

3.6 Ground Transportation and Circulation

3.6.1 Introduction

This section addresses the potential for impacting ground transportation and circulation associated with implementing the Proposed Action.

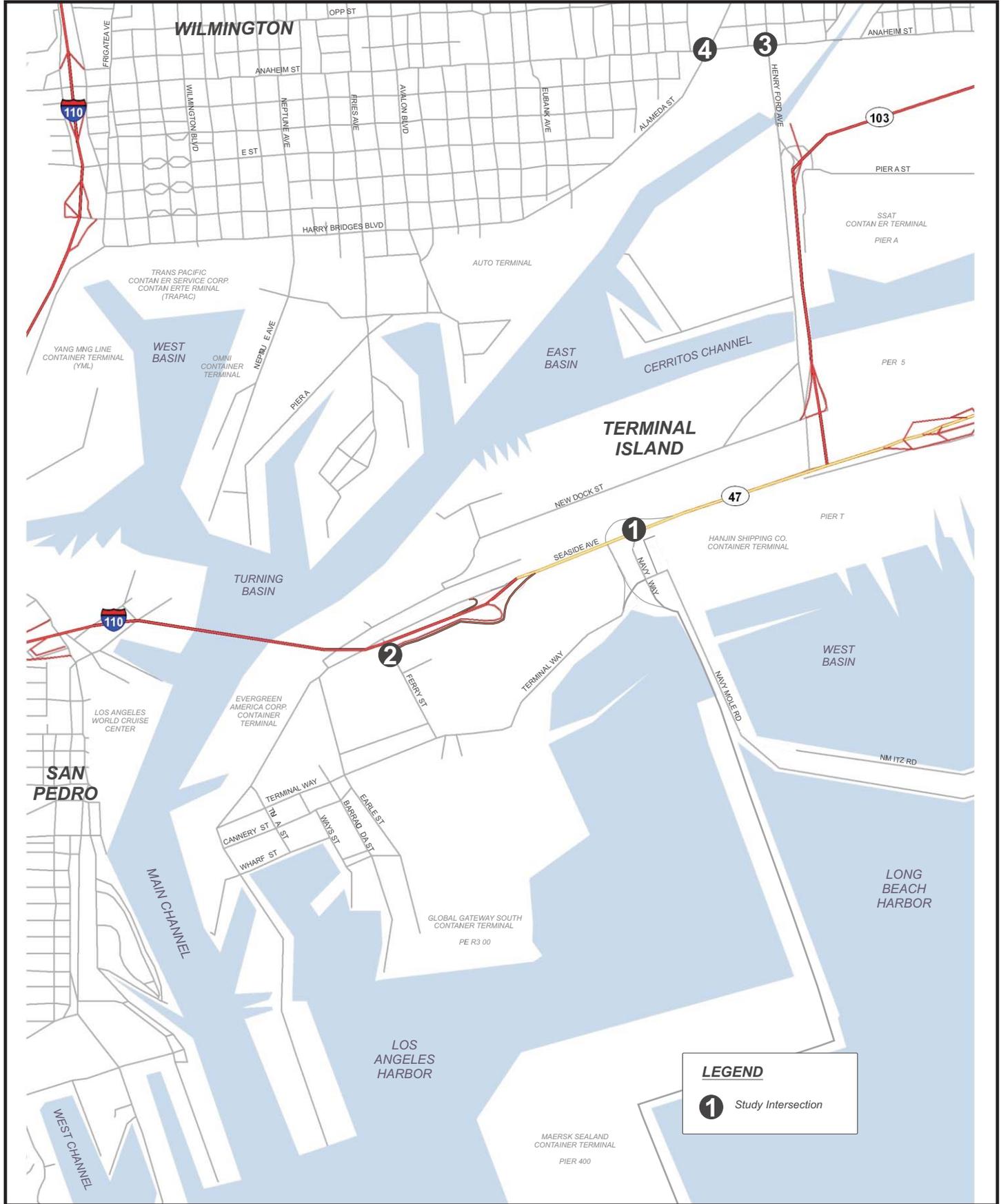
3.6.2 Environmental Setting

A study of traffic and transportation associated with dredging operations was addressed in the previous 1992 EIS/EIR and the 2000 SEIS/SEIR. Those studies analyzed the impact of additional traffic generated by throughput at the new container terminals to be constructed at the new land areas created by the Channel Deepening Project at Pier 300 and Pier 400. The Proposed Action would result in disposing approximately 3.0 mcy of dredge material at various disposal locations within the Port and at an ocean disposal site. The disposal sites proposed to be used for the Proposed Action would result in shallow water areas in the Outer Harbor of the Port, a CDF piled with clean dredge material placed as surcharge to +30 feet MLLW, a new 5-acre land area that would be used to reconfigure a roadway at the Northwest Slip, upland disposal at the Anchorage Road Soil Storage Site, and ocean disposal of remaining material at LA-2. None of these disposal options would result in increased throughput at the Port and would not increase the amount of car or truck traffic originating from or traveling to the Port.

3.6.2.1 Regional and Local Access

Access to the harbor area and Terminal Island is provided by a network of freeways and arterial routes, as shown in Figure 3.6-1. The freeway network consists of the Harbor Freeway (I-110), the Long Beach Freeway (I-710), the San Diego Freeway (I-405), and the Terminal Island Freeway (SR-103, SR-47), while the arterial street network that serves Terminal Island includes Seaside Avenue/Ocean Boulevard which provides access to and from the island plus a series of streets on Terminal Island: Terminal Way, Ferry Street, Earle Street, Seaside Avenue, Navy Way and Reeves Avenue.

The Harbor and Long Beach Freeways are north-south highways that extend from the Port area to downtown Los Angeles. They each have six lanes in the vicinity of the harbor and widen to eight lanes to the north. The San Diego Freeway is an eight-lane freeway that passes through the Los Angeles region generally parallel to the coast. The Terminal Island Freeway is a short highway that extends from Terminal Island across the Heim Bridge and terminates at Willow Street approximately 245 m (800 feet) east of the Southern Pacific Intermodal Container



Source: Iteris, 2008.

**Figure 3.6-1
 Study Area
 Intersection Locations**

Transfer Facility (ICTF). It is six lanes wide on the southern segment, narrowing to four lanes at Anaheim Street.

The transportation environmental setting for the Proposed Action includes those streets and intersections that would be used by both automobile and truck traffic associated with construction of the Proposed Action to gain access to and from Terminal Island. The streets most likely to be impacted by project-related auto and truck traffic include the following; Seaside Avenue/Ocean Boulevard, Terminal Way, Ferry Street, Navy Way and Earle Street. The relationship of the Proposed Action site to the regional transportation network is shown in Figure 3.6-1.

Seaside Avenue/Ocean Boulevard runs east-west from downtown Long Beach, over the Gerald Desmond Bridge and connects to the terminus of the Terminal Island Freeway (SR 47/SR 103). Ocean Boulevard is designated State Route 710 between I-710 and SR 47. Ocean Boulevard/Seaside Avenue is designated State Route 47 between I-110 and the Terminal Island Freeway. Ocean Boulevard is constructed with six travel lanes and left-turn lanes at intersections. At the east city boundary, Seaside Avenue is renamed Ocean Boulevard in Long Beach and continues to the east to the Gerald Desmond Bridge.

Navy Way runs north-south on Terminal Island, has two lanes in each direction, and connects with Seaside Avenue and Terminal Way. It provides access to Pier 300 and Pier 400 and the project area.

Terminal Way is a four-to six-lane, generally east-west street providing access to Pier 300, the US Coast Guard Base and Berths 243-245. It turns into Ferry Street on its west end, and Navy Way on its east end, at Reeves Avenue.

Ferry Street is a four-lane, north-south street providing direct access to the Vincent Thomas Bridge and Seaside Boulevard.

3.6.2.2 Proposed Action Construction Activities

The Proposed Action consists of disposing approximately 3.0 mcy of material from the bottom of the Main Channel and several berths in the POLA and disposing it at various disposal locations within the Port and at an open water ocean disposal site. All dredged material would be disposed within the waters of the inner and outer harbors of the Port, the open ocean, or within the enclosed area of the Anchorage Road Soil Storage Site (ARSSS). Dredge and disposal activities would be carried out using waterborne construction equipment such as clamshell

dredges, barges, and tugboats. Construction activities would not occur in or within the immediate proximity of a road right-of way and would not require closure of any roadways.

Construction of the Proposed Action would require construction workers to travel to the project site as well as limited deliveries of equipment and materials, as discussed below.

Alternative 1

Construction of Alternative 1 would occur 24 hours per day for approximately 15 months and would include three shifts (7:00 a.m. to 3:00 p.m., 3:00 p.m. to 11:00 p.m., and 11:00 p.m. to 7:00 a.m. of approximately 77 workers. This alternative would also require a peak of 15 haul trips per day. Construction workers would park at a staging area in Fish Harbor.

Alternative 2

Construction of Alternative 2 would occur 24 hours per day for approximately 17 months and would include three shifts (7:00 a.m. to 3:00 p.m., 3:00 p.m. to 11:00 p.m., and 11:00 p.m. to 7:00 a.m. of approximately 71 workers. This alternative would no require any haul trips on public roadways. Construction workers would park at a staging area in Fish Harbor.

3.6.2.3 Existing Area Traffic Conditions

Trucks and worker vehicles arriving at the project site would typically access I-110 or I-710 en route to the construction parking area. Most vehicular traffic arriving from destinations outside the POLA proceed eastbound from I-110 to SR 47 across the Vincent Thomas Bridge or westbound from I-710 to Ocean Boulevard across the Gerald Desmond Bridge, and proceed along Seaside Avenue/Ocean Boulevard to Navy Way or the interchange at Seaside Avenue. Another route to the port and project site is via Alameda Street.

3.6.2.4 Roadway Operations

Truck and automobile traffic along roadways, including automobiles, Port trucks (i.e., containers, bobtails, and chassis), and other regional traffic not related to POLA operations, affect traffic volumes within the project vicinity. Freeway ramp/roadway intersections along I-110, SR-47, and Route 1 south of I-405 are also affected by regional traffic volumes. Existing traffic volumes for the key intersections in the project area are summarized in Table 3.6-1.

Intersection Operations

In Los Angeles, the Los Angeles Department of Transportation (LADOT) has adopted the use of the Critical Movement Analysis (CMA) method, as published in “Los Angeles Department of Transportation Traffic Study Policies and Procedures,” (August 2003). The CMA value is used

to assess the intersections level of service. Level of Service (LOS) is a qualitative indication of an intersection's operating conditions as represented by traffic congestion and delay and the volume/capacity (V/C) ratio. For signalized intersections, it is measured from LOS A (excellent conditions) to LOS F (very poor conditions), with LOS D (V/C of 0.900, fair conditions) typically considered to be the threshold of acceptability. The relationship between V/C ratio and LOS for signalized intersections is shown in Table 3.6-2.

Table 3.6-1 Existing 2004 Local Roadway Traffic Volumes

Intersection	Existing					
	AM PEAK HOUR			PM PEAK HOUR		
	Port Trucks	All Trucks	All Vehicles	Port Trucks	All Trucks	All Vehicles
Alameda Street/Anaheim Street	330	462	2510	518	624	2722
Henry Ford Avenue/Anaheim Street	326	437	2495	545	611	2638
Ferry Street/Terminal Way	376	419	863	355	378	983
Earle Street/Terminal Way	443	469	946	309	326	811
Ferry Street/Vincent Thomas Bridge EB Ramp	382	409	874	287	306	994

Notes: The POLA Baseline Transportation Study (MMA, 2004), developed in conjunction with the PCAC traffic subcommittee, evaluated only roadway segments with over 50 peak hour Port truck trips. As the Anaheim Street/Henry Ford Avenue and Navy Way/Seaside Avenue roadway intersections had less than 50 peak hour Port truck trips, these roadways were not evaluated in the POLA Baseline Transportation Study.

Source: MMA, 2004.

Table 3.6-2 Relationship Between Level of Service and V/C Ratio at Signalized Intersections

V/C Ratio	LOS	Traffic Conditions
0 to 0.600	A	Excellent. No vehicle waits longer than one red light, and no approach phase is fully used.
>0.601 to 0.700	B	Very Good. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
>0.701 to 0.800	C	Good. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
>0.801 to 0.900	D	Fair. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
>0.901 to 1.000	E	Poor. Represents the most vehicles that the intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
> 1.000	F	Failure. Backups from nearby locations or cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: TRB 1980.

For signalized intersections, the LOS values were determined by using Critical Movement Analysis (CMA) methodology contained in the Transportation Research Board's (TRB) Circular No. 212 – Interim Materials on Highway Capacity (TRB 1980). In addition, trucks use more

roadway capacity than automobiles because of their size weight and acceleration capabilities compared to autos. The concept of Passenger Car Equivalent (PCE) is used in the study to adjust for the effect of trucks in the traffic stream. PCE is defined as the amount of capacity in terms of passenger cars used by a single heavy vehicle of a particular type under specified roadway, traffic, and control conditions. A PCE factor of 1.1 was applied to tractors, 2.0 was applied to chassis, and 2.0 was applied to the container truck volumes for the LOS calculations. These factors are consistent with factors applied in previous port studies including the Port of Los Angeles Baseline Transportation Study (MMA, 2004) and subsequent work conducted for the POLA Roadway Master Plan (Parsons, 2007). The methodologies employed in this SEIS/SEIR technical traffic analysis are based on, and consistent with, the methodologies developed for these previous studies.

Based on peak-hour traffic volumes, V/C ratios, and average intersection control delays, the corresponding LOS, as it existed in 2004, has been determined for each project area intersection. The resulting 2004 intersections LOS are summarized in Table 3.6-3. The data in the table indicate that the existing study intersections currently operate at LOS C or better during the morning and afternoon peak hours.

Table 3.6-3 2004 Existing Conditions Intersection Levels of Service (LOS)

Intersection	YEAR 2004			
	AM PEAK HOUR		PM PEAK HOUR	
	LOS	V/C	LOS	V/C
Navy Way/Seaside Avenue	A	0.487	A	0.545
Henry Ford Avenue/Anaheim Street	A	0.566	B	0.625
Alameda Street/Anaheim Street	B	0.669	B	0.658
Ferry Street/SR-47 EB On/Off Ramps	A	0.282	A	0.463

3.6.3 Applicable Regulations

The City of Los Angeles Department of Transportation, the Port of Los Angeles and Caltrans control the street system in and adjacent to the project area. Those agencies are responsible for maintaining the roadway system and funding and implementing necessary improvements. The State of California vehicle Code provides regulation on vehicle height, weight and width. The Port is directed by internal standards and polices that guide the provision of service to its customers.

3.6.4 Methodology

Impacts were assessed by quantifying differences between future conditions without and with the Proposed Action construction activities. Future traffic conditions were estimated by adding traffic due to proposed local development projects, regional traffic growth, and traffic increases

resulting from POLA and POLB terminal throughput growth and separately for both project operations and project construction traffic to the baseline year 2004 traffic volumes. However, no traffic is assumed to occur from project operations, therefore all analyses consider project construction traffic only.

The purpose of this analysis is to isolate and disclose information about the potential impacts of construction of the Proposed Action. Substantial growth in background traffic in the vicinity of the Proposed Action has occurred since the baseline year (2004) and is anticipated to occur in future analysis years. The average growth rate was estimated using the Existing 2003 Passenger Car Equivalent (PCE) and 2015 Alternative 1- No Project (PCE) turning movement volumes from the Transportation and Circulation Study prepared for the approved Berth 136-147 Container Terminal Project EIS/EIR (USACE and LAHD, 2007). A straight line growth rate was derived using the 2003 and 2015 intersection turning movement volumes. The resulting growth rate was an average of 3.73 percent per year. For purposes of a worst case analysis, this study used an average growth rate of four percent per year. However, none of this growth as background traffic is attributable to the Proposed Action. The traffic projections from the Berth 136-147 Container Terminal Project EIS/EIR are the most recently completed projections that are part of an approved EIR in the POLA, thus they are the most appropriate projections to tier off for current studies. This also ensures consistency with recently adopted environmental studies in the Port.

Because the Port anticipates that local traffic conditions surrounding the Proposed Action will increase regardless of whether the Proposed Action is approved, baseline conditions for this traffic analysis include other anticipated future traffic growth not attributable to the Proposed Action (i.e., traffic in a given year due to other proposed local development projects, regional traffic growth, and traffic increases from Port terminal throughput growth not including the Proposed Action).

For this traffic analysis, the baseline for determining the significance of potential project impacts is Year 2004 baseline traffic conditions plus anticipated growth in non-project “background” traffic in Year 2009. Year 2009 is selected because it is expected that project construction – and therefore project-related construction traffic -- will reach its peak. After Year 2009, project construction traffic will diminish to zero, and there will be no project operational trips.

The methodology of comparing project construction traffic in 2009 to anticipated background traffic levels (without project construction) in 2009 accounts for the impacts of the construction of the Proposed Action itself, compared to unrelated regional traffic growth, proposed local development projects, and traffic increases resulting from Port terminal throughput growth that is

not attributable to the Proposed Action. This method ensures that the growth of background traffic in future years is not inaccurately attributed to the Proposed Action. Although the baseline used in this chapter differs from other impact sections in which the baseline is treated like a snapshot in time, it is utilized because it provides a realistic and conservative identification and determination of the likely traffic impacts.

3.6.5 Thresholds of Significance

The *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006) provides specific guidance to address potential traffic impacts resulting from construction and operation of a Proposed Action. A project in the Los Angeles Harbor is considered to have a significant transportation/circulation impact if the project or action would result in one or more of the following occurrences discussed below.

The Proposed Action would have a significant impact on transportation/circulation if it would:

TRANS-1: Result in short-term impacts on streets during Proposed Action construction. In the absence of specific criteria for construction impacts from LADOT, the same significant impact thresholds for intersections during operations are also applied for the construction period. Thus, a project would have a significant impact on transportation/circulation during construction if it would increase an intersection's V/C ratio in accordance with the following guidelines: (Note that the impact would be less than significant if the final LOS is A or B.)

- V/C ratio increase greater than or equal to 0.040 if final LOS is C,
- V/C ratio increase greater than or equal to 0.020 if final LOS is D, or
- V/C ratio increase greater than or equal to 0.010 if final LOS is E or F;

Final LOS" is defined as projected conditions but without project traffic mitigation.

TRANS-2: Increase an intersection's volume/capacity ratio in accordance with the following guidelines: (Note that the impact would be less than significant if the final LOS is A or B.)

- V/C ratio increase greater than or equal to 0.040 (or 4 seconds delay for stop-controlled intersections) if final LOS is C,
- V/C ratio increase greater than or equal to 0.020 (or 2 seconds delay for stop-controlled intersections) if final LOS is D, or
- V/C ratio increase greater than or equal to 0.010 (or 1.5 seconds delay for stop-controlled intersections) if final LOS is E or F.

If an unsignalized intersection is projected to operate at LOS C, D, E or F, the intersection would be re-analyzed using the signalized intersection methodology to determine the significance of impacts using the sliding scale criteria described above per L.A. CEQA Thresholds Guide.

- TRANS-3:** Additional demand on local transit services may occur due to project operation. However, LADOT does not have any established thresholds to determine significance of transit system impacts. The project would have an impact on local transit services if it would increase demand beyond the supply of such services anticipated at project build-out.
- TRANS-4:** According to the Congestion Management Plan (CMP), Traffic Impact Analysis Guidelines, an increase of 0.02 or more in the demand-to-capacity (D/C) ratio with a resulting LOS F at a CMP arterial monitoring station is deemed a significant impact. This applies only if the project meets the minimum CMP threshold for analysis, which are 50 trips at a CMP intersection and 150 trips on a freeway segment.
- TRANS-5:** An increase in rail activity could cause delays to motorists at the affected at-grade crossings where additional project trains would cross and/or where the project would result in additional vehicular traffic flow. The project is considered to have a significant impact at the affected at-grade crossings if the average vehicle control delay caused by the project at the crossing would exceed the Highway Capacity Manual (HCM) threshold for level of service E at a signalized intersection, which is 55 seconds of average vehicle delay (TRB 2000). The Highway Capacity Manual is the national standard for the measurement of highway and intersection capacity and levels of service.

3.6.6 Impact Analysis and Mitigation Measures

3.6.6.1 Alternative 1: Port Development and Environmental Enhancement

Alternative 1, Port Development and Environmental Enhancement, would consist of disposing dredged material at the following disposal sites: Berths 243-245; Northwest Slip; CSWH Expansion Area; Eelgrass Habitat Area; and LA-2.

A Confined Disposal Facility (CDF) would be created at the Berths 243-245 disposal site and would be covered with clean dredge material placed as surcharge to an elevation of approximately +30 feet MLLW, which would remain in place until a future geotechnical investigation/monitoring determines the fill has been consolidated. In the future, if the Port

decides to remove the surcharge material, an appropriate CEQA document would be prepared to analyze potential impacts of surcharge removal. Potential environmental impacts of future development of the new 5-acre land area at the Northwest Slip have been addressed in the Berth 136-147 Container Terminal Project Final EIS/EIR and are summarized in Section 3.14.

Impact TRANS-1 Short term impacts to streets would occur during construction of Alternative 1.

The proposed construction schedule for Alternative 1 would be up to 15 months. During construction, there would be temporary impacts to the surrounding street network as a result of worker and truck trips traveling to and from the Proposed Action site. It is anticipated that no construction materials would be stored on-site. Construction access routes would be via the I-110 to SR 47 across the Vincent Thomas Bridge or via the I-710 to Ocean Boulevard across the Gerald Desmond Bridge to Navy Way via Seaside Avenue/Ocean Boulevard.

Construction Worker Trips

Construction of Alternative 1 would last approximately 15 months and would require an estimated peak workforce of 77 persons per shift that would be expected to travel along local roadways to the Port.

Implementation of Alternative 1 would not require construction activities within a road right-of-way. All construction activities would occur within the waters of the inner and outer harbors of the POLA and the open ocean, and would not affect area roadways. Furthermore, construction of Alternative 1 would not require road or lane closures. All dredging activities occur offshore; therefore all construction worker trips are to and from the construction worker parking area.

Construction worker needs have been identified with approximately 77 construction workers per shift during the peak construction period (Year 2009). Construction would occur 24 hours per day in three shifts: 7:00 a.m. to 3:00 p.m., 3:00 p.m. to 11:00 p.m., and 11:00 p.m. to 7:00 a.m. Construction workers would park at a staging area in Fish Harbor. Although approximately 77 worker trips would occur during peak construction period, due to the modified work hours, construction worker trips are not expected to impact the surrounding street network during the p.m. peak period from 4:00 p.m. to 6:00 p.m. Workers in the afternoon would arrive at and depart from the construction parking area prior to the p.m. peak period (shift starts/ends at 3:00 p.m.) and would not impact the p.m. peak hour. However, construction workers depart during the a.m. peak period (shift ends at 7:00 a.m.) and could potentially impact the a.m. peak hour commute for the peak construction period (Year 2009).

Truck Trips

Alternative 1 construction activities would require up to 15 daily truck trips to haul demolition debris from the construction site. During peak hours, up to four (4) truck trips could occur. Accordingly, the total number of truck trips is projected to peak during the peak construction period in Year 2009. However, when compared to existing intersection volume/capacity ratios, construction project related truck trips during the AM and PM peak periods are nominal and are not expected to create any significant Proposed Action impacts on the roadway system.

Construction Period Traffic Handling Assumptions

The following standard construction period traffic handling measures would be used and, therefore, are assumed for the analysis:

- **Designated Truck Routes:** Trucks delivering materials to and from the construction site must stay on designated truck routes determined by Caltrans and the City of Los Angeles Department of Transportation. Preapproved truck routes around the POLA include:
 - Interstate 110 – Beginning at Junction 9th Street and Gaffey Street and ending at Junction Route 47
 - Interstate 110 – Beginning at Junction Route 47 and ending at Junction Route 101
 - State Highway 47 – Beginning at Junction 110 and ending at Junction Route 103
 - Interstate 710 – Beginning at Route 1 and ending at Junction 10
 - State Highway 103 – Beginning at Junction Route 47 and ending at Junction Route 1 (Pacific Coast Highway)
- **Traffic Control:** In the event that a temporary road and/or lane closure would be necessary during construction, the contractor shall provide traffic control activities and personnel, as necessary and as required by LADOT, to minimize traffic impacts. This may include detour signage, cones, construction area signage, flagmen, and other measures as required for safe traffic handling in the construction zone.
- **Construction Scheduling:** Construction would not occur near residential areas outside of the hours dictated by the City of Los Angeles noise ordinance. The City of Los Angeles noise ordinance limits construction near residences to 7:00 a.m. to 9:00 p.m., Monday through Friday, and from 8:00 a.m. to 6:00 p.m. on Saturday.

As shown in Table 3.6-4, all intersections impacted by construction activities operate at LOS C or better. The maximum number of construction vehicle trips, conservatively estimated at 492 trips per day and 85 a.m. peak hour trips, would occur during construction activity at the Proposed Action site. This peak construction activity would be temporary and the increase in vehicle trips would be minimal relative to the existing and future baseline plus project scenario

LOS of A to C at affected intersections, and would be much less than the 0.04 degradation (for intersections with LOS of A to C) to 0.01 degradation (for intersections with LOS with LOS of E or F) as identified in significance criterion TRANS-1, above. Therefore, Alternative 1 construction traffic would not substantially increase vehicular volumes at any intersections within the Proposed Action area during typical commute peak periods.

Table 3.6-4 Intersection Level of Service Analysis – 2009 Adjusted Baseline

Study Intersection	2009 Adjusted Baseline				Adjusted Baseline + Project Construction Traffic				Change in V/C		Significantly Impacted
	A.M. PEAK HOUR		P.M. PEAK HOUR		A.M. PEAK HOUR		P.M. PEAK HOUR		A.M.	P.M.	
	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay			
1. Navy Way / Seaside Ave.	B	0.626	C	0.706	B	0.631	C	0.706	0.005	0.000	No
2. Ferry St. / SR-47 EB Ramp	A	0.423	A	0.546	A	0.424	A	0.546	0.001	0.000	No
3. Henry Ford Ave. / Anaheim St.	B	0.675	C	0.745	B	0.675	C	0.745	0.000	0.000	No
4. Alameda St. / Anaheim St.	C	0.797	C	0.785	C	0.797	C	0.785	0.000	0.000	No
<i>Notes:</i>											
* City of Los Angeles signalized intersections were analyzed using Critical Movement Analysis (CMA) methodology.											

Impact Determination

Alternative 1 construction traffic would not substantially increase vehicular volumes at any intersections within the Proposed Action area during typical commute peak periods; impacts on ground transportation and circulation impacts would be less than significant.

Mitigation Measures. Under Alternative 1, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 1 are required. Therefore, no residual impacts would occur.

Impact TRANS-2 Alternative 1 would not increase an intersection’s V/C ratio in accordance with the following guidelines:

- V/C ratio increase ≥ 0.040 if final LOS is C,
- V/C ratio increase ≥ 0.020 if final LOS is D, or
- V/C ratio increase ≥ 0.010 if final LOS is E or F.

Operation of the disposal sites created under Alternative 1 would not result in increased traffic to area roadways. Therefore, Alternative 1 would not contribute to an increased V/C ratio at area intersections.

Impact Determination

Operation of Alternative 1 would not result in increased V/C ratios at area intersections. Therefore, no impacts would occur.

Mitigation Measures. Under Alternative 1, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 1 are required. Therefore, no residual impacts would occur.

Impact TRANS-3 Alternative 1 Project operations would not result in a significant increase in related public transit use

Operation of the disposal sites created under Alternative 1 would not require any on-site employees and would not result in increased use of public transit.

Impact Determination

Operation of Alternative 1 does not require any on-site employees. Therefore the project would not have an impact on local transit services.

Mitigation Measures. Under Alternative 1, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 1 are required. Therefore, no residual impacts would occur.

Impact TRANS-4: Alternative 1 operations would not result in a significant increase in freeway congestion.

There are no trips associated with Alternative 1 project operations; therefore Alternative 1 would not result in increased freeway congestion.

Impact Determination

Alternative 1 would not result in increased freeway congestion. No impacts would occur..

Mitigation Measures. Under Alternative 1, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 1 are required. Therefore, no residual impacts would occur.

Impact TRANS-5: Alternative 1 operations would not cause an increase in rail activity that would cause delays in regional traffic.

The disposal sites created under Alternative 1 would not result in increased throughput. Therefore this alternative would not result in increased rail activity.

Impact Determination

Alternative 1 would not result in increased rail activity. No impacts would occur.

Mitigation Measures. Under Alternative 1, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 1 are required. Therefore, no residual impacts would occur.

3.6.6.2 Alternative 2: Environmental Enhancement and Ocean Disposal

Alternative 2, Environmental Enhancement and Ocean Disposal, consists of placing dredge material at the following locations: CSWH Expansion Area, Eelgrass Habitat Area, ARSSS, and LA-2. No new land area would be created as result of this alternative.

Impact TRANS-1 Short term impacts to streets would not occur during construction of Alternative 2.

The proposed construction schedule for Alternative 2 would be up to 17 months and would consist of the same shifts as identified above for Alternative 1. During construction, there would be temporary impacts to the surrounding street network as a result of worker trips traveling to and from the Proposed Action site. It is anticipated that no construction materials would be stored on-site. Construction access routes would be identical to those identified above for Alternative 1. All construction activities associated with Alternative 2 would occur within the waters of the inner and outer harbors of the POLA the open ocean, with the exception of disposal of contaminated sediments at the upland ARSSS.

Construction Worker Trips

Under Alternative 2, the maximum number of construction vehicle trips, conservatively estimated at 426 trips per day and 71 peak hour trips, which is less than the 492 daily trips and 85 peak hours trips estimated for Alternative 1, would occur during construction activity at the project site. Construction trips related to Alternative 2 would travel the same roadways during the same hours as construction trips identified above for Alternative 1.

Truck Trips

Alternative 2 would not require any demolition activities and therefore would not require any trucks to travel to the project site.

Construction Period Traffic Handling Assumptions

The standard construction period traffic handling measures identified above for Alternative 1 under Impact TRANS-1 would be used for Alternative and, therefore, are assumed for the analysis.

Impact Analysis

As shown above in Table 3.6-4 for Alternative 1, all intersections impacted by construction activities operate at LOS C or better. The maximum number of construction vehicle trips, conservatively estimated for Alternative 1 would occur during peak construction activity at the Proposed Action site. This peak construction activity would be temporary and the increase in vehicle trips would be minimal relative to the existing and future baseline plus project scenario LOS of A to C at affected intersections, and would be much less than the 0.04 degradation (for intersections with LOS of A to C) to 0.01 degradation (for intersections with LOS of E or F) as identified in significance criterion TRANS-1, above.

Because Alternative 2 would add even fewer daily and peak hour trips to the same roadways analyzed for Alternative 1, the increase in vehicle trips to the existing and future baseline plus project scenario LOS of A to C at affected intersections associated with Alternative 2 would be incrementally decreased compared to Alternative 1. Therefore, Alternative 2 construction traffic would not substantially increase vehicular volumes at any intersections within the Proposed Action area during typical commute peak periods.

Implementation of Alternative 2 would not require construction activities within a road right-of-way, although four to six haul trips would travel across Shore Road from a temporary bermed holding area to the ARSSS, approximately 0.15 miles away. Shore Road is used exclusively for access to boat marinas located adjacent to Shore Road and Anchorage Road and does not experience high levels of traffic, therefore, the temporary crossing of up to six trucks per day would not result in substantial disruptions to existing traffic.

Impact Determination

Alternative 2 construction traffic would not substantially increase vehicular volumes at any intersections within the Proposed Action area during typical commute peak periods; impacts on ground transportation and circulation impacts would be less than significant.

Mitigation Measures. Under Alternative 2, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 2 are required. Therefore, no residual impacts would occur.

Impact TRANS-2 **Alternative 2 would not increase an intersection's V/C ratio in accordance with the following guidelines:**

- V/C ratio increase ≥ 0.040 if final LOS is C,
- V/C ratio increase ≥ 0.020 if final LOS is D, or
- V/C ratio increase ≥ 0.010 if final LOS is E or F.

Operation of the disposal sites created under Alternative 2 would not result in increased traffic to area roadways. Therefore, Alternative 2 would not contribute to an increased V/C ratio at area intersections.

Impact Determination

Operation of Alternative 2 would not result in increased V/C ratios at area intersections. Therefore, no impacts would occur.

Mitigation Measures. Under Alternative 2, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 2 are required. Therefore, no residual impacts would occur.

Impact TRANS-3 **Alternative 2 Project operations would not result in a significant increase in related public transit use**

Operation of the disposal sites created under Alternative 2 would not require any on-site employees and would not result in increased use of public transit.

Impact Determination

Operation of Alternative 2 does not require any on-site employees. Therefore the project would not have an impact on local transit services.

Mitigation Measures. Under Alternative 2, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 2 are required. Therefore, no residual impacts would occur.

Impact TRANS-4 Alternative 2 operations would not result in a significant increase in freeway congestion.

There are no trips associated with Alternative 2 project operations; therefore Alternative 2 would not result in increased freeway congestion.

Impact Determination

Alternative 2 would not result in increased freeway congestion. No impacts would occur..

Mitigation Measures. Under Alternative 2, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 1 are required. Therefore, no residual impacts would occur.

Impact TRANS-5 Alternative 2 operations would not cause an increase in rail activity that would cause delays in regional traffic.

The disposal sites created under Alternative 2 would not result in increased throughput and would not require any rail activity. Therefore this alternative would not result in increased rail activity.

Impact Determination

Alternative 2 would not result in increased rail activity. No impacts would occur.

Mitigation Measures. Under Alternative 2, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 2 are required. Therefore, no residual impacts would occur.

3.6.6.3 Alternative 3: No Action

Under the No Action Alternative, no construction activities related to the Proposed Action would occur. No new landfills or new shallow water areas would be created. Since all approved disposal sites have been completed, no further dredging would take place and the Channel Deepening Project would not be completed. Existing environmental conditions at the Proposed Action disposal sites would continue to exist. Approximately 1.025 mcy of material within the federally-authorized channel and 0.675 mcy of berth dredging would remain to be dredged and disposed. In addition the 0.815 mcy of surcharge on the Southwest Slip Area would remain to be removed and disposed. Additionally, the 0.080 mcy of contaminated dredge material would remain within the Main Channel of the Port.

Impact TRANS-1 Short term impacts to streets would not occur during construction of Alternative 3.

Under Alternative 3, no construction activities related to the Proposed Action would occur. As such, no activities related to the Proposed Action would occur within a road right of way.

Impact Determination

Implementation of Alternative 3 would not require work within or closure of any roadways. Therefore, Alternative 3 would not result in short term impacts to streets during construction activities.

Mitigation Measures. Under Alternative 3, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 3 are required. Therefore, no residual impacts would occur.

Residual Impacts. Significant impacts would not occur.

Impact TRANS-2 Alternative 3 would not increase an intersection's V/C ratio in accordance with the following guidelines:

- V/C ratio increase ≥ 0.040 if final LOS is C,
- V/C ratio increase ≥ 0.020 if final LOS is D, or
- V/C ratio increase ≥ 0.010 if final LOS is E or F.

Under Alternative 3, no construction activities related to the Proposed Action would occur. As such, no new trips would be generated on the roadway system.

Impact Determination

Since no new trips would be generated on the roadway system, no impacts would occur.

Mitigation Measures. Under Alternative 3, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 3 are required. Therefore, no residual impacts would occur.

Impact TRANS-3 Alternative 3 Project operations would not result in a significant increase in related public transit use

Alternative 3 would not require any on-site employees to travel to any of the disposal site and would not result in increased use of public transit.

Impact Determination

Alternative 3 does not require any on-site employees and would not have an impact on local transit services.

Mitigation Measures. Under Alternative 3, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 3 are required. Therefore, no residual impacts would occur.

Impact TRANS-4 Alternative 3 operations would not result in a significant increase in freeway congestion.

There are no trips associated with Alternative 3, therefore Alternative 3 would not result in increased freeway congestion.

Impact Determination

Alternative 3 would not result in increased freeway congestion. No impacts would occur..

Mitigation Measures. Under Alternative 3, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 3 are required. Therefore, no residual impacts would occur.

Impact TRANS-5 Alternative 3 operations would not cause an increase in rail activity that would cause delays in regional traffic.

Alternative 3 would not result in increased throughput. Therefore this alternative would not result in increased rail activity.

Impact Determination

Alternative 3 would not result in increased rail activity. No impacts would occur.

Mitigation Measures. Under Alternative 3, no significant adverse impacts would occur; therefore, no mitigation measures are required.

Residual Impacts. No mitigation measures for implementation of Alternative 3 are required. Therefore, no residual impacts would occur.

3.6.7 Impact Summary

This section summarizes the conclusions of the impact analysis presented above in Section 3.6.6. Table 3.6-5 lists each impact identified for each alternative of the Proposed Action, along with the significance of each impact.

Table 3.6-5 Impact Summary

Impact	Alternative 1	Alternative 2	Alternative 3
Trans-1. Short term impacts to streets would not occur during construction.	LTS	LTS	NI
Trans-2. An intersection's V/C ratio would not be increased, in accordance with LADOT guidelines.	NI	NI	NI
Trans-3. Project operations would not result in a significant increase in related public transit use.	NI	NI	NI
Trans-4. Project operation operations would not result in a significant increase in freeway congestion.	NI	NI	NI
Trans-5. Delays in regional traffic would not be caused by increased rail activity.	NI	NI	NI

S&U = Significant and Unavoidable
 LTS = Less than Significant

SM = Significant but Mitigated
 NI = No Impact

Construction traffic associated with Alternatives 1 and 2 would have less than significant impacts on the local and regional transportation system, and would have not impacts related to project operation.

3.6.8 Mitigation Measures

No significant impacts on ground transportation would occur; therefore, no mitigation measures are required.

3.6.9 Significant Unavoidable Adverse Impacts

No significant unavoidable impacts would occur.

3.6.10 Mitigation Measures Monitoring Plan

Since no mitigation measures are required for ground transportation, a mitigation monitoring plan is not be required.