3.0

MODIFICATIONS TO THE DRAFT PROGRAM EIR

3.1 Introduction

This chapter addresses modifications made to the Draft PEIR for the proposed Program. It presents all revisions to the Draft PEIR, including changes in response to public comments, as determined necessary by the LAHD for the following sections of the PEIR:

- Executive Summary;
- Chapter 2.0, Program Description;
- Chapter 3.0, Environmental Analysis;
- Section 3.1, Aesthetics/Visual Resources;
- Section 3.2, Air Quality and Greenhouse Gases;
- Section 3.3, Biological Resources;
- Section 3.4, Cultural Resources;
- Section 3.5, Geology;
- Section 3.6, Groundwater and Soils;
- Section 3.7, Hazards and Hazardous Materials;
- Section 3.8, Land Use;
- Section 3.9, Noise;
- Section 3.10, Public Services;
- Section 3.11, Recreation;
- Section 3.12, Transportation and Circulation;
- Section 3.13, Utilities;
- Section 3.14, Water Quality, Sediments, and Oceanography;
- Chapter 4.0, Cumulative Analysis;
- Chapter 5.0, Program Alternatives;
- Chapter 10.0, References;

- Appendix A, Draft Port Master Plan Update (PMPU);
- Appendix D, Air Quality; and,
- Appendix F, Ground Transportation.

Only subsections of the above chapters with revisions are included herein; subsections that were not revised are not shown. Please refer to the Draft PEIR for the complete text.

Consistent with CEQA Guidelines Section 15088(d), responses to comments may take the form of a revision to the Draft PEIR or may be presented in a separate section in the Final PEIR. Chapter 2.0, Response to Comments, of this Final PEIR includes the responses to public comments. Revisions to the Draft PEIR made in response to public comments, for purposes of clarification or correction, or issues identified by LAHD are presented in the following subsections. The numbering format from the Draft PEIR is maintained in the sections presented herein. Changes to the Draft PEIR are shown in revision mode format (i.e., deletions are shown with ~~strikethrough~~ and additions are shown with underline). Corrections of inconsequential typographical errors are not included.

3.2 Changes to the Draft Program EIR

Changes to the text of the Draft PEIR as presented below are incorporated into the Final PEIR.

3.2.1 Changes Made to the Executive Summary

3.2.1.1 Table ES-1, Proposed PMPU Planning Areas and Allowable Land Uses

Table ES-1 was updated to reflect changes to the Final PMPU.

Table ES-1. Proposed PMPU Planning Areas and Allowable Land Uses

Planning Area	*Location*	*Acreage*	*Allowable Land Uses**
1 (San Pedro)	From the Breakwater up to the Vincent Thomas Bridge	~~414~~413	Recreational Boating, Commercial, Break Bulk, Open Space, Institutional, Cruise Operations, and Maritime Support
2 (West Basin and Wilmington)	From the Vincent Thomas Bridge to north of the Cerritos Channel	~~1,095~~1,098	Container, Open Space, Liquid Bulk, Break Bulk, Dry Bulk, Maritime Support, Recreational Boating, and Commercial
3 (Terminal Island)	Terminal Island, excluding Fish Harbor	~~2,156~~1,940	Container, Liquid Bulk, Dry Bulk, Maritime Support, Open Space
4 (Fish Harbor)	Fish Harbor, including former Southwest Marine Shipyard site	92	Commercial Fishing, Maritime Support, Break Bulk, and Institutional
5 (Water)	All water excluding areas adjacent to marinas	3,~~211~~209	Navigable Waterways, Maneuvering Areas, Anchorage Areas, and Shallow Water Habitat
Note: *Proposed land uses would be confined to the specific sites identified on the PMPU Land Use Designations Map (Figure ES-5).			

3.2.1.2 Figure ES-5, Proposed PMPU Land Use Designations

Figure ES-5 was modified to depict the PMPU land use designation for Cabrillo Beach as open space. This figure was updated to identify Warehouse No. 1 in Planning Area 1 as a mixed land use site that would allow institutional and/or visitor-serving commercial uses. Figure ES-5 was also revised to include all of the buildings at the Southwest Marine Shipyard site (Berths 240-241) within the break bulk land use designation and identify this area as a mixed land use site that would allow break bulk and/or maritime support uses.

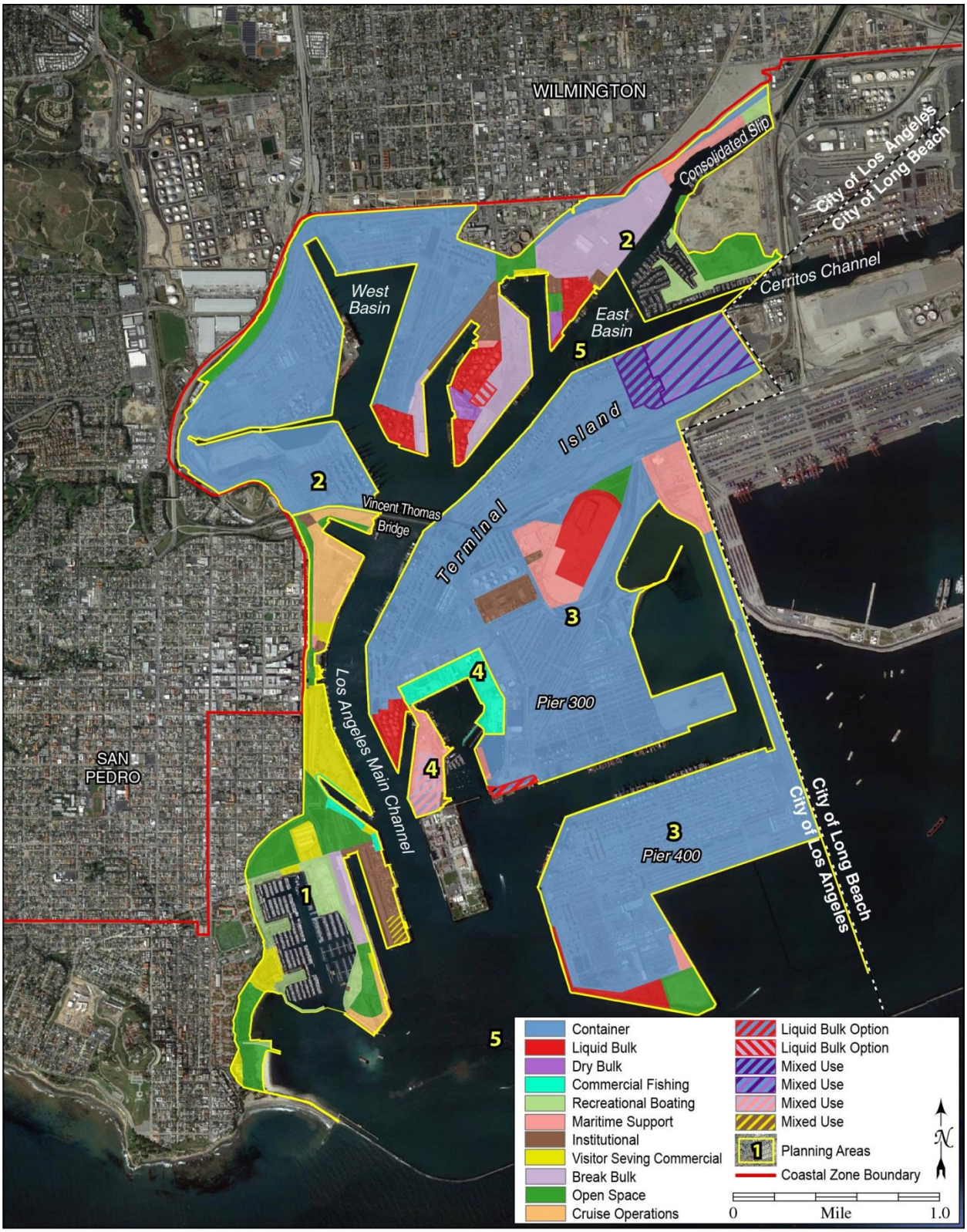

Figure ES-5. Proposed PMPU Land Use Designations

3.2.1.3 Table ES-3, Proposed PMPU Land and Water Use Definitions

Table ES-3 was updated to reflect changes to the Final PMPU.

Table ES-3. Proposed PMPU Land and Water Use Definitions

Land Use	*Description*	*Examples*
	*Land Use**	
Container	Water-dependent uses focused on container cargo handling and movement.	▪ Container Terminal ▪ Chassis Storage ▪ On-Dock Rail Yard ▪ Omni Terminal
Dry Bulk	Water-dependent uses focused on non-containerized, dry bulk cargoes shipped in large, unpackaged amounts.	▪ Cement ▪ Potash and similar ▪ Grain; ▪ Scrap Metal
Break Bulk	Water-dependent uses focused on non-containerized, bulk cargoes packaged as a unit.	▪ Roll-On Roll-Off Cargoes ▪ Steel Slabs ▪ Neo Bulk ▪ Fruit ▪ Automobiles
Cruise Operations	Water-dependent operations focused on cruise operations and passenger handling.	▪ Cruise Facilities ▪ Baggage Handling Facilities
Liquid Bulk	Water-dependent uses focused on storage, receipt, and delivery of liquid bulk commodities.	▪ Crude Oil Terminal ▪ Petroleum Products Terminal ▪ Non-petroleum Products and Other Liquid Bulk Commodities
Maritime Support	Water-dependent and non water-dependent operations necessary to support cargo handling and other maritime activities.	▪ Barge/Tugboat ▪ Boatyard and Ship Repair ▪ Marine Fueling Station ▪ Marine Service Contractors, (e.g., diving, and emergency response services) ▪ Water Taxi ▪ Cargo Fumigation
Commercial Fishing	Facilities related to commercial fishing and processing.	▪ Fish Processing ▪ Cold Storage/Fish Unloading/Ice House ▪ Fishing Vessel Moorage ▪ Fish Laboratories and Testing
Recreational Boating	Recreational boating activities generally associated with marinas.	▪ Marinas ▪ Upland Boat Storage ▪ Yacht Clubs ▪ Marina-Related Retail

Table ES-3. Proposed PMPU Land and Water Use Definitions

Land Use	*Description*	*Examples*
Visitor-Serving Commercial	Visitor serving commercial uses for the public, including museums.	▪ Restaurant ▪ Maritime Related Office ▪ Visitor Serving Retail ▪ Harbor Tour Vessels ▪ Sport Fishing ▪ Museums ▪ Community Centers/Conference Centers ▪ Exhibit Space
Open Space	Open spaces reserved for the general public such as parks and beaches or open areas reserved for environmental protection.	▪ Public Beaches ▪ Parks ▪ Environmentally Protected Area ▪ Wetlands
Institutional	Uses and facilities operated by government agencies.	▪ Public Safety (Police and Fire) ▪ Other Federal, State, and Local Agencies ▪ Educational ▪ Marine Research Facility ▪ Non-profit Organizations
Water Use		
Navigation	Water areas devoted to anchorage of vessels, movement and maneuvering of vessels.	▪ Main Channel ▪ East and West Turning Basin
Environmental Mitigation	Water areas dedicated to environmental protection and not suitable for the navigation of cargo moving vessels.	▪ Shallow Water Habitat
Recreational Boating	Water areas associated with the mooring of recreational vessels.	▪ Marina Slip Areas
Berthing	Water areas directly adjacent to cargo berths. These areas are dedicated to the berthing of cargo vessels.	▪ Cargo Berths
Note: *In addition to the specific land use definitions and scope of activities, uses directly related to and supporting the land use are also permitted activities. Examples include, but are not limited to, an administrative office and/or maintenance and repair facility that support a container terminal or administrative offices and/or quality control laboratory that support commercial fishing processing activities.		

3.2.1.4 Table ES-4, Proposed PMPU Appealable/Fill Projects and Land Use Changes

Table ES-4 was modified to identify Warehouse No. 1 in Planning Area 1 as a mixed land use site that would allow institutional and/or visitor-serving commercial uses. This table was also revised to include all of the buildings at the Southwest Marine Shipyard site (Berths 240-241) within the break bulk land use designation and identify this area as a mixed land use site that would allow break bulk and/or maritime support uses.

Table ES-4. Proposed PMPU Appealable/Fill Projects and Land Use Changes

Planning Area	*Appealable/Fill Project*[a,b]	*Land Use Change*[c]
	Planning Area 1	
Planning Area 1: San Pedro	None	1: (Mixed Land Use Site): Existing institutional uses at Warehouse No. 1 would remain and/or be changed to visitor-serving commercial.~~None~~
	Planning Area 2	
Planning Area 2: West Basin and Wilmington	Berths 187-189 Liquid Bulk Relocation	~~1~~2: The liquid bulk terminal at Berths 187-189 (Vopak) would be relocated to Berths 191-194. Berths 187-189 would consist of open space and institutional land uses.
	Yang Ming Terminal Redevelopment, including Cut and Fill (3-acre cut; 6-acre fill)	~~2~~3: An additional 6 acres of fill at Berths 120-121 and cut of 3 acres of land at Berths 121-127 for the Yang Ming Terminal would be designated as container area.
		~~3~~4: The liquid bulk facility at Berths 118-120 (Kinder Morgan) would be eliminated and replaced with container cargo uses.
	China Shipping Fill (16-acre fill)	~~4~~5: An additional 16 acres of fill would be added at Berth 102 for the China Shipping container terminal and designated for container cargo uses.
	None	~~5~~6: (Optional Land Use Site): Vacant land on Mormon Island between San Clemente Avenue and Hermosa Street would be changed to liquid bulk or break bulk.
	Planning Area 3	
Planning Area 3: Terminal Island	Berth 300 Development (18-acre fill)	~~6~~7: An additional 18 acres of fill would be added at Pier 300 and designated for container cargo uses.
	None	~~7~~8: (Mixed Land Use Sites): Vacant land at Berths 206-209 would be changed to container, break bulk, and/or dry bulk and dry bulk land at Berths 210-211 would be changed to dry bulk and/or container.
		~~8~~9: Vacant land between Seaside Avenue and Reeves Avenue and south of Reeves Avenue would be changed to maritime support.
		~~9~~10: Vacant land along Ferry Street would be changed to maritime support.
		~~10~~11: The land use consisting of the existing liquid bulk area (ExxonMobil) north of the Terminal Island Water Reclamation Plant (TIWRP) would be replaced with container cargo uses.
		~~11~~[d]12[d]: The institutional area south of Pier 400 would be changed to open space (least tern habitat).
		~~12~~13: Existing container area on Pier 400 would be changed to maritime support.
		~~13~~14: Vacant land, commercial fishing, and industrial areas near Fish Harbor would be changed to container cargo uses.
		~~14~~15: (Optional Land Use Site); Existing maritime support uses at Berth 301 would be changed to container or liquid bulk.
	Planning Area 4	
Planning Area 4: Fish Harbor	Tri Marine Expansion	None
	338 Cannery Street Adaptive Reuse	None
	Al Larson Marina	~~15~~16: Land use change from recreational boating to maritime support.
	None	~~16~~17: (Mixed Land Use Site): Vacant land at Southwest Marine Shipyard would be changed to ~~maritime support and~~ break bulk and/or maritime support. The surrounding area would be changed to maritime support.

Table ES-4. Proposed PMPU Appealable/Fill Projects and Land Use Changes

Planning Area	*Appealable/Fill Project*[a,b]	*Land Use Change*[c]
		~~17~~18: Vacant land, commercial fishing, liquid bulk, and institutional land uses at Fish Harbor would be replaced with commercial fishing and maritime support.
Planning Area 5		
Planning Area 5: Water	None	None

Notes:
a. These projects are appealable to the CCC, as defined under CCA Section 30715. Refer to Section ES.3.5, Changes to Land Uses and Proposed Appealable/Fill Projects within the PMPU Planning Areas, for additional details.
b. Proposed fill projects would be consistent with the PMPU, once certified, and would not require an amendment. Appealable/fill projects that would have fill or cut and fill are bolded.
c. Refer to Figure ES-6 (Proposed PMPU Land Use Changes) for the specific locations of the proposed land use changes. The numbers included in this column correspond to the number of the land use change depicted in Figure ES-6.
d. This land use change is administrative because it only changes the definition of the land use; no impacts to the physical environment would occur. Therefore, this land use change is not carried forward for analysis in the PEIR.

3.2.1.5 Figure ES-6, Proposed PMPU Land Use Changes

Figure ES-6 was modified to include the proposed mixed land use designation (institutional and/or visitor-serving commercial) for Warehouse No. 1 in Planning Area 1.

Figure ES-6. Proposed PMPU Land Use Changes

3.2.1.6 Section ES.3.5, Changes to Land Uses and Proposed Appealable/Fill Projects within the PMPU Planning Areas

The proposed appealable/fill projects are in various planning stages and are anticipated to be initiated or completed within the next 5 years. Future environmental documents for the proposed appealable/fill projects would incorporate this PEIR by reference and concentrate on the site-specific issues related to the proposed appealable/fill project at the appropriate phase of the planning process. Following the completion of project-specific CEQA reviews for the proposed appealable/fill projects, the LAHD would issue CDPs for approved projects. ~~However, it would not be necessary to seek a PMPU amendment from the CCC regarding the proposed fill projects analyzed herein.~~

3.2.1.7 Table ES-5, Other PMPU Projects and Land Use Changes

Table ES-5 was modified to include updates to the Final PMPU regarding the other project, Berths 212-224 Container Terminal Expansion, in Planning Area 3. This table was also updated to incorporate the additional other project, Relocation of ExxonMobil Storage Tanks, included in the Final PMPU.

Table ES-5. Other PMPU Projects and Land Use Changes[a]

Planning Area	*Other Projects*	*Appealable[b]*	*Land Use Changes*	*Comments*
Planning Area 1				
Planning Area 1: San Pedro	Outer Harbor Cruise Terminal and Outer Harbor Park	No	Vacant land would be changed to cruise operations and open space.	This project was previously evaluated in the certified San Pedro Waterfront Project EIS/EIR.
	City Dock No. 1 Marine Research Project	No	The break bulk area east of East Channel (Berths 57-71) would be changed to institutional.	This project was previously evaluated in the certified City Dock No. 1 Marine Research Project EIR.
	Ports O'Call Redevelopment	No	Industrial uses along Harbor Boulevard would be changed to commercial.	This project was previously evaluated in the certified San Pedro Waterfront Project EIS/EIR.
	Various	No	A variety of projects occurring along the San Pedro Waterfront have associated land use changes which eliminate industrial land uses and result in increased public access to the waterfront (open spaces), additional visitor-serving commercial development within the Port, and expanded cruise operations.	These land use changes were previously evaluated in the certified San Pedro Waterfront Project EIS/EIR and the certified Cabrillo Marina Phase II Development Project EIR.

Table ES-5. Other PMPU Projects and Land Use Changes[a]

Planning Area	*Other Projects*	*Appealable[b]*	*Land Use Changes*	*Comments*
Planning Area 2				
Planning Area 2: West Basin and Wilmington	Wilmington Waterfront Development Project	No	Institutional and industrial areas near Wilmington (north of Berths 184-185) would be changed to open space.	This project was previously evaluated in the certified Wilmington Waterfront Development Project EIS/EIR.
	Anchorage Road Soil Storage Site (ARSSS) Open Space	No	None	This is not a proposed project. Specific details are currently not available.
	Berths 176-181 Break Bulk Terminal Redevelopment	No	The Mormon Island container area (Berths 174-181) would be changed to break bulk.	This is not a proposed project. Specific details are currently not available.
	East Basin Marina Improvements	Yes	Vacant land east of Yacht Haven Marina (Berths 201-203) would be changed to recreational boating.	This is not a proposed project. Specific details are currently not available.
Planning Area 3				
Planning Area 3: Terminal Island	Pier 500 (200-acre fill)	No	None	This is not a proposed project. Specific details are currently not available.
	Trucking Support Center	No	None	This is not a proposed project. Specific details are currently not available.
	Terminal Island On-Dock Rail Facility	No	None	This is not a proposed project. Specific details are currently not available.
	Berths 212-224 Container Terminal Expansion~~Relocation of SA Recycling~~	No	None	This is not a proposed project. Specific details are currently not available.
	Relocation of ExxonMobil Storage Tanks	Yes	None	This is not a proposed project. Specific details are currently not available.
Planning Area 4				
Planning Area 4: Fish Harbor	Relocation of Jankovich Marine Fueling Station	Yes	None	This project was previously evaluated in the certified San Pedro Waterfront Project EIS/EIR.

Notes:

a. The PEIR does not analyze the impacts of other projects included in the PMPU that have already been evaluated in a certified CEQA document. Furthermore, as some projects included in the PMPU are in the conceptual design stage, sufficient project details are not available to support a programmatic evaluation of potential impacts. These other projects are listed in the PEIR for purposes of public disclosure and addressed in Chapter 4.0, Cumulative Analysis.

b. These projects are appealable to the CCC, as defined under CCA Section 30715. Please refer to Section ES.3.5, Changes to Land Uses and Proposed Appealable/Fill Projects within the PMPU Planning Areas, for additional details.

3.2.1.8 Section ES.3.5.1.1, Planning Area 1: San Pedro, General Overview

Planning Area 1 would encompass the San Pedro Waterfront, extending from the breakwater to the Vincent Thomas Bridge along the western boundary of the Port (Figure ES-8). This area includes Berths 19-95, the Port's cruise operations, institutional uses, open space (Cabrillo Beach), and recreational boating activities. Planning Area 1 includes land uses focused on public access to the waterfront, but also has limited cargo operations and commercial fishing activities. Planning Area 1 emphasizes waterfront access through a waterfront promenade, parks, museums, academic uses, and visitor-serving commercial uses and attractions. ~~No land use changes would occur in Planning Area 1.~~ In Planning Area 1, existing institutional uses at Warehouse No. 1 would remain and/or be changed to visitor-serving commercial. Adaptive reuse of Warehouse No. 1 would occur in conformance with LAHD's *Built Environment Historic, Architectural, and Cultural Resource Policy*.

3.2.1.9 Figure ES-8, Proposed PMPU Planning Area 1 Land Use Designations

Figure ES-8 was modified to show the PMPU land use designation for Cabrillo Beach as open space. This figure was updated to show Warehouse No. 1 as a mixed land use site that would allow institutional and/or visitor-serving commercial uses.

Figure ES-8. Proposed PMPU Planning Area 1 Land Use Designations

3.2.1.10 Section ES.3.5.4.1, Planning Area 4: Fish Harbor, General Overview

Planning Area 4 would contain Fish Harbor and focus on expanding commercial fishing while maintaining adequate acreages for maritime support uses. Commercial fishing would remain in the northern and eastern portions of Fish Harbor, while maritime support, break bulk cargo, and other institutional uses would be focused along the western portion of Fish Harbor. ~~Break bulk cargo handling is anticipated at Berths 240-241 and the backland area.~~ Vacant land at Southwest Marine Shipyard (Berths 240-241) would be a mixed land use site and allow break bulk and/or maritime support uses. Additional land use changes are associated with the proposed appealable/fill projects in Planning Area 4. The *Terminal Island Land Use Plan* also provides the framework for Planning Area 4.

3.2.1.11 Figure ES-11, Proposed PMPU Planning Area 4 Land Use Designations

Figure ES-11 was modified to show all of the buildings at the Southwest Marine Shipyard site (Berths 240-241) within the break bulk land use designation and identify this area as a mixed land use site that would allow break bulk and/or maritime support uses.

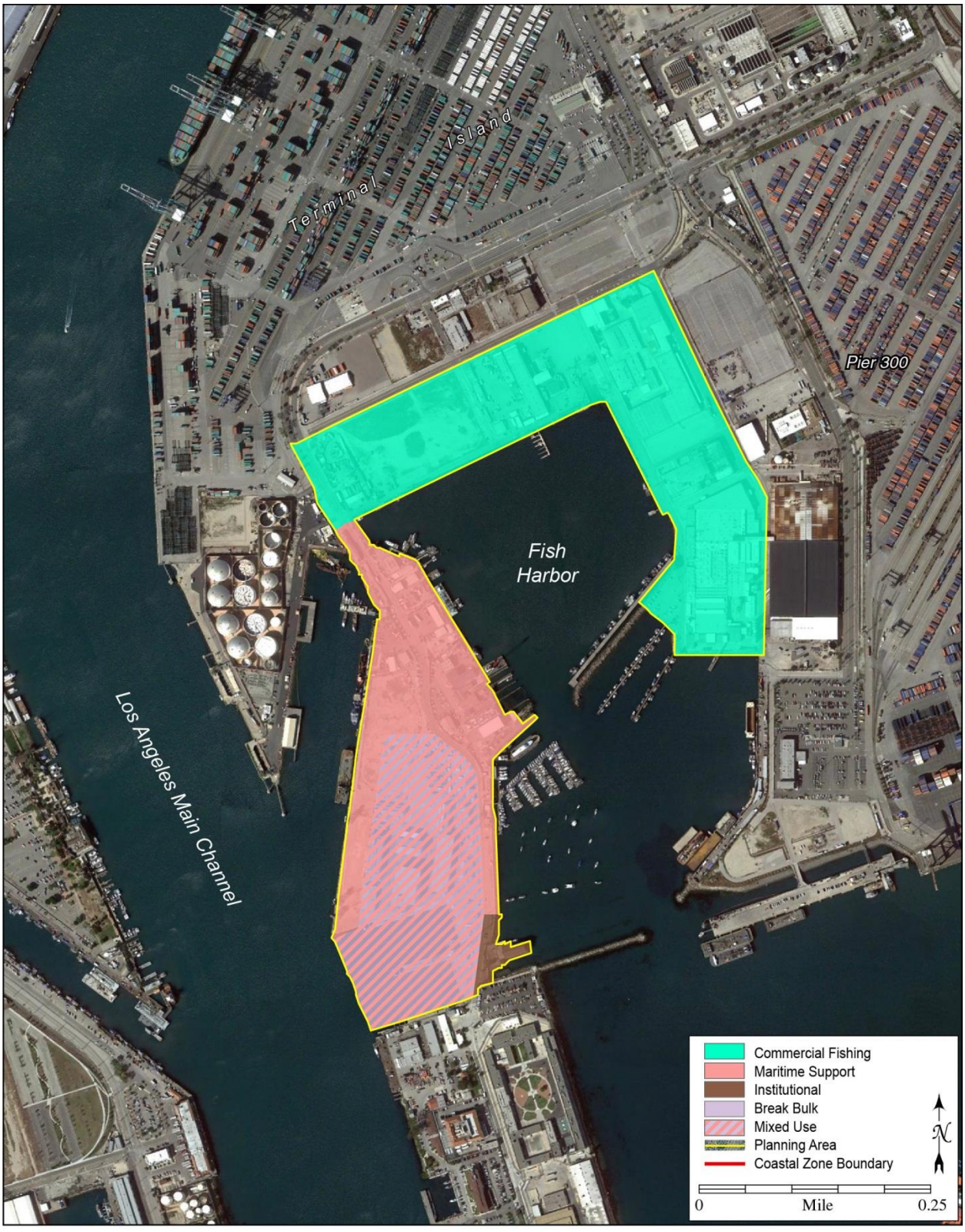

Figure ES-11. Proposed PMPU Planning Area 4 Land Use Designations

3.2.1.12 Table ES-6, Summary of Proposed PMPU Land Use Changes

Table ES-6 was modified to clarify the following**:**

- The land use designation for Cabrillo Beach was changed from visitor-serving commercial to open space, which resulted in the removal of approximately 21 acres from the previously analyzed visitor-serving commercial land uses;
- The Cabrillo Beach boat launch area was incorporated into the previously analyzed recreational boating area acreage, which resulted in an additional 2 acres for this land use designation. This change also resulted in the loss of approximately 2 acres of open water in Planning Area 5;
- Warehouse No. 1 was changed to a mixed land use site that would allow institutional and/or visitor-serving commercial land uses. Because visitor-serving commercial is a more intensive land use, this resulted in the removal of approximately 6 acres of institutional uses in Planning Area 1; and,
- Vacant land at Southwest Marine Shipyard was changed to a mixed land use site that would allow break bulk and/or maritime support uses. Because break bulk is a more intensive land use, this resulted in the removal of approximately 6 acres of maritime support in Planning Area 4.

Table ES-6. Summary of Proposed PMPU Land Use Changes

Land Use Type	*Existing (2011) (acres)*[a]	*Proposed Changes Evaluated in the PEIR (acres)*	*Previously Analyzed Changes (acres)*[b]	*Overall Difference (acres)*	*PMPU Acreage (acres)*
Container	2,050	288	33	321	2,371
Liquid Bulk	119	-17	66	49	168
Dry Bulk	45	-30	1	-29	15
Commercial Fishing	20	36	2	38	58
Recreational Marina (Recreational Boating)	66	0	25~~23~~	25~~23~~	91~~88~~
Industrial (Maritime Support)	45	75~~81~~	13	88~~94~~	133~~139~~
Institutional	115	-37~~31~~	15	-22~~16~~	92~~98~~
Commercial (Visitor Serving/Commercial)	88	6~~0~~	15~~36~~	21~~36~~	109~~124~~
Break Bulk	160	21~~15~~	38	59~~53~~	219~~213~~
Open Space	92	28	110~~89~~	138~~117~~	231~~210~~
Passengers/Supporting Commercial (Cruise Operations)	54	0	15	15	69
Vacant	658	-333	-325	-658	0
Open Water[c]	3,224	-37	-7~~-5~~	-44~~-42~~	3,180~~3,182~~
Total[d]	6,735	0	0	0	6,735

Notes:
a. All acreages are approximate. Acreages for mixed use and optional land use sites are associated with the "worst case" or most intensive land use for an individual site, as evaluated in this PEIR.
b. The PEIR does not analyze the impacts of the land use changes included in the PMPU that have already been evaluated in a certified CEQA document.
c. Acreages do not include the Reservation Point Area (i.e., 64 acres). This is not LAHD controlled property.
d. The total area includes open water acreage and all unassigned acreage in Planning Areas 1–4 and boundary differences.

3.2.1.13 Table ES-7, Summary of Potential Impacts and Mitigation Measures for the Proposed Program

Table ES-7 was revised to clarify the title of Mitigation Measure TRANS-1.

Table ES-7. Summary of Potential Impacts and Mitigation Measures for the Proposed Program

Environmental Impacts	*Impact Determination*	*Mitigation Measures*	*Impact After Mitigation*
3.1 Aesthetics/Visual Resources			
Operations			
TRANS-4: Operation of the proposed Program would cause increases considered significant for freeway congestion.	Significant	**MM TRANS-1: ~~Implement the~~ Interstate (I)-710 Corridor ~~Project~~Improvements**	Significant and unavoidable

3.2.2 Changes Made to Chapter 2.0, Program Description

Section 2.3.2.5 was inadvertently omitted from the Draft PEIR.

3.2.2.1 Section 2.3.2.5, Planning Area 5 (Wilmington District)

Planning Area 5 (Wilmington District) comprises approximately 622 acres encompassing the northern terminus of the Main Channel and includes areas adjacent to the community of Wilmington and the Consolidated Slip. Existing land uses include break bulk, dry bulk, liquid bulk, institutional, recreational, and vacant lands (Figure 2.3-2).

3.2.2.2 Table 2.5-1, Proposed PMPU Planning Areas and Allowable Land Uses

Table 2.5-1 was updated to reflect changes to the Final PMPU.

Table 2.5-1. Proposed PMPU Planning Areas and Allowable Land Uses

Planning Area	*Location*	*Acreage*	*Allowable Land Uses**
1 (San Pedro)	From the Breakwater up to the Vincent Thomas Bridge	413~~4~~	Recreational Boating, Commercial, Break Bulk, Open Space, Institutional, Cruise Operations, and Maritime Support
2 (West Basin and Wilmington)	From the Vincent Thomas Bridge to north of the Cerritos Channel	1,098~~095~~	Container, Open Space, Liquid Bulk, Break Bulk, Dry Bulk, Maritime Support, Recreational Boating, and Commercial
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4 (Fish Harbor)	Fish Harbor, including former Southwest Marine Shipyard site	92	Commercial Fishing, Maritime Support, Break Bulk, and Institutional
5 (Water)	All water excluding areas adjacent to marinas	3,209~~11~~	Navigable Waterways, Maneuvering Areas, Anchorage Areas, and Shallow Water Habitat
Note: *Proposed land uses would be confined to the specific sites identified on the PMPU Land Use Designations Map (Figure 2.5-2).			

3.2.2.3 Figure 2.5-2, Proposed PMPU Land Use Designations

Figure 2.5-2 was modified to depict the PMPU land use designation for Cabrillo Beach as open space. This figure was updated to identify Warehouse No. 1 in Planning Area 1 as a mixed land use site that would allow institutional and/or visitor-serving commercial uses. Figure 2.5-2 was also revised to include all of the buildings at the Southwest Marine Shipyard site (Berths 240-241) within the break bulk land use designation and identify this area as a mixed land use site that would allow break bulk and/or maritime support uses.

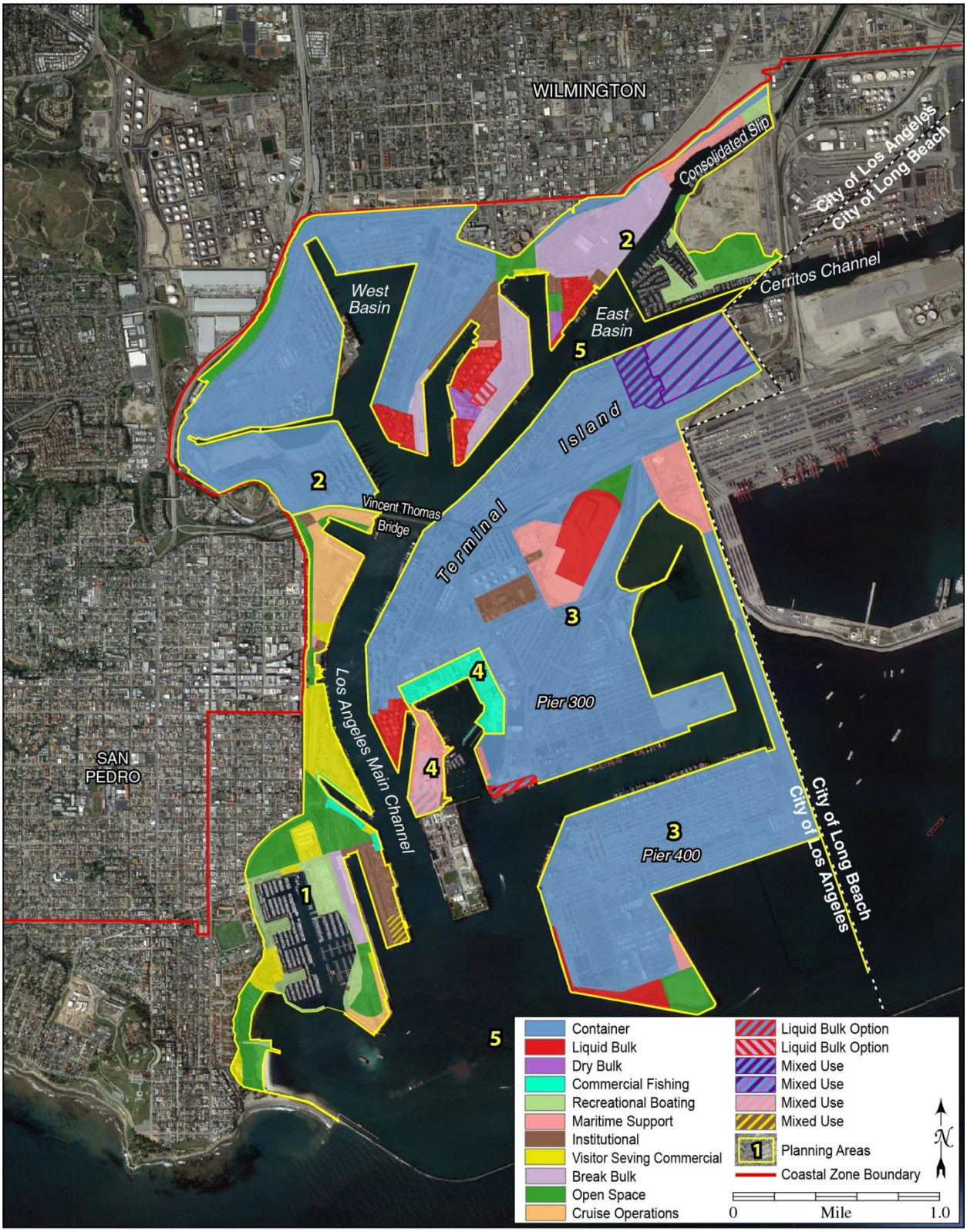

Figure 2.5-2. Proposed PMPU Land Use Designations

3.2.2.4 Table 2.5-3, Proposed PMPU Land and Water Use Definitions

Table 2.5-3 was updated to reflect changes to the Final PMPU.

Table 2.5-3. Proposed PMPU Land and Water Use Definitions

Land Use	*Description*	*Examples*
	*Land Use**	
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Liquid Bulk	Water-dependent uses focused on storage, receipt, and delivery of liquid bulk commodities.	▪ Crude Oil Terminal ▪ Petroleum Products Terminal ▪ Non-petroleum Products and Other Liquid Bulk Commodities
Maritime Support	Water-dependent and non water-dependent operations necessary to support cargo handling and other maritime activities.	▪ Barge/Tugboat ▪ Boatyard and Ship Repair ▪ Marine Fueling Station ▪ Marine Service Contractors, (e.g., diving, and emergency response services) ▪ Water Taxi ▪ Cargo Fumigation
Commercial Fishing	Facilities related to commercial fishing and processing.	▪ Fish Processing ▪ Cold Storage/Fish Unloading/Ice House ▪ Fishing Vessel Moorage ▪ Fish Laboratories and Testing
Recreational Boating	Recreational boating activities generally associated with marinas.	▪ Marinas ▪ Upland Boat Storage ▪ Yacht Clubs ▪ Marina-Related Retail

Table 2.5-3. Proposed PMPU Land and Water Use Definitions

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Open Space	Open spaces reserved for the general public such as parks and beaches or open areas reserved for environmental protection.	▪ Public Beaches ▪ Parks ▪ Environmentally Protected Area ▪ Wetlands
Institutional	Uses and facilities operated by government agencies.	▪ Public Safety (Police and Fire) ▪ Other Federal, State, and Local Agencies ▪ Educational ▪ Marine Research Facility ▪ Non-profit Organizations
Water Use		
Navigation	Water areas devoted to anchorage of vessels, movement and maneuvering of vessels.	▪ Main Channel ▪ East and West Turning Basin
Environmental Mitigation	Water areas dedicated to environmental protection and not suitable for the navigation of cargo moving vessels.	▪ Shallow Water Habitat
Recreational Boating	Water areas associated with the mooring of recreational vessels.	▪ Marina Slip Areas
Berthing	Water areas directly adjacent to cargo berths. These areas are dedicated to the berthing of cargo vessels.	▪ Cargo Berths
Note: *In addition to the specific land use definitions and scope of activities, uses directly related to and supporting the land use are also permitted activities. Examples include, but are not limited to, an administrative office and/or maintenance and repair facility that support a container terminal or administrative offices and/or quality control laboratory that support commercial fishing processing activities.		

3.2.2.5 Section 2.5.3, Changes to Land Uses and Proposed Appealable/Fill Projects within the PMPU Planning Areas

The proposed Program includes revisions to allowable land uses and proposed appealable/fill projects (Figures 2.5-3 and 2.5-4 and Table 2.5-4). As previously discussed, the PEIR focuses on land use changes that would result in changes and/or intensification of activities with the potential for impacting the physical environment, as well as the proposed appealable/fill projects, as defined under CCA Section 30715. Appealable projects include: liquefied natural gas and crude oil projects that could have a significant impact on oil and gas supplies; wastewater treatment facilities except those producing incidental amounts associated with Port activities; road or highway projects that are not principally for internal circulation within the Port; office and residential buildings not associated with Port administrative activities;

hotels, motels, and shopping facilities not associated with commercial goods for water-oriented purposes; commercial fishing facilities; recreational small craft marina related facilities; oil refineries; and, petrochemical production plants. The proposed appealable/fill projects are in various planning stages and are anticipated to be initiated or completed within the next 5 years. As noted in Section 1.5.1, Scope of Analysis, future environmental documents for the proposed appealable/fill projects would incorporate this PEIR by reference and concentrate on the site-specific issues related to the appealable/fill project at the appropriate phase of the planning process. Following the completion of project-specific CEQA reviews for the proposed appealable/fill projects, the LAHD would issue CDPs for approved projects. ~~However, it would not be necessary to seek a PMPU amendment from the CCC in regard to the proposed fill projects analyzed herein.~~

3.2.2.6 Figure 2.5-3, Proposed PMPU Land Use Changes

Figure 2.5-3 was modified to include the proposed mixed land use designation (institutional and/or visitor-serving commercial) for Warehouse No. 1 in Planning Area 1.

Figure 2.5-3. Proposed PMPU Land Use Changes

3.2.2.7 Table 2.5-4, Proposed PMPU Appealable/Fill Projects and Land Use Changes

Table 2.5-4 was modified to identify Warehouse No. 1 in Planning Area 1 as a mixed land use site that would allow institutional and/or visitor-serving commercial uses. This table was also revised to include all of the buildings at the Southwest Marine Shipyard site (Berths 240-241) within the break bulk land use designation and identify this area as a mixed land use site that would allow break bulk and/or maritime support uses.

Table 2.5-4. Proposed PMPU Appealable/Fill Projects and Land Use Changes

Planning Area	*Appealable/Fill Project*[a,b]	*Land Use Change*[c]
Planning Area 1		
Planning Area 1: San Pedro	None	1: (Mixed Land Use Site): Existing institutional uses at Warehouse No. 1 would remain and/or be changed to visitor-serving commercial.~~None~~
Planning Area 2		
Planning Area 2: West Basin and Wilmington	Berths 187-189 Liquid Bulk Relocation	~~1~~2: The liquid bulk terminal at Berths 187-189 (Vopak) would be relocated to Berths 191-194. Berths 187-189 would consist of open space and institutional land uses.
	Yang Ming Terminal Redevelopment, including Cut and Fill (3-acre cut; 6-acre fill)	~~2~~3: An additional 6 acres of fill at Berths 120-121 and cut of 3 acres of land at Berths 121-127 for the Yang Ming Terminal would be designated as container area.
		~~3~~4: The liquid bulk facility at Berths 118-120 (Kinder Morgan) would be eliminated and replaced with container cargo uses.
	China Shipping Fill (16-acre fill)	~~4~~5: An additional 16 acres of fill would be added at Berth 102 for the China Shipping container terminal and designated for container cargo uses.
	None	~~5~~6: (Optional Land Use Site): Vacant land on Mormon Island between San Clemente Avenue and Hermosa Street would be changed to liquid bulk or break bulk.
Planning Area 3		
Planning Area 3: Terminal Island	Berth 300 Development (18-acre fill)	~~6~~7: An additional 18 acres of fill would be added at Pier 300 and designated for container cargo uses.
	None	~~7~~8: (Mixed Land Use Sites): Vacant land at Berths 206-209 would be changed to container, break bulk, and/or dry bulk and dry bulk land at Berths 210-211 would be changed to dry bulk and/or container.
		~~8~~9: Vacant land between Seaside Avenue and Reeves Avenue and south of Reeves Avenue would be changed to maritime support.
		~~9~~10: Vacant land along Ferry Street would be changed to maritime support.
		~~10~~11: The land use consisting of the existing liquid bulk area (ExxonMobil) north of the Terminal Island Water Reclamation Plant (TIWRP) would be replaced with container cargo uses.
		~~11~~[d]12[d]: The institutional area south of Pier 400 would be changed to open space (least tern habitat).
		~~12~~13: Existing container area on Pier 400 would be changed to maritime support.
		~~13~~14: Vacant land, commercial fishing, and industrial areas near Fish Harbor would be changed to container cargo uses.

Table 2.5-4. Proposed PMPU Appealable/Fill Projects and Land Use Changes

Planning Area	*Appealable/Fill Project*[a,b]	*Land Use Change*[c]
		~~14~~15: (Optional Land Use Site): Existing maritime support uses at Berth 301 would be changed to container or liquid bulk.
Planning Area 4		
Planning Area 4: Fish Harbor	Tri Marine Expansion	None
	338 Cannery Street Adaptive Reuse	None
	Al Larson Marina	~~15~~16: Land use change from recreational boating to maritime support.
	None	~~16~~17: (Mixed Land Use Site): Vacant land at Southwest Marine Shipyard would be changed to ~~maritime support and~~ break bulk and/or maritime support. The surrounding area would be changed to maritime support.
		~~17~~18: Vacant land, commercial fishing, liquid bulk, and institutional land uses at Fish Harbor would be replaced with commercial fishing and maritime support.
Planning Area 5		
Planning Area 5: Water	None	None

Notes:
a. These projects are appealable to the CCC, as defined under CCA Section 30715. Refer to Section 2.5.3, Changes to Land Uses and Proposed Appealable/Fill Projects within the PMPU Planning Areas, for additional details.
b. Proposed fill projects would be consistent with the PMPU, once certified, and would not require an amendment. Appealable/fill projects that would have fill or cut and fill are bolded.
c. Refer to Figure 2.5-3 (Proposed PMPU Land Use Changes) for the specific locations of the proposed land use changes. The numbers included in this column correspond to the number of the land use change depicted in Figure 2.5-3.
d. This land use change is administrative because it only changes the definition of the land use; no impacts to the physical environment would occur. Therefore, this land use change is not carried forward for analysis in the PEIR.

3.2.2.8 Table 2.5-5, Other PMPU Projects and Land Use Changes

Table 2.5-5 was modified to include updates to the Final PMPU regarding the other project, Berths 212-224 Container Terminal Expansion, in Planning Area 3. This table was also updated to incorporate the additional other project, Relocation of ExxonMobil Storage Tanks, included in the Final PMPU.

Table 2.5-5. Other PMPU Projects and Land Use Changes[a]

Planning Area	*Other Projects*	*Appealable[b]*	*Land Use Changes*	*Comments*
Planning Area 1				
Planning Area 1: San Pedro	Outer Harbor Cruise Terminal and Outer Harbor Park	No	Vacant land would be changed to cruise operations and open space.	This project was previously evaluated in the certified San Pedro Waterfront Project EIS/EIR.
	City Dock No. 1 Marine Research Project	No	The break bulk area east of East Channel (Berths 57-71) would be changed to institutional.	This project was previously evaluated in the certified City Dock No. 1 Marine Research Project EIR.
	Ports O'Call Redevelopment	No	Industrial uses along Harbor Boulevard would be changed to commercial.	This project was previously evaluated in the certified San Pedro Waterfront Project EIS/EIR.
	Various	No	A variety of projects occurring along the San Pedro Waterfront have associated land use changes which eliminate industrial land uses and result in increased public access to the waterfront (open spaces), additional visitor-serving commercial development within the Port, and expanded cruise operations.	These land use changes were previously evaluated in the certified San Pedro Waterfront Project EIS/EIR and the certified Cabrillo Marina Phase II Development Project EIR.
Planning Area 2				
Planning Area 2: West Basin and Wilmington	Wilmington Waterfront Development Project	No	Institutional and industrial areas near Wilmington (north of Berths 184-185) would be changed to open space.	This project was previously evaluated in the certified Wilmington Waterfront Development Project EIS/EIR.
	Anchorage Road Soil Storage Site (ARSSS) Open Space	No	None	This is not a proposed project. Specific details are currently not available.
	Berths 176-181 Break Bulk Terminal Redevelopment	No	The Mormon Island container area (Berths 174-181) would be changed to break bulk.	This is not a proposed project. Specific details are currently not available.
	East Basin Marina Improvements	Yes	Vacant land east of Yacht Haven Marina (Berths 201-203) would be changed to recreational boating.	This is not a proposed project. Specific details are currently not available.
Planning Area 3				
Planning Area 3: Terminal Island	Pier 500 (200-acre fill)	No	None	This is not a proposed project. Specific details are currently not available.
	Trucking Support Center	No	None	This is not a proposed project. Specific details are currently not available.
	Terminal Island On-Dock Rail Facility	No	None	This is not a proposed project. Specific details are currently not available.

Table 2.5-5. Other PMPU Projects and Land Use Changes[a]

Planning Area	*Other Projects*	*Appealable[b]*	*Land Use Changes*	*Comments*
	Berths 212-224 Container Terminal Expansion~~Relocation of SA Recycling~~	No	None	This is not a proposed project. Specific details are currently not available.
	Relocation of ExxonMobil Storage Tanks	Yes	None	This is not a proposed project. Specific details are currently not available.
Planning Area 4				
Planning Area 4: Fish Harbor	Relocation of Jankovich Marine Fueling Station	Yes	None	This project was previously evaluated in the certified San Pedro Waterfront Project EIS/EIR.

Notes:
a. The PEIR does not analyze the impacts of other projects included in the PMPU that have already been evaluated in a certified CEQA document. Furthermore, as some projects included in the PMPU are in the conceptual design stage, sufficient project details are not available to support a programmatic evaluation of potential impacts. These other projects are listed in the PEIR for purposes of public disclosure and addressed in Chapter 4.0, Cumulative Analysis.
b. These projects are appealable to the CCC, as defined under CCA Section 30715. Please refer to Section 2.5.3, Changes to Land Uses and Proposed Appealable/Fill Projects within the PMPU Planning Areas, for additional details.

3.2.2.9 Section 2.5.3.2.1, Planning Area 1: San Pedro, General Overview

Planning Area 1 would encompass the San Pedro Waterfront, extending from the breakwater to the Vincent Thomas Bridge along the western boundary of the Port (Figure ES-8). This area includes Berths 19-95, the Port's cruise operations, institutional uses, open space (Cabrillo Beach), and recreational boating activities. Planning Area 1 includes land uses focused on public access to the waterfront, but also has limited cargo operations and commercial fishing activities. Planning Area 1 emphasizes waterfront access through a waterfront promenade, parks, museums, academic uses, and visitor-serving commercial uses and attractions. ~~No land use changes would occur in Planning Area 1.~~ In Planning Area 1, existing institutional uses at Warehouse No. 1 would remain and/or be changed to visitor-serving commercial. Adaptive reuse of Warehouse No. 1 would occur in conformance with LAHD's *Built Environment Historic, Architectural, and Cultural Resource Policy.*

3.2.2.10 Figure 2.5-5, Proposed PMPU Planning Area 1 Land Use Designations

Figure 2.5-5 was modified to show the PMPU land use designation for Cabrillo Beach as open space. This figure was also updated to show Warehouse No. 1 as a mixed land use site that would allow institutional and/or visitor-serving commercial uses.

Figure 2.5-5. Proposed PMPU Planning Area 1 Land Use Designations

3.2.2.11 Section 2.5.3.5.1, Planning Area 4: Fish Harbor General Overview

Planning Area 4 would contain Fish Harbor and focus on expanding commercial fishing while maintaining adequate acreages for maritime support uses. Commercial fishing would remain in the northern and eastern portions of Fish Harbor, while maritime support and other institutional uses would be located along the western portion of Fish Harbor (Figure 2.5-8). ~~Break bulk cargo handling is anticipated at Berths 240-241 and the backland area.~~ Vacant land at Southwest Marine Shipyard (Berths 240-241) would be a mixed land use site and allow break bulk and/or maritime support uses. Additional land use changes are associated with the proposed appealable/fill projects in Planning Area 4. The *Terminal Island Land Use Plan* also provides the framework for Planning Area 4.

3.2.2.12 Figure 2.5-8, Proposed PMPU Planning Area 4 Land Use Designations

Figure 2.5-8 was modified to show all of the buildings at the Southwest Marine Shipyard (Berths 240-241) within the break bulk land use designation and identify this area as a mixed land use site that would allow break bulk and/or maritime support uses.

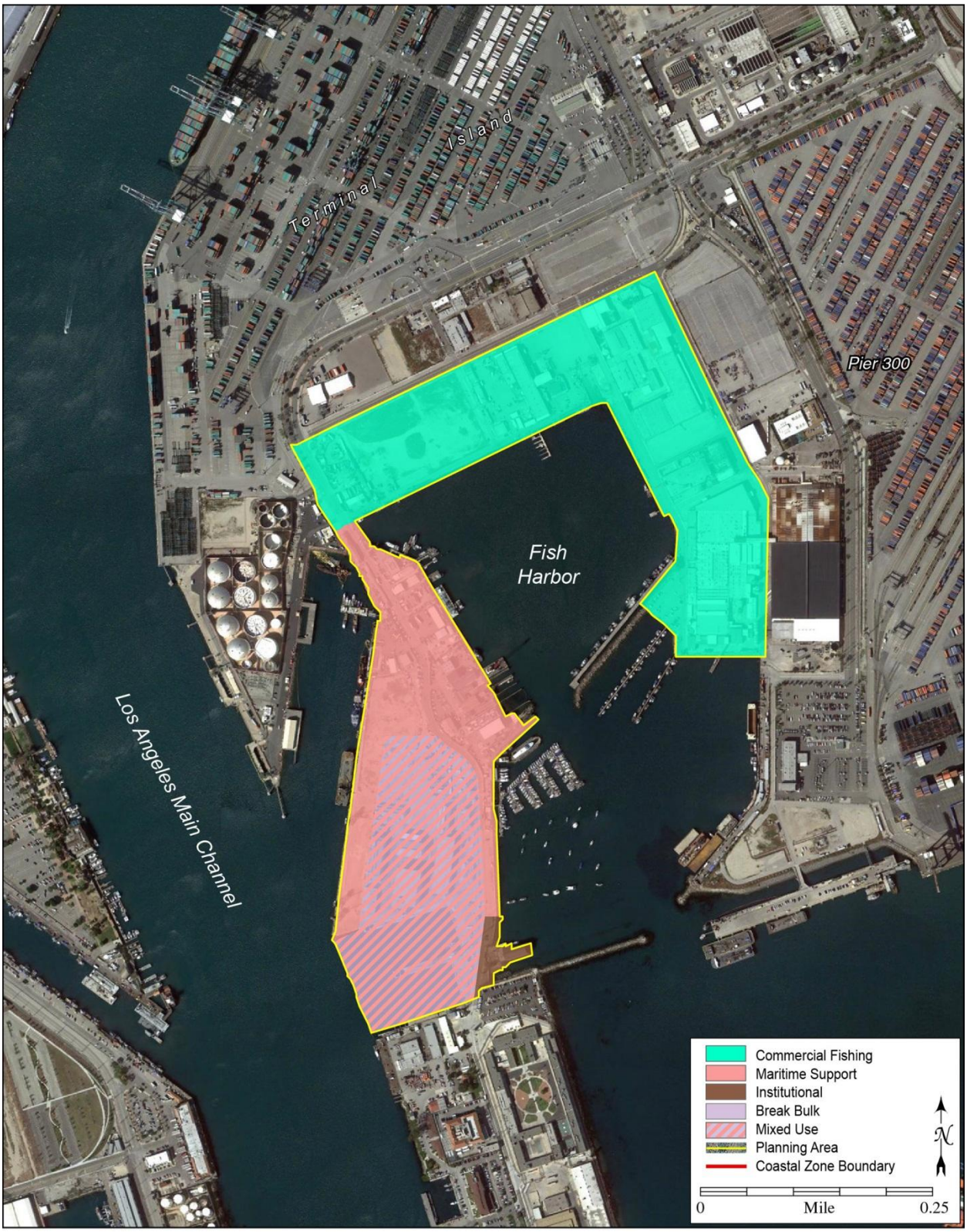


Figure 2.5-8. Proposed PMPU Planning Area 4 Land Use Designations

3.2.2.13 Table 2.5-6, Summary of Proposed PMPU Land Use Changes

Table 2.5-6 was modified to clarify the following**:**

- The land use designation for Cabrillo Beach was changed from visitor-serving commercial to open space, which resulted in the removal of approximately 21 acres from the previously analyzed visitor-serving commercial land uses;
- The Cabrillo Beach boat launch area was incorporated into the previously analyzed recreational boating area acreage, which resulted in an additional 2 acres for this land use designation. This change also resulted in the loss of approximately 2 acres of open water in Planning Area 5; and,
- Warehouse No. 1 was changed to a mixed land use site that would allow institutional and/or visitor-serving commercial land uses. Because visitor-serving commercial is a more intensive land use, this resulted in the removal of approximately 6 acres of institutional uses in Planning Area 1; and,
- Vacant land at Southwest Marine Shipyard was changed to a mixed land use site that would allow break bulk and/or maritime support uses. Because break bulk is a more intensive land use, this resulted in the removal of approximately 6 acres of maritime support in Planning Area 4.

Table 2.5-6. Summary of Proposed PMPU Land Use Changes

Land Use Type	*Existing (2011) (acres)*[a]	*Proposed Changes Evaluated in the PEIR (acres)*	*Previously Analyzed Changes (acres)*[b]	*Overall Difference (acres)*	*PMPU Acreage (acres)*
Container	2,050	288	33	321	2,371
Liquid Bulk	119	-17	66	49	168
Dry Bulk	45	-30	1	-29	15
Commercial Fishing	20	36	2	38	58
Recreational Marina (Recreational Boating)	66	0	25~~23~~	25~~23~~	91~~88~~
Industrial (Maritime Support)	45	75~~81~~	13	88~~94~~	133~~139~~
Institutional	115	-37~~31~~	15	-22~~16~~	92~~98~~
Commercial (Visitor Serving/Commercial)	88	6~~0~~	15~~36~~	21~~36~~	109~~124~~
Break Bulk	160	21~~15~~	38	59~~53~~	219~~213~~
Open Space	92	28	110~~89~~	138~~117~~	231~~210~~
Passengers/Supporting Commercial (Cruise Operations)	54	0	15	15	69
Vacant	658	-333	-325	-658	0
Open Water[c]	3,224	-37	-7~~-5~~	-44~~-42~~	3,180~~3,182~~
Total[d]	6,735	0	0	0	6,735

Notes:
a. All acreages are approximate. Acreages for mixed use and optional land use sites are associated with the "worst case" or most intensive land use for an individual site, as evaluated in this PEIR.
b. The PEIR does not analyze the impacts of the land use changes included in the PMPU that have already been evaluated in a certified CEQA document.
c. Acreages do not include the Reservation Point Area (i.e., 64 acres). This is not LAHD controlled property.
d. The total area includes open water acreage and all unassigned acreage in Planning Areas 1–4 and boundary differences.

3.2.2.14 Section 2.5.7.1, PMPU Goals

Section 2.5.7.1, PMPU Goals, was updated to reflect changes to the Final PMPU.

Goal 3: Accommodate Diverse Cargoes

The Port should continue its commitment to accommodating a variety of water-dependent cargo handling facilities, including container, break bulk, dry bulk, and liquid bulk uses. While revenues generated from each land use vary, overall plans for the Port should allow for some capacity for different modes of cargo to serve the larger economic and public interest of the state. Ancillary uses, such as ship and boat repair, harbor craft, and barge and tug operations, are vital support industries and are also important customers that should be prioritized, based on need. Demand and market studies for specific ancillary uses should be pursued periodically. Additionally, existing commercial fishing and recreational boating facilities will be protected consistent with the policies of the CCA.

Goal 4: Increase Public Access to the Waterfront

As a part of a larger community, the Port will provide for enhanced public access to the waterfront and visitor-serving facilities including retail restaurants, museums, and parks. Waterfront access should be provided to both the local communities of San Pedro and Wilmington. These visitor-serving areas should be developed to connect with local commercial districts directly outside the Port district, such as Downtown San Pedro and the Wilmington Avalon Corridor. Within the visitor-serving areas, pedestrian and bicycle pathways should connect a series of commercial and open space destinations as well as allow the opportunity to network into regional resources such as the California Coastal Trail (CCT). Public access areas and residential areas adjacent to the Port should be buffered through landscaping, as feasible.

Goal 5: Protect Historic Resources

The Port shall identify and pursue the preservation of the historic resources within its jurisdiction. The history of the Port, including significant periods such as the era of shipbuilding, commercial fishing industry, and the Japanese American Fishing Village, should continue to be memorialized, as appropriate, through monuments and preservation of associated existing buildings and sites. Nothing stated herein shall be interpreted to impede the Port's ability to meet its mandates identified in the CCA to operate as a commercial port and accommodate transportation, commercial, industrial and cargo handling activities. The *Built Environment Historic, Architectural, and Cultural Resource Policy*, adopted by the Board, established the formal procedures to potentially adaptively reuse and protect historic resources.

The goal to adaptively reuse historic resources shall be included among other goals when considering a proposed use for the site. Further, the Port shall encourage the productive reuse of historic resources in the future by periodically reviewing, as needed, with stakeholder input, whether additional Port related land uses in certain areas with identified historic resources would enhance the opportunity to the reuse vacant or underutilized historic resources.~~The Port should, where feasible, identify and preserve historic resources within the Port. Significant historic events, such as~~

~~the historic commercial fishing industry or the Japanese-American fishing village on Terminal Island, should continue to be memorialized through monuments. A historic resources policy should be formalized and adopted by the Board to establish the Port's commitment to adaptive reuse and protection of historic structures.~~

3.2.3 Changes Made to Chapter 3.0, Environmental Analysis

Chapter 3.0, Environmental Analysis, was revised to clarify that the proposed land use change in Planning Area 1 (i.e., designating Warehouse No. 1 as a mixed land use site) was included in the Final PEIR impact analysis. Additional revisions are related to the analysis of an additional freeway link location on the I-710 north of Florence Avenue in response to comments received from Caltrans on the Draft PEIR.

As mentioned in Chapter 2.0, Response to Comments, the change in land use related to the Southwest Marine Shipyard in Planning Area 4 would not alter conclusions identified in the Draft PEIR, and therefore is not analyzed herein.

3.2.3.1 Section 3.0.4, Level of Analysis

Consistent with a PEIR level of analysis, it is notable that several changes proposed in the PMPU are administrative (e.g., changes to existing planning areas and land use categories/definitions) and would cause no impacts to the physical environment. For much of the PMPU area, proposed land use categories would be compatible with or less intensive than existing land uses, potentially resulting in fewer impacts to the physical environment compared to existing conditions. Consequently, these land use changes are not addressed in the individual resource sections. Further, since there are no proposed appealable/fill projects or land use changes associated with Planning Area ~~s1 and~~ 5 (Section 2.5.3, Changes to Land Uses and Proposed Appealable/Fill Projects within the PMPU Planning Areas), evaluations are presented only for Planning Areas 1, 2, 3, and 4 in the resource sections.

3.2.4 Changes Made to Section 3.1, Aesthetics/Visual Resources

Section 3.1, Aesthetics/Visual Resources, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site.

3.2.4.1 Section 3.1.4.3, Impacts and Mitigation

Impact AES-1: The proposed Program would not cause substantial, adverse effects on a scenic vista.

Planning Areas ~~2~~ 1 – 4

Main Channel, Adjacent Areas, and San Pedro Waterfront

One proposed appealable/fill project, the Berths 187-189 Liquid Bulk Relocation Project, would be within view from the Main Channel, Slip 5, and the East Basin Marinas. It is possible that land use changes within the Southwest Marine Shipyard may be visible from points within the Main Channel and from the southeast end of Ports O'Call Village and the adjacent marina. The proposed land use change at Warehouse No. 1 would be visible from the Main Channel and San Pedro Waterfront. No other proposed appealable/fill projects or land use changes would be seen from points elsewhere along the Main Channel, adjacent areas, or the San Pedro Waterfront.

The extent of obstruction

Since views from the Main Channel and San Pedro Waterfront do not currently extend past the edge of the Main Channel and its adjacent areas, such as the East Basin Marinas, the proposed appealable/fill project (Berths 187-189 Liquid Bulk Relocation Project), land use changes within the Southwest Marine Shipyard, and Warehouse No. 1 land use change would have no potential for obstructing views to the interior of the PMPU area.

Impact AES-2: The proposed Program would not cause substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within [view from] a state scenic highway.

Planning Areas ~~2~~ 1 – 4

Impact AES-3: The proposed Program would not cause a substantial degradation of existing visual character or quality of a site and its surroundings.

The issue addressed in Impact AES-3 is the degree to which the proposed Program would contrast unfavorably and noticeably with features of the PMPU area.

Planning Areas ~~2~~ 1 – 4

Main Channel, Adjacent Areas and San Pedro Waterfront

The proposed appealable/fill project nearest to the Main Channel and adjacent areas and the San Pedro Waterfront is the Al Larson Marina at Fish Harbor. It would not be within critical public views, as would be the case for the two other projects at Fish Harbor (Tri Marine Expansion and 338 Cannery Street Adaptive Reuse), Pier 300

(Berth 300 Development), and conversion of Berth 301 to liquid bulk or container cargo uses. It is possible that land use changes within the Southwest Marine Shipyard may be visible. The proposed changes include converting recreational boating to maritime support and vacant land changing to maritime support and break bulk. These land use changes may be noticeable from points within the Main Channel and from the southeast end of Ports O'Call Village and the adjacent marina. Changes from recreational boating and vacant land to maritime support and break bulk would be entirely within the established character of the Port, and no unfavorable contrast would result. Similarly, conversion of Berth 301 from maritime support to liquid bulk or container cargo uses would be within the established character of the Port. The proposed land use change at Warehouse No. 1 would be visible from points within the Main Channel. The proposed change includes converting existing institutional uses to mixed use - institutional and/or visitor-serving commercial. Construction (i.e., improvements to Warehouse No. 1 to support visitor-serving commercial uses) and operations would be entirely within the established character of the Port, and no unfavorable contrast would result. Therefore, the condition of the potentially affected views would continue to be rated ***Visual Modification Class 1***.

Impact AES-4: The proposed Program would not result in a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Planning Areas ~~2~~ 1 – 4

Impact AES-5: The proposed Program would not result in substantial shadow effects on nearby shadow-sensitive uses.

Planning Areas ~~2~~ 1 – 4

Construction and Operations

Existing shadow-sensitive land uses occur only in PMPU Planning Area 1 within the vicinity of the World Cruise Center, Catalina Terminal, Maritime Museum, Ports O'Call Village, and within or near 22nd Street Park and Bloch Field, Cabrillo Marina, and Cabrillo Beach. Only the proposed appealable/fill projects and land use changes occurring southeast, south, and southwest of these public use areas would have the potential to cast shadows on them. The proposed land use change at Warehouse No. 1 (i.e., existing institutional uses would be changed to mixed use - institutional and/or visitor-serving commercial) would be located approximately 0.3 miles from the nearest sensitive viewers (users of Cabrillo Way Marina). These viewers would not be affected by the negligible amounts of new shading that would occur as a result of improvements to Warehouse No. 1. ~~However, no~~ No ~~such~~ proposed appealable/fill projects or other land use changes would occur in ~~these areas, so no shadows would be cast upon shadow-sensitive land uses.~~Planning Area 1.

Development associated with the proposed appealable/fill projects and land use changes under the proposed Program would not affect shadow-sensitive land uses outside the PMPU area. In general, shading produced by new facilities and infrastructure would be limited to within individual project sites, adjacent waters, and industrial areas.

Impact AES-6: The proposed Program would not result in impacts inconsistent with guidelines and regulations established to protect aesthetic/visual resources.

Planning Areas ~~2~~ 1 – 4

3.2.5 Changes Made to Section 3.2, Air Quality and Greenhouse Gases

Section 3.2, Air Quality and Greenhouse Gases, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site.

3.2.5.1 Section 3.2.4.3, Impacts and Mitigation

Impact AQ-1: Construction activities associated with the proposed Program would produce emissions that exceed a SCAQMD Daily Emission Threshold.

The impact criterion relates only to construction, so operational impacts are not discussed in the analyses for this criterion.

Planning Area 1

Construction

Proposed land use changes within Planning Area 1 would allow for potential conversion of the Warehouse No. 1 area from institutional to visitor-serving commercial land uses. Construction activities associated with this land use change would include improvements to support potential future uses. Table 3.2-12 presents estimates of daily unmitigated emissions from a variety of terminal, backland, and landfill construction activities that could occur as part of the PMPU. The activity identified in Table 3.2-12 that would pertain to proposed construction activities in Planning Area 1 is building construction. However, the smaller amount of construction activities proposed within Planning Area 1 would produce lower peak daily emissions compared to those identified for building construction in Table 3.2-12.

Impact Determination

Construction

The data in Table 3.2-12 show that unmitigated peak daily emissions from either terminal development or landfill construction would exceed the SCAQMD daily emission thresholds for VOCs and NO_x. In addition peak daily emissions from terminal development would exceed the CO, PM_{10}, and $PM_{2.5}$ thresholds. Further, the peak day scenario of combined terminal/backlands development and landfill construction activities would exceed all SCAQMD daily emission thresholds except SO_x. Therefore, unmitigated construction emissions within Planning Areas 2 and 3 would be significant for VOCs, CO, NO_x, PM_{10}, and $PM_{2.5}$. Peak daily emissions from terminal development would occur from all seven activities identified for this

action. Peak daily emissions from landfill construction would occur from trench excavation and quarry run placement during dike construction at project locations. Construction activities within Planning Areas 1 and 4 would have the potential to produce significant levels of NO_x and PM_{10} emissions.

Impact AQ-2: Construction activities associated with the PMPU would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance.

The impact criterion relates only to construction, so operational impacts are not discussed in the analyses for this criterion.

Planning Area 1

Construction

The proposed land use change within Planning Area 1 would require only a minor amount of construction activities. It is expected that the minor amounts of emissions generated from these activities would not contribute to an exceedance of any SCAQMD ambient significance threshold.

Impact AQ-3: Operations associated with the proposed Program would result in emissions that exceed a SCAQMD daily emission threshold.

This impact criterion relates only to operations, so construction impacts are not discussed in the analyses for this criterion.

Planning Area 1

Operations

Table 3.2-15a summarizes peak daily unmitigated emissions estimated for the full build-out of operations associated with the Planning Area 1 land use change. Operational emission sources associated with the proposed land use change in Planning Area 1 would include user vehicles, area sources, and natural gas-fired space and water heaters.

Table 3.2-15a. Unmitigated Peak Daily Operational Emissions – Planning Area 1

Planning Area/Emission Source	*Pounds per Day*					
	VOC	*CO*	*NO_x*	*SO_x*	*PM_{10}*	*$PM_{2.5}$*
Planning Area 1						
Area Material Usage	2.7	-	-	-	-	-
Space and Water Heaters	0.0	0.1	0.1	0.0	0.0	0.0
User Vehicles*	0.6	29.4	2.6	0.4	0.8	0.3
Total Daily Emissions - Planning Area 1	**0.6**	**29.4**	**2.6**	**0.4**	**0.8**	**0.3**
SCAQMD Significance Thresholds	**55**	**550**	**55**	**150**	**150**	**55**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**
Notes: *User vehicle emissions would occur within the SCAB.						

Impact Determination

Operations

The data in Table 3.2-15a show that peak daily unmitigated emissions generated by operations of proposed land use changes in Planning Area 1 would not exceed any SCAQMD daily significance threshold. The data in Tables 3.2-16 and 3-2-17 also show that unmitigated emissions generated by operations of proposed appealable/fill projects and land use changes in Planning Areas 2 and 3 during a peak day would exceed the SCAQMD daily emission significance thresholds for all pollutants. Lastly, the data in Table 3.2-18 show that unmitigated NO_x emissions generated by operations of proposed appealable/fill projects and land use changes in Planning Area 4 during a peak day would exceed the SCAQMD daily significance threshold. In addition, VOC emissions generated by operations of proposed appealable/fill projects and land use changes within Planning Areas 2 and 3 would exceed the 10 tons per year annual VOC threshold. Therefore, unmitigated emissions of VOC, CO, NO_x, SO_x, PM_{10}, and $PM_{2.5}$ that exceed these significance thresholds during the operation of the proposed Program would be significant.

Impact AQ-4: Operations associated with the proposed Program would result in ambient air pollutant concentrations that exceed a SCAQMD threshold of significance.

This impact criterion only relates to operations, so construction impacts are not discussed in the analyses for this criterion.

Planning Area 1

Operations

The land use change proposed in Planning Area 1 would involve only a minor amount of operational activities. It is expected that emissions generated from these activities would not exceed any SCAQMD ambient significance threshold.

Impact AQ-5: The proposed Program would not generate on-road traffic that would contribute to an exceedance of the 1-hour or 8-hour CO standards.

This impact criterion relates only to operations, so construction impacts are not discussed in the analyses for this criterion.

Planning Areas ~~2~~ 1 – 4

Impact AQ-6: Operations associated with the proposed Program would not create an objectionable odor at the nearest sensitive receptor.

This impact criterion relates only to operations, so construction impacts are not discussed in the analyses for this criterion.

Planning Areas ~~2~~ 1 – 4

Impact AQ-7: The proposed Program would expose receptors to significant levels of TACs.

Planning Area 1

Construction and Operations

The amount of TACs generated from construction and operations due to the proposed land use change within Planning Area 1 would be low enough that they would not exceed any SCAQMD public health threshold.

Impact AQ-8: The proposed Program would not conflict with or obstruct implementation of an applicable AQMP or the CAAP.

Planning Areas ~~2~~ 1 – 4

Impact GHG-1: The proposed Program would produce GHG emissions that would exceed a CEQA threshold.

Planning Areas ~~2~~ 1 – 4

Table 3.2-26. GHG Emissions from Construction Activities – Proposed Program

Planning Area/Activity	*Total Emissions (Metric Tons)*[a,b]			
	CO_2	CH_4	N_2O	CO_2e[c]
Planning Area 1				
Building Construction	356	0.02	0.01	360
Planning Area 2				
6-Acre Landfill Construction	3,868	0.6	0.0	3,892
16-Acre Landfill Construction	10,314	1.5	0.1	10,378
Wharf Construction	2,015	0.1	0.05	2,031
Backland Construction	1,107	0.07	0.03	1,118
AMP Installation	166	0.01	0	168
Demolition	46	0	0	46
Building Construction	712	0.04	0.02	719
Reefer Area Expansion	161	0.01	0.01	162
Utility Infrastructure	127	0.01	0	128
Cranes Installation	59	0	0	59
Modify Gate	122	0.01	0	123
Worker Commute	443	0.02	0.01	446
Total GHGs - Planning Area 2	**19,139**	**2.34**	**0.25**	**19,269**

Table 3.2-26. GHG Emissions from Construction Activities – Proposed Program

Planning Area/Activity	*Total Emissions (Metric Tons)*[a,b]			
	CO_2	*CH_4*	*N_2O*	*CO_2e*[c]
Planning Area 3				
18-Acre Landfill Construction	11,603	1.7	0.1	11,675
Terminal/Backland Developments	26,439	1.4	0.6	26,663
Total GHGs - Planning Area 3	**38,042**	**3.13**	**0.75**	**38,338**
Planning Area 4				
Terminal/Backland Developments	1,821	0.1	0.0	1,837
Total GHGs - Planning Area 4	**1,821**	**0.1**	**0.04**	**1,837**
Total GHGs - PMPU	**59,715** ~~**59,359**~~	**5.62** ~~**5.6**~~	**1.11** ~~**1.1**~~	**60,164** ~~**59,804**~~

Notes:
a. Emissions might not add precisely due to rounding.
b. One metric ton equals 1,000 kilograms, 2,205 pounds, or 1.1 U.S. (short) tons.
c. CO_2e = the carbon dioxide equivalent emissions of all GHGs combined. The carbon dioxide equivalent emission rate for each GHG represents the emission rate multiplied by its GWP. The GWPs are 1 for CO_2; 21 for CH_4; and 310 for N_2O.

Tables 3.2-~~27~~ 26a through 3.2-29 summarize the annual unmitigated GHG emissions that would occur in California from potential construction and operation of proposed appealable/fill projects and land use changes within Planning Areas ~~2~~ 1 through 4. Construction emissions presented in Tables 3.2-~~27~~ 26a through 3.2-29 are amortized over 30 years. For all cargo types, GHG emission sources include OGVs, tugboats, on-road trucks, trains, and cargo handling equipment. In addition, these data include fugitive refrigerant losses from refrigerated containers and worker commuter vehicles for container cargo operations.

Table 3.2-26a. Unmitigated Annual GHG Emissions – Planning Area 1 Full Build-out

Activity/Emission Source	*Metric Tons per Year CO_2e*[a,b]
Construction - 30-Year Average	12
Operations	
Energy	462
Waste	49
Water	51
User Vehicles	1,722
Total – Operations	**2,284**
Total GHGs - Planning Area 1[c]	**2,296**
GHG Significance Threshold	**10,000**
Significant?	**No**

Notes:
a. One metric ton equals 1,000 kilograms, 2,205 pounds, or 1.1 U.S. (short) tons.
b. CO_2e = the carbon dioxide equivalent emissions of all GHGs combined. The carbon dioxide equivalent emission rate for each GHG represents the emission rate multiplied by its GWP. The GWPs are 1 for CO_2; 21 for CH_4; 310 for N_2O; and 1,300 for HFC-134a.
c. Emissions might not add precisely due to rounding.

Impact Determination

Construction and Operations

Tables 3.2-~~26a~~26a~~27~~ through 3.2-29 show that future construction and operation of proposed appealable/fill projects and land use changes within Planning Areas 2 and 3 would produce annual CO_2e emissions that would exceed the CEQA threshold of 10,000 metric tons per year of CO_2e. Therefore, GHG emissions from the proposed Program would result in a significant impact. Construction and operation of proposed land use changes within Planning Areas 1 and 4 would produce annual CO_2e emissions that would not exceed the CEQA threshold of 10,000 metric tons per year of CO_2e.

Impact GHG-2: The proposed Program would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHGs.

Planning Areas ~~2~~ 1 – 4

3.2.6 Changes Made to Section 3.3, Biological Resources

Section 3.3, Biological Resources, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site.

3.2.6.1 Section 3.3.4.3, Impacts and Mitigation

Impact BIO-1: The proposed Program would not result in the loss of individuals, or the reduction of existing habitat, of a state- or federally-listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or the loss of federally-listed critical habitat.

Planning Area 1

Construction

The only construction in Planning Area 1 would be potential improvements to Warehouse No. 1 associated with a land use change from institutional to mixed use. Although the details of potential construction activities presently are unavailable, it is not expected that they would involve any in-water work such as dredging or pile installation. Construction or demolition activities would likely produce temporary increases in noise, night-time lighting, and activity that could result in short-term disturbances to special-status species, if present in the vicinity of work areas.

No adverse effects on sensitive bird species would be expected based on distance considerations. For example, the nest area on Pier 400 that is seasonally used by endangered California least terns would be more than 1 mile from construction or demolition activities. Similarly, construction or demolition activities would be more

than 2 miles from nest sites of peregrine falcons at the Vincent Thomas or Schuyler F. Heim bridges, and locations near Fries Avenue on Mormon Island where burrowing owls have been reported as transient visitors.

Peregrine falcons and loggerhead shrike prey on other birds (e.g., rock pigeons, starlings), which may be disturbed away from the work areas during construction. This temporary disturbance of potential foraging area would not adversely affect peregrine falcons or loggerhead shrike because they forage over several miles throughout the port complex.

No adverse effects would occur to other special status bird species listed on Table 3.3-1 (western snowy plover, Belding's savannah sparrow, brant, common loon), which have a low potential to occur and do not nest at the Port.

Land use changes involving construction or demolition associated with changes in types of facilities could adversely affect birds covered under the MBTA and/or similar provisions of the California Fish and Game Code, if construction/demolition occurs during the nesting season and suitable nesting areas are in the vicinity. Surveys generally are required to confirm presence or absence of nesting during the breeding season.

Operations

No adverse effects on special-status birds would be expected from the proposed land use change in Planning Area 1. Operations would be more than 1 mile from nesting sites of California least tern and other SSC on Pier 400 and would not affect potential nesting sites of the peregrine falcon located more than 2 miles away on the Vincent Thomas or Schuyler F. Heim bridges or burrowing owls that can be transient visitors to Mormon Island.

Impact BIO-2: The proposed Program would not result in a substantial reduction or alteration of a state-, federally-, or locally-designated natural habitat, special aquatic site, or plant community, including wetlands.

Planning Area 1

Construction

The proposed land use change in Planning Area 1 (retaining existing institutional uses at Warehouse No. 1 and/or changing uses to visitor-serving commercial) would not reduce or alter natural habitats, special aquatic sites, plant communities, or wetlands.

Essential Fish Habitat

Construction and demolition activities for land-based facilities would have no direct effects on EFH, which is located in the water. Indirect impacts to waters associated with runoff during construction would be controlled with standard BMPs, project-specific SWPPPs, and permit compliance (Section 3.14.4.3, Water Quality, Sediments, and Oceanography).

Natural or Plant Communities

Natural plant communities, mudflats, or wetlands would not be affected by construction activities since none occur at Warehouse No. 1.

Significant Ecological Areas

No SEAs occur in Planning Area 1.

Operations

Operations associated with the proposed change in land use would have limited, if any, effects on designated natural habitat, special aquatic sites, or plant communities. There would be no discharges other than stormwater runoff, and facilities would be operated in accordance with SWPPPs to ensure that stormwater quality complies with permit conditions (Section 3.14.4.3, Water Quality, Sediments, and Oceanography). Consequently, no degradation in the quality of EFH would be expected.

Impact BIO-3: The proposed Program would not result in interference with wildlife movement/migration that may diminish the long-term survival of a species.

Planning Area 1

Construction

No migration corridors occur within the port complex. Construction activities would not block or interfere with the migration of special status birds or birds covered under the MBTA, which could fly over or around the construction activities.

The movement of marine mammals, if present in the vicinity, could be affected by noise and disturbance associated with construction or demolition activities (discussed under Impact BIO-1). No long-term effects on marine mammal populations would occur due to the localized and temporary nature of construction or demolition activities as well as the lack of rookeries within the port complex.

Operations

The proposed change in land use would not create barriers to wildlife movement within the port complex. Additional vessel calls to the Port associated with development in Planning Area 1 would not impede or interfere with migrations of whales or turtles, which generally are sparsely distributed along the coast.

Impact BIO-4: The proposed Program would result in a substantial disruption of local biological communities.

Planning Area 1

Construction

The proposed land use change from institutional to visitor-serving commercial would not result in substantial disruption of biological communities. Construction or demolition could result in temporary disturbance of terrestrial animals (e.g., lizards, rodents, and upland birds) that may inhabit or use developed land areas. As discussed under Impact BIO-1, construction or demolition associated with changes in the types of facilities could adversely affect birds covered under the MBTA and/or similar provisions of the California Fish and Game Code, if construction/demolition occurs during the nesting season and suitable nesting areas occur in the vicinity. Most terrestrial wildlife is dominated by non-native species or those adapted to living in an urbanized environment; therefore, localized impacts would have limited, if any, effects on populations of native wildlife. Construction activities would have minimal effects on terrestrial plant resources because plant cover is generally sparse or dominated by non-native species. Potential indirect impacts to waters from runoff during construction would be controlled with standard BMPs, project-specific SWPPPs, and permit compliance (Section 3.14.4.3, Water Quality, Sediments, and Oceanography).

Operations

Operations consistent with land use changes would have limited effects on biological communities. There would be no discharges other than stormwater runoff, and facilities would be operated in accordance with SWPPPs to ensure that stormwater quality complies with permit conditions (Section 3.14.4.3, Water Quality, Sediments, and Oceanography).

Impact BIO-5: The proposed Program would not result in a permanent loss of marine habitat.

Planning Area 1

Construction and Operations

The proposed land use change in would not include any fill or in-water activities; therefore, there would be no loss of marine habitat in Planning Area 1.

Impact BIO-6: The proposed Program would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Planning Area 1

Construction and Operations

Removal of native trees would not be expected in Planning Area 1 since none occur in the area of the proposed land use change.

3.2.7 Changes Made to Section 3.4, Cultural Resources

Section 3.4, Cultural Resources, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site. Sections 3.4.2.3.2 through 3.4.2.3.4 were revised to include additional information regarding the Port's tuna canning industry and former Japanese-American community on Terminal Island.

3.2.7.1 Section 3.4.2.3.2, Initial Commercial Shipping, 1857 to 1897

Phinneas Banning, one of the earliest residents of the area, recognized its potential as a commercial shipping port. In 1857, he constructed new docks to capitalize on the increasing trade coming in and out of Los Angeles along two of the primary routes to the southwest goldfields, the Gila River Trail and the Old Spanish Trail. With his base location in Wilmington, Banning shuttled materials on smaller boats to and from the Rancho San Pedro waterfront.

Banning also understood the importance of rail transportation between his operation on the bay and the growing City of Los Angeles. In 1869, Banning organized the Los Angeles and San Pedro Railroad (LA&SP), the first reliable means of moving cargo from the ships coming into San Pedro Harbor to the City of Los Angeles.

The first short rail line in southern California, the LA&SP, was acquired by the Southern Pacific Railroad (SPRR) in 1872. In an attempt to break the monopoly the SPRR had on shipping in the area, Senator John P. Jones from Nevada started the Los Angeles and Independence Railroad (LA&I) (Los Angeles to Santa Monica Pier) 1 year prior to the acquisition of LA&SP by SPRR. However, the LA&I also was absorbed quickly into the SPRR system, in 1877 (Queenan 1986).

Improved transportation to and from the harbor facilitated the burgeoning growth of Los Angeles. Between 1880 and 1890, the population of the city grew from 11,000 to 50,000. By 1900, it had reached 102,000 (Matson 1920). This boom fueled increased demand for construction supplies and consumer goods, much of which arrived on ships that docked at San Pedro.

In 1893, the first fish cannery was established within the Port, associated with the start of an industry that was to play a large role in the Port's development. Soon thereafter, Albert Halfhill, co-owner of the California Fish Company, developed a method of canning whereby albacore were steamed (removing the oils and changing the color to white), and the meat was packed in vegetable oil. This gave the tuna a more acceptable taste and appearance to Euro-American consumers.

3.2.7.2 Section 3.4.2.3.3, Founding of Port of Los Angeles, 1897 to 19141913

The growth of commerce in the Los Angeles region required formal establishment of a shipping port. The federal government agreed to assist the city by establishing its official harbor in the region. Following the recommendation of several studies of possible alternatives, the San Pedro Harbor site won authorization from Congress in March 1897.

In preparation for the opening of the Panama Canal (which occurred in 1914), the City of Los Angeles extended its boundaries to coastal tidewaters when it annexed a strip of San Pedro in 1906. The Port and the LAHD were officially created in December 1907, and numerous harbor improvements followed. These improvements included completion of the 2.22-mile breakwater, broadening and dredging of the main channel, completion of the first major wharf by the SPRR, construction of the Angel's Gate lighthouse, and construction of the first municipal pier and wholesale fish market. By 1909, both Wilmington and San Pedro had been consolidated into the City of Los Angeles. As a result of these improvements and consolidation, by 1913, the Port was the largest lumber importer in the world (Matson 1920).

The opening of the Panama Canal in August 1914 significantly reduced the transshipment time between eastern and western U.S. ports. The canal also promised to open up new trade opportunities worldwide. In anticipation of increased trade, the City of Los Angeles completed one of many large municipal terminals in the harbor. With the outbreak of World War I, the promise of increased trade and expansion possibilities was put on hold (Queenan 1986).

In 1914, the Port began dredging what would become Fish Harbor, a specialized area for fish processing and canning at Terminal Island. Fish Harbor was operational by 1915 and most of the Port's canneries moved to the new harbor, making tuna fishing and processing the most visible activity in that part of the island. Martin Bogdanovich founded the French Sardine Company, better known by its later name Star-Kist. Eventually, the company became the largest fish cannery in the world. By the 1920s, 11 canneries operated from the Port, served by a large fleet of fishing vessels and employing 1,800 cannery workers and 4,800 fishermen (Jones & Stokes 2004). The workforce was ethnically diverse and included Japanese, Italians, Mexicans, and Yugoslavians.

3.2.7.3 Section 3.4.2.3.4, Wartime Changes, 1914 to 1950

World War I considerably changed the principal uses of the Port. Wishing to establish a significant presence on the Pacific coast, the U.S. Navy took possession of a portion of the harbor and used it as a training and submarine base.

During the war, the Port was one of the chief sources of employment for area residents. Shipbuilding enterprises (including Southwestern Shipbuilding Company, Los Angeles Shipbuilding and Drydock Corporation, and Ralph J. Chandler Shipbuilding) began turning out vessels by the dozens for the war effort. The Port of Long Beach, established only 2 years before the onset of the war, offered the only southern California shipping and shipbuilding competition to the Port.

Despite the previous use of the Port for the shipment of goods both into and out of California, it was not until 1915 that the first warehouse was completed. With that completion, the Port was transformed from a small, poorly equipped landing to a significant seaport able to handle deep-sea ships with varied cargo (Queenan 1986). Increased trade at the Port between 1917 and 1930 motivated many distributors to construct more warehouses and sheds.

Improvements to transportation systems in the harbor area also facilitated the growth of trade. By 1917, a vast railroad network existed around the harbor and the Los Angeles region, allowing for the efficient transfer of goods across the country (San Buenaventura Research Associates 1992).

Following the end of World War I in 1918, the Port was increasingly used for the importation of lumber and other types of raw materials. As in the prewar period, approximately 98 percent of the inbound cargo consisted of lumber needed to satisfy the demand for housing and factories caused by the rapid growth of the Los Angeles area (Matson 1920). The dominant export in the postwar years was crude oil.

The fishing industry continued to expand, and in 1929 75 percent of the fish canned in California was from Port canneries. The Port received 45 percent of the California fish catch and 25 percent of the total catches in the U.S., including Alaska, for a total of 857 million pounds.

With the end of the war, limitations on trade ended. Los Angeles had developed a wide variety of enterprises whose products passed through the Port. Although freight-handling facilities had long existed for oil, lumber, shipbuilding, and fish, new facilities were developed to handle such products as cotton, borax, citrus crops, and steel. In 1923, the City of Los Angeles passed a harbor improvement bond measure for construction of additional wharves to meet the demands of increased trade (Queenan 1986; San Buenaventura Research Associates 1992). By 1929, in an effort to streamline the railroad portion of shipping within the harbor, the various railroad companies including the SPRR, UP, Santa Fe, and Pacific Electric Railway, consolidated their operations under the title “Harbor Belt Line Railroad” (Queenan 1986; San Buenaventura Research Associates 1992).

During the Depression years, traffic within the Port slowed along with the rest of the American economy (Queenan 1986). Although the Port experienced a sharp decline in its international trade, the Harbor Commission continued to improve its facilities, constructing a new breakwater and new cargo and passenger terminals.

In 1940, the Pacific Fleet was moved to Pearl Harbor where it was attacked on December 7, 1941, bringing the U.S. into World War II. On Terminal Island, the Japanese community that had centered on the fishing industry was adversely affected by America’s involvement in the war. At its height in 1940, the Port’s Japanese

population had grown to 3,000, just prior to its abrupt decline following the bombing of Pearl Harbor. Beginning in early 1942, the Port's Japanese Americans were forcibly removed from their homes, and most were sent to Manzanar in California's Owens Valley.

During World War II, San Pedro Harbor, as one of the closest major ports to the Pacific Theatre of Operations, was fully involved in defense activities. Between 1941 and 1945, ship and aircraft production facilities in the harbor area worked day and night to produce more than 15 million tons of war equipment. Hundreds of thousands of military and civilian personnel shipped out through San Pedro in support of the war effort and returned through it when their tasks were done.

Following the war, LAHD launched a broad restoration program. Many of the facilities in the harbor required maintenance that had been delayed due to the war. Although the adjacent Long Beach Harbor conducted its own improvements while battling subsidence (the sinking of the land from the many years of oil extraction), LAHD improved a number of its buildings and removed many temporary wartime buildings (Queenan 1986).

Related to the fishing industry, the Los Angeles Harbor area produced nearly half of the 9.5 million cases of tuna packed in the U.S. during 1950. However, the 1960s marked the beginning of the Fish Harbor cannery decline as the larger canning operations (i.e., Van Camp and StarKist), began establishing other, more cost-effective canneries overseas. By 1975, most of the Port's canneries had been bought out by multinational corporations, and by the mid 1980s many of their operations had moved out of Los Angeles. The last plant, Chicken of the Sea, closed in 2001.

3.2.7.4 Table 3.4-2, Recorded and Potentially Eligible Historic Resources in the PMPU Area

Table 3.4-2 was modified to include the Port of Los Angeles Dive Team Building (Fireboat House 1/Fire Station No. 11), which was inadvertently omitted from the Draft PEIR. The table was also revised to include two buildings associated with the Japanese American Fishing Village, located at 700–702 and 712-716 Tuna Street, as potentially eligible for inclusion on the LAHCM Register.

Table 3.4-2. Recorded and Potentially Eligible Historic Resources in the PMPU Area

Register	*Name/Description*	*PMPU Planning Area*
CRHR	Al Larson Boat Shop, 1046 South Seaside Avenue, Structures A1 (Stock Room and Tool Room), A2 (Offices, Carpenter Shop, winch houses and bathrooms and storage), A3 (Storage), C1 (Machine and Electrical Shops), and C2 (Welding Shop and Storage)	4
LAHCM	American Marine Corporation, 1500 S. Barracuda Street, office and sheds	3
CRHR	Borax Facility, 300 Falcon Street, Berths 165-166	2
LAHCM	Cabrillo Beach Bathhouse,3720 Stephen M. White Drive, LAHCM No. 571	1
CRHR	***Cabrillo Marine Aquarium, 3730 Stephen M. White Drive***	1
NRHP	California Petroleum Company Terminal, Marine Oil Terminal, Berths 171-173 (demolished)	2

Table 3.4-2. Recorded and Potentially Eligible Historic Resources in the PMPU Area

Register	*Name/Description*	*PMPU Planning Area*
NRHP	Chicken of the Sea Cannery, 338 Cannery Street, Cannery Building, Retort Building, Packing Building, Cooking Building, Butchering Building, Office Building, and Warehouse 1	4
LAHCM	College of Oceaneering - National Polytechnic College of Engineering and Oceaneering, 252 South Fries Street, Single Two-Story Wooden Office Building	2
CRHR	Cruise Terminal 100 Swinford Street, Berths 93A, B, C	2
CRHR	Duffy's Ferry	2
NRHP	Federal Breakwater	5
CRHR	Harbor Construction and Maintenance Yard, Berth 161, Auto Repair Garage, Service Building, Cabinet Shop and Mill, Consolidated Shop, Boat Shop, Carpenter's Shop and Rigging Loft, Blacksmith Shop, Electric Shop, and Paint Shop	2
LAHCM	Japanese American Fishing Village, Buildings at 700–702 and 712-716 Tuna Street	4
SHL	***Liberty Hill Site, vicinity of 5th Street and Harbor Boulevard, SHL-1021, 19-150331***	1
NRHP	***Los Angeles Harbor Light Station, San Pedro (19-167268)***	5
NRHP, LAHCM	***Municipal Ferry Building (Maritime Marine Museum), Berth 84, San Pedro (19-176736), LAHCM No. 146***	1
NRHP, LAHCM	***Municipal Warehouse No. 1, 2500 Signal Street, LAHCM No. 2709***	1
NRHP	Municipal Pier No. 1, Berths 57-60	1
NRHP	Municipal Wholesale Fish Market, 2190 Signal Street	1
NRHP	Pan American Petroleum Company Marine Loading Station Facility Pump House (Westway Facility), Berth 70	1
NRHP	Pan Pacific Fisheries, 350 Sardine Street, Cannery Building	4
NRHP	Pan-Am Terminal Facility – Signal Street Properties, Berth 56, CDFG Building	1
NRHP, LAHCM	***Ralph J. Scott Fireboat No. 2, Berth 87, San Pedro (19-180719), LAHCM No. 154***	1
CRHR	Port of Los Angeles Police Dive Team Building (Old Fireboat Station #1)	4
NRHP	S.P. Slip No. 1	1
NRHP	***S.S. Lane Victory, Berth 4, San Pedro (19-1870720)***	1
NRHP, SHL, LAHCM	***S.S. Catalina (The Great White Steamship), San Pedro (19-167267), SHL-0894, LAHCM No. 213, (Broken up for Scrap)***	
CRHR	San Pedro Boat Works, Berth 44, All Buildings	1
CRHR	Sewage Pump Station #666, 647 Fries Avenue	2
NRHP	Sewage Pump Station #669, 390 N. Seaside Avenue	4
NRHP District	Southwest Marine Terminal, Berth 240, Administration Building, Medical Building (No. 8), Foreman's Building (No. 34), Transportation Shop (No. 4), Blacksmith and Anglesmith Shop, Plate Shop (No. 6), Machine Shop (No. 3), Machine Storage and Warehouse Building (No. 7), Shop (No. 9), Employees' Building, Paint Shop and Substation, Substation No. 3, Substation No. 7, Building No. 22, Dry Dock No. 2, and Pre-1946 Cranes	3
NRHP	Star-Kist Tuna Cannery Main Plant, 1050-1054 Ways Street	4
SHL, LAHCM	***Timm's Point and Landing, SHL-0384, 19-186583, LAHCM No. 171***	1
NRHP	Transit Sheds, Berths 57, 58-60, 151-157	2

Table 3.4-2. Recorded and Potentially Eligible Historic Resources in the PMPU Area

Register	*Name/Description*	*PMPU Planning Area*
NRHP	Union Oil Terminal, Berths 150-151	2
NRHP	United Fruit Company Terminal, Berth 147 (Demolished)	2
NRHP	U.S. Customs House, 300 South Ferry Street, Office Building and Warehouse	3
NRHP	U.S. Immigration Station, 309 E. 22nd Street, Two-story Commercial Building (currently Canetti's Restaurant)	1
LAHCM	***USS Los Angeles Naval Monument (John S. Gibson, Jr. Park), LAHCM No. 188***	1
NRHP	Vincent Thomas Bridge	2, 3, 5
Note: Bold italic type indicates that a property is listed in the NRHP, CRHR, or LACHM.		

3.2.7.5 Section 3.4.4.2, Impacts and Mitigation Measures

Impact CR-1: The proposed Program would not disturb, damage, or degrade archaeological or ethnographic resources, and thus cause a substantial adverse change in the significance of such resources as defined in §15064.5.

Planning Area 1

Construction

The proposed land use change for Planning Area 1 would designate Warehouse No. 1 as mixed use, either retaining the existing institutional use or changing to visitor-serving commercial. Warehouse No. 1 is underlain by artificial fill materials from prior dredging and construction activities. No proposed appealable/fill projects would be constructed in Planning Area 1. Therefore, no archaeological or ethnographic resources would be disturbed or degraded by the proposed land use change.

Operations

The proposed Program would not result in any operations-related impacts on cultural resources within Planning Area 1. This is because no ground disturbances are expected to occur during operations associated with the proposed land use change.

Impact CR-2: The proposed Program would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.

Planning Area 1

Construction

Warehouse No. 1 is identified as an historical resource on the NRHP and LAHCM (Table 3.4-2). Construction associated with changing this facility to visitor-serving commercial likely would include improvements to support potential future uses, such as a restaurant, maritime related office, visitor serving retail, harbor tour vessels,

sport fishing, museums, and/or community centers/conference centers. Any modifications to the structure would be completed in compliance with Secretary of the Interior's Professional Qualifications Standards and the LAHD's *Built Environment Historic, Architectural, and Cultural Resource Policy*.

Operations

The proposed Program would not result in any operations-related impacts on cultural resources within Planning Area 1. This is because no ground disturbances are expected to occur during operations associated with the proposed land use change.

Mitigation Measures

The following mitigation measures would be implemented, as applicable, for the proposed appealable/fill projects and land use changes under the proposed Program.

MM CR-3: Historical Resource Assessment. Once a proposed project site is identified, the LAHD shall make a determination on whether a Historical Resource Assessment is necessary to determine the presence of a historical resource, as defined under CEQA. If such an assessment determines that a historic resource is present, the LAHD shall determine the need to implement measures that might include, but are not limited to, one or more of the following to further avoid, minimize, or substantially reduce the identified impacts:

- A preservation architect meeting the Secretary of the Interior's Professional Qualifications Standards in historic architecture shall participate in preconstruction and construction monitoring activities to ensure continuing conformance with Secretary's Standards and/or avoidance of a material impairment of the historical resources;
- Complete photographic documentation of the historic resource prior to implementing the project. Such documentation shall adhere to standards and guidelines for Historical American Buildings Survey (HABS), Historic American Engineering Record (HAER), and Historic American Landscapes Survey (HALS) documentation, as outlined in the November 2011 HABS/HAER/HALS Guidelines set by the Heritage Documentation Programs instituted by the National Park Service (http://www.cr.nps.gov/hdp/standards/halsguidelines.htm). At a minimum, the level of photographic documentation shall be at the HABS/HAER Level II;
- For certain projects it may be necessary to establish an environmentally sensitive area and put up barriers to ensure the protection of specific built environment features, such as buildings, structures, and landscape and hardscape elements. The environmentally sensitive area shall be outlined on project plans and the construction crew must be made aware of restrictions and requirements for protecting historical resources for the duration of the project. A qualified professional meeting the Secretary of the Interior's Professional Qualifications Standards may be required to monitor the project to ensure adherence to restrictions; and/or,
- Additional protective measures (e.g., in-situ preservation, adaptive reuse, and relocation) shall be implemented as necessary.

Impact CR-3: The proposed Program would not disturb, destroy, or eliminate access to unknown unique paleontological resources.

Planning Area 1

Construction

Warehouse No. 1 is an existing structure underlain by artificial fill materials from prior dredging and construction activities. Therefore, no paleontological resources would be disturbed or degraded by the land use change.

Operations

The proposed Program would not result in any operations-related impacts on cultural resources within Planning Area 1. This is because no ground disturbances are expected to occur during operations associated with the proposed land use change.

3.2.7.6 Table 3.4-3, Summary Matrix of Potential Impacts and Mitigation Measures for Cultural Resources Associated With the Proposed Program

Table 3.4-3 was revised to include the additional protective measures (e.g., in-situ preservation, adaptive reuse, and relocation) for **MM CR-3**.

Table 3.4-3. Summary Matrix of Potential Impacts and Mitigation Measures for Cultural Resources Associated With the Proposed Program

Environmental Impacts	*Impact Determination*	*Mitigation Measures*	*Impact after Mitigation*
Construction			
CR-2: Construction of the proposed Program would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.	Significant	**MM CR-3: Historical Resource Assessment.** Once a proposed project site is identified, the LAHD shall make a determination on whether a Historical Resource Assessment is necessary to determine the presence of a historical resource, as defined under CEQA. If such an assessment determines that a historic resource is present, the LAHD shall determine the need to implement measures that might include, but are not limited to, one or more of the following to further avoid, minimize, or substantially reduce the identified impacts: ▪ A preservation architect meeting the Secretary of the Interior's Professional Qualifications Standards in historic architecture shall participate in preconstruction and construction monitoring activities to ensure continuing conformance with Secretary's Standards and/or avoidance of a material impairment of the historical resources; ▪ Complete photographic documentation of the historic resource prior to implementing the project. Such documentation shall adhere to standards and guidelines for HABS, HAER, and HALS documentation, as outlined in the November 2011 HABS/HAER/HALS Guidelines set by the Heritage Documentation Programs instituted by the National Park Service (http://www.cr.nps.gov/hdp/standards/halsguidelines.htm). At a minimum, the level of photographic documentation shall be at the HABS/HAER Level II; ▪ For certain projects it may be necessary to establish an environmentally sensitive area and put up barriers to ensure the protection of specific built environment features, such as buildings, structures, and landscape and hardscape elements. The environmentally sensitive area shall be outlined on project plans and the construction crew must be made aware of restrictions and requirements for protecting historical resources for the duration of the project. A qualified professional meeting the Secretary of the Interior's Professional Qualifications Standards may be required to monitor the project to ensure adherence to restrictions; and/or, ▪ Additional protective measures (e.g., in-situ preservation, adaptive reuse, and relocation) shall be implemented as necessary.	Less than significant

3.2.8 Changes Made to Section 3.5, Geology

Section 3.5, Geology, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site.

3.2.8.1 Section 3.5.4.3, Impacts and Mitigation

Impact GEO-1: The proposed Program would not result in substantial damage to structures or infrastructure or expose people to substantial risk of injury from seismic activity along the Palos Verdes Fault Zone or other regional faults that could produce fault ruptures, seismic ground shaking, liquefaction, or other seismically induced ground failure.

Planning Area 1

Construction

Construction associated with modifying Warehouse No. 1 to visitor-serving commercial likely would include improvements to support potential future uses. Construction would not cause or accelerate geologic hazards. However, the Los Angeles region, as for the overall southern California region, cannot avoid earthquake-related hazards, such as liquefaction, ground rupture, ground acceleration, and ground shaking. Although no faults within the Port area are currently zoned under the Alquist-Priolo Act, potential hazards exist due to seismic activities associated with the Palos Verdes Fault Zone and the presence of hydraulic fill.

The City of Los Angeles Building Code, Sections 91.000 through 91.7016 of the LAMC, regulates construction. These building codes and criteria provide requirements for construction, grading, excavations, use of fill, and foundation work, including type of materials, design, procedures, etc. These codes are intended to limit the probability of occurrence and the severity of consequences from geological hazards, such as earthquakes. Necessary permits, plan checks, and inspections are also specified. The LAMC also incorporates structural seismic requirements of the CBC. LAHD's and City of Los Angeles' Department of Building and Safety engineers would review the individual project plans for compliance with the appropriate standards in the building codes. Any modifications to Warehouse No. 1 would comply with the appropriate standards established in the building codes.

Operations

Because active faults are located within and near Planning Area 1 and the area is mapped within an area of historic liquefaction, there is a potential for substantial risk of seismic impacts and subsequent potential to contribute to seismically-induced ground shaking that could result in injury to people and damage to structures during operations. However, any modifications to Warehouse No. 1 associated with the proposed land use change in Planning Area 1 would be completed in compliance with established building codes and LAHD design criteria, including incorporation of modern construction engineering and safety standards.

Impact GEO-2: The proposed Program would not expose people and structures to substantial risk involving tsunamis or seiches.

Planning Area 1

Construction

The Port region historically has been subject to tsunamis and seiches. Therefore, development on or near the shore within exposed portions of the PMPU area would risk the exposure of people to hazards from a tsunami or seiche. Although relatively rare, if a large tsunami or seiche occurred it would be expected to cause some amount of damage and possibly injuries in exposed on- or near-shore locations. As a result, this type of risk is considered by the LAHD as the average, or normal condition for most on- and near-shore locations in southern California. Therefore, impacts from a tsunami or seiche would be any that exceeded this normal condition and cause substantial damage and/or substantial injuries.

Since tsunamis and seiches are derived from wave action, the risk of damage or injuries from these events at any particular location is lessened if the location is high enough above sea level, far enough inland, or protected by manmade structures such as dikes or concrete walls. The height of a given site above sea level is either the result of an artificial structure (e.g., a dock or wall), topography (e.g., a hill or slope), or both, and a key variable related to the height of a site location relative to sea level is the behavior of tides. During high tide, for instance, the distance between a site and sea level is less, while during low tide the distance is greater. How high a site must be located above sea level to avoid substantial wave action during a tsunami or seiche depends on the height of the tide at the time of the event and the height of the potential tsunami or seiche wave. These factors would be considered for any construction within the PMPU area.

The Los Angeles/Long Beach Port Complex model (Moffat and Nichol 2007) predicts maximum tsunami wave heights in the Port area of approximately 5.2 to 6.6 feet above mean sea level (MSL) for the earthquake scenario and approximately 7.2 to 23.0 feet above MSL for the landslide scenario. The highest anticipated water levels from these scenarios would occur in the Outer Harbor area. For the Palos Verdes Landslide II scenario (Moffat and Nichol 2007), the model predicts a 23-foot wave height in the vicinity of Warehouse No. 1. Because construction at Warehouse No. 1 would be at lower elevations than predicted tsunami wave heights, there is a risk of coastal flooding due to tsunamis and seiches. Modifications to Warehouse No. 1 based on existing building codes may not prevent substantial damage to structures from coastal flooding. In addition, projects in construction phases are especially susceptible to damage due to the temporary conditions, such as unfinished structures, which are typically not in a condition to withstand coastal flooding.

Emergency planning and coordination between the Port contractors and LAHD would contribute to reducing onsite injuries during a tsunami. Port engineers and LAHD police work with contractors to develop earthquake and tsunami response training and procedures based on the Port's tsunami plan to ensure that construction and operations personnel are prepared to act in the event of a large seismic event. These procedures include immediate evacuation requirements in the event that a large seismic event occurs.

Operations

Impacts associated with operations within Planning Area 1 would be the same as discussed above for construction.

Impact GEO-3: The proposed Program would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from subsidence/soil settlement.

Planning Area 1

Construction

The proposed land use change in Planning Area 1 associated with Warehouse No. 1 would not necessarily require new construction, but may involve improvements to change this facility to visitor-serving commercial uses. Any modifications would be consistent with city design guidelines, including Sections 91.000 through 91.7016 of the LAMC, in conjunction with criteria established by LAHD. Compared to existing conditions, these modifications are expected to reduce potential risks from subsidence or settlement to the structure or to people.

Operations

Impacts associated with operations within Planning Area 1 would be the same as discussed above for construction.

Impact GEO-4: The proposed Program would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from soil expansion.

Planning Area 1

Construction

Warehouse No. 1 is constructed on fill, which may be expansive. The proposed land use change associated with Warehouse No. 1 would not necessarily require new construction, but may involve improvements to change this facility to visitor-serving commercial uses. Any modifications would be consistent with city design guidelines, including Sections 91.000 through 91.7016 of the LAMC, in conjunction with criteria established by LAHD. Compared to existing conditions, these modifications are expected to reduce potential risks from soils expansion to the structure or to people.

Operations

Impacts associated with operations within Planning Area 1 would be the same as discussed above for construction.

Impact GEO-5: The proposed Program would not result in or expose people or property to a substantial risk of landslides or mudslides.

Planning Areas ~~2~~ 1 – 4

Construction

The topography in Planning Areas 1, 2, 3, and 4 is flat and not subject to landslides or mudflows.

Operations

Impacts associated with operations within Planning Areas 1, 2, 3, and 4 would be the same as discussed above for construction impacts.

Impact GEO-6: The proposed Program would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from unstable soil conditions from excavation, grading, or fill.

Planning Area 1

Construction

The proposed land use change in Planning Area 1 associated with Warehouse No. 1 may involve improvements to change this facility to visitor-serving commercial uses. Any modifications would be consistent with city design guidelines, including Sections 91.000 through 91.7016 of the LAMC, in conjunction with criteria established by LAHD. Therefore, modifications to Warehouse No. 1 would not increase risks to infrastructure or to people as a result of unstable soil conditions.

Operations

Impacts associated with operations within Planning Area 1 would be the same as discussed above for construction.

Impact GEO-7: The proposed Program would not result in one or more distinct and prominent geologic or topographic features being destroyed, permanently covered, or materially and adversely modified.

Planning Areas ~~2~~ 1 – 4

Construction

Since Planning Areas 1, 2, 3, and 4 are relatively flat and paved, with no prominent geologic or topographic features, new construction associated with the proposed appealable/fill projects and land use changes would not result in any distinct and

prominent geologic or topographic features being destroyed, permanently covered, or materially and adversely modified.

Operations

Potential destruction of distinct or prominent geologic or topographic features would only pertain to construction activities.

Impact GEO-8: The proposed Program within the limits of the oil field would not result in the permanent loss of availability of any mineral resource of regional, statewide, or local significance.

Planning Area 1

Construction

Planning Area 1 is not within a significant aggregate resource zone. The proposed project site is in a mineral resource zone area classified as MRZ-1, which is defined as an area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence (LAHD 2012). Planning Area 1 does not contain nor is it in close proximity to an oil, gas, or geothermal well. In addition, Planning Area 1 is not known to contain mineral resources that would be of value to the region or state. No quarrying operations are established in the vicinity, and the nearest oil field and drilling areas include the Torrance Oil Field, located north of PCH (SR-1), and the Wilmington Oil Field~~,~~ located in the northern portion of the Port. Consequently, no impacts to mineral resources from the proposed land use change would occur.

Operations

Impacts associated with operations within Planning Area 1 would be the same as discussed above for construction.

Impact GEO-9: The proposed Program would not result in substantial damage to structures or infrastructure or expose people to substantial risk of injury from sea level rise.

Planning Area 1

Construction

As indicated in Table 3.5-3, predicted sea level rise in the Port through 2050 varies from 10 to 17 inches, with an average of 14 inches. Such an increase in itself would not likely inundate Planning Area 1. However, such an increase could locally exacerbate flooding in the unlikely event of a tsunami or seiche. Refer to Impact GEO-2 for a discussion of potential tsunami impacts.

Operations

Impacts associated with operations within Planning Area 1 would be the same as discussed above for construction.

3.2.9 Changes Made to Section 3.6, Groundwater and Soils

Section 3.6, Groundwater and Soils, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site.

3.2.9.1 Section 3.6.4.3, Impacts and Mitigation

Impact GW-1: The proposed Program would expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, resulting in exposure to construction and operation personnel. The exposure would not be deleterious to humans, based on regulatory standards established by the lead agency for the site.

Planning Area 1

Construction

Because there are no proposed appealable/fill projects in Planning Area 1, the only potential for impacts from exposure to contaminated soils would be associated with improvements to Warehouse No. 1 related to changes to a visitor-serving commercial land use. The details of these improvements, and their potential for disturbing contaminated soils, presently are unknown. However, if contaminated soils were encountered, they would be handled, transported, remediated, and/or disposed of in accordance with all applicable federal, state, and local laws and regulations, the regulatory lead agency's (e.g., DTSC or Los Angeles RWQCB) requirements, and LAHD leasing requirements related to hazardous materials, hazardous wastes, and regulatory compliance.

Operations

Operation of an improved Warehouse No. 1 as a visitor-serving commercial facility would not expose workers or the public to unacceptable levels of soil or groundwater contamination.

Impact GW-2: The proposed Program would not result in changes in the rate or direction of movement of existing contaminants; expansion of the area affected by contaminants; or increases in the level of groundwater contamination, which would increase risk of harm to humans.

Planning Area 1

Construction

The only potential for impacts in Planning Area 1 from contaminant dispersion would be associated with improvements to Warehouse No. 1, as related to changing

existing institutional uses to visitor-serving commercial. The details of these possible improvements, and their potential for dispersing contaminants, presently are unknown. However, if contaminated soils or groundwater were encountered during construction of improvements to Warehouse No. 1 they would be handled, transported, remediated, and/or disposed of in accordance with all applicable federal, state, and local laws and regulations; requirements of the regulatory lead agency (e.g., DTSC or Los Angeles RWQCB) requirements; and LAHD leasing requirements related to hazardous materials, hazardous wastes, and regulatory compliance.

Operations

Operation of an improved Warehouse No. 1 as a visitor-serving commercial facility would not increase risks to humans through dispersion of existing contaminants.

Impact GW-3: The proposed Program would not result in a demonstrable and sustained reduction in groundwater recharge capacity or change in potable water levels sufficient to reduce the ability of a water utility to use the groundwater basin for public water supplies, conjunctive use purposes, storage of imported water, or summer/winter peaking, or to respond to emergencies and drought; reduce yields of adjacent wells or well fields (public or private); or, adversely change the rate or direction of groundwater flow.

Planning Areas ~~2~~ 1 – 4

Impact GW-4: The proposed Program would not result in a violation of regulatory water quality standards at an existing production well, as defined in CCR, Title 22, Division 4, Chapter 15 and in the Safe Drinking Water Act.

Planning Areas ~~2~~ 1 – 4

3.2.10 Changes Made to Section 3.7, Hazards and Hazardous Materials

Section 3.7, Hazards and Hazardous Materials, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site.

3.2.10.1 Section 3.7.4.3, Impacts and Mitigation

Impact HAZ-1: The proposed Program would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Planning Areas ~~2~~ 1 – 4

The only proposed land use change for Planning Area 1 would be changing Warehouse No. 1 from institutional use to mixed use (institutional and/or visitor-serving commercial). There are no proposed appealable/fill projects in Planning Area 1.

Impact HAZ-2: The proposed Program would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Planning Areas ~~2~~ 1 – 4

Existing institutional uses at Warehouse No. 1 in Planning Area 1 would be changed to mixed use (institutional and/or visitor-serving commercial). The proposed appealable/fill projects and associated land use changes in Planning Area 2 would relocate Vopak from Berths 187-189 to Berths 191-194. Vacant land at the optional land use site on Mormon Island (Planning Area 2) would be changed to liquid bulk or break bulk. In Planning Area 3, there would be the option of changing Berth 301 from maritime support to container cargo uses or liquid bulk.

Impact HAZ-3: The proposed Program would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Planning Areas ~~2~~ 1 – 4

Section 3.7.2.1, Regional Setting, presents a list of schools within approximately one-quarter mile of the Port boundary.

Three schools are located within one-quarter mile of the boundary of Planning Area 1: 15th Street Elementary, Port of Los Angeles High School, and World Tots LA. However, the proposed land use change in this planning area (i.e., retaining existing institutional uses at Warehouse No. 1 and/or changing uses to visitor-serving commercial) would not involve handling or emitting hazardous materials and would not be within one-quarter mile of these schools.

Impact HAZ-4: The proposed Program would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Planning Areas ~~2~~ 1 – 4

3.2.11 Changes Made to Section 3.8, Land Use

Section 3.8, Land Use, was revised to clarify that the proposed land use change in Planning Area 1 (i.e., designating Warehouse No. 1 as a mixed land use site) was including in the impact analysis.

3.2.11.1 Section 3.8.4.3, Impacts and Mitigation

Impact LU-1: The proposed Program would be consistent with the General Plan or adopted environmental goals or policies contained in other applicable plans adopted for the purpose of avoiding or mitigating an environmental impact.

Planning Areas ~~2~~ 1 – 4

3.2.12 Changes Made to Section 3.9, Noise

Section 3.9, Noise, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site.

3.2.12.1 Section 3.9.4.3, Impacts and Mitigation

Impact NOI-1: Daytime construction activities lasting more than 10 days in a 3-month period would produce noise levels that exceed existing ambient exterior noise levels by 5 dB(A) or more at a noise-sensitive use.

Planning Area 1

Construction

The only construction activities in Planning Area 1 would be from possible improvements to Warehouse No. 1 associated with changing land use designations (existing institutional uses would be changed to mixed use - institutional and/or visitor-serving commercial). The details of these possible improvements presently are unknown. Nevertheless, sources of construction-related noise could include many of the equipment types listed in Table 3.9-5, with the exception that use of a pile driver is not anticipated. The closest sensitive receptors (liveaboards in Cabrillo Marina) would be more than 400 feet from noise sources associated with Warehouse No. 1 structural upgrades, and general construction noise would be below 5 dB at that distance.

Impact NOI-2: Construction activities would not produce noise levels that exceed the ambient noise level by 5 dB(A) at a noise-sensitive use between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, before 8:00 A.M. or after 6:00 P.M. on Saturday, or at any time on Sunday.

The impact criterion relates only to construction, so operational impacts are not discussed in the analyses for this criterion.

Planning Areas ~~2~~ 1 – 4

Impact NOI-3: Construction or operation would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.

Planning Areas ~~2~~ 1 – 4

Construction

Construction of the proposed appealable/fill projects in Planning Areas ~~2~~ 1 through 4 would likely involve a range of heavy equipment for excavating and pile driving along with associated truck and vehicle traffic. Vibration levels generated by construction equipment would vary depending on factors such as the type of equipment, the activity being performed, and the condition of the equipment. The dominant sources of vibration from construction equipment are impact pile-driving or pavement-breaking and heavy truck traffic. Sensitive receptor locations in Planning Areas ~~2~~ 1 through 4 are more than 50 feet from construction areas. Therefore, ground vibration from pile driving or truck traffic associated with construction of the proposed appealable/fill projects and land use changes would not exceed the FTA ground-borne criterion for buildings extremely susceptible to vibration damage, as shown in Figure 3.9-1, at sensitive receptor locations in Planning Areas ~~2~~ 1 through 4.

Operations

The dominant sources of operational vibration would likely be haul truck traffic into and out of the Port and rail movements. The only residential uses located within the PMPU which are close to rail lines are liveaboards. Ground vibration would be sufficiently damped at these locations due to the effect of groundborne to waterborne vibration transfer attenuation. Ground vibration from truck or rail traffic associated with operations of the proposed appealable/fill projects and land use changes would not exceed FTA ground-borne vibration criteria at sensitive receptor locations in Planning Areas ~~2~~ 1 through 4.

Impact NOI-4: The ambient noise level measured at the property line of affected uses would not increase by 3 dB(A) in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category, or any 5 dB(A) or greater noise increase, as defined by city thresholds.

Cargo Terminals

The main operational noise sources associated with the proposed appealable/fill projects and land use changes would include intermittent sounds associated with loading and unloading at marine terminals, movement of ocean going and support vessels, movement of vehicles (primarily trucks) entering and exiting various terminals and commercial locations within the planning area, and rail traffic. These

noise sources are common within the Port, and the operation of the proposed appealable/fill projects and land use changes in Planning Areas ~~2~~ 1 through 4 would not result in noise levels exceeding the noise increment threshold.

Planning Areas ~~2~~ 1 – 4

Operations

Rail yard noise sources associated with the proposed Program, when added to the ambient noise level, are expected to result in maximum noise levels of 63 dB(A) CNEL at the closest "residential" area – the East Basin/Cerritos Channel marinas. This would represent a 2 dB(A) increase in the CNEL and, therefore, would be below the noise increment threshold.

The proposed Program would result in up to a stand-alone increase of 6 dB(A) in rail related noise at the Henry Ford Avenue at-grade crossing and along the rail lines leading out of the Port (from 56 to 62 dB). This would not be indicative of noise impacts resulting from train movements in and out of Terminal Island on liveaboards within the East Basin/Cerritos Channel marinas because the dominant traffic noise sources are louder. Existing ambient noise levels are already high in the vicinity of the rail crossing, and the contribution of increased rail operations associated with the proposed Program to the overall CNEL in this area would be less than 3 dB(A) CNEL, which would be below the noise increment threshold.

Similarly, noise from cargo terminal operations associated with the proposed appealable/fill projects and land use changes in Planning Areas ~~2~~ 1 through 4 would not exceed the noise increment threshold.

3.2.13 Changes Made to Section 3.10, Public Services

Section 3.10, Public Services, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site.

3.2.13.1 Section 3.10.4.3, Impacts and Mitigation

Impact PS-1: The proposed Program would not burden existing USCG, LAPD, or Port Police staff levels and facilities, such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without constructing additional facilities that could cause significant environmental effects.

Planning Area 1

Construction

The Port Police would provide primary law enforcement services during construction associated with changing existing institutional uses at Warehouse No. 1 to visitor-serving commercial; therefore, demands on LAPD services would be minimal. The

construction site would be fenced and access would be limited to authorized personnel. However, during construction additional demands on Port Police personnel for traffic control services would be required if roadway operations are impacted by installation or upgrades to utility infrastructure within the public right-of-way.

Construction activities associated with the land use change noted above would not affect USCG response times because this project would be within the current USCG coverage area and would not affect the distance or routes between USCG facilities and the construction site.

Operations

Operations associated with visitor-serving commercial uses at Warehouse No. 1 would increase operational activities within the PMPU area. Replacing the existing institutional uses at Warehouse No. 1 with visitor-serving commercial uses would increase demands on law enforcement services compared to existing conditions.

The Port Police would provide primary law enforcement services to the PMPU area and the LAPD would provide support to the Port Police under special circumstances. As such, LAPD response times would not be affected by operations at Warehouse No. 1. In addition to working with the LAPD, the Port Police also coordinate with the Long Beach Police Department and the Los Angeles County Sheriff for landside assistance and with the USCG for commercial vessel operations (Grant 2011, personal communication). The proposed land use change in Planning Area 1 would not burden the Port Police such that they would not be able to maintain their current level of service to the PMPU area. However, the Port Police continue to assess the needs of the Port, including the PMPU area, and would make adjustments to their operations as needed.

The proposed visitor-serving commercial land uses at Warehouse No. 1 would result in additional visitors to the PMPU area. However, it is not expected that activities associated with this area would require a substantial increase in police protection compared to existing conditions. This is because the site is relatively small (approximately 6 acres) and within the Port Police's existing patrol area. Given the Port Police's existing patrol of land and water and their expanding and updating of resources, the PMPU area would be adequately served. Furthermore, as discussed above, the Port Police currently work cooperatively with various agencies to provide adequate protection when additional support is needed to respond to an emergency situation.

Operation of the proposed land use change in Planning Area 1 would not affect USCG response times. This is because this area would be within the current USCG coverage area and would not affect the distance or routes between USCG facilities and the project site.

Impact PS-2: The proposed Program would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

Planning Area 1

Construction

Construction associated with upgrading Warehouse No. 1 to support visitor-serving commercial uses would have the potential to temporarily interrupt fire flow water supplies during installation of utility infrastructure. However, utility upgrades/modifications occur frequently during construction, and are generally conducted with minimal, if any, disruptions to existing utility services. However, temporary interruptions and/or delays to fire protection services would occur if roadway operations are impacted during installation or upgrades to utility infrastructure within the public right-of-way.

Construction activities associated with the land use change in Planning Area 1 would comply with all applicable state and local codes and ordinances to ensure adequate fire protection. In addition, the LAHD would notify the LAFD in advance of construction activities that would affect fire suppression infrastructure. The LAFD would be afforded the opportunity to review and comment on project features affecting fire suppression infrastructure. As discussed under Impact PS-1, construction and demolition activities would be subject to emergency response systems implemented by LAFD and WATCH requirements (**MM PS-1**). Consequently, construction associated with this land use change would not result in a need for changes to existing fire protection facilities.

Operations

Operations associated with the land use change in Planning Area 1 would increase demands on fire protection services compared to existing conditions due to replacing the existing institutional uses at Warehouse No. 1 with visitor-serving commercial uses. The land use change in Planning Area 1 would be designed and constructed to meet applicable state and local codes and ordinances to ensure adequate fire protection and would be subject to LAFD review and approval. These codes and ordinances require fire protection infrastructure (e.g., fire hydrants and sprinklers). Furthermore, fire stations in the PMPU area are generally located to facilitate quick emergency response throughout the Port.

The proposed visitor-serving commercial uses at Warehouse No. 1 would result in additional visitors to the PMPU area. However, it is not expected that activities associated with this area would require a substantial increase in fire protection services compared to existing conditions. As previously discussed, response times to the PMPU area is 5 minutes or less by land and 10 minutes or less by water, which are less than the LAFD required response times.

3.2.14 Changes Made to Section 3.11, Recreation

Section 3.11, Recreation, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site.

3.2.14.1 Figure 3.11-1, On-Land Park and Recreational Facilities

Figure 3.11-1 was modified to show the correct location of the existing California Coastal Trail within the PMPU area.

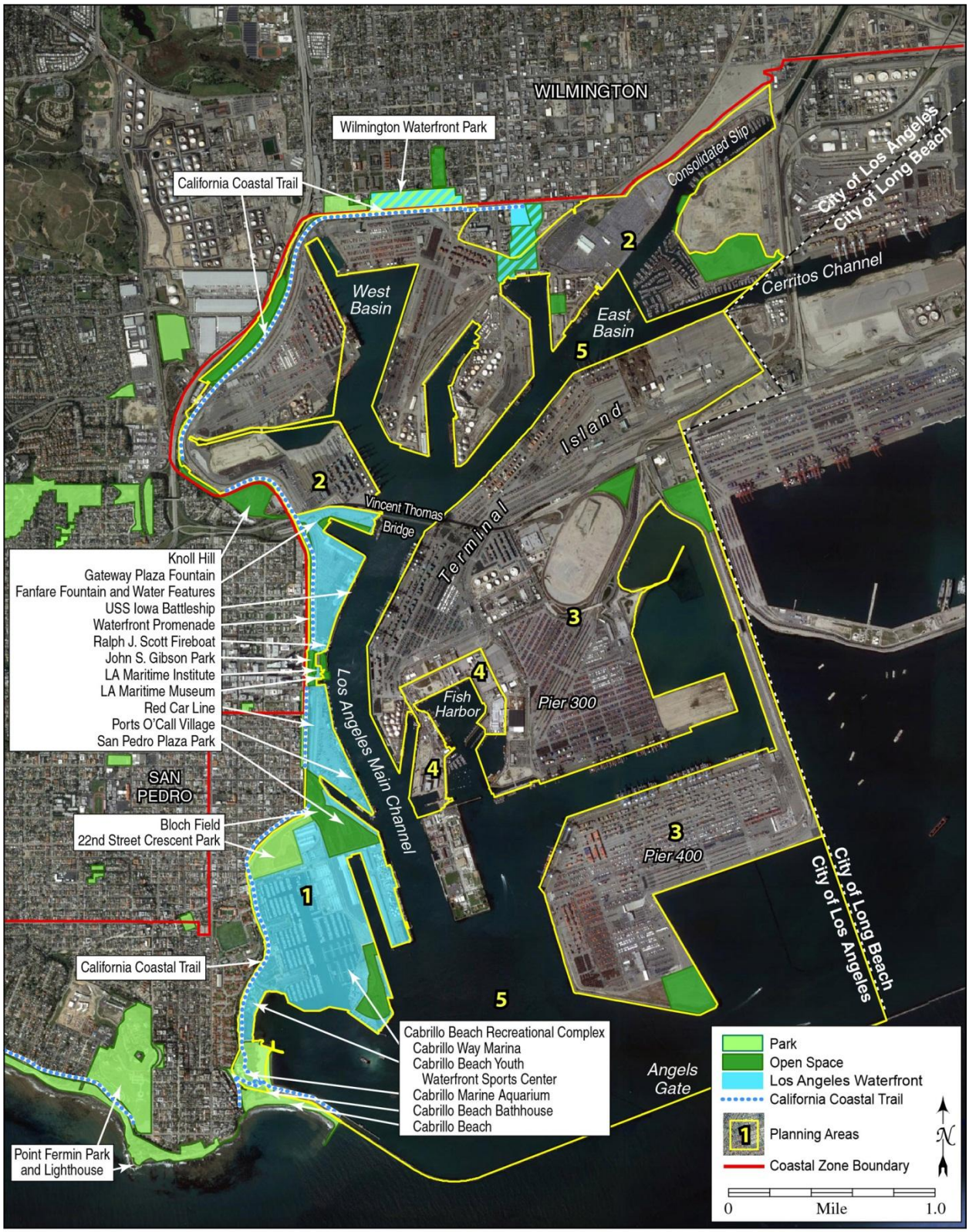


Figure 3.11-1. On-Land Park and Recreational Facilities

3.2.14.2 Section 3.11.4.3, Impacts and Mitigation

Impact REC-1: The proposed Program would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated.

Planning Area 1

Construction

Construction associated with the land use change at Warehouse No. 1 would not increase use of or demand for neighborhood parks. This is because this land use change is not expected to result in substantial in-migration or relocation of construction employees to satisfy the need for increased temporary, construction-related employment (Section 7.3, Effects Related to Socioeconomics and Environmental Quality). Since construction associated with the proposed land use change in Planning Area 1 would not increase use of existing recreational facilities, indirect acceleration of the physical deterioration of facilities would not occur.

Operations

Operations associated with the proposed visitor-serving commercial uses at Warehouse No. 1 would not generate substantial new demand for recreational or park services that would in turn result in a substantial physical deterioration or expansion of existing park or recreational facilities. Therefore, operation of the proposed land use change in Planning Area 1 would not result in direct or indirect deterioration of recreational parks or other recreational facilities.

Impact REC-2: The proposed Program would not include recreational facilities or require the construction or expansion of recreational facilities that could have an adverse physical effect on the environment.

Planning Area 1

Construction

The proposed land use change in Planning Area 1 would not construct new recreational facilities or expand existing facilities. Therefore, construction activities would not result in actions to recreational facilities that would have physical effects on the environment.

Operations

Operations associated with the visitor-serving commercial uses at Warehouse No. 1 would not require constructing new recreational facilities or modifying existing facilities. Therefore, operations would not result in actions to recreational facilities that would have physical effects on the environment.

3.2.15 Changes Made to Section 3.12, Transportation and Circulation

Section 3.12, Transportation and Circulation, was modified to include Planning Area 1 land use trip generation in the transportation analysis along with two additional intersection analysis locations near Planning Area 1: Gaffey Street/1st Street; and Harbor Boulevard/Swinford Street/SR-47 EB Ramps. Section 3.12.3.1.3 and Tables 3.12-19 and 3.12-20 were updated to clarify that the proposed Program would have significant freeway impacts during additional peak hours on the I-710 north of I-105, north of Firestone Boulevard. Tables 3.12-19 and 3.12-20 also include analysis of an additional freeway link location on the I-710 north of Florence Avenue. This additional location was analyzed in response to comments received from Caltrans on the Draft PEIR.

3.2.15.1 Section 3.12.2.1, Environmental Setting, Ground Transportation

Harbor Boulevard is classified as a Major Class II Highway and provides north-south access along the eastern edge of the San Pedro community.

Gaffey Street is classified as a Major Class II Highway that runs north-south. The 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.

The traffic setting for the proposed Program includes those streets and intersections that would be used by both automobile and truck traffic to gain access to and from the PMPU area, as well as those streets that would be used by construction traffic related to future development (i.e., equipment and commuting workers). Thirty-four study intersections that are located near or on routes serving the PMPU area were chosen for analysis. The 34 study intersections include the following (refer to Figure 3.12-1 for illustration of study intersection locations):

1. Ocean Boulevard Westbound/Terminal Island Freeway (SR-47) – City of Long Beach;
2. Ocean Boulevard Eastbound/Terminal Island Freeway (SR-47) – City of Long Beach;
3. Ocean Boulevard Westbound/Pier S Avenue – City of Long Beach;
4. Ocean Boulevard Eastbound/Pier S Avenue – City of Long Beach;
5. Seaside Avenue/Navy Way – City of Los Angeles;
6. Ferry Street/SR 47 Ramps – City of Los Angeles;
7. Pico Avenue/Pier B Street/9th Street/I-710 Ramps – City of Long Beach;
8. Anaheim Street/Harbor Avenue – City of Long Beach;
9. Anaheim Street/Santa Fe Avenue – City of Long Beach;
10. Anaheim Street/East I Street/West 9th Street – City of Long Beach;
11. Anaheim Street/Farragut Avenue – City of Los Angeles;
12. Anaheim Street/Henry Ford Avenue – City of Los Angeles;

13. Anaheim Street/Alameda Street – City of Los Angeles;
14. Henry Ford Avenue/Pier A Way/SR-47/103 Ramps – City of Los Angeles;
15. Harry Bridges Boulevard/Broad Avenue – City of Los Angeles;
16. Harry Bridget Boulevard/Avalon Boulevard – City of Los Angeles;
17. Harry Bridges Boulevard/Fries Avenue – City of Los Angeles;
18. Harry Bridges Boulevard/Neptune Avenue – City of Los Angeles;
19. Harry Bridges Boulevard/Wilmington Boulevard – City of Los Angeles;
20. Harry Bridges Boulevard/Figueroa Street – City of Los Angeles;
21. PCH/Alameda Street Ramp – City of Los Angeles;
22. PCH/Santa Fe Avenue – City of Long Beach;
23. PCH/Harbor Avenue – City of Long Beach;
24. Sepulveda Boulevard/Alameda Street Ramp – City of Carson;
25. Intermodal Way/Sepulveda Boulevard – City of Carson;
26. Intermodal Container Transfer Facility (ICTF) Driveway/Sepulveda Boulevard – City of Los Angeles;
27. Middle Road/Sepulveda Boulevard – City of Los Angeles;
28. Sepulveda Boulevard/SR-103 – City of Long Beach;
29. Alameda Street/Henry Ford Avenue – City of Los Angeles;
30. Alameda Street/PCH Ramp – City of Los Angeles;
31. Alameda Street/Sepulveda Boulevard Ramp – City of Carson;
32. Alameda Street/223rd Street Ramp – City of Carson;
33. Alameda Street Ramp/223rd Street – City of Los Angeles;
34. I-405 Southbound Ramps/223rd Street – City of Los Angeles;
35. Gaffey Street/1st Street – City of Los Angeles; and,
36. Harbor Boulevard/Swinford Street/SR-47 Ramps – City of Los Angeles.

~~Two~~ Three additional non-CMP locations on the State Highway system were included for analysis, as also shown in Figure 3.12-2, on the basis of their location relative to the PMPU area and the potential for proposed Program-related traffic using the roadways. The locations are:

1. I-710 north of Florence Avenue;
~~1.~~2. SR-47 at Vincent Thomas Bridge; and,
~~2.~~3. SR-47 at Commodore Schuyler Heim Bridge.

3.2.15.2 Figure 3.12-1, Project Study Area and Study Intersections

Figure 3.12-1 was updated to include the two additional intersection analysis locations near Planning Area 1 (i.e., Gaffey Street/1st Street and Harbor Boulevard/Swinford Street/SR-47 Ramps).

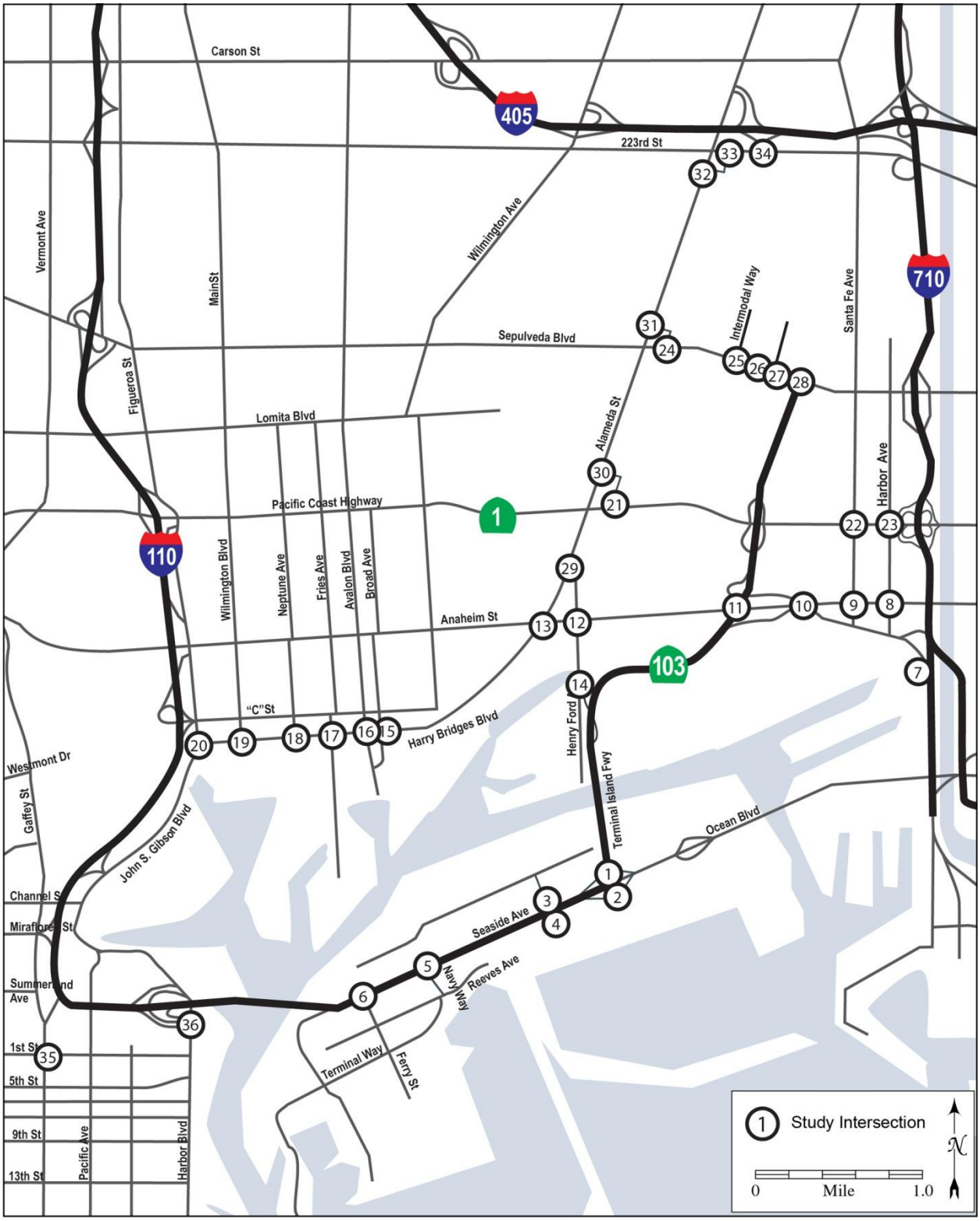


Figure 3.12-1. Project Study Area and Study Intersections

3.2.15.3 Figure 3.12-2, Study Area Freeway Segments

Figure 3.12-2 was updated to include the additional freeway link location on the I-710 north of Florence Avenue.

3.2.15.4 Section 3.12.2.1.1, Existing Area Traffic Conditions

Levels of Service Analysis

Based on peak-hour traffic volumes and V/C ratios, the corresponding LOS at study area intersections were determined, as summarized in Table 3.12-3. The data in the table indicate that all of the existing study intersections currently operate at LOS C or better during peak hours except intersection #22 PCH at Santa Fe Avenue which operates at LOS D in the P.M. peak hour and intersection #35 Gaffey Street at 1st Street, which operates at LOS D in the A.M. and P.M. peak hours. Midday analysis was not conducted at intersections #35 and #36, which are located in the commercial district of San Pedro, due to a lack of available trip generation data and since the midday period does not have peaking characteristics that are studied as part of traffic analysis. Retail land use trip generation does not have empirical trip generation rates because they usually generate fewer trips in the midday than in the A.M. or P.M. peak hours. This is specifically the case with commercial land uses in San Pedro, which, unlike the other locations analyzed in this document (container terminals), do not peak in the midday.

As shown in Table 3.12-4 all freeway locations currently operate at LOS D or better except for the following:

- I-405 at Santa Fe Avenue – LOS F(0) (northbound A.M. Peak Hour); LOS E (southbound A.M. Peak Hour); LOS E (northbound P.M. Peak Hour); LOS F(0) (southbound P.M. Peak Hour);
- I-710 north of PCH – LOS E (northbound A.M. Peak Hour); LOS F(0) (southbound A.M. Peak Hour); LOS E (northbound P.M. Peak Hour); LOS E (southbound P.M. Peak Hour);
- I-710 north of I-405, south of Del Amo Boulevard – LOS E (southbound A.M. Peak Hour); LOS E (northbound P.M. Peak Hour);
- I-710 north of I-105, north of Firestone Boulevard – LOS F(0) (northbound A.M. Peak Hour); LOS F(0) (southbound A.M. Peak Hour); LOS F(0) (northbound P.M. Peak Hour); LOS F(0) (southbound P.M. Peak Hour); and,
- I-710 north of Florence Avenue – LOS E (northbound A.M. Peak Hour); LOS F(0) (southbound A.M. Peak Hour); LOS F(0) (northbound P.M. Peak Hour); LOS F(0) (southbound P.M. Peak Hour).

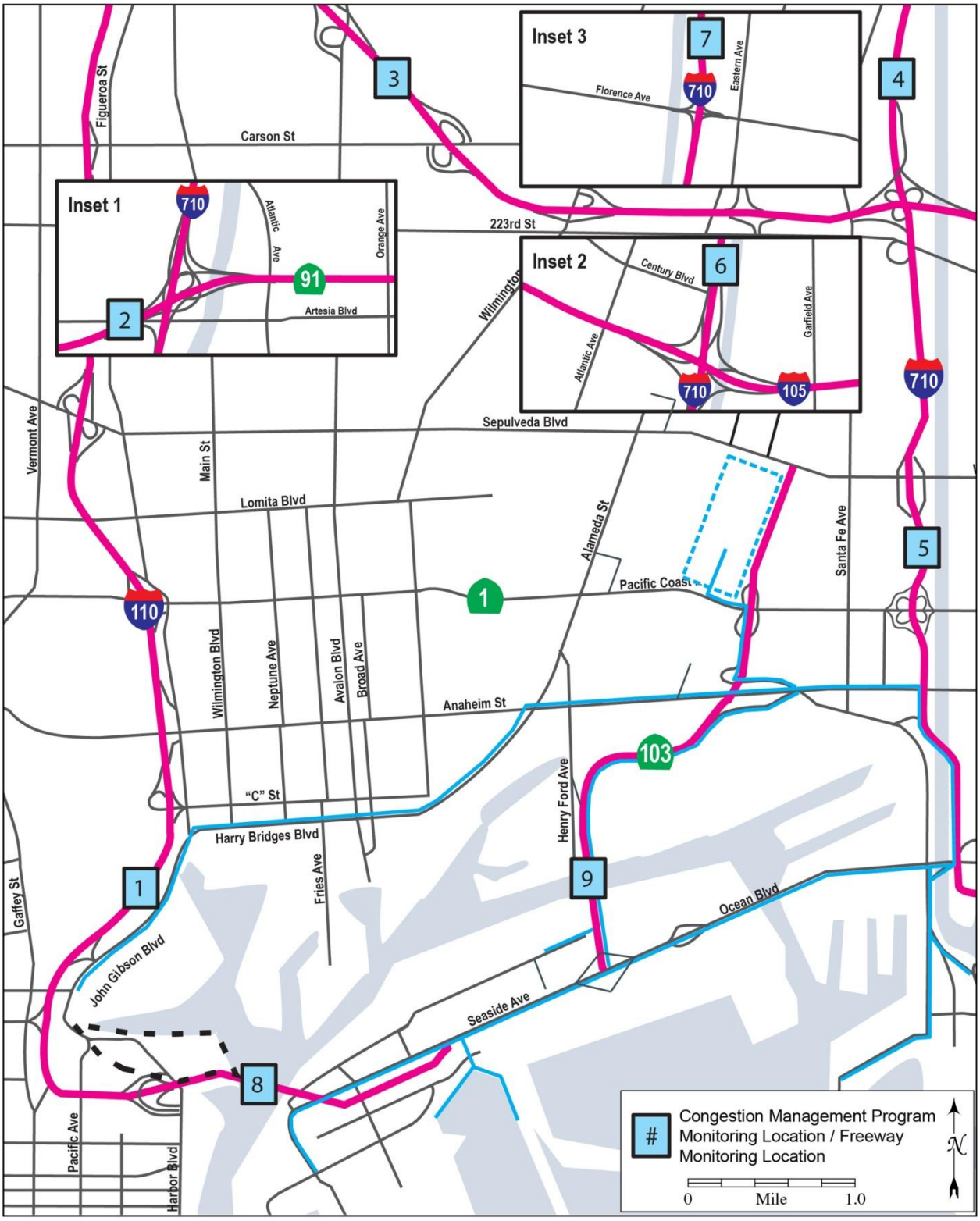


Figure 3.12-2. Study Area Freeway Segments

Table 3.12-3. Baseline Intersection Level of Service

Int #	*Analysis Intersection*	*Baseline*					
		A.M.		*M.D.*		*P.M.*	
		LOS	*V/C*	*LOS*	*V/C*	*LOS*	*V/C*
1	Ocean Blvd (WB)/[Terminal Island Fwy[b]	A	0.335	A	0.398	A	0.375
2	Ocean Blvd (EB)/Terminal Island Fwy[b]	A	0.215	A	0.379	A	0.348
3	Ocean Blvd (WB)/Pier S Ave[b]	A	0.266	A	0.313	A	0.341
4	Ocean Blvd (EB)/Pier S Ave[b]	A	0.209	A	0.364	A	0.340
5	Seaside Ave/Navy Way[a]	A	0.427	A	0.316	A	0.541
6	Ferry St (Seaside Ave)/SR-47 Ramps[a]	A	0.112	A	0.244	A	0.142
7	Pico Ave / Pier B St/9th St / I-710 Ramps[b]	A	0.435	A	0.519	A	0.499
8	Anaheim St/Harbor Ave[b]	A	0.453	A	0.455	A	0.560
9	Anaheim St/Santa Fe Ave[b]	A	0.473	A	0.508	A	0.578
10	Anaheim St/E I St / W 9th St[b]	A	0.501	A	0.525	A	0.529
11	Anaheim St/Farragut Ave[a]	A	0.277	A	0.228	A	0.286
12	Anaheim St/Henry Ford Ave[a]	A	0.300	A	0.416	A	0.560
13	Anaheim St/Alameda St[a]	A	0.361	A	0.325	A	0.468
14	Henry Ford Ave/Pier A Wy/SR-47/103 Ramps[a]	A	0.078	A	0.125	A	0.167
15	Harry Bridges Blvd/Broad Ave[a]	A	0.143	A	0.115	A	0.218
16	Harry Bridges Blvd/Avalon Blvd[a]	A	0.155	A	0.082	A	0.238
17	Harry Bridges Blvd/Fries Ave[a]	A	0.123	A	0.127	A	0.203
18	Harry Bridges Blvd/Neptune Ave[a]	A	0.053	A	0.028	A	0.127
19	Harry Bridges Blvd/Wilmington Blvd[a]	A	0.119	A	0.077	A	0.202
20	Harry Bridges Blvd/Figueroa St[a]	A	0.235	A	0.237	A	0.292
21	Pacific Coast Hwy/Alameda St Ramp[a]	A	0.505	A	0.411	A	0.561
22	Pacific Coast Hwy/Santa Fe Ave[b]	C	0.773	B	0.699	D	0.821
23	Pacific Coast Hwy/Harbor Ave[b]	B	0.628	B	0.603	C	0.733
24	Sepulveda Blvd/Alameda St Ramp[c]	B	0.679	A	0.484	B	0.612
25	Intermodal Way/Sepulveda Blvd[c]	A	0.371	A	0.310	A	0.403
26	ICTF Drwy/Sepulveda Blvd[a]	A	0.193	A	0.369	A	0.425
27	Middle Rd/Sepulveda Blvd[a]	A	0.223	A	0.254	A	0.481
28	Sepulveda Blvd/SR-10[b]	A	0.318	A	0.330	A	0.491
29	Alameda St/Henry Ford Ave[a]	A	0.057	A	0.183	A	0.207
30	Alameda St/Pacific Coast Hwy Ramp[a]	A	0.439	A	0.368	A	0.598
31	Alameda St/Sepulveda Boulevard Ramp[c]	A	0.389	A	0.463	A	0.588
32	Alameda St/223rd St Ramp[c]	A	0.509	A	0.484	A	0.565
33	Alameda St Ramp/223rd St[a]	A	0.342	A	0.504	C	0.758
34	I-405 SB Ramps/223rd St[a]	A	0.379	A	0.319	A	0.435
35	Gaffey St/1st St[a]	D	0.860	n/a	n/a	D	0.825
36	Harbor Blvd/Swinford St/SR-47 (EB) Ramp[a]	A	0.307	n/a	n/a	A	0.331

Notes:
a. City of Los Angeles intersection, analyzed using CMA methodology, according to city standards.
b. City of Long Beach intersection analyzed using ICU methodology, according to city standards.
c. City of Carson intersection analyzed using ICU methodology, according to city standards.

Table 3.12-4. Baseline Freeway Level of Service

Freeway	*Location*	*Capacity*	*Northbound/Eastbound*						*Southbound/Westbound*					
			A.M. Peak Hour			*P.M. Peak Hour*			*A.M. Peak Hour*			*P.M. Peak Hour*		
			Demand	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*
#1 I-110	South of C Street (CMP monitoring station - south of "C" St)	8,000	4,375	0.55	C	2,490	0.31	A	3,375	0.42	B	4,205	0.53	B
#2 SR-91	West of I-710 (CMP monitoring station - east of Alameda St/Santa Fe Ave interchange)	12,000	6,060	0.51	B	8,928	0.74	C	10,660	0.89	D	7,205	0.60	C
#3 I-405	Between I-110 and I-710 (CMP monitoring station - Santa Fe Ave)	10,000	11,535	1.15	F(0)	9,865	0.99	E	9,545	0.95	E	11,160	1.12	F(0)
#4 I-710	North of PCH (CMP monitoring station-north of Jct Rte 1 [PCH], Willow St)	6,000	5,770	0.96	E	5,950	0.99	E	6,690	1.12	F(0)	5,660	0.94	E
#5 I-710	North of I-405 (CMP monitoring station n/o Jct. 405, south of Del Amo)	8,000	6,370	0.80	D	7,740	0.97	E	7,805	0.98	E	6,785	0.85	D
#6 I-710	North of I-105, north of Firestone	8,000	8,175	1.02	F(0)	9,120	1.14	F(0)	9,285	1.16	F(0)	9,105	1.14	F(0)
#7 I-710	North of Florence Avenue*	8,000	7,710	0.96	E	8,600	1.08	F(0)	8,760	1.10	F(0)	8,590	1.07	F(0)
#~~7~~ 8 SR-47	Vincent Thomas Bridge*	4,000	2,445	0.61	C	2,560	0.64	C	2,100	0.53	B	2,930	0.73	C
#~~8~~ 9 SR-47	Commodore Schuyler Heim Bridge*	6,000	305	0.05	A	830	0.14	A	590	0.10	A	655	0.11	A

Notes: Capacity based on the methodology in the 2010 CMP for Los Angeles County (LACMTA 2010); D/C = demand to capacity ratio.
*Non-CMP location.

3.2.15.5 Section 3.12.3.1.1, Methodology, Proposed Program Trip Generation

Program-related trip generation was developed using existing intermodal facility traffic counts, tenant-supplied information, the ports' QuickTrip truck generation model, and the Institute of Transportation Engineers Trip Generation, 9th Edition. Traffic that would be generated by the proposed Program was forecasted to determine potential impacts on study area roadways.

The trip generation estimate for the 102,000 square foot retail land use at Warehouse No. 1 for the proposed Program was obtained from the Institute of Transportation Engineers Trip Generation, 9th Edition Land Use 820 (Shopping) for the Daily and A.M. trip generation rate and Land Use 826 (Specialty Retail) for the P.M. trip generation rate, consistent with the San Pedro Waterfront Project EIS/EIR.

For the purposes of this analysis the residential distribution data of terminal employees, surveyed as part of the Longshore Worker place of residence, was used to distribute port-related employee auto trips in the Port Travel Demand Model.

Figure 3.12-6, Program Trip Distribution, depicts the distribution and routes of trips in the vicinity. The proposed Program trip generation was determined by using the proposed Program's TEU projections, the QuickTrip outputs, and specific trip generation from non-container truck trips at Warehouse No. 1 (Planning Area 1) and Fish Harbor (Planning Area 4). The resultant proposed Program's daily trip generation, distinguished between trips into and out of the Port ("In" and "Out", respectively), is shown in Table 3.12-14, and its peak hour trip generation is shown in Table 3.12-15.

Table 3.12-14. Proposed Program Daily Trip Generation

Planning Area	*Location*	*Autos*		*Non-container Trucks*		*Bobtails*		*Chassis*		*Containers*		*Total Vehicles*
		In	*Out*	*In*	*Out*	*In*	*Out*	*In*	*Out*	*In*	*Out*	
Planning Area 1: San Pedro	Warehouse No. 1	2,175	2,180	-	-	-	-	-	-	-	-	4,355
Planning Area 2: West Basin and Wilmington	Berths 100-131 (West Basin Container Terminal-Yang Ming-China Shipping)	1,155	940	-	-	1,010	950	315	135	2,020	2,255	8,780
Planning Area 3: Terminal Island	Berths 302-305 (APL-Eagle Marine Services)	1,410	1,145	-	-	1,475	1,395	235	350	2,810	2,795	11,615
Planning Area 4: Fish Harbor	Fish Harbor	-	-	25	25	-	-	-	-	-	-	50
	Total	**4,740 ~~2,565~~**	**4,265 ~~2,085~~**	**25**	**25**	**2,485**	**2,345**	**550**	**485**	**4,830**	**5,050**	**~~20,445~~ 24,800**

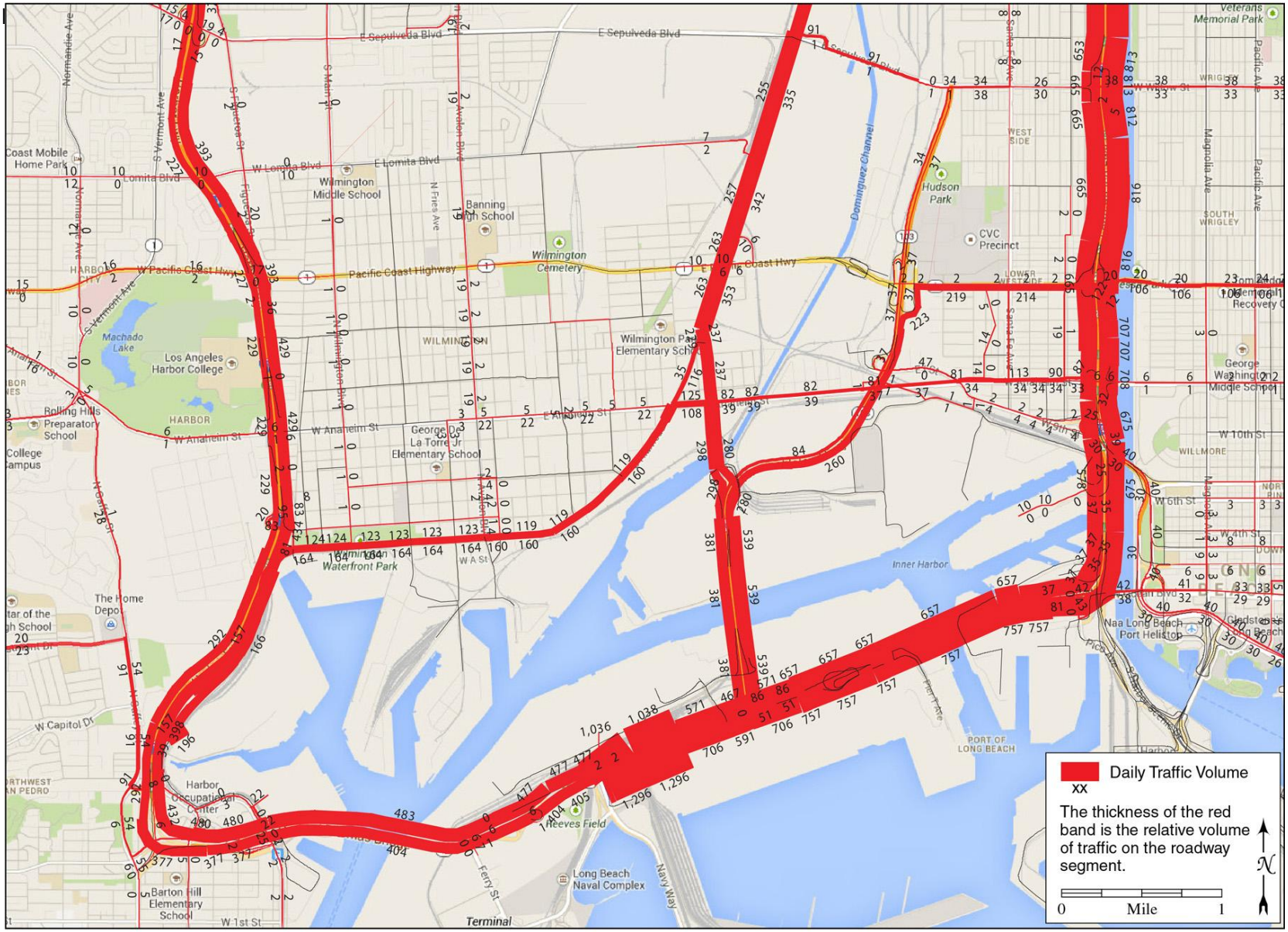


Figure 3.12-6. Program Trip Distribution

Table 3.12-15. Proposed Program Peak Hour Trip Generation (in Passenger Car Equivalents)

Planning Area	*Location*	*A.M. Peak Hour*			*M.D. Peak Hour*			*P.M. Peak Hour*		
		In	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*
Planning Area 1: San Pedro	Warehouse No. 1	40	25	65	n/a	n/a	n/a	120	155	275
Planning Area 2: West Basin and Wilmington	Berths 100-131 (West Basin Container Terminal-Yang Ming-China Shipping)	435	460	895	475	475	950	375	485	860
Planning Area 3: Terminal Island	Berths 302-305 (APL-Eagle Marine Services)	590	560	1,150	630	650	1,280	460	605	1,065
Planning Area 4: Fish Harbor	Fish Harbor	10	10	20	10	10	20	10	10	20
Total		**1,075~~1,035~~**	**1,055~~1,030~~**	**2,130~~2,065~~**	**1,115~~1,115~~**	**1,135~~1,135~~**	**2,250~~2,250~~**	**965~~845~~**	**1,255~~1,100~~**	**2,220~~1,945~~**

3.2.15.6 Section 3.12.3.1.3, Impacts and Mitigation

Impact TRANS-1: The proposed Program would not result in a short-term, temporary increase in truck and auto traffic.

Impact TRANS-1 only pertains to construction, so operations impacts are not applicable for this evaluation.

Planning Areas ~~2~~ 1 – 4

The proposed land use change in Planning Area 1 includes designating Warehouse No. 1 as a mixed land use site (i.e., existing institutional uses would be changed to mixed use - institutional and/or visitor-serving commercial).

Impact TRANS-2: The proposed Program would not significantly impact at least one study location V/C ratios or level of service for long-term vehicular traffic.

Traffic conditions that would be associated with the proposed appealable/fill projects and land use changes under the proposed Program were compared to the applicable baseline to determine the proposed Program's incremental impacts, and the incremental impacts were assessed using the significance criteria described above in Section 3.12.3.1.2, Thresholds of Significance.

Planning Areas ~~2~~ 1 – 4

Construction and Operations

The proposed land use change in Planning Area 1 includes designating Warehouse No. 1 as a mixed land use site (i.e., existing institutional uses would be changed to mixed use - institutional and/or visitor-serving commercial).

As described in Section 3.12.3.1.1, Methodology, the Port travel demand model was used to estimate the growth in traffic from the proposed Program at the analysis locations. The trips shown in Table 3.12-17 were added to the model and distributed through the roadway network to determine the level of traffic added to baseline turning movement volumes by the proposed Program. Midday analysis was not conducted at intersections #35 and #36, which are located in the commercial district of San Pedro, due to a lack of available trip generation data and the midday period not having peaking characteristics that are studied as part of traffic analysis. Retail land use trip generation does not have empirical trip generation rates because they usually generate fewer trips in the midday than in the A.M. or P.M. peak hours. This is specifically the case with commercial land uses in San Pedro, which, unlike the other locations analyzed in this document (container terminals), do not peak in the midday.

Table 3.12-17. Trip Generation Analysis Assumptions and Input Data for the Proposed Program

	CEQA Baseline (2011)	*Proposed Program (2035)*
Annual TEUs	3,729,000	11,249,000
Peak Monthly TEUs	339,000	1,024,000
Trip Generation Results – A.M. Peak		
Program Added Auto Trips	-----	~~225~~290
Program Added Truck Trips (PCE)	-----	1,840
Program Added Total Trips (PCE)	-----	~~2,065~~2,130
Trip Generation Results – M.D. Peak		
Program Added Auto Trips	-----	110
Program Added Truck Trips (PCE)	-----	2,140
Program Added Total Trips (PCE)	-----	2,250
Trip Generation Results – P.M. Peak		
Program Added Auto Trips	-----	~~525~~800
Program Added Truck Trips (PCE)	-----	1,420
Program Added Total Trips (PCE)	-----	~~1,945~~2,200
Note: Trips generated for the proposed Program represent incremental increases compared to the CEQA baseline.		

Impact Determination

Construction and Operations

Table 3.12-18 summarizes the CEQA baseline and CEQA baseline with Program operating conditions at each study intersection. The results of the traffic study, as presented in Table 3.12-18 and in the worksheets in Appendix F show that circulation system impacts from the proposed Program relative to CEQA baseline conditions would be less than significant.

Table 3.12-18. Intersection Level of Service Analysis – CEQA Baseline vs. Proposed Program

#	Study Intersection	CEQA Baseline (2011)						CEQA Baseline Plus Program						Changes in V/C			Significant Impact		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak		A.M.	M.D.	P.M.	A.M.	M.D.	P.M.
		LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	Peak	Peak	Peak	Peak	Peak	Peak
1	Ocean Blvd (WB) / Terminal Island Fwy[b]	A	0.335	A	0.398	A	0.375	A	0.401	A	0.490	A	0.417	0.066	0.092	0.042	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy[b]	A	0.215	A	0.379	A	0.348	A	0.295	A	0.447	A	0.381	0.080	0.068	0.033	N	N	N
3	Ocean Blvd (WB) / Pier S Ave[b]	A	0.266	A	0.313	A	0.341	A	0.325	A	0.400	A	0.386	0.059	0.087	0.045	N	N	N
4	Ocean Blvd (EB) / Pier S Ave[b]	A	0.209	A	0.364	A	0.340	A	0.297	A	0.453	A	0.385	0.088	0.089	0.045	N	N	N
5	Seaside Ave / Navy Wy A	A	0.427	A	0.316	A	0.541	A	0.494	A	0.383	A	0.596	0.068	0.067	0.055	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps[a]	A	0.112	A	0.244	A	0.142	A	0.114	A	0.258	A	0.153	0.002	0.014	0.011	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps[b]	A	0.435	A	0.519	A	0.499	A	0.455	A	0.528	A	0.499	0.020	0.009	0.000	N	N	N
8	Anaheim St / Harbor Ave[b]	A	0.453	A	0.455	A	0.560	A	0.518	A	0.478	A	0.566	0.065	0.023	0.006	N	N	N
9	Anaheim St / Santa Fe Ave[b]	A	0.473	A	0.508	A	0.578	A	0.503	A	0.519	A	0.585	0.030	0.011	0.007	N	N	N
10	Anaheim St / E I St / W 9th St[b]	A	0.501	A	0.525	A	0.529	A	0.548	A	0.561	A	0.542	0.047	0.036	0.013	N	N	N
11	Anaheim St / Farragut Ave[a]	A	0.277	A	0.228	A	0.286	A	0.326	A	0.268	A	0.305	0.049	0.040	0.019	N	N	N
12	Anaheim St / Henry Ford Ave[a]	A	0.300	A	0.416	A	0.560	A	0.391	A	0.468	A	0.592	0.091	0.052	0.032	N	N	N
13	Anaheim St / Alameda St[a]	A	0.361	A	0.325	A	0.468	A	0.418	A	0.391	A	0.468	0.057	0.066	0.000	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47 Ramps[a]	A	0.078	A	0.125	A	0.167	A	0.078	A	0.164	A	0.193	0.000	0.039	0.026	N	N	N
15	Harry Bridges Blvd / Broad Ave[a]	A	0.143	A	0.115	A	0.218	A	0.222	A	0.195	A	0.255	0.079	0.080	0.037	N	N	N
16	Harry Bridges Blvd / Avalon Blvd[a]	A	0.155	A	0.082	A	0.238	A	0.233	A	0.162	A	0.270	0.078	0.080	0.032	N	N	N
17	Harry Bridges Blvd / Fries Ave[a]	A	0.123	A	0.127	A	0.203	A	0.180	A	0.193	A	0.240	0.057	0.066	0.037	N	N	N
18	Harry Bridges Blvd / Neptune Ave[a]	A	0.053	A	0.028	A	0.127	A	0.125	A	0.100	A	0.163	0.072	0.072	0.036	N	N	N
19	Harry Bridges Blvd / Wilmington Blvd[a]	A	0.119	A	0.077	A	0.202	A	0.217	A	0.173	A	0.248	0.098	0.096	0.046	N	N	N
20	Harry Bridges Blvd / Figueroa St[a]	A	0.235	A	0.237	A	0.292	A	0.297	A	0.307	A	0.328	0.062	0.070	0.036	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp[a]	A	0.505	A	0.411	A	0.561	A	0.533	A	0.450	A	0.575	0.028	0.039	0.014	N	N	N
22	Pacific Coast Hwy / Santa Fe Ave[b]	C	0.773	B	0.699	D	0.821	C	0.787	C	0.745	D	0.854	0.014	0.046	0.033	N	N	N
23	Pacific Coast Hwy / Harbor Ave[b]	B	0.628	B	0.603	C	0.733	B	0.635	B	0.636	C	0.758	0.007	0.033	0.025	N	N	N
24	Sepulveda Blvd / Alameda St Ramp[c]	B	0.679	A	0.484	B	0.612	B	0.679	A	0.492	B	0.612	0.000	0.008	0.000	N	N	N
25	Intermodal Way / Sepulveda Blvd[c]	A	0.371	A	0.310	A	0.403	A	0.371	A	0.310	A	0.403	0.000	0.000	0.000	N	N	N
26	ICTF Drwy / Sepulveda Blvd[a]	A	0.193	A	0.369	A	0.425	A	0.201	A	0.411	A	0.432	0.008	0.042	0.007	N	N	N
27	Middle Rd / Sepulveda Blvd[a]	A	0.223	A	0.254	A	0.481	A	0.223	A	0.254	A	0.481	0.000	0.000	0.000	N	N	N
28	Sepulveda Blvd / SR-103[b]	A	0.318	A	0.330	A	0.491	A	0.356	A	0.358	A	0.509	0.038	0.028	0.018	N	N	N
29	Alameda St / Henry Ford Ave[a]	A	0.057	A	0.183	A	0.207	A	0.147	A	0.273	A	0.262	0.090	0.090	0.055	N	N	N
30	Alameda St / Pacific Coast Hwy Ramp[a]	A	0.439	A	0.368	A	0.598	A	0.478	A	0.401	B	0.619	0.039	0.033	0.021	N	N	N
31	Alameda St / Sepulveda Boulevard Ramp[c]	A	0.389	A	0.463	A	0.588	A	0.422	A	0.492	B	0.606	0.033	0.029	0.018	N	N	N
32	Alameda St / 223rd St Ramp[c]	A	0.509	A	0.484	A	0.565	B	0.607	B	0.621	B	0.611	0.098	0.137	0.046	N	N	N
33	Alameda St Ramp / 223rd St[a]	A	0.342	A	0.504	C	0.758	A	0.374	A	0.542	C	0.772	0.032	0.038	0.014	N	N	N
34	I-405 SB Ramps / 223rd St[a]	A	0.379	A	0.319	A	0.435	A	0.389	A	0.330	A	0.439	0.010	0.011	0.004	N	N	N
35	Gaffey St/1st St	D	0.860	n/a	n/a	D	0.825	D	0.861	n/a	n/a	D	0.828	0.001	n/a	0.003	N	n/a	N
36	Harbor Blvd / Swinford St / SR-47 EB Ramp	A	0.307	n/a	n/a	A	0.331	A	0.312	n/a	n/a	A	0.356	0.005	n/a	0.025	N	n/a	N

Notes:
a. City of Los Angeles intersection, analyzed using CMA methodology according to city standards.
b. City of Long Beach intersection analyzed using ICU methodology according to city standards.
c. City of Carson intersection analyzed using ICU methodology according to city standards.

Impact TRANS-3: The proposed Program would not cause an increase in onsite employees due to operations, which would then result in a significant increase in public transit use.

Impact TRANS-3 only pertains to operations, so construction impacts are not applicable for this evaluation.

Planning Areas ~~2~~ 1 – 4

Operations

The proposed appealable/fill projects (i.e., Berths 187-189 Liquid Bulk Relocation, Yang Ming Terminal Redevelopment, China Shipping Fill, Berth 300 Development, Tri Marine Expansion, 338 Cannery Street Adaptive Reuse, and Al Larson Marina) and land use changes would involve some increase in personnel during operations. Commuters in the Port tend to drive, meaning proposed appealable/fill projects under the PMPU would result in increases in traffic. Due to the need of many longshoremen and other Port workers for daily mobility since they work at different berths, public transit is generally not heavily utilized. The primary reason that workers generally would not use public transit is their work shift schedule. Most workers prefer to use a personal automobile to facilitate timely commuting. Also, Port workers' incomes are generally higher than similarly skilled jobs in other areas and higher incomes correlate to lower public transit usage. In addition, parking at the Port is readily available and free for employees, which encourages workers to drive to work. Further, some Port workers report first each day to union locations and are then are assigned to a Port terminal location. This requires the workers to have a car due since their work destination each day may vary. Finally, although there are 13 existing transit routes that serve the general vicinity surrounding the PMPU area, none of the existing routes stop within 1 mile of the PMPU Planning Areas with Port terminals.

The land use change associated with Warehouse No. 1 in Planning Area 1 would have increased transit utilization as estimated using the 2010 *Los Angeles County Congestion Management Program Appendix D Guidelines for Transportation Impact Analysis*:

- Multiply total trips generated by 1.4 to convert vehicle trips to person trips; and,
- For each time period, multiply nine percent for the primarily commercial land uses within ¼ mile of the CMP transit corridor.

The resulting transit trip generation is 550 daily transit trips, in the A.M. peak hour 5 inbound and 3 outbound transit trips, and in the P.M. peak hour 15 inbound and 20 outbound transit trips.

Impact Determination

Operations

Although the proposed appealable/fill projects and land use changes under the proposed Program would result in additional onsite employees, the increase in work-related trips using public transit would be negligible. Consequently, impacts on local transit services due to additional demand would be less than significant.

The transit demand associated with the Warehouse No. 1 land use change in Planning Area 1 is estimated as 550 daily transit trips, in the A.M. peak hour 5 inbound and 3 outbound transit trips, and in the P.M. peak hour 15 inbound and 20 outbound transit trips. Transit operators in San Pedro would be notified of this land use change and the potential increase of public transit use. However, the estimated level of ridership is not expected to significantly impact transit services.

Impact TRANS-4: The proposed Program would result in operations that would cause increases considered significant for freeway congestion.

Impact TRANS-4 only pertains to operations, so construction impacts are not applicable for this evaluation.

Planning Areas ~~2~~ 1 – 4

Operations

As noted above, the proposed land use change in Planning Area 1 includes changing existing institutional uses at Warehouse No. 1 to mixed use - institutional and/or visitor-serving commercial. The proposed appealable/fill projects in Planning Area 2 include the Berths 187-189 Liquid Bulk Relocation, Yang Ming Terminal Redevelopment, and China Shipping Fill. The Berths 187-189 Liquid Bulk Relocation Project would involve relocating liquid bulk storage from Slip 5 to Berths 191-194 in the East Basin. The proposed appealable/fill project in Planning Area 3 is the Berth 300 Development, which includes 18 acres of fill to be designated for container uses. The proposed appealable/fill projects in Planning Area 4 include the Tri Marine Expansion, 338 Cannery Street Adaptive Reuse, and Al Larson Marina. Likewise, additional proposed land use changes in Planning Areas 2 and 3 that would affect future operations include converting vacant land at an optional land use site on Mormon Island to liquid bulk in Planning Area 2; converting Berths 206-209 and 210-211 to mixed use; changing vacant land between Seaside Avenue and Reeves Avenue and south of Reeves Avenue to maritime support; changing the institutional area along Ferry Street to maritime support; converting liquid bulk in the area north of the TIWRP to container area; changing vacant land, commercial fishing, and industrial areas near Fish Harbor to container area; and the option of changing Berth 301 to a liquid bulk or container handling facility in Planning Area 3.

While the proposed appealable/fill projects and land use changes are not evenly distributed between planning areas, truck traffic associated with these projects would ultimately use the same freeways. The proposed appealable/fill projects would increase truck traffic on freeways in the vicinity of the Port, although more cargo is expected to be transported by rail in the future than has been the case in the past with existing development at the Port. These projects would also increase employment to some extent; however, as noted above, they would not be likely to substantially increase commuter traffic.~~Most proposed appealable/fill projects and land use changes would involve some increase in personnel during operations. Larger cargo volumes would also tend to increase truck traffic, although a larger fraction of cargo is expected to travel by rail in the future. Commuter and truck traffic associated with the proposed appealable/fill projects and land use changes under the PMPU would result in increases in traffic on the freeway system.~~

A traffic impact analysis was conducted for the following locations, consistent with requirements under the CMP TIA Guidelines (LACMTA 2010):

- CMP arterial monitoring intersections, including freeway on-ramp or off-ramp, where the program would add 50 or more trips during either the A.M. or P.M. weekday peak hours;
- CMP freeway monitoring locations where the program ~~would~~ could add 150 or more trips during either the A.M. or P.M. weekday peak hours. The freeway locations potentially affected by appealable/fill projects under the proposed Program are as follow:
  - I-110 south of C Street (CMP Station 1045);
  - SR-91 east of Alameda Street and Santa Fe Avenue (CMP Station 1033);
  - I-405 at Santa Fe Avenue (CMP Station 1066);
  - I-710 between PCH and Willow Street (CMP Station 1078);
  - I-710 between I-405 and Del Amo Boulevard (CMP Station 1079);
  - I-710 north of I-105 and north of Firestone Boulevard (CMP Station 1080);
  - I-710 north of Florence Avenue (as requested in Caltrans comments on the Draft PEIR);
  - SR-47 at Vincent Thomas Bridge; and,
  - SR 47 at Commodore Schuyler Heim Bridge.

As prescribed in the *Guide For The Preparation of Traffic Impact Studies* (Caltrans 2002) for general plan amendments/updates, the general plan update is to be compared to the current general plan. The Port's PMP serves as the City of Los Angeles' long-term area plan for the Port district, similar to a City of Los Angeles Community Plan component of the General Plan. Therefore, the LOS results shown in the Draft PEIR (Table 4.2-7) represent the required Caltrans traffic analysis scenario, which compared the PMPU with the existing PMP under future conditions. However, to ensure full compliance with CEQA, traffic conditions with the PMPU, under CEQA baseline conditions, also were analyzed.

The proposed appealable/fill projects and land use changes under the proposed Program would result in additional truck trips on the surrounding freeway system. Tables 3.12-19 and 3.12-20 identify the change in LOS at freeway monitoring locations due to the proposed Program compared to baseline.

Table 3.12-19. CEQA Baseline vs. Proposed Program Freeway Analysis – A.M. Peak Hour

Fwy.	*Location*	*Capacity*	*Northbound/Eastbound*								*Southbound/Westbound*							
			CEQA Baseline			*CEQA Baseline Plus Program*			Δ *D/C*	*Proj Imp*	*CEQA Baseline*			*CEQA Baseline Plus Program*			Δ *D/C*	*Proj Imp*
			Demand	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*			*Demand*	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*		
I-110	Wilmington, s/o "C" St.	8,000	4,375	0.55	C	4,555~~4,540~~	0.57	C	0.02	No	3,375	0.42	B	3,570~~3,540~~	0.45~~44~~	B	0.03~~02~~	No
SR-91	e/o Alameda Street/Santa Fe Ave	12,000	6,060	0.51	B	6,115	0.51	B	0.00~~0.01~~	No	10,660	0.89	D	10,685~~10,680~~	0.89	D	0.00	No
I-405	Santa Fe Ave.	10,000	11,535	1.15	F(0)	11,545	1.15	F(0)	0.00	No	9,545	0.95	E	9,550	0.96	E	0.01~~00~~	No
I-710	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,770	0.96	E	6,045	1.01	F(0)	0.05	Yes	6,690	1.12	F(0)	6,935	1.16	F(0)	0.04	Yes
I-710	n/o Jct Rte 405, s/o Del Amo	8,000	6,370	0.80	D	6,640	0.83	D	0.03	No	7,805	0.98	E	8,050	1.01	F(0)	0.03	Yes
I-710	n/o Rte 105, n/o Firestone	8,000	8,175	1.02	F(0)	8,375	1.05	F(0)	0.03	Yes	9,285	1.16	F(0)	9,440	1.18	F(0)	0.02	No
I-710	n/o Florence Avenue	8,000	7,710	0.96	E	7,880	0.99	E	0.03	No	8,760	1.10	F(0)	8,900	1.11	F(0)	0.01	No
SR-47	Vincent Thomas Bridge	4,000	2,445	0.61	C	2,590	0.65	C	0.04	No	2,100	0.53	B	2,210	0.55	C	0.02~~3~~	No
SR-47	Commodore Schuyler Heim Bridge	6,000~~4,000~~	305	0.05	A	565	0.09	A	0.04	No	590	0.10	A	830	0.14	A	0.04	No
*Supplemental Select Zone Analysis Locations**			*Max Project Increment Before Significant Imp*			*Project Increment*			Δ *D/C*	*Sig Imp*	*Max Project Increment Before Significant Imp*			*Project Increment*			Δ *D/C*	*Sig Imp*
I-405	n/o I-110	10,000	150			35			0.00	No	150			25			0.00	No
SR-91	e/o Lakewood Blvd.	10,000	150			140			0.01	No	150			80			0.01	No
SR-60	e/o Jct 605	12,000	180			30			0.00	No	180			25			0.00	No
I-105	e/o Bellflower Bl, w/o I-605	8,000	120			60			0.01	No	120			50			0.01	No
I-110	Manchester Bl	12,000	180			85			0.01	No	180			85			0.01	No
I-605	n/o Telegraph Rd	10,000	150			80			0.01	No	150			65			0.01	No
I-710	s/o SR-60	8,000	120			20			0.00	No	120			10			0.00	No

Notes: *Full impact analysis not performed for these locations; instead, the maximum project increment before the increment becomes a significant impact was calculated for each location and was compared to the project increment shown on the Select Zone Analysis.

Table 3.12-20. CEQA Baseline vs. Proposed Program Freeway Analysis – P.M. Peak Hour

Fwy.	*Location*	*Capacity*	*Northbound/Eastbound*								*Southbound/Westbound*							
			CEQA Baseline			*CEQA Baseline Plus Program*			*Δ D/C*	*Proj Imp*	*CEQA Baseline*			*CEQA Baseline Plus Program*			*Δ D/C*	*Proj Imp*
			Demand	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*			*Demand*	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*		
I-110	Wilmington, s/o "C" St.	8,000	2,490	0.31	A	2,730~~2,645~~	0.34~~0.33~~	A	0.03~~02~~	No	4,205	0.53	B	4,445~~4,355~~	0.56~~0.54~~	C	0.03~~0.02~~	No
SR-91	e/o Alameda Street/Santa Fe Ave	12,000	8,925	0.74	C	8,965~~8,955~~	0.75	C	0.01~~0~~	No	7,205	0.60	C	7,220~~7,210~~	0.60	C	0.00	No
I-405	Santa Fe Ave.	10,000	9,865	0.99	E	9,870	0.99	E	0.00	No	11,160	1.12	F(0)	11,165	1.12	F(0)	0.00	No
I-710	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,950	0.99	E	6,170	1.03	F(0)	0.04	Yes	5,660	0.94	E	5,840	0.97	E	0.03	No
I-710	n/o Jct Rte 405, s/o Del Amo	8,000	7,740	0.97	E	7,960	1.00	E	0.03	No	6,785	0.85	D	6,925	0.87	D	0.02	No
I-710	n/o Rte 105, n/o Firestone	8,000	9,120	1.14	F(0)	9,275~~270~~	1.16	F(0)	0.02	~~No~~Yes	9,105	1.14	F(0)	9,195~~9,190~~	1.15	F(0)	0.01	No
I-710	n/o Florence Avenue	8,000	8,600	1.08	F(0)	8,735	1.09	F(0)	0.01	No	8,590	1.07	F(0)	8,670	1.08	F(0)	0.01	No
SR-47	Vincent Thomas Bridge	4,000	2,560	0.64	C	2,655	0.66	C	0.02	No	2,930	0.73	C	3,035	0.76	C	0.03	No
SR-47	Commodore Schuyler Heim Bridge	~~4~~6,000	830	0.14	A	1,015	0.17	A	0.03	No	655	0.11	A	800	0.13	A	0.02	No
*Supplemental Select Zone Analysis Locations**			*Max Project Increment Before Significant Imp*			*Project Increment*			*Δ D/C*	*Sig Imp*	*Max Project Increment Before Significant Imp*			*Project Increment*			*Δ D/C*	*Sig Imp*
I-405	n/o I-110	10,000	150			45			0.00	No	150			25			0.00	No
SR-91	e/o Lakewood Blvd.	10,000	150			110			0.01	No	150			55			0.01	No
SR-60	e/o Jct 605	12,000	180			25			0.00	No	180			15			0.00	No
I-105	e/o Bellflower Bl, w/o I-605	8,000	120			60			0.01	No	120			30			0.00	No
I-110	Manchester Bl	12,000	180			100			0.01	No	180			105			0.01	No
I-605	n/o Telegraph Rd	10,000	150			60			0.01	No	150			35			0.00	No
I-710	s/o SR-60	8,000	120			20			0.00	No	120			5			0.00	No

Notes: *Full impact analysis not performed for these locations; instead, the maximum project increment before the increment becomes a significant impact was calculated for each location and was compared to the project increment shown on the Select Zone Analysis.

The analysis shows that the proposed Program would cause an increase of 0.02 or more of the D/C ratio at three freeway link locations operating at LOS F or worse, and exceed the threshold of significance of the CMP. Proposed appealable/fill projects under the proposed Program would result in significant freeway impacts relative to the CEQA baseline conditions at the following locations:

- I-710 north of PCH – northbound A.M. Peak Hour; southbound A.M. Peak Hour; northbound P.M. Peak Hour;
- I-710 north of I-405, south of Del Amo Boulevard – southbound A.M. Peak Hour; and,
- I-710 north of I-105, north of Firestone Boulevard – northbound A.M. Peak Hour; southbound A.M. Peak Hour; northbound P.M. Peak Hour.

The freeway link along I-710 between PCH and Firestone Boulevard is forecast to have more than 150 proposed Program-associated trips and operate at LOS F. That section of I-710 is a component of a broader I-710 Corridor EIS/EIR analyzing the range of possible improvement alternatives for the 18-mile I-710 corridor between the Port and the Port of Long Beach and the Pomona Freeway (SR-60) being conducted by Metro, Caltrans and five other agencies. The recently released I-710 Draft EIR/EIS (Caltrans and LACMTA 2012) identifies improvements to the corridor to accommodate all future year (2035) regional traffic. The Draft EIR/EIS analyses were based on a projected Port/Port of Long Beach container cargo forecast of 43.2 million TEUs (Caltrans and LACMTA 2012). The projected future year 2035 combined ports (Port and the Port of Long Beach) container forecast analyzed in this Draft PEIR is 42.8 million TEU, including the increment associated with the proposed Program. Therefore, the proposed Program is consistent with the I-710 Draft EIR/EIS since the proposed I-710 Corridor improvements will have accounted for the incremental traffic associated with the proposed Program. The final I-710 Corridor EIS/EIR is scheduled to be approved by Caltrans in July ~~the first quarter of 2013~~2016. However, to be conservative in analyzing potential impact from the proposed Program, the I-710 Corridor improvements were not assumed in this analysis.

It should be noted that the Port is voluntarily collaborating with the state in addressing future traffic conditions on the I-710, as a ~~funding and technical~~ partner with Caltrans and Metro. The LAHD contributed $5 million for the Project Approval/Environmental Documentation (PA/ED) phase, and participates directly and extensively by providing technical guidance/input for preliminary engineering; the Administrative, Draft, and Final EIR/EIS; and the Caltrans Project Report. This input also is provided on all technical studies, including -but not limited to: air quality, transportation, goods movement, rail/intermodal, and, alternative technology. For these studies, the LAHD provided all Port and Port of Long Beach traffic volumes for direct incorporation into the I-710 Corridor Project EIR/EIS model (which is a focus model of the SCAG RTP model). These projections are consistent with the PMPU Draft PEIR analyses. Additionally, the Port and Port of Long Beach jointly conducted several alternative technology (ZECMS) studies which guided the I-710 Corridor Project EIR/EIS studies, and ultimately led to the recommendation of a separate truckway with zero emission technology.~~The recently released I-710 Draft EIR/EIS (Caltrans and LACMTA 2012) identifies improvements to the corridor to accommodate all future year (2035) regional traffic. The Draft EIR/EIS analyses~~

~~were based on a projected Port/Port of Long Beach container cargo forecast of 43.2 million TEUs (Caltrans and LACMTA 2012). The projected future year 2035 combined ports (Port and the Port of Long Beach) container forecast analyzed in this Draft PEIR is 42.8 million TEU, including the increment associated with the proposed Program. Therefore, the proposed Program is consistent with the I-710 Draft EIR/EIS since the proposed I-710 Corridor improvements will have accounted for the incremental traffic associated with the proposed Program.~~

Impact Determination

Operations

The I-710 Corridor Project Recirculated Draft EIR/EIS (Caltrans and LACMTA 2012) is currently being prepared, and will identify improvements to the corridor to accommodate all future year (2035) regional traffic, including Year 2035 Port and Port of Long Beach traffic. As such, the I-710 Corridor Project EIS/EIR would address traffic impacts of the overall Port area and regional growth on the I-710 corridor, which encompasses the significant impact determined as part of this analysis for the proposed Program. However, until the I-710 Corridor Project is implemented the proposed Program would cause significant impacts to three freeway study locations along the I-710, as noted above.

As described previously, the LAHD is voluntarily collaborating with the state in addressing future traffic conditions on the I-710, as a partner with Caltrans and Metro. Because the I-710 Corridor Project has not yet been approved, and because there is currently no funding mechanism allowing projects to contribute pro-rata mitigation funding for needed infrastructure improvements to that freeway, it is not currently feasible to mitigate impacts to the I-710 by contributing mitigation funding for that purpose. Nevertheless, if the I-710 Corridor Project, or components thereof, is approved for construction, and if a mechanism for the contribution of mitigation funding for the I-710 Corridor Project comes into existence, the LAHD will consider the need for and feasibility of contribution toward funding that project in the future, in connection with subsequent project-specific environmental review for the proposed appealable/fill projects and land use changes under the PMPU. Any such funding would be in addition to revenue from tolls on the truck facility and funds from other public sources, including Metro (e.g., Measure R, CMAQ, RTSP, etc.), the federal, and/or the state government. The LAHD is also providing input to Metro's private-public partnership study, which includes tolls as a fund source.

~~If the entire I-710 Corridor Project, or components thereof, is approved for construction, the Port may voluntarily contribute funding in the future. This funding would be in addition to revenue from tolls on the truck facility and funds from other public sources such as Metro (e.g., Measure R, CMAQ, RTSP, etc.), the federal, and/or the state government. The Port is also providing input to Metro's private-public partnership study, which includes tolls as a fund source. As such, the I-710 Corridor EIS/EIR would address the traffic impact of overall Port area and regional growth on the I-710 corridor, which encompasses the significant impact determined as part of this analysis for the proposed Program. Until the I-710 Corridor Project is implemented, the proposed Program would cause a significant impact to the three freeway study locations along the I-710.~~

Mitigation Measures

This PEIR determined that development of the proposed appealable/fill projects and land use changes under the PMPU, in aggregate, would have a potential significant impact at three locations that are undergoing detailed design-level analysis as part of the I-710 Corridor Project Recirculated Draft EIR/EIS. Given that the I-710 Corridor Project EIR/EIS is still in development, along with the associated specific freeway and arterial street improvement projects, it would be inappropriate and infeasible at present to identify alternative Program-level specific mitigation measures. This is because such measures could be in conflict with the needs of the agency partners while those agencies are collaborating on detailed planning and design of the I-710 Corridor Project. Furthermore, it is possible that the degradation of operating conditions on the I-710 attributable to the PMPU could be ameliorated by implementation of the I-710 Corridor Project.

Furthermore, the proposed appealable/fill projects under the PMPU are in preliminary planning stages. Therefore, it is not possible at present to accurately describe or predict particular alternative infrastructure improvements that would be both feasible and effective at avoiding or reducing any significant freeway traffic impacts of any particular development projects or land use changes under the proposed Program. This is because the type of development, timing of development, and conditions at the time in which development would occur are not currently known. Therefore, as future planning efforts occur for the proposed appealable/fill projects and development resulting from land use changes under the PMPU, separate environmental documentation with detailed traffic analyses would be prepared, if required under CEQA, to determine specific impacts associated with proposed development and mitigation would be applied, as necessary and as feasible.

Accordingly, although implementation of the I-710 Corridor Project is beyond the LAHD's authority, although project-specific mitigation funding for the I-710 Corridor Project is not currently feasible, and although it is premature to identify alternative infrastructure improvements which could feasibly mitigate significant traffic impacts of development under the PMPU, the following measure would be implemented, as required under CEQA, for the proposed appealable/fill projects and land use changes under the proposed Program which are determined to cause a significant freeway impact to the I-710.

~~The following mitigation measure would be implemented, as applicable, for the proposed appealable/fill projects and land use changes under the proposed Program. Project-specific environmental documents may adjust this mitigation measure as necessary to respond to project-specific conditions.~~

MM TRANS-1: ~~Implement~~ I-710 Corridor ~~Project~~Improvements. Project-specific environmental documentation would be completed for projects occurring under the PMPU to determine project-specific impacts to the I-710. For significantly impacted locations determined in subsequent project-specific environmental documents, LAHD would collaborate with Caltrans and other agencies to identify how potential regional infrastructure improvements are funded. If the I-710 Corridor Project is not yet approved or has been abandoned at the time of consideration of future project-specific approvals under the PMPU, subsequent environmental documents for such development will evaluate whether alternative infrastructure

improvements would be both feasible and necessary to mitigate any potential significant impacts of such projects.

~~LAHD shall collaborate with Caltrans and Metro to secure funding and ensure timely implementation of the I-710 Corridor project by 2035 to alleviate the effects of future Port area and regional traffic growth on the I-710.~~

~~Mitigation measures such as lane additions or other potential freeway modifications that arise from the I-710 EIS/EIR may be sufficient to alleviate the LOS deficiency. However, it is not known at this time if this will be the case. Also, schedules for completion of the proposed appealable/fill projects and land use changes are not known at this time, and all of them will have project-specific environmental documentation conducted to readdress these potential impacts. Therefore, additional mitigation measures may need to be considered in those documents.~~

Residual Impacts

Unless or until the I-710 Corridor Project is approved and constructed, ~~R~~residual impacts would be significant and unavoidable ~~if the I-710 Corridor Project is not implemented by 2035.~~ .

Impact TRANS-5: The proposed Program would not result in operations that would cause a significant impact in vehicular delay at railroad grade crossings.

Impact TRANS-5 only pertains to operations, so construction impacts are not applicable for this evaluation.

Planning Areas ~~2~~ 1– 4

Operations

As noted above, the proposed land use change in Planning Area 1 includes changing existing institutional uses at Warehouse No. 1 to mixed use - institutional and/or visitor-serving commercial. The proposed appealable/fill projects in Planning Area 2 are the Berths 187-189 Liquid Bulk Relocation, Yang Ming Terminal Redevelopment, and China Shipping Fill. The Berths 187-189 Liquid Bulk Relocation Project would involve relocating bulk liquid storage from Slip 5 to Berths 191-194 in the East Basin. The proposed appealable/fill project in Planning Area 3 is the Berth 300 Development, which involves 18 acres of fill to be designated for container uses. Proposed appealable/fill projects in Planning Area 4 are the Tri Marine Expansion, 338 Cannery Street Adaptive Reuse, and Al Larson Marina. Likewise, a number of proposed land use changes in Planning Areas 2 and 3, such as converting vacant land at an optional land use site on Mormon Island to liquid bulk or break bulk in Planning Area 2; converting Berths 206-209 and Berths 210-211 to mixed use; changing the vacant land between Seaside Avenue and Reeves Avenue and south of Reeves Avenue to maritime support; changing institutional area along Ferry Street to maritime support; converting liquid bulk in the area north of the TIWRP to container area; changing vacant land, commercial fishing, and industrial areas near Fish Harbor to container area; and the option of changing Berth 301 to a

liquid bulk or container handling facility in Planning Area 3, would affect future operations at the Port. As the analysis below demonstrates, the proposed appealable/fill projects in Planning Area 2, in particular, would increase train movements at the Henry Ford Avenue grade crossing.

Impact TRANS-6: The proposed Program would not substantially increase hazards due to a design feature or incompatible uses.

Planning Areas ~~2~~ 1 – 4

Construction and Operations

Proposed appealable/fill projects in Planning Areas 2 through 4 are the Berths 187-189 Liquid Bulk Relocation, Yang Ming Terminal Redevelopment, China Shipping Fill, Berth 300 Development, Tri Marine Expansion, 338 Cannery Street Adaptive Reuse, and Al Larson Marina. Some of the proposed appealable/fill projects would involve modifications to entry or egress from existing roadways in the Port. While the proposed appealable/fill projects could result in design changes relative to transportation ingress/egress, such changes would be designed in accordance with building and safety code requirements and any new access roads or driveways would need to meet LADOT and Port engineering requirements. All design changes would be subject to review prior to permitting or leasing. Likewise there are a number of land use changes in Planning Areas ~~2~~ 1 through 4 that would affect future operations at the Port, and new development would be subject to building and safety code requirements.

Impact TRANS-7: The proposed Program would not result in inadequate emergency access.

Planning Areas ~~2~~ 1 – 4

Impact TRANS-8: The proposed Program would not conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Planning Areas ~~2~~ 1 – 4

Construction and Operations

Construction and operation of the proposed appealable/fill projects and development associated with proposed land use changes in Planning Areas ~~2~~ 1 through 4 would be subject to a comprehensive review of adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities to ensure that they do not decrease the performance or safety of such facilities.

Impact TRANS-9: The proposed Program would not result in inadequate parking capacity.

Planning Areas ~~2~~ 1 – 4

Construction and Operations

Most of the proposed appealable/fill projects and development resulting from proposed land use changes in Planning Areas ~~2~~ 1 through 4 would involve some increase in personnel during construction and operations which would increase commuter traffic to some extent and the need for parking. However, parking is not currently limited within the Port and the large areas associated with marine terminals typically provide sufficient parking. In addition, the Port currently has excess parking available at many of its terminals. Future development associated with the proposed appealable/fill projects and land use changes would meet parking code requirements based on its land use designation and zoning through the incorporation of appropriate design features and/or parking management plans.

3.2.15.7 Section 3.12.3.2.3, Impacts and Mitigation

Impact VT-1: The proposed Program would not interfere with the operation of designated vessel traffic lanes and/or adversely affect the safety of vessels navigating within the Port of Los Angeles and its approaches.

Planning Areas ~~2~~ 1 – 4

The proposed land use change in Planning Area 1 includes changing existing institutional uses at Warehouse No. 1 to mixed use - institutional and/or visitor-serving commercial.

3.2.15.8 Table 3.12-27, Summary Matrix of Potential Impacts and Mitigation Measures for Transportation and Circulation Associated With the Proposed Program

Table 3.12-27. Summary Matrix of Potential Impacts and Mitigation Measures for Transportation and Circulation Associated With the Proposed Program

Environmental Impacts	*Impact Determination*	*Mitigation Measures*	*Impact after Mitigation*
		Operations	
TRANS-4: Operation of the proposed Program would cause increases considered significant for freeway congestion.	Significant	**MM TRANS-1: ~~Implement the~~ I-710 Corridor ~~Project~~Improvements.** Project-specific environmental documentation would be completed for projects occurring under the PMPU to determine project-specific impacts to the I-710. For significantly impacted locations determined in subsequent project-specific environmental documents, LAHD would collaborate with Caltrans and other agencies to identify how potential regional infrastructure improvements are funded. If the I-710 Corridor Project is not yet approved or has been abandoned at the time of consideration of future project-specific approvals under the PMPU, subsequent environmental documents for such development will evaluate whether alternative infrastructure improvements would be both feasible and necessary to mitigate any potential significant impacts of such projects. ~~LAHD shall collaborate with Caltrans and Metro to secure funding and ensure timely implementation of the I-710 Corridor project by 2035 to alleviate the effects of future Port area and regional traffic growth on the I-710.~~ ~~Mitigation measures such as lane additions or other potential freeway modifications that arise from the I-710 EIS/EIR may be sufficient to alleviate the LOS deficiency. However, it is not known at this time if this will be the case. Also, schedules for completion of the proposed appealable/fill projects and land use changes are not known at this time, and all of them will have project-specific environmental documentation conducted to readdress these potential impacts. Therefore, additional mitigation measures may need to be considered in those documents.~~	Significant and unavoidable

3.2.16 Changes Made to Section 3.13, Utilities

Section 3.13, Utilities, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site, in particular modifying Table 3.13-1, Table 3.13-2, and Table 3.13-3.

3.2.16.1 Section 3.13.4.1.1, Water Supply

Table 3.13-1. Predicted Water Demand for the Proposed Program

Planning Area	*PMPU Land Use Designation*	*General Land Use*	*Area[a] (square feet)*	*Water Consumption Rate[b] (gpd/ 1,000 square feet)*	*Water Demand (mgd)*	*Water Demand (AFY)*
Planning Area 1	Institutional	Office	-239,580	167	-0.04	-45
	Visitor Serving Comm	Museum	239,580	167	0.04	45
				Planning Area 1 Subtotal	**0.00**	**0**
Planning Area 2	Container	Warehouse	1,446,192	22	0.03	36
	Break Bulk	Warehouse	-87,120	22	0.00	-2
	Liquid Bulk	Warehouse	17,424	22	0.00	0
	Dry Bulk	Warehouse	-152,460	22	0.00	-4
	Institutional	Office	-209,088	167	-0.03	-39
	Industrial	Industrial	-8,712	89	0.00	-1
				Planning Area 2 Subtotal	**0.010.00**	**-90**
Planning Area 3	Container	Warehouse	11,138,292	22	0.25	277
	Liquid Bulk	Warehouse	-723,096	22	-0.02	-18
	Commercial Fishing	Industrial	-87,120	89	-0.01	-9
	Dry Bulk	Warehouse	-1,158,696	22	-0.03	-29
	Maritime Support	Industrial	2,783,484	89	0.25	277
				Planning Area 3 Subtotal	**0.44**	**499**
Planning Area 4	Break Bulk	Industrial	-771,012	22	-0.02	-19
	Liquid Bulk	Industrial	-43,560	22	0.00	-1
	Commercial Fishing	Office	1,655,280	89	0.15	165
	Maritime Support	Industrial	1,006,236	89	0.09	100
	Institutional	Office	-78,408	150	-0.01	-13
				Planning Area 4 Subtotal	**0.21**	**231**
				Total	**0.640.65**	**721730**

Notes*: gpd*- gallons per day; *mgd* – millions of gallons per day; *AFY* – acre-feet per year

a. Areas are based on the change (net increase or loss) of acreage resulting from the PMPU. Areas are also based on the overall land use category of the land to be developed or converted, not individual buildings. Development of the project sites will include parking areas as well as others that have minimal water demands. These estimates are conservative and may overestimate the projected increase in water demands.

b. Sewer Generation Rates from City of Los Angeles 2006 – Appendix M multiplied by 111 percent.

3.2.16.2 Section 3.13.4.1.2, Wastewater

Table 3.13-2. Predicted Wastewater Generation

Planning Area	*PMPU Land Use Designation*	*General Land Use*	*Area[a] (square feet)*	*Sewer Generation Factor[b] (gpd/1,000 square feet)*	*Wastewater Generation (mgd)*
Planning Area 1	Institutional	Office	-239,580	150	-0.04
	Visitor Serving Comm	Museum	239,580	150	0.04
				Planning Area 1 Subtotal	**0.00**
Planning Area 2	Container	Warehouse	1,446,192	20	0.03
	Break Bulk	Warehouse	-87,120	20	0.00
	Liquid Bulk	Warehouse	17,424	20	0.00
	Dry Bulk	Warehouse	-152,460	20	0.00
	Institutional	Office	-209,088	150	-0.03
	Industrial	Industrial	-8,712	80	0.00
				Planning Area 2 Subtotal	**-0.01~~00.00~~**
Planning Area 3	Container	Warehouse	11,138,292	20	0.22
	Liquid Bulk	Warehouse	-723,096	20	-0.01
	Commercial Fishing	Industrial	-87,120	80	-0.01
	Dry Bulk	Warehouse	-1,158,696	20	-0.02
	Maritime Support	Industrial	2,783,484	80	0.22
				Planning Area 3 Subtotal	**0.40**
Planning Area 4	Break Bulk	Industrial	-771,012	20	-0.02
	Liquid Bulk	Industrial	-43,560	20	0.00
	Commercial Fishing	Office	1,655,280	80	0.13
	Maritime Support	Industrial	1,006,236	80	0.08
	Institutional	Office	-78,408	150	-0.01
				Planning Area 4 Subtotal	**0.18**
				Total	**0.58~~59~~**

Notes: *gpd*- gallons per day; *mgd* – millions of gallons per day

a. Areas are based on the change (net increase or loss) of acreage resulting from the PMPU. Areas are also based on the overall land use category of the land to be developed or converted, not individual buildings. Development of the project sites will include parking areas as well as other non-wastewater generation land uses. By using the overall land use category, these estimates may overestimate the projected increase in wastewater generation.

b. City of Los Angeles 2006 – Appendix M.

3.2.16.3 Section 3.13.4.1.4, Solid Waste

Table 3.13-3. Predicted Solid Waste Generation

	Planning Area 1	*Planning Area 2*	*Planning Area 3*	*Planning Area 4*	*Total*
Net Development (acres)	0	24.3	274.4	40.6	339.30
Generation Factor*	0.372	0.372	0.372	0.372	0.372
Total Solid Waste (tons/year)	0	9.0	102.1	15.1	126.2
Total Solid Waste (tons/day)	0	0.025	0.280	0.041	0.346
Chiquita Canyon Landfill Permitted Throughput (tons/day)	6,000	6,000	6,000	6,000	6,000
Chiquita Canyon Landfill Permitted Throughput (Percent)	0.0	0.0004	0.0047	0.0007	0.0058
Sunshine Canyon Permitted Throughput (tons/day)	5,500	5,500	5,500	5,500	5,500
Sunshine Canyon Landfill Permitted Throughput (percent)	0.0	0.0005	0.0051	0.0008	0.0063

Source: *Solid waste generation for terminals provided by LAHD.

3.2.16.4 Section 3.13.4.3, Impacts and Mitigation

Impact UT-1: The proposed Program would not result in a substantial increase in wastewater flows that would exceed the wastewater treatment requirements of the Los Angeles RWQCB or the capacity of existing treatment facilities.

Planning Area 1

Construction

The proposed Program would designate Warehouse No. 1 in Planning Area 1 as a mixed land use site that would allow institutional and/or visitor-serving commercial uses. Conversion to a visitor-serving commercial use could involve upgrading plumbing at existing facilities and could require modifying existing wastewater systems and constructing new infrastructure to connect to new buildings. These activities would require temporary shutdown of the plumbing within the affected buildings as upgrades are implemented and would preclude use of these fixtures during this time. However, portable temporary facilities would be available for construction workers. Waste from such facilities would be hauled away and disposed of in accordance with Los Angeles RWCQB regulations. Construction associated with the proposed land use change would not result in increased wastewater flows that would exceed existing capacity.

Operations

Conversion of Warehouse No. 1 to a visitor-serving commercial use would result in no net change in wastewater generation compared to existing institutional uses (Table 3.13-2). Wastewater generated from the Warehouse No. 1 area would be conveyed to and treated at the TIWRP. Land use changes would not result in increased wastewater flows that would exceed existing capacity.

Impact UT-2: The proposed Program would not result in a substantial increase in water demand that would exceed the water supplies available from existing entitlements and resources, and new or expanded facilities or entitlements would not be required.

Planning Area 1

Construction

The proposed Program would designate Warehouse No. 1 in Planning Area 1 as a mixed land use site that would allow institutional and/or visitor-serving commercial uses. Conversion to a visitor-serving commercial use would use water for various purposes, such as dust suppression, mixing and pouring concrete, and other construction-related activities. Typically, the majority of water use during construction is associated with dust suppression during grading or trenching, which is generally performed by water trucks. Water usage during construction would be temporary and insubstantial and would not exceed the existing supply.

Operations

Conversion of Warehouse No. 1 to a visitor-serving commercial use would result in no net change in water use compared to existing institutional uses (Table 3.13-1). All proposed land use changes would be designed in accordance with LAHD's Green Building Policy, the City of Los Angeles Green LA Action Plan, and LAMC, ensuring implementation of water/energy efficiency designs and material reuse. Operation of the proposed land use change at Warehouse No. 1 would not result in increased water demand that would exceed the existing supply.

Impact UT-3: The proposed Program would not generate substantial surface runoff that would exceed the capacity of existing municipal storm drain systems.

Planning Area 1

Construction

The proposed Program would designate Warehouse No. 1 in Planning Area 1 as a mixed land use site that would allow institutional and/or visitor-serving commercial uses. Conversion to a visitor-serving commercial use would be managed in accordance with the project's construction SWPPP, prepared in compliance with CWA NPDES, to avoid flooding and uncontrolled runoff requirements (refer to Section 3.14, Water Quality, Sediments, and Oceanography for additional details). Stormwater runoff volumes from this site are not expected to exceed the capacity of storm drain systems.

Operations

Storm drains within the PMPU area have sufficient capacity to accommodate current demands and are designed to accommodate 10-year storm events. Storm drain improvements may be required on a project specific basis. The proposed Warehouse No. 1 land use change could require installation and expansion of stormwater drainage facilities necessary to accommodate stormwater runoff.

The proposed land use change in Planning Area 1 could result in minor changes in stormwater runoff volumes due to differences in site permeability. However, these differences would not be substantial and would not exceed the capacity of the existing storm drain systems.

The proposed land use change in Planning Area 1 would implement LID and LEED requirements that include design features for reducing impervious cover and increasing infiltration (e.g., through porous paving or other permeable surface), increasing evapotranspiration (e.g., by increased use of vegetation), and capturing, treating, and re-using stormwater runoff (e.g., through the use of bioswales, retention basins, and cisterns). Facilities would be constructed in accordance with the requirements of the Municipal Storm Water NPDES Permit (NPDES Permit No. CAS004001), SUSMP regulations, and LAMC requirements (e.g., LID), which specify similar design and operational measures to reduce runoff. These measures would reduce runoff from the Warehouse No. 1 area compared to baseline conditions.

Impact UT-4: The proposed Program would not result in an increase in solid waste generation due to project operations that would exceed the capacity of existing solid waste handling and disposal facilities.

Planning Area 1

Construction

Construction and demolition activities associated with the conversion Warehouse No. 1 in Planning Area 1 to a visitor-serving commercial use would generate debris including asphalt, concrete, building materials, and solids. In 2010, the LAHD achieved a 99 percent diversion rate for construction debris through its construction recycling program. Assuming similar diversion rates would be achieved for this land use change, the quantity of debris from construction and demolition that would require solid waste disposal would be relatively small and would not exceed the capacity of existing solid waste handling and disposal facilities.

In the event that unidentified hazardous materials are encountered during construction associated with the conversion of Warehouse No. 1 to a visitor-serving commercial use, LAHD would consider feasible recycling options. However, if recycling is not an option, disposal of hazardous materials at a Class I landfill would be in accordance with facility and hazardous material requirements.

Operations

The proposed land use change in Planning Area 1 is estimated to cause no net change in the generation of solid waste (Table 3.12-3). To ensure adequate long-term solid waste management, the proposed land use change would be required to comply with policies and standards set forth in the city's solid waste plans, including the city's Solid Waste IRP that is currently under preparation. The city is pursuing Zero-Waste solutions in the city, which could result in substantial reductions in solid waste disposal volumes, thereby preserving the capacity of existing landfills over an extended time period. Operation of the proposed land use change would also be

required to comply with applicable waste diversion requirements, as well as all existing hazardous waste laws and regulations.

Impact UT-5: The proposed Program would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.

Planning Area 1

Construction

Energy (diesel fuel and electricity) would be used during construction associated with the conversion of Warehouse No. 1 in Planning Area 1 to a visitor-serving commercial use. Energy expenditures during construction activities would be short-term, occurring periodically during project-specific construction phases. Construction associated with this land use change would not result in substantial waste or inefficient use of energy because construction would be competitively bid, which would facilitate efficiency in all construction stages. Current LAHD bid specifications include provisions to reduce energy consumption, such as staging work during non-peak hours when appropriate.

Operations

The land use change in Planning Area 1 would incorporate energy-efficient designs that are mandated by current building codes and LAHD policies (e.g., LEED, LAHD's Green Building Policy, the City of Los Angeles Green LA Action Plan, and LAMC). LAHD policies, such as LEED, aim to make construction and development projects more energy efficient. To accomplish this goal, LAHD has committed to design any new building over 7,500 square feet with a minimum LEED Gold or Silver certification, depending on the type of building. As such, energy efficiency standards would be incorporated into the improvements of Warehouse No. 1 to decrease energy demands. Additionally, any modifications to Warehouse No. 1 would incorporate energy conservation measures in compliance with CBC Title 24 that requires energy efficiency standards for additions, alterations, and repairs to nonresidential buildings.

3.2.17 Changes Made to Section 3.14, Water Quality, Sediments, and Oceanography

Section 3.14, Water Quality, Sediments, and Oceanography, was modified to evaluate potential impacts associated with designating Warehouse No. 1 in Planning Area 1 to a mixed land use site.

3.2.17.1 Section 3.14.4.3, Impacts and Mitigation

Impact WQ-1: The proposed Program would not cause violations of any water quality standard or waste discharge requirement, or create a condition of pollution, contamination or nuisance as defined in California Water Code §13050.

Planning Area 1

Construction

The only construction in Planning Area 1 would be potential structural upgrades of Warehouse No. 1 associated with a land use change from institutional to mixed use (institutional and/or visitor-serving commercial). Although the details of potential construction activities presently are unknown, it is not expected that they would involve any in-water work such as dredging or pile installation. Construction would require coverage under the General Construction Activities Storm Water Permit. The WDRs for stormwater runoff in the County of Los Angeles and incorporated cities covered under NPDES Permit No. CAS004001 (December 13, 2001) require implementation of runoff control from all construction sites. Preparation and implementation of a construction SWPPP would be required prior to the start of any construction activities, and construction contractors would be required to implement BMPs such as general site management, construction and waste materials management, erosion control, and sediment control to prevent/contain releases of soils and contaminants. Any accidental releases are expected to be small and result in temporary, localized impacts to water quality that would not violate water quality standards or adversely affect the beneficial uses of waters of the Port.

Operations

Operation of Warehouse No. 1 as a visitor-serving commercial facility would not result in any discharges other than stormwater runoff, which would be collected by the storm drain system and likely discharged to the harbor in quantities and at locations similar to existing conditions.

Impact WQ-2: The proposed Program would not result in placement of fill that substantially reduces or increases the amount of surface water in a water body.

Planning Area 1

Construction

The proposed land use change in Planning Area 1 associated with changing Warehouse No. 1 from institutional to mixed use (institutional and/or visitor-serving commercial) would not involve placement of fill or other in-water construction work that would alter the surface water of the Port.

Operations

Operation of Warehouse No. 1 as a mixed use facility would not result in placement of fill or alter the surface water of the Port.

Impact WQ-3: The proposed Program would not result in placement of fill that causes permanent adverse changes to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow.

Planning Area 1

Construction

The proposed land use change in Planning Area 1 (associated with changing Warehouse No. 1 from institutional to mixed use (institutional and/or visitor-serving commercial) would not involve placement of fill or other in-water construction work that would alter water flow in the Port.

Operations

Operation of Warehouse No. 1 as a mixed use facility would not result in placement of fill or alter water flow in the Port.

Impact WQ-4: The proposed Program would not accelerate natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled onsite.

Planning Area 1

Construction

The only construction in Planning Area 1 would be potential structural improvements to Warehouse No. 1 associated with changing the land use from institutional to mixed use (institutional and/or visitor-serving commercial). Construction would require coverage under the General Construction Activities Storm Water Permit. The WDRs for stormwater runoff in the County of Los Angeles and incorporated cities covered under NPDES Permit No. CAS004001 (December 13, 2001) require implementation of runoff control from all construction sites. Preparation and implementation of a

construction SWPPP would be required prior to the start of any construction activities, and construction contractors would be required to implement BMPs such as general site management, construction and waste materials management, erosion control, and sediment control to prevent/contain releases of soils and contaminants.

Operations

Operation of Warehouse No. 1 as a visitor-serving commercial facility would not result in any conditions that would allow or promote erosion or sedimentation.

3.2.18 Changes Made to Chapter 4.0, Cumulative Analysis

3.2.18.1 Table 4.1-1, Related and Cumulative Projects

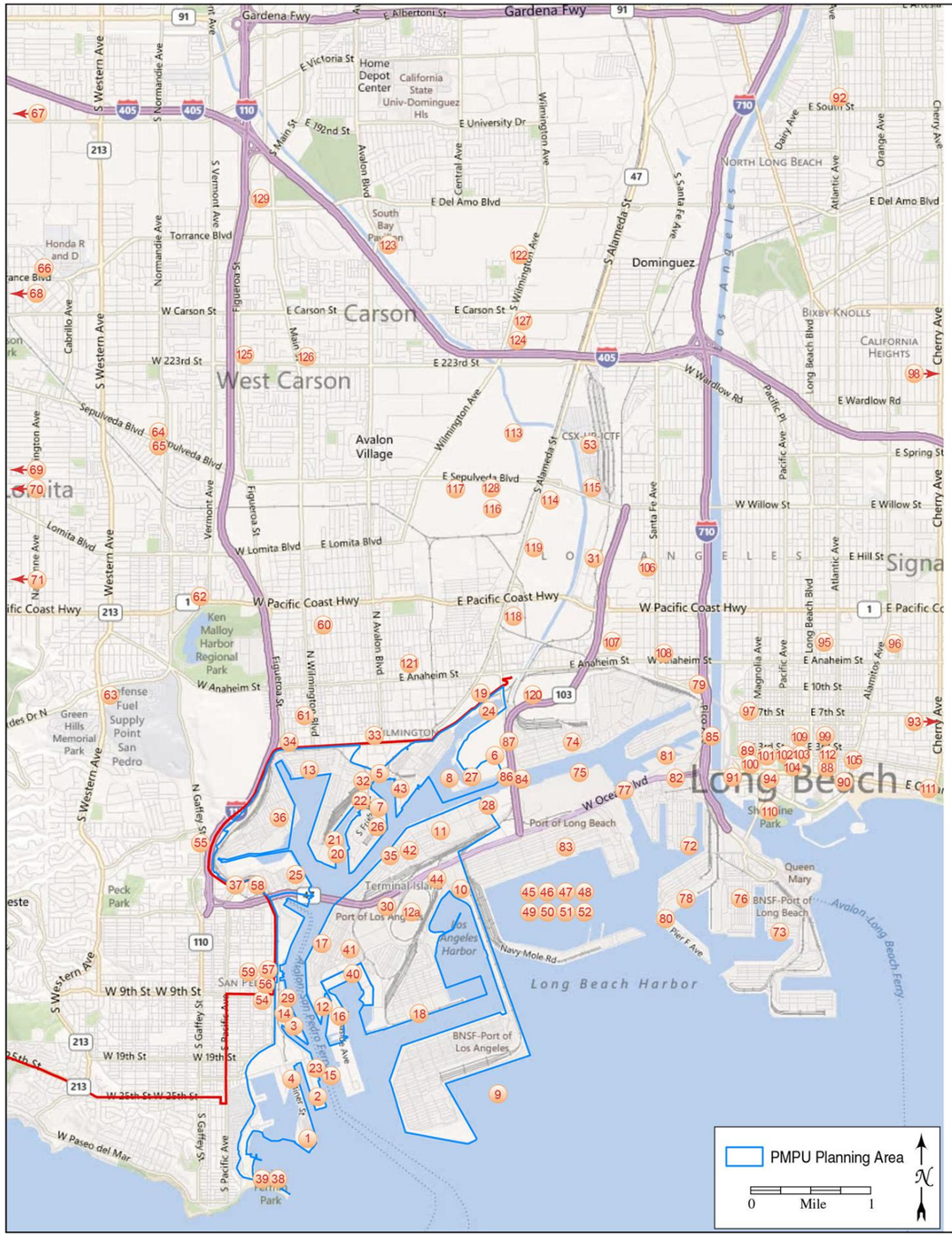
Table 4.1-1 was modified to include updates to the Final PMPU regarding the other project, Berths 212-224 Container Terminal Expansion, in Planning Area 3. This table was also updated to incorporate the additional other project, Relocation of ExxonMobil Storage Tanks, included in the Final PMPU.

Table 4.1-1. Related and Cumulative Projects

No. in Figure 4.1-1	*Project Title and Location*	*Project Description*	*Project Status*
Port of Los Angeles Projects			
11	~~Relocation of SA Recycling~~Berths 212-224 Container Terminal Expansion, Port of Los Angeles	This project would expand the existing container terminal at Berths 212-224 to the east. Depending on the operational scheme and acreage requirements for the container terminal expansion, the existing dry bulk facility at Berths 210-211 may be allowed to remain in its current location and potentially expand its operations. Should non-contiguous container operations prove not to be feasible, the existing dry bulk facility may require relocation to the east to allow for container uses immediately adjacent to the existing container operations. Break bulk uses are also included in the potential container terminal expansion.~~This project would relocate the existing 26-acre dry bulk facility currently located at Berths 210-211 eastward to a similar sized facility at Berths 206-207.~~	Conceptual planning stage.
12a	Relocation of ExxonMobil Storage Tanks, Port of Los Angeles	This project would relocate the existing ExxonMobil crude oil storage facility on Terminal Island to a site within the rail loop track.	Conceptual planning stage.

3.2.18.2 Figure 4.1-1, Location of Cumulative Projects

Figure 4.1-1 was modified to include updates to the Berths 212-224 Container Terminal Expansion Project (#11) and the Relocation of ExxonMobil Storage Tanks Project (#12a).



LEGEND

Port of Los Angeles Projects

1. Outer Harbor Cruise Terminal and Outer Harbor Park
2. City Dock No. 1 Marine Research Project
3. Ports O' Call Redevelopment
4. Cabrillo Way Marina, Phase II
5. Wilmington Waterfront Development Project
6. Anchorage Road Soil Storage Site (ARSSS) Open Space
7. Berths 176-181 Break Bulk Terminal Redevelopment
8. East Basin Marina Improvements
9. Pier 500
10. Trucking Support Center
11. Berths 212-224 Container Terminal Expansion
12. Relocation of Jankovich Marine Fueling Station

12a. Relocation of ExxonMobil Storage Tanks

13. Berths 136-147 Marine Terminal (TraPac)
14. San Pedro Waterfront Project
15. Channel Deepening Project
16. Al Larson Boat Shop Improvement Project
17. Berths 226-236 (Evergreen) Container Terminal Improvements Project
18. Berths 302-306 APL Container Terminal Project
19. ILWU Local 13 Dispatch Hall Project
20. SSA Marine Outer Harbor Fruit Facility Relocation
21. Crescent Warehouse Company Relocation
22. Ultramar Lease Renewal Project
23. Westway Decommissioning
24. Consolidated Slip Restoration Project
25. Berths 97-109, China Shipping Development Project
26. Berths 171-181, Pasha Marine Terminal Improvements Project
27. Wilmington Youth Sailing and Aquatic Center
28. Berths 206-209 Interim Container Terminal Reuse Project
29. San Pedro Waterfront Enhancements Project
30. Joint Container Inspection Facility
31. Southern California International Gateway Project (SCIG)
32. South Wilmington Grade Separation
33. Wilmington Waterfront Master Plan (Avalon Boulevard Corridor Project)
34. "C" Street/Figueroa Street Interchange
35. Berths 212-224 (YTI) Container Terminal Improvements Project
36. Berths 121-131 (Yang Ming) Container Terminal Improvements Project
37. John S. Gibson Blvd/I-110 Access Ramps and SR-47/I-110 Connector Improvement Program
38. Inner Cabrillo Beach Water Quality Improvement Program
39. Cabrillo Beach Pump Project (Tier III)
40. Fish Harbor Redevelopment
41. Terminal Island On-Dock Rail Redevelopment
42. Solar Panel Installation Program
43. WWL Vehicle Services Cargo Terminal

POLA and/or POLB Potential Port-Wide Operational Projects

44. Navy Way/Seaside Avenue Interchange
45. Terminal Free Time
46. Extended Terminal Gates (Pier Pass)
47. Shuttle Train/Inland Container Yard
48. Origin/Destination and Toll Study
49. Virtual Container Yard
50. Increased On-Dock Rail Usage
51. Optical Character Recognition
52. Truck Driver Appointment System

ICTF Joint Powers Authority

53. Union Pacific Railroad ICTF Modernization Project

Community Projects San Pedro

54. Pacific Corridors Redevelopment Project
55. Single Family Homes (Gaffey Street)
58. Mixed-Use Development, 281 W. 8th Street
59. Palos Verdes Urban Village
58. Temporary Little League Park
59. Centre Street Lofts

Community of Wilmington Projects

60. Distribution Center and Warehouse
61. Dana Strand Public Housing Development Project

Projects in Harbor City, Lomita, and Torrance

62. Kaiser Permanente South Bay Master Plan
63. Ponte Vista, 26900 Western Avenue (near Green Hills Park)
64. Warehouses, 1351 W. Sepulveda Blvd.
65. Sepulveda Industrial Park
66. Capellino & Associates 1104 Sartori Ave.

Projects in Harbor City, Lomita, and Torrance (continued)

67. Linda Francis 18900 Hawthorne Blvd.
68. Providence Health System 5215 Torrance Blvd.
69. Torrence Memorial Medical Center 3330 Lomita Blvd.
70. Continental Development 2843 Lomina Blvd.
71. Mark Sachs 2909 PCH

Port of Long Beach Projects

72. Middle Harbor Terminal Redevelopment
73. Piers G & J Terminal Redevelopment Project
74. Pier A East
75. Pier S Marine Terminal
76. Administration Building & Maintenance Facility Replacement Project
77. Gerald Desmond Bridge Replacement Project
78. Chemoil Marine Terminal, Tank Installation
79. Pier B Rail Yard Expansion
80. Mitsubishi Cement Corporation Facility Modifications
81. Eagle Rock Construction Aggregate Terminal Development
82. Cemera Long Beach Aggregate Terminal
83. TTI Grain Export Terminal Installation Project

Alameda Corridor Transportation Authority and Caltrans Projects

84. Schuyler Heim Bridge Replacement
85. I-710 (Long Beach Freeway) Corridor Project
86. Badger Avenue Bridge Expansion
87. SR-47 Expressway

City of Long Beach Projects

88. Shoreline Gateway Project
89. West Gateway Redevelopment Project
90. 2nd+PCH 6400 Pacific Coast Highway
91. Golden Shore Master Plan
92. North Village Center
93. Kroc Community Center
94. Hotel Sierra, 290 Bay Street
95. 1235 Long Beach Blvd., Mixed-Use Project
96. Douglas Park Rezone Project
97. Drake Chavez Park Expansion
98. 15th St. & Alamitos Ave. Open Space Development Intersection Improvements
99. City Place Lofts, 4th Street and Elm Avenue
100. Lyon West Gateway Residential Development, Broadway at Magnolia Ave. & 3rd St.
101. Pine-Pacific, bounded by Pine & Pacific Avenues, and 3rd & 4th Streets
102. Lofts at 3rd & Promenade
103. Broadway Block Development, Broadway
104. Hotel Esterel, Promenade at Broadway
105. Promenade Master Plan, between Shoreline Dr. & 5th Street
106. Admiral Kidd Park Expansion Site, Santa Fe at Willard
107. Everbright Paper Recycling Center
108. Westside Storm Drain Improvement Project
109. 495 Promenade North
110. 100 Aquarium Way
111. 2010 Ocean Blvd.
112. 600 E. Broadway

Wilmington/Carson Projects

113. BP Carson Refinery Safety, Compliance, and Optimization Project
114. Kinder Morgan Terminal Expansion
115. Chemoil Terminals Corporation
118. ConocoPhillips Refinery Tank Replacement Project
117. BP Logistics Project
118. Ultramar Inc., Olympic Tank Farm
119. WesPac Smart Energy Transport System Project
120. Tesoro Reliability Improvements and Regulatory Compliance Project
121. Warren Oil WTU Central Facility and New Equipment Project, 625 E. Anaheim St., Wilmington

City of Carson Projects

122. 20945 S. Wilmington Ave., CUP430-95
123. 770 E. Del Amo Blvd., DOR 831-03
124. 1950 E. 220th St., DOR 1324-09
125. 418 E. 223rd St., DOR 893-05
126. 22309 S. Main St., DOR 1305-09
127. 2000 E. Carson St., DOR 1300-08
128. 2000 E. Sepulveda Blvd., CUP 529-02
129. 20331 S. Main St., GPA 86-08; ZCC 160-08; DOR 1294-08

Figure 4.1-1. Location of Cumulative Projects

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3.2.18.3 Section 4.2.10.2, Cumulative Impact PS-2

The Cumulative Impact PS-2 impact statement was revised for consistency with the cumulative analysis conclusion.

Cumulative Impact PS-2: The proposed Program would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service – Less than Cumulatively Considerable ~~with Mitigation~~

3.2.18.4 Section 4.2.12.1.1, Ground Transportation

Section 4.2.12.1.1, Ground Transportation, and Tables 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6 and 4.2.7 were updated to include proposed Program trips from Planning Area 1 and the analysis of two additional intersection analysis locations at Gaffey Street/1st Street and Harbor Boulevard/Swinford Street/SR-47 Ramps, and an additional freeway link location on the I-710 north of Florence Avenue. The additional freeway location was analyzed to in response to comments received from Caltrans on the Draft PEIR. Table 4.2-7 was also updated to clarify that the proposed Program would have a significant freeway impact during the A.M. peak hour on the I-710 between PCH and Willow Street, determined as part of the freeway analysis conducted to evaluate cumulatively considerable impacts. Additionally, Table 4.2-7 has been updated to show the results of the select zone freeway analysis that was completed in response to comments received from Caltrans on the Draft PEIR.

QuickTrip

The net differences in vehicle trips between the proposed Program and PMP are listed by planning area in Table 4.2-1. The proposed Program trip generation was determined by using the proposed Program's TEU projections, the QuickTrip outputs, and specific trip generation from non-container truck trips at Warehouse No. 1 (Planning Area 1) and Fish Harbor (Planning Area 4). The resultant proposed Program's daily trip generation is shown in Table 4.2-2, and its peak hour trip generation is shown in Table 4.2-3.

Table 4.2-2. Proposed Program Daily Trip Generation

		Autos		*Noncontainer Trucks*		*Bobtails*		*Chassis*		*Containers*		*Total Vehicles*
Planning Area	*Location*	*In*	*Out*	*In*	*Out*	*In*	*Out*	*In*	*Out*	*In*	*Out*	
Planning Area 1: San Pedro	Warehouse No. 1	2,175	2,180	-	-	-	-	-	-	-	-	4,355
Planning Area 2: West Basin and Wilmington	Berths 100-131 (West Basin Container Terminal-Yang Ming-China Shipping)	170	135	-	-	135	125	70	5	295	390	1,325
Planning Area 3: Terminal Island	Berths 302-305 (APL-Eagle Marine Services)	410	335	-	-	415	385	150	25	840	1,040	3,600
Planning Area 4: Fish Harbor	Fish Harbor	-	-	25	25	-	-	-	-	-	-	50
	Total	**2,755 ~~580~~**	**2,650 ~~470~~**	**25**	**25**	**550**	**510**	**220**	**30**	**1,135**	**1,430**	**9,330 ~~4,975~~**

Table 4.2-3. Proposed Program Peak Hour Trip Generation (in Passenger Car Equivalents)

		A.M. Peak Hour			**M.D. Peak Hour**			**P.M. Peak Hour**		
Planning Area	*Location*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*
Planning Area 1: San Pedro	Warehouse No. 1	40	25	65	n/a	n/a	n/a	120	155	275
Planning Area 2: West Basin and Wilmington	Berths 100-131 (West Basin Container Terminal-Yang Ming-China Shipping)	70	55	125	65	65	130	45	70	115
Planning Area 3: Terminal Island	Berths 302-305 (APL-Eagle Marine Services)	185	165	350	175	185	360	125	165	290
Planning Area 4: Fish Harbor	Fish Harbor	10	10	20	10	10	20	10	10	20
	Total	**305 ~~265~~**	**255 ~~230~~**	**560 ~~495~~**	**250**	**260**	**510**	**300 ~~180~~**	**400 ~~245~~**	**700 ~~425~~**

Cumulative Impact TRANS-2: The proposed Program would not significantly impact at least one study location V/C ratios or level of service for long-term vehicular traffic - Less than Cumulatively Considerable

Contribution of the Proposed Program (Prior to Mitigation)

Tables 4.2-4 and 4.2-5 also show future operating conditions with the proposed Program. The proposed Program conditions were compared to CEQA baseline and the future without Program conditions to determine cumulative and cumulatively considerable impacts, and then the impacts were assessed using the significant impact criteria.

Table 4.2-4. Cumulative Intersection Level of Service Analysis – Year 2035 Proposed Program

#	Study Intersection	CEQA Baseline (2011)						2035 With Program						Changes in V/C			Cumulative Impact		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
		LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C						
1	Ocean Blvd (WB) / Terminal Island Fwy[b]	A	0.335	A	0.398	A	0.375	A	0.539	A	0.587	A	0.455	0.204	0.189	0.080	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy[b]	A	0.215	A	0.379	A	0.348	A	0.497	A	0.543	A	0.454	0.282	0.164	0.106	N	N	N
3	Ocean Blvd (WB) / Pier S Ave[b]	A	0.266	A	0.313	A	0.341	A	0.563	A	0.547	A	0.433	0.297	0.234	0.092	N	N	N
4	Ocean Blvd (EB) / Pier S Ave[b]	A	0.209	A	0.364	A	0.340	A	0.393	A	0.538	A	0.454	0.184	0.174	0.114	N	N	N
5	Seaside Ave / Navy Way	A	0.427	A	0.316	A	0.541	Not an Intersection									N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps[a]	A	0.112	A	0.244	A	0.142	A	0.404	A	0.484	A	0.379	0.292	0.240	0.237	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps[b]	A	0.435	A	0.519	A	0.499	D	0.846	E	0.921	B	0.622	0.411	0.402	0.123	N	N	N
8	Anaheim St / Harbor Ave[b]	A	0.453	A	0.455	A	0.560	B	0.688	C	0.712	B	0.649	0.235	0.257	0.089	N	N	N
9	Anaheim St / Santa Fe Ave[b]	A	0.473	A	0.508	A	0.578	B	0.679	B	0.671	C	0.781	0.206	0.163	0.203	N	N	N
10	Anaheim St / E I St / W 9th St[b]	A	0.501	A	0.525	A	0.529	D	0.853	D	0.848	C	0.795	0.352	0.323	0.266	N	N	N
11	Anaheim St / Farragut Ave[a]	A	0.277	A	0.228	A	0.286	A	0.351	A	0.285	A	0.360	0.074	0.057	0.074	N	N	N
12	Anaheim St / Henry Ford Ave[a]	A	0.300	A	0.416	A	0.560	C	0.742	C	0.792	D	0.867	0.442	0.376	0.307	Yes	Yes	Yes
13	Anaheim St / Alameda St[a]	A	0.361	A	0.325	A	0.468	A	0.596	A	0.486	C	0.746	0.235	0.161	0.278	N	N	Yes
14	Henry Ford Ave / Pier A Wy / SR-47/103 Ramps[a]	A	0.078	A	0.125	A	0.167	A	0.511	A	0.449	A	0.336	0.433	0.324	0.169	N	N	N
15	Harry Bridges Blvd / Broad Ave[a]	A	0.143	A	0.115	A	0.218	A	0.263	A	0.185	A	0.365	0.120	0.070	0.147	N	N	N
16	Harry Bridges Blvd / Avalon Blvd[a]	A	0.155	A	0.082	A	0.238	A	0.477	A	0.320	A	0.568	0.322	0.238	0.330	N	N	N
17	Harry Bridges Blvd / Fries Ave[a]	A	0.123	A	0.127	A	0.203	A	0.258	A	0.253	A	0.360	0.135	0.126	0.157	N	N	N
18	Harry Bridges Blvd / Neptune Ave[a]	A	0.053	A	0.028	A	0.127	A	0.150	A	0.100	A	0.280	0.097	0.072	0.153	N	N	N
19	Harry Bridges Blvd / Wilmington Blvd[a]	A	0.119	A	0.077	A	0.202	A	0.379	A	0.265	A	0.358	0.260	0.188	0.156	N	N	N
20	Harry Bridges Blvd / Figueroa St[a]	A	0.235	A	0.237	A	0.292	B	0.617	A	0.447	C	0.778	0.382	0.210	0.486	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp[a]	A	0.505	A	0.411	A	0.561	A	0.512	A	0.461	C	0.716	0.007	0.050	0.155	N	N	Yes
22	Pacific Coast Hwy / Santa Fe Ave[b]	C	0.773	B	0.699	D	0.821	E	0.917	D	0.881	E	0.974	0.144	0.182	0.153	Yes	N	N
23	Pacific Coast Hwy / Harbor Ave[b]	B	0.628	B	0.603	C	0.733	C	0.735	C	0.765	E	0.900	0.107	0.162	0.167	N	N	N
24	Sepulveda Blvd / Alameda St Ramp[c]	B	0.679	A	0.484	B	0.612	A	0.486	A	0.514	B	0.617	-0.193	0.030	0.005	N	N	N
25	Intermodal Way / Sepulveda Blvd[c]	A	0.371	A	0.310	A	0.403	A	0.561	A	0.564	B	0.634	0.190	0.254	0.231	N	N	N
26	ICTF Driveway / Sepulveda Blvd[a]	A	0.193	A	0.369	A	0.425	A	0.425	A	0.446	A	0.512	0.232	0.077	0.087	N	N	N
27	Middle Rd / Sepulveda Blvd[a]	A	0.223	A	0.254	A	0.481	A	0.272	A	0.240	A	0.509	0.049	-0.014	0.028	N	N	N
28	Sepulveda Blvd / SR-103[b]	A	0.318	A	0.330	A	0.491	A	0.467	A	0.363	B	0.619	0.149	0.033	0.128	N	N	N
29	Alameda St / Henry Ford Ave[a]	A	0.057	A	0.183	A	0.207	A	0.247	A	0.298	A	0.230	0.190	0.115	0.023	N	N	N
30	Alameda St / Pacific Coast Hwy Ramp[a]	A	0.439	A	0.368	A	0.598	A	0.542	A	0.549	B	0.696	0.103	0.181	0.098	N	N	N
31	Alameda St / Sepulveda Boulevard Ramp[c]	A	0.389	A	0.463	A	0.588	D	0.802	D	0.848	C	0.717	0.413	0.385	0.129	N	N	N
32	Alameda St / 223rd St Ramp[c]	A	0.509	A	0.484	A	0.565	B	0.611	D	0.814	B	0.607	0.102	0.330	0.042	N	N	N
33	Alameda St Ramp / 223rd St[a]	A	0.342	A	0.504	C	0.758	A	0.388	C	0.726	D	0.854	0.046	0.222	0.096	N	Yes	Yes
34	I-405 SB Ramps / 223rd St[a]	A	0.379	A	0.319	A	0.435	A	0.447	A	0.467	A	0.473	0.068	0.148	0.038	N	N	N
35	Gaffey St/1st St	D	0.860	n/a	n/a	D	0.825	F	1.064	n/a	n/s	E	0.934	0.204	n/a	0.109	Yes	n/a	Yes
36	Harbor Blvd / Swinford St / SR-47 EB Ramp	A	0.307	n/a	n/a	A	0.331	A	0.549	n/s	n/s	B	0.659	0.243	n/a	0.328	N	n/a	N

Notes:
a. City of Los Angeles intersection, analyzed using CMA methodology according to city standards.
b. City of Long Beach intersection analyzed using ICU methodology according to city standards.
c. City of Carson intersection analyzed using ICU methodology according to city standards.

Table 4.2-5. Cumulatively Considerable Intersection Level of Service Analysis – Year 2035 Proposed Program

#	Study Intersection	2035 Without Program						2035 With Program						Changes in V/C			Cumulatively Considerable Impact		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
		LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C						
1	Ocean Blvd (WB) / Terminal Island Fwy[b]	A	0.518	A	0.574	A	0.442	A	0.539	A	0.587	A	0.455	0.021	0.013	0.013	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy[b]	A	0.472	A	0.530	A	0.441	A	0.497	A	0.543	A	0.454	0.025	0.013	0.013	N	N	N
3	Ocean Blvd (WB) / Pier S Ave[b]	A	0.548	A	0.530	A	0.425	A	0.563	A	0.547	A	0.433	0.015	0.017	0.008	N	N	N
4	Ocean Blvd (EB) / Pier S Ave[b]	A	0.404	A	0.528	A	0.444	A	0.393	A	0.538	A	0.454	-0.011	0.010	0.010	N	N	N
5	Seaside Ave / Navy Way	Not an Intersection															N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps[a]	A	0.404	A	0.484	A	0.379	A	0.404	A	0.484	A	0.379	0.000	0.000	0.000	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps[b]	D	0.843	E	0.918	B	0.618	D	0.846	E	0.921	B	0.622	0.003	0.003	0.004	N	N	N
8	Anaheim St / Harbor Ave[b]	B	0.688	C	0.712	B	0.649	B	0.688	C	0.712	B	0.649	0.000	0.000	0.000	N	N	N
9	Anaheim St / Santa Fe Ave[b]	B	0.671	B	0.659	C	0.778	B	0.679	B	0.671	C	0.781	0.008	0.012	0.003	N	N	N
10	Anaheim St / E I St / W 9th St[b]	D	0.842	D	0.836	C	0.787	D	0.853	D	0.848	C	0.795	0.011	0.012	0.008	N	N	N
11	Anaheim St / Farragut Ave[a]	A	0.343	A	0.275	A	0.354	A	0.351	A	0.285	A	0.360	0.008	0.010	0.006	N	N	N
12	Anaheim St / Henry Ford Ave[a]	C	0.715	C	0.774	D	0.860	C	0.742	C	0.792	D	0.867	0.027	0.018	0.007	N	N	N
13	Anaheim St / Alameda St[a]	A	0.554	A	0.479	C	0.739	A	0.596	A	0.486	C	0.746	0.042	0.007	0.007	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 Ramps[a]	A	0.500	A	0.444	A	0.331	A	0.511	A	0.449	A	0.336	0.011	0.005	0.005	N	N	N
15	Harry Bridges Blvd / Broad Ave[a]	A	0.247	A	0.165	A	0.353	A	0.263	A	0.185	A	0.365	0.016	0.020	0.012	N	N	N
16	Harry Bridges Blvd / Avalon Blvd[a]	A	0.460	A	0.300	A	0.557	A	0.477	A	0.320	A	0.568	0.017	0.020	0.011	N	N	N
17	Harry Bridges Blvd / Fries Ave[a]	A	0.245	A	0.238	A	0.345	A	0.258	A	0.253	A	0.360	0.013	0.015	0.015	N	N	N
18	Harry Bridges Blvd / Neptune Ave[a]	A	0.137	A	0.085	A	0.265	A	0.150	A	0.100	A	0.280	0.013	0.015	0.015	N	N	N
19	Harry Bridges Blvd / Wilmington Blvd[a]	A	0.363	A	0.246	A	0.340	A	0.379	A	0.265	A	0.358	0.016	0.019	0.018	N	N	N
20	Harry Bridges Blvd / Figueroa St[a]	B	0.617	A	0.447	C	0.767	B	0.617	A	0.447	C	0.778	0.000	0.000	0.011	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp[a]	A	0.512	A	0.454	C	0.712	A	0.512	A	0.461	C	0.716	0.000	0.007	0.004	N	N	N
22	Pacific Coast Hwy / Santa Fe Ave[b]	E	0.917	D	0.859	E	0.956	E	0.917	D	0.881	E	0.974	0.000	0.022	0.018	N	N	N
23	Pacific Coast Hwy / Harbor Ave[b]	C	0.735	C	0.749	D	0.884	C	0.735	C	0.765	E	0.900	0.000	0.016	0.016	N	N	N
24	Sepulveda Blvd / Alameda St Ramp[c]	A	0.461	A	0.486	B	0.617	A	0.486	A	0.514	B	0.617	0.025	0.028	0.000	N	N	N
25	Intermodal Way / Sepulveda Blvd[c]	A	0.544	A	0.544	B	0.634	A	0.561	A	0.564	B	0.634	0.017	0.020	0.000	N	N	N
26	ICTF Drwy / Sepulveda Blvd[a]	A	0.411	A	0.430	A	0.504	A	0.425	A	0.446	A	0.512	0.014	0.016	0.008	N	N	N
27	Middle Rd / Sepulveda Blvd[a]	A	0.272	A	0.240	A	0.509	A	0.272	A	0.240	A	0.509	0.000	0.000	0.000	N	N	N
28	Sepulveda Blvd / SR-103[b]	A	0.467	A	0.361	B	0.616	A	0.467	A	0.363	B	0.619	0.000	0.002	0.003	N	N	N
29	Alameda St / Henry Ford Ave[a]	A	0.235	A	0.287	A	0.227	A	0.247	A	0.298	A	0.230	0.012	0.011	0.003	N	N	N
30	Alameda St / Pacific Coast Hwy Ramp[a]	A	0.533	A	0.544	B	0.692	A	0.542	A	0.549	B	0.696	0.009	0.005	0.004	N	N	N
31	Alameda St / Sepulveda Boulevard Ramp[c]	C	0.791	D	0.840	C	0.712	D	0.802	D	0.848	C	0.717	0.011	0.008	0.005	N	N	N
32	Alameda St / 223rd St Ramp[c]	A	0.596	C	0.796	B	0.600	B	0.611	D	0.814	B	0.607	0.015	0.018	0.007	N	N	N
33	Alameda St Ramp / 223rd St[a]	A	0.319	B	0.640	D	0.812	A	0.326	B	0.647	D	0.816	0.007	0.007	0.004	N	N	N
34	I-405 SB Ramps / 223rd St[a]	A	0.446	A	0.464	A	0.471	A	0.447	A	0.467	A	0.473	0.001	0.003	0.002	N	N	N
35	Gaffey St/1st St	F	1.063	n/a	n/a	E	0.930	F	1.064	n/a	n/s	E	0.934	0.001	n/a	0.004	N	n/a	N
36	Harbor Blvd / Swinford St / SR-47 EB Ramp	A	0.541	n/a	n/a	B	0.635	A	0.549	n/s	n/s	B	0.659	0.008	n/a	0.024	N	n/a	N

Notes:
a. City of Los Angeles intersection, analyzed using CMA methodology according to city standards.
b. City of Long Beach intersection analyzed using ICU methodology according to city standards.
c. City of Carson intersection analyzed using ICU methodology according to city standards.

Cumulative Impact TRANS-3: The proposed Program would not cause an increase in onsite employees due to operations, which would then result in a significant increase in public transit use - Less than Cumulatively Considerable

Contribution of the Proposed Program (Prior to Mitigation)

Although operation of the proposed appealable/fill projects would result in additional onsite employees, the increase in work-related trips using public transit would be negligible. Intermodal facilities generate extremely low transit demand for several reasons. The primary reason that workers generally would not use public transit is their work shift schedule. Most workers prefer to use a personal automobile to facilitate timely commuting, and in any case would live throughout the southern California region and generally not have convenient access to the few bus routes that serve the Port. Finally, parking at proposed appealable/fill project sites would be readily available and free for employees. Therefore, it is expected that fewer than ten work trips per day would be made on public transit, which could easily be accommodated by existing transit services and would not result in a demand for transit services which would exceed the supply of such services. Accordingly, the proposed Program would not make a cumulatively considerable contribution to a significant cumulative impact.

Planning Area 1, which would have a land use change for Warehouse No. 1, would have increased transit utilization as estimated using the 2010 *Los Angeles County Congestion Management Program Appendix D Guidelines for Transportation Impact Analysis*:

- Multiply total trips generated by 1.4 to convert vehicle trips to person trips; and,
- For each time period, multiply nine percent for the primarily commercial land uses within ¼ mile of the CMP transit corridor.

The resulting transit trip generation is 550 daily transit trips, in the A.M. peak hour 5 inbound and 3 outbound transit trips, and in the P.M. peak hour 15 inbound and 20 outbound transit trips.

Cumulative Impact TRANS-4: The proposed Program would result in operations that would cause increases considered significant for freeway congestion – Less than Cumulatively Considerable with Mitigation

Cumulative Impact TRANS-4 addresses the potential for the proposed Program when combined with past, present, and reasonably foreseeable future projects to result in significant increases in highway congestions.

Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Freeways in the region are affected by new projects that add traffic or change the distribution of traffic. Most of the related projects in Table 4.1-1 (e.g., Ports O'Call

Redevelopment (#3), Trucking Support Center (#10), Berths 226-236 (Evergreen) Container Terminal Improvements Project (#17, and Berths 121-131 (Yang Ming) Container Terminal Improvements Project (#36)) can be expected to add traffic to the freeway system. The effects were evaluated at the freeway monitoring stations listed below that likely would be affected by the proposed appealable/fill projects under the proposed Program:

- I-110 south of "C" Street (CMP Station 1045);
- SR-91 east of Alameda Street and Santa Fe Avenue (CMP Station 1033);
- I-405 at Santa Fe Avenue (CMP Station 1066);
- I-710 between Pacific Coast Highway and Willow Street (CMP Station 1078);
- I-710 between I-405 and Del Amo Boulevard (CMP Station 1079);
- I-710 between I-105 and Firestone Boulevard (CMP Station 1080);
- I-710 north of Florence Avenue;
- SR-47 at Vincent Thomas Bridge; and,
- SR 47 at Commodore Schuyler Heim Bridge.

Tables 4.2-6 and 4.2-7 show the expected volumes of traffic on those segments, a comparison of the CEQA baseline to 2035 With Program (i.e., with the related projects and other background growth) and 2035 Without Program. The past, present, and reasonably foreseeable future projects would add traffic to the freeway system and at the CMP monitoring stations, resulting in significant cumulative impacts to monitoring stations operating at LOS F or worse.

Table 4.2-6, summarizes future freeway operating conditions of the CEQA Baseline and the CEQA Baseline plus the proposed Program including the related projects in Table 4.1-1 at each study CMP location. A number of the study locations will operate at LOS D or E in the future. Cumulative impacts are shown to occur at ~~four~~ five locations; those locations are along the I-405 and I-710.

Table 4.2-6. Year 2035 Proposed Program Cumulative Freeway Analysis

Fwy.	*Location*	*Capacity*	*Northbound/Eastbound*								*Southbound/Westbound*							
			CEQA Baseline			*Year 2035 Future With Program*			*Δ D/C*	*Cum Imp*	*CEQA Baseline*			*Year 2035 Future With Program*			*Δ D/C*	*Cum Imp*
			Demand	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*			*Demand*	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*		
A.M. Peak Hour																		
I-110	Wilmington, s/o "C" St	8,000	4,375	0.55	C	5,0455,030	0.63	C	0.08	No	3,375	0.42	B	4,345315	0.54	B	0.12	No
SR-91	e/o Alameda Street/Santa Fe Ave	12,000	6,060	0.51	B	8,715	0.73	C	0.22	No	10,660	0.89	D	8,905900	0.74	C	-0.15	No
I-405	Santa Fe Ave.	10,000	11,535	1.15	F(0)	9,900	0.99	E	-0.16	No	9,545	0.95	E	10,910	1.09	F(0)	0.14	Yes
I-710	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,770	0.96	E	8,370	1.40	F(2)	0.44	Yes	6,690	1.12	F(0)	8,785	1.46	F(3)	0.3435	Yes
I-710	n/o Jct Rte 405, s/o Del Amo	8,000	6,370	0.80	D	8,880	1.11	F(0)	0.31	Yes	7,805	0.98	E	9,975	1.25	F(0)	0.27	Yes
I-710	n/o Rte 105, n/o Firestone	8,000	8,175	1.02	F(0)	9,110	1.14	F(0)	0.12	Yes	9,285	1.16	F(0)	9,905	1.24	F(0)	0.08	Yes
I-710	n/o Florence Avenue	8,000	7,710	0.96	E	8,585	1.07	F(0)	0.11	Yes	8,760	1.10	F(0)	9,335	1.17	F(0)	0.07	Yes
SR-47	Vincent Thomas Bridge	4,000	2,445	0.61	C	3,690	0.92	D	0.31	No	2,100	0.53	B	3,050	0.76	C	0.2324	No
SR-47	Commodore Schuyler Heim Bridge	6,000	305	0.05	A	4,265	0.71	C	0.66	No	590	0.10	A	3,640	0.61	C	0.51	No
P.M. Peak Hour																		
I-110	Wilmington, s/o "C" St	8,000	2,490	0.31	A	4,825740	0.6059	C	0.2928	No	4,205	0.53	B	5,270180	0.6665	C	0.1312	No
SR-91	e/o Alameda Street/Santa Fe Ave	12,000	8,925	0.74	C	10,525515	0.88	D	0.14	No	7,205	0.60	C	9,510500	0.79	D	0.19	No
I-405	Santa Fe Ave.	10,000	9,865	0.99	E	10,400	1.04	F(0)	0.05	Yes	11,160	1.12	F(0)	11,510	1.15	F(0)	0.03	Yes
I-710	n/o Jct Rte 1 (PCH), Willow St	6,000	5,950	0.99	E	7,220	1.20	F(0)	0.21	Yes	5,660	0.94	E	7,080	1.18	F(0)	0.24	Yes
I-710	n/o Jct Rte 405, s/o Del Amo	8,000	7,740	0.97	E	9,140	1.14	F(0)	0.17	Yes	6,785	0.85	D	7,970	1.00	E	0.15	No
I-710	n/o Rte 105, n/o Firestone	8,000	9,120	1.14	F(0)	9,665660	1.21	F(0)	0.07	Yes	9,105	1.14	F(0)	9,520515	1.19	F(0)	0.05	Yes
I-710	n/o Florence Avenue	8,000	8,600	1.08	F(0)	9,105	1.14	F(0)	0.06	Yes	8,590	1.07	F(0)	8,975	1.12	F(0)	0.05	Yes
SR-47	Vincent Thomas Bridge	4,000	2,560	0.64	C	3,110	0.78	D	0.14	No	2,930	0.73	C	3,630	0.91	D	0.18	No
SR-47	Commodore Schuyler Heim Bridge	6,000	830	0.14	A	4,245	0.71	C	0.57	No	655	0.11	A	4,905	0.82	D	0.71	No

Table 4.2-7. Year 2035 Proposed Program Cumulatively Considerable Freeway Analysis

Fwy	*Location*	*Capacity*	*Northbound/Eastbound*								*Southbound/Westbound*							
			Year 2035 Future Without Program			*Year 2035 Future With Program*			*Δ D/C*	*Cum Con Imp*	*Year 2035 Future Without Program*			*Year 2035 Future With Program*			*Δ D/C*	*Cum Con Imp*
			Demand	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*			*Demand*	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*		
A.M. Peak Hour																		
I-110	Wilmington, s/o "C" St	8,000	4,985	0.62	C	5,045~~030~~	0.63	C	0.01	No	4,275	0.53	B	4,345~~315~~	0.54	B	0.01	No
SR-91	e/o Alameda Street/Santa Fe Ave	12,000	8,710	0.73	C	8,715	0.73	C	0.00	No	8,900	0.74	C	8,905~~900~~	0.74	C	0.00	No
I-405	Santa Fe Ave	10,000	9,900	0.99	E	9,900	0.99	E	0.00	No	10,905	1.09	F(0)	10,910	1.09	F(0)	0.00	No
I-710	n/o Jct Rte 1 (PCH), Willow St	6,000	8,275	1.38	F(2)	8,370	1.40	F(2)	0.02	~~No~~Yes	8,685	1.45	F(2)	8,785	1.46	F(3)	0.01~~02~~	No
I-710	n/o Jct Rte 405, s/o Del Amo	8,000	8,780	1.10	F(0)	8,880	1.11	F(0)	0.01	No	9,880	1.24	F(0)	9,975	1.25	F(0)	0.01	No
I-710	n/o Rte 105, n/o Firestone	8,000	9,035	1.13	F(0)	9,110	1.14	F(0)	0.01	No	9,835	1.23	F(0)	9,905	1.24	F(0)	0.01	No
I-710	n/o Florence Avenue	8,000	8,520	1.07	F(0)	8,585	1.07	F(0)	0.00	No	9,270	1.16	F(0)	9,335	1.17	F(0)	0.01	No
SR-47	Vincent Thomas Bridge	4,000	3,640	0.91	D	3,690	0.92	D	0.01	No	3,010	0.75	C	3,050	0.76	C	0.01	No
SR-47	Commodore Schuyler Heim Bridge	6,000	4,170	0.70	C	4,265	0.71	C	0.01~~02~~	No	3,545	0.59	C	3,640	0.61	C	0.02	No
*Supplemental Select Zone Analysis Locations**			*Max Project Increment Before Significant Impact*			*Project Increment*			*Δ D/C*	*Cum Con Imp*	*Max Project Increment Before Significant Impact*			*Project Increment*			*Δ D/C*	*Cum Con Imp*
I-405	n/o I-110	10,000	150			5			0.00	No	150			15			0.00	No
SR-91	e/o Lakewood Blvd	10,000	150			15			0.00	No	150			25			0.00	No
SR-60	e/o Jct 605	12,000	180			10			0.00	No	180			10			0.00	No
I-105	e/o Bellflower Bl, w/o I-605	8,000	120			10			0.00	No	120			10			0.00	No
I-110	Manchester Bl	12,000	180			25			0.00	No	180			30			0.00	No
I-605	n/o Telegraph Rd	10,000	150			25			0.00	No	150			30			0.00	No
I-710	s/o SR-60	8,000	120			5			0.00	No	120			5			0.00	No
P.M. Peak Hour																		
I-110	Wilmington, s/o "C" St	8,000	4,690	0.59	C	4,825~~4,740~~	0.60~~59~~	C	0.01	No	5,150	0.64	C	5,270~~5,180~~	0.66~~65~~	C	0.02~~00~~	No
SR-91	e/o Alameda Street/Santa Fe Ave	12,000	10,510	0.88	D	10,515	0.88	D	0.00	No	9,500	0.79	D	9,500	0.79	D	0.00	No
I-405	Santa Fe Ave	10,000	10,400	1.04	F(0)	10,400	1.04	F(0)	0.00	No	11,505	1.15	F(0)	11,510	1.15	F(0)	0.00	No

Table 4.2-7. Year 2035 Proposed Program Cumulatively Considerable Freeway Analysis

Fwy	*Location*	*Capacity*	*Northbound/Eastbound*								*Southbound/Westbound*							
			Year 2035 Future Without Program			*Year 2035 Future With Program*			Δ *D/C*	*Cum Con Imp*	*Year 2035 Future Without Program*			*Year 2035 Future With Program*			Δ *D/C*	*Cum Con Imp*
			Demand	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*			*Demand*	*D/C*	*LOS*	*Demand*	*D/C*	*LOS*		
I-710	n/o Jct Rte 1 (PCH), Willow St	6,000	7,145	1.19	F(0)	7,220	1.20	F(0)	0.01	No	7,015	1.17	F(0)	7,080	1.18	F(0)	0.01	No
I-710	n/o Jct Rte 405, s/o Del Amo	8,000	9,055	1.13	F(0)	9,140	1.14	F(0)	0.01	No	7,910	0.99	E	7,970	1.00	E	0.01	No
I-710	n/o Rte 105, n/o Firestone	8,000	9,605	1.20	F(0)	9,665~~660~~	1.21	F(0)	0.01	No	9,475	1.18	F(0)	9,520~~515~~	1.19	F(0)	0.01	No
I-710	n/o Florence Avenue	8,000	9,060	1.13	F(0)	9,110	1.14	F(0)	0.01	No	8,940	1.12	F(0)	8,980	1.12	F(0)	0.00	No
SR-47	Vincent Thomas Bridge	4,000	3,070	0.77	C	3,110	0.78	D	0.01	No	3,585	0.90	D	3,630	0.91	D	0.01	No
SR-47	Commodore Schuyler Heim Bridge	6,000	4,170	0.70	C	4,245	0.71	C	0.01	No	4,855	0.81	D	4,905	0.82	D	0.01	No
*Supplemental Select Zone Analysis Locations**			*Max Project Increment Before Significant Impact*			*Project Increment*			Δ *D/C*	*Cum Con Imp*	*Max Project Increment Before Significant Impact*			*Project Increment*			Δ *D/C*	*Cum Con Imp*
I-405	n/o I-110	10,000	150			20			0.00	No	150			15			0.00	No
SR-91	e/o Lakewood Blvd	10,000	150			25			0.00	No	150			10			0.00	No
SR-60	e/o Jct 605	12,000	180			10			0.00	No	180			5			0.00	No
I-105	e/o Bellflower Bl, w/o I-605	8,000	120			10			0.00	No	120			10			0.00	No
I-110	Manchester Bl	12,000	180			50			0.00	No	180			50			0.00	No
I-605	n/o Telegraph Rd	10,000	150			25			0.00	No	150			15			0.00	No
I-710	s/o SR-60	8,000	120			10			0.00	No	120			0			0.00	No

Note: *Full impact analysis not performed for these locations; instead, the maximum project increment before the increment becomes a significant impact was calculated for each location and compared to the project increment shown on the Select Zone Analysis.

Contribution of the Proposed Program (Prior to Mitigation)

As prescribed in the *Guide For The Preparation of Traffic Impact Studies* (Caltrans 2002) for general plan amendments/updates, the general plan update is to be compared to the current general plan. The Port's PMP serves as the City of Los Angeles' long-term area plan for the Port district, similar to a City of Los Angeles Community Plan component of the General Plan. Hence, the LOS results shown in the Draft PEIR (Table 4.2-7) represent the required Caltrans traffic analysis scenario, which compared the PMPU with the existing PMP. However, to ensure full compliance with CEQA, baseline traffic conditions with the PMPU have also been analyzed.

Table 4.2-7 compares the future 2035 Without Program (CEQA baseline plus related projects) to the proposed Program at each CMP location in order to determine if there is a cumulatively considerable impact. The analysis shows that the proposed Program would cause an increase of 0.02 or more of the D/C ratio at one ~~freeway link~~ location~~s~~ ~~-~~operating at LOS F or worse, I-710 between PCH and Willow, and, therefore would cause a CMP location to experience a cumulatively considerable impact by exceeding the threshold of significance.

The I-710 Corridor Project Recirculated Draft EIR/EIS (Caltrans and LACMTA 2012) is currently being prepared, and will identify improvements to the corridor to accommodate all future year (2035) regional traffic, including Year 2035 Port and Port of Long Beach traffic. As such, the I-710 Corridor Project EIS/EIR would address traffic impacts of the overall Port area and regional growth on I-710 corridor, which encompasses the significant impact determined as part of this analysis for the proposed Program. The LAHD contributed $5 million for the PA/ED phase, and participates directly and extensively by providing technical guidance/input for preliminary engineering; the Administrative, Draft, and Final EIR/EIS; and the Caltrans Project Report. This input also is provided on all technical studies, including but not limited to: air quality, transportation, goods movement, rail/intermodal, and alternative technology. For these studies, the LAHD provided all Port and Port of Long Beach traffic volumes for direct incorporation into the I-710 Corridor Project EIR/EIS model (which is a focus model of the SCAG RTP model). These projections are consistent with the PMPU Draft PEIR analyses. Additionally, the Port and Port of Long Beach jointly conducted several alternative technology (ZECMS) studies which guided the I-710 Corridor Project EIR/EIS studies, and ultimately led to the recommendation of a separate truckway with zero emission technology.

Mitigation Measures and Cumulative Residual Impacts

The proposed Program would make a cumulatively considerable contribution to a significant cumulative impact if future improvements to the I-710 corridor are not accomplished as expected. ~~**MM TRANS-1** would require the Port to collaborate with Caltrans and Metro to secure funding and ensure timely implementation of the I-710 Corridor project by 2035 to alleviate future Port area and regional traffic growth on the I-710. Implementation of this measure would reduce cumulative freeway segment impacts to be less than cumulatively significant.~~

This PEIR determined that development of the proposed appealable/fill projects and land use changes under the PMPU, in aggregate, would have a potential significant cumulative impact at one location that is undergoing detailed design-level analysis as part of the I-710 Corridor Project Recirculated Draft EIR/EIS. Given that the I-710 Corridor Project EIR/EIS is still in development, along with the associated specific freeway and arterial street improvement projects, it would be inappropriate and infeasible at present to identify alternative Program-level specific mitigation measures. This is because such measures could be in conflict with the needs of the agency partners while those agencies are collaborating on detailed planning and design of the I-710 Corridor Project. Furthermore, it is possible that the degradation of operating conditions on the I-710 attributable to the PMPU could be ameliorated by implementation of the I-710 Corridor Project.

Furthermore, the proposed appealable/fill projects under the PMPU are in preliminary planning stages; therefore, it is not possible at present to accurately describe or predict particular alternative infrastructure improvements which would be both feasible and effective at avoiding or reducing any significant freeway traffic impacts of any particular development projects or land use changes under the proposed Program. This is because the type of development, timing of development, and conditions at the time in which development would occur are not currently known. Therefore, as future planning efforts occur for the proposed appealable/fill projects and development resulting from land use changes under the PMPU, separate environmental documentation with detailed traffic analyses would be prepared, if required under CEQA, to determine specific impacts associated with proposed development and mitigation would be applied, as necessary and as feasible.

Accordingly, although implementation of the I-710 Corridor Project is beyond the LAHD's authority, although project-specific mitigation funding for the I-710 Corridor Project is not currently feasible, and although it is premature to identify alternative infrastructure improvements which could feasibly mitigate significant traffic impacts of development under the PMPU, the following measure would be implemented, as required under CEQA, for the proposed appealable/fill projects and land use changes under the proposed Program which are determined to cause a significant freeway impact to the I-710.

MM TRANS-1: I-710 Corridor Improvements. Project-specific environmental documentation would be completed for projects occurring under the PMPU to determine project-specific impacts to the I-710. For significantly impacted locations determined in subsequent project-specific environmental documents, LAHD would collaborate with Caltrans and other agencies to identify how potential regional infrastructure improvements are funded. If the I-710 Corridor Project is not yet approved or has been abandoned at the time of consideration of future project-specific approvals under the PMPU, subsequent environmental documents for such development will evaluate whether alternative infrastructure improvements would be both feasible and necessary to mitigate any potential significant impacts of such projects.

Given that the impact is limited to one freeway location, and considering the implementation of reasonably foreseeable projects (those approved or proposed), and the implementation of mitigation measures related to future project-specific

environmental documents, cumulative freeway segment impacts would be reduced to less than cumulatively significant.

3.2.19 Changes Made to Chapter 5.0, Program Alternatives

Section 5.2, Alternative 1 – No-Program Alternative, and Section 5.3, Alternative 2 – No Fill Alternative, were revised for consistency with the alternatives analysis conclusions.

3.2.19.1 Section 5.2.2.2, Air Quality and Greenhouse Gases

The No-Program Alternative would include future projects constructed and operated under the existing PMP that would be expected to generate a range of significant project-specific and cumulative air quality impacts. However, these impacts would be similar but slightly less than ~~to~~ those associated with the PMPU, as evaluated in Section 3.2, Air Quality and Greenhouse Gases, and other projects evaluated in Chapter 4.0, Cumulative Analysis. Differences between the No-Program and proposed Program alternatives would be associated with emissions from construction and operation of appealable/fill projects and land use changes under the PMPU, although it is possible that projects similar to the PMPU appealable/fill projects could occur in the future, under an amended PMP scenario, and result in impacts comparable to those described for the proposed Program. Therefore, under the No-Program Alternative, no new impacts would occur beyond those that presently exist under the PMP.

3.2.19.2 Section 5.2.2.3, Biological Resources

Under the No-Program Alternative, future projects constructed and operated under the existing PMP would be expected to result in significant project-specific and cumulative impacts to biological resources. These impacts would be similar but slightly less than ~~to~~ those associated with the PMPU, as evaluated in Section 3.3, Biological Resources, and other projects evaluated in Chapter 4.0, Cumulative Analysis. Differences between the No-Program and proposed Program alternatives would be associated with the appealable/fill projects and land use changes under the PMPU. In particular, the No-Program Alternative would not result in the loss of EFH and marine habitat due to project-related fills, although it is possible that projects similar to the PMPU appealable/fill projects could occur in the future, under an amended PMP scenario, and result in impacts comparable to those described for the proposed Program.

3.2.19.3 Section 5.2.2.9, Noise

Under the No-Program Alternative, noise and vibration impacts from construction and operation of future projects under the PMP would be similar but slightly less than~~to~~ those described for the proposed Program. Given the absence of project-specific details to assess the potential magnitude of these impacts, this analysis concludes that construction activities under the No-Program Alternative would have the potential to result in significant noise impacts. Residual impacts would depend on

project-specific factors; however, noise impacts during construction would be significant and unavoidable. Operation of future projects under the No-Program Alternative would not result in a substantial change in the noise environment within the PMPU area or result in vibration that exceeds thresholds. Regardless, under the No-Program Alternative, no new impacts to noise would occur beyond those that presently exist under the PMP.

3.2.19.4 Section 5.3.2.2, Air Quality and Greenhouse Gases

Under the No Fill Alternative, appealable projects other than the cut/fill projects and associated land use changes included in the proposed Program would generate a variety of project-specific and cumulative air quality impacts that would be similar but slightly less than~~to~~ those for the proposed Program and other projects evaluated in Chapter 4.0, Cumulative Analysis.

3.2.19.5 Section 5.3.2.9, Noise

Under the No Fill Alternative, impacts would be slightly less than those described for the proposed Program. This is because the cut/ fill projects and associated land use changes that are included in the proposed Program would not occur~~The No Fill Alternative would involve four appealable projects, but no cut/fill projects~~. Compared to the proposed Program, this would reduce the potential for construction-related noise impacts. Nevertheless, as for the proposed Program, construction activities would likely involve noise levels that exceed standards at sensitive receptors, and impacts would be significant. Similar to the proposed Program, implementation of mitigation measures (**MM NOI-1 through MM NOI-11**) would be required during construction activities. Residual impacts would depend on project-specific factors; however, noise impacts during construction would be significant and unavoidable. Operation of allowable projects under the No-Program Alternative would not result in a substantive change in the noise environment within the PMPU area. Therefore, noise impacts from operations would be less than significant. Construction activities under the No Fill Alternative would not result in vibration that exceeds thresholds.

3.2.20 Changes Made to Chapter 10.0, References

3.2.20.1 Section 3.2, Air Quality and Greenhouse Gases

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3.2.20.2 Section 3.3, Biological Resources

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3.2.21 Changes Made to Appendix A, Draft Port Master Plan Update

A summary of the changes made to Draft PMPU is provided below. Revisions to the Draft PMPU that directly correspond to changes to the Draft PEIR are presented in this chapter. The Final PMPU is included in Appendix A, Port Master Plan, of this Final PEIR.

The key changes to the Draft PMPU include:

- Clarification of the PMPU Goals;
- Inclusion of additional PMPU land use examples;
- Clarification of public access infrastructure and programs at the Port;
- Modification of PMPU land use designations and boundaries;
- Clarification of land use acreages for the PMPU planning areas; and,
- Clarification of an existing and inclusion of an additional other project.

3.2.22 Changes Made to Appendix D, Air Quality

Appendix D, Air Quality, was modified to include the air quality emission calculations associated with construction and operation of Warehouse No. 1 as a mixed land use site.

Appendix D Table of Contents - Air Emissions Calculations for the POLA PMPU PFEIR

Table D-1. Increases in Auto Daily VMT by Speed Category for Planning Area 1 - POLA PMPU

Speed	*Autos*
0-10	1
11-15	261
16-20	855
21-25	3,668
26-30	3,387
31-35	2,168
36-40	1,924
41-45	1,594
46-50	1,161
51-55	521
56-60	249
61-65	96
Total Daily VMT	**15,888**

Table D-2. On-Road Auto Emission Factors - POLA PMPU Project

	Emission Factors (Grams/Mile)											
Project Year/Mode	*VOC*	*CO*	*NOx*	*SOx*	*PM10*	*PM2.5*	*Dust PM10*	*Dust PM2.5*	*Total PM10*	*Total PM2.5*	*CO2*	*References*
Year 2025												
5	0.09	1.51	0.13	0.01	0.01	0.01	0.02	0.01	0.03	0.02	1,106	(1)
10	0.06	1.29	0.11	0.01	0.01	0.01	0.02	0.01	0.03	0.01	819	(1)
15	0.03	1.04	0.09	0.01	0.00	0.00	0.02	0.01	0.02	0.01	503	(1)
20	0.02	0.95	0.08	0.01	0.00	0.00	0.02	0.01	0.02	0.01	418	(1)
25	0.02	0.87	0.07	0.01	0.00	0.00	0.02	0.01	0.02	0.01	359	(1)
30	0.01	0.81	0.07	0.01	0.00	0.00	0.02	0.01	0.02	0.01	321	(1)
35	0.01	0.77	0.07	0.01	0.00	0.00	0.02	0.01	0.02	0.01	299	(1)
40	0.01	0.71	0.07	0.01	0.00	0.00	0.02	0.01	0.02	0.01	287	(1)
45	0.01	0.66	0.07	0.01	0.00	0.00	0.02	0.01	0.02	0.01	287	(1)
50	0.01	0.62	0.07	0.01	0.00	0.00	0.02	0.01	0.02	0.01	296	(1)
55	0.01	0.58	0.07	0.01	0.00	0.00	0.02	0.01	0.02	0.01	315	(1)
60	0.01	0.56	0.07	0.01	0.00	0.00	0.02	0.01	0.02	0.01	351	(1)
65	0.02	0.69	0.09	0.01	0.00	0.00	0.02	0.01	0.02	0.01	384	(1)

Notes: (1) From EMFAC2011 (ARB 2011) for SCAB average fleet and year 2020.

Table D-3. Daily Auto Emissions - Planning Area 1 - POLA PMPU

	Pounds per Day											
Year/Speed	VOC	CO	NOx	SOx	PM10	PM2.5	Dust PM10	Dust PM2.5	Total PM10	Total PM2.5	CO2	CO2 TPY
Year 2025												
0-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	0.44
10-15	0.0	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	472	64.39
15-20	0.1	2.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	949	129.60
20-25	0.2	7.7	0.6	0.1	0.0	0.0	0.2	0.1	0.2	0.1	3,377	461.02
25-30	0.1	6.5	0.5	0.1	0.0	0.0	0.2	0.1	0.2	0.1	2,683	366.18
30-35	0.0	3.9	0.3	0.0	0.0	0.0	0.1	0.0	0.1	0.0	1,533	209.27
35-40	0.0	3.3	0.3	0.0	0.0	0.0	0.1	0.0	0.1	0.0	1,267	172.92
40-45	0.0	2.5	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.0	1,010	137.93
45-50	0.0	1.7	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.0	735	100.33
50-55	0.0	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	340	46.44
55-60	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	173	23.63
60-65	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74	10.15
Subtotal	**0.6**	**29.4**	**2.6**	**0.4**	**0.1**	**0.1**	**0.7**	**0.2**	**0.8**	**0.3**	**12,618**	**1,722**

Table D-4. Operational Emissions from CalEEMod - Year 2025 - Full Build-out of PMPU Planning Area 1

	Tons per Year						
Scenario/Emission Source	VOC	CO	NO_X	SO_X	PM_{10}	$PM_{2.5}$	CO2e
Proposed							
Area	0.49	-	-	-	-	-	-
Energy	-	0.01	0.01	-	-	-	462
Waste					-	-	49
Water					-	-	51
Total - TPY	**0.49**	**0.01**	**0.01**	**-**	**-**	**-**	**561**
Proposed							
Area	2.7	-	-	-	-	-	
Energy	-	0.1	0.1	-	-	-	
Waste	-	-	-	-	-	-	
Water	-	-	-	-	-	-	
Total - PPD	**2.7**	**0.1**	**0.1**	**-**	**-**	**-**	

Table D-5. Unmitigated Peak Daily Operational Emissions - Year 2025 - Full Build-out of PMPU Planning Area 1

	Pounds per Day					
Scenario/Emission Source	VOC	CO	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Container Cargo						
Area	2.7	-	-	-	-	-
Energy	-	0.1	0.1	-	-	-
Waste	-	-	-	-	-	-
Water	-	-	-	-	-	-
User Vehicles	0.6	29.4	2.6	0.4	0.8	0.3
Total - Planning Area 1	**0.6**	**29.4**	**2.6**	**0.4**	**0.8**	**0.3**

Table D-6. Unmitigated Annual GHG Emissions - Year 2025 - Full Build-out of PMPU Planning Area 1

Activity/Emission Source	*Total Emissions (Metric Tons)*				
	CO_2	*CH_4*	*N_2O*	*HFC-134*	*CO2e*
Construction					
Construction - 30-Year Average					11.98
Operations					
Area					-
Energy					462
Waste					49
Water					51
User Vehicles					1,722
Total Operations					**2,284**
Total - Planning Area 1					**2,296**

CalEEMod Version: CalEEMod.2011.1.1 Date: 5/30/2013

Strip Mall

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Strip Mall	102	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	9		2.2		
		Precipitation Freq (Days)			
			33		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase -

Off-road Equipment -

1 of 7

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2011	0.12				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	1.06				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**1.18**				**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2011	0.12				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012	1.06					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**1.18**				**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.49	0.00	0.00	0.00		0.00	0.00		0.00	0.00	#	#	0.00	0.00	0.00	0.00
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	#	#	#####	0.02	0.01	462.21
Mobile	2.51	5.85	####	0.05	5.13	0.29	5.42	0.08	0.28	0.36	#	#	####	0.16	0.00	######
Waste						0.00	0.00		0.00	0.00	#	#	####	1.28	0.00	48.72
Water						0.00	0.00		0.00	0.00	#	#	####	0.23	0.01	50.55
Total	**3.00**	**5.86**	**22.29**	**0.05**	**5.13**	**0.29**	**5.42**	**0.08**	**0.28**	**0.36**	**21.74**	**4,610.06**	**4,631.80**	**1.69**	**0.02**	**4,671.91**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.49	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	459.33	459.33	0.02	0.01	462.21
Mobile	2.51	5.85	22.28	0.05	5.13	0.29	5.42	0.08	0.28	0.36	0.00	4,107.07	4,107.07	0.16	0.00	4,110.43
Waste						0.00	0.00		0.00	0.00	21.74	0.00	21.74	1.28	0.00	48.72
Water						0.00	0.00		0.00	0.00	0.00	43.66	43.66	0.23	0.01	50.55
Total	**3.00**	**5.86**	**22.29**	**0.05**	**5.13**	**0.29**	**5.42**	**0.08**	**0.28**	**0.36**	**21.74**	**4,610.06**	**4,631.80**	**1.69**	**0.02**	**4,671.91**

5.0 Energy Detail

5.2 Energy by Land Use - Natural Gas

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	450.08	450.08	0.02	0.01	452.90
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	450.08	450.08	0.02	0.01	452.90
NaturalGas Mitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	9.25	9.25	0.00	0.00	9.31
NaturalGas Unmitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	9.25	9.25	0.00	0.00	9.31
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.1 Mitigation Measures Energy

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Strip Mall	173400	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	9.25	9.25	0.00	0.00	9.31
Total		**0.00**	**0.01**	**0.01**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**9.25**	**9.25**	**0.00**	**0.00**	**9.31**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Strip Mall	173400	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	9.25	9.25	0.00	0.00	9.31
Total		**0.00**	**0.01**	**0.01**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**9.25**	**9.25**	**0.00**	**0.00**	**9.31**

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Strip Mall	1.54734e+006					450.08	0.02	0.01	452.90
Total						**450.08**	**0.02**	**0.01**	**452.90**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Strip Mall	1.54734e+006					450.08	0.02	0.01	452.90
Total						**450.08**	**0.02**	**0.01**	**452.90**

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6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.49	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.49	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.12					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.12					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.49	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					43.66	0.23	0.01	50.55
Unmitigated					43.66	0.23	0.01	50.55
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Strip Mall	7.5554 / 4.63073					43.66	0.23	0.01	50.55
Total						**43.66**	**0.23**	**0.01**	**50.55**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Strip Mall	7.5554 / 4.63073					43.66	0.23	0.01	50.55
Total						**43.66**	**0.23**	**0.01**	**50.55**

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8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					21.74	1.28	0.00	48.72
Unmitigated					21.74	1.28	0.00	48.72
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Strip Mall	107.1					21.74	1.28	0.00	48.72
Total						**21.74**	**1.28**	**0.00**	**48.72**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Strip Mall	107.1					21.74	1.28	0.00	48.72
Total						**21.74**	**1.28**	**0.00**	**48.72**

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3.2.23 Changes Made to Appendix F, Ground Transportation

Appendix F, Ground Transportation, was modified to include Figure F-1 and Figure F-2 that show the results of the select zone freeway analysis. This appendix was also updated to include the additional analysis sheets for the two new intersection analysis locations (i.e., Gaffey Street/1st Street and Harbor Blvd/Swinford Street/ SR-47 Ramps).

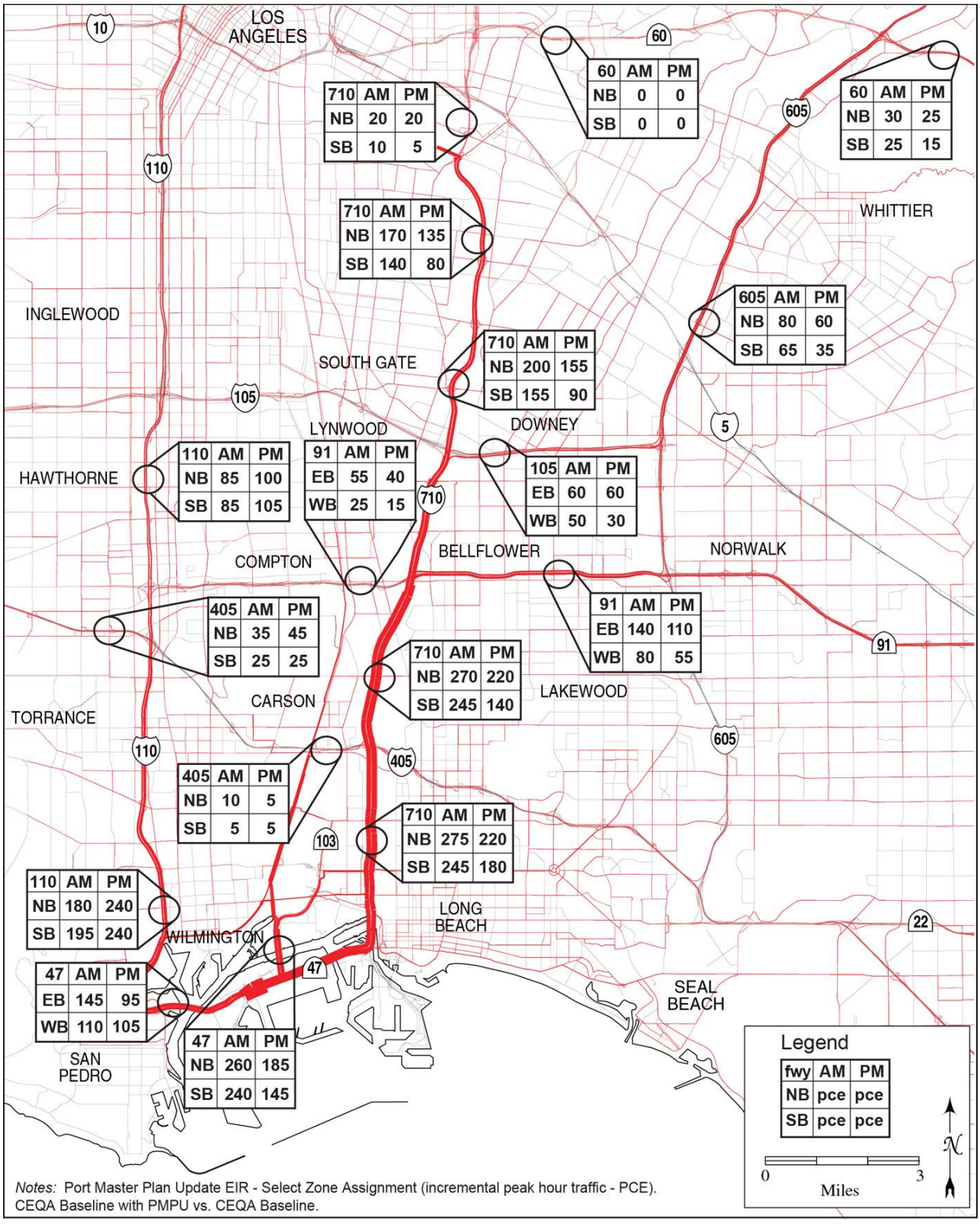

Figure F-1. Proposed Program Select Zone Analysis

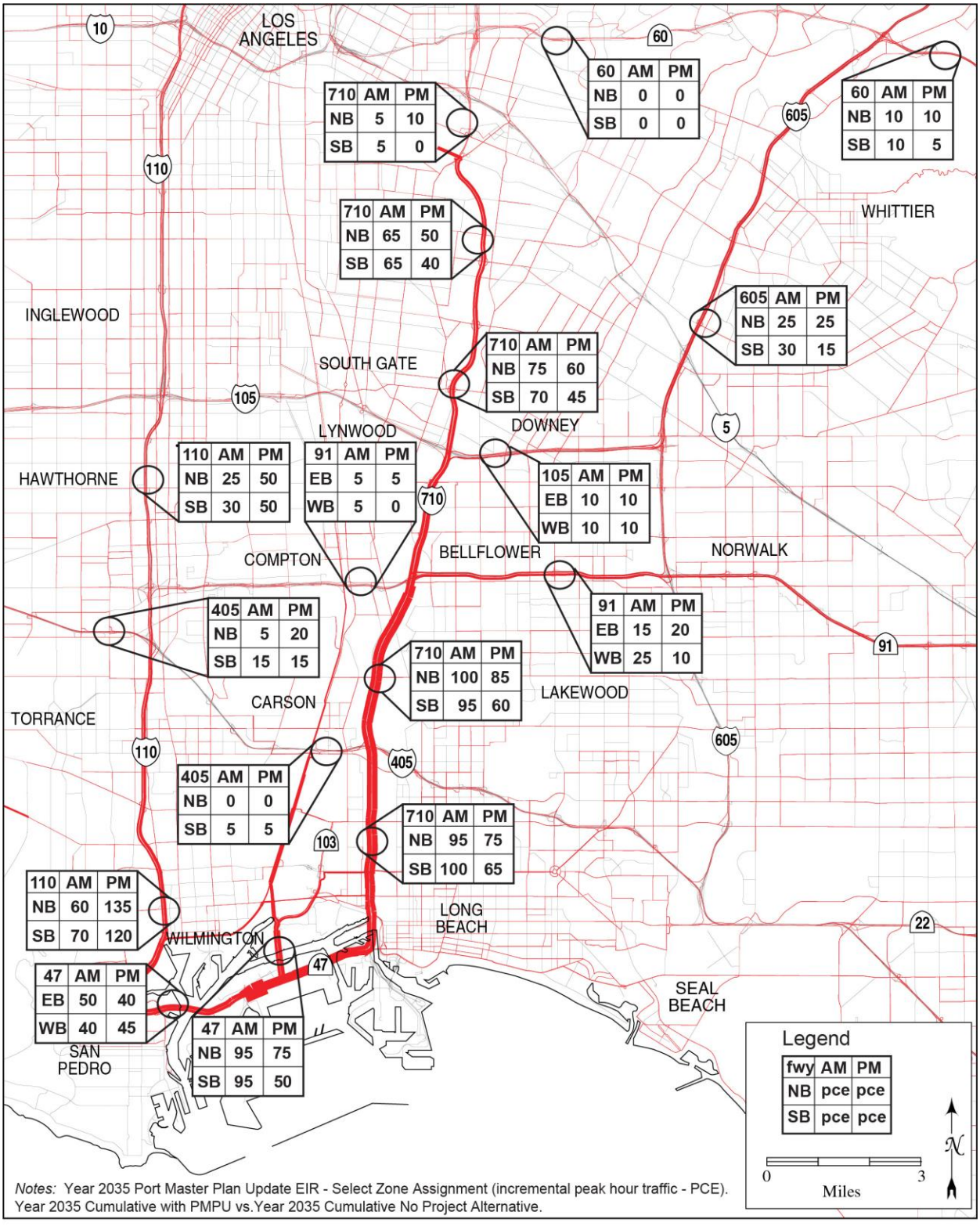

Figure F-2. Year 2035 Cumulative Select Zone Analysis

LADOT Moving LA Forward

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Gaffey Street	Year of Count:	2011	Ambient Growth: (%):		Conducted by:		Date:	
35	East-West Street:	1st Street	Projection Year:	2042	Peak Hour:	AM	Reviewed by:		Project:	PMPU

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			3			3				3				3				3
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			2			2				2				2				2
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--			0	NB-- 0 SB--			0	NB-- 0 SB--			0
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--			0	EB-- 0 WB--			0	EB-- 0 WB--			0
	ATSAC-1 or ATSAC+ATCS-2?			2			2				2				2				2
	Override Capacity			0			0				0				0				0
NORTHBOUND	Left	12	1	12	0	12	12	0	12	1	12	0	12	1	12	0	12	1	12
	Left-Through		0							0				0				0	
	Through	1696	2	568	2	1698	569	113	1809	2	606	2	1811	2	607	0	1811	2	607
	Through-Right		1							1				1				1	
	Right	8	0	8	0	8	8	0	8	0	8	0	8	0	8	0	8	0	8
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	73	1	73	0	73	73	125	198	1	198	0	198	1	198	0	198	1	198
	Left-Through		0							0				0				0	
	Through	1363	2	567	3	1366	569	62	1425	2	632	3	1428	2	634	0	1428	2	634
	Through-Right		1							1				1				1	
	Right	339	0	339	0	339	339	132	471	0	471	0	471	0	471	0	471	0	471
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	1066	1	560	0	1066	560	0	1066	1	563	0	1066	1	563	0	1066	1	563
	Left-Through		1							1				1				1	
	Through	53	0	560	0	53	560	6	59	0	563	0	59	0	563	0	59	0	563
	Through-Right		0							0				0				0	
	Right	24	1	18	0	24	18	0	24	1	18	0	24	1	18	0	24	1	18
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	41	1	41	0	41	41	0	41	1	41	0	41	1	41	0	41	1	41
	Left-Through		0							0				0				0	
	Through	134	1	134	0	134	134	2	136	1	136	0	136	1	136	0	136	1	136
	Through-Right		0							0				0				0	
	Right	203	1	167	0	203	167	186	389	1	290	0	389	1	290	0	389	1	290
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		641	North-South:		642	North-South:			804	North-South:			805	North-South:			805
		East-West:		727	East-West:		727	East-West:			853	East-West:			853	East-West:			853
		SUM:		1368	SUM:		1369	SUM:			1657	SUM:			1658	SUM:			1658
	VOLUME/CAPACITY (V/C) RATIO:			0.960			0.961				1.163				1.164				1.164
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.860			0.861				1.063				1.064				1.064
	LEVEL OF SERVICE (LOS):			D			D				F				F				F

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

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

5/31/2013-12:32 PM 1 PMPU 2 additional intersection analysis.xlsx

LADOT Moving LA Forward

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Gaffey Street	Year of Count:	2011	Ambient Growth: (%):		Conducted by:		Date:	
35	East-West Street:	1st Street	Projection Year:	2042	Peak Hour:	PM	Reviewed by:		Project:	PMPU

No. of Phases			3			3			3			3			3			3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			2			2			2			2			2			2	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	31	1	**31**	0	31	**31**	2	33	1	**33**	0	33	1	**33**	0	33	1	**33**
	Left-Through		0							0				0				0	
	Through	1421	2	479	12	1433	485	149	1570	2	531	12	1582	2	537	0	1582	2	537
	Through-Right		1							1				1				1	
	Right	17	0	17	0	17	17	6	23	0	23	0	23	0	23	0	23	0	23
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	88	1	88	0	88	88	141	229	1	229	0	229	1	229	0	229	1	229
	Left-Through		0							0				0				0	
	Through	1726	2	**723**	10	1736	**728**	49	1775	2	**774**	10	1785	2	**779**	0	1785	2	**779**
	Through-Right		1							1				1				1	
	Right	444	0	444	0	444	444	104	548	0	548	0	548	0	548	0	548	0	548
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	771	1	**439**	0	771	**439**	70	841	1	**500**	0	841	1	**500**	0	841	1	**500**
	Left-Through		1							1				1				1	
	Through	107	0	439	0	107	439	52	159	0	500	0	159	0	500	0	159	0	500
	Through-Right		0							0				0				0	
	Right	58	1	43	0	58	43	1	59	1	43	0	59	1	43	0	59	1	43
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	35	1	35	0	35	35	2	37	1	37	0	37	1	37	0	37	1	37
	Left-Through		0							0				0				0	
	Through	125	1	**125**	0	125	**125**	30	155	1	155	0	155	1	155	0	155	1	155
	Through-Right		0							0				0				0	
	Right	147	1	103	0	147	103	128	275	1	**161**	0	275	1	**161**	0	275	1	**161**
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		754	*North-South:*		759	*North-South:*			807	*North-South:*			812	*North-South:*			812
		East-West:		564	*East-West:*		564	*East-West:*			661	*East-West:*			661	*East-West:*			661
		SUM:		1318	*SUM:*		1323	*SUM:*			1468	*SUM:*			1473	*SUM:*			1473
VOLUME/CAPACITY *(V/C)* RATIO:				0.925			0.928				1.030				1.034				1.034
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.825			0.828				0.930				0.934				0.934
LEVEL OF SERVICE (LOS):				D			D				E				E				E

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

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

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Harbor Bl	Year of Count:	2011	Ambient Growth: (%):	0	Conducted by:		Date:	
11	East-West Street:	Swinford St / SR-47 EB Ramps	Projection Year:	2042	Peak Hour:	AM	Reviewed by:		Project:	

	2011 CONDITION			2011 PLUS PROJECT			2042 CONDITION W/O PROJECT				2042 CONDITION W/ PROJECT				2042 W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
No. of Phases			4			4			4				4					4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			2			2			2				2					2
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--			0
	EB-- 3 WB--		0	EB-- 3 WB--		0	EB-- 3 WB--		0		EB-- 3 WB--		0		EB-- 3 WB--			0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2					2
Override Capacity			0			0			0				0					0
NORTHBOUND																		
Left	371	2	204	4	375	206	166	537	2	295	4	541	2	298	0	541	2	298
Left-Through		0							0				0				0	
Through	753	1	**260**	13	766	**264**	604	1357	2	**461**	13	1370	2	**466**	0	1370	2	**466**
Through-Right		1							1				1				1	
Right	27	0	0	0	27	0	0	27	0	0	0	27	0	0	0	27	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	28	1	**28**	0	28	**28**	0	28	1	**28**	0	28	1	**28**	0	28	1	**28**
Left-Through		0							0				0				0	
Through	77	2	39	1	78	39	46	123	2	55	1	124	2	55	0	124	2	55
Through-Right		1							1				1				1	
Right	41	0	0	0	41	0	0	41	0	0	0	41	0	0	0	41	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	178	1	178	0	178	178	86	264	1	264	0	264	1	264	0	264	1	264
Left-Through		0							0				0				0	
Through	122	0	**499**	0	122	**512**	0	122	0	**847**	0	122	0	**860**	0	122	0	**860**
Through-Right		0							0				0				0	
Right	876	1	0	26	902	0	696	1572	1	0	26	1598	1	0	0	1598	1	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	39	0	**39**	0	39	**39**	0	39	0	**39**	0	39	0	**39**	0	39	0	**39**
Left-Through		1							1				1				1	
Through	9	0	26	0	9	26	0	9	0	26	0	9	0	26	0	9	0	26
Through-Right		1							1				1				1	
Right	17	0	0	0	17	0	0	17	0	0	0	17	0	0	0	17	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		288	*North-South:*		292	*North-South:*		489		*North-South:*		494		*North-South:*			494
	East-West:		538	*East-West:*		551	*East-West:*		886		*East-West:*		899		*East-West:*			899
	SUM:		826	*SUM:*		843	*SUM:*		1375		*SUM:*		1393		*SUM:*			1393
VOLUME/CAPACITY *(V/C)* RATIO:			0.601			0.613			1.000				1.013					1.013
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.501			0.513			0.900				0.913					0.913
LEVEL OF SERVICE (LOS):			A			A			D				E					E

PROJECT IMPACT

Change in *v/c* due to project: 0.013 — *Δv/c* after mitigation: 0.013

Significant impacted? YES — Fully mitigated? NO

version 1d beta;5/18/2011

Specialized EB RT Calcs

2011 CONDITION	EB Critical Move		2011 PLUS PROJECT	EB Critical Move		2042 CONDITION W/O PROJECT	EB Critical Move		2042 CONDITION W/ PROJECT	EB Critical Move		2042 W/ PROJECT W/ MITIGATION	EB Critical Move	
	RT	LT		RT	LT		RT	LT		RT	LT		RT	LT
N-S	288	288	N-S	292	292	N-S	489	489	N-S	494	494	N-S	494	494
EB	232	178	EB	235	178	EB	354	264	EB	360	264	EB	360	264
WB	39	39	WB	39	39	WB	39	39	WB	39	39	WB	39	39
Sum	559	505	Sum	566	509	Sum	882	792	Sum	893	797	Sum	893	797
V/C	0.407	0.367	**V/C**	0.412	0.370	**V/C**	0.641	0.576	**V/C**	0.649	0.580	V/C	0.649	0.580
Less	0.307	0.267	Less A	0.312	0.270	Less ATS	0.541	0.476	Less ATS	0.549	0.480	Less ATS	0.549	0.480
LOS	A	A	LOS	A	A	LOS	A	A	LOS	A	A	LOS	A	A
	Int V/C	**0.307**		**Int V/C**	**0.312**		**Int V/C**	**0.541**		**Int V/C**	**0.549**		Int V/C	0.549
		A			A			A			A			A

PROJECT IMPACT

Change in *v/c* due to project: 0.008 — *Δv/c* after mitigation: 0.008

Significant impacted? NO — Fully mitigated? NO

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Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Harbor Bl	Year of Count:	2011	Ambient Growth: (%):	0	Conducted by:		Date:	
11	East-West Street:	Swinford St / SR-47 EB Ramps	Projection Year:	2042	Peak Hour:	PM	Reviewed by:		Project:	

	2011 CONDITION			2011 PLUS PROJECT			2042 CONDITION W/O PROJECT				2042 CONDITION W/ PROJECT				2042 W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
No. of Phases			4			4			4				4				4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			2			2			2				2				2	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
	EB-- 3 WB--		0	EB-- 3 WB--		0	EB-- 3 WB--		0		EB-- 3 WB--		0		EB-- 3 WB--		0	
ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
Override Capacity			0			0			0				0				0	
NORTHBOUND Left	435	2	239	25	460	253	426	861	2	474	25	886	2	487	0	886	2	487
Left-Through		0							0				0				0	
Through	605	1	209	82	687	236	804	1409	2	477	82	1491	2	504	0	1491	2	504
Through-Right		1							1				1				1	
Right	22	0	0	0	22	0	0	22	0	0	0	22	0	0	0	22	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND Left	12	1	12	0	12	12	0	12	1	12	0	12	1	12	0	12	1	12
Left-Through		0							0				0				0	
Through	123	2	62	4	127	64	60	183	2	86	4	187	2	88	0	187	2	88
Through-Right		1							1				1				1	
Right	75	0	0	0	75	0	1	76	0	0	0	76	0	0	0	76	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND Left	224	1	224	0	224	224	47	271	1	271	0	271	1	271	0	271	1	271
Left-Through		0							0				0				0	
Through	13	0	557	0	13	597	0	13	0	910	0	13	0	951	0	13	0	951
Through-Right		0							0				0				0	
Right	1100	1	0	81	1181	0	707	1807	1	0	81	1888	1	0	0	1888	1	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
WESTBOUND Left	38	0	38	0	38	38	0	38	0	38	0	38	0	38	0	38	0	38
Left-Through		1							1				1				1	
Through	31	0	44	0	31	44	0	31	0	44	0	31	0	44	0	31	0	44
Through-Right		1							1				1				1	
Right	13	0	0	0	13	0	0	13	0	0	0	13	0	0	0	13	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	North-South:		301	North-South:		317	North-South:		560		North-South:		575		North-South:		575	
	East-West:		601	East-West:		641	East-West:		954		East-West:		995		East-West:		995	
	SUM:		902	SUM:		958	SUM:		1514		SUM:		1570		SUM:		1570	
VOLUME/CAPACITY (V/C) RATIO:			0.656			0.697			1.101				1.142				1.142	
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.556			0.597			1.001				1.042				1.042	
LEVEL OF SERVICE (LOS):			A			A			E				F				F	

PROJECT IMPACT

Change in *v/c* due to project: 0.041 — Δ*v/c* after mitigation: 0.041

Significant impacted? YES — Fully mitigated? NO

version 1d beta;5/18/2011

Specialized EB RT Calcs

2011 CONDITION	EB Critical Move RT	EB Critical Move LT
N-S	301	301
EB	248	224
WB	44	44
Sum	593	569
V/C	0.431	0.414
Less .	0.331	0.314
LOS A		A
Int V/C		0.331
		A

2011 PLUS PROJECT	EB Critical Move RT	EB Critical Move LT
N-S	317	317
EB	266	224
WB	44	44
Sum	627	585
V/C	0.456	0.425
Less A	0.356	0.325
LOS	A	A
Int V/C		0.356
		A

2042 CONDITION W/O PROJECT	EB Critical Move RT	EB Critical Move LT
N-S	560	560
EB	407	271
WB	44	44
Sum	1011	875
V/C	0.735	0.636
Less ATS	0.635	0.536
LOS	B	A
Int V/C		0.635
		B

2042 CONDITION W/ PROJECT	EB Critical Move RT	EB Critical Move LT
N-S	575	575
EB	425	271
WB	44	44
Sum	1044	890
V/C	0.759	0.647
Less ATS	0.659	0.547
LOS	B	A
Int V/C		0.659
		B

2042 W/ PROJECT W/ MITIGATION	EB Critical Move RT	EB Critical Move LT
N-S	575	575
EB	425	271
WB	44	44
Sum	1044	890
V/C	0.759	0.647
Less ATS	0.659	0.547
LOS	B	A
Int V/C		0.659
		B

PROJECT IMPACT

Change in *v/c* due to project: 0.024 — Δ*v/c* after mitigation: 0.024

Significant impacted? NO — Fully mitigated? NO

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