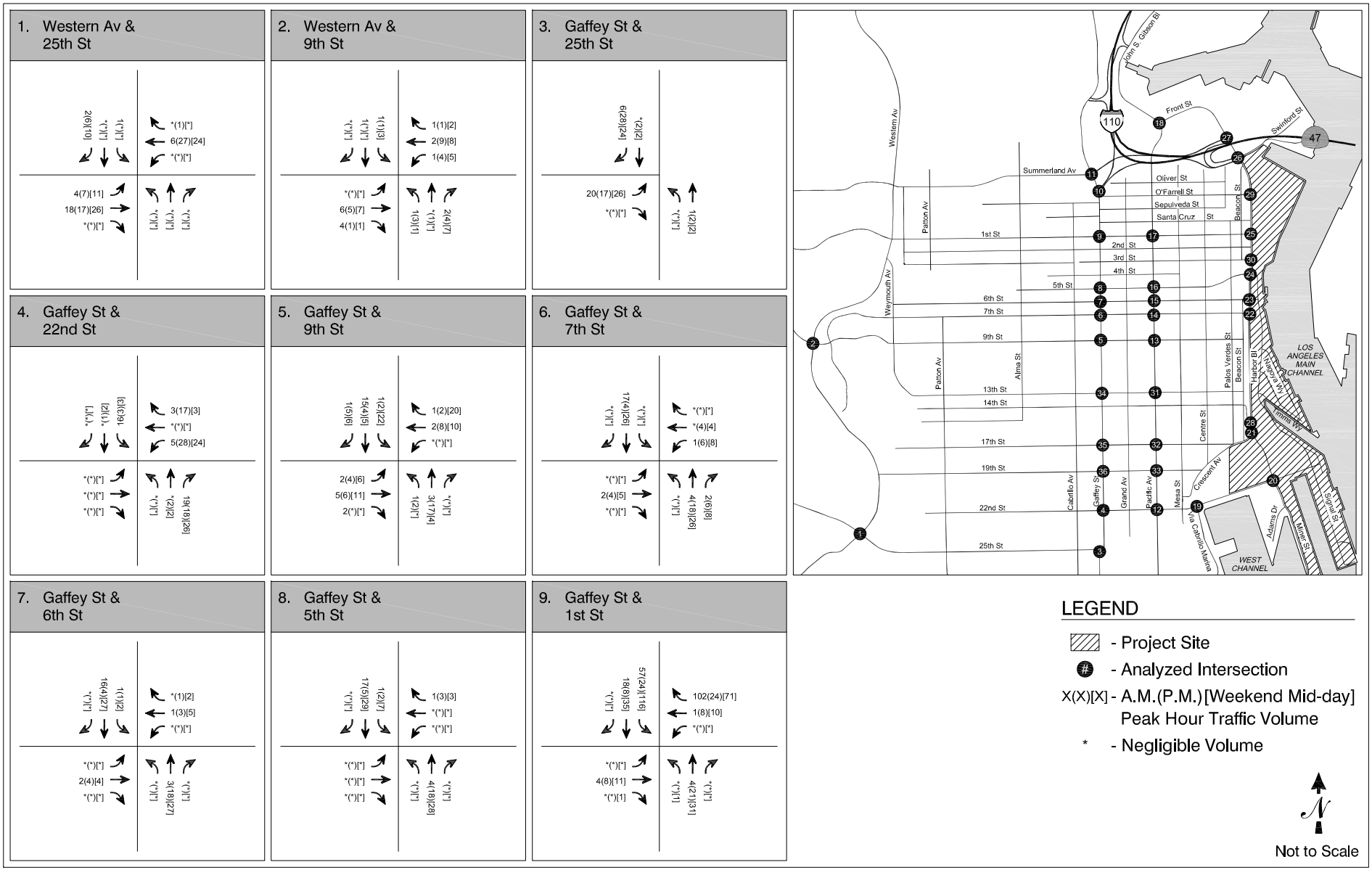
ALTERNATIVE 4 ONLY TRAFFIC VOLUMES - 2015

FIGURE 37 (CONT.)



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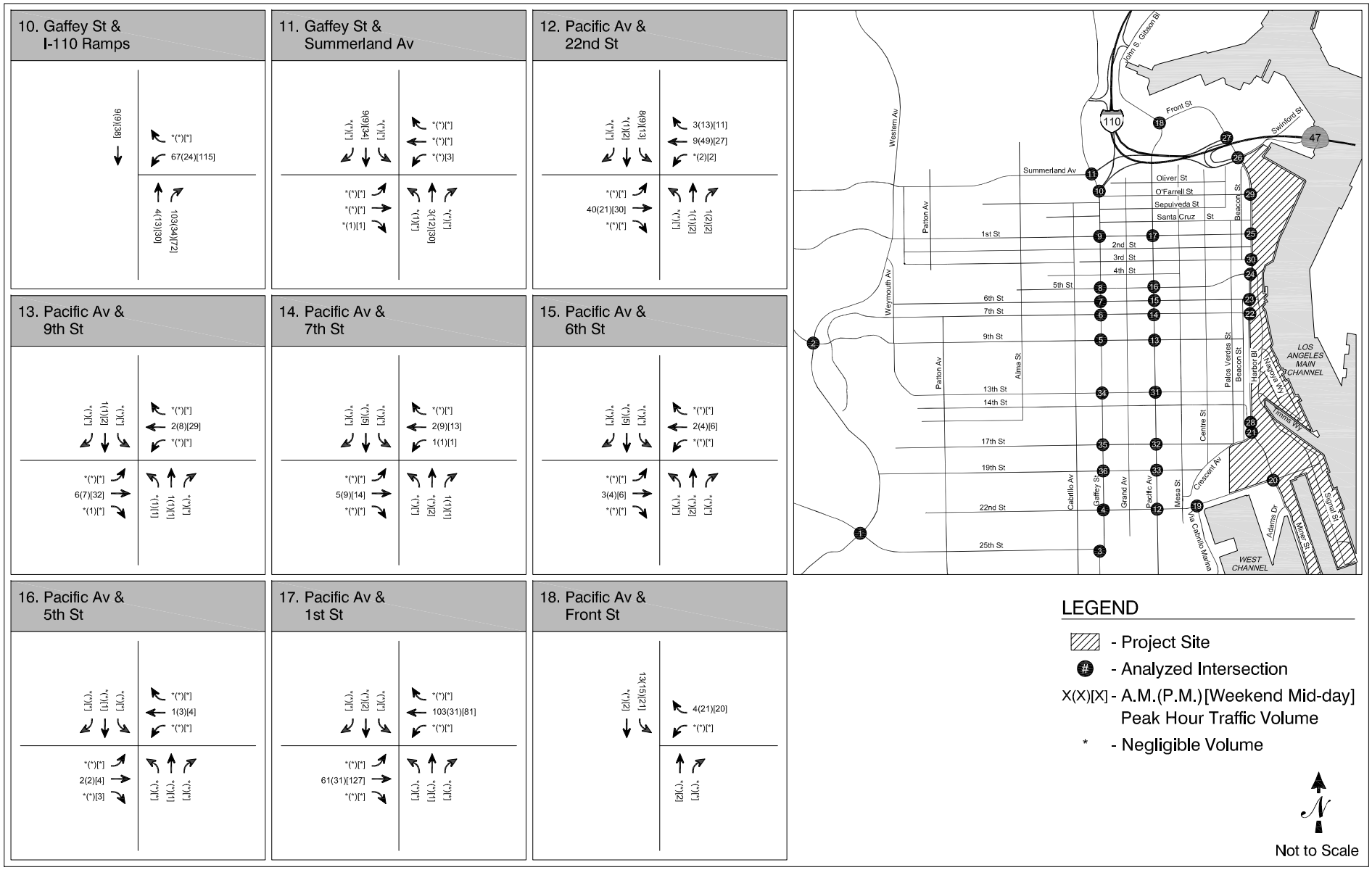
ALTERNATIVE 4 ONLY TRAFFIC VOLUMES - 2037

FIGURE 38



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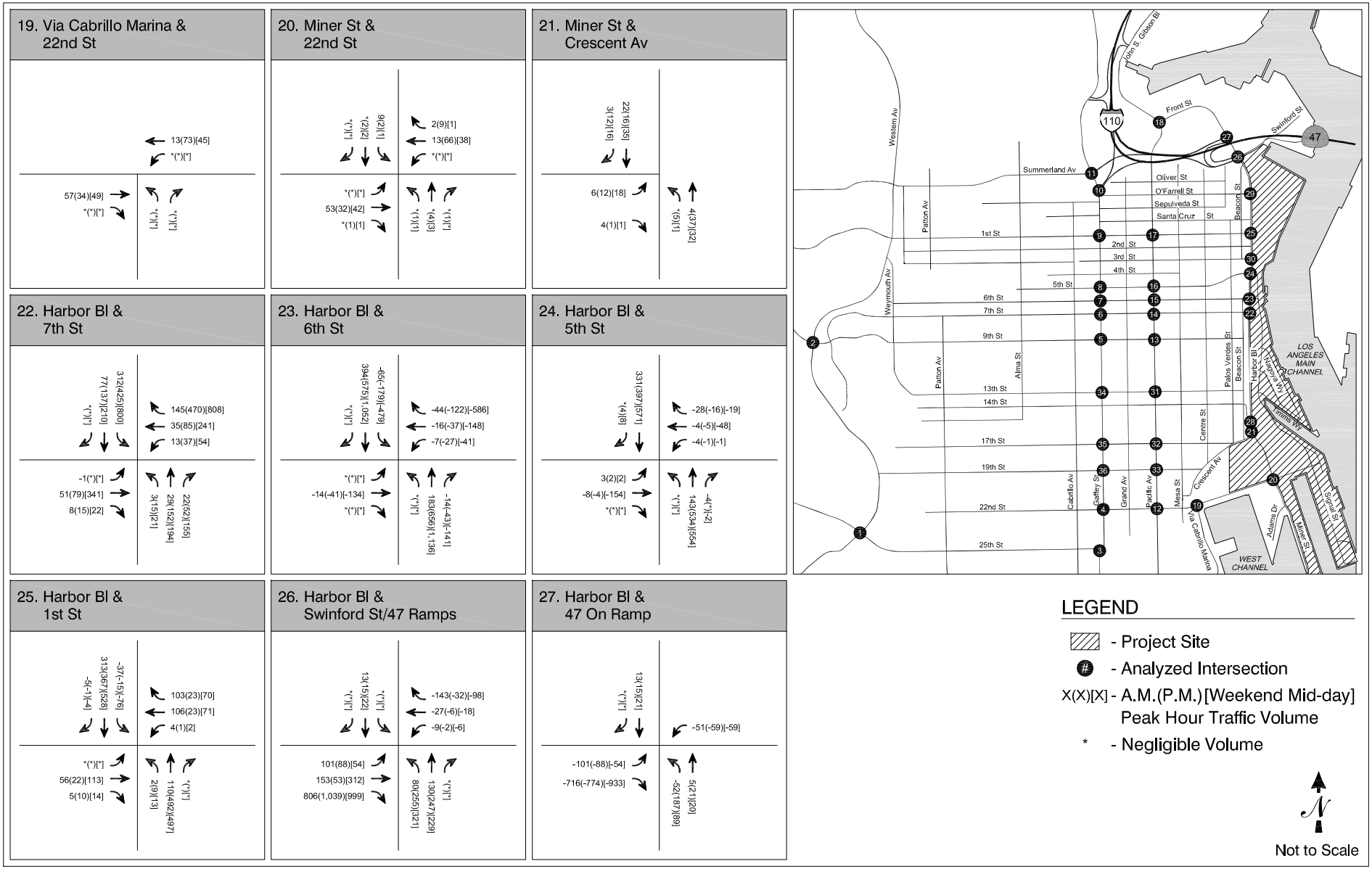
ALTERNATIVE 4 ONLY TRAFFIC VOLUMES - 2037

FIGURE 38 (CONT.)



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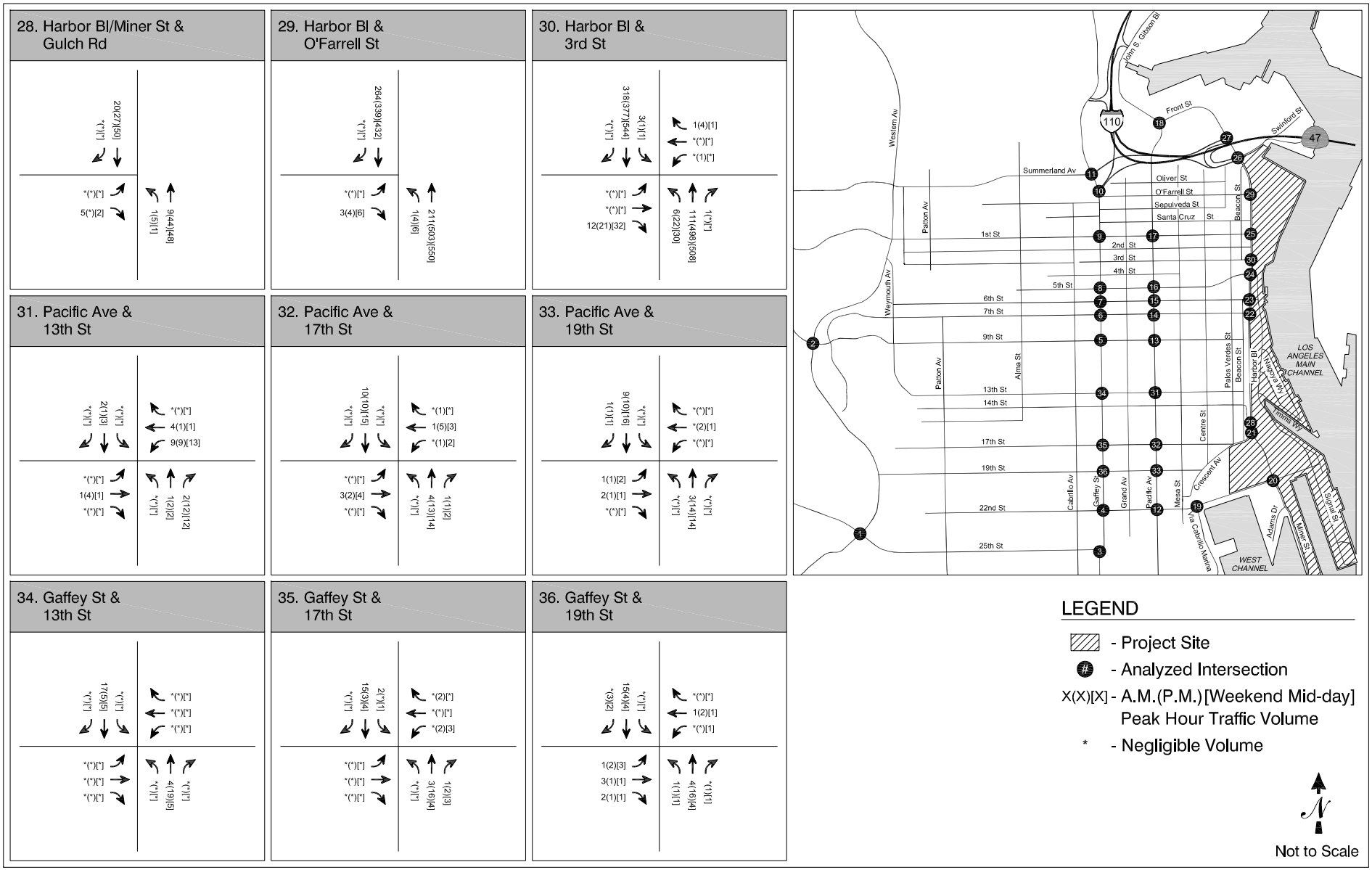
ALTERNATIVE 4 ONLY TRAFFIC VOLUMES - 2037

FIGURE 38 (CONT.)



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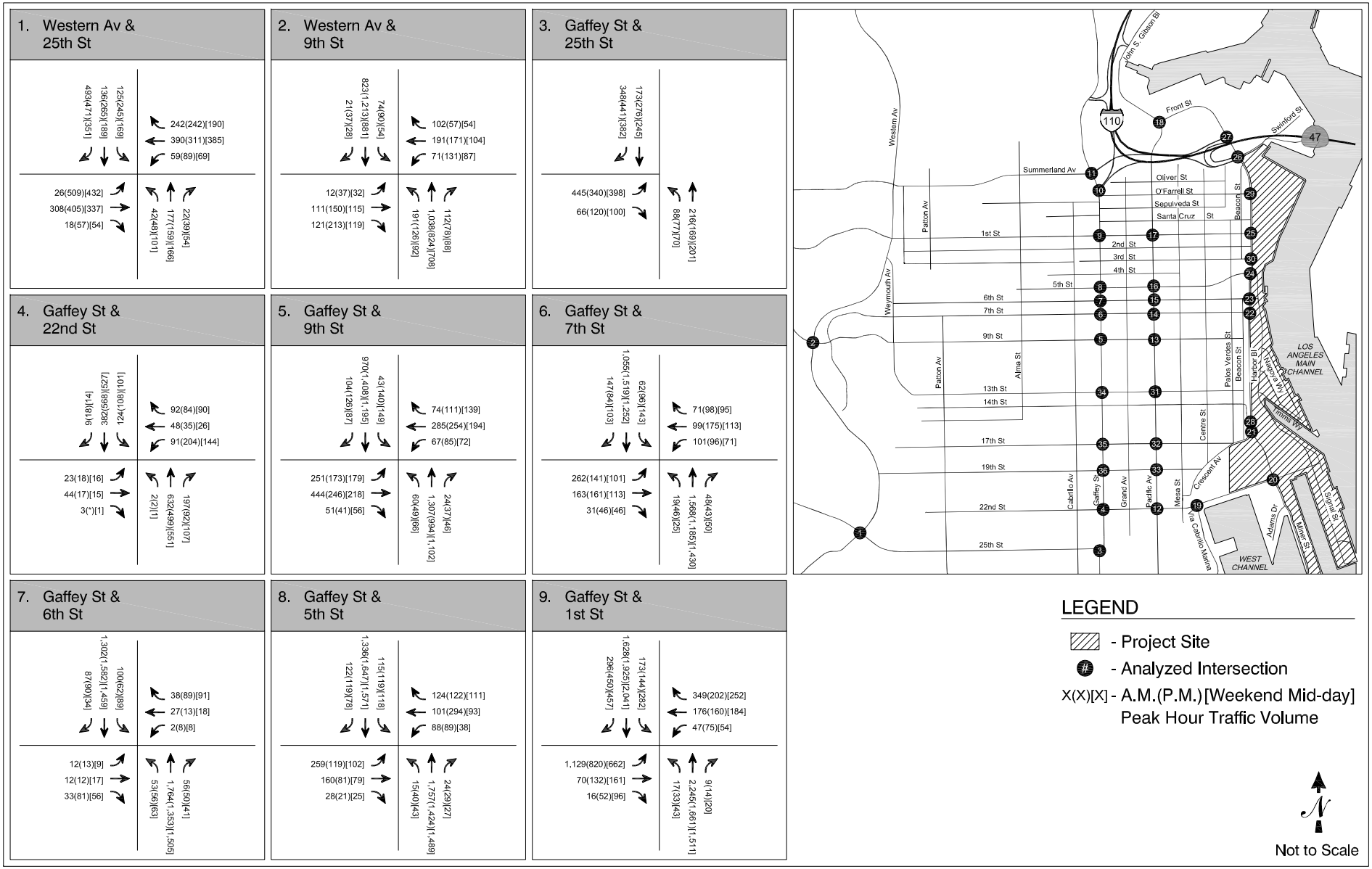
ALTERNATIVE 4 ONLY TRAFFIC VOLUMES - 2037

FIGURE 38 (CONT.)



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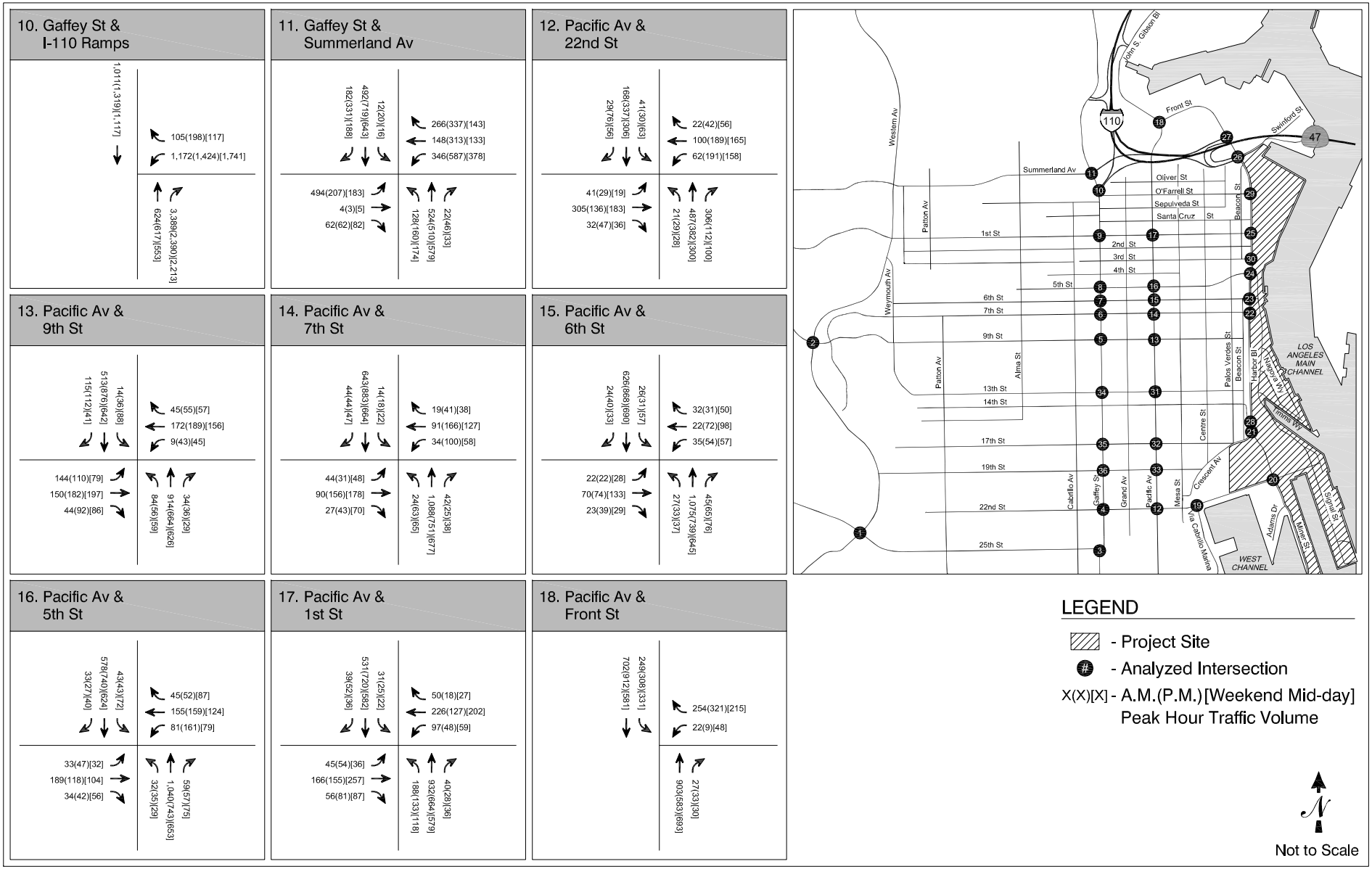
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 4 - 2015

FIGURE 39



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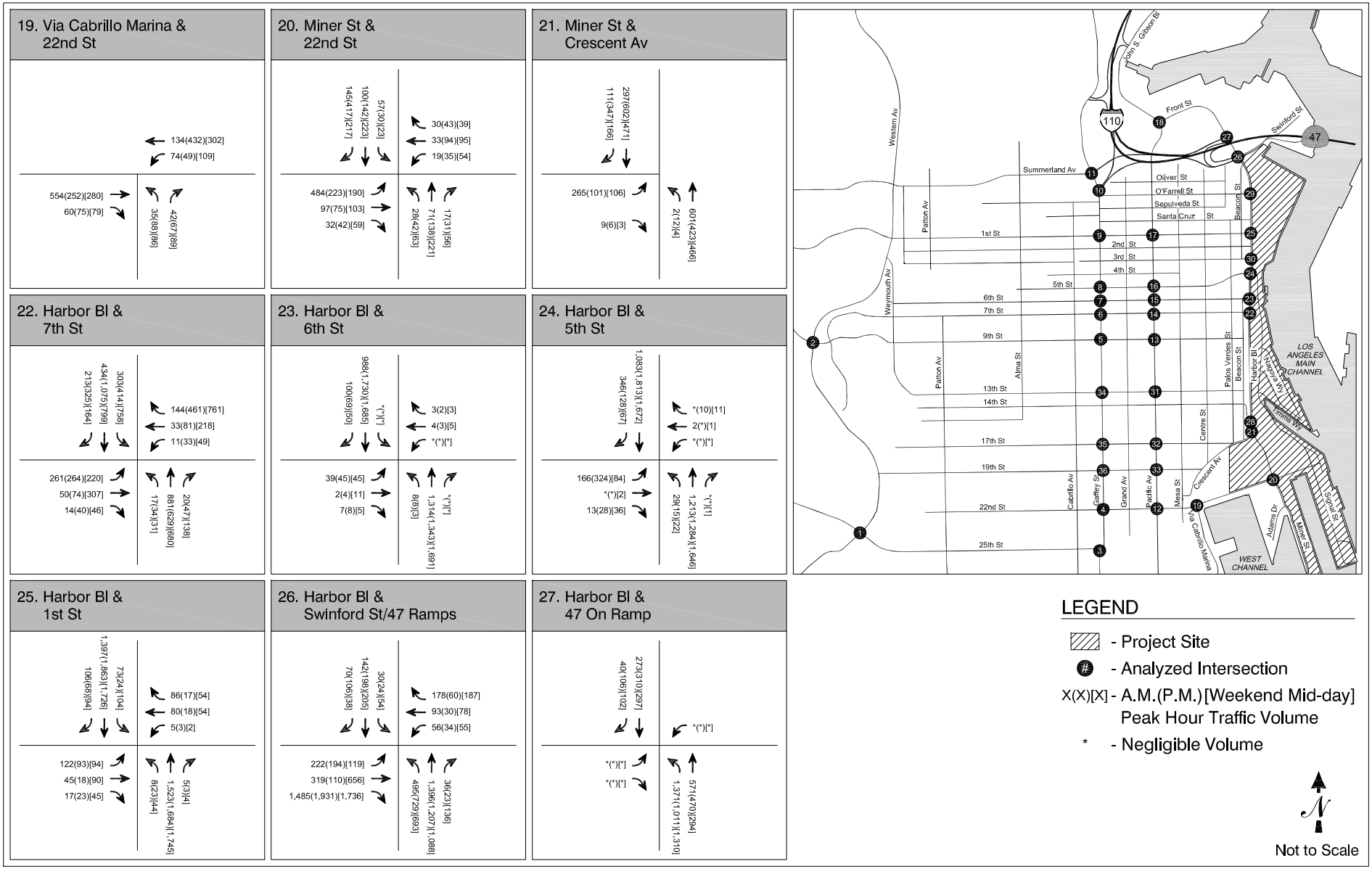
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 4 - 2015

FIGURE 39 (CONT.)



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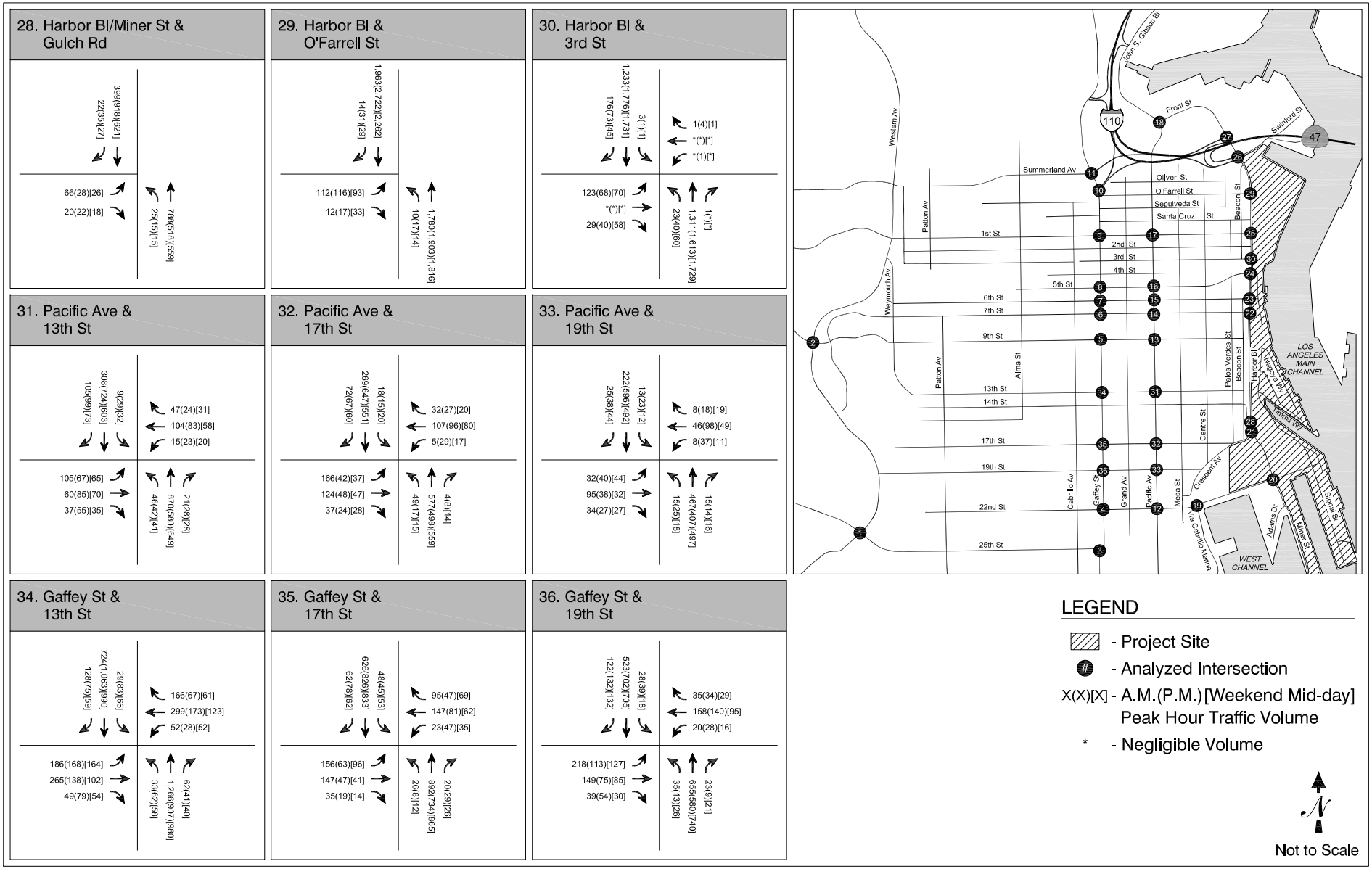
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 4 - 2015

FIGURE 39 (CONT.)



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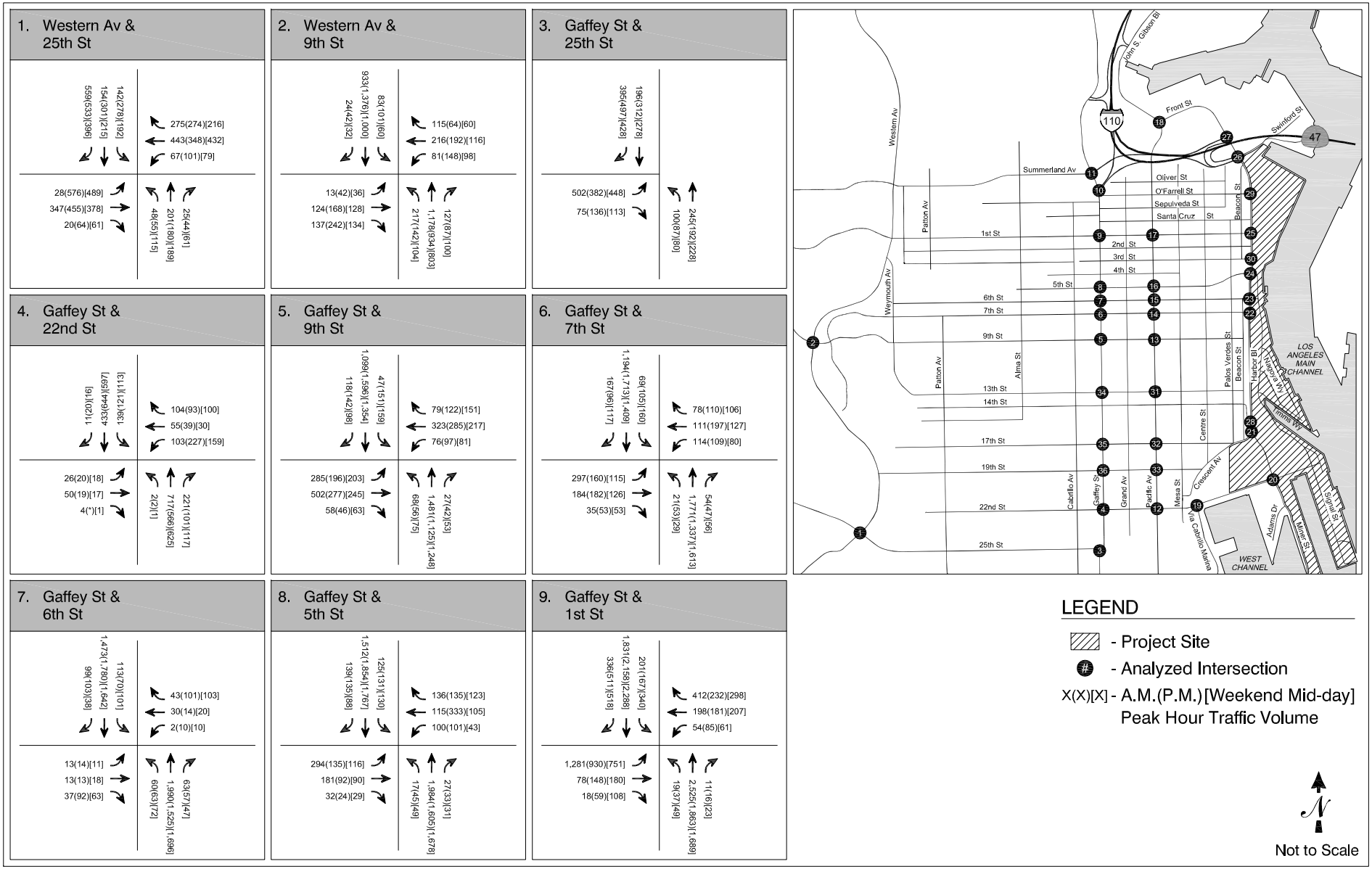
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 4 - 2015

FIGURE 39 (CONT.)



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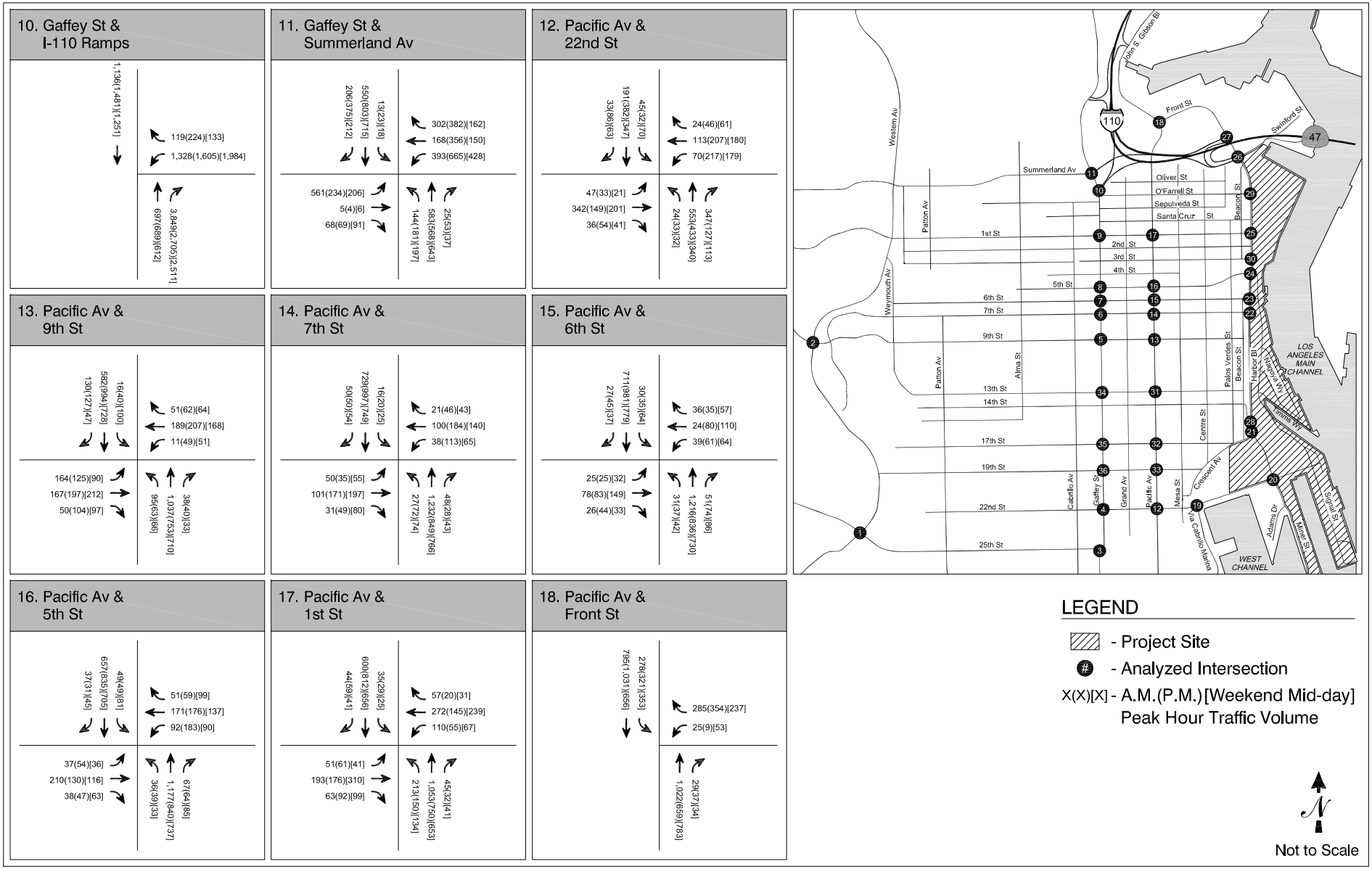
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 4 - 2037

FIGURE 40



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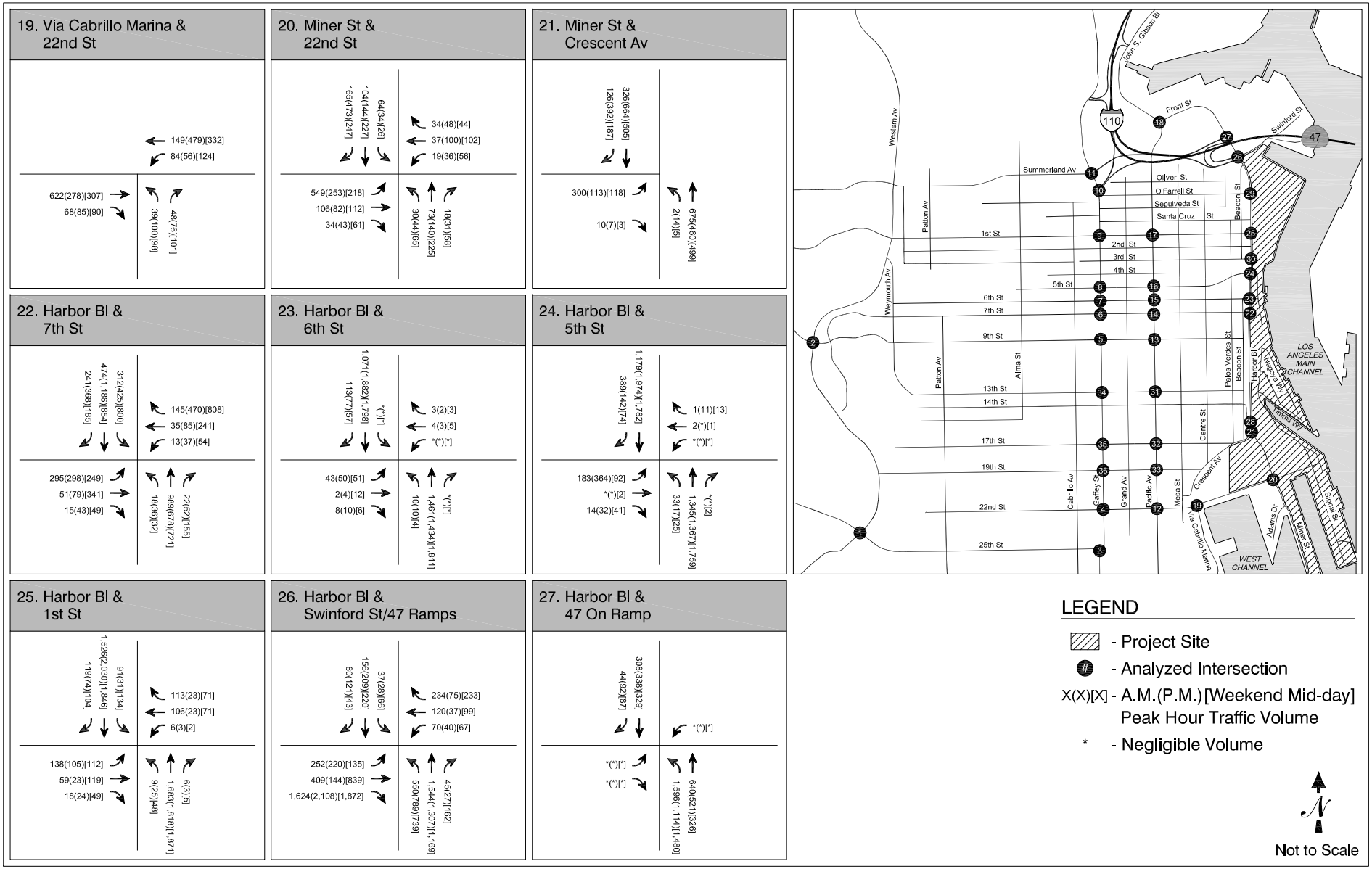
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 4 - 2037

FIGURE 40 (CONT.)



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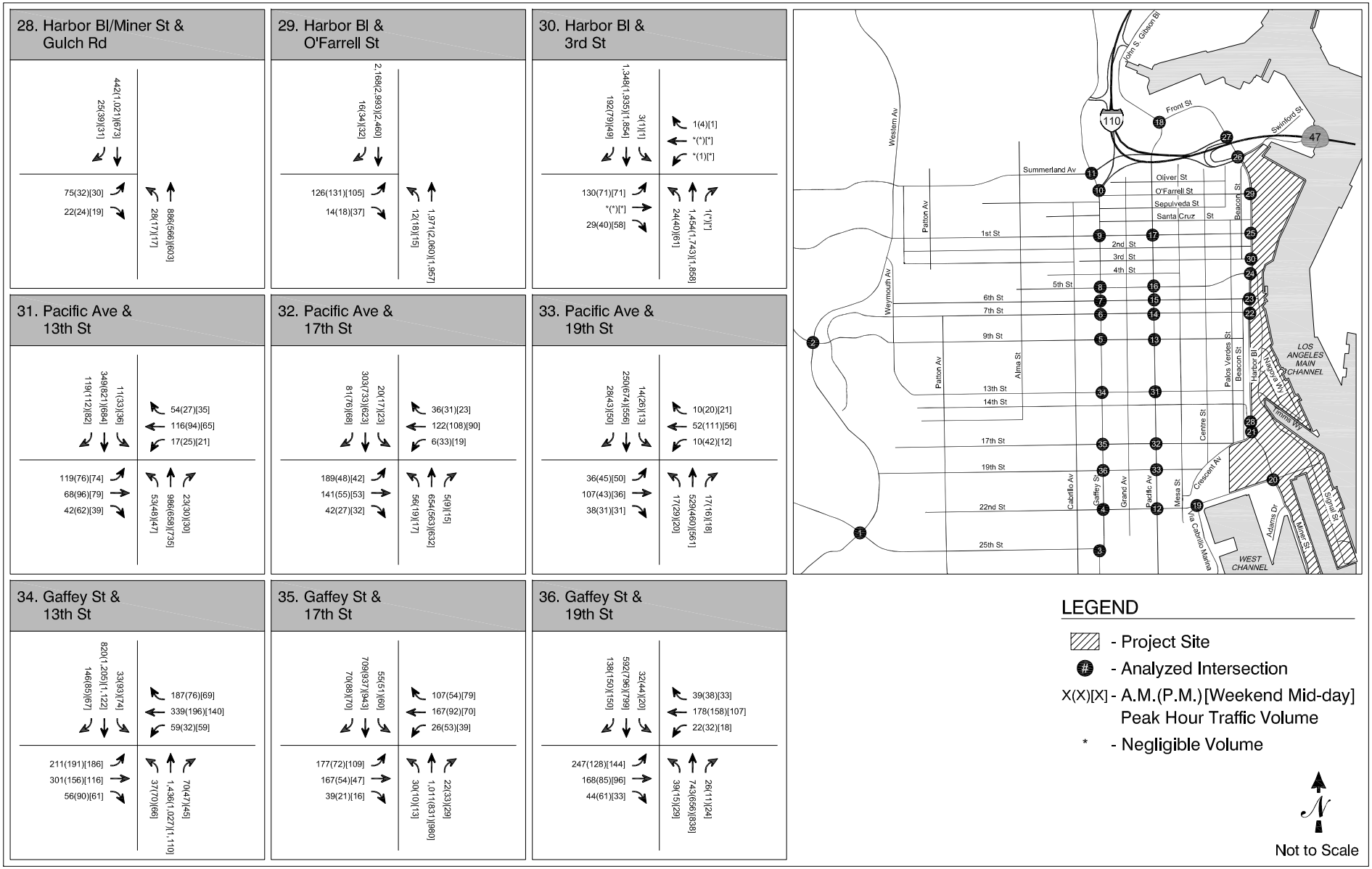
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 4 - 2037

FIGURE 40 (CONT.)



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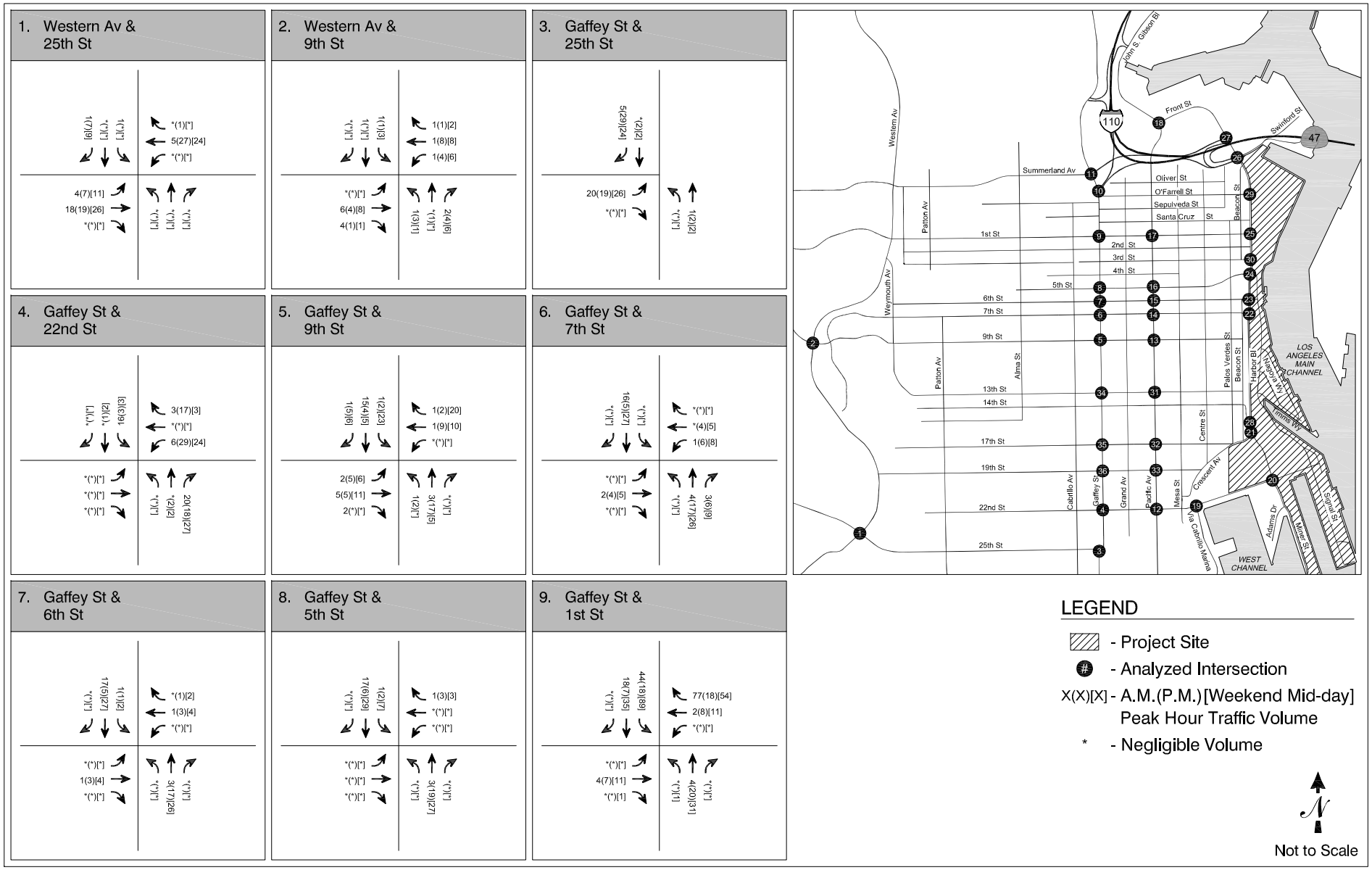
FUTURE TRAFFIC VOLUMES WITH PROJECT ALTERNATIVE 4 - 2037

FIGURE 40 (CONT.)



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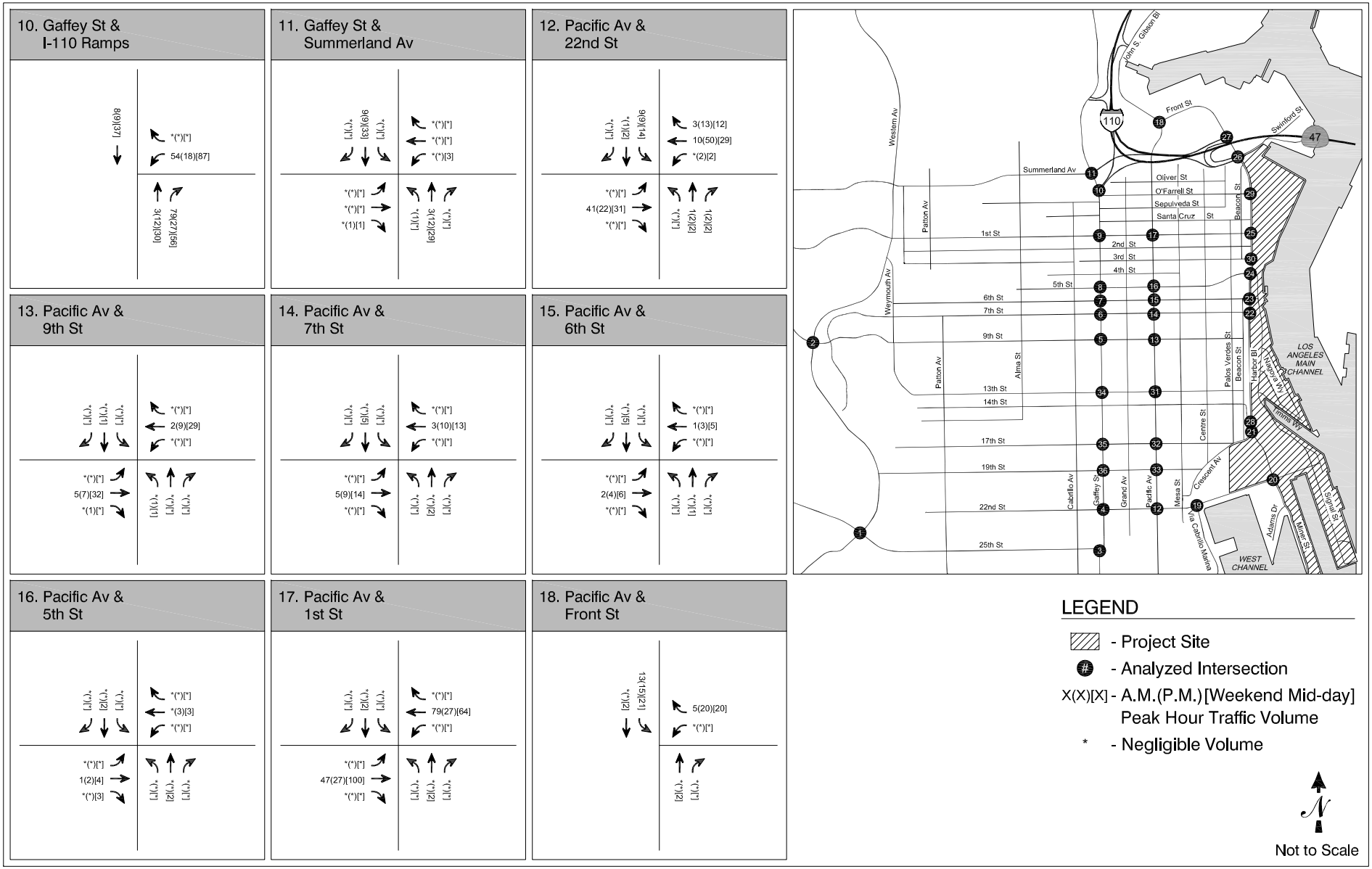
ALTERNATIVE 5 ONLY TRAFFIC VOLUMES (NO PROJECT, NEPA BASELINE) - 2015

FIGURE 41



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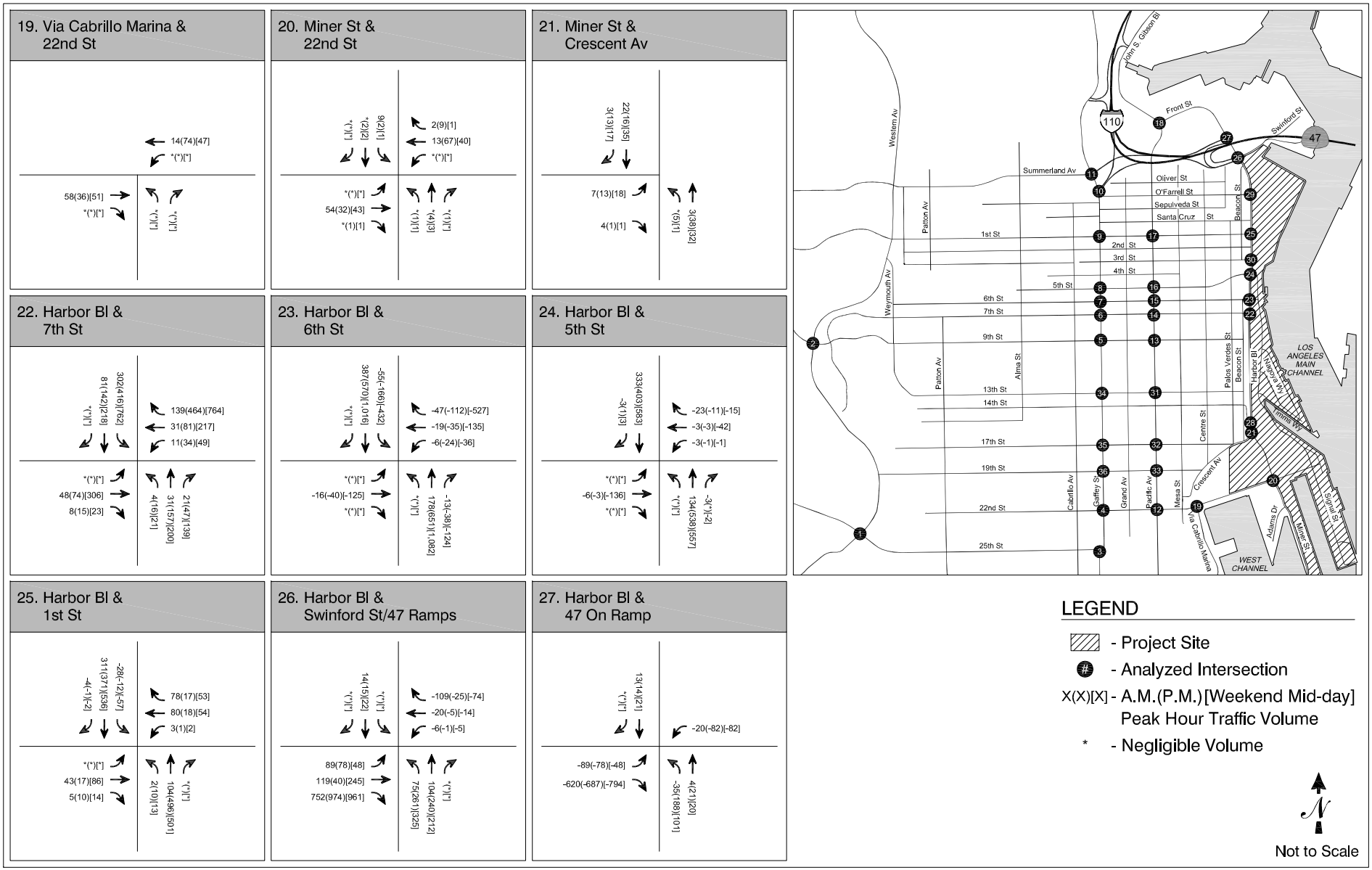
ALTERNATIVE 5 ONLY TRAFFIC VOLUMES (NO PROJECT, NEPA BASELINE) - 2015

FIGURE 41 (CONT.)



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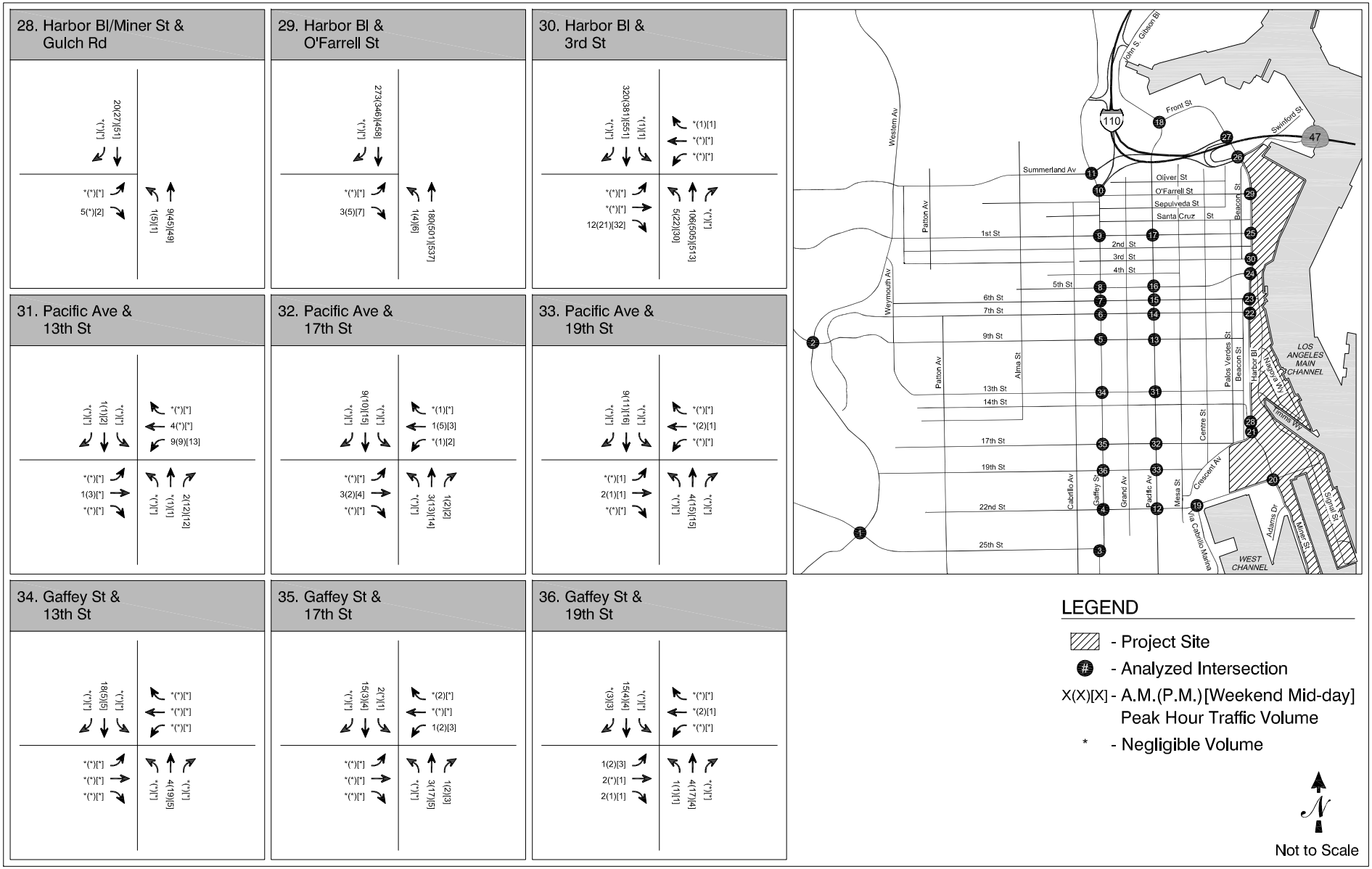
ALTERNATIVE 5 ONLY TRAFFIC VOLUMES (NO PROJECT, NEPA BASELINE) - 2015

FIGURE 41 (CONT.)



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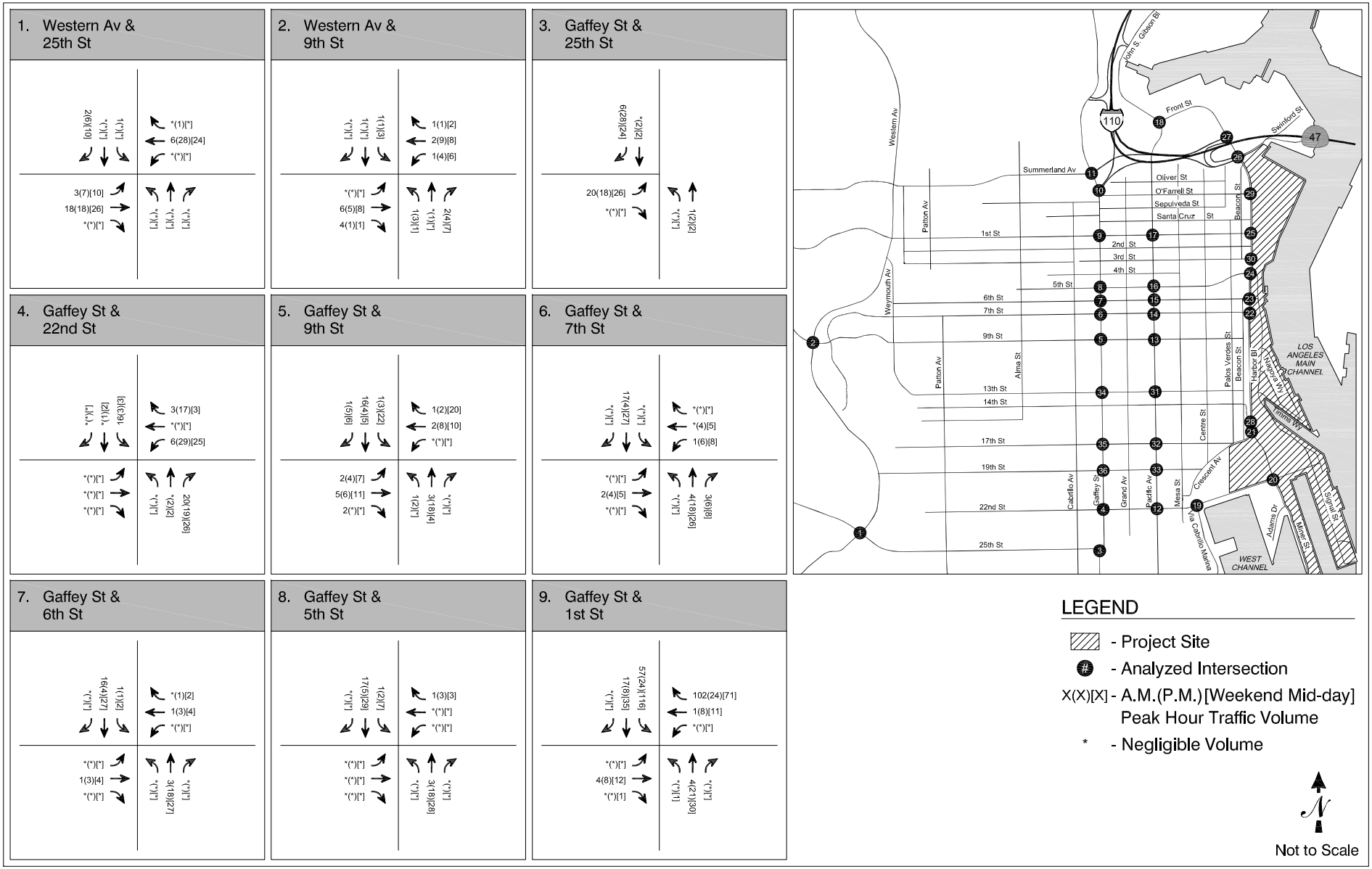
ALTERNATIVE 5 ONLY TRAFFIC VOLUMES (NO PROJECT, NEPA BASELINE) - 2015

FIGURE 41 (CONT.)



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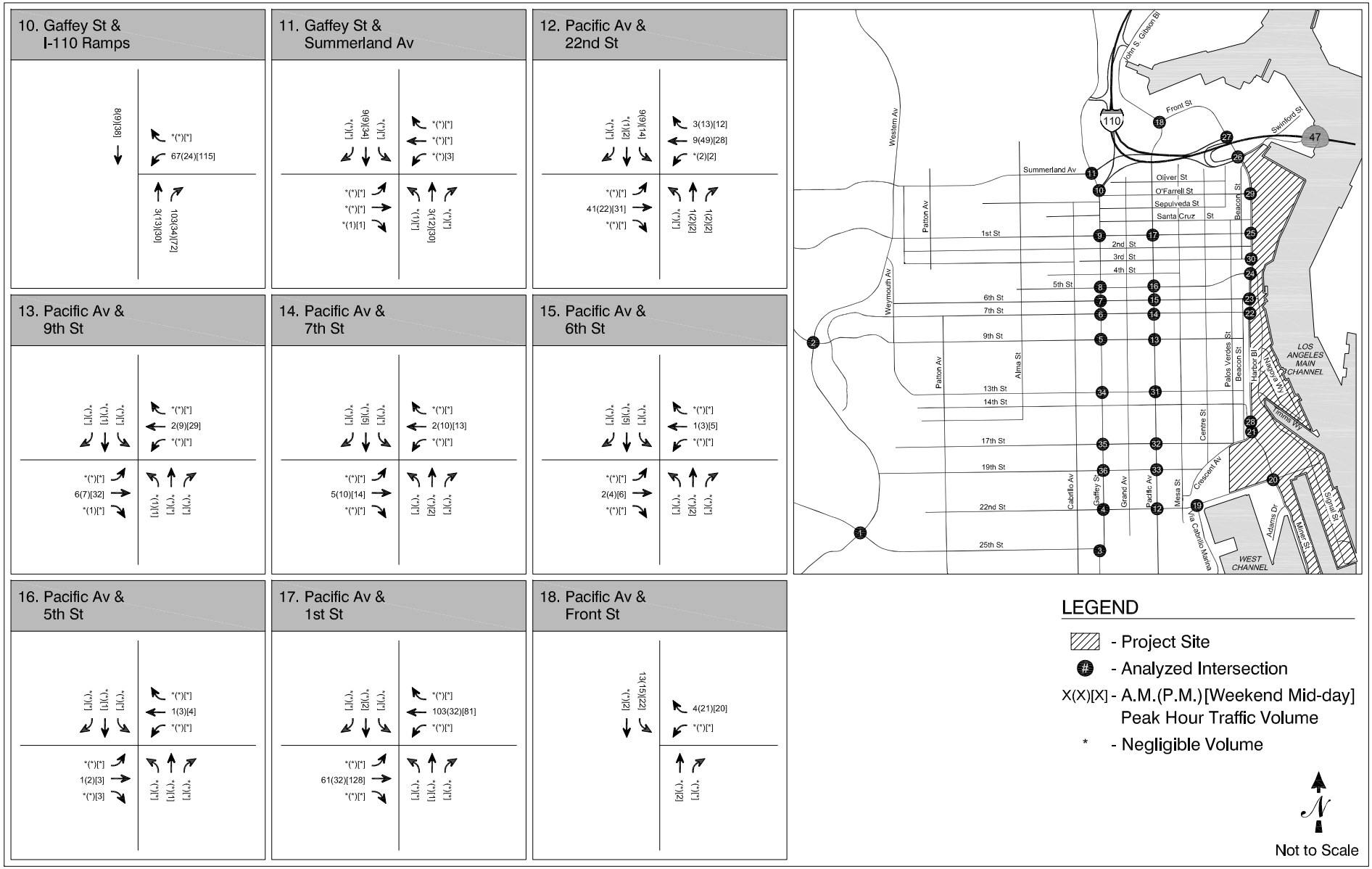
ALTERNATIVE 5 ONLY TRAFFIC VOLUMES (NO PROJECT, NEPA BASELINE) - 2037

FIGURE 42



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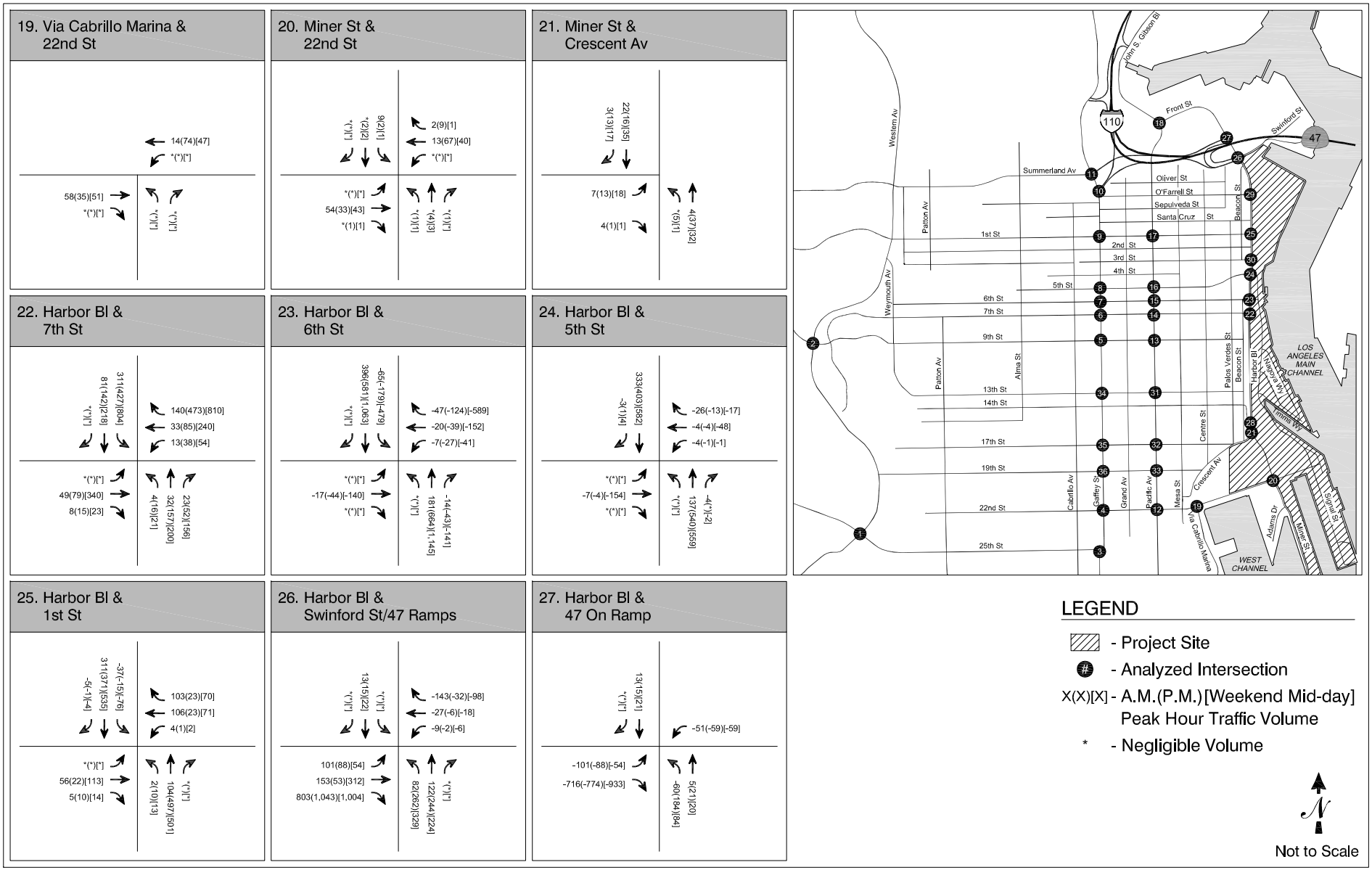
ALTERNATIVE 5 ONLY TRAFFIC VOLUMES (NO PROJECT, NEPA BASELINE) - 2037

FIGURE 42 (CONT.)



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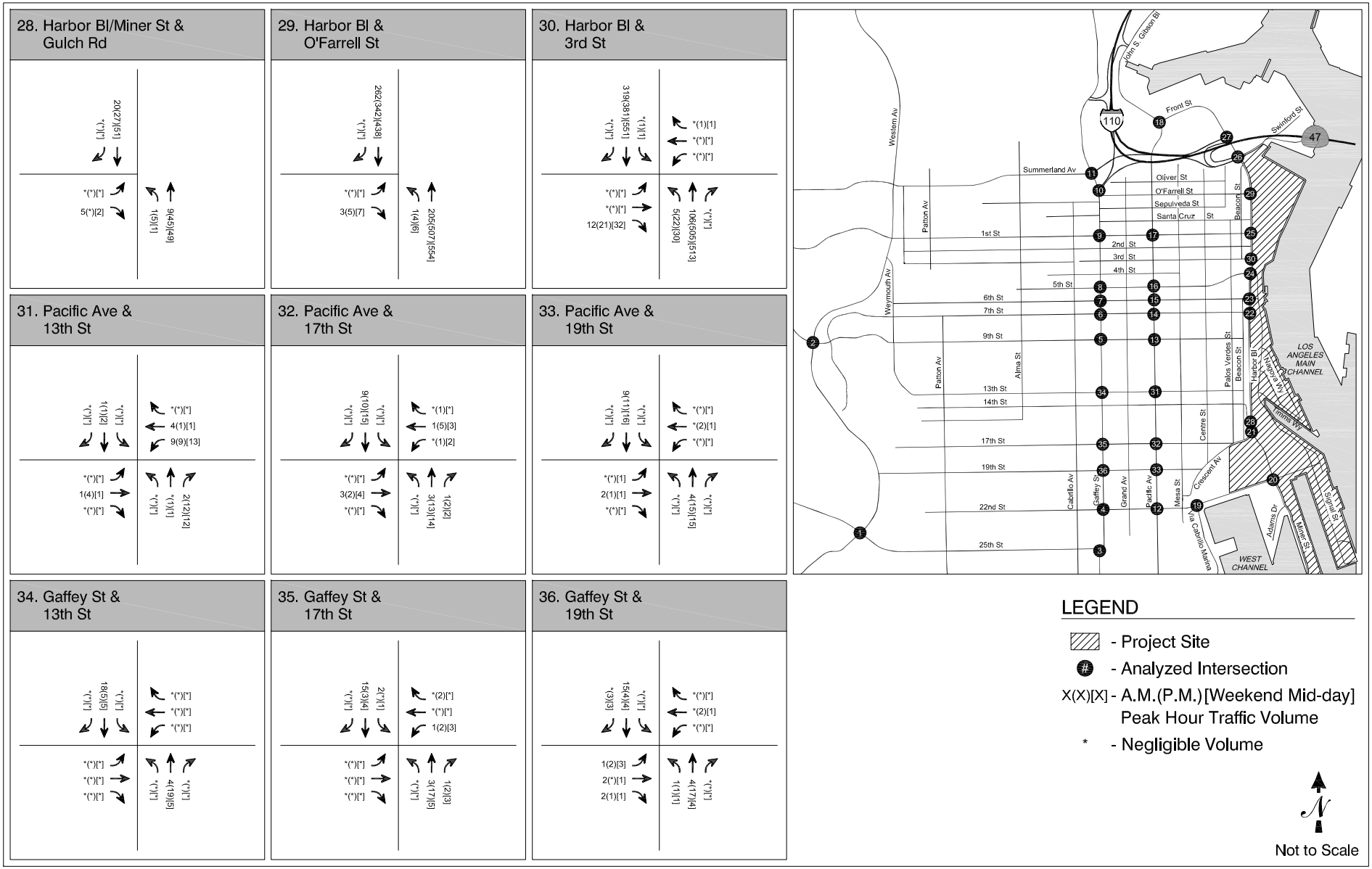
ALTERNATIVE 5 ONLY TRAFFIC VOLUMES (NO PROJECT, NEPA BASELINE) - 2037

FIGURE 42 (CONT.)



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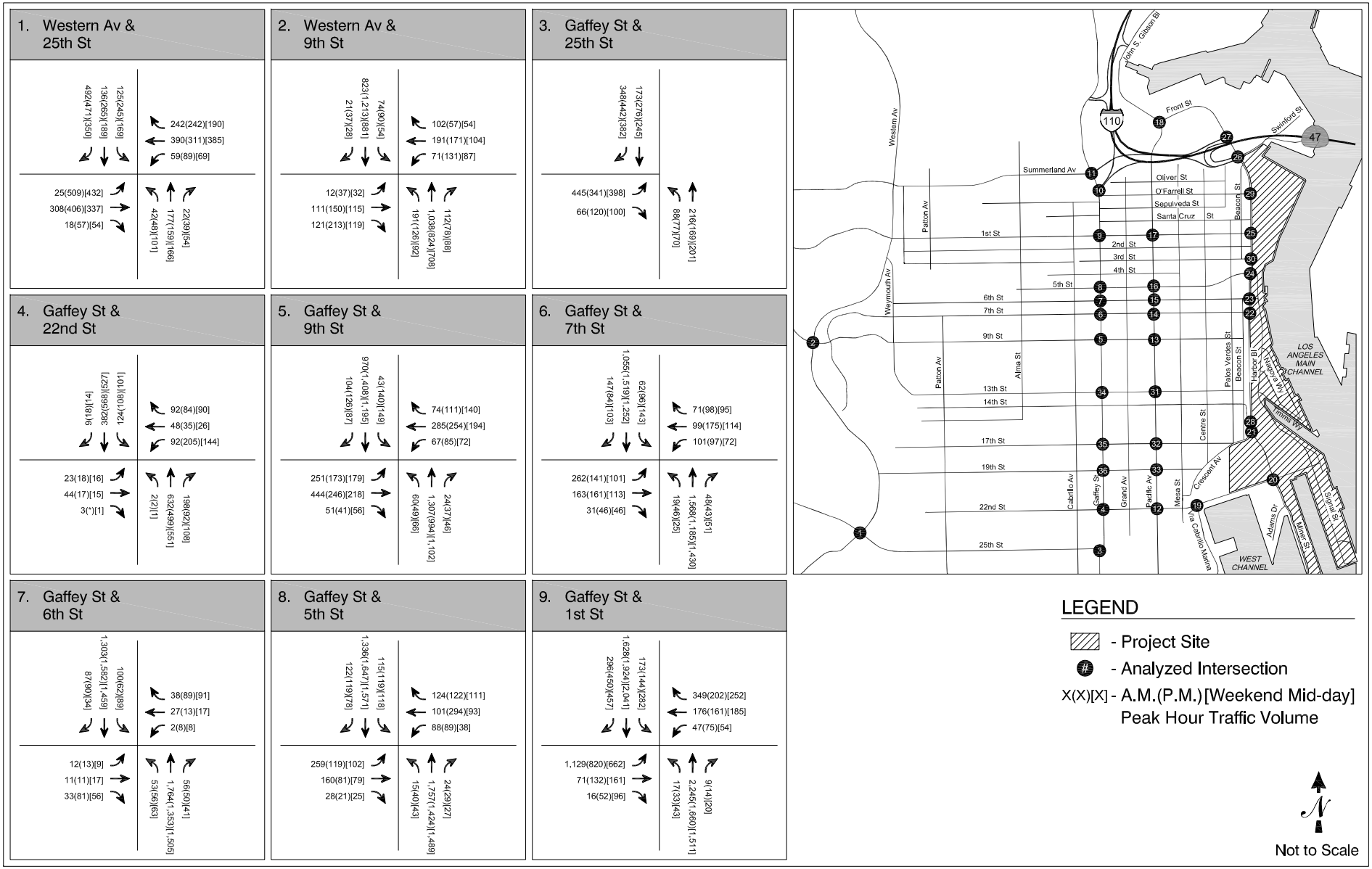
ALTERNATIVE 5 ONLY TRAFFIC VOLUMES (NO PROJECT, NEPA BASELINE) - 2037

FIGURE 42 (CONT.)



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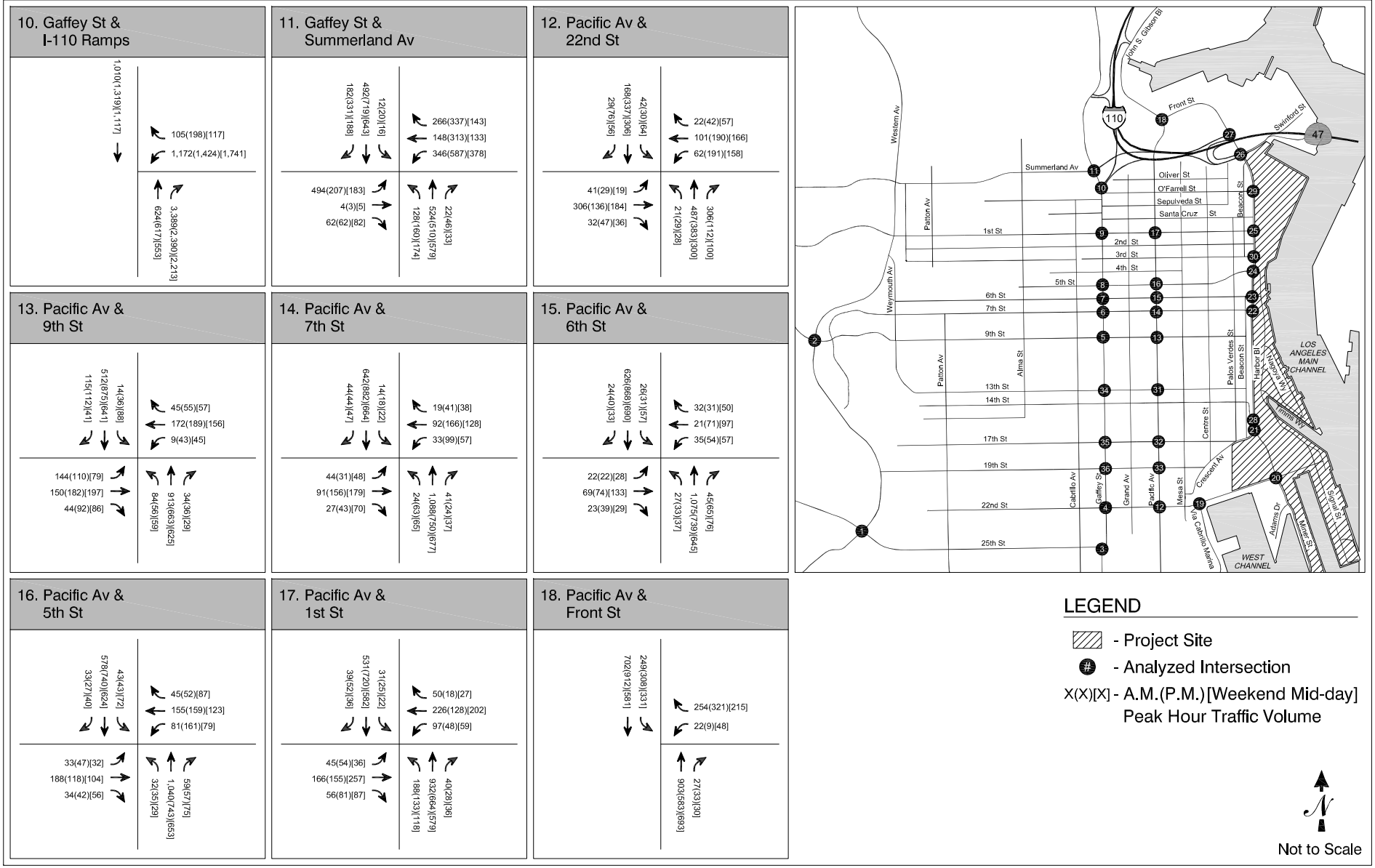
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 5 (NO PROJECT, NEPA BASELINE) - 2015

FIGURE 43



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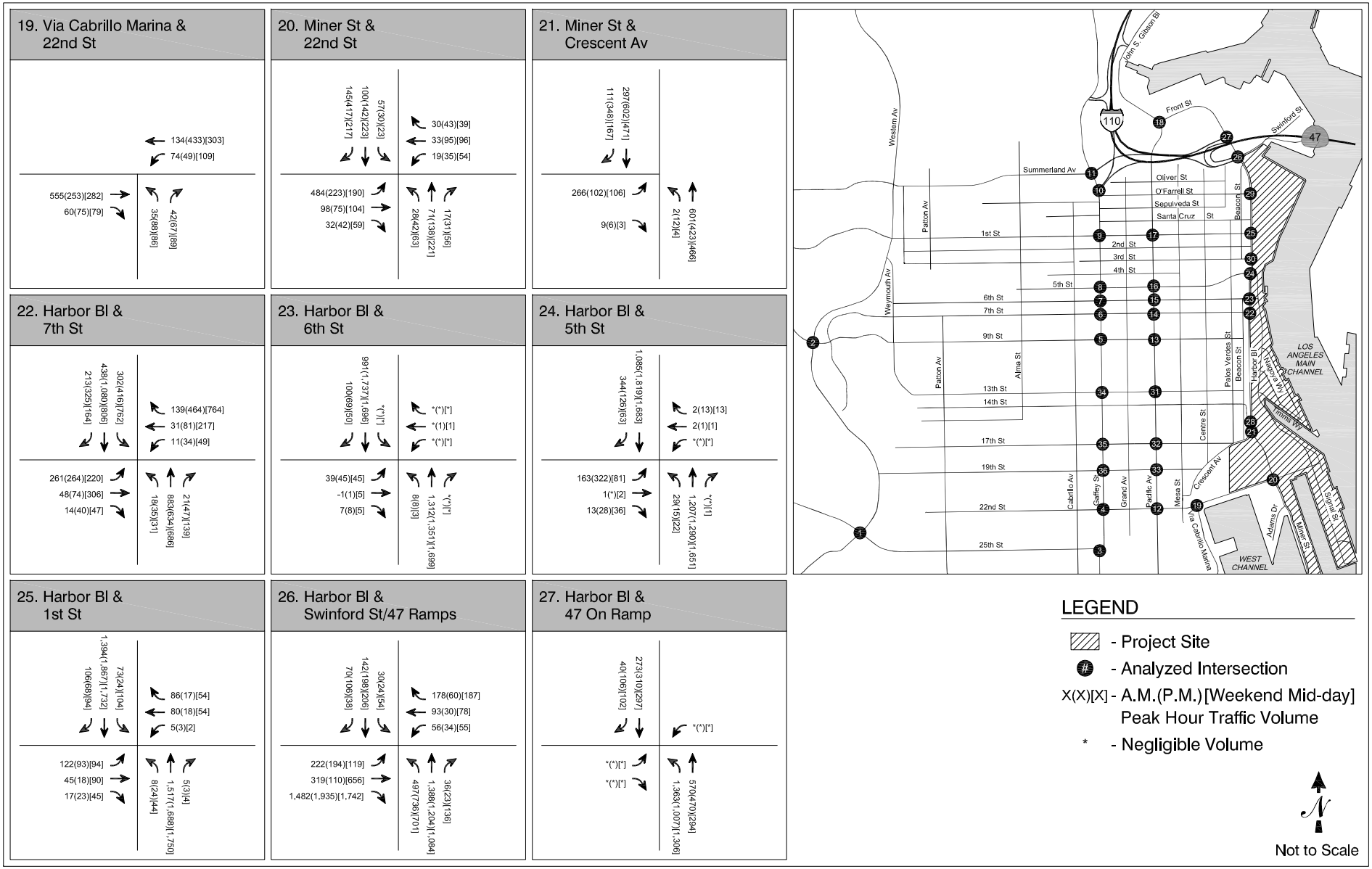
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 5 (NO PROJECT, NEPA BASELINE) - 2015

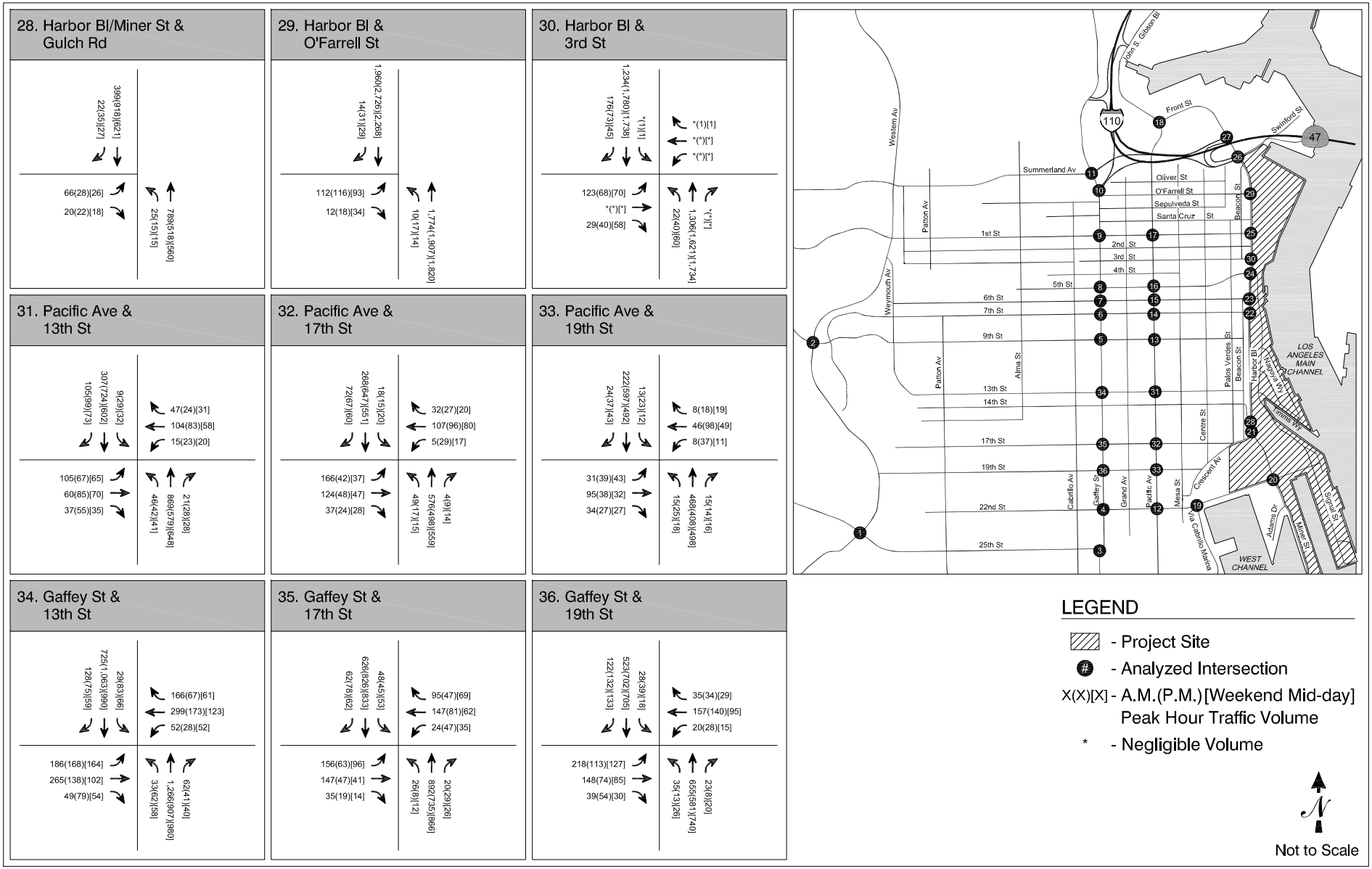
FIGURE 43 (CONT.)



FEHR & PEERS
KAKU ASSOCIATES

FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 5 (NO PROJECT, NEPA BASELINE) - 2015

FIGURE 43 (CONT.)



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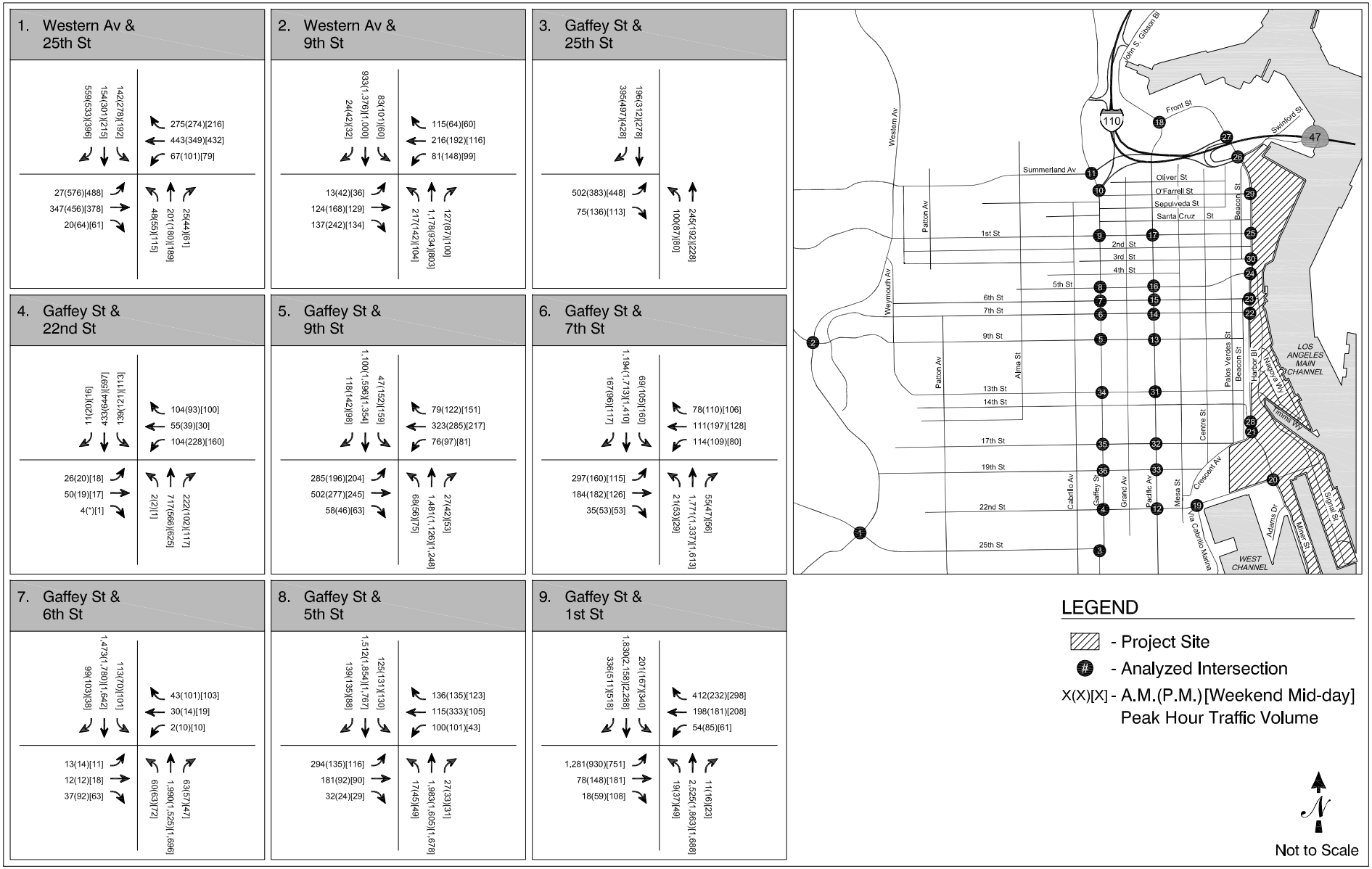
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 5 (NO PROJECT, NEPA BASELINE) - 2015

FIGURE 43 (CONT.)



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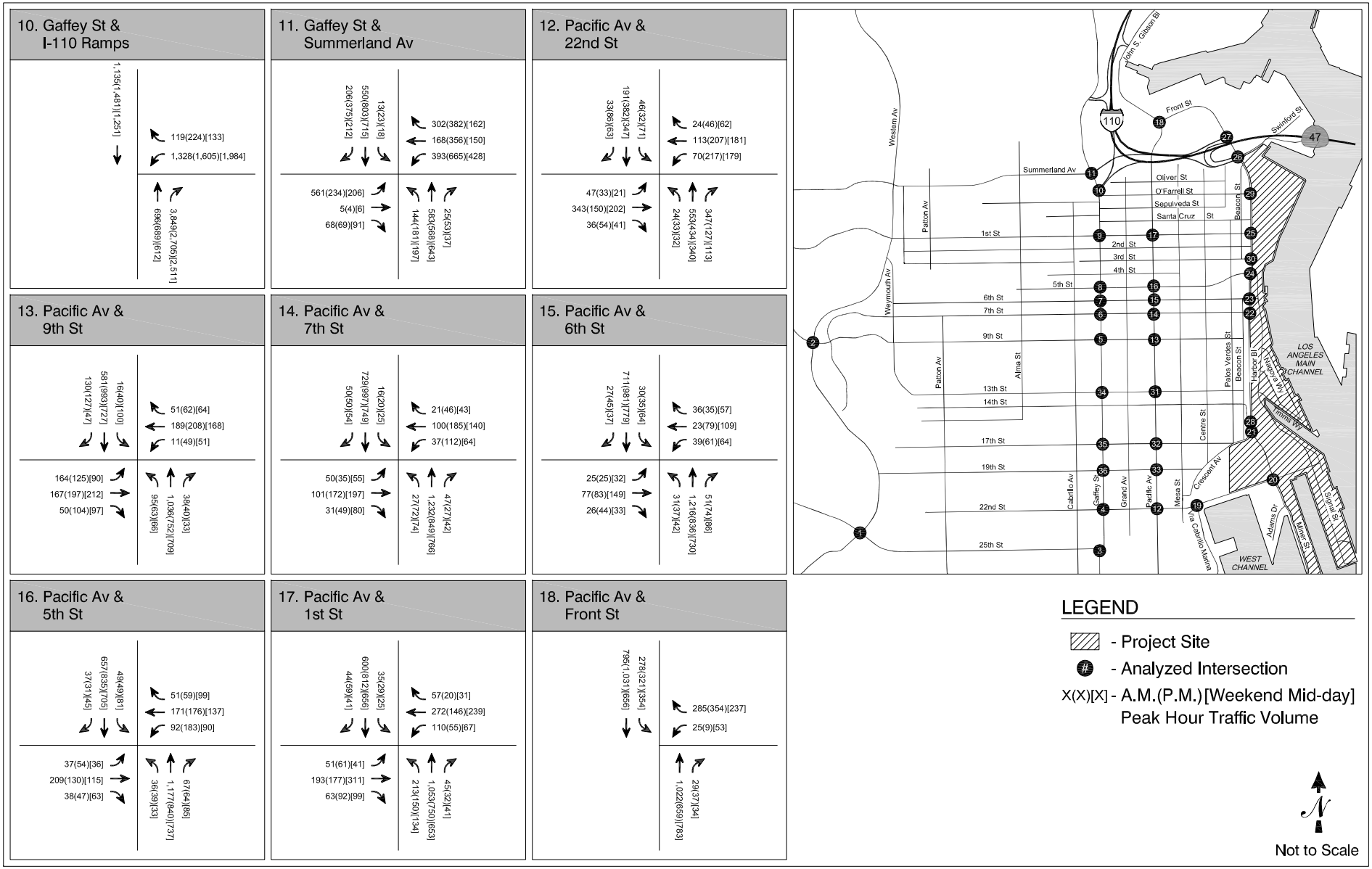
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 5 (NO PROJECT, NEPA BASELINE) - 2037

FIGURE 44



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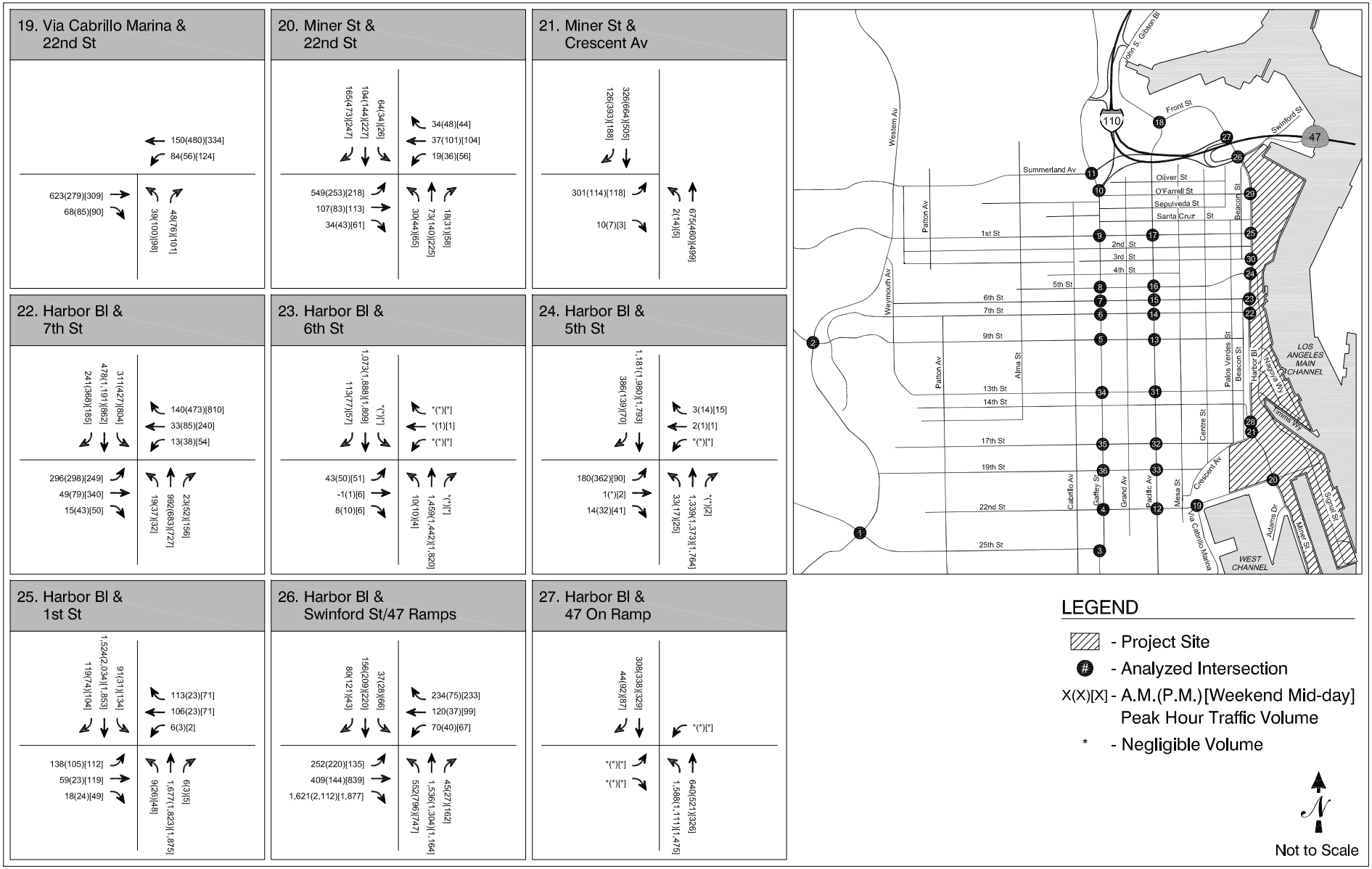
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 5 (NO PROJECT, NEPA BASELINE) - 2037

FIGURE 44 (CONT.)



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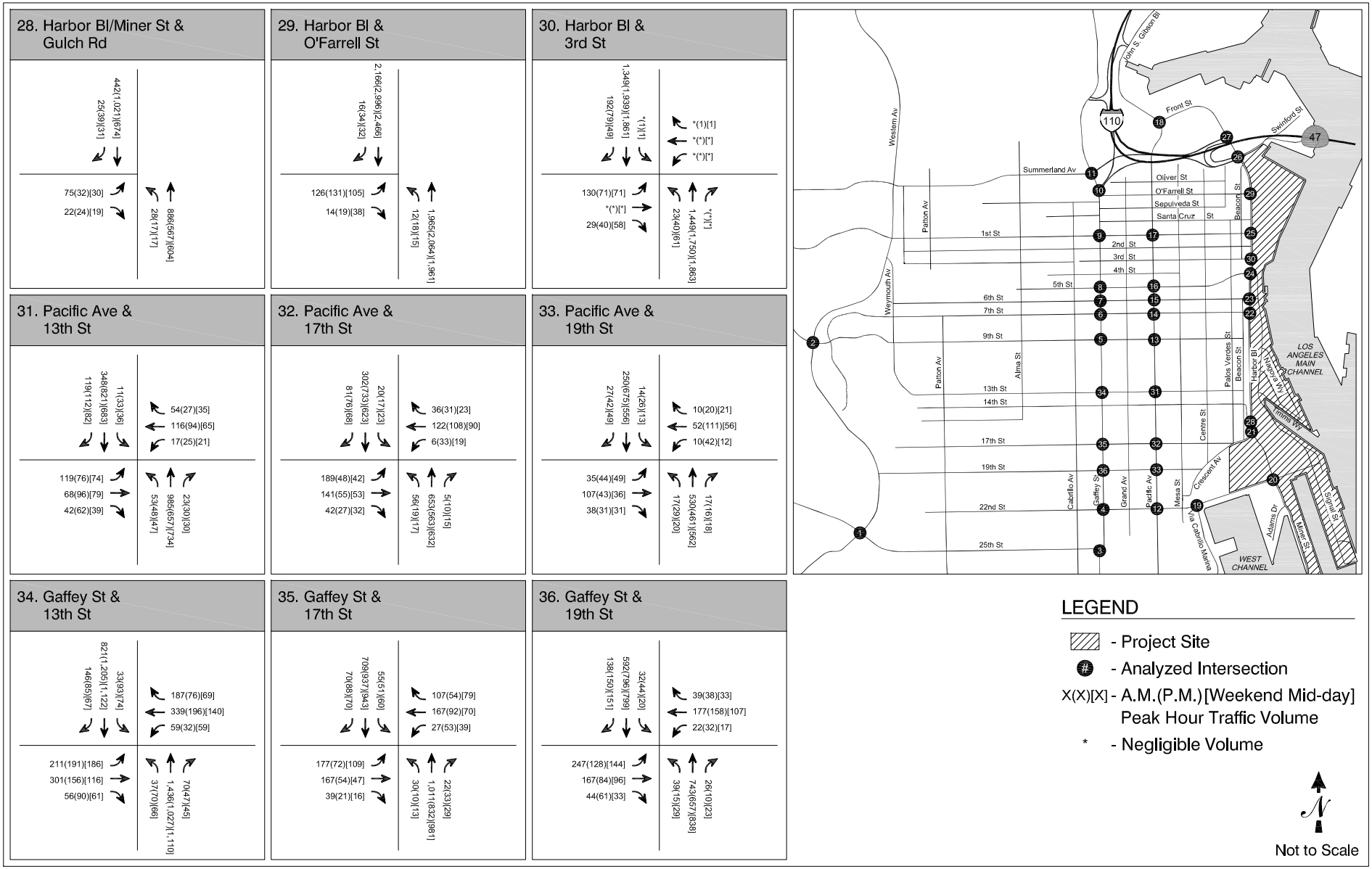
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 5 (NO PROJECT, NEPA BASELINE) - 2037

FIGURE 44 (CONT.)



FEHR & PEERS
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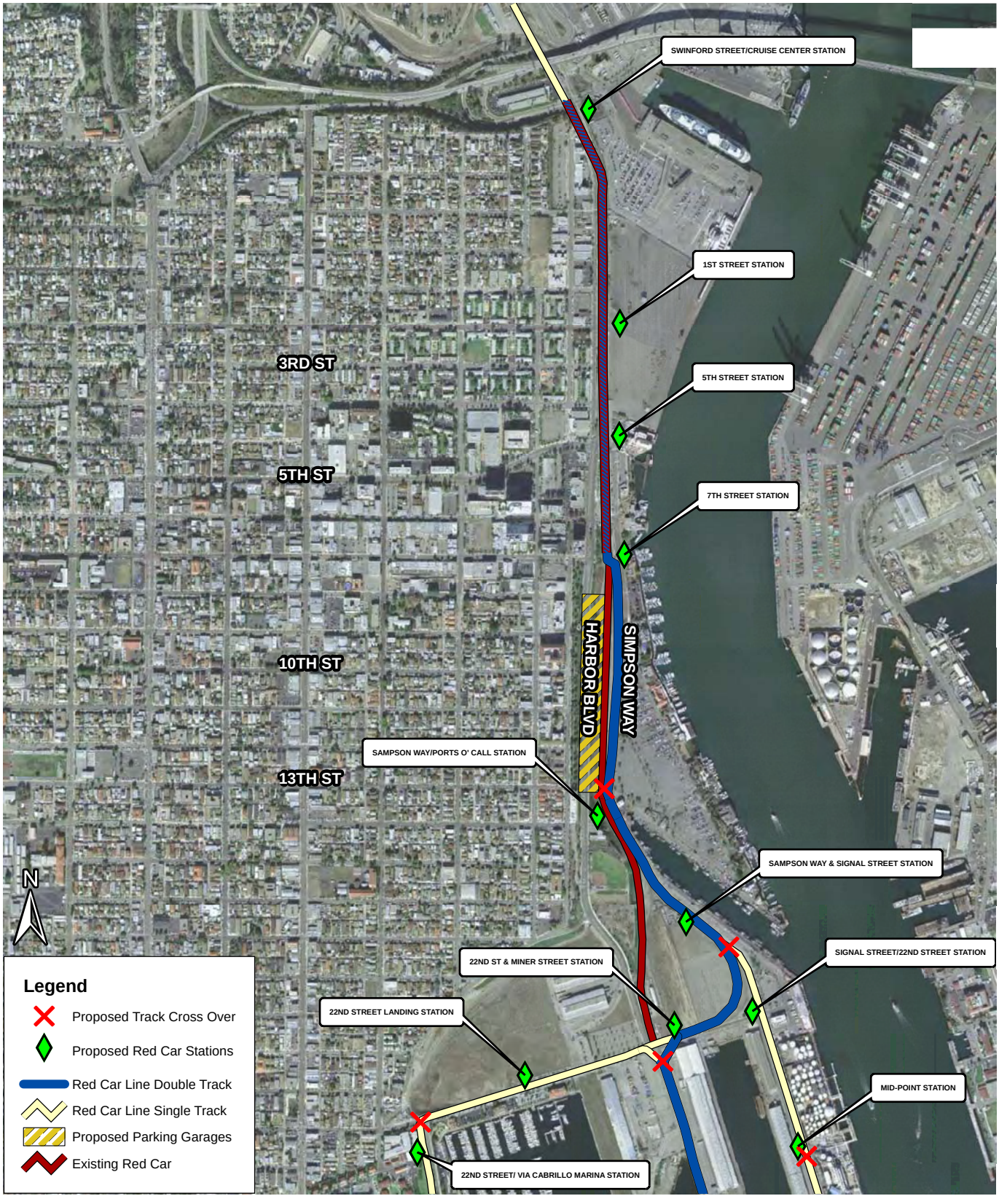
FUTURE TRAFFIC VOLUMES WITH ALTERNATIVE 5 (NO PROJECT, NEPA BASELINE) - 2037

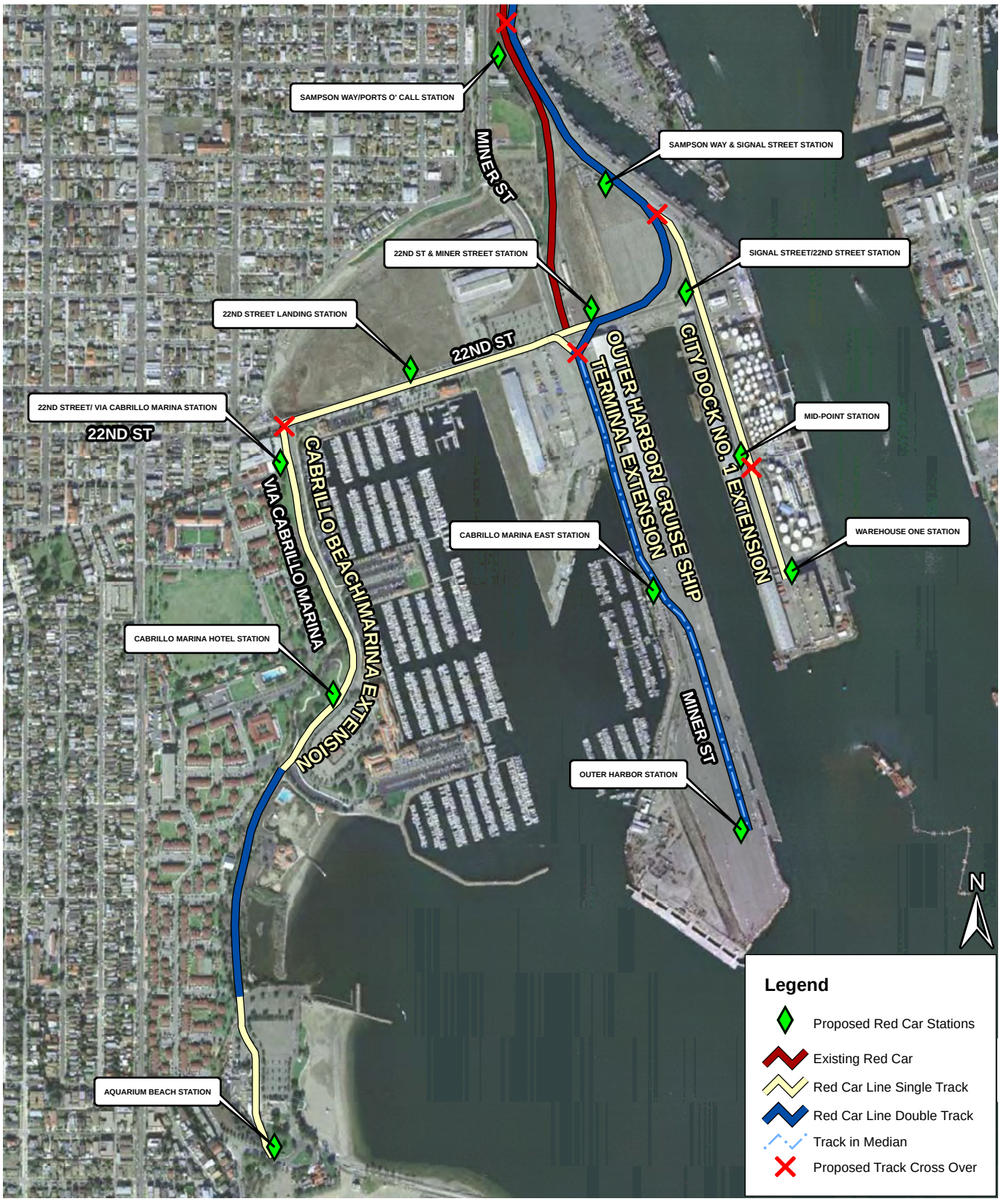
FIGURE 44 (CONT.)



FEHR & PEERS
TRANSPORTATION CONSULTANTS

PROPOSED WATERFRONT RED CAR EXPANSION - NORTHERN AREA

FIGURE 45



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TRANSPORTATION CONSULTANTS

PROPOSED WATERFRONT RED CAR EXPANSION - SOUTHERN AREA
FIGURE 46

TABLES

Table 1

Summary of the Proposed Project and Alternatives

Elements	*Existing Conditions (CEQA Baseline)*	*Proposed Project*	*Alternative 1*	*Alternative 2*	*Alternative 3 (Reduced Project)*	*Alternative 4*	*Alternative 5 (No-Federal-Action)—NEPA Baseline*	*Alternative 6 (No-Project)*
HARBORS, PROMENADE, AND OPEN SPACE								
Waterfront Promenade	Exists in Cabrillo Marina Phase I only; existing waterfront uses vary, including marina slips along the POC waterfront, SP Slip, Westway Terminal, City Dock No. 1 with warehouses, youth camp, and salt marsh	30-foot-wide multi-use path and boardwalk with landscaping, seating, lighting, railing, and pedestrian signage, implementing the California Coastal Trail; marinas in POC relocated to Cabrillo Marina Phase II; mudflat habitat shaded by deck plaza; "working" promenade to be developed along S.P. Slip; around City Dock No. 1 near Warehouse No. 1, in the Outer Harbor; would be elevated along the youth camp and the salt marsh	Same as proposed project	Same as proposed project, with the exception of the area near the youth camp and salt marsh where the promenade would extend along the east side of Shoshonean Way, rather than along the waterfront	Same as proposed project	Same as proposed project	No promenade over water at North Harbor, Downtown Harbor, 7th Street Harbor, 7th Street Pier, Ports O' Call, or City Dock No. 1; no change to mudflat at Berth 78; no relocation of marinas in Ports O'Call area. The promenade along the youth camp and salt marsh would extend along the east side of Shoshonean Way, rather than along the waterfront (as in Alternative 2)	No new promenade areas would be created; promenade would be created at Cabrillo Beach, along Shoshonean Drive, within Ports O'Call as the "Paseo" on the landside, and the Federal Breakwater (as approved under Waterfront Enhancements Project); no change to mudflat at Berth 78; no relocation of marinas in Ports O'Call area
North Harbor	Currently occupied by Berths 87–90, former omni terminal, currently used as occasional 3rd cruise berth	5.0-acre water cut to accommodate tugboats, visiting historic and naval vessels, and S.S. Lane Victory	5.0-acre water cut, with extended wharf	Same as proposed project	Same as proposed project	This project element is not included in Alternative No. 4; current use as a cruise berth will continue	This project element is not included in Alternative No. 5; current use as a cruise berth will continue	No development of North Harbor; current use as a cruise berth will continue
Downtown Harbor	Currently occupied by LAMI, Port vessels, Top Sail, Crowley tugboats, surface parking, and landscaping	1.50-acre water cut with modifications to Berth 86 to accommodate LAMI, Port vessels, other visiting ships; demolish temporary Top Sail facility, surface parking, and landscaping	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	This project element is not included in Alternative No. 5; current use by LAMI, Port vessels, Top Sail, surface parking, and landscaping will continue; Town Square will be developed as approved in the Waterfront Enhancements Project	No development of Downtown Harbor; current use by LAMI, Port vessels, Top Sail, surface parking, and landscaping will continue; Town Square will be developed as approved in the Waterfront Enhancements Project
7th Street Harbor	Porte-cochere and parking area for Acapulco Restaurant	0.32-acre water cut for visiting vessels	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	This project element is not included in Alternative No. 5; current use as Porte-cochere and parking area for Acapulco Restaurant would continue	No development of 7th Street Harbor; current use as Porte-cochere and parking area for Acapulco Restaurant would continue
7th Street Pier	Porte-cochere and parking area for Acapulco Restaurant	Public dock for short-term berthing of visiting vessels; demo part of Acapulco parking and floating dock; 12 slips replaced in Cabrillo Way Marina	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	This project element is not included in Alternative No. 5; current use as Porte-cochere and parking area for Acapulco Restaurant would continue	No development of 7th Street Pier; current use as Porte-cochere and parking area for Acapulco Restaurant would continue
Town Square	Currently occupied by parking for Maritime Museum and Top Sail	0.79-acre public plaza with decorative surface, promenade, and short-term surface parking	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Town Square will be developed as approved in the Waterfront Enhancements Project
Downtown Water Feature	Parking and circulation area near Maritime Museum	12,000-square-foot interactive water feature	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	No development of Downtown Water Feature; continued use as parking and circulation area near Maritime museum

Elements	*Existing Conditions (CEQA Baseline)*	*Proposed Project*	*Alternative 1*	*Alternative 2*	*Alternative 3 (Reduced Project)*	*Alternative 4*	*Alternative 5 (No-Federal-Action)—NEPA Baseline*	*Alternative 6 (No-Project)*
John S. Gibson Park	Existing memorial park	Landscaping improvements	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	No improvements to existing John S. Gibson Park
Pedestrian and Waterfront Access Linkages	Existing pedestrian waterfront access only at Ports O'Call and near Maritime Museum (not formalized)	Pedestrian crossing at Harbor Boulevard and Swinford Street; pedestrian bridge at 13th Street (land bridge using proposed Waterfront Red Car maintenance facility); pedestrian and waterfront access at 1st, 3rd, and 7th Streets; vehicular access at 1st Street	Same as proposed project	Same as proposed project	Pedestrian crossing at Harbor Boulevard and Swinford Street; pedestrian crossing w/o museum; pedestrian and waterfront access at 1st, 3rd, and 7th Streets; vehicular access at 1st Street	Same as proposed project	Pedestrian crossing at Harbor Boulevard and Swinford Street; pedestrian bridge at 13th Street (land bridge using proposed Waterfront Red Car maintenance facility); pedestrian access at 1st, 3rd, and 7th Streets	No improvements to pedestrian and waterfront linkages
Fishermen's Park	Existing underutilized commercial structures in Ports O'Call	3 acres within POC	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	No development of Fishermen's Park in Ports O'Call
Outer Harbor Park	Existing omni terminal	6-acre open space park with landscaping, hardscape, lighting, and benches	Same as proposed project	6-acre park to be constructed on top of Outer Harbor Terminal Parking Structure	Same as proposed project	Same as proposed project	Same as proposed project	No development of Outer Harbor Park
San Pedro Park	Underutilized vacant land, existing Waterfront Red Car maintenance facility; Warehouses No. 9 and 10; temporary special event overflow parking	16.4 acres with landscaping and hardscape areas (expansion of approved 22nd Street Park under the Waterfront Enhancements Project)	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	No development of San Pedro Park
Reuse of Warehouses Nos. 9 and 10	Existing warehousing operations for Crescent Warehouse	Reuse for community-serving commercial uses that would complement the recreational uses of San Pedro Park; approximately 35,000 square feet of Warehouse No. 9 would include a public *mercado* or weekend farmer's market type of use; no specific use identified for the remaining portion of Warehouse No. 9; Warehouse No. 10 would be used for parking and is expected to accommodate approximately 200 spaces for the users of Warehouse No. 9.	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Warehouse operations would continue into the foreseeable future; may be vacated in the future with no reuse

Elements	*Existing Conditions (CEQA Baseline)*	*Proposed Project*	*Alternative 1*	*Alternative 2*	*Alternative 3 (Reduced Project)*	*Alternative 4*	*Alternative 5 (No-Federal-Action)—NEPA Baseline*	*Alternative 6 (No-Project)*
NEW DEVELOPMENT AND EXISTING TENANTS								
CRUISE SHIP FACILITIES								
Berths and Terminal Facilities								
Cruise Berths	2 Inner Harbor permanent berths and 1 occasional Inner Harbor 3rd berth Berth 93—1,000 lf Berths 91–92—1,000 lf Berths 87–90—1,000 lf	2 Inner Harbor with no construction; 2 Outer Harbor with new catwalk at Berths 45–47; and wharf extension at Berths 49–50 Berth 93—1,000 lf Berths 91–92—1,250 lf Berths 45–47—1,250 lf Berths 49–50—1,250 lf	2 Inner Harbor; 1 Outer Harbor Berth 93—1,000 lf Berths 91–92—1,250 lf Berths 87–90—540 lf (not useable as a cruise berth) Berths 45–47—1,250 lf	Same as proposed project Berth 93—1,000 lf Berths 91–92—1,250 lf Berths 45–47—1,250 lf Berths 49–50—1,250 lf	2 Inner Harbor; 1 Outer Harbor Berth 93—1,000 lf Berths 91–92—1,250 lf Berths 45–47—1,250 lf	3 Inner Harbor; no Outer Harbor berths Berth 93—1,000 lf Berths 91–92—1,000 lf Berths 87–90—1,000 lf	3 Inner Harbor berths remain (no new wharf work); no Outer Harbor berths; Berth 46 continues as a lay berth Berth 93—1,000 lf Berths 91–92—1,000 lf Berths 87–90—1,000 lf	3 Inner Harbor berths remain; no Outer Harbor berths; Berth 46 continues as a lay berth Berth 93—1,000 lf Berth 91–92—1,000 lf Berths 87-90—1,000 lf
Inner Harbor Terminals	2 existing terminals serving 2 permanent and 1 occasional-use Inner Harbor berths at 87—93	No change to Inner Harbor Terminals	Demolish berth 91 terminal; rebuild 200,000-square-foot terminal to serve Berths 91–92	Same as proposed project	Same as proposed project	Demolish Berth 91 terminal; rebuild 200,000-square-foot terminal to serve Berths 91 and 87	Demolish B 91 terminal and rebuild 200,000-square-foot terminal to serve Berths 91 and 87	Existing baggage handling facility could act as terminal for existing Berth 87
Outer Harbor Terminal	Existing omni terminal	Two new 100,000-square-foot terminals serving two berths	New 100,00-square-foot terminal serving 1 berth	Same as proposed project	New 100,000-square-foot terminal serving 1 berth	No Outer Harbor terminal	This project element is not included in Alternative No. 5; existing omni terminal would remain operational	No development of Outer Harbor Terminal; existing omni terminal would remain operational
Parking for Cruise Ships								
Inner Harbor Parking (Berths 91–93)	Existing cruise surface parking	4,000 spaces of surface parking and new 3-level structure (dedicated to Catalina and Inner and Outer Cruise Terminals) covering a 10.7-acre footprint	3,325 spaces in new 3-level structure covering 9.4-acre footprint	2,900 spaces in new 3-level structure covering 7.8-acre footprint	3,500 spaces in new 3-level structure covering 9.4-acre footprint	3,700 spaces in new 3-level structure covering a 9.9-acre footprint	3,500 spaces in new 3-level structure covering 9.4-acre footprint	No new parking structures would be developed; existing surface parking remains
Outer Harbor Parking	Existing omni terminal	400 surface parking spaces (dedicated to non-passengers)	200 surface parking spaces (dedicated to non-passengers)	1,500 spaces in new 2-level (1-story) structure; 6-acre Outer Harbor Park to be located on top of parking structure	200 surface spaces (dedicated to non-passengers)	Surface parking to support 6-acre Outer Harbor park only (approximately 60 spaces)	Surface parking to support 6-acre Outer Harbor park only (approximately 60 spaces)	No parking would be provided since no Outer Harbor Park would be constructed
Catalina Express Parking	Approximately 1,000 spaces under Vincent Thomas Bridge, shared with World Cruise Center	700 surface spaces under VT Bridge and 300 surface spaces shared with Inner Harbor Cruise Terminal	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Shared parking with existing cruise facilities would continue

Elements	*Existing Conditions (CEQA Baseline)*	*Proposed Project*	*Alternative 1*	*Alternative 2*	*Alternative 3 (Reduced Project)*	*Alternative 4*	*Alternative 5 (No-Federal-Action)—NEPA Baseline*	*Alternative 6 (No-Project)*
PORTS O'CALL REDEVELOPMENT								
Development	Existing 150,000 square feet of commercial use and restaurants, surface parking	Redevelop 150,000 square feet of existing development and add 150,000 square feet of new development; new 75,000-square-foot conference center (total of 375,000-square-foot of development)	Same as proposed project	Same as proposed project	Demo and rebuild 40,000 square feet at Ports O'Call and add 37,500 square feet of new development (total of 187,500 square feet of development)	Same as proposed project	Same as proposed project	No new development or redevelopment in Ports O'Call
Parking	Existing POC surface parking; S.P. Railyard at bluffs	Berths 78–83: 400 surface (dedicated to POC and Downtown Harbor) Bluff Site: 1,692 spaces in four new 4-level structures dedicated to POC Berths 73–77: 330 existing surface spaces dedicated to POC 22nd Street & Sampson Way: 256 new surface spaces dedicated to POC	Same as proposed project	Same as proposed project	Existing parking accommodates all POC and Downtown Harbor; no new surface or structure parking to be provided	Same as proposed project	Same as proposed project	No new parking in Ports O'Call; displaced parking that would occur under the Waterfront Enhancements Project for the "Paseo" would be provided at proposed lot at 22nd Street/Sampson Way
Southern Pacific Railyard Demolition	Railyard at bluff site adjacent to Ports O'Call between 6th Street and S.P. Slip used for storage of rail cars (primarily for Westway Terminal operations)	Removal of rail tracks for bluff parking	Same as proposed project	Same as proposed project	Removal of rail tracks; no bluff parking structures provided.	Same as proposed project	Same as proposed project	SP Railyard would remain in place; no storage of rail cars or use by Westway after Westway vacates in 2009
Waterfront Red Car Maintenance Facility (and Museum)	Maintenance facility currently exists near the intersection of Miner and 22nd Streets	17,600 square feet maintenance facility to be developed at 13th Street within S.P. Railyard bluff site; Waterfront Red Car museum would be located outside of the project area	Waterfront Red Car museum and maintenance facility would be located within Warehouse No. 1	Same as proposed project	Maintenance facility would be same as proposed project; museum would be developed in S.P. Railyard near 7th Street	Maintenance facility would be same as proposed project; museum would be developed in S.P. Railyard near 7th Street	Same as proposed project	No new maintenance facility; existing Waterfront Red Car maintenance facility would remain at Miner Street/22nd Street
Ralph J. Scott Fireboat Museum	Fireboat is currently stored on land adjacent to Fire Station No. 112 at Berth 87	10,000-square-foot multi-level display south of Fire Station No. 112	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Fireboat would continue to remain in temporary location on land adjacent to Fire Station No. 112 at Berth 87	Fireboat would continue to remain in temporary location on land adjacent to Fire Station No. 112 at Berth 87
Westway Terminal Demolition	13-acre liquid bulk terminal at Berth 65	Demolition of existing facilities following closure by February 2009; future redevelopment for recreational and/or commercial and/or institutional use	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Demolition of existing facilities following closure by February 2009

Elements	*Existing Conditions (CEQA Baseline)*	*Proposed Project*	*Alternative 1*	*Alternative 2*	*Alternative 3 (Reduced Project)*	*Alternative 4*	*Alternative 5 (No-Federal-Action)—NEPA Baseline*	*Alternative 6 (No-Project)*
Tugboats	Existing tugboat operations by Crowley and Millennium; Crowley building located near Fire Station No. 112; Crowley tugboats located at Berth 86; Millennium Tugs at Berth 195; offices at 300 E. Water Street	Lease renewals and construction of two 10,000-square-foot buildings around the North Harbor; tugboat fleets to be located in the North Harbor	Same as proposed project	Same as proposed project	Same as proposed project	Crowley and Millennium Tugboat operations are relocated to the Westway Terminal at Berths 70–71, and offices will reuse Westway building and/or expand existing building and/or construct new office building	Crowley and Millennium Tugboat operations are relocated to the Westway Terminal at Berths 70–71, and offices will reuse Westway building and/or expand existing building and/or construct new office building	Existing tugboat operations remain in their respective locations with no waterside improvements
Los Angeles Maritime Institute	Existing operations out of temporary trailer near Berth 86	Lease renewal and reuse of existing Crowley Tugboat building	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Lease renewal and existing operations out of Top Sail temporary building	Lease renewal and existing operations out of Top Sail temporary building
S.S. Lane Victory	Existing location at Berth 94 with temporary trailer for administrative activities	Relocation from Berth 94 to North Harbor; New 10,000-square-foot structure and lease renewal	Same as proposed project	Same as proposed project	Same as proposed project	Relocate from Berth 94 to Ports O' Call	Remains in existing location at Berth 94	Remains in existing location at Berth 94
Jankovich & Son, Inc. Fueling Station	Existing marine oil serve station and storage facility in Ports O'Call at Berth 74; 8 aboveground tanks hold ultra-low-sulfur diesel, biodiesel, gasoline, and kerosene; lease expires in 2007	20-year lease renewal in existing location; upgrades to tanks, establishment of temporary tank farm near Ports O' Call during construction	Relocation to Terminal Island (Berth 240) and 20-year lease renewal	Relocation to Terminal Island (Berth 240) and 20-year lease renewal	Same as proposed project	Relocation to Terminal Island (Berth 240) and 20-year lease renewal	Jankovich Company continues in existing location on holdover; no lease renewal or upgrades	Jankovich Company continues in existing location on holdover; no lease renewal or upgrades
Mike's Main Channel Fueling Station	Existing operations in Ports O'Call near S.P. Slip entrance; currently on a month-to-month lease	10-year lease renewal at existing location	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	No lease renewal/holdover
Catalina Express/Island Express	Current operations at Berth 96; required to relocate as a result of displacement under the China Shipping Project to Berth 95 (temporary location)	Relocation from Berth 96 or Berth 95 to Berth 94 in existing S.S. Lane Victory location on a permanent basis; relocate 8,500-gallon fueling dock; build 8,000 square feet of floating docks to accommodate 8–10 vessels; Island Express Helicopters to remain in place at Berth 95	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Remains in place at Berth 95 following the temporary move per China Shipping agreement	Remains in place at Berth 95 following the temporary move per China Shipping agreement
TRANSPORTATION IMPROVEMENTS								
Sampson Way Expansion	Currently a 2-lane roadway from 6th Street through Ports O'Call extending to 22nd Street near the Municipal Fish Market	Expansion to 2 lanes each direction from 7th Street, with curve near Municipal Fish Market to meet with 22nd Street, with Waterfront Red Car tracks on the side	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	No expansion of Sampson Way; remains 1 lane in each direction between 6th and 22nd Streets with no improvements

Elements	*Existing Conditions (CEQA Baseline)*	*Proposed Project*	*Alternative 1*	*Alternative 2*	*Alternative 3 (Reduced Project)*	*Alternative 4*	*Alternative 5 (No-Federal-Action)—NEPA Baseline*	*Alternative 6 (No-Project)*
7th Street/ Sampson Way Intersection Improvements	Currently the intersection at 7th Street is a 3-way intersection, with no access from Harbor Boulevard	Enhanced intersection with modification of 6th Street connection, eliminating access to Sampson Way from Harbor at 6th Street	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	No construction of 7th Street/Sampson Way improvements; access to Sampson Way from Harbor Boulevard remains at 6th Street
Harbor Boulevard	Currently 2 lanes in each direction from Swinford to 22nd Street	Harbor Boulevard remains at existing capacity with 2 lanes in each direction; landscaping improvements on west side of Harbor Boulevard south of 7th Street, and in the median starting at the Swinford intersection south to 22nd Street; Waterfront Red Car is side running	Harbor Boulevard reduced to 1 lane southbound, with northbound cul-de-sac at 13th Street with viaduct extending Crescent Avenue to Sampson Way; landscaping improvements on west side of Harbor Boulevard south of 7th Street, and in the median starting at the Swinford intersection south to 22nd Street	Harbor Boulevard reduced to 1 lane southbound, with northbound cul-de-sac at 13th Street with viaduct extending Crescent Avenue to Sampson Way; landscaping improvements on west side of Harbor Boulevard south of 7th Street, and in the median starting at the Swinford intersection south to 22nd Street	Harbor Blvd. reduced to 1 lane each way with greenbelt; No Crescent/Sampson connection; landscaping improvements on west side of Harbor Blvd. south of 7th Street, and in the median starting at the Swinford intersection south to 22nd Street	Same as proposed project	Same as proposed project	Harbor Boulevard remains at existing capacity with no other improvements
Surface Parking Adjacent to Acapulco	Existing Sampson Way and circulation area	New 138-space surface parking lot adjacent to Acapulco to serve Downtown Harbor, Town Square, and Acapulco restaurant uses	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	Same as proposed project	No new parking lot would be constructed
Waterfront Red Car Extension	Waterfront Red Car currently extends from Swinford to 22nd Street along the east side of Harbor Boulevard, through the existing S.P. Railyard to the Maintenance Facility	Waterfront Red Car Extension to Cabrillo Beach, Outer Harbor, and City Dock #1	Same as proposed project	Same as proposed project except along Shoshonean Way where the alignment would be along the west side of the roadway, rather than in the roadway with vehicular right-of-way.	Same as proposed project	Same as proposed project	Same as proposed project	Waterfront Red Car would not be extended under the proposed project

TABLE 2
EXISTING SURFACE STREET CHARACTERISTICS

SEGMENT	FROM	TO	LANE		MEDIAN	PARKING RESTRICTIONS		SPEED
			NB/EB	SB/WB	TYPE	NB/EB	SB/WB	LIMIT
5th St	Cabrillo Av	Grand Av	1	1	SDY	PA	PA	30
	Grand Av	Pacific Av	1	1	SDY	PA 2hr(8a-6p)/NSAT	NSAT/PA 2hr(8a-6p)	30
	Pacific Av	Mesa St	1	1	2LT	PA 2hr(9a-5p)	PA 2hr(9a-5p)	30
	Mesa St	Palos Verdes St	2	2	2LT	MP 2hr(9a-5p)	MP 2hr(9a-5p)	30
	Palos Verdes St	Harbor Bl	2	2	2LT	PA	PA	30
6th St	Cabrillo Av	Gaffey St	1	1	SDY	PA	PA	30
	Gaffey St	Pacific Av	1	1	SDY	MP 2hr(8a-6p)	MP 2hr(8a-6p)/PA	30
	Pacific Av	Centre St	1	1	SDY	MP 2hr(9a-5p)	MP 2hr(9a-5p)	30
	Centre St	Palos Verdes St	1	1	SDY	NSAT/MP 1hr(8a-6p)	NSAT/MP 2hr(8a-6p)	30
	Palos Verdes St	Beacon St	1	1	SDY	NSAT	MP 2hr(8a-6p)	30
	Beacon St	Harbor Bl	1	1	SDY	MP 1hr(8a-6p)	MP 2hr(8a-6p)	30
7th St	Cabrillo Av	Gaffey St	1	1	SDY/DY	PA	PA	30
	Gaffey St	Grand Av	1	1	SDY/DY	MP 2hr(8a-6p)	PA	30
	Grand Av	Pacific Av	1	1	SDY/DY	MP 30min,1hr,2hr(8a-6p)	MP 2hr(8a-6p)	30
	Pacific Av	Palos Verdes St	1	1	2LT	MP 2hr(9a-5p)	MP 30min,2hr(9a-5p)	30
	Palos Verdes St	Harbor Bl	1	1	2LT	MP 2hr(8a-6p)	MP 2hr(9a-5p)	30
9th St	Western Av	Dodson Av	1	1	2LT	PA	PA	25/35
	Dodson Av	Meyler St	1	1	DY	PA	PA	35
	Meyler St	Cabrillo Av	1	1	DY	PA 2hr(8a-6p)	PA 2hr(8a-6p)	35
	Cabrillo Av	Gaffey St	1	1	DY	MP 2hr(8a-6p)	PA	35
	Gaffey St	Pacific Av	1	1	SDY	MP 2hr(8a-6p)	MP 2hr(8a-6p)/PA	25
	Pacific Av	Mesa St	1	1	SDY	MP 2hr(9a-5p)	PA/MP 2hr(9a-5p)	25
	Mesa St	Palos Verdes St	1	1	SDY	PA	PA 1hr(8a-6p)/PA	25
	Palos Verdes St	Beacon St	1	1	SDY	MP 2hr(9a-5p)	MP 2hr(9a-5p)	25
13th St	Cabrillo Av	Gaffey St	1	1	DY	PA	PA	25
	Gaffey St	Pacific Av	1	1	SDY	PA	PA 2hr(8a-6p)/PA	25
	Pacific Av	Mesa St	1	1	SDY	PA 1hr(8a-6p)/PA	PA	25
	Mesa St	Beacon St	1	1	SDY	PA	PA	25
22nd St	Cabrillo Av	Pacific Av	1	1	SDY	PA	PA	25
	Pacific Av	Mesa St	1	1	SDY	PA 1hr(8a-6p)/PA	PA	25
	Mesa St	Via Cabrillo Marina	2	2	2LT	NSAT	NSAT	25
	Via Cabrillo Marina	Outer St	2	2	DY	PA/MP 3hr(10a-10p)/NSAT	NSAT	25
	Outer St	Miner St	2	2	DY	NSAT	NSAT	25
	Miner St	Sampson Way&Signal St	2	2	2LT	NSAT	NSAT	25
	Sampson Way&Signal St	Signal Pl	2	2	2LT	NSAT	NSAT	25
25th St	Gaffey St	Cabrillo Av	1	1	2LT	NSAT	PA	35
	Cabrillo Av	Patton St	1	1	2LT	PA	PA	35
	Patton St	Western Av	2	2	2LT	NSAT	NSAT	35
	Western Av	Moray Av	2	1	2LT	PA/NSAT	NSAT	35
	Moray Av	Mermaid Dr	2	1	2LT	PA	PA	35/40
	Mermaid Dr	Catalina Vis	1	1	2LT/DY	NSAT/NS (6-9a,3-7p)	NSAT	45

TABLE 2
EXISTING SURFACE STREET CHARACTERISTICS

SEGMENT	FROM	TO	LANE		MEDIAN	PARKING RESTRICTIONS		SPEED
			NB/EB	SB/WB	TYPE	NB/EB	SB/WB	LIMIT
Palos Verdes Dr	Catalina Vis	Seacliff Dr	1	1	DY/RM	NSAT	NSAT	45
Gaffey St	30th St	23rd St	1	1	DY	PA	PA	35
	23rd St	22nd St	2	1	DY	PA	PA	35
	22nd St	18th St	2	2	DY	PA	PA	35
	18th St	17th St	2	2	DY	PA 1hr(8a-6p)	NSAT	35
	17th St	15th St	2	2	DY	PA	PA 1hr(8a-6p)	35
	15th St	14th St	2	2	DY	PA 1hr(8a-6p)	PA 1hr(8a-6p)	35
	14th St	13th St	2	2	DY	RZ/PA	PA 1hr(8a-6p)	35
	13th St	12th St	2	2	DY	PA 1hr(8a-6p)	RZ	35
	12th St	11th St	2	2	DY	PA 1hr(8a-6p)	PA 1hr(8a-6p)	35
	11th St	9th St	2	2	2LT	PA 1hr(8a-6p)	NSAT/RZ	35
	9th St	7th St	2	2	2LT	PA 1hr(8a-6p)	PA 1hr(8a-6p)	35
	7th St	6th St	2	2	2LT	PA 1hr(8a-6p)	PA 30min(8a-6p)	35
	6th St	5th St	2	2	2LT	PA 1hr(8a-6p)	PA 1hr(8a-6p)	35
	5th St	3rd St	2	2	2LT	PA 1hr(9a-4p)	NS(7a-7p)	35
	3rd St	1st St	3/2	3/2	2LT	PA 1hr(9a-4p)	NS(7a-7p)	35
	1st St	Santa Cruz St	3	3/2	2LT	NSAT	NS(3-7p)/NSAT	35
	Santa Cruz St	Sepulveda St	4	3/2	RM	NSAT	NS(3-7p)	35
	Sepulveda St	I-110	4	3/2	RM	NSAT	NS(3-7p)	35
	I-110	Summerland Av	2	3	2LT	NSAT	NSAT	35
	Summerland Av	Channel St	2	2	2LT	NSAT	NSAT	40
Pacific Av	30th St	26th St	1	1	2LT	PA	PA	35
	26th St	Hamilton Av	1	1	2LT	NSAT	PA	35
	Hamilton Av	22nd St	1	1	2LT	PA 1hr(8a-6p)	PA 1hr(8a-6p)	35
	22nd St	21st St	1	1	DY	PA 2hr(8a-6p)	RZ	35
	21st St	19th St	2	2	DY	PA 1hr(8a-6p)	PA 1hr(8a-6p)	35
	19th St	18th St	2	2	DY	PA	PA	35
	18th St	14th St	2	2	DY	PA 1hr(8a-6p)	PA 1hr(8a-6p)	35
	14th St	9th St	2	2	DY	PM 2hr(8a-6p)	PM 2hr(8a-6p)	35/25
	9th St	5th St	2	2	DY	PM 2hr(9a-5p)	PM 2hr(9a-5p)	35
	5th St	3rd St	2	2	DY	PM 2hr(8a-6p)	PM 2hr(8a-6p)	35
	3rd St	Santa Cruz St	2	2	DY	PM 1hr(8a-6p)	PA 1hr(8a-6p)	35
	Santa Cruz St	Sepulveda St	2	2	DY	PA 1hr(8a-6p)	PA 1hr(8a-6p)	35
	Sepulveda St	O'Farrell St	2	2	DY	PA	NSAT	35
	O'Farrell St	Bonita St	2	2	2LT	PA	PA/RZ	35/25
	Bonita St	Front St	2	2	2LT	NSAT	NSAT	35/25
	Front St	Channel St	2	2	2LT	NSAT	RZ/PA 2hr(8a-6p)/PA	35
Western Av	25th St	19th St	2	2	2LT	PA	NSAT	40
	19th St	Baynner Dr	2	2	RM	NP	NSAT	40
	Baynner Dr	1st St	2	2	RM	NSAT	NSAT	40
Crescent Av	21st St	20th St	1	1	DY	NSAT	PA	30

TABLE 2
EXISTING SURFACE STREET CHARACTERISTICS

SEGMENT	FROM	TO	LANE		MEDIAN	PARKING RESTRICTIONS		SPEED
			NB/EB	SB/WB	TYPE	NB/EB	SB/WB	LIMIT
	20th St	17th St	1	1	SDY	NSAT	PA	30
	17th St	Harbor Bl	1	1	DY	NSAT	NSAT	30
1st St	Harbor Bl	Gaffey St	1	1	SDY	PA	PA	30
	Gaffey St	Western Av	1	1	DY	PA	PA	30
Front St	Pacific Av	SR-47 WB On Ramp	2	2	2LT	NSAT	NSAT	35
Harbor Bl	SR-47 WB On Ramp	Beacon St	2	2	RM	NSAT	NSAT	35
	Beacon St	1st St	2	2	RM	PA	PA 2hr(8a-6p)	35
	1st St	3rd St	2	2	RM	NSAT	PA	35
	3rd St	6th St	2	2	RM	PA 2hr(8a-6p)	PA	35
	6th St	7th St	2	2	RM	PA	RZ	35
	7th St	Crescent Av	2	2	DY	NSAT/PA	PA	35
Miner St	Crescent Av	22nd St	2	2	2LT	NSAT	NSAT	35

Notes:

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

LANES:
= Number of lanes
3/2 = 3 lanes, 1 being both a lane and a parking lane

Misc:
hr = Hour
min = Minutes

PARKING:
PA = Parking Allowed
NSAT = No Stopping Any Time
RZ = Red zone - No parking allowed
MP = Metered Parking
NP = Not Posted
NS = No Stopping

TABLE 3
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS
CMA METHODOLOGY

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	0.610-0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.710-0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.810-0.900	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	0.910-1.000	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 Board, *Transportation Research Circular No. 212, Interim Materials on Highway Capacity*, 1980.

TABLE 4
LEVEL OF SERVICE DEFINITIONS
FOR UNSIGNALIZED INTERSECTIONS

Level of Service	Average Total Delay (seconds/vehicle)
A	$\leq$ 10
B	> 10 and $\leq$ 15
C	> 15 and $\leq$ 25
D	> 25 and $\leq$ 35
E	> 35 and $\leq$ 50
F	> 50

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

TABLE 5
INTERSECTION LEVEL OF SERVICE ANALYSIS SUMMARY
EXISTING CONDITIONS (YEAR 2007)

INT #	INTERSECTION	PEAK HOUR	EXISTING	
			Delay or V/C	LOS
*1	Western Ave &	AM	0.531	A
	25th St	PM	0.513	A
		WKEND	0.479	A
*2	Western Ave &	AM	0.482	A
	9th St	PM	0.610	B
		WKEND	0.402	A
*3	Gaffey St &	AM	0.382	A
	25th St	PM	0.371	A
		WKEND	0.373	A
*4	Gaffey St &	AM	0.405	A
	22nd St	PM	0.362	A
		WKEND	0.317	A
*5	Gaffey St &	AM	0.723	C
	9th St	PM	0.747	C
		WKEND	0.640	B
*6	Gaffey St &	AM	0.717	C
	7th St	PM	0.696	B
		WKEND	0.631	B
7	Gaffey St &	AM	**	F
	6th St [a]	PM	**	F
		WKEND	**	F
*8	Gaffey St &	AM	0.849	D
	5th St	PM	0.854	D
		WKEND	0.663	B
*9	Gaffey St &	AM	1.137	F
	1st St	PM	0.994	E
		WKEND	0.995	E
*10	Gaffey St &	AM	0.364	A
	I-110	PM	0.502	A
		WKEND	0.487	A
*11	Gaffey St &	AM	0.815	D
	Summerland Ave	PM	0.919	E
		WKEND	0.579	A
*12	Pacific Ave &	AM	0.511	A
	22nd St	PM	0.423	A
		WKEND	0.356	A
*13	Pacific Ave &	AM	0.489	A
	9th St	PM	0.515	A
		WKEND	0.441	A
*14	Pacific Ave &	AM	0.410	A
	7th St	PM	0.440	A
		WKEND	0.417	A
*15	Pacific Ave &	AM	0.420	A
	6th St	PM	0.385	A
		WKEND	0.395	A
*16	Pacific Ave &	AM	0.489	A
	5th St	PM	0.435	A
		WKEND	0.381	A
*17	Pacific Ave &	AM	0.424	A
	1st St	PM	0.432	A
		WKEND	0.376	A
*18	Pacific Ave &	AM	0.362	A
	Front St	PM	0.272	A
		WKEND	0.326	A

TABLE 5
INTERSECTION LEVEL OF SERVICE ANALYSIS SUMMARY
EXISTING CONDITIONS (YEAR 2007)

INT #	INTERSECTION	PEAK HOUR	EXISTING	
			Delay or V/C	LOS
19	Via Cabrillo Marina &	AM	0.177	A
	22nd St	PM	0.084	A
		WKEND	0.122	A
20	Miner St &	AM	0.318	A
	22nd St	PM	0.317	A
		WKEND	0.178	A
21	Miner St &	AM	19	C
	Crescent Ave [a]	PM	18	C
		WKEND	13	B
*22	Harbor Bl &	AM	0.263	A
	7th St	PM	0.286	A
		WKEND	0.134	A
*23	Harbor Bl &	AM	0.360	A
	6th St	PM	0.324	A
		WKEND	0.462	A
*24	Harbor Bl &	AM	0.329	A
	5th St	PM	0.527	A
		WKEND	0.295	A
*25	Harbor Bl &	AM	0.391	A
	1st St	PM	0.395	A
		WKEND	0.289	A
*26	Harbor Bl &	AM	0.648	B
	Swinford St/SR 47 EB Ramps	PM	0.739	C
		WKEND	0.586	A
27	Harbor Bl &	AM	10	A
	SR 47 WB On Ramp [a]	PM	10	A
		WKEND	9	A
28	Harbor Bl &	AM	12	B
	Gulch Rd [b]	PM	12	B
		WKEND	9	A
29	Harbor Bl &	AM	0.431	A
	O'Farrell St	PM	0.649	B
		WKEND	0.403	A
30	Harbor Bl &	AM	37	E
	3rd St	PM	**	F
		WKEND	32	D
31	Pacific Av &	AM	0.413	A
	13th St	PM	0.373	A
		WKEND	0.322	A
32	Pacific Av &	AM	0.367	A
	17th St	PM	0.293	A
		WKEND	0.235	A
33	Pacific Av &	AM	0.199	A
	19th St	PM	0.278	A
		WKEND	0.188	A
34	Gaffey St &	AM	0.815	D
	13th St	PM	0.606	B
		WKEND	0.550	A
35	Gaffey St &	AM	0.544	A
	17th St	PM	0.428	A
		WKEND	0.449	A
36	Gaffey St &	AM	0.467	A
	19th St	PM	0.388	A
		WKEND	0.381	A

Notes:

* Intersection is currently operating under ATSAC system.

** Indicates oversaturated conditions. Delay cannot be calculated.

[a] Intersection is two-way stop controlled. Vehicular Delay for the most constrained movement is reported rather than V/C ratio.

[b] Intersection is four-way stop-controlled. Average Intersection Delay is reported.

TABLE 6
CUMULATIVE DEVELOPMENT PROJECTS TRIP GENERATION ESTIMATES

Proj #	Address	Project Name	Description	Size	Unit	Weekday [a]						Weekend [b]		
						AM Peak Hour Trips			PM Peak Hour Trips			Mid-Day Peak Hour Trips		
						In	Out	Total	In	Out	Total	In	Out	Total
1 [c] [f]	407-409 7th St & 390 W 8th St	Bank Lofts & Mint Building	Residential Lofts Specialty Retail	87 5	DU KSF	9	42	51	57	28	85	22 11	19 8	41 19
2	255 W 5th St at Centre St	Vue	High-Rise Condominiums	220	DU	13	53	66	53	33	86	33	44	77
3 [d] [h]	330 S Centre St. at 5th St	LA Harbor Police Station & Charter School	Police Station Library Charter School	155 12.5 580	Employees KSF Students	323	189	512	80	120	200	55	55	110
4	1427 N Gaffey St at Basin St	-	Single Family Homes	135	DU	25	76	101	86	50	136	69	58	127
5 [i] [c] [f]	281 W 8th St at Centre St	-	Condominiums Specialty Retail	72 7	DU KSF	7	32	39	42	21	63	18 15	16 12	34 26
6 [c]	1605 N Gaffey St at Capitol Dr	Target	Retail Center	136	KSF	91	58	149	189	205	394	412	381	793
7[b] [c] [f] [k]	550 Palos Verdes St at 5th St	Palos Verdes Urban Village	High-Rise Condominiums Specialty Retail Paint Store - Removal *Net New Trips*	251 4.0 11	DU KSF KSF	15	62	77	29	17	46	38 8 (68) *(22)*	50 7 (58) *(1)*	88 15 (126) *(23)*
8 [c] [e] [f]	327 & 407 N Harbor Bl at O'Farrell	-	Condominiums Specialty Retail	94 3	DU KSF	7 1	34 1	41 2	33 3	16 3	49 6	24 6	20 5	44 11
9 [g] [c] [e] [f]	666 S Centre St	Centre Street Lofts	Residential Lofts Specialty Retail	116 20	DU KSF	5 7	23 4	28 11	22 18	11 23	33 41	16 39	14 35	30 74
10	245-255 W 7th St	La Salle Lofts	Condominiums	26	DU	2	9	11	9	4	14	7	6	12
11 [c] [e] [f]	111 N Harbor Bl & 203-233 Harbor Bl	Ocean View Landing	Condominiums Specialty Retail	158 8	DU KSF	12 2	58 2	70 4	55 7	27 9	82 16	40 16	34 14	74 30
12	420-430 9th St at Mesa	-	Condominiums	25	DU	2	9	11	9	4	13	6	5	12
13	210 N Palos Verdes St	Toberman Village	Apartments	49	DU	5	20	25	20	10	30	13	12	25
14	308 N Palos Verdes St	Harborside Terrace	Town Homes	16	DU	1	6	7	5	3	8	4	3	8
15	366-372 W 8th St	-	Condominiums	18	DU	1	7	8	6	3	9	5	4	8
16	901 E St	E Street Cold Logistics	Warehouse	85	KSF	61	13	74	14	43	57	6	4	10
17	L St & Lecouvreur St	-	Single Family Homes	8	DU	2	4	6	5	3	8	4	4	8
18	Miner & 22nd St	-	Cabrillo Marina Phase II	n/a	n/a	102	83	185	186	172	358	279	285	564
19	26900 S Western Ave	Ponte Vista	Condominiums Senior Housing Baseball Fields	1725 575 2	DU DU Fields	112 21 2	475 25 1	587 46 3	407 38 28	249 25 13	656 63 41	260 87 27	344 86 30	604 173 57
20 [j]	Berths 121-131	Yang Ming Container Terminal	Year 2015 Year 2037	n/a	n/a	252 143	111 109	363 252	206 119	302 181	508 300	206 119	302 181	508 300
21 [j]	Berths 100-102	China Shipping Container Terminal	Year 2015 Year 2037	n/a	n/a	262 160	115 145	377 335	214 157	314 241	528 398	214 157	314 241	528 398
22 [j]	Berths 136-147	TraPac Container Terminal	Year 2015 Year 2037	n/a	n/a	122 143	85 99	207 242	86 57	124 81	210 138	86 99	124 143	210 242
23	Harry Bridges Blvd & Avalon Blvd	Wilmington Waterfront	Restaurant, Industrial, Retail	180	KSF	149	39	188	82	189	271	105	87	192
24	401 Hawaiian Ave	New Dana Strand	Condominiums Apartments Single Family Homes Senior Housing	115 120 76 100	DU DU DU DU	9 12 14 4	42 49 43 4	51 61 57 8	40 48 49 7	20 26 28 4	60 74 77 11	29 31 38 15	25 31 33 15	54 62 71 30
25	28000 S Western Ave	-	Condominiums	140	DU	1	43	44	13	(12)	1	36	30	66
26 [l]	Maritime Industrial	Westway Liquid Bulk Terminal	130 - Industrial Park	13	acres	(81)	(17)	(98)	(21)	(73)	(94)	(6)	(6)	(12)
Total 2015						1,570	1,803	3,373	2,125	2,015	4,140	2,182	2,452	4,635
Total 2037						1,380	1,845	3,255	1,952	1,778	3,730	2,051	2,277	4,329

Footnotes:
[a] Weekday trip rates are "Weekday" & "Peak Hour Adjacent Street Traffic" rates from *Trip Generation, 7th Edition* (Institute of Transportation Engineers, 2003) unless noted below.
[b] Weekend trip rates are "Saturday" and "Saturday, Peak Hour of Generator" rates from *Trip Generation, 7th Edition*, unless noted below.
[c] To reflect expected use, retail land uses have been credited with a 25% pass-by trip reduction.
[d] ITE Weekend rates not available for school or police station. Assumes school generates negligible weekend trips and police station and library generate equivalent weekday trips.
[e] No weekday AM Peak Hour rate for specialty retail. Rate used is the PM Peak Hour rate multiplied by the proportion of AM to PM Peak Hour rates for Shopping Center land use (ITE LU 820).
[f] No "Saturday, Peak Hour of Generator" rate available for specialty retail. Rate used is rate for Shopping Center land use (ITE LU 820).
[g] Project is currently 55% occupied, so trip generation estimates were reduced accordingly.
[h] LADOT data derived from *Port Police Headquarters, California Maritime Center, and Charter School Draft EIR* (Los Angeles Harbor Department, April 2005).
Currently school has 420 students, so school trip generation rates for that use were reduced accordingly.
[i] Project is assumed to be same as CRA Project at 255-295 W 8th St. LADOT project chosen because it generates more trips and is the more conservative of the two.
[j] No weekend data available for container terminal projects. Assumes PM peak hour trip generation for weekend midday period.
[k] Directional distribution not available. A 54% inbound 46% outbound split is assumed.
[l] Existing Westway lease will be terminated in early 2009. Demolition is scheduled for completion by February 2010.

Source Data:
Projects 1-8, 25: Weekday data provided by LADOT. In/out splits from "Peak Hour Adjacent Street Traffic" splits from *Trip Generation, 7th Edition*.
Projects 9-10: Project parameters from *Beacon Street Redevelopment Project Five-Year Implementation Plan* (CRA, November 2007).
Projects 11-15: Project parameters from *Pacific Corridor Redevelopment Project Five-Year Implementation Plan* (CRA, November 2007).
Projects 16-17: Project parameters from *Los Angeles Harbor Industrial Center Redevelopment Project Five-Year Implementation Plan* (CRA, November 2007).
Project 18: Based on data from *Traffic Study for Cabrillo Marina Phase II* (Kaku Associates, November 2002).
Project 19: Weekday data from *Traffic Impact Study, Ponte Vista at San Pedro* (Linscott, Law & Greenspan Engineers, September 2006).
Projects 20-22: Based on data from *Draft Environmental Impact Report, Berths 136-147 [TraPac] Container Terminal Project* (Meyer, Mohaddes Associates, 2006).
Projects 23-24: Based on data from *Traffic, Circulation & Parking Assessment Wilmington Waterfront Development Master Plan* (Fehr & Peers/Kaku Associates, 2007).

TABLE 7
PROPOSED PROJECT TRIP GENERATION (YEAR 2015)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	WEEKDAY							WEEKEND			
				Weekday Daily	AM Peak Hour			PM Peak Hour			Weekend Daily	Midday Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		5240 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*4,241*	*140*	*308*	*447*	*71*	*112*	*182*	*4,241*	*399*	*196*	*595*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*2,604*	*66*	*96*	*161*	*4*	*5*	*8*	*2,604*	*98*	*86*	*184*
	Full Size Bus/Coach	*[6]*		*446*	*37*	*7*	*44*	*2*	*2*	*4*	*446*	*21*	*13*	*34*
	Delivery/Service (Truck, van)	*[6]*		*372*	*50*	*38*	*88*	*11*	*6*	*17*	*372*	*22*	*20*	*42*
	All Modes Subtotal	[6]		7,664	265	476	741	106	106	212	7,664	534	321	855
Maritime Office	Crowley Tugboat Office Relocation	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Museum	S.S. Lane Victory Relocation to Berth 87	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Maritime Office	Los Angeles Maritime Institute to reuse Crowley Building	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Waterfront Promenade and Town Square	[7] [8]	15.3 Acres	306	20	20	40	14	14	28	306	20	20	40
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	*125 ksf*	*11,244*	*51*	*51*	*101*	*627*	*309*	*936*	*11,795*	*798*	*555*	*1,353*
	New POC Retail Development	*814 - Specialty Retail [4]*	*175 ksf*	*7,756*	*113*	*72*	*186*	*209*	*266*	*474*	*7,357*	*380*	*351*	*732*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	300 ksf	16,150	139	105	244	711	488	1,199	16,279	1,002	770	1,771
Conference Facilities	75 KSF max 1000 person POC Conference Center	[10] [14]	300 Attendees	780	112	23	135	23	112	135	390	23	112	135
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)	[6]	5240 Pass.											
Berths 45-47 & 49-50	*Passenger Vehicle*	*[6] [15]*		*4,242*	*140*	*309*	*448*	*71*	*112*	*182*	*4,242*	*399*	*196*	*595*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*2,604*	*66*	*96*	*161*	*4*	*5*	*8*	*2,604*	*98*	*86*	*184*
	Full Size Bus/Coach	*[6]*		*446*	*37*	*7*	*44*	*2*	*2*	*4*	*446*	*21*	*13*	*34*
	Delivery/Service (Truck, van)	*[6]*		*372*	*50*	*38*	*88*	*11*	*6*	*17*	*372*	*22*	*20*	*42*
	All Modes Subtotal	[6]		7,664	265	476	741	106	106	212	7,664	534	321	855
Cruise Ship Operations	Parking Shuttle to/from Outer Harbor	[15 [16] [17]	1572 Pass.	302	38	38	75	6	6	13	302	22	22	44
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***36,008***	***1,086***	***1,194***	***2,280***	***1,036***	***1,106***	***2,142***	***35,633***	***2,234***	***1,647***	***3,882***
SUBTOTAL EXISTING				***17,658***	***440***	***732***	***1,172***	***474***	***355***	***829***	***17,772***	***1,187***	***777***	***1,964***
NET NEW TRIPS				***18,350***	***646***	***462***	***1,108***	***562***	***751***	***1,313***	***17,861***	***1,047***	***870***	***1,917***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 15% internal capture reduction was taken for POC commercial uses in the weekday daily, weekend daily, AM peak, PM peak, and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal. Bus trip generation increased by a PCE factor of 2.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 8
PROPOSED PROJECT TRIP GENERATION (YEAR 2037)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	WEEKDAY							WEEKEND			
				Weekday Daily	AM Peak Hour			PM Peak Hour			Weekend Daily	Midday Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		7868 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*6,368*	*210*	*462*	*672*	*106*	*168*	*274*	*6,368*	*600*	*294*	*894*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*3,910*	*98*	*144*	*242*	*5*	*7*	*13*	*3,910*	*148*	*129*	*277*
	Full Size Bus/Coach	*[6]*		*670*	*56*	*10*	*66*	*3*	*3*	*6*	*670*	*31*	*19*	*50*
	Delivery/Service (Truck, van)	*[6]*		*559*	*75*	*57*	*132*	*17*	*8*	*25*	*559*	*32*	*31*	*63*
	All Modes Subtotal	[6]		11,508	398	714	1,113	159	159	318	11,508	803	482	1,284
Maritime Office	Crowley Tugboat Office Relocation	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Museum	S.S. Lane Victory Relocation to Berth 87	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Maritime Office	Los Angeles Maritime Institute to reuse Crowley Building	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Waterfront Promenade and Town Square	[7] [8]	15.3 Acres	306	20	20	40	14	14	28	306	20	20	40
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	*125 ksf*	*11,244*	*51*	*51*	*101*	*627*	*309*	*936*	*11,795*	*798*	*555*	*1,353*
	New POC Retail Development	*814 - Specialty Retail [4]*	*175 ksf*	*7,756*	*113*	*72*	*186*	*209*	*266*	*474*	*7,357*	*380*	*351*	*732*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	300 ksf	16,150	139	105	244	711	488	1,199	16,279	1,002	770	1,771
Conference Facilities	75 KSF max 1000 person POC Conference Center	[10] [14]	300 Attendees	780	112	23	135	23	112	135	390	23	112	135
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)	[6]	7868 Pass.											
Berths 45-47 & 49-50	*Passenger Vehicle*	*[6] [15]*		*6,369*	*210*	*463*	*673*	*106*	*168*	*274*	*6,369*	*600*	*294*	*894*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*3,910*	*98*	*144*	*242*	*5*	*7*	*13*	*3,910*	*148*	*129*	*277*
	Full Size Bus/Coach	*[6]*		*670*	*56*	*10*	*66*	*3*	*3*	*6*	*670*	*31*	*19*	*50*
	Delivery/Service (Truck, van)	*[6]*		*559*	*75*	*57*	*132*	*17*	*8*	*25*	*559*	*32*	*31*	*63*
	All Modes Subtotal	[6]		11,508	398	714	1,113	159	159	318	11,508	803	482	1,284
Cruise Ship Operations	Parking Shuttle to/from Outer Harbor	[15 [16] [17]	2360 Pass.	454	57	57	113	9	9	19	453	33	33	66
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***43,847***	***1,371***	***1,690***	***3,061***	***1,146***	***1,215***	***2,361***	***43,472***	***2,781***	***1,980***	***4,761***
SUBTOTAL EXISTING				***21,168***	***561***	***950***	***1,511***	***523***	***403***	***926***	***21,282***	***1,432***	***924***	***2,356***
NET NEW TRIPS				***22,679***	***809***	***740***	***1,550***	***623***	***812***	***1,435***	***22,190***	***1,350***	***1,056***	***2,406***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 15% internal capture reduction was taken for POC commercial uses in the weekday daily, weekend daily, AM peak, PM peak, and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal. Bus trip generation increased by a PCE factor of 2.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 9
NO PROJECT/CEQA BASELINE TRIP GENERATION (YEAR 2015)

Existing Land Use	Description	ITE Land Use Code/Source	Size	WEEKDAY							WEEKEND			
				Weekday Daily	AM Peak Hour			PM Peak Hour			Weekend Daily	Midday Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Museum	S.S. Lane Victory Removal from Berth 94	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		7500 Pass.											
Berths 87-93	*Passenger Vehicle*	*[6]*		*6,071*	*200*	*441*	*641*	*101*	*160*	*261*	*6,071*	*572*	*280*	*852*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*3,728*	*94*	*137*	*231*	*5*	*7*	*12*	*3,728*	*141*	*123*	*264*
	Full Size Bus/Coach	*[6]*		*639*	*53*	*10*	*63*	*3*	*3*	*6*	*639*	*30*	*18*	*48*
	Delivery/Service (Truck, van)	*[6]*		*533*	*72*	*54*	*126*	*16*	*8*	*24*	*533*	*31*	*29*	*60*
	All Modes Subtotal	[6]		10,970	380	681	1,061	152	152	303	10,970	765	459	1,224
Maritime Office	Los Angeles Maritime Institute	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Maritime Office	Crowley Tugboat Office	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Marina	Downtown Harbor Docking Slips	420 - Marina	12 Slips	36	0	1	1	1	1	2	39	1	2	3
Ports O' Call Commercial	*POC Restaurant*	*931 - Quality Restaurant*	60 ksf	*5,397*	*24*	*24*	*49*	*301*	*148*	*449*	*5,662*	*383*	*266*	*649*
	POC Retail	*814 - Specialty Retail [4] [13]*	40 ksf	*1,773*	*26*	*17*	*42*	*48*	*61*	*108*	*1,682*	*87*	*80*	*167*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]		6,094	43	35	77	296	178	474	6,242	399	294	694
Marina	Ports O' Call Docking Slips Removal	420 - Marina	126 Slips	373	3	7	10	14	10	24	406	15	19	34
Maintenance Facility	Temporary Red Car Maintenance Facility	110 - General Light Industrial [1]	11 Emp.	33	4	1	5	1	4	5	33	4	1	5
Warehousing	Warehouses 9 & 10 Operations	150 - Warehouse [11]	20 Emp.	60	3	7	10	8	4	12	20	1	1	2
TOTAL				***17,658***	***440***	***732***	***1,172***	***474***	***355***	***829***	***17,772***	***1,187***	***777***	***1,964***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 50% internal capture reduction was taken for POC retail uses in the weekday daily, weekend daily, PM and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 10
NO PROJECT/CEQA BASELINE TRIP GENERATION (YEAR 2037)

Existing Land Use	Description	ITE Land Use Code/Source	Size	WEEKDAY							WEEKEND			
				Weekday Daily	AM Peak Hour			PM Peak Hour			Weekend Daily	Midday Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Museum	S.S. Lane Victory Removal from Berth 94	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		9900 Pass.											
Berths 87-93	*Passenger Vehicle*	*[6]*		*8,013*	*264*	*582*	*845*	*133*	*211*	*345*	*8,013*	*755*	*370*	*1,125*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*4,920*	*124*	*181*	*305*	*7*	*9*	*16*	*4,920*	*186*	*162*	*348*
	Full Size Bus/Coach	*[6]*		*843*	*70*	*13*	*83*	*4*	*4*	*8*	*843*	*39*	*24*	*63*
	Delivery/Service (Truck, van)	*[6]*		*703*	*95*	*71*	*166*	*21*	*11*	*32*	*703*	*41*	*39*	*79*
	All Modes Subtotal	[6]		14,480	501	899	1,400	200	200	400	14,480	1,010	606	1,616
Maritime Office	Los Angeles Maritime Institute	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Maritime Office	Crowley Tugboat Office	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Marina	Downtown Harbor Docking Slips	420 - Marina	12 Slips	36	0	1	1	1	1	2	39	1	2	3
Ports O' Call Commercial	*POC Restaurant*	*931 - Quality Restaurant*	60 ksf	*5,397*	*24*	*24*	*49*	*301*	*148*	*449*	*5,662*	*383*	*266*	*649*
	POC Retail	*814 - Specialty Retail [4] [13]*	40 ksf	*1,773*	*26*	*17*	*42*	*48*	*61*	*108*	*1,682*	*87*	*80*	*167*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]		6,094	43	35	77	296	178	474	6,242	399	294	694
Marina	Ports O' Call Docking Slips Removal	420 - Marina	126 Slips	373	3	7	10	14	10	24	406	15	19	34
Maintenance Facility	Temporary Red Car Maintenance Facility	110 - General Light Industrial [1]	11 Emp.	33	4	1	5	1	4	5	33	4	1	5
Warehousing	Warehouses 9 & 10 Operations	150 - Warehouse [11]	20 Emp.	60	3	7	10	8	4	12	20	1	1	2
TOTAL				***21,168***	***561***	***950***	***1,511***	***523***	***403***	***926***	***21,282***	***1,432***	***924***	***2,356***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 50% internal capture reduction was taken for POC retail uses in the weekday daily, weekend daily, PM and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 11
ALTERNATIVE 1 TRIP GENERATION (YEAR 2015)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	PROJECT TRIPS										
				Daily	AM Peak Hour			PM Peak Hour			Daily	Weekend Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		5240 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*4,241*	*140*	*308*	*447*	*71*	*112*	*182*	*4,241*	*399*	*196*	*595*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*2,604*	*66*	*96*	*161*	*4*	*5*	*8*	*2,604*	*98*	*86*	*184*
	Full Size Bus/Coach	*[6]*		*446*	*37*	*7*	*44*	*2*	*2*	*4*	*446*	*21*	*13*	*34*
	Delivery/Service (Truck, van)	*[6]*		*372*	*50*	*38*	*88*	*11*	*6*	*17*	*372*	*22*	*20*	*42*
	All Modes Subtotal	[6]		7,664	265	476	741	106	106	212	7,664	534	321	855
Maritime Office	Crowley Tugboat Office Relocation	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Museum	S.S. Lane Victory Relocation to Berth 87	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Maritime Office	Los Angeles Maritime Institute to reuse Crowley Building	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Waterfront Promenade and Town Square	[7] [8]	15.3 Acres	306	20	20	40	14	14	28	306	20	20	40
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	*125 ksf*	*11,244*	*51*	*51*	*101*	*627*	*309*	*936*	*11,795*	*798*	*555*	*1,353*
	New POC Retail Development	*814 - Specialty Retail [4]*	*175 ksf*	*7,756*	*113*	*72*	*186*	*209*	*266*	*474*	*7,357*	*380*	*351*	*732*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	300 ksf	16,150	139	105	244	711	488	1,199	16,279	1,002	770	1,771
Conference Facilities	75 KSF max 1000 person Conference Center	[10] [14]	300 Attendees	780	112	23	135	23	112	135	390	23	112	135
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Museum	Red Car Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		2620 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*2,121*	*70*	*154*	*224*	*35*	*56*	*91*	*2,121*	*200*	*98*	*298*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*1,302*	*33*	*48*	*81*	*2*	*2*	*4*	*1,302*	*49*	*43*	*92*
	Full Size Bus/Coach	*[6]*		*223*	*19*	*3*	*22*	*1*	*1*	*2*	*223*	*10*	*6*	*17*
	Delivery/Service (Truck, van)	*[6]*		*186*	*25*	*19*	*44*	*6*	*3*	*8*	*186*	*11*	*10*	*21*
	All Modes Subtotal	[6]		3,832	133	238	370	53	53	106	3,832	267	160	428
Cruise Ship Operations	Parking Shuttle to/from Outer Harbor	[15] [16] [17]	786 Pass.	152	19	19	38	3	3	6	152	11	11	22
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***32,061***	***934***	***938***	***1,872***	***981***	***1,051***	***2,032***	***31,704***	***1,957***	***1,477***	***3,434***
SUBTOTAL EXISTING				***17,754***	***452***	***734***	***1,186***	***477***	***366***	***843***	***17,869***	***1,199***	***780***	***1,978***
NET NEW TRIPS				***14,306***	***483***	***203***	***686***	***504***	***685***	***1,189***	***13,836***	***759***	***697***	***1,456***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 15% internal capture reduction was taken for POC commercial uses in the weekday daily, weekend daily, AM peak, PM peak, and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal. Bus trip generation increased by a PCE factor of 2.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 12
ALTERNATIVE 1 TRIP GENERATION (YEAR 2037)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	PROJECT TRIPS										
				Daily	AM Peak Hour			PM Peak Hour			Daily	Weekend Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		7868 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*6,368*	*210*	*462*	*672*	*106*	*168*	*274*	*6,368*	*600*	*294*	*894*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*3,910*	*98*	*144*	*242*	*5*	*7*	*13*	*3,910*	*148*	*129*	*277*
	Full Size Bus/Coach	*[6]*		*670*	*56*	*10*	*66*	*3*	*3*	*6*	*670*	*31*	*19*	*50*
	Delivery/Service (Truck, van)	*[6]*		*559*	*75*	*57*	*132*	*17*	*8*	*25*	*559*	*32*	*31*	*63*
	All Modes Subtotal	[6]		11,508	398	714	1,113	159	159	318	11,508	803	482	1,284
Maritime Office	Crowley Tugboat Office Relocation	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Museum	S.S. Lane Victory Relocation to Berth 87	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Maritime Office	Los Angeles Maritime Institute to reuse Crowley Building	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Waterfront Promenade and Town Square	[7] [8]	15.3 Acres	306	20	20	40	14	14	28	306	20	20	40
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	*125 ksf*	*11,244*	*51*	*51*	*101*	*627*	*309*	*936*	*11,795*	*798*	*555*	*1,353*
	New POC Retail Development	*814 - Specialty Retail [4]*	*175 ksf*	*7,756*	*113*	*72*	*186*	*209*	*266*	*474*	*7,357*	*380*	*351*	*732*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	300 ksf	16,150	139	105	244	711	488	1,199	16,279	1,002	770	1,771
Conference Facilities	75 KSF max 1000 person Conference Center	[10] [14]	300 Attendees	780	112	23	135	23	112	135	390	23	112	135
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Museum	Red Car Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		3934 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*3,184*	*105*	*231*	*336*	*53*	*84*	*137*	*3,184*	*300*	*147*	*447*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*1,955*	*49*	*72*	*121*	*3*	*4*	*6*	*1,955*	*74*	*65*	*138*
	Full Size Bus/Coach	*[6]*		*335*	*28*	*5*	*33*	*2*	*2*	*3*	*335*	*15*	*10*	*25*
	Delivery/Service (Truck, van)	*[6]*		*279*	*38*	*28*	*66*	*8*	*4*	*13*	*279*	*16*	*15*	*31*
	All Modes Subtotal	[6]		5,754	199	357	556	79	79	159	5,754	401	241	642
Cruise Ship Operations	Parking Shuttle to/from Outer Harbor	[15] [16] [17]	1180 Pass.	228	28	28	57	5	5	9	228	17	17	33
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***37,902***	***1,143***	***1,305***	***2,448***	***1,062***	***1,132***	***2,194***	***37,546***	***2,365***	***1,723***	***4,088***
SUBTOTAL EXISTING				***21,265***	***573***	***952***	***1,526***	***526***	***414***	***940***	***21,379***	***1,443***	***927***	***2,370***
NET NEW TRIPS				***16,637***	***570***	***353***	***923***	***537***	***718***	***1,255***	***16,167***	***922***	***797***	***1,718***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 15% internal capture reduction was taken for POC commercial uses in the weekday daily, weekend daily, AM peak, PM peak, and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal. Bus trip generation increased by a PCE factor of 2.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 13
ALTERNATIVE 2 TRIP GENERATION (YEAR 2015)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	WEEKDAY							WEEKEND			
				Weekday Daily	AM Peak Hour			PM Peak Hour			Weekend Daily	Midday Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		5240 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*4,241*	*140*	*308*	*447*	*71*	*112*	*182*	*4,241*	*399*	*196*	*595*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*2,604*	*66*	*96*	*161*	*4*	*5*	*8*	*2,604*	*98*	*86*	*184*
	Full Size Bus/Coach	*[6]*		*446*	*37*	*7*	*44*	*2*	*2*	*4*	*446*	*21*	*13*	*34*
	Delivery/Service (Truck, van)	*[6]*		*372*	*50*	*38*	*88*	*11*	*6*	*17*	*372*	*22*	*20*	*42*
	All Modes Subtotal	[6]		7,664	265	476	741	106	106	212	7,664	534	321	855
Maritime Office	Crowley Tugboat Office Relocation	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Museum	S.S. Lane Victory Relocation to Berth 87	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Maritime Office	Los Angeles Maritime Institute to reuse Crowley Building	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Waterfront Promenade and Town Square	[7] [8]	15.3 Acres	306	20	20	40	14	14	28	306	20	20	40
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	*125 ksf*	*11,244*	*51*	*51*	*101*	*627*	*309*	*936*	*11,795*	*798*	*555*	*1,353*
	New POC Retail Development	*814 - Specialty Retail [4]*	*175 ksf*	*7,756*	*113*	*72*	*186*	*209*	*266*	*474*	*7,357*	*380*	*351*	*732*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	300 ksf	16,150	139	105	244	711	488	1,199	16,279	1,002	770	1,771
Conference Facilities	75 KSF max 1000 person POC Conference Center	[10] [14]	300 Attendees	780	112	23	135	23	112	135	390	23	112	135
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)	[6]	5240 Pass.											
Berths 45-47 & 49-50	*Passenger Vehicle*	*[6] [15]*		*4,242*	*140*	*309*	*448*	*71*	*112*	*182*	*4,242*	*399*	*196*	*595*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*2,604*	*66*	*96*	*161*	*4*	*5*	*8*	*2,604*	*98*	*86*	*184*
	Full Size Bus/Coach	*[6]*		*446*	*37*	*7*	*44*	*2*	*2*	*4*	*446*	*21*	*13*	*34*
	Delivery/Service (Truck, van)	*[6]*		*372*	*50*	*38*	*88*	*11*	*6*	*17*	*372*	*22*	*20*	*42*
	All Modes Subtotal	[6]		7,664	265	476	741	106	106	212	7,664	534	321	855
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***35,706***	***1,048***	***1,157***	***2,205***	***1,030***	***1,099***	***2,130***	***35,331***	***2,212***	***1,625***	***3,838***
SUBTOTAL EXISTING				***17,748***	***451***	***734***	***1,185***	***477***	***365***	***842***	***17,863***	***1,198***	***779***	***1,977***
NET NEW TRIPS				***17,958***	***597***	***422***	***1,019***	***553***	***735***	***1,288***	***17,469***	***1,014***	***846***	***1,860***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 15% internal capture reduction was taken for POC commercial uses in the weekday daily, weekend daily, AM peak, PM peak, and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 14
ALTERNATIVE 2 TRIP GENERATION (YEAR 2037)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	WEEKDAY							WEEKEND			
				Weekday Daily	AM Peak Hour			PM Peak Hour			Weekend Daily	Midday Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		7868 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*6,368*	*210*	*462*	*672*	*106*	*168*	*274*	*6,368*	*600*	*294*	*894*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*3,910*	*98*	*144*	*242*	*5*	*7*	*13*	*3,910*	*148*	*129*	*277*
	Full Size Bus/Coach	*[6]*		*670*	*56*	*10*	*66*	*3*	*3*	*6*	*670*	*31*	*19*	*50*
	Delivery/Service (Truck, van)	*[6]*		*559*	*75*	*57*	*132*	*17*	*8*	*25*	*559*	*32*	*31*	*63*
	All Modes Subtotal	[6]		11,508	398	714	1,113	159	159	318	11,508	803	482	1,284
Maritime Office	Crowley Tugboat Office Relocation	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Museum	S.S. Lane Victory Relocation to Berth 87	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Maritime Office	Los Angeles Maritime Institute to reuse Crowley Building	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Waterfront Promenade and Town Square	[7] [8]	15.3 Acres	306	20	20	40	14	14	28	306	20	20	40
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	*125 ksf*	*11,244*	*51*	*51*	*101*	*627*	*309*	*936*	*11,795*	*798*	*555*	*1,353*
	New POC Retail Development	*814 - Specialty Retail [4]*	*175 ksf*	*7,756*	*113*	*72*	*186*	*209*	*266*	*474*	*7,357*	*380*	*351*	*732*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	300 ksf	16,150	139	105	244	711	488	1,199	16,279	1,002	770	1,771
Conference Facilities	75 KSF max 1000 person POC Conference Center	[10] [14]	300 Attendees	780	112	23	135	23	112	135	390	23	112	135
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)	[6]	7868 Pass.											
Berths 45-47 & 49-50	*Passenger Vehicle*	*[6] [15]*		*6,369*	*210*	*463*	*673*	*106*	*168*	*274*	*6,369*	*600*	*294*	*894*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*3,910*	*98*	*144*	*242*	*5*	*7*	*13*	*3,910*	*148*	*129*	*277*
	Full Size Bus/Coach	*[6]*		*670*	*56*	*10*	*66*	*3*	*3*	*6*	*670*	*31*	*19*	*50*
	Delivery/Service (Truck, van)	*[6]*		*559*	*75*	*57*	*132*	*17*	*8*	*25*	*559*	*32*	*31*	*63*
	All Modes Subtotal	[6]		11,508	398	714	1,113	159	159	318	11,508	803	482	1,284
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***43,394***	***1,314***	***1,634***	***2,948***	***1,136***	***1,206***	***2,342***	***43,019***	***2,748***	***1,947***	***4,695***
SUBTOTAL EXISTING				***21,259***	***572***	***952***	***1,525***	***525***	***413***	***939***	***21,373***	***1,443***	***926***	***2,369***
NET NEW TRIPS				***22,135***	***742***	***682***	***1,423***	***611***	***792***	***1,403***	***21,646***	***1,306***	***1,021***	***2,326***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 15% internal capture reduction was taken for POC commercial uses in the weekday daily, weekend daily, AM peak, PM peak, and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 15
ALTERNATIVE 3 TRIP GENERATION (YEAR 2015)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	PROJECT TRIPS										
				Daily	AM Peak Hour			PM Peak Hour			Daily	Weekend Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		5240 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*4,241*	*140*	*308*	*447*	*71*	*112*	*182*	*4,241*	*399*	*196*	*595*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*2,604*	*66*	*96*	*161*	*4*	*5*	*8*	*2,604*	*98*	*86*	*184*
	Full Size Bus/Coach	*[6]*		*446*	*37*	*7*	*44*	*2*	*2*	*4*	*446*	*21*	*13*	*34*
	Delivery/Service (Truck, van)	*[6]*		*372*	*50*	*38*	*88*	*11*	*6*	*17*	*372*	*22*	*20*	*42*
	All Modes Subtotal	[6]		7,664	265	476	741	106	106	212	7,664	534	321	855
Maritime Office	Crowley Tugboat Office Relocation	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Museum	S.S. Lane Victory Relocation to Berth 87	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Maritime Office	Los Angeles Maritime Institute to reuse Crowley Building	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Waterfront Promenade and Town Square	[7] [8]	15.3 Acres	306	20	20	40	14	14	28	306	20	20	40
Museum	Red Car Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	*78.2 ksf*	*7,034*	*32*	*32*	*63*	*392*	*193*	*586*	*7,379*	*499*	*347*	*846*
	New POC Retail Development	*814 - Specialty Retail [4]*	*109.3 ksf*	*4,844*	*71*	*45*	*116*	*130*	*166*	*296*	*4,595*	*238*	*219*	*457*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	187.5 ksf	10,097	87	65	152	444	305	750	10,178	626	481	1,108
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		2620 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*2,121*	*70*	*154*	*224*	*35*	*56*	*91*	*2,121*	*200*	*98*	*298*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*1,302*	*33*	*48*	*81*	*2*	*2*	*4*	*1,302*	*49*	*43*	*92*
	Full Size Bus/Coach	*[6]*		*223*	*19*	*3*	*22*	*1*	*1*	*2*	*223*	*10*	*6*	*17*
	Delivery/Service (Truck, van)	*[6]*		*186*	*25*	*19*	*44*	*6*	*3*	*8*	*186*	*11*	*10*	*21*
	All Modes Subtotal	[6]		3,832	133	238	370	53	53	106	3,832	267	160	428
Cruise Ship Operations	Parking Shuttle to/from Outer Harbor	[15] [16] [17]	786 Pass.	152	19	19	38	3	3	6	152	11	11	22
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***25,228***	***770***	***876***	***1,646***	***692***	***756***	***1,447***	***25,213***	***1,559***	***1,076***	***2,635***
SUBTOTAL EXISTING				***17,658***	***440***	***732***	***1,172***	***474***	***355***	***829***	***17,772***	***1,187***	***777***	***1,964***
NET NEW TRIPS				***7,570***	***330***	***143***	***473***	***218***	***401***	***618***	***7,441***	***372***	***299***	***671***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 50% internal capture reduction was taken for POC retail uses in the weekday daily, weekend daily, PM and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal. Bus trip generation increased by a PCE factor of 2.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 16
ALTERNATIVE 3 TRIP GENERATION (YEAR 2037)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	PROJECT TRIPS										
				Daily	AM Peak Hour			PM Peak Hour			Daily	Weekend Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		7868 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*6,368*	*210*	*462*	*672*	*106*	*168*	*274*	*6,368*	*600*	*294*	*894*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*3,910*	*98*	*144*	*242*	*5*	*7*	*13*	*3,910*	*148*	*129*	*277*
	Full Size Bus/Coach	*[6]*		*670*	*56*	*10*	*66*	*3*	*3*	*6*	*670*	*31*	*19*	*50*
	Delivery/Service (Truck, van)	*[6]*		*559*	*75*	*57*	*132*	*17*	*8*	*25*	*559*	*32*	*31*	*63*
	All Modes Subtotal	[6]		11,508	398	714	1,113	159	159	318	11,508	803	482	1,284
Maritime Office	Crowley Tugboat Office Relocation	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Museum	S.S. Lane Victory Relocation to Berth 87	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Maritime Office	Los Angeles Maritime Institute to reuse Crowley Building	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Waterfront Promenade and Town Square	[7] [8]	15.3 Acres	306	20	20	40	14	14	28	306	20	20	40
Museum	Red Car Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	*78.2 ksf*	*7,034*	*32*	*32*	*63*	*392*	*193*	*586*	*7,379*	*499*	*347*	*846*
	New POC Retail Development	*814 - Specialty Retail [4]*	*109.3 ksf*	*4,844*	*71*	*45*	*116*	*130*	*166*	*296*	*4,595*	*238*	*219*	*457*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	300 ksf	10,097	87	65	152	444	305	750	10,178	626	481	1,108
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		3934 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*3,184*	*105*	*231*	*336*	*53*	*84*	*137*	*3,184*	*300*	*147*	*447*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*1,955*	*49*	*72*	*121*	*3*	*4*	*6*	*1,955*	*74*	*65*	*138*
	Full Size Bus/Coach	*[6]*		*335*	*28*	*5*	*33*	*2*	*2*	*3*	*335*	*15*	*10*	*25*
	Delivery/Service (Truck, van)	*[6]*		*279*	*38*	*28*	*66*	*8*	*4*	*13*	*279*	*16*	*15*	*31*
	All Modes Subtotal	[6]		5,754	199	357	556	79	79	159	5,754	401	241	642
Cruise Ship Operations	Parking Shuttle to/from Outer Harbor	[15] [16] [17]	1180 Pass.	228	28	28	57	5	5	9	228	17	17	33
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***31,069***	***979***	***1,243***	***2,222***	***773***	***837***	***1,610***	***31,054***	***1,967***	***1,323***	***3,290***
SUBTOTAL EXISTING				***21,168***	***561***	***950***	***1,511***	***523***	***403***	***926***	***21,282***	***1,432***	***924***	***2,356***
NET NEW TRIPS				***9,901***	***418***	***293***	***710***	***250***	***433***	***684***	***9,772***	***535***	***399***	***934***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 50% internal capture reduction was taken for POC retail uses in the weekday daily, weekend daily, PM and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal. Bus trip generation increased by a PCE factor of 2.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 17
ALTERNATIVE 4 TRIP GENERATION (YEAR 2015)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	PROJECT TRIPS										
				Daily	AM Peak Hour			PM Peak Hour			Daily	Weekend Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		7500 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*6,071*	*200*	*441*	*641*	*101*	*160*	*261*	*6,071*	*572*	*280*	*852*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*3,728*	*94*	*137*	*231*	*5*	*7*	*12*	*3,728*	*141*	*123*	*264*
	Full Size Bus/Coach	*[6]*		*639*	*53*	*10*	*63*	*3*	*3*	*6*	*639*	*30*	*18*	*48*
	Delivery/Service (Truck, van)	*[6]*		*533*	*72*	*54*	*126*	*16*	*8*	*24*	*533*	*31*	*29*	*60*
	All Modes Subtotal	[6]		10,970	380	681	1,061	152	152	303	10,970	765	459	1,224
Maritime Office	Los Angeles Maritime Institute to reuse Crowley Building	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Waterfront Promenade and Town Square	[7] [8]	15.3 Acres	306	20	20	40	14	14	28	306	20	20	40
Museum	Red Car Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Museum	S.S. Lane Victory Relocation to POC	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	*125 ksf*	*11,244*	*51*	*51*	*101*	*627*	*309*	*936*	*11,795*	*798*	*555*	*1,353*
	New POC Retail Development	*814 - Specialty Retail [4]*	*175 ksf*	*7,756*	*113*	*72*	*186*	*209*	*266*	*474*	*7,357*	*380*	*351*	*732*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	300 ksf	16,150	139	105	244	711	488	1,199	16,279	1,002	770	1,771
Conference Facilities	75 KSF max 1000 person Conference Center	[10] [14]	300 Attendees	780	112	23	135	23	112	135	390	23	112	135
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Maritime Office	Crowley Tugboat Office Relocation to Westways Site	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation to Westways Site	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***31,383***	***897***	***886***	***1,783***	***971***	***1,040***	***2,011***	***31,027***	***1,910***	***1,444***	***3,353***
SUBTOTAL EXISTING				***17,754***	***452***	***734***	***1,186***	***477***	***366***	***843***	***17,869***	***1,199***	***780***	***1,978***
NET NEW TRIPS				***13,629***	***446***	***152***	***597***	***494***	***675***	***1,168***	***13,158***	***711***	***664***	***1,375***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 15% internal capture reduction was taken for POC commercial uses in the weekday daily, weekend daily, AM peak, PM peak, and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 18
ALTERNATIVE 4 TRIP GENERATION (YEAR 2037)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	PROJECT TRIPS										
				Daily	AM Peak Hour			PM Peak Hour			Daily	Weekend Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		9900 Pass.											
Berths 91-93	*Passenger Vehicle*	*[6]*		*8,013*	*264*	*582*	*845*	*133*	*211*	*345*	*8,013*	*755*	*370*	*1,125*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*4,920*	*124*	*181*	*305*	*7*	*9*	*16*	*4,920*	*186*	*162*	*348*
	Full Size Bus/Coach	*[6]*		*843*	*70*	*13*	*83*	*4*	*4*	*8*	*843*	*39*	*24*	*63*
	Delivery/Service (Truck, van)	*[6]*		*703*	*95*	*71*	*166*	*21*	*11*	*32*	*703*	*41*	*39*	*79*
	All Modes Subtotal	[6]		14,480	501	899	1,400	200	200	400	14,480	1,010	606	1,616
Maritime Office	Los Angeles Maritime Institute to reuse Crowley Building	710 - General Office	10 Emp.	33	4	1	5	1	4	5	5	0	0	0
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Waterfront Promenade and Town Square	[7] [8]	15.3 Acres	306	20	20	40	14	14	28	306	20	20	40
Museum	Red Car Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Museum	S.S. Lane Victory Relocation to POC	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	*125 ksf*	*11,244*	*51*	*51*	*101*	*627*	*309*	*936*	*11,795*	*798*	*555*	*1,353*
	New POC Retail Development	*814 - Specialty Retail [4]*	*175 ksf*	*7,756*	*113*	*72*	*186*	*209*	*266*	*474*	*7,357*	*380*	*351*	*732*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	300 ksf	16,150	139	105	244	711	488	1,199	16,279	1,002	770	1,771
Conference Facilities	75 KSF max 1000 person Conference Center	[10] [14]	300 Attendees	780	112	23	135	23	112	135	390	23	112	135
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Maritime Office	Crowley Tugboat Office Relocation to Westways Site	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation to Westways Site	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***34,894***	***1,019***	***1,104***	***2,123***	***1,019***	***1,089***	***2,108***	***34,537***	***2,154***	***1,590***	***3,745***
SUBTOTAL EXISTING				***21,265***	***573***	***952***	***1,526***	***526***	***414***	***940***	***21,379***	***1,443***	***927***	***2,370***
NET NEW TRIPS				***13,629***	***446***	***152***	***597***	***494***	***675***	***1,168***	***13,158***	***711***	***664***	***1,375***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 15% internal capture reduction was taken for POC commercial uses in the weekday daily, weekend daily, AM peak, PM peak, and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 19
ALTERNATIVE 5/NEPA BASELINE TRIP GENERATION (YEAR 2015)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	PROJECT TRIPS										
				Daily	AM Peak Hour			PM Peak Hour			Daily	Weekend Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		7500 Pass.											
Berths 87-93	*Passenger Vehicle*	*[6]*		*6,071*	*200*	*441*	*641*	*101*	*160*	*261*	*6,071*	*572*	*280*	*852*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*3,728*	*94*	*137*	*231*	*5*	*7*	*12*	*3,728*	*141*	*123*	*264*
	Full Size Bus/Coach	*[6]*		*639*	*53*	*10*	*63*	*3*	*3*	*6*	*639*	*30*	*18*	*48*
	Delivery/Service (Truck, van)	*[6]*		*533*	*72*	*54*	*126*	*16*	*8*	*24*	*533*	*31*	*29*	*60*
	All Modes Subtotal	[6]		10,970	380	681	1,061	152	152	303	10,970	765	459	1,224
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Town Square	[7] [8]	0.79 Acres	16	1	1	2	1	1	1	16	1	1	2
Museum	S.S. Lane Victory Relocation to POC	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	125 ksf	*11,244*	*51*	*51*	*101*	*627*	*309*	*936*	*11,795*	*798*	*555*	*1,353*
	New POC Retail Development	*814 - Specialty Retail [4] [13]*	175 ksf	*7,756*	*113*	*72*	*186*	*209*	*266*	*474*	*7,357*	*380*	*351*	*732*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]		16,150	139	105	244	711	488	1,199	16,279	1,002	770	1,771
Conference Facilities	75 KSF max 1000 person Conference Center	[10] [14]	300 Attendees	780	112	23	135	23	112	135	390	23	112	135
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Maritime Office	Crowley Tugboat Office Relocation to Westways Site	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation to Westways Site	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***31,024***	***874***	***867***	***1,741***	***956***	***1,022***	***1,979***	***30,677***	***1,889***	***1,424***	***3,313***
SUBTOTAL EXISTING				***17,216***	***432***	***724***	***1,156***	***458***	***341***	***798***	***17,322***	***1,171***	***756***	***1,927***
NET NEW TRIPS				***13,808***	***442***	***143***	***585***	***498***	***682***	***1,180***	***13,355***	***719***	***668***	***1,387***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 50% internal capture reduction was taken for POC retail uses in the weekday daily, weekend daily, PM and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 20
ALTERNATIVE 5/NEPA BASELINE TRIP GENERATION (YEAR 2037)

Proposed Land Use	Description	ITE Land Use Code/Source	Size	PROJECT TRIPS										
				Daily	AM Peak Hour			PM Peak Hour			Daily	Weekend Peak Hour		
					Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total
Cruise Ship Terminal	Cruise Ship Terminal (All Modes)		9900 Pass.											
Berths 87-93	*Passenger Vehicle*	*[6]*		*8,013*	*264*	*582*	*845*	*133*	*211*	*345*	*8,013*	*755*	*370*	*1,125*
	Shared Ride (Taxi/Limo/Shuttle)	*[6]*		*4,920*	*124*	*181*	*305*	*7*	*9*	*16*	*4,920*	*186*	*162*	*348*
	Full Size Bus/Coach	*[6]*		*843*	*70*	*13*	*83*	*4*	*4*	*8*	*843*	*39*	*24*	*63*
	Delivery/Service (Truck, van)	*[6]*		*703*	*95*	*71*	*166*	*21*	*11*	*32*	*703*	*41*	*39*	*79*
	All Modes Subtotal	[6]		14,480	501	899	1,400	200	200	400	14,480	1,010	606	1,616
Museum	Ralph J. Scott Fireboat Museum	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Public Open Space	Town Square	[7] [8]	0.79 Acres	16	1	1	2	1	1	1	16	1	1	2
Museum	S.S. Lane Victory Relocation to POC	[9]	10 ksf	36	0	0	0	1	1	2	54	1	1	2
Ports O' Call Commercial	*New POC Restaurant Development*	*931 - Quality Restaurant*	125 ksf	*11,244*	*51*	*51*	*101*	*627*	*309*	*936*	*11,795*	*798*	*555*	*1,353*
	New POC Retail Development	*814 - Specialty Retail [4] [13]*	175 ksf	*7,756*	*113*	*72*	*186*	*209*	*266*	*474*	*7,357*	*380*	*351*	*732*
	Total POC Commercial less 15% Internal Capture	931 & 814 [12]	300 ksf	16,150	139	105	244	711	488	1,199	16,279	1,002	770	1,771
Conference Facilities	75 KSF max 1000 person Conference Center	[10] [14]	300 Attendees	780	112	23	135	23	112	135	390	23	112	135
Public Open Space	Fisherman's Park	[7] [8]	6 Acres	120	8	8	16	5	5	11	120	8	8	16
Maintenance Facility	Red Car Maintenance and Storage Facility	110 - General Light Industrial [1]	37 Emp.	112	14	3	16	3	12	16	112	14	3	16
Mercado	Warehouses No. 9 & 10 reuse	[5]	35 ksf	776	11	7	19	21	27	48	736	38	35	73
Warehouse	Warehouses No. 9 & 10 reuse	150 - Warehousing	35 ksf	174	13	3	16	4	12	16	43	3	2	4
Maritime Office	Crowley Tugboat Office Relocation to Westways Site	710 - General Office	7 Emp.	23	3	0	3	1	3	3	4	0	0	0
Maritime Office	Millennium Tugboat Office Relocation to Westways Site	710 - General Office	25 Emp.	83	11	1	12	2	10	12	14	0	0	0
Research and Development	Research and Development Campus on Westways site	760 - R+D Center [3]	13 acres	1,035	183	35	218	24	177	201	292	21	18	39
Public Open Space	San Pedro Park at 22nd and Miner Streets	[7] [8]	18 Acres	537	0	0	0	7	17	23	1,196	10	11	21
Public Open Space	Outer Harbor Park	[7] [8]	6 Acres	179	0	0	0	2	6	8	399	3	4	7
TOTAL				***34,534***	***996***	***1,085***	***2,080***	***1,005***	***1,071***	***2,076***	***34,188***	***2,134***	***1,571***	***3,705***
SUBTOTAL EXISTING				***20,726***	***554***	***942***	***1,496***	***506***	***389***	***895***	***20,832***	***1,415***	***903***	***2,319***
NET NEW TRIPS				***13,808***	***442***	***143***	***585***	***498***	***682***	***1,180***	***13,355***	***719***	***668***	***1,387***

Source: *Trip Generation, 7th Edition* (Institute of Transportation Engineers [ITE], 2003), except as noted.

Notes:
[1] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[2] Weekend daily assumed to be same as weekday daily and weekend peak hour rate assumed to be same as weekday PM peak hour.
[3] Assumed weekend directional distribution was assumed to be the same as General Office (ITE #710).
[4] Weekday AM and Weekend peak hour rate derived from ITE Land Use 820 - Shopping Center.
[5] Mercado land use assumed to be 1/2 trip generation of ITE #814 - Specialty Retail.
[6] Based on turning count movement by vehicle type data collected at POLA on Friday January, 11 2008. Full Size Bus/Coach trip generation increased by a PCE (Passenger Car Equivalent) factor of 2 to account for the operating characteristics of these vehicles.
[7] Trip generation rate from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002).
[8] Weekend daily and peak hour trip rate assumed to be same as Weekday and AM peak hour rates.
[9] Trip generation rates from *Autry National Center Traffic Study* (Fehr & Peers, February 2007).
[10] Conference center trip generation based on an assumed AVR of 2.0, 75% of attendees arrive during the peak hour, staff equivalent of 10% of attendees, two groups on weekdays, and one group on weekends.
[11] Assumed daily traffic is based on estimated truck trips per day plus an estimated 2.2 trips per employee.
[12] A 50% internal capture reduction was taken for POC retail uses in the weekday daily, weekend daily, PM and weekend peak hours.
[13] Existing 150 KSF POC assumes 60% restaurant, 40% retail, and 2/3 occupied at time of study.
[14] 100 attendees assumed for weekend conference activities.
[15] Assumes 30% of Outer Harbor cruise ship passengers arrive/leave as occupants of a parked vehicle. Obtained from *2006 Port of Los Angeles Cruise Study* (Bermello, Ajamil & Partners, July 2006).
[16] Assumes 50 passenger buses running at 85% occupancy making two round trips per hour between parking facility and Outer Harbor Cruise Terminal.
[17] Assumes 50% of passengers disembark and ride shuttle during AM peak hour, 7% of passenger embark and ride shuttle during PM peak hour, and 30% of passengers embark and ride shuttle during weekend peak hour (*Traffic and Parking Study for the Carnival Cruise Passenger Terminal for the Port of Long Beach*).

TABLE 21
CEQA/NEPA BASELINE OPERATING CONDITIONS (2015)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2015)		ALTERNATIVE 6 (CEQA BASELINE) (YEAR 2015)	
			V/C	LOS	V/C	LOS
1	Western Ave &	AM	0.548	A	0.544	A
	25th St	PM	0.543	A	0.521	A
		WKND	0.514	A	0.493	A
2	Western Ave &	AM	0.498	A	0.496	A
	9th St	PM	0.624	B	0.619	B
		WKND	0.426	A	0.415	A
3	Gaffey St &	AM	0.395	A	0.381	A
	25th St	PM	0.387	A	0.372	A
		WKND	0.400	A	0.381	A
4	Gaffey St &	AM	0.431	A	0.407	A
	22nd St	PM	0.399	A	0.364	A
		WKND	0.400	A	0.377	A
5	Gaffey St &	AM	0.779	C	0.775	C
	9th St	PM	0.803	D	0.788	C
		WKND	0.724	C	0.686	B
6	Gaffey St &	AM	0.768	C	0.766	C
	7th St	PM	0.741	C	0.737	C
		WKND	0.696	B	0.681	B
7	Gaffey St &	AM	0.908	E	0.905	E
	6th St [a]	PM	0.846	D	0.841	D
		WKND	0.823	D	0.805	D
8	Gaffey St &	AM	0.946	E	0.943	E
	5th St	PM	0.923	E	0.919	E
		WKND	0.729	C	0.713	C
9	Gaffey St &	AM	1.214	F	1.141	F
	1st St	PM	0.944	E	0.937	E
		WKND	0.936	E	0.919	E
10	Gaffey St &	AM	0.409	A	0.395	A
	I-110 Ramps	PM	0.554	A	0.548	A
		WKND	0.561	A	0.533	A
11	Gaffey St &	AM	0.864	D	0.861	D
	Summerland Ave	PM	0.982	E	0.979	E
		WKND	0.636	B	0.624	B
12	Pacific Ave &	AM	0.547	A	0.513	A
	22nd St	PM	0.477	A	0.426	A
		WKND	0.409	A	0.375	A
13	Pacific Ave &	AM	0.578	A	0.577	A
	9th St	PM	0.551	A	0.544	A
		WKND	0.503	A	0.481	A
14	Pacific Ave &	AM	0.421	A	0.419	A
	7th St	PM	0.473	A	0.467	A
		WKND	0.443	A	0.433	A
15	Pacific Ave &	AM	0.426	A	0.425	A
	6th St	PM	0.392	A	0.389	A
		WKND	0.407	A	0.401	A
16	Pacific Ave &	AM	0.540	A	0.539	A
	5th St	PM	0.456	A	0.455	A
		WKND	0.398	A	0.395	A
17	Pacific Ave &	AM	0.523	A	0.471	A
	1st St	PM	0.471	A	0.453	A
		WKND	0.477	A	0.410	A
18	Pacific Ave &	AM	0.416	A	0.407	A
	Front St	PM	0.339	A	0.328	A
		WKND	0.420	A	0.405	A
19	Via Cabrillo Marina &	AM	0.181	A	0.161	A
	22nd St	PM	0.086	A	0.071	A
		WKND	0.136	A	0.118	A
20	Miner St &	AM	0.352	A	0.349	A
	22nd St	PM	0.348	A	0.323	A
		WKND	0.282	A	0.265	A
21	Miner St &	AM	0.480	A	0.469	A
	Crescent Ave [a]	PM	0.496	A	0.468	A
		WKND	0.360	A	0.322	A
22	Harbor Bl &	AM	0.557	A	0.273	A
	7th St	PM	0.569	A	0.322	A
		WKND	0.772	C	0.184	A
23	Harbor Bl &	AM	0.369	A	0.382	A
	6th St	PM	0.515	A	0.372	A
		WKND	0.498	A	0.591	A
24	Harbor Bl &	AM	0.454	A	0.377	A
	5th St	PM	0.785	C	0.606	B
		WKND	0.573	A	0.374	A
25	Harbor Bl &	AM	0.691	B	0.532	A
	1st St	PM	0.668	B	0.481	A
		WKND	0.751	C	0.511	A
26	Harbor Bl &	AM	0.872	D	0.880	D
	Swinford St / SR-47 EB	PM	0.600	A	0.558	A
	Ramps	WKND	0.914	E	0.913	E
27	Harbor Bl &	AM	0.599	A	0.607	B
	SR-47 WB On Ramp	PM	0.510	A	0.432	A
		WKND	0.600	A	0.553	A
28	Harbor Bl &	AM	0.422	A	0.413	A
	Gulch Rd [b]	PM	0.452	A	0.436	A
		WKND	0.319	A	0.296	A
29	Harbor Bl &	AM	0.643	B	0.549	A
	O'Farrell St	PM	0.909	E	0.788	C
		WKND	0.750	C	0.589	A
30	Harbor Bl &	AM	0.653	B	0.603	B
	3rd St [a]	PM	0.833	D	0.655	B
		WKND	0.833	D	0.578	A
31	Pacific Av &	AM	0.414	A	0.405	A
	13th St	PM	0.395	A	0.367	A
		WKND	0.328	A	0.315	A
32	Pacific Av &	AM	0.359	A	0.356	A
	17th St	PM	0.289	A	0.281	A
		WKND	0.230	A	0.221	A
33	Pacific Av &	AM	0.187	A	0.184	A
	19th St	PM	0.271	A	0.267	A
		WKND	0.180	A	0.173	A
34	Gaffey St &	AM	0.831	D	0.829	D
	13th St	PM	0.611	B	0.610	B
		WKND	0.555	A	0.553	A
35	Gaffey St &	AM	0.545	A	0.543	A
	17th St	PM	0.425	A	0.422	A
		WKND	0.452	A	0.447	A
36	Gaffey St &	AM	0.475	A	0.469	A
	19th St	PM	0.392	A	0.387	A
		WKND	0.392	A	0.386	A

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 22
CEQA/NEPA BASELINE OPERATING CONDITIONS (2037)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2037)		ALTERNATIVE 6 (CEQA BASELINE) (YEAR 2037)	
			V/C	LOS	V/C	LOS
1	Western Ave &	AM	0.637	B	0.631	B
	25th St	PM	0.626	B	0.603	B
		WKND	0.593	A	0.572	A
2	Western Ave &	AM	0.577	A	0.574	A
	9th St	PM	0.721	C	0.716	C
		WKND	0.495	A	0.485	A
3	Gaffey St &	AM	0.460	A	0.446	A
	25th St	PM	0.449	A	0.435	A
		WKND	0.466	A	0.446	A
4	Gaffey St &	AM	0.500	A	0.477	A
	22nd St	PM	0.537	A	0.503	A
		WKND	0.461	A	0.438	A
5	Gaffey St &	AM	0.892	D	0.887	D
	9th St	PM	0.919	E	0.905	E
		WKND	0.821	D	0.787	C
6	Gaffey St &	AM	0.879	D	0.877	D
	7th St	PM	0.850	D	0.846	D
		WKND	0.796	C	0.781	C
7	Gaffey St &	AM	1.023	F	1.020	F
	6th St [a]	PM	0.953	E	0.948	E
		WKND	0.930	E	0.912	E
8	Gaffey St &	AM	1.075	F	1.073	F
	5th St	PM	1.053	F	1.049	F
		WKND	0.833	D	0.816	D
9	Gaffey St &	AM	1.400	F	1.304	F
	1st St	PM	1.078	F	1.070	F
		WKND	1.067	F	1.051	F
10	Gaffey St &	AM	0.473	A	0.457	A
	I-110 Ramps	PM	0.636	B	0.629	B
		WKND	0.649	B	0.614	B
11	Gaffey St &	AM	0.990	E	0.987	E
	Summerland Ave	PM	1.122	F	1.119	F
		WKND	0.727	C	0.715	C
12	Pacific Ave &	AM	0.630	B	0.596	A
	22nd St	PM	0.546	A	0.496	A
		WKND	0.469	A	0.437	A
13	Pacific Ave &	AM	0.665	B	0.663	B
	9th St	PM	0.632	B	0.625	B
		WKND	0.575	A	0.553	A
14	Pacific Ave &	AM	0.487	A	0.486	A
	7th St	PM	0.571	A	0.565	A
		WKND	0.512	A	0.502	A
15	Pacific Ave &	AM	0.495	A	0.494	A
	6th St	PM	0.455	A	0.453	A
		WKND	0.471	A	0.465	A
16	Pacific Ave &	AM	0.621	B	0.621	B
	5th St	PM	0.526	A	0.525	A
		WKND	0.461	A	0.459	A
17	Pacific Ave &	AM	0.616	B	0.547	A
	1st St	PM	0.547	A	0.526	A
		WKND	0.567	A	0.481	A
18	Pacific Ave &	AM	0.482	A	0.473	A
	Front St	PM	0.376	A	0.365	A
		WKND	0.473	A	0.456	A
19	Via Cabrillo Marina &	AM	0.216	A	0.196	A
	22nd St	PM	0.107	A	0.094	A
		WKND	0.165	A	0.147	A
20	Miner St &	AM	0.407	A	0.402	A
	22nd St	PM	0.404	A	0.378	A
		WKND	0.310	A	0.294	A
21	Miner St &	AM	0.541	A	0.530	A
	Crescent Ave [a]	PM	0.553	A	0.525	A
		WKND	0.394	A	0.356	A
22	Harbor Bl &	AM	0.624	B	0.321	A
	7th St	PM	0.639	B	0.373	A
		WKND	0.842	D	0.214	A
23	Harbor Bl &	AM	0.415	A	0.443	A
	6th St	PM	0.570	A	0.429	A
		WKND	0.541	A	0.666	B
24	Harbor Bl &	AM	0.501	A	0.434	A
	5th St	PM	0.871	D	0.689	B
		WKND	0.621	B	0.425	A
25	Harbor Bl &	AM	0.809	D	0.616	B
	1st St	PM	0.741	C	0.547	A
		WKND	0.852	D	0.602	B
26	Harbor Bl &	AM	1.048	F	1.117	F
	Swinford St / SR-47 EB	PM	0.675	B	0.639	B
	Ramps	WKND	1.096	F	1.113	F
27	Harbor Bl &	AM	0.727	C	0.746	C
	SR-47 WB On Ramp	PM	0.551	A	0.475	A
		WKND	0.664	B	0.624	B
28	Harbor Bl &	AM	0.473	A	0.465	A
	Gulch Rd [b]	PM	0.503	A	0.488	A
		WKND	0.349	A	0.325	A
29	Harbor Bl &	AM	0.723	C	0.633	B
	O'Farrell St	PM	1.011	F	0.891	D
		WKND	0.827	D	0.673	B
30	Harbor Bl &	AM	0.713	C	0.668	B
	3rd St [a]	PM	0.902	E	0.723	C
		WKND	0.887	D	0.631	B
31	Pacific Av &	AM	0.483	A	0.473	A
	13th St	PM	0.460	A	0.451	A
		WKND	0.383	A	0.370	A
32	Pacific Av &	AM	0.422	A	0.419	A
	17th St	PM	0.341	A	0.333	A
		WKND	0.289	A	0.280	A
33	Pacific Av &	AM	0.224	A	0.221	A
	19th St	PM	0.321	A	0.315	A
		WKND	0.221	A	0.209	A
34	Gaffey St &	AM	0.955	E	0.953	E
	13th St	PM	0.707	C	0.705	C
		WKND	0.643	B	0.641	B
35	Gaffey St &	AM	0.633	B	0.629	B
	17th St	PM	0.497	A	0.493	A
		WKND	0.565	A	0.559	A
36	Gaffey St &	AM	0.550	A	0.544	A
	19th St	PM	0.487	A	0.483	A
		WKND	0.456	A	0.450	A

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 23
PROPOSED PROJECT INTERSECTION LEVELS OF SERVICE (2015)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2015)		ALTERNATIVE 6 (CEQA BASELINE) (YEAR 2015)		PROPOSED PROJECT (YEAR 2015)		IMPACT			
									NEPA Baseline		CEQA Baseline	
			V/C	LOS	V/C	LOS	V/C	LOS	Change	Impact	Change	Impact
1	Western Ave & 25th St	AM	0.548	A	0.544	A	0.551	A	0.003	NO	0.007	NO
		PM	0.543	A	0.521	A	0.544	A	0.001	NO	0.022	NO
		WKND	0.514	A	0.493	A	0.515	A	0.001	NO	0.022	NO
2	Western Ave & 9th St	AM	0.498	A	0.496	A	0.501	A	0.003	NO	0.005	NO
		PM	0.624	B	0.619	B	0.626	B	0.001	NO	0.006	NO
		WKND	0.426	A	0.415	A	0.428	A	0.003	NO	0.013	NO
3	Gaffey St & 25th St	AM	0.395	A	0.381	A	0.397	A	0.001	NO	0.015	NO
		PM	0.387	A	0.372	A	0.387	A	0.000	NO	0.015	NO
		WKND	0.400	A	0.381	A	0.402	A	0.002	NO	0.022	NO
4	Gaffey St & 22nd St	AM	0.431	A	0.407	A	0.463	A	0.033	NO	0.056	NO
		PM	0.399	A	0.364	A	0.407	A	0.008	NO	0.043	NO
		WKND	0.400	A	0.377	A	0.459	A	0.059	NO	0.081	NO
5	Gaffey St & 9th St	AM	0.779	C	0.775	C	0.790	C	0.011	NO	0.015	NO
		PM	0.803	D	0.788	C	0.805	D	0.002	NO	0.017	NO
		WKND	0.724	C	0.686	B	0.731	C	0.007	NO	0.045	YES
6	Gaffey St & 7th St	AM	0.768	C	0.766	C	0.777	C	0.009	NO	0.011	NO
		PM	0.741	C	0.737	C	0.743	C	0.002	NO	0.007	NO
		WKND	0.696	B	0.681	B	0.701	C	0.005	NO	0.020	NO
7	Gaffey St & 6th St [a]	AM	0.908	E	0.905	E	0.918	E	0.011	YES	0.013	YES
		PM	0.846	D	0.841	D	0.848	D	0.003	NO	0.008	NO
		WKND	0.823	D	0.805	D	0.831	D	0.008	NO	0.026	YES
8	Gaffey St & 5th St	AM	0.946	E	0.943	E	0.955	E	0.009	NO	0.012	YES
		PM	0.923	E	0.919	E	0.925	E	0.002	NO	0.006	NO
		WKND	0.729	C	0.713	C	0.736	C	0.006	NO	0.022	NO
9	Gaffey St & 1st St	AM	1.214	F	1.141	F	1.211	F	-0.003	NO	0.070	YES
		PM	0.944	E	0.937	E	0.946	E	0.001	NO	0.009	NO
		WKND	0.936	E	0.919	E	0.943	E	0.007	NO	0.024	YES
10	Gaffey St & I-110 Ramps	AM	0.409	A	0.395	A	0.410	A	0.001	NO	0.015	NO
		PM	0.554	A	0.548	A	0.555	A	0.001	NO	0.007	NO
		WKND	0.561	A	0.533	A	0.565	A	0.005	NO	0.032	NO
11	Gaffey St & Summerland Ave	AM	0.864	D	0.861	D	0.864	D	0.001	NO	0.004	NO
		PM	0.982	E	0.979	E	0.982	E	0.000	NO	0.004	NO
		WKND	0.636	B	0.624	B	0.637	B	0.001	NO	0.013	NO
12	Pacific Ave & 22nd St	AM	0.547	A	0.513	A	0.557	A	0.011	NO	0.045	NO
		PM	0.477	A	0.426	A	0.479	A	0.003	NO	0.053	NO
		WKND	0.409	A	0.375	A	0.432	A	0.023	NO	0.057	NO
13	Pacific Ave & 9th St	AM	0.578	A	0.577	A	0.580	A	0.002	NO	0.003	NO
		PM	0.551	A	0.544	A	0.551	A	0.001	NO	0.007	NO
		WKND	0.503	A	0.481	A	0.505	A	0.003	NO	0.025	NO
14	Pacific Ave & 7th St	AM	0.421	A	0.419	A	0.421	A	-0.001	NO	0.001	NO
		PM	0.473	A	0.467	A	0.475	A	0.001	NO	0.007	NO
		WKND	0.443	A	0.433	A	0.444	A	0.001	NO	0.011	NO
15	Pacific Ave & 6th St	AM	0.426	A	0.425	A	0.427	A	0.001	NO	0.002	NO
		PM	0.392	A	0.389	A	0.392	A	0.000	NO	0.003	NO
		WKND	0.407	A	0.401	A	0.407	A	0.001	NO	0.007	NO
16	Pacific Ave & 5th St	AM	0.540	A	0.539	A	0.541	A	0.001	NO	0.001	NO
		PM	0.456	A	0.455	A	0.456	A	0.000	NO	0.001	NO
		WKND	0.398	A	0.395	A	0.399	A	0.001	NO	0.003	NO
17	Pacific Ave & 1st St	AM	0.523	A	0.471	A	0.517	A	-0.007	NO	0.046	NO
		PM	0.471	A	0.453	A	0.469	A	-0.002	NO	0.016	NO
		WKND	0.477	A	0.410	A	0.469	A	-0.008	NO	0.059	NO
18	Pacific Ave & Front St	AM	0.416	A	0.407	A	0.422	A	0.006	NO	0.015	NO
		PM	0.339	A	0.328	A	0.341	A	0.002	NO	0.013	NO
		WKND	0.420	A	0.405	A	0.431	A	0.011	NO	0.026	NO
19	Via Cabrillo Marina & 22nd St	AM	0.181	A	0.161	A	0.187	A	0.006	NO	0.026	NO
		PM	0.086	A	0.071	A	0.087	A	0.001	NO	0.017	NO
		WKND	0.136	A	0.118	A	0.149	A	0.013	NO	0.031	NO
20	Miner St & 22nd St	AM	0.352	A	0.349	A	0.561	A	0.209	NO	0.212	NO
		PM	0.348	A	0.323	A	0.353	A	0.004	NO	0.029	NO
		WKND	0.282	A	0.265	A	0.520	A	0.239	NO	0.255	NO
21	Miner St & Crescent Ave [a]	AM	0.480	A	0.469	A	0.605	B	0.125	NO	0.136	NO
		PM	0.496	A	0.468	A	0.521	A	0.025	NO	0.053	NO
		WKND	0.360	A	0.322	A	0.493	A	0.133	NO	0.171	NO
22	Harbor Bl & 7th St	AM	0.557	A	0.273	A	0.671	B	0.113	NO	0.398	NO
		PM	0.569	A	0.322	A	0.590	A	0.021	NO	0.268	NO
		WKND	0.772	C	0.184	A	0.859	D	0.087	YES	0.675	YES
23	Harbor Bl & 6th St	AM	0.369	A	0.382	A	0.481	A	0.111	NO	0.099	NO
		PM	0.515	A	0.372	A	0.539	A	0.024	NO	0.167	NO
		WKND	0.498	A	0.591	A	0.619	B	0.121	NO	0.029	NO
24	Harbor Bl & 5th St	AM	0.454	A	0.377	A	0.562	A	0.107	NO	0.184	NO
		PM	0.785	C	0.606	B	0.806	D	0.021	YES	0.200	YES
		WKND	0.573	A	0.374	A	0.696	B	0.123	NO	0.322	NO
25	Harbor Bl & 1st St	AM	0.691	B	0.532	A	0.806	D	0.115	YES	0.274	YES
		PM	0.668	B	0.481	A	0.694	B	0.025	NO	0.213	NO
		WKND	0.751	C	0.511	A	0.817	D	0.067	YES	0.306	YES
26	Harbor Bl & Swinford St / SR-47 EB Ramps	AM	0.872	D	0.880	D	0.935	E	0.063	YES	0.055	YES
		PM	0.600	A	0.558	A	0.627	B	0.028	NO	0.069	NO
		WKND	0.914	E	0.913	E	0.939	E	0.025	YES	0.026	YES
27	Harbor Bl & SR-47 WB On Ramp	AM	0.599	A	0.607	B	0.678	B	0.079	NO	0.071	NO
		PM	0.510	A	0.432	A	0.530	A	0.020	NO	0.098	NO
		WKND	0.600	A	0.553	A	0.656	B	0.056	NO	0.102	NO
28	Harbor Bl & Gulch Rd [b]	AM	0.422	A	0.413	A	0.573	A	0.151	NO	0.160	NO
		PM	0.452	A	0.436	A	0.480	A	0.028	NO	0.044	NO
		WKND	0.319	A	0.296	A	0.454	A	0.135	NO	0.158	NO
29	Harbor Bl & O'Farrell St	AM	0.643	B	0.549	A	0.712	C	0.069	YES	0.163	YES
		PM	0.909	E	0.788	C	0.931	E	0.022	YES	0.143	YES
		WKND	0.750	C	0.589	A	0.864	D	0.114	YES	0.275	YES
30	Harbor Bl & 3rd St [a]	AM	0.653	B	0.603	B	0.793	C	0.140	YES	0.190	YES
		PM	0.833	D	0.655	B	0.865	D	0.033	YES	0.210	YES
		WKND	0.833	D	0.578	A	0.981	E	0.148	YES	0.403	YES
31	Pacific Av & 13th St	AM	0.414	A	0.405	A	0.415	A	0.001	NO	0.010	NO
		PM	0.395	A	0.367	A	0.395	A	0.000	NO	0.028	NO
		WKND	0.328	A	0.315	A	0.329	A	0.001	NO	0.013	NO
32	Pacific Av & 17th St	AM	0.359	A	0.356	A	0.360	A	0.001	NO	0.004	NO
		PM	0.289	A	0.281	A	0.289	A	0.000	NO	0.008	NO
		WKND	0.230	A	0.221	A	0.230	A	0.000	NO	0.009	NO
33	Pacific Av & 19th St	AM	0.187	A	0.184	A	0.187	A	0.001	NO	0.003	NO
		PM	0.271	A	0.267	A	0.272	A	0.001	NO	0.005	NO
		WKND	0.180	A	0.173	A	0.181	A	0.001	NO	0.007	NO
34	Gaffey St & 13th St	AM	0.831	D	0.829	D	0.840	D	0.009	NO	0.011	NO
		PM	0.611	B	0.610	B	0.613	B	0.002	NO	0.003	NO
		WKND	0.555	A	0.553	A	0.565	A	0.010	NO	0.012	NO
35	Gaffey St & 17th St	AM	0.545	A	0.543	A	0.554	A	0.009	NO	0.011	NO
		PM	0.425	A	0.422	A	0.427	A	0.002	NO	0.005	NO
		WKND	0.452	A	0.447	A	0.462	A	0.010	NO	0.015	NO
36	Gaffey St & 19th St	AM	0.475	A	0.469	A	0.488	A	0.013	NO	0.019	NO
		PM	0.392	A	0.387	A	0.395	A	0.003	NO	0.008	NO
		WKND	0.392	A	0.386	A	0.406	A	0.014	NO	0.020	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 24
PROPOSED PROJECT INTERSECTION LEVELS OF SERVICE (2037)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2037)		ALTERNATIVE 6 (NO PROJECT) (YEAR 2037)		PROPOSED PROJECT (YEAR 2037)		IMPACT			
									NEPA Baseline		No Project Baseline	
			V/C	LOS	V/C	LOS	V/C	LOS	Change	Impact	Change	Impact
1	Western Ave & 25th St	AM	0.637	B	0.631	B	0.640	B	0.004	NO	0.009	NO
		PM	0.626	B	0.603	B	0.626	B	0.001	NO	0.023	NO
		WKND	0.593	A	0.572	A	0.595	A	0.003	NO	0.023	NO
2	Western Ave & 9th St	AM	0.577	A	0.574	A	0.581	A	0.004	NO	0.006	NO
		PM	0.721	C	0.716	C	0.721	C	0.000	NO	0.005	NO
		WKND	0.495	A	0.485	A	0.499	A	0.004	NO	0.014	NO
3	Gaffey St & 25th St	AM	0.460	A	0.446	A	0.462	A	0.002	NO	0.016	NO
		PM	0.449	A	0.435	A	0.449	A	0.001	NO	0.015	NO
		WKND	0.466	A	0.446	A	0.470	A	0.004	NO	0.024	NO
4	Gaffey St & 22nd St	AM	0.500	A	0.477	A	0.549	A	0.049	NO	0.073	NO
		PM	0.537	A	0.503	A	0.557	A	0.020	NO	0.055	NO
		WKND	0.461	A	0.438	A	0.536	A	0.075	NO	0.098	NO
5	Gaffey St & 9th St	AM	0.892	D	0.887	D	0.909	E	0.017	YES	0.021	YES
		PM	0.919	E	0.905	E	0.923	E	0.005	NO	0.018	YES
		WKND	0.821	D	0.787	C	0.833	D	0.011	NO	0.045	YES
6	Gaffey St & 7th St	AM	0.879	D	0.877	D	0.892	D	0.013	NO	0.015	NO
		PM	0.850	D	0.846	D	0.853	D	0.003	NO	0.007	NO
		WKND	0.796	C	0.781	C	0.804	D	0.008	NO	0.023	YES
7	Gaffey St & 6th St [a]	AM	1.023	F	1.020	F	1.040	F	0.017	YES	0.020	YES
		PM	0.953	E	0.948	E	0.957	E	0.003	NO	0.008	NO
		WKND	0.930	E	0.912	E	0.942	E	0.012	YES	0.030	YES
8	Gaffey St & 5th St	AM	1.075	F	1.073	F	1.089	F	0.014	YES	0.016	YES
		PM	1.053	F	1.049	F	1.056	F	0.003	NO	0.007	NO
		WKND	0.833	D	0.816	D	0.842	D	0.010	NO	0.027	YES
9	Gaffey St & 1st St	AM	1.400	F	1.304	F	1.414	F	0.015	YES	0.110	YES
		PM	1.078	F	1.070	F	1.080	F	0.002	NO	0.010	YES
		WKND	1.067	F	1.051	F	1.077	F	0.010	YES	0.027	YES
10	Gaffey St & I-110 Ramps	AM	0.473	A	0.457	A	0.479	A	0.006	NO	0.022	NO
		PM	0.636	B	0.629	B	0.638	B	0.002	NO	0.009	NO
		WKND	0.649	B	0.614	B	0.659	B	0.011	NO	0.045	NO
11	Gaffey St & Summerland Ave	AM	0.990	E	0.987	E	0.991	E	0.001	NO	0.004	NO
		PM	1.122	F	1.119	F	1.122	F	0.000	NO	0.004	NO
		WKND	0.727	C	0.715	C	0.728	C	0.001	NO	0.013	NO
12	Pacific Ave & 22nd St	AM	0.630	B	0.596	A	0.647	B	0.017	NO	0.051	NO
		PM	0.546	A	0.496	A	0.551	A	0.005	NO	0.055	NO
		WKND	0.469	A	0.437	A	0.507	A	0.038	NO	0.071	NO
13	Pacific Ave & 9th St	AM	0.665	B	0.663	B	0.669	B	0.004	NO	0.005	NO
		PM	0.632	B	0.625	B	0.633	B	0.001	NO	0.008	NO
		WKND	0.575	A	0.553	A	0.580	A	0.005	NO	0.027	NO
14	Pacific Ave & 7th St	AM	0.487	A	0.486	A	0.487	A	0.000	NO	0.001	NO
		PM	0.571	A	0.565	A	0.572	A	0.001	NO	0.007	NO
		WKND	0.512	A	0.502	A	0.513	A	0.001	NO	0.011	NO
15	Pacific Ave & 6th St	AM	0.495	A	0.494	A	0.496	A	0.001	NO	0.002	NO
		PM	0.455	A	0.453	A	0.455	A	0.000	NO	0.003	NO
		WKND	0.471	A	0.465	A	0.471	A	0.001	NO	0.006	NO
16	Pacific Ave & 5th St	AM	0.621	B	0.621	B	0.622	B	0.001	NO	0.001	NO
		PM	0.526	A	0.525	A	0.526	A	0.000	NO	0.001	NO
		WKND	0.461	A	0.459	A	0.461	A	0.000	NO	0.003	NO
17	Pacific Ave & 1st St	AM	0.616	B	0.547	A	0.619	B	0.003	NO	0.072	NO
		PM	0.547	A	0.526	A	0.548	A	0.001	NO	0.022	NO
		WKND	0.567	A	0.481	A	0.571	A	0.003	NO	0.089	NO
18	Pacific Ave & Front St	AM	0.482	A	0.473	A	0.492	A	0.011	NO	0.020	NO
		PM	0.376	A	0.365	A	0.380	A	0.004	NO	0.015	NO
		WKND	0.473	A	0.456	A	0.493	A	0.020	NO	0.036	NO
19	Via Cabrillo Marina & 22nd St	AM	0.216	A	0.196	A	0.226	A	0.009	NO	0.029	NO
		PM	0.107	A	0.094	A	0.111	A	0.004	NO	0.017	NO
		WKND	0.165	A	0.147	A	0.185	A	0.020	NO	0.038	NO
20	Miner St & 22nd St	AM	0.407	A	0.402	A	0.723	C	0.316	YES	0.321	YES
		PM	0.404	A	0.378	A	0.410	A	0.006	NO	0.032	NO
		WKND	0.310	A	0.294	A	0.668	B	0.359	NO	0.375	NO
21	Miner St & Crescent Ave [a]	AM	0.541	A	0.530	A	0.729	C	0.188	YES	0.199	YES
		PM	0.553	A	0.525	A	0.592	A	0.038	NO	0.067	NO
		WKND	0.394	A	0.356	A	0.593	A	0.198	NO	0.237	NO
22	Harbor Bl & 7th St	AM	0.624	B	0.321	A	0.800	C	0.175	YES	0.478	YES
		PM	0.639	B	0.373	A	0.672	B	0.033	NO	0.299	NO
		WKND	0.842	D	0.214	A	0.972	E	0.130	YES	0.758	YES
23	Harbor Bl & 6th St	AM	0.415	A	0.443	A	0.588	A	0.173	NO	0.145	NO
		PM	0.570	A	0.429	A	0.607	B	0.037	NO	0.178	NO
		WKND	0.541	A	0.666	B	0.721	C	0.179	YES	0.055	YES
24	Harbor Bl & 5th St	AM	0.501	A	0.434	A	0.680	B	0.179	NO	0.246	NO
		PM	0.871	D	0.689	B	0.906	E	0.034	YES	0.216	YES
		WKND	0.621	B	0.425	A	0.806	D	0.185	YES	0.381	YES
25	Harbor Bl & 1st St	AM	0.809	D	0.616	B	1.002	F	0.193	YES	0.386	YES
		PM	0.741	C	0.547	A	0.787	C	0.046	YES	0.240	YES
		WKND	0.852	D	0.602	B	0.975	E	0.124	YES	0.373	YES
26	Harbor Bl & Swinford St / SR-47 EB Ramps	AM	1.048	F	1.117	F	1.198	F	0.151	YES	0.081	YES
		PM	0.675	B	0.639	B	0.726	C	0.052	YES	0.087	YES
		WKND	1.096	F	1.113	F	1.208	F	0.111	YES	0.095	YES
27	Harbor Bl & SR-47 WB On Ramp	AM	0.727	C	0.746	C	0.876	D	0.149	YES	0.130	YES
		PM	0.551	A	0.475	A	0.586	A	0.036	NO	0.112	NO
		WKND	0.664	B	0.624	B	0.771	C	0.107	YES	0.147	YES
28	Harbor Bl & Gulch Rd [b]	AM	0.473	A	0.465	A	0.694	B	0.221	NO	0.229	NO
		PM	0.503	A	0.488	A	0.545	A	0.043	NO	0.058	NO
		WKND	0.349	A	0.325	A	0.553	A	0.203	NO	0.228	NO
29	Harbor Bl & O'Farrell St	AM	0.723	C	0.633	B	0.830	D	0.107	YES	0.197	YES
		PM	1.011	F	0.891	D	1.046	F	0.035	YES	0.155	YES
		WKND	0.827	D	0.673	B	1.006	F	0.179	YES	0.333	YES
30	Harbor Bl & 3rd St [a]	AM	0.713	C	0.668	B	0.928	E	0.216	YES	0.260	YES
		PM	0.902	E	0.723	C	0.948	E	0.047	YES	0.225	YES
		WKND	0.887	D	0.631	B	1.108	F	0.222	YES	0.478	YES
31	Pacific Av & 13th St	AM	0.483	A	0.473	A	0.483	A	0.001	NO	0.010	NO
		PM	0.460	A	0.451	A	0.459	A	-0.001	NO	0.009	NO
		WKND	0.383	A	0.370	A	0.384	A	0.001	NO	0.014	NO
32	Pacific Av & 17th St	AM	0.422	A	0.419	A	0.423	A	0.001	NO	0.004	NO
		PM	0.341	A	0.333	A	0.341	A	0.000	NO	0.008	NO
		WKND	0.289	A	0.280	A	0.289	A	0.000	NO	0.009	NO
33	Pacific Av & 19th St	AM	0.224	A	0.221	A	0.225	A	0.001	NO	0.003	NO
		PM	0.321	A	0.315	A	0.321	A	0.001	NO	0.006	NO
		WKND	0.221	A	0.209	A	0.221	A	0.001	NO	0.012	NO
34	Gaffey St & 13th St	AM	0.955	E	0.953	E	0.969	E	0.014	YES	0.015	YES
		PM	0.707	C	0.705	C	0.709	C	0.003	NO	0.004	NO
		WKND	0.643	B	0.641	B	0.659	B	0.015	NO	0.017	NO
35	Gaffey St & 17th St	AM	0.633	B	0.629	B	0.645	B	0.013	NO	0.016	NO
		PM	0.497	A	0.493	A	0.500	A	0.003	NO	0.007	NO
		WKND	0.565	A	0.559	A	0.580	A	0.015	NO	0.021	NO
36	Gaffey St & 19th St	AM	0.550	A	0.544	A	0.569	A	0.019	NO	0.025	NO
		PM	0.487	A	0.483	A	0.492	A	0.005	NO	0.009	NO
		WKND	0.456	A	0.450	A	0.477	A	0.021	NO	0.027	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 25
ALTERNATIVE 1 INTERSECTION LEVELS OF SERVICE (2015)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2015)		ALTERNATIVE 6 (CEQA BASELINE) (YEAR 2015)		ALTERNATIVE 1 (YEAR 2015)		IMPACT			
									NEPA Baseline		CEQA Baseline	
			V/C	LOS	V/C	LOS	V/C	LOS	Change	Impact	Change	Impact
1	Western Ave &	AM	0.548	A	0.544	A	0.550	A	0.001	NO	0.006	NO
	25th St	PM	0.543	A	0.521	A	0.543	A	0.000	NO	0.022	NO
		WKND	0.514	A	0.493	A	0.514	A	0.000	NO	0.021	NO
2	Western Ave &	AM	0.498	A	0.496	A	0.499	A	0.001	NO	0.003	NO
	9th St	PM	0.624	B	0.619	B	0.624	B	0.000	NO	0.005	NO
		WKND	0.426	A	0.415	A	0.426	A	0.001	NO	0.011	NO
3	Gaffey St &	AM	0.395	A	0.381	A	0.395	A	0.000	NO	0.014	NO
	25th St	PM	0.387	A	0.372	A	0.386	A	-0.001	NO	0.014	NO
		WKND	0.400	A	0.381	A	0.401	A	0.001	NO	0.020	NO
4	Gaffey St &	AM	0.431	A	0.407	A	0.446	A	0.015	NO	0.039	NO
	22nd St	PM	0.399	A	0.364	A	0.402	A	0.003	NO	0.038	NO
		WKND	0.400	A	0.377	A	0.429	A	0.029	NO	0.052	NO
5	Gaffey St &	AM	0.779	C	0.775	C	0.784	C	0.005	NO	0.009	NO
	9th St	PM	0.803	D	0.788	C	0.803	D	0.001	NO	0.015	NO
		WKND	0.724	C	0.686	B	0.725	C	0.001	NO	0.039	NO
6	Gaffey St &	AM	0.768	C	0.766	C	0.773	C	0.005	NO	0.007	NO
	7th St	PM	0.741	C	0.737	C	0.742	C	0.001	NO	0.005	NO
		WKND	0.696	B	0.681	B	0.698	B	0.002	NO	0.017	NO
7	Gaffey St &	AM	0.908	E	0.905	E	0.913	E	0.006	NO	0.008	NO
	6th St [a]	PM	0.846	D	0.841	D	0.848	D	0.002	NO	0.007	NO
		WKND	0.823	D	0.805	D	0.828	D	0.005	NO	0.023	YES
8	Gaffey St &	AM	0.946	E	0.943	E	0.950	E	0.004	NO	0.007	NO
	5th St	PM	0.923	E	0.919	E	0.924	E	0.001	NO	0.005	NO
		WKND	0.729	C	0.713	C	0.733	C	0.004	NO	0.020	NO
9	Gaffey St &	AM	1.214	F	1.141	F	1.198	F	-0.016	NO	0.057	YES
	1st St	PM	0.944	E	0.937	E	0.944	E	0.000	NO	0.007	NO
		WKND	0.936	E	0.919	E	0.939	E	0.002	NO	0.020	YES
10	Gaffey St &	AM	0.409	A	0.395	A	0.407	A	-0.001	NO	0.013	NO
	I-110 Ramps	PM	0.554	A	0.548	A	0.553	A	-0.001	NO	0.005	NO
		WKND	0.561	A	0.533	A	0.559	A	-0.002	NO	0.025	NO
11	Gaffey St &	AM	0.864	D	0.861	D	0.864	D	0.000	NO	0.003	NO
	Summerland Ave	PM	0.982	E	0.979	E	0.982	E	0.000	NO	0.004	NO
		WKND	0.636	B	0.624	B	0.636	B	0.000	NO	0.012	NO
12	Pacific Ave &	AM	0.547	A	0.513	A	0.551	A	0.004	NO	0.038	NO
	22nd St	PM	0.477	A	0.426	A	0.476	A	-0.001	NO	0.050	NO
		WKND	0.409	A	0.375	A	0.418	A	0.009	NO	0.043	NO
13	Pacific Ave &	AM	0.578	A	0.577	A	0.579	A	0.001	NO	0.002	NO
	9th St	PM	0.551	A	0.544	A	0.551	A	0.000	NO	0.007	NO
		WKND	0.503	A	0.481	A	0.505	A	0.002	NO	0.024	NO
14	Pacific Ave &	AM	0.421	A	0.419	A	0.421	A	-0.001	NO	0.001	NO
	7th St	PM	0.473	A	0.467	A	0.475	A	0.001	NO	0.007	NO
		WKND	0.443	A	0.433	A	0.444	A	0.001	NO	0.011	NO
15	Pacific Ave &	AM	0.426	A	0.425	A	0.426	A	0.000	NO	0.001	NO
	6th St	PM	0.392	A	0.389	A	0.392	A	0.000	NO	0.003	NO
		WKND	0.407	A	0.401	A	0.407	A	0.000	NO	0.006	NO
16	Pacific Ave &	AM	0.540	A	0.539	A	0.540	A	0.000	NO	0.001	NO
	5th St	PM	0.456	A	0.455	A	0.456	A	0.000	NO	0.001	NO
		WKND	0.398	A	0.395	A	0.398	A	0.000	NO	0.003	NO
17	Pacific Ave &	AM	0.523	A	0.471	A	0.509	A	-0.015	NO	0.038	NO
	1st St	PM	0.471	A	0.453	A	0.468	A	-0.003	NO	0.015	NO
		WKND	0.477	A	0.410	A	0.461	A	-0.017	NO	0.051	NO
18	Pacific Ave &	AM	0.416	A	0.407	A	0.417	A	0.001	NO	0.010	NO
	Front St	PM	0.339	A	0.328	A	0.339	A	0.000	NO	0.011	NO
		WKND	0.420	A	0.405	A	0.421	A	0.001	NO	0.017	NO
19	Via Cabrillo Marina &	AM	0.181	A	0.161	A	0.184	A	0.002	NO	0.022	NO
	22nd St	PM	0.086	A	0.071	A	0.086	A	0.000	NO	0.015	NO
		WKND	0.136	A	0.118	A	0.143	A	0.006	NO	0.025	NO
20	Miner St &	AM	0.352	A	0.349	A	0.396	A	0.044	NO	0.047	NO
	22nd St	PM	0.348	A	0.323	A	0.356	A	0.008	NO	0.033	NO
		WKND	0.282	A	0.265	A	0.347	A	0.065	NO	0.082	NO
21	Miner St &	AM	0.480	A	0.469	A	0.770	C	0.290	YES	0.301	YES
	Crescent Ave [a]	PM	0.496	A	0.468	A	0.888	D	0.392	YES	0.419	YES
		WKND	0.360	A	0.322	A	0.689	B	0.329	NO	0.368	NO
22	Harbor Bl &	AM	0.557	A	0.273	A	0.584	A	0.027	NO	0.311	NO
	7th St	PM	0.569	A	0.322	A	0.738	C	0.169	YES	0.416	YES
		WKND	0.772	C	0.184	A	0.685	B	-0.087	NO	0.501	NO
23	Harbor Bl &	AM	0.369	A	0.382	A	0.424	A	0.055	NO	0.042	NO
	6th St	PM	0.515	A	0.372	A	0.527	A	0.011	NO	0.154	NO
		WKND	0.498	A	0.591	A	0.557	A	0.059	NO	-0.033	NO
24	Harbor Bl &	AM	0.454	A	0.377	A	0.502	A	0.048	NO	0.125	NO
	5th St	PM	0.785	C	0.606	B	0.793	C	0.008	NO	0.187	YES
		WKND	0.573	A	0.374	A	0.630	B	0.057	NO	0.256	NO
25	Harbor Bl &	AM	0.691	B	0.532	A	0.742	C	0.051	YES	0.210	YES
	1st St	PM	0.668	B	0.481	A	0.677	B	0.008	NO	0.196	NO
		WKND	0.751	C	0.511	A	0.765	C	0.014	NO	0.253	YES
26	Harbor Bl &	AM	0.872	D	0.880	D	0.854	D	-0.018	NO	-0.025	NO
	Swinford St / SR-47 EB	PM	0.600	A	0.558	A	0.611	B	0.011	NO	0.052	NO
	Ramps	WKND	0.914	E	0.913	E	0.867	D	-0.047	NO	-0.046	NO
27	Harbor Bl &	AM	0.599	A	0.607	B	0.614	B	0.015	NO	0.007	NO
	SR-47 WB On Ramp	PM	0.510	A	0.432	A	0.517	A	0.007	NO	0.085	NO
		WKND	0.600	A	0.553	A	0.612	B	0.012	NO	0.058	NO
28	Harbor Bl &	AM	0.422	A	0.413	A	0.413	A	-0.009	NO	0.000	NO
	Gulch Rd [b]	PM	0.452	A	0.436	A	0.842	D	0.390	YES	0.406	YES
		WKND	0.319	A	0.296	A	0.647	B	0.328	NO	0.351	NO
29	Harbor Bl &	AM	0.643	B	0.549	A	0.666	B	0.023	NO	0.117	NO
	O'Farrell St	PM	0.909	E	0.788	C	0.917	E	0.007	NO	0.129	YES
		WKND	0.750	C	0.589	A	0.795	C	0.045	YES	0.207	YES
30	Harbor Bl &	AM	0.653	B	0.603	B	0.722	C	0.069	YES	0.119	YES
	3rd St [a]	PM	0.833	D	0.655	B	0.848	D	0.016	NO	0.193	YES
		WKND	0.833	D	0.578	A	0.904	E	0.071	YES	0.326	YES
31	Pacific Av &	AM	0.414	A	0.405	A	0.414	A	0.000	NO	0.009	NO
	13th St	PM	0.395	A	0.367	A	0.395	A	0.000	NO	0.028	NO
		WKND	0.328	A	0.315	A	0.328	A	0.000	NO	0.013	NO
32	Pacific Av &	AM	0.359	A	0.356	A	0.359	A	0.000	NO	0.003	NO
	17th St	PM	0.289	A	0.281	A	0.287	A	-0.001	NO	0.007	NO
		WKND	0.230	A	0.221	A	0.229	A	-0.001	NO	0.007	NO
33	Pacific Av &	AM	0.187	A	0.184	A	0.187	A	0.001	NO	0.003	NO
	19th St	PM	0.271	A	0.267	A	0.272	A	0.001	NO	0.005	NO
		WKND	0.180	A	0.173	A	0.180	A	0.000	NO	0.007	NO
34	Gaffey St &	AM	0.831	D	0.829	D	0.835	D	0.005	NO	0.006	NO
	13th St	PM	0.611	B	0.610	B	0.612	B	0.001	NO	0.002	NO
		WKND	0.555	A	0.553	A	0.561	A	0.005	NO	0.007	NO
35	Gaffey St &	AM	0.545	A	0.543	A	0.549	A	0.004	NO	0.007	NO
	17th St	PM	0.425	A	0.422	A	0.427	A	0.001	NO	0.005	NO
		WKND	0.452	A	0.447	A	0.457	A	0.005	NO	0.010	NO
36	Gaffey St &	AM	0.475	A	0.469	A	0.481	A	0.007	NO	0.013	NO
	19th St	PM	0.392	A	0.387	A	0.395	A	0.003	NO	0.007	NO
		WKND	0.392	A	0.386	A	0.399	A	0.007	NO	0.013	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 26
ALTERNATIVE 1 INTERSECTION LEVELS OF SERVICE (2037)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2037)		ALTERNATIVE 6 (NO PROJECT) (YEAR 2037)		ALTERNATIVE 1 (YEAR 2037)		IMPACT			
									NEPA Baseline		No Project Baseline	
			V/C	LOS	V/C	LOS	V/C	LOS	Change	Impact	Change	Impact
1	Western Ave & 25th St	AM	0.637	B	0.631	B	0.638	B	0.001	NO	0.007	NO
		PM	0.626	B	0.603	B	0.626	B	0.000	NO	0.022	NO
		WKND	0.593	A	0.572	A	0.593	A	0.001	NO	0.021	NO
2	Western Ave & 9th St	AM	0.577	A	0.574	A	0.579	A	0.001	NO	0.004	NO
		PM	0.721	C	0.716	C	0.721	C	0.000	NO	0.005	NO
		WKND	0.495	A	0.485	A	0.496	A	0.001	NO	0.012	NO
3	Gaffey St & 25th St	AM	0.460	A	0.446	A	0.461	A	0.001	NO	0.015	NO
		PM	0.449	A	0.435	A	0.449	A	0.000	NO	0.014	NO
		WKND	0.466	A	0.446	A	0.467	A	0.001	NO	0.021	NO
4	Gaffey St & 22nd St	AM	0.500	A	0.477	A	0.523	A	0.023	NO	0.047	NO
		PM	0.537	A	0.503	A	0.547	A	0.010	NO	0.045	NO
		WKND	0.461	A	0.438	A	0.505	A	0.043	NO	0.067	NO
5	Gaffey St & 9th St	AM	0.892	D	0.887	D	0.899	D	0.007	NO	0.012	NO
		PM	0.919	E	0.905	E	0.921	E	0.002	NO	0.015	YES
		WKND	0.821	D	0.787	C	0.826	D	0.005	NO	0.039	YES
6	Gaffey St & 7th St	AM	0.879	D	0.877	D	0.885	D	0.006	NO	0.008	NO
		PM	0.850	D	0.846	D	0.851	D	0.001	NO	0.005	NO
		WKND	0.796	C	0.781	C	0.799	C	0.003	NO	0.018	NO
7	Gaffey St & 6th St [a]	AM	1.023	F	1.020	F	1.032	F	0.008	NO	0.012	YES
		PM	0.953	E	0.948	E	0.955	E	0.002	NO	0.007	NO
		WKND	0.930	E	0.912	E	0.936	E	0.006	NO	0.024	YES
8	Gaffey St & 5th St	AM	1.075	F	1.073	F	1.082	F	0.007	NO	0.009	NO
		PM	1.053	F	1.049	F	1.054	F	0.001	NO	0.006	NO
		WKND	0.833	D	0.816	D	0.837	D	0.004	NO	0.021	YES
9	Gaffey St & 1st St	AM	1.400	F	1.304	F	1.394	F	-0.006	NO	0.089	YES
		PM	1.078	F	1.070	F	1.079	F	0.001	NO	0.009	NO
		WKND	1.067	F	1.051	F	1.072	F	0.005	NO	0.022	YES
10	Gaffey St & I-110 Ramps	AM	0.473	A	0.457	A	0.475	A	0.001	NO	0.017	NO
		PM	0.636	B	0.629	B	0.636	B	0.000	NO	0.007	NO
		WKND	0.649	B	0.614	B	0.650	B	0.001	NO	0.036	NO
11	Gaffey St & Summerland Ave	AM	0.990	E	0.987	E	0.990	E	0.000	NO	0.003	NO
		PM	1.122	F	1.119	F	1.122	F	0.000	NO	0.004	NO
		WKND	0.727	C	0.715	C	0.727	C	0.000	NO	0.012	NO
12	Pacific Ave & 22nd St	AM	0.630	B	0.596	A	0.637	B	0.007	NO	0.041	NO
		PM	0.546	A	0.496	A	0.547	A	0.001	NO	0.051	NO
		WKND	0.469	A	0.437	A	0.487	A	0.018	NO	0.051	NO
13	Pacific Ave & 9th St	AM	0.665	B	0.663	B	0.667	B	0.002	NO	0.003	NO
		PM	0.632	B	0.625	B	0.633	B	0.001	NO	0.007	NO
		WKND	0.575	A	0.553	A	0.578	A	0.003	NO	0.025	NO
14	Pacific Ave & 7th St	AM	0.487	A	0.486	A	0.487	A	0.000	NO	0.001	NO
		PM	0.571	A	0.565	A	0.572	A	0.001	NO	0.007	NO
		WKND	0.512	A	0.502	A	0.513	A	0.001	NO	0.011	NO
15	Pacific Ave & 6th St	AM	0.495	A	0.494	A	0.495	A	0.000	NO	0.001	NO
		PM	0.455	A	0.453	A	0.455	A	0.000	NO	0.003	NO
		WKND	0.471	A	0.465	A	0.471	A	0.000	NO	0.005	NO
16	Pacific Ave & 5th St	AM	0.621	B	0.621	B	0.622	B	0.001	NO	0.001	NO
		PM	0.526	A	0.525	A	0.526	A	0.000	NO	0.001	NO
		WKND	0.461	A	0.459	A	0.461	A	0.000	NO	0.003	NO
17	Pacific Ave & 1st St	AM	0.616	B	0.547	A	0.608	B	-0.008	NO	0.061	NO
		PM	0.547	A	0.526	A	0.545	A	-0.002	NO	0.019	NO
		WKND	0.567	A	0.481	A	0.557	A	-0.010	NO	0.076	NO
18	Pacific Ave & Front St	AM	0.482	A	0.473	A	0.485	A	0.004	NO	0.013	NO
		PM	0.376	A	0.365	A	0.377	A	0.001	NO	0.012	NO
		WKND	0.473	A	0.456	A	0.479	A	0.006	NO	0.022	NO
19	Via Cabrillo Marina & 22nd St	AM	0.216	A	0.196	A	0.221	A	0.004	NO	0.025	NO
		PM	0.107	A	0.094	A	0.108	A	0.001	NO	0.015	NO
		WKND	0.165	A	0.147	A	0.175	A	0.010	NO	0.028	NO
20	Miner St & 22nd St	AM	0.407	A	0.402	A	0.488	A	0.081	NO	0.086	NO
		PM	0.404	A	0.378	A	0.413	A	0.009	NO	0.035	NO
		WKND	0.310	A	0.294	A	0.426	A	0.116	NO	0.132	NO
21	Miner St & Crescent Ave [a]	AM	0.541	A	0.530	A	0.887	D	0.346	YES	0.357	YES
		PM	0.553	A	0.525	A	0.999	E	0.446	YES	0.474	YES
		WKND	0.394	A	0.356	A	0.793	C	0.399	YES	0.438	YES
22	Harbor Bl & 7th St	AM	0.624	B	0.321	A	0.697	B	0.073	NO	0.376	NO
		PM	0.639	B	0.373	A	0.829	D	0.191	YES	0.457	YES
		WKND	0.842	D	0.214	A	0.765	C	-0.077	NO	0.551	YES
23	Harbor Bl & 6th St	AM	0.415	A	0.443	A	0.503	A	0.088	NO	0.060	NO
		PM	0.570	A	0.429	A	0.588	A	0.018	NO	0.159	NO
		WKND	0.541	A	0.666	B	0.629	B	0.087	NO	-0.037	NO
24	Harbor Bl & 5th St	AM	0.501	A	0.434	A	0.591	A	0.090	NO	0.157	NO
		PM	0.871	D	0.689	B	0.886	D	0.015	NO	0.197	YES
		WKND	0.621	B	0.425	A	0.710	C	0.088	YES	0.284	YES
25	Harbor Bl & 1st St	AM	0.809	D	0.616	B	0.908	E	0.099	YES	0.292	YES
		PM	0.741	C	0.547	A	0.764	C	0.023	NO	0.217	YES
		WKND	0.852	D	0.602	B	0.904	E	0.052	YES	0.302	YES
26	Harbor Bl & Swinford St / SR-47 EB Ramps	AM	1.048	F	1.117	F	1.080	F	0.032	YES	-0.037	NO
		PM	0.675	B	0.639	B	0.698	B	0.023	NO	0.059	NO
		WKND	1.096	F	1.113	F	1.099	F	0.002	NO	-0.015	NO
27	Harbor Bl & SR-47 WB On Ramp	AM	0.727	C	0.746	C	0.781	C	0.053	YES	0.034	NO
		PM	0.551	A	0.475	A	0.565	A	0.015	NO	0.091	NO
		WKND	0.664	B	0.624	B	0.703	C	0.039	NO	0.079	YES
28	Harbor Bl & Gulch Rd [b]	AM	0.473	A	0.465	A	0.477	A	0.003	NO	0.012	NO
		PM	0.503	A	0.488	A	0.946	E	0.443	YES	0.458	YES
		WKND	0.349	A	0.325	A	0.746	C	0.397	YES	0.421	YES
29	Harbor Bl & O'Farrell St	AM	0.723	C	0.633	B	0.763	C	0.039	NO	0.129	YES
		PM	1.011	F	0.891	D	1.025	F	0.014	YES	0.134	YES
		WKND	0.827	D	0.673	B	0.904	E	0.077	YES	0.231	YES
30	Harbor Bl & 3rd St [a]	AM	0.713	C	0.668	B	0.823	D	0.110	YES	0.154	YES
		PM	0.902	E	0.723	C	0.925	E	0.023	YES	0.202	YES
		WKND	0.887	D	0.631	B	0.994	E	0.108	YES	0.363	YES
31	Pacific Av & 13th St	AM	0.483	A	0.473	A	0.483	A	0.000	NO	0.009	NO
		PM	0.460	A	0.451	A	0.459	A	-0.001	NO	0.009	NO
		WKND	0.383	A	0.370	A	0.383	A	0.000	NO	0.013	NO
32	Pacific Av & 17th St	AM	0.422	A	0.419	A	0.422	A	0.000	NO	0.003	NO
		PM	0.341	A	0.333	A	0.339	A	-0.001	NO	0.007	NO
		WKND	0.289	A	0.280	A	0.287	A	-0.001	NO	0.007	NO
33	Pacific Av & 19th St	AM	0.224	A	0.221	A	0.225	A	0.001	NO	0.003	NO
		PM	0.321	A	0.315	A	0.321	A	0.000	NO	0.005	NO
		WKND	0.221	A	0.209	A	0.221	A	0.000	NO	0.011	NO
34	Gaffey St & 13th St	AM	0.955	E	0.953	E	0.962	E	0.007	NO	0.009	NO
		PM	0.707	C	0.705	C	0.708	C	0.001	NO	0.003	NO
		WKND	0.643	B	0.641	B	0.651	B	0.007	NO	0.009	NO
35	Gaffey St & 17th St	AM	0.633	B	0.629	B	0.639	B	0.006	NO	0.009	NO
		PM	0.497	A	0.493	A	0.499	A	0.001	NO	0.005	NO
		WKND	0.565	A	0.559	A	0.573	A	0.008	NO	0.013	NO
36	Gaffey St & 19th St	AM	0.550	A	0.544	A	0.559	A	0.009	NO	0.015	NO
		PM	0.487	A	0.483	A	0.490	A	0.003	NO	0.007	NO
		WKND	0.456	A	0.450	A	0.467	A	0.011	NO	0.017	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 27
ALTERNATIVE 2 INTERSECTION LEVELS OF SERVICE (2015)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2015)		ALTERNATIVE 6 (CEQA BASELINE) (YEAR 2015)		ALTERNATIVE 2 (YEAR 2015)		IMPACT			
									NEPA Baseline		CEQA Baseline	
			V/C or *Delay*	LOS	V/C or *Delay*	LOS	V/C or *Delay*	LOS	Change	Impact	Change	Impact
1	Western Ave & 25th St	AM	0.548	A	0.544	A	0.551	A	0.002	NO	0.006	NO
		PM	0.543	A	0.521	A	0.543	A	0.000	NO	0.022	NO
		WKND	0.514	A	0.493	A	0.515	A	0.001	NO	0.022	NO
2	Western Ave & 9th St	AM	0.498	A	0.496	A	0.501	A	0.004	NO	0.006	NO
		PM	0.624	B	0.619	B	0.626	B	0.001	NO	0.006	NO
		WKND	0.426	A	0.415	A	0.429	A	0.004	NO	0.014	NO
3	Gaffey St & 25th St	AM	0.395	A	0.381	A	0.396	A	0.001	NO	0.015	NO
		PM	0.387	A	0.372	A	0.387	A	0.000	NO	0.015	NO
		WKND	0.400	A	0.381	A	0.402	A	0.002	NO	0.022	NO
4	Gaffey St & 22nd St	AM	0.431	A	0.407	A	0.477	A	0.046	NO	0.069	NO
		PM	0.399	A	0.364	A	0.411	A	0.012	NO	0.047	NO
		WKND	0.400	A	0.377	A	0.465	A	0.065	NO	0.088	NO
5	Gaffey St & 9th St	AM	0.779	C	0.775	C	0.795	C	0.015	NO	0.020	NO
		PM	0.803	D	0.788	C	0.806	D	0.003	NO	0.018	NO
		WKND	0.724	C	0.686	B	0.733	C	0.009	NO	0.047	YES
6	Gaffey St & 7th St	AM	0.768	C	0.766	C	0.781	C	0.013	NO	0.015	NO
		PM	0.741	C	0.737	C	0.744	C	0.003	NO	0.007	NO
		WKND	0.696	B	0.681	B	0.703	C	0.007	NO	0.023	NO
7	Gaffey St & 6th St [a]	AM	0.908	E	0.905	E	0.923	E	0.016	YES	0.018	YES
		PM	0.846	D	0.841	D	0.849	D	0.003	NO	0.008	NO
		WKND	0.823	D	0.805	D	0.834	D	0.012	NO	0.029	YES
8	Gaffey St & 5th St	AM	0.946	E	0.943	E	0.959	E	0.013	YES	0.016	YES
		PM	0.923	E	0.919	E	0.926	E	0.003	NO	0.007	NO
		WKND	0.729	C	0.713	C	0.739	C	0.009	NO	0.025	NO
9	Gaffey St & 1st St	AM	1.214	F	1.141	F	1.194	F	-0.020	NO	0.052	YES
		PM	0.944	E	0.937	E	0.946	E	0.001	NO	0.009	NO
		WKND	0.936	E	0.919	E	0.945	E	0.009	NO	0.026	YES
10	Gaffey St & I-110 Ramps	AM	0.409	A	0.395	A	0.409	A	0.000	NO	0.014	NO
		PM	0.554	A	0.548	A	0.554	A	0.000	NO	0.006	NO
		WKND	0.561	A	0.533	A	0.563	A	0.002	NO	0.029	NO
11	Gaffey St & Summerland Ave	AM	0.864	D	0.861	D	0.864	D	0.000	NO	0.003	NO
		PM	0.982	E	0.979	E	0.982	E	0.000	NO	0.004	NO
		WKND	0.636	B	0.624	B	0.636	B	0.000	NO	0.012	NO
12	Pacific Ave & 22nd St	AM	0.547	A	0.513	A	0.562	A	0.015	NO	0.049	NO
		PM	0.477	A	0.426	A	0.481	A	0.004	NO	0.055	NO
		WKND	0.409	A	0.375	A	0.441	A	0.032	NO	0.067	NO
13	Pacific Ave & 9th St	AM	0.578	A	0.577	A	0.580	A	0.002	NO	0.003	NO
		PM	0.551	A	0.544	A	0.551	A	0.001	NO	0.007	NO
		WKND	0.503	A	0.481	A	0.506	A	0.003	NO	0.025	NO
14	Pacific Ave & 7th St	AM	0.421	A	0.419	A	0.421	A	-0.001	NO	0.001	NO
		PM	0.473	A	0.467	A	0.475	A	0.001	NO	0.007	NO
		WKND	0.443	A	0.433	A	0.444	A	0.001	NO	0.011	NO
15	Pacific Ave & 6th St	AM	0.426	A	0.425	A	0.427	A	0.001	NO	0.002	NO
		PM	0.392	A	0.389	A	0.392	A	0.000	NO	0.003	NO
		WKND	0.407	A	0.401	A	0.407	A	0.000	NO	0.006	NO
16	Pacific Ave & 5th St	AM	0.540	A	0.539	A	0.540	A	0.000	NO	0.001	NO
		PM	0.456	A	0.455	A	0.456	A	0.000	NO	0.001	NO
		WKND	0.398	A	0.395	A	0.398	A	0.000	NO	0.003	NO
17	Pacific Ave & 1st St	AM	0.523	A	0.471	A	0.501	A	-0.022	NO	0.031	NO
		PM	0.471	A	0.453	A	0.466	A	-0.005	NO	0.013	NO
		WKND	0.477	A	0.410	A	0.452	A	-0.025	NO	0.042	NO
18	Pacific Ave & Front St	AM	0.416	A	0.407	A	0.422	A	0.006	NO	0.015	NO
		PM	0.339	A	0.328	A	0.341	A	0.002	NO	0.013	NO
		WKND	0.420	A	0.405	A	0.431	A	0.011	NO	0.026	NO
19	Via Cabrillo Marina & 22nd St	AM	0.181	A	0.161	A	0.189	A	0.008	NO	0.028	NO
		PM	0.086	A	0.071	A	0.088	A	0.002	NO	0.018	NO
		WKND	0.136	A	0.118	A	0.154	A	0.018	NO	0.036	NO
20	Miner St & 22nd St	AM	0.352	A	0.349	A	0.498	A	0.146	NO	0.149	NO
		PM	0.348	A	0.323	A	0.360	A	0.012	NO	0.037	NO
		WKND	0.282	A	0.265	A	0.583	A	0.301	NO	0.318	NO
21	Miner St & Crescent Ave [a]	AM	0.480	A	0.469	A	0.863	D	0.383	YES	0.394	YES
		PM	0.496	A	0.468	A	0.919	E	0.423	YES	0.451	YES
		WKND	0.360	A	0.322	A	0.859	D	0.499	YES	0.538	YES
22	Harbor Bl & 7th St	AM	0.557	A	0.273	A	0.708	C	0.151	YES	0.435	YES
		PM	0.569	A	0.322	A	0.768	C	0.199	YES	0.446	YES
		WKND	0.772	C	0.184	A	0.763	C	-0.009	NO	0.579	YES
23	Harbor Bl & 6th St	AM	0.369	A	0.382	A	0.509	A	0.139	NO	0.127	NO
		PM	0.515	A	0.372	A	0.546	A	0.031	NO	0.174	NO
		WKND	0.498	A	0.591	A	0.655	B	0.157	NO	0.064	NO
24	Harbor Bl & 5th St	AM	0.454	A	0.377	A	0.591	A	0.137	NO	0.214	NO
		PM	0.785	C	0.606	B	0.813	D	0.028	YES	0.207	YES
		WKND	0.573	A	0.374	A	0.735	C	0.162	YES	0.361	YES
25	Harbor Bl & 1st St	AM	0.691	B	0.532	A	0.802	D	0.111	YES	0.270	YES
		PM	0.668	B	0.481	A	0.693	B	0.025	NO	0.212	NO
		WKND	0.751	C	0.511	A	0.838	D	0.087	YES	0.326	YES
26	Harbor Bl & Swinford St / SR-47 EB R	AM	0.872	D	0.880	D	0.902	E	0.030	YES	0.023	YES
		PM	0.600	A	0.558	A	0.629	B	0.030	NO	0.071	NO
		WKND	0.914	E	0.913	E	0.880	D	-0.033	NO	-0.033	NO
27	Harbor Bl & SR-47 WB On Ramp	AM	0.599	A	0.607	B	0.681	B	0.082	NO	0.074	NO
		PM	0.510	A	0.432	A	0.530	A	0.020	NO	0.098	NO
		WKND	0.600	A	0.553	A	0.659	B	0.059	NO	0.105	NO
28	Harbor Bl & Gulch Rd [b]	AM	0.422	A	0.413	A	0.495	A	0.073	NO	0.083	NO
		PM	0.452	A	0.436	A	0.874	D	0.423	YES	0.438	YES
		WKND	0.319	A	0.296	A	0.818	D	0.498	YES	0.522	YES
29	Harbor Bl & O'Farrell St	AM	0.643	B	0.549	A	0.714	C	0.071	YES	0.165	YES
		PM	0.909	E	0.788	C	0.937	E	0.027	YES	0.149	YES
		WKND	0.750	C	0.589	A	0.894	D	0.144	YES	0.305	YES
30	Harbor Bl & 3rd St [a]	AM	0.653	B	0.603	B	0.828	D	0.176	YES	0.226	YES
		PM	0.833	D	0.655	B	0.873	D	0.041	YES	0.218	YES
		WKND	0.833	D	0.578	A	1.028	F	0.194	YES	0.449	YES
31	Pacific Av & 13th St	AM	0.414	A	0.405	A	0.414	A	0.000	NO	0.009	NO
		PM	0.395	A	0.367	A	0.395	A	0.000	NO	0.028	NO
		WKND	0.328	A	0.315	A	0.329	A	0.001	NO	0.013	NO
32	Pacific Av & 17th St	AM	0.359	A	0.356	A	0.359	A	0.000	NO	0.003	NO
		PM	0.289	A	0.281	A	0.287	A	-0.001	NO	0.007	NO
		WKND	0.230	A	0.221	A	0.229	A	-0.001	NO	0.007	NO
33	Pacific Av & 19th St	AM	0.187	A	0.184	A	0.187	A	0.001	NO	0.003	NO
		PM	0.271	A	0.267	A	0.272	A	0.001	NO	0.005	NO
		WKND	0.180	A	0.173	A	0.180	A	0.000	NO	0.007	NO
34	Gaffey St & 13th St	AM	0.831	D	0.829	D	0.844	D	0.013	NO	0.015	NO
		PM	0.611	B	0.610	B	0.614	B	0.003	NO	0.004	NO
		WKND	0.555	A	0.553	A	0.570	A	0.015	NO	0.017	NO
35	Gaffey St & 17th St	AM	0.545	A	0.543	A	0.558	A	0.013	NO	0.015	NO
		PM	0.425	A	0.422	A	0.429	A	0.003	NO	0.007	NO
		WKND	0.452	A	0.447	A	0.467	A	0.015	NO	0.019	NO
36	Gaffey St & 19th St	AM	0.475	A	0.469	A	0.493	A	0.019	NO	0.025	NO
		PM	0.392	A	0.387	A	0.396	A	0.004	NO	0.009	NO
		WKND	0.392	A	0.386	A	0.412	A	0.020	NO	0.026	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 28
ALTERNATIVE 2 INTERSECTION LEVELS OF SERVICE (2037)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2037)		ALTERNATIVE 6 (NO PROJECT) (YEAR 2037)		ALTERNATIVE 2 (YEAR 2037)		IMPACT			
									NEPA Baseline		No Project Baseline	
			V/C or *Delay*	LOS	V/C or *Delay*	LOS	V/C or *Delay*	LOS	Change	Impact	Change	Impact
1	Western Ave & 25th St	AM	0.637	B	0.631	B	0.641	B	0.004	NO	0.010	NO
		PM	0.626	B	0.603	B	0.626	B	0.000	NO	0.022	NO
		WKND	0.593	A	0.572	A	0.595	A	0.003	NO	0.023	NO
2	Western Ave & 9th St	AM	0.577	A	0.574	A	0.582	A	0.005	NO	0.008	NO
		PM	0.721	C	0.716	C	0.721	C	0.000	NO	0.005	NO
		WKND	0.495	A	0.485	A	0.500	A	0.005	NO	0.015	NO
3	Gaffey St & 25th St	AM	0.460	A	0.446	A	0.462	A	0.002	NO	0.016	NO
		PM	0.449	A	0.435	A	0.449	A	0.001	NO	0.015	NO
		WKND	0.466	A	0.446	A	0.470	A	0.004	NO	0.024	NO
4	Gaffey St & 22nd St	AM	0.500	A	0.477	A	0.570	A	0.070	NO	0.093	NO
		PM	0.537	A	0.503	A	0.566	A	0.029	NO	0.063	NO
		WKND	0.461	A	0.438	A	0.545	A	0.084	NO	0.107	NO
5	Gaffey St & 9th St	AM	0.892	D	0.887	D	0.915	E	0.023	YES	0.027	YES
		PM	0.919	E	0.905	E	0.925	E	0.006	NO	0.019	YES
		WKND	0.821	D	0.787	C	0.840	D	0.019	NO	0.053	YES
6	Gaffey St & 7th St	AM	0.879	D	0.877	D	0.897	D	0.019	NO	0.021	YES
		PM	0.850	D	0.846	D	0.854	D	0.004	NO	0.008	NO
		WKND	0.796	C	0.781	C	0.808	D	0.012	NO	0.027	YES
7	Gaffey St & 6th St [a]	AM	1.023	F	1.020	F	1.047	F	0.023	YES	0.027	YES
		PM	0.953	E	0.948	E	0.958	E	0.005	NO	0.010	YES
		WKND	0.930	E	0.912	E	0.947	E	0.017	YES	0.035	YES
8	Gaffey St & 5th St	AM	1.075	F	1.073	F	1.096	F	0.020	YES	0.022	YES
		PM	1.053	F	1.049	F	1.057	F	0.004	NO	0.008	NO
		WKND	0.833	D	0.816	D	0.849	D	0.016	NO	0.033	YES
9	Gaffey St & 1st St	AM	1.400	F	1.304	F	1.387	F	-0.012	NO	0.083	YES
		PM	1.078	F	1.070	F	1.081	F	0.003	NO	0.011	YES
		WKND	1.067	F	1.051	F	1.082	F	0.015	YES	0.031	YES
10	Gaffey St & I-110 Ramps	AM	0.473	A	0.457	A	0.477	A	0.004	NO	0.020	NO
		PM	0.636	B	0.629	B	0.637	B	0.001	NO	0.009	NO
		WKND	0.649	B	0.614	B	0.655	B	0.007	NO	0.041	NO
11	Gaffey St & Summerland Ave	AM	0.990	E	0.987	E	0.991	E	0.001	NO	0.004	NO
		PM	1.122	F	1.119	F	1.122	F	0.000	NO	0.004	NO
		WKND	0.727	C	0.715	C	0.728	C	0.001	NO	0.013	NO
12	Pacific Ave & 22nd St	AM	0.630	B	0.596	A	0.655	B	0.025	NO	0.059	NO
		PM	0.546	A	0.496	A	0.554	A	0.008	NO	0.058	NO
		WKND	0.469	A	0.437	A	0.522	A	0.053	NO	0.085	NO
13	Pacific Ave & 9th St	AM	0.665	B	0.663	B	0.669	B	0.005	NO	0.006	NO
		PM	0.632	B	0.625	B	0.633	B	0.001	NO	0.008	NO
		WKND	0.575	A	0.553	A	0.581	A	0.005	NO	0.027	NO
14	Pacific Ave & 7th St	AM	0.487	A	0.486	A	0.487	A	-0.001	NO	0.001	NO
		PM	0.571	A	0.565	A	0.572	A	0.001	NO	0.007	NO
		WKND	0.512	A	0.502	A	0.513	A	0.001	NO	0.011	NO
15	Pacific Ave & 6th St	AM	0.495	A	0.494	A	0.496	A	0.001	NO	0.002	NO
		PM	0.455	A	0.453	A	0.455	A	0.000	NO	0.003	NO
		WKND	0.471	A	0.465	A	0.471	A	0.000	NO	0.005	NO
16	Pacific Ave & 5th St	AM	0.621	B	0.621	B	0.622	B	0.001	NO	0.001	NO
		PM	0.526	A	0.525	A	0.526	A	0.000	NO	0.001	NO
		WKND	0.461	A	0.459	A	0.461	A	0.000	NO	0.003	NO
17	Pacific Ave & 1st St	AM	0.616	B	0.547	A	0.596	A	-0.020	NO	0.049	NO
		PM	0.547	A	0.526	A	0.543	A	-0.005	NO	0.017	NO
		WKND	0.567	A	0.481	A	0.545	A	-0.023	NO	0.063	NO
18	Pacific Ave & Front St	AM	0.482	A	0.473	A	0.492	A	0.011	NO	0.020	NO
		PM	0.376	A	0.365	A	0.380	A	0.004	NO	0.015	NO
		WKND	0.473	A	0.456	A	0.493	A	0.020	NO	0.036	NO
19	Via Cabrillo Marina & 22nd St	AM	0.216	A	0.196	A	0.229	A	0.013	NO	0.033	NO
		PM	0.107	A	0.094	A	0.111	A	0.004	NO	0.018	NO
		WKND	0.165	A	0.147	A	0.193	A	0.027	NO	0.046	NO
20	Miner St & 22nd St	AM	0.407	A	0.402	A	0.642	B	0.235	NO	0.240	NO
		PM	0.404	A	0.378	A	0.419	A	0.015	NO	0.041	NO
		WKND	0.310	A	0.294	A	0.785	C	0.475	YES	0.491	YES
21	Miner St & Crescent Ave [a]	AM	0.541	A	0.530	A	1.026	F	0.485	YES	0.496	YES
		PM	0.553	A	0.525	A	1.048	F	0.495	YES	0.523	YES
		WKND	0.394	A	0.356	A	1.053	F	0.658	YES	0.697	YES
22	Harbor Bl & 7th St	AM	0.624	B	0.321	A	0.884	D	0.260	YES	0.563	YES
		PM	0.639	B	0.373	A	0.875	D	0.236	YES	0.503	YES
		WKND	0.842	D	0.214	A	0.908	E	0.066	YES	0.694	YES
23	Harbor Bl & 6th St	AM	0.415	A	0.443	A	0.631	B	0.215	NO	0.188	NO
		PM	0.570	A	0.429	A	0.617	B	0.047	NO	0.188	NO
		WKND	0.541	A	0.666	B	0.776	C	0.235	YES	0.110	YES
24	Harbor Bl & 5th St	AM	0.501	A	0.434	A	0.725	C	0.225	YES	0.291	YES
		PM	0.871	D	0.689	B	0.916	E	0.045	YES	0.227	YES
		WKND	0.621	B	0.425	A	0.866	D	0.244	YES	0.440	YES
25	Harbor Bl & 1st St	AM	0.809	D	0.616	B	0.999	E	0.189	YES	0.383	YES
		PM	0.741	C	0.547	A	0.787	C	0.046	YES	0.240	YES
		WKND	0.852	D	0.602	B	1.005	F	0.154	YES	0.403	YES
26	Harbor Bl & Swinford St / SR-47 EB F	AM	1.048	F	1.117	F	1.151	F	0.103	YES	0.034	YES
		PM	0.675	B	0.639	B	0.728	C	0.053	YES	0.089	YES
		WKND	1.096	F	1.113	F	1.120	F	0.023	YES	0.007	NO
27	Harbor Bl & SR-47 WB On Ramp	AM	0.727	C	0.746	C	0.882	D	0.154	YES	0.135	YES
		PM	0.551	A	0.475	A	0.586	A	0.036	NO	0.112	NO
		WKND	0.664	B	0.624	B	0.775	C	0.111	YES	0.151	YES
28	Harbor Bl & Gulch Rd [b]	AM	0.473	A	0.465	A	0.604	B	0.131	NO	0.139	NO
		PM	0.503	A	0.488	A	0.998	E	0.495	YES	0.510	YES
		WKND	0.349	A	0.325	A	1.007	F	0.658	YES	0.682	YES
29	Harbor Bl & O'Farrell St	AM	0.723	C	0.633	B	0.853	D	0.129	YES	0.219	YES
		PM	1.011	F	0.891	D	1.054	F	0.043	YES	0.163	YES
		WKND	0.827	D	0.673	B	1.052	F	0.225	YES	0.379	YES
30	Harbor Bl & 3rd St [a]	AM	0.713	C	0.668	B	0.982	E	0.269	YES	0.313	YES
		PM	0.902	E	0.723	C	0.962	E	0.060	YES	0.238	YES
		WKND	0.887	D	0.631	B	1.179	F	0.293	YES	0.548	YES
31	Pacific Av & 13th St	AM	0.483	A	0.473	A	0.483	A	0.000	NO	0.009	NO
		PM	0.460	A	0.451	A	0.459	A	-0.001	NO	0.009	NO
		WKND	0.383	A	0.370	A	0.384	A	0.001	NO	0.014	NO
32	Pacific Av & 17th St	AM	0.422	A	0.419	A	0.422	A	0.000	NO	0.003	NO
		PM	0.341	A	0.333	A	0.339	A	-0.001	NO	0.007	NO
		WKND	0.289	A	0.280	A	0.287	A	-0.001	NO	0.007	NO
33	Pacific Av & 19th St	AM	0.224	A	0.221	A	0.225	A	0.001	NO	0.003	NO
		PM	0.321	A	0.315	A	0.321	A	0.000	NO	0.005	NO
		WKND	0.221	A	0.209	A	0.221	A	0.000	NO	0.011	NO
34	Gaffey St & 13th St	AM	0.955	E	0.953	E	0.975	E	0.020	YES	0.021	YES
		PM	0.707	C	0.705	C	0.711	C	0.004	NO	0.005	NO
		WKND	0.643	B	0.641	B	0.665	B	0.022	NO	0.024	NO
35	Gaffey St & 17th St	AM	0.633	B	0.629	B	0.651	B	0.019	NO	0.022	NO
		PM	0.497	A	0.493	A	0.501	A	0.004	NO	0.008	NO
		WKND	0.565	A	0.559	A	0.587	A	0.022	NO	0.027	NO
36	Gaffey St & 19th St	AM	0.550	A	0.544	A	0.579	A	0.029	NO	0.035	NO
		PM	0.487	A	0.483	A	0.494	A	0.007	NO	0.011	NO
		WKND	0.456	A	0.450	A	0.486	A	0.030	NO	0.036	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 29
ALTERNATIVE 3 INTERSECTION LEVELS OF SERVICE (2015)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2015)		ALTERNATIVE 6 (CEQA BASELINE) (YEAR 2015)		ALTERNATIVE 3 (YEAR 2015)		IMPACT			
									NEPA Baseline		CEQA Baseline	
			V/C or *Delay*	LOS	V/C or *Delay*	LOS	V/C or *Delay*	LOS	Change	Impact	Change	Impact
1	Western Ave &	AM	0.548	A	0.544	A	0.548	A	-0.001	NO	0.004	NO
	25th St	PM	0.543	A	0.521	A	0.534	A	-0.008	NO	0.013	NO
		WKND	0.514	A	0.493	A	0.501	A	-0.013	NO	0.008	NO
2	Western Ave &	AM	0.498	A	0.496	A	0.498	A	0.000	NO	0.002	NO
	9th St	PM	0.624	B	0.619	B	0.621	B	-0.003	NO	0.002	NO
		WKND	0.426	A	0.415	A	0.421	A	-0.004	NO	0.006	NO
3	Gaffey St &	AM	0.395	A	0.381	A	0.392	A	-0.004	NO	0.011	NO
	25th St	PM	0.387	A	0.372	A	0.379	A	-0.008	NO	0.006	NO
		WKND	0.400	A	0.381	A	0.391	A	-0.010	NO	0.010	NO
4	Gaffey St &	AM	0.431	A	0.407	A	0.442	A	0.011	NO	0.035	NO
	22nd St	PM	0.399	A	0.364	A	0.393	A	-0.006	NO	0.029	NO
		WKND	0.400	A	0.377	A	0.419	A	0.019	NO	0.042	NO
5	Gaffey St &	AM	0.779	C	0.775	C	0.781	C	0.001	NO	0.006	NO
	9th St	PM	0.803	D	0.788	C	0.797	C	-0.005	NO	0.009	NO
		WKND	0.724	C	0.686	B	0.719	C	-0.005	NO	0.033	NO
6	Gaffey St &	AM	0.768	C	0.766	C	0.771	C	0.003	NO	0.005	NO
	7th St	PM	0.741	C	0.737	C	0.740	C	-0.001	NO	0.003	NO
		WKND	0.696	B	0.681	B	0.693	B	-0.003	NO	0.013	NO
7	Gaffey St &	AM	0.908	E	0.905	E	0.913	E	0.005	NO	0.007	NO
	6th St [a]	PM	0.846	D	0.841	D	0.844	D	-0.002	NO	0.003	NO
		WKND	0.823	D	0.805	D	0.823	D	0.000	NO	0.018	NO
8	Gaffey St &	AM	0.946	E	0.943	E	0.949	E	0.004	NO	0.006	NO
	5th St	PM	0.923	E	0.919	E	0.922	E	-0.001	NO	0.003	NO
		WKND	0.729	C	0.713	C	0.729	C	-0.001	NO	0.015	NO
9	Gaffey St &	AM	1.214	F	1.141	F	1.197	F	-0.017	NO	0.056	YES
	1st St	PM	0.944	E	0.937	E	0.941	E	-0.004	NO	0.004	NO
		WKND	0.936	E	0.919	E	0.931	E	-0.005	NO	0.012	YES
10	Gaffey St &	AM	0.409	A	0.395	A	0.407	A	-0.002	NO	0.012	NO
	I-110 Ramps	PM	0.554	A	0.548	A	0.552	A	-0.002	NO	0.004	NO
		WKND	0.561	A	0.533	A	0.557	A	-0.003	NO	0.024	NO
11	Gaffey St &	AM	0.864	D	0.861	D	0.863	D	-0.001	NO	0.002	NO
	Summerland Ave	PM	0.982	E	0.979	E	0.980	E	-0.002	NO	0.001	NO
		WKND	0.636	B	0.624	B	0.634	B	-0.002	NO	0.010	NO
12	Pacific Ave &	AM	0.547	A	0.513	A	0.544	A	-0.003	NO	0.031	NO
	22nd St	PM	0.477	A	0.426	A	0.461	A	-0.016	NO	0.035	NO
		WKND	0.409	A	0.375	A	0.403	A	-0.007	NO	0.028	NO
13	Pacific Ave &	AM	0.578	A	0.577	A	0.578	A	0.000	NO	0.001	NO
	9th St	PM	0.551	A	0.544	A	0.548	A	-0.003	NO	0.004	NO
		WKND	0.503	A	0.481	A	0.500	A	-0.003	NO	0.019	NO
14	Pacific Ave &	AM	0.421	A	0.419	A	0.420	A	-0.001	NO	0.001	NO
	7th St	PM	0.473	A	0.467	A	0.471	A	-0.003	NO	0.003	NO
		WKND	0.443	A	0.433	A	0.439	A	-0.005	NO	0.005	NO
15	Pacific Ave &	AM	0.426	A	0.425	A	0.425	A	-0.001	NO	0.001	NO
	6th St	PM	0.392	A	0.389	A	0.391	A	-0.001	NO	0.001	NO
		WKND	0.407	A	0.401	A	0.405	A	-0.002	NO	0.004	NO
16	Pacific Ave &	AM	0.540	A	0.539	A	0.540	A	0.000	NO	0.001	NO
	5th St	PM	0.456	A	0.455	A	0.455	A	-0.001	NO	0.001	NO
		WKND	0.398	A	0.395	A	0.397	A	-0.001	NO	0.001	NO
17	Pacific Ave &	AM	0.523	A	0.471	A	0.508	A	-0.015	NO	0.037	NO
	1st St	PM	0.471	A	0.453	A	0.464	A	-0.007	NO	0.011	NO
		WKND	0.477	A	0.410	A	0.455	A	-0.022	NO	0.045	NO
18	Pacific Ave &	AM	0.416	A	0.407	A	0.414	A	-0.003	NO	0.006	NO
	Front St	PM	0.339	A	0.328	A	0.333	A	-0.006	NO	0.005	NO
		WKND	0.420	A	0.405	A	0.413	A	-0.007	NO	0.008	NO
19	Via Cabrillo Marina &	AM	0.181	A	0.161	A	0.180	A	-0.001	NO	0.019	NO
	22nd St	PM	0.086	A	0.071	A	0.080	A	-0.006	NO	0.009	NO
		WKND	0.136	A	0.118	A	0.134	A	-0.002	NO	0.016	NO
20	Miner St &	AM	0.352	A	0.349	A	0.413	A	0.061	NO	0.064	NO
	22nd St	PM	0.348	A	0.323	A	0.344	A	-0.004	NO	0.021	NO
		WKND	0.282	A	0.265	A	0.338	A	0.056	NO	0.073	NO
21	Miner St &	AM	0.480	A	0.469	A	0.804	D	0.324	YES	0.335	YES
	Crescent Ave [a]	PM	0.496	A	0.468	A	0.878	D	0.382	YES	0.409	YES
		WKND	0.360	A	0.322	A	0.674	B	0.314	NO	0.353	NO
22	Harbor Bl &	AM	0.557	A	0.273	A	0.936	E	0.379	YES	0.663	YES
	7th St	PM	0.569	A	0.322	A	0.691	B	0.121	NO	0.369	NO
		WKND	0.772	C	0.184	A	0.995	E	0.223	YES	0.811	YES
23	Harbor Bl &	AM	0.369	A	0.382	A	0.407	A	0.038	NO	0.025	NO
	6th St	PM	0.515	A	0.372	A	0.449	A	-0.067	NO	0.076	NO
		WKND	0.498	A	0.591	A	0.451	A	-0.047	NO	-0.139	NO
24	Harbor Bl &	AM	0.454	A	0.377	A	0.485	A	0.030	NO	0.107	NO
	5th St	PM	0.785	C	0.606	B	0.711	C	-0.074	NO	0.105	YES
		WKND	0.573	A	0.374	A	0.518	A	-0.055	NO	0.144	NO
25	Harbor Bl &	AM	0.691	B	0.532	A	0.706	C	0.015	NO	0.174	YES
	1st St	PM	0.668	B	0.481	A	0.598	A	-0.071	NO	0.117	NO
		WKND	0.751	C	0.511	A	0.657	B	-0.093	NO	0.146	NO
26	Harbor Bl &	AM	0.872	D	0.880	D	0.861	D	-0.011	NO	-0.018	NO
	Swinford St / SR-47 EB	PM	0.600	A	0.558	A	0.597	A	-0.002	NO	0.039	NO
	Ramps	WKND	0.914	E	0.913	E	0.859	D	-0.055	NO	-0.055	NO
27	Harbor Bl &	AM	0.599	A	0.607	B	0.608	B	0.009	NO	0.001	NO
	SR-47 WB On Ramp	PM	0.510	A	0.432	A	0.489	A	-0.020	NO	0.058	NO
		WKND	0.600	A	0.553	A	0.576	A	-0.024	NO	0.022	NO
28	Harbor Bl &	AM	0.422	A	0.413	A	0.823	D	0.401	YES	0.410	YES
	Gulch Rd [b]	PM	0.452	A	0.436	A	0.843	D	0.392	YES	0.408	YES
		WKND	0.319	A	0.296	A	0.648	B	0.328	NO	0.352	NO
29	Harbor Bl &	AM	0.643	B	0.549	A	0.648	B	0.005	NO	0.099	NO
	O'Farrell St	PM	0.909	E	0.788	C	0.849	D	-0.061	NO	0.061	YES
		WKND	0.750	C	0.589	A	0.711	C	-0.039	NO	0.122	YES
30	Harbor Bl &	AM	0.653	B	0.603	B	0.703	C	0.050	YES	0.100	YES
	3rd St [a]	PM	0.833	D	0.655	B	0.745	C	-0.088	NO	0.090	YES
		WKND	0.833	D	0.578	A	0.763	C	-0.071	NO	0.184	YES
31	Pacific Av &	AM	0.414	A	0.405	A	0.411	A	-0.003	NO	0.007	NO
	13th St	PM	0.395	A	0.367	A	0.391	A	-0.004	NO	0.024	NO
		WKND	0.328	A	0.315	A	0.321	A	-0.007	NO	0.005	NO
32	Pacific Av &	AM	0.359	A	0.356	A	0.359	A	0.000	NO	0.003	NO
	17th St	PM	0.289	A	0.281	A	0.285	A	-0.004	NO	0.004	NO
		WKND	0.230	A	0.221	A	0.225	A	-0.005	NO	0.004	NO
33	Pacific Av &	AM	0.187	A	0.184	A	0.187	A	0.000	NO	0.003	NO
	19th St	PM	0.271	A	0.267	A	0.270	A	-0.001	NO	0.003	NO
		WKND	0.180	A	0.173	A	0.178	A	-0.002	NO	0.005	NO
34	Gaffey St &	AM	0.831	D	0.829	D	0.835	D	0.005	NO	0.006	NO
	13th St	PM	0.611	B	0.610	B	0.612	B	0.001	NO	0.002	NO
		WKND	0.555	A	0.553	A	0.560	A	0.005	NO	0.007	NO
35	Gaffey St &	AM	0.545	A	0.543	A	0.549	A	0.004	NO	0.007	NO
	17th St	PM	0.425	A	0.422	A	0.425	A	0.000	NO	0.003	NO
		WKND	0.452	A	0.447	A	0.455	A	0.003	NO	0.008	NO
36	Gaffey St &	AM	0.475	A	0.469	A	0.481	A	0.007	NO	0.013	NO
	19th St	PM	0.392	A	0.387	A	0.392	A	0.000	NO	0.005	NO
		WKND	0.392	A	0.386	A	0.397	A	0.005	NO	0.011	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 30
ALTERNATIVE 3 INTERSECTION LEVELS OF SERVICE (2037)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2037)		ALTERNATIVE 6 (NO PROJECT) (YEAR 2037)		ALTERNATIVE 3 (YEAR 2037)		IMPACT			
									NEPA Baseline		No Project Baseline	
			V/C or *Delay*	LOS	V/C or *Delay*	LOS	V/C or *Delay*	LOS	Change	Impact	Change	Impact
1	Western Ave & 25th St	AM	0.637	B	0.631	B	0.636	B	-0.001	NO	0.005	NO
		PM	0.626	B	0.603	B	0.616	B	-0.009	NO	0.013	NO
		WKND	0.593	A	0.572	A	0.582	A	-0.011	NO	0.010	NO
2	Western Ave & 9th St	AM	0.577	A	0.574	A	0.578	A	0.001	NO	0.004	NO
		PM	0.721	C	0.716	C	0.718	C	-0.003	NO	0.002	NO
		WKND	0.495	A	0.485	A	0.491	A	-0.004	NO	0.006	NO
3	Gaffey St & 25th St	AM	0.460	A	0.446	A	0.456	A	-0.004	NO	0.011	NO
		PM	0.449	A	0.435	A	0.441	A	-0.008	NO	0.006	NO
		WKND	0.466	A	0.446	A	0.456	A	-0.009	NO	0.011	NO
4	Gaffey St & 22nd St	AM	0.500	A	0.477	A	0.520	A	0.020	NO	0.043	NO
		PM	0.537	A	0.503	A	0.539	A	0.002	NO	0.037	NO
		WKND	0.461	A	0.438	A	0.495	A	0.033	NO	0.057	NO
5	Gaffey St & 9th St	AM	0.892	D	0.887	D	0.897	D	0.005	NO	0.010	NO
		PM	0.919	E	0.905	E	0.914	E	-0.005	NO	0.009	NO
		WKND	0.821	D	0.787	C	0.818	D	-0.003	NO	0.031	YES
6	Gaffey St & 7th St	AM	0.879	D	0.877	D	0.884	D	0.005	NO	0.007	NO
		PM	0.850	D	0.846	D	0.849	D	-0.001	NO	0.003	NO
		WKND	0.796	C	0.781	C	0.795	C	-0.001	NO	0.014	NO
7	Gaffey St & 6th St [a]	AM	1.023	F	1.020	F	1.031	F	0.007	NO	0.011	YES
		PM	0.953	E	0.948	E	0.952	E	-0.002	NO	0.003	NO
		WKND	0.930	E	0.912	E	0.931	E	0.001	NO	0.019	YES
8	Gaffey St & 5th St	AM	1.075	F	1.073	F	1.082	F	0.006	NO	0.008	NO
		PM	1.053	F	1.049	F	1.052	F	-0.001	NO	0.004	NO
		WKND	0.833	D	0.816	D	0.833	D	0.001	NO	0.018	NO
9	Gaffey St & 1st St	AM	1.400	F	1.304	F	1.393	F	-0.007	NO	0.089	YES
		PM	1.078	F	1.070	F	1.075	F	-0.004	NO	0.004	NO
		WKND	1.067	F	1.051	F	1.065	F	-0.002	NO	0.015	YES
10	Gaffey St & I-110 Ramps	AM	0.473	A	0.457	A	0.474	A	0.001	NO	0.017	NO
		PM	0.636	B	0.629	B	0.635	B	-0.001	NO	0.006	NO
		WKND	0.649	B	0.614	B	0.649	B	0.000	NO	0.035	NO
11	Gaffey St & Summerland Ave	AM	0.990	E	0.987	E	0.989	E	-0.001	NO	0.002	NO
		PM	1.122	F	1.119	F	1.120	F	-0.002	NO	0.001	NO
		WKND	0.727	C	0.715	C	0.725	C	-0.002	NO	0.010	NO
12	Pacific Ave & 22nd St	AM	0.630	B	0.596	A	0.631	B	0.001	NO	0.035	NO
		PM	0.546	A	0.496	A	0.531	A	-0.015	NO	0.035	NO
		WKND	0.469	A	0.437	A	0.471	A	0.002	NO	0.035	NO
13	Pacific Ave & 9th St	AM	0.665	B	0.663	B	0.666	B	0.001	NO	0.003	NO
		PM	0.632	B	0.625	B	0.630	B	-0.002	NO	0.005	NO
		WKND	0.575	A	0.553	A	0.574	A	-0.001	NO	0.021	NO
14	Pacific Ave & 7th St	AM	0.487	A	0.486	A	0.486	A	-0.001	NO	0.000	NO
		PM	0.571	A	0.565	A	0.568	A	-0.003	NO	0.003	NO
		WKND	0.512	A	0.502	A	0.507	A	-0.005	NO	0.005	NO
15	Pacific Ave & 6th St	AM	0.495	A	0.494	A	0.495	A	-0.001	NO	0.001	NO
		PM	0.455	A	0.453	A	0.454	A	-0.001	NO	0.001	NO
		WKND	0.471	A	0.465	A	0.469	A	-0.002	NO	0.003	NO
16	Pacific Ave & 5th St	AM	0.621	B	0.621	B	0.621	B	0.000	NO	0.001	NO
		PM	0.526	A	0.525	A	0.525	A	-0.001	NO	0.001	NO
		WKND	0.461	A	0.459	A	0.460	A	-0.001	NO	0.001	NO
17	Pacific Ave & 1st St	AM	0.616	B	0.547	A	0.607	B	-0.009	NO	0.059	NO
		PM	0.547	A	0.526	A	0.541	A	-0.007	NO	0.015	NO
		WKND	0.567	A	0.481	A	0.552	A	-0.015	NO	0.071	NO
18	Pacific Ave & Front St	AM	0.482	A	0.473	A	0.482	A	0.001	NO	0.010	NO
		PM	0.376	A	0.365	A	0.371	A	-0.005	NO	0.006	NO
		WKND	0.473	A	0.456	A	0.471	A	-0.002	NO	0.014	NO
19	Via Cabrillo Marina & 22nd St	AM	0.216	A	0.196	A	0.216	A	0.000	NO	0.020	NO
		PM	0.107	A	0.094	A	0.102	A	-0.005	NO	0.008	NO
		WKND	0.165	A	0.147	A	0.167	A	0.001	NO	0.020	NO
20	Miner St & 22nd St	AM	0.407	A	0.402	A	0.504	A	0.098	NO	0.102	NO
		PM	0.404	A	0.378	A	0.401	A	-0.003	NO	0.023	NO
		WKND	0.310	A	0.294	A	0.410	A	0.100	NO	0.116	NO
21	Miner St & Crescent Ave [a]	AM	0.541	A	0.530	A	0.938	E	0.398	YES	0.408	YES
		PM	0.553	A	0.525	A	0.989	E	0.436	YES	0.464	YES
		WKND	0.394	A	0.356	A	0.778	C	0.384	YES	0.423	YES
22	Harbor Bl & 7th St	AM	0.624	B	0.321	A	1.093	F	0.469	YES	0.772	YES
		PM	0.639	B	0.373	A	0.775	C	0.136	YES	0.402	YES
		WKND	0.842	D	0.214	A	1.131	F	0.289	YES	0.917	YES
23	Harbor Bl & 6th St	AM	0.415	A	0.443	A	0.487	A	0.071	NO	0.044	NO
		PM	0.570	A	0.429	A	0.510	A	-0.060	NO	0.081	NO
		WKND	0.541	A	0.666	B	0.523	A	-0.018	NO	-0.142	NO
24	Harbor Bl & 5th St	AM	0.501	A	0.434	A	0.572	A	0.072	NO	0.138	NO
		PM	0.871	D	0.689	B	0.804	D	-0.067	NO	0.115	YES
		WKND	0.621	B	0.425	A	0.598	A	-0.023	NO	0.173	NO
25	Harbor Bl & 1st St	AM	0.809	D	0.616	B	0.864	D	0.054	YES	0.248	YES
		PM	0.741	C	0.547	A	0.685	B	-0.056	NO	0.138	NO
		WKND	0.852	D	0.602	B	0.809	D	-0.043	NO	0.207	YES
26	Harbor Bl & Swinford St / SR-47 EB Ramps	AM	1.048	F	1.117	F	1.093	F	0.045	YES	-0.024	NO
		PM	0.675	B	0.639	B	0.687	B	0.012	NO	0.048	NO
		WKND	1.096	F	1.113	F	1.102	F	0.006	NO	-0.011	NO
27	Harbor Bl & SR-47 WB On Ramp	AM	0.727	C	0.746	C	0.774	C	0.046	YES	0.027	NO
		PM	0.551	A	0.475	A	0.539	A	-0.012	NO	0.064	NO
		WKND	0.664	B	0.624	B	0.667	B	0.003	NO	0.043	NO
28	Harbor Bl & Gulch Rd [b]	AM	0.473	A	0.465	A	0.959	E	0.486	YES	0.494	YES
		PM	0.503	A	0.488	A	0.948	E	0.446	YES	0.461	YES
		WKND	0.349	A	0.325	A	0.748	C	0.399	YES	0.423	YES
29	Harbor Bl & O'Farrell St	AM	0.723	C	0.633	B	0.755	C	0.031	NO	0.121	YES
		PM	1.011	F	0.891	D	0.959	E	-0.052	NO	0.068	YES
		WKND	0.827	D	0.673	B	0.825	D	-0.002	NO	0.153	YES
30	Harbor Bl & 3rd St [a]	AM	0.713	C	0.668	B	0.803	D	0.090	YES	0.134	YES
		PM	0.902	E	0.723	C	0.822	D	-0.080	NO	0.098	YES
		WKND	0.887	D	0.631	B	0.853	D	-0.033	NO	0.223	YES
31	Pacific Av & 13th St	AM	0.483	A	0.473	A	0.480	A	-0.003	NO	0.007	NO
		PM	0.460	A	0.451	A	0.455	A	-0.005	NO	0.005	NO
		WKND	0.383	A	0.370	A	0.376	A	-0.007	NO	0.006	NO
32	Pacific Av & 17th St	AM	0.422	A	0.419	A	0.422	A	0.000	NO	0.003	NO
		PM	0.341	A	0.333	A	0.337	A	-0.004	NO	0.004	NO
		WKND	0.289	A	0.280	A	0.284	A	-0.005	NO	0.004	NO
33	Pacific Av & 19th St	AM	0.224	A	0.221	A	0.224	A	0.000	NO	0.003	NO
		PM	0.321	A	0.315	A	0.319	A	-0.001	NO	0.004	NO
		WKND	0.221	A	0.209	A	0.214	A	-0.007	NO	0.005	NO
34	Gaffey St & 13th St	AM	0.955	E	0.953	E	0.961	E	0.007	NO	0.008	NO
		PM	0.707	C	0.705	C	0.708	C	0.001	NO	0.003	NO
		WKND	0.643	B	0.641	B	0.651	B	0.007	NO	0.009	NO
35	Gaffey St & 17th St	AM	0.633	B	0.629	B	0.639	B	0.006	NO	0.009	NO
		PM	0.497	A	0.493	A	0.498	A	0.001	NO	0.005	NO
		WKND	0.565	A	0.559	A	0.571	A	0.006	NO	0.011	NO
36	Gaffey St & 19th St	AM	0.550	A	0.544	A	0.559	A	0.009	NO	0.015	NO
		PM	0.487	A	0.483	A	0.489	A	0.001	NO	0.006	NO
		WKND	0.456	A	0.450	A	0.465	A	0.009	NO	0.015	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 31
ALTERNATIVE 4 INTERSECTION LEVELS OF SERVICE (2015)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2015)		ALTERNATIVE 6 (CEQA BASELINE) (YEAR 2015)		ALTERNATIVE 4 (YEAR 2015)		IMPACT			
									NEPA Baseline		CEQA Baseline	
			V/C or *Delay*	LOS	V/C or *Delay*	LOS	V/C or *Delay*	LOS	Change	Impact	Change	Impact
1	Western Ave &	AM	0.548	A	0.544	A	0.549	A	0.001	NO	0.005	NO
	25th St	PM	0.543	A	0.521	A	0.543	A	0.000	NO	0.022	NO
		WKND	0.514	A	0.493	A	0.514	A	0.000	NO	0.021	NO
2	Western Ave &	AM	0.498	A	0.496	A	0.498	A	0.000	NO	0.002	NO
	9th St	PM	0.624	B	0.619	B	0.624	B	0.000	NO	0.005	NO
		WKND	0.426	A	0.415	A	0.426	A	0.000	NO	0.011	NO
3	Gaffey St &	AM	0.395	A	0.381	A	0.395	A	0.000	NO	0.014	NO
	25th St	PM	0.387	A	0.372	A	0.386	A	-0.001	NO	0.014	NO
		WKND	0.400	A	0.381	A	0.400	A	0.000	NO	0.020	NO
4	Gaffey St &	AM	0.431	A	0.407	A	0.430	A	-0.001	NO	0.023	NO
	22nd St	PM	0.399	A	0.364	A	0.398	A	-0.001	NO	0.034	NO
		WKND	0.400	A	0.377	A	0.400	A	0.000	NO	0.023	NO
5	Gaffey St &	AM	0.779	C	0.775	C	0.779	C	0.000	NO	0.005	NO
	9th St	PM	0.803	D	0.788	C	0.803	D	0.000	NO	0.015	NO
		WKND	0.724	C	0.686	B	0.723	C	-0.001	NO	0.037	NO
6	Gaffey St &	AM	0.768	C	0.766	C	0.768	C	0.000	NO	0.002	NO
	7th St	PM	0.741	C	0.737	C	0.741	C	0.000	NO	0.005	NO
		WKND	0.696	B	0.681	B	0.695	B	-0.001	NO	0.014	NO
7	Gaffey St &	AM	0.908	E	0.905	E	0.908	E	0.000	NO	0.002	NO
	6th St [a]	PM	0.846	D	0.841	D	0.846	D	0.000	NO	0.005	NO
		WKND	0.823	D	0.805	D	0.823	D	0.001	NO	0.018	NO
8	Gaffey St &	AM	0.946	E	0.943	E	0.946	E	0.000	NO	0.003	NO
	5th St	PM	0.923	E	0.919	E	0.923	E	0.000	NO	0.004	NO
		WKND	0.729	C	0.713	C	0.729	C	0.000	NO	0.016	NO
9	Gaffey St &	AM	1.214	F	1.141	F	1.214	F	0.000	NO	0.073	YES
	1st St	PM	0.944	E	0.937	E	0.944	E	0.000	NO	0.007	NO
		WKND	0.936	E	0.919	E	0.936	E	-0.001	NO	0.017	YES
10	Gaffey St &	AM	0.409	A	0.395	A	0.409	A	0.000	NO	0.014	NO
	I-110 Ramps	PM	0.554	A	0.548	A	0.554	A	0.000	NO	0.006	NO
		WKND	0.561	A	0.533	A	0.561	A	0.000	NO	0.027	NO
11	Gaffey St &	AM	0.864	D	0.861	D	0.864	D	0.000	NO	0.003	NO
	Summerland Ave	PM	0.982	E	0.979	E	0.982	E	0.000	NO	0.004	NO
		WKND	0.636	B	0.624	B	0.636	B	0.000	NO	0.012	NO
12	Pacific Ave &	AM	0.547	A	0.513	A	0.545	A	-0.001	NO	0.033	NO
	22nd St	PM	0.477	A	0.426	A	0.475	A	-0.001	NO	0.049	NO
		WKND	0.409	A	0.375	A	0.407	A	-0.002	NO	0.033	NO
13	Pacific Ave &	AM	0.578	A	0.577	A	0.578	A	0.000	NO	0.001	NO
	9th St	PM	0.551	A	0.544	A	0.551	A	0.000	NO	0.007	NO
		WKND	0.503	A	0.481	A	0.503	A	0.001	NO	0.023	NO
14	Pacific Ave &	AM	0.421	A	0.419	A	0.421	A	-0.001	NO	0.001	NO
	7th St	PM	0.473	A	0.467	A	0.475	A	0.001	NO	0.007	NO
		WKND	0.443	A	0.433	A	0.444	A	0.001	NO	0.011	NO
15	Pacific Ave &	AM	0.426	A	0.425	A	0.427	A	0.001	NO	0.002	NO
	6th St	PM	0.392	A	0.389	A	0.392	A	0.000	NO	0.003	NO
		WKND	0.407	A	0.401	A	0.407	A	0.000	NO	0.006	NO
16	Pacific Ave &	AM	0.540	A	0.539	A	0.541	A	0.001	NO	0.001	NO
	5th St	PM	0.456	A	0.455	A	0.456	A	0.000	NO	0.001	NO
		WKND	0.398	A	0.395	A	0.399	A	0.001	NO	0.003	NO
17	Pacific Ave &	AM	0.523	A	0.471	A	0.523	A	0.000	NO	0.053	NO
	1st St	PM	0.471	A	0.453	A	0.471	A	0.000	NO	0.018	NO
		WKND	0.477	A	0.410	A	0.477	A	0.000	NO	0.067	NO
18	Pacific Ave &	AM	0.416	A	0.407	A	0.416	A	0.000	NO	0.009	NO
	Front St	PM	0.339	A	0.328	A	0.339	A	0.000	NO	0.011	NO
		WKND	0.420	A	0.405	A	0.420	A	0.000	NO	0.015	NO
19	Via Cabrillo Marina &	AM	0.181	A	0.161	A	0.181	A	-0.001	NO	0.020	NO
	22nd St	PM	0.086	A	0.071	A	0.085	A	-0.001	NO	0.015	NO
		WKND	0.136	A	0.118	A	0.136	A	-0.001	NO	0.018	NO
20	Miner St &	AM	0.352	A	0.349	A	0.352	A	0.000	NO	0.003	NO
	22nd St	PM	0.348	A	0.323	A	0.348	A	0.000	NO	0.025	NO
		WKND	0.282	A	0.265	A	0.281	A	-0.001	NO	0.016	NO
21	Miner St &	AM	0.480	A	0.469	A	0.479	A	-0.001	NO	0.010	NO
	Crescent Ave [a]	PM	0.496	A	0.468	A	0.495	A	-0.001	NO	0.027	NO
		WKND	0.360	A	0.322	A	0.360	A	0.000	NO	0.038	NO
22	Harbor Bl &	AM	0.557	A	0.273	A	0.556	A	-0.001	NO	0.283	NO
	7th St	PM	0.569	A	0.322	A	0.567	A	-0.002	NO	0.245	NO
		WKND	0.772	C	0.184	A	0.769	C	-0.003	NO	0.585	YES
23	Harbor Bl &	AM	0.369	A	0.382	A	0.369	A	-0.001	NO	-0.013	NO
	6th St	PM	0.515	A	0.372	A	0.515	A	0.000	NO	0.143	NO
		WKND	0.498	A	0.591	A	0.499	A	0.001	NO	-0.091	NO
24	Harbor Bl &	AM	0.454	A	0.377	A	0.445	A	-0.010	NO	0.067	NO
	5th St	PM	0.785	C	0.606	B	0.781	C	-0.004	NO	0.175	YES
		WKND	0.573	A	0.374	A	0.569	A	-0.004	NO	0.195	NO
25	Harbor Bl &	AM	0.691	B	0.532	A	0.693	B	0.002	NO	0.161	NO
	1st St	PM	0.668	B	0.481	A	0.666	B	-0.002	NO	0.186	NO
		WKND	0.751	C	0.511	A	0.749	C	-0.001	NO	0.238	YES
26	Harbor Bl &	AM	0.872	D	0.880	D	0.875	D	0.003	NO	-0.004	NO
	Swinford St / SR-47 EB	PM	0.600	A	0.558	A	0.603	B	0.003	NO	0.044	NO
	Ramps	WKND	0.914	E	0.913	E	0.915	E	0.001	NO	0.002	NO
27	Harbor Bl &	AM	0.599	A	0.607	B	0.602	B	0.003	NO	-0.006	NO
	SR-47 WB On Ramp	PM	0.510	A	0.432	A	0.511	A	0.001	NO	0.079	NO
		WKND	0.600	A	0.553	A	0.602	B	0.002	NO	0.048	NO
28	Harbor Bl &	AM	0.422	A	0.413	A	0.421	A	-0.001	NO	0.008	NO
	Gulch Rd [b]	PM	0.452	A	0.436	A	0.452	A	0.000	NO	0.016	NO
		WKND	0.319	A	0.296	A	0.319	A	0.000	NO	0.023	NO
29	Harbor Bl &	AM	0.643	B	0.549	A	0.644	B	0.001	NO	0.095	NO
	O'Farrell St	PM	0.909	E	0.788	C	0.907	E	-0.002	NO	0.119	YES
		WKND	0.750	C	0.589	A	0.747	C	-0.003	NO	0.159	YES
30	Harbor Bl &	AM	0.653	B	0.603	B	0.653	B	0.000	NO	0.050	NO
	3rd St [a]	PM	0.833	D	0.655	B	0.834	D	0.002	NO	0.179	YES
		WKND	0.833	D	0.578	A	0.831	D	-0.003	NO	0.253	YES
31	Pacific Av &	AM	0.414	A	0.405	A	0.415	A	0.001	NO	0.010	NO
	13th St	PM	0.395	A	0.367	A	0.395	A	0.000	NO	0.028	NO
		WKND	0.328	A	0.315	A	0.329	A	0.001	NO	0.013	NO
32	Pacific Av &	AM	0.359	A	0.356	A	0.360	A	0.001	NO	0.004	NO
	17th St	PM	0.289	A	0.281	A	0.289	A	0.000	NO	0.008	NO
		WKND	0.230	A	0.221	A	0.230	A	0.000	NO	0.009	NO
33	Pacific Av &	AM	0.187	A	0.184	A	0.187	A	0.001	NO	0.003	NO
	19th St	PM	0.271	A	0.267	A	0.272	A	0.001	NO	0.005	NO
		WKND	0.180	A	0.173	A	0.181	A	0.001	NO	0.007	NO
34	Gaffey St &	AM	0.831	D	0.829	D	0.831	D	0.000	NO	0.001	NO
	13th St	PM	0.611	B	0.610	B	0.611	B	0.000	NO	0.001	NO
		WKND	0.555	A	0.553	A	0.555	A	0.000	NO	0.002	NO
35	Gaffey St &	AM	0.545	A	0.543	A	0.545	A	-0.001	NO	0.002	NO
	17th St	PM	0.425	A	0.422	A	0.425	A	0.000	NO	0.003	NO
		WKND	0.452	A	0.447	A	0.452	A	0.000	NO	0.005	NO
36	Gaffey St &	AM	0.475	A	0.469	A	0.475	A	0.001	NO	0.007	NO
	19th St	PM	0.392	A	0.387	A	0.393	A	0.001	NO	0.005	NO
		WKND	0.392	A	0.386	A	0.393	A	0.001	NO	0.007	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 32
ALTERNATIVE 4 INTERSECTION LEVELS OF SERVICE (2037)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2037)		ALTERNATIVE 6 (NO PROJECT) (YEAR 2037)		ALTERNATIVE 4 (YEAR 2037)		IMPACT			
									NEPA Baseline		No Project Baseline	
			V/C or *Delay*	LOS	V/C or *Delay*	LOS	V/C or *Delay*	LOS	Change	Impact	Change	Impact
1	Western Ave & 25th St	AM	0.637	B	0.631	B	0.637	B	0.000	NO	0.006	NO
		PM	0.626	B	0.603	B	0.625	B	-0.001	NO	0.022	NO
		WKND	0.593	A	0.572	A	0.593	A	0.001	NO	0.021	NO
2	Western Ave & 9th St	AM	0.577	A	0.574	A	0.577	A	0.000	NO	0.003	NO
		PM	0.721	C	0.716	C	0.721	C	0.000	NO	0.005	NO
		WKND	0.495	A	0.485	A	0.494	A	-0.001	NO	0.009	NO
3	Gaffey St & 25th St	AM	0.460	A	0.446	A	0.460	A	0.000	NO	0.014	NO
		PM	0.449	A	0.435	A	0.448	A	-0.001	NO	0.013	NO
		WKND	0.466	A	0.446	A	0.466	A	0.000	NO	0.020	NO
4	Gaffey St & 22nd St	AM	0.500	A	0.477	A	0.499	A	-0.001	NO	0.022	NO
		PM	0.537	A	0.503	A	0.537	A	-0.001	NO	0.034	NO
		WKND	0.461	A	0.438	A	0.461	A	-0.001	NO	0.023	NO
5	Gaffey St & 9th St	AM	0.892	D	0.887	D	0.892	D	0.000	NO	0.005	NO
		PM	0.919	E	0.905	E	0.919	E	0.000	NO	0.013	YES
		WKND	0.821	D	0.787	C	0.821	D	-0.001	NO	0.033	YES
6	Gaffey St & 7th St	AM	0.879	D	0.877	D	0.879	D	0.000	NO	0.002	NO
		PM	0.850	D	0.846	D	0.850	D	0.000	NO	0.004	NO
		WKND	0.796	C	0.781	C	0.795	C	-0.001	NO	0.014	NO
7	Gaffey St & 6th St [a]	AM	1.023	F	1.020	F	1.023	F	0.000	NO	0.003	NO
		PM	0.953	E	0.948	E	0.953	E	0.000	NO	0.005	NO
		WKND	0.930	E	0.912	E	0.931	E	0.001	NO	0.019	YES
8	Gaffey St & 5th St	AM	1.075	F	1.073	F	1.076	F	0.001	NO	0.003	NO
		PM	1.053	F	1.049	F	1.053	F	0.000	NO	0.004	NO
		WKND	0.833	D	0.816	D	0.833	D	0.000	NO	0.017	NO
9	Gaffey St & 1st St	AM	1.400	F	1.304	F	1.400	F	0.000	NO	0.095	YES
		PM	1.078	F	1.070	F	1.078	F	0.000	NO	0.008	NO
		WKND	1.067	F	1.051	F	1.067	F	-0.001	NO	0.016	YES
10	Gaffey St & I-110 Ramps	AM	0.473	A	0.457	A	0.474	A	0.001	NO	0.017	NO
		PM	0.636	B	0.629	B	0.636	B	0.000	NO	0.007	NO
		WKND	0.649	B	0.614	B	0.649	B	0.000	NO	0.035	NO
11	Gaffey St & Summerland Ave	AM	0.990	E	0.987	E	0.990	E	0.000	NO	0.003	NO
		PM	1.122	F	1.119	F	1.122	F	0.000	NO	0.004	NO
		WKND	0.727	C	0.715	C	0.727	C	0.000	NO	0.012	NO
12	Pacific Ave & 22nd St	AM	0.630	B	0.596	A	0.629	B	-0.001	NO	0.033	NO
		PM	0.546	A	0.496	A	0.545	A	-0.001	NO	0.049	NO
		WKND	0.469	A	0.437	A	0.468	A	-0.001	NO	0.031	NO
13	Pacific Ave & 9th St	AM	0.665	B	0.663	B	0.665	B	0.001	NO	0.002	NO
		PM	0.632	B	0.625	B	0.632	B	0.000	NO	0.007	NO
		WKND	0.575	A	0.553	A	0.576	A	0.001	NO	0.023	NO
14	Pacific Ave & 7th St	AM	0.487	A	0.486	A	0.487	A	0.000	NO	0.001	NO
		PM	0.571	A	0.565	A	0.572	A	0.001	NO	0.007	NO
		WKND	0.512	A	0.502	A	0.513	A	0.001	NO	0.011	NO
15	Pacific Ave & 6th St	AM	0.495	A	0.494	A	0.496	A	0.001	NO	0.002	NO
		PM	0.455	A	0.453	A	0.455	A	0.000	NO	0.003	NO
		WKND	0.471	A	0.465	A	0.471	A	0.000	NO	0.005	NO
16	Pacific Ave & 5th St	AM	0.621	B	0.621	B	0.622	B	0.001	NO	0.001	NO
		PM	0.526	A	0.525	A	0.526	A	0.000	NO	0.001	NO
		WKND	0.461	A	0.459	A	0.461	A	0.000	NO	0.003	NO
17	Pacific Ave & 1st St	AM	0.616	B	0.547	A	0.616	B	0.000	NO	0.069	NO
		PM	0.547	A	0.526	A	0.547	A	-0.001	NO	0.021	NO
		WKND	0.567	A	0.481	A	0.567	A	-0.001	NO	0.085	NO
18	Pacific Ave & Front St	AM	0.482	A	0.473	A	0.482	A	0.000	NO	0.009	NO
		PM	0.376	A	0.365	A	0.376	A	0.000	NO	0.011	NO
		WKND	0.473	A	0.456	A	0.472	A	-0.001	NO	0.015	NO
19	Via Cabrillo Marina & 22nd St	AM	0.216	A	0.196	A	0.216	A	-0.001	NO	0.020	NO
		PM	0.107	A	0.094	A	0.107	A	0.000	NO	0.013	NO
		WKND	0.165	A	0.147	A	0.165	A	-0.001	NO	0.018	NO
20	Miner St & 22nd St	AM	0.407	A	0.402	A	0.407	A	0.000	NO	0.005	NO
		PM	0.404	A	0.378	A	0.403	A	-0.001	NO	0.025	NO
		WKND	0.310	A	0.294	A	0.309	A	-0.001	NO	0.015	NO
21	Miner St & Crescent Ave [a]	AM	0.541	A	0.530	A	0.540	A	-0.001	NO	0.010	NO
		PM	0.553	A	0.525	A	0.552	A	-0.002	NO	0.027	NO
		WKND	0.394	A	0.356	A	0.393	A	-0.001	NO	0.038	NO
22	Harbor Bl & 7th St	AM	0.624	B	0.321	A	0.625	B	0.001	NO	0.304	NO
		PM	0.639	B	0.373	A	0.636	B	-0.003	NO	0.263	NO
		WKND	0.842	D	0.214	A	0.846	D	0.004	NO	0.632	YES
23	Harbor Bl & 6th St	AM	0.415	A	0.443	A	0.421	A	0.005	NO	-0.022	NO
		PM	0.570	A	0.429	A	0.571	A	0.001	NO	0.142	NO
		WKND	0.541	A	0.666	B	0.551	A	0.010	NO	-0.114	NO
24	Harbor Bl & 5th St	AM	0.501	A	0.434	A	0.504	A	0.003	NO	0.070	NO
		PM	0.871	D	0.689	B	0.868	D	-0.004	NO	0.178	YES
		WKND	0.621	B	0.425	A	0.602	B	-0.019	NO	0.177	NO
25	Harbor Bl & 1st St	AM	0.809	D	0.616	B	0.812	D	0.002	NO	0.196	YES
		PM	0.741	C	0.547	A	0.739	C	-0.002	NO	0.192	YES
		WKND	0.852	D	0.602	B	0.855	D	0.004	NO	0.253	YES
26	Harbor Bl & Swinford St / SR-47 EB Ramps	AM	1.048	F	1.117	F	1.051	F	0.003	NO	-0.066	NO
		PM	0.675	B	0.639	B	0.677	B	0.003	NO	0.039	NO
		WKND	1.096	F	1.113	F	1.099	F	0.002	NO	-0.015	NO
27	Harbor Bl & SR-47 WB On Ramp	AM	0.727	C	0.746	C	0.731	C	0.004	NO	-0.015	NO
		PM	0.551	A	0.475	A	0.552	A	0.001	NO	0.077	NO
		WKND	0.664	B	0.624	B	0.666	B	0.002	NO	0.042	NO
28	Harbor Bl & Gulch Rd [b]	AM	0.473	A	0.465	A	0.473	A	0.000	NO	0.008	NO
		PM	0.503	A	0.488	A	0.503	A	0.000	NO	0.015	NO
		WKND	0.349	A	0.325	A	0.348	A	-0.001	NO	0.023	NO
29	Harbor Bl & O'Farrell St	AM	0.723	C	0.633	B	0.724	C	0.001	NO	0.091	YES
		PM	1.011	F	0.891	D	1.009	F	-0.001	NO	0.119	YES
		WKND	0.827	D	0.673	B	0.825	D	-0.003	NO	0.152	YES
30	Harbor Bl & 3rd St [a]	AM	0.713	C	0.668	B	0.718	C	0.006	NO	0.050	YES
		PM	0.902	E	0.723	C	0.903	E	0.002	NO	0.180	YES
		WKND	0.887	D	0.631	B	0.896	D	0.009	NO	0.265	YES
31	Pacific Av & 13th St	AM	0.483	A	0.473	A	0.483	A	0.001	NO	0.010	NO
		PM	0.460	A	0.451	A	0.460	A	0.000	NO	0.009	NO
		WKND	0.383	A	0.370	A	0.384	A	0.001	NO	0.014	NO
32	Pacific Av & 17th St	AM	0.422	A	0.419	A	0.423	A	0.001	NO	0.004	NO
		PM	0.341	A	0.333	A	0.341	A	0.000	NO	0.008	NO
		WKND	0.289	A	0.280	A	0.289	A	0.000	NO	0.009	NO
33	Pacific Av & 19th St	AM	0.224	A	0.221	A	0.225	A	0.001	NO	0.003	NO
		PM	0.321	A	0.315	A	0.321	A	0.001	NO	0.006	NO
		WKND	0.221	A	0.209	A	0.221	A	0.001	NO	0.012	NO
34	Gaffey St & 13th St	AM	0.955	E	0.953	E	0.955	E	0.000	NO	0.001	NO
		PM	0.707	C	0.705	C	0.707	C	0.000	NO	0.001	NO
		WKND	0.643	B	0.641	B	0.643	B	0.000	NO	0.002	NO
35	Gaffey St & 17th St	AM	0.633	B	0.629	B	0.632	B	-0.001	NO	0.003	NO
		PM	0.497	A	0.493	A	0.497	A	0.000	NO	0.004	NO
		WKND	0.565	A	0.559	A	0.565	A	0.000	NO	0.005	NO
36	Gaffey St & 19th St	AM	0.550	A	0.544	A	0.551	A	0.001	NO	0.007	NO
		PM	0.487	A	0.483	A	0.488	A	0.001	NO	0.005	NO
		WKND	0.456	A	0.450	A	0.457	A	0.001	NO	0.007	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 33
ALTERNATIVE 5 INTERSECTION LEVELS OF SERVICE (2015)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 6 (CEQA BASELINE) (YEAR 2015)		ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2015)		CEQA Baseline	
			V/C or *Delay*	LOS	V/C or *Delay*	LOS	Change	Impact
1	Western Ave &	AM	0.544	A	0.548	A	0.004	NO
	25th St	PM	0.521	A	0.543	A	0.022	NO
		WKND	0.493	A	0.514	A	0.021	NO
2	Western Ave &	AM	0.496	A	0.498	A	0.002	NO
	9th St	PM	0.619	B	0.624	B	0.005	NO
		WKND	0.415	A	0.426	A	0.011	NO
3	Gaffey St &	AM	0.381	A	0.395	A	0.014	NO
	25th St	PM	0.372	A	0.387	A	0.015	NO
		WKND	0.381	A	0.400	A	0.020	NO
4	Gaffey St &	AM	0.407	A	0.431	A	0.023	NO
	22nd St	PM	0.364	A	0.399	A	0.035	NO
		WKND	0.377	A	0.400	A	0.023	NO
5	Gaffey St &	AM	0.775	C	0.779	C	0.005	NO
	9th St	PM	0.788	C	0.803	D	0.015	NO
		WKND	0.686	B	0.724	C	0.038	NO
6	Gaffey St &	AM	0.766	C	0.768	C	0.002	NO
	7th St	PM	0.737	C	0.741	C	0.005	NO
		WKND	0.681	B	0.696	B	0.015	NO
7	Gaffey St &	AM	0.905	E	0.908	E	0.002	NO
	6th St [a]	PM	0.841	D	0.846	D	0.005	NO
		WKND	0.805	D	0.823	D	0.018	NO
8	Gaffey St &	AM	0.943	E	0.946	E	0.003	NO
	5th St	PM	0.919	E	0.923	E	0.004	NO
		WKND	0.713	C	0.729	C	0.016	NO
9	Gaffey St &	AM	1.141	F	1.214	F	0.073	YES
	1st St	PM	0.937	E	0.944	E	0.007	NO
		WKND	0.919	E	0.936	E	0.017	YES
10	Gaffey St &	AM	0.395	A	0.409	A	0.014	NO
	I-110 Ramps	PM	0.548	A	0.554	A	0.006	NO
		WKND	0.533	A	0.561	A	0.027	NO
11	Gaffey St &	AM	0.861	D	0.864	D	0.003	NO
	Summerland Ave	PM	0.979	E	0.982	E	0.004	NO
		WKND	0.624	B	0.636	B	0.012	NO
12	Pacific Ave &	AM	0.513	A	0.547	A	0.034	NO
	22nd St	PM	0.426	A	0.477	A	0.051	NO
		WKND	0.375	A	0.409	A	0.035	NO
13	Pacific Ave &	AM	0.577	A	0.578	A	0.001	NO
	9th St	PM	0.544	A	0.551	A	0.007	NO
		WKND	0.481	A	0.503	A	0.022	NO
14	Pacific Ave &	AM	0.419	A	0.421	A	0.002	NO
	7th St	PM	0.467	A	0.473	A	0.006	NO
		WKND	0.433	A	0.443	A	0.010	NO
15	Pacific Ave &	AM	0.425	A	0.426	A	0.001	NO
	6th St	PM	0.389	A	0.392	A	0.003	NO
		WKND	0.401	A	0.407	A	0.006	NO
16	Pacific Ave &	AM	0.539	A	0.540	A	0.001	NO
	5th St	PM	0.455	A	0.456	A	0.001	NO
		WKND	0.395	A	0.398	A	0.003	NO
17	Pacific Ave &	AM	0.471	A	0.523	A	0.053	NO
	1st St	PM	0.453	A	0.471	A	0.018	NO
		WKND	0.410	A	0.477	A	0.067	NO
18	Pacific Ave &	AM	0.407	A	0.416	A	0.009	NO
	Front St	PM	0.328	A	0.339	A	0.011	NO
		WKND	0.405	A	0.420	A	0.015	NO
19	Via Cabrillo Marina &	AM	0.161	A	0.181	A	0.020	NO
	22nd St	PM	0.071	A	0.086	A	0.015	NO
		WKND	0.118	A	0.136	A	0.018	NO
20	Miner St &	AM	0.349	A	0.352	A	0.003	NO
	22nd St	PM	0.323	A	0.348	A	0.025	NO
		WKND	0.265	A	0.282	A	0.017	NO
21	Miner St &	AM	0.469	A	0.480	A	0.011	NO
	Crescent Ave [a]	PM	0.468	A	0.496	A	0.028	NO
		WKND	0.322	A	0.360	A	0.038	NO
22	Harbor Bl &	AM	0.273	A	0.557	A	0.284	NO
	7th St	PM	0.322	A	0.569	A	0.247	NO
		WKND	0.184	A	0.772	C	0.588	YES
23	Harbor Bl &	AM	0.382	A	0.369	A	-0.013	NO
	6th St	PM	0.372	A	0.515	A	0.143	NO
		WKND	0.591	A	0.498	A	-0.093	NO
24	Harbor Bl &	AM	0.377	A	0.454	A	0.077	NO
	5th St	PM	0.606	B	0.785	C	0.179	YES
		WKND	0.374	A	0.573	A	0.199	NO
25	Harbor Bl &	AM	0.532	A	0.691	B	0.159	NO
	1st St	PM	0.481	A	0.668	B	0.188	NO
		WKND	0.511	A	0.751	C	0.239	YES
26	Harbor Bl &	AM	0.880	D	0.872	D	-0.007	NO
	Swinford St / SR-47 EB	PM	0.558	A	0.600	A	0.041	NO
	Ramps	WKND	0.913	E	0.914	E	0.001	NO
27	Harbor Bl &	AM	0.607	B	0.599	A	-0.008	NO
	SR-47 WB On Ramp	PM	0.432	A	0.510	A	0.078	NO
		WKND	0.553	A	0.600	A	0.046	NO
28	Harbor Bl &	AM	0.413	A	0.422	A	0.009	NO
	Gulch Rd [b]	PM	0.436	A	0.452	A	0.016	NO
		WKND	0.296	A	0.319	A	0.023	NO
29	Harbor Bl &	AM	0.549	A	0.643	B	0.093	NO
	O'Farrell St	PM	0.788	C	0.909	E	0.121	YES
		WKND	0.589	A	0.750	C	0.161	YES
30	Harbor Bl &	AM	0.603	B	0.653	B	0.050	NO
	3rd St [a]	PM	0.655	B	0.833	D	0.178	YES
		WKND	0.578	A	0.833	D	0.255	YES
31	Pacific Av &	AM	0.405	A	0.414	A	0.009	NO
	13th St	PM	0.367	A	0.395	A	0.028	NO
		WKND	0.315	A	0.328	A	0.013	NO
32	Pacific Av &	AM	0.356	A	0.359	A	0.003	NO
	17th St	PM	0.281	A	0.289	A	0.008	NO
		WKND	0.221	A	0.230	A	0.009	NO
33	Pacific Av &	AM	0.184	A	0.187	A	0.003	NO
	19th St	PM	0.267	A	0.271	A	0.005	NO
		WKND	0.173	A	0.180	A	0.007	NO
34	Gaffey St &	AM	0.829	D	0.831	D	0.001	NO
	13th St	PM	0.610	B	0.611	B	0.001	NO
		WKND	0.553	A	0.555	A	0.002	NO
35	Gaffey St &	AM	0.543	A	0.545	A	0.003	NO
	17th St	PM	0.422	A	0.425	A	0.003	NO
		WKND	0.447	A	0.452	A	0.005	NO
36	Gaffey St &	AM	0.469	A	0.475	A	0.006	NO
	19th St	PM	0.387	A	0.392	A	0.005	NO
		WKND	0.386	A	0.392	A	0.006	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 34
ALTERNATIVE 5 INTERSECTION LEVELS OF SERVICE (2037)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	ALTERNATIVE 6 (NO PROJECT) (YEAR 2037)		ALTERNATIVE 5 (NEPA BASELINE) (YEAR 2037)		No Project Baseline	
			V/C or *Delay*	LOS	V/C or *Delay*	LOS	Change	Impact
1	Western Ave & 25th St	AM	0.631	B	0.637	B	0.006	NO
		PM	0.603	B	0.626	B	0.022	NO
		WKND	0.572	A	0.593	A	0.020	NO
2	Western Ave & 9th St	AM	0.574	A	0.577	A	0.003	NO
		PM	0.716	C	0.721	C	0.005	NO
		WKND	0.485	A	0.495	A	0.011	NO
3	Gaffey St & 25th St	AM	0.446	A	0.460	A	0.014	NO
		PM	0.435	A	0.449	A	0.014	NO
		WKND	0.446	A	0.466	A	0.020	NO
4	Gaffey St & 22nd St	AM	0.477	A	0.500	A	0.023	NO
		PM	0.503	A	0.537	A	0.035	NO
		WKND	0.438	A	0.461	A	0.023	NO
5	Gaffey St & 9th St	AM	0.887	D	0.892	D	0.005	NO
		PM	0.905	E	0.919	E	0.013	YES
		WKND	0.787	C	0.821	D	0.034	YES
6	Gaffey St & 7th St	AM	0.877	D	0.879	D	0.002	NO
		PM	0.846	D	0.850	D	0.004	NO
		WKND	0.781	C	0.796	C	0.015	NO
7	Gaffey St & 6th St [a]	AM	1.020	F	1.023	F	0.003	NO
		PM	0.948	E	0.953	E	0.005	NO
		WKND	0.912	E	0.930	E	0.018	YES
8	Gaffey St & 5th St	AM	1.073	F	1.075	F	0.002	NO
		PM	1.049	F	1.053	F	0.004	NO
		WKND	0.816	D	0.833	D	0.017	NO
9	Gaffey St & 1st St	AM	1.304	F	1.400	F	0.095	YES
		PM	1.070	F	1.078	F	0.008	NO
		WKND	1.051	F	1.067	F	0.017	YES
10	Gaffey St & I-110 Ramps	AM	0.457	A	0.473	A	0.016	NO
		PM	0.629	B	0.636	B	0.007	NO
		WKND	0.614	B	0.649	B	0.035	NO
11	Gaffey St & Summerland Ave	AM	0.987	E	0.990	E	0.003	NO
		PM	1.119	F	1.122	F	0.004	NO
		WKND	0.715	C	0.727	C	0.012	NO
12	Pacific Ave & 22nd St	AM	0.596	A	0.630	B	0.034	NO
		PM	0.496	A	0.546	A	0.050	NO
		WKND	0.437	A	0.469	A	0.033	NO
13	Pacific Ave & 9th St	AM	0.663	B	0.665	B	0.001	NO
		PM	0.625	B	0.632	B	0.007	NO
		WKND	0.553	A	0.575	A	0.022	NO
14	Pacific Ave & 7th St	AM	0.486	A	0.487	A	0.001	NO
		PM	0.565	A	0.571	A	0.007	NO
		WKND	0.502	A	0.512	A	0.010	NO
15	Pacific Ave & 6th St	AM	0.494	A	0.495	A	0.001	NO
		PM	0.453	A	0.455	A	0.003	NO
		WKND	0.465	A	0.471	A	0.005	NO
16	Pacific Ave & 5th St	AM	0.621	B	0.621	B	0.001	NO
		PM	0.525	A	0.526	A	0.001	NO
		WKND	0.459	A	0.461	A	0.003	NO
17	Pacific Ave & 1st St	AM	0.547	A	0.616	B	0.069	NO
		PM	0.526	A	0.547	A	0.021	NO
		WKND	0.481	A	0.567	A	0.086	NO
18	Pacific Ave & Front St	AM	0.473	A	0.482	A	0.009	NO
		PM	0.365	A	0.376	A	0.011	NO
		WKND	0.456	A	0.473	A	0.016	NO
19	Via Cabrillo Marina & 22nd St	AM	0.196	A	0.216	A	0.020	NO
		PM	0.094	A	0.107	A	0.013	NO
		WKND	0.147	A	0.165	A	0.018	NO
20	Miner St & 22nd St	AM	0.402	A	0.407	A	0.005	NO
		PM	0.378	A	0.404	A	0.026	NO
		WKND	0.294	A	0.310	A	0.016	NO
21	Miner St & Crescent Ave [a]	AM	0.530	A	0.541	A	0.011	NO
		PM	0.525	A	0.553	A	0.028	NO
		WKND	0.356	A	0.394	A	0.038	NO
22	Harbor Bl & 7th St	AM	0.321	A	0.624	B	0.303	NO
		PM	0.373	A	0.639	B	0.266	NO
		WKND	0.214	A	0.842	D	0.628	YES
23	Harbor Bl & 6th St	AM	0.443	A	0.415	A	-0.028	NO
		PM	0.429	A	0.570	A	0.141	NO
		WKND	0.666	B	0.541	A	-0.124	NO
24	Harbor Bl & 5th St	AM	0.434	A	0.501	A	0.067	NO
		PM	0.689	B	0.871	D	0.182	YES
		WKND	0.425	A	0.621	B	0.196	NO
25	Harbor Bl & 1st St	AM	0.616	B	0.809	D	0.193	YES
		PM	0.547	A	0.741	C	0.194	YES
		WKND	0.602	B	0.852	D	0.250	YES
26	Harbor Bl & Swinford St / SR-47 EB Ramps	AM	1.117	F	1.048	F	-0.069	NO
		PM	0.639	B	0.675	B	0.036	NO
		WKND	1.113	F	1.096	F	-0.017	NO
27	Harbor Bl & SR-47 WB On Ramp	AM	0.746	C	0.727	C	-0.019	NO
		PM	0.475	A	0.551	A	0.076	NO
		WKND	0.624	B	0.664	B	0.040	NO
28	Harbor Bl & Gulch Rd [b]	AM	0.465	A	0.473	A	0.008	NO
		PM	0.488	A	0.503	A	0.015	NO
		WKND	0.325	A	0.349	A	0.024	NO
29	Harbor Bl & O'Farrell St	AM	0.633	B	0.723	C	0.090	YES
		PM	0.891	D	1.011	F	0.120	YES
		WKND	0.673	B	0.827	D	0.155	YES
30	Harbor Bl & 3rd St [a]	AM	0.668	B	0.713	C	0.044	YES
		PM	0.723	C	0.902	E	0.178	YES
		WKND	0.631	B	0.887	D	0.256	YES
31	Pacific Av & 13th St	AM	0.473	A	0.483	A	0.009	NO
		PM	0.451	A	0.460	A	0.009	NO
		WKND	0.370	A	0.383	A	0.013	NO
32	Pacific Av & 17th St	AM	0.419	A	0.422	A	0.003	NO
		PM	0.333	A	0.341	A	0.008	NO
		WKND	0.280	A	0.289	A	0.009	NO
33	Pacific Av & 19th St	AM	0.221	A	0.224	A	0.003	NO
		PM	0.315	A	0.321	A	0.005	NO
		WKND	0.209	A	0.221	A	0.011	NO
34	Gaffey St & 13th St	AM	0.953	E	0.955	E	0.001	NO
		PM	0.705	C	0.707	C	0.001	NO
		WKND	0.641	B	0.643	B	0.002	NO
35	Gaffey St & 17th St	AM	0.629	B	0.633	B	0.003	NO
		PM	0.493	A	0.497	A	0.004	NO
		WKND	0.559	A	0.565	A	0.005	NO
36	Gaffey St & 19th St	AM	0.544	A	0.550	A	0.006	NO
		PM	0.483	A	0.487	A	0.005	NO
		WKND	0.450	A	0.456	A	0.006	NO

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 35
SIGNIFICANT TRAFFIC IMPACTS - PROPOSED PROJECT AND PROJECT ALTERNATIVES (2015)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	PROPOSED PROJECT (YEAR 2015)		ALTERNATIVE 1 (YEAR 2015)		ALTERNATIVE 2 (YEAR 2015)		ALTERNATIVE 3 (YEAR 2015)		ALTERNATIVE 4 (YEAR 2015)		Alternative 5 (Year 2015)
			NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	CEQA
5	Gaffey St & 9th St	AM											
		PM											
		WKND		X				X					
7	Gaffey St & 6th St [a]	AM	X	X			X	X					
		PM											
		WKND		X		X		X					
8	Gaffey St & 5th St	AM		X			X	X					
		PM											
		WKND											
9	Gaffey St & 1st St	AM		X		X		X		X		X	X
		PM											
		WKND		X		X		X		X		X	X
21	Miner St & Crescent Ave [a]	AM			X	X	X	X	X	X			
		PM			X	X	X	X	X	X			
		WKND					X	X					
22	Harbor Bl & 7th St	AM					X	X	X	X			
		PM			X	X	X	X					
		WKND	X	X				X	X	X		X	X
24	Harbor Bl & 5th St	AM											
		PM	X	X		X	X	X		X		X	X
		WKND					X	X					
25	Harbor Bl & 1st St	AM	X	X	X	X	X	X		X			
		PM											
		WKND	X	X		X	X	X				X	X
26	Harbor Bl & Swinford St / SR-47 EB Ramps	AM	X	X			X	X					
		PM											
		WKND	X	X									
28	Harbor Bl & Gulch Rd [b]	AM							X	X			
		PM			X	X	X	X	X	X			
		WKND					X	X					
29	Harbor Bl & O'Farrell St	AM	X	X			X	X					
		PM	X	X		X	X	X		X		X	X
		WKND	X	X	X	X	X	X		X		X	X
30	Harbor Bl & 3rd St [a]	AM	X	X	X	X	X	X	X	X			
		PM	X	X		X	X	X		X		X	X
		WKND	X	X	X	X	X	X		X		X	X
Total Impacted Intersections:			7	10	6	9	10	12	4	8	0	6	6

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 36
SIGNIFICANT TRAFFIC IMPACTS - PROPOSED PROJECT & PROJECT ALTERNATIVES (2037)
SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	PROPOSED PROJECT (YEAR 2037)		ALTERNATIVE 1 (YEAR 2037)		ALTERNATIVE 2 (YEAR 2037)		ALTERNATIVE 3 (YEAR 2037)		ALTERNATIVE 4 (YEAR 2037)		Alternative 5 (Year 2037)
			NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	CEQA
5	Gaffey St &	AM	X	X			X	X					
	9th St	PM		X		X		X				X	X
		WKND		X		X		X		X		X	X
6	Gaffey St &	AM						X					
	7th St	PM											
		WKND		X				X					
7	Gaffey St &	AM	X	X		X	X	X		X			
	6th St [a]	PM						X					
		WKND	X	X		X	X	X		X		X	X
8	Gaffey St &	AM	X	X			X	X					
	5th St	PM											
		WKND		X		X		X					
9	Gaffey St &	AM	X	X		X		X		X		X	X
	1st St	PM		X				X					
		WKND	X	X		X	X	X		X		X	X
20	Miner St &	AM	X	X									
	22nd St	PM											
		WKND					X	X					
21	Miner St &	AM	X	X	X	X	X	X	X	X			
	Crescent Ave [a]	PM			X	X	X	X	X	X			
		WKND			X	X	X	X	X	X			
22	Harbor Bl &	AM	X	X			X	X	X	X			
	7th St	PM			X	X	X	X	X	X			
		WKND	X	X		X	X	X	X	X		X	X
23	Harbor Bl &	AM											
	6th St	PM											
		WKND	X	X			X	X					
24	Harbor Bl &	AM					X	X					
	5th St	PM	X	X		X	X	X		X		X	X
		WKND	X	X	X	X	X	X					
25	Harbor Bl &	AM	X	X	X	X	X	X	X	X		X	X
	1st St	PM	X	X		X	X	X				X	X
		WKND	X	X	X	X	X	X		X		X	X
26	Harbor Bl &	AM	X	X	X		X	X	X				
	Swinford St / SR-47 EB Ramps	PM	X	X			X	X					
		WKND	X	X			X						
27	Harbor Bl &	AM	X	X	X		X	X	X				
	SR-47 WB On Ramp	PM											
		WKND	X	X		X	X	X					
28	Harbor Bl &	AM							X	X			
	Gulch Rd [b]	PM			X	X	X	X	X	X			
		WKND			X	X	X	X	X	X			
29	Harbor Bl &	AM	X	X		X	X	X		X		X	X
	O'Farrell St	PM	X	X	X	X	X	X		X		X	X
		WKND	X	X	X	X	X	X		X		X	X
30	Harbor Bl &	AM	X	X	X	X	X	X	X	X		X	X
	3rd St [a]	PM	X	X	X	X	X	X		X		X	X
		WKND	X	X	X	X	X	X		X		X	X
34	Gaffey St &	AM	X	X			X	X					
	13th St	PM											
		WKND											
Total Impacted Intersections:			15	16	9	12	16	17	7	10	0	8	8

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 37
MITIGATED INTERSECTION LEVELS OF SERVICE (2015) - SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	PROPOSED PROJECT		ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3 (REDUCED PROJECT)		ALTERNATIVE 4		ALTERNATIVE 5	
			Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS
5	Gaffey St &	AM	0.790	C	0.784	C	0.795	C	0.781	C	0.779	C	0.779	C
	9th St	PM	0.697	B	0.697	B	0.698	B	0.689	B	0.696	B	0.696	B
		WKND	0.731	C	0.725	C	0.733	C	0.719	C	0.723	C	0.724	C
7	Gaffey St &	AM	0.429	A	0.427	A	0.432	A	0.426	A	0.424	A	0.424	A
	6th St	PM	0.392	A	0.391	A	0.393	A	0.389	A	0.391	A	0.391	A
		WKND	0.565	A	0.562	A	0.567	A	0.558	A	0.559	A	0.558	A
8	Gaffey St &	AM	0.744	C	0.740	C	0.746	C	0.739	C	0.737	C	0.737	C
	5th St	PM	0.718	C	0.717	C	0.718	C	0.715	C	0.717	C	0.717	C
		WKND	0.736	C	0.733	C	0.739	C	0.729	C	0.729	C	0.729	C
9	Gaffey St &	AM	1.211	F	1.198	F	1.194	F	1.197	F	1.214	F	1.214	F
	1st St	PM	0.946	E	0.944	E	0.946	E	0.941	E	0.944	E	0.944	E
		WKND	0.943	E	0.939	E	0.945	E	0.931	E	0.936	E	0.936	E
21	Miner St &	AM	0.605	B	0.770	C	0.863	D	0.804	D	0.479	A	0.480	A
	Crescent Ave [a]	PM	0.521	A	0.888	D	0.919	E	0.878	D	0.495	A	0.496	A
		WKND	0.493	A	0.689	B	0.859	D	0.674	B	0.360	A	0.360	A
22	Harbor Bl &	AM	0.586	A	0.499	A	0.623	B	0.851	D	0.471	A	0.469	A
	7th St	PM	0.504	A	0.651	B	0.682	B	0.637	B	0.480	A	0.483	A
		WKND	0.787	C	0.613	B	0.691	B	0.923	E	0.698	B	0.700	B
24	Harbor Bl &	AM	0.562	A	0.502	A	0.591	A	0.485	A	0.445	A	0.441	A
	5th St	PM	0.616	B	0.607	B	0.619	B	0.552	A	0.599	A	0.601	B
		WKND	0.624	B	0.584	A	0.644	B	0.468	A	0.554	A	0.547	A
25	Harbor Bl &	AM	0.584	A	0.527	A	0.571	A	0.497	A	0.511	A	0.509	A
	1st St	PM	0.480	A	0.466	A	0.477	A	0.415	A	0.458	A	0.459	A
		WKND	0.573	A	0.517	A	0.578	A	0.471	A	0.524	A	0.525	A
26	Harbor Bl &	AM	0.862	D	0.788	C	0.843	D	0.795	C	0.797	C	0.794	C
	Swinford St / SR-47 EB Ramps	PM	0.598	A	0.582	A	0.603	B	0.573	A	0.572	A	0.569	A
		WKND	0.867	D	0.801	D	0.820	D	0.792	C	0.839	D	0.837	D
28	Harbor Bl &	AM	0.573	A	0.413	A	0.495	A	0.823	D	0.421	A	0.422	A
	Gulch Rd [b]	PM	0.480	A	0.842	D	0.874	D	0.843	D	0.452	A	0.452	A
		WKND	0.454	A	0.647	B	0.818	D	0.648	B	0.319	A	0.319	A
29	Harbor Bl &	AM	0.474	A	0.443	A	0.475	A	0.431	A	0.429	A	0.428	A
	O'Farrell St	PM	0.627	B	0.618	B	0.631	B	0.571	A	0.612	B	0.613	B
		WKND	0.580	A	0.617	B	0.600	A	0.476	A	0.503	A	0.505	A
30	Harbor Bl &	AM	0.380	A	0.354	A	0.395	A	0.324	A	0.333	A	0.332	A
	3rd St	PM	0.429	A	0.419	A	0.434	A	0.359	A	0.412	A	0.410	A
		WKND	0.482	A	0.449	A	0.518	A	0.365	A	0.416	A	0.409	A

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 38
MITIGATED INTERSECTION LEVELS OF SERVICE (2037) - SUMMARY TABLE

INT #	INTERSECTION	PEAK HOUR	PROPOSED PROJECT		ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3 (REDUCED PROJECT)		ALTERNATIVE 4		ALTERNATIVE 5	
			Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS
5	Gaffey St &	AM	0.909	E	0.899	D	0.915	E	0.897	D	0.892	D	0.892	D
	9th St	PM	0.795	C	0.793	C	0.797	C	0.787	C	0.792	C	0.793	C
		WKND	0.833	D	0.826	D	0.840	D	0.818	D	0.821	D	0.821	D
6	Gaffey St &	AM	0.685	B	0.680	B	0.688	B	0.679	B	0.675	B	0.676	B
	7th St	PM	0.651	B	0.650	B	0.651	B	0.648	B	0.649	B	0.649	B
		WKND	0.804	D	0.799	C	0.808	D	0.795	C	0.795	C	0.796	C
7	Gaffey St &	AM	0.499	A	0.495	A	0.503	A	0.494	A	0.490	A	0.490	A
	6th St	PM	0.455	A	0.454	A	0.456	A	0.452	A	0.453	A	0.453	A
		WKND	0.653	B	0.649	B	0.657	B	0.645	B	0.645	B	0.644	B
8	Gaffey St &	AM	0.849	D	0.845	D	0.854	D	0.845	D	0.840	D	0.840	D
	5th St	PM	0.822	D	0.821	D	0.823	D	1.052	F	0.820	D	0.820	D
		WKND	0.842	D	0.837	D	0.849	D	0.833	D	0.833	D	0.833	D
9	Gaffey St &	AM	1.414	F	1.394	F	1.387	F	1.393	F	1.400	F	1.400	F
	1st St	PM	1.080	F	1.079	F	1.081	F	1.075	F	1.078	F	1.078	F
		WKND	1.077	F	1.072	F	1.082	F	1.065	F	1.067	F	1.067	F
20	Miner St &	AM	0.564	A	0.488	A	0.642	B	0.474	A	0.447	A	0.447	A
	22nd St	PM	0.499	A	0.501	A	0.507	A	0.490	A	0.492	A	0.493	A
		WKND	0.508	A	0.391	A	0.636	B	0.368	A	0.323	A	0.324	A
21	Miner St &	AM	0.729	C	0.887	D	1.026	F	0.938	E	0.540	A	0.541	A
	Crescent Ave [a]	PM	0.592	A	0.999	E	1.048	F	0.989	E	0.552	A	0.553	A
		WKND	0.593	A	0.793	C	1.053	F	0.778	C	0.393	A	0.394	A
22	Harbor Bl &	AM	0.703	C	0.600	B	0.787	C	0.997	E	0.528	A	0.528	A
	7th St	PM	0.574	A	0.732	C	0.778	C	0.677	B	0.539	A	0.541	A
		WKND	0.891	D	0.683	B	0.827	D	1.050	F	0.757	C	0.760	C
23	Harbor Bl &	AM	0.588	A	0.503	A	0.631	B	0.487	A	0.421	A	0.415	A
	6th St	PM	0.450	A	0.429	A	0.458	A	0.352	A	0.415	A	0.415	A
		WKND	0.654	B	0.598	A	0.724	C	0.489	A	0.543	A	0.541	A
24	Harbor Bl &	AM	0.680	B	0.591	A	0.725	C	0.572	A	0.504	A	0.501	A
	5th St	PM	0.695	B	0.682	B	0.701	C	0.628	B	0.670	B	0.672	B
		WKND	0.710	C	0.651	B	0.741	C	0.536	A	0.593	A	0.595	A
25	Harbor Bl &	AM	0.742	C	0.659	B	0.724	C	0.619	B	0.609	B	0.608	B
	1st St	PM	0.551	A	0.532	A	0.548	A	0.482	A	0.515	A	0.518	A
		WKND	0.699	B	0.632	B	0.706	C	0.591	A	0.611	B	0.612	B
26	Harbor Bl &	AM	1.095	F	0.986	E	1.067	F	0.999	E	0.949	E	0.947	E
	Swinford St / SR-47 EB Ramps	PM	0.688	B	0.662	B	0.695	B	0.653	B	0.640	B	0.637	B
		WKND	1.109	F	1.008	F	1.037	F	1.012	F	1.003	F	1.000	F
27	Harbor Bl &	AM	0.876	D	0.781	C	0.882	D	0.774	C	0.731	C	0.727	C
	SR-47 WB On Ramp	PM	0.586	A	0.565	A	0.586	A	0.539	A	0.552	A	0.551	A
		WKND	0.771	C	0.703	C	0.775	C	0.667	B	0.666	B	0.664	B
28	Harbor Bl &	AM	0.694	B	0.477	A	0.604	B	0.959	E	0.473	A	0.473	A
	Gulch Rd [b]	PM	0.545	A	0.946	E	0.998	E	0.948	E	0.503	A	0.503	A
		WKND	0.553	A	0.746	C	1.007	F	0.748	C	0.348	A	0.349	A
29	Harbor Bl &	AM	0.557	A	0.513	A	0.566	A	0.506	A	0.487	A	0.486	A
	O'Farrell St	PM	0.709	C	0.694	B	0.714	C	0.649	B	0.684	B	0.685	B
		WKND	0.679	B	0.611	B	0.710	C	0.557	A	0.559	A	0.561	A
30	Harbor Bl &	AM	0.452	A	0.402	A	0.482	A	0.382	A	0.369	A	0.368	A
	3rd St	PM	0.478	A	0.465	A	0.485	A	0.404	A	0.452	A	0.451	A
		WKEND	0.565	A	0.501	A	0.605	B	0.417	A	0.438	A	0.440	A
34	Gaffey St &	AM	0.929	E	0.923	E	0.935	E	0.922	E	0.915	E	0.915	E
	13th St	PM	0.688	B	0.687	B	0.689	B	0.687	B	0.685	B	0.685	B
		WKND	0.619	B	0.611	B	0.626	B	0.611	B	0.604	B	0.604	B

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 39
SIGNIFICANT TRAFFIC IMPACTS - AFTER MITIGATIONS (2015)

INT #	INTERSECTION	PEAK HOUR	PROPOSED PROJECT		ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3		ALTERNATIVE 4		ALTERNATIVE 5
			NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	CEQA
5	Gaffey St & 9th St	AM											
		PM											
		WKND		X				X					
7	Gaffey St & 6th St	AM											
		PM											
		WKND											
8	Gaffey St & 5th St	AM											
		PM											
		WKND											
9	Gaffey St & 1st St	AM		X		X		X		X		X	X
		PM											
		WKND		X		X		X		X		X	X
21	Miner St & Crescent Ave [a]	AM			X	X	X	X	X	X			
		PM			X	X	X	X	X	X			
		WKND					X	X					
22	Harbor Bl & 7th St	AM							X	X			
		PM											
		WKND		X					X	X			
24	Harbor Bl & 5th St	AM											
		PM											
		WKND											
25	Harbor Bl & 1st St	AM											
		PM											
		WKND											
26	Harbor Bl & Swinford St / SR-47 EB Ramps	AM											
		PM											
		WKND											
28	Harbor Bl & Gulch Rd [b]	AM							X	X			
		PM			X	X	X	X	X	X			
		WKND					X	X					
29	Harbor Bl & O'Farrell St	AM											
		PM											
		WKND											
30	Harbor Bl & 3rd St	AM											
		PM											
		WKND											
Total Impacted Intersections:			0	3	2	3	2	4	3	4	0	1	1

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 40
SIGNIFICANT TRAFFIC IMPACTS - AFTER MITIGATIONS (2037)

INT #	INTERSECTION	PEAK HOUR	PROPOSED PROJECT		ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3		ALTERNATIVE 4		ALTERNATIVE 5
			NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	NEPA	CEQA	CEQA
5	Gaffey St & 9th St	AM	X	X			X	X					
		PM											
		WKND		X		X		X		X		X	X
6	Gaffey St & 7th St	AM											
		PM											
		WKND		X				X					
7	Gaffey St & 6th St	AM											
		PM											
		WKND											
8	Gaffey St & 5th St	AM											
		PM											
		WKND		X		X		X					
9	Gaffey St & 1st St	AM	X	X		X		X		X		X	X
		PM		X				X					
		WKND	X	X		X	X	X		X		X	X
20	Miner St & 22nd St	AM											
		PM											
		WKND											
21	Miner St & Crescent Ave [a]	AM	X	X	X	X	X	X	X	X			
		PM			X	X	X	X	X	X			
		WKND			X	X	X	X	X	X			
22	Harbor Bl & 7th St	AM	X	X			X	X	X	X			
		PM			X	X	X	X					
		WKND	X	X				X	X	X		X	X
23	Harbor Bl & 6th St	AM											
		PM											
		WKND					X	X					
24	Harbor Bl & 5th St	AM					X	X					
		PM											
		WKND	X	X			X	X					
25	Harbor Bl & 1st St	AM		X				X					
		PM											
		WKND						X					
26	Harbor Bl & Swinford St / SR-47 EB Ramps	AM	X				X						
		PM											
		WKND	X										
27	Harbor Bl & SR-47 WB On Ramp	AM	X	X	X		X	X	X				
		PM											
		WKND	X	X		X	X	X					
28	Harbor Bl & Gulch Rd [b]	AM							X	X			
		PM			X	X	X	X	X	X			
		WKND			X	X	X	X	X	X			
29	Harbor Bl & O'Farrell St	AM											
		PM											
		WKND											
30	Harbor Bl & 3rd St	AM											
		PM											
		WKND											
34	Gaffey St & 13th St	AM											
		PM											
		WKND											
Total Impacted Intersections:			7	9	4	7	9	11	4	5	0	3	3

Notes:

All signalized intersections assumed to operate under ATSAC/ATCS system in the future.

[a] Intersection is two-way stop-controlled.

[b] Intersection is all-way stop-controlled.

TABLE 41
ADT STREET SEGMENT IMPACT ANALYSIS (2015)

Street Segments	Alternative	Existing (2007)	NEPA Baseline (Alternative 5)	CEQA Baseline (Alternative 6)	Project Only	Future with Project (2015)	NEPA Increase (%)	CEQA Increase (%)	Impact Criteria	NEPA Impacts	CEQA Impacts
1. Santa Cruz St between Grand & Pacific	Project	1486	1,927	1,857	83	1,940	1%	4%	12%	NO	NO
	Alternative 1				72	1,929	0%	4%	12%	NO	NO
	Alternative 2				84	1,941	1%	5%	12%	NO	NO
	Alternative 3				24	1,881	-2%	1%	12%	NO	NO
	Alternative 4				65	1,922	0%	4%	12%	NO	NO
	Alternative 5				70	1,927	0%	4%	12%	NO	NO
2. W 17th St between Centre & Palos Verdes	Project	1758	1,952	1,788	194	1,982	2%	11%	12%	NO	NO
	Alternative 1				227	2,015	3%	13%	10%	NO	**YES**
	Alternative 2				265	2,053	5%	15%	10%	NO	**YES**
	Alternative 3				85	1,873	-4%	5%	12%	NO	NO
	Alternative 4				163	1,951	0%	9%	12%	NO	NO
	Alternative 5				164	1,952	0%	9%	12%	NO	NO

TABLE 42
ADT STREET SEGMENT IMPACT ANALYSIS (2037)

Street Segments	Alternative	Existing (2007)	NEPA Baseline (Alternative 5)	CEQA Baseline (Alternative 6)	Project Only	Future with Project (2037)	NEPA Increase (%)	CEQA Increase (%)	Impact Criteria	NEPA Impacts	CEQA Impacts
1. Santa Cruz St between Grand & Pacific	Project	1486	1,999	1,929	94	2,023	1%	5%	10%	NO	NO
	Alternative 1				79	2,008	0%	4%	10%	NO	NO
	Alternative 2				95	2,024	1%	5%	10%	NO	NO
	Alternative 3				29	1,958	-2%	2%	12%	NO	NO
	Alternative 4				70	1,999	0%	4%	12%	NO	NO
	Alternative 5				70	1,999	0%	4%	12%	NO	NO
2. W 17th St between Centre & Palos Verdes	Project	1758	2,036	1,872	219	2,091	3%	12%	10%	NO	**YES**
	Alternative 1				250	2,122	4%	13%	10%	NO	**YES**
	Alternative 2				300	2,172	7%	16%	10%	NO	**YES**
	Alternative 3				100	1,972	-3%	5%	12%	NO	NO
	Alternative 4				163	2,035	0%	9%	10%	NO	NO
	Alternative 5				164	2,036	0%	9%	10%	NO	NO

TABLE 43
LEVEL OF SERVICE DEFINITIONS FOR
FREEWAY MAINLINE SEGMENTS

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

Source: *2004 Congestion Management Program for Los Angeles County* (Metro, 2004).

TABLE 44
PROPOSED PROJECT FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2015

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2015)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2015)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,886	0.56	C	3,580	0.41	B	288	365	5,174	0.59	C	3,945	0.45	B	0.03	No	0.04	No
		PM	4	4	8,800	8,800	3,402	0.39	B	4,621	0.53	B	423	318	3,825	0.43	B	4,939	0.56	C	0.04	No	0.03	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	9,273	0.84	D	11,664	1.06	F(0)	46	59	9,319	0.85	D	11,723	1.07	F(0)	0.01	No	0.01	No
		PM	5	5	11,000	11,000	11,085	1.01	F(0)	12,637	1.15	F(0)	68	51	11,153	1.01	F(0)	12,688	1.15	F(0)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	10,636	0.97	E	9,186	0.84	D	23	29	10,659	0.97	E	9,215	0.84	D	0.00	No	0.00	No
		PM	5	5	11,000	11,000	9,172	0.83	D	10,277	0.93	D	34	26	9,206	0.84	D	10,303	0.94	E	0.01	No	0.01	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	10,111	0.92	D	7,043	0.71	C	70	88	10,181	0.93	D	7,131	0.72	C	0.01	No	0.01	No
		PM	5	4.5	11,000	9,900	9,023	0.82	D	10,139	1.02	F(0)	102	77	9,125	0.83	D	10,216	1.03	F(0)	0.01	No	0.01	No

NEPA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				NEPA BASELINE (YEAR 2015)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2015)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,964	0.56	C	3,823	0.43	B	210	122	5,174	0.59	C	3,945	0.45	B	0.03	No	0.02	No
		PM	4	4	8,800	8,800	3,777	0.43	B	4,896	0.56	C	48	43	3,825	0.43	B	4,939	0.56	C	0.00	No	0.00	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	9,286	0.84	D	11,703	1.06	F(0)	34	20	9,319	0.85	D	11,723	1.07	F(0)	0.01	No	0.01	No
		PM	5	5	11,000	11,000	11,145	1.01	F(0)	12,681	1.15	F(0)	8	7	11,153	1.01	F(0)	12,688	1.15	F(0)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	10,642	0.97	E	9,206	0.84	D	17	10	10,659	0.97	E	9,215	0.84	D	0.00	No	0.00	No
		PM	5	5	11,000	11,000	9,202	0.84	D	10,299	0.94	E	4	3	9,206	0.84	D	10,303	0.94	E	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	10,130	0.92	D	7,102	0.72	C	51	30	10,181	0.93	D	7,131	0.72	C	0.01	No	0.00	No
		PM	5	4.5	11,000	9,900	9,114	0.83	D	10,206	1.03	F(0)	12	10	9,125	0.83	D	10,216	1.03	F(0)	0.00	No	0.00	No

Notes:

* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.

** F(0) through F(3) represent gradations of LOS F (see Table 10).

*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.

[1] Capacity of 2,200 vehicles per hour per lane assumed.

[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 45
PROPOSED PROJECT FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2037

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2037)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2037)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	5,546	0.63	C	4,064	0.46	B	482	473	6,028	0.69	C	4,537	0.52	B	0.06	No	0.06	No
		PM	4	4	8,800	8,800	3,861	0.44	B	5,246	0.60	C	467	361	4,328	0.49	B	5,607	0.64	C	0.05	No	0.04	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,526	0.96	E	13,240	1.20	F(0)	78	76	10,604	0.96	E	13,316	1.21	F(0)	0.00	No	0.01	No
		PM	5	5	11,000	11,000	12,583	1.14	F(0)	14,344	1.30	F(1)	75	58	12,658	1.15	F(0)	14,402	1.31	F(1)	0.01	No	0.01	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,073	1.10	F(0)	10,426	0.95	E	39	38	12,112	1.10	F(0)	10,464	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,411	0.95	E	11,665	1.06	F(0)	38	29	10,449	0.95	E	11,694	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,476	1.04	F(0)	7,995	0.81	D	117	114	11,593	1.05	F(0)	8,109	0.82	D	0.01	No	0.01	No
		PM	5	4.5	11,000	9,900	10,243	0.93	D	11,508	1.16	F(0)	113	87	10,356	0.94	E	11,595	1.17	F(0)	0.01	No	0.01	No

NEPA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				NEPA BASELINE (YEAR 2037)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2037)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,964	0.56	C	3,823	0.43	B	404	230	5,368	0.61	C	4,053	0.46	B	0.05	No	0.03	No
		PM	4	4	8,800	8,800	3,777	0.43	B	4,896	0.56	C	91	87	3,868	0.44	B	4,983	0.57	C	0.01	No	0.01	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,539	0.96	E	13,279	1.21	F(0)	65	37	10,604	0.96	E	13,316	1.21	F(0)	0.00	No	0.00	No
		PM	5	5	11,000	11,000	12,644	1.15	F(0)	14,388	1.31	F(1)	15	14	12,658	1.15	F(0)	14,402	1.31	F(1)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,079	1.10	F(0)	10,446	0.95	E	33	19	12,112	1.10	F(0)	10,464	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,441	0.95	E	11,687	1.06	F(0)	7	7	10,449	0.95	E	11,694	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,495	1.04	F(0)	8,054	0.81	D	98	56	11,593	1.05	F(0)	8,109	0.82	D	0.01	No	0.01	No
		PM	5	4.5	11,000	9,900	10,334	0.94	E	11,574	1.17	F(0)	22	21	10,356	0.94	E	11,595	1.17	F(0)	0.00	No	0.00	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 46
ALTERNATIVE 1 FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2015

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2015)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2015)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,886	0.56	C	3,580	0.41	B	107	259	4,993	0.57	C	3,839	0.44	B	0.01	No	0.03	No
		PM	4	4	8,800	8,800	3,402	0.39	B	4,621	0.53	B	378	277	3,780	0.43	B	4,898	0.56	C	0.04	No	0.03	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	9,273	0.84	D	11,664	1.06	F(0)	17	42	9,290	0.84	D	11,706	1.06	F(0)	0.00	No	0.00	No
		PM	5	5	11,000	11,000	11,085	1.01	F(0)	12,637	1.15	F(0)	61	45	11,146	1.01	F(0)	12,682	1.15	F(0)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	10,636	0.97	E	9,186	0.84	D	9	21	10,645	0.97	E	9,207	0.84	D	0.00	No	0.00	No
		PM	5	5	11,000	11,000	9,172	0.83	D	10,277	0.93	D	30	22	9,202	0.84	D	10,299	0.94	E	0.01	No	0.01	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	10,111	0.92	D	7,043	0.71	C	26	63	10,137	0.92	D	7,106	0.72	C	0.00	No	0.01	No
		PM	5	4.5	11,000	9,900	9,023	0.82	D	10,139	1.02	F(0)	91	67	9,114	0.83	D	10,206	1.03	F(0)	0.01	No	0.01	No

NEPA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				NEPA BASELINE (YEAR 2015)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2015)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,964	0.56	C	3,823	0.43	B	29	16	4,993	0.57	C	3,839	0.44	B	0.01	No	0.01	No
		PM	4	4	8,800	8,800	3,777	0.43	B	4,896	0.56	C	3	2	3,780	0.43	B	4,898	0.56	C	0.00	No	0.00	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	9,286	0.84	D	11,703	1.06	F(0)	5	3	9,290	0.84	D	11,706	1.06	F(0)	0.00	No	0.00	No
		PM	5	5	11,000	11,000	11,145	1.01	F(0)	12,681	1.15	F(0)	0	0	11,146	1.01	F(0)	12,682	1.15	F(0)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	10,642	0.97	E	9,206	0.84	D	2	1	10,645	0.97	E	9,207	0.84	D	0.00	No	0.00	No
		PM	5	5	11,000	11,000	9,202	0.84	D	10,299	0.94	E	0	0	9,202	0.84	D	10,299	0.94	E	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	10,130	0.92	D	7,102	0.72	C	7	4	10,137	0.92	D	7,106	0.72	C	0.00	No	0.00	No
		PM	5	4.5	11,000	9,900	9,114	0.83	D	10,206	1.03	F(0)	1	0	9,114	0.83	D	10,206	1.03	F(0)	0.00	No	0.00	No

Notes:

* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.

** F(0) through F(3) represent gradations of LOS F (see Table 10).

*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.

[1] Capacity of 2,200 vehicles per hour per lane assumed.

[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 47
ALTERNATIVE 1 FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2037

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2037)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2037)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	5,546	0.63	C	4,064	0.46	B	212	318	5,758	0.65	C	4,382	0.50	B	0.02	No	0.04	No
		PM	4	4	8,800	8,800	3,861	0.44	B	5,246	0.60	C	402	300	4,263	0.48	B	5,546	0.63	C	0.04	No	0.03	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,526	0.96	E	13,240	1.20	F(0)	34	51	10,560	0.96	E	13,291	1.21	F(0)	0.00	No	0.01	No
		PM	5	5	11,000	11,000	12,583	1.14	F(0)	14,344	1.30	F(1)	65	48	12,648	1.15	F(0)	14,392	1.31	F(1)	0.01	No	0.01	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,073	1.10	F(0)	10,426	0.95	E	17	26	12,090	1.10	F(0)	10,452	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,411	0.95	E	11,665	1.06	F(0)	32	24	10,443	0.95	E	11,689	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,476	1.04	F(0)	7,995	0.81	D	51	77	11,527	1.05	F(0)	8,072	0.82	D	0.01	No	0.01	No
		PM	5	4.5	11,000	9,900	10,243	0.93	D	11,508	1.16	F(0)	97	73	10,340	0.94	E	11,581	1.17	F(0)	0.01	No	0.01	No

NEPA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				NEPA BASELINE (YEAR 2037)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2037)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,964	0.56	C	3,823	0.43	B	134	75	5,098	0.58	C	3,898	0.44	B	0.02	No	0.01	No
		PM	4	4	8,800	8,800	3,777	0.43	B	4,896	0.56	C	26	26	3,803	0.43	B	4,922	0.56	C	0.00	No	0.00	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,539	0.96	E	13,279	1.21	F(0)	22	12	10,560	0.96	E	13,291	1.21	F(0)	0.00	No	0.00	No
		PM	5	5	11,000	11,000	12,644	1.15	F(0)	14,388	1.31	F(1)	4	4	12,648	1.15	F(0)	14,392	1.31	F(1)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,079	1.10	F(0)	10,446	0.95	E	11	6	12,090	1.10	F(0)	10,452	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,441	0.95	E	11,687	1.06	F(0)	2	2	10,443	0.95	E	11,689	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,495	1.04	F(0)	8,054	0.81	D	32	18	11,527	1.05	F(0)	8,072	0.82	D	0.01	No	0.01	No
		PM	5	4.5	11,000	9,900	10,334	0.94	E	11,574	1.17	F(0)	6	6	10,340	0.94	E	11,581	1.17	F(0)	0.00	No	0.00	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 48
ALTERNATIVE 2 FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2015

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2015)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2015)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,886	0.56	C	3,580	0.41	B	286	358	5,172	0.59	C	3,938	0.45	B	0.03	No	0.04	No
		PM	4	4	8,800	8,800	3,402	0.39	B	4,621	0.53	B	417	317	3,819	0.43	B	4,938	0.56	C	0.04	No	0.03	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	9,273	0.84	D	11,664	1.06	F(0)	46	58	9,319	0.85	D	11,722	1.07	F(0)	0.01	No	0.01	No
		PM	5	5	11,000	11,000	11,085	1.01	F(0)	12,637	1.15	F(0)	67	51	11,152	1.01	F(0)	12,688	1.15	F(0)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	10,636	0.97	E	9,186	0.84	D	23	29	10,659	0.97	E	9,215	0.84	D	0.00	No	0.00	No
		PM	5	5	11,000	11,000	9,172	0.83	D	10,277	0.93	D	34	26	9,206	0.84	D	10,303	0.94	E	0.01	No	0.01	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	10,111	0.92	D	7,043	0.71	C	69	87	10,180	0.93	D	7,130	0.72	C	0.01	No	0.01	No
		PM	5	4.5	11,000	9,900	9,023	0.82	D	10,139	1.02	F(0)	101	77	9,124	0.83	D	10,216	1.03	F(0)	0.01	No	0.01	No

NEPA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				NEPA BASELINE (YEAR 2015)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2015)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,964	0.56	C	3,823	0.43	B	208	115	5,172	0.59	C	3,938	0.45	B	0.03	No	0.02	No
		PM	4	4	8,800	8,800	3,777	0.43	B	4,896	0.56	C	42	42	3,819	0.43	B	4,938	0.56	C	0.00	No	0.00	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	9,286	0.84	D	11,703	1.06	F(0)	34	19	9,319	0.85	D	11,722	1.07	F(0)	0.01	No	0.01	No
		PM	5	5	11,000	11,000	11,145	1.01	F(0)	12,681	1.15	F(0)	7	7	11,152	1.01	F(0)	12,688	1.15	F(0)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	10,642	0.97	E	9,206	0.84	D	17	9	10,659	0.97	E	9,215	0.84	D	0.00	No	0.00	No
		PM	5	5	11,000	11,000	9,202	0.84	D	10,299	0.94	E	3	3	9,206	0.84	D	10,303	0.94	E	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	10,130	0.92	D	7,102	0.72	C	50	28	10,180	0.93	D	7,130	0.72	C	0.01	No	0.00	No
		PM	5	4.5	11,000	9,900	9,114	0.83	D	10,206	1.03	F(0)	10	10	9,124	0.83	D	10,216	1.03	F(0)	0.00	No	0.00	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 49
ALTERNATIVE 2 FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2037

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2037)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2037)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	5,546	0.63	C	4,064	0.46	B	480	467	6,026	0.68	C	4,531	0.51	B	0.05	No	0.05	No
		PM	4	4	8,800	8,800	3,861	0.44	B	5,246	0.60	C	460	359	4,321	0.49	B	5,605	0.64	C	0.05	No	0.04	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,526	0.96	E	13,240	1.20	F(0)	77	75	10,603	0.96	E	13,315	1.21	F(0)	0.00	No	0.01	No
		PM	5	5	11,000	11,000	12,583	1.14	F(0)	14,344	1.30	F(1)	74	58	12,657	1.15	F(0)	14,402	1.31	F(1)	0.01	No	0.01	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,073	1.10	F(0)	10,426	0.95	E	39	38	12,112	1.10	F(0)	10,464	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,411	0.95	E	11,665	1.06	F(0)	37	29	10,448	0.95	E	11,694	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,476	1.04	F(0)	7,995	0.81	D	116	113	11,592	1.05	F(0)	8,108	0.82	D	0.01	No	0.01	No
		PM	5	4.5	11,000	9,900	10,243	0.93	D	11,508	1.16	F(0)	111	87	10,354	0.94	E	11,595	1.17	F(0)	0.01	No	0.01	No

NEPA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				NEPA BASELINE (YEAR 2037)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2037)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,964	0.56	C	3,823	0.43	B	402	224	5,366	0.61	C	4,047	0.46	B	0.05	No	0.03	No
		PM	4	4	8,800	8,800	3,777	0.43	B	4,896	0.56	C	84	85	3,861	0.44	B	4,981	0.57	C	0.01	No	0.01	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,539	0.96	E	13,279	1.21	F(0)	65	36	10,603	0.96	E	13,315	1.21	F(0)	0.00	No	0.00	No
		PM	5	5	11,000	11,000	12,644	1.15	F(0)	14,388	1.31	F(1)	14	14	12,657	1.15	F(0)	14,402	1.31	F(1)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,079	1.10	F(0)	10,446	0.95	E	32	18	12,112	1.10	F(0)	10,464	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,441	0.95	E	11,687	1.06	F(0)	7	7	10,448	0.95	E	11,694	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,495	1.04	F(0)	8,054	0.81	D	97	54	11,592	1.05	F(0)	8,108	0.82	D	0.01	No	0.01	No
		PM	5	4.5	11,000	9,900	10,334	0.94	E	11,574	1.17	F(0)	20	21	10,354	0.94	E	11,595	1.17	F(0)	0.00	No	0.00	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 50
ALTERNATIVE 3 FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2015

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2015)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2015)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,886	0.56	C	3,580	0.41	B	74	175	4,960	0.56	C	3,755	0.43	B	0.00	No	0.02	No
		PM	4	4	8,800	8,800	3,402	0.39	B	4,621	0.53	B	221	120	3,623	0.41	B	4,741	0.54	B	0.02	No	0.01	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	9,273	0.84	D	11,664	1.06	F(0)	12	28	9,285	0.84	D	11,692	1.06	F(0)	0.00	No	0.00	No
		PM	5	5	11,000	11,000	11,085	1.01	F(0)	12,637	1.15	F(0)	36	19	11,121	1.01	F(0)	12,656	1.15	F(0)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	10,636	0.97	E	9,186	0.84	D	6	14	10,642	0.97	E	9,200	0.84	D	0.00	No	0.00	No
		PM	5	5	11,000	11,000	9,172	0.83	D	10,277	0.93	D	18	10	9,190	0.84	D	10,287	0.94	E	0.01	No	0.01	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	10,111	0.92	D	7,043	0.71	C	18	42	10,129	0.92	D	7,085	0.72	C	0.00	No	0.01	No
		PM	5	4.5	11,000	9,900	9,023	0.82	D	10,139	1.02	F(0)	53	29	9,076	0.83	D	10,168	1.03	F(0)	0.01	No	0.01	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 51
ALTERNATIVE 3 FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2037

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2037)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2037)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	5,546	0.63	C	4,064	0.46	B	179	233	5,725	0.65	C	4,297	0.49	B	0.02	No	0.03	No
		PM	4	4	8,800	8,800	3,861	0.44	B	5,246	0.60	C	246	143	4,107	0.47	B	5,389	0.61	C	0.03	No	0.01	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,526	0.96	E	13,240	1.20	F(0)	29	38	10,555	0.96	E	13,278	1.21	F(0)	0.00	No	0.01	No
		PM	5	5	11,000	11,000	12,583	1.14	F(0)	14,344	1.30	F(1)	40	23	12,623	1.15	F(0)	14,367	1.31	F(1)	0.01	No	0.01	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,073	1.10	F(0)	10,426	0.95	E	14	19	12,087	1.10	F(0)	10,445	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,411	0.95	E	11,665	1.06	F(0)	20	12	10,431	0.95	E	11,677	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,476	1.04	F(0)	7,995	0.81	D	43	56	11,519	1.05	F(0)	8,051	0.81	D	0.01	No	0.00	No
		PM	5	4.5	11,000	9,900	10,243	0.93	D	11,508	1.16	F(0)	60	35	10,303	0.94	E	11,543	1.17	F(0)	0.01	No	0.01	No

NEPA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				NEPA BASELINE (YEAR 2037)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2037)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,964	0.56	C	3,823	0.43	B	101	0	5,065	0.58	C	3,823	0.43	B	0.02	No	0.00	No
		PM	4	4	8,800	8,800	3,777	0.43	B	4,896	0.56	C	0	0	3,777	0.43	B	4,896	0.56	C	0.00	No	0.00	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,539	0.96	E	13,279	1.21	F(0)	16	0	10,555	0.96	E	13,279	1.21	F(0)	0.00	No	0.00	No
		PM	5	5	11,000	11,000	12,644	1.15	F(0)	14,388	1.31	F(1)	0	0	12,644	1.15	F(0)	14,388	1.31	F(1)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,079	1.10	F(0)	10,446	0.95	E	8	0	12,087	1.10	F(0)	10,446	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,441	0.95	E	11,687	1.06	F(0)	0	0	10,441	0.95	E	11,687	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,495	1.04	F(0)	8,054	0.81	D	24	0	11,519	1.05	F(0)	8,054	0.81	D	0.01	No	0.00	No
		PM	5	4.5	11,000	9,900	10,334	0.94	E	11,574	1.17	F(0)	0	0	10,334	0.94	E	11,574	1.17	F(0)	0.00	No	0.00	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 52
ALTERNATIVE 4 FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2015

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2015)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2015)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,886	0.56	C	3,580	0.41	B	83	245	4,969	0.56	C	3,825	0.43	B	0.00	No	0.02	No
		PM	4	4	8,800	8,800	3,402	0.39	B	4,621	0.53	B	372	272	3,774	0.43	B	4,893	0.56	C	0.04	No	0.03	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	9,273	0.84	D	11,664	1.06	F(0)	13	40	9,286	0.84	D	11,704	1.06	F(0)	0.00	No	0.00	No
		PM	5	5	11,000	11,000	11,085	1.01	F(0)	12,637	1.15	F(0)	60	44	11,145	1.01	F(0)	12,681	1.15	F(0)	0.00	No	0.00	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	10,636	0.97	E	9,186	0.84	D	7	20	10,643	0.97	E	9,206	0.84	D	0.00	No	0.00	No
		PM	5	5	11,000	11,000	9,172	0.83	D	10,277	0.93	D	30	22	9,202	0.84	D	10,299	0.94	E	0.01	No	0.01	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	10,111	0.92	D	7,043	0.71	C	20	59	10,131	0.92	D	7,102	0.72	C	0.00	No	0.01	No
		PM	5	4.5	11,000	9,900	9,023	0.82	D	10,139	1.02	F(0)	90	66	9,113	0.83	D	10,205	1.03	F(0)	0.01	No	0.01	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 53
ALTERNATIVE 4 FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2037

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2037)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2037)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,886	0.56	C	3,580	0.41	B	83	245	4,969	0.56	C	3,825	0.43	B	0.00	No	0.02	No
		PM	4	4	8,800	8,800	3,402	0.39	B	4,621	0.53	B	372	272	3,774	0.43	B	4,893	0.56	C	0.04	No	0.03	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,526	0.96	E	13,240	1.20	F(0)	13	40	10,539	0.96	E	13,280	1.21	F(0)	0.00	No	0.01	No
		PM	5	5	11,000	11,000	12,583	1.14	F(0)	14,344	1.30	F(1)	60	44	12,643	1.15	F(0)	14,388	1.31	F(1)	0.01	No	0.01	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,073	1.10	F(0)	10,426	0.95	E	7	20	12,080	1.10	F(0)	10,446	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,411	0.95	E	11,665	1.06	F(0)	30	22	10,441	0.95	E	11,687	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,476	1.04	F(0)	7,995	0.81	D	20	59	11,496	1.05	F(0)	8,054	0.81	D	0.01	No	0.00	No
		PM	5	4.5	11,000	9,900	10,243	0.93	D	11,508	1.16	F(0)	90	66	10,333	0.94	E	11,574	1.17	F(0)	0.01	No	0.01	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 54
ALTERNATIVE 5 FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2015

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2015)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2015)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,886	0.56	C	3,580	0.41	B	78	243	4,964	0.56	C	3,823	0.43	B	0.00	No	0.02	No
		PM	4	4	8,800	8,800	3,402	0.39	B	4,621	0.53	B	375	275	3,777	0.43	B	4,896	0.56	C	0.04	No	0.03	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,526	0.96	E	13,240	1.20	F(0)	13	39	10,539	0.96	E	13,279	1.21	F(0)	0.00	No	0.01	No
		PM	5	5	11,000	11,000	12,583	1.14	F(0)	14,344	1.30	F(1)	61	44	12,644	1.15	F(0)	14,388	1.31	F(1)	0.01	No	0.01	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,073	1.10	F(0)	10,426	0.95	E	6	20	12,079	1.10	F(0)	10,446	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,411	0.95	E	11,665	1.06	F(0)	30	22	10,441	0.95	E	11,687	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,476	1.04	F(0)	7,995	0.81	D	19	59	11,495	1.04	F(0)	8,054	0.81	D	0.00	No	0.00	No
		PM	5	4.5	11,000	9,900	10,243	0.93	D	11,508	1.16	F(0)	91	66	10,334	0.94	E	11,574	1.17	F(0)	0.01	No	0.01	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 55
ALTERNATIVE 5 FREEWAY MAINLINE LEVEL OF SERVICE ANALYSIS 2037

CEQA IMPACT ANALYSIS

FREEWAY	CMP MONITORING STATION	AM/PM	LANES & CAPACITY				CEQA BASELINE (YEAR 2037)						PROJECT ONLY VOL		CUMULATIVE PLUS PROJECT (2037)						SIGNIFICANT IMPACT			
			# of Lanes		Capacity [1]		North/Westbound			South/Eastbound					North/Westbound			South/Eastbound			North/Westbound		South/Eastbound	
			N/WB*	S/EB*	N/WB	S/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	NB/WB	SB/EB	Volume [2]	V/C	LOS**	Volume [2]	V/C	LOS**	Project V/C change	Significant Impact?	Project V/C change	Significant Impact?
I-110	South of C Street	**AM**	4	4	8,800	8,800	4,886	0.56	C	3,580	0.41	B	78	243	4,964	0.56	C	3,823	0.43	B	0.00	No	0.02	No
		PM	4	4	8,800	8,800	3,402	0.39	B	4,621	0.53	B	375	275	3,777	0.43	B	4,896	0.56	C	0.04	No	0.03	No
I-110	At Manchester Boulevard	**AM**	5	5	11,000	11,000	10,526	0.96	E	13,240	1.20	F(0)	13	39	10,539	0.96	E	13,279	1.21	F(0)	0.00	No	0.01	No
		PM	5	5	11,000	11,000	12,583	1.14	F(0)	14,344	1.30	F(1)	61	44	12,644	1.15	F(0)	14,388	1.31	F(1)	0.01	No	0.01	No
I-405	South of Route 110 at Carson Scales	**AM**	5	5	11,000	11,000	12,073	1.10	F(0)	10,426	0.95	E	6	20	12,079	1.10	F(0)	10,446	0.95	E	0.00	No	0.00	No
		PM	5	5	11,000	11,000	10,411	0.95	E	11,665	1.06	F(0)	30	22	10,441	0.95	E	11,687	1.06	F(0)	0.00	No	0.00	No
I-405	North of Inglewood Boulevard	**AM**	5	4.5	11,000	9,900	11,476	1.04	F(0)	7,995	0.81	D	19	59	11,495	1.04	F(0)	8,054	0.81	D	0.00	No	0.00	No
		PM	5	4.5	11,000	9,900	10,243	0.93	D	11,508	1.16	F(0)	91	66	10,334	0.94	E	11,574	1.17	F(0)	0.01	No	0.01	No

Notes:
* A half-lane indicates an auxiliary lane or HOV lane in this section of freeway.
** F(0) through F(3) represent gradations of LOS F (see Table 10).
*** Significant impact if project contributes a V/C ratio net increase of 0.02 or more to a location projected to operate at LOS F.
[1] Capacity of 2,200 vehicles per hour per lane assumed.
[2] A growth factor of .65% per year was applied to grow the data available from Caltrans 2006 Traffic Volumes on California State Highways for existing (Year 2007) and future (Year 2015 and Year 2037) projections.

TABLE 56
CODE PARKING ANALYSIS - PROPOSED PROJECT

PROJECT COMPONENT	SIZE	Code Requirement [a]		PROPOSED PROJECT			
		Ratio	Spaces	Proposed Supply	2015 Estimated Need	2037 Estimated Need	LOCATION
Inner Harbor Cruise Terminals (2 Berths) - Passengers	200,000 sf	1/500	400	1,750	1,072	1,711	Inner Harbor Parking Structure
Inner Harbor Cruise Terminals (2 Berths) - Non-Passenger		n/a		400	400	400	Inner Harbor - Surface Parking
Outer Harbor Cruise Terminals - (2 Berths) - Passengers	200,000 sf	1/500	400	1,750	1,072	1,711	Inner Harbor Parking Structure
Outer Harbor Cruise Terminals (2 Berths) - Non-Passenger		n/a		400	400	400	Outer Harbor - Surface Parking
Catalina Express (1 Berth) and Island Helicopter	50,000 sf [b]	1/500	100	1,000	1,000	1,000	700 spaces below Bridge 300 spaces in Inner Harbor Parking Structure
Fire Station #112	Same as Existing	n/a	20	20	20	20	Existing Lot adjacent to FS #112
Crowley Tugs	10,000 sf	1/500	20	20	20	20	20 spaces in a 40-space lot adjacent to 1st Street & Harbor Boulevard
Millennium Tugs	10,000 sf	1/500	20	20	20	20	20 spaces in a 40-space lot adjacent to 1st Street & Harbor Boulevard
Los Angeles Maritime Institute	5,200 sf	1/500	10	132	40	40	40 spaces within the 132-space shared surface lots adjacent to North Harbor
S.S. Lane Victory	10,000 sf	1/500	20		20	20	20 spaces within the 132-space shared surface lots adjacent to North Harbor
LA Maritime Museum	27,734 sf	1/500	55	14	112	112	14 spaces in surface lot adjacent to Museum and 98 spaces within the 138-space surface lot adjacent to Acapulco Restaurant
Ralph J. Scott Fireboat Museum	10,000 sf	1/500	20	138	40	40	40 spaces in the 138-space surface lot adjacent to Acapulco Restaurant
Acapulco Restaurant	10,600 sf	1/500 [c]	21		106	106	106 spaces within the 138-space surface lot adjacent to Acapulco Restaurant
Ports O' Call Restaurants	125,000 sf	1/500 [c]	250		[d]	[d]	common parking at Ports O' Call
Ports O' Call Retail	175,000 sf	1/500 [c]	350		[d]	[d]	common parking at Ports O' Call
Ports O' Call Conference Center - Meeting Space	37,500 sf	at 1/35 sf	1,071		[d]	[d]	common parking at Ports O' Call
Ports O' Call Conference Center - Office Space	37,500 sf	at 1/500 sf	75		[d]	[d]	common parking at Ports O' Call
Red Car Maintenance Facility	17,600 sf	at 1/500 sf	35		[d]	[d]	52 spaces within the common parking at Ports O' Call
Fisherman's Park (6 acres)	6 acres	none	0		[d]	[d]	30 spaces within the common parking at Ports O' Call
Ports O' Call Redevelopment Total			1,781	2,638	2,638	2,638	[d]
Jankovich & Sons Fueling Station	Same as Existing	n/a	30	30	30	30	Existing Lot within site
Mike's Marine Fueling Station	Same as Existing	n/a	4	4	4	4	Existing Lot within site
Outer Harbor Park (6 acres)	6 acres	none	0	60	60	60	Outer Harbor - Surface Parking
San Pedro Park (18 acres)	18 acres	none	0	500	500	500	surface lot at Sampson Way & 22nd Street
Reuse of Warehouse No. 10 for parking	87,500 sf	none	n/a	n/a	n/a	n/a	reuse of Warehouse No. 10 for parking requires no additional parking
Reuse of Warehouse No. 9 - warehouse	35,000 sf	20 spaces + 1/5,000 sf over 10,000 sf	25	200	25	25	within Warehouse No. 10 (200 spaces)
Reuse of Warehouse No. 9 - retail	35,000 sf	1/500 [c]	70		140	140	within Warehouse No. 10 (200 spaces)
TOTAL			2,996	9,076	7,719	8,997	

Footnotes:
[a] Los Angeles Municipal Code Section 12.21.A.4
[b] Assumed size of future Catalina Express Terminal is 50,000 square feet.
[c] Los Angeles Municipal Code Section 12.21.A.4.x.3 requires 1 space per 500 square feet of development for this use, as the project site lies within a designated State Enterprise Zone.
[d] The intent of the project is that the 2,638 parking spaces adjacent to Ports O' Call will serve these uses. Proposed parking supply includes 1,652 structured spaces west of Sampson Way, 330 surface spaces at Berths 73 - 77, 400 spaces at Berths 78 - 83 and 256 spaces at San Pedro Park.

TABLE 57
CODE PARKING ANALYSIS - ALTERNATIVE 1

PROJECT COMPONENT	SIZE	Code Requirement [a]		ALTERNATIVE 1			
		Ratio	Spaces	Proposed Supply	2015 Estimated Need	2037 Estimated Need	LOCATION
Two Inner Harbor Cruise Terminals (2 Berths) - Passengers	###### sf	1/500	800	1,750	1,429	2,183	Inner Harbor Parking Structure
Inner Harbor Cruise Terminals (2 Berths) - Non-Passenger		n/a		400	400	400	Inner Harbor - Surface Parking
Outer Harbor Cruise Terminals - (1 Berth) - Passengers	###### sf	1/500	200	875	715	1,082	Inner Harbor Parking Structure
Outer Harbor Cruise Terminals (1 Berth) - Non-Passenger		n/a		200	200	200	Outer Harbor - Surface Parking
Catalina Express (1 Berth) and Island Helicopter	50,000 sf [b]	1/500	100	1,000	1,000	1,000	700 spaces below Bridge 300 spaces in Inner Harbor Parking Structure
Fire Station #112	Same as Existing	n/a	20	20	20	20	Existing Lot adjacent to FS #112
Crowley Tugs	10,000 sf	1/500	20	20	20	20	20 spaces in a 40-space lot adjacent to 1st Street & Harbor Boulevard
Millennium Tugs	10,000 sf	1/500	20	20	20	20	20 spaces in a 40-space lot adjacent to 1st Street & Harbor Boulevard
Los Angeles Maritime Institute	5,200 sf	1/500	10	132	40	40	40 spaces within the 132-space shared surface lots adjacent to North Harbor
S.S. Lane Victory	10,000 sf	1/500	20		20	20	20 spaces within the 132-space shared surface lots adjacent to North Harbor
LA Maritime Museum	27,734 sf	1/500	55	14	112	112	14 spaces in surface lot adjacent to Museum and 98 spaces within the 138-space surface lot adjacent to Acapulco Restaurant
Ralph J. Scott Fireboat Museum	10,000 sf	1/500	20	138	40	40	40 spaces in the 138-space surface lot adjacent to Acapulco Restaurant
Acapulco Restaurant	10,600 sf	1/500 [c]	21		106	106	106 spaces within the 138-space surface lot adjacent to Acapulco Restaurant
Ports O' Call Restaurants	###### sf	1/500 [c]	250		[d]	[d]	common parking at Ports O' Call
Ports O' Call Retail	###### sf	1/500 [c]	350		[d]	[d]	common parking at Ports O' Call
Ports O' Call Conference Center - Meeting Space	37,500 sf	at 1/35 sf	1,071		[d]	[d]	common parking at Ports O' Call
Ports O' Call Conference Center - Office Space	37,500 sf	at 1/500 sf	75		[d]	[d]	common parking at Ports O' Call
Fisherman's Park (6 acres)	6 acres	none	0		[d]	[d]	30 spaces within the common parking at Ports O' Call
Ports O' Call Redevelopment Total			1,746	2,638	2,638	2,638	[d]
Red Car Maintenance Facility and Museum	17,600 sf	at 1/500 sf	35	26	78	78	52 spaces within the common parking at Ports O' Call plus 26 spaces at Warehouse No. 1
Jankovich & Sons Fueling Station	Same as Existing	n/a	30	30	30	30	Relocated to Berth 240
Mike's Marine Fueling Station	Same as Existing	n/a	4	4	4	4	Relocated to Berth 240
Outer Harbor Park (6 acres)	6 acres	none	0	60	60	60	Outer Harbor - Surface Parking
San Pedro Park (18 acres)	18 acres	none	0	500	500	500	surface lot at Sampson Way & 22nd Street
Reuse of Warehouse No. 10 for parking	87,500 sf	none	n/a	n/a	n/a	n/a	reuse of Warehouse No. 10 for parking requires no additional parking
Reuse of Warehouse No. 9 - warehouse	35,000 sf	20 spaces + 1/5,000 sf over 10,000 sf	25	200	25	25	within Warehouse No. 10 (200 spaces)
Reuse of Warehouse No. 9 - retail	35,000 sf	1/500 [c]	70		140	140	within Warehouse No. 10 (200 spaces)
TOTAL			3,196	8,027	7,597	8,728	

Footnotes:

[a] Los Angeles Municipal Code Section 12.21.A.4

[b] Assumed size of future Catalina Express Terminal is 50,000 square feet.

[c] Los Angeles Municipal Code Section 12.21.A.4.x.3 requires 1 space per 500 square feet of development for this use, as t project site lies within a designated State Enterprise Zone.

[d] The intent of the project is that the 2,638 parking spaces adjacent to Ports O' Call will serve these uses. Proposed parkir includes 1, 652 structured spaces west of Sampson Way, 330 surface spaces at Berths 73 - 77, 400 spaces at Berths 78 and 256 spaces at San Pedro Park.

TABLE 58
CODE PARKING ANALYSIS - ALTERNATIVE 2

PROJECT COMPONENT	SIZE	Code Requirement [a]		ALTERNATIVE 2			
		Ratio	Spaces	Proposed Supply	2015 Estimated Need	2037 Estimated Need	LOCATION
Inner Harbor Cruise Terminals (2 Berths) - Passengers	200,000 sf	1/500	400	2,400	1,072	1,711	Inner Harbor Parking Structure
Inner Harbor Cruise Terminals (2 Berths) - Non-Passenger		n/a		400	400	400	Inner Harbor - Surface Parking
Outer Harbor Cruise Terminals - (2 Berths) - Passengers	200,000 sf	1/500	400	1,100	1,072	1,711	Outer Harbor Parking Structure and Inner Harbor Parking Structure (650 spaces)
Outer Harbor Cruise Terminals (2 Berths) - Non-Passenger		n/a		400	400	400	Outer Harbor - Non-Passenger
Catalina Express (1 Berth) and Island Helicopter	50,000 sf [b]	1/500	100	1,000	1,000	1,000	700 spaces below Bridge 300 spaces in Inner Harbor Parking Structure
Fire Station #112	Same as Existing	n/a	20	20	20	20	Existing Lot adjacent to FS #112
Crowley Tugs	10,000 sf	1/500	20	20	20	20	20 spaces in a 40-space lot adjacent to 1st Street & Harbor Boulevard
Millennium Tugs	10,000 sf	1/500	20	20	20	20	20 spaces in a 40-space lot adjacent to 1st Street & Harbor Boulevard
Los Angeles Maritime Institute	5,200 sf	1/500	10	132	40	40	40 spaces within the 132-space shared surface lots adjacent to North Harbor
S.S. Lane Victory	10,000 sf	1/500	20		20	20	20 spaces within the 132-space shared surface lots adjacent to North Harbor
LA Maritime Museum	27,734 sf	1/500	55	14	112	112	14 spaces in surface lot adjacent to Museum and 98 spaces within the 138-space surface lot adjacent to Acapulco Restaurant
Ralph J. Scott Fireboat Museum	10,000 sf	1/500	20	138	40	40	40 spaces in the 138-space surface lot adjacent to Acapulco Restaurant
Acapulco Restaurant	10,600 sf	1/500 [c]	21		106	106	106 spaces within the 138-space shared lot adjacent to Acapulco Restaurant
Ports O' Call Restaurants	125,000 sf	1/500 [c]	250		[d]	[d]	common parking at Ports O' Call
Ports O' Call Retail	175,000 sf	1/500 [c]	350		[d]	[d]	common parking at Ports O' Call
Ports O' Call Conference Center - Meeting Space	37,500 sf	at 1/35 sf	1,071		[d]	[d]	common parking at Ports O' Call
Ports O' Call Conference Center - Office Space	37,500 sf	at 1/500 sf	75		[d]	[d]	common parking at Ports O' Call
Red Car Maintenance Facility	17,600 sf	at 1/500 sf	35		[d]	[d]	52 spaces within the common parking at Ports O' Call
Fisherman's Park (6 acres)	6 acres	none	0		[d]	[d]	30 spaces within the common parking at Ports O' Call
Ports O' Call Redevelopment Total			1,781	2,638	2,638	2,638	[d]
Jankovich & Sons Fueling Station	Same as Existing	n/a	30	30	30	30	Relocated to Berth 240
Mike's Marine Fueling Station	No Change	No Change	4	4	4	4	Existing Lot within site
Outer Harbor Park (6 acres)	6 acres	none	0	60	60	60	Upper Level of Outer Harbor Parking Structure
San Pedro Park (18 acres)	18 acres	none	0	500	500	500	surface lot at Sampson Way & 22nd Street
Reuse of Warehouse No. 10 for parking	87,500 sf	none	n/a	n/a	n/a	n/a	reuse of Warehouse No. 10 for parking requires no additional parking
Reuse of Warehouse No. 9 - warehouse	35,000 sf	20 spaces + 1/5,000 sf over 10,000 sf	25	200	25	25	within Warehouse No. 10 (200 spaces)
Reuse of Warehouse No. 9 - retail	35,000 sf	1/500 [c]	70		140	140	within Warehouse No. 10 (200 spaces)
TOTAL			2,996	9,076	7,719	8,997	

Footnotes:

[a] Los Angeles Municipal Code Section 12.21.A.4

[b] Assumed size of future Catalina Express Terminal is 50,000 square feet.

[c] Los Angeles Municipal Code Section 12.21.A.4.x.3 requires 1 space per 500 square feet of development for this use, as the project site lies within a designated State Enterprise Zone.

[d] The intent of the project is that the 2,638 parking spaces adjacent to Ports O' Call will serve these uses. Proposed parking supply includes 1,652 structured spaces west of Sampson Way, 330 surface spaces at Berths 73 - 77, 400 spaces at Berths 78 - 83 and 256 spaces at San Pedro Park.

TABLE 59
CODE PARKING ANALYSIS - ALTERNATIVE 3

PROJECT COMPONENT	SIZE	Code Requirement [a]		ALTERNATIVE 3			
		Ratio	Spaces	Proposed Supply	2015 Estimated Need	2037 Estimated Need	LOCATION
Inner Harbor Cruise Terminals (2 Berths) - Passengers	200,000 sf	1/500	400	1,750	1,429	2,183	Inner Harbor Parking Structure
Inner Harbor Cruise Terminals (2 Berths) - Non-Passenger		n/a		400	400	400	Inner Harbor - Surface Parking
Outer Harbor Cruise Terminals - (1 Berth) - Passengers	100,000 sf	1/500	200	875	715	1,092	Inner Harbor Parking Structure
Outer Harbor Cruise Terminals (1 Berth) - Non-Passenger		n/a		200	200	200	Outer Harbor - Surface Parking
Catalina Express (1 Berth) and Island Helicopter	50,000 sf [b]	1/500	100	1,000	1,000	1,000	700 spaces below Bridge 300 spaces in Inner Harbor Parking Structure
Fire Station #112	Same as Existing	n/a	20	20	20	20	Existing Lot adjacent to FS #112
Crowley Tugs	10,000 sf	1/500	20	20	20	20	20 spaces in a 40-space lot adjacent to 1st Street & Harbor Boulevard
Millennium Tugs	10,000 sf	1/500	20	20	20	20	20 spaces in a 40-space lot adjacent to 1st Street & Harbor Boulevard
Los Angeles Maritime Institute	5,200 sf	1/500	10	132	40	40	40 spaces within the 132-space surface lots adjacent to North Harbor
S.S. Lane Victory	10,000 sf	1/500	20		20	20	20 spaces within the 132-space surface lots adjacent to North Harbor
LA Maritime Museum	27,734 sf	1/500	55	14	112	112	14 spaces in surface lot adjacent to Museum and 98 spaces within the 138-space surface lot adjacent to Acapulco Restaurant
Ralph J. Scott Fireboat Museum	10,000 sf	1/500	20	138	40	40	40 spaces in the 138-space surface lot adjacent to Acapulco Restaurant
Acapulco Restaurant	10,600 sf	1/500 [c]	21		106	106	106 spaces within the 138-space surface lot adjacent to Acapulco Restaurant
Ports O' Call Restaurants	78,200 sf	1/500 [c]	156		[d]	[d]	common parking at Ports O' Call
Ports O' Call Retail	109,300 sf	1/500 [c]	219		[d]	[d]	common parking at Ports O' Call
Red Car Maintenance Facility and Museum	17,600 sf	at 1/500 sf	35		[d]	[d]	78 spaces within the common parking at Ports O' Call
Fisherman's Park (6 acres)	6 acres	none	0		[d]	[d]	30 spaces within the common parking at Ports O' Call
Ports O' Call Redevelopment Total			410	1,500	1,500	1,500	[d]
Jankovich & Sons Fueling Station	Same as Existing	n/a	30	30	30	30	Existing Lot within site
Mike's Marine Fueling Station	Same as Existing	n/a	4	4	4	4	Existing Lot within site
Outer Harbor Park (6 acres)	6 acres	none	0	60	60	60	Outer Harbor - Surface Parking
San Pedro Park (18 acres)	18 acres	none	0	500	500	500	surface lot at Sampson Way & 22nd Street
Reuse of Warehouse No. 10 for parking	87,500 sf	none	n/a	n/a	n/a	n/a	reuse of Warehouse No. 10 for parking requires no additional parking
Reuse of Warehouse No. 9 - warehouse	35,000 sf	20 spaces + 1/5,000 sf over 10,000 sf	25	200	25	25	within Warehouse No. 10 (200 spaces)
Reuse of Warehouse No. 9 - retail	35,000 sf	1/500 [c]	70		140	140	within Warehouse No. 10 (200 spaces)
TOTAL			1,425	6,863	6,381	7,512	

Footnotes:
[a] Los Angeles Municipal Code Section 12.21.A.4
[b] Assumed size of future Catalina Express Terminal is 50,000 square feet.
[c] Los Angeles Municipal Code Section 12.21.A.4.x.3 requires 1 space per 500 square feet of development for this use, as the project site lies within a designated State Enterprise Zone.
[d] Existing 1,500 space surface parking accommodates all POC and Downtown Harbor; no new surface or structure parking to be provided

TABLE 60
CODE PARKING ANALYSIS - ALTERNATIVE 4

PROJECT COMPONENT	SIZE	Code Requirement [a]		ALTERNATIVE 4			
		Ratio	Spaces	Proposed Supply	2015 Estimated Need	2037 Estimated Need	LOCATION
Two Inner Harbor Cruise Terminals (3 Berths) - Passengers	400,000 sf	1/500	800	2,625	2,041	2,730	Inner Harbor Parking Structure
Inner Harbor Cruise Terminals (3 Berths) - Non-Passenger		n/a		600	600	600	Inner Harbor - Surface Parking
Catalina Express (1 Berth) and Island Helicopter	50,000 sf [b]	1/500	100	1,000	1,000	1,000	700 spaces below Bridge 300 spaces in Inner Harbor Parking Structure
Fire Station #112	Same as Existing	n/a	20	20	20	20	Existing Lot adjacent to FS #112
Crowley Tugs [e]	10,000 sf	1/500	20	20	20	20	surface parking at Berths 70 - 71
Millennium Tugs [e]	10,000 sf	1/500	20	20	20	20	surface parking at Berths 70 - 71
Los Angeles Maritime Institute	5,200 sf	1/500	10	152	40	40	40 spaces within the 152-space surface lot near 3rd Street
LA Maritime Museum	27,734 sf	1/500	55	14	112	112	14 spaces in surface lot adjacent to Museum and 98 spaces within the 138-space surface lot adjacent to Acapulco Restaurant
Ralph J. Scott Fireboat Museum	10,000 sf	1/500	20	138	40	40	40 spaces in the 138-space surface lot adjacent to Acapulco Restaurant
Acapulco Restaurant	10,600 sf	1/500 [c]	21		106	106	106 spaces within the 138-space surface lot adjacent to Acapulco Restaurant
Ports O' Call Restaurants	125,000 sf	1/500 [c]	250		[d]	[d]	common parking at Ports O' Call
Ports O' Call Retail	175,000 sf	1/500 [c]	350		[d]	[d]	common parking at Ports O' Call
Ports O' Call Conference Center - Meeting Space	37,500 sf	at 1/35 sf	1,071		[d]	[d]	common parking at Ports O' Call
Ports O' Call Conference Center - Office Space	37,500 sf	at 1/500 sf	75		[d]	[d]	common parking at Ports O' Call
S.S. Lane Victory	10,000 sf	1/500	20		20	20	20 spaces within the 132-space shared surface lots adjacent to North Harbor
Red Car Maintenance Facility and Museum	17,600 sf	at 1/500 sf	35		78	78	52 spaces within the common parking at Ports O' Call plus 26 spaces at Warehouse No. 1
Fisherman's Park (6 acres)	6 acres	none	0		[d]	[d]	30 spaces within the common parking at Ports O' Call
Ports O' Call Redevelopment Total			1,801	2,638	2,638	2,638	[d]
Jankovich & Sons Fueling Station	Same as Existing	n/a	30	30	30	30	Relocated to Berth 240
Mike's Marine Fueling Station	Same as Existing	n/a	4	4	4	4	Relocated to Berth 240
Outer Harbor Park (6 acres)	6 acres	none	0	60	60	60	Outer Harbor - Surface Parking
San Pedro Park (18 acres)	18 acres	none	0	500	500	500	surface lot at Sampson Way & 22nd Street
Reuse of Warehouse No. 10 for parking	87,500 sf	none	n/a	n/a	n/a	n/a	reuse of Warehouse No. 10 for parking requires no additional parking
Reuse of Warehouse No. 9 - warehouse	35,000 sf	20 spaces + 1/5,000 sf over 10,000 sf	25	200	25	25	within Warehouse No. 10 (200 spaces)
Reuse of Warehouse No. 9 - retail	35,000 sf	1/500 [c]	70		140	140	within Warehouse No. 10 (200 spaces)
TOTAL			2,996	8,021	7,494	8,183	

Footnotes:
[a] Los Angeles Municipal Code Section 12.21.A.4
[b] Assumed size of future Catalina Express Terminal is 50,000 square feet.
[c] Los Angeles Municipal Code Section 12.21.A.4.x.3 requires 1 space per 500 square feet of development for this use, as the project site lies within a designated State Enterprise Zone.
[d] The intent of the project is that the 2,638 parking spaces adjacent to Ports O' Call will serve these uses. Proposed parking supply includes 1,652 structured spaces west of Sampson Way, 330 surface spaces at Berths 73 - 77, 400 spaces at Berths 78 - 83 and 256 spaces at San Pedro Park.

TABLE 61
CODE PARKING ANALYSIS - ALTERNATIVE 5

PROJECT COMPONENT	SIZE	Code Requirement [a]		ALTERNATIVE 5			
		Ratio	Spaces	Proposed Supply	2015 Estimated Need	2037 Estimated Need	LOCATION
Two Inner Harbor Cruise Terminals (3 Berths) - Passengers	400,000 sf	1/500	800	2,625	2,041	2,730	Inner Harbor Parking Structure
Inner Harbor Cruise Terminals (3 Berths) - Non-Passenger		n/a		600	600	600	Inner Harbor - Surface Parking
Catalina Express (1 Berth) and Island Helicopter	50,000 sf [b]	1/500	100	1,000	1,000	1,000	700 spaces below Bridge 300 spaces in Inner Harbor Parking Structure
Fire Station #112	Same as Existing	n/a	20	20	20	20	Existing Lot adjacent to FS #112
Crowley Tugs [e]	10,000 sf	1/500	20	20	20	20	surface parking at Berths 70 - 71
Millennium Tugs [e]	10,000 sf	1/500	20	20	20	20	surface parking at Berths 70 - 71
Los Angeles Maritime Institute	5,200 sf	1/500	10	40	40	40	40 surface spaces near 3rd Street
LA Maritime Museum	27,734 sf	1/500	55	14	112	112	14 spaces in surface lot adjacent to Museum and 98 spaces within the 138-space common surface lot adjacent to Acapulco Restaurant
Ralph J. Scott Fireboat Museum	10,000 sf	1/500	20	138	40	40	40 spaces in the 138-space surface lot adjacent to Acapulco Restaurant
Acapulco Restaurant	10,600 sf	1/500 [c]	21		106	106	106 spaces within the 138-space surface lot adjacent to Acapulco Restaurant
Ports O' Call Restaurants	125,000 sf	1/500 [c]	250		[d]	[d]	common parking at Ports O' Call
Ports O' Call Retail	175,000 sf	1/500 [c]	350		[d]	[d]	common parking at Ports O' Call
Ports O' Call Conference Center - Meeting Space	37,500 sf	at 1/35 sf	1,071		[d]	[d]	common parking at Ports O' Call
Ports O' Call Conference Center - Office Space	37,500 sf	at 1/500 sf	75		[d]	[d]	common parking at Ports O' Call
S.S. Lane Victory	10,000 sf	1/500	20		[d]	[d]	common parking at Ports O' Call
Red Car Maintenance Facility	17,600 sf	at 1/500 sf	35		[d]	[d]	52 spaces within the common parking at Ports O' Call
Fisherman's Park (6 acres)	6 acres	none	0		[d]	[d]	30 spaces within the common parking at Ports O' Call
Ports O' Call Redevelopment Total			1,781	2,638	2,638	2,638	[d]
Jankovich & Sons Fueling Station	Same as Existing	n/a	30	30	30	30	Existing Lot within site
Mike's Marine Fueling Station	Same as Existing	n/a	4	4	4	4	Existing Lot within site
Outer Harbor Park (6 acres)	6 acres	none	0	60	60	60	Outer Harbor - Surface Parking
San Pedro Park (18 acres)	18 acres	none	0	500	500	500	surface lot at Sampson Way & 22nd Street
Reuse of Warehouse No. 10 for parking	87,500 sf	none	n/a	n/a	n/a	n/a	reuse of Warehouse No. 10 for parking requires no additional parking
Reuse of Warehouse No. 9 - warehouse	35,000 sf	20 spaces + 1/5,000 sf over 10,000 sf	25	200	25	25	within Warehouse No. 10 (200 spaces)
Reuse of Warehouse No. 9 - retail	35,000 sf	1/500 [c]	70		140	140	within Warehouse No. 10 (200 spaces)
TOTAL			2,996	7,909	7,396	8,085	

Footnotes:

[a] Los Angeles Municipal Code Section 12.21.A.4

[b] Assumed size of future Catalina Express Terminal is 50,000 square feet.

[c] Los Angeles Municipal Code Section 12.21.A.4.x.3 requires 1 space per 500 square feet of development for this use, as the project site lies within a designated State Enterprise Zone.

[d] The intent of the project is that the 2,638 parking spaces adjacent to Ports O' Call will serve these uses. Proposed parking supply includes 1,652 structured spaces west of Sampson Way, 330 surface spaces at Berths 73 - 77, 400 spaces at Berths 78 - 83 and 256 spaces at San Pedro Park.