Section 3.6
Ground Transportation

SECTION SUMMARY

This section describes existing ground transportation within the Port and surrounding area, and addresses the reasonably foreseeable and potentially significant adverse impacts that could result from implementation of the proposed Project or, an alternative, should an alternative be adopted in lieu of the proposed Project. The ground transportation section evaluates how the proposed Project is forecasted to impact key locations in the local and regional roadway and railway systems. The proposed Project would result in various improvements to the existing Everport Container Terminal, and would increase the throughput of the terminal from approximately 1,240,773 TEUs annually (in 2013) to 2,379,525 TEUs annually by 2038. The existing terminal's capacity is approximately 1,818,000 TEUs annually. The increase in capacity of the terminal under the proposed Project would increase truck trips and rail activity, thereby potentially increasing congestion on area roadways and at at-grade rail crossings. The proposed Project also includes the vacation (closure and rerouting) of Terminal Way from Earle Street to Cannery Street and development of supporting infrastructure such as drainage systems, electrical supply systems and other infrastructure needed to support the proposed Project.

Section 3.6, Ground Transportation, provides the following:

- a description of existing ground transportation conditions in the study area;
- a description of applicable program and regulations regarding ground transportation;
- a discussion on the methodology used to determine whether the proposed Project or alternatives to the proposed Project would result in significant impacts on ground transportation;
- an impact analysis of both the proposed Project and alternatives; and
- a description of feasible mitigation measures proposed to reduce significant adverse impacts, as applicable.

Key Points of Section 3.6:

The proposed Project would make infrastructure improvements to an existing container terminal, and its operations would be consistent with other uses and container terminals in the Port of Los Angeles. The alternatives evaluated include the No Federal Action Alternative, the No Project Alternative, two Reduced Project alternatives, and an Expanded On-Dock Railyard Alternative. The analysis of construction-related trips determined that significant impacts to the transportation system would not occur. The analysis of terminal operations determined that, under CEQA, the proposed Project, and the alternatives considered herein, would not result in any direct significant adverse ground transportation impacts over existing baseline conditions, including to roadways, intersections, rail, or other modes of ground transportation. Impacts to roadway intersections under CEQA are less than significant because

existing conditions are generally free flowing. Under NEPA, the proposed Project and Alternatives 3, 4, and 5 would have significant impacts in 2026 and 2038 (based on forecasted future conditions) at the following intersection study location:

- Intersection #14: Ferry Street at State Route (SR)-47 (Terminal Island Freeway)/Seaside Avenue Ramps (Proposed Project, Alternatives 3, 4, and 5)

The westbound approach of the Ferry Street at State Route (SR)-47 (Terminal Island Freeway)/Seaside Avenue Ramps intersection is located in Caltrans right-of-way, and not owned by the City of Los Angeles. Because of this, no mitigation is within the Port's jurisdictional control that could reduce the intersection impact to a less than significant level under NEPA. Therefore, the impact at this intersection would remain significant and unavoidable.

The evaluation of rail related impacts to vehicular delay at inland at-grade rail crossings, which is provided for informational purposes, determined that increases in vehicular delay would not exceed the significance threshold and would not result in a substantial impact.

3.6.1 Introduction

This section provides a summary of the transportation/circulation impact analysis for the proposed Project and alternatives. The transportation analysis includes 12 freeway/roadway segments and 18 key intersections that would be used by truck and automobile traffic to gain access to and from the Project site and for which potentially significant impacts are reasonably foreseeable. These include the nearest Congestion Management Program (CMP) monitoring stations, assessed in conformance with Los Angeles County Metropolitan Transportation Authority (Metro) CMP guidelines (Metro, 2010), and additional roadway facilities within the study area. The existing conditions data collection methodology is included in Appendix E1. The technical traffic impact data from the model runs is included in Appendix E2.

In addition, an analysis of the potential rail-related impacts to vehicular delays at at-grade rail crossings for associated with the proposed Project and alternatives is included for informational purposes.

3.6.2 Environmental Setting

3.6.2.1 Regional and Local Access

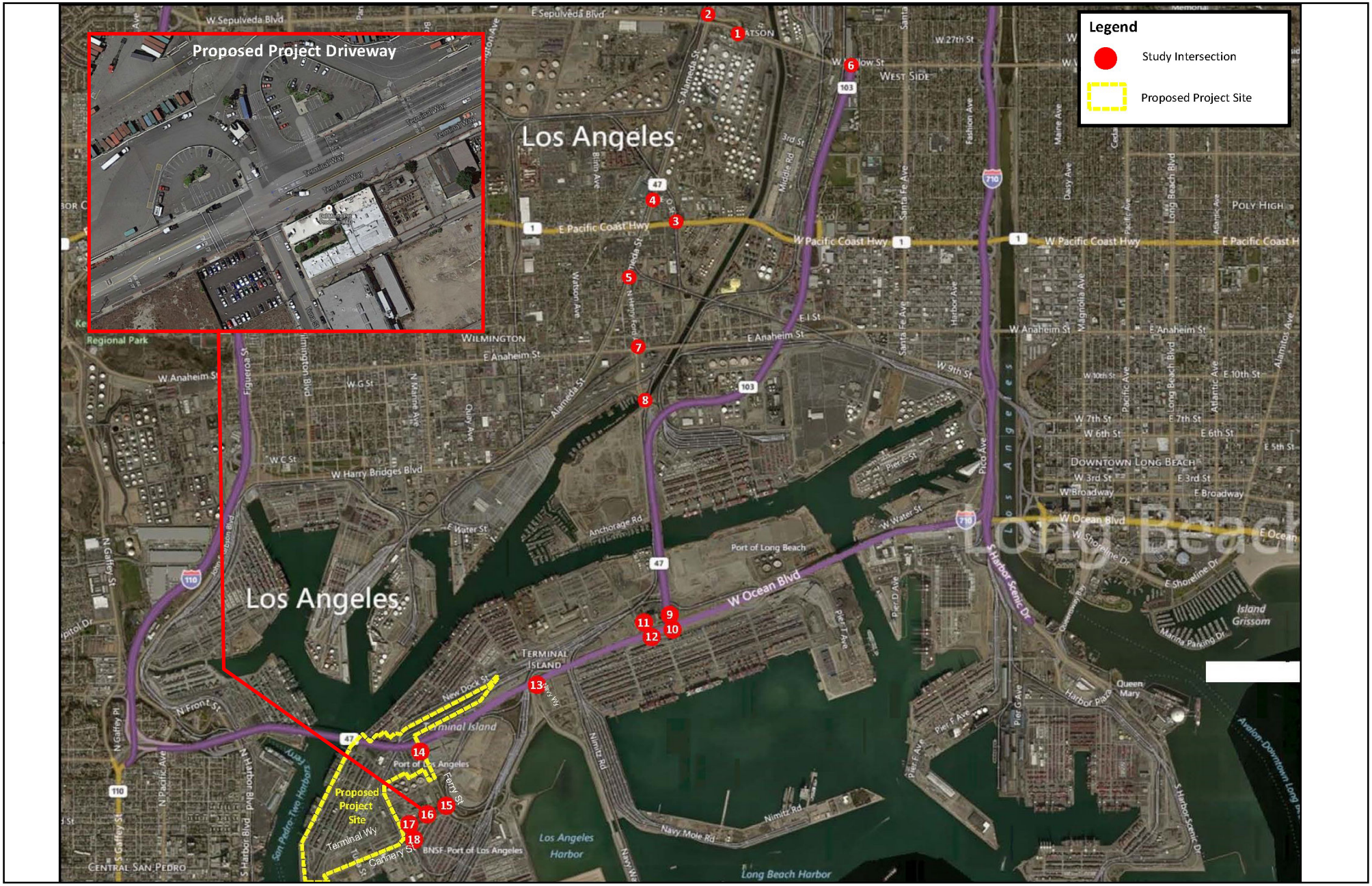
The Project site is located on Terminal Island, within an industrial area of the Port of Los Angeles. The site is within the Port of Los Angeles Community Plan area in the City of Los Angeles, which is adjacent to the communities of San Pedro and Wilmington, and approximately 20 miles south of downtown Los Angeles. The site is generally bounded on the north by the Terminal Island Freeway (SR-47), Earle Street on the east, the Los Angeles Main Channel to the west, and Slip 240 and Cannery Street to the south. Access to the Project site is from driveways along Terminal Way and Earle Street.

A network of freeways and arterial routes provides regional access to the Project site, as shown on Figure 3.6-1. The freeway network consists of the Artesia Freeway (SR-91), the Harbor Freeway (Interstate [I]-110), the Long Beach Freeway (I-710), the San Diego Freeway (I-405), and the Terminal Island Freeway (SR-47/SR-103).

The closest highway interchanges serving the Project site are the SR-47 at Ferry Street and the SR-47 at Navy Way.

As shown in Figure 3.6-1, the arterial street network that serves the Project area includes Alameda Street, Anaheim Street, Earle Street, Ferry Street, Front Street, Harry Bridges Boulevard, John S. Gibson Boulevard, Navy Way, Ocean Boulevard/Seaside Avenue, Pacific Coast Highway (PCH), Reeves Avenue, Sepulveda Boulevard and Terminal Way. Below is a description of Project area roadways.

The *Artesia Freeway* (SR-91) is an east-west highway that extends from Vermont Avenue in Gardena east to the junction with the Pomona (SR-60 west of SR-91) and Moreno Valley (SR-60 and I-215 east of SR-91) freeways in Riverside. It has eight general-purpose lanes and two high-occupancy vehicle (HOV) lanes north of the harbor.



Source: Iteris, 2016

Figure 3.6-1
Study Intersections

The *Harbor Freeway* (I-110) is a north-south highway that extends from Gaffey Street in San Pedro to downtown Los Angeles and Pasadena. It has six general-purpose lanes near the harbor and widens to eight lanes to the north.

The *Long Beach Freeway* (I-710) is a north-south highway that extends from the port area in Long Beach to Valley Boulevard in Alhambra. It has six general-purpose lanes near the harbor and widens to eight lanes to the north.

The *San Diego Freeway* (I-405) is a north-south highway that extends from Santa Ana Freeway (I-5) in Irvine to I-5 in the Mission Hills district of Los Angeles. It has eight general-purpose lanes and two HOV lanes north of the harbor.

The *Terminal Island Freeway* (SR-47/SR-103) is a short highway that begins at Ocean Boulevard on Terminal Island, where it overlaps with SR-47. It then crosses the Schuyler Heim Bridge, and travels north to its terminus at Willow Street in Long Beach. It has six general-purpose lanes on the southern segment, narrowing to four lanes north of Anaheim Street.

Alameda Street extends north from Harry Bridges Boulevard and serves as a key truck route between the harbor area and downtown Los Angeles. Alameda Street is grade-separated at all major intersections south of SR-91. Alameda Street is striped variously as a four-lane and six-lane roadway in the Project area. Ultimately, Alameda Street is planned to be striped for six lanes over most of its length. Alameda Street is classified as a Major Highway Class II in the City of Los Angeles General Plan, and a Major Highway in the City of Carson General Plan.

Anaheim Street is a four-lane to six-lane, east-west street in the study area. Anaheim Street has an interchange with the I-710 freeway, connects to the Terminal Island Freeway (SR-47/SR-103) via East 'I' Street, and intersects Alameda Street at grade.

Cannery Street is a two-lane east-west roadway that extends from Seaside Avenue to Earle Street. Cannery Street is unclassified in the City of Los Angeles General Plan.

Earle Street is a four-lane north-south roadway that extends from Pilchard Street to Marina Way. Earle Street is unclassified in the City of Los Angeles General Plan.

Ferry Street is a four-lane north-south internal Port roadway that provides local access to Pier 300 and Pier 400 from Seaside Avenue/Ocean Boulevard and the Terminal Island Freeway (SR-47/SR-103). Ferry Street is classified as a Secondary Highway in the City of Los Angeles General Plan.

Navy Way is an internal Port roadway that provides local access to Pier 300 and Pier 400 from Seaside Avenue/Ocean Boulevard and the Terminal Island Freeway (SR-47/SR-103). Navy Way is generally a four-lane north-south roadway, although south of the Terminal Way intersection, the southbound lanes turn into a single lane until the Seaside Way/Ocean Boulevard westbound off-ramp merges to form two southbound lanes. Navy Way is unclassified in the City of Los Angeles General Plan.

Ocean Boulevard/Seaside Avenue is a four-lane to six-lane street that bisects Terminal Island and connects San Pedro to Long Beach via the Vincent Thomas and Gerald Desmond bridges. Ocean Boulevard is designated SR-710 between I-710 and the Terminal Island Freeway, and Seaside Avenue is designated SR-47 between I-110 and the Terminal Island Freeway.

Pacific Coast Highway (SR-1) is a four-lane to six-lane arterial highway that extends east-west north of the Project site. PCH has interchanges with the I-710 freeway and the Terminal Island Freeway (SR-47/SR-103), and connects to Alameda Street via East O Street. PCH is classified as a Major Highway Class II north of the Project site in the City of Los Angeles General Plan.

Reeves Avenue is a two-lane to three-lane roadway (two eastbound lanes and one westbound lane) that serves as the eastbound extension of Terminal Way between Navy Way and Nimitz Road. Reeves Avenue is unclassified in the City of Los Angeles General Plan.

Sepulveda Boulevard/Willow Street is a four-lane roadway that extends east-west north of the Project site. Trucks are prohibited on Sepulveda Boulevard east of the Terminal Island Freeway (SR-103 portion). Sepulveda Boulevard is classified as a Major Highway Class II in the City of Los Angeles General Plan and a Major Highway in the City of Carson General Plan. East of the Terminal Island Freeway (SR-103), Sepulveda Boulevard turns into Willow Street, and is classified as a Major Arterial in the City of Long Beach General Plan.

Terminal Way is a four-lane to six-lane roadway that extends in a general east-west direction between Seaside Avenue and Navy Way. Terminal Way provides access to Pier 300 and the U.S. Coast Guard Base. Terminal Way is unclassified in the City of Los Angeles General Plan.

The traffic setting for the proposed Project includes those streets and intersections that would be used by both automobile and truck traffic to gain access to and from the Project site or are potentially affected by rail crossings. Most of the streets and intersections are also currently being used by automobile and truck traffic. Eighteen study intersections that are located near or on routes serving the Project site were chosen for analysis. Proposed Project-related traffic on streets farther away from the Project site would decrease due to dissipation and is not reasonably foreseeable to consider within a larger geographic context. Project-related traffic beyond the geographic scope of the area analyzed in this EIS/EIR would also be less than the number of trips that would require analysis per the City of Los Angeles Department of Transportation (LADOT) traffic impact study guidelines. The 18 study intersections that could exceed the LADOT traffic Study Guideline criteria include the following (see Figure 3.6-1 for study intersection locations):

1) Alameda Street at Sepulveda Boulevard ramp (along Sepulveda) – City of Carson
2) Alameda Street at Sepulveda Boulevard ramp (along Alameda) – City of Carson
3) Alameda Street at PCH ramp/East O Street (along PCH) – City of Los Angeles (CMP arterial monitoring station)
4) Alameda Street at PCH ramp/East O Street (along Alameda) – City of Los Angeles

5) Alameda Street at Henry Ford Avenue/Denni Street—City of Los Angeles
6) SR-103 (Terminal Island Freeway) at Sepulveda Boulevard – City of Long Beach
7) Henry Ford Avenue at Anaheim Street – City of Los Angeles
8) Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way – City of Los Angeles
9) SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps – City of Long Beach
10) SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps – City of Long Beach
11) Pier S Avenue at Ocean Boulevard Westbound Ramps – City of Long Beach
12) Pier S Avenue at Ocean Boulevard Eastbound Ramps – City of Long Beach
13) Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue – City of Los Angeles
14) Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps – City of Los Angeles
15) Ferry Street at Terminal Way – City of Los Angeles
16) Everport Container Terminal Gate at Terminal Way – City of Los Angeles
17) Earle Street at Terminal Way – City of Los Angeles
18) Earle Street at Cannery Street – City of Los Angeles

A traffic impact analysis is required at the following locations, pursuant to the Los Angeles County CMP (Metro, 2010):

- CMP arterial monitoring intersections, including freeway on- or off-ramps, where the proposed Project would add 50 or more trips during either the A.M. or P.M. weekday peak hours.
- CMP freeway monitoring locations where the proposed Project would add 150 or more trips during either the A.M. or P.M. weekday peak hours.

According to the CMP requirements, projects are only required to be compared to a future condition; i.e., growth in cargo at the terminal is permitted to be assumed (Metro, 2010). In compliance with CEQA, the proposed Project and alternatives analyzed are compared to the CEQA baseline, in which no growth in container volumes or traffic is assumed at the Everport Container Terminal. The existing environmental conditions at the time of the NOP are used as the baseline from which to consider the incremental and potentially significant adverse impacts of the Project. For the CEQA analysis, the baseline terminal operations are 1,240,773 annual TEUs. For the NEPA baseline, the terminal throughput is based on forecasted demand in each analysis year, up to the terminal's current buildout capacity. The NEPA baseline terminal operations per analysis year are: Year 2019: 1,278,107 annual TEUs, Year 2026: 1,429,728 annual TEUs, and Year 2038: 1,818,000 annual TEUs which is the current buildout capacity of the existing terminal.

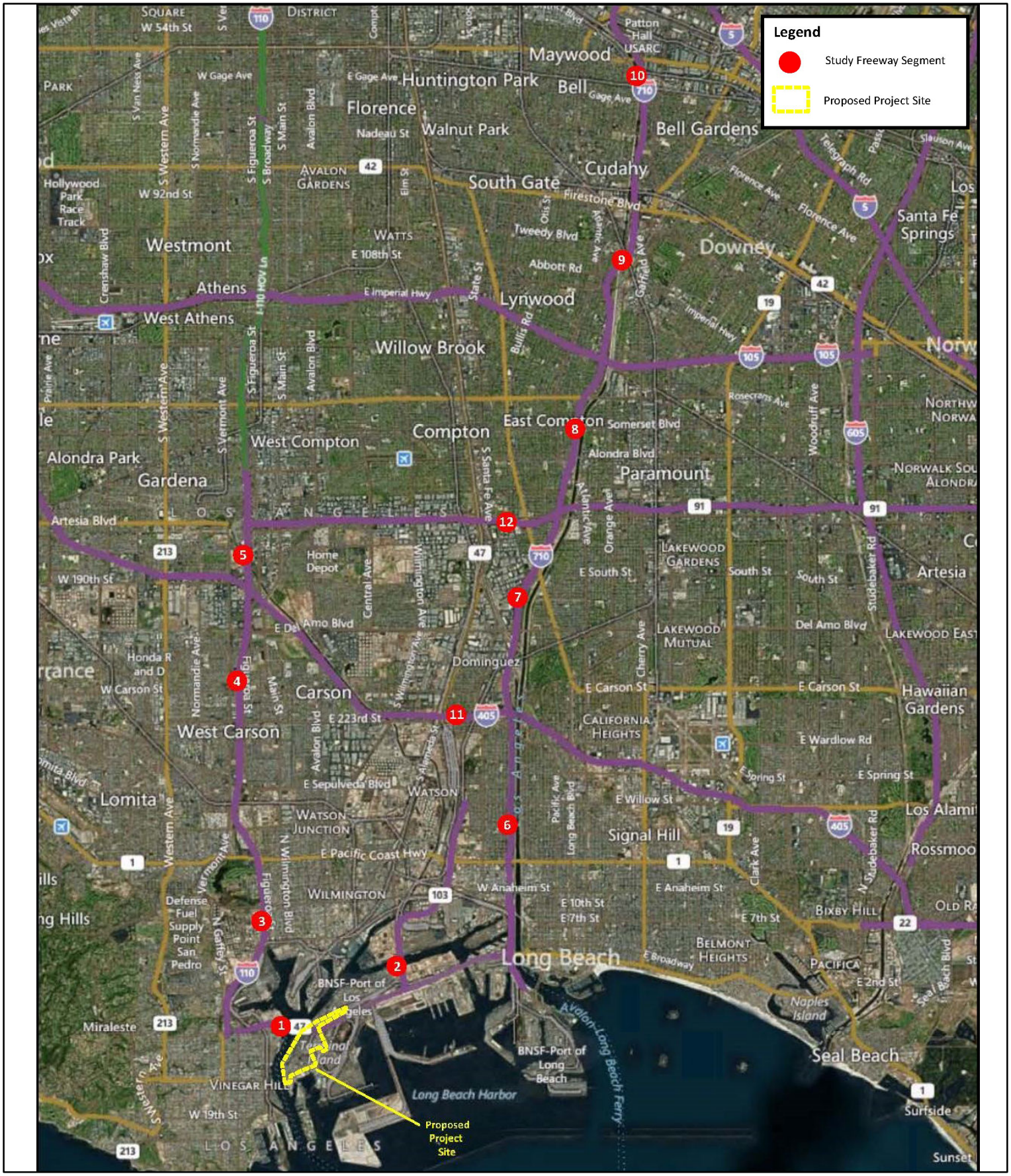
Three CMP arterial monitoring stations located within five miles of the Project study area are:

- PCH/Santa Fe Avenue (not a study intersection—less than 50 peak hour trips added by the proposed Project);
- Alameda Street/PCH (Study Intersections #3 and #4); and
- PCH/Figueroa Street (not a study intersection—less than 50 peak hour trips added by the proposed Project).

The closest freeway CMP monitoring stations include I-710 at Willow Street and I-110 at C Street; these are within approximately five miles of the Project site (see Figure 3.6-2 for illustration of study area freeway segment locations). In addition to the aforementioned two CMP locations, the following freeway segments were analyzed:

1) SR-47 at Vincent Thomas Bridge
2) SR-47/SR-103 at Commodore Schuyler Heim Bridge
3) I-110 south of C Street (CMP freeway monitoring station—south of C Street);
4) I-110 north of 223rd Street
5) I-110 north of I-405
6) I-710 north of PCH (CMP freeway monitoring station—north of the junction ofSR-1 [PCH] and Willow Street);
7) I-710 north of I-405 (CMP freeway monitoring station—north of the junction ofI-405, south of Del Amo Boulevard);
8) I-710 north of Alondra Boulevard
9) I-710 north of Firestone Boulevard (CMP freeway monitoring station—north of the junction ofI-105, north of Firestone Boulevard);
10) I-710 north of Florence Avenue;
11) I-405 between I-110 and I-710 (CMP freeway monitoring station—at Santa Fe Avenue);
12) SR-91 west of I-710 (CMP freeway monitoring station—east of Alameda Street and Santa Fe Avenue interchange)

Vehicle queuing analysis was conducted at the Ferry Street/SR-47 ramps, which are the closest state highway system ramps serving the proposed Project.



Source: Iteris, 2016

Figure 3.6-2
Study Freeway Segments

3.6.2.2 Existing Area Traffic Conditions

Existing truck and automobile traffic along study roadways and intersections, including automobiles, Port trucks, and other truck and regional traffic not related to the Port, was determined by collecting vehicle turning movement counts at the study locations from the field. The counts were classified by vehicle type and collected on weekdays during morning, afternoon (port peak) and evening periods: A.M. (7:00 to 9:00 A.M.), mid-day (M.D.; 1:00 to 3:00 P.M.), and P.M. (4:00 to 6:00 P.M.). Peak hour freeway counts were obtained from the Caltrans Traffic Census Program which publishes average daily traffic volumes for the state highway system on an annual basis. For more information regarding the existing conditions data collection methodology see the Appendix E1.

For this analysis, some intersection traffic counts were available from the baseline period, from before the baseline period, while other intersections had to be counted after issuance of the NOI/NOP. In order to ensure more accurate and reliable existing baseline data for use in this impacts analysis, LAHD exercised discretion to adjust counts taken during different time periods for seasonal and annual variation in port operations using port TEU throughput statistics and comparing two study locations that were counted inside and outside of the baseline period (study intersections #13 and #14) to develop factors for auto and truck volumes to adjust the counts taken outside of the baseline period (see Appendix E1). Port area traffic analyses and the Port's Quicktrip/Trainbuilder model use the average weekday of the peak month of port operations in a given year for the basis of existing and forecasted traffic volumes. Therefore, this methodology ensured a representative, conservative level of background traffic would be used for the traffic analysis of potential significant impacts of the proposed project and alternatives.Daily classification counts were conducted at the entry/exit gates that serve the Project site in 2013 and were utilized in the calibration of the Project site trip generation in the Port Transportation Analysis (PortTAM) Model.

The peak hour at each intersection was determined from traffic counts collected above by assessing the highest volume of total traffic occurring during one consecutive hour at each location. Regional traffic occurring during the A.M. and P.M. peak hours is mainly due to commute trips, school trips, and other background trips. While the peak hour for Port-related truck traffic generally occurs sometime during the M.D. period, greater overall levels of traffic occur during the A.M. and P.M. peak hours due to the greater level of work related regional vehicular traffic combined with Port-related traffic. Port traffic forecasts indicate a more even traffic distribution throughout the day in future years, thus minimizing the M.D. peak. The data indicate that, for study intersections, the A.M. or P.M. peak hour represents the highest level of traffic and therefore the "worst case" for purposes of the traffic operations analysis. However, the traffic analysis presents the results from the A.M., M.D., and P.M. peak hours.

Field-collected traffic count data are presented in Appendix E2. Level of service (LOS) is a qualitative indication of an intersection's operating conditions as represented by traffic congestion and delay and the volume to capacity (V/C) ratio. For intersections, it is measured from LOS A (excellent conditions) to LOS F (very poor conditions), with LOS D (V/C of less than 0.900, fair conditions, for signalized intersections; delay of less than 35.0 seconds, fair conditions, for unsignalized intersections) typically considered to be the threshold of acceptability. The relationship between V/C ratio and delay, and LOS for signalized and unsignalized intersections is shown in Table 3.6-1.

Table 3.6-1: Level of Service Criteria—Intersections

Signalized Intersections (V/C Ratio)	Unsignalized Intersections (delay [seconds])	LOS	Traffic Conditions
0 to 0.600	≤10.0	A	Excellent. Little or no delay/congestion. No vehicle waits longer than one red light, and no approach phase is fully used.
>0.601 to 0.700	>10.0 and ≤15.0	B	Very Good. Slight congestion/delay. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
>0.701 to 0.800	>15.0 and ≤25.0	C	Good. Moderate delay/congestion. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
>0.801 to 0.900	>25.0 and ≤35.0	D	Fair. Significant delay/congestion. 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	>35.0 and ≤50.0	E	Poor. Extreme congestion/delay. Represents the most vehicles that the intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
> 1.000	>50.0	F	Failure. Intersection failure/gridlock. 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: Transportation Research Board (TRB), 1980; TRB, 2010

The study intersections are located in the City of Los Angeles, the City of Long Beach, and the City of Carson. For purposes of this analysis, the locally defined thresholds of significance at intersections are used. Although the City of Los Angeles has a different method to assess intersection-operating conditions than that used by the City of Carson and the City of Long Beach, the methodologies are similar and generally yield similar results and conclusions.

Intersection levels of service in the City of Los Angeles were assessed using the LADOT Critical Movement Analysis (CMA) method as published in the *Los Angeles Department of Transportation Traffic Study Policies and Procedures* (LADOT,2013). For signalized

intersections, LOS values were determined by using CMA methodology contained in the *Transportation Research Board's Circular No. 212 – Interim Materials on Highway Capacity* (TRB, 1980).

Consistent with City of Carson and the City of Long Beach guidelines for analyses, traffic conditions in the vicinity of the proposed Project and within the City of Carson or the City of Long Beach's jurisdiction were analyzed using an intersection capacity-based methodology known as the *Intersection Capacity Utilization Methodology*, referred to hereinafter as the ICU Methodology.

For this analysis, it is assumed that trucks use more roadway capacity than automobiles because of their size, weight, and acceleration capabilities when compared to autos. The concept of passenger car equivalent (PCE)[1]is used in the study to adjust for the effect of trucks in the traffic stream. A PCE factor of 1.1 was applied to tractors (bobtails), and a PCE factor of 2.0 was applied to chassis and to the container truck volumes for the LOS calculations. This means tractors are calculated as using 10 percent more roadway capacity than autos, and chassis and container trucks are calculated as using 100 percent more roadway capacity than autos. These factors are consistent with factors applied in previous port studies, including the *Draft Port of Los Angeles Baseline Transportation Study* (*Baseline Transportation Study*) (POLA, 2004). They are also consistent with subsequent work conducted for various environmental studies in the Port area.

Many of the methodologies employed in this CEQA/NEPA technical traffic analysis are based on, and consistent with, the methodologies developed for the *Baseline Transportation Study*. This includes a computerized traffic analysis tool called the PortTAM Model, the trip generation methodology, and the intersection analysis methodologies. However, the *Baseline Transportation Study* was not conducted specifically for this proposed Project, and the precise assumptions and figures used in preparation of this Draft EIS/EIR are Project-specific. The PortTAM Model was updated to integrate with the Southern California Association of Governments (SCAG) 2012-2035 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) model.

State Highway and Metro Congestion Management Program (CMP) Analyses

In accordance with the California Department of Transportation's (Caltrans') "Guide for the Preparation of Traffic Impact Studies" (Caltrans, 2002), several freeway mainline segments were analyzed for potential impacts. The locations analyzed were over and above those prescribed by the Metro CMP Traffic Impact Analysis (TIA) Guidelines, which are as follows:

- CMP arterial monitoring intersections, including freeway on-ramp or off-ramp, where the proposed Project would add 50 or more trips to the intersection during either the A.M. or P.M. weekday peak hours.

[1]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.

- CMP freeway monitoring locations where the proposed Project would add 150 or more trips, in either direction, during either the A.M. or P.M. weekday peak hours.

Pursuant to Caltrans' traffic study requirements, freeway roadway segments were also analyzed using the operational analysis methodology provided in the *Highway Capacity Manual* (2010 HCM). For those locations projected to be operating at LOS F, the freeway segments were also analyzed in compliance with the County of Los Angeles CMP (Metro, 2010) to utilize D/C ratio to determine LOS.

The 2010 HCM is a fundamental reference document that incorporates the latest research on highway capacity and quality of service. The 2010 HCM uses density (in passenger cars per mile per lane) to define LOS. The relationship between density and LOS for freeway segments is shown in Table 3.6-2.

Table 3.6-2: Freeway HCM Level of Service Criteria

Freeway Level of Service (LOS)	Density in passenger cars/mile/lane
A	< = 11
B	> 11–18
C	> 18–26
D	> 26–35
E	> 35–45
F	> 45

Source: TRB, 2010

The CMP is the official source of data for regional coordination of traffic studies in the County of Los Angeles. The CMP uses the Density/Capacity (D/C) ratio to determine LOS. The relationship between the D/C ratio and LOS for freeway segments per the CMP is shown in Table 3.6-3.

LOS F(1) through F(3) designations are assigned where severely congested (less than 25 mph) conditions prevail for more than one hour, converted to an estimate of peak hour demand in the table above.

CMP arterial monitoring stations were analyzed in compliance with the County of Los Angeles CMP guidelines (Metro, 2010). However, since the County of Los Angeles CMP guidelines permit intersection LOS calculations to be conducted using the CMA/Circular 212 method (the same analysis method used by the City of Los Angeles), no additional CMP analysis is required at CMP arterial monitoring stations.

Table 3.6-3: Freeway CMP Level of Service Criteria

Freeway Level of Service (LOS)	Volume/Capacity Ratio
A	0.01–0.35
B	>0.35–0.54
C	>0.54–0.77
D	>0.77–0.93
E	>0.93–1.00
F(0)	>1.00–1.25
F(1)	>1.25–1.35
F(2)	>1.35–1.45
F(3)	>1.45

Source: Metro, 2010

Levels of Service Analysis

Based on peak-hour traffic volumes and V/C ratios, the corresponding LOS at study area intersections was determined for 2013 and is summarized in Table 3.6-4. The data in the table indicate that all of the existing study intersections currently operate at LOS C or better during the A.M., M.D., and P.M. peak hours as defined above.

The baseline volumes at the CMP monitoring stations and other freeway segments in the study area were obtained from 2013 Caltrans traffic counts of average daily traffic and peak hour. The baseline freeway volumes, density, and LOS are shown in Table 3.6-5.

Roadway Segment Evaluation

Two area roadway segments were evaluated as part of the existing area traffic conditions analysis; Terminal Way and Cannery Street between Barracuda Street and Earle Street. Below is a brief description of each roadway segment:

- Terminal Way between Barracuda Street and Earle Street – Terminal Way between Barracuda Street and Earle Street is a four-lane divided roadway that extends in a general east-west direction and provides access to the Project driveway. Terminal Way is unclassified in the City of Los Angeles General Plan and has an average daily traffic volume of 8,580.
- Cannery Street between Barracuda Street and Earle Street – Cannery Street between Barracuda Street and Earle Street is a two-lane undivided roadway that extends in a general east-west direction and is located south of the Project site. Cannery Street is unclassified in the City of Los Angeles General Plan and has an average daily traffic volume of 1,147.

Table 3.6-4: CEQA Baseline Intersection Level of Service

Int. #	Analysis Intersection	CEQA Baseline					
		A.M.		M.D.		P.M.	
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	C	0.764	A	0.579	B	0.679
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.468	A	0.472	A	0.529
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	B	0.621	A	0.589	B	0.697
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.291	A	0.249	A	0.395
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.069	A	0.198	A	0.214
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [1]	A	0.513	B	0.632	B	0.673
7	Henry Ford Avenue at Anaheim Street [2]	A	0.347	A	0.402	A	0.486
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	A	0.200	A	0.102	A	0.130
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [1]	A	0.368	A	0.288	A	0.269
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [1]	A	0.275	A	0.400	A	0.301
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [1]	A	0.331	A	0.265	A	0.269
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [1]	A	0.275	A	0.302	A	0.275
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	A	0.395	A	0.341	A	0.518
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	A	0.259	A	0.243	A	0.317
15	Ferry Street at Terminal Way [2]	A	0.329	A	0.147	A	0.108
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.100	A	0.288	A	0.180
17	Earle Street at Terminal Way [2]	A	0.098	A	0.138	A	0.161
18	Earle Street at Cannery Street [2]	A	0.111	A	0.115	A	0.069

Notes:

[1] City of Carson or City of Long Beach intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection; analyzed using CMA methodology according to City standards.

BOLD = LOS E or F

1

1 **Table 3.6-5: CEQA Baseline Freeway Level of Service**

Freeway	Location	Northbound / Westbound						Southbound / Eastbound					
		A.M. Peak Hour			P.M. Peak Hour			A.M. Peak Hour			P.M. Peak Hour		
		Demand or Volume	Density (pc/mi/ln)	LOS	Demand or Volume	Density (pc/mi/ln)	LOS	Demand or Volume	Density (pc/mi/ln)	LOS	Demand or Volume	Density (pc/mi/ln)	LOS
#1 SR-47	At Vincent Thomas Bridge	1,876	17.9	B	2,764	26.5	D	2,235	21.4	C	2,759	26.4	D
#2 SR-47/SR-103	At Commodore Schuyler Heim Bridge	1,119	7.1	A	1,173	7.5	A	922	5.9	A	997	6.4	A
#3 I-110 [1]	South of C Street	3,771	15.3	B	4,678	18.9	C	5,096	20.6	C	3,302	13.4	B
#4 I-110	North of 223rd Street	6,352	26.1	D	7,686	34.0	D	8,422	28.1	D	5,699	18.5	C
#5 I-110	North of I-405	10,565	40.2	E	10,440	39.2	E	9,265	31.1	D	9,002	30.8	D
#6 I-710 [1]	North of PCH	6,442	45.4	**F**	5,819	38.1	E	6,545	46.9	**F**	5,659	36.7	E
#7 I-710 [1]	North of I-405	7,998	39.9	E	6,785	32.5	D	7,617	37.1	E	7,526	36.6	E
#8 I-710	North of Alondra Boulevard	8,025	26.5	D	6,491	21.0	C	7,631	25.0	C	7,868	25.8	C
#9 I-710 [1]	North of Firestone Boulevard	7,932	35.8	E	6,466	26.7	D	7,376	31.9	D	7,838	35.1	E
#10 I-710	North of Florence Avenue	8,535	40.9	E	5,550	22.5	C	7,518	32.8	D	7,824	35.0	E
#11 I-405 [1]	Between I-110 and I-710	6,587	21.3	C	10,127	37.1	E	9,895	35.7	E	8,669	29.2	D
#12 SR-91 [1]	West of I-710	6,619	17.9	B	7,780	21.0	C	8,384	22.7	C	6,032	16.3	B

Note: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane [pc/mi/ln]).

[1] CMP location
BOLD = LOS F

2

As shown in Table 3.6-5, the following freeway segment is operating at LOS F:

- #6 I-170 north of PCH (CMP) (northbound and southbound A.M. peak hour).

3.6.2.3 Existing Transit Service

Several transit agencies provide service near the Project site, including Metro, the Municipal Area Express, Long Beach Transit, Torrance Transit, and LADOT. Together, these transit agencies operate 16 transit routes within and/or near the proposed Project, which are described below and summarized in Table 3.6-6.

Metro Express Line 550 (Exposition Park-San Pedro via Harbor Transitway). Metro Transit Line 550 provides express bus service from Exposition Park to San Pedro via the Harbor Freeway. Line 550 starts at Hoover Street and 32nd Street in Exposition Park and travels south to its final destination in at 7th Street and Patton Avenue in San Pedro. The A.M. and P.M. peak period headway is approximately 30 minutes. Weekend M.D. peak period headway is approximately 60 minutes.

Metro Local Line 202 (Willowbrook-Compton-Wilmington). Metro Transit Line 202 is a north-south local service that travels from Wilmington to Willowbrook along Alameda Street. Line 202 provides service from the Metro Blue Line, connecting at the Del Amo Blue Line Station. Weekday A.M. and P.M. peak period headway is approximately one hour. Late Night and Owl service is provided between Compton and Willowbrook Monday through Friday, with no service on Saturdays, Sundays and holidays.

Metro Local Line 205 (Willowbrook Station-San Pedro via Wilmington Avenue-Vermont Avenue). Metro Transit Line 205 is a north-south local service that travels from Willowbrook to San Pedro primarily along Wilmington Avenue and Vermont Avenue. Line 205 provides service from the Metro Blue Line/Green Line Stations in Willowbrook, to destinations such as the Harbor Gateway Transit Center, Harbor-UCLA Medical Center, and L.A. Harbor College. Weekday and weekend A.M. and P.M. peak period headway is approximately 60 minutes.

Metro Local 232 (Long Beach-LAX via Sepulveda Boulevard). Metro Transit Line 232 is a north-south route between El Segundo and Harbor City, and an east-west route between Harbor City and Long Beach. Line 232 connects to the Metro Blue Line in downtown Long Beach. The A.M. and P.M. peak period headway ranges between 20 and 40 minutes. Saturday peak period headway is 30 minutes.

Metro Local 246 (San Pedro-Artesia Transit Center via Pacific Avenue and Avalon Boulevard). Metro Transit Line 246 is a north-south route that travels from San Pedro to the Artesia Transit Center in Los Angeles. Line 246 traverses Line 247 between the Artesia Transit Center and Pacific Avenue and Front Street in San Pedro. At Pacific Avenue and Front Street, Line 246 continues south along Pacific Avenue to Paseo Del Mar and Gaffey Street. The A.M. and P.M. peak period headway ranges between 20 and 25 minutes. The weekend peak period headway is approximately 40 minutes.

Torrance Transit Line 3 (Redondo Beach-Downtown Long Beach). Torrance Transit Line 3 is an east-west route between Redondo Beach and Carson, a north-south route between Carson and Wilmington, and an east-west route between Wilmington and

downtown Long Beach. Line 3 travels along PCH through the proposed project area via PCH. The A.M. and P.M. peak period headway is approximately 15 minutes. Weekend M.D. peak period headway is 60 minutes.

Torrance Transit Line 7 (Redondo Beach-Carson). Torrance Transit Line 7 is an east-west route between Redondo Beach and Carson via Sepulveda Boulevard. Line 7 travels along Sepulveda Boulevard through the study area. The A.M. and P.M. peak period headway is approximately 60 minutes. Saturday M.D. peak period headway is 60 minutes.

Torrance Transit Line 9 (Torrance-Wilmington). Torrance Transit Line 9 is an east-west route between Torrance and Wilmington via Lomita Boulevard. Line 9 travels along Lomita Boulevard north of the study area. The A.M. and P.M. peak period headway is approximately 60 minutes. Saturday M.D. peak period headway is 60 minutes.

Long Beach Transit Line 1 (Easy Street). Long Beach Transit Line 1runs both north-south and east-west primarily along Long Beach Boulevard, PCH, Easy Street, and Wardlow Road from the Long Beach Transit Mall in downtown Long Beach to the Wardlow Metro Blue Line station. The A.M. and P.M. peak period headway is approximately 30 minutes. Saturday peak period headway is 45 minutes.

Long Beach Transit Line 171 (Long Beach-Seal Beach via Pacific Coast Highway). Long Beach Transit Lines 171 and 172 traverse similar routes along PCH between Technology Place and Lakewood Boulevard. From Lakewood Boulevard, Line 171 continues east along PCH to its terminus at Studebaker Road. The A.M. and P.M. peak period headway is approximately 20 minutes. Weekend peak period headway is 45 minutes.

Long Beach Transit Line 176 (Long Beach-Signal Hill-Lakewood via Pacific Coast Highway and Lakewood Boulevard). Long Beach Transit Lines 171 and 176 traverse similar routes along PCH between Technology Place and Lakewood Boulevard. From Lakewood Boulevard, Line 176 travels north along Lakewood Boulevard to its terminus at the Lakewood Mall. The A.M. and P.M. peak period headway is approximately 30 minutes. This line does not operate on weekends.

Long Beach Transit Line 191/192 (Santa Fe-Del Amo Blvd.-South St). Long Beach Transit Lines 191 and 192 traverse similar routes between the Long Beach Transit Mall in downtown Long Beach and the Del Amo Blue Line station. From the Del Amo Blue Line station, Line 191 continues east along Del Amo Boulevard to its terminus at Bloomfield Street, and Line 192 travels north to South Street via Long Beach Boulevard, Market Street, and Atlantic Avenue to its terminus at the Los Cerritos Center. The A.M. and P.M. peak period headway between Lines 191 and 192 is 10 to 20 minutes. Weekend peak period headway is 20 minutes.

LADOT Commuter Express Line 142 (Ports O'Call-Long Beach Transit Mall). LADOT Commuter Express Line 142 runs east-west along Ocean Boulevard through the proposed project area from downtown Long Beach to San Pedro. The A.M. and P.M. peak period headway is approximately 30 minutes. Weekend peak period headway is 60 minutes.

LADOT DASH Wilmington Line (Clockwise-Counterclockwise Local Service). The LADOT DASH Wilmington Line provides local service in the Wilmington community of the City of Los Angeles. Local clockwise service is provided primarily along Figueroa Street, PCH, Watson Avenue, East L Street, Avalon Boulevard, and Anaheim Street. Local counterclockwise service is provided primarily along Wilmington Boulevard, PCH, Avalon Boulevard, Anaheim Street, West C Street, and Hawaiian Avenue. The A.M. and P.M. peak period headway is approximately 15 minutes. Weekend peak period headway is 15 minutes.

LADOT DASH San Pedro Line (Local Service). The LADOT DASH San Pedro Line provides local service in the San Pedro community of the City of Los Angeles. Local service is provided primarily along Western Avenue, Summerland Avenue, Gaffey Street, 1st Street, Centre Street, 7th Street, 19th Street, and Western Avenue. The A.M. and P.M. peak period headway is approximately 20 minutes. Weekend peak period headway is 20 minutes.

Table 3.6-6: Baseline Transit Service

Transit Agency	Line	Route Name	Days of Operation	Headways/Frequency	
Metro	Express 450	San Pedro-Harbor Gateway-Los Angeles-Downtown LA	Monday–Friday	A.M.	30–35 minutes
				P.M.	30–60 minutes
			Weekend Peak		45-50 minutes
	Express 550	Exposition Park-San Pedro via Harbor Transitway	Monday–Friday	A.M.	30 minutes
				P.M.	30 minutes
			Weekend Peak		60 minutes
	Local 202	Willowbrook–Compton–Wilmington	Monday–Friday	A.M.	60 minutes
				P.M.	60 minutes
	Local 205	Willowbrook Station-San Pedro via Wimington Avenue and Vermont Avenue	Monday–Friday	A.M.	60 minutes
				P.M.	60 minutes
			Weekend Peak		60 minutes
	Local 232	Long Beach-LAX via Sepulveda Boulevard	Monday–Friday	A.M.	20–40 minutes
				P.M.	20–40 minutes
			Saturday Peak		30 minutes
	Local 246	San Pedro-Artesia Transit Center via Pacific Avenue and Avalon Boulevard	Monday–Friday	A.M.	20–25 minutes
				P.M.	20 minutes
			Weekend Peak		40 minutes
			Monday–Friday	A.M.	15 minutes

Table 3.6-6: Baseline Transit Service

Transit Agency	Line	Route Name	Days of Operation	Headways/Frequency	
Torrance Transit	T3	Redondo Beach–Long Beach		P.M.	15 minutes
			Weekend Peak		60 minutes
	T7	Redondo Beach-Carson	Monday–Friday	A.M.	60 minutes
				P.M.	60 minutes
			Saturday Peak		60 minutes
	T9	Torrance-Wilmington	Monday–Friday	A.M.	60 minutes
				P.M.	60 minutes
			Saturday Peak		60 minutes
Long Beach Transit	1	Easy Avenue	Monday–Friday	A.M.	30 minutes
				P.M.	30 minutes
			Weekend Peak		45 minutes
	171	Long Beach-Seal Beach via PCH	Monday–Friday	A.M.	20 minutes
				P.M.	20 minutes
			Weekend Peak		45 minutes
	176	Long Beach-Signal Hill-Lakewood via PCH & Lakewood Boulevard.	Monday–Friday	A.M.	30 minutes
				P.M.	30 minutes
	191/192	Santa Fe-Del Amo Boulevard-South Street.	Monday–Friday	A.M.	10-15 minutes
				P.M.	10-20 minutes
			Weekend Peak		20 minutes
LADOT Commuter Express	142	San Pedro–Long Beach	Monday–Friday	A.M.	30 minutes
				P.M.	30 minutes
			Weekend Peak		60 minutes
LADOT DASH	LDWLM	Wilmington Area	Monday–Friday	A.M.	15 minutes
				P.M.	15 minutes
			Weekend Peak		15 minutes
	LDSP	San Pedro Area	Monday–Friday	A.M.	20 minutes
				P.M.	20 minutes
			Weekend Peak		20 minutes

3.6.2.4 Existing Bicycle and Pedestrian Conditions

Terminal Island is not an area conducive to bicycle or pedestrian utilization given the industrial nature of the area, lack of residences, and lack of existing bicycle or pedestrian facilities connecting to Terminal Island.

The City of Los Angeles Bicycle Plan shows no planned bicycle facilities on Terminal Island. The streets and intersections adjacent to the Project site have sidewalks and crosswalks to accommodate pedestrians. In front of the existing terminal, Terminal Way has a sidewalk and crosswalk across the site driveway.

There is a sidewalk on the south side of the Gerald Desmond Bridge that is currently under construction; however, no sidewalks or other non-motorized facilities are west of where the bridge ends near the W. Seaside Boulevard on-ramp. The Gerald Desmond Bridge is currently under construction and will include the Mark Bixby Memorial Bicycle Pedestrian Path with at least three scenic overlooks upon its planned completion in 2018. Plans for continuation of the path to the Long Beach City Line at Navy Way are included in the official City of Long Beach Bike Map.[2]

The Commodore Schuyler F. Heim Bridge Replacement does not include pedestrian accommodations but does have bicycle accessible shoulder lanes. The Vincent Thomas Bridge does not include pedestrian and bicycle accommodations.

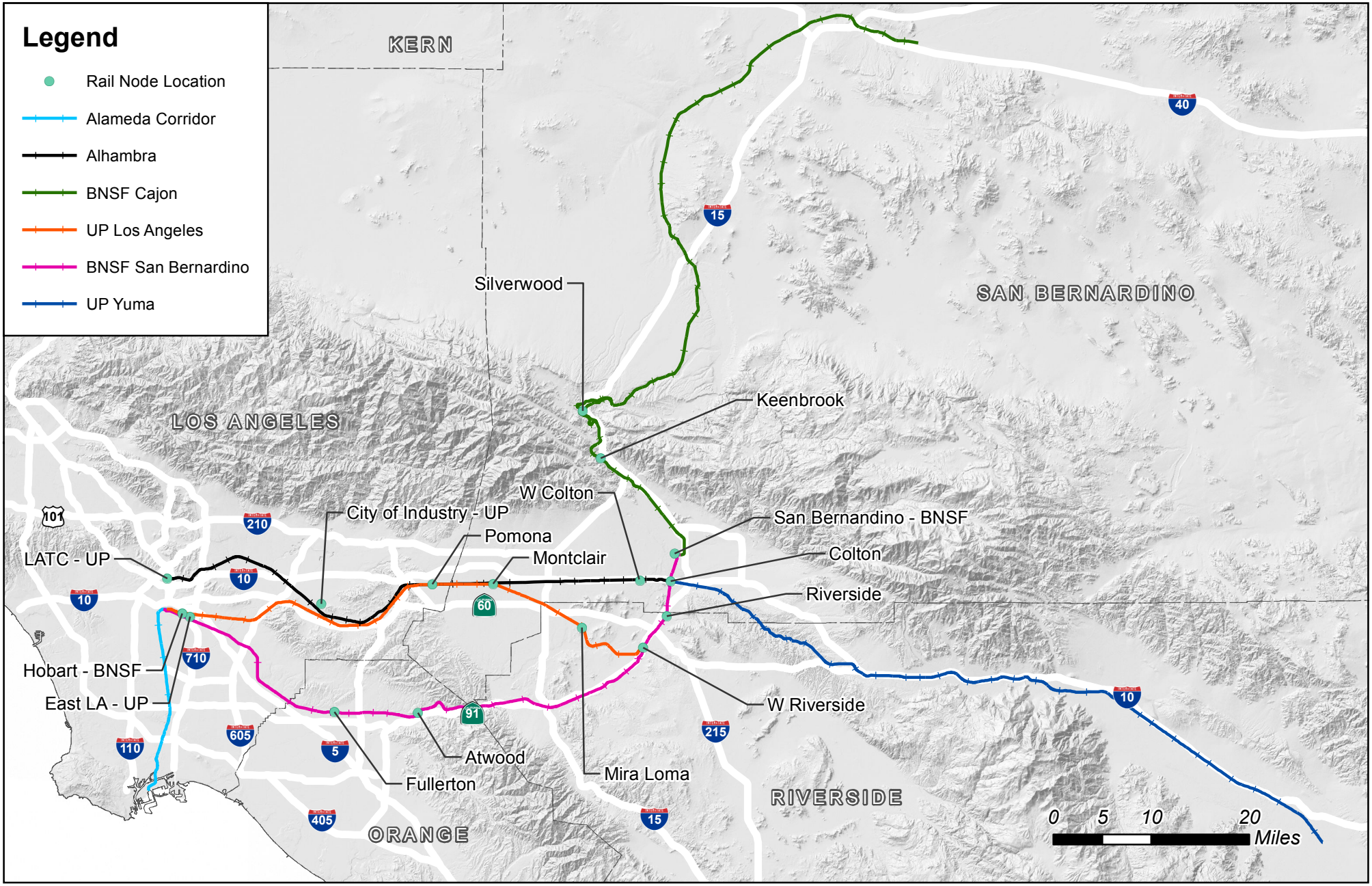
3.6.2.5 Rail Transportation Setting

The Ports of Los Angles and Long Beach are served by two Class I railroads: Union Pacific Railroad (UP) and the Burlington Northern Santa Fe Railway (BNSF). Pacific Harbor Line, Inc. (PHL) is a rail switching company that is responsible for building the trains that the mainline rail companies will transport outside the Port Complex, and provides rail switching, maintenance, and dispatching services within the harbor area. Sections 1.2.2 and 1.2.3.3 in Chapter 1, Introduction, provide additional detail on rail operations within and outside of the Port Complex.

North of the harbor area, the ports are served by the Alameda Corridor, which was completed in 2002. All harbor-related trains of the UP and the BNSF use the Alameda Corridor to access the railroads' mainlines, which begin near downtown Los Angeles. East of downtown Los Angeles, Port-related trains use either the BNSF San Bernardino Subdivision, the UP Los Angeles Subdivision, or the UP Alhambra Subdivision. Figure 3.6-3 displays a map of the freight railroad lines.

To transition from the Alameda Corridor to the Alhambra Subdivision, the UP utilizes trackage rights over Metrolink's East Bank Line, which runs parallel to the Los Angeles River on the east side of downtown Los Angeles. The UP Los Angeles Subdivision terminates at West Riverside Junction where it joins the BNSF San Bernardino Subdivision. The BNSF San Bernardino Subdivision continues north of Colton Crossing and transitions to the BNSF Cajon Subdivision. The Cajon line continues north to Barstow and Daggett, and then east toward Needles and beyond. UP trains exercise trackage rights over the BNSF Subdivision from West Riverside Junction to San Bernardino and over the Cajon Subdivision from San Bernardino to Daggett, which is a short distance east of Barstow. The UP Alhambra Subdivision and the BNSF San Bernardino Subdivision cross at Colton Crossing in San Bernardino County. East of Colton Crossing, the UP Yuma Subdivision passes through the Palm Springs area, Indio, and continues to Arizona and beyond.

[2] City of Long Beach Bike Map http://www.longbeach.gov/civica/filebank/blobdload.asp?BlobID=26440



Source: Cambridge Systematics, 2016; TransCAD Transportation Data Layers, 2016

Figure 3.6-3
Map of Southern California Freight Railroad Lines

The BNSF operates intermodal terminals for containers and trailers at: (1) Hobart and Commerce Yards (in the City of Commerce) and (2) San Bernardino Yard. The UP operates intermodal terminals at: (1) East Los Angeles Yard (ELA) at the west end of the UP Los Angeles Subdivision, (2) Los Angeles Transportation Center (LATC) at the west end of the UP Alhambra Subdivision, (3) City of Industry (COI) on the UP Alhambra Subdivision, and (4) the Intermodal Container Transfer Facility (ICTF) near the south end of the Alameda Corridor. In addition, both UP and BNSF operate trains hauling marine containers that originate or terminate at on-dock terminals within the Ports of Los Angeles and Long Beach.

UP also has a large carload freight classification yard at West Colton (at the east end of the Alhambra Subdivision). A large auto unloading terminal is located at Mira Loma (mid-way between Pomona and West Riverside on the Los Angeles Subdivision).

The BNSF San Bernardino Subdivision has at least two main tracks. There are segments of triple track between Hobart and Fullerton. The BNSF recently completed a third main track from San Bernardino to the summit of the Cajon Pass. The UP Alhambra Subdivision is mostly single-track, while the UP Los Angeles Subdivision has two main tracks west of Pomona and a mixture of one and two tracks east of Pomona. North from West Colton, UP operates the single-track Mojave Subdivision to northern California and Pacific Northwest points. This line closely parallels the BNSF Cajon Subdivision as the two lines climb the southern slope of the Cajon Pass. Connections are afforded at Keenbrook and Silverwood to enable UP trains to enter/exit the main tracks of the BNSF Cajon Subdivision. Beyond Silverwood to Palmdale, the UP Mojave Subdivision has very little train traffic. East from Colton Crossing to Indio, UP operates its transcontinental Sunset Route main line, also known as the UP Yuma Subdivision. The line now has two main tracks the entire distance to Indio. East of Indio, the Sunset Route still has stretches of single track, but construction of a second main track is underway.

In March 2013, the Los Angeles Harbor Commission certified the Final EIR and approved the Southern California International Gateway (SCIG) intermodal railyard, which is designed to increase the efficiency and competitiveness of moving containerized cargo through both the Ports of Los Angeles and Long Beach. Initially, SCIG is expected to handle approximately 570,800 TEUs. By 2035, SCIG is projected to handle a maximum of 2,800,000 TEUs. It would be developed and operated by the BNSF on a 185-acre site approximately four miles north of the San Pedro Bay Port Complex (also referred to as the Port Complex). The SCIG project is expected to reduce truck traffic, freeway congestion, and air pollution by eliminating approximately 1,300,000 truck trips annually along a 24-mile stretch of the Long Beach (I-710) Freeway to BNSF's Hobart Yard near downtown Los Angeles. In March 2016, the project approvals were vacated by court order and all project activities were expended until the Port complies with revisions to its CEQA analysis. Therefore, the rail traffic impacts analysis in this section of the Draft EIS/EIR does not include the SCIG project.

Geographic Study Rail Lines and At-Grade Crossings

While impacts to rail within the Port area are required to be addressed in this Draft EIS/EIR, an expanded discussion of the rail transport of goods outside of the Port area is also provided in this environmental document for informational purposes only. The geographical study area for the informational evaluation of rail impacts to the proposed Project and alternatives includes those at-grade crossings that are located east of the off-

dock railyards at the northern end of the Alameda Corridor (in the Downtown Los Angeles area. The Alameda Corridor is used to transport cargo to downtown railyards, and eliminated 200 rail/street crossings that previously existed within the San Pedro, Wilmington, Long Beach, and other communities between the Port Complex and downtown Los Angeles. The existing and projected increase in rail traffic from the Everport Container Terminal would access all of the railroads' mainlines; therefore, the geographic study area includes the BNSF San Bernardino Subdivision from Hobart and Commerce Yards to San Bernardino, the BNSF Cajon Subdivision from San Bernardino to Barstow, the UP Alhambra Subdivision from LATC to Colton Crossing, the UP Los Angeles Subdivision from ELA to West Riverside Junction, and the UP Yuma Subdivision from Colton Crossing to Indio (see Figure 3.6-3). BNSF at-grade crossings between Barstow and the Nevada border and UP at-grade crossings between Indio and Arizona border are in rural areas with low traffic volumes (typically less than 5,000 average daily trips) and therefore are not included in the geographic study.

There are no at-grade crossings on UP Mojave Subdivision between West Colton and Silverwood. The Alameda Corridor eliminated all of the at-grade crossings between the Ports and the intermodal railyards on Washington Boulevard in the Cities of Vernon and Commerce (BNSF's Hobart and Commerce Yards and UP's ELA). On the UP and BNSF rail lines east of these yards, many railway-roadway grade separations have been constructed, but in 2013 about 170 at-grade crossings remain in the geographic study area: 56 of them are along the BNSF San Bernardino Subdivision, 13 along BNSF Cajon Subdivision, 38 along UP Alhambra Subdivision, 40 along UP Los Angeles Subdivision, and 20 along UP Yuma Subdivision. In the Pomona/Montclair area, the UP Alhambra and Los Angeles Subdivisions are close parallel lines, at-grade crossings are pairwise separated by a distance of a few hundred feet (all under about 500 feet, and most commonly under about 100 feet); which results in additive delays to vehicular traffic on the crossing streets. Thus, the rail impacts for the 20 at-grade crossings on the two lines in this area were evaluated in this Draft EIS/EIR as 10 effective at-grade crossings on one railroad corridor.

3.6.3 Applicable Regulations

Traffic analysis in the state of California is guided by policies and standards set at the state level by Caltrans and local jurisdictions. Since the proposed Project is in the City of Los Angeles, it would adhere to the adopted City transportation policies. The cities in the study area have established threshold criteria to determine significant traffic impacts of a project in their jurisdictions. (See Section 3.6.4.4 [Thresholds of Significance].)

3.6.3.1 Intersection Operations

Cities have traffic impact study guidelines to ensure proposed projects mitigate potential transportation system impacts. Each of the cities with analysis intersections in the study area, Los Angeles, Long Beach and Carson have their own intersection analysis guidelines and thresholds of significance.

3.6.3.2 Freeway Guidelines

Caltrans does not have specific significance thresholds for freeway impact analysis, but relies on county transportation agencies to identify the thresholds and methodology in their Congestion Management Programs (CMPs). According to the Los Angeles County

CMP Traffic Impact Analysis Guidelines, a project must produce a minimum of 50 trips at a CMP intersection and 150 trips on a freeway segment during a peak hour to meet the minimum threshold from CMP analysis. The CMP uses a demand-to-capacity (D/C) ratio to determine operations at CMP monitoring stations.

"An Agreement Between the City of Los Angeles and Caltrans District 7 On Freeway Impact Analysis Procedures" was cosigned by the agencies in October 2013. The agreement described freeway impact analysis screening criteria and analysis methodology, mitigation options and coordination. In accordance with that agreement, this analysis includes Highway Capacity Manual (HCM) analysis of freeway mainlines and a queuing analysis of analyzed freeway off-ramps.

3.6.3.3 Rail Operations

The California Public Utilities Commission (CPUC) has regulatory authority over rail operations and grade crossings throughout the state. However, rail operations under the proposed Project and alternatives are not subject to approval or modification by the CPUC because no grade crossings would be added.

3.6.3.4 SB 743

Under California Senate Bill 743, the Public Resources Code was amended to eliminate the use of vehicle delay as a metric of environmental impact under CEQA. However, Office of Planning Research guidelines for updating the analysis of transportation impacts under CEQA are not finalized and transition to an alternative analysis methodology is recommended to be phased over a multiyear period. Neither the City of Los Angeles nor County of Los Angeles have adopted an alternative primary metric for CEQA transportation impact for analysis, therefore this analysis continues to use vehicle delay as a metric of potential transportation impact, along with other metrics such as bicycle and pedestrian conditions and conformity with area planning efforts. The draft CEQA analysis update guidelines from the Office of Planning Research recommend using vehicle miles traveled as the primary metric of transportation impact across the state in response to Senate Bill 743. In addition, this transportation impact analysis also includes vehicle miles traveled analysis.

3.6.4 Impacts and Mitigation Measures

3.6.4.1 Methodology

Traffic

Impacts of the proposed Project, and the Project Alternatives, were assessed by quantifying differences between baseline conditions, baseline plus project conditions, and future baseline plus project and cumulative future year conditions. For the CEQA analysis presented in this section, baseline conditions are year 2013 traffic volumes, which is consistent with the *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* court decision. A secondary analysis methodology was also performed and can be found in Chapter 4, Cumulative Analysis, which uses a future baseline and is the methodology typically used by experts in identifying cumulative traffic impacts under CEQA. (See also *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439 [finding that in appropriate

circumstances an EIR can base its impacts analysis on a projection of future conditions if supported by substantial evidence]; CEQA Guidelines, §§ 15125, 15126.2, subd. (a).)

Unlike CEQA, the analysis included in an EIS prepared pursuant to NEPA may assume traffic generated by other future proposed actions as part of the baseline, including through 2038. NEPA future baseline traffic conditions were therefore estimated by also assuming funded transportation improvements, traffic due to regional traffic growth, and traffic increases resulting from Port terminal throughput growth, which includes some growth in operations at the Everport Container Terminal that would occur in the absence of a USACE permit.

Local traffic growth for NEPA analysis was forecast based on a computerized traffic analysis tool known as the PortTAM Model, which includes traffic growth for the Port and the local area.

In addition, the analysis of the proposed Project and Alternatives 4 and 5 include the anticipated throughput capacity associated with 'peel off' yards. As described in detail in Section 1.2.2.2 in Chapter 1, Introduction, peel off yards offer additional backland areas in the vicinity of the container terminals for the stacking together in a single block containers belonging to high-volume importers (e.g., 'big-box' retailers, such as Target and WalMart). The containers can then be delivered quickly to warehouses and distribution centers off-site. Because the proposed Project and Alternatives 4 and 5 would be backland constrained, a portion of the total container handling capacity of the peel off yards (approximately 2,034,000 TEUs on an annual basis) were added to these alternatives (which increases their throughput) and evaluated herein.

Port Transportation Analysis Model (PortTAM)

The PortTAM Model was originally developed for the *Ports of Long Beach and Los Angeles Transportation Study* (POLB and POLA, 2001). It was subsequently revised and updated for several efforts including the *Port of Los Angeles Baseline Transportation Study* (POLA, 2004). Further, this model was recently updated using SCAG's latest Regional Travel Demand Forecasting Model. Elements of the SCAG Heavy Duty Truck (HDT) model were also used. The use of the SCAG model to account for sub-regional and regional traffic growth beyond the general proximity of the Project site is an accepted practice by agencies/ jurisdictions. The SCAG model is used for the regions federally required RTP (SCAG, 2012). Also used are the State Implementation Plan and the South Coast Air Quality Management Plan (SCAQMD,2012). TransCAD is the software platform used for modeling. The PortTAM Model data is owned by Los Angeles Harbor Department (LAHD) and is housed and operated at consultant offices.

SCAG Regional Travel Demand Model

The SCAG Regional Travel Demand Model is the basis and "parent" of most subregional models in the Southern California six-county region, comprising Ventura, Los Angeles, Orange, San Bernardino, Riverside, and Imperial Counties. At the regional level, this model has the most comprehensive and current data—for both existing and future conditions—on housing, population, employment, and other socioeconomic input variables used to develop regional travel demand forecasts. The model has more than 4,200 zones, including 90 zones in the Port area, and a complete network of regional transportation infrastructure, including more than 3,520 miles of freeways and over 18,650 miles of major, primary, and secondary arterials.

For purposes of sub-regional transportation analysis (such as at the Port), the SCAG Regional Travel Demand Model provides the most comprehensive and dynamic tool to forecast the magnitude of trips and distribution of travel patterns anywhere in the region. However, by virtue of its design and function, the SCAG Regional Travel Demand Model is not (and cannot be) very detailed and precise in any specific area of the region, and this is the case in the Ports of Long Beach and Los Angeles focus area. Therefore, the PortTAM Model has been comprehensively updated and detailed in the Port focus area. In addition, typical "post-processing" of model data is used to reflect local conditions.

The SCAG Regional HDT (heavy duty truck) model was developed as an adjunct component to the SCAG Regional Travel Demand Model. The HDT model develops explicit forecasts for heavy-duty vehicles with a gross vehicle weight (GVW) of 8,500 pounds and greater. The HDT model includes trip generation, trip distribution, and network traffic assignment modules for heavy-duty trucks stratified by three heavy-duty truck gross vehicle weight classifications, as follows:

- Light-Heavy—8,500 to 14,000 GVW
- Medium-Heavy—14,000 to 30,000 GVW
- Heavy-Heavy—over 30,000 GVW

The HDT Model utilizes the SCAG Regional Travel Demand Model network for its traffic assignment process without major refinements and additions to the network. However, several network modifications have been implemented, including link capacity enhancements, truck prohibitions, and incorporation of truck PCE factors. All of these were carried forward into the PortTAM Model focus area. The presence of vehicles other than passenger cars in the traffic stream affects traffic flow in two ways: (1) these vehicles, which are much larger than passenger cars, occupy more roadway space (and capacity) than individual passenger cars, and (2) the operational capabilities of these vehicles, including acceleration, deceleration, and maintenance of speed, are generally inferior to passenger cars and result in formation of large gaps in the traffic stream that reduce the highway capacity. On long, sustained grades and segments with impaired capacities, where trucks operate considerably slower, formation of these large gaps can have a profound impact on the traffic stream. The PortTAM Model takes all of these factors into account.

The TransCAD model uses four periods to forecast traffic over a full 24-hour period: the A.M. period (6:00 A.M. to 9:00 A.M.), the M.D. period (9:00A.M. to 3:00 P.M.), the P.M. period (3:00 P.M. to 7:00 P.M.), and the night period (7:00 P.M. to 6:00 A.M.). The outputs of the model include daily and peak-period roadway link volumes and speeds and peak-period intersection turning movement volumes.

The following steps describe the development of refined intersection turning movement volumes from model-produced raw forecasts used in the traffic analysis of the proposed Project and alternatives.

- The base year 2012 RTP model scenario and future year model scenarios forecast peak-period intersection turning movement volumes were converted to peak-hour approach and departure volumes by summing the turning movements and applying peak-hour factors of 0.38, 0.18, and 0.28 for A.M., M.D., and P.M. peaks, respectively.

- For each leg (north, south, east, and west) of the study intersections, PortTAM 2013 scenario-derived intersection approach and departure volumes were subtracted from the corresponding future-year approach and departure volumes. This calculation yielded a set of approach and departure volumes, which is representative of the growth volume between the base year and future years.
- This estimated growth between the base year and future years was added to ground-count data. This resulted in adjusted future-year approach and departure forecast auto volumes at each leg of the study intersections, which were used to determine the future-year turning movement volumes.
- The B-turn methodology is generally described in the *National Cooperative Highway Research Program Report (NCHRP) 255: Highway Traffic Data for Urbanized Area Project Planning and Design*, Chapter 8. The B-turn method uses the base-year turning movement percentages of each approach volume (based on actual traffic counts) and proceeds through an iterative computational technique to produce a final set of future-year turning movement volumes. The computations involve alternatively balancing the rows (approaches) and the columns (departures) of a turning movement matrix until an acceptable convergence is obtained. The results must be checked for reasonableness, and manual adjustments are sometimes necessary, such as when a change in the model network in a future scenario that would change travel patterns would not be comparable to the base-year model network volumes or existing traffic counts, in which case future raw model volumes would be used.
- Raw future-year model peak-hour trip generation was used to represent the proposed Project driveway volumes.

The SCAG Regional Travel Demand Model is owned, developed, and housed at SCAG offices, and is used by agencies and consultants for sub-regional planning work, such as for Port environmental studies.

Rail

As discussed above, an expanded discussion of the rail transport of goods outside of the Port area is provided in this environmental document for informational purposes only, despite the lack of substantial evidence of any reasonably foreseeable significant adverse rail-related impacts to these areas from the proposed Project. Sections 1.2.2 and 1.2.3.3 in Chapter 1, Introduction, provide additional detail on rail facilities and operations within the Port Complex. The regional rail system in the Inland Empire is not in the vicinity of the proposed Project, and impacts on this system are not required to be evaluated as considered by the court in a legal decision regarding a challenge of an approval of a project for which the Port of Los Angeles certified an EIR (Berths 97-109 Container Terminal Improvement Project). In the legal decision, the court held: "We conclude neither the City nor the County of Riverside is in the 'vicinity' of the project. The Port did not abuse its discretion by failing to include in the recirculated Draft EIR an analysis of rail-related impacts on the City and County of Riverside."

However, because regional rail has been, and continues to be, an important issue to many stakeholders, an analysis of such effects is provided for informational purposes only. The data and informational analysis, which is not required under CEQA, includes a methodology and evaluation criteria for assessing rail impacts. Other regional

transportation plans should continue to examine the rail system and provide recommendations for future improvements as appropriate and necessary.

Rail impacts of the proposed Project were assessed by quantifying differences in vehicular delays due to at-grade crossings between baseline conditions and baseline conditions plus the proposed Project.

The LAHD has developed a standard methodology for evaluating potential transportation impacts of port development projects on existing at-grade railroad crossings. Specifically, cargo terminal or intermodal yard projects potentially generate additional freight train movements that could result in additional "gate down" time and motorist delays at existing at-grade crossings.

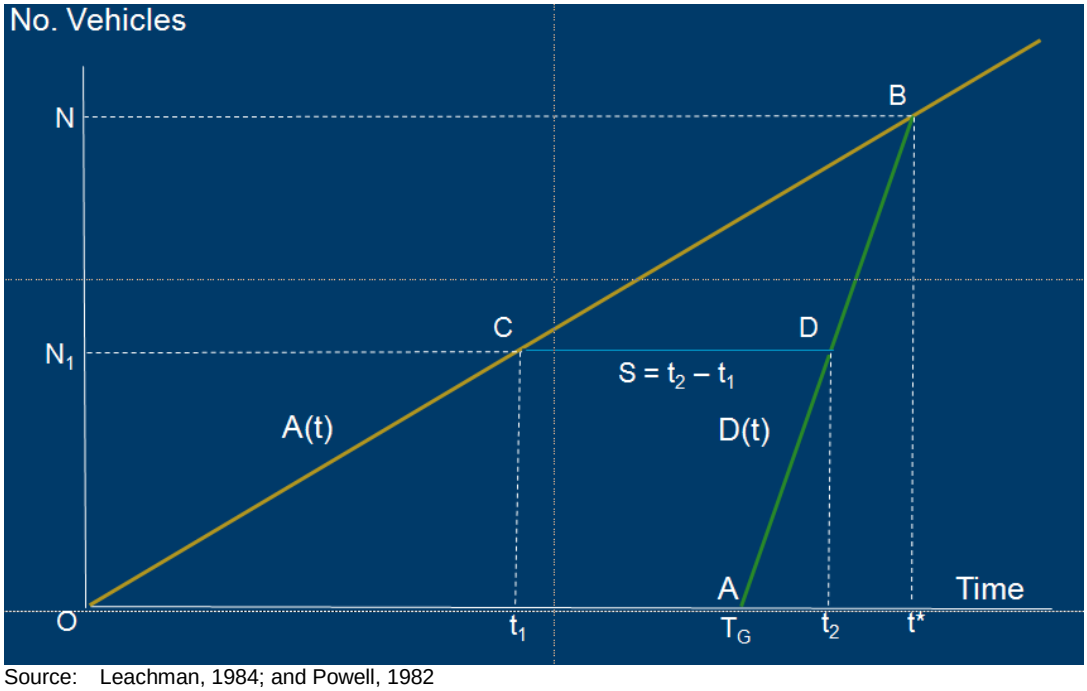
Impacts of the proposed Project are analyzed in terms of average vehicle delay at the study area at-grade crossings. Average vehicle delay is calculated by dividing the total vehicle delay caused by trains passing a crossing during the peak commute hour by the number of vehicles passing the at-grade crossing in that hour. This is a universally accepted approach for evaluating vehicle delay at signalized intersections consistent with methodologies contained in the 2010 HCM. At-grade crossings operate similar to traditional signalized intersections, where some vehicles experience no delay (during a green phase or when the gate is up) and others are stopped for a certain period of time (during a red phase or when a train is crossing). While different approaches could be considered, the LOS procedures for signalized intersections were identified as the most logical and consistent approach for assessing the significance of average vehicle delays at at-grade crossings.

Per the 2010 HCM, LOS D includes delays of up to 55 seconds. LOS D is an acceptable LOS at signalized intersections in most urban areas in the Southern California region. Anything exceeding this threshold is generally considered unacceptable. LOS is measured using peak-hour average vehicle delay (PHAVD). PHAVD is based on the train and vehicular volumes and calculated using the following data:

- peak-hour vehicle arrival and departure rates (vehicles per minute per lane);
- gate down time (function of speed and length of train, width of intersection, clearance distance, and lead and lag times of gate operation); and
- total number of vehicles arriving per period.

The methodology for computing vehicular delay is based on Figure 3.6-4, which shows total vehicle arrivals and departures for an isolated at-grade crossing blockage. The yellow line represents vehicles arriving at an at-grade crossing, beginning at the time when the gates go down (point "O" in the figure). Total gate down time is depicted as "TG." The green line represents the vehicles departing the queue after the gate is lifted starting at time = TG (point "A" in the figure). The queues are fully dissipated at time = t* (point "B" in the figure). The total vehicle delay is represented by the area of triangle OAB bounded by the yellow line, the green line, and the "X" axis. The length of the line represents the amount of delay experienced by the nth vehicle. Calculating the value of this line for each vehicle arriving at the crossing and then adding those values up is equivalent to computing the area of triangle OAB. This calculation is performed for each train arriving at the crossing over the course of a day. Delay will vary by time of day, because there is more highway traffic during peak hours. Many of the vehicles arriving at the crossing will not be delayed by a train, but they are included in the calculation of

average delay. This is the same way that average delay is computed for signalized intersections.



Source: Leachman, 1984; and Powell, 1982

Figure 3.6-4 Total Arrivals and Departures for an Isolated Blockage

The equation for total vehicle delay for an isolated blockage, V, is:

$$V = \left(\frac{1}{2}\right)\frac{qT_G{}^2}{(1-q/d)}$$

where TG = gate down time, q = vehicle arrival rate, and d = vehicle departure rate. Note that delay is a function of the square of the gate down time. Hourly average delay per vehicle is calculated by dividing total delay over one hour by the number of vehicles arriving at the crossing in the same hour.

The calculation of hourly average vehicle delay accounts for the following:

- total vehicles arriving at the crossing in a one-hour period, whether the vehicles are delayed by a train or not;
- total delay experienced by all vehicles in that hour; and
- all trains passing through the crossing in that hour.

The equation above relates to the effects of an isolated blockage; i.e., it is assumed that the vehicle queues are completely dissipated before the next train arrives at the crossing. However, where the rail corridor has more than one track, it is possible that a second train traveling in the opposite direction could arrive at the crossing before the queues from the first train have fully dissipated. More complex delay equations for these "multiple events" have been derived by Dr. Robert Leachman of U.C. Berkeley (Leachman, 1984). In an effort to compute these effects and how likely they are to occur, Dr. Leachman simulated railroad traffic for both 2010 and 2035 against streets with varying average daily traffic (ADT) per lane and recomputed vehicular delays, including the impacts of multiple events. With higher train volumes, multiple events occur more often, and the level of the vehicular delay is greater on streets with more vehicle traffic per lane. Based on a sample of Dr. Leachman's results for different train volumes and ADT per lane, a curve for the calculation of a "Bias Factor" was created/fitted. This Bias Factor adjustment accounts for additional delay associated with multiple crossings that overlap in time. The fitted equation for the Bias Factor (BF) is as follows:

$$\boldsymbol{BF = exp\left(-0.52868 + (.000173)\times\left(\frac{ADT}{Lane}\right) + (0.01036)\times(Total\ Train\ Volume\ per\ Day)\right)}$$

The R-squared value for the fitted equation is 0.9322, indicating a very good correlation among the variables. Using this equation, a Bias Factor was computed for each grade crossing that has more than one track crossing the street. The Bias Factor is then multiplied by the unadjusted vehicle hours of delay for an isolated blockage to account for the effects of multiple events. For example, the average Bias Factor for all grade crossings on the BNSF San Bernardino Subdivision for 2013 is approximately 1.025, meaning that the unadjusted delay values are increased by an average of 2.5 percent. The LOS definitions/ranges for the intersection operational methodology contained in the 2010 HCM are applied to the PHAVD results.

Study Area In-Port At-Grade Rail Crossings

Within the Port, there are three study area at-grade rail crossings of the Earle Street Lead track of the Alameda Corridor Subdivision, which would experience project-related traffic. The Earle Street Lead line is a lightly-used rail spur located within the Port of Los Angeles and rail moves are not expected to be at a frequency to cause delays of either rail or roadway conditions. All three crossings have gated warning systems:

- Terminal Way west of Earle Street: CPUC Crossing ID: LA-3524, DOT Number: 811372G
- Cannery Street west of Earle Street: CPUC Crossing ID: LA-2617, DOT Number: 811503H
- Earle Street south of Cannery Street: CPUC Crossing ID: LA-3607, DOT Number: 927844A

Rail Volumes

In order to predict at-grade crossing delays on railroad mainlines, it is first necessary to estimate how many containers by market segment are handled at each railyard in Southern California under CEQA Baseline Conditions (2013) and in 2038 with the proposed Project. From this information, the number of intermodal trains per day (by type and length) is estimated for each yard. Next, trains by type and length are allocated to specific segments of track, and then combined with non-intermodal and passenger train types. Finally, delays at grade crossings are computed. CEQA Baseline Conditions (2013) rail volumes and Project Trains were estimated using the following:

- Detailed annual and peak-month lifts data and projections for containers from/to Los Angeles Harbor Ports (i.e., Port Complex) terminals;
- Detailed annual lifts data and projections for the Ports' on-dock intermodal yards containers;
- Detailed annual lifts data and projections for off-dock intermodal yards containers, with markets including:
    - direct intermodal containers from the Ports (intact containers that are not transloaded);
    - transloaded containers (cargo that has been first taken out of 40-foot containers at a warehouse and then placed into 53-foot domestic containers before arriving at the railyard); and
    - "pure" domestic cargo and empty containers in either domestic 53-foot containers or trailers (cargo that has not passed through the Ports);
- Other rail data and projections developed for the 2013 Port of Los Angeles' Port Master Plan Update and 2012 RTP, with markets including:
    - non-intermodal rail volumes (including bulk, automobiles, and carload); and
    - passenger rail volumes.

The parameters for estimating 2013 peak-month average daily intermodal (containerized) rail volumes include:

- annual lifts handled by individual yards;
- marine terminal specific lifts to TEUs conversion factor;
- monthly peaking factor;
- average rail car length (depends on the mix of cars of varying lengths that make up the trains);
- locomotive length;
- number of locomotives per train for different train lengths;
- slot utilization (percentage of rail car capacity actually used by containers). For example, a five-well rail car has the capacity for 10 double-stacked containers. If only nine containers are loaded onto the car, then the slot utilization is 90 percent;

- market-wise distribution of trains by length (percentage of trains that are 6,000 feet, 8,000 feet, 10,000 feet, and 12,000 feet long, including locomotives); and
- yard-to-segment allocation matrix.

For each intermodal yard and each type of market (direct intermodal, transload, pure domestic, and non-intermodal), trains per day were estimated. Train volumes were then allocated to specific railroad tracks from downtown Los Angeles to Indio and Barstow. For BNSF, 100 percent of the train volumes were assigned to the BNSF San Bernardino and Cajon Subdivisions. For UP, 50 percent of trains were assigned to the Alhambra Subdivision and 50 percent to the Los Angeles Subdivision. Exceptions to that rule are UP trains loaded at the COI yard, which must use the UP Alhambra Subdivision, and automobile trains loaded at the Mira Loma Yard, which must use the UP Los Angeles Subdivision. UP trains on the Los Angeles Subdivision also use the BNSF San Bernardino Subdivision between West Riverside and Colton Crossing. Beyond the Colton Crossing, it was assumed that 85 percent of the UP trains would use the Yuma Subdivision to the east and 15 percent would use the BNSF Cajon Subdivision to the north between Barstow and Keenbrook. Approximately 10 percent of the UP volumes would use the BNSF Cajon Subdivision between Keenbrook and San Bernardino, and five percent would use the UP Mojave Subdivision between Keenbrook and West Colton.

The 2013 freight train volumes were uniformly distributed over 24 hours and assigned to four different time periods of the day, as shown in Table 3.6-7. For example, the A.M. peak period consists of three hours, or 12.5 percent of a 24-hour day. A daily estimate of 12.5 percent of freight trains were assigned to the A.M. peak period. Passenger train volumes were allocated to time periods according to actual MetroLink and Amtrak schedules. To validate the assumption that freight trains are uniformly distributed over 24 hours, actual train volumes by time of day were acquired from the ACTA and the BNSF Railway. The results are shown in Tables 3.6-8 and 3.6-9. The actual distribution by time period is reasonably close to the uniform distribution shown in Table 3.6-7. Therefore, a uniform distribution of freight train volumes for 2013 was considered to be a reasonable assumption.

Table 3.6-7: Time Periods of the Day

Time Period	Time of Day	No. of Hours	Percent of 24 Hours (uniform distribution)
A.M. Peak Period	6:00 A.M. to 9:00 A.M.	3	12.5 percent
Midday	9:00 A.M. to 3:00 P.M.	6	25.0 percent
P.M. Peak Period	3:00 P.M. to 7:00 P.M.	4	16.7 percent
Night	7:00 P.M. to 6:00 A.M.	11	45.8 percent
Total Daily		**24**	**100.0 percent**

Table 3.6-8: Alameda Corridor Train Volume by Time of Day, 2010

Time Period	Time of Day	Average No. of Trains per Period*	percent of Total Daily
A.M. Peak Period	6:00 A.M. to 9:00 A.M.	5.0	12.9 percent
Midday	9:00 A.M. to 3:00 P.M.	8.2	21.3 percent
P.M. Peak Period	3:00 P.M. to 7:00 P.M.	5.5	14.4 percent
Night	7:00 P.M. to 6:00 A.M.	19.9	51.5 percent
Total Daily		**38.6**	**100.0 percent**

* Daily average for last week of each quarter in 2010.
Source: ACTA, 2010

Table 3.6-9: BNSF Train Volume at Highgrove in Riverside County by Time of Day, 2010

Time Period	Time of Day	Average No. of Trains per Period*	percent of Total Daily
A.M. Peak Period	6:00 A.M. to 9:00 A.M.	10	14.1 percent
Midday	9:00 A.M. to 3:00 P.M.	16	22.2 percent
P.M. Peak Period	3:00 P.M. to 7:00 P.M.	10	14.3 percent
Night	7:00 P.M. to 6:00 A.M.	35	49.4 percent
Total Daily		**71**	**100.0 percent**

*Measured over 62 days (July 1-31, 2008 and August 1-31, 2010)
Source: BNSF, 2011

CEQA Baseline Conditions (2013) Roadway Crossing Volumes

For at-grade crossings analysis, CEQA Baseline Conditions (2013) traffic volumes were developed using traffic counts and the SCAG RTP. Daily highway traffic was then allocated to four different time periods of the day, based on the hourly factors from the SCAG RTP model and traffic counts as shown in Table 3.6-10.

Table 3.6-10: Hourly Factors Applied to Average Daily Traffic (ADT), by County

	Time of Day	San Bernardino County	Riverside County	Orange County	Los Angeles County
A.M. Peak Period	6:00 A.M. to 9:00 A.M.	0.0687	0.0661	0.0693	0.0686
Midday	9:00 A.M. to 3:00 P.M.	0.0450	0.0492	0.0461	0.0462
P.M. Peak Period	3:00 P.M. to 7:00 P.M.	0.1054	0.0873	0.0929	0.0945
Night	7:00 P.M. to 6:00 A.M.	0.0093	0.0143	0.0131	0.0126

CEQA Baseline Conditions (2013) Delay Impacts

Tables 3.6-11 through 3.6-16 list the delay at all crossings for CEQA Baseline Conditions (2013). As can be seen, none of the locations experienced an average peak delay greater than 55 seconds.

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Table 3.6-11: BNSF San Bernardino Subdivision, from Hobart Yard to San Bernardino, 2013 CEQA Baseline

	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
San Bernardino MP 0.0						
Laurel Street	2	2,240	62.0	118.1	3.6	6.0
Olive Street	2	2,660	62.0	118.1	4.3	6.1
E Street	2	700	62.0	118.1	1.1	5.7
H Street	2	1,390	62.0	118.1	2.2	5.8
Valley Boulevard	2	10,490	62.0	118.1	22.2	8.9
Colton Crossing MP 3.2						
Highgrove Junction MP 6.1 (Connection to Perris via MetroLink)						
Main Street	2	2,550	76.2	148.2	5.3	7.8
Riverside-San Bernardino County Line MP 6.41						
Center Street	4	6,220	76.2	148.7	13.0	7.9
Iowa Avenue	4	22,920	76.2	148.7	60.5	10.9
Palmyrita Avenue	2	3,750	76.2	148.2	7.9	8.0
Chicago Avenue	4	13,570	76.2	148.7	31.2	9.0
Spruce Street	4	7,250	76.2	148.7	15.4	8.0
3rd Street	4	10,910	76.2	148.7	24.2	8.6
Mission Inn (7th Street)	4	5,330	76.2	148.7	11.1	7.8
Riverside Yard and Amtrak Station MP 10.02-10.16						
Cridge Street	2	3,760	101.4	166.7	8.5	8.8
West Riverside Junction MP 10.6 (Connection to UP Los Angeles Sub)						
Jane Street	2	2,160	68.9	111.1	3.1	5.4
Mary Street	4	11,940	68.9	111.5	18.9	6.2
Washington Street	2	8,290	68.9	111.1	13.9	6.8
Madison Street	4	15,730	68.9	111.5	26.2	6.7
Jefferson Street	2	8,200	68.9	111.1	13.7	6.7

Table 3.6-11: BNSF San Bernardino Subdivision, from Hobart Yard to San Bernardino, 2013 CEQA Baseline

	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
Adams Street	4	17,520	68.9	111.5	29.9	6.9
Jackson Street	4	7,820	68.9	111.5	11.7	5.8
Gibson Street	2	860	68.9	111.1	1.2	5.2
Harrison Street	2	6,670	68.9	111.1	10.7	6.3
Tyler Street	4	15,630	68.9	111.5	26.0	6.7
Pierce Street	2	11,190	68.9	111.1	20.5	7.7
Buchanan Street	2	9,580	68.9	111.1	16.7	7.1
Magnolia Avenue(eastbound)	2	8,800	68.9	111.1	15.0	6.9
Magnolia Avenue(westbound)	2	8,800	68.9	111.1	15.0	6.9
Mckinley Street	4	26,660	68.9	111.5	52.7	8.5
Radio Road	2	4,300	68.9	111.1	6.5	5.8
Joy Street	2	7,280	68.9	111.1	11.9	6.5
Sheridan Street	2	2,370	68.9	111.1	3.4	5.5
Cota Street	4	6,040	68.9	111.5	8.9	5.6
Railroad Street	4	9,680	68.9	111.5	14.9	6.0
Smith Street	4	13,700	68.9	111.5	22.2	6.4
Auto Center Drive	2	11,570	68.9	111.1	21.4	7.8
Riverside-Orange County Line						
Kellogg Drive	4	7,050	68.9	111.5	10.6	5.7
Lakeview Avenue	3	19,340	68.9	111.3	38.6	8.7
Richfield Road	4	9,720	68.9	111.5	15.1	6.0
Atwood Junction MP 40.6 (Connection to Old Olive Sub)						
Van Buren Street	2	6,940	49.5	92.1	10.0	5.7
Jefferson Street	3	6,520	49.5	92.2	8.8	5.2
Tustin Avenue (Rose Drive)	4	29,920	49.5	92.4	57.3	8.5
Orangethorpe Avenue	4	29,040	49.5	92.4	54.6	8.3
Kraemer Boulevard	4	20,290	49.5	92.4	32.5	6.6
Placentia Avenue	4	14,870	49.5	92.4	21.9	5.9
State College Boulevard	4	24,180	49.5	92.4	41.4	7.3
Acacia Avenue	4	6,910	49.5	92.4	9.1	5.0

Table 3.6-11: BNSF San Bernardino Subdivision, from Hobart Yard to San Bernardino, 2013 CEQA Baseline

	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
Raymond Avenue	4	21,570	49.5	92.4	35.3	6.8
Fullerton Junction MP 45.5 = MP 165.5						
Orange-LA County Line						
Valley View Avenue	4	24,890	94	128	53.4	9.4
Rosecrans/Marquardt Avenue	4	23,500	94	128	49.1	9.0
Lakeland Road	2	6,630	94	127	11.6	7.0
Los Nietos Road	4	20,740	94	128	41.2	8.4
Norwalk Boulevard	4	26,590	94	128	59.1	9.9
Pioneer Boulevard	4	15,520	94	128	28.2	7.5
Passons Boulevard	4	12,860	94	128	22.5	7.0
Serapis Avenue	2	6,360	94	127	11.0	7.0
Commerce Yard MP 148.5						
Hobart Yard MP 146.0						
OVERALL						
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)					**1,185.7**	
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)						**10.9**

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Table 3.6-12: BNSF Cajon Subdivision from San Bernardino to Barstow, 2013 CEQA Baseline

Boundary/Junction – Street	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
Barstow MP 0						
Lenwood Road	2	4,490	67	116	6.1	5.0
Hinkley Road	2	480	67	116	0.6	4.5
Indian Trail Road	2	540	67	116	0.7	4.5
Vista Road	2	2,770	67	116	3.6	4.8
Turner Road	2	30	67	116	0.0	4.4
North Bryman Road	2	160	67	116	0.2	4.4
South Bryman Road	2	1,920	67	116	2.5	4.7
Robinson Ranch Road	2	110	67	116	0.1	4.4
1st Street	2	690	67	137	1.2	6.3
6th Street	4	3,600	67	159	8.7	8.8
Silverwood Junction MP 56.6						
Keenbrook Junction MP 69.4						
Swarthout Canyon Road	2	180	78	224	0.7	14.2
Devore Road/Glen Helen Parkway	4	6,270	78	224	26.5	15.6
Dike Junction						
Palm Avenue	2	11,850	59	171	48.1	16.4
San Bernardino MP 81.4						
OVERALL						
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)					**99.0**	
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)						**16.4**

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Table 3.6-13: UP Alhambra Subdivision from Los Angeles Transportation Center (LATC) to Colton Crossing, 2013 CEQA Baseline (Excluding Segment That is Combined with UP Los Angeles Subdivision)

Boundary/Junction – Street	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
LATC MP 482.9						
San Pablo Street	4	4,100	20.0	98.4	12.6	11.4
Vineburn Avenue	2	1,370	20.0	69.4	2.1	5.5
Worth/Boca Road	2	7,940	20.0	69.4	14.8	7.6
Valley Boulevard	4	27,850	20.0	46.6	26.9	4.2
Ramona Street	2	12,880	20.0	69.4	26.7	8.8
Mission Road	3	23,330	20.0	69.5	54.0	10.4
Del Mar Avenue	2	21,330	20.0	69.4	67.2	16.2
San Gabriel Boulevard	4	35,550	20.0	69.6	91.5	12.1
Walnut Grove Avenue	3	15,530	20.0	40.8	10.1	2.7
Encinita Avenue	2	6,470	20.0	40.7	3.7	2.2
Lower Azusa Road	4	17,620	20.0	40.8	10.9	2.5
Temple City Boulevard	4	21,140	20.0	40.8	13.9	2.7
Baldwin Avenue	4	26,220	20.0	40.8	18.8	3.1
Arden Drive	4	11,190	20.0	40.8	6.3	2.2
El Monte Junction MP 494.99						
Tyler Avenue	4	11,920	57.5	67.8	9.3	3.2
Cogswell Road	2	10,200	57.5	67.5	9.0	3.9
Temple Avenue	4	27,390	57.5	67.8	27.7	4.7
Bassett Junction MP 498.45						
Vineland Avenue	2	12,710	20.8	41.4	9.1	3.0
Puente Avenue	4	32,190	20.8	41.5	26.5	3.7
Orange Avenue	2	5,830	20.8	41.4	3.4	2.2
California Avenue	2	19,010	20.8	41.4	18.0	4.6
City of Industry Junction MP 501.5						
Fullerton Road	4	18,510	26.0	52.4	15.0	3.3

Table 3.6-13: UP Alhambra Subdivision from Los Angeles Transportation Center (LATC) to Colton Crossing, 2013 CEQA Baseline (Excluding Segment That is Combined with UP Los Angeles Subdivision)

Boundary/Junction – Street	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
Fairway Drive	4	20,080	26.0	52.4	16.7	3.4
Lemon Road	4	17,390	26.0	52.4	13.9	3.2
Brea Canyon Road	2	14,570	26.0	52.2	14.2	4.3
Pomona Junction MP 514.3	**HANDLED SEPARATELY DUE TO PROXIMITY TO UP LOS ANGELES SUBDIVISION**					
LA-San Bernardino County Line MP 516.7						
Montclair Junction						
Bon View Avenue	2	10,030	26.8	52.6	8.1	3.3
Vineyard Avenue	4	30,790	26.8	52.7	30.2	4.4
Milliken Avenue	6	34,230	26.8	52.9	29.1	3.5
Kaiser Junction MP 527.5						
West Colton MP 534.7						
Colton Crossing MP 538.70						
OVERALL						
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)					**589.8**	
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)						**16.2**

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Table 3.6-14: UP Los Angeles Subdivision from East Los Angeles Yard to West Riverside Junction, 2013 CEQA Baseline (Excluding Segment That is Combined with UP Alhambra Subdivision)

Boundary/Junction – Street	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
East Los Angeles MP 5.85						
S. Vail Avenue	2	8,000	25.4	50.7	8.2	4.2
Maple Avenue	2	5,630	25.4	50.7	5.4	3.8
S. Greenwood Avenue	4	7,380	25.4	50.9	6.8	3.6
Montebello Boulevard	4	20,840	25.4	50.9	23.1	4.7
Durfee Avenue	2	14,150	25.4	36.0	8.5	2.8
Rose Hills Road	4	9,570	25.4	34.5	3.8	1.6
Mission Mill Road	2	2,210	25.4	34.4	0.8	1.5
Workman Mill	4	7,750	25.4	34.5	3.0	1.6
Turnbull Canyon Road	4	14,640	25.4	34.5	6.3	1.8
Stimson Avenue& Puente Avenue	4	14,920	25.4	34.5	6.5	1.8
Bixby Drive	2	3,010	25.4	34.4	1.1	1.5
Fullerton Road	4	24,570	25.4	34.5	12.5	2.3
Nogales Street	6	38,240	25.4	34.6	19.8	2.4
Fairway Drive	4	25,690	25.4	34.5	13.3	2.4
Lemon Street	4	15,270	25.4	34.5	6.6	1.8
Pomona Junction MP 31.9	**HANDLED SEPARATELY DUE TO PROXIMITY TO UP ALHAMBRA SUBDIVSION**					
LA-San Bernardino County Line MP 33.17						
E. Montclair Junction MP 35.02						
Bonview Avenue	2	3,460	29.5	42.6	1.7	2.0
Grove Avenue	6	39,250	29.5	42.8	26.8	3.1
Vineyard Avenue	4	4,430	29.5	42.7	2.1	1.9
Archibald Avenue	4	5,230	29.5	42.7	2.5	1.9
San Bernardino-Riverside County Line MP 43.36						
Milliken Avenue	6	20,900	29.5	42.8	11.4	2.3

Table 3.6-14: UP Los Angeles Subdivision from East Los Angeles Yard to West Riverside Junction, 2013 CEQA Baseline (Excluding Segment That is Combined with UP Alhambra Subdivision)

Boundary/Junction – Street	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
Mira Loma Junction MP 45.7						
Bellegrave Avenue	2	7,680	29.7	42.8	4.2	2.3
Rutile Street	2	8,250	29.7	42.8	4.6	2.4
Clay Street	4	13,460	29.7	42.8	9.0	3.0
Mountain View Avenue	2	1,710	29.7	50.3	1.1	2.6
Streeter Avenue	4	13,820	29.7	50.4	10.6	3.1
Palm Avenue	2	7,480	29.7	47.3	5.1	2.8
Brockton Avenue	4	13,320	29.7	50.4	10.2	3.1
Riverside Avenue	2	11,460	29.7	50.3	10.1	3.8
Panorama Road	2	6,360	29.7	50.3	4.8	3.0
West Riverside Junction MP 56.7						
OVERALL						
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)					**239.3**	
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)						**4.7**

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Table 3.6-15: Combined UP Alhambra and Los Angeles Subdivisions in Pomona and Montclair Area, 2013 CEQA Baseline

Boundary/Junction – Street	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
Pomona Junction MP 514.3						
Hamilton Boulevard	4	8,110	52.0	89.8	9.4	4.5
Park Avenue	2	5,730	52.0	89.5	6.9	4.8
Main Street	2	1,590	52.0	89.5	1.7	4.1
Palomares Street	2	3,910	52.0	89.5	4.5	4.4
San Antonio Avenue	4	6,970	52.0	89.8	8.0	4.4
LA-San Bernardino County Line MP 516.7						
Monte Vista Avenue	4	12,200	52.0	89.8	14.9	4.8
San Antonio Avenue	4	10,330	52.0	89.8	12.3	4.7
Vine Avenue	2	7,580	52.0	89.5	9.6	5.1
Sultana Avenue	2	11,300	52.0	89.5	16.0	6.0
Campus Avenue	2	10,600	52.0	89.5	14.7	5.8
Montclair Junction						
OVERALL						
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)					**97.9**	
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)						**6.0**

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Table 3.6-16: UP Yuma Subdivision from Colton Crossing to Indio, 2013 CEQA Baseline

Boundary/Junction – Street	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
Colton Crossing MP 539.0						
Hunts Lane	4	13,340	42.7	96.9	20.9	6.1
Whittier Avenue	2	190	42.7	114.3	0.4	6.7
Beaumont Avenue	2	460	42.7	114.3	0.9	6.8
San Timoteo Canyon Road	2	11,490	42.7	114.3	29.6	10.8
Alessandro Road	2	290	42.7	114.3	0.5	6.7
San Bernardino-Riverside County Line MP 549.25						
Live Oak Canyon Road	2	1,080	42.7	114.3	2.0	6.9
San Timoteo Canyon Road	2	1,410	42.7	114.3	2.7	6.9
Viele Avenue	2	100	42.7	96.6	0.1	4.8
California Avenue	2	6,490	42.7	96.6	9.8	5.8
Pennsylvania Avenue	2	8,040	42.7	96.6	12.6	6.1
North Sunset Avenue	2	3,740	42.7	96.6	5.3	5.3
22nd Street	4	15,190	42.7	96.9	23.7	6.1
San Gorgonio Avenue	2	12,570	42.7	96.6	22.4	7.3
Hargrave Street	2	16,360	42.7	96.6	33.0	8.8
Apache Trail	2	2,480	42.7	96.6	3.4	5.1
Broadway	2	6,550	42.7	96.6	9.9	5.8
Tipton Road	2	110	42.7	96.6	0.1	4.8
Garnet MP 588.32						
West Indio MP 609.63						
Indio MP 610.9						
Avenue 52	4	10,780	42.7	96.9	16.0	5.6
Avenue 56/Airport Boulevard	2	4,700	42.7	96.6	6.8	5.5

Table 3.6-16: UP Yuma Subdivision from Colton Crossing to Indio, 2013 CEQA Baseline

Boundary/Junction – Street	# of Lanes	Baseline Average Daily Traffic (Vehicles/Day)	Baseline Average Daily Train Volume (Trains/Day)	Baseline Total Gate Down Time (Minutes/Day)	Baseline Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)	Baseline P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)
Avenue 66/4th Street	2	7,700	42.7	96.6	12.0	6.1
OVERALL						
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)					**212.2**	
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)						**10.8**

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3.6.4.2 CEQA Baseline

Section 15125 of the CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the vicinity of a project that exist at the time of the NOP. These environmental conditions "normally" constitute the baseline physical conditions from which the CEQA lead agency determines whether a project would result in a potentially significant adverse impact. The NOP for the proposed Project was published in October 2014. For purposes of this Draft EIS/EIR, the CEQA baseline conditions reflect the area traffic conditions and container throughput at the terminal for the 12-month calendar year leading up to publication of the NOP (January through December 2013) in order to provide a representative characterization of activity levels throughout the complete calendar year preceding release of the NOP. In 2013, the Everport Container Terminal encompassed approximately 205 acres under its long-term lease and handled approximately 1,240,773 TEUs and 166 vessel calls. (See also Chapter 2, Project Description, Section 2.7.1 and Table 2-1.)

For this analysis, some intersection traffic counts were available from the baseline period, some from before the baseline period, while other intersections had to be counted after issuance of the NOI/NOP. In order to ensure more accurate and reliable existing baseline data for use in this impacts analysis, LAHD exercised discretion to adjust counts taken during different time periods for seasonal and annual variation in port operations using port TEU throughput statistics and comparing two study locations that were counted inside and outside of the baseline period (study intersections #13 and #14) to develop factors for auto and truck volumes to adjust the counts taken outside of the baseline period (see Appendix E1). Port area traffic analyses and the Port's Quicktrip/Trainbuilder model use the average weekday of the peak month of port operations in a given year for the basis of existing and forecasted traffic volumes. Therefore, this approach was used to ensure a representative, conservative level of background traffic would be used for the traffic analysis of potential significant impacts of the proposed project and alternatives

Trip generation (automobiles and trucks) from the container terminal in the baseline year was developed based on the terminal's throughput in the baseline year using the QuickTrip model, and is as follows:

		CEQA Baseline Conditions		
Time Period	Vehicle Type	In	Out	Total
A.M. Peak Hour	Auto	117	62	179
	Truck	121	48	169
M.D. Peak Hour	Auto	44	69	1113
	Truck	178	162	340
P.M. Peak Hour	Auto	183	285	469
	Truck	113	110	222

QuickTrip uses actual gate data from terminals within the Port Complex to produce the trip generation for the peak hours. The operating conditions at the study intersections and freeway locations in the CEQA baseline period, which are respectively presented in Table 3.6-4 and Table 3.6-5 above, include the above baseline trips generated by the terminal, as well as the adjustments to the traffic count data from different count periods

(described above) to reflect baseline conditions (see Appendix E1). Baseline transit service in the Project area is summarized in Table 3.6-6 above.

In 2013, the existing container terminal generated approximately 1.8 trains per day. The number of trains by rail segment under 2013 CEQA baseline conditions are presented below in Table 3.6-41, and traffic delay at the at-grade crossings under baseline conditions are presented in Tables 3.6-11 thorough 3.6-16 above.

The CEQA baseline differs from the No Project Alternative (Alternative 2) in that the No Project Alternative addresses what is likely to happen at the Project site over time without implementation of the Project, starting from the existing conditions. Therefore, the No Project Alternative is not the baseline and allows for growth at the existing terminal that could be expected to occur without additional approvals, whereas the CEQA baseline does not (CEQA Guidelines, Section 15126.6, subd. (e)(1)).

Additionally, to provide further understanding of the proposed Project's environmental impacts, a secondary or cumulative analysis was performed for the proposed Project's ground transportation impacts in comparison to a future baseline for the years 2017, 2018, 2019, 2026, and 2038. The future baseline represents the anticipated traffic conditions (including background traffic growth) at the study intersections at those times (or study year, e.g., 2038) for which the proposed project traffic would affect the intersections. Whereas background traffic changes with forecasted socioeconomic factors, the proposed Project site is analyzed as operating at its CEQA Baseline condition for comparison to scenarios with the proposed Project and Alternatives in order to determine potential impacts. This analysis can be found in Chapter 4, Cumulative Analysis.

3.6.4.3 NEPA Baseline

For purposes of this Draft EIS/EIR, the evaluation of significance under NEPA is defined by comparing the proposed Project or other alternative to the NEPA baseline. The NEPA baseline conditions are described in Section 2.7.2 and summarized in Table 2-1 in Chapter 2, Project Description. The NEPA baseline condition for determining significance of impacts includes the full range of construction and operational activities the applicant could implement and is likely to implement absent a federal action, in this case the issuance of a USACE permit.

Unlike the CEQA baseline, federal lead agencies under NEPA may assume a future no action baseline that reflects future circumstances which are likely to occur without any federal action, including, for example, predictable actions by persons or entities, other than the federal agencies involved in a project action, acting in accordance with past approvals and level of management intensity. As described in Chapter 2, the NEPA baseline is the same as the No Federal Action Alternative.

The NEPA baseline includes anticipated increases in operations for each study year, which are projected to occur absent a federal permit. Federal permit decisions focus on direct impacts of the proposed Project to the aquatic environment, as well as indirect and cumulative impacts in the uplands determined to be within the scope of federal control and responsibility. Significance of the proposed Project or the alternatives under NEPA is defined by comparing the proposed Project or the alternatives to the NEPA baseline.

Under the NEPA baseline, none of the proposed construction activities would occur in water or in water-side locations; however, the backlands improvements (addition of 23.5 acres) and lease amendment could occur in the absence of a USACE permit, and existing operations, projected growth in goods movement using existing and previously approved infrastructure, and improved backlands, would continue up to the terminal's maximum physical capacity of approximately 1,818,000 TEUs by 2038. No raising of existing cranes or new cranes would be added, no wharf improvements, as well as no dredging would occur, but the NEPA baseline includes additional AMP vaults. The current lease that expires in 2028 has an option for a 10-year extension, which could result in terminal operations through 2038.

The NEPA baseline also assumes implementation of existing and future Port-wide Clean Air Action Plan (CAAP) measures and mitigation measures identified as part of the LAHD's CEQA action. Any mitigation measures under the No Federal Action alternative would be required and enforced only by LAHD because USACE does not have legal authority to require or enforce mitigation in the absence of a federal permit.

Regional background (ambient) traffic growth for NEPA analysis (and the secondary cumulative CEQA impact analysis in Chapter 4, Cumulative Analysis, in this Draft EIS/EIR) was estimated using data from the PortTAM Model (described in Section 3.6.4.1), which includes cumulative background traffic growth. Background traffic growth occurs as a result of regional growth in employment, population, schools, and other activities. To determine the appropriate growth rates, the growth in non-port trips was determined using data from the SCAG regional model. It should be noted that most of the related projects are covered by the growth forecasts of the PortTAM Model. Other local projects are not included in the SCAG Regional Travel Demand Forecasting Model and were therefore separately accounted for in the PortTAM Model to ensure the EIS/EIR did not understate future cumulative impacts. All Ports of Long Beach and Los Angeles-projected container and non-container terminal traffic growth are included in the PortTAM Model.

The background future intersection traffic volumes (which account for cumulative non-proposed project growth) were developed based on SCAG socioeconomic projections with amendments as reflected in the PortTAM Model.

The background future freeway volume traffic volumes along I-110, I-405, I-710, and SR-91 were obtained from the PortTAM Model.

Ports of Los Angeles and Long Beach Trip Generation

Trip generation by the Ports of Los Angeles and Long Beach for the years 2017, 2018, 2019, 2026, and 2038 were estimated by adding traffic resulting from the terminal expansion and associated throughput growth. The 2009 San Pedro Bay Cargo Forecast was used to determine the total port throughput for each future analysis year. Subsequent to the completion of this analysis an updated in a 2016 Cargo Forecast (Mercator International and Oxford Economics, 2016). The 2009 and 2016 cargo forecasts do not materially differ for the purposes of this analysis. Furthermore, the overall port complex TEU throughput forecast is higher in the 2009 forecast than the 2016 forecast: the 2009 annual forecast for 2030 is 34.6 million TEUs whereas the 2016 annual forecast for 2030 is 34.4 million TEUs. This results in slightly more conservative analysis conditions by using the 2009 Cargo Forecast.

Port-related trip generation was developed using the LAHD's 'QuickTrip/TrainBuilder' Model (hereafter referred to as just 'QuickTrip'). Port-related trip generation is separated into four classes of vehicles:

- Bobtails: tractor-only;
- Chassis: tractor plus chassis;
- Container: tractor and chassis with loaded or empty container; and
- Auto: Employee automobiles and other auto visitor trips.

Operating conditions under each of the analysis years was defined by changing operating parameters as follows: modified weekend activity; expanded terminal operating hours; increased on-dock rail use; and, increased dual transactions within the terminal. These operating parameters affect the amount of truck traffic generated by the terminals to their estimated maximum capacity. Cargo volume (throughput) would increase over the years, and terminals would also change their operations to accommodate the increase in containers. Accordingly, these operational changes are already being put into place. It should be noted that increased throughput does not directly translate into a proportional increase in truck trips due to the different terminal operating parameters over the years. For example, truck trips could actually decrease at certain terminals in the future due to the implementation and expansion of on-dock rail, even with greater throughput. This is because the increase in on-dock capacity is even greater than the increase in throughput, thus resulting in fewer truck trips but more containers processed through the terminal.

The following section summarizes some of the key operating parameters used in the trip generation estimate. These operating parameters are derived from and consistent with the parameters developed and applied in the *Port of Los Angeles Baseline Transportation Study* (POLA, 2004) and the *Port of Los Angeles Roadway Study*.

Work shifts. To achieve the forecasted TEU throughput volumes, the Port's terminals must handle more cargo during the non-peak hours (time periods outside of the A.M., M.D. and P.M. peak hours) than they do currently. The QuickTrip model can generate trips for one, two, or three shifts. For the proposed Project, the terminal operator has indicated they can handle the projected daily container movements via truck (imports, exports, empties, and bare chassis) with the Day Shift (8:00 A.M. to 5:00 P.M.) and Second/Night Shift (5:00 P.M. to 3:00 A.M.). The Hoot Shift (3:00 A.M. to 7:00 A.M.) is only needed for vessel unloading/loading. The railyard is also operated with the day and night shifts only for loading/unloading, with switching done by PHL and the railroads through the entire day.

Non-Cargo Trip Generation. Non-cargo trips (employee, visitor, delivery/vendor trips) were determined based upon data from LAHD.

TEU Throughput Growth. Port TEU throughput is from the *2009 San Pedro Bay Cargo Forecast* of overall port-wide growth based on estimates of terminal capacity and demand as discussed in Chapters 1 and 2 (The Tioga Group, Inc. and IHD Global Insight, 2009).

On-Dock Rail Usage. On-dock rail refers to a rail terminal within or adjacent to the cargo terminal used to build trains to take containers to and from the terminal via rail. Those containers therefore do not travel by truck; rather, they enter or leave the terminal on rail cars. As the percentage of containers moved via on-dock rail is increased, the percentage of containers moved by truck decreases. Building and operating on-dock rail facilities are key methods for reducing truck trips to and from the container terminal. It is expected that the use of on-dock rail will increase throughout the Port over time for many reasons, including the construction of expanded on-dock rail facilities, improvements and enhancements to new and existing on-dock rail facilities, improvements in rail operation technologies, increased demand for rail movements as opposed to truck movements, improved container management procedures, and other factors. The amount of cargo throughput that can be handled by on-dock rail is based on the capacity of the on-dock rail facility, which includes the overall size of the on-dock railyard, the number of linear feet of rail track in the facility, the number and type of equipment servicing the railyard, the physical layout of the railyard, how it interacts with the rest of the terminal, and other design and operational factors. These factors determine the number of trains that can be built within given time periods, the size of the trains, and the overall level of terminal throughput that can be carried in and out of the terminal on rail cars.

Weekend Terminal Operations. Based upon detailed terminal capacity analyses that evaluate terminal and gate congestion, historical weekend gate move data, and a reasonably conservative analysis, weekend throughput is assumed to be 15 percent of the total weekly throughput.

Peak hour Port-related truck trips do not increase proportionately with TEU growth. This is because, in future years, on-dock rail usage would increase and work shift splits would change as described above. Both of these actions would shift more activity to the second shift and away from the day shift. Therefore, although total trips would increase between the baseline and Port build-out, some of the increase would occur during off-peak time periods due to the operating parameters described above.

According to the 2009 San Pedro Bay Cargo Forecast, most Port cargo terminals would reach capacity by approximately 2035 even with assumed terminal improvements (see Section 1.2.3.1 in Chapter 1, Introduction).

Proposed Project-Related Trip Generation and Distribution

QuickTrip

Forecast proposed Project/alternative-related trip generation includes trips generated by the proposed Project and alternatives. Traffic growth related to the proposed Project and alternatives was developed using the QuickTrip truck generation model. QuickTrip is a spreadsheet truck trip generation model that was developed for the *Ports of Long Beach and Los Angeles Transportation Study* (POLB and POLA, 2001). QuickTrip estimates terminal truck flows by hour of the day based on TEU throughput and using assumed

terminal operating parameters. The QuickTrip model was run and tested against the gate data (gate counts and historical gate data from the terminals). These data (TEU per container ratio, monthly TEU throughput, mode split, hours of operation, dual move percentage, worker shift splits, and peaking factors) were input into QuickTrip for each terminal. QuickTrip was validated by comparing estimates of gate activity to actual gate counts conducted in the field. The results of the validation exercise indicate that the QuickTrip model is able to estimate truck movements by day and peak hour within two percent to 10 percent of actual counts for all terminals (both directions combined), depending on which peak hour is modeled.

The Port throughput provides the "demand" for the proposed Project; therefore, the daily and hourly loaded container truck trips to/from the proposed Project/alternatives were determined using QuickTrip.

Throughput projections for the Port Complex are discussed in Sections 1.2.3.1 in Chapter 1, Introduction, and 2.2.2.1 in Chapter 2, Project Description. The proposed Project/alternative-related TEU throughput for the CEQA baseline and year 2038 proposed Project and alternatives to the proposed Project is shown in the following Table 3.6-17.

Table 3.6-17: Annual TEUs: CEQA Baseline and 2038 Proposed Project and Alternatives

Alternative	Annual TEUs
CEQA Baseline	1,240,773
2038 Proposed Project	2,379,525
2038 NEPA Baseline (Alt 1) and No Project (Alternative 2)	1,818,000
2038 Reduced Wharf Improvements (Alternative 3)	2,250,000
2038 No Backland Improvements and No Street Closure (Alternative 4)	2,115,133
2038 Expanded On-Dock Railyard/TICTF (Alternative 5)	2,379,525

As can be seen from the table, the proposed Project and Alternative 5 would have the same annual terminal throughput of 2,379,525 TEUs in 2038, and Alternative 1 and Alternative 2 would have the same annual terminal throughput of 1,818,000 TEUs. Alternatives 3 and 4 would have throughput between those two alternative groups, with 2,250,000 TEUs for Alternative 3 and 2,115,133 TEUs for Alternative 4.

Proposed Project Operational Trip Generation and Distribution

Trip generation for the proposed Project and alternatives for the analysis years was derived from projected TEU forecast provided by LAHD relative to the expected capacity of the proposed Project terminal in each scenario by using the LAHD's QuickTrip trip generation tool.

As mentioned above, increased throughput does not directly translate into proportionally increased truck trips due to the different hourly terminal operating parameters and changes to the amount of containers moved by on-dock intermodal rail over the years.

Trip distribution was based on data from the PortTAM Model, which is based on truck driver origin/destination surveys (actual surveys of truck drivers at the gates), as well as from longshore worker place of residence data.

Proposed Project Construction-Related Trip Generation and Distribution

Construction of the proposed Project would include improvements to Berths 226-229 and Berths 230-232 that would involve installing sheet and/or king piles and dredging to increase the depth of the berths. Additional improvements at the terminal would include the delivery and installation of up to five new cranes, raising of up to five of the existing cranes, installation of support infrastructure, demolition of existing structures, street vacation and backlands expansion, and gate relocation.

Construction of the proposed Project is expected to take approximately 24 months and begin in 2017. In-water construction would be staged such that one vessel could be at berth at any given time. Under this scenario, installation of sheet piles would occur along Berths 230-232, followed by dredging along these berths (Berths 226-229 would remain operational during this phase). Dredge materials would be disposed of at an upland site or ocean disposal site. Once improvements to Berths 230-232 are completed, operations would occur at these berths, while Berths 226-229 are under construction. Street vacation/closure and rerouting, demolition, backland construction and gate relocation would overlap with in-water construction.

The total number of construction-related trips would vary during construction of the proposed Project. It is anticipated that the majority of construction materials (i.e., aggregate, concrete, asphalt, sand, and slurry) would be provided by local suppliers and stored at the contractors' existing facilities. The majority of construction materials would be imported during off-peak traffic hours (the main exception being cement trucks, which have a limited window for delivery times). Construction haul 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 Terminal Way via Ferry Street. Workers arrive at the construction site prior to the A.M. peak period and depart prior to or after the P.M. peak period, as a standard practice for construction of container terminal projects within the Port.

Construction period project-related truck and auto trips were estimated for the peak construction activities in August 2017 and August 2018 with 72 inbound and outbound PCE trips in the A.M. peak hour, 55 inbound and outbound PCE trips in the M.D. peak hour, and 41 inbound and outbound PCE trips in the P.M. peak hour. This construction peak trip generation is the same for both the upland disposal of dredge material scenario and ocean disposal scenario since the dredge disposal does not occur during the peak of construction-related trips generated by the proposed Project construction. However, it should be noted that upland disposal would require approximately 2,250 more truck trips than the ocean disposal scenario. The construction related trips were distributed to the study locations based on the QuickTrip model for truck trips and the longshore worker place of residence data for auto trips.

Proposed Project-Related Trip Vehicle Miles Traveled

The draft CEQA analysis update guidelines from the Office of Planning Research recommend using average vehicle miles traveled per trip as the primary metric of transportation impact across the state in response to Senate Bill 743. However, Office of Planning Research guidelines for updating the analysis of transportation impacts under CEQA are not finalized and transition to an alternative analysis methodology is recommended to be phased over a multiyear period. This EIS/EIR has been released prior to the effective date of the new OPR methodology. Nonetheless, the average vehicle miles traveled (VMT) per trip for the Baseline, proposed Project and Alternatives is shown for informational purposes. The VMT information provided in Table 3.6-18 was derived from the PortTAM Model. It should be noted that that projected average VMT per auto and truck trip for the proposed Project and all alternatives would not be substantively different than average VMTs per trip under baseline conditions.

Table 3.6-18: Analysis Scenario Average Vehicle Miles Traveled by Trip

Alternative	Average Daily Auto VMT				Average Daily Truck VMT			
	2013	2019	2026	2038	2013	2019	2026	2038
CEQA Baseline	11.15	-	-	-	25.36	-	-	-
NEPA Baseline	-	10.53	10.46	10.46	-	22.86	23.15	23.17
Proposed Project	-	10.53	10.33	10.32	-	22.68	23.03	22.13
Alternative 1 & 2	-	10.53	10.46	10.46	-	22.86	23.15	23.17
Alternative 3	-	10.54	10.34	10.37	-	22.62	23.01	22.32
Alternative 4	-	10.56	10.37	10.38	-	22.61	23.00	22.42
Alternative 5	-	10.56	10.28	10.32	-	22.61	22.24	22.41

Source: PortTAM Model, 2016.

Proposed Project-Area Transportation Improvements

There are a number of transportation projects planned to be implemented in the Port area during the lease period of the proposed Project and alternatives, as described below. These projects are either included in the regional transportation planning and programming documents and the SCAG RTP and Regional Transportation Improvement Program, or were developed as part of Port Planning and implementation efforts, including the Port of Los Angeles Roadway Transportation Study (POLA, 2004). Several of the transportation projects contained in the study have been reviewed by Caltrans. Caltrans is the agency that owns, operates, and controls many of these transportation facilities. Therefore, implementation of any improvements at those locations must be approved by Caltrans before they can proceed. A major project development milestone is called the Project Study Report (PSR), which outlines the need for a project, describes the project components, analyzes the project, and assesses alternatives. After approval of the PSR, a project is considered to be approved by Caltrans for purposes of proceeding to the development of geometric plans, right-of-way maps, environmental studies, and construction. All of the noted projects have been taken through the PSR process, and the PSR documents were approved by Caltrans. Additionally, funds have been designated for these projects. The remaining steps to implementation of the projects include engineering plan preparation, environmental documentation, funding, and construction. Because these projects were approved by

Caltrans through the PSR process, have been or are planned to be environmentally cleared via appropriate documents, and have committed funding, they are reasonably foreseeable projects and are therefore included in the EIS/EIR transportation analysis as related projects and assumed to be in place during the proposed Project's/alternatives' build-out years for NEPA analysis and the cumulative analysis for ground transportation in Chapter 4, Cumulative Analysis. This document's CEQA analysis, by contrast, does not assume that these planned transportation improvements will be in place for the proposed Project's analysis, as they are not part of the baseline.

The related transportation projects include:

Gerald Desmond Bridge Replacement Project: The Port of Long Beach, in cooperation with Caltrans, is replacing the existing Gerald Desmond Bridge, which connects SR-710 to Terminal Island, in the City of Long Beach. The Gerald Desmond Bridge Replacement Project will improve existing traffic flows across the bridge, replace the physically deteriorated existing structure, and increase the vertical clearance beneath the bridge for the shipping traffic that passes below. In terms of capacity, the bridge will be expanded to include six travel lanes plus full standard shoulders, in comparison to the existing bridge, which has three lanes on the ascending portions of the bridge and two lanes on the descending portions and has limited shoulders. The new bridge and Ocean Boulevard will be the westerly extension of SR-710 to SR-47 (Terminal Island Freeway). It is assumed to be completed in all future scenarios since the bridge is planned to be completed by mid-2018.

Navy Way/Seaside Avenue Interchange: Construction of a new flyover connector from northbound Navy Way to Westbound Seaside Avenue would eliminate the need for a traffic signal at this location. The flyover improvement would provide direct ramp connections for existing left-turn movements, thereby eliminating conflicts between left-turn and through traffic that normally occurs at a traditional intersection. The Project analysis assumes that this new connector will be completed after 2026 but prior to 2038.

The following major planned regional improvements are not included as part of the cumulative analysis; however, their construction would alter the regional roadway capacity near the Port by affecting roadways utilized by both cumulative background trips and proposed Project trips.

I-710 (Long Beach Freeway) Corridor Project: LAHD is collaborating with Caltrans, SCAG, Metro, Gateway Cities Council of Governments, and the Port of Long Beach on the I-710 Corridor Project. The Port is a funding and technical partner to Caltrans and Metro for the Project Approval/Environmental Documentation phase. The recently released Draft EIR/EIS identifies improvements to the entire 20-mile corridor to accommodate all year 2035 Port of Los Angeles/Port of Long Beach and regional traffic. The corridor area includes the mainline freeway and adjacent arterial street system. The proposed improvements potentially include: a separate truckway that may accommodate zero emission technology; additional lanes on the mainline in various locations; improved/reconstructed freeway-freeway and arterial street interchanges; and extensive arterial street/intersection improvements throughout the entire corridor area.

SR-47 Expressway: This proposed ACTA project consists of a new, four-lane elevated roadway connecting the replacement Schuyler Heim Bridge on the south end with Alameda Street on the north end, just south of PCH. This new viaduct would provide a

bypass of three signalized intersections and five at-grade railroad crossings along Henry Ford Avenue and Alameda Street between Pier A Way and PCH. This planned ACTA project is presently awaiting the resolution of environmental litigation, which has caused the postponement of final design. This project is unfunded at this time.

3.6.4.4 Thresholds of Significance

A project in the Port is considered to have a significant transportation/circulation impact if the project would result in one or more of the following occurrences. These criteria are based on the *L.A. CEQA Thresholds Guide* (City of Los Angeles, 2006) and other criteria applied to Port projects, and are used as the basis for determining the impacts of the proposed Project and alternatives under CEQA and NEPA, except as noted for NEPA.

TRANS – 1: Would the proposed Project/alternative construction result in a significant short-term temporary increase in truck and auto traffic?

In the City of Los Angeles, proposed Project construction would have a significant impact under CEQA or NEPA on transportation/circulation if it increases an intersection's V/C ratio in accordance with the following guidelines:

- V/C ratio increase greater than or equal to 0.04 if final LOS is C;
- V/C ratio increase greater than or equal to 0.02 if final LOS is D; or
- V/C ratio increase greater than or equal to 0.01 if final LOS is E or F.

TRANS – 2: Would the long-term vehicular traffic associated with the proposed Project/alternative significantly impact at least one study location's volume/capacity ratios or level of service?

For intersections in the cities of Carson and Long Beach, proposed project operations would have a significant impact under CEQA or NEPA on transportation/circulation if it increases an intersection's V/C ratio in accordance with the following guideline:

- V/C ratio of 0.02 or greater if the final LOS is E or F.

In the City of Los Angeles, proposed Project operations would have a significant impact under CEQA or NEPA on transportation/circulation if it increases an intersection's V/C ratio in accordance with the following guidelines:

- V/C ratio increase greater than or equal to 0.04 if final LOS is C;
- V/C ratio increase greater than or equal to 0.02 if final LOS is D; or
- V/C ratio increase greater than or equal to 0.01 if final LOS is E or F.

TRANS – 3: Would an increase in on-site employees due to proposed Project/alternative operations result in a significant increase in related public transit use?

The proposed Project would have a significant impact on local transit services if it would increase demand beyond the supply of such services anticipated at proposed Project build-out (i.e., 2038).

TRANS – 4: Would proposed Project/alternative operations result in increases considered significant related to freeway congestion?

Pursuant to Caltrans' traffic study requirements, freeway roadway segments were analyzed using the operational analysis methodology provided in the *Highway Capacity Manual* (2010 HCM). For those locations projected to be operating at LOS F, the freeway segments were also analyzed in compliance with the County of Los Angeles CMP (Metro, 2010) to utilize D/C ratio to determine LOS.

According to the CMP Traffic Impact Analysis Guidelines, an increase of 0.02 or more in the D/C ratio with a resulting LOS F at a CMP freeway monitoring station is deemed a significant impact (Metro, 2010). This applies only if a project meets the minimum CMP thresholds for including the location in the analysis, which are 50 trips at a CMP intersection and 150 trips on a freeway segment. At non-CMP freeway segments, an increase of 0.02 or more in the D/C ratio with a resulting LOS F is deemed a significant impact.

TRANS – 5: Would the proposed Project/alternative cause an increase in rail activity and/or delays in regional highway traffic due to an increase in rail activity?

For inland at-grade rail crossings, the analysis presented under significant threshold TRANS-5 is provided for informational purposes only, as discussed under "Rail" in Section 3.6.4.1. The proposed Project is considered to have an impact at the affected at-grade crossings if the average vehicle delay in the peak hour caused by the proposed Project (relative to the CEQA baseline) would exceed the levels shown in Table 3.6-19. If the LOS at the crossing is A through D, then the impact is not considered adverse. If, with the proposed Project or alternative, the crossing is at LOS E (55 to 80 seconds of average vehicle delay), and the change in delay is two seconds or more, then an impact is identified for informational purposes. If the crossing is at LOS F (over 80 seconds of average vehicle delay), and the change in average delay is one second or more, then an impact is identified for informational purposes.

As noted below, because there are no at-grade crossings between the proposed Project site and the greater Los Angeles intermodal railyards (i.e., BNSF's Hobart Yard, UP's ELA), there are no rail-related at-grade impacts in this area, and such impacts beyond these railyard locations are outside of the area of federal control and responsibility and scope of analysis and are therefore no direct or indirect impacts would occur under NEPA.

LAHD is using the impact thresholds shown in Table 3.6-19 to evaluate vehicle delay impacts at at-grade crossings consistent with the rail methodology.

Table 3.6-19: Impact Threshold for Rail Impacts

Level of Service (LOS) with Project	Change in Average Delay per Vehicle
A – D	Not Significant
E (55 – 80 seconds of average delay per vehicle)	2 seconds
F (over 80 seconds of average delay per vehicle)	1 second

TRANS – 6: Would the proposed Project/alternative substantially increase transportation hazards due to a design feature?

The proposed design would create a transportation hazard, such as creating sharp turns in roadways or dangerous intersections, as a design feature of the proposed Project.

The following criterion was dismissed in the NOP, and are not analyzed as part of this Draft EIS/EIR:

- *Would the proposed Project result in inadequate emergency access?*

  This criterion was dismissed because while the proposed Project expand the Everport Container Terminal to the parcels between Terminal Way and Cannery Street which would result in closure of Terminal Way west of Earle Street, those parcels would be cleared prior to the roadway closure so that access to the Project site or other areas within the Port would not be obstructed.

  The proposed Project is therefore not expected to have a significant impact on emergency access.

- *Would the Project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

  This criterion was dismissed because the proposed Project does not include any modifications to existing roadways on Terminal Island that support current or future bike lanes or bus stops. The proposed Project itself would not include visitor-serving uses that would benefit from alternative modes of transportation. The proposed Project is therefore expected to have no impact on alternative transportation policies or facilities.

3.6.4.5 Impact Determination

Proposed Project

Impact TRANS-1: Proposed Project construction would not result in a significant short-term, temporary increase in truck and auto traffic.

The proposed Project would be constructed between 2017 and 2018. As previously stated, the total number of construction-related trips would vary during construction of the proposed Project. It is anticipated that the majority of construction materials (i.e., aggregate, concrete, asphalt, sand, and slurry) would be provided by local suppliers and stored at the contractors' existing facilities. The majority of construction materials would be imported during off-peak traffic hours (the main exception being cement trucks, which have a limited window for delivery times). Construction haul 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 Terminal Way via Ferry Street.

Construction activities could result in temporary increases in traffic volumes and roadway disruptions in the vicinity of a construction site. Potential construction effects from the proposed Project on roadway operations include the following:

- temporary increases in traffic associated with construction worker commutes, delivery of construction materials, hauling of demolished and/or excavated materials, and general deliveries would increase travel demand on roadways; and
- heavy and slow-moving construction vehicles would mix with general-purpose vehicular and non-motorized traffic in the area.

As a standard practice, LAHD requires contractors to prepare a detailed traffic management plan for Port projects, which includes the following: detour plans, coordination with emergency services and transit providers, coordination with adjacent property owners and tenants, advanced notification of temporary bus stop loss and/or bus line relocation, identification of temporary alternative bus routes, advanced notice of temporary parking loss, identification of temporary parking replacement or alternative adjacent parking within a reasonable walking distance, use of designated haul routes, use of truck staging areas, observance of hours of operation restrictions, and appropriate signage for construction activities. The traffic management plan would be submitted to LAHD and LADOT for approval before construction begins.

CEQA Impact Determination

Traffic conditions with the proposed Project were estimated by adding traffic resulting from construction-related trucks and autos to the CEQA baseline. The peak day of construction traffic conditions are estimated to be 72 inbound and outbound PCE trips in the A.M. peak hour, 55 inbound and outbound PCE trips in the M.D. peak hour, and 41 inbound and outbound PCE trips in the P.M. peak hour. Table 3.6-20 summarizes the traffic analysis and CEQA impact determination, and as shown, the proposed Project would not result in significant impacts under CEQA based on the significance criteria described in Section 3.6.4.5.

Appendix E2 contains all of the CEQA baseline, NEPA baseline, and with the proposed Project construction period traffic forecasts and LOS calculation worksheets.

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Table 3.6-20: Intersection Level of Service Analysis—CEQA Baseline Compared to Proposed Project Construction Period Conditions

Int. #	Study Intersection	CEQA Baseline						Proposed Project Construction Conditions						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	C	0.764	A	0.579	B	0.679	C	0.764	A	0.579	B	0.679	0.000	0.000	0.000	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.468	A	0.472	A	0.529	A	0.468	A	0.472	A	0.529	0.000	0.000	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	B	0.621	A	0.589	B	0.697	B	0.621	A	0.589	B	0.697	0.000	0.000	0.000	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.291	A	0.249	A	0.395	A	0.291	A	0.249	A	0.395	0.000	0.000	0.000	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.069	A	0.198	A	0.214	A	0.069	A	0.198	A	0.214	0.000	0.000	0.000	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.513	B	0.632	B	0.673	A	0.513	B	0.632	B	0.673	0.000	0.000	0.000	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	A	0.347	A	0.402	A	0.486	A	0.347	A	0.402	A	0.486	0.000	0.000	0.000	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	A	0.200	A	0.102	A	0.130	A	0.200	A	0.102	A	0.130	0.000	0.000	0.000	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.368	A	0.288	A	0.269	A	0.368	A	0.288	A	0.269	0.000	0.000	0.000	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.400	A	0.301	A	0.275	A	0.400	A	0.301	0.000	0.000	0.000	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.331	A	0.265	A	0.269	A	0.331	A	0.265	A	0.270	0.000	0.000	0.001	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.302	A	0.275	A	0.275	A	0.302	A	0.275	0.000	0.000	0.000	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	A	0.395	A	0.341	A	0.518	A	0.406	A	0.341	A	0.519	0.011	0.000	0.001	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	A	0.259	A	0.243	A	0.317	A	0.339	A	0.305	A	0.362	0.080	0.062	0.045	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.329	A	0.147	A	0.108	A	0.329	A	0.147	A	0.108	0.000	0.000	0.000	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.100	A	0.288	A	0.180	A	0.148	A	0.325	A	0.207	0.048	0.037	0.027	No	No	No
17	Earle Street at Terminal Way [2]	A	0.098	A	0.138	A	0.161	A	0.098	A	0.138	A	0.161	0.000	0.000	0.000	No	No	No
18	Earle Street at Cannery Street [2]	A	0.111	A	0.115	A	0.069	A	0.111	A	0.115	A	0.069	0.000	0.000	0.000	No	No	No

Notes:
[1] City of Carson intersection analyzed using ICU methodology according to City standards.
[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.
[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-21: Intersection Level of Service Analysis—2017 NEPA Baseline Compared to Proposed Project - 2017 Construction Period Conditions

Int. #	Study Intersection	2017 NEPA Baseline						2017 With Proposed Project Construction Conditions						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	C	0.789	B	0.607	C	0.702	C	0.789	B	0.607	C	0.702	0.000	0.000	0.000	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.459	A	0.458	A	0.530	A	0.459	A	0.458	A	0.530	0.000	0.000	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	C	0.721	B	0.669	C	0.751	C	0.721	B	0.669	C	0.751	0.000	0.000	0.000	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.366	A	0.486	A	0.456	A	0.366	A	0.486	A	0.456	0.000	0.000	0.000	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.291	A	0.413	A	0.450	A	0.291	A	0.413	A	0.450	0.000	0.000	0.000	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.466	B	0.661	C	0.770	A	0.466	B	0.661	C	0.770	0.000	0.000	0.000	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	B	0.624	B	0.671	D	0.859	B	0.624	B	0.671	D	0.859	0.000	0.000	0.000	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	A	0.282	A	0.306	A	0.455	A	0.282	A	0.306	A	0.455	0.000	0.000	0.000	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps[31]	A	0.440	A	0.370	A	0.445	A	0.440	A	0.370	A	0.445	0.000	0.000	0.000	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.385	B	0.503	B	0.504	A	0.385	B	0.503	B	0.504	0.000	0.000	0.000	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.402	A	0.365	A	0.482	A	0.402	A	0.365	A	0.483	0.000	0.000	0.001	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.429	A	0.423	B	0.481	A	0.429	A	0.423	B	0.481	0.000	0.000	0.000	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	A	0.494	A	0.448	B	0.665	A	0.505	A	0.449	B	0.666	0.011	0.001	0.001	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	A	0.562	A	0.528	A	0.569	B	0.642	A	0.590	B	0.614	0.080	0.062	0.045	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.364	A	0.216	A	0.142	A	0.364	A	0.216	A	0.142	0.000	0.000	0.000	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.219	A	0.391	A	0.329	A	0.267	A	0.428	A	0.356	0.048	0.037	0.027	No	No	No
17	Earle Street at Terminal Way [2]	A	0.191	A	0.233	A	0.235	A	0.191	A	0.233	A	0.235	0.000	0.000	0.000	No	No	No
18	Earle Street at Cannery Street [2]	A	0.117	A	0.165	A	0.117	A	0.117	A	0.165	A	0.117	0.000	0.000	0.000	No	No	No

Notes:
[1] City of Carson intersection analyzed using ICU methodology according to City standards.
[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.
[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-22: Intersection Level of Service Analysis—2018 NEPA Baseline Compared to Proposed Project - 2018 Construction Period Conditions

Int. #	Study Intersection	2018 NEPA Baseline						2018 With Proposed Project Construction Conditions						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	E	0.994	B	0.609	E	0.993	E	0.994	B	0.609	E	0.993	0.000	0.000	0.000	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.565	A	0.463	B	0.603	A	0.565	A	0.463	B	0.603	0.000	0.000	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	E	0.947	B	0.660	F	1.065	E	0.947	B	0.660	F	1.065	0.000	0.000	0.000	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.549	A	0.513	B	0.646	A	0.549	A	0.513	B	0.646	0.000	0.000	0.000	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.552	A	0.425	B	0.648	A	0.552	A	0.425	B	0.648	0.000	0.000	0.000	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	B	0.686	B	0.662	E	0.986	B	0.686	B	0.662	E	0.986	0.000	0.000	0.000	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	C	0.762	C	0.708	F	1.197	C	0.762	C	0.708	F	1.197	0.000	0.000	0.000	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	A	0.282	A	0.317	B	0.601	A	0.282	A	0.317	B	0.601	0.000	0.000	0.000	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.463	A	0.356	A	0.436	A	0.463	A	0.356	A	0.436	0.000	0.000	0.000	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.432	B	0.498	A	0.454	A	0.432	B	0.498	A	0.454	0.000	0.000	0.000	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.455	A	0.381	B	0.600	A	0.455	A	0.381	C	0.601	0.000	0.000	0.001	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.495	A	0.379	A	0.477	A	0.495	A	0.379	A	0.477	0.000	0.000	0.000	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	A	0.582	A	0.477	C	0.791	A	0.593	A	0.477	C	0.792	0.011	0.000	0.001	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	A	0.569	A	0.532	A	0.536	B	0.649	A	0.593	A	0.581	0.080	0.061	0.045	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.377	A	0.230	A	0.279	A	0.377	A	0.230	A	0.279	0.000	0.000	0.000	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.219	A	0.393	A	0.331	A	0.267	A	0.430	A	0.358	0.048	0.037	0.027	No	No	No
17	Earle Street at Terminal Way [2]	A	0.174	A	0.240	A	0.255	A	0.174	A	0.240	A	0.255	0.000	0.000	0.000	No	No	No
18	Earle Street at Cannery Street [2]	A	0.117	A	0.165	A	0.119	A	0.117	A	0.165	A	0.119	0.000	0.000	0.000	No	No	No

Notes:
[1] City of Carson intersection analyzed using ICU methodology according to City standards.
[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.
[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Traffic conditions with the proposed Project construction for the years 2017 and 2018 were estimated by adding construction period Project-related truck and auto trips to the 2017 and 2018 NEPA Baseline Conditions: 72 inbound and outbound PCE trips in the A.M. peak hour, 55 inbound and outbound PCE trips in the M.D. peak hour, and 41 inbound and outbound PCE trips in the P.M. peak hour. The construction-related trips were distributed to the study locations based on the QuickTrip model for truck trips and the longshore worker place of residence data for auto trips.

Tables 3.6-21 and 3.6-22 summarize the traffic analysis for the 2017 and 2018 NEPA baselines compared to 2017 and 2018 with the proposed Project construction conditions respectively. As shown, the proposed Project would not result in significant impacts under NEPA based on the significance criteria described in Section 3.6.4.5.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRANS-2: Long-term vehicular traffic associated with the proposed Project would significantly impact volume/capacity ratio or level of service.

Traffic conditions with the proposed Project were compared to the applicable CEQA or NEPA baseline to determine the proposed Project's incremental impacts, and then the incremental impacts were assessed using the significance criteria described in Section 3.6.4.5.

CEQA Impact Determination

Traffic conditions with the proposed Project were estimated by adding traffic resulting from the improved and enhanced container terminal operations and associated throughput growth to the CEQA baseline. Table 3.6-23 summarizes the trip generation assumptions for the CEQA baseline and the proposed Project at is maximum throughput in Year 2038. Traffic generated by the proposed Project was estimated to determine potential impacts of the proposed Project on study area roadways.

Table 3.6-23: Trip Generation Analysis Assumptions and Input Data for Everport Container Terminal: CEQA Impact Determination

Time Period	Vehicle Type	CEQA Baseline Conditions			2038 With Project Conditions		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	117	62	179	196	160	356
	Truck	121	48	169	394	362	756
M.D. Peak Hour	Auto	44	69	1113	68	109	177
	Truck	178	162	340	282	266	548
P.M. Peak Hour	Auto	183	285	469	191	413	604
	Truck	113	110	222	145	164	309

Appendix E2 contains all of the CEQA baseline, NEPA baseline, and with the proposed Project traffic forecasts and LOS calculation worksheets.

Table 3.6-27 below compares the proposed Project operating conditions at each study intersection relative to baseline conditions, and identifies impacts using the significance criteria described in Section 3.6.4.5.

Based on the results of the traffic study as presented in Table 3.6-27 and the worksheets set forth in Appendix E2, the proposed Project would not result in significant adverse traffic and circulation system related impacts relative to the CEQA baseline conditions at any of the study locations.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Traffic conditions with the proposed Project for the years 2019, 2026 and 2038 were estimated by adding traffic resulting from the expanded container terminal and associated throughput growth to the NEPA baseline. The evaluation assumptions described in Section 3.6.4.5 apply.

Tables 3.6-24, 3.6-25, and 3.6-26 summarize the trip generation conditions for the NEPA baseline and with the proposed Project for 2019, 2026, and 2038 respectively.

Table 3.6-24: Trip Generation Analysis Assumptions and Input Data for Everport Container Terminal: Year 2019

Time Period	Vehicle Type	2019 NEPA Baseline Conditions			2019 With Project Conditions		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	121	64	185	122	65	187
	Truck	125	49	174	127	50	177
M.D. Peak Hour	Auto	45	71	116	46	71	117
	Truck	183	167	350	186	170	355
P.M. Peak Hour	Auto	189	294	483	190	296	487
	Truck	116	113	230	118	115	233

Table 3.6-25: Trip Generation Analysis Assumptions and Input Data for Everport Container Terminal: Year 2026

Time Period	Vehicle Type	2026 NEPA Baseline Conditions			2026 With Project Conditions		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	132	106	238	161	130	291
	Truck	219	198	417	289	262	551
M.D. Peak Hour	Auto	49	76	125	57	91	148
	Truck	156	146	302	206	192	398
P.M. Peak Hour	Auto	150	291	441	169	346	514
	Truck	81	89	170	107	118	224

Table 3.6-26: Trip Generation Analysis Assumptions and Input Data for Everport Container Terminal: Year 2038

Time Period	Vehicle Type	2038 NEPA Baseline Conditions			2038 With Project Conditions		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	159	129	288	196	160	356
	Truck	276	253	529	394	362	756
M.D. Peak Hour	Auto	57	90	147	68	109	177
	Truck	197	185	382	282	266	548
P.M. Peak Hour	Auto	167	342	509	191	413	604
	Truck	101	113	214	145	164	309

Tables 3.6-28, 3.6-29, and 3.6-30 summarize the intersection operating conditions for the NEPA baseline and with the proposed Project for 2019, 2026, and 2038 respectively.

The proposed Project would result in the following significant impacts under NEPA based on the significance criteria described in Section 3.6.4.5 (the V/C increment for the given future intersection LOS was exceeded):

Year 2019

- No Significant Impacts

Year 2026

- Study Intersection #14: Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps (A.M. and P.M. peak hours)

Year 2038

- Study Intersection #14: Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps

Mitigation Measures

The westbound approach of the Ferry Street at State Route (SR)-47 (Terminal Island Freeway)/Seaside Avenue Ramps intersection is located in Caltrans right-of-way, and not owned by the City of Los Angeles. Because of this, no mitigation is within the Port's jurisdictional control that could reduce the intersection impact to a less than significant level under NEPA.

Residual Impacts

Impacts would remain significant and unavoidable.

Table 3.6-27: Intersection Level of Service Analysis—CEQA Baseline Compared to 2038 With Proposed Project

Int. #	Study Intersection	CEQA Baseline						2038 With Proposed Project						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	C	0.764	A	0.579	B	0.679	C	0.767	A	0.576	B	0.681	0.003	-0.003	0.002	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.468	A	0.472	A	0.529	A	0.469	A	0.474	A	0.529	0.001	0.002	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	B	0.621	A	0.589	B	0.697	B	0.621	A	0.586	B	0.699	0.000	-0.003	0.002	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.291	A	0.249	A	0.395	A	0.292	A	0.249	A	0.398	0.001	0.000	0.003	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.069	A	0.198	A	0.214	A	0.070	A	0.197	A	0.212	0.001	-0.001	-0.002	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.513	B	0.632	B	0.673	A	0.517	B	0.639	B	0.663	0.004	0.007	-0.010	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	A	0.347	A	0.402	A	0.486	A	0.348	A	0.404	A	0.488	0.001	0.002	0.002	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	A	0.200	A	0.102	A	0.130	A	0.200	A	0.105	A	0.136	0.000	0.003	0.006	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.368	A	0.288	A	0.269	A	0.376	A	0.299	A	0.281	0.008	0.011	0.012	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.400	A	0.301	A	0.281	A	0.422	A	0.322	0.006	0.022	0.021	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.331	A	0.265	A	0.269	A	0.342	A	0.267	A	0.275	0.011	0.002	0.006	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.302	A	0.275	A	0.284	A	0.313	A	0.292	0.009	0.011	0.017	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	A	0.395	A	0.341	A	0.518	A	0.400	A	0.331	A	0.514	0.005	-0.010	-0.004	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	A	0.259	A	0.243	A	0.317	A	0.292	A	0.271	A	0.376	0.033	0.028	0.059	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.329	A	0.147	A	0.108	A	0.375	A	0.215	A	0.137	0.046	0.068	0.029	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.100	A	0.288	A	0.180	Not an Intersection (Internal to Project Site)											
17	Earle Street at Terminal Way [2]	A	0.098	A	0.138	A	0.161	A	0.346	A	0.273	A	0.311	0.248	0.135	0.150	No	No	No
18	Earle Street at Cannery Street [2]	A	0.111	A	0.115	A	0.069	A	0.341	A	0.274	A	0.271	0.230	0.159	0.202	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-28: Intersection Level of Service Analysis—2019 NEPA Baseline Compared to 2019 With Proposed Project

Int. #	Study Intersection	2019 NEPA Baseline						2019 With Proposed Project						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	F	1.011	B	0.639	F	1.006	F	1.011	B	0.639	F	1.006	0.000	0.000	0.000	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.533	A	0.490	A	0.599	A	0.533	A	0.490	A	0.599	0.000	0.000	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	D	0.839	B	0.603	E	0.951	D	0.839	B	0.603	E	0.951	0.000	0.000	0.000	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.415	A	0.514	A	0.510	A	0.415	A	0.514	A	0.510	0.000	0.000	0.000	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.381	A	0.467	A	0.494	A	0.381	A	0.467	A	0.494	0.000	0.000	0.000	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.563	B	0.628	E	0.939	A	0.563	B	0.628	E	0.938	0.000	0.000	-0.001	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	B	0.666	B	0.648	E	0.901	B	0.666	B	0.648	E	0.901	0.000	0.000	0.000	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	B	0.605	A	0.410	A	0.543	B	0.605	A	0.410	A	0.543	0.000	0.000	0.000	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.584	C	0.593	C	0.604	A	0.584	C	0.593	C	0.605	0.000	0.000	0.001	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.498	F	0.884	D	0.766	A	0.498	F	0.884	D	0.766	0.000	0.000	0.000	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.467	A	0.491	A	0.497	A	0.467	A	0.492	A	0.497	0.000	0.001	0.000	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.409	A	0.468	B	0.552	A	0.409	A	0.468	B	0.553	0.000	0.000	0.001	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	B	0.607	A	0.421	B	0.699	B	0.607	A	0.421	B	0.699	0.000	0.000	0.000	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	B	0.679	A	0.581	B	0.661	B	0.680	A	0.581	B	0.663	0.001	0.000	0.002	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.365	A	0.259	A	0.193	A	0.366	A	0.261	A	0.193	0.001	0.002	0.000	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.221	A	0.398	A	0.334	Not an Intersection (Internal to the Project Site)											
17	Earle Street at Terminal Way [2]	A	0.403	A	0.405	A	0.326	A	0.417	A	0.459	A	0.412	0.014	0.054	0.086	No	No	No
18	Earle Street at Cannery Street [2]	A	0.119	A	0.165	A	0.121	A	0.355	A	0.361	A	0.321	0.236	0.196	0.200	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-29: Intersection Level of Service Analysis—2026 NEPA Baseline Compared to 2026 With Proposed Project

Int. #	Study Intersection	2026 NEPA Baseline						2026 With Proposed Project						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	E	0.957	B	0.664	C	0.767	E	0.959	B	0.662	C	0.768	0.002	-0.002	0.001	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	C	0.757	A	0.590	B	0.623	C	0.757	A	0.588	B	0.623	0.000	-0.002	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	C	0.761	A	0.545	C	0.711	C	0.761	A	0.543	C	0.713	0.000	-0.002	0.002	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	C	0.773	A	0.555	A	0.464	C	0.773	A	0.562	A	0.463	0.000	0.007	-0.001	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	C	0.732	A	0.488	A	0.511	C	0.729	A	0.487	A	0.511	-0.003	-0.001	0.000	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	C	0.781	D	0.810	C	0.732	C	0.783	D	0.816	C	0.729	0.002	0.006	-0.003	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	E	0.938	C	0.720	D	0.888	F	1.043	C	0.788	E	0.920	-0.001	0.004	0.003	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	C	0.790	A	0.447	A	0.512	C	0.791	A	0.449	A	0.516	0.001	0.002	0.004	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	E	0.990	D	0.699	C	0.679	E	0.995	D	0.699	D	0.691	0.005	0.000	0.012	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	F	1.279	F	1.060	E	0.856	F	1.284	F	1.068	E	0.870	0.005	0.008	0.014	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	C	0.787	B	0.571	A	0.498	C	0.794	B	0.572	B	0.502	0.007	0.001	0.004	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	C	0.754	B	0.564	C	0.630	C	0.760	B	0.571	C	0.642	0.006	0.007	0.012	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	D	0.851	A	0.495	B	0.690	D	0.855	A	0.501	B	0.694	0.004	0.006	0.004	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	F	1.028	B	0.668	C	0.767	F	1.048	B	0.685	D	0.808	0.020	0.017	0.041	**Yes**	No	**Yes**
15	Ferry Street at Terminal Way [2]	A	0.504	A	0.248	A	0.206	A	0.533	A	0.289	A	0.218	0.029	0.041	0.012	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.461	A	0.423	A	0.336	Not an Intersection (Internal to the Project Site)											
17	Earle Street at Terminal Way [2]	A	0.573	A	0.449	A	0.342	B	0.638	A	0.541	A	0.447	0.065	0.092	0.105	No	No	No
18	Earle Street at Cannery Street [2]	A	0.127	A	0.168	A	0.132	A	0.372	A	0.367	A	0.332	0.245	0.199	0.200	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-30: Intersection Level of Service Analysis—2038 NEPA Baseline Compared to 2038 With Proposed Project

Int. #	Study Intersection	2038 NEPA Baseline						2038 With Proposed Project						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	F	1.007	D	0.816	E	0.936	F	1.009	D	0.813	E	0.938	0.002	-0.003	0.002	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	D	0.815	B	0.618	B	0.670	D	0.820	B	0.615	B	0.670	0.005	-0.003	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	D	0.848	C	0.702	D	0.823	D	0.847	B	0.699	D	0.825	-0.001	-0.003	0.002	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	D	0.875	B	0.609	A	0.532	D	0.873	B	0.621	A	0.533	-0.002	0.012	0.001	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	D	0.824	A	0.542	A	0.578	D	0.821	A	0.541	A	0.576	-0.003	-0.001	-0.002	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	D	0.853	D	0.877	D	0.847	D	0.857	D	0.886	D	0.837	0.004	0.009	-0.010	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	F	1.047	D	0.884	E	0.976	F	1.166	E	0.965	F	1.031	-0.002	0.008	0.005	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	D	0.858	A	0.483	A	0.565	D	0.859	A	0.486	A	0.571	0.001	0.003	0.006	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	F	1.095	E	0.823	E	0.802	F	1.104	E	0.840	E	0.820	0.009	0.017	0.018	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	F	1.490	F	1.248	F	1.017	F	1.496	F	1.270	F	1.038	0.006	0.022	0.021	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	D	0.844	C	0.624	B	0.559	D	0.855	C	0.627	B	0.564	0.011	0.003	0.005	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	D	0.850	C	0.647	D	0.725	D	0.859	C	0.658	D	0.742	0.009	0.011	0.017	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	Not an Intersection (Interchange Improvement)																	
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	F	1.218	D	0.816	E	0.958	F	1.250	D	0.845	F	1.017	0.032	0.029	0.059	**Yes**	**Yes**	**Yes**
15	Ferry Street at Terminal Way [2]	A	0.545	A	0.347	A	0.141	A	0.591	A	0.370	A	0.159	0.046	0.023	0.018	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.459	A	0.420	A	0.335	Not an Intersection (Internal to the Project Site)											
17	Earle Street at Terminal Way [2]	A	0.566	A	0.440	A	0.353	B	0.669	A	0.563	A	0.455	0.103	0.123	0.102	No	No	No
18	Earle Street at Cannery Street [2]	A	0.136	A	0.171	A	0.147	A	0.389	A	0.372	A	0.348	0.253	0.201	0.201	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

Impact TRANS-3: An increase in on-site employees due to proposed Project operations would not significantly increase public transit use.

Although operation of the proposed Project would result in additional on-site employees (approximately 750 additional employees on a peak day), the increase in use of public transit for work-related trips would be negligible. Port terminal facilities generate extremely low transit demand for several reasons. The primary reason is that proposed Project workers generally report to Union Halls for terminal assignment before proceeding to the terminal for work. That intermediate destination along with work shift schedules makes the use of public transportation difficult for Port workers. 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 transit usage. In addition, parking at the Port is readily available and free for employees, which does not encourage workers to utilize public transit. Finally, although there are 12 existing transit routes that serve the study area surrounding the Project site, none of the existing routes stop within one mile of the Project site.

CEQA Impact Determination

Based on the analysis above, impacts due to additional demand on local transit services would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The proposed Project would result in a higher employment level compared to the NEPA baseline due to increased throughput operations, but for the same reasons as discussed under the CEQA impacts discussion, the increase in public transit usage for work-related trips would be negligible. Therefore, less than significant impacts under NEPA would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRANS-4: Proposed project operations would not significantly increase freeway congestion.

A traffic impact analysis is required at the following locations, according to the CMP, TIA Guidelines (Metro, 2010) and in accordance with the "Agreement Between City of Los Angeles and Caltrans District 7 On Freeway Impact Analysis Procedures":

- CMP arterial monitoring intersections, including freeway on-ramp or off-ramp, where the proposed Project would add 50 or more trips during either the A.M. or P.M. weekday peak hours. The three CMP arterial monitoring stations are:
  - PCH/Santa Fe Avenue (not a study intersection—less than 50 peak hour trips added by the proposed Project);
  - Alameda Street/ PCH (Study Intersection #5); and
  - PCH/Figueroa Street (not a study intersection—less than 50 peak hour trips added by the proposed Project).
- CMP freeway monitoring locations where the proposed Project would add 150 or more trips during either the A.M. or P.M. weekday peak hours. The CMP freeway monitoring stations expected to be affected by the proposed Project are in the following locations:
  - I-405 at Santa Fe Avenue (CMP Station 1066);
  - SR-91 east of Alameda Street and Santa Fe Avenue (CMP Station 1033);
  - I-710 between I-405 and Del Amo Boulevard (CMP Station 1079);
  - I-710 north of I-105, north of Firestone Boulevard (CMP Station 1080);
  - I-710 between PCH and Willow Street (CMP Station 1078); and
  - I-110 south of C Street (CMP Station 1045).

Additional freeway segments were also evaluated to assess the increases in traffic congestion along major area freeway segments (see Figure 3.6-2).

- SR-47 at the Vincent Thomas Bridge;
- SR-47/SR-103 at Commodore Schuyler Heim Bridge;
- I-110 north of 223rd Street;
- I-110 north of I-405;
- I-710 north of Alondra Boulevard; and
- I-710 north of Florence Avenue.

Queuing analysis was conducted for the state highway system ramp intersection of SR-47 at Ferry Street and SR-103 at San Gabriel Avenue using HCM methodology for the analysis alternative with the highest volume of traffic at the ramps: Year 2038 with Project Conditions. Intersection lane storage length was measured from the stop bar to the end of the lane while ramp storage length was measured from the stop bar to the SR-47 mainline. As shown in Table 3.6-31, none of the lane storage lengths are exceeded at any of the analyzed intersections.

Table 3.6-31: State Highway System Queuing Analysis – 2038 With Project Conditions

Location	Movement Group	Storage Length (feet)	Volume (PCE per hour)			95 percent Queue Length (feet)			Storage Length Exceeded ?
			A.M.	M.D.	P.M.	A.M.	M.D.	P.M.	
SR-47 at Ferry Street	WBR WBL	850 2,090	3 291	12 123	0 341	8 370	13 97	0 325	
	SR-47 EB Off-Ramp	2,090							NO
	SBT	2,980	1,412	908	617	218	62	79	
	SBL	2,980	329	175	7	366	42	5	
	SR-47 WB Off-Ramp	2,980							NO
SR-103 at San Gabriel Avenue	EBTL	75	36	6	20	5	1	3	
	EBR	175	164	254	309	23	42	69	
	SR-103 NB Off-Ramp	400							NO
	NBL	450	160	150	208	60	42	106	
	WB PCH to San Gabriel								NO

Notes: WBR/L westbound right/left turn lane; NBR/T northbound right/through lane; SBL/T southbound left/through lane

CEQA Impact Determination

The proposed Project would result in additional truck trips on the surrounding freeway system. Tables 3.6-32 and 3.6-33 summarize the change to freeway monitoring locations as well as the additional freeway segments due to the proposed Project.

The analysis shows that the proposed Project would not cause an increase of 0.02 or more of the D/C ratio of any freeway link operating at LOS F or worse. The amount of proposed Project-related traffic that would be added at all other freeway links would not be of sufficient magnitude to meet or exceed the threshold of significance of the CMP relative to CEQA baseline conditions. Therefore, the proposed project would not conflict the CMP.

Based on the above, the proposed Project would not result in a significant traffic impact under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Tables 3.6-34 through 3.6-39 summarize the change to freeway analysis locations due to the proposed Project compared to the NEPA Baseline in years 2019, 2026, and 2038.

The results of the analysis indicate that the proposed Project would not cause an increase of 0.02 or more in the D/C ratio at any of the CMP freeway monitoring locations and/or freeway analysis links that would result in LOS F. Therefore, proposed project would not conflict the CMP.

Consequently, traffic impacts on the freeway system would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Table 3.6-32: CEQA Baseline Compared to 2038 With Proposed Project - Freeway Analysis—A.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			CEQA Baseline					2038 With Proposed Project						CEQA Baseline					2038 With Proposed Project					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	1,876	18.0	B	-		1,918	18.4	C	-		-	No	2,235	21.4	C	-		2,263	21.7	C	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,119	7.1	A	-		1,145	7.3	A	-		-	No	922	5.9	A	-		970	6.2	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	3,771	15.3	B	-		3,792	15.4	B	-		-	No	5,096	20.6	C	-		5,113	20.7	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,352	26.1	D	-		6,365	26.2	D	-		-	No	8,422	28.1	D	-		8,435	28.2	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,565	40.2	E	0.90	D	10,574	40.2	E	0.90	D	0.00	No	9,265	32.1	D	-		9,272	32.2	D	-		-	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	6,442	45.4	F	0.95	E	6,487	46.1	F	0.96	E	0.01	No	6,545	47.0	F	0.97	E	6,591	47.7	F	0.98	E	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction I-405, south of Del Amo)	9,000	7,998	39.9	E	0.89	D	8,040	40.3	E	0.89	D	0.00	No	7,617	37.1	E	0.85	D	7,664	37.5	E	0.85	D	0.01	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,025	26.5	D	-		8,062	26.6	D	-		-	No	7,631	24.9	C	-		7,675	25.1	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	7,932	35.8	E	0.84	D	7,960	36.0	E	0.85	D	0.01	No	7,376	31.9	D	-		7,411	32.1	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,535	41.0	E	0.91	D	8,562	41.2	E	0.91	D	0.00	No	7,518	32.8	D	-		7,552	33.1	D	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	6,587	21.3	C	-		6,587	21.3	C	-		-	No	9,895	35.7	E	0.84	D	9,895	35.7	E	0.84	D	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,619	17.9	B	-		6,619	17.9	B	-		-	No	8,384	22.7	C	-		8,385	22.7	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Table 3.6-33: CEQA Baseline Compared to 2038 With Proposed Project - Freeway Analysis—P.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			CEQA Baseline					2038 With Proposed Project						CEQA Baseline					2026 With Proposed Project					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	2,764	26.4	D	-		2,828	27.1	D	-		-	No	2,759	26.4	D	-		2,787	26.7	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,173	7.5	A	-		1,229	7.8	A	-		-	No	997	6.4	A	-		1,041	6.6	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,678	18.9	C	-		4,719	19.1	C	-		-	No	3,302	13.4	B	-		3,318	13.4	B	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	7,686	34.0	D	-		7,709	34.2	D	-		-	No	5,699	18.5	C	-		5,712	18.5	C	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,440	39.3	E	0.89	D	10,453	39.4	E	0.89	D	0.00	No	9,002	30.8	D	-		9,010	30.8	D	-		-	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,819	38.1	E	0.86	D	5,893	38.8	E	0.87	D	0.01	No	5,659	36.7	E	0.84	D	5,719	37.2	E	0.85	D	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	6,785	32.5	D	-		6,857	32.8	D	-		-	No	7,526	36.5	E	0.84	D	7,585	36.9	E	0.84	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	6,491	21.0	C	-		6,555	21.2	C	-		-	No	7,868	25.9	C	-		7,927	26.1	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	6,466	26.7	D	-		6,514	27.0	D	-		-	No	7,838	35.1	E	0.83	D	7,879	35.4	E	0.84	D	0.01	No
#10 I-710	North of Florence Avenue[1]	9,400	5,550	22.5	C	-		5,595	22.7	C	-		-	No	7,824	35.0	D	0.83	D	7,862	35.3	E	0.84	D	0.01	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,127	37.1	E	0.86	D	10,127	37.1	E	0.86	D	0.00	No	8,669	29.2	D	-		8,669	29.2	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	7,780	21.0	C	-		7,780	21.0	C	-		-	No	6,032	22.1	B	-		6,032	16.3	B	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
1Non-CMP location

1

2

Table 3.6-34: 2019 NEPA Baseline Compared to 2019 With Proposed Project - Freeway Analysis—A.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			2019 NEPA Baseline					2019 With Proposed Project						2019 NEPA Baseline					2019 With Proposed Project					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	3,508	33.6	D	-		3,508	33.6	D	-		-	No	3,199	30.6	D	-		3,199	30.6	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	642	4.1	A	-		642	4.1	A	-		-	No	1,422	9.1	A	-		1,422	9.1	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	5,565	22.6	C	-		5,565	22.6	C	-		-	No	4,879	19.8	C	-		4,879	19.8	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	8,975	45.5	F	0.95	E	8,975	45.5	F	0.95	E	0.00	No	7,372	24.0	C	-		7,372	24.0	C	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,531	39.9	E	0.90	D	10,531	39.9	E	0.90	D	0.00	No	11,295	46.2	F	0.96	E	11,295	46.2	F	0.96	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,555	35.8	E	0.82	D	5,555	35.8	E	0.82	D	0.00	No	7,020	55.8	F	1.04	F(0)	7,020	55.8	F	1.04	F(0)	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,045	40.3	E	0.89	D	8,045	40.3	E	0.89	D	0.00	No	8,161	41.3	E	0.91	D	8,161	41.3	E	0.91	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,181	27.1	D	-		8,181	27.1	D	-		-	No	9,080	31.2	D	-		9,080	31.2	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	7,639	33.7	D	-		7,639	33.7	D	-		-	No	8,614	41.7	E	0.92	D	8,614	41.7	E	0.92	D	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	7,940	35.9	E	0.84	D	7,940	35.9	E	0.84	D	0.00	No	9,771	56.5	F	1.04	F(0)	9,771	56.5	F	1.04	F(0)	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	12,113	55.1	F	1.03	F(0)	12,113	55.1	F	1.03	F(0)	0.00	No	8,624	29.0	D	-		8,624	29.0	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	9,884	27.3	D	-		9,884	27.3	D	-		-	No	8,460	22.9	C	-		8,460	22.9	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Table 3.6-35: 2019 NEPA Baseline Compared to 2019 With Proposed Project - Freeway Analysis—P.M. Peak

			Northbound / Eastbound												Southbound / Westbound										
			2019 NEPA Baseline					2019 With Proposed Project							2019 NEPA Baseline					2019 With Proposed Project						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,207	4,207	43.6	E	0.90	D	4,207	43.6	E	0.90	D	0.00	No	3,687	35.6	E	0.78	D	3,687	35.6	E	0.78	D	0.00	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	1,466	1,466	9.4	A	-		1,466	9.4	A	-		-	No	1,704	10.9	A	-		1,704	10.9	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	4,629	4,629	18.7	C	-		4,629	18.7	C	-		-	No	5,500	22.3	C	-		5,500	22.3	C	-		-	No
#4 I-110	North of 223rd Street [1]	6,802	6,802	28.5	D	-		6,802	28.5	D	-		-	No	8,315	27.7	D	-		8,315	27.7	D	-		-	No
#5 I-110	North of I-405 [1]	10,188	10,188	37.5	E	0.87	D	10,188	37.5	E	0.87	D	0.00	No	11,048	44.0	E	0.94	E	11,048	44.0	E	0.94	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	5,441	5,441	34.9	D	-		5,441	34.9	D	-		-	No	6,136	41.5	E	0.91	D	6,136	41.5	E	0.91	D	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	8,102	8,102	40.8	E	0.90	D	8,102	40.8	E	0.90	D	0.00	No	6,782	32.4	D	-		6,782	32.4	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	8,656	8,656	29.2	D	-		8,656	29.2	D	-		-	No	7,172	23.3	C	-		7,172	23.3	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	8,567	8,567	41.3	E	0.91	D	8,567	41.3	E	0.91	D	0.00	No	6,870	28.9	D	-		6,870	28.9	D	-		-	No
#10 I-710	North of Florence Avenue[1]	8,710	8,710	42.7	E	0.93	D	8,710	42.7	E	0.93	D	0.00	No	6,498	26.9	D	-		6,498	26.9	D	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	10,400	10,400	39.0	E	0.89	D	10,400	39.0	E	0.89	D	0.00	No	11,955	53.2	F	1.02	F(0)	11,955	53.2	F	1.02	F(0)	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	7,720	7,720	20.8	C	-		7,720	20.8	C	-		-	No	9,247	22.3	C	-		9,247	13.4	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Table 3.6-36: 2026 NEPA Baseline Compared to 2026 With Proposed Project - Freeway Analysis—A.M. Peak

Freeway	Location	Cap.	Northbound / Eastbound												Southbound / Westbound											
			2026 NEPA Baseline					2026 With Proposed Project					Change in D/C	Sign. Impt?	2026 NEPA Baseline					2026 With Proposed Project					Change in D/C	Sign. Impt?
			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS		
#1 SR-47	Vincent Thomas Bridge [1]	4,108	4,108	41.8	E	0.87	D	4,137	42.3	E	0.88	D	0.01	No	3,307	31.6	D	-		3,325	31.8	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	1,788	1,788	11.4	B	-		1,804	11.5	B	-		-	No	2,599	16.6	B	-		2,631	16.8	B	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	6,746	6,746	28.2	D	-		6,759	28.2	D	-		-	No	5,653	22.9	C	-		5,664	23.0	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,688	9,688	55.1	F	1.03	F(0)	9,696	55.2	F	1.03	F(0)	0.00	No	8,023	26.5	D	-		8,031	26.5	D	-		-	No
#5 I-110	North of I-405 [1]	10,651	10,651	40.8	E	0.91	D	10,656	40.9	E	0.91	D	0.00	No	11,678	50.1	F	0.99	E	11,682	50.1	F	0.99	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	7,507	7,507	69.6	F	1.11	F(0)	7,533	70.6	F	1.12	F(0)	0.00	No	8,259	114.8	F	1.22	F(0)	8,286	117.6	F	1.23	F(0)	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,396	9,396	56.4	F	1.04	F(0)	9,421	56.8	F	1.05	F(0)	0.00	No	9,201	53.3	F	1.02	F(0)	9,229	53.7	F	1.03	F(0)	0.00	No
#8 I-710	North of Alondra Boulevard [1]	8,932	8,932	30.5	D	-		8,954	30.6	D	-		-	No	9,586	33.9	D	-		9,612	34.0	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	8,066	8,066	36.9	E	0.86	D	8,082	37.0	E	0.86	D	0.00	No	8,990	45.7	F	0.96	E	9,011	45.9	F	0.96	E	0.00	No
#10 I-710	North of Florence Avenue[1]	8,146	8,146	37.5	E	0.87	D	8,162	37.6	E	0.87	D	0.00	No	9,796	56.9	F	1.04	F(0)	9,815	57.2	F	1.04	F(0)	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,802	11,802	51.4	F	1.00	F(0)	11,802	51.4	F	1.00	F(0)	0.00	No	8,221	27.3	D	-		8,221	27.3	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	9,515	9,515	26.1	D	-		9,515	26.1	D	-		-	No	8,043	21.7	C	-		8,043	21.7	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

2

Table 3.6-37: 2026 NEPA Baseline Compared to 2026 With Proposed Project - Freeway Analysis—P.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			2026 NEPA Baseline					2026 With Proposed Project							2026 NEPA Baseline					2026 With Proposed Project						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,163	42.8	E	0.89	D	4,207	43.6	E	0.90	D	0.01	No	3,222	30.8	D	-		3,240	31.0	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,706	10.9	A	-		1,743	11.1	B	-		-	No	1,605	10.2	A	-		1,633	10.4	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,631	18.7	C	-		4,658	18.9	C	-		-	No	5,235	21.2	C	-		5,245	21.2	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,698	27.9	D	-		6,713	28.0	D	-		-	No	7,988	26.3	D	-		7,996	26.4	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	9,867	35.5	E	0.84	D	9,875	35.6	E	0.84	D	0.00	No	10,761	41.7	E	0.92	D	10,766	41.7	E	0.92	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,434	34.8	D	0.81	D	5,479	35.2	E	0.81	D	0.00	No	5,839	38.3	E	0.87	D	5,874	38.7	E	0.87	D	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	7,826	38.6	E	0.87	D	7,869	38.9	E	0.87	D	0.00	No	6,457	30.9	D	-		6,492	31.1	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	7,986	26.3	D	-		8,024	26.5	D	-		-	No	6,356	20.6	C	-		6,391	20.7	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,156	37.6	E	0.87	D	8,184	37.8	E	0.87	D	0.00	No	6,503	26.9	D	-		6,527	27.0	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,198	37.9	E	0.87	D	8,225	38.2	E	0.87	D	0.00	No	5,997	24.4	C	-		6,019	24.6	C	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	9,712	34.6	D	-		9,712	34.6	D	-		-	No	10,984	43.5	E	0.93	E	10,984	43.5	E	0.93	E	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,920	18.7	C	-		6,920	18.7	C	-		-	No	8,447	21.2	C	-		8,447	13.4	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1
2

Table 3.6-38: 2038 NEPA Baseline Compared to 2038 With Proposed Project - Freeway Analysis—A.M. Peak

Freeway	Location	Cap.	Northbound / Eastbound												Southbound / Westbound											
			2038 NEPA Baseline					2038 With Proposed Project					Change in D/C	Sign. Impt?	2038 NEPA Baseline					2038 With Proposed Project					Change in D/C	Sign. Impt?
			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS		
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,365	47.0	F	0.93	D	4,407	48.0	F	0.94	E	0.01	No	3,602	34.6	D	-		3,630	34.9	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	2,180	13.9	B	-		2,205	14.1	B	-		-	No	2,964	18.9	C	-		3,012	19.2	C	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	7,336	31.6	D	-		7,357	31.8	D	-		-	No	6,302	25.9	C	-		6,319	26.0	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	9,889	58.5	F	1.05	F(0)	9,902	58.7	F	1.05	F(0)	0.00	No	8,407	28.1	D	-		8,420	28.1	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,533	39.9	E	0.90	D	10,542	40.0	E	0.90	D	0.00	No	11,957	53.2	F	1.02	F(0)	11,964	53.3	F	1.02	F(0)	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	7,865	85.5	F	1.17	F(0)	7,910	88.1	F	1.17	F(0)	0.00	No	8,784	213.8	F	1.30	F(0)	8,830	231.5	F	1.31	F(0)	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	10,029	70.2	F	1.11	F(0)	10,071	71.3	F	1.12	F(0)	0.01	No	9,583	59.9	F	1.06	F(0)	9,630	60.8	F	1.07	F(0)	0.01	No
#8 I-710	North of Alondra Boulevard [1]	11,750	9,556	33.7	D	-		9,594	33.9	D	-		-	No	10,226	37.8	E	0.87	D	10,270	38.1	E	0.87	D	0.00	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,567	41.3	E	0.91	D	8,595	41.5	E	0.91	D	0.00	No	9,532	52.7	F	1.01	F(0)	9,567	53.2	F	1.02	F(0)	0.01	No
#10 I-710	North of Florence Avenue[1]	9,400	8,545	41.0	E	0.91	D	8,572	41.3	E	0.91	D	0.00	No	10,645	75.4	F	1.13	F(0)	10,678	76.3	F	1.14	F(0)	0.01	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,741	41.5	E	0.91	D	10,741	41.5	E	0.91	D	0.00	No	8,205	27.2	D	-		8,205	27.2	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	8,650	23.4	C	-		8,650	23.4	C	-		-	No	7,511	20.3	C	-		7,511	20.3	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Table 3.6-39: 2038 NEPA Baseline Compared to 2038 With Proposed Project - Freeway Analysis—P.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			2038 NEPA Baseline					2038 With Proposed Project						2038 NEPA Baseline					2038 With Proposed Project					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,585	52.8	F	0.98	E	4,649	54.8	F	0.99	E	0.01	No	3,277	31.4	D	-		3,305	31.6	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	2,079	13.3	B	-		2,135	13.6	B	-		-	No	1,870	11.9	B	-		1,914	12.2	B	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	5,232	21.2	C	-		5,273	21.3	C	-		-	No	5,460	22.1	C	-		5,476	22.2	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,809	28.5	D	-		6,833	28.7	D	-		-	No	8,089	26.7	D	-		8,102	26.8	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	9,976	36.2	E	0.85	D	9,989	36.3	E	0.85	D	0.00	No	10,814	42.1	E	0.92	D	10,822	42.1	E	0.92	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,476	35.2	E	0.81	D	5,550	35.8	E	0.82	D	0.01	No	6,020	40.2	E	0.89	D	6,080	40.8	E	0.90	D	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,059	40.4	E	0.90	D	8,131	41.0	E	0.90	D	0.00	No	6,600	31.6	D	-		6,659	31.9	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,550	28.7	D	-		8,614	29.0	D	-		-	No	6,790	22.0	C	-		6,849	22.2	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,462	40.3	E	0.90	D	8,510	40.7	E	0.91	D	0.01	No	6,668	27.8	D	-		6,708	28.0	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,566	41.2	E	0.91	D	8,612	41.7	E	0.92	D	0.01	No	6,187	25.3	C	-		6,225	25.5	C	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	9,687	34.4	D	-		9,687	34.4	D	-		-	No	11,211	45.5	F	0.95	E	11,211	45.5	F	0.95	E	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,735	18.2	C	-		6,735	18.2	C	-		-	No	8,082	22.2	C	-		8,082	13.4	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Impact TRANS-5 (For Informational Purposes): Proposed Project operations would not cause a significant impact in vehicular delay at at-grade railroad crossings within the proposed project vicinity or in the region.

Vehicular delays resulting from rail trips associated with the proposed Project were estimated by adding rail trips resulting from the expanded container terminal and associated throughput growth to the applicable CEQA baseline (January 2013 to December 2013). The proposed Project would result in an average of 5.5 trains per day (on-dock and off-dock direct intermodal type) during the peak month by 2038. Table 3.6-40 shows the estimated CEQA Baseline conditions (2013) rail volumes and Project Trains by rail segment under the proposed Project. Results of the vehicular delay calculations at at-grade crossings are shown in Tables 3.6-41 through 3.6-46 below (one table is provided for each of the major main lines).

CEQA Impact Determination (For Informational Purposes)

Rail Volumes

There would be an increase in the cargo throughput at the Everport Container Terminal from 1,240,773 TEUs in 2013 to a forecast cargo throughput of 2,379,525 TEUs in 2038 under the proposed Project. In the baseline year 2013, all on-dock and off-dock direct intermodal containers to and from the Everport Container Terminal amounted to 284,018 TEUs. Under the proposed Project, this would increase to 951,810 TEUs in 2038, an increase in the direct intermodal[3] cargo volumes of 667,792 TEUs. The volume of cargo passing through on-dock railyards is projected to increase from 230,227 TEUs in 2013 to 606,341 TEUs by 2038, while the volume of cargo passing through off-dock railyards is projected to increase from 53,791 TEUs in 2013 to 345,469 TEUs by 2038. The percentage of terminal throughput that would be handled by on-dock rail is expected to increase from approximately 18.6 percent in 2013 to up to approximately 25.5 percent in 2038 under the proposed Project and off-dock railyards from approximately 4.3 percent in 2013 to approximately 14.5 percent in 2038.

The proposed Project would result in an average of 5.5 trains per day (on-dock and off-dock direct intermodal type) during the peak month by 2038. This is an increase in average of 3.7 trains per day during the peak month, over the baseline year of 2013 (1.8 trains per day were seen during the peak month in 2013). This would come from an average decrease of 0.54 daily trains for 6,000-foot trains, but an average increase of 2.98 for 8,000-foot trains and 1.29 for 10,000-foot trains, and no change in 12,000-foot trains.

The increase of 3.7 daily trains at on-dock and off-dock intermodal railyards during the peak month (above the baseline daily train trips) are considered to be the "Project Trains" for evaluating the proposed Project's rail impacts. Some parameters used in the estimation of the Everport Container Terminal-related 2013 on-dock and off-dock direct intermodal rail volumes were modified in the 2038 proposed Project rail volume estimates; these include:

- on-dock and off-dock intermodal yards maximum practical capacities;

[3]*Direct intermodal* refers to cargo that is moved as intact marine containers between a marine terminal and an intermodal yard. The intermodal yard can be at an on-dock location as well as at an off-dock location.

- marine terminal specific lifts to TEUs conversion factors of 1.83 in 2013, and 1.80 in 2038;
- monthly peaking factor;
- average rail car length (depends on the mix of cars of varying lengths that make up the trains); and
- market-wise distribution of trains by length (percentage of trains that are 6,000 feet, 8,000 feet, 10,000 feet, and 12,000 feet long, including locomotives).

For 2013 and 2038 under the proposed Project, on-dock and off-dock direct intermodal rail volumes associated with the Everport Container Terminal during the peak month are allocated to specific railroad tracks using status quo routing and the difference in the rail volumes provided estimates of Project Trains by rail segment. These trains were then added to background train volumes for 2013 during the peak month to assess grade crossing delays in the baseline year (2013). The Project Trains were also uniformly distributed over 24 hours and assigned to four different time periods of the day. Table 3.6-40 shows the estimated CEQA Baseline conditions (2013) rail volumes and Project Trains by rail segment under the proposed Project that are quantified for rail impacts.

Table 3.6-40: CEQA Baseline Conditions (2013) Average Daily Rail Volumes in the Peak Month and Project Trains by Rail Segment, Trains per Day

Railroad Subdivision	Rail Segment	CEQA Baseline (2013) Daily Freight Rail Volume	CEQA Baseline (2013) Daily Passenger Rail Volume	CEQA Baseline (2013) Daily Total Rail Volume	Daily Project Trains under the Proposed Project
UP Trains					
UPRR Los Angeles	East LA – Pomona	13.4	12.0	25.4	1.2
	Pomona – Montclair	15.3	12.0	27.3	1.0
	Montclair - Mira Loma	17.5	12.0	29.5	1.0
	Mira Loma - W Riverside	17.7	12.0	29.7	1.0
UPRR Alhambra	LATC - El Monte	20.0	-	20.0	1.0
	El Monte - Bassett	20.0	37.5	57.5	1.0
	Bassett - Industry	20.0	0.8	20.8	1.0
	Industry - Pomona	25.2	0.8	26.0	1.0
	Pomona - Montclair	23.9	0.8	24.7	1.0
	Montclair - Kaiser	26.0	0.8	26.8	1.0
	Kaiser - W Colton	27.7	0.8	28.5	1.0
	W Colton - Colton	27.4	0.8	28.2	0.9
UPRR Mojave (Palmdale)	W Colton - Silverwood	19.3	-	19.3	0.2
UPRR Yuma	Colton - Indio	41.9	0.8	42.7	1.7
BNSF San Bernardino	W Riverside - Riverside	17.7	-	17.7	1.4
	Riverside - Highgrove	17.7	-	17.7	1.4

Table 3.6-40: CEQA Baseline Conditions (2013) Average Daily Rail Volumes in the Peak Month and Project Trains by Rail Segment, Trains per Day

Railroad Subdivision	Rail Segment	CEQA Baseline (2013) Daily Freight Rail Volume	CEQA Baseline (2013) Daily Passenger Rail Volume	CEQA Baseline (2013) Daily Total Rail Volume	Daily Project Trains under the Proposed Project
	Highgrove - Colton	17.7	-	17.7	1.4
	Colton - San Bernardino	2.4	-	2.4	1.4
BNSF Cajon	San Bernardino - Keenbrook	2.7	-	2.7	0.2
	Keenbrook - Silverwood	2.7	-	2.7	0.2
	Silverwood - Barstow	10.7	-	10.7	0.2
BNSF Trains					
BNSF San Bernardino	Hobart - Fullerton	33.9	56.8	90.7	1.7
	Fullerton - Atwood	33.9	12.3	46.2	1.7
	Atwood - W Riverside	37.7	27.0	64.8	1.7
	W Riverside - Riverside	40.3	39.0	79.3	1.7
	Riverside - Highgrove	40.3	13.8	54.1	1.7
	Highgrove - Colton	40.3	11.4	51.7	1.7
	Colton - San Bernardino	44.0	11.4	55.5	1.7
BNSF Cajon	San Bernardino - Keenbrook	52.3	2.0	54.3	1.7
	Keenbrook - Silverwood	52.3	2.0	54.3	1.7
	Silverwood – Barstow	52.3	2.0	54.3	1.7
BNSF & UP Trains					
BNSF San Bernardino	W Riverside - Riverside	58.0	39.0	97.0	3.1
	Riverside – Highgrove	58.0	13.8	71.8	3.1
	Highgrove – Colton	58.0	11.4	69.4	3.1
	Colton - San Bernardino	46.5	11.4	57.9	3.1
BNSF Cajon	San Bernardino – Keenbrook	55.0	2.0	57.0	2.0
	Keenbrook - Silverwood	74.2	2.0	76.2	2.0
	Silverwood – Barstow	63.0	2.0	65.0	1.9

Source: QuickTrip—Train Builder Integrated Model August 2015 Version; Non-intermodal and Passenger Trains

At-Grade Crossing Delays

Tables 3.6-41 through 3.6-46 list the vehicular delays at at-grade crossings for the CEQA baseline plus proposed Project condition. Based on the estimated Project Trains, no vehicular delay impacts at the at-grade crossings exceed LAHD thresholds of

significance for rail impacts, hence delay impacts would not be substantial under the proposed Project.

Within the Port, there are three study area at-grade rail crossings of the Earle Street Lead track of the Alameda Corridor Subdivision, which would experience project-related traffic. Terminal Way, Cannery Street, and Earle Street serve Terminal Island traffic and carry little through traffic. The three at-grade rail crossings listed below are located on spur lines downstream of the on-dock yard, and do not experience trains entering or exiting Terminal Island Container Transfer Facility (TICTF) to and from the north. Because of the low train volumes on the spur lines, these at-grade rail crossings do not experience vehicular delays. All three crossings have gated warning systems:

- Terminal Way west of Earle Street: CPUC Crossing ID: LA-3524, DOT Number: 811372G
- Cannery Street west of Earle Street: CPUC Crossing ID: LA-2617, DOT Number: 811503H
- Earle Street south of Cannery Street: CPUC Crossing ID: LA- 3607, DOT Number: 927844A

In addition, the proposed Project is not expected to result in substantial secondary impacts (i.e., related to air, noise, and public services) related to increased vehicular delay at at-grade railroad crossings.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination (For Informational Purposes)

Because there are no mainline at-grade railroad crossings between the proposed project site and the greater Los Angeles intermodal railyards (i.e., BNSF's Hobart Yard, UP's ELA), there are no mainline rail-related at-grade impacts in this area. Further, impacts beyond these railyard locations are outside of USACE's federal scope of analysis and are therefore not evaluated under NEPA. Because potential vehicle delay impacts at mainline at-grade railroad crossings beyond these geographical limits fall outside of USACE's area of federal control and responsibility and scope of analysis (see Section 2.7 in Chapter 2, Project Description), there are no direct or indirect impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Because the impacts are outside of federal control and responsibility there are no direct or indirect impacts under NEPA.

Table 3.6-41: BNSF Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Proposed Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles / Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	
San Bernardino MP 0.0															
Laurel Street	2	2,240	65.1	62.0	3.1	126.3	118.1	8.2	3.9	3.6	0.3	6.5	6.0	0.5	NO
Olive Street	2	2,660	65.1	62.0	3.1	126.3	118.1	8.2	4.7	4.3	0.4	6.6	6.1	0.5	NO
E Street	2	700	65.1	62.0	3.1	126.3	118.1	8.2	1.2	1.1	0.1	6.2	5.7	0.5	NO
H Street	2	1,390	65.1	62.0	3.1	126.3	118.1	8.2	2.4	2.2	0.2	6.3	5.8	0.5	NO
Valley Boulevard	2	10,490	65.1	62.0	3.1	126.3	118.1	8.2	24.0	22.2	1.9	9.7	8.9	0.7	NO
Colton Crossing MP 3.2															
Highgrove Junction MP 6.1 (Connection to Perris via MetroLink)															
Main Street	2	2,550	79.3	76.2	3.1	156.4	148.2	8.2	5.7	5.3	0.3	8.3	7.8	0.5	NO
Riverside-San Bernardino County Line MP 6.41															
Center Street	4	6,220	79.3	76.2	3.1	156.8	148.7	8.2	13.9	13.0	0.9	8.4	7.9	0.5	NO
Iowa Avenue	4	22,920	79.3	76.2	3.1	156.8	148.7	8.2	64.5	60.5	4.0	11.7	10.9	0.7	NO
Palmyrita Avenue	2	3,750	79.3	76.2	3.1	156.4	148.2	8.2	8.5	7.9	0.5	8.5	8.0	0.5	NO
Chicago Avenue	4	13,570	79.3	76.2	3.1	156.8	148.7	8.2	33.2	31.2	2.0	9.6	9.0	0.6	NO
Spruce Street	4	7,250	79.3	76.2	3.1	156.8	148.7	8.2	16.4	15.4	1.0	8.5	8.0	0.5	NO
3rd Street	4	10,910	79.3	76.2	3.1	156.9	148.7	8.2	25.8	24.2	1.6	9.1	8.6	0.6	NO
Mission Inn (7th Street)	4	5,330	79.3	76.2	3.1	156.9	148.7	8.2	11.8	11.1	0.7	8.3	7.8	0.5	NO
Riverside Yard and Amtrak Station MP 10.02-10.16															
Cridge Street	2	3,760	104.5	101.4	3.1	174.9	166.7	8.2	9.1	8.5	0.5	9.3	8.8	0.5	NO

Table 3.6-41: BNSF Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Proposed Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles / Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	
West Riverside Junction MP 10.6 (Connection to UP Los Angeles Sub)															
Jane Street	2	2,160	70.6	68.9	1.7	115.7	111.1	4.6	3.3	3.1	0.2	5.7	5.4	0.3	NO
Mary Street	4	11,940	70.6	68.9	1.7	116.1	111.5	4.6	19.9	18.9	1.0	6.5	6.2	0.3	NO
Washington Street	2	8,290	70.6	68.9	1.7	115.7	111.1	4.6	14.6	13.9	0.7	7.1	6.8	0.3	NO
Madison Street	4	15,730	70.6	68.9	1.7	116.1	111.5	4.6	27.6	26.2	1.4	7.0	6.7	0.3	NO
Jefferson Street	2	8,200	70.6	68.9	1.7	115.7	111.1	4.6	14.4	13.7	0.7	7.1	6.7	0.3	NO
Adams Street	4	17,520	70.6	68.9	1.7	116.1	111.5	4.6	31.5	29.9	1.6	7.3	6.9	0.4	NO
Jackson Street	4	7,820	70.6	68.9	1.7	116.1	111.5	4.6	12.4	11.7	0.6	6.1	5.8	0.3	NO
Gibson Street	2	860	70.6	68.9	1.7	115.7	111.1	4.6	1.3	1.2	0.1	5.5	5.2	0.3	NO
Harrison Street	2	6,670	70.6	68.9	1.7	115.7	111.1	4.6	11.2	10.7	0.6	6.7	6.3	0.3	NO
Tyler Street	4	15,630	70.6	68.9	1.7	116.1	111.5	4.6	27.3	26.0	1.4	7.0	6.7	0.3	NO
Pierce Street	2	11,190	70.6	68.9	1.7	115.7	111.1	4.6	21.5	20.5	1.1	8.0	7.7	0.4	NO
Buchanan Street	2	9,580	70.6	68.9	1.7	115.7	111.1	4.6	17.5	16.7	0.9	7.5	7.1	0.4	NO
Magnolia Avenue EB	2	8,800	70.6	68.9	1.7	115.7	111.1	4.6	15.7	15.0	0.8	7.3	6.9	0.4	NO
Magnolia Avenue WB	2	8,800	70.6	68.9	1.7	115.7	111.1	4.6	15.7	15.0	0.8	7.3	6.9	0.4	NO
Mckinley Street	4	26,660	70.6	68.9	1.7	116.1	111.5	4.6	55.5	52.7	2.8	9.0	8.5	0.4	NO
Radio Road	2	4,300	70.6	68.9	1.7	115.7	111.1	4.6	6.8	6.5	0.3	6.1	5.8	0.3	NO
Joy Street	2	7,280	70.6	68.9	1.7	115.7	111.1	4.6	12.5	11.9	0.6	6.8	6.5	0.3	NO
Sheridan Street	2	2,370	70.6	68.9	1.7	115.7	111.1	4.6	3.6	3.4	0.2	5.7	5.5	0.3	NO
Cota Street	4	6,040	70.6	68.9	1.7	116.1	111.5	4.6	9.3	8.9	0.5	5.9	5.6	0.3	NO
Railroad Street	4	9,680	70.6	68.9	1.7	116.1	111.5	4.6	15.6	14.9	0.8	6.3	6.0	0.3	NO
Smith Street	4	13,700	70.6	68.9	1.7	116.1	111.5	4.6	23.3	22.2	1.2	6.7	6.4	0.3	NO
Auto Center Drive	2	11,570	70.6	68.9	1.7	115.7	111.1	4.6	22.6	21.4	1.1	8.2	7.8	0.4	NO

Table 3.6-41: BNSF Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Proposed Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles / Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	
Riverside-Orange County Line															
Kellogg Drive	4	7,050	70.6	68.9	1.7	116.1	111.5	4.6	11.1	10.6	0.6	6.0	5.7	0.3	NO
Lakeview Avenue	3	19,340	70.6	68.9	1.7	115.9	111.3	4.6	40.6	38.6	2.0	9.1	8.7	0.4	NO
Richfield Road	4	9,720	70.6	68.9	1.7	116.1	111.5	4.6	15.9	15.1	0.8	6.3	6.0	0.3	NO
Atwood Junction MP 40.6 (Connection to Old Olive Sub)															
Van Buren Street	2	6,940	51.2	49.5	1.7	96.7	92.1	4.6	10.6	10.0	0.6	6.0	5.7	0.3	NO
Jefferson Street	3	6,520	51.2	49.5	1.7	96.8	92.2	4.6	9.3	8.8	0.5	5.5	5.2	0.3	NO
Tustin Avenue (Rose Drive)	4	29,920	51.2	49.5	1.7	96.9	92.4	4.6	60.7	57.3	3.4	9.0	8.5	0.5	NO
Orangethorpe Avenue	4	29,040	51.2	49.5	1.7	96.9	92.4	4.6	57.8	54.6	3.2	8.8	8.3	0.5	NO
Kraemer Boulevard	4	20,290	51.2	49.5	1.7	96.9	92.4	4.6	34.4	32.5	1.9	7.0	6.6	0.4	NO
Placentia Avenue	4	14,870	51.2	49.5	1.7	96.9	92.4	4.6	23.2	21.9	1.3	6.2	5.9	0.3	NO
State College Boulevard	4	24,180	51.2	49.5	1.7	96.9	92.4	4.6	43.9	41.4	2.5	7.7	7.3	0.4	NO
Acacia Avenue	4	6,910	51.2	49.5	1.7	96.9	92.4	4.6	9.7	9.1	0.5	5.3	5.0	0.3	NO
Raymond Avenue	4	21,570	51.2	49.5	1.7	96.9	92.4	4.6	37.4	35.3	2.1	7.2	6.8	0.4	NO
Fullerton Junction MP 45.5 = MP 165.5															
Orange-LA County Line															
Valley View Avenue	4	24,890	95.6	93.9	1.7	132.5	127.9	4.6	56.0	53.4	2.6	9.8	9.4	0.4	NO
Rosecrans/Marquardt Avenue	4	23,500	95.6	93.9	1.7	132.5	127.9	4.6	51.5	49.1	2.4	9.5	9.0	0.4	NO
Lakeland Road	2	6,630	95.6	93.9	1.7	132.0	127.4	4.6	12.1	11.6	0.6	7.4	7.0	0.3	NO
Los Nietos Road	4	20,740	95.6	93.9	1.7	132.5	127.9	4.6	43.2	41.2	2.0	8.8	8.4	0.4	NO

Table 3.6-41: BNSF Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Proposed Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles / Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	W/Proj	W/O Proj	Chg	
Norwalk Boulevard	4	26,590	95.6	93.9	1.7	132.5	127.9	4.6	62.0	59.1	2.9	10.3	9.9	0.5	NO
Pioneer Boulevard	4	15,520	95.6	93.9	1.7	132.5	127.9	4.6	29.6	28.2	1.4	7.8	7.5	0.4	NO
Passons Boulevard	4	12,860	95.6	93.9	1.7	132.5	127.9	4.6	23.6	22.5	1.1	7.4	7.0	0.3	NO
Serapis Avenue	2	6,360	95.6	93.9	1.7	132.0	127.4	4.6	11.6	11.0	0.5	7.3	7.0	0.3	NO
Commerce Yard MP 148.5															
Hobart Yard MP 146.0															
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**1,252.4**	**1,185.7**	**66.7**				
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**11.7**	**10.9**	**0.8**	

Table 3.6-42: BNSF San Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Proposed Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impacts?
			W/Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/Proj	W/O Proj	Change	W/Proj	W/O Proj	Change	
Barstow MP 0															
Lenwood Road	2	4,490	68.7	66.8	1.9	120.3	116.5	3.9	6.3	6.1	0.2	5.2	5.0	0.2	NO
Hinkley Road	2	480	68.7	66.8	1.9	120.3	116.5	3.9	0.6	0.6	0.0	4.7	4.5	0.2	NO
Indian Trail Road	2	540	68.7	66.8	1.9	120.3	116.5	3.9	0.7	0.7	0.0	4.7	4.5	0.2	NO
Vista Road	2	2,770	68.7	66.8	1.9	120.3	116.5	3.9	3.8	3.6	0.1	5.0	4.8	0.2	NO
Turner Road	2	30	68.7	66.8	1.9	120.3	116.5	3.9	0.0	0.0	0.0	4.6	4.4	0.2	NO
North Bryman Road	2	160	68.7	66.8	1.9	120.3	116.5	3.9	0.2	0.2	0.0	4.6	4.4	0.2	NO
South Bryman Road	2	1,920	68.7	66.8	1.9	120.3	116.5	3.9	2.6	2.5	0.1	4.8	4.7	0.2	NO
Robinson Ranch Road	2	110	68.7	66.8	1.9	120.3	116.5	3.9	0.1	0.1	0.0	4.6	4.4	0.2	NO
1st Street	2	690	68.7	66.8	1.9	141.9	137.2	4.6	1.3	1.2	0.0	6.6	6.3	0.2	NO
6th Street	4	3,600	68.7	66.8	1.9	164.6	159.2	5.4	9.0	8.7	0.3	9.2	8.8	0.4	NO
Silverwood Junction MP 56.6															
Keenbrook Junction MP 69.4															
Swarthout Canyon Road	2	180	80.1	78.1	2.0	230.7	223.5	7.2	0.7	0.7	0.0	14.8	14.2	0.5	NO
Devore Road/Glen Helen Pkwy	4	6,240	80.1	78.1	2.0	231.3	224.1	7.2	27.5	26.5	1.0	16.2	15.6	0.6	NO
Dike Junction															
Palm Avenue	2	11,790	60.7	58.8	1.9	177.2	170.6	6.6	50.3	48.1	2.2	17.1	16.4	0.7	NO
San Bernardino MP 81.4															
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**103.1**	**99.0**	**4.1**				

Table 3.6-42: BNSF San Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Proposed Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impacts?
			W/Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/Proj	W/O Proj	Change	W/Proj	W/O Proj	Change	
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**17.1**	**16.4**	**0.7**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only.

Table 3.6-43: UP Alhambra Subdivision from Los Angeles Transportation Center (LATC) to Colton Crossing, 2013 Baseline Plus 2038 Proposed Project (Excluding Segment That is Combined with UP Los Angeles Subdivision)

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
LATC MP 482.9															
San Pablo Street	4	4,100	21.0	20.0	1.0	104.1	98.4	5.8	13.5	12.6	0.8	12.1	11.4	0.8	NO
Vineburn Avenue	2	1,370	21.0	20.0	1.0	73.5	69.4	4.0	2.2	2.1	0.1	5.8	5.5	0.4	NO
Worth/Boca Road	2	7,940	21.0	20.0	1.0	73.5	69.4	4.0	15.8	14.8	1.0	8.1	7.6	0.5	NO
Valley Boulevard	4	27,850	21.0	20.0	1.0	49.3	46.6	2.7	28.7	26.9	1.7	4.5	4.2	0.3	NO
Ramona Street	2	12,880	21.0	20.0	1.0	73.5	69.4	4.0	28.5	26.7	1.8	9.4	8.8	0.6	NO
Mission Road	3	23,330	21.0	20.0	1.0	73.6	69.5	4.0	57.5	54.0	3.6	11.0	10.4	0.7	NO
Del Mar Avenue	2	21,330	21.0	20.0	1.0	73.5	69.4	4.0	71.6	67.2	4.4	17.3	16.2	1.1	NO
San Gabriel Boulevard	4	35,550	21.0	20.0	1.0	73.6	69.6	4.1	97.5	91.5	6.0	12.9	12.1	0.8	NO
Walnut Grove Avenue	3	15,530	21.0	20.0	1.0	43.1	40.8	2.3	10.8	10.1	0.6	2.8	2.7	0.2	NO
Encinita Avenue	2	6,470	21.0	20.0	1.0	43.1	40.7	2.3	4.0	3.7	0.2	2.4	2.2	0.1	NO
Lower Azusa Road	4	17,620	21.0	20.0	1.0	43.2	40.8	2.3	11.6	10.9	0.7	2.6	2.5	0.2	NO
Temple City Boulevard	4	21,140	21.0	20.0	1.0	43.2	40.8	2.3	14.8	13.9	0.9	2.9	2.7	0.2	NO
Baldwin Avenue	4	26,220	21.0	20.0	1.0	43.2	40.8	2.3	20.0	18.8	1.2	3.3	3.1	0.2	NO
Arden Drive	4	11,190	21.0	20.0	1.0	43.2	40.8	2.3	6.7	6.3	0.4	2.3	2.2	0.1	NO
El Monte Junction MP 494.99															
Tyler Avenue	4	11,920	58.5	57.5	1.0	70.1	67.8	2.3	9.7	9.3	0.4	3.4	3.2	0.1	NO
Cogswell Road	2	10,200	58.5	57.5	1.0	69.8	67.5	2.3	9.4	9.0	0.4	4.0	3.9	0.2	NO
Temple Avenue	4	27,390	58.5	57.5	1.0	70.1	67.8	2.3	29.0	27.7	1.3	4.9	4.7	0.2	NO
Bassett Junction MP 498.45															
Vineland Avenue	2	12,710	21.8	20.8	1.0	43.7	41.4	2.3	9.6	9.1	0.6	3.2	3.0	0.2	NO
Puente Avenue	4	32,190	21.8	20.8	1.0	43.8	41.5	2.3	28.2	26.5	1.7	4.0	3.7	0.2	NO
Orange Avenue	2	5,830	21.8	20.8	1.0	43.7	41.4	2.3	3.6	3.4	0.2	2.4	2.2	0.1	NO
California Avenue	2	19,010	21.8	20.8	1.0	43.7	41.4	2.3	19.2	18.0	1.1	4.9	4.6	0.3	NO

Table 3.6-43: UP Alhambra Subdivision from Los Angeles Transportation Center (LATC) to Colton Crossing, 2013 Baseline Plus 2038 Proposed Project (Excluding Segment That is Combined with UP Los Angeles Subdivision)

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
City of Industry Junction MP 501.5															
Fullerton Road	4	18,510	27.0	26.0	1.0	54.7	52.4	2.3	15.8	15.0	0.7	3.4	3.3	0.2	NO
Fairway Drive	4	20,080	27.0	26.0	1.0	54.7	52.4	2.3	17.5	16.7	0.8	3.6	3.4	0.2	NO
Lemon Road	4	17,390	27.0	26.0	1.0	54.7	52.4	2.3	14.6	13.9	0.7	3.4	3.2	0.2	NO
Brea Canyon Road	2	14,570	27.0	26.0	1.0	54.6	52.2	2.3	14.9	14.2	0.7	4.5	4.3	0.2	NO
Pomona Junction MP 514.3	**HANDLED SEPARATELY DUE TO PROXIMITY TO UP LOS ANGELES SUBDIVISION**														
LA-San Bernardino Co Line MP 516.7															
Montclair Junction															
Bon View Avenue	2	10,030	27.8	26.8	1.0	55.0	52.6	2.3	8.5	8.1	0.4	3.4	3.3	0.2	NO
Vineyard Avenue	4	30,790	27.8	26.8	1.0	55.1	52.7	2.3	31.7	30.2	1.5	4.6	4.4	0.2	NO
Milliken Avenue	6	34,230	27.8	26.8	1.0	55.2	52.9	2.3	30.6	29.1	1.5	3.7	3.5	0.2	NO
Kaiser Junction MP 527.5															
West Colton MP 534.7															
Colton Crossing MP 538.70															
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**625.4**	**589.8**	**35.6**				
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**17.3**	**16.2**	**1.1**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only

Table 3.6-44: UP Los Angeles Subdivision from East Los Angeles Yard to West Riverside Junction, 2013 Baseline Plus 2038 Proposed Project (Excluding Segment That is Combined with UP Alhambra Subdivision)

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
East Los Angeles MP 5.85															
S. Vail Avenue	2	8,000	26.6	25.4	1.2	54.9	50.7	4.2	9.0	8.2	0.8	4.6	4.2	0.4	NO
Maple Avenue	2	5,630	26.6	25.4	1.2	54.9	50.7	4.2	5.9	5.4	0.6	4.2	3.8	0.4	NO
S. Greenwood Avenue	4	7,380	26.6	25.4	1.2	55.1	50.9	4.2	7.4	6.8	0.7	3.9	3.6	0.3	NO
Montebello Boulevard	4	20,840	26.6	25.4	1.2	55.1	50.9	4.2	25.5	23.1	2.4	5.2	4.7	0.5	NO
Durfee Avenue	2	14,150	26.6	25.4	1.2	38.7	36.0	2.7	9.2	8.5	0.8	3.0	2.8	0.2	NO
Rose Hills Road	4	9,570	26.6	25.4	1.2	37.1	34.5	2.6	4.2	3.8	0.4	1.8	1.6	0.1	NO
Mission Mill Road	2	2,210	26.6	25.4	1.2	37.0	34.4	2.6	0.9	0.8	0.1	1.6	1.5	0.1	NO
Workman Mill	4	7,750	26.6	25.4	1.2	37.1	34.5	2.6	3.3	3.0	0.3	1.7	1.6	0.1	NO
Turnbull Canyon Road	4	14,640	26.6	25.4	1.2	37.1	34.5	2.6	6.9	6.3	0.6	2.0	1.8	0.2	NO
Stimson Avenue& Puente Avenue	4	14,920	26.6	25.4	1.2	37.1	34.5	2.6	7.0	6.5	0.6	2.0	1.8	0.2	NO
Bixby Drive	2	3,010	26.6	25.4	1.2	37.0	34.4	2.6	1.3	1.1	0.1	1.7	1.5	0.1	NO
Fullerton Road	4	24,570	26.6	25.4	1.2	37.1	34.5	2.6	13.6	12.5	1.1	2.5	2.3	0.2	NO
Nogales Street	6	38,240	26.6	25.4	1.2	37.2	34.6	2.6	21.6	19.8	1.8	2.6	2.4	0.2	NO
Fairway Drive	4	25,690	26.6	25.4	1.2	37.1	34.5	2.6	14.5	13.3	1.2	2.6	2.4	0.2	NO
Lemon Street	4	15,270	26.6	25.4	1.2	37.1	34.5	2.6	7.2	6.6	0.6	2.0	1.8	0.2	NO
Pomona Junction MP 31.9	**HANDLED SEPARATELY DUE TO PROXIMITY TO UP ALHAMBRA SUBDIVISION**														
LA-San Bernardino County Line MP 33.17															
E. Montclair Junction MP 35.02															
Bonview Avenue	2	3,460	30.5	29.5	1.0	44.8	42.6	2.2	1.8	1.7	0.1	2.1	2.0	0.1	NO
Grove Avenue	6	39,250	30.5	29.5	1.0	45.0	42.8	2.2	28.4	26.8	1.6	3.3	3.1	0.2	NO

Table 3.6-44: UP Los Angeles Subdivision from East Los Angeles Yard to West Riverside Junction, 2013 Baseline Plus 2038 Proposed Project (Excluding Segment That is Combined with UP Alhambra Subdivision)

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Vineyard Avenue	4	4,430	30.5	29.5	1.0	44.9	42.7	2.2	2.3	2.1	0.1	2.0	1.9	0.1	NO
Archibald Avenue	4	5,230	30.5	29.5	1.0	44.9	42.7	2.2	2.7	2.5	0.2	2.0	1.9	0.1	NO
San Bernardino-Riverside County Line MP 43.36															
Milliken Avenue	6	20,900	30.5	29.5	1.0	45.0	42.8	2.2	12.1	11.4	0.7	2.4	2.3	0.1	NO
Mira Loma Junction MP 45.7															
Bellegrave Avenue	2	7,680	30.7	29.7	1.0	45.0	42.8	2.2	4.5	4.2	0.3	2.4	2.3	0.1	NO
Rutile Street	2	8,250	30.7	29.7	1.0	45.0	42.8	2.2	4.9	4.6	0.3	2.5	2.4	0.1	NO
Clay Street	2	13,460	30.7	29.7	1.0	45.0	42.8	2.2	9.6	9.0	0.6	3.2	3.0	0.2	NO
Jurupa Avenue	4	16,260	30.7	29.7	1.0	45.1	42.9	2.2	9.7	9.1	0.6	2.5	2.4	0.1	NO
Mountain View Avenue	2	1,710	30.7	29.7	1.0	52.9	50.3	2.7	1.2	1.1	0.1	2.7	2.6	0.2	NO
Streeter Avenue	4	13,820	30.7	29.7	1.0	53.1	50.4	2.7	11.3	10.6	0.7	3.3	3.1	0.2	NO
Palm Avenue	2	7,480	30.7	29.7	1.0	49.8	47.3	2.5	5.4	5.1	0.3	3.0	2.8	0.2	NO
Brockton Avenue	4	13,320	30.7	29.7	1.0	53.1	50.4	2.7	10.8	10.2	0.7	3.3	3.1	0.2	NO
Riverside Avenue	2	11,460	30.7	29.7	1.0	52.9	50.3	2.7	10.7	10.1	0.6	4.0	3.8	0.2	NO
Panorama Road	2	6,360	30.7	29.7	1.0	52.9	50.3	2.7	5.1	4.8	0.3	3.2	3.0	0.2	NO
West Riverside Junction MP 56.7															
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**258.3**	**239.3**	**19.0**				
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**5.2**	**4.7**	**0.5**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only

Table 3.6-45: Combined UP Alhambra and Los Angeles Subdivisions in Pomona and Montclair Area, 2013 Baseline Plus 2038 Proposed Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Pomona Junction MP 514.3															
Hamilton Boulevard	4	8,110	54.1	52.0	2.0	94.4	89.8	4.7	10.0	9.4	0.6	4.8	4.5	0.3	NO
Park Avenue	2	5,730	54.1	52.0	2.0	94.2	89.5	4.7	7.3	6.9	0.4	5.0	4.8	0.3	NO
Main Street	2	1,590	54.1	52.0	2.0	94.2	89.5	4.7	1.8	1.7	0.1	4.3	4.1	0.2	NO
Palomares Street	2	3,910	54.1	52.0	2.0	94.2	89.5	4.7	4.8	4.5	0.3	4.7	4.4	0.3	NO
San Antonio Avenue	4	6,970	54.1	52.0	2.0	94.4	89.8	4.7	8.4	8.0	0.5	4.7	4.4	0.3	NO
LA-San Bernardino County Line MP 516.7															
Monte Vista Avenue	4	12,200	54.1	52.0	2.0	94.4	89.8	4.7	15.7	14.9	0.9	5.1	4.8	0.3	NO
San Antonio Avenue	4	10,330	54.1	52.0	2.0	94.4	89.8	4.7	13.0	12.3	0.7	4.9	4.7	0.3	NO
Vine Avenue	2	7,580	54.1	52.0	2.0	94.2	89.5	4.7	10.1	9.6	0.6	5.4	5.1	0.3	NO
Sultana Avenue	2	11,300	54.1	52.0	2.0	94.2	89.5	4.7	17.0	16.0	1.0	6.4	6.0	0.4	NO
Campus Avenue	2	10,600	54.1	52.0	2.0	94.2	89.5	4.7	15.6	14.7	0.9	6.2	5.8	0.3	NO
Montclair Junction															
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**103.8**	**97.9**	**5.9**				
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**6.4**	**6.0**	**0.4**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only

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Table 3.6-46: UP Yuma Subdivision from Colton Crossing to Indio, 2013 Baseline Plus 2038 Proposed Project.

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Colton Crossing MP 539.0															
Hunts Lane	4	13,340	44.4	42.7	1.7	101.4	96.9	4.6	22.1	20.9	1.1	6.5	6.1	0.3	NO
Whittier Avenue	2	190	44.4	42.7	1.7	119.8	114.3	5.4	0.4	0.4	0.0	7.1	6.7	0.4	NO
Beaumont Avenue	2	460	44.4	42.7	1.7	119.8	114.3	5.4	0.9	0.9	0.0	7.1	6.8	0.4	NO
San Timoteo Cyn Road	2	11,490	44.4	42.7	1.7	119.8	114.3	5.4	31.2	29.6	1.6	11.4	10.8	0.6	NO
Alessandro Road	2	290	44.4	42.7	1.7	119.8	114.3	5.4	0.6	0.5	0.0	7.1	6.7	0.4	NO
San Bernardino-Riverside County Line MP 549.25															
Live Oak Cyn Road	2	1,080	44.4	42.7	1.7	119.8	114.3	5.4	2.1	2.0	0.1	7.2	6.9	0.4	NO
San Timoteo Cyn Road	2	1,410	44.4	42.7	1.7	119.8	114.3	5.4	2.8	2.7	0.1	7.3	6.9	0.4	NO
Viele Avenue	2	100	44.4	42.7	1.7	101.2	96.6	4.5	0.1	0.1	0.0	5.0	4.8	0.3	NO
California Avenue	2	6,490	44.4	42.7	1.7	101.2	96.6	4.5	10.3	9.8	0.5	6.1	5.8	0.3	NO
Pennsylvania Avenue	2	8,040	44.4	42.7	1.7	101.2	96.6	4.5	13.3	12.6	0.7	6.5	6.1	0.3	NO
North Sunset Avenue	2	3,740	44.4	42.7	1.7	101.2	96.6	4.5	5.6	5.3	0.3	5.6	5.3	0.3	NO
22nd Street	4	15,190	44.4	42.7	1.7	101.4	96.9	4.6	25.0	23.7	1.3	6.4	6.1	0.3	NO
San Gorgonio Avenue	2	12,570	44.4	42.7	1.7	101.2	96.6	4.5	23.6	22.4	1.2	7.7	7.3	0.4	NO
Hargrave Street	2	16,360	44.4	42.7	1.7	101.2	96.6	4.5	34.8	33.0	1.8	9.3	8.8	0.5	NO
Apache Trail	2	2,480	44.4	42.7	1.7	101.2	96.6	4.5	3.6	3.4	0.2	5.4	5.1	0.3	NO
Broadway	2	6,550	44.4	42.7	1.7	101.2	96.6	4.5	10.5	9.9	0.5	6.1	5.8	0.3	NO
Tipton Road	2	110	44.4	42.7	1.7	101.2	96.6	4.5	0.2	0.1	0.0	5.0	4.8	0.3	NO

Table 3.6-46: UP Yuma Subdivision from Colton Crossing to Indio, 2013 Baseline Plus 2038 Proposed Project.

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Impact?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Garnet MP 588.32															
West Indio MP 609.63															
Indio MP 610.9															
Avenue 52	4	10,780	44.4	42.7	1.7	101.4	96.9	4.6	16.8	16.0	0.9	5.9	5.6	0.3	NO
Avenue 56/Airport Boulevard	2	4,700	44.4	42.7	1.7	101.2	96.6	4.5	7.2	6.8	0.4	5.8	5.5	0.3	NO
Avenue 66/4th Street	2	7,700	44.4	42.7	1.7	101.2	96.6	4.5	12.6	12.0	0.6	6.4	6.1	0.3	NO
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**223.6**	**212.2**	**11.4**				
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**11.4**	**10.8**	**0.6**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only

Impact TRANS-6: The proposed Project would not substantially increase transportation hazards due to a design feature.

The proposed Project includes the closure (vacation) of Terminal Way west of Earle Street and Barracuda Street north of Cannery Street. Connections to parcels adjacent to S. Seaside Avenue would be maintained by the existing Cannery Street, which is a parallel roadway 400 feet to the south of Terminal Way. The provisions of the State Streets and Highways Code and the Los Angeles City Administrative Code govern the processing of a request to vacate a public easement such as street, alley, walk or other public easements within the City of Los Angeles. It is a legislative act of the City Council to terminate any stipulated public rights within the area proposed to be vacated. The City of Los Angeles Bureau of Engineering is the reviewing department and transmits applications to other City departments, public agencies, and affected public utilities for their comments and recommendations. LADOT would approve the design of improvements to Cannery Street.

The review process includes investigations, referrals, recommendations and a report coordinated by the Bureau of Engineering for presentation to the City Council through the Public Works Committee. The processing of vacation applications is subject to CEQA and the City's Environmental Guidelines. Based on the recommendation of the Public Works Committee, the City Council makes its findings for conditional approval or for denial of the vacation request. A public hearing would be scheduled for the City Council to hear testimony on the vacation request from any interested persons. After the public hearing, the City Council makes a final determination on the vacation request. A Resolution to Vacate would be submitted to the City Council for consideration along with the City Engineer's report.

The Applicant is responsible for:

- Public Works Improvements: the conditional approval of vacation application requires conformance to the Highways and Freeways Element of the General Plan and to the street improvement policies for private developments. The Applicant is responsible for the costs of constructing any required street, sewer, and storm drain improvements including the planting of tress and installation of streetlights and fire hydrants.
- Public Utilities: all costs in connection with relocation or protection of any affected public utilities or any other such facilities located within the vacation area are to be borne by the Applicant.
- Rights of Other Property Owners: the City of Los Angeles requires the consents and waivers of damages of all property owner adjoin the public right-of-way proposed to be vacated. In addition, the consents and waivers of other property owner may be required as determined by the City Engineer or City Council.
- Reversionary Rights: it is the Applicant's responsibility to determine the ownership of the underlying fee interest of the public right-of-way proposed to be vacated. The Bureau of Engineering may require the submittal of a title report.

CEQA Impact Determination

The Port, as the applicant, would follow the City of Los Angeles' street vacation procedures for the vacation of Terminal Way west of Earle Street and Barracuda Street

north of Cannery Street. Further, all applicable engineering and design requirements would be followed by the Harbor Department in any project-related roadway modifications. Therefore, the proposed Project wound not substantially increase transportation hazards due to a design feature and cause impacts under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

The Port would follow the City of Los Angeles' street vacation procedures for the vacation of Terminal Way west of Earle Street and Barracuda Street north of Cannery Street. In addition, both the proposed Project and the NEPA baseline include backlands expansion, the vacation of Terminal Way and rerouting of traffic to Cannery Street, and gate relocation. Therefore, the proposed Project would not increase transportation hazards due to a design feature relative to the NEPA baseline, and would not cause impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Alternative 1 – No Federal Action

Alternative1 is a NEPA-required No Federal Action Alternative. As explained above, this alternative includes the activities that would occur absent a DA permit, and could include improvements that require a local permit. Absent a DA permit, no dredging, dredged material disposal, in-water pile installation, or raising of existing cranes or new crane installation would occur. The existing terminal is berth-constrained, and its ability to handle larger ships (compared to current terminal constraints) would be facilitated by activities that require a DA permit (dredging, in-water pile driving, and raising or new cranes). Therefore, without the activities that address berth constraints of the terminal (which would allow the terminal to service larger ships) the existing terminal capacity would not be increased. The No Federal Action Alternative includes 23.5 acres of additional backlands development and gate improvements to improve cargo-handling efficiency. The additional backland area would not change the capacity of the existing berth-constrained terminal.

The site would continue to operate as an approximately 229-acre container terminal where cargo containers are loaded to/from vessels, temporarily stored on backlands, and transferred to/from trucks or on-dock rail. In addition, the No Federal Action Alternative would include a lease extension to 2038, which would require a local action, but not a federal action. Based on the throughput projections, the Everport Container Terminal is expected to operate at its capacity of approximately 1,818,000 TEUs by 2038. AMP facilities have been installed and are currently in use at Berths 227 (two AMP vaults) and

230 (one AMP vault). Additional AMP vaults would be included at the wharf under the No Federal Action Alternative.

Under Alternative 1, the terminal's 2038 throughput is projected to result in an annual average of 3.8 trains per day, and an average of 4.2 trains per day during the peak month (on-dock and off-dock direct intermodal type). This is an increase in annual average of 2.2 trains per day, and an increase in average of 2.4 trains per day during the peak month, over the baseline year of 2013. The volume of cargo passing through the Everport Container Terminal's portion of the TICTF on-dock railyard is projected to increase from 230,227 TEUs in 2013 to 606,341 TEUs by 2038. The existing TICTF under Alternative 1 is projected to have sufficient capacity to handle the full amount of anticipated demand for on-dock rail facilities associated with the maximum terminal throughput of 1,818,000 TEUs. The volume of cargo passing through off-dock railyards is projected to increase from 53,791 TEUs in 2013 to 120,859 TEUs by 2038. The percentage of terminal throughput that would be handled by on-dock rail is expected to increase from approximately 18.6 percent in 2013 to up to approximately 33.4 percent in 2038 under this alternative and off-dock railyard from approximately 4.3 percent in 2013 to approximately 6.6 percent in 2038.

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

Under the No Federal Action Alternative, no federal action would occur; however, LAHD would expand the terminal and construct and develop terminal improvements (e.g. backlands expansion, gate relocation, and vacation of Terminal Way). Although the No Federal Action Alternative would require less construction than the proposed Project, a detailed traffic management plan would be prepared and implemented as a standard requirement for work in public streets by LADOT. Traffic management plans provide details of the protocols and activities to be followed for any street closures, construction staging and construction vehicle operation during the construction period in order to ensure adequate transportation facilities are available throughout the construction period. Further, the number of construction trips would be less than the proposed Project. As such, impacts would be less than significant.

CEQA Impact Determination

Given that Alternative 1 would involve less construction than the proposed Project (which would not result in a significant construction traffic impact), that most of the traffic associated with construction would occur outside of the peak periods, and that a detailed traffic management plan would be prepared and implemented, Alternative 1 would not result in a significant short-term, temporary increase in truck and auto traffic. Therefore, impacts for Alternative 1 would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative1 would only include construction activities that require local actions and permits and would therefore be included in the NEPA baseline. Therefore, there would be no incremental difference between Alternative 1 and the NEPA baseline, and Alternative 1 would result in no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact TRANS-2: Long-term vehicular traffic associated with Alternative 1 would not significantly impact a study location's volume/capacity ratios or level of service.

Under the No Federal Action Alternative, no in-water or overwater construction activities would occur. LAHD would construct and develop additional backlands or terminal improvements, the terminal would continue to operate, and throughput would reach the terminal's maximum capacity of approximately 1.82 million TEUs. Table 3.6-47 shows the incremental difference in trip generation from the CEQA baseline conditions to the 2038 No Federal Action conditions, during the peak hours.

Table 3.6-47: Trip Generation Analysis Assumptions and Input Data for Everport Container Terminal: CEQA Impact Determination

Time Period	Vehicle Type	CEQA Baseline Conditions			2038 No Federal Action Conditions		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	117	62	179	159	129	288
	Truck	121	48	169	276	253	529
M.D. Peak Hour	Auto	44	69	113	57	90	147
	Truck	178	162	340	197	185	382
P.M. Peak Hour	Auto	183	285	469	167	342	509
	Truck	113	110	222	101	113	214

CEQA Impact Determination

Traffic generated by the No Federal Action Alternative was estimated to determine potential impacts of this alternative on study area roadways.

Table 3.6-48 summarizes the CEQA baseline and the No Federal Action Alternative intersection operating conditions at each study intersection. The V/C increment between the CEQA baseline and the No Federal Action Alternative intersection operating conditions for each year were compared to determine the impact of this alternative, and then the impacts were assessed using the appropriate City's criteria for significant impacts.

Based on the results of the traffic study as presented in Table 3.6-48, the No Federal Action Alternative would not result in significant circulation system impacts relative to CEQA baseline conditions.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The No Federal Action Alternative would have the same throughput as the NEPA baseline. Therefore, there would be no incremental difference between Alternative 1 and the NEPA baseline, and Alternative 1 would result in no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

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Table 3.6-48: Intersection Level of Service Analysis—CEQA Baseline Compared to Alternative 1 - 2038 Conditions

Int. #	Study Intersection	CEQA Baseline						Alternative 1 Conditions						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	C	0.764	A	0.579	B	0.679	C	0.767	A	0.576	B	0.681	0.003	-0.003	0.002	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.468	A	0.472	A	0.529	A	0.469	A	0.474	A	0.529	0.001	0.002	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	B	0.621	A	0.589	B	0.697	B	0.621	A	0.586	B	0.699	0.000	-0.003	0.002	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.291	A	0.249	A	0.395	A	0.292	A	0.249	A	0.398	0.001	0.000	0.003	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.069	A	0.198	A	0.214	A	0.070	A	0.197	A	0.212	0.001	-0.001	-0.002	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.513	B	0.632	B	0.673	A	0.518	B	0.640	B	0.663	0.005	0.008	-0.010	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	A	0.347	A	0.402	A	0.486	A	0.348	A	0.404	A	0.488	0.001	0.002	0.002	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	A	0.200	A	0.102	A	0.130	A	0.200	A	0.105	A	0.136	0.000	0.003	0.006	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.368	A	0.288	A	0.269	A	0.376	A	0.300	A	0.281	0.008	0.012	0.012	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.400	A	0.301	A	0.281	A	0.423	A	0.323	0.006	0.023	0.022	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.331	A	0.265	A	0.269	A	0.342	A	0.267	A	0.275	0.011	0.002	0.006	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.302	A	0.275	A	0.285	A	0.314	A	0.292	0.010	0.012	0.017	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	A	0.395	A	0.341	A	0.518	A	0.400	A	0.331	A	0.513	0.005	-0.010	-0.005	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	A	0.259	A	0.243	A	0.317	A	0.293	A	0.271	A	0.379	0.034	0.028	0.062	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.329	A	0.147	A	0.108	A	0.377	A	0.217	A	0.138	0.048	0.070	0.030	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.100	A	0.288	A	0.180	A	0.129	A	0.350	A	0.223	0.029	0.062	0.043	No	No	No
17	Earle Street at Terminal Way [2]	A	0.098	A	0.138	A	0.161	A	0.111	A	0.208	A	0.203	0.013	0.070	0.042	No	No	No
18	Earle Street at Cannery Street [2]	A	0.111	A	0.115	A	0.069	A	0.111	A	0.115	A	0.069	0.000	0.000	0.000	No	No	No

Notes:
[1] City of Carson intersection analyzed using ICU methodology according to City standards.
[2] City of Los Angeles intersections analyzed using CMA methodology according to City standards.
[3] City of Long Beach intersections analyzed using ICU methodology according to City standards.

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Impact TRANS-3: Alternative 1 operations would not cause a significant increase in related public transit use resulting from an increase in on-site employees.

The increase in use of public transit for work-related trips from operation of Alternative 1 would be negligible. Intermodal facilities generate extremely low transit demand for several reasons. The primary reason is that terminal workers generally do not use public transit due to 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 transit usage. In addition, parking at the Port is readily available and free for employees, which does not encourage workers to utilize public transit. Finally, although there are 17 existing transit routes that serve the general area surrounding the project site, none of the existing routes stop within one mile of the terminal.

CEQA Impact Determination

Because the increase in use of public transit for work-related trips would be negligible relative to baseline conditions and demand would be low, impacts due to additional demand on local transit services would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The No Federal Action Alternative would have the same throughput as the NEPA baseline. Therefore, there would be no incremental difference between Alternative 1 and the NEPA baseline, and Alternative 1 would result in no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact TRANS-4: Alternative 1 operations would not significantly increase freeway congestion.

A traffic impact analysis is required at the following locations, according to the CMP, TIA Guidelines (Metro, 2010):

- CMP arterial monitoring intersections, including freeway on-ramp or off-ramp, where the proposed Project would add 50 or more trips during either the A.M. or P.M. weekday peak hours; and

- CMP freeway monitoring locations where the proposed Project would add 150 or more trips during either the A.M. or P.M. weekday peak hours.

CEQA Impact Determination

Tables 3.6-49 and 3.6-50 summarize the change to freeway monitoring locations under the No Federal Action Alternative in comparison to the CEQA baseline conditions during A.M. and P.M. peak hours, respectively. The results of the analysis indicate that Alternative 1 would not cause an increase of 0.02 or more in the D/C ratio at any of the CMP freeway monitoring locations and/or freeway analysis links that results in LOS F; therefore, no further freeway system analysis is required at those locations. Alternative 1 would not conflict the CMP.

The analysis shows that the No Federal Action Alternative would not result in a significant traffic impact under CEQA relative to the CEQA baseline.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The No Federal Action Alternative would have the same throughput as the NEPA baseline. Therefore, there would be no incremental difference between Alternative 1 and the NEPA baseline, and Alternative 1 would not conflict the CMP. Therefore, Alternative 1 would result in no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Table 3.6-49: CEQA Baseline Compared to Alternative 1 - 2038 Freeway Analysis—A.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			CEQA Baseline					Alternative 1						CEQA Baseline					Alternative 1					
Freeway	Location	Capacity	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	1,876	18.0	B	-		1,876	18.0	B	-		-	No	2,235	21.4	B	-		2,235	21.4	C	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,119	7.1	A	-		1,119	7.1	A	-		-	No	922	5.9	A	-		922	5.9	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	3,771	15.3	B	-		3,771	15.3	B	-		-	No	5,096	20.6	B	-		5,096	20.6	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,352	26.1	D	-		6,352	26.1	D	-		-	No	8,422	28.1	D	-		8,422	28.1	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,565	40.2	E	0.90	D	10,565	40.2	E	0.90	D	0.00	No	9,265	32.1	E	0.79	D	9,265	32.1	D	0.79	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	6,442	45.4	F	0.95	E	6,442	45.4	F	0.95	E	0.00	No	6,545	47.0	F	0.97	E	6,545	47.0	F	0.97	E	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	7,998	39.9	E	0.89	D	7,998	39.9	E	0.89	D	0.00	No	7,617	37.1	E	0.85	D	7,617	37.1	E	0.85	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,025	26.5	D	-		8,025	26.5	D	-		-	No	7,631	24.9	D	-		7,631	24.9	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	7,932	35.8	E	0.84	D	7,932	35.8	E	0.84	D	0.00	No	7,376	31.9	E	0.78	D	7,376	31.9	D	0.78	D	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	8,535	41.0	E	0.91	D	8,535	41.0	E	0.91	D	0.00	No	7,518	32.8	E	0.80	D	7,518	32.8	D	0.80	D	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	6,587	21.3	C	-		6,587	21.3	C	-		-	No	9,895	35.7	C	0.84	D	9,895	35.7	E	0.84	D	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,619	17.9	B	-		6,619	17.9	B	-		-	No	8,384	22.7	B	-		8,384	22.7	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Table 3.6-50: CEQA Baseline Compared to Alternative 1 - 2038 Freeway Analysis—P.M. Peak

Freeway	Location	Capacity	Northbound / Eastbound												Southbound / Westbound											
			CEQA Baseline					Alternative 1					Change in D/C	Sign. Impt?	CEQA Baseline					Alternative 1					Change in D/C	Sign. Impt?
			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS		
#1 SR-47	Vincent Thomas Bridge [1]	4,700	2,764	26.4	D	-		2,764	26.4	D	-		-	No	2,759	26.4	D	-		2,759	26.4	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,173	7.5	A	-		1,173	7.5	A	-		-	No	997	6.4	A	-		997	6.4	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,678	18.9	C	-		4,678	18.9	C	-		-	No	3,302	13.4	B	-		3,302	13.4	B	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	7,686	34.0	D	-		7,686	34.0	D	-		-	No	5,699	18.5	C	-		5,699	18.5	C	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,440	39.3	E	0.89	D	10,440	39.3	E	0.89	D	0.00	No	9,002	30.8	D	-		9,002	30.8	D	-		-	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,819	38.1	E	0.86	D	5,819	38.1	E	0.86	D	0.00	No	5,659	36.7	E	0.84	D	5,659	36.7	E	0.84	D	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	6,785	32.5	D	-		6,785	32.5	D	-		-	No	7,526	36.5	E	0.84	D	7,526	36.5	E	0.84	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	6,491	21.0	C	-		6,491	21.0	C	-		-	No	7,868	25.9	C	-		7,868	25.9	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	6,466	26.7	D	-		6,466	26.7	D	-		-	No	7,838	35.1	E	0.83	D	7,838	35.1	E	0.83	D	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	5,550	22.5	C	-		5,550	22.5	C	-		-	No	7,824	35.0	D	-		7,824	35.0	D	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,127	37.1	E	0.86	D	10,127	37.1	E	0.86	D	0.00	No	8,669	29.2	D	-		8,669	29.2	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	7,780	21.0	C	-		7,780	21.0	C	-		-	No	6,032	16.3	B	-		6,032	16.3	B	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Impact TRANS-5 (For Informational Purposes): Alternative 1 operations would not cause a significant impact in vehicular delay at at-grade railroad crossings within the project vicinity or in the region.

Based on the analysis of 2038 trains under the proposed Project, vehicular delays at at-grade crossings east of the Alameda Corridor would not exceed the impact thresholds. Alternative 1 would result in less throughput than the proposed Project and direct intermodal rail volumes would form 40 percent of the throughput (this percentage is the same as the proposed Project), therefore, this alternative would result in fewer daily trains and less vehicular delays at at-grade crossing crossings than the proposed Project.

Within the Port, there are three study area at-grade rail crossings of the Earle Street Lead track of the Alameda Corridor Subdivision, which would experience Alternative 1-related traffic. Terminal Way, Cannery Street, and Earle Street serve Terminal Island traffic and carry little through traffic. The three at-grade rail crossings listed below are located on spur lines downstream of the on-dock yard, and do not experience trains entering or exiting TICTF to and from the north. Because of the low train volumes on the spur lines, these at-grade rail crossings do not experience vehicular delays. All three crossings have gated warning systems:

- Terminal Way west of Earle Street: CPUC Crossing ID: LA-3524, DOT Number: 811372G
- Cannery Street west of Earle Street: CPUC Crossing ID: LA-2617, DOT Number: 811503H
- Earle Street south of Cannery Street: CPUC Crossing ID: LA- 3607, DOT Number: 927844A

In addition, Alternative 1 is not expected to result in significant secondary impacts (i.e., related to air, noise, and public services) related to increased vehicular delay at at-grade railroad crossings.

CEQA Impact Determination (For Informational Purposes)

Alternative 1 would result in less annual throughput and daily train trips than the proposed Project. Since the proposed Project would not result in a substantial impact on at-grade crossing vehicular delays relative to the CEQA baseline, neither would Alternative1. Therefore, impacts to vehicular delays at at-grade crossings would not be substantial.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination (For Informational Purposes)

Because there are no mainline at-grade railroad crossings between the project site and the greater Los Angeles intermodal railyards (i.e., BNSF's Hobart Yard, UP's ELA), there

are no rail-related at-grade impacts in this area. Further, impacts beyond these railyard locations are outside of the NEPA/federal scope of analysis and therefore not evaluated under NEPA. Because potential vehicle delay impacts at mainline at-grade railroad crossings beyond these geographical limits fall outside of the USACE's area of federal control and responsibility and scope of analysis (see Section 2.7 in Chapter 2, Project Description), there are no direct or indirect impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Because the impacts are outside of federal control and responsibility there are no direct or indirect impacts under NEPA.

Impact TRANS-6: Alternative 1 would not substantially increase transportation hazards due to a design feature.

CEQA Impact Determination

Under the No Federal Action Alternative, no in-water construction activity would occur, but backlands would be expanded and Terminal Way vacated. The Port would follow the City of Los Angeles' street vacation procedures for the vacation of Terminal Way west of Earle Street and Barracuda Street north of Cannery Street. Further, improvements to Cannery Street would require LADOT review and approval. Therefore, Alternative 1 wound not substantially increase transportation hazards due to a design feature and cause impacts under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 1 would involve closure of Terminal Way and rerouting of local traffic to Cannery Street, however, these changes are included in the NEPA baseline. Therefore, there would be no incremental difference between Alternative 1 and the NEPA baseline, and Alternative 1 would result in no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Alternative 2 – No Project

Alternative 2 is a CEQA-only alternative. The No Project Alternative is not evaluated under NEPA because NEPA requires an evaluation of Alternative 1: No Federal Action (see Section 2.9.1.2 in Chapter 2, Project Description).

Under Alternative 2, no construction activities would occur in water or upland areas, and no terminal improvements or increases in backland acreage would not be implemented. No raising of existing cranes and no new cranes would be added, no wharf improvements, nor dredging, would occur. The current lease that expires in 2028 has an option for a ten-year extension, which could result in terminal operations through 2038.

Under the No Project Alternative, the existing Everport Container Terminal would continue to operate as an approximately 205-acre container terminal. Based on the throughput projections for the Port, the Everport Container Terminal is expected to operate at its existing capacity of approximately 1,818,000 TEUs in 2038. AMP facilities have been installed and are currently in use at Berths 227 (two existing AMP vaults) and 230 (one existing AMP vault).

Alternative 2 would have an annual terminal throughput of 1,818,000 TEUs, which is the same as Alternative 1 and the NEPA baseline. Since the trip generation of the terminal is dependent on TEU throughput and terminal operating parameters, Alternative 2 would result in the same trip generation and traffic conditions as Alternative 1 and the NEPA baseline.

Under Alternative 2, the terminal's 2038 throughput is projected to result in an annual average of 3.8 trains per day, and an average of 4.2 trains per day during the peak month (on-dock and off-dock direct intermodal type). This is an increase in annual average of 2.2 trains per day, and an increase in average of 2.4 trains per day during the peak month, over the baseline year of 2013. The volume of cargo passing through the Everport Container Terminal's portion of the TICTF on-dock railyard is projected (Cambridge Systematics, 2015) to increase from 230,227 TEUs in 2013 to 606,341 TEUs by 2038. The existing TICTF under Alternative 2 is projected to have sufficient capacity to handle the full amount of anticipated demand for on-dock rail facilities associated with the maximum terminal throughput 1,818,000 TEUs. The volume of cargo passing through off-dock railyards is projected to increase from 53,791 TEUs in 2013 to 120,859 TEUs by 2038. The percentage of terminal throughput that would be handled by on-dock rail is expected to increase from approximately 18.6 percent in 2013 to up to approximately 33.4 percent in 2038 under this alternative and off-dock railyard from approximately 4.3 percent in 2013 to approximately 6.6 percent in 2038.

Impact TRANS-1: Alternative 2 construction would not result in a significant short-term, temporary increase in truck and auto traffic.

Under the No Project Alternative, no construction would occur. Therefore, there would be no impacts on traffic related to construction under this alternative.

CEQA Impact Determination

Because construction would not occur, there would be no impact on traffic related to construction under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (see Alternative 1 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Impact TRANS-2: Long-term vehicular traffic associated with Alternative 2 would not significantly impact a study location's volume/capacity ratios or level of service.

Under the No Project Alternative, no LAHD or federal action would occur. LAHD would not construct and develop additional backlands or terminal improvements, but the existing terminal would continue to operate.

CEQA Impact Determination

Trip generation under the No Project Alternative was estimated to determine potential impacts of this alternative on study area roadways and are the same values as shown in Table 3.6-47 in the Alternative 1: No Federal Action.

Table 3.6-48 summarizes the CEQA baseline and the 2038 No Federal Action intersection operating conditions, which are the same as the No Project Alternative intersection operating conditions at each study intersection. The V/C increment between the CEQA baseline and the No Federal Action Alternative intersection operating conditions for each year were compared to determine the impact of this alternative, and then the impacts were assessed using the appropriate City's criteria for significant impacts.

Based on the results of the traffic study as presented in Table 3.6-48, the No Project Alternative would not result in significant circulation system impacts relative to CEQA baseline conditions.

Mitigation Measures

Mitigation measures are not required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (see Alternative 1 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Impact TRANS-3: Alternative 2 would not cause a significant increase in related public transit use resulting from an increase in on-site employees.

The increase in use of public transit for work-related trips under Alternative 2 would be negligible. Intermodal facilities generate extremely low transit demand for several reasons. The primary reason is that terminal workers generally do not use public transit due to their work shift schedule. Most workers prefer to use a personal automobile to facilitate timely commuting. In addition, Port workers' incomes are generally higher than similarly skilled jobs in other areas, and higher incomes correlate to lower transit usage. In addition, parking at the Port is readily available and free for employees, which does not encourage workers to utilize public transit. Finally, although there are 17 existing transit routes that serve the general area surrounding the project site, none of the existing routes stop within one mile of the terminal.

CEQA Impact Determination

Because the increase in use of public transit for work-related trips would be negligible relative to baseline conditions and demand would be low, impacts due to additional demand on local transit services would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (see Alternative 1 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Impact TRANS-4: Alternative 2 operations would not significantly increase freeway congestion.

A traffic impact analysis is required at the following locations, according to the CMP, TIA Guidelines (Metro, 2010):

- CMP arterial monitoring intersections, including freeway on-ramp or off-ramp, where the proposed Project would add 50 or more trips during either the A.M. or P.M. weekday peak hours; and
- CMP freeway monitoring locations where the proposed Project would add 150 or more trips during either the A.M. or P.M. weekday peak hours.

CEQA Impact Determination

Tables 3.6-49 and 3.6-50 above summarize the change to freeway analysis locations under the No Federal Action (Alternative 1) compared to CEQA baseline conditions during A.M. and P.M. peak hours, respectively. Since on road traffic operating conditions under Alternative 2 would be the same as Alternative 1, the throughput for both alternatives would be the same. The results of the analysis indicate that the No Project Alternative would not cause an increase of 0.02 or more in the D/C ratio at any of the CMP freeway monitoring locations and/or freeway analysis links that results in LOS F relative to the CEQA baseline; therefore, no further freeway system analysis is required at those locations. Alternative 2 would not conflict the CMP.

The analysis shows that the No Project Alternative would not result in a significant traffic impact under CEQA relative to the CEQA baseline conditions.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (see Alternative 1 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Impact TRANS-5 (For Informational Purposes): Alternative 2 operations would not cause a significant impact in vehicular delay at at-grade railroad crossings within the proposed project vicinity or in the region.

Based on the analysis of 2038 trains under the proposed Project, vehicular delays at at-grade crossings east of the Alameda Corridor would not exceed the thresholds of significance. Alternative 2 would result in less throughput than the proposed Project and direct intermodal rail volumes would form 40 percent of the throughput (this percentage is the same as the proposed Project); therefore, this alternative would result in fewer daily trains and less vehicular delays at at-grade crossings than the proposed Project

CEQA Impact Determination

Alternative 2 would result in less annual throughput and daily train trips than the proposed Project. Because the proposed Project would not result in a significant impact on at-grade crossing vehicular delays relative to the CEQA baseline, neither would Alternative 2. Therefore, impacts to vehicular delays at at-grade crossings under Alternative 2 would not be substantial.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (see Alternative 1 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Impact TRANS-6: Alternative 2 would not substantially increase transportation hazards due to a design feature.

CEQA Impact Determination

Under the No Project Alternative, no construction activity would occur. Therefore, Alternative 2 wound not substantially increase transportation hazards due to a design feature and cause impacts under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (see Alternative 1 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Alternative 3 – Reduced Project: Reduced Wharf

Under Alternative 3, there would be two operating berths after construction, Berths 226-229 would be deepened, but Berths 230-232 would remain at their existing depth. This alternative would require less dredging (by approximately 8,000 cy) and sheet pile driving and a slightly shorter construction period than the proposed Project. Based on the throughput projections, this alternative is expected to operate at its capacity of approximately 2,250,000 TEUs by 2038 slightly less than the proposed Project. This alternative would accommodate the largest vessels in the fleet mix (16,000 TEUs) at Berths 226-229. The existing design depth that remains at Berths 230-232 would only be capable of handling vessels up to 8,000 TEUs. While the terminal could handle greater throughput than the No Project and No Federal Action alternatives, this reduced project alternative would not quite achieve the same level of efficient operations as achieved by the proposed Project because this it would only accommodate the larger vessels at one berth compared to two berths under the proposed Project.

Under Alternative 3, the terminal's 2038 throughput is projected to result in an annual average of 4.7 trains per day, and an average of 5.2 trains per day during the peak month (on-dock and off-dock direct intermodal type). This is an increase in annual average of 3.1 trains per day, and an increase in average of 3.4 trains per day during the peak month, over the baseline year of 2013. The volume of cargo passing through the Everport Container Terminal's portion of the TICTF on-dock railyard is projected to increase from 230,227 TEUs in 2013 to 606,341 TEUs by 2038. The existing TICTF under Alternative 3 is projected to have sufficient capacity to handle the full amount of anticipated demand for on-dock rail facilities associated with the maximum terminal throughput of 2,250,000 TEUs. The volume of cargo passing through off-dock railyards is projected to increase from 53,791 TEUs in 2013 to 293,659 TEUs by 2038. The percentage of terminal throughput that would be handled by on-dock rail is expected to increase from approximately 18.6 percent in 2013 to up to approximately 26.9 percent in 2038 under this alternative and off-dock railyard from approximately 4.3 percent in 2013 to approximately 13.1 percent in 2038.

Impact TRANS-1: Alternative 3 construction would not result in a short-term, temporary increase in truck and auto traffic.

The proposed construction activities for Alternative 3 are similar to those for the proposed Project. Construction activities could result in temporary increases in traffic volumes and roadway disruptions in the vicinity of the construction areas.

CEQA Impact Determination

Alternative 3 would involve less construction than the proposed Project (which also did not result in significant impacts relative to the CEQA baseline). Most of the traffic associated with construction would occur outside of the peak periods. Furthermore, a detailed traffic management plan would be prepared and implemented for project elements that require approval from LADOT. As such, Alternative 3 would not result in a significant short-term, temporary increase in truck and auto traffic. Therefore, impacts for Alternative 3 would be less than significant under CEQA.

Mitigation Measure

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 3 would involve less construction than the proposed Project (which also did not result in significant impacts relative to the NEPA baseline). Most of the traffic associated with construction would occur outside of the peak periods, and a detailed traffic management plan would be prepared and implemented. As such, Alternative 3 would not result in a significant short-term, temporary increase in truck and auto traffic. Therefore, impacts for Alternative 3 would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRANS-2: Long-term vehicular traffic associated with Alternative 3 would significantly impact a study location's volume/capacity ratio or level of service.

Traffic conditions with Alternative 3 were compared to the applicable baseline to determine the Alternative 3 incremental impacts, and then the incremental impacts were assessed using the significance criteria described in Section 3.6.4.5.

CEQA Impact Determination

Table 3.6-51 summarizes the trip generation for the CEQA baseline and Alternative 3. Traffic conditions with Alternative 3 were estimated by including traffic resulting from the improved container terminal and associated throughput growth to the CEQA baseline.

Table 3.6-51: Trip Generation Analysis Assumptions and Input Data for Everport Container Terminal: Year 2038

Time Period	Vehicle Type	CEQA Baseline Conditions			2038 Alternative 3		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	117	62	179	187	153	340
	Truck	121	48	169	367	337	704
M.D. Peak Hour	Auto	44	69	113	65	105	170
	Truck	178	162	340	262	247	509
P.M. Peak Hour	Auto	183	285	469	186	396	582
	Truck	113	110	222	135	152	287

Appendix E2 contains all of the CEQA baseline, NEPA baseline, and future with-project traffic forecasts and LOS calculation worksheets.

Table 3.6-55 below summarizes the CEQA baseline plus Alternative 3 intersection operating conditions at each study intersection. The CEQA baseline and with-project intersection operating conditions were compared to determine the Alternative 3 regional impacts, and then the incremental impacts were assessed using the appropriate significance criteria described in Section 3.6.4.5.

Based on the results of the traffic study as presented in Table 3.6-55 and worksheets set forth in Appendix E2, Alternative 3 would not result in significant circulation system impacts at any study intersection relative to CEQA baseline conditions.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant

NEPA Impact Determination

Traffic conditions with Alternative 3 were estimated by adding traffic resulting from the improved container terminal and associated throughput growth to the NEPA baseline. The evaluation assumptions described under Impact TRANS-2 would apply.

Tables 3.6-52, 3.6-53, and 3.6-54 summarize the trip generation for the NEPA baseline and Alternative 3 conditions for 2019, 2026, and 2038 respectively.

Table 3.6-52: Trip Generation Analysis Alternative 3 Assumptions and Input Data for Everport Container Terminal: Year 2019

Time Period	Vehicle Type	2019 NEPA Baseline Conditions			2019 Alternative 3		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	121	64	185	120	64	184
	Truck	125	49	174	124	48	172
M.D. Peak Hour	Auto	45	71	116	45	70	115
	Truck	183	167	350	181	165	346
P.M. Peak Hour	Auto	189	294	483	188	292	479
	Truck	116	113	230	115	112	227

Table 3.6-53: Trip Generation Analysis Alternative 3 Assumptions and Input Data for Everport Container Terminal: Year 2026

Time Period	Vehicle Type	2026 NEPA Baseline Conditions			2026 Alternative 3		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	132	106	238	154	125	279
	Truck	219	198	417	269	244	512
M.D. Peak Hour	Auto	49	76	125	55	88	143
	Truck	156	146	302	192	179	370
P.M. Peak Hour	Auto	150	291	441	165	334	498
	Truck	81	89	170	99	110	209

Table 3.6-54: Trip Generation Analysis Alternative 3 Assumptions and Input Data for Everport Container Terminal: Year 2038

Time Period	Vehicle Type	2038 NEPA Baseline Conditions			2038 Alternative 3		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	159	129	288	187	153	340
	Truck	276	253	529	367	337	704
M.D. Peak Hour	Auto	57	90	147	65	105	170
	Truck	197	185	382	262	247	509
P.M. Peak Hour	Auto	167	342	509	186	396	582
	Truck	101	113	214	135	152	287

Tables 3.6-56, 3.6-57, and 3.6-58 summarize the intersection operating conditions for the NEPA baseline and Alternative 3 for 2019, 2026, and 2038 respectively.

As with the proposed Project, Alternative 3 would result in the following significant impacts under NEPA based on the significance criteria described in Section 3.6.4.5 (the V/C increment for the given future intersection LOS was exceeded):

Year 2019

- No Significant Impacts

Year 2026

- Study Intersection #14: Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps (A.M. peak hour)

Year 2038

- Study Intersection #14: Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps (A.M., and P.M. peak hours)

Mitigation Measures

The westbound approach of the Ferry Street at State Route (SR)-47 (Terminal Island Freeway)/Seaside Avenue Ramps intersection is located in Caltrans right-of-way, and not owned by the City of Los Angeles. Because of this, no mitigation is within the Port's jurisdictional control that could reduce the intersection impact to a less than significant level under NEPA.

Residual Impacts

Impacts would remain significant and unavoidable.

Table 3.6-55: Intersection Level of Service Analysis—CEQA Baseline Compared to 2038 with Alternative 3

Int. #	Study Intersection	CEQA Baseline						2038 With Alternative 3						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	C	0.764	A	0.579	B	0.679	C	0.767	A	0.576	B	0.681	0.003	-0.003	0.002	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.468	A	0.472	A	0.529	A	0.469	A	0.474	A	0.529	0.001	0.002	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	B	0.621	A	0.589	B	0.697	B	0.621	A	0.586	B	0.699	0.000	-0.003	0.002	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.291	A	0.249	A	0.395	A	0.292	A	0.249	A	0.398	0.001	0.000	0.003	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.069	A	0.198	A	0.214	A	0.070	A	0.197	A	0.212	0.001	-0.001	-0.002	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.513	B	0.632	B	0.673	A	0.518	B	0.640	B	0.663	0.005	0.008	-0.010	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	A	0.347	A	0.402	A	0.486	A	0.348	A	0.404	A	0.488	0.001	0.002	0.002	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	A	0.200	A	0.102	A	0.130	A	0.200	A	0.105	A	0.136	0.000	0.003	0.006	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.368	A	0.288	A	0.269	A	0.376	A	0.300	A	0.281	0.008	0.012	0.012	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.400	A	0.301	A	0.281	A	0.423	A	0.323	0.006	0.023	0.022	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.331	A	0.265	A	0.269	A	0.342	A	0.267	A	0.275	0.011	0.002	0.006	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.302	A	0.275	A	0.285	A	0.314	A	0.292	0.010	0.012	0.017	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	A	0.395	A	0.341	A	0.518	A	0.400	A	0.331	A	0.513	0.005	-0.010	-0.005	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	A	0.259	A	0.243	A	0.317	A	0.293	A	0.271	A	0.379	0.034	0.028	0.062	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.329	A	0.147	A	0.108	A	0.377	A	0.217	A	0.138	0.048	0.070	0.030	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.100	A	0.288	A	0.180	Not an Intersection (Internal to Project Site)											
17	Earle Street at Terminal Way [2]	A	0.098	A	0.138	A	0.161	A	0.333	A	0.266	A	0.302	0.235	0.128	0.141	No	No	No
18	Earle Street at Cannery Street [2]	A	0.111	A	0.115	A	0.069	A	0.332	A	0.267	A	0.260	0.221	0.152	0.191	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-56: Intersection Level of Service Analysis—2019 NEPA Baseline Compared to 2019 with Alternative 3

Int. #	Study Intersection	2019 NEPA Baseline						2019 With Alternative 3						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	F	1.011	B	0.639	F	1.006	F	1.011	B	0.639	F	1.006	0.000	0.000	0.000	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.533	A	0.490	A	0.599	A	0.533	A	0.490	A	0.599	0.000	0.000	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	D	0.839	B	0.603	E	0.951	D	0.839	B	0.603	E	0.951	0.000	0.000	0.000	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.415	A	0.514	A	0.510	A	0.415	A	0.514	A	0.510	0.000	0.000	0.000	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.381	A	0.467	A	0.494	A	0.381	A	0.467	A	0.494	0.000	0.000	0.000	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.563	B	0.628	E	0.939	A	0.563	B	0.628	E	0.939	0.000	0.000	0.000	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	B	0.666	B	0.648	E	0.901	B	0.666	B	0.648	E	0.901	0.000	0.000	0.000	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	B	0.605	A	0.410	A	0.543	B	0.605	A	0.410	A	0.543	0.000	0.000	0.000	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.584	C	0.593	C	0.604	A	0.584	C	0.593	C	0.604	0.000	0.000	0.000	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.498	F	0.884	D	0.766	A	0.498	F	0.884	D	0.765	0.000	0.000	-0.001	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.467	A	0.491	A	0.497	A	0.467	A	0.491	A	0.497	0.000	0.000	0.000	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.409	A	0.468	B	0.552	A	0.409	A	0.468	B	0.552	0.000	0.000	0.000	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	B	0.607	A	0.421	B	0.699	B	0.607	A	0.421	B	0.699	0.000	0.000	0.000	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	B	0.679	A	0.581	B	0.661	B	0.679	A	0.581	B	0.661	0.000	0.000	0.000	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.365	A	0.259	A	0.193	A	0.365	A	0.259	A	0.193	0.000	0.000	0.000	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.221	A	0.398	A	0.334	Not an Intersection (Internal to Project Site)											
17	Earle Street at Terminal Way [2]	A	0.403	A	0.405	A	0.326	A	0.421	A	0.456	A	0.410	0.018	0.051	0.084	No	No	No
18	Earle Street at Cannery Street [2]	A	0.119	A	0.165	A	0.121	A	0.355	A	0.361	A	0.321	0.236	0.196	0.200	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-57: Intersection Level of Service Analysis—2026 NEPA Baseline Compared to 2026 with Alternative 3

Int. #	Study Intersection	2026 NEPA Baseline						2026 With Alternative 3						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	E	0.957	B	0.664	C	0.767	E	0.959	B	0.663	C	0.768	0.002	-0.001	0.001	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	C	0.757	A	0.590	B	0.623	C	0.757	A	0.589	B	0.623	0.000	-0.001	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	C	0.761	A	0.545	C	0.711	C	0.761	A	0.543	C	0.713	0.000	-0.002	0.002	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	C	0.773	A	0.555	A	0.464	C	0.774	A	0.560	A	0.463	0.001	0.005	-0.001	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	C	0.732	A	0.488	A	0.511	C	0.730	A	0.487	A	0.510	-0.002	-0.001	-0.001	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	C	0.781	D	0.810	C	0.732	C	0.783	D	0.815	C	0.730	0.002	0.005	-0.002	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	E	0.938	C	0.720	D	0.888	F	1.045	C	0.786	E	0.920	0.001	0.002	0.003	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	C	0.790	A	0.447	A	0.512	C	0.790	A	0.448	A	0.515	0.000	0.001	0.003	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	E	0.990	D	0.699	C	0.679	E	0.994	D	0.700	D	0.688	0.004	0.001	0.009	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	F	1.279	F	1.060	E	0.856	F	1.282	F	1.066	E	0.867	0.003	0.006	0.011	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	C	0.787	B	0.571	A	0.498	C	0.792	B	0.572	B	0.501	0.005	0.001	0.003	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	C	0.754	B	0.564	C	0.630	C	0.758	B	0.569	C	0.639	0.004	0.005	0.009	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	D	0.851	A	0.495	B	0.690	D	0.853	A	0.499	B	0.693	0.002	0.004	0.003	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	F	1.028	B	0.668	C	0.767	F	1.042	B	0.680	C	0.798	0.014	0.012	0.031	**Yes**	No	No
15	Ferry Street at Terminal Way [2]	A	0.504	A	0.248	A	0.206	A	0.525	A	0.278	A	0.215	0.021	0.030	0.009	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.461	A	0.423	A	0.336	Not an Intersection (Internal to Project Site)											
17	Earle Street at Terminal Way [2]	A	0.573	A	0.449	A	0.342	B	0.624	A	0.535	A	0.443	0.051	0.086	0.101	No	No	No
18	Earle Street at Cannery Street [2]	A	0.127	A	0.168	A	0.132	A	0.372	A	0.367	A	0.332	0.245	0.199	0.200	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-58: Intersection Level of Service Analysis—2038 NEPA Baseline Compared to 2038 with Alternative 3

Int. #	Study Intersection	2038 NEPA Baseline						2038 With Alternative 3						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	F	1.007	D	0.816	E	0.936	F	1.008	D	0.814	E	0.937	0.001	-0.002	0.001	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	D	0.815	B	0.618	B	0.670	D	0.819	B	0.617	B	0.670	0.004	-0.001	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	D	0.848	C	0.702	D	0.823	D	0.847	C	0.700	D	0.824	-0.001	-0.002	0.001	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	D	0.875	B	0.609	A	0.532	D	0.873	B	0.616	A	0.532	-0.002	0.007	0.000	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	D	0.824	A	0.542	A	0.578	D	0.822	A	0.541	A	0.577	-0.002	-0.001	-0.001	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	D	0.853	D	0.877	D	0.847	D	0.856	D	0.880	D	0.843	0.003	0.003	-0.004	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	F	1.168	E	0.957	E	0.976	F	1.167	E	0.962	E	0.977	-0.001	0.005	0.001	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	D	0.858	A	0.483	A	0.565	D	0.859	A	0.485	A	0.568	0.001	0.002	0.003	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	F	1.095	E	0.823	E	0.802	F	1.102	E	0.832	E	0.811	0.007	0.009	0.009	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	F	1.490	F	1.248	F	1.017	F	1.494	F	1.260	F	1.027	0.004	0.012	0.010	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	D	0.844	C	0.624	B	0.559	D	0.853	C	0.626	B	0.562	0.009	0.002	0.003	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	D	0.850	C	0.647	D	0.725	D	0.857	C	0.653	D	0.733	0.007	0.006	0.008	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	Not an Intersection – Navy Way / Seaside Interchange Improvement																	
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	F	1.218	D	0.816	E	0.958	F	1.242	D	0.831	E	0.986	0.024	0.015	0.028	**Yes**	No	**Yes**
15	Ferry Street at Terminal Way [2]	A	0.545	A	0.347	A	0.141	A	0.580	A	0.358	A	0.150	0.035	0.011	0.009	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.459	A	0.420	A	0.335	Not an Intersection (Internal to the Project Site)											
17	Earle Street at Terminal Way [2]	A	0.566	A	0.440	A	0.353	B	0.638	A	0.540	A	0.445	0.072	0.100	0.092	No	No	No
18	Earle Street at Cannery Street [2]	A	0.136	A	0.171	A	0.147	A	0.389	A	0.372	A	0.348	0.253	0.201	0.201	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

1

Impact TRANS-3: Alternative 3 operations would not cause a significant increase in related public transit use resulting from an increase in on-site employees.

The increase in use of public transit for work-related trips from operation of Alternative 3 would be negligible. Intermodal facilities generate extremely low transit demand for several reasons. The primary reason is that terminal workers generally do not use public transit due to 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 transit usage. In addition, parking at the Port is readily available and free for employees, which does not encourage workers to utilize public transit. Finally, although there are 17 existing transit routes that serve the general area surrounding the project site, none of the existing routes stop within one mile of the terminal.

CEQA Impact Determination

Based on the analysis above, impacts due to additional demand on local transit services would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 3 would result in a slightly higher employment level compared to the NEPA baseline due to increased throughput operations, but as discussed above, the increase in use of public transit for work-related trips would be negligible. Therefore, less than significant impacts under NEPA would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRANS-4: Alternative 3 operations would not significantly increase freeway congestion.

A traffic impact analysis is required at the following locations, according to the CMP, TIA Guidelines (Metro, 2010):

- CMP arterial monitoring intersections, including freeway on-ramp or off-ramp, where the proposed Project would add 50 or more trips during either the A.M. or P.M. weekday peak hours; and

- CMP freeway monitoring locations where the proposed Project would add 150 or more trips during either the A.M. or P.M. weekday peak hours.

CEQA Impact Determination

Alternative 3 would result in additional truck trips on the surrounding freeway system. Tables 3.6-59 and 3.6-60 summarize the change to freeway monitoring locations during A.M. and P.M. peak hours, respectively due to Alternative 3.

The results of the analysis indicate that Alternative 3 would not cause an increase of 0.02 or more in the D/C ratio at any of the CMP freeway monitoring locations and/or freeway analysis links that result in LOS F under CEQA baseline and future CEQA baseline conditions; therefore, no further freeway system analysis is required at those locations. Alternative 3 would not conflict the CMP.

Based on the above, traffic impacts on the freeway system would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 3 would result in additional truck trips on the surrounding freeway system. Tables 3.6-61 through 3.6-66 summarize the change to freeway monitoring locations during A.M. and P.M. peak hours, respectively due to Alternative 3.

The results of the analysis indicate that Alternative 3 would not cause an increase of 0.02 or more in the D/C ratio at any of the CMP freeway monitoring locations and/or freeway analysis links that result in LOS F; therefore, no further freeway system analysis is required at those locations. Alternative 3 would not conflict the CMP. Consequently, traffic impacts on the freeway system would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Table 3.6-59: CEQA Baseline Compared to Alternative 3 - 2038 Freeway Analysis—A.M. Peak

Freeway	Location	Cap.	Northbound / Eastbound											Southbound / Westbound										
			CEQA Baseline					2038 Alternative 3					Change in D/C	Sign. Impt?	CEQA Baseline					2038 Alternative 3					Change in D/C	Sign. Impt?
			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS		
#1 SR-47	Vincent Thomas Bridge 1	4,700	1,876	18.0	B	-		1,908	18.3	C	-		-	No	2,235	21.4	B	-		2,256	21.6	C	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,119	7.1	A	-		1,139	7.3	A	-		-	No	922	5.9	A	-		959	6.1	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	3,771	15.3	B	-		3,787	15.3	B	-		-	No	5,096	20.6	B	-		5,109	20.7	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,352	26.1	D	-		6,362	26.2	D	-		-	No	8,422	28.1	D	-		8,432	28.2	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,565	40.2	E	0.90	D	10,572	40.2	E	0.90	D	0.00	No	9,265	32.1	E	0.79	D	9,271	32.2	D	0.79	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	6,442	45.4	F	0.95	E	6,477	45.9	F	0.96	E	0.01	No	6,545	47.0	F	0.97	E	6,581	47.5	F	0.97	E	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	7,998	39.9	E	0.89	D	8,031	40.2	E	0.89	D	0.00	No	7,617	37.1	E	0.85	D	7,653	37.4	E	0.85	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,025	26.5	D	-		8,053	26.6	D	-		-	No	7,631	24.9	D	-		7,665	25.1	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	7,932	35.8	E	0.84	D	7,953	36.0	E	0.85	D	0.01	No	7,376	31.9	E	0.78	D	7,403	32.1	D	0.79	D	0.01	No
#10 I-710	North of Florence Avenue[1]	9,400	8,535	41.0	E	0.91	D	8,556	41.1	E	0.91	D	0.00	No	7,518	32.8	E	0.80	D	7,544	33.0	D	0.80	D	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	6,587	21.3	C	-		6,587	21.3	C	-		-	No	9,895	35.7	C	-		9,895	35.7	E	0.84	D	-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,619	17.9	B	-		6,619	17.9	B	-		-	No	8,384	22.7	B	-		8,385	22.7	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-60: CEQA Baseline Compared to Alternative 3 - 2038 Freeway Analysis—P.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			CEQA Baseline					2038 Alternative 3							CEQA Baseline					2026 Alternative 3						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	2,764	26.4	D	-		2,813	26.9	D	-		-	No	2,759	26.4	D	-		2,780	26.6	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,173	7.5	A	-		1,216	7.8	A	-		-	No	997	6.4	A	-		1,031	6.6	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,678	18.9	C	-		4,710	19.1	C	-		-	No	3,302	13.4	B	-		3,315	13.4	B	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	7,686	34.0	D	-		7,704	34.1	D	-		-	No	5,699	18.5	C	-		5,709	18.5	C	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,440	39.3	E	0.89	D	10,450	39.3	E	0.89	D	0.00	No	9,002	30.8	D	-		9,008	30.8	D	-		-	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,819	38.1	E	0.86	D	5,876	38.7	E	0.87	D	0.01	No	5,659	36.7	E	0.84	D	5,705	37.1	E	0.85	D	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	6,785	32.5	D	-		6,840	32.7	D	-		-	No	7,526	36.5	E	0.84	D	7,571	36.8	E	0.84	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	6,491	21.0	C	-		6,540	21.2	C	-		-	No	7,868	25.9	C	-		7,913	26.0	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	6,466	26.7	D	-		6,503	26.9	D	-		-	No	7,838	35.1	E	0.83	D	7,869	35.3	E	0.84	D	0.01	No
#10 I-710	North of Florence Avenue[1]	9,400	5,550	22.5	C	-		5,585	22.6	C	-		-	No	7,824	35.0	D	0.83	D	7,853	35.2	E	0.84	D	0.01	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,127	37.1	E	0.86	D	10,127	37.1	E	0.86	D	0.00	No	8,669	29.2	D	-		8,669	29.2	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	7,780	21.0	C	-		7,780	21.0	C	-		-	No	6,032	16.3	B	-		6,032	16.3	B	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

Table 3.6-61: 2019 NEPA Baseline Compared to 2019 With Alternative 3 - Freeway Analysis—A.M. Peak

Freeway	Location	Cap.	Northbound / Eastbound											Southbound / Westbound										
			2019 NEPA Baseline					2019 Alternative 3							2019 NEPA Baseline					2019 Alternative 3					
			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	3,508	33.6	D	-		3,508	33.6	D	-		-	No	3,199	30.6	D	-		3,199	30.6	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	642	4.1	A	-		642	4.1	A	-		-	No	1,422	9.1	A	-		1,422	9.1	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	5,565	22.6	C	-		5,565	22.6	C	-		-	No	4,879	19.8	C	-		4,879	19.8	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	8,975	45.5	F	0.95	E	8,975	45.5	F	0.95	E	0.00	No	7,372	24.0	C	-		7,372	24.0	C	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,531	39.9	E	0.90	D	10,531	39.9	E	0.90	D	0.00	No	11,295	46.2	F	0.96	E	11,295	46.2	F	0.96	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,555	35.8	E	0.82	D	5,555	35.8	E	0.82	D	0.00	No	7,020	55.8	F	1.04	F(0)	7,020	55.8	F	1.04	F(0)	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,045	40.3	E	0.89	D	8,045	40.3	E	0.89	D	0.00	No	8,161	41.3	E	0.91	D	8,161	41.3	E	0.91	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,181	27.1	D	-		8,181	27.1	D	-		-	No	9,080	31.2	D	-		9,080	31.2	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	7,639	33.7	D	-		7,639	33.7	D	-		-	No	8,614	41.7	E	0.92	D	8,614	41.7	E	0.92	D	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	7,940	35.9	E	0.84	D	7,940	35.9	E	0.84	D	0.00	No	9,771	56.5	F	1.04	F(0)	9,771	56.5	F	1.04	F(0)	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	12,113	55.1	F	1.03	F(0)	12,113	55.1	F	1.03	F(0)	0.00	No	8,624	29.0	D	-		8,624	29.0	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	9,884	27.3	D	-		9,884	27.3	D	-		-	No	8,460	22.9	C	-		8,460	22.9	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Table 3.6-62: 2019 NEPA Baseline Compared to 2019 With Alternative 3 - Freeway Analysis—P.M. Peak

			Northbound / Eastbound											Southbound / Westbound									
			2019 NEPA Baseline					2019 Alternative 3						2019 NEPA Baseline					2019 Alternative 3					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,207	43.6	E	0.90	D	4,207	43.6	E	0.90	D	0.00	No	3,687	35.6	E	0.78	D	3,687	35.6	E	0.78	D	0.00	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,466	9.4	A	-		1,466	9.4	A	-		-	No	1,704	10.9	A	-		1,704	10.9	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,629	18.7	C	-		4,629	18.7	C	-		-	No	5,500	22.3	C	-		5,500	22.3	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,802	28.5	D	-		6,802	28.5	D	-		-	No	8,315	27.7	D	-		8,315	27.7	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,188	37.5	E	0.87	D	10,188	37.5	E	0.87	D	0.00	No	11,048	44.0	E	0.94	E	11,048	44.0	E	0.94	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,441	34.9	D	-		5,441	34.9	D	-		-	No	6,136	41.5	E	0.91	D	6,136	41.5	E	0.91	D	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,102	40.8	E	0.90	D	8,102	40.8	E	0.90	D	0.00	No	6,782	32.4	D	-		6,782	32.4	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,656	29.2	D	-		8,656	29.2	D	-		-	No	7,172	23.3	C	-		7,172	23.3	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,567	41.3	E	0.91	D	8,567	41.3	E	0.91	D	0.00	No	6,870	28.9	D	-		6,870	28.9	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,710	42.7	E	0.93	D	8,710	42.7	E	0.93	D	0.00	No	6,498	26.9	D	-		6,498	26.9	D	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,400	39.0	E	0.89	D	10,400	39.0	E	0.89	D	0.00	No	11,955	53.2	F	1.02	F(0)	11,955	53.2	F	1.02	F(0)	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	7,720	20.8	C	-		7,720	20.8	C	-		-	No	9,247	25.2	C	-		9,247	25.2	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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2

Table 3.6-63: 2026 NEPA Baseline Compared to 2026 With Alternative 3 - Freeway Analysis—A.M. Peak

			Northbound / Eastbound												Southbound / Westbound										
			2026 NEPA Baseline					2026 Alternative 3							2026 NEPA Baseline					2026 Alternative 3						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign .Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,108	41.8	E	0.87	D	4,129	42.2	E	0.88	D	0.00	No	3,307	31.6	D	-		3,321	31.8	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,788	11.4	B	-		1,800	11.5	B	-		-	No	2,599	16.6	B	-		2,623	16.7	B	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	6,746	28.2	D	-		6,755	28.2	D	-		-	No	5,653	22.9	C	-		5,661	23.0	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	9,688	55.1	F	1.03	F(0)	9,694	55.2	F	1.03	F(0)	0.00	No	8,023	26.5	D	-		8,029	26.5	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,651	40.8	E	0.91	D	10,655	40.8	E	0.91	D	0.00	No	11,678	50.1	F	0.99	E	11,681	50.1	F	0.99	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	7,507	69.6	F	1.11	F(0)	7,526	70.3	F	1.11	F(0)	0.00	No	8,259	114.8	F	1.22	F(0)	8,278	116.8	F	1.23	F(0)	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	9,396	56.4	F	1.04	F(0)	9,414	56.7	F	1.05	F(0)	0.01	No	9,201	53.3	F	1.02	F(0)	9,221	53.6	F	1.02	F(0)	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,932	30.5	D	-		8,948	30.5	D	-		-	No	9,586	33.9	D	-		9,604	34.0	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,066	36.9	E	0.86	D	8,078	36.9	E	0.86	D	0.00	No	8,990	45.7	F	0.96	E	9,005	45.9	F	0.96	E	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	8,146	37.5	E	0.87	D	8,157	37.6	E	0.87	D	0.00	No	9,796	56.9	F	1.04	F(0)	9,810	57.1	F	1.04	F(0)	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	11,802	51.4	F	1.00	F(0)	11,802	51.4	F	1.00	F(0)	0.00	No	8,221	27.3	D	-		8,221	27.3	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	9,515	26.1	D	-		9,515	26.1	D	-		-	No	8,043	21.7	C	-		8,043	21.7	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Table 3.6-64: 2026 NEPA Baseline Compared to 2026 With Alternative 3 - Freeway Analysis—P.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			2026 NEPA Baseline					2026 Alternative 3					Change in D/C	Sign. Impt?	2026 NEPA Baseline					2026 Alternative 3					Change in D/C	Sign. Impt?
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS		
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,163	42.8	E	0.89	D	4,196	43.4	E	0.89	D	0.01	No	3,222	30.8	D	-		3,235	31.0	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,706	10.9	A	-		1,733	11.1	B	-		-	No	1,605	10.2	A	-		1,625	10.4	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,631	18.7	C	-		4,651	18.8	C	-		-	No	5,235	21.2	C	-		5,242	21.2	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,698	27.9	D	-		6,709	28.0	D	-		-	No	7,988	26.3	D	-		7,994	26.4	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	9,867	35.5	E	0.84	D	9,873	35.5	E	0.84	D	0.00	No	10,761	41.7	E	0.92	D	10,764	41.7	E	0.92	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,434	34.8	D	-		5,466	35.1	E	0.81	D	-	No	5,839	38.3	E	0.87	D	5,864	38.6	E	0.87	D	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	7,826	38.6	E	0.87	D	7,857	38.8	E	0.87	D	0.00	No	6,457	30.9	D	-		6,482	31.0	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	7,986	26.3	D	-		8,013	26.4	D	-		-	No	6,356	20.6	C	-		6,381	20.7	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,156	37.6	E	0.87	D	8,176	37.8	E	0.87	D	0.00	No	6,503	26.9	D	-		6,520	27.0	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,198	37.9	E	0.87	D	8,217	38.1	E	0.87	D	0.00	No	5,997	24.4	C	-		6,013	24.5	C	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	9,712	34.6	D	-		9,712	34.6	D	-		-	No	10,984	43.5	E	0.93	E	10,984	43.5	E	0.93	E	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,920	18.7	C	-		6,920	18.7	C	-		-	No	8,447	22.8	C	-		8,447	22.8	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-65: 2038 NEPA Baseline Compared to 2038 With Alternative 3 - Freeway Analysis—A.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			2038 NEPA Baseline					2038 Alternative 3						2038 NEPA Baseline					2038 Alternative 3					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,365	47.0	F	0.93	D	4,397	47.7	F	0.94	E	0.01	No	3,602	34.6	D	-		3,623	34.9	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	2,180	13.9	B	-		2,200	14.0	B	-		-	No	2,964	18.9	C	-		3,001	19.1	C	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	7,336	31.6	D	-		7,353	31.7	D	-		-	No	6,302	25.9	C	-		6,315	26.0	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	9,889	58.5	F	1.05	F(0)	9,899	58.7	F	1.05	F(0)	0.00	No	8,407	28.1	D	-		8,417	28.1	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,533	39.9	E	0.90	D	10,540	40.0	E	0.90	D	0.00	No	11,957	53.2	F	1.02	F(0)	11,962	53.3	F	1.02	F(0)	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	7,865	85.5	F	1.17	F(0)	7,899	87.5	F	1.17	F(0)	0.00	No	8,784	213.8	F	1.30	F(0)	8,819	227.2	F	1.31	F(0)	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	10,029	70.2	F	1.11	F(0)	10,061	71.1	F	1.12	F(0)	0.01	No	9,583	59.9	F	1.06	F(0)	9,620	60.6	F	1.07	F(0)	0.01	No
#8 I-710	North of Alondra Boulevard [1]	11,750	9,556	33.7	D	-		9,585	33.9	D	-		-	No	10,226	37.8	E	0.87	D	10,260	38.0	E	0.87	D	0.00	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,567	41.3	E	0.91	D	8,589	41.5	E	0.91	D	0.00	No	9,532	52.7	F	1.01	F(0)	9,559	53.1	F	1.02	F(0)	0.01	No
#10 I-710	North of Florence Avenue[1]	9,400	8,545	41.0	E	0.91	D	8,565	41.2	E	0.91	D	0.00	No	10,645	75.4	F	1.13	F(0)	10,671	76.1	F	1.14	F(0)	0.01	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,741	41.5	E	0.91	D	10,741	41.5	E	0.91	D	0.00	No	8,205	27.2	D	-		8,205	27.2	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	8,650	23.4	C	-		8,650	23.4	C	-		-	No	7,511	20.3	C	-		7,511	20.3	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Table 3.6-66: 2038 NEPA Baseline Compared to 2038 With Alternative 3 - Freeway Analysis—P.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			2038 NEPA Baseline					2038 Alternative 3							2038 NEPA Baseline					2038 Alternative 3					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,585	52.8	F	0.98	E	4,634	54.3	F	0.99	E	0.01	No	3,277	31.4	D	-		3,298	31.6	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	2,079	13.3	B	-		2,122	13.5	B	-		-	No	1,870	11.9	B	-		1,904	12.1	B	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	5,232	21.2	C	-		5,263	21.3	C	-		-	No	5,460	22.1	C	-		5,473	22.2	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,809	28.5	D	-		6,827	28.6	D	-		-	No	8,089	26.7	D	-		8,099	26.8	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	9,976	36.2	E	0.85	D	9,986	36.2	E	0.85	D	0.00	No	10,814	42.1	E	0.92	D	10,820	42.1	E	0.92	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,476	35.2	E	0.81	D	5,533	35.6	E	0.82	D	0.01	No	6,020	40.2	E	0.89	D	6,066	40.7	E	0.90	D	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,059	40.4	E	0.90	D	8,114	40.9	E	0.90	D	0.00	No	6,600	31.6	D	-		6,645	31.8	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,550	28.7	D	-		8,599	28.9	D	-		-	No	6,790	22.0	C	-		6,835	22.1	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,462	40.3	E	0.90	D	8,499	40.6	E	0.90	D	0.00	No	6,668	27.8	D	-		6,699	27.9	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,566	41.2	E	0.91	D	8,601	41.6	E	0.91	D	0.00	No	6,187	25.3	C	-		6,216	25.5	C	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	9,687	34.4	D	-		9,687	34.4	D	-		-	No	11,211	45.5	F	0.95	E	11,211	45.5	F	0.95	E	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,735	18.2	C	-		6,735	18.2	C	-		-	No	8,082	21.8	C	-		8,082	21.8	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Impact TRANS-5 (For Informational Purposes): Alternative 3 operations would not cause a significant impact in vehicular delay at at-grade railroad crossings within the Alternative 3 vicinity or in the region.

Based on the analysis of 2038 trains under the proposed Project, vehicular delays at at-grade crossings east of the Alameda Corridor would not exceed the thresholds of significance. Alternative 3 would result in less throughput than the proposed Project and direct intermodal rail volumes would form 40 percent of the throughput (this percentage is the same as the proposed Project), therefore, this alternative would result in fewer daily trains and less vehicular delays at at-grade crossing crossings than the proposed Project, which did not result in a substantial rail-related impact.

Within the Port, there are three study area at-grade rail crossings of the Earle Street Lead track of the Alameda Corridor Subdivision, which would experience project-related traffic. Terminal Way, Cannery Street, and Earle Street serve Terminal Island traffic and carry little through traffic. The three at-grade rail crossings listed below are located on spur lines downstream of the on-dock yard, and do not experience trains entering or exiting TICTF to and from the north. Because of the low train volumes on the spur lines, these at-grade rail crossings do not experience vehicular delays. All three crossings have gated warning systems:

- Terminal Way west of Earle Street: CPUC Crossing ID: LA-3524, DOT Number: 811372G
- Cannery Street west of Earle Street: CPUC Crossing ID: LA-2617, DOT Number: 811503H
- Earle Street south of Cannery Street: CPUC Crossing ID: LA-3607, DOT Number: 927844A

In addition, as with the proposed Project, Alternative 3 is not expected to result in significant secondary impacts (i.e., related to air, noise, and public services) related to increased vehicular delay at at-grade railroad crossings.

CEQA Impact Determination (For Informational Purposes)

Alternative 3 would handle less throughput and generate less daily train trips than the proposed Project. Because the proposed Project would not result in a significant impact on grade crossing delays relative to the CEQA baseline, neither would Alternative 3. Therefore, Alternative 3 would not result in substantial vehicular delays are at-grade crossings.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because there are no mainline at-grade railroad crossings between the Project site and the greater Los Angeles intermodal railyards (i.e., BNSF's Hobart Yard, UP's ELA), there are no mainline rail-related at-grade impacts in this area. Further, impacts beyond these railyard locations are outside of the NEPA/federal scope of analysis and therefore not evaluated under NEPA. Because potential vehicle delay impacts at mainline at-grade railroad crossings beyond these geographical limits fall outside of the federal control and responsibility and scope of analysis (see Section 2.8 in Chapter 2, Project Description), there are no direct or indirect impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Because the impacts are outside of federal control and responsibility there are no direct or indirect impacts under NEPA.

Impact TRANS-6: Alternative 3 would not substantially increase transportation hazards due to a design feature.

Alternative 3 includes the closure (vacation) of Terminal Way west of Earle Street and Barracuda Street north of Cannery Street. Connections to parcels adjacent to S. Seaside Avenue would be maintained by the existing Cannery Street, which is a parallel roadway approximately 400 feet to the south of Terminal Way. Vacation of Terminal Way and improvement of Cannery Street under Alternative 3 would be as described above under the proposed Project.

CEQA Impact Determination

Under Alternative 3, the Port would follow the City of Los Angeles' street vacation procedures for the vacation of Terminal Way west of Earle Street and Barracuda Street north of Cannery Street. Therefore, Alternative 3 wound not substantially increase transportation hazards due to a design feature and cause impacts under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

The Port would follow the City of Los Angeles' street vacation procedures for the vacation of Terminal Way west of Earle Street and Barracuda Street north of Cannery Street. In addition, both Alternative 3 and the NEPA baseline include backlands expansion, the vacation of Terminal Way and rerouting of traffic to Cannery Street, and gate relocation. Therefore, Alternative 3 wound not increase transportation hazards due to a design feature and would not result in an impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Alternative 4 – Reduced Project: No Backland Improvements

Under Alternative 4, there would be two operating berths after construction, similar to the proposed Project. This alternative would require the same dredging as the proposed Project. This alternative would accommodate the largest vessels (16,000 TEUs) at Berths 226-229. The new design depth at Berths 230-232 would be capable of handling vessels up to 10,000 TEUs. Based on the throughput projections, this alternative is expected to operate at its capacity of approximately 2,115,133 TEUs by 2038, as compared to the proposed Project, which is expected to operate at a capacity of approximately 2,379,525 TEUs. Under Alternative 4, the terminal would handle less cargo than the proposed Project. However, 208 vessels would call on the terminal in 2038, to the same as the proposed Project.

Under Alternative 4, the terminal's 2038 throughput is projected to result in an annual average of 4.4 trains per day, and an average of 4.9 trains per day during the peak month (on-dock and off-dock direct intermodal type). This is an increase in annual average of 2.8 trains per day, and an increase in average of 3.1 trains per day during the peak month, over the baseline year of 2013. The volume of cargo passing through the Everport Container Terminal's portion of the TICTF on-dock railyard is projected to increase from 230,227 TEUs in 2013 to 606,341 TEUs by 2038. The existing TICTF under Alternative 4 is projected to have sufficient capacity to handle the full amount of anticipated demand for on-dock rail facilities associated with the maximum terminal throughput of 2,115,133 TEUs. The volume of cargo passing through off-dock railyards is projected to increase from 53,791 TEUs in 2013 to 239,712 TEUs by 2038. The percentage of terminal throughput that would be handled by on-dock rail is expected to increase from approximately 18.6 percent in 2013 to up to approximately 28.7 percent in 2038 under this alternative and off-dock railyard from approximately 4.3 percent in 2013 to approximately 11.3 percent in 2038.

Impact TRANS-1: Alternative 4 construction would not result in a short-term, temporary increase in truck and auto traffic.

The proposed construction activities for Alternative 4would be less than those of the proposed Project (Alternative 4 would not include backlands expansion and improvements). Construction activities could result in temporary increases in traffic volumes and roadway disruptions in the vicinity of the construction areas.

CEQA Impact Determination

Given that Alternative 4 would involve less construction than the proposed Project (which did not result in significant construction traffic impacts relative to the CEQA baseline), and that most of the traffic associated with construction would occur outside of the peak periods, Alternative 4 would not result in a significant short-term, temporary increase in truck and auto traffic. Therefore, impacts for Alternative 4 would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 4 would include in-water construction that is not included in the NEPA baseline, but would not include backlands development that is included in the NEPA baseline. Alternative 4 would involve less construction than the proposed Project (which did not result in significant construction traffic impacts relative to the NEPA baseline). Most of the traffic associated with construction would occur outside of the peak periods; therefore, Alternative 4 would not result in a significant short-term, temporary increase in truck and auto traffic under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRANS-2: Long-term vehicular traffic associated with Alternative 4 would significantly impact a study location's volume/capacity ratio or level of service.

Traffic conditions with Alternative 4 were compared to the applicable baseline to determine the proposed Project's incremental impacts, and then the incremental impacts were assessed using the significance criteria described in Section 3.6.4.5.

CEQA Impact Determination

Table 3.6-67 summarizes the trip generation for the CEQA baseline and Alternative 4. Traffic conditions with Alternative 4 were estimated by adding traffic resulting from the improved container terminal and associated throughput growth to the CEQA baseline.

Table 3.6-67: Trip Generation Analysis Assumptions and Input Data for Everport Container Terminal: Year 2038 – Alternative 4

Time Period	Vehicle Type	CEQA Baseline Conditions			2038Alternative 4		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	117	62	179	179	145	324
	Truck	121	48	169	338	311	649
M.D. Peak Hour	Auto	44	69	1113	63	100	163
	Truck	178	162	340	242	228	470
P.M. Peak Hour	Auto	183	285	469	180	379	559
	Truck	113	110	222	124	140	264

Table 3.6-71 below summarizes the CEQA baseline plus Alternative 4 intersection operating conditions at each study intersection. The CEQA baseline and with-project intersection operating conditions were compared to determine the Alternative 4 regional impacts, and then the impacts were assessed using the appropriate significance criteria described in Section 3.6.4.5.

Based on the results of the traffic study as presented in Table 3.6-71 and worksheets set forth in Appendix E2, Alternative 4 would not result in significant circulation system impacts at any study intersection relative to CEQA baseline conditions.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant

NEPA Impact Determination

Traffic conditions with Alternative 4 were estimated by adding traffic resulting from the improved container terminal and associated throughput growth to the NEPA baseline. The evaluation assumptions described under Impact TRANS-2 would apply.

Tables 3.6-68, 3.6-69, and 3.6-70 summarize the trip generation for the NEPA baseline and Alternative 4 conditions for 2019, 2026, and 2038 respectively.

Table 3.6-68: Trip Generation Analysis Alternative 4 Assumptions and Input Data for Everport Container Terminal: Year 2019

Time Period	Vehicle Type	2019 NEPA Baseline Conditions			2019 Alternative 4		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	121	64	185	118	63	180
	Truck	125	49	174	120	47	168
M.D. Peak Hour	Auto	45	71	116	44	69	113
	Truck	183	167	350	176	161	336
P.M. Peak Hour	Auto	189	294	483	185	287	472
	Truck	116	113	230	112	109	221

Table 3.6-69: Trip Generation Analysis Alternative 4 Assumptions and Input Data for Everport Container Terminal: Year 2026

Time Period	Vehicle Type	2026 NEPA Baseline Conditions			2026 Alternative 4		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	132	106	238	147	119	267
	Truck	219	198	417	253	229	481
M.D. Peak Hour	Auto	49	76	125	53	84	137
	Truck	156	146	302	180	168	348
P.M. Peak Hour	Auto	150	291	441	160	321	481
	Truck	81	89	170	93	103	196

Table 3.6-70: Trip Generation Analysis Alternative 4 Assumptions and Input Data for Everport Container Terminal: Year 2038

Time Period	Vehicle Type	2038 NEPA Baseline Conditions			2038 Alternative 4		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	159	129	288	179	145	324
	Truck	276	253	529	338	311	649
M.D. Peak Hour	Auto	57	90	147	63	100	163
	Truck	197	185	382	242	228	470
P.M. Peak Hour	Auto	167	342	509	180	379	559
	Truck	101	113	214	124	140	264

Tables 3.6-72, 3.6-73, and 3.6-74 summarize the intersection operating conditions for the NEPA baseline and Alternative 4 for 2019, 2026, and 2038 respectively.

Alternative 4 would result in the following significant impacts under NEPA based on the significance criteria described in Section 3.6.4.5 (the V/C increment for the given future intersection LOS was exceeded):

Year 2019

- No Significant Impacts

Year 2026

- Study Intersection #14: Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps (A.M. peak hour)

Year 2038

- Study Intersection #14: Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps (A.M. and P.M. peak hours)

Mitigation Measures

The westbound approach of the Ferry Street at State Route (SR)-47 (Terminal Island Freeway)/Seaside Avenue Ramps intersection is controlled by Caltrans, rather than the City of Los Angeles. Because of this, no mitigation is within the Port's control that that could reduce the intersection impact to a less than significant level under NEPA.

Residual Impacts

Impacts would remain significant and unavoidable.

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Table 3.6-71: Intersection Level of Service Analysis—CEQA Baseline Compared to 2038 With Alternative 4

Int. #	Study Intersection	CEQA Baseline						2038 With Alternative 4						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	C	0.764	A	0.579	B	0.679	C	0.766	A	0.578	B	0.679	0.002	-0.001	0.000	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.468	A	0.472	A	0.529	A	0.468	A	0.473	A	0.529	0.000	0.001	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	B	0.621	A	0.589	B	0.697	B	0.621	A	0.588	B	0.697	0.000	-0.001	0.000	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.291	A	0.249	A	0.395	A	0.292	A	0.249	A	0.397	0.001	0.000	0.002	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.069	A	0.198	A	0.214	A	0.070	A	0.198	A	0.213	0.001	0.000	-0.001	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.513	B	0.632	B	0.673	A	0.515	B	0.633	B	0.669	0.002	0.001	-0.004	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	A	0.347	A	0.402	A	0.486	A	0.348	A	0.403	A	0.488	0.001	0.001	0.002	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	A	0.200	A	0.102	A	0.130	A	0.200	A	0.104	A	0.132	0.000	0.002	0.002	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.368	A	0.288	A	0.269	A	0.373	A	0.288	A	0.273	0.005	0.000	0.004	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.400	A	0.301	A	0.278	A	0.408	A	0.309	0.003	0.008	0.008	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.331	A	0.265	A	0.269	A	0.337	A	0.265	A	0.271	0.006	0.000	0.002	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.302	A	0.275	A	0.280	A	0.306	A	0.281	0.005	0.004	0.006	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	A	0.395	A	0.341	A	0.518	A	0.397	A	0.337	A	0.517	0.002	-0.004	-0.001	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	A	0.259	A	0.243	A	0.317	A	0.277	A	0.253	A	0.336	0.018	0.010	0.019	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.329	A	0.147	A	0.108	A	0.354	A	0.171	A	0.118	0.025	0.024	0.010	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.100	A	0.288	A	0.180	A	0.150	A	0.397	A	0.256	0.050	0.109	0.076	No	No	No
17	Earle Street at Terminal Way [2]	A	0.098	A	0.138	A	0.161	A	0.122	A	0.195	A	0.238	0.024	0.057	0.077	No	No	No
18	Earle Street at Cannery Street [2]	A	0.111	A	0.115	A	0.069	A	0.111	A	0.115	A	0.069	0.000	0.000	0.000	No	No	No

Notes:
[1] City of Carson intersection analyzed using ICU methodology according to City standards.
[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.
[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-72: Intersection Level of Service Analysis—2019 NEPA Baseline Compared to 2019 With Alternative 4

Int. #	Study Intersection	2019 NEPA Baseline						2019 With Alternative 4						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	F	1.011	B	0.639	F	1.006	F	1.011	B	0.640	F	1.006	0.000	0.001	0.000	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.533	A	0.490	A	0.599	A	0.533	A	0.492	A	0.599	0.000	0.002	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	D	0.839	B	0.603	E	0.951	D	0.839	B	0.604	E	0.951	0.000	0.001	0.000	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.415	A	0.514	A	0.510	A	0.415	A	0.514	A	0.510	0.000	0.000	0.000	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.381	A	0.467	A	0.494	A	0.381	A	0.467	A	0.494	0.000	0.000	0.000	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.563	B	0.628	E	0.939	A	0.563	B	0.626	E	0.941	0.000	-0.002	0.002	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	B	0.666	B	0.648	E	0.901	B	0.666	B	0.648	E	0.901	0.000	0.000	0.000	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	B	0.605	A	0.410	A	0.543	B	0.605	A	0.410	A	0.541	0.000	0.000	-0.002	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.584	C	0.593	C	0.604	A	0.583	C	0.592	C	0.601	-0.001	-0.001	-0.003	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.498	F	0.884	D	0.766	A	0.498	F	0.882	D	0.763	0.000	-0.002	-0.003	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.467	A	0.491	A	0.497	A	0.466	A	0.491	A	0.496	-0.001	0.000	-0.001	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.409	A	0.468	B	0.552	A	0.408	A	0.466	B	0.549	-0.001	-0.002	-0.003	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	B	0.607	A	0.421	B	0.699	B	0.607	A	0.419	B	0.698	0.000	-0.002	-0.001	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	B	0.679	A	0.581	B	0.661	B	0.677	A	0.577	B	0.652	-0.002	-0.004	-0.009	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.365	A	0.259	A	0.193	A	0.362	A	0.250	A	0.190	-0.003	-0.009	-0.003	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.221	A	0.398	A	0.334	A	0.219	A	0.390	A	0.328	-0.002	-0.008	-0.006	No	No	No
17	Earle Street at Terminal Way [2]	A	0.403	A	0.405	A	0.326	A	0.400	A	0.401	A	0.326	-0.003	-0.004	0.000	No	No	No
18	Earle Street at Cannery Street [2]	A	0.119	A	0.165	A	0.121	A	0.119	A	0.165	A	0.121	0.000	0.000	0.000	No	No	No

Notes:
[1] City of Carson intersection analyzed using ICU methodology according to City standards.
[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.
[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-73: Intersection Level of Service Analysis—2026 NEPA Baseline Compared to 2026 With Alternative 4

Int. #	Study Intersection	2026 NEPA Baseline						2026 With Alternative 4						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	E	0.957	B	0.664	C	0.767	E	0.947	B	0.683	C	0.763	-0.010	0.019	-0.004	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	C	0.757	A	0.590	B	0.623	C	0.761	A	0.592	B	0.622	0.004	0.002	-0.001	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	C	0.761	A	0.545	C	0.711	C	0.758	A	0.544	C	0.718	-0.003	-0.001	0.007	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	C	0.773	A	0.555	A	0.464	C	0.779	A	0.565	A	0.458	0.006	0.010	-0.006	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	C	0.732	A	0.488	A	0.511	C	0.757	A	0.482	A	0.503	0.025	-0.006	-0.008	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	C	0.781	D	0.810	C	0.732	C	0.784	D	0.806	C	0.735	0.003	-0.004	0.003	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	E	0.938	C	0.720	D	0.888	E	0.923	C	0.720	D	0.885	-0.015	0.000	-0.003	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	C	0.790	A	0.447	A	0.512	D	0.800	A	0.446	A	0.514	0.010	-0.001	0.002	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	E	0.990	D	0.699	C	0.679	E	0.988	D	0.699	D	0.684	-0.002	0.000	0.005	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	F	1.279	F	1.060	E	0.856	F	1.269	F	1.057	E	0.861	-0.010	-0.003	0.005	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	C	0.787	B	0.571	A	0.498	C	0.789	B	0.572	B	0.524	0.002	0.001	0.026	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	C	0.754	B	0.564	C	0.630	C	0.759	B	0.564	C	0.632	0.005	0.000	0.002	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	D	0.851	A	0.495	B	0.690	D	0.858	A	0.503	B	0.689	0.007	0.008	-0.001	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	F	1.028	B	0.668	C	0.767	F	1.057	B	0.681	C	0.793	0.029	0.013	0.026	**Yes**	No	No
15	Ferry Street at Terminal Way [2]	A	0.504	A	0.248	A	0.206	A	0.558	A	0.269	A	0.214	0.054	0.021	0.008	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.461	A	0.423	A	0.336	A	0.358	A	0.279	A	0.173	-0.103	-0.144	-0.163	No	No	No
17	Earle Street at Terminal Way [2]	A	0.573	A	0.449	A	0.342	B	0.622	A	0.519	A	0.439	0.049	0.070	0.097	No	No	No
18	Earle Street at Cannery Street [2]	A	0.127	A	0.168	A	0.132	A	0.372	A	0.367	A	0.332	0.245	0.199	0.200	No	No	No

Notes:
[1] City of Carson intersection analyzed using ICU methodology according to City standards.
[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.
[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-74: Intersection Level of Service Analysis—2038 NEPA Baseline Compared to 2038 With Alternative 4

Int. #	Study Intersection	2038 NEPA Baseline						2038 With Alternative 4						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	F	1.007	D	0.816	E	0.936	F	1.008	D	0.815	E	0.937	0.001	-0.001	0.001	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	D	0.815	B	0.618	B	0.670	D	0.818	B	0.617	B	0.670	0.003	-0.001	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	D	0.848	C	0.702	D	0.823	D	0.848	C	0.701	D	0.824	0.000	-0.001	0.001	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	D	0.875	B	0.609	A	0.532	D	0.873	B	0.613	A	0.532	-0.002	0.004	0.000	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	D	0.824	A	0.542	A	0.578	D	0.822	A	0.541	A	0.577	-0.002	-0.001	-0.001	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	D	0.853	D	0.877	D	0.847	D	0.855	D	0.880	D	0.844	0.002	0.003	-0.003	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	F	1.047	D	0.884	E	0.976	F	1.043	D	0.867	E	0.973	-0.004	-0.017	-0.003	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	D	0.858	A	0.483	A	0.565	D	0.859	A	0.484	A	0.567	0.001	0.001	0.002	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	F	1.095	E	0.823	E	0.802	F	1.100	E	0.829	E	0.808	0.005	0.006	0.006	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	F	1.490	F	1.248	F	1.017	F	1.493	F	1.255	F	1.025	0.003	0.007	0.008	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	D	0.844	C	0.624	B	0.559	D	0.850	C	0.625	B	0.561	0.006	0.001	0.002	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	D	0.850	C	0.647	D	0.725	D	0.855	C	0.651	D	0.731	0.005	0.004	0.006	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	Not an Intersection (Navy Way / Seaside Interchange Improvement)																	
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	F	1.218	D	0.816	E	0.958	F	1.235	D	0.826	E	0.977	0.017	0.010	0.019	**Yes**	No	**Yes**
15	Ferry Street at Terminal Way [2]	A	0.545	A	0.347	A	0.141	A	0.569	A	0.355	A	0.147	0.024	0.008	0.006	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.459	A	0.420	A	0.335	A	0.379	A	0.295	A	0.183	-0.080	-0.125	-0.152	No	No	No
17	Earle Street at Terminal Way [2]	A	0.566	A	0.440	A	0.353	B	0.624	A	0.543	A	0.426	0.058	0.103	0.073	No	No	No
18	Earle Street at Cannery Street [2]	A	0.136	A	0.171	A	0.147	A	0.389	A	0.372	A	0.348	0.253	0.201	0.201	No	No	No

Notes:
[1] City of Carson intersection analyzed using ICU methodology according to City standards.
[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.
[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Impact TRANS-3: Alternative 4 operations would not cause a significant increase in related public transit use resulting from an increase in on-site employees.

The increase in use of public transit for work-related trips from operation of Alternative 4 would be negligible. Intermodal facilities generate extremely low transit demand for several reasons. The primary reason is that terminal workers generally do not use public transit due to 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 transit usage. In addition, parking at the Port is readily available and free for employees, which does not encourage workers to utilize public transit. Finally, although there are 17 existing transit routes that serve the general area surrounding the project site, none of the existing routes stop within one mile of the terminal.

CEQA Impact Determination

Based on the analysis above, impacts due to additional demand on local transit services would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 4 would result in a higher employment level compared to the NEPA baseline due to increased throughput operations (but less than the proposed Project), but as discussed above, the increase in use of public transit for work-related trips would be negligible. Therefore, impacts would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRANS-4: Alternative 4 operations would not significantly increase freeway congestion.

A traffic impact analysis is required at the following locations, according to the CMP, TIA Guidelines (Metro, 2010):

- CMP arterial monitoring intersections, including freeway on-ramp or off-ramp, where the proposed Project would add 50 or more trips during either the A.M. or P.M. weekday peak hours; and

- CMP freeway monitoring locations where the proposed Project would add 150 or more trips during either the A.M. or P.M. weekday peak hours.

CEQA Impact Determination

Alternative 4 would result in additional truck trips on the surrounding freeway system. Tables 3.6-75 and 3.6-76 summarize the change to freeway monitoring locations during A.M. and P.M. peak hours, respectively due to Alternative 4.

The results of the analysis indicate that Alternative 4 would not cause an increase of 0.02 or more in the D/C ratio at any of the CMP freeway monitoring locations and/or freeway analysis links that result in LOS F under CEQA baseline and future CEQA baseline conditions; therefore, no further freeway system analysis is required at those locations. Alternative 4 would not conflict the CMP.

Based on the above, traffic impacts on the freeway system would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 4 would result in additional truck trips on the surrounding freeway system. Tables 3.6-77 through 3.6-82 summarize the change to freeway monitoring locations during A.M. and P.M. peak hours, respectively due to Alternative 4.

The results of the analysis indicate that Alternative 4 would not cause an increase of 0.02 or more in the D/C ratio at any of the CMP freeway monitoring locations and/or freeway analysis links that result in LOS F; therefore, no further freeway system analysis is required at those locations. Alternative 4 would not conflict the CMP. Consequently, traffic impacts on the freeway system would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Table 3.6-75: CEQA Baseline Compared to Alternative 4 - 2038 Freeway Analysis—A.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			CEQA Baseline					2038 Alternative 4						CEQA Baseline					2038 Alternative 4					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	1,876	18.0	B	-		1,898	18.2	C	-		-	No	2,235	21.4	B	-		2,250	21.5	C	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,119	7.1	A	-		1,133	7.2	A	-		-	No	922	5.9	A	-		947	6.0	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	3,771	15.3	B	-		3,782	15.3	B	-		-	No	5,096	20.6	B	-		5,105	20.7	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,352	26.1	D	-		6,359	26.2	D	-		-	No	8,422	28.1	D	-		8,429	28.2	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,565	40.2	E	0.90	D	10,570	40.2	E	0.90	D	0.00	No	9,265	32.1	E	0.79	D	9,269	32.2	D	0.79	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	6,442	45.4	F	0.95	E	6,466	45.8	F	0.96	E	0.00	No	6,545	47.0	F	0.97	E	6,570	47.3	F	0.97	E	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	7,998	39.9	E	0.89	D	8,021	40.1	E	0.89	D	0.00	No	7,617	37.1	E	0.85	D	7,642	37.3	E	0.85	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,025	26.5	D	-		8,044	26.6	D	-		-	No	7,631	24.9	D	-		7,654	25.0	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	7,932	35.8	E	0.84	D	7,947	35.9	E	0.85	D	0.00	No	7,376	31.9	E	0.78	D	7,395	32.0	D	0.79	D	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	8,535	41.0	E	0.91	D	8,549	41.1	E	0.91	D	0.00	No	7,518	32.8	E	0.80	D	7,536	33.0	D	0.80	D	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	6,587	21.3	C	-		6,587	21.3	C	-		-	No	9,895	35.7	C	-		9,895	35.7	E	0.84	D	-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,619	17.9	B	-		6,619	17.9	B	-		-	No	8,384	22.7	B	-		8,385	22.7	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-76: CEQA Baseline Compared to Alternative 4 - 2038 Freeway Analysis—P.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			CEQA Baseline					2038 Alternative 4							CEQA Baseline					2026 Alternative 4						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	2,764	26.4	D	-		2,798	26.8	D	-		-	No	2,759	26.4	D	-		2,774	26.5	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,173	7.5	A	-		1,203	7.7	A	-		-	No	997	6.4	A	-		1,021	6.5	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,678	18.9	C	-		4,700	19.0	C	-		-	No	3,302	13.4	B	-		3,311	13.4	B	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	7,686	34.0	D	-		7,698	34.1	D	-		-	No	5,699	18.5	C	-		5,706	18.5	C	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,440	39.3	E	0.89	D	10,447	39.3	E	0.89	D	0.00	No	9,002	30.8	D	-		9,006	30.8	D	-		-	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,819	38.1	E	0.86	D	5,858	38.5	E	0.87	D	0.01	No	5,659	36.7	E	0.84	D	5,691	36.9	E	0.84	D	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	6,785	32.5	D	-		6,823	32.6	D	-		-	No	7,526	36.5	E	0.84	D	7,557	36.7	E	0.84	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	6,491	21.0	C	-		6,525	21.1	C	-		-	No	7,868	25.9	C	-		7,899	26.0	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	6,466	26.7	D	-		6,491	26.8	D	-		-	No	7,838	35.1	E	0.83	D	7,860	35.3	E	0.84	D	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	5,550	22.5	C	-		5,574	22.6	C	-		-	No	7,824	35.0	D	-		7,844	35.1	E	0.83	D	-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,127	37.1	E	0.86	D	10,127	37.1	E	0.86	D	0.00	No	8,669	29.2	D	-		8,669	29.2	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	7,780	21.0	C	-		7,780	21.0	C	-		-	No	6,032	16.3	B	-		6,032	16.3	B	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-77: 2019 NEPA Baseline Compared to 2019 With Alternative 4 - Freeway Analysis—A.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			2019 NEPA Baseline					2019 Alternative 4							2019 NEPA Baseline					2019 Alternative 4					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	3,508	33.6	D	-		3,508	33.6	D	-		-	No	3,199	30.6	D	-		3,199	30.6	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	642	4.1	A	-		642	4.1	A	-		-	No	1,422	9.1	A	-		1,422	9.1	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	5,565	22.6	C	-		5,565	22.6	C	-		-	No	4,879	19.8	C	-		4,879	19.8	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	8,975	45.5	F	0.95	E	8,975	45.5	F	0.95	E	0.00	No	7,372	24.0	C	-		7,372	24.0	C	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,531	39.9	E	0.90	D	10,531	39.9	E	0.90	D	0.00	No	11,295	46.2	F	0.96	E	11,295	46.2	F	0.96	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,555	35.8	E	0.82	D	5,555	35.8	E	0.82	D	0.00	No	7,020	55.8	F	1.04	F(0)	7,020	55.8	F	1.04	F(0)	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,045	40.3	E	0.89	D	8,045	40.3	E	0.89	D	0.00	No	8,161	41.3	E	0.91	D	8,161	41.3	E	0.91	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,181	27.1	D	-		8,181	27.1	D	-		-	No	9,080	31.2	D	-		9,080	31.2	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	7,639	33.7	D	-		7,639	33.7	D	-		-	No	8,614	41.7	E	0.92	D	8,614	41.7	E	0.92	D	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	7,940	35.9	E	0.84	D	7,940	35.9	E	0.84	D	0.00	No	9,771	56.5	F	1.04	F(0)	9,771	56.5	F	1.04	F(0)	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	12,113	55.1	F	1.03	F(0)	12,113	55.1	F	1.03	F(0)	0.00	No	8,624	29.0	D	-		8,624	29.0	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	9,884	27.3	D	-		9,884	27.3	D	-		-	No	8,460	22.9	C	-		8,460	22.9	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-78: 2019 NEPA Baseline Compared to 2019 With Alternative 4 - Freeway Analysis—P.M. Peak

			Northbound / Eastbound												Southbound / Westbound										
			2019 NEPA Baseline					2019 Alternative 4							2019 NEPA Baseline					2019 Alternative 4						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,207	43.6	E	0.90	D	4,207	43.6	E	0.90	D	0.00	No	3,687	35.6	E	0.78	D	3,687	35.6	E	0.78	D	0.00	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,466	9.4	A	-		1,466	9.4	A	-		-	No	1,704	10.9	A	-		1,704	10.9	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,629	18.7	C	-		4,629	18.7	C	-		-	No	5,500	22.3	C	-		5,500	22.3	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,802	28.5	D	-		6,802	28.5	D	-		-	No	8,315	27.7	D	-		8,315	27.7	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,188	37.5	E	0.87	D	10,188	37.5	E	0.87	D	0.00	No	11,048	44.0	E	0.94	E	11,048	44.0	E	0.94	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,441	34.9	D	-		5,440	34.9	D	-		-	No	6,136	41.5	E	0.91	D	6,136	41.5	E	0.91	D	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,102	40.8	E	0.90	D	8,101	40.8	E	0.90	D	0.00	No	6,782	32.4	D	-		6,782	32.4	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,656	29.2	D	-		8,656	29.2	D	-		-	No	7,172	23.3	C	-		7,172	23.3	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,567	41.3	E	0.91	D	8,567	41.3	E	0.91	D	0.00	No	6,870	28.9	D	-		6,870	28.9	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,710	42.7	E	0.93	D	8,710	42.7	E	0.93	D	0.00	No	6,498	26.9	D	-		6,498	26.9	D	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,400	39.0	E	0.89	D	10,400	39.0	E	0.89	D	0.00	No	11,955	53.2	F	1.02	F(0)	11,955	53.2	F	1.02	F(0)	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	7,720	20.8	C	-		7,720	20.8	C	-		-	No	9,247	25.2	C	-		9,247	25.2	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

Table 3.6-79: 2026 NEPA Baseline Compared to 2026 With Alternative 4 - Freeway Analysis—A.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			2026 NEPA Baseline					2026 Alternative 4						2026 NEPA Baseline					2026 Alternative 4					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,108	41.8	E	0.87	D	4,123	42.0	E	0.88	D	0.01	No	3,307	31.6	D	-		3,316	31.7	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,788	11.4	B	-		1,796	11.5	B	-		-	No	2,599	16.6	B	-		2,615	16.7	B	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	6,746	28.2	D	-		6,752	28.2	D	-		-	No	5,653	22.9	C	-		5,658	22.9	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	9,688	55.1	F	1.03	F(0)	9,692	55.2	F	1.03	F(0)	0.00	No	8,023	26.5	D	-		8,027	26.5	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,651	40.8	E	0.91	D	10,653	40.8	E	0.91	D	0.00	No	11,678	50.1	F	0.99	E	11,680	50.1	F	0.99	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	7,507	69.6	F	1.11	F(0)	7,520	70.1	F	1.11	F(0)	0.00	No	8,259	114.8	F	1.22	F(0)	8,272	116.1	F	1.23	F(0)	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	9,396	56.4	F	1.04	F(0)	9,408	56.6	F	1.05	F(0)	0.01	No	9,201	53.3	F	1.02	F(0)	9,214	53.5	F	1.02	F(0)	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,932	30.5	D	-		8,943	30.5	D	-		-	No	9,586	33.9	D	-		9,598	33.9	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,066	36.9	E	0.86	D	8,074	36.9	E	0.86	D	0.00	No	8,990	45.7	F	0.96	E	9,000	45.8	F	0.96	E	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	8,146	37.5	E	0.87	D	8,153	37.6	E	0.87	D	0.00	No	9,796	56.9	F	1.04	F(0)	9,805	57.0	F	1.04	F(0)	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	11,802	51.4	F	1.00	F(0)	11,802	51.4	F	1.00	F(0)	0.00	No	8,221	27.3	D	-		8,221	27.3	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	9,515	26.1	D	-		9,515	26.1	D	-		-	No	8,043	21.7	C	-		8,043	21.7	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-80: 2026 NEPA Baseline Compared to 2026 With Alternative 4 - Freeway Analysis—P.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			2026 NEPA Baseline					2026 Alternative 4							2026 NEPA Baseline					2026 Alternative 4					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,163	42.8	E	0.89	D	4,172	42.9	E	0.89	D	0.00	No	3,222	30.8	D	-		3,240	31.0	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,706	10.9	A	-		1,720	11.0	A	-		-	No	1,605	10.2	A	-		1,612	10.3	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,631	18.7	C	-		4,636	18.8	C	-		-	No	5,235	21.2	C	-		5,235	21.2	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,698	27.9	D	-		6,702	27.9	D	-		-	No	7,988	26.3	D	-		8,002	26.4	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	9,867	35.5	E	0.84	D	9,869	35.5	E	0.84	D	0.00	No	10,761	41.7	E	0.92	D	10,783	41.8	E	0.92	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,434	34.8	D	-		5,451	35.0	D	-		-	No	5,839	38.3	E	0.87	D	5,860	38.5	E	0.87	D	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	7,826	38.6	E	0.87	D	7,843	38.7	E	0.87	D	0.00	No	6,457	30.9	D	-		6,470	31.0	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	7,986	26.3	D	-		8,003	26.4	D	-		-	No	6,356	20.6	C	-		6,379	20.7	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,156	37.6	E	0.87	D	8,167	37.7	E	0.87	D	0.00	No	6,503	26.9	D	-		6,503	26.9	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,198	37.9	E	0.87	D	8,209	38.0	E	0.87	D	0.00	No	5,997	24.4	C	-		6,015	24.5	C	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	9,712	34.6	D	-		9,712	34.6	D	-		-	No	10,984	43.5	E	0.93	E	10,988	43.5	E	0.94	E	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,920	18.7	C	-		6,920	18.7	C	-		-	No	8,447	22.8	C	-		8,447	22.8	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

Table 3.6-81: 2038 NEPA Baseline Compared to 2038 With Alternative 4 - Freeway Analysis—A.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			2038 NEPA Baseline					2038 Alternative 4							2038 NEPA Baseline					2038 Alternative 4						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,365	47.0	F	0.93	D	4,387	47.5	F	0.93	E	0.00	No	3,602	34.6	D	-		3,617	34.8	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	2,180	13.9	B	-		2,194	14.0	B	-		-	No	2,964	18.9	C	-		2,990	19.1	C	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	7,336	31.6	D	-		7,347	31.7	D	-		-	No	6,302	25.9	C	-		6,311	25.9	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	9,889	58.5	F	1.05	F(0)	9,896	58.6	F	1.05	F(0)	0.00	No	8,407	28.1	D	-		8,414	28.1	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,533	39.9	E	0.90	D	10,538	40.0	E	0.90	D	0.00	No	11,957	53.2	F	1.02	F(0)	11,961	53.3	F	1.02	F(0)	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	7,865	85.5	F	1.17	F(0)	7,889	86.9	F	1.17	F(0)	0.00	No	8,784	213.8	F	1.30	F(0)	8,808	222.8	F	1.30	F(0)	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	10,029	70.2	F	1.11	F(0)	10,051	70.8	F	1.12	F(0)	0.00	No	9,583	59.9	F	1.06	F(0)	9,608	60.3	F	1.07	F(0)	0.01	No
#8 I-710	North of Alondra Boulevard [1]	11,750	9,556	33.7	D	-		9,576	33.8	D	-		-	No	10,226	37.8	E	0.87	D	10,249	37.9	E	0.87	D	0.00	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,567	41.3	E	0.91	D	8,582	41.4	E	0.91	D	0.00	No	9,532	52.7	F	1.01	F(0)	9,551	53.0	F	1.02	F(0)	0.01	No
#10 I-710	North of Florence Avenue[1]	9,400	8,545	41.0	E	0.91	D	8,559	41.2	E	0.91	D	0.00	No	10,645	75.4	F	1.13	F(0)	10,663	75.9	F	1.13	F(0)	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,741	41.5	E	0.91	D	10,741	41.5	E	0.91	D	0.00	No	8,205	27.2	D	-		8,205	27.2	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	8,650	23.4	C	-		8,650	23.4	C	-		-	No	7,511	20.3	C	-		7,511	20.3	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Table 3.6-82: 2038 NEPA Baseline Compared to 2038 With Alternative 4 - Freeway Analysis—P.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			2038 NEPA Baseline					2038 Alternative 4							2038 NEPA Baseline					2038 Alternative 4						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,585	52.8	F	0.98	E	4,619	53.8	F	0.98	E	0.01	No	3,277	31.4	D	-		3,292	31.5	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	2,079	13.3	B	-		2,109	13.5	B	-		-	No	1,870	11.9	B	-		1,893	12.1	B	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	5,232	21.2	C	-		5,254	21.3	C	-		-	No	5,460	22.1	C	-		5,469	22.1	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,809	28.5	D	-		6,822	28.6	D	-		-	No	8,089	26.7	D	-		8,096	26.8	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	9,976	36.2	E	0.85	D	9,983	36.2	E	0.85	D	0.00	No	10,814	42.1	E	0.92	D	10,818	42.1	E	0.92	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,476	35.2	E	0.81	D	5,515	35.5	E	0.82	D	0.01	No	6,020	40.2	E	0.89	D	6,052	40.5	E	0.90	D	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,059	40.4	E	0.90	D	8,097	40.7	E	0.90	D	0.00	No	6,600	31.6	D	-		6,631	31.7	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,550	28.7	D	-		8,584	28.8	D	-		-	No	6,790	22.0	C	-		6,821	22.1	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,462	40.3	E	0.90	D	8,487	40.5	E	0.90	D	0.00	No	6,668	27.8	D	-		6,689	27.9	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,566	41.2	E	0.91	D	8,590	41.5	E	0.91	D	0.00	No	6,187	25.3	C	-		6,207	25.4	C	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	9,687	34.4	D	-		9,687	34.4	D	-		-	No	11,211	45.5	F	0.95	E	11,211	45.5	F	0.95	E	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,735	18.2	C	-		6,735	18.2	C	-		-	No	8,082	21.8	C	-		8,082	21.8	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Impact TRANS-5 (For Informational Purposes): Alternative 4 operations would not cause a significant impact in vehicular delay at at-grade railroad crossings within the Alternative 4 vicinity or in the region.

Based on the analysis of 2038 trains under the proposed Project, vehicular delays at at-grade crossings east of the Alameda Corridor would not exceed the thresholds of significance. Alternative 4 would result in less throughput than the proposed Project and direct intermodal rail volumes would form 40 percent of the throughput (percentage same as the proposed Project), therefore, this alternative would result in fewer daily trains and shorter vehicular delays at at-grade crossing crossings than the proposed Project.

Within the Port, there are three study area at-grade rail crossings of the Earle Street Lead track of the Alameda Corridor Subdivision, which would experience Project-related traffic. Terminal Way, Cannery Street, and Earle Street serve Terminal Island traffic and carry little through traffic. The three at-grade rail crossings listed below are located on spur lines downstream of the on-dock yard, and do not experience trains entering or exiting TICTF to and from the north. Because of the low train volumes on the spur lines, these at-grade rail crossings do not experience vehicular delays. All three crossings have gated warning systems:

- Terminal Way west of Earle Street: CPUC Crossing ID: LA-3524, DOT Number: 811372G
- Cannery Street west of Earle Street: CPUC Crossing ID: LA-2617, DOT Number: 811503H
- Earle Street south of Cannery Street: CPUC Crossing ID: LA- 3607, DOT Number: 927844A

In addition, as with the proposed Project, Alternative 4 is not expected to result in significant secondary impacts (i.e., related to air, noise, and public services) related to increased vehicular delay at at-grade railroad crossings.

CEQA Impact Determination

Because the proposed Project would not result in a significant impact on grade crossing delays under CEQA, neither would Alternative 4 because Alternative 4 would have less throughput than the proposed Project. Therefore, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because there are no mainline at-grade railroad crossings between the project site and the greater Los Angeles intermodal railyards (i.e., BNSF's Hobart Yard, UP's ELA), there are no mainline rail-related at-grade impacts in this area. Further, such impacts beyond

these railyard locations are outside of the federal scope of analysis and therefore not evaluated under NEPA. Because potential vehicle delay impacts at mainline at-grade railroad crossings beyond these geographical limits fall outside of the federal control and responsibility and scope of analysis (see Section 2.8 in Chapter 2, Project Description), there are no direct or indirect impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Because the impacts are outside of federal control and responsibility there are no direct or indirect impacts under NEPA.

Impact TRANS-6: Alternative 4 would not substantially increase transportation hazards due to a design feature.

Alternative 4 would not include backland expansion onto the 22 acre parcels that contains Terminal Way; therefore, there would be no vacation of Terminal Way or improvements to Cannery Street in this alternative.

CEQA Impact Determination

Under Alternative 4, no roadway alterations to design features would occur, therefore, Alternative 4 wound not substantially increase transportation hazards due to a design feature and cause impacts under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

Under Alternative 4, no roadway alterations to design features would occur, therefore, Alternative 4 wound not substantially increase transportation hazards due to a design feature and cause impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Alternative 5 – Expanded On-Dock Railyard: Wharf and Backland Improvements with an Expanded TICTF

Alternative 5 would be the same as the proposed Project but with an additional on-dock rail track at the TICTF. Under this alternative, there would be two operating berths after construction, similar to the proposed Project. This alternative would require the same

dredging as the proposed Project. This alternative would accommodate the largest vessels (16,000 TEUs) at Berths 226-229. The new design depth at Berths 230-232 would be capable of handling vessels up to 10,000 TEUs. Based on the throughput projections, this alternative is expected to operate at its capacity of approximately 2,379,525 TEUs by 2038, the same as the proposed Project. Under this project alternative, the terminal could handle similar levels of cargo as the proposed Project, but would have added capacity at the TICTF and be able to transport a greater number of containers via on-dock rail than the proposed Project. Under this alternative, 208 vessels would call on the terminal in 2038, the same as the proposed Project.

Under Alternative 5, the terminal's 2038 throughput is projected to result in an annual average of 4.9 trains per day, and an average of 5.5 trains per day during the peak month (on-dock and off-dock direct intermodal type). This is an increase in annual average of 3.3 trains per day, and an increase in average of 3.7 trains per day during the peak month, over the baseline year of 2013. The terminal would have added capacity at the TICTF and be able to transport a greater number of containers via rail than the proposed Project (the additional rail at the TICTF would increase its capacity from 606,341 TEUs to 659,841 TEUs). Under Alternative 5, the volume of cargo passing through the Everport Container Terminal's portion of the TICTF on-dock railyard is projected to increase from 230,227 TEUs in 2013 to 659,841 TEUs by2038). The improved TICTF under Alternative 5 is projected to have sufficient capacity to handle the full amount of anticipated demand for on-dock rail facilities associated with the maximum terminal throughput of 2,379,525 TEUs. The volume of cargo passing through off-dock railyards is projected to increase from 53,791 TEUs in 2013 to 291,969 TEUs by 2038. The percentage of terminal throughput that would be handled by on-dock rail is expected to increase from approximately 18.6 percent in 2013 to approximately 27.7 percent in 2038 under this alternative, and off-dock railyards from approximately 4.3 percent in 2013 to approximately 12.3 percent in 2038.

Impact TRANS-1: Alternative 5 construction would not result in a short-term, temporary increase in truck and auto traffic.

The proposed construction activities for Alternative 5 are similar to those for the proposed Project except that Alternative 5 would include construction of an additional track at the TICTF. Construction activities could result in temporary increases in traffic volumes and roadway disruptions in the vicinity of the construction areas.

CEQA Impact Determination

Given that most of the traffic associated with construction would occur outside of the peak periods, Alternative 5 would not result in a significant short-term, temporary increase in truck and auto traffic. Further, a detailed traffic management plan would be prepared and implemented, as required by LADOT. Impacts for Alternative 5 would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 5 includes construction of elements that are not included in the NEPA baseline. However, given that most of the traffic associated with construction would occur outside of the peak periods, Alternative 5 would not result in a significant short-term, temporary increase in truck and auto traffic. Further, a detailed traffic management plan would be prepared and implemented, as required by LADOT.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRANS-2: Long-term vehicular traffic associated with Alternative 5 would significantly impact a study location's volume/capacity ratio or level of service.

Traffic conditions with Alternative 5 were compared to the applicable baseline to determine the incremental impacts of Alternative 5, and then the incremental impacts were assessed using the significance criteria described in Section 3.6.4.5.

CEQA Impact Determination

Tables 3.6-83 summarizes the trip generation for the CEQA baseline and Alternative 5. Traffic conditions with Alternative 5 were estimated by adding traffic resulting from the improved container terminal and associated throughput growth to the CEQA baseline.

Table 3.6-83: Trip Generation Analysis Assumptions and Input Data for Everport Container Terminal: Year 2038 – Alternative 5

Time Period	Vehicle Type	CEQA Baseline Conditions			2038 Alternative 5		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	117	62	179	179	145	324
	Truck	121	48	169	338	311	649
M.D. Peak Hour	Auto	44	69	1113	63	100	163
	Truck	178	162	340	242	228	470
P.M. Peak Hour	Auto	183	285	469	180	379	559
	Truck	113	110	222	124	140	264

Table 3.6-87 summarizes the CEQA baseline plus Alternative 5 intersection operating conditions at each study intersection. The CEQA baseline and with-project intersection operating conditions were compared to determine the Alternative 5 regional impacts, and then the impacts were assessed using the appropriate significance criteria described in Section 3.6.4.5.

Based on the results of the traffic study as presented in Table 3.6-87 and worksheets in Appendix E2, Alternative 5 would not result in significant circulation system impacts at any study intersection relative to CEQA baseline conditions.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant

NEPA Impact Determination

Traffic conditions with Alternative 5 were estimated by adding traffic resulting from the improved container terminal and associated throughput growth to the NEPA baseline. The evaluation assumptions described under Impact TRANS-2 would apply. Tables 3.6-84, 3.6-85, and 3.6-86 summarize the trip generation for the NEPA baseline and Alternative 5 conditions for 2019, 2026, and 2038 respectively.

Table 3.6-84: Trip Generation Analysis Alternative 5 Assumptions and Input Data for Everport Container Terminal: Year 2019

Time Period	Vehicle Type	2019 NEPA Baseline Conditions			2019 Alternative 5		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	121	64	185	122	65	187
	Truck	125	49	174	127	50	177
M.D. Peak Hour	Auto	45	71	116	46	71	117
	Truck	183	167	350	186	170	355
P.M. Peak Hour	Auto	189	294	483	190	296	487
	Truck	116	113	230	118	115	233

Table 3.6-85: Trip Generation Analysis Alternative 5 Assumptions and Input Data for Everport Container Terminal: Year 2026

Time Period	Vehicle Type	2026 NEPA Baseline Conditions			2026Alternative 5		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	132	106	238	161	131	292
	Truck	219	198	417	283	255	538
M.D. Peak Hour	Auto	49	76	125	57	91	149
	Truck	156	146	302	201	188	389
P.M. Peak Hour	Auto	150	291	441	169	346	515
	Truck	81	89	170	104	115	219

Table 3.6-86: Trip Generation Analysis Alternative 5 Assumptions and Input Data for Everport Container Terminal: Year 2038

Time Period	Vehicle Type	2038 NEPA Baseline Conditions			2038Alternative 5		
		In	Out	Total	In	Out	Total
A.M. Peak Hour	Auto	159	129	288	197	161	358
	Truck	276	253	529	384	353	737
M.D. Peak Hour	Auto	57	90	147	68	110	178
	Truck	197	185	382	275	259	534
P.M. Peak Hour	Auto	167	342	509	192	414	605
	Truck	101	113	214	141	159	301

Tables 3.6-88, 3.6-89, and 3.6-90 summarize the intersection operating conditions for the NEPA baseline and Alternative 5 for 2019, 2026, and 2038 respectively.

Similar to the proposed Project, Alternative 5 would result in the following significant impacts under NEPA based on the significance criteria described in Section 3.6.4.5 (the V/C increment for the given future intersection LOS was exceeded):

Year 2019

- No Significant Impacts

Year 2026

- Study Intersection #14: Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps (A.M. and P.M. peak hours)

Year 2038

- Study Intersection #14: Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps (A.M. and P.M. peak hours)

Mitigation Measures

The westbound approach of the Ferry Street at State Route (SR)-47 (Terminal Island Freeway)/Seaside Avenue Ramps intersection is controlled by Caltrans, rather than the City of Los Angeles. Because of this, no mitigation is within the Port's control that that could reduce the intersection impact to a less than significant level under NEPA.

Residual Impacts

Impacts would remain significant and unavoidable.

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Table 3.6-87: Intersection Level of Service Analysis—CEQA Baseline Compared to 2038 With Alternative 5

Int. #	Study Intersection	CEQA Baseline						2038 With Alternative 5						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	C	0.764	A	0.579	B	0.679	C	0.767	A	0.578	B	0.680	0.003	-0.001	0.001	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.468	A	0.472	A	0.529	A	0.469	A	0.473	A	0.529	0.001	0.001	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	B	0.621	A	0.589	B	0.697	B	0.621	A	0.587	B	0.698	0.000	-0.002	0.001	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.291	A	0.249	A	0.395	A	0.292	A	0.261	A	0.397	0.001	0.012	0.002	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.069	A	0.198	A	0.214	A	0.070	A	0.197	A	0.213	0.001	-0.001	-0.001	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.513	B	0.632	B	0.673	A	0.517	B	0.637	B	0.667	0.004	0.005	-0.006	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	A	0.347	A	0.402	A	0.486	A	0.348	A	0.404	A	0.488	0.001	0.002	0.002	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	A	0.200	A	0.102	A	0.130	A	0.200	A	0.104	A	0.133	0.000	0.002	0.003	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.368	A	0.288	A	0.269	A	0.375	A	0.293	A	0.276	0.007	0.005	0.007	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.400	A	0.301	A	0.281	A	0.412	A	0.315	0.006	0.012	0.014	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.331	A	0.265	A	0.269	A	0.341	A	0.266	A	0.272	0.010	0.001	0.003	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.275	A	0.302	A	0.275	A	0.284	A	0.309	A	0.285	0.009	0.007	0.010	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	A	0.395	A	0.341	A	0.518	A	0.400	A	0.335	A	0.515	0.005	-0.006	-0.003	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	A	0.259	A	0.243	A	0.317	A	0.290	A	0.260	A	0.354	0.031	0.017	0.037	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.329	A	0.147	A	0.108	A	0.373	A	0.189	A	0.126	0.044	0.042	0.018	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.100	A	0.288	A	0.180	Not an Intersection (Internal to Project Site)											
17	Earle Street at Terminal Way [2]	A	0.098	A	0.138	A	0.161	A	0.325	A	0.264	A	0.309	0.227	0.126	0.148	No	No	No
18	Earle Street at Cannery Street [2]	A	0.111	A	0.115	A	0.069	A	0.341	A	0.274	A	0.271	0.230	0.159	0.202	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-88: Intersection Level of Service Analysis—2019 NEPA Baseline Compared to 2019 With Alternative 5

Int. #	Study Intersection	2019 NEPA Baseline						2019 With Alternative 5						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	F	1.011	B	0.639	F	1.006	F	1.011	B	0.639	F	1.006	0.000	0.000	0.000	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	A	0.533	A	0.490	A	0.599	A	0.533	A	0.490	A	0.599	0.000	0.000	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	D	0.839	B	0.603	E	0.951	D	0.839	B	0.603	E	0.951	0.000	0.000	0.000	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	A	0.415	A	0.514	A	0.510	A	0.415	A	0.514	A	0.510	0.000	0.000	0.000	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	A	0.381	A	0.467	A	0.494	A	0.381	A	0.467	A	0.494	0.000	0.000	0.000	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	A	0.563	B	0.628	E	0.939	A	0.563	B	0.628	E	0.938	0.000	0.000	-0.001	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	B	0.666	B	0.648	E	0.901	B	0.666	B	0.648	E	0.901	0.000	0.000	0.000	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	B	0.605	A	0.410	A	0.543	B	0.605	A	0.410	A	0.543	0.000	0.000	0.000	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	A	0.584	C	0.593	C	0.604	A	0.584	C	0.593	C	0.605	0.000	0.000	0.001	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	A	0.498	F	0.884	D	0.766	A	0.498	F	0.884	D	0.766	0.000	0.000	0.000	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	A	0.467	A	0.491	A	0.497	A	0.467	A	0.492	A	0.497	0.000	0.001	0.000	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	A	0.409	A	0.468	B	0.552	A	0.409	A	0.468	B	0.553	0.000	0.000	0.001	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	B	0.607	A	0.421	B	0.699	B	0.607	A	0.421	B	0.699	0.000	0.000	0.000	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	B	0.679	A	0.581	B	0.661	B	0.680	A	0.581	B	0.663	0.001	0.000	0.002	No	No	No
15	Ferry Street at Terminal Way [2]	A	0.365	A	0.259	A	0.193	A	0.366	A	0.261	A	0.193	0.001	0.002	0.000	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.221	A	0.398	A	0.334	Not an Intersection (Internal to Project Site)											
17	Earle Street at Terminal Way [2]	A	0.403	A	0.405	A	0.326	A	0.417	A	0.459	A	0.412	0.014	0.054	0.086	No	No	No
18	Earle Street at Cannery Street [2]	A	0.119	A	0.165	A	0.121	A	0.355	A	0.361	A	0.321	0.236	0.196	0.200	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-89: Intersection Level of Service Analysis—2026 NEPA Baseline Compared to 2026 With Alternative 5

Int. #	Study Intersection	2026 NEPA Baseline						2026 With Alternative 5						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	E	0.957	B	0.664	C	0.767	E	0.959	B	0.662	C	0.768	0.002	-0.002	0.001	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	C	0.757	A	0.590	B	0.623	C	0.757	A	0.589	B	0.623	0.000	-0.001	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	C	0.761	A	0.545	C	0.711	C	0.761	A	0.543	C	0.713	0.000	-0.002	0.002	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	C	0.773	A	0.555	A	0.464	C	0.774	A	0.561	A	0.463	0.001	0.006	-0.001	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	C	0.732	A	0.488	A	0.511	C	0.730	A	0.487	A	0.511	-0.002	-0.001	0.000	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	C	0.781	D	0.810	C	0.732	C	0.784	D	0.816	C	0.730	0.003	0.006	-0.002	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	E	0.938	C	0.720	D	0.888	F	1.043	C	0.787	E	0.920	-0.001	0.003	0.003	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	C	0.790	A	0.447	A	0.512	C	0.791	A	0.449	A	0.516	0.001	0.002	0.004	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	E	0.990	D	0.699	C	0.679	E	0.995	D	0.700	D	0.690	0.005	0.001	0.011	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	F	1.279	F	1.060	E	0.856	F	1.283	F	1.067	E	0.870	0.004	0.007	0.014	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	C	0.787	B	0.571	A	0.498	C	0.793	B	0.572	B	0.502	0.006	0.001	0.004	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	C	0.754	B	0.564	C	0.630	C	0.759	B	0.571	C	0.641	0.005	0.007	0.011	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	D	0.851	A	0.495	B	0.690	D	0.854	A	0.500	B	0.694	0.003	0.005	0.004	No	No	No
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	F	1.028	B	0.668	C	0.767	F	1.046	B	0.684	D	0.806	0.018	0.016	0.039	**Yes**	No	**Yes**
15	Ferry Street at Terminal Way [2]	A	0.504	A	0.248	A	0.206	A	0.531	A	0.287	A	0.217	0.027	0.039	0.011	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.461	A	0.423	A	0.336	Not an Intersection (Internal to Project Site)											
17	Earle Street at Terminal Way [2]	A	0.573	A	0.449	A	0.342	B	0.638	A	0.541	A	0.447	0.065	0.092	0.105	No	No	No
18	Earle Street at Cannery Street [2]	A	0.127	A	0.168	A	0.132	A	0.372	A	0.367	A	0.332	0.245	0.199	0.200	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Table 3.6-90: Intersection Level of Service Analysis—2038 NEPA Baseline Compared to 2038 With Alternative 5

Int. #	Study Intersection	2038 NEPA Baseline						2038 With Alternative 5						Changes in V/C or Delay			Significant Impact?		
		A.M. Peak		M.D. Peak		P.M. Peak		A.M. Peak		M.D. Peak		P.M. Peak							
		LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	A.M. Peak	M.D. Peak	P.M. Peak	A.M. Peak	M.D. Peak	P.M. Peak
1	Alameda Street at Sepulveda Boulevard ramp (on Sepulveda) [1]	F	1.007	D	0.816	E	0.936	F	1.009	D	0.814	E	0.937	0.002	-0.002	0.001	No	No	No
2	Alameda Street at Sepulveda Boulevard ramp (on Alameda) [1]	D	0.815	B	0.618	B	0.670	D	0.820	B	0.617	B	0.670	0.005	-0.001	0.000	No	No	No
3	Alameda Street at PCH ramp/East O Street (on PCH) [2]	D	0.848	C	0.702	D	0.823	D	0.847	C	0.700	D	0.825	-0.001	-0.002	0.002	No	No	No
4	Alameda Street at PCH ramp/East O Street (on Alameda) [2]	D	0.875	B	0.609	A	0.532	D	0.873	B	0.616	A	0.532	-0.002	0.007	0.000	No	No	No
5	Alameda Street at Henry Ford Avenue/Denni Street [2]	D	0.824	A	0.542	A	0.578	D	0.821	A	0.541	A	0.577	-0.003	-0.001	-0.001	No	No	No
6	SR-103 (Terminal Island Freeway) at Sepulveda Boulevard [3]	D	0.853	D	0.877	D	0.847	D	0.857	D	0.881	D	0.841	0.004	0.004	-0.006	No	No	No
7	Henry Ford Avenue at Anaheim Street [2]	F	1.047	D	0.884	E	0.976	F	1.046	D	0.889	E	0.979	-0.001	0.005	0.003	No	No	No
8	Henry Ford Avenue at SR-47 (Terminal Island Freeway) Ramps/Pier A Way [2]	D	0.858	A	0.483	A	0.565	D	0.859	A	0.485	A	0.568	0.001	0.002	0.003	No	No	No
9	SR-47 (Terminal Island Freeway) at Ocean Boulevard Westbound Ramps [3]	F	1.095	E	0.823	E	0.802	F	1.104	E	0.834	E	0.813	0.009	0.011	0.011	No	No	No
10	SR-47 (Terminal Island Freeway) at Ocean Boulevard Eastbound Ramps [3]	F	1.490	F	1.248	F	1.017	F	1.496	F	1.262	F	1.031	0.006	0.014	0.014	No	No	No
11	Pier S Avenue at Ocean Boulevard Westbound Ramps [3]	D	0.844	C	0.624	B	0.559	D	0.855	C	0.626	B	0.561	0.011	0.002	0.002	No	No	No
12	Pier S Avenue at Ocean Boulevard Eastbound Ramps [3]	D	0.850	C	0.647	D	0.725	D	0.859	C	0.654	D	0.735	0.009	0.007	0.010	No	No	No
13	Navy Way at SR-47 (Terminal Island Freeway)/Seaside Avenue [2]	Not an Intersection (Navy Way / Seaside Interchange Improvement)																	
14	Ferry Street at SR-47 (Terminal Island Freeway)/Seaside Avenue Ramps [2]	F	1.218	D	0.816	E	0.958	F	1.248	D	0.834	E	0.995	0.030	0.018	0.037	**Yes**	No	**Yes**
15	Ferry Street at Terminal Way [2]	A	0.545	A	0.347	A	0.141	A	0.588	A	0.361	A	0.153	0.043	0.014	0.012	No	No	No
16	Everport Container Terminal Gate at Terminal Way [2]	A	0.459	A	0.420	A	0.335	Not an Intersection (Internal to Project Site)											
17	Earle Street at Terminal Way [2]	A	0.566	A	0.440	A	0.353	B	0.656	A	0.565	A	0.449	0.090	0.125	0.096	No	No	No
18	Earle Street at Cannery Street [2]	A	0.136	A	0.171	A	0.147	A	0.389	A	0.372	A	0.348	0.253	0.201	0.201	No	No	No

n/a = not applicable

Notes:

[1] City of Carson intersection analyzed using ICU methodology according to City standards.

[2] City of Los Angeles intersection analyzed using CMA methodology according to City standards.

[3] City of Long Beach intersection analyzed using ICU methodology according to City standards.

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Impact TRANS-3: Alternative 5 operations would not cause a significant increase in related public transit use resulting from an increase in on-site employees.

The increase in use of public transit for work-related trips from operation of Alternative 5 would be negligible. Intermodal facilities generate extremely low transit demand for several reasons. The primary reason is that terminal workers generally do not use public transit due to 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 transit usage. In addition, parking at the Port is readily available and free for employees, which does not encourage workers to utilize public transit. Finally, although there are 17 existing transit routes that serve the general area surrounding the project site, none of the existing routes stop within one mile of the terminal.

CEQA Impact Determination

Based on the analysis above, impacts due to additional demand on local transit services would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 5 would result in a higher employment level compared to the NEPA baseline due to a higher level of throughput operations, but as discussed, the increase in use of public transit for work-related trips would be negligible. Therefore, the impacts would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact TRANS-4: Alternative 5 operations would not significantly increase freeway congestion.

A traffic impact analysis is required at the following locations, according to the CMP, TIA Guidelines (Metro, 2010):

- CMP arterial monitoring intersections, including freeway on-ramp or off-ramp, where the proposed Project would add 50 or more trips during either the A.M. or P.M. weekday peak hours; and

- CMP freeway monitoring locations where the proposed Project would add 150 or more trips during either the A.M. or P.M. weekday peak hours.

CEQA Impact Determination

Alternative 5 would result in additional truck trips on the surrounding freeway system. Tables 3.6-91 and 3.6-92 summarize the change to freeway monitoring locations during A.M. and P.M. peak hours, respectively due to Alternative 5.

The results of the analysis indicate that Alternative 5 would not cause an increase of 0.02 or more in the D/C ratio at any of the CMP freeway monitoring locations and/or freeway analysis links that result in LOS F under CEQA baseline and future CEQA baseline conditions; therefore, no further freeway system analysis is required at those locations. Alternative 5 would not conflict the CMP.

Based on the above, traffic impacts on the freeway system would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Tables 3.6-93 and 3.6-98 summarize the change to freeway monitoring locations during A.M. and P.M. peak hours, respectively due to Alternative 5 relative to the NEPA baseline. The results of the analysis indicate that Alternative 5 would not cause an increase of 0.02 or more in the D/C ratio at a CMP freeway monitoring locations and/or freeway analysis links that result in LOS F. Alternative 5 would not conflict the CMP.

Based on the above, traffic impacts on the freeway system would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Table 3.6-91: CEQA Baseline Compared to Alternative 5 - 2038 Freeway Analysis—A.M. Peak

			Northbound / Eastbound											Southbound / Westbound										
			CEQA Baseline					2038 Alternative 5					Change in D/C	Sign. Impt?	CEQA Baseline					2038 Alternative 5					Change in D/C	Sign. Impt?
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS		
#1 SR-47	Vincent Thomas Bridge [1]	4,700	1,876	18.0	B	-		1,917	18.3	C	-		-	No	2,235	21.4	B	-		2,261	21.6	C	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,119	7.1	A	-		1,143	7.3	A	-		-	No	922	5.9	A	-		968	6.2	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	3,771	15.3	B	-		3,791	15.3	B	-		-	No	5,096	20.6	B	-		5,112	20.7	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,352	26.1	D	-		6,364	26.2	D	-		-	No	8,422	28.1	D	-		8,434	28.2	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,565	40.2	E	0.90	D	10,573	40.2	E	0.90	D	0.00	No	9,265	32.1	E	0.79	D	9,272	32.2	D	0.79	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	6,442	45.4	F	0.95	E	6,483	46.0	F	0.96	E	0.01	No	6,545	47.0	F	0.97	E	6,588	47.6	F	0.98	E	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	7,998	39.9	E	0.89	D	8,037	40.2	E	0.89	D	0.00	No	7,617	37.1	E	0.85	D	7,661	37.4	E	0.85	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,025	26.5	D	-		8,059	26.6	D	-		-	No	7,631	24.9	D	-		7,671	25.1	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	7,932	35.8	E	0.84	D	7,957	36.0	E	0.85	D	0.01	No	7,376	31.9	E	0.78	D	7,408	32.1	D	0.79	D	0.01	No
#10 I-710	North of Florence Avenue[1]	9,400	8,535	41.0	E	0.91	D	8,560	41.2	E	0.91	D	0.00	No	7,518	32.8	E	0.80	D	7,549	33.0	D	0.80	D	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	6,587	21.3	C	-		6,587	21.3	C	-		-	No	9,895	35.7	C	-		9,895	35.7	E	0.84	D	-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,619	17.9	B	-		6,619	17.9	B	-		-	No	8,384	22.7	B	-		8,385	22.7	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-92: CEQA Baseline Compared to Alternative 5 - 2038 Freeway Analysis—P.M. Peak

			Northbound / Eastbound											Southbound / Westbound									
			CEQA Baseline					2038 Alternative 5						CEQA Baseline					2026 Alternative 5						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	2,764	26.4	D	-		2,826	27.0	D	-		-	No	2,759	26.4	D	-		2,785	26.7	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,173	7.5	A	-		1,226	7.8	A	-		-	No	997	6.4	A	-		1,039	6.6	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,678	18.9	C	-		4,717	19.1	C	-		-	No	3,302	13.4	B	-		3,317	13.4	B	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	7,686	34.0	D	-		7,708	34.1	D	-		-	No	5,699	18.5	C	-		5,711	18.5	C	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,440	39.3	E	0.89	D	10,452	39.4	E	0.89	D	0.00	No	9,002	30.8	D	-		9,009	30.8	D	-		-	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,819	38.1	E	0.86	D	5,887	38.8	E	0.87	D	0.01	No	5,659	36.7	E	0.84	D	5,714	37.2	E	0.85	D	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	6,785	32.5	D	-		6,851	32.8	D	-		-	No	7,526	36.5	E	0.84	D	7,580	36.9	E	0.84	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	6,491	21.0	C	-		6,550	21.2	C	-		-	No	7,868	25.9	C	-		7,922	26.1	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	6,466	26.7	D	-		6,510	26.9	D	-		-	No	7,838	35.1	E	0.83	D	7,875	35.4	E	0.84	D	0.01	No
#10 I-710	North of Florence Avenue[1]	9,400	5,550	22.5	C	-		5,591	22.7	C	-		-	No	7,824	35.0	D	-		7,859	35.3	E	0.84	D	-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,127	37.1	E	0.86	D	10,127	37.1	E	0.86	D	0.00	No	8,669	29.2	D	-		8,669	29.2	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	7,780	21.0	C	-		7,780	21.0	C	-		-	No	6,032	16.3	B	-		6,032	16.3	B	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-93: 2019 NEPA Baseline Compared to 2019 With Alternative 5 - Freeway Analysis—A.M. Peak

			Northbound / Eastbound											Southbound / Westbound									
			2019 NEPA Baseline					2019 Alternative 5						2019 NEPA Baseline					2019 Alternative 5					
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	3,508	33.6	D	-		3,508	33.6	D	-		-	No	3,199	30.6	D	-		3,199	30.6	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	642	4.1	A	-		642	4.1	A	-		-	No	1,422	9.1	A	-		1,422	9.1	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	5,565	22.6	C	-		5,565	22.6	C	-		-	No	4,879	19.8	C	-		4,879	19.8	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	8,975	45.5	F	0.95	E	8,975	45.5	F	0.95	E	0.00	No	7,372	24.0	C	-		7,372	24.0	C	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,531	39.9	E	0.90	D	10,531	39.9	E	0.90	D	0.00	No	11,295	46.2	F	0.96	E	11,295	46.2	F	0.96	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,555	35.8	E	0.82	D	5,555	35.8	E	0.82	D	0.00	No	7,020	55.8	F	1.04	F(0)	7,020	55.8	F	1.04	F(0)	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,045	40.3	E	0.89	D	8,045	40.3	E	0.89	D	0.00	No	8,161	41.3	E	0.91	D	8,161	41.3	E	0.91	D	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,181	27.1	D	-		8,181	27.1	D	-		-	No	9,080	31.2	D	-		9,080	31.2	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	7,639	33.7	D	-		7,639	33.7	D	-		-	No	8,614	41.7	E	0.92	D	8,614	41.7	E	0.92	D	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	7,940	35.9	E	0.84	D	7,940	35.9	E	0.84	D	0.00	No	9,771	56.5	F	1.04	F(0)	9,771	56.5	F	1.04	F(0)	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	12,113	55.1	F	1.03	F(0)	12,113	55.1	F	1.03	F(0)	0.00	No	8,624	29.0	D	-		8,624	29.0	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	9,884	27.3	D	-		9,884	27.3	D	-		-	No	8,460	22.9	C	-		8,460	22.9	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-94: 2019 NEPA Baseline Compared to 2019 With Alternative 5 - Freeway Analysis—P.M. Peak

Freeway	Location	Cap.	Northbound / Eastbound											Southbound / Westbound										
			2019 NEPA Baseline					2019 Alternative 5						2019 NEPA Baseline					2019 Alternative 5					
			Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,207	43.6	E	0.90	D	4,207	43.6	E	0.90	D	0.00	No	3,687	35.6	E	0.78	D	3,687	35.6	E	0.78	D	0.00	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,466	9.4	A	-		1,466	9.4	A	-		-	No	1,704	10.9	A	-		1,704	10.9	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,629	18.7	C	-		4,629	18.7	C	-		-	No	5,500	22.3	C	-		5,500	22.3	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,802	28.5	D	-		6,802	28.5	D	-		-	No	8,315	27.7	D	-		8,315	27.7	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,188	37.5	E	0.87	D	10,188	37.5	E	0.87	D	0.00	No	11,048	44.0	E	0.94	E	11,048	44.0	E	0.94	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,441	34.9	D	-		5,441	34.9	D	-		-	No	6,136	41.5	E	0.91	D	6,136	41.5	E	0.91	D	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,102	40.8	E	0.90	D	8,102	40.8	E	0.90	D	0.00	No	6,782	32.4	D	-		6,782	32.4	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,656	29.2	D	-		8,656	29.2	D	-		-	No	7,172	23.3	C	-		7,172	23.3	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,567	41.3	E	0.91	D	8,567	41.3	E	0.91	D	0.00	No	6,870	28.9	D	-		6,870	28.9	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,710	42.7	E	0.93	D	8,710	42.7	E	0.93	D	0.00	No	6,498	26.9	D	-		6,498	26.9	D	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,400	39.0	E	0.89	D	10,400	39.0	E	0.89	D	0.00	No	11,955	53.2	F	1.02	F(0)	11,955	53.2	F	1.02	F(0)	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	7,720	20.8	C	-		7,720	20.8	C	-		-	No	9,247	25.2	C	-		9,247	25.2	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-95: 2026 NEPA Baseline Compared to 2026 With Alternative 5 - Freeway Analysis—A.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			2026 NEPA Baseline					2026 Alternative 5							2026 NEPA Baseline					2026 Alternative 5						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,108	41.8	E	0.87	D	4,136	42.3	E	0.88	D	0.01	No	3,307	31.6	D	-		3,325	31.8	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,788	11.4	B	-		1,803	11.5	B	-		-	No	2,599	16.6	B	-		2,630	16.8	B	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	6,746	28.2	D	-		6,758	28.2	D	-		-	No	5,653	22.9	C	-		5,663	23.0	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	9,688	55.1	F	1.03	F(0)	9,695	55.2	F	1.03	F(0)	0.00	No	8,023	26.5	D	-		8,030	26.5	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,651	40.8	E	0.91	D	10,656	40.8	E	0.91	D	0.00	No	11,678	50.1	F	0.99	E	11,682	50.1	F	0.99	E	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	7,507	69.6	F	1.11	F(0)	7,531	70.5	F	1.12	F(0)	0.00	No	8,259	114.8	F	1.22	F(0)	8,283	117.3	F	1.23	F(0)	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	9,396	56.4	F	1.04	F(0)	9,418	56.8	F	1.05	F(0)	0.01	No	9,201	53.3	F	1.02	F(0)	9,226	53.6	F	1.03	F(0)	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,932	30.5	D	-		8,952	30.6	D	-		-	No	9,586	33.9	D	-		9,609	34.0	D	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,066	36.9	E	0.86	D	8,081	37.0	E	0.86	D	0.00	No	8,990	45.7	F	0.96	E	9,009	45.9	F	0.96	E	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	8,146	37.5	E	0.87	D	8,160	37.6	E	0.87	D	0.00	No	9,796	56.9	F	1.04	F(0)	9,814	57.2	F	1.04	F(0)	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	11,802	51.4	F	1.00	F(0)	11,802	51.4	F	1.00	F(0)	0.00	No	8,221	27.3	D	-		8,221	27.3	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	9,515	26.1	D	-		9,515	26.1	D	-		-	No	8,043	21.7	C	-		8,043	21.7	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-96: 2026 NEPA Baseline Compared to 2026 With Alternative 5 - Freeway Analysis—P.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			2026 NEPA Baseline					2026 Alternative 5							2026 NEPA Baseline					2026 Alternative 5						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,163	42.8	E	0.89	D	4,206	43.6	E	0.89	D	0.01	No	3,222	30.8	D	-		3,239	31.0	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	1,706	10.9	A	-		1,741	11.1	B	-		-	No	1,605	10.2	A	-		1,631	10.4	A	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	4,631	18.7	C	-		4,657	18.9	C	-		-	No	5,235	21.2	C	-		5,244	21.2	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,698	27.9	D	-		6,712	28.0	D	-		-	No	7,988	26.3	D	-		7,995	26.4	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	9,867	35.5	E	0.84	D	9,874	35.6	E	0.84	D	0.00	No	10,761	41.7	E	0.92	D	10,765	41.7	E	0.92	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,434	34.8	D	0.81	D	5,475	35.2	E	0.81	D	0.00	No	5,839	38.3	E	0.87	D	5,871	38.6	E	0.87	D	0.00	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	7,826	38.6	E	0.87	D	7,865	38.9	E	0.87	D	0.00	No	6,457	30.9	D	-		6,488	31.0	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	7,986	26.3	D	-		8,020	26.5	D	-		-	No	6,356	20.6	C	-		6,387	20.7	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,156	37.6	E	0.87	D	8,181	37.8	E	0.87	D	0.00	No	6,503	26.9	D	-		6,524	27.0	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,198	37.9	E	0.87	D	8,222	38.1	E	0.87	D	0.00	No	5,997	24.4	C	-		6,017	24.5	C	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	9,712	34.6	D	-		9,712	34.6	D	-		-	No	10,984	43.5	E	0.93	E	10,984	43.5	E	0.93	E	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,920	18.7	C	-		6,920	18.7	C	-		-	No	8,447	22.8	C	-		8,447	22.8	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

Table 3.6-97: 2038 NEPA Baseline Compared to 2038 With Alternative 5 - Freeway Analysis—A.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			2038 NEPA Baseline					2038 Alternative 5							2038 NEPA Baseline					2038 Alternative 5					
Freeway	Location	Cap.	Vol	Density	LOS	D/C1	D/C1	Vol	Density	LOS	D/C1	D/C1	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C1	D/C1	Vol	Density	LOS	D/C1	D/C1	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,365	47.0	F	0.93	D	4,406	48.0	F	0.94	E	0.01	No	3,602	34.6	D	-		3,628	34.9	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	2,180	13.9	B	-		2,204	14.1	B	-		-	No	2,964	18.9	C	-		3,010	19.2	C	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	7,336	31.6	D	-		7,356	31.8	D	-		-	No	6,302	25.9	C	-		6,318	26.0	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	9,889	58.5	F	1.05	F(0)	9,901	58.7	F	1.05	F(0)	0.00	No	8,407	28.1	D	-		8,419	28.1	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	10,533	39.9	E	0.90	D	10,541	40.0	E	0.90	D	0.00	No	11,957	53.2	F	1.02	F(0)	11,963	53.3	F	1.02	F(0)	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	7,865	85.5	F	1.17	F(0)	7,906	87.9	F	1.17	F(0)	0.00	No	8,784	213.8	F	1.30	F(0)	8,826	229.9	F	1.31	F(0)	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	10,029	70.2	F	1.11	F(0)	10,068	71.2	F	1.12	F(0)	0.00	No	9,583	59.9	F	1.06	F(0)	9,627	60.7	F	1.07	F(0)	0.00	No
#8 I-710	North of Alondra Boulevard [1]	11,750	9,556	33.7	D	-		9,591	33.9	D	-		-	No	10,226	37.8	E	0.87	D	10,266	38.1	E	0.87	D	0.00	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,567	41.3	E	0.91	D	8,593	41.5	E	0.91	D	0.00	No	9,532	52.7	F	1.01	F(0)	9,564	53.2	F	1.02	F(0)	0.00	No
#10 I-710	North of Florence Avenue[1]	9,400	8,545	41.0	E	0.91	D	8,569	41.3	E	0.91	D	0.00	No	10,645	75.4	F	1.13	F(0)	10,675	76.3	F	1.14	F(0)	0.00	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	10,741	41.5	E	0.91	D	10,741	41.5	E	0.91	D	0.00	No	8,205	27.2	D	-		8,205	27.2	D	-		-	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	8,650	23.4	C	-		8,650	23.4	C	-		-	No	7,511	20.3	C	-		7,511	20.3	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

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Table 3.6-98: 2038 NEPA Baseline Compared to 2038 With Alternative 5 - Freeway Analysis—P.M. Peak

			Northbound / Eastbound												Southbound / Westbound									
			2038 NEPA Baseline					2038 Alternative 5							2038 NEPA Baseline					2038 Alternative 5						
Freeway	Location	Cap.	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?	Vol	Density	LOS	D/C[1]	LOS	Vol	Density	LOS	D/C[1]	LOS	Change in D/C	Sign. Impt?
#1 SR-47	Vincent Thomas Bridge [1]	4,700	4,585	52.8	F	0.98	E	4,647	54.7	F	0.99	E	0.01	No	3,277	31.4	D	-		3,303	31.6	D	-		-	No
#2 SR-47/SR-103	Commodore Schuyler Heim Bridge [1]	6,750	2,079	13.3	B	-		2,132	13.6	B	-		-	No	1,870	11.9	B	-		1,912	12.2	B	-		-	No
#3 I-110	South of C Street (CMP monitoring station—south of C Street)	9,400	5,232	21.2	C	-		5,271	21.3	C	-		-	No	5,460	22.1	C	-		5,475	22.2	C	-		-	No
#4 I-110	North of 223rd Street [1]	9,400	6,809	28.5	D	-		6,831	28.6	D	-		-	No	8,089	26.7	D	-		8,101	26.8	D	-		-	No
#5 I-110	North of I-405 [1]	11,750	9,976	36.2	E	0.85	D	9,988	36.3	E	0.85	D	0.00	No	10,814	42.1	E	0.92	D	10,821	42.1	E	0.92	D	0.00	No
#6 I-710	North of PCH (CMP monitoring station—north of the junction of SR-1 [PCH], Willow Street)	6,750	5,476	35.2	E	0.81	D	5,545	35.7	E	0.82	D	0.01	No	6,020	40.2	E	0.89	D	6,075	40.8	E	0.90	D	0.01	No
#7 I-710	North of I-405 (CMP monitoring station—north of the junction of I-405, south of Del Amo)	9,000	8,059	40.4	E	0.90	D	8,125	41.0	E	0.90	D	0.00	No	6,600	31.6	D	-		6,654	31.8	D	-		-	No
#8 I-710	North of Alondra Boulevard [1]	11,750	8,550	28.7	D	-		8,608	29.0	D	-		-	No	6,790	22.0	C	-		6,844	22.2	C	-		-	No
#9 I-710	North of I-105 and north of Firestone Boulevard (CMP monitoring station)	9,400	8,462	40.3	E	0.90	D	8,506	40.7	E	0.90	D	0.00	No	6,668	27.8	D	-		6,705	28.0	D	-		-	No
#10 I-710	North of Florence Avenue[1]	9,400	8,566	41.2	E	0.91	D	8,608	41.7	E	0.92	D	0.01	No	6,187	25.3	C	-		6,222	25.5	C	-		-	No
#11 I-405	Between I-110 and I-710 (CMP monitoring station—Santa Fe Avenue)	11,750	9,687	34.4	D	-		9,687	34.4	D	-		-	No	11,211	45.5	F	0.95	E	11,211	45.5	F	0.95	E	0.00	No
#12 SR-91	West of I-710 (CMP monitoring station—east of Alameda Street/Santa Fe Avenue interchange)	14,100	6,735	18.2	C	-		6,735	18.2	C	-		-	No	8,082	21.8	C	-		8,082	21.8	C	-		-	No

Notes: Freeway operation conditions based on the methodology in the 2010 HCM where level of service is based on density (passenger car per mile per lane).
Per Caltrans traffic impact study guidelines, Caltrans targets maintaining LOS between C and D; for segments where LOS is E or F, D/C was used to determine impact significance per CMP guidelines.
[1]Non-CMP location

1

Impact TRANS-5 (For Informational Purposes): Alternative 5 operations would not cause a significant impact in vehicular delay at at-grade railroad crossings within the Alternative 5 vicinity or in the region.

Vehicular delays resulting from rail trips associated with Alternative 5 were estimated by adding rail trips resulting from the expanded container terminal and associated throughput growth to the applicable CEQA baseline (January 2013 through December 2013). Results of the vehicular delay calculations at at-grade crossings are shown in tables below (one table is provided for each of the major main lines).

CEQA Impact Determination (For Informational Purposes)

Alternative 5 would add an extra track at the TICTF but would handle the same level of throughput as the proposed Project. In the baseline year 2013, all on-dock and off-dock direct intermodal containers to and from the Everport Container Terminal amounted to 230,227 TEUs. Under Alternative 5, this would increase to 659,841 TEUs, which would be an increase in the on-dock direct intermodal cargo volumes of 429,614 TEUs.

Table 3.6-99 summarizes the average daily rail volumes in the peak month under the 2013 CEQA baseline, and also includes the daily trains (by rail segment) anticipated under Alternative 5. The number of trains by rail segment appear to be the same as that in the proposed Project because:

- total direct intermodal cargo under Alternative 5 is 40 percent of the terminal throughput, which is the same as the proposed Project;
- additional TICTF capacity draws direct intermodal cargo primarily from UP and BNSF off-dock intermodal yards in near port and LA downtown area (and only small changes in direct intermodal rail traffic at UP's City of Industry yard and BNSF's San Bernardino yard),
- additional trains at TICTF travel on Alameda Corridor between the ports and LA downtown area, which has no at-grade crossings; and
- the rail segments with at-grade crossings that are shown in the table are located east of the LA downtown area yards.

Table 3.6-99: CEQA Baseline Conditions (2013) Average Daily Rail Volumes in the Peak Month and Alt 5 – Additional TICTF - Project Trains by Rail Segment (Trains per Day)

Railroad Subdivision	Rail Segment	CEQA Baseline (2013) Daily Freight Rail Volume	CEQA Baseline (2013) Daily Passenger Rail Volume	CEQA Baseline (2013) Daily Total Rail Volume	Daily Project Trains under Alt 5 – Additional TICTF - Project
UP Trains					
UPRR Los Anegeles	East LA – Pomona	13.4	12.0	25.4	1.2
	Pomona – Montclair	15.3	12.0	27.3	1.0
	Montclair - Mira Loma	17.5	12.0	29.5	1.0
	Mira Loma - W Riverside	17.7	12.0	29.7	1.0
UPRR Alhambra	LATC - El Monte	20.0	-	20.0	1.0
	El Monte - Bassett	20.0	37.5	57.5	1.0
	Bassett - Industry	20.0	0.8	20.8	1.0
	Industry - Pomona	25.2	0.8	26.0	1.0
	Pomona - Montclair	23.9	0.8	24.7	1.0
	Montclair - Kaiser	26.0	0.8	26.8	1.0
	Kaiser - W Colton	27.7	0.8	28.5	1.0
	W Colton - Colton	27.4	0.8	28.2	0.9
UPRR Mojave (Palmdale)	W Colton - Silverwood	19.3	-	19.3	0.2
UPRR Yuma	Colton - Indio	41.9	0.8	42.7	1.7
BNSF San Bernardino	W Riverside - Riverside	17.7	-	17.7	1.4
	Riverside - Highgrove	17.7	-	17.7	1.4
	Highgrove - Colton	17.7	-	17.7	1.4
	Colton - San Bernardino	2.4	-	2.4	1.4
BNSF Cajon	San Bernardino - Keenbrook	2.7	-	2.7	0.2
	Keenbrook - Silverwood	2.7	-	2.7	0.2
	Silverwood - Barstow	10.7	-	10.7	0.2
BNSF Trains					
BNSF San Bernardino	Hobart - Fullerton	33.9	56.8	90.7	1.7
	Fullerton - Atwood	33.9	12.3	46.2	1.7
	Atwood - W Riverside	37.7	27.0	64.8	1.7
	W Riverside - Riverside	40.3	39.0	79.3	1.7
	Riverside - Highgrove	40.3	13.8	54.1	1.7
	Highgrove - Colton	40.3	11.4	51.7	1.7

Table 3.6-99: CEQA Baseline Conditions (2013) Average Daily Rail Volumes in the Peak Month and Alt 5 – Additional TICTF - Project Trains by Rail Segment (Trains per Day)

Railroad Subdivision	Rail Segment	CEQA Baseline (2013) Daily Freight Rail Volume	CEQA Baseline (2013) Daily Passenger Rail Volume	CEQA Baseline (2013) Daily Total Rail Volume	Daily Project Trains under Alt 5 – Additional TICTF - Project
	Colton - San Bernardino	44.0	11.4	55.5	1.7
BNSF Cajon	San Bernardino - Keenbrook	52.3	2.0	54.3	1.7
	Keenbrook - Silverwood	52.3	2.0	54.3	1.7
	Silverwood – Barstow	52.3	2.0	54.3	1.7
BNSF & UP Trains					
BNSF San Bernardino	W Riverside - Riverside	58.0	39.0	97.0	3.1
	Riverside – Highgrove	58.0	13.8	71.8	3.1
	Highgrove – Colton	58.0	11.4	69.4	3.1
	Colton - San Bernardino	46.5	11.4	57.9	3.1
BNSF Cajon	San Bernardino – Keenbrook	55.0	2.0	57.0	2.0
	Keenbrook - Silverwood	74.2	2.0	76.2	2.0
	Silverwood – Barstow	63.0	2.0	65.0	1.9

Source: QuickTrip—Train Builder Integrated Model August 2015 Version; Non-intermodal and Passenger Trains

Tables 3.6-100 through 3.6-105 list the delays at at-grade crossings for the CEQA baseline plus Alternative 5. Based on the estimated Project Trains, vehicular delay impacts at none of the at-grade crossings exceed LAHD thresholds of significance for rail impacts, hence delay impacts would be less than significant under Alternative 5.

Within the Port, there are three study area at-grade rail crossings of the Earle Street Lead track of the Alameda Corridor Subdivision, which would experience project-related traffic. Terminal Way, Cannery Street, and Earle Street serve Terminal Island traffic and carry little through traffic. The three at-grade rail crossings listed below are located on spur lines downstream of the on-dock yard, and do not experience trains entering or exiting TICTF to and from the north. Because of the low train volumes on the spur lines, these at-grade rail crossings do not experience vehicular delays. All three crossings have gated warning systems:

- Terminal Way west of Earle Street: CPUC Crossing ID: LA-3524, DOT Number: 811372G
- Cannery Street west of Earle Street: CPUC Crossing ID: LA-2617, DOT Number: 811503H

- Earle Street south of Cannery Street: CPUC Crossing ID: LA- 3607, DOT Number: 927844A

In addition, as with the proposed Project, Alternative 5 is not expected to result in significant secondary impacts (i.e., related to air, noise, and public services) related to increased vehicular delay at at-grade railroad crossings.

As shown below in Tables 3.6-100 through 3.6-105, Alternative 5 would not result in a significant impact on grade crossing delays under CEQA. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because there are no mainline at-grade railroad crossings between the project site and the greater Los Angeles intermodal railyards (i.e., BNSF's Hobart Yard, UP's ELA), there are no mainline rail-related at-grade impacts in this area. Further, such impacts beyond these railyard locations are outside of the NEPA/federal scope of analysis and therefore not evaluated under NEPA. Because potential vehicle delay impacts at mainline at-grade railroad crossings beyond these geographical limits fall outside of the area of federal control and responsibility and scope of analysis (see Section 2.8 in Chapter 2, Project Description), there are no direct or indirect impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Because the impacts are outside of federal control and responsibility there are no direct or indirect impacts under NEPA.

1

Table 3.6-100: BNSF Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
San Bernardino MP 0.0															
Laurel Street	2	2,240	65.1	62.0	3.1	126.3	118.1	8.2	3.9	3.6	0.3	6.5	6.0	0.5	NO
Olive Street	2	2,660	65.1	62.0	3.1	126.3	118.1	8.2	4.7	4.3	0.4	6.6	6.1	0.5	NO
E Street	2	700	65.1	62.0	3.1	126.3	118.1	8.2	1.2	1.1	0.1	6.2	5.7	0.5	NO
H Street	2	1,390	65.1	62.0	3.1	126.3	118.1	8.2	2.4	2.2	0.2	6.3	5.8	0.5	NO
Valley Bl	2	10,490	65.1	62.0	3.1	126.3	118.1	8.2	24.0	22.2	1.9	9.7	8.9	0.7	NO
Colton Crossing MP 3.2															
Highgrove Junction MP 6.1 (Connection to Perris via MetroLink)															
Main Street	2	2,550	79.3	76.2	3.1	156.4	148.2	8.2	5.7	5.3	0.3	8.3	7.8	0.5	NO
Riverside-San Bernardino County Line MP 6.41															
Center Street	4	6,220	79.3	76.2	3.1	156.8	148.7	8.2	13.9	13.0	0.9	8.4	7.9	0.5	NO
Iowa Avenue	4	22,920	79.3	76.2	3.1	156.8	148.7	8.2	64.5	60.5	4.0	11.7	10.9	0.7	NO
Palmyrita Avenue	2	3,750	79.3	76.2	3.1	156.4	148.2	8.2	8.5	7.9	0.5	8.5	8.0	0.5	NO
Chicago Avenue	4	13,570	79.3	76.2	3.1	156.8	148.7	8.2	33.2	31.2	2.0	9.6	9.0	0.6	NO
Spruce Street	4	7,250	79.3	76.2	3.1	156.8	148.7	8.2	16.4	15.4	1.0	8.5	8.0	0.5	NO
3rd Street	4	10,910	79.3	76.2	3.1	156.8	148.7	8.2	25.8	24.2	1.6	9.1	8.6	0.6	NO
Mission Inn (7th Street)	4	5,330	79.3	76.2	3.1	156.8	148.7	8.2	11.8	11.1	0.7	8.3	7.8	0.5	NO

Table 3.6-100: BNSF Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Riverside Yard and Amtrak Station MP 10.02-10.16															
Cridge Street	2	3,760	104.5	101.4	3.1	174.9	166.7	8.2	9.1	8.5	0.5	9.3	8.8	0.5	NO
West Riverside Junction MP 10.6 (Connection to UP Los Angeles Sub)															
Jane Street	2	2,160	70.6	68.9	1.7	115.7	111.1	4.6	3.3	3.1	0.2	5.7	5.4	0.3	NO
Mary Street	4	11,940	70.6	68.9	1.7	116.1	111.5	4.6	19.9	18.9	1.0	6.5	6.2	0.3	NO
Washington Street	2	8,290	70.6	68.9	1.7	115.7	111.1	4.6	14.6	13.9	0.7	7.1	6.8	0.3	NO
Madison Street	4	15,730	70.6	68.9	1.7	116.1	111.5	4.6	27.6	26.2	1.4	7.0	6.7	0.3	NO
Jefferson Street	2	8,200	70.6	68.9	1.7	115.7	111.1	4.6	14.4	13.7	0.7	7.1	6.7	0.3	NO
Adams Street	4	17,520	70.6	68.9	1.7	116.1	111.5	4.6	31.5	29.9	1.6	7.3	6.9	0.4	NO
Jackson Street	4	7,820	70.6	68.9	1.7	116.1	111.5	4.6	12.4	11.7	0.6	6.1	5.8	0.3	NO
Gibson Street	2	860	70.6	68.9	1.7	115.7	111.1	4.6	1.3	1.2	0.1	5.5	5.2	0.3	NO
Harrison Street	2	6,670	70.6	68.9	1.7	115.7	111.1	4.6	11.2	10.7	0.6	6.7	6.3	0.3	NO
Tyler Street	4	15,630	70.6	68.9	1.7	116.1	111.5	4.6	27.3	26.0	1.4	7.0	6.7	0.3	NO
Pierce Street	2	11,190	70.6	68.9	1.7	115.7	111.1	4.6	21.5	20.5	1.1	8.0	7.7	0.4	NO
Buchanan Street	2	9,580	70.6	68.9	1.7	115.7	111.1	4.6	17.5	16.7	0.9	7.5	7.1	0.4	NO
Magnolia Avenue EB	2	8,800	70.6	68.9	1.7	115.7	111.1	4.6	15.7	15.0	0.8	7.3	6.9	0.4	NO
Magnolia Avenue WB	2	8,800	70.6	68.9	1.7	115.7	111.1	4.6	15.7	15.0	0.8	7.3	6.9	0.4	NO
Mckinley Street	4	26,660	70.6	68.9	1.7	116.1	111.5	4.6	55.5	52.7	2.8	9.0	8.5	0.4	NO
Radio Road	2	4,300	70.6	68.9	1.7	115.7	111.1	4.6	6.8	6.5	0.3	6.1	5.8	0.3	NO
Joy Street	2	7,280	70.6	68.9	1.7	115.7	111.1	4.6	12.5	11.9	0.6	6.8	6.5	0.3	NO
Sheridan Street	2	2,370	70.6	68.9	1.7	115.7	111.1	4.6	3.6	3.4	0.2	5.7	5.5	0.3	NO

Table 3.6-100: BNSF Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Cota Street	4	6,040	70.6	68.9	1.7	116.1	111.5	4.6	9.3	8.9	0.5	5.9	5.6	0.3	NO
Railroad Street	4	9,680	70.6	68.9	1.7	116.1	111.5	4.6	15.6	14.9	0.8	6.3	6.0	0.3	NO
Smith Street	4	13,700	70.6	68.9	1.7	116.1	111.5	4.6	23.3	22.2	1.2	6.7	6.4	0.3	NO
Auto Center Drive	2	11,570	70.6	68.9	1.7	115.7	111.1	4.6	22.6	21.4	1.1	8.2	7.8	0.4	NO
Riverside-Orange County Line															
Kellogg Drive	4	7,050	70.6	68.9	1.7	116.1	111.5	4.6	11.1	10.6	0.6	6.0	5.7	0.3	NO
Lakeview Avenue	3	19,340	70.6	68.9	1.7	115.9	111.3	4.6	40.6	38.6	2.0	9.1	8.7	0.4	NO
Richfield Road	4	9,720	70.6	68.9	1.7	116.1	111.5	4.6	15.9	15.1	0.8	6.3	6.0	0.3	NO
Atwood Junction MP 40.6 (Connection to Old Olive Sub)															
Van Buren Street	2	6,940	51.2	49.5	1.7	96.7	92.1	4.6	10.6	10.0	0.6	6.0	5.7	0.3	NO
Jefferson Street	3	6,520	51.2	49.5	1.7	96.8	92.2	4.6	9.3	8.8	0.5	5.5	5.2	0.3	NO
Tustin Avenue (Rose Drive)	4	29,920	51.2	49.5	1.7	96.9	92.4	4.6	60.7	57.3	3.4	9.0	8.5	0.5	NO
OrangethorpeAvenue	4	29,040	51.2	49.5	1.7	96.9	92.4	4.6	57.8	54.6	3.2	8.8	8.3	0.5	NO
Kraemer Boulevard	4	20,290	51.2	49.5	1.7	96.9	92.4	4.6	34.4	32.5	1.9	7.0	6.6	0.4	NO
Placentia Avenue	4	14,870	51.2	49.5	1.7	96.9	92.4	4.6	23.2	21.9	1.3	6.2	5.9	0.3	NO
State College Boulevard	4	24,180	51.2	49.5	1.7	96.9	92.4	4.6	43.9	41.4	2.5	7.7	7.3	0.4	NO
Acacia Avenue	4	6,910	51.2	49.5	1.7	96.9	92.4	4.6	9.7	9.1	0.5	5.3	5.0	0.3	NO
Raymond Avenue	4	21,570	51.2	49.5	1.7	96.9	92.4	4.6	37.4	35.3	2.1	7.2	6.8	0.4	NO
Fullerton Junction MP 45.5 = MP 165.5															
Orange-LA County Line															

Table 3.6-100: BNSF Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Valley View Avenue	4	24,890	95.6	93.9	1.7	132.5	127.9	4.6	56.0	53.4	2.6	9.8	9.4	0.4	NO
Rosecrans/Marquardt Avenue	4	23,500	95.6	93.9	1.7	132.5	127.9	4.6	51.5	49.1	2.4	9.5	9.0	0.4	NO
Lakeland Road	2	6,630	95.6	93.9	1.7	132.0	127.4	4.6	12.1	11.6	0.6	7.4	7.0	0.3	NO
Los Nietos Road	4	20,740	95.6	93.9	1.7	132.5	127.9	4.6	43.2	41.2	2.0	8.8	8.4	0.4	NO
Norwalk Boulevard	4	26,590	95.6	93.9	1.7	132.5	127.9	4.6	62.0	59.1	2.9	10.3	9.9	0.5	NO
Pioneer Boulevard	4	15,520	95.6	93.9	1.7	132.5	127.9	4.6	29.6	28.2	1.4	7.8	7.5	0.4	NO
Passons Boulevard	4	12,860	95.6	93.9	1.7	132.5	127.9	4.6	23.6	22.5	1.1	7.4	7.0	0.3	NO
Serapis Avenue	2	6,360	95.6	93.9	1.7	132.0	127.4	4.6	11.6	11.0	0.5	7.3	7.0	0.3	NO
Commerce Yard MP 148.5															
Hobart Yard MP 146.0															
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**1,252.4**	**1,185.7**	**66.7**				
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**11.7**	**10.9**	**0.8**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only.

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Table 3.6-101: BNSF San Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Barstow MP 0															
Lenwood Road	2	4,490	68.7	66.8	1.9	120.3	116.5	3.9	6.3	6.1	0.2	5.2	5.0	0.2	NO
Hinkley Road	2	480	68.7	66.8	1.9	120.3	116.5	3.9	0.6	0.6	0.0	4.7	4.5	0.2	NO
Indian Trail Road	2	540	68.7	66.8	1.9	120.3	116.5	3.9	0.7	0.7	0.0	4.7	4.5	0.2	NO
Vista Road	2	2,770	68.7	66.8	1.9	120.3	116.5	3.9	3.8	3.6	0.1	5.0	4.8	0.2	NO
Turner Road	2	30	68.7	66.8	1.9	120.3	116.5	3.9	0.0	0.0	0.0	4.6	4.4	0.2	NO
North Bryman Road	2	160	68.7	66.8	1.9	120.3	116.5	3.9	0.2	0.2	0.0	4.6	4.4	0.2	NO
South Bryman Road	2	1,920	68.7	66.8	1.9	120.3	116.5	3.9	2.6	2.5	0.1	4.8	4.7	0.2	NO
Robinson Ranch Road	2	110	68.7	66.8	1.9	120.3	116.5	3.9	0.1	0.1	0.0	4.6	4.4	0.2	NO
1st Street	2	690	68.7	66.8	1.9	141.9	137.2	4.6	1.3	1.2	0.0	6.6	6.3	0.2	NO
6th Street	4	3,600	68.7	66.8	1.9	164.6	159.2	5.4	9.0	8.7	0.3	9.2	8.8	0.4	NO
Silverwood Junction MP 56.6															
Keenbrook Junction MP 69.4															
Swarthout Canyon Road	2	180	80.1	78.1	2.0	230.7	223.5	7.2	0.7	0.7	0.0	14.8	14.2	0.5	NO
Devore Road/Glen Helen Pkwy	4	6,240	80.1	78.1	2.0	231.3	224.1	7.2	27.5	26.5	1.0	16.2	15.6	0.6	NO
Dike Junction															
Palm Avenue	2	11,790	60.7	58.8	1.9	177.2	170.6	6.6	50.3	48.1	2.2	17.1	16.4	0.7	NO
San Bernardino MP 81.4															
OVERALL															**NONE SIGN.**

Table 3.6-101: BNSF San Cajon Subdivision, from San Bernardino to Barstow, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**103.1**	**99.0**	**4.1**				
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**17.1**	**16.4**	**0.7**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only.

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Table 3.6-102: UP Alhambra Subdivision from Los Angeles Transportation Center (LATC) to Colton Crossing, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project (Excluding Segment That is Combined with UP Los Angeles Subdivision)

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
LATC MP 482.9															
San Pablo Street	4	4,100	21.0	20.0	1.0	104.1	98.4	5.8	13.5	12.6	0.8	12.1	11.4	0.8	NO
Vineburn Avenue	2	1,370	21.0	20.0	1.0	73.5	69.4	4.0	2.2	2.1	0.1	5.8	5.5	0.4	NO
Worth/Boca Road	2	7,940	21.0	20.0	1.0	73.5	69.4	4.0	15.8	14.8	1.0	8.1	7.6	0.5	NO
Valley Boulevard	4	27,850	21.0	20.0	1.0	49.3	46.6	2.7	28.7	26.9	1.7	4.5	4.2	0.3	NO
Ramona Street	2	12,880	21.0	20.0	1.0	73.5	69.4	4.0	28.5	26.7	1.8	9.4	8.8	0.6	NO
Mission Road	3	23,330	21.0	20.0	1.0	73.6	69.5	4.0	57.5	54.0	3.6	11.0	10.4	0.7	NO
Del Mar Avenue	2	21,330	21.0	20.0	1.0	73.5	69.4	4.0	71.6	67.2	4.4	17.3	16.2	1.1	NO
San Gabriel Boulevard	4	35,550	21.0	20.0	1.0	73.6	69.6	4.1	97.5	91.5	6.0	12.9	12.1	0.8	NO
Walnut Grove Avenue	3	15,530	21.0	20.0	1.0	43.1	40.8	2.3	10.8	10.1	0.6	2.8	2.7	0.2	NO
Encinita Avenue	2	6,470	21.0	20.0	1.0	43.1	40.7	2.3	4.0	3.7	0.2	2.4	2.2	0.1	NO
Lower Azusa Road	4	17,620	21.0	20.0	1.0	43.2	40.8	2.3	11.6	10.9	0.7	2.6	2.5	0.2	NO
Temple City Boulevard	4	21,140	21.0	20.0	1.0	43.2	40.8	2.3	14.8	13.9	0.9	2.9	2.7	0.2	NO
Baldwin Avenue	4	26,220	21.0	20.0	1.0	43.2	40.8	2.3	20.0	18.8	1.2	3.3	3.1	0.2	NO
Arden Drive	4	11,190	21.0	20.0	1.0	43.2	40.8	2.3	6.7	6.3	0.4	2.3	2.2	0.1	NO
El Monte Junction MP 494.99															
Tyler Avenue	4	11,920	58.5	57.5	1.0	70.1	67.8	2.3	9.7	9.3	0.4	3.4	3.2	0.1	NO
Cogswell Road	2	10,200	58.5	57.5	1.0	69.8	67.5	2.3	9.4	9.0	0.4	4.0	3.9	0.2	NO
Temple Avenue	4	27,390	58.5	57.5	1.0	70.1	67.8	2.3	29.0	27.7	1.3	4.9	4.7	0.2	NO
Bassett Junction MP 498.45															
Vineland Avenue	2	12,710	21.8	20.8	1.0	43.7	41.4	2.3	9.6	9.1	0.6	3.2	3.0	0.2	NO
Puente Avenue	4	32,190	21.8	20.8	1.0	43.8	41.5	2.3	28.2	26.5	1.7	4.0	3.7	0.2	NO

Table 3.6-102: UP Alhambra Subdivision from Los Angeles Transportation Center (LATC) to Colton Crossing, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project (Excluding Segment That is Combined with UP Los Angeles Subdivision)

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Orange Avenue	2	5,830	21.8	20.8	1.0	43.7	41.4	2.3	3.6	3.4	0.2	2.4	2.2	0.1	NO
California Avenue	2	19,010	21.8	20.8	1.0	43.7	41.4	2.3	19.2	18.0	1.1	4.9	4.6	0.3	NO
City of Industry Junction MP 501.5															
Fullerton Road	4	18,510	27.0	26.0	1.0	54.7	52.4	2.3	15.8	15.0	0.7	3.4	3.3	0.2	NO
Fairway Drive	4	20,080	27.0	26.0	1.0	54.7	52.4	2.3	17.5	16.7	0.8	3.6	3.4	0.2	NO
Lemon Road	4	17,390	27.0	26.0	1.0	54.7	52.4	2.3	14.6	13.9	0.7	3.4	3.2	0.2	NO
Brea Canyon Road	2	14,570	27.0	26.0	1.0	54.6	52.2	2.3	14.9	14.2	0.7	4.5	4.3	0.2	NO
Pomona Junction MP 514.3	**HANDLED SEPARATELY DUE TO PROXIMITY TO UP LOS ANGELES SUBDIVISION**														
LA-San Bernardino County Line MP 516.7															
Montclair Junction															
Bon View Avenue	2	10,030	27.8	26.8	1.0	55.0	52.6	2.3	8.5	8.1	0.4	3.4	3.3	0.2	NO
Vineyard Avenue	4	30,790	27.8	26.8	1.0	55.1	52.7	2.3	31.7	30.2	1.5	4.6	4.4	0.2	NO
Milliken Avenue	6	34,230	27.8	26.8	1.0	55.2	52.9	2.3	30.6	29.1	1.5	3.7	3.5	0.2	NO
Kaiser Junction MP 527.5															
West Colton MP 534.7															
Colton Crossing MP 538.70															
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**625.4**	**589.8**	**35.6**				

Table 3.6-102: UP Alhambra Subdivision from Los Angeles Transportation Center (LATC) to Colton Crossing, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project (Excluding Segment That is Combined with UP Los Angeles Subdivision)

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**17.3**	**16.2**	**1.1**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only.

Table 3.6-103: UP Los Angeles Subdivision from East Los Angeles Yard to West Riverside Junction, 2013 Baseline Plus2038 Alternative 5 – Additional TCITF Capacity Project (Excluding Segment That is Combined with UP Alhambra Subdivision)

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
East Los Angeles MP 5.85															
S. Vail Avenue	2	8,000	26.5	25.4	1.2	54.8	50.7	4.1	9.0	8.2	0.8	4.6	4.2	0.4	NO
Maple Avenue	2	5,630	26.5	25.4	1.2	54.8	50.7	4.1	5.9	5.4	0.5	4.2	3.8	0.4	NO
S. Greenwood Avenue	4	7,380	26.5	25.4	1.2	55.0	50.9	4.1	7.4	6.8	0.7	3.9	3.6	0.3	NO
Montebello Bl	4	20,840	26.5	25.4	1.2	55.0	50.9	4.1	25.4	23.1	2.3	5.2	4.7	0.5	NO
Durfee Avenue	2	14,150	26.5	25.4	1.2	38.6	36.0	2.7	9.2	8.5	0.8	3.0	2.8	0.2	NO
Rose Hills Road	4	9,570	26.5	25.4	1.2	37.0	34.5	2.5	4.2	3.8	0.3	1.8	1.6	0.1	NO
Mission Mill Road	2	2,210	26.5	25.4	1.2	36.9	34.4	2.5	0.9	0.8	0.1	1.6	1.5	0.1	NO
Workman Mill	4	7,750	26.5	25.4	1.2	37.0	34.5	2.5	3.3	3.0	0.3	1.7	1.6	0.1	NO
Turnbull Canyon Road	4	14,640	26.5	25.4	1.2	37.0	34.5	2.5	6.9	6.3	0.6	2.0	1.8	0.1	NO

Table 3.6-103: UP Los Angeles Subdivision from East Los Angeles Yard to West Riverside Junction, 2013 Baseline Plus2038 Alternative 5 – Additional TCITF Capacity Project (Excluding Segment That is Combined with UP Alhambra Subdivision)

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Stimson Avenue& Puente Avenue	4	14,920	26.5	25.4	1.2	37.0	34.5	2.5	7.0	6.5	0.6	2.0	1.8	0.2	NO
Bixby Drive	2	3,010	26.5	25.4	1.2	36.9	34.4	2.5	1.3	1.1	0.1	1.7	1.5	0.1	NO
Fullerton Road	4	24,570	26.5	25.4	1.2	37.0	34.5	2.5	13.6	12.5	1.1	2.5	2.3	0.2	NO
Nogales Street	6	38,240	26.5	25.4	1.2	37.1	34.6	2.5	21.6	19.8	1.7	2.6	2.4	0.2	NO
Fairway Drive	4	25,690	26.5	25.4	1.2	37.0	34.5	2.5	14.5	13.3	1.2	2.5	2.4	0.2	NO
Lemon Street	4	15,270	26.5	25.4	1.2	37.0	34.5	2.5	7.2	6.6	0.6	2.0	1.8	0.2	NO
Pomona Junction MP 31.9	**HANDLED SEPARATELY DUE TO PROXIMITY TO UP ALHAMBRA SUBDIVISION**														
LA-San Bernardino County Line MP 33.17															
E. Montclair Junction MP 35.02															
Bonview Avenue	2	3,460	30.5	29.5	1.0	44.8	42.6	2.2	1.8	1.7	0.1	2.1	2.0	0.1	NO
Grove Avenue	6	39,250	30.5	29.5	1.0	45.0	42.8	2.2	28.4	26.8	1.6	3.3	3.1	0.2	NO
Vineyard Avenue	4	4,430	30.5	29.5	1.0	44.9	42.7	2.2	2.3	2.1	0.1	2.0	1.9	0.1	NO
Archibald Avenue	4	5,230	30.5	29.5	1.0	44.9	42.7	2.2	2.7	2.5	0.2	2.0	1.9	0.1	NO
San Bernardino-Riverside County Line MP 43.36															
Milliken Avenue	6	20,900	30.5	29.5	1.0	45.0	42.8	2.2	12.1	11.4	0.7	2.4	2.3	0.1	NO
Mira Loma Junction MP 45.7															
Bellegrave Avenue	2	7,680	30.7	29.7	1.0	45.0	42.8	2.2	4.5	4.2	0.3	2.4	2.3	0.1	NO
Rutile Street	2	8,250	30.7	29.7	1.0	45.0	42.8	2.2	4.9	4.6	0.3	2.5	2.4	0.1	NO
Clay Street	2	13,460	30.7	29.7	1.0	45.0	42.8	2.2	9.6	9.0	0.6	3.2	3.0	0.2	NO
Jurupa Avenue	4	16,260	30.7	29.7	1.0	45.1	42.9	2.2	9.7	9.1	0.6	2.5	2.4	0.1	NO
Mountain View Avenue	2	1,710	30.7	29.7	1.0	52.9	50.3	2.7	1.2	1.1	0.1	2.7	2.6	0.2	NO

Table 3.6-103: UP Los Angeles Subdivision from East Los Angeles Yard to West Riverside Junction, 2013 Baseline Plus2038 Alternative 5 – Additional TCITF Capacity Project (Excluding Segment That is Combined with UP Alhambra Subdivision)

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Streeter Avenue	4	13,820	30.7	29.7	1.0	53.1	50.4	2.7	11.3	10.6	0.7	3.3	3.1	0.2	NO
Palm Avenue	2	7,480	30.7	29.7	1.0	49.8	47.3	2.5	5.4	5.1	0.3	3.0	2.8	0.2	NO
Brockton Avenue	4	13,320	30.7	29.7	1.0	53.1	50.4	2.7	10.8	10.2	0.7	3.3	3.1	0.2	NO
Riverside Avenue	2	11,460	30.7	29.7	1.0	52.9	50.3	2.7	10.7	10.1	0.6	4.0	3.8	0.2	NO
Panorama Road	2	6,360	30.7	29.7	1.0	52.9	50.3	2.7	5.1	4.8	0.3	3.2	3.0	0.2	NO
West Riverside Junction MP 56.7															
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**258.0**	**239.3**	**18.7**				
Max.P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**5.2**	**4.7**	**0.5**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only.

Table 3.6-104: Combined UP Alhambra and Los Angeles Subdivisions in Pomona and Montclair Area, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Pomona Junction MP 514.3															
Hamilton Boulevard	4	8,110	54.1	52.0	2.0	94.4	89.8	4.7	10.0	9.4	0.6	4.8	4.5	0.3	NO
Park Avenue	2	5,730	54.1	52.0	2.0	94.2	89.5	4.7	7.3	6.9	0.4	5.0	4.8	0.3	NO
Main Street	2	1,590	54.1	52.0	2.0	94.2	89.5	4.7	1.8	1.7	0.1	4.3	4.1	0.2	NO
Palomares Street	2	3,910	54.1	52.0	2.0	94.2	89.5	4.7	4.8	4.5	0.3	4.7	4.4	0.3	NO
San Antonio Avenue	4	6,970	54.1	52.0	2.0	94.4	89.8	4.7	8.4	8.0	0.5	4.7	4.4	0.3	NO
LA-San Bernardino County Line MP 516.7															
Monte Vista Avenue	4	12,200	54.1	52.0	2.0	94.4	89.8	4.7	15.7	14.9	0.9	5.1	4.8	0.3	NO
San Antonio Avenue	4	10,330	54.1	52.0	2.0	94.4	89.8	4.7	13.0	12.3	0.7	4.9	4.7	0.3	NO
Vine Avenue	2	7,580	54.1	52.0	2.0	94.2	89.5	4.7	10.1	9.6	0.6	5.4	5.1	0.3	NO
Sultana Avenue	2	11,300	54.1	52.0	2.0	94.2	89.5	4.7	17.0	16.0	1.0	6.4	6.0	0.4	NO
Campus Avenue	2	10,600	54.1	52.0	2.0	94.2	89.5	4.7	15.6	14.7	0.9	6.2	5.8	0.3	NO
Montclair Junction															
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**103.8**	**97.9**	**5.9**				
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**6.4**	**6.0**	**0.4**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only.

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Table 3.6-105: UP Yuma Subdivision from Colton Crossing to Indio, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Colton Crossing MP 539.0															
Hunts Lane	4	13,340	44.4	42.7	1.7	101.4	96.9	4.6	22.1	20.9	1.1	6.5	6.1	0.3	NO
Whittier Avenue	2	190	44.4	42.7	1.7	119.8	114.3	5.4	0.4	0.4	0.0	7.1	6.7	0.4	NO
Beaumont Avenue	2	460	44.4	42.7	1.7	119.8	114.3	5.4	0.9	0.9	0.0	7.1	6.8	0.4	NO
San Timoteo Cyn Road	2	11,490	44.4	42.7	1.7	119.8	114.3	5.4	31.2	29.6	1.6	11.4	10.8	0.6	NO
Alessandro Road	2	290	44.4	42.7	1.7	119.8	114.3	5.4	0.6	0.5	0.0	7.1	6.7	0.4	NO
San Bernardino-Riverside County Line MP 549.25															
Live Oak Cyn Road	2	1,080	44.4	42.7	1.7	119.8	114.3	5.4	2.1	2.0	0.1	7.2	6.9	0.4	NO
San Timoteo Cyn Road	2	1,410	44.4	42.7	1.7	119.8	114.3	5.4	2.8	2.7	0.1	7.3	6.9	0.4	NO
Viele Avenue	2	100	44.4	42.7	1.7	101.2	96.6	4.5	0.1	0.1	0.0	5.0	4.8	0.3	NO
California Avenue	2	6,490	44.4	42.7	1.7	101.2	96.6	4.5	10.3	9.8	0.5	6.1	5.8	0.3	NO
Pennsylvania Avenue	2	8,040	44.4	42.7	1.7	101.2	96.6	4.5	13.3	12.6	0.7	6.5	6.1	0.3	NO
North Sunset Avenue	2	3,740	44.4	42.7	1.7	101.2	96.6	4.5	5.6	5.3	0.3	5.6	5.3	0.3	NO
22nd Street	4	15,190	44.4	42.7	1.7	101.4	96.9	4.6	25.0	23.7	1.3	6.4	6.1	0.3	NO
San Gorgonio Avenue	2	12,570	44.4	42.7	1.7	101.2	96.6	4.5	23.6	22.4	1.2	7.7	7.3	0.4	NO
Hargrave Street	2	16,360	44.4	42.7	1.7	101.2	96.6	4.5	34.8	33.0	1.8	9.3	8.8	0.5	NO
Apache Trail	2	2,480	44.4	42.7	1.7	101.2	96.6	4.5	3.6	3.4	0.2	5.4	5.1	0.3	NO
Broadway	2	6,550	44.4	42.7	1.7	101.2	96.6	4.5	10.5	9.9	0.5	6.1	5.8	0.3	NO

Table 3.6-105: UP Yuma Subdivision from Colton Crossing to Indio, 2013 Baseline Plus 2038 Alternative 5 – Additional TCITF Capacity Project

Boundary/Junction – Street	# of Lanes	Average Daily Traffic (Vehicles/ Day)	Average Daily Train Volume (Trains/Day)			Daily Total Gate Down Time (Minutes/Day)			Daily Total Vehicle Hours of Delay (Veh-Hrs/Day)			P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)			Significant ?
			W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	W/ Proj	W/O Proj	Change	
Tipton Road	2	110	44.4	42.7	1.7	101.2	96.6	4.5	0.2	0.1	0.0	5.0	4.8	0.3	NO
Garnet MP 588.32															
West Indio MP 609.63															
Indio MP 610.9															
Avenue 52	4	10,780	44.4	42.7	1.7	101.4	96.9	4.6	16.8	16.0	0.9	5.9	5.6	0.3	NO
Avenue 56/Airport Boulevard	2	4,700	44.4	42.7	1.7	101.2	96.6	4.5	7.2	6.8	0.4	5.8	5.5	0.3	NO
Avenue 66/4th Street	2	7,700	44.4	42.7	1.7	101.2	96.6	4.5	12.6	12.0	0.6	6.4	6.1	0.3	NO
OVERALL															**NONE SIGN.**
Total Daily Vehicle Hours of Delay (Veh-Hrs/Day)									**223.6**	**212.2**	**11.4**				
Maximum P.M. Peak Average Delay per Vehicle (Seconds/Vehicle)												**11.4**	**10.8**	**0.6**	

Note: The results of at-grade highway-rail crossings delay analysis shown above are for informational purposes only.

Impact TRANS-6: Alternative 5 would not substantially increase transportation hazards due to a design feature.

Alternative 5 includes the closure (vacation) of Terminal Way west of Earle Street and Barracuda Street north of Cannery Street. Connections to parcels adjacent to S. Seaside Avenue would be maintained by the existing Cannery Street, which is a parallel roadway 400 feet to the south of Terminal Way. Vacation of Terminal Way and improvement of Cannery Street under Alternative 5 would be as described above under the proposed Project.

CEQA Impact Determination

Under Alternative 5, the Port will follow the City of Los Angeles' street vacation procedures for the vacation of Terminal Way west of Earle Street and Barracuda Street north of Cannery Street. Therefore, Alternative 5 wound not substantially increase transportation hazards due to a design feature and cause impacts under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

The Port will follow the City of Los Angeles' street vacation procedures for the vacation of Terminal Way west of Earle Street and Barracuda Street north of Cannery Street. In addition, both Alternative 5 and the NEPA baseline include backlands expansion, the vacation of Terminal Way and rerouting of traffic to Cannery Street. Therefore, the Alternative 5 wound not substantially increase transportation hazards due to a design feature and cause impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

3.6.4.6 Summary of Impact Determinations

Table 3.6-106 summarizes the CEQA and NEPA impact determinations of the proposed Project and alternatives related to Ground Transportation, as described in the detailed discussion above. This table is meant to allow easy comparison between the impacts of the proposed Project and alternatives with respect to this resource. Identified potential impacts may be based on federal, state, or City significance criteria, Port criteria, and the scientific judgment of the report preparers.

For each impact threshold, the table describes the impact, notes the CEQA and NEPA impact determinations, describes any applicable mitigation measures, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table.

Table 3.6-106: Summary Matrix of Potential Impacts and Mitigation Measures for Ground Transportation Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
Proposed Project	**TRANS-1:** Proposed Project construction would not result in a short-term, temporary increase in truck and auto traffic.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant
	TRANS-2: Long-term vehicular traffic associated with the proposed Project would not significantly impact volume/capacity ratios or level of service.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Potentially significant at Intersection #14	NEPA: No mitigation is available.	NEPA: Significant and unavoidable
	TRANS-3: An increase in on-site employees due to proposed Project operations would not significantly increase public transit use.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant
	TRANS-4: Proposed Project operations would not significantly increase freeway congestion.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant

Table 3.6-106: Summary Matrix of Potential Impacts and Mitigation Measures for Ground Transportation Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
	TRANS-5 (For Informational Purposes): Proposed Project operations would not cause a significant impact in vehicular delay at at-grade railroad crossings within the proposed project vicinity or in the region.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No impact	NEPA: No mitigation is required.	NEPA: No impact
	TRANS-6: The proposed Project would not substantially increase transportation hazards due to a design feature.	CEQA: No Impact	CEQA: No mitigation is required.	CEQA: No Impact
		NEPA: No Impact	NEPA: No mitigation is required.	NEPA: No Impact
Alternative 1 – No Federal Action	**TRANS-1:** Alternative 1 construction would not result in a short-term, temporary increase in truck and auto traffic.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No Impact	NEPA: No mitigation is required.	NEPA: No Impact
	TRANS-2: Long-term vehicular traffic associated with Alternative 1 would not significantly impact volume/capacity ratios or level of service.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No Impact	NEPA: No mitigation is required.	NEPA: No Impact
	TRANS-3: An increase in on-site employees due to Alternative 1 operations would not significantly increase public transit use.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No Impact	NEPA: No mitigation is required.	NEPA: No Impact
	TRANS-4: Alternative 1 operations would not significantly increase freeway congestion.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No Impact	NEPA: No mitigation is required.	NEPA: No Impact

Table 3.6-106: Summary Matrix of Potential Impacts and Mitigation Measures for Ground Transportation Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
	TRANS-5 (For Informational Purposes): Alternative 1 operations would not cause a significant impact in vehicular delay at at-grade railroad crossings within the proposed project vicinity or in the region.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No impact	NEPA: No mitigation is required.	NEPA: No impact
	TRANS-6: The Alternative 1 would not substantially increase transportation hazards due to a design feature.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No Impact	NEPA: No mitigation is required.	NEPA: No Impact
Alternative 2 – No Project	**TRANS-1:** Alternative 2 construction would not result in a short-term, temporary increase in truck and auto traffic.	CEQA: No Impact	CEQA: No mitigation is required.	CEQA: No Impact
		NEPA: Not applicable	NEPA: Not applicable	NEPA: Not applicable
	TRANS-2: Long-term vehicular traffic associated with Alternative 2 would not significantly impact volume/capacity ratios or level of service.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Not applicable	NEPA: Not applicable	NEPA: Not applicable
	TRANS-3: An increase in on-site employees due to Alternative 2 operations would not significantly increase public transit use.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Not applicable	NEPA: Not applicable	NEPA: Not applicable
	TRANS-4: Alternative 2 operations would not significantly increase freeway congestion.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Not applicable	NEPA: Not applicable	NEPA: Not applicable
	TRANS-5 (For Informational Purposes): Alternative 2 operations would not cause a significant impact in vehicular delay at at-	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant

Table 3.6-106: Summary Matrix of Potential Impacts and Mitigation Measures for Ground Transportation Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
	grade railroad crossings within the proposed project vicinity or in the region.	NEPA: Not applicable	NEPA: Not applicable	NEPA: Not applicable
	TRANS-6: Alternative 2 would not substantially increase transportation hazards due to a design feature.	CEQA: No Impact	CEQA: No mitigation is required.	CEQA: No Impact
		NEPA: Not applicable	NEPA: Not applicable	NEPA: Not applicable
Alternative 3 – Reduced Project: Reduced Wharf Improvements	**TRANS-1:** Alternative 3 construction would not result in a short-term, temporary increase in truck and auto traffic.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant
	TRANS-2: Long-term vehicular traffic associated with Alternative 3 would not significantly impact volume/capacity ratios or level of service.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Potentially significant at Intersection #14	NEPA: No mitigation is available.	NEPA: Significant and unavoidable
	TRANS-3: An increase in on-site employees due to Alternative 3 operations would not significantly increase public transit use.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant
	TRANS-4: Alternative 3 operations would not significantly increase freeway congestion.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant
	TRANS-5 (For Informational Purposes): Alternative 3 operations would not cause a significant impact in vehicular delay at at-	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant

Table 3.6-106: Summary Matrix of Potential Impacts and Mitigation Measures for Ground Transportation Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
	grade railroad crossings within the proposed project vicinity or in the region.	NEPA: No impact	NEPA: No mitigation is required.	NEPA: No impact
	TRANS-6: Alternative 3 would not substantially increase transportation hazards due to a design feature.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No Impact	NEPA: No mitigation is required.	NEPA: No Impact
Alternative 4 – Reduced Project: No Backland Improvements	**TRANS-1:** Alternative 4 construction would not result in a short-term, temporary increase in truck and auto traffic.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant
	TRANS-2: Long-term vehicular traffic associated with Alternative 4 would not significantly impact volume/capacity ratios or level of service.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: : Potentially significant at Intersection #14	NEPA: No mitigation is available.	NEPA: Significant and unavoidable
	TRANS-3: An increase in on-site employees due to Alternative 4 operations would not significantly increase public transit use.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant
	TRANS-4: Alternative 4 operations would not significantly increase freeway congestion.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant

Table 3.6-106: Summary Matrix of Potential Impacts and Mitigation Measures for Ground Transportation Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
	TRANS-5 (For Informational Purposes): Alternative 4 operations would not cause a significant impact in vehicular delay at at-grade railroad crossings within the proposed project vicinity or in the region.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No impact	NEPA: No mitigation is required.	NEPA: No impact
	TRANS-6: Alternative 4 would not substantially increase transportation hazards due to a design feature.	CEQA: No Impact	CEQA: No mitigation is required.	CEQA: No Impact
		NEPA: No Impact	NEPA: No mitigation is required.	NEPA: No Impact
Alternative 5 – Expanded On-Dock Railyard: Wharf and Backland Improvements with an Expanded TICTF	**TRANS-1:** Alternative 5 construction would not result in a short-term, temporary increase in truck and auto traffic.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant
	TRANS-2: Long-term vehicular traffic associated with Alternative 5 would not significantly impact volume/capacity ratios or level of service.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Potentially significant at Intersection #14	NEPA: No mitigation is available.	NEPA: Significant and unavoidable
	TRANS-3: An increase in on-site employees due to Alternative 5 operations would not significantly increase public transit use.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant
	TRANS-4: Alternative 3 operations would not significantly increase freeway congestion.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant

Table 3.6-106: Summary Matrix of Potential Impacts and Mitigation Measures for Ground Transportation Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Residual Impacts after Mitigation
		NEPA: Less than significant	NEPA: No mitigation is required.	NEPA: Less than significant
	TRANS-5 (For Informational Purposes): Alternative 5 operations would not cause a significant impact in vehicular delay at at-grade railroad crossings within the proposed project vicinity or in the region.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No impact	NEPA: No mitigation is required.	NEPA: No impact
	TRANS-6: Alternative 5 would not substantially increase transportation hazards due to a design feature.	CEQA: Less than significant	CEQA: No mitigation is required.	CEQA: Less than significant
		NEPA: No Impact	NEPA: No mitigation is required.	NEPA: No Impact

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3.6.4.7 Mitigation Monitoring

The proposed Project and Alternatives 1 through 5 would not result in significant traffic impacts under CEQA at any analyzed intersection or freeway segment. The proposed Project and Alternative 3, 4, and 5 would result in significant traffic impacts under NEPA at one intersection (#14: Ferry Street at State Route (SR)-47 (Terminal Island Freeway)/Seaside Avenue Ramps); however, the westbound approach of this intersection is controlled by Caltrans, rather than the City of Los Angeles. Because of this, no mitigation is within the Port's control that that could reduce the intersection impact to a less than significant level under NEPA.

3.6.5 Significant Unavoidable Impacts

Vehicular traffic associated with terminal operations under the proposed Project and Alternatives 3, 4, and 5 would remain significant and unavoidable under NEPA.