# Chapter 5
# Alternatives

## 5.1 Introduction

This section presents a description of the alternatives to the proposed Project, evaluates their environmental impacts, and compares the impacts of each alternative to those of the other alternatives, including the proposed Project.

## 5.1.1 Evaluation of Alternatives

### 5.1.1.1 CEQA Requirements

CEQA's requirements for an EIR to evaluate alternatives are described fully in Section 1. Briefly, the CEQA Guidelines, Section 15126.6, require that an EIR present a range of reasonable alternatives to the proposed Project, or to the location of the project, that could feasibly attain most of the basic project objectives, but would avoid or substantially lessen any significant effects of the project. Section 15126.6 also requires an evaluation of the comparative merits of the alternatives. An EIR is not required to consider alternatives that are infeasible, which are described in Section 2.5.

### 5.1.1.2 Alternatives Comparison

Section 2.5 considered alternatives to the proposed Project, including a number of alternatives that were rejected from further evaluation on various grounds (Section 2.5.2). The two alternatives to the proposed Project that are evaluated in this section were introduced in Section 2.5.3. They are:

- Alternative 1: No Project
- Alternative 2: Reduced Project

Each of these is described in more detail below.

Criteria for determining the significance of impacts related to each issue area are based on the State CEQA Guidelines, the Los Angeles CEQA Thresholds Guide, and the scientific judgment of the report preparers. The specific criteria employed in this document are described in Section 3 for the proposed Project, and are the same for the alternatives. The impact assessment methodology described in Section 3 for the proposed Project was applied to the alternatives, as well.

Section 5.4 presents a summary of the results of the significance analysis for the resource areas that involve significant impacts from one or more of the alternatives, and identifies the alternatives that would result in unavoidable significant impacts, as discussed in Section 3. A summary of the resources with unavoidable significant impacts or significant impacts that can be mitigated to less than significant is provided in Sections 5.4.2 and 5.4.3.

# 5.2 Alternative 1: No Project

## 5.2.1 Project Description

The No Project Alternative considers what would reasonably be expected to occur if the Port did not approve the proposed Project (CEQA Guidelines Section 15126.6(e)(3)(C)). Under the No Project Alternative, the Port would not issue any permits or discretionary approvals associated with the proposed Project, the proposed Project would not be built, and existing uses and operations at the Project site would continue under existing or holdover leases (see Section 2.2.2 for a list of current tenants). Forecasted increases in cargo throughput at the two San Pedro Bay Ports, including intermodal cargo, would still occur, and the intermodal cargo that could not be accommodated by on-dock railyards would continue to be handled by the existing near and off-dock railyards (UP ICTF and the BNSF Hobart).

BNSF has represented that, in this case, additional intermodal cargo would be drayed to and from the Hobart and Commerce railyard, in East Los Angeles, approximately 24 miles north of the San Pedro Bay Ports, and the domestic cargo currently occupying a share of Hobart/Commerce's capacity would be shifted to other regional intermodal facilities. BNSF employs various operational and facility improvements at its intermodal railyards to increase throughput and would employ these measures at the Hobart and Commerce Yards. These improvements would allow Hobart/Commerce to handle 8,000-foot trains and the increased volume of containers. The physical improvements, which include converting a portion of the site from wheeled storage to a stacked operation, extension of existing loading tracks, and addition of new loading tracks, and operational changes to improve efficiency would further increase capacity. These changes would allow Hobart/Commerce to handle approximately 2.0 million TEUs per year in 2020, approximately 800,000 of them international cargo (i.e., to and from the marine terminals), and 2.8 million TEUs per year in 2023 (BNSF communication, 2009 and 2010).

This alternative assumes that existing operations would continue at the proposed Project site, and that these operations would grow by 10 percent from baseline levels by 2016, and then remain at 2016 levels for all future years due to site configuration and size as well as future growth projections obtained from California Cartage (Szabo, personal communication, 2011). Access to the site would continue to be from both the Pacific Coast Highway (PCH) and Sepulveda Boulevard entrances, both of which are assumed to maintain baseline geometrics as unsignalized ramps.

This alternative also assumes that drayage trucks that would operate between the marine terminals and the SCIG facility under the proposed Project would instead operate between the marine terminals and the Hobart Yard. Accordingly, compared to the proposed Project, the No Project Alternative would result in approximately 1,800 additional truck trips per average day between the port terminals and Hobart railyard in each direction in 2016, increasing to approximately 4,150 additional trips per day in 2023 and thereafter (see Table 2-2) on I-710. Because of the distance to the Hobart/Commerce Yard, each trip would be approximately 20 miles longer in each direction than under the proposed Project. Under the No Project Alternative, no line haul locomotive train trips would occur between the Project site and the BNSF Hobart/Commerce Yard. However, there would be limited onsite locomotive activity associated with existing California Cartage and L.A. Harbor Grain Terminal operations.

## 5.2.2 Impact Analysis

### 5.2.2.1 Aesthetics

Under the No Project Alternative, LAHD would not issue any permits or discretionary approvals, no improvements would be constructed, and existing structures would remain. Accordingly, there would be no physical changes to public views, scenic resources, or the existing natural and artificial light regimes from the baseline condition.

#### Impact Determination

Because there would be no physical changes to the project site, this alternative would have no impacts relative to AES-1 through AES-3.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

No impact would occur.

### 5.2.2.2 Air Quality

Under the No Project Alternative, LAHD would not issue any permits or discretionary approvals, no improvements would be constructed, and existing structures would remain. Tenants currently occupying the Project site would continue to utilize their existing facilities, and the activities of these tenants would be expected to grow by 10 percent from baseline levels by 2016, after which no further growth is assumed.

Under the No Project Alternative, the SCIG facility would not be constructed and no other construction activities would occur at the Project site. Thus, there are no impacts under AQ-1, and AQ-2 for this alternative, as these impacts address construction-related emissions only. The No Project Alternative would have no impacts under AQ-6 (odor) as there would be no change from baseline conditions. The impact determination discussions for AQ-3, AQ-4, AQ-5, AQ-7, and AQ-8 are presented below.

**Alt 1 Impact AQ-3: The No Project Alternative would not result in operational emissions that exceed 10 tons per year of VOCs and SCAQMD thresholds of significance.**

Table 5-1 presents unmitigated average daily criteria pollutant emissions associated with the No Project Alternative for the analysis years of 2013, 2014, 2015, 2016, 2023, 2035, and 2046. The average daily emissions represent the annual emissions divided by 360 days per year. No Project emissions are compared to the baseline (2005) to determine significance.

Table 5-2 presents peak daily unmitigated emissions estimated for the No Project Alternative in years 2013, 2014, 2015, 2016, 2023, 2035, and 2046. Peak daily emissions represent theoretical upper-bound estimates of activity levels at the facility and relocated tenant sites. Therefore, in contrast to average daily emissions, peak daily emissions would occur infrequently and are based upon a lesser known and therefore more theoretical set of conservative assumptions. Comparisons to the peak daily baseline emissions are presented to determine significance.

1 **Table 5-1. Average Daily Operational Emissions – No Project Alternative.**

| Source Category | Average Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| ***Project Year 2013*** | | | | | | |
| Trucks On-Site | 25 | 73 | 179 | 0 | 39 | 7 |
| Trucks Off-Site [b] | 27 | 114 | 364 | 1 | 49 | 10 |
| CHE | 53 | 1,685 | 335 | 1 | 9 | 9 |
| Employee Commute On-Site | 0 | 3 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 7 | 208 | 18 | 0 | 121 | 10 |
| Tenant Locomotive Activities | 0 | 0 | 2 | 0 | 0 | 0 |
| **Total - Project Year 2013 [d]** | **112** | **2,083** | **899** | **2** | **220** | **36** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | 539 | 4,079 | 8,447 | 139 | 685 | 314 |
| No Project minus CEQA Baseline [c] | -82 | -535 | -1,246 | -10 | -64 | -62 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2014*** | | | | | | |
| Trucks On-Site | 24 | 72 | 171 | 0 | 38 | 6 |
| Trucks Off-Site [b] | 28 | 114 | 348 | 1 | 48 | 7 |
| CHE | 54 | 1,686 | 354 | 1 | 10 | 9 |
| Employee Commute On-Site | 0 | 3 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 6 | 188 | 16 | 0 | 118 | 10 |
| Tenant Locomotive Activities | 0 | 0 | 2 | 0 | 0 | 0 |
| **Total - Project Year 2014 [d]** | **112** | **2,063** | **892** | **2** | **214** | **33** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | 539 | 4,079 | 8,447 | 139 | 685 | 314 |
| No Project minus CEQA Baseline [c] | -83 | -556 | -1,253 | -10 | -70 | -65 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2015*** | | | | | | |
| Trucks On-Site | 23 | 70 | 173 | 0 | 38 | 6 |
| Trucks Off-Site [b] | 27 | 110 | 339 | 1 | 48 | 8 |
| CHE | 10 | 1,688 | 350 | 1 | 10 | 9 |
| Employee Commute On-Site | 0 | 3 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 5 | 172 | 15 | 0 | 118 | 10 |
| Tenant Locomotive Activities | 0 | 0 | 2 | 0 | 0 | 0 |
| **Total - Project Year 2015 [d]** | **66** | **2,043** | **879** | **2** | **215** | **33** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | 539 | 4,079 | 8,447 | 139 | 685 | 314 |
| Proposed Project minus CEQA Baseline [c] | -129 | -576 | -1,266 | -10 | -70 | -65 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2016*** | | | | | | |
| Trucks On-Site | 24 | 75 | 183 | 0 | 41 | 6 |
| Trucks Off-Site [b, f] | 155 | 701 | 2,016 | 6 | 352 | 60 |
| CHE | 51 | 1,854 | 297 | 1 | 8 | 8 |
| Employee Commute On-Site | 0 | 3 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 5 | 175 | 15 | 0 | 130 | 12 |
| Tenant Locomotive Activities | 0 | 0 | 3 | 0 | 0 | 0 |
| Locomotives Off-Site [b] | 45 | 135 | 1551 | 2 | 32 | 30 |
| **Total - Project Year 2016 [d]** | **281** | **2,943** | **4,064** | **9** | **566** | **116** |

| Source Category | Average Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | 539 | 4,079 | 8,447 | 139 | 685 | 314 |
| No Project minus CEQA Baseline [c] | -258 | -1,136 | -4,383 | -130 | -119 | -198 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2023*** | | | | | | |
| Trucks On-Site | 17 | 63 | 110 | 0 | 41 | 6 |
| Trucks Off-Site [b, f] | 147 | 643 | 1,443 | 8 | 466 | 79 |
| CHE | 49 | 1,859 | 261 | 1 | 7 | 7 |
| Employee Commute On-Site | 0 | 2 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 3 | 106 | 8 | 0 | 130 | 12 |
| Tenant Locomotive Activities | 0 | 0 | 3 | 0 | 0 | 0 |
| Locomotives Off-Site [b] | 40 | 189 | 1,486 | 2 | 21 | 19 |
| **Total - Project Year 2023 [d]** | **257** | **2,862** | **3,311** | **11** | **668** | **123** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | 539 | 4,079 | 8,447 | 139 | 685 | 314 |
| No Project minus CEQA Baseline | -283 | -1217 | -5136 | -128 | -17 | -190 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2035*** | | | | | | |
| Trucks On-Site | 16 | 60 | 117 | 0 | 41 | 6 |
| Trucks Off-Site [b, f] | 141 | 620 | 1,453 | 8 | 463 | 79 |
| CHE | 47 | 1851 | 209 | 1 | 4 | 4 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 2 | 68 | 5 | 0 | 130 | 12 |
| Tenant Locomotive Activities | 0 | 0 | 3 | 0 | 0 | 0 |
| Locomotives Off-Site [b] | 16 | 129 | 629 | 2 | 9 | 8 |
| **Total - Project Year 2035 [d]** | **221** | **2,729** | **2,416** | **11** | **649** | **109** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | 539 | 4,079 | 8,447 | 139 | 685 | 314 |
| No Project minus CEQA Baseline | -318 | -1350 | -6032 | -128 | -36 | -205 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2046*** | | | | | | |
| Trucks On-Site | 16 | 60 | 118 | 0 | 41 | 6 |
| Trucks Off-Site [b, f] | 141 | 614 | 1448 | 8 | 462 | 78 |
| CHE | 41 | 1,859 | 210 | 1 | 4 | 4 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 1 | 63 | 4 | 0 | 130 | 12 |
| Tenant Locomotive Activities | 0 | 0 | 3 | 0 | 0 | 0 |
| Locomotives Off-Site [b] | 10 | 120 | 385 | 2 | 5 | 5 |
| **Total - Project Year 2046 [d]** | **210** | **2,718** | **2,167** | **11** | **645** | **105** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | 539 | 4,079 | 8,447 | 139 | 685 | 314 |
| No Project minus CEQA Baseline | -329 | -1362 | -6280 | -128 | -40 | -209 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |

| Source Category | Average Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| | | | | | | |

a) Emissions represent annual emissions divided by 360 days per year of operation.
b) Truck, train, and worker commute emissions include transport within the South Coast Air Basin.
c) By definition, the No Project minus Baseline increment in 2013, 2014 and 2015 does not account for both the truck travel between port terminals to Hobart Yard and the rail travel from Hobart Yard to the South Coast Air Basin boundary as they are not a part of the Project and Alternatives during this period.
d) Emissions might not precisely add due to rounding. For further explanation, refer to the discussion in Section 3.2.4.1.
e) The emission estimates presented in this table were calculated using the latest available data, assumptions, and emission factors at the time this document was prepared. Future studies might use updated data, assumptions, and emission factors that are not currently available.
f) Off-site trucks include tenant trucks and trucks that should have gone to SCIG but instead are going to Hobart Yard.

**Table 5-2. Peak Daily Operational Emissions – No Project Alternative.**

| Source Category | Peak Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| ***Project Year 2013*** | | | | | | |
| Trucks On-Site | 28 | 82 | 201 | 0 | 43 | 8 |
| Trucks Off-Site [b] | 30 | 127 | 407 | 1 | 55 | 11 |
| CHE | 59 | 1,887 | 375 | 1 | 11 | 10 |
| Employee Commute On-Site | 0 | 3 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 7 | 208 | 18 | 0 | 121 | 10 |
| Tenant Locomotive Activities | 0 | 0 | 2 | 0 | 0 | 0 |
| **Total - Project Year 2013 [d]** | **125** | **2,307** | **1,004** | **3** | **232** | **39** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| No Project minus CEQA Baseline [c] | -121 | -709 | -1,869 | -15 | -115 | -90 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2014*** | | | | | | |
| Trucks On-Site | 27 | 80 | 191 | 0 | 42 | 7 |
| Trucks Off-Site [b] | 31 | 127 | 389 | 1 | 53 | 8 |
| CHE | 60 | 1,888 | 397 | 1 | 11 | 10 |
| Employee Commute On-Site | 0 | 3 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 6 | 188 | 16 | 0 | 118 | 10 |
| Tenant Locomotive Activities | 0 | 0 | 2 | 0 | 0 | 0 |
| **Total - Project Year 2014 [d]** | **125** | **2,287** | **996** | **3** | **226** | **35** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| No Project minus CEQA Baseline [c] | -121 | -730 | -1,877 | -15 | -120 | -93 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2015*** | | | | | | |
| Trucks On-Site | 26 | 78 | 193 | 0 | 42 | 7 |
| Trucks Off-Site [b] | 30 | 123 | 380 | 1 | 54 | 9 |
| CHE | 11 | 1,890 | 392 | 1 | 11 | 10 |
| Employee Commute On-Site | 0 | 3 | 0 | 0 | 2 | 0 |

| Source Category | Peak Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| Employee Commute Off-Site [b] | 5 | 172 | 15 | 0 | 118 | 10 |
| Tenant Locomotive Activities | 0 | 0 | 2 | 0 | 0 | 0 |
| **Total - Project Year 2015 [d]** | **73** | **2,266** | **982** | **3** | **226** | **36** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| No Project minus CEQA Baseline [c] | -172 | -750 | -1,891 | -15 | -120 | -93 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2016*** | | | | | | |
| Trucks On-Site | 27 | 84 | 205 | 0 | 46 | 7 |
| Trucks Off-Site [b, f] | 174 | 785 | 2,257 | 6 | 394 | 67 |
| CHE | 57 | 2,076 | 333 | 1 | 9 | 9 |
| Employee Commute On-Site | 0 | 3 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 5 | 175 | 15 | 0 | 130 | 12 |
| Tenant Locomotive Activities | 0 | 0 | 3 | 0 | 0 | 0 |
| Locomotives Off-site [b] | 107 | 278 | 2,562 | 2 | 45 | 41 |
| **Total - Project Year 2016 [d]** | **371** | **3,400** | **5,374** | **10** | **627** | **137** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| No Project minus CEQA Baseline | -219 | -1,535 | -4,831 | -134 | -120 | -208 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2023*** | | | | | | |
| Trucks On-Site | 19 | 71 | 123 | 0 | 46 | 7 |
| Trucks Off-Site [b, f] | 165 | 719 | 1,616 | 8 | 522 | 89 |
| CHE | 55 | 2,082 | 292 | 1 | 8 | 8 |
| Employee Commute On-Site | 0 | 2 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 3 | 106 | 8 | 0 | 130 | 12 |
| Tenant Locomotive Activities | 0 | 0 | 3 | 0 | 0 | 0 |
| Locomotives Off-Site [b] | 143 | 371 | 3,416 | 2 | 60 | 55 |
| **Total - Project Year 2023 [d]** | **385** | **3,350** | **5,458** | **12** | **768** | **170** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| No Project minus CEQA Baseline | -204 | -1,585 | -4,747 | -132 | 22 | -174 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2035*** | | | | | | |
| Trucks On-Site | 18 | 67 | 131 | 0 | 46 | 7 |
| Trucks Off-Site [b, f] | 158 | 695 | 1,627 | 8 | 519 | 88 |
| CHE | 53 | 2,072 | 234 | 1 | 5 | 4 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 2 | 68 | 5 | 0 | 130 | 12 |
| Tenant Locomotive Activities | 0 | 0 | 3 | 0 | 0 | 0 |
| Locomotives Off-Site [b] | 89 | 371 | 2,859 | 2 | 37 | 34 |

| Source Category | Peak Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| **Total - Project Year 2035** [d] | **319** | **3,274** | **4,858** | **12** | **739** | **146** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| No Project minus CEQA Baseline | -271 | -1,661 | -5,346 | -131 | -8 | -199 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2046*** | | | | | | |
| Trucks On-Site | 17 | 67 | 132 | 0 | 46 | 7 |
| Trucks Off-Site [b, f] | 157 | 688 | 1,621 | 8 | 517 | 87 |
| CHE | 46 | 2,082 | 235 | 1 | 5 | 5 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 2 | 0 |
| Employee Commute Off-Site [b] | 1 | 63 | 4 | 0 | 130 | 12 |
| Tenant Locomotive Activities | 0 | 0 | 3 | 0 | 0 | 0 |
| Locomotives Off-Site [b] | 95 | 381 | 3,039 | 2 | 46 | 42 |
| **Total - Project Year 2046** [d] | **318** | **3,282** | **5,034** | **12** | **746** | **153** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| No Project minus CEQA Baseline | -272 | -1,653 | -5,171 | -132 | -1 | -192 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |

a) Emissions represent annual emissions divided by 360 days per year of operation.
b) Truck, train, and worker commute emissions include transport within the South Coast Air Basin.
c) By definition, the No Project minus Baseline increment in 2013, 2014 and 2015 does not account for both the truck travel between port terminals to Hobart Yard and the rail travel from Hobart Yard to the South Coast Air Basin boundary as they are not a part of the Project and Alternatives during this period.
d) Emissions might not precisely add due to rounding. For further explanation, refer to the discussion in Section 3.2.4.1.
e) The emission estimates presented in this table were calculated using the latest available data, assumptions, and emission factors at the time this document was prepared. Future studies might use updated data, assumptions, and emission factors that are not currently available.
f) Off-site trucks include tenant trucks and trucks that should have gone to SCIG but instead are going to Hobart Yard.

### Impact Determination

The impacts of this alternative would be less than significant.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

Less than significant impact.

**Alt 1 Impact AQ-4: The No Project Alternative operations would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance in Table 3.2-25.**

Implementation of the No Project Alternative, which assumes that the proposed Project is not built, accounts for growth in activity by existing tenants at the Project site, and includes trucks traveling to the downtown Hobart Yard. These activities would affect the ambient air pollutant concentrations relative to the baseline.

Tables 5-3 and 5-4 present the maximum offsite ground level concentrations of criteria pollutants estimated for the No Project Alternative. The 1-hour and annual $NO_2$, and 24-hour and annual $PM_{10}$ increments would exceed the SCAQMD ambient thresholds. The 1-hour $NO_2$ increment would also exceed the NAAQS. These would be significant impacts.

**Table 5-3. Maximum Offsite $NO_2$, CO, and $SO_2$ Concentrations Associated with Operation of the No Project Alternative.**

| Pollutant | Averaging Time | Maximum Modeled Concentration of No Project Alternative | Background Concentration[b] | Total Ground Level Concentration[a] | SCAQMD Threshold |
|---|---|---|---|---|---|
| | | ($\mu g/m^3$) | ($\mu g/m^3$) | ($\mu g/m^3$) | ($\mu g/m^3$) |
| $NO_2$ [c] | 1-hour | 1,194 | 245 | **1,438** | 338 |
| | 1-hour [d] | 1,194 | 146 | **1,340** | (189)[f] |
| | Annual | 24 | 40 | **64** | 56 |
| CO | 1-hour | 2,938 | 5,842 | 8,780 | 23,000 |
| | 8-hour | 793 | 4,467 | 5,260 | 10,000 |
| $SO_2$ | 1-hour | 7.4 | 288 | 296 | 655 |
| | 1-hour [e] | 7.4 | 53 | 61 | (196)[f] |
| | 24-hour | 1.1 | 31 | 33 | 105 |

a) Exceedances of the thresholds are indicated in bold. Modeled concentrations of $NO_2$, $SO_2$, and CO are absolute No Project Alternative concentrations.
b) CO background concentrations are the projected future year values for Monitor 4, Long Beach, published by the SCAQMD for years 2010, 2015, and 2020 (all identical). $NO_2$ and $SO_2$ background concentrations were obtained from the North Long Beach Monitoring Station. Unless noted otherwise, the maximum concentrations during the years of 2007, 2008, and 2009 were used.
c) $NO_2$ concentrations were calculated assuming a 75 percent conversion rate from NOx to $NO_2$ for the annual averaging period and an 80 percent conversion rate from NOx to $NO_2$ for the 1-hour averaging period.
d) This comparison is to the federal NAAQS, which is a 98th percentile threshold. Here, the background concentration is the 3-year average of the 8th highest daily maximum 1-hour concentration, over the years 2007, 2008, and 2009.
e) This comparison is to the federal NAAQS, which is a 99th percentile threshold. Here, the background concentration is the 3-year average of the 4th highest daily maximum 1-hour concentration, over the years 2007, 2008, and 2009.
f) A standard not yet adopted as a threshold of significance by SCAQMD.

**Table 5-4. Maximum Offsite $PM_{10}$ and $PM_{2.5}$ Concentrations Associated with Operation of the No Project Alternative.**

| Pollutant | Averaging Time | Maximum Modeled Concentration of No Project Alternative[b] | Maximum Modeled Concentration of Baseline[b] | Ground-Level Concentration Increment[a,b,c] | SCAQMD Threshold |
|---|---|---|---|---|---|
| | | ($\mu g/m^3$) | ($\mu g/m^3$) | ($\mu g/m^3$) | ($\mu g/m^3$) |
| $PM_{10}$ | 24-hour | 16.1 | 21.4 | 2.3 | 2.5 |
| | Annual | 6.7 | 6.3 | **1.2** | 1.0 |
| $PM_{2.5}$ | 24-hour | 3.5 | 12.5 | -0.1 | 2.5 |

a) Exceedances of the threshold are indicated in bold. The thresholds for $PM_{10}$ and $PM_{2.5}$ are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.
b) The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the No Project Alternative concentration.
c) The increment represents operation of the No Project Alternative minus baseline.

## Impact Determination

The No Project Alternative would exceed the SCAQMD thresholds for 1-hour and annual $NO_2$ and 24-hour and annual $PM_{10}$. It would also exceed the NAAQS for 1-hour $NO_2$. Therefore, the No Project Alternative would have significant impacts under AQ-4.

### *Mitigation Measures*

Mitigation measures would not be applicable to this alternative as there would be no construction or changes to existing tenant lease agreements that would require discretionary actions subject to CEQA.

### *Residual Impacts*

Significant for 1-hour and annual $NO_2$ and 24-hour and annual $PM_{10}$, and exceedance of the NAAQS for 1-hour $NO_2$.

## Alt 1 Impact AQ-5: The No Project Alternative would not generate on-road traffic that would contribute to an exceedance of the 1-hour or 8-hour CO standards.

The No Project Alternative would include off-site traffic, including truck trips, that could affect nearby intersections predicted to experience congestion in future years. Under relatively stagnant conditions with periods of near-calm winds, heavily congested intersections can produce elevated levels of carbon monoxide in their immediate vicinity. Therefore, a microscale "hot-spot" modeling analysis was conducted to determine whether the proposed Project would contribute to a violation of the ambient air quality standards for CO at a local intersection. The methodology for this analysis is described in Section 3.2.4.3. The intersection of Anaheim Street/E. I Street/W. 9th Street (p.m. peak) was selected for the CO analysis. This intersection is the worst-performing intersection as determined by the transportation study (Section 3.10). It is projected to operate at LOS C in 2016, but by 2046, would operate at LOS E.

Table 5-5 presents maximum 1-hour and 8-hour CO concentrations predicted at locations 3 meters from the edge of the intersection. These results indicate that CO concentrations would not exceed the CO standards during any analysis year for the No Project Alternative.

**Table 5-5. Maximum Predicted CO Concentrations at the Anaheim St./E. I St/W. 9th St. Intersection – No Project Alternative.**

| Project Year | 1-hour Concentration (ppm) | 8-hour Concentration (ppm) |
|---|---|---|
| 2016 | 6.5 | 5.0 |
| 2046 | 5.7 | 4.4 |
| Most stringent standard | 20 | 9 |

Notes:
a) 1-hour concentrations include a background concentration of 5.1 ppm for 2016 and 2046 (SCAQMD, 2005).
b) 8-hour concentrations include a background concentration of 3.9 for 2016 and 2046.
c) A persistence of factor 0.77 was used to estimate 8-hour concentrations from model-calculated 1-hour concentrations, with this factor derived from the ratio (8-hour/1-hour) of future background values.
d) CAL3QHC input parameters include meteorological conditions of 0.5 meters per second (m/s) wind speed, stability F, 5-degree variation of wind direction, 1,000 meter mixing height, 0 cm/sec settling and deposition velocity, and 100 cm surface roughness length (urban land-use).
e) Emission factors were derived using EMFAC2007 v2.3 for link speeds of 27 mph for all movements except the southbound approach/northbound departure, which used 25 mph in 2016 with and without the proposed project/ 2046 with proposed project, and 26 mph no project.
f) Idle emission factors for vehicle classifications not derived in the EMFAC model were calculated by multiplying the emission factor for 3 mph x 3. Cumulative idle rates used in the modeling represent weighted-average emission rates based on vehicle classification and corresponding percent VMT travel fractions.
g) Model receptors were placed 3 meters (10 feet) from the roadway edge, outside the mixing zone, at setback distances of approximately 25, 50, and 100 feet from the intersection corners along each road link and 1.8 m height.

### Impact Determination

Predicted CO concentrations at the Anaheim St./E. I St/W. 9th St. intersection are below the most stringent CO thresholds. Accordingly, impacts would be less than significant.

#### *Mitigation Measures*

Mitigation is not required.

#### *Residual Impacts*

Less than significant impact.

### Alt 1 Impact AQ-7: The No Project Alternative would not expose receptors to significant levels of TACs.

The No Project Alternative assumes that the proposed Project is not built; consequently, there are no construction emissions associated with this Alternative. The No Project Alternative does account for tenant growth and associated operational emissions, as well as trucks traveling to the downtown Hobart Yard.

For residential receptors, the main sources of TACs from this Alternative would be trucks going to and from the Hobart Yard, as well as tenant onsite and offsite trucks and tenant CHE emissions. For occupational receptors, DPM emissions from Hobart trucks, tenant onsite and offsite trucks, and tenant CHE emissions are the main TAC sources.

A similar approach was used to perform the HRA for this alternative as described in the evaluation of the proposed Project in section 3.2.4.3.

Table 5-6 presents the maximum predicted health impacts associated with the No Project Alternative. The table includes estimates of individual lifetime cancer risk, chronic non-

HI, and acute non-cancer HI at the maximally exposed receptors. Results are presented for No Project Alternative, Baseline, and CEQA increment (alternative minus baseline).

**Table 5-6. Maximum Health Impacts Associated with the No Project Alternative.**

| Health Impact | Receptor Type | Maximum Predicted Impact | | | Significance Threshold |
|---|---|---|---|---|---|
| | | No Project | CEQA Baseline | CEQA Increment | |
| Cancer Risk | Residential | $128 \times 10^{-6}$ (128 in a million) | $568 \times 10^{-6}$ (568 in a million) | $-440 \times 10^{-6}$ (-440 in a million) | $10 \times 10^{-6}$ (10 in a million) |
| | Occupational | $37 \times 10^{-6}$ (37 in a million) | $215 \times 10^{-6}$ (215 in a million) | $-97 \times 10^{-6}$ (-97 in a million) | |
| | Sensitive | $32 \times 10^{-6}$ (32 in a million) | $220 \times 10^{-6}$ (220 in a million) | $-116 \times 10^{-6}$ (-116 in a million) | |
| | Student | $2.3 \times 10^{-6}$ (2.3 in a million) | $4.7 \times 10^{-6}$ (4.7 in a million) | $-2.4 \times 10^{-6}$ (-2.4 in a million) | |
| | Recreational | $59 \times 10^{-6}$ (59 in a million) | $329 \times 10^{-6}$ (329 in a million) | $-146 \times 10^{-6}$ (-146 in a million) | |
| Chronic Hazard Index | Residential | 0.11 | 0.36 | -0.23 | 1.0 |
| | Occupational | 0.18 | 0.69 | -0.51 | |
| | Sensitive | 0.03 | 0.16 | -0.10 | |
| | Student | 0.03 | 0.16 | -0.13 | |
| | Recreational | 0.18 | 0.69 | -0.51 | |
| Acute Hazard Index | Residential | 0.12 | 0.29 | -0.17 | 1.0 |
| | Occupational | 0.31 | 0.79 | -0.48 | |
| | Sensitive | 0.11 | 0.27 | -0.16 | |
| | Student | 0.10 | 0.27 | -0.17 | |
| | Recreational | 0.31 | 0.79 | -0.48 | |

Notes:
a) Exceedances of the significance thresholds are in bold. The significance thresholds apply to the CEQA increments only.
b) The maximum increments might not occur at the same receptor locations as the maximum impacts. This means that the increments cannot necessarily be determined by subtracting the CEQA baseline impact from the project impact. Rather, the subtraction must be done at each receptor, for all modeled receptors, and the maximum result selected.
c ) The CEQA Increment represents Project minus CEQA baseline.
d) When the maximum increment for a receptor type is negative, the maximum increment displayed is the increment at the maximum project receptor location.
e) Data represent the receptor locations with the maximum impacts or increments. The impacts or increments at all other modeled receptors would be less than these values for each receptor type.
f) The No Project Alternative assumes that the Proposed Project is not built. It accounts for tenant growth.

Consistent with the Port's health risk modeling protocol (see Section 3.2.4.3), a cancer burden analysis is not required for the No Project Alternative, and thus none is provided here.

The No Project Alternative assumes that the Proposed Project is not built, but that tenant use of the site increases over time. The data in Table 5-6 show that the CEQA cancer risk increment at the MEI location of the No Project Alternative is predicated to be -440 in a million ($-440 \times 10^{-6}$), at a residential receptor. This risk value, as well as the cancer risk values at all residential receptors, are negative values and below the significance threshold of 10 in a million. The receptor location for the maximum No Project Alternative impact for residential receptors is in the Westside neighborhood of Long Beach adjacent to Interstate 710 (the Long Beach Freeway), approximately 4490 feet (0.85 miles) east of the Eastern site boundary. The CEQA increments are below the CEQA significance threshold at all receptors, including occupational, sensitive, student, and recreational.

The maximum chronic HI increments are predicted to be less than the CEQA significance threshold of 1.0 at all receptors. The maximum acute HI increments are also predicted to be less than the CEQA significance threshold of 1.0 for all receptors.

### Particulates: Morbidity and Mortality

As noted in Impact AQ-4 in Section 3.2, concentrations of $PM_{2.5}$ would not exceed the SCAQMD significance threshold for the No Project Alternative. They would also not exceed the Ports' threshold for calculation of morbidity and mortality from $PM_{2.5}$ and therefore, no calculation of morbidity and mortality is warranted (see Appendix C3).

### Impact Determination

Because operation of the No Project Alternative would not cause exceedances of the SCAQMD health risk thresholds, impacts for this alternative would be less than significant.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Less than significant impact.

### Alt 1 Impact AQ-8: The No Project Alternative would conflict with or obstruct implementation of an applicable air quality plan.

In the No Project Alternative, there would be no construction or changes to existing tenant lease agreements that would require discretionary actions subject to CEQA. Thus emissions and subsequent air quality impacts from these operations would be subject only to any existing and future local, state and federal rules and regulations, and the Port's tariff or concession agreements for those tenants who are licensed motor carriers under Port drayage truck concessions. Because there would be no lease mechanism to trigger requirements for these operations to go beyond these regulations for some of the tenants or some of their operations, the No Project Alternative would conflict with air quality plans and the goals of the CAAP.

### Impact Determination

Because the No Project Alternative would conflict with an applicable air quality plan, this would represent a significant impact.

#### *Mitigation Measures*

No feasible mitigation is available.

#### *Residual Impacts*

Significant and unavoidable.

### 5.2.2.3 Biological Resources

Under the No Project Alternative, LAHD would not issue any permits or discretionary approvals, the proposed Project would not be built, and no vegetation removal or bridge replacement would occur. Accordingly, baseline biological resources would not be affected by construction or operation.

#### Impact Determination

Because there would be no changes in biological resources, the No Project Alternative would have no impacts under criteria BIO-1 through BIO-4.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

No impact would occur.

### 5.2.2.4 Cultural Resources

Under the No Project Alternative LAHD would not issue any permits or discretionary approvals, the proposed Project would not be built, and there would be no physical disturbance to the project site that could affect archaeological resources (including ethnographic resources), historic resources, or paleontological resources.

#### Impact Determination

The No Project Alternative would have no impacts related to cultural resources under criteria CR-1 through CR-3.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

No impact would occur.

### 5.2.2.5 Geology and Soils

Under the No Project Alternative, LAHD would not issue any permits or discretionary approvals, the proposed Project would not be built, and existing uses and operations at the Project site would continue under existing or holdover leases or terminated. The site would be subject to the same probability and severity of seismic events and other geological conditions as under baseline conditions, and the affected infrastructure and personnel would be the same as under baseline conditions.

#### Impact Determination

Because there would be no physical or operational changes at the site, the No Project Alternative would have no impacts under criteria GEO-1 through GEO-8.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

No impact would occur.

## 5.2.2.6 Greenhouse Gases

### Alt 1 Impact GHG-1: The No Project Alternative would result in an increase in operational GHG emissions

Table 5-7 shows the annual operational GHG emissions for the No Project Alternative. Baseline annual emissions are compared to future annual emissions to determine significance for the proposed Project and alternatives. The largest increases for this alternative would occur in 2016 and beyond as a result of increases in activity by off-site trucks to accommodate the projected increase in cargo throughput. The No Project Alternative GHG emissions also exceed those of the proposed Project for each analysis year, consistent with the finding that the movement of container cargo by rail is more fuel-efficient than movement by truck.

**Table 5.7. Annual Operational Emissions – No Project Alternative.**

| Source Category | Annual Emissions (metric tons/year) [a,e] | | | |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
| ***Project Year 2013*** | | | | |
| Trucks On-Site | 2,430 | 0 | 0 | 2,431 |
| Trucks Off-Site [b] | 11,856 | 0 | 0 | 11,866 |
| CHE | 9,548 | 6 | 0 | 9,665 |
| Employee Commute On-Site | 117 | 0 | 0 | 117 |
| Employee Commute Off-Site [b] | 5,643 | 0 | 0 | 5,737 |
| Tenant Locomotive Activities | 14 | 0 | 0 | 14 |
| Electricity | 3,932 | 0 | 0 | 3,949 |
| **Total - Project Year 2013 [d]** | **33,538** | **6** | **0** | **33,779** |
| CEQA Impacts | | | | |
| CEQA Baseline Emissions | 159,269 | 21 | 3 | 160,528 |
| No Project minus CEQA Baseline [c] | -496 | -9 | 0 | -784 |
| Thresholds | | | | **0** |
| **Significance?** | | | | **No** |
| | | | | |
| ***Project Year 2014*** | | | | |
| Trucks On-Site | 2,430 | 0 | 0 | 2,431 |
| Trucks Off-Site [b] | 12,242 | 0 | 0 | 12,252 |
| CHE | 9,587 | 5 | 0 | 9,697 |
| Employee Commute On-Site | 116 | 0 | 0 | 117 |
| Employee Commute Off-Site [b] | 5,594 | 0 | 0 | 5,679 |
| Tenant Locomotive Activities | 14 | 0 | 0 | 14 |
| Electricity | 3,932 | 0 | 0 | 3,949 |
| **Total - Project Year 2014 [d]** | **33,915** | **6** | **0** | **34,138** |
| CEQA Impacts | | | | |
| CEQA Baseline Emissions | 159,269 | 21 | 3 | 160,528 |
| No Project minus CEQA Baseline [c] | -119 | -10 | 0 | -426 |
| Thresholds | | | | **0** |

| Source Category | Annual Emissions (metric tons/year) [a,e] | | | |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
| **Significance?** | | | | **No** |
| | | | | |
| ***Project Year 2015*** | | | | |
| Trucks On-Site | 2,430 | 0 | 0 | 2,431 |
| Trucks Off-Site [b] | 12,242 | 0 | 0 | 12,252 |
| CHE | 9,587 | 5 | 0 | 9,692 |
| Employee Commute On-Site | 116 | 0 | 0 | 117 |
| Employee Commute Off-Site [b] | 5,583 | 0 | 0 | 5,651 |
| Tenant Locomotive Activities | 14 | 0 | 0 | 14 |
| Electricity | 3,932 | 0 | 0 | 3,949 |
| **Total - Project Year 2015 [d]** | **33,903** | **6** | **0** | **34,104** |
| CEQA Impacts | | | | |
| CEQA Baseline Emissions | 159,269 | 21 | 3 | 160,528 |
| No Project minus CEQA Baseline [c] | -131 | -10 | 0 | -459 |
| Thresholds | | | | **0** |
| **Significance?** | | | | **No** |
| | | | | |
| ***Project Year 2016*** | | | | |
| Trucks On-Site | 2,673 | 0 | 0 | 2,674 |
| Trucks Off-Site [b, f] | 95,441 | 0 | 0 | 95,525 |
| CHE | 10,503 | 5 | 0 | 10,614 |
| Employee Commute On-Site | 128 | 0 | 0 | 128 |
| Employee Commute Off-Site [b] | 6,132 | 0 | 0 | 6,212 |
| Tenant Locomotive Activities | 15 | 0 | 0 | 15 |
| Locomotives Off-Site [b] | 78,960 | 6 | 2 | 79,732 |
| Electricity | 4,325 | 0 | 0 | 4,344 |
| **Total - Project Year 2016 [d]** | **198,177** | **12** | **3** | **199,244** |
| CEQA Impacts | | | | |
| CEQA Baseline Emissions | 159,269 | 21 | 3 | 160,528 |
| No Project minus CEQA Baseline | 38,908 | -9 | 0 | 38,716 |
| Thresholds | | | | **0** |
| **Significance?** | | | | **Yes** |
| | | | | |
| ***Project Year 2023*** | | | | |
| Trucks On-Site | 2,673 | 0 | 0 | 2,674 |
| Trucks Off-Site [b, f] | 127,832 | 0 | 0 | 127,944 |
| CHE | 10,376 | 5 | 0 | 10,482 |
| Employee Commute On-Site | 126 | 0 | 0 | 127 |
| Employee Commute Off-Site [b] | 6,016 | 0 | 0 | 6,068 |
| Tenant Locomotive Activities | 15 | 0 | 0 | 15 |
| Locomotives Off-Site [b] | 105,281 | 8 | 3 | 106,309 |
| Electricity | 4,325 | 0 | 0 | 4,344 |
| **Total - Project Year 2023 [d]** | 256,644 | 14 | 3 | 257,962 |
| CEQA Impacts | | | | |
| CEQA Baseline Emissions | 159,269 | 21 | 3 | 160,528 |
| No Project minus CEQA Baseline | 97,375 | -7 | 1 | 97,434 |
| Thresholds | | | | **0** |
| **Significance?** | | | | **Yes** |
| | | | | |
| ***Project Year 2035*** | | | | |
| Trucks On-Site | 2,673 | 0 | 0 | 2,674 |

| Source Category | Annual Emissions (metric tons/year) [a,e] | | | |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
| Trucks Off-Site [b, f] | 127,347 | 0 | 0 | 127,458 |
| CHE | 10,503 | 5 | 0 | 10,608 |
| Employee Commute On-Site | 125 | 0 | 0 | 126 |
| Employee Commute Off-Site [b] | 5,961 | 0 | 0 | 5,993 |
| Tenant Locomotive Activities | 15 | 0 | 0 | 15 |
| Locomotives Off-Site [b] | 105,281 | 8 | 3 | 106,309 |
| Electricity | 4,325 | 0 | 0 | 4,344 |
| **Total - Project Year 2035 [d]** | 256,230 | 14 | 3 | 257,526 |
| CEQA Impacts | | | | |
| CEQA Baseline Emissions | 159,269 | 21 | 3 | 160,528 |
| No Project minus CEQA Baseline | 96,960 | -7 | 1 | 96,998 |
| Thresholds | | | | **0** |
| **Significance?** | | | | **Yes** |
| | | | | |
| ***Project Year 2046*** | | | | |
| Trucks On-Site | 2,673 | 0 | 0 | 2,674 |
| Trucks Off-Site [b, f] | 127,657 | 0 | 0 | 127,769 |
| CHE | 10,503 | 5 | 0 | 10,608 |
| Employee Commute On-Site | 125 | 0 | 0 | 125 |
| Employee Commute Off-Site [b] | 6,014 | 0 | 0 | 6,042 |
| Tenant Locomotive Activities | 15 | 0 | 0 | 15 |
| Locomotives Off-Site [b] | 105,281 | 8 | 3 | 106,309 |
| Electricity | 4,325 | 0 | 0 | 4,344 |
| **Total - Project Year 2046 [d]** | 256,593 | 14 | 3 | 257,886 |
| CEQA Impacts | | | | |
| CEQA Baseline Emissions | 159,269 | 21 | 3 | 160,528 |
| No Project minus CEQA Baseline | 97,324 | -7 | 1 | 97,358 |
| Thresholds | | | | **0** |
| **Significance?** | | | | **Yes** |

a) Emissions represent annual emissions.
b) Truck, train, and worker commute emissions include transport within the boundaries of the State of California.
c) By definition, the No Project minus Baseline increment in 2013, 2014 and 2015 does not account for both the truck travel between port terminals to Hobart Yard and the rail travel from Hobart Yard to the South Coast Air Basin boundary as they are not a part of the Project and Alternatives during this period.
d) Emissions might not precisely add due to rounding. For further explanation, refer to the discussion in Section 3.2.4.1.
e) The emission estimates presented in this table were calculated using the latest available data, assumptions, and emission factors at the time this document was prepared. Future studies might use updated data, assumptions, and emission factors that are not currently available.
f) Off-site trucks include tenant drayage trucks and drayage trucks that travel between Hobart Yard and the Port terminals.

## Impact Determination – Project Emissions

The No Project annual operational GHG emissions would exceed the baseline emissions and thus result in a significant impact.

### *Mitigation Measures - Project Emissions*

GHG mitigation measures would not be applicable to this alternative as there would be no construction or changes to existing tenant lease agreements that would require

discretionary actions subject to CEQA. Future rule making on the state and federal level is likely to require cleaner technologies that will reduce GHG emissions from the No Project Alternative. However, in the absence of discretionary actions related to existing operations (e.g., new leases or permits), there is no mechanism for imposing mitigation.

*Residual Impacts*

No feasible mitigation is available to reduce GHG emissions of the No Project Alternative. Therefore, the residual impacts of GHG emissions during operation are significant.

**Alt 1 Impact GHG-2: The No Project Alternative would conflict with State and local plans and policies.**

The No Project Alternative would not increase use of more efficient modes of goods movement by continuing to move cargo by truck to the Hobart railyard. Therefore no additional efficiency in cargo movement is realized in the No Project Alternative, which is inconsistent with the goals of the AB32 scoping plan, the Western Regional Climate Action Initiative, the Mayor of Los Angeles' Executive Directive No. 10, and the Port of Los Angeles Climate Action Plan. The No Project Alternative would also not be consistent with the Southern California Association of Governments' Regional Transportation Plan (RTP), which is part of the SCAQMD's AQMP and which has identified the SCIG project as potentially playing a key role in addressing the growth of high-density truck traffic (SCAG, 2008). Finally, because it would not provide additional needed intermodal rail facilities, the No Project Alternative would not meet the Port of Los Angeles Plan objectives, policies and standards and criteria to support more efficient port operations and offsite transport, including development of an efficient rail transportation system with appropriate transfer facilities near the Port.

Furthermore as described in Section 3.6, based on the currently available data, the Port area would be subject to inundation from sea level rise due to climate change. These impacts would affect the No Project Alternative.

**Impact Determination – Project Emissions**

The No Project Alternative would conflict with State and local plans and policies for GHG emissions reductions, representing a significant impact. Impacts of climate change (sea level rise) on the No Project Alternative represent a significant and unavoidable impact.

*Mitigation Measures*

No feasible mitigation is available, as discussed in Section 3.6.4.3.

*Residual Impacts*

Significant and unavoidable.

### 5.2.2.7 Hazards and Hazardous Materials

Under the No Project Alternative, LAHD would not issue any permits or discretionary approvals, and the proposed Project would not be built. Existing uses and operations at the Project and relocation sites would continue under existing or holdover leases or terminated. The on-site activities include the use of hazardous materials in operations and

maintenance of goods movement support activities (e.g., road and rail activities, warehousing, and various container and truck maintenance, servicing, and storage activities), and the handling of cargo that includes hazardous materials, which are expected to increase, as a result of the future increase in site activity, by an estimated ten percent after 2016 when compared to the baseline levels. Drayage truck trips between the ports and Hobart Yard would continue, increasing from approximately 1.6 million one-way trips in 2005 to approximately 3.2 million one-way trips by 2023.

#### Impact Determination

For operation of the No Project Alternative, the LACFD risk matrix (see Section 3.7.4.1.1 and Table 3.7-2) for the No Project Alternative yields Risk Code 4 ("acceptable") for all significance criteria. Under the No Project Alternative no demolition or construction impacts would occur for RISK-1 through RISK-7 because no demolition or construction would occur. Consistent with the preliminary findings of the NOP *Supplemental Environmental Checklist and Impact Analysis* (Checklist, Appendix A), operational impacts associated with on-site activities would be less than significant for RISK-1 through RISK-7 because the intensity of activities at the proposed Project and relocation sites would increase by only ten percent compared to baseline conditions.

With respect to the truck trips between the ports and the Hobart Yard, at an average distance of approximately 20 miles per one-way trip, increased risk of accidents would be expected compared to the risk of accidents for the shorter, 4-5 miles per one-way trip between the ports and the proposed SCIG site. For travel near the port terminals and roadways, the Port-wide Transportation Master Plan (TMP) and the requirements for new trucks and maintenance of those trucks under the CTP would reduce the risk of accidents as described in 3.7.4.3.2. However, under the No Project Alternative only the CTP would apply and the TMP would not apply to reduce risks of accidents for the longer trip segment to and from the ports and the Hobart Yard. In the absence of data or methodology to quantify how the increased risk of accidents from longer trip segments may be offset by the decreases in risk from the CTP, the impacts from these increased risks of accident are considered less than significant under RISK-2b.

##### *Mitigation Measures*

No mitigation is required.

##### *Residual Impacts*

Less than significant impacts.

## 5.2.2.8 Land Use

Under the No Project Alternative, LAHD would not issue any permits or discretionary approvals, and the proposed Project would not be built. Existing uses and operations at the Project and relocation sites are assumed to continue under existing or holdover leases.

The baseline uses within the Project site are consistent with the general industrial land use designations and zoning including Heavy Industrial per the Los Angeles General Plan and the Wilmington-Harbor City Community Plan, Heavy Manufacturing per the Carson General Plan and zoning, and Restricted Industry and Public Rights-of-Way per the Long Beach General Plan and zoning. Existing schools, parks, business parks, and residences in Long Beach would continue to be located near existing site activities under the No Project Alternative (trucking and cargo handling) as described in Table 3.8-1. Existing

businesses within the Project site would not be displaced or relocated and, therefore, there would be no potential for relocated land uses to affect offsite neighborhoods, communities, or land uses adversely.

Because it would not provide additional needed intermodal rail facilities, the No Project Alternative would not meet the Port of Los Angeles plans, objectives and policies to support more efficient port operations and offsite transport, or the goals of the SCAG RTP and the State's Goods Movement Action Plan.

#### Impact Determination

No change would occur to the Project site under the No Project Alternative. Therefore, the No Project Alternative would have no impact on consistency with land use plans, would not alter the types of uses within the area, divide or isolate a community, or have secondary impacts on surrounding land uses not already addressed in the other resource sections, and there would be no impact related to LU-1, LU-3, and LU-4. Because of the No Project Alternative's inconsistency with the environmental goals of the Port of Los Angeles Plan, the SCAG RTP, and the Goods Movement Action Plan, the No Project Alternative would have a significant impact related to LU-2.

##### *Mitigation Measures*

Because there would be no construction or changes to existing tenant lease agreements that would require discretionary actions subject to CEQA, there is no mechanism for imposing mitigation.

##### *Residual Impacts*

Significant and unavoidable.

### 5.2.2.9 Noise

Under the No Project Alternative, LAHD would not issue any permits or discretionary approvals, no improvements would be constructed, and existing structures would remain. Accordingly, there would be no construction-related noise or vibration.

Operations at the existing site would continue from the current tenants. The existing noise environment, which is primarily from vehicular traffic on the roadway network, would be expected to change when compared to the baseline noise levels as a result of the future increase in site activity and traffic, estimated at ten percent by 2016 and thereafter, and approved roadway changes. In addition, under the No Project alternative, the projected increase in container cargo arriving at the Ports would continue to be drayed to Hobart by truck, resulting in increased ambient noise. The resultant changes in noise levels are presented in Table 5-8. Rail traffic on area rail lines attributable to the activities of existing on-site uses is also assumed to increase by ten percent over the existing condition of less than one train per day. That increase would be expressed as more railcars per train rather than additional trains, so that the actual number of train movements per day would be unchanged.

1 **Table 5-8. No Project Alternative Roadway Traffic Noise Level Changes.**

| ROADWAY SEGMENT | Existing CNEL @ 100 ft | No Project Alternative CNEL @100 ft | Project Increment in Traffic Noise Level, dB |
|---|---|---|---|
| **ALAMEDA ST** | | | |
| n/o Anaheim St | 79.4 | 79.4 | 0 |
| w/o Eubank Ave | 81.5 | 81.5 | 0 |
| s/o PCH | 81.7 | 81.7 | 0 |
| s/o Anaheim St | 80.9 | 81 | 0.1 |
| **E ANAHEIM ST** | | | |
| between Anaheim and Henry Ford | 76.7 | 76.7 | 0 |
| e/o Henry Ford Ave | 76.6 | 76.7 | 0.1 |
| w/o E I St | 76.2 | 76.3 | 0.1 |
| w/o Anaheim Way | 76.6 | 76.7 | 0.1 |
| **E HARRY BRIDGES BLVD** | | | |
| e/o Avalon Blvd | 81 | 81 | 0 |
| **E SEPULVEDA BLVD** | | | |
| e/o Alameda St | 75.9 | 75.9 | 0 |
| **JOHN S GIBSON BLVD** | | | |
| n/o I-110 Ramps | 78.5 | 78.7 | 0.2 |
| **LONG BEACH FWY** | | | |
| n/o Imperial Hwy | 88.6 | 88.8 | 0.2 |
| s/o Imperial Hwy | 88.7 | 88.8 | 0.1 |
| n/o I-105 | 88.4 | 88.5 | 0.1 |
| SB s/o I-105 | 85.7 | 85.8 | 0.1 |
| n/o Rosecrans Ave | 88.5 | 88.6 | 0.1 |
| s/o Rosecrans Ave | 89.9 | 90.0 | 0.1 |
| NB between Alondra and Rosecrans | 87 | 87.1 | 0.1 |
| n/o Alondra | 90.0 | 90.1 | 0.1 |
| s/o Alondra | 89.8 | 89.9 | 0.1 |
| n/o SR-91 | 89.6 | 89.7 | 0.1 |
| n/o Artesia Blvd | 88.7 | 88.8 | 0.1 |
| s/o Artesia Blvd | 89.2 | 89.3 | 0.1 |
| n/o Long Beach Blvd | 90.5 | 90.5 | 0.0 |
| s/o Long Beach Blvd | 90.1 | 90.1 | 0.0 |
| n/o Del Amo Blvd | 89.8 | 89.9 | 0.0 |
| s/o Del Amo Blvd | 90.1 | 90.2 | 0.1 |
| n/o Wardlow Rd | 90.4 | 90.4 | 0.1 |
| SB s/o Wardlow Rd | 86.6 | 86.7 | 0.1 |
| n/o Willow St | 89.3 | 89.4 | 0.0 |
| s/o Willow St | 89.3 | 89.4 | 0.1 |
| n/o Anaheim St | 89.2 | 89.3 | 0.0 |
| s/o Anaheim St | 89.0 | 89.1 | 0.1 |
| NB s/o off ramp at PCH | 86.2 | 86.3 | 0.1 |
| NB s/o loop off ramp at PCH | 86.4 | 86.5 | 0.1 |
| NB n/o PCH | 86.1 | 86.2 | 0.1 |
| s/o PCH | 88.8 | 88.9 | 0.1 |
| NB n/o I-405 Interchange | 86.8 | 86.9 | 0.1 |
| NB s/o I-405 Interchange Ramp | 86.5 | 86.6 | 0.1 |
| s/o Firestone Blvd | 88.6 | 88.7 | 0.1 |
| n/o 9th St | 89.4 | 89.5 | 0.1 |
| s/o 9th St | 88.5 | 88.6 | 0.1 |
| NB n/o 10th St | 85.9 | 86 | 0.1 |
| SB n/o I-405 | 86.7 | 86.8 | 0.1 |

| ROADWAY SEGMENT | Existing CNEL @ 100 ft | No Project Alternative CNEL @100 ft | Project Increment in Traffic Noise Level, dB |
|---|---|---|---|
| SB s/o Del Amo Blvd Off ramp | 87.1 | 87.2 | 0.1 |
| NB n/o Dell Amo Blvd Off Ramp | 87.2 | 87.3 | 0.1 |
| SB s/o On ramp at Del Amo Blvd | 87.1 | 87.2 | 0.1 |
| NB between s/o off ramp at Del Amo Blvd | 86.8 | 86.8 | 0.0 |
| between off/on ramps at Willow St | 89.1 | 89.2 | 0.1 |
| NB Between Ramps at Anaheim St | 86.4 | 86.4 | 0.0 |

### Impact Determination

This alternative would not include any construction activities that could potentially cause an increase in noise levels at nearby sensitive receiver locations. Accordingly, there would be no impacts related to NOI-1 and NOI-2, and the construction components of NOI-6, NOI-7, NOI-10, and NOI-11.

Operations under the No Project alternative would not result in the CNEL being increased by 3 dBA CNEL or more above baseline nor increased to within the "normally unacceptable" or "clearly unacceptable" category, nor exceed 5 dBA over the current CNEL at sensitive locations in the cities of Los Angeles, Long Beach, and Carson. Since the increase in site-related train activity would not add a daily train movement (increased activity would be expressed as additional cars on existing trains), there would be no increase in rail-related noise and vibration. Accordingly, operational impacts related to NOI-3, NOI-6, NOI-7, NOI-10, and NOI-11 would be less than significant.

The No Project alternative would not result in construction-related or operations-related interior noise levels exceeding 52 dBA at schools in the cities of Los Angeles, Long Beach, and Carson; thus, it would not affect classroom speech intelligibility. Interior nighttime single event levels are not expected to exceed 80 dBA at nearby residences in the cities of Los Angeles, Long Beach, and Carson and would not result in a significant number of single event awakenings. Accordingly, impacts related to NOI-4, NOI-8, NOI-9, and NOI-12 would be less than significant. There would be no impacts related to NOI-5 and NOI-13 as there are no schools in the vicinity of the Project in the City of Los Angeles and the City of Carson, respectively.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

Impacts would be less than significant.

## 5.2.2.10 Transportation and Circulation

Under the No Project Alternative, LAHD would not issue any permits or discretionary approvals, no improvements would be constructed, and existing structures would remain. Accordingly, there would be no physical changes to roads or other transportation infrastructure and the existing site uses would continue. Trip generation would increase by ten percent over baseline levels by 2046, although no changes in traffic patterns from the baseline condition are assumed. Under the No Project Alternative, no construction activities would occur and therefore no impacts are evaluated under impact TRANS-1.

Since no physical changes to roads or other transportation infrastructure would occur, there would be no impacts under impacts TRANS-6 through TRANS-8.

Quantitative trip generation estimates were developed from traffic counts of the existing site driveways during the baseline (Table 5-9).

**Table 5-9. No Project Peak-Hour Trip Generation and Net Change Compared to CEQA Baseline Conditions (in Passenger Car Equivalents).**

| Year | AM Peak Hour | | | MD Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | In | Out | Total | In | Out | Total | In | Out | Total |
| CEQA Baseline | 565 | 290 | 855 | 295 | 340 | 635 | 360 | 395 | 755 |
| No Project | 620 | 320 | 940 | 325 | 375 | 700 | 395 | 435 | 830 |
| Net Change | 55 | 30 | 85 | 30 | 35 | 65 | 35 | 40 | 75 |

### Alt 1 Impact TRANS-2: Long-term vehicular traffic associated with the No Project Alternative would not significantly impact a study intersection's volume/capacity ratios, or level of service.

Traffic conditions resulting from the No Project Alternative were estimated by comparing its traffic (Table 5-9) to the Baseline traffic conditions described in section 3.10 to determine potential impacts on study area intersections. The comparison (Table 5-10) shows that none of the 25 study intersections would exceed any of the thresholds of significance.

#### Impact Determination

Volume to capacity ratios and levels of service at all study intersections would not exceed significance criteria. Accordingly, impacts would be less than significant.

#### *Mitigation Measures*

No mitigation required.

#### *Residual Impacts*

Less than significant impacts.

### Alt 1 Impact TRANS-3: Operation of the No Project Alternative would result in a less than significant increase in public transit use.

The No Project Alternative is assumed to result in additional on-site employees as a result of the ten percent increase in activity. However, the increase in work-related trips using public transit would be negligible for two reasons. First, the increased number of workers would be small relative to the existing work force. Second, most workers prefer to use a personal automobile to facilitate timely commuting (the availability of free parking at the work sites), and in any case live throughout the Southern California region and do not have access to the few bus routes that serve the site. Therefore, it is expected that fewer than ten additional work trips per day would be made on public transit, which could easily be accommodated by existing transit services.

### Impact Determination

Given the small numbers of workers expected to use any one transit line, impacts due to additional demand on local transit services would be less than significant.

#### *Mitigation Measures*

No mitigation required.

#### *Residual Impacts*

Less than significant impacts.

**Table 5-10. Intersection Level of Service Analysis – No Project Alternative.**

| # | Study Intersection | Baseline | | | | | | Baseline Plus Alt. 1--No Project | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.454 | A | 0.391 | A | 0.466 | A | 0.456 | A | 0.391 | A | 0.468 | 0.002 | 0.000 | 0.002 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.205 | A | 0.334 | A | 0.321 | A | 0.206 | A | 0.334 | A | 0.324 | 0.001 | 0.000 | 0.003 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.302 | A | 0.300 | A | 0.330 | A | 0.303 | A | 0.3 | A | 0.331 | 0.001 | 0.000 | 0.001 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.222 | A | 0.362 | A | 0.351 | A | 0.222 | A | 0.362 | A | 0.353 | 0.000 | 0.000 | 0.002 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.641 | A | 0.363 | B | 0.649 | B | 0.642 | A | 0.363 | B | 0.651 | 0.001 | 0.000 | 0.002 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.307 | A | 0.196 | A | 0.202 | A | 0.309 | A | 0.2 | A | 0.205 | 0.002 | 0.004 | 0.003 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.569 | A | 0.533 | A | 0.597 | A | 0.575 | A | 0.539 | B | 0.603 | 0.006 | 0.006 | 0.006 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | A | 0.526 | A | 0.577 | B | 0.678 | A | 0.527 | A | 0.578 | B | 0.679 | 0.001 | 0.001 | 0.001 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.619 | A | 0.598 | C | 0.722 | B | 0.62 | A | 0.598 | C | 0.723 | 0.001 | 0.000 | 0.001 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | A | 0.526 | A | 0.495 | B | 0.618 | A | 0.528 | A | 0.497 | B | 0.619 | 0.002 | 0.002 | 0.001 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.393 | A | 0.391 | A | 0.560 | A | 0.393 | A | 0.391 | A | 0.56 | 0.000 | 0.000 | 0.000 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.502 | A | 0.597 | C | 0.748 | A | 0.506 | A | 0.597 | C | 0.75 | 0.004 | 0.000 | 0.002 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | A | 0.481 | A | 0.468 | B | 0.612 | A | 0.481 | A | 0.472 | B | 0.619 | 0.000 | 0.004 | 0.007 | N | N | N |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.365 | A | 0.358 | A | 0.331 | A | 0.367 | A | 0.358 | A | 0.333 | 0.002 | 0.000 | 0.002 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.288 | A | 0.377 | A | 0.3 | A | 0.29 | A | 0.38 | 0.002 | 0.002 | 0.003 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.323 | A | 0.263 | A | 0.463 | A | 0.325 | A | 0.265 | A | 0.467 | 0.002 | 0.002 | 0.004 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.338 | A | 0.303 | A | 0.377 | A | 0.34 | A | 0.303 | A | 0.378 | 0.002 | 0.000 | 0.001 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.257 | A | 0.237 | A | 0.332 | A | 0.258 | A | 0.238 | A | 0.333 | 0.001 | 0.001 | 0.001 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.379 | A | 0.373 | A | 0.508 | A | 0.381 | A | 0.375 | A | 0.51 | 0.002 | 0.002 | 0.002 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.415 | A | 0.457 | A | 0.482 | A | 0.417 | A | 0.457 | A | 0.482 | 0.002 | 0.000 | 0.000 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.572 | A | 0.425 | B | 0.680 | A | 0.573 | A | 0.425 | B | 0.681 | 0.001 | 0.000 | 0.001 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.378 | A | 0.444 | A | 0.431 | A | 0.385 | A | 0.444 | A | 0.432 | 0.007 | 0.000 | 0.001 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.745 | B | 0.617 | C | 0.799 | C | 0.748 | B | 0.62 | D | 0.804 | 0.003 | 0.003 | 0.005 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | A | 0.588 | B | 0.649 | C | 0.723 | A | 0.59 | B | 0.65 | C | 0.726 | 0.002 | 0.001 | 0.003 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | B | 0.653 | B | 0.637 | B | 0.665 | B | 0.653 | B | 0.643 | B | 0.673 | 0.000 | 0.006 | 0.008 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using ICU methodology according to City standards.

**Table 5-11. No Project Alternative Freeway Contribution.**

| Fwy. | Location | Baseline | | | | Baseline Plus Reduced Project | | | | Difference | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NB/EB | | SB/WB | | NB/EB | | SB/WB | | NB/EB | | SB/WB | |
| | | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH |
| I-110 | Wilmington, s/o "C"St. | 4,374 | 2,490 | 3,373 | 4,203 | 4,404 | 2,510 | 3,373 | 4,203 | 30 | 20 | - | - |
| SR-91 | e/o Alameda St/Santa Fe Ave | 6,060 | 8,924 | 10,662 | 7,205 | 6,090 | 8,944 | 10,672 | 7,215 | 30 | 20 | 10 | 10 |
| I-405 | Santa Fe Ave. | 11,533 | 9,863 | 9,543 | 11,162 | 11,538 | 9,868 | 9,558 | 11,182 | 5 | 5 | 15 | 20 |
| I-710 | n/o Jct (PCH), Willow St. | 5,771 | 5,951 | 6,690 | 5,660 | 6,011 | 6,101 | 6,835 | 5,855 | 240 | 150 | 145 | 195 |
| I-710 | n/o Jct Rte 405, s/o Del Amo | 6,370 | 7,742 | 7,807 | 6,783 | 6,635 | 7,907 | 7,972 | 7,008 | 265 | 165 | 165 | 225 |
| I-710 | n/o Rte 105, n/o Firestone | 8,173 | 9,122 | 9,283 | 9,104 | 8,468 | 9,307 | 9,458 | 9,339 | 295 | 185 | 175 | 235 |

Note: ( ) denotes negative value

**Table 5-12. No Project Alternative Freeway Level of Service Analysis.**

**AM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Baseline | | | Baseline Plus No Project | | | Δ D/C | Exceed Thresh. | Baseline | | | Baseline Plus No Project | | | Δ D/C | Exceed Thresh. |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,374 | 0.55 | C | 4,404 | 0.55 | C | 0.00 | No | 3,373 | 0.42 | B | 3,373 | 0.42 | B | 0.00 | No |
| SR-91 | 10.62 | e/o Alameda St/Santa Fe Ave | 12,000 | 6,060 | 0.51 | B | 6,090 | 0.51 | B | 0.00 | No | 10,662 | 0.89 | D | 10,672 | 0.89 | D | 0.00 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 11,533 | 1.15 | F(0) | 11,538 | 1.15 | F(0) | 0.00 | No | 9,543 | 0.95 | E | 9,558 | 0.96 | E | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,771 | 0.96 | E | 6,011 | 1.00 | F(0) | 0.04 | Yes | 6,690 | 1.12 | F(0) | 6,835 | 1.14 | F(0) | 0.02 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 6,370 | 0.80 | D | 6,635 | 0.83 | D | 0.03 | No | 7,807 | 0.98 | E | 7,972 | 1.00 | E | 0.02 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,173 | 1.02 | F(0) | 8,468 | 1.06 | F(0) | 0.04 | Yes | 9,283 | 1.16 | F(0) | 9,458 | 1.18 | F(0) | 0.02 | Yes |

**PM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | CEQA Baseline | | | CEQA Baseline Plus No Project | | | Δ D/C | Exceed Thresh. | CEQA Baseline | | | CEQA Baseline Plus No Project | | | Δ D/C | Exceed Thresh. |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 2,490 | 0.31 | A | 2,510 | 0.31 | A | 0.00 | No | 4,203 | 0.53 | B | 4,203 | 0.53 | B | 0.00 | No |
| SR-91 | 10.62 | e/o Alameda St/Santa Fe Ave | 12,000 | 8,924 | 0.74 | C | 8,944 | 0.75 | C | 0.00 | No | 7,205 | 0.60 | C | 7,215 | 0.60 | C | 0.00 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,863 | 0.99 | E | 9,868 | 0.99 | E | 0.00 | No | 11,162 | 1.12 | F(0) | 11,182 | 1.12 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,951 | 0.99 | E | 6,101 | 1.02 | F(0) | 0.03 | Yes | 5,660 | 0.94 | E | 5,855 | 0.98 | E | 0.03 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 7,742 | 0.97 | E | 7,907 | 0.99 | E | 0.02 | No | 6,783 | 0.85 | D | 7,008 | 0.88 | D | 0.03 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,122 | 1.14 | F(0) | 9,307 | 1.16 | F(0) | 0.02 | Yes | 9,104 | 1.14 | F(0) | 9,339 | 1.17 | F(0) | 0.03 | Yes |

### Alt 1 Impact TRANS-4: Operation of the No Project Alternative would result in a significant increase in highway congestion.

The No Project Alternative would result in more truck trips to Hobart Yard near downtown Los Angeles than under baseline conditions, as a result of the growth in cargo throughput. The maximum addition would be approximately 115 trips totaled over the three daily peak hours (Table 5-9). All of the Congestion Management Program (CMP) intersections in the study area currently operate at LOS C or better (Table 5-10), and most would not be adversely affected by the addition of a portion of those 115 trips.

The No Project Alternative would add trucks to the freeway system. A comparison of the baseline condition with the No Project plus baseline condition (Table 5-11) shows that some freeway segments would experience as many as 295 additional trucks in a peak hour, which would represent a 3.4 percent increase. As shown in Table 5-12, these additional trips would cause LOS to exceed the significance threshold at two locations on I-710.

#### Impact Determination

Because two freeway intersections would operate at LOS F during at least one peak period, the No Project Alternative would cause a significant impact related to highway congestion.

The No Project Alternative could not result in more than 150 additional trips on any of the Congestion Management Program freeway monitoring locations as shown in Tables 5-11 and 5-12; therefore, no Congestion Management Program freeway system analysis is required.

##### *Mitigation Measures*

Transportation mitigation measures would not be applicable to this alternative as there would be no construction or changes to existing freeways that would require discretionary actions subject to CEQA. In the absence of discretionary actions related to existing operations, there is no mechanism for imposing mitigation.

##### *Residual Impacts*

Significant increases in highway congestion would occur at two locations on the I-710 freeway. Therefore residual impacts are significant.

### Alt 1 Impact TRANS-5: No Project Alternative operations would not cause an increase in rail activity, and would not cause delays in regional traffic.

Under the No Project Alternative, intermodal cargo carried by rail would continue to be handled at the on-dock yards in the ports and at the Hobart Yard outside the ports. Activities on the site, which currently generate less than one train per day, would not result in substantially increased train traffic. With respect to delays at at-grade crossings, there would be no difference in the No Project Alternative scenario from the analysis conducted in Section 3.10.4.3 because the same number of trains would depart from Hobart Yard as from the SCIG facility in the proposed Project.

#### Impact Determination

The No Project Alternative would have a less than significant impact on regional rail lines or traffic, because a railyard would not be constructed, site activities would increase by only 10 percent, and number of train trips would be equivalent to that of the proposed Project east of Hobart Yard.

*Mitigation Measures*

No mitigation would be necessary.

*Residual Impacts*

Impacts would be less than significant.

### 5.2.2.11 Utilities and Public Services

Under the No Project Alternative, LAHD would not issue any permits or discretionary approvals, and the proposed Project would not be built. Existing uses and operations at the Project and relocation sites are assumed to continue under existing or holdover leases. The demand for public services such as law enforcement and fire protection would remain essentially unchanged, given that site activity would increase by only ten percent, and baseline conditions with respect to electric, gas, sewer, solid waste disposal, storm drainage, and water supply infrastructure would remain in effect.

#### Impact Determination

Operations under the No Project Alternative would not require additional public services or energy consumption, or the construction of new facilities. However there would continue to be solid waste generated by the existing uses at the site, and area landfills are already projected to be at or near capacity. Accordingly, there would be a significant impact related to solid waste generation, under impact PS-6.

*Mitigation Measures*

Solid waste mitigation measures would not be applicable to this alternative as there would be no construction or changes to existing site operations that would require discretionary actions subject to CEQA. In the absence of discretionary actions related to existing operations, there is no mechanism for imposing mitigation.

*Residual Impacts*

Residual impacts would be significant.

### 5.2.2.12 Water Resources

Under the No Project Alternative, LAHD would not issue any permits or discretionary approvals, the proposed Project would not be built, and existing uses and operations at the Project site are assumed to continue under existing or holdover leases. Baseline storm water infrastructure would remain in place, and groundwater and surface water conditions, including storm water inputs and operational activities, would be unchanged from baseline conditions. The increase in activity levels would not result in changes in storm water inputs, drainage patterns, groundwater resources, or vulnerability to flooding, but could result in somewhat greater discharges of pollutants. The increase would be negligible, however.

### Impact Determination

Under the No Project Alternative, no construction would take place, and there would be no impacts associated with WR-1a through WR-7a. Although operational activity levels would increase, the resulting discharges of pollutants would be negligible, and operations would not result in additional water quality violations, waste discharges, or changes to existing drainage, runoff, and groundwater resources within the Project area. Therefore, no impacts would occur for WR-1b through WR-7b.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

No impact.

# 5.3 Alternative 2: Reduced Project

## 5.3.1 Project Description

Under this alternative, the SCIG facility and relocated tenant facilities described in the proposed Project would be constructed, but SCIG's activity level would be limited by lease conditions. All physical features would be the same as the proposed Project, including the railyard features (trackage, cranes, buildings, and roads) and the off-site improvements to roads and trackage. The construction methods and schedule would be the same as the proposed Project (Section 2.4.3).

At full operation, the Reduced Project would handle approximately 1.85 million TEUs per year (instead of the 2.8 million TEU associated with the proposed Project), and it is anticipated it would reach capacity in its first year of operation (2016). Those containers would be transported by 2,160 trains (6 round trips per day) and approximately 1.33 million one-way truck trips per year. The operational details of the facility (Table 5-13) would be largely the same as those of the proposed Project (Section 2.4.4), although the facility may only operate two shifts per day to handle the reduced throughput. In addition, under the Reduced Project, the overflow trucks which would have been handled by the proposed Project would continue to drive to Hobart or would otherwise be handled at the ICTF facility based on regional intermodal demand projections as described in Chapter 1 that will occur independently of the Reduced Project Alternative.

**Table 5-13. Operations at the Project Site Under the Reduced Project Alternative.**

| Element | Analysis Year | | | |
|---|---|---|---|---|
| | 2016 | 2023 | 2035 | 2046 |
| Trucks (one-way trips per year)[1] | 1.33 million | 1.33 million | 1.33 million | 1.33 million |
| Trains (round trips per day)[2] | 6 | 6 | 6 | 6 |
| TEUs per year | 1.85 million | 1.85 million | 1.85 million | 1.85 million |
| Employees | 250 | 250 | 250 | 250 |

Notes:
1) The number of trucks is greater than the number of containers to allow for a proportion of "bobtail" (i.e., unloaded) trips in cases where a truck is not loaded in both directions. The ratio is 1.33:1.
2) A train is assumed to carry 260 containers: the number of train moves per day is double the number of round trips (i.e., one inbound move, one outbound move).

# 5.3.2 Impact Analysis

## 5.3.2.1 Aesthetics

The effects of Alternative 2 on Aesthetics and Visual Resources would be identical to those of the proposed Project because the physical features would be the same. See Section 3.1.4.3.1 for the complete impact assessment, which is summarized below.

**Alt 2 Impact AES-1: The Reduced Project Alternative would adversely affect the existing visual character or quality of the site and its surroundings.**

As part of the Reduced Project Alternative, as with the proposed Project, the existing historically significant rail bridge over Sepulveda Boulevard on the north side of the project site would be replaced with a new bridge that would be modern in design and consistent with the common bridge construction practices. Visual simulations of the proposed improvements are shown in Figures 3.1-13, 3.1-14, 3.1-16, and 3.1-18.

As described in Section 3.1.4.3, the project site and relocation sites currently contain primarily industrial warehousing activities as well as container and trailer parking and other goods movement support activities. Surrounding land uses to the north, west and south consist of similar industrial land uses. Public views are considered moderately low in quality. There are no adopted plans, ordinances, regulations, standards (LORS), policies or objectives which identify or designate as scenic, or otherwise valued, views at these locations. The Reduced Project Alternative would introduce a new visual feature in the view. However, its visual characteristics would be consistent with the existing industrial character of the Project area. The existing SCE electrical transmission line towers and the vertical elements associated with the existing heavy industrial uses to the west of the Project site, both over 100 feet tall, dominate the vertical element of the views. The sound walls that would be required as mitigation for noise impacts (see Section 3.9 and Section 5.3.2.9) would represent a new visual feature, but would not dominate west-facing views from residential and public areas in West Long Beach.

The replacement of the historically important Sepulveda Boulevard railroad bridge with a modern new bridge would alter the aesthetic character of that feature and create a change in the visual environment.

**Impact Determination**

No critical views have been identified with the Project site that are recognized and valued for their representing scenic vistas. No critical public views of the Project site are available from designated scenic highways, routes, corridors or parkways. Although elements of the existing Project site would be removed and replaced with new elements, most of the changes would not alter the visual character of the area, which is industrial and generally considered to be of low visual quality. Construction of the new Sepulveda Boulevard railroad bridge, however, would result in a substantial change in the visual environment as seen from Key View 4. Accordingly, the Reduced Project Alternative, including relocation sites, would have less than significant impacts on the visual characteristics of the Project area except in the case of the demolition and reconstruction of the Sepulveda Boulevard railroad bridge, which is considered a significant impact.

*Mitigation Measures*

Mitigation is required for the significant impact associated with the demolition of the Sepulveda Boulevard railroad bridge. Implementation of mitigation measures **MM CR-2** and **MM CR-3** (see section 3.4 Cultural Resources) would ensure that historic elements of the existing railroad bridge would be maintained to the greatest extent feasible, which would reduce the degree to which the view of the bridge would be altered, but because it is not certain how much, if any, of the historic elements of the bridge could be retained, visual impacts would remain significant and unavoidable.

*Residual Impacts*

Implementation of **MM CR-2** and **MM CR-3** would reduce adverse effects to the historical resource, but the impact would remain significant and unavoidable. No further mitigation is available to reduce this impact to less than significant.

### Alt 2 Impact AES-2: The Reduced Project Alternative would not result in a new source of light or glare that would adversely affect day or nighttime views in the area.

The project site is in a heavily industrial area that has existing sources of nighttime external illumination, primarily consisting of security lighting. Implementation of this alternative would add substantial new light sources to the area, including both normal industrial building and perimeter security lighting and area lighting for facility operations. The area lighting would consist of up to 32, 100-foot-tall, high-mast light poles. Sensitive receptors located in the residential areas to the east, across the Terminal Island Freeway would be affected as the existing site is not brightly lit (although the areas north and west of the project site are brightly lit by the ICTF) and does not include many lights that are visible to the sensitive receptors. The new lighting would include automated, efficient directional and shielding features in accordance with Port lighting policy/practice to minimize light spillover into adjacent facilities and residences and to minimize energy use.

Overall, the lighting to be installed with the proposed Project and at the relocation sites is not anticipated to have significant adverse effects on light-sensitive land uses and viewers (i.e., residential and drivers) in the Project area. In addition, the proposed lighting must be in compliance with POLA's Terminal Lighting Design Guidelines, which apply to both terminal and non-terminal Port properties. As discussed in Section 3.1.3.1.1, compliance with POLA's Terminal Lighting Design Guidelines requires the completion of lighting monitoring after the installation of the new lighting in order to ensure that light levels comply with the quantitative standards outlined in the guidelines.

### Impact Determination

Nighttime construction for the Reduced Project Alternative, if any, would be limited to short periods of activity at the PCH intersection. Due to the distance between the proposed Project and the area sensitive receptors, there would not be a significant visual impact relative to light and glare as a result of project operations. Accordingly, impacts of the Reduced Project related to light and glare would be less than significant.

*Mitigation Measures*

No mitigation is required, but Implementation of **MM AES-1** (see Section 3.1.4.3.1) would ensure that impacts remain less than significant.

*Residual Impacts*

Less than significant impact.

**Alt 2 Impact AES-3: The Reduced Project Alternative would result in no shadow effects on nearby shadow-sensitive land uses.**

Project features over 60 feet tall include the proposed electric-powered, rail-mounted gantry cranes (87 to 100 feet tall); the office and maintenance buildings at the project and relocation sites would be less than 60 feet high. The cranes would not block appreciable amounts of light, because of their open construction, and would be located well within the project site, away from any shade-sensitive land uses. The proposed buildings would not cast shadows on any shade-sensitive land uses. The Reduced Project Alternative would not be inconsistent with policies supporting the enhancement of scenic views and public access to them.

**Impact Determination**

The Reduced Project Alternative would not create new areas of shadow on any shadow-sensitive land uses. Therefore, no impact would occur relative to Impact AES-3.

*Mitigation Measures*

No mitigation is required.

*Residual Impacts*

No impact would occur.

### 5.3.2.2 Air Quality

Under the Reduced Project Alternative, all construction activities would be identical to those described under the Project Alternative. Project operations would be similar in nature to the Project Alternative, but reduced in the cargo capacity of the SCIG facility. The remaining cargo destined for BNSF that could not be accommodated at the Reduced Project facility would be moved by truck to the Hobart railyard. Relocation of tenants and their subsequent activities at the relocation sites would be identical to the proposed Project.

Under the Reduced Project Alternative, the SCIG facility would be constructed identically to the proposed Project. Accordingly, impacts related to construction (AQ-1, and AQ-2) would be identical to those for the proposed Project presented in Section 3.2.4.3, i.e., significant and unavoidable. The Reduced Project Alternative would have a less than significant impact under AQ-5 (CO concentrations at a local intersection) as described in section 3.2.4.3 and summarized in Table 3.2.31. This conclusion is based on a) less traffic would be generated by the Reduced Project Alternative at the study intersection than by the proposed Project, and b) although traffic on highways north of the Project site would be greater than under baseline conditions it would be less than under the No Project, which was shown to have a less than significant impact. As described for the proposed Project in section 3.2.4.3, the Reduced Project Alternative would have a less than significant impact under AQ-6 (odor) and no impact under AQ-8 (AQMP implementation). The impact determination discussions for AQ-3, AQ-4 and AQ-7 are presented below.

### Alt 2 Impact AQ-3: The Reduced Project Alternative would not result in operational emissions that exceed 10 tons per year of VOCs and SCAQMD thresholds of significance.

Table 5-14 presents unmitigated average daily criteria pollutant emissions associated with the Reduced Project Alternative for the analysis years of 2013, 2014, 2015, 2016, 2023, 2035, and 2046. The average daily emissions represent the annual emissions divided by 360 days per year. Reduced Project emissions are compared to the baseline (2005) to determine significance.

Table 5-15 presents peak daily unmitigated emissions estimated for the Reduced Project Alternative in years 2013, 2014, 2015, 2016, 2023, 2035, and 2046. Peak daily emissions represent theoretical upper-bound estimates of activity levels at the facility and relocated tenant sites. Therefore, in contrast to average daily emissions, peak daily emissions would occur infrequently and are based upon a lesser known and therefore more theoretical set of conservative assumptions. Comparisons to the peak daily baseline emissions are presented to determine significance.

**Table 5-14. Average Daily Operational Emissions – Reduced Project Alternative.**

| Source Category | Average Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| ***Project Year 2013*** | | | | | | |
| Trucks On-Site | 20 | 56 | 132 | 0 | 28 | 5 |
| Trucks Off-Site [b] | 23 | 96 | 304 | 1 | 40 | 8 |
| CHE | 43 | 1,355 | 265 | 0 | 8 | 7 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 1 | 0 |
| Employee Commute Off-Site [b] | 3 | 86 | 8 | 0 | 51 | 5 |
| Tenant Locomotive Activities | 0 | 0 | 1 | 0 | 0 | 0 |
| **Total - Project Year 2013 [d]** | **89** | **1,595** | **710** | **1** | **128** | **26** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **539** | **4,079** | **8,447** | **139** | **685** | **314** |
| Reduced Project minus CEQA Baseline [c] | -106 | -1,024 | -1,435 | -12 | -156 | -71 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2014*** | | | | | | |
| Trucks On-Site | 12 | 35 | 80 | 0 | 17 | 3 |
| Trucks Off-Site [b] | 13 | 53 | 152 | 0 | 20 | 3 |
| CHE | 13 | 405 | 118 | 0 | 4 | 4 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 2 | 49 | 4 | 0 | 31 | 4 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2014 [d]** | **39** | **543** | **354** | **1** | **73** | **13** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **539** | **4,079** | **8,447** | **139** | **685** | **314** |
| Reduced Project minus CEQA Baseline [c] | -155 | -2,076 | -1,791 | -12 | -212 | -84 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2015*** | | | | | | |
| Trucks On-Site | 11 | 34 | 82 | 0 | 17 | 3 |
| Trucks Off-Site [b] | 12 | 49 | 145 | 0 | 20 | 3 |
| CHE | 4 | 406 | 117 | 0 | 4 | 4 |

| Source Category | Average Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 1 | 45 | 4 | 0 | 32 | 4 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2015 [d]** | **28** | **534** | **348** | **1** | **73** | **14** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **539** | **4,079** | **8,447** | **139** | **685** | **314** |
| Reduced Project minus CEQA Baseline [c] | -166 | -2,084 | -1,797 | -12 | -212 | -84 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2016*** | | | | | | |
| Locomotives On-Site | 3 | 8 | 61 | 0 | 2 | 1 |
| Locomotives Off-Site [b] | 59 | 172 | 1,928 | 2 | 41 | 38 |
| Trucks On-Site | 31 | 117 | 361 | 0 | 186 | 27 |
| Trucks Off-Site [b] | 34 | 140 | 434 | 1 | 71 | 12 |
| Railyard Equipment | 6 | 661 | 7 | 0 | 0 | 0 |
| TRU | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 14 | 1 | 0 | 11 | 1 |
| Refueling Trucks On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Refueling Trucks Off-Site [b] | 0 | 0 | 1 | 0 | 0 | 0 |
| Relocated Tenant Sources | | | | | | |
| Trucks On-Site | 10 | 33 | 78 | 0 | 17 | 3 |
| Trucks Off-Site [b] | 11 | 46 | 131 | 0 | 20 | 3 |
| CHE | 12 | 405 | 94 | 0 | 3 | 3 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 1 | 36 | 3 | 0 | 27 | 3 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2016 [d]** | **169** | **1,633** | **3,099** | **4** | **379** | **92** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **539** | **4,079** | **8,447** | **139** | **685** | **314** |
| Reduced Project minus CEQA Baseline | -370 | -2,446 | -5,348 | -135 | -306 | -221 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2023*** | | | | | | |
| Locomotives On-Site | 2 | 9 | 47 | 0 | 1 | 1 |
| Locomotives Off-Site [b] | 48 | 223 | 1,729 | 2 | 25 | 23 |
| Trucks On-Site | 26 | 102 | 289 | 0 | 186 | 28 |
| Trucks Off-Site [b] | 51 | 218 | 514 | 3 | 158 | 27 |
| Railyard Equipment | 8 | 662 | 7 | 0 | 0 | 0 |
| TRU | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 8 | 1 | 0 | 11 | 1 |
| Refueling Trucks On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Refueling Trucks Off-Site [b] | 0 | 0 | 0 | 0 | 0 | 0 |
| Relocated Tenant Sources | | | | | | |
| Trucks On-Site | 7 | 27 | 36 | 0 | 17 | 3 |
| Trucks Off-Site [b] | 7 | 28 | 43 | 0 | 20 | 3 |
| CHE | 12 | 408 | 86 | 0 | 3 | 3 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |

| Source Category | Average Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| Employee Commute Off-Site [b] | 1 | 22 | 2 | 0 | 27 | 3 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2023 [d]** | **162** | **1,708** | **2,756** | **6** | **449** | **92** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **539** | **4,079** | **8,447** | **139** | **685** | **314** |
| Reduced Project minus CEQA Baseline | -377 | -2,371 | -5,691 | -133 | -236 | -222 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2035*** | | | | | | |
| Locomotives On-Site | 1 | 7 | 23 | 0 | 0 | 0 |
| Locomotives Off-Site [b] | 16 | 127 | 595 | 2 | 9 | 8 |
| Trucks On-Site | 25 | 101 | 291 | 0 | 186 | 28 |
| Trucks Off-Site [b] | 15 | 59 | 154 | 1 | 43 | 7 |
| Railyard Equipment | 8 | 663 | 7 | 0 | 0 | 0 |
| TRU | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 5 | 0 | 0 | 11 | 1 |
| Refueling Trucks On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Refueling Trucks Off-Site [b] | 0 | 0 | 0 | 0 | 0 | 0 |
| Relocated Tenant Sources | | | | | | |
| Trucks On-Site | 6 | 26 | 41 | 0 | 17 | 3 |
| Trucks Off-Site [b] | 6 | 23 | 43 | 0 | 19 | 3 |
| CHE | 11 | 404 | 48 | 0 | 1 | 1 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 14 | 1 | 0 | 27 | 3 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2035 [d]** | **89** | **1,431** | **1,204** | **4** | **314** | **54** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **539** | **4,079** | **8,447** | **139** | **685** | **314** |
| Reduced Project minus CEQA Baseline | -450 | -2,649 | -7,243 | -135 | -371 | -260 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2046*** | | | | | | |
| Locomotives On-Site | 1 | 7 | 15 | 0 | 0 | 0 |
| Locomotives Off-Site [b] | 10 | 119 | 363 | 2 | 5 | 5 |
| Trucks On-Site | 25 | 101 | 290 | 0 | 186 | 27 |
| Trucks Off-Site [b] | 15 | 58 | 153 | 1 | 43 | 7 |
| Railyard Equipment | 8 | 663 | 7 | 0 | 0 | 0 |
| TRU | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 5 | 0 | 0 | 11 | 1 |
| Refueling Trucks On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Refueling Trucks Off-Site [b] | 0 | 0 | 0 | 0 | 0 | 0 |
| Relocated Tenant Sources | | | | | | |
| Trucks On-Site | 6 | 26 | 42 | 0 | 16 | 3 |
| Trucks Off-Site [b] | 6 | 23 | 42 | 0 | 19 | 3 |
| CHE | 11 | 406 | 48 | 0 | 1 | 1 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 13 | 1 | 0 | 27 | 3 |

| Source Category | Average Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2046 [d]** | **83** | **1,421** | **962** | **4** | **309** | **50** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **539** | **4,079** | **8,447** | **139** | **685** | **314** |
| Reduced Project minus CEQA Baseline | -456 | -2,658 | -7,485 | -135 | -376 | -263 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |

a) Emissions represent annual emissions divided by 360 days per year of operation.
b) Truck, train, and worker commute emissions include transport within the South Coast Air Basin.
c) By definition, the Reduced Project minus Baseline increment in 2013, 2014 and 2015 does not account for both the truck travel between port terminals to Hobart Yard and the rail travel from Hobart Yard to the South Coast Air Basin boundary as they are not a part of the project during this period.
d) Emissions might not precisely add due to rounding. For further explanation, refer to the discussion in Section 3.2.4.1.
e) The emission estimates presented in this table were calculated using the latest available data, assumptions, and emission factors at the time this document was prepared. Future studies might use updated data, assumptions, and emission factors that are not currently available.

**Table 5-15. Peak Daily Operational Emissions – Reduced Project Alternative.**

| Source Category | Peak Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| ***Project Year 2013*** | | | | | | |
| Trucks On-Site | 23 | 63 | 148 | 0 | 32 | 6 |
| Trucks Off-Site [b] | 25 | 108 | 340 | 1 | 44 | 9 |
| CHE | 48 | 1,517 | 297 | 0 | 9 | 8 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 1 | 0 |
| Employee Commute Off-Site [b] | 3 | 86 | 8 | 0 | 51 | 5 |
| Tenant Locomotive Activities | 0 | 0 | 1 | 0 | 0 | 0 |
| **Total - Project Year 2013 [d]** | **99** | **1,775** | **794** | **1** | **137** | **29** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| Reduced Project minus CEQA Baseline [c] | -116 | -1,102 | -1,601 | -13 | -167 | -79 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2014*** | | | | | | |
| Trucks On-Site | 13 | 39 | 90 | 0 | 19 | 3 |
| Trucks Off-Site [b] | 14 | 59 | 170 | 0 | 22 | 3 |
| CHE | 15 | 453 | 132 | 0 | 4 | 4 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 2 | 49 | 4 | 0 | 31 | 4 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2014 [d]** | **44** | **602** | **396** | **1** | **77** | **15** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| Reduced Project minus CEQA Baseline [c] | -172 | -2,275 | -1,999 | -13 | -227 | -94 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2015*** | | | | | | |
| Trucks On-Site | 12 | 38 | 92 | 0 | 19 | 3 |

| Source Category | Peak Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| Trucks Off-Site [b] | 13 | 55 | 162 | 0 | 22 | 3 |
| CHE | 4 | 454 | 131 | 0 | 4 | 4 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 1 | 45 | 4 | 0 | 32 | 4 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2015 [d]** | **32** | **593** | **389** | **1** | **78** | **15** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| Reduced Project minus CEQA Baseline [c] | -184 | -2,284 | -2,006 | -13 | -226 | -94 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2016*** | | | | | | |
| Locomotives On-Site | 8 | 14 | 113 | 0 | 3 | 3 |
| Locomotives Off-Site [b] | 142 | 345 | 3,228 | 2 | 59 | 54 |
| Trucks On-Site | 35 | 131 | 404 | 1 | 208 | 31 |
| Trucks Off-Site [b] | 38 | 157 | 486 | 1 | 80 | 13 |
| Railyard Equipment | 12 | 852 | 30 | 0 | 1 | 1 |
| TRU | 1 | 12 | 11 | 0 | 0 | 0 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 14 | 1 | 0 | 11 | 1 |
| Refueling Trucks On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Refueling Trucks Off-Site [b] | 0 | 0 | 1 | 0 | 0 | 0 |
| Relocated Tenant Sources | | | | | | |
| Trucks On-Site | 12 | 37 | 87 | 0 | 19 | 3 |
| Trucks Off-Site [b] | 13 | 51 | 146 | 0 | 22 | 3 |
| CHE | 12 | 405 | 94 | 0 | 3 | 3 |
| Employee Commute On-Site | 0 | 1 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 1 | 36 | 3 | 0 | 27 | 3 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2016 [d]** | **275** | **2,054** | **4,603** | **5** | **434** | **117** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| Reduced Project minus CEQA Baseline | -314 | -2,882 | -5,602 | -139 | -312 | -228 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2023*** | | | | | | |
| Locomotives On-Site | 8 | 14 | 113 | 0 | 3 | 3 |
| Locomotives Off-Site [b] | 175 | 429 | 4,005 | 2 | 73 | 67 |
| Trucks On-Site | 29 | 114 | 324 | 1 | 208 | 31 |
| Trucks Off-Site [b] | 57 | 245 | 575 | 3 | 177 | 30 |
| Railyard Equipment | 14 | 853 | 30 | 0 | 1 | 1 |
| TRU | 2 | 16 | 11 | 0 | 0 | 0 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 8 | 1 | 0 | 11 | 1 |
| Refueling Trucks On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Refueling Trucks Off-Site [b] | 0 | 0 | 0 | 0 | 0 | 0 |
| Relocated Tenant Sources | | | | | | |
| Trucks On-Site | 8 | 31 | 41 | 0 | 19 | 3 |
| Trucks Off-Site [b] | 8 | 31 | 49 | 0 | 22 | 3 |

| Source Category | Peak Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| CHE | 12 | 408 | 86 | 0 | 3 | 3 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 1 | 22 | 2 | 0 | 27 | 3 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2023 [d]** | **313** | **2,171** | **5,236** | **7** | **545** | **145** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| Reduced Project minus CEQA Baseline | -277 | -2,765 | -4,969 | -137 | -202 | -199 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2035*** | | | | | | |
| Locomotives On-Site | 6 | 15 | 104 | 0 | 2 | 2 |
| Locomotives Off-Site [b] | 91 | 351 | 2,752 | 2 | 38 | 35 |
| Trucks On-Site | 28 | 113 | 326 | 1 | 208 | 31 |
| Trucks Off-Site [b] | 17 | 66 | 172 | 1 | 48 | 8 |
| Railyard Equipment | 14 | 853 | 30 | 0 | 1 | 1 |
| TRU | 2 | 16 | 11 | 0 | 0 | 0 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 5 | 0 | 0 | 11 | 1 |
| Refueling Trucks On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Refueling Trucks Off-Site [b] | 0 | 0 | 0 | 0 | 0 | 0 |
| Relocated Tenant Sources | | | | | | |
| Trucks On-Site | 7 | 29 | 46 | 0 | 19 | 3 |
| Trucks Off-Site [b] | 7 | 26 | 49 | 0 | 22 | 3 |
| CHE | 11 | 404 | 48 | 0 | 1 | 1 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 14 | 1 | 0 | 27 | 3 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2035 [d]** | **183** | **1,893** | **3,539** | **4** | **377** | **88** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| Reduced Project minus CEQA Baseline | -407 | -3,042 | -6,666 | -140 | -369 | -257 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |
| ***Project Year 2046*** | | | | | | |
| Locomotives On-Site | 5 | 13 | 93 | 0 | 2 | 2 |
| Locomotives Off-Site [b] | 61 | 118 | 1,753 | 2 | 38 | 35 |
| Trucks On-Site | 28 | 113 | 325 | 1 | 208 | 31 |
| Trucks Off-Site [b] | 17 | 65 | 171 | 1 | 48 | 8 |
| Railyard Equipment | 14 | 853 | 30 | 0 | 1 | 1 |
| TRU | 2 | 16 | 11 | 0 | 0 | 0 |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 5 | 0 | 0 | 11 | 1 |
| Refueling Trucks On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Refueling Trucks Off-Site [b] | 0 | 0 | 0 | 0 | 0 | 0 |
| Relocated Tenant Sources | | | | | | |
| Trucks On-Site | 7 | 29 | 47 | 0 | 18 | 3 |
| Trucks Off-Site [b] | 7 | 26 | 48 | 0 | 22 | 3 |
| CHE | 11 | 406 | 48 | 0 | 1 | 1 |

| Source Category | Peak Daily Emissions (lb/day) [a,e] | | | | | |
|---|---|---|---|---|---|---|
| | VOC | CO | NOx | SOx | $PM_{10}$ | $PM_{2.5}$ |
| Employee Commute On-Site | 0 | 0 | 0 | 0 | 0 | 0 |
| Employee Commute Off-Site [b] | 0 | 13 | 1 | 0 | 27 | 3 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total - Project Year 2046 [d]** | **152** | **1,658** | **2,527** | **4** | **376** | **88** |
| CEQA Impacts | | | | | | |
| CEQA Baseline Emissions | **590** | **4,935** | **10,205** | **144** | **747** | **345** |
| Reduced Project minus CEQA Baseline | -438 | -3,278 | -7,678 | -140 | -371 | -257 |
| Thresholds | **55** | **550** | **55** | **150** | **150** | **55** |
| **Significance?** | **No** | **No** | **No** | **No** | **No** | **No** |
| | | | | | | |

a) Emissions represent annual emissions divided by 360 days per year of operation.
b) Truck, train, and worker commute emissions include transport within the South Coast Air Basin.
c) By definition, the Reduced Project minus Baseline increment in 2013, 2014 and 2015 does not account for both the truck travel between port terminals to Hobart Yard and the rail travel from Hobart Yard to the South Coast Air Basin boundary as they are not a part of the project during this period.
d) Emissions might not precisely add due to rounding. For further explanation, refer to the discussion in Section 3.2.4.1.
e) The emission estimates presented in this table were calculated using the latest available data, assumptions, and emission factors at the time this document was prepared. Future studies might use updated data, assumptions, and emission factors that are not currently available.

### Impact Determination

There are no impacts for this alternative related to operational emissions.

#### *Mitigation Measures*

No mitigation is required.

#### *Residual Impacts*

No impact.

### Alt 2 Impact AQ-4: The Reduced Project Alternative operations would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance in Table 3.2-25.

Implementation of the Reduced Project Alternative would somewhat reduce the ambient impact of operational emissions relative to the proposed Project. Tables 5-16 and 5-17 present the maximum off-site ground level concentrations of criteria pollutants estimated for the Reduced Project Alternative construction and operations.

**Table 5-16. Maximum Offsite $NO_2$, CO, and $SO_2$ Concentrations Associated with Operation of the Reduced Project Alternative.**

| Pollutant | Averaging Time | Maximum Modeled Concentration of Unmitigated Reduced Project Alternative | Background Concentration[b] | Total Ground Level Concentration[a] | SCAQMD Threshold |
|---|---|---|---|---|---|
| | | ($\mu g/m^3$) | ($\mu g/m^3$) | ($\mu g/m^3$) | ($\mu g/m^3$) |
| $NO_2$ [c] | 1-hour | 953 | 245 | **1,198** | 338 |
| | 1-hour [d] | 953 | 146 | **1,100** | (189)[f] |
| | Annual | 42 | 40 | **82** | 56 |
| CO | 1-hour | 1,000 | 5,842 | 6,842 | 23,000 |
| | 8-hour | 252 | 4,467 | 4,719 | 10,000 |
| $SO_2$ | 1-hour | 1.9 | 288 | 290 | 655 |
| | 1-hour [e] | 1.9 | 53 | 55 | (196)[f] |
| | 24-hour | 0.3 | 31 | 32 | 105 |

a) Exceedances of the thresholds are indicated in bold. Modeled concentrations of $NO_2$, $SO_2$, and CO are absolute Unmitigated Reduced Project Alternative concentrations.
b) CO background concentrations are the projected future year values for Monitor 4, Long Beach, published by the SCAQMD for years 2010, 2015, and 2020 (all identical). $NO_2$ and $SO_2$ background concentrations were obtained from the North Long Beach Monitoring Station. Unless noted otherwise, the maximum concentrations during the years of 2007, 2008, and 2009 were used.
c) $NO_2$ concentrations were calculated assuming a 75 percent conversion rate from NOx to $NO_2$ for the annual averaging period and an 80 percent conversion rate from NOx to $NO_2$ for the 1-hour averaging period.
d) This comparison is to the federal NAAQS, which is a 98th percentile threshold. Here, the background concentration is the 3-year average of the 8th highest daily maximum 1-hour concentration, over the years 2007, 2008, and 2009.
e) This comparison is to the federal NAAQS, which is a 99th percentile threshold. Here, the background concentration is the 3-year average of the 4th highest daily maximum 1-hour concentration, over the years 2007, 2008, and 2009.
f) A standard not yet adopted as a threshold of significance by SCAQMD.

**Table 5-17. Maximum Offsite $PM_{10}$ and $PM_{2.5}$ Concentrations Associated with Operation of the Reduced Project Alternative.**

| Pollutant | Averaging Time | Maximum Modeled Concentration of Unmitigated Reduced Project Alternative[b] | Maximum Modeled Concentration of Baseline[b] | Ground-Level Concentration Increment[a,b,c] | SCAQMD Threshold |
|---|---|---|---|---|---|
| | | ($\mu g/m^3$) | ($\mu g/m^3$) | ($\mu g/m^3$) | ($\mu g/m^3$) |
| $PM_{10}$ | 24-hour | 44.5 | 21.4 | **38.5** | 2.5 |
| | Annual | 23.3 | 6.3 | **21.8** | 1.0 |
| $PM_{2.5}$ | 24-hour | 6.8 | 12.5 | **4.5** | 2.5 |

a) Exceedances of the threshold are indicated in bold. The thresholds for $PM_{10}$ and $PM_{2.5}$ are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.
b) The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the Unmitigated Reduced Project Alternative concentration.
c) The increment represents operation of the Unmitigated Proposed Project minus baseline.

## Impact Determination

The Reduced Project Alternative would exceed the SCAQMD thresholds for 1-hour and annual $NO_2$, 24-hour and annual $PM_{10}$, and 24-hour $PM_{2.5}$. It would also exceed the NAAQS for 1-hour $NO_2$. Therefore, the Reduced Project Alternative would have significant impacts under AQ-4.

### *Mitigation Measures*

Mitigation measure **MM AQ-7** would apply to the Reduced Project Alternative, and would require that BNSF conduct weekly sweeping on-site at the SCIG facility to reduce fugitive dust emissions from SCIG drayage trucks, yard hostlers, service trucks and employee vehicles. Tables 5-18 and 5-19 present the ambient peak off-site pollutant concentrations for the mitigated Reduced Project Alternative. In addition, lease measures **LM AQ-8** and **LM AQ-9** would also apply to the Reduced Project Alternative.

Mitigation measure **MM AQ-7** applies to the SCIG facility and only two relocated tenants, Cal Cartage and Three Rivers Trucking. Fast Lane is largely a container storage business, and the trucks calling on the Fast Lane facility are primarily vendor trucks over which Fast Lane has no direct operational control. The ACTA maintenance yard consists primarily of a small administration building and a storage site for equipment, and is serviced by light-duty vehicles and maintenance trucks. For these reasons, the mitigation measure below was not applied to Fast Lane and ACTA facilities.

**Table 5-18. Maximum Offsite $NO_2$, CO, and $SO_2$ Concentrations Associated with Operation of the Reduced Project Alternative – with Mitigation.**

| Pollutant | Averaging Time | Maximum Modeled Concentration of Mitigated Reduced Project Alternative | Background Concentration[b] | Total Ground Level Concentration[a] | SCAQMD Threshold |
|---|---|---|---|---|---|
| | | ($\mu g/m^3$) | ($\mu g/m^3$) | ($\mu g/m^3$) | ($\mu g/m^3$) |
| $NO_2$ [c] | 1-hour | 953 | 245 | **1,198** | 338 |
| | 1-hour [d] | 953 | 146 | **1,100** | (189)[f] |
| | Annual | 42 | 40 | **82** | 56 |
| CO | 1-hour | 1,000 | 5,842 | 6,842 | 23,000 |
| | 8-hour | 252 | 4,467 | 4,719 | 10,000 |
| $SO_2$ | 1-hour | 1.9 | 288 | 290 | 655 |
| | 1-hour [e] | 1.9 | 53 | 55 | (196)[f] |
| | 24-hour | 0.3 | 31 | 32 | 105 |

a) Exceedances of the thresholds are indicated in bold. Modeled concentrations of $NO_2$, $SO_2$, and CO are absolute Mitigated Reduced Project Alternative concentrations.
b) CO background concentrations are the projected future year values for Monitor 4, Long Beach, published by the SCAQMD for years 2010, 2015, and 2020 (all identical). $NO_2$ and $SO_2$ background concentrations were obtained from the North Long Beach Monitoring Station. Unless noted otherwise, the maximum concentrations during the years of 2007, 2008, and 2009 were used.
c) $NO_2$ concentrations were calculated assuming a 75 percent conversion rate from NOx to $NO_2$ for the annual averaging period and an 80 percent conversion rate from NOx to $NO_2$ for the 1-hour averaging period.
d) This comparison is to the federal NAAQS, which is a 98th percentile threshold. Here, the background concentration is the 3-year average of the 8th highest daily maximum 1-hour concentration, over the years 2007, 2008, and 2009.
e) This comparison is to the federal NAAQS, which is a 99th percentile threshold. Here, the background concentration is the 3-year average of the 4th highest daily maximum 1-hour concentration, over the years 2007, 2008, and 2009.
f) A standard not yet adopted as a threshold of significance by SCAQMD.

**Table 5-19. Maximum Offsite $PM_{10}$ and $PM_{2.5}$ Concentrations Associated with Operation of the Reduced Project Alternative – with Mitigation.**

| Pollutant | Averaging Time | Maximum Modeled Concentration of Mitigated Reduced Project Alternative[b] ($\mu g/m^3$) | Maximum Modeled Concentration of Baseline[b] ($\mu g/m^3$) | Ground-Level Concentration Increment[a,b,c] ($\mu g/m^3$) | SCAQMD Threshold ($\mu g/m^3$) |
|---|---|---|---|---|---|
| $PM_{10}$ | 24-hour | 35.4 | 21.4 | **28.0** | 2.5 |
| | Annual | 15.8 | 6.3 | **14.3** | 1.0 |
| $PM_{2.5}$ | 24-hour | 6.1 | 12.5 | **3.2** | 2.5 |

a) Exceedances of the threshold are indicated in bold. The thresholds for $PM_{10}$ and $PM_{2.5}$ are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.
b) The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the mitigated Reduced Project Alternative concentration.
c) The increment represents operation of the unmitigated proposed Project minus baseline.

*Residual Impacts*

The Mitigated Reduced Project Alternative residual air quality impacts would remain significant for 1-hour and annual $NO_2$, 24-hour and annual $PM_{10}$, and 24-hour $PM_{2.5}$.

**Alt 2 Impact AQ-7: The Reduced Project Alternative would not expose receptors to significant levels of TACs.**

Construction emissions associated with the Reduced Project Alternative would be identical to those associated with the proposed Project.

The main sources of TACs from this alternative would be DPM emissions from offsite and onsite trucks for both the residential and occupational receptors. A similar approach was used to perform the HRA for this alternative as described in the evaluation of the Proposed Project in section 3.2.4.3.

Table 5-20 presents the maximum predicted health impacts associated with the Reduced Project Alternative. The table includes estimates of individual lifetime cancer risk, chronic non-cancer hazard index, and acute non-cancer hazard index at the maximally exposed receptors. Results are presented for this alternative, the baseline, and the increment (alternative minus baseline).

**Table 5-20. Maximum Health Impacts Associated with the Unmitigated Reduced Project Alternative.**

| Health Impact | Receptor Type | Maximum Predicted Impact | | | Significance Threshold |
|---|---|---|---|---|---|
| | | Reduced Project | Baseline | Increment | |
| Cancer Risk | Residential | $35 \times 10^{-6}$ (35 in a million) | $568 \times 10^{-6}$ (568 in a million) | $-174 \times 10^{-6}$ (-174 in a million) | $10 \times 10^{-6}$ (10 in a million) |
| | Occupational | $29 \times 10^{-6}$ (29 in a million) | $215 \times 10^{-6}$ (215 in a million) | $-125 \times 10^{-6}$ (-125 in a million) | |
| | Sensitive | $30 \times 10^{-6}$ (30 in a million) | $220 \times 10^{-6}$ (220 in a million) | $-190 \times 10^{-6}$ (-190 in a million) | |
| | Student | $2.6 \times 10^{-6}$ (2.6 in a million) | $4.7 \times 10^{-6}$ (4.7 in a million) | $-2.1 \times 10^{-6}$ (-2.1 in a million) | |
| | Recreational | $43 \times 10^{-6}$ (43 in a million) | $329 \times 10^{-6}$ (329 in a million) | $-194 \times 10^{-6}$ (-194 in a million) | |

| Health Impact | Receptor Type | Maximum Predicted Impact | | | Significance Threshold |
|---|---|---|---|---|---|
| | | Reduced Project | Baseline | Increment | |
| Chronic Hazard Index | Residential | 0.09 | 0.36 | -0.06 | 1.0 |
| | Occupational | 0.44 | 0.69 | 0.10 | |
| | Sensitive | 0.10 | 0.16 | -0.07 | |
| | Student | 0.10 | 0.16 | -0.07 | |
| | Recreational | 0.44 | 0.69 | 0.10 | |
| Acute Hazard Index | Residential | 0.19 | 0.29 | 0.01 | 1.0 |
| | Occupational | 0.65 | 0.79 | 0.13 | |
| | Sensitive | 0.21 | 0.27 | 0.000 | |
| | Student | 0.21 | 0.27 | -0.065 | |
| | Recreational | 0.65 | 0.79 | 0.13 | |

Notes:
a) Exceedances of the significance thresholds are in bold. The significance thresholds apply to the increments only.
b) The maximum increments might not occur at the same receptor locations as the maximum impacts. This means that the increments cannot necessarily be determined by subtracting the baseline impact from the project impact. Rather, the subtraction must be done at each receptor, for all modeled receptors, and the maximum result selected.
c) The increment represents Project minus baseline.
d) When the maximum increment for a receptor type is negative, the maximum increment displayed is the increment at the maximum project receptor location.
e) Data represent the receptor locations with the maximum impacts or increments. The impacts or increments at all other modeled receptors would be less than these values for each receptor type.
f) The Unmitigated Reduced Project scenario is based on a reduced throughput assumption.

TAC –related cancer risk estimates for the Reduced Project Alternative are negative, and as discussed for the Project Alternative do not support identification of a one in a million cancer risk isopleth. The absence of this cancer risk isopleth for the Reduced Project Alternative does not allow for the identification of population around the Reduced Project Alternative and therefore does not support an analysis of cancer burden for the Reduced Project.

*Particulates: Morbidity and Mortality*

As described in **Impact Alt 2 AQ-4**, the results of ambient air dispersion modeling indicated that operation of the unmitigated Reduced Project would result in off-site 24-hour $PM_{2.5}$ concentrations that exceed the SCAQMD significance threshold of 2.5 $\mu g/m^3$. Because of this exceedance, operational $PM_{2.5}$ concentrations meet the POLA's criteria for calculating morbidity and mortality attributable to PM. In accordance with POLA's methodology, census blocks lying partially or completely within the 24-h $PM_{2.5}$ $\mu g/m^3$ concentration isopleth were identified (see Appendix C3 for fuller discussion of methodology). However, all impacted census blocks were found to be located in industrialized areas in the vicinity of the project. Because no residential populations inhabit the impacted census blocks, the Reduced Project Alternative is not expected to have an impact on PM-attributable morbidity or mortality. Accordingly, no calculations of morbidity and mortality were warranted.

## Impact Determination

The data in Table 5-20 show that the CEQA cancer risk increment at the MEI location of the Reduced Project Alternative, which is a residential receptor, is predicted to be -174 in a million ($-174 \times 10^{-6}$), at. This risk value, as well as the cancer risk values at all residential receptors, are negative values and are below the significance threshold of 10 in a million. The receptor location for the maximum unmitigated Reduced Project Alternative impact for residential receptors is the same location as the maximum

unmitigated proposed Project impact: in the Westside neighborhood of Long Beach at a residential development near the intersection of West 20th Street and San Gabriel Avenue, approximately 730 feet east of the Southeastern site boundary. The increments would also be below the significance threshold at all receptors, including occupational, sensitive, student, and recreational.

The maximum chronic HI increments are predicted to be less than the significance threshold of 1.0 at all receptors. The maximum acute HI increments are also predicted to be less than the significance threshold of 1.0 for all receptors. Accordingly, the Reduced Project Alternative would have less than significant impacts related to exposure to TACs.

*Mitigation Measures*

The AQ-7 impacts for the Reduced Project alternative would be less than significant; therefore, mitigation is not required. Nevertheless, **MM-AQ-1** to **MM AQ-3**, described in section 3.2.4.3, would reduce the TAC impacts from the unmitigated Reduced Project Alternative by reducing emissions from construction equipment operating at the Port.

Table 5-21 presents a summary of the maximum health impacts that would occur with operation of the mitigated Reduced Project Alternative. The cancer risk for the location of the maximum residential impact for the mitigated Reduced Project Alternative is 34 in a million ($34 \times 10^{-6}$) which is slightly lower than the maximum residential cancer risk associated with the unmitigated Reduced Project Alternative by about 3 percent. The maximum residential chronic hazard index would be reduced by about 25 percent. The maximum residential acute hazard index would be reduced by about 12 percent.

**Table 5-21. Maximum Health Impacts Associated with the Mitigated Reduced Project Alternative.**

| Health Impact | Receptor Type | Maximum Predicted Impact | | | Significance Threshold |
|---|---|---|---|---|---|
| | | Mitigated Reduced Project | Baseline | Increment | |
| Cancer Risk | Residential | $34 \times 10^{-6}$ (34 in a million) | $568 \times 10^{-6}$ (568 in a million) | $-174 \times 10^{-6}$ (-174 in a million) | $10 \times 10^{-6}$ (10 in a million) |
| | Occupational | $27 \times 10^{-6}$ (27 in a million) | $215 \times 10^{-6}$ (215 in a million) | $-127 \times 10^{-6}$ (-127 in a million) | |
| | Sensitive | $29 \times 10^{-6}$ (29 in a million) | $220 \times 10^{-6}$ (220 in a million) | $-191 \times 10^{-6}$ (-191 in a million) | |
| | Student | $1.7 \times 10^{-6}$ (1.7 in a million) | $4.7 \times 10^{-6}$ (4.7 in a million) | $-3 \times 10^{-6}$ (-3 in a million) | |
| | Recreational | $42 \times 10^{-6}$ (42 in a million) | $329 \times 10^{-6}$ (329 in a million) | $-196 \times 10^{-6}$ (-196 in a million) | |
| Chronic Hazard Index | Residential | 0.06 | 0.36 | -0.08 | 1.0 |
| | Occupational | 0.26 | 0.69 | 0.02 | |
| | Sensitive | 0.07 | 0.16 | -0.09 | |
| | Student | 0.07 | 0.16 | -0.09 | |
| | Recreational | 0.26 | 0.69 | 0.02 | |
| Acute Hazard Index | Residential | 0.16 | 0.29 | -0.073 | 1.0 |
| | Occupational | 0.59 | 0.79 | 0.08 | |
| | Sensitive | 0.18 | 0.27 | -0.09 | |
| | Student | 0.18 | 0.27 | -0.09 | |
| | Recreational | 0.59 | 0.79 | 0.08 | |

Notes:
a) Exceedances of the significance thresholds are in bold. The significance thresholds apply to the increments only.
b) The maximum increments might not occur at the same receptor locations as the maximum impacts. This means that the increments cannot necessarily be determined by subtracting the baseline impact from the project impact. Rather, the subtraction must be done at each receptor, for all modeled receptors, and the maximum result selected.
c) The increment represents Project minus baseline.
d) When the maximum increment for a receptor type is negative, the maximum increment displayed is the increment at the maximum project receptor location.
e) Data represent the receptor locations with the maximum impacts or increments. The impacts or increments at all other modeled receptors would be less than these values for each receptor type.
f) The Mitigated Reduced Project Alternative assumes that the Port guidelines for reducing emissions from construction equipment operating at the Port are followed; it is otherwise equivalent to the Unmitigated Reduced Project Alternative.

The data in Table 5-21 show that the cancer risk increment at the location of the Mitigated Reduced Project Alternative MEI is predicted to be -174 in a million ($-174 \times 10^{-6}$) at a residential receptor. This risk value, as well as the cancer risk values at all residential receptors, are negative values and below the significance threshold of 10 in a million. The receptor location for the maximum Mitigated Reduced Project Alternative impact for residential receptors is the same location as for the unmitigated Reduced Project Alternative. The increments are also below the significance threshold at all receptors, including occupational, sensitive, student, and recreational.

The maximum chronic HI increments are predicted to be less than the significance threshold of 1.0 at all receptors. The maximum acute HI increments are also predicted to be less than the significance threshold of 1.0 for all receptors.

### *Residual Impacts*

The mitigated Reduced Project Alternative residual health risk impacts would remain less than significant.

### 5.3.2.3 Biological Resources

Under the Reduced Project Alternative, all construction activities would be identical to those described under the Project Alternative. Project operations would be similar in nature to the Project Alternative, but reduced in the cargo capacity of the SCIG facility.

Accordingly, impacts related to construction (BIO-1a through BIO-4a) would be identical to those for the proposed Project presented in Section 3.3.4.3. Accordingly the construction impact under BIO-1a is considered below. There would be no impacts under BIO-2a and BIO-3a, and a less than significant impact under BIO-4a. Operational impacts would be identical to or lesser in magnitude than the proposed Project. Accordingly, there would be no impact under BIO-1b, BIO-2b, and BIO-3b and a less than significant impact under BIO-4b.

**Alt 2 Impact BIO-1: Construction and operation of the Reduced Project Alternative would potentially result in the loss of individuals of, or have a substantial adverse effect, either directly or through habitat modifications on, any federally listed critical habitat or species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS. Operation of the Reduced Project Alternative would not cause a loss of individuals of, or have substantial adverse effects upon the habitat of, any sensitive species.**

Under this alternative, vegetation and tree removal as well as bridge replacement and renovation would occur during construction within the BSA. No sensitive plants were detected onsite and none are expected to occur given the lack of suitable habitat. Two wildlife species of special concern, the double-crested cormorant and the California gull, have a high potential to occur onsite as occasional visitors, but the BSA does not contain suitable nesting habitat. There is moderate potential for three sensitive bat species to roost within palms west of Terminal Island Highway and throughout the BSA. There is low potential for these sensitive bat species to roost within the Pacific Coast Highway Bridge and Dominguez Channel Bridge based on survey results and habitat suitability, and none for roosting in the Sepulveda Bridge.

#### Impact Determination

Neither of the bird species of special concern would be adversely affected by project construction because no suitable nesting habitat is present. Vegetation and tree removal as well as bridge replacement and renovation would occur during construction within the BSA. These activities would significantly affect other species of nesting birds, if present. Disturbance of active nests would violate the MBTA and result in a significant impact requiring mitigation. Bridge renovation and replacement would have a significant impact on roosting bats, if any are present.

For the purposes of this analysis it is assumed that the operational impacts of the Reduced Project would be the same in nature and magnitude as the impacts of the proposed Project (Section 3.3.4.3.1.2). Accordingly, impacts of operation would be less than significant.

#### *Mitigation Measures*

Mitigation measure **MM BIO-1a** (Section 3.3.4.3.1) shall be implemented to address vegetation and habitat removal during the breeding season. Mitigation measure **MM BIO-1b** (Section 3.3.4.3.1) shall be implemented to address the presence and disturbance of roosting bats.

*Residual Impacts*

Implementation of mitigation measures **MM BIO-1a** and **MM BIO-1b** would reduce impacts to a level less than significant.

### 5.3.2.4 Cultural Resources

Construction of Alternative 2, the Reduced Project, would be identical to the proposed Project; the physical configuration of the alternative would be the same as that of the proposed Project. Construction would be the only source of potential impacts to cultural resources, and is evaluated below.

Operation of the Reduced Project Alternative would be of the same nature as the proposed Project except with lower throughput. Operations would not involve ground disturbances with the potential to encroach on unknown cultural resources. Therefore, operation of the Reduced Project Alternative would not result in impacts that would affect archaeological resources (including ethnographic resources) under Impact CR-1, historic resources under Impact CR-2, or paleontological resources under Impact CR-3.

**Alt 2 Impact CR-1: Construction of the Reduced Project Alternative could potentially disturb, damage, or degrade unknown archaeological or ethnographic resources.**

**Impact Determination**

Implementation of the Reduced Project Alternative could disturb, damage, or degrade intact resources and result in significant impacts to previously unidentified archaeological or ethnographic resources that may be eligible for the CRHR. Buried cultural resources that were not identified during field surveys, including artifacts and human remains, could be encountered during ground-disturbing activities that could result in demolition of or substantial damage to significant cultural resources, thus creating a significant impact on cultural resources.

*Mitigation Measures*

Because the Project area possesses a high potential to encompass buried or otherwise obscured archaeological resources, **MM CR-1**, which requires an on-site cultural monitor (see section 3.4.4.3), would be implemented.

*Residual Impacts*

Implementation of MM CR-1 would reduce impacts to less than significant.

**Alt 2 Impact CR-2: Construction of the Reduced Project Alternative would cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.**

**Impact Determination**

The Reduced Project Alternative would demolish and replace a historical resource, the Sepulveda Boulevard Bridge. In replacing the bridge, the Reduced Project Alternative would eliminate the historic materials and integrity of the bridge. Therefore, this alternative would result in a significant impact because it would cause a substantial adverse change in the significance of an historical resource as it demolishes or materially

alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

*Mitigation Measures*

**MM CR-2** and **MM CR-3** (see section 3.4.4.3), which call for documentation of the resource and a plan for salvaging or re-using as much of the bridge as possible, would be implemented.

*Residual Impacts*

Implementation of **MM CR-2** and **MM CR-3** would reduce adverse effects to the historical resource, but the impact would remain significant.

**Alt 2 Impact CR-3: Construction of the Reduced Project Alternative would potentially disturb, damage, or degrade unknown paleontological resources.**

**Impact Determination**

Implementation of the Reduced Project Alternative could have a significant impact on previously unidentified paleontological resources if it results in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance. Grading and excavation associated with project construction activities would potentially expose subsurface paleontological resources. Any vertebrate fossils exposed by grading without appropriate professional, systematic recovery would be destroyed, and their ability to be preserved for future study lost. The Reduced Project Alternative would have a significant impact on paleontological resources.

*Mitigation Measures*

**MM CR-4**, which requires an on-site paleontological monitor (see Section 3.4.4.3),would apply to Alternative 2 in the event that paleontological resources are encountered during project construction.

*Residual Impacts*

Implementation of **MM CR-4** would result in a less than significant impact to paleontological resources that may be encountered during project construction.

### 5.3.2.5 Geology and Soils

In this alternative, the intermodal facility described in the proposed Project would be constructed on the site; all physical features would be the same as the proposed Project. The operation of the Reduced Project would be the same in nature as the proposed Project, but its activity level would be limited by lease conditions so that the throughput would be lower. Therefore, as discussed in Section 3.5.4.3 for the proposed Project, there would be no impacts under GEO-5 and GEO-7, and less than significant impacts under GEO-1 through GEO-4, and GEO-6 and GEO-8 for the Reduced Project Alternative.

### 5.3.2.6 Greenhouse Gases

**Alt 2 Impact GHG-1: The Reduced Project Alternative would result in an increase in construction-related and operation-related GHG emissions.**

Table 5-22 compares the annual operational GHG emissions for the Reduced Project Alternative with baseline annual emissions to determine significance for the Reduced Project. Construction emissions would be the same as described for the proposed Project (Table 3.6-2 and Table 3.6-3).

**Table 5-22. Annual Operational Emissions – Reduced Project Alternative.**

| Source Category | Annual Emissions (metric tons/year) [a,e] | | | | |
|---|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | HFC | $CO_2e$ |
| ***Project Year 2013*** | | | | | |
| Trucks On-Site | 1,846 | 0 | 0 | 0 | 1,846 |
| Trucks Off-Site [b] | 9,782 | 0 | 0 | 0 | 9,790 |
| CHE | 7,967 | 5 | 0 | 0 | 8,067 |
| Employee Commute On-Site | 57 | 0 | 0 | 0 | 57 |
| Employee Commute Off-Site [b] | 2,639 | 0 | 0 | 0 | 2,684 |
| Tenant Locomotive Activities | 7 | 0 | 0 | 0 | 7 |
| Electricity | 3,199 | 0 | 0 | 0 | 3,213 |
| **Total - Project Year 2013 [d]** | **25,496** | **5** | **0** | **0** | **25,664** |
| CEQA Impacts | | | | | |
| CEQA Baseline Emissions | **159,269** | **21** | **3** | **0** | **160,528** |
| Reduced Project minus CEQA Baseline [c] | -46,388 | -14 | -2 | 0 | -47,170 |
| Thresholds | | | | | 0 |
| **Significance?** | | | | | **No** |
| | | | | | |
| ***Project Year 2014*** | | | | | |
| Trucks On-Site | 1,173 | 0 | 0 | 0 | 1,173 |
| Trucks Off-Site [b] | 5,092 | 0 | 0 | 0 | 5,096 |
| CHE | 3,417 | 1 | 0 | 0 | 3,445 |
| Employee Commute On-Site | 32 | 0 | 0 | 0 | 32 |
| Employee Commute Off-Site [b] | 1,561 | 0 | 0 | 0 | 1,584 |
| Tenant Locomotive Activities | 2 | 0 | 0 | 0 | 2 |
| Electricity | 1,025 | 0 | 0 | 0 | 1,029 |
| **Total - Project Year 2014 [d]** | **12,301** | **1** | **0** | **0** | **12,361** |
| CEQA Impacts | | | | | |
| CEQA Baseline Emissions | **159,269** | **21** | **3** | **0** | **160,528** |
| Reduced Project minus CEQA Baseline [c] | -59,583 | -18 | -2 | 0 | -60,472 |
| Thresholds | | | | | 0 |
| **Significance?** | | | | | **No** |
| | | | | | |
| ***Project Year 2015*** | | | | | |
| Trucks On-Site | 1,173 | 0 | 0 | 0 | 1,173 |
| Trucks Off-Site [b] | 5,092 | 0 | 0 | 0 | 5,096 |
| CHE | 3,417 | 1 | 0 | 0 | 3,444 |
| Employee Commute On-Site | 32 | 0 | 0 | 0 | 32 |
| Employee Commute Off-Site [b] | 1,557 | 0 | 0 | 0 | 1,570 |
| Tenant Locomotive Activities | 2 | 0 | 0 | 0 | 2 |
| Electricity | 1,025 | 0 | 0 | 0 | 1,029 |
| **Total - Project Year 2015 [d]** | **12,298** | **1** | **0** | **0** | **12,346** |

| Source Category | Annual Emissions (metric tons/year) [a,e] | | | | |
|---|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | HFC | $CO_2e$ |
| CEQA Impacts | | | | | |
| CEQA Baseline Emissions | **159,269** | **21** | **3** | **0** | **160,528** |
| Reduced Project minus CEQA Baseline [c] | -59,586 | -18 | -2 | 0 | -60,488 |
| Thresholds | | | | | 0 |
| **Significance?** | | | | | **No** |
| | | | | | |
| ***Project Year 2016*** | | | | | |
| Locomotives On-Site | 987 | 0 | 0 | 0 | 997 |
| Locomotives Off-Site [b] | 85,009 | 7 | 2 | 0 | 85,839 |
| Trucks On-Site | 8,435 | 0 | 0 | 0 | 8,440 |
| Trucks Off-Site [b] | 20,603 | 0 | 0 | 0 | 20,621 |
| Railyard Equipment | 218 | 0 | 0 | 0 | 232 |
| TRU | 5 | 0 | 0 | 0 | 15 |
| Employee Commute On-Site | 22 | 0 | 0 | 0 | 22 |
| Employee Commute Off-Site [b] | 644 | 0 | 0 | 0 | 652 |
| Refueling Trucks On-Site | 1 | 0 | 0 | 0 | 1 |
| Refueling Trucks Off-Site [b] | 24 | 0 | 0 | 0 | 24 |
| Electricity | 1,569 | 0 | 0 | 0 | 1,576 |
| Relocated Tenant Sources | | | | | |
| Trucks On-Site | 1,173 | 0 | 0 | 0 | 1,173 |
| Trucks Off-Site [b] | 5,093 | 0 | 0 | 0 | 5,097 |
| CHE | 3,407 | 1 | 0 | 0 | 3,432 |
| Employee Commute On-Site | 32 | 0 | 0 | 0 | 32 |
| Employee Commute Off-Site [b] | 1,349 | 0 | 0 | 0 | 1,366 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 |
| Electricity | 1,025 | 0 | 0 | 0 | 1,029 |
| **Total - Project Year 2016 [d]** | **129,594** | **9** | **2** | **0** | **130,549** |
| CEQA Impacts | | | | | |
| CEQA Baseline Emissions | **159,269** | **21** | **3** | **0** | **160,528** |
| Reduced Project minus CEQA Baseline | -29,675 | -13 | 0 | 0 | -29,979 |
| Thresholds | | | | | **0** |
| **Significance?** | | | | | **No** |
| | | | | | |
| ***Project Year 2023*** | | | | | |
| Locomotives On-Site | 995 | 0 | 0 | 0 | 1,004 |
| Locomotives Off-Site [b] | 108,525 | 9 | 3 | 0 | 109,585 |
| Trucks On-Site | 8,435 | 0 | 0 | 0 | 8,440 |
| Trucks Off-Site [b] | 44,729 | 0 | 0 | 0 | 44,767 |
| Railyard Equipment | 218 | 0 | 0 | 0 | 232 |
| TRU | 7 | 0 | 0 | 0 | 17 |
| Employee Commute On-Site | 22 | 0 | 0 | 0 | 22 |
| Employee Commute Off-Site [b] | 630 | 0 | 0 | 0 | 636 |
| Refueling Trucks On-Site | 1 | 0 | 0 | 0 | 1 |
| Refueling Trucks Off-Site [b] | 24 | 0 | 0 | 0 | 24 |
| Electricity | 1,569 | 0 | 0 | 0 | 1,576 |
| Relocated Tenant Sources | | | | | |
| Trucks On-Site | 1,173 | 0 | 0 | 0 | 1,173 |
| Trucks Off-Site [b] | 5,088 | 0 | 0 | 0 | 5,093 |
| CHE | 3,407 | 1 | 0 | 0 | 3,430 |
| Employee Commute On-Site | 31 | 0 | 0 | 0 | 31 |
| Employee Commute Off-Site [b] | 1,312 | 0 | 0 | 0 | 1,323 |

| Source Category | Annual Emissions (metric tons/year) [a,e] | | | | |
|---|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | HFC | $CO_2e$ |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 |
| Electricity | 1,025 | 0 | 0 | 0 | 1,029 |
| **Total - Project Year 2023** [d] | **177,190** | **11** | **3** | **0** | **178,384** |
| CEQA Impacts | | | | | |
| CEQA Baseline Emissions | **159,269** | **21** | **3** | **0** | **160,528** |
| Reduced Project minus CEQA Baseline | 17,920 | -11 | 0 | 0 | 17,856 |
| Thresholds | | | | | **0** |
| **Significance?** | | | | | **Yes** |
| | | | | | |
| ***Project Year 2035*** | | | | | |
| Locomotives On-Site | 1,075 | 0 | 0 | 0 | 1,086 |
| Locomotives Off-Site [b] | 85,634 | 7 | 2 | 0 | 86,470 |
| Trucks On-Site | 8,435 | 0 | 0 | 0 | 8,440 |
| Trucks Off-Site [b] | 12,775 | 0 | 0 | 0 | 12,786 |
| Railyard Equipment | 218 | 0 | 0 | 0 | 232 |
| TRU | 7 | 0 | 0 | 0 | 17 |
| Employee Commute On-Site | 22 | 0 | 0 | 0 | 22 |
| Employee Commute Off-Site [b] | 634 | 0 | 0 | 0 | 637 |
| Refueling Trucks On-Site | 1 | 0 | 0 | 0 | 1 |
| Refueling Trucks Off-Site [b] | 24 | 0 | 0 | 0 | 24 |
| Electricity | 1,569 | 0 | 0 | 0 | 1,576 |
| Relocated Tenant Sources | | | | | |
| Trucks On-Site | 1,173 | 0 | 0 | 0 | 1,173 |
| Trucks Off-Site [b] | 5,140 | 0 | 0 | 0 | 5,144 |
| CHE | 3,407 | 1 | 0 | 0 | 3,430 |
| Employee Commute On-Site | 31 | 0 | 0 | 0 | 31 |
| Employee Commute Off-Site [b] | 1,329 | 0 | 0 | 0 | 1,336 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 |
| Electricity | 1,025 | 0 | 0 | 0 | 1,029 |
| **Total - Project Year 2035** [d] | **122,497** | **9** | **2** | **0** | **123,433** |
| CEQA Impacts | | | | | |
| CEQA Baseline Emissions | **159,269** | **21** | **3** | **0** | **160,528** |
| Reduced Project minus CEQA Baseline | -36,772 | -13 | 0 | 0 | -37,095 |
| Thresholds | | | | | **0** |
| **Significance?** | | | | | **No** |
| | | | | | |
| ***Project Year 2046*** | | | | | |
| Locomotives On-Site | 1,076 | 0 | 0 | 0 | 1,087 |
| Locomotives Off-Site [b] | 85,634 | 7 | 2 | 0 | 86,470 |
| Trucks On-Site | 8,435 | 0 | 0 | 0 | 8,440 |
| Trucks Off-Site [b] | 12,775 | 0 | 0 | 0 | 12,786 |
| Railyard Equipment | 218 | 0 | 0 | 0 | 232 |
| TRU | 7 | 0 | 0 | 0 | 17 |
| Employee Commute On-Site | 22 | 0 | 0 | 0 | 22 |
| Employee Commute Off-Site [b] | 627 | 0 | 0 | 0 | 630 |
| Refueling Trucks On-Site | 1 | 0 | 0 | 0 | 1 |
| Refueling Trucks Off-Site [b] | 24 | 0 | 0 | 0 | 24 |
| Electricity | 1,569 | 0 | 0 | 0 | 1,576 |
| Relocated Tenant Sources | | | | | |
| Trucks On-Site | 1,173 | 0 | 0 | 0 | 1,173 |
| Trucks Off-Site [b] | 5,111 | 0 | 0 | 0 | 5,115 |

| Source Category | Annual Emissions (metric tons/year) [a,e] | | | | |
|---|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | HFC | $CO_2e$ |
| CHE | 3,407 | 1 | 0 | 0 | 3,430 |
| Employee Commute On-Site | 31 | 0 | 0 | 0 | 31 |
| Employee Commute Off-Site [b] | 1,319 | 0 | 0 | 0 | 1,326 |
| Tenant Locomotive Activities | 0 | 0 | 0 | 0 | 0 |
| Electricity | 1,025 | 0 | 0 | 0 | 1,029 |
| **Total - Project Year 2046 [d]** | **122,454** | **9** | **2** | **0** | **123,389** |
| CEQA Impacts | | | | | |
| CEQA Baseline Emissions | **159,269** | **21** | **3** | **0** | **160,528** |
| Reduced Project minus CEQA Baseline | -36,815 | -13 | 0 | 0 | -37,139 |
| Thresholds | | | | | **0** |
| **Significance?** | | | | | **No** |

a) Emissions represent annual emissions.
b) Truck, train, and worker commute emissions include transport within the South Coast Air Basin.
c) By definition, the Reduced Project minus Baseline increment in 2013, 2014 and 2015 does not account for both the truck travel between port terminals to Hobart Yard and the rail travel from Hobart Yard to the South Coast Air Basin boundary as they are not a part of the project during this period.
d) Emissions might not precisely add due to rounding. For further explanation, refer to the discussion in Section 3.2.4.1.
e) The emission estimates presented in this table were calculated using the latest available data, assumptions, and emission factors at the time this document was prepared. Future studies might use updated data, assumptions, and emission factors that are not currently available.

### Impact Determination

Construction of the Reduced Project Alternative would generate GHGs. Because any increase exceeds the POLA threshold of zero, construction emissions would represent a significant impact related to GHGs. Annual operational emissions would be less than the baseline emissions except in 2023, when emissions would exceed the baseline due to increases in cargo throughput at the facility. Therefore, significant impacts under CEQA would occur for the Reduced Project Alternative.

#### *Mitigation Measures*

Mitigation measures **MM GHG-1** to **MM GHG-7**, which would require a variety of fuel and energy conservation measures, recycling, and solar energy generation, would be applied to the Reduced Project.

#### *Residual Impacts*

GHG mitigation measures GHG-1 through GHG-7 were not quantified because of the difficulty in determining quantitative future year GHG emissions reductions from these measures. Impacts would remain significant for Reduced Project construction and operations after mitigation.

### Impact GHG-2: The Reduced Project Alternative would not conflict with State and local plans and policies.

The Reduced Project Alternative would result in more efficient use of fossil fuels to move goods through the Ports as a result of increased used of rail versus trucking. The Reduced Project Alternative is consistent with key legislation, regulations, plans and policies described in Section 3.6.3, Applicable Regulations. This is described in more detail in Section 3.6.4.3.

As described in Section 3.6.4.3, the best available data on sea level rise indicates that some portions of the Reduced Project Alternative site, many of the transportation routes associated with the Reduced Project Alternative, as well as large areas of the Ports of Los Angeles and Long Beach would be inundated.

#### Impact Determination

The Reduced Project Alternative is consistent with State and local policies and plans for GHG emissions. As noted in Section 3.6.4.3, in the absence of more detailed studies using refined data on topographic features and elevations, and improved projections of sea level rise, the Reduced Project Alternative would be subject to impacts from sea level rise, and these impacts are considered significant.

##### *Mitigation Measures*

Sea-level rise and its consequences will be addressed on a regional basis and the design of appropriate protection for a specific project because these factors have not yet been defined. Accordingly, no feasible mitigation is available to apply to the Reduced Project Alternative.

##### *Residual Impacts*

As no feasible mitigation is available, impacts would remain significant and unavoidable.

### 5.3.2.7 Hazards and Hazardous Materials

In this alternative, the intermodal facility and relocation facilities described in the proposed Project would be constructed on the site; all physical features would be the same as the proposed Project. The operation of the Reduced Project would be the same in nature as the proposed Project, but its activity level would be limited by lease conditions so that the throughput would be lower.

The lower activity level means that there would be fewer truck trips between the facility and the port terminals, fewer cargo containers carrying hazardous materials would be handled at the facility, and a lower level of maintenance activity would occur. The lower activity levels, in turn, would reduce the probability of accidents and upsets involving trucks, cargo containers, and fuels and lubricants. The safety measures that would be performed under the proposed Project would also be performed under the Reduced Project Alternative.

Under the Reduced Project Alternative, demolition and construction impacts would be the same as those of the proposed Project (Section 3.7.4.3). The LACFD risk matrix (see Section 3.7.4.1.1 and Table 3.7-2) applied to construction of the Reduced Project Alternative yields Risk Code 4 (“acceptable”) for all significance criteria. Therefore, the impacts would be less than significant for RISK-1 through RISK-5 and Risk 7, and no impact would be associated with RISK-6.

Because of the lower probability of accidents and upsets, the LACFD risk matrix applied to operation of the Reduced Project Alternative yields Risk Code 4 (“acceptable”) for all significance criteria. Accordingly, impacts associated with operation of the Reduced Project Alternative would be less than those of the proposed Project, i.e., less than significant for RISK-1 through RISK-7.

### 5.3.2.8 Land Use

In the Reduced Project Alternative, all physical features of the proposed Project would be constructed, existing tenants would be relocated to the relocation sites as described in Section 2.3, and the operational details of the facility would be the same as those of the proposed Project. However, the throughput of Alternative 2 would be limited by lease conditions, resulting in lower operational activity levels than with the proposed Project.

Alternative 2 would be identical to the proposed Project in terms of its relationship to local plans, zoning, and land use designations (see Section 3.8.2). As in the case of the proposed Project, all elements of the site are located in areas designated for heavy and restricted industrial land uses and public rights-of-way and not in areas designated for environmental preservation pursuant to any city, community, or other applicable plans. Implementation of the Reduced Project Alternative would be identical to the Proposed Project to the extent that it would not substantially alter existing land uses. Also like the Proposed Project, no features would be constructed or operated that would divide or isolate any neighborhoods or communities. Like the proposed Project, the Reduced Project Alternative would include truck and rail operations; accordingly secondary impacts from traffic congestion, noise, and air pollution would occur.

The Reduced Project Alternative, by providing an intermodal rail facility, would be consistent with the goals of the Port of Los Angeles Plan, the SCAG RCP, and the Goods Movement Action Plan. The Reduced Project Alternative would not cause changes in patterns of land use in adjacent communities or cause immigration or emigration in response to changing job opportunities. Future siting of sensitive uses in the portion of West Long Beach adjacent to the Terminal Island Freeway would be precluded by the presence of the Reduced Project Alternative. However, because other industrial uses in the area and the presence of the Terminal Island Freeway would also discourage such siting, the proposed Project would be contributory to a general prohibition against siting sensitive uses in the area.

Because the Reduced Project Alternative would be identical to the proposed Project in terms of configuration and land use, impacts relative to LU-1 through LU-3 would be less than significant. Impact LU-4 under the Reduced Project Alternative is evaluated below.

#### Alt 2 Impact LU-4: The Reduced Project Alternative would cause secondary impacts to surrounding land uses.

As discussed in section 3.8.4.3 for the proposed Project, the Reduced Project Alternative would cause significant air quality and noise impacts. The proposed Project would not cause changes in patterns of land use in adjacent communities or cause immigration or emigration in response to changing job opportunities. Future siting of sensitive uses in the portion of West Long Beach adjacent to the Terminal Island Freeway would be precluded by the presence of the Reduced Project. However, because other industrial uses in the area and the presence of the Terminal Island Freeway would also discourage such siting, the Reduced Project would be contributory to a general prohibition against siting sensitive uses in the area.

#### Impact Determination

Because the air quality and noise impacts would remain significant after mitigation, secondary impacts on land use would be considered significant for the Reduced Project Alternative.

*Mitigation Measures*

Mitigation measures for air quality and noise impacts have been imposed (sections 3.2 and 3.9), including MM AQ-1 through MM AQ-7 and MM NOI-1 through MM NOI-3. However, those mitigation measures are not expected to reduce these impacts to less than significant. Because the Reduced Project Alternative would continue to have significant impacts, the Reduced Project Alternative also would result in potentially significant secondary land use impacts.

*Residual Impacts*

With implementation of mitigation measures, air quality impacts and corresponding secondary land use impacts would be reduced. However, the Reduced Project Alternative's residual secondary land use impacts would remain significant and unavoidable.

### 5.3.2.9 Noise

In this alternative, the intermodal facility and relocation facilities described in the proposed Project would be constructed on the site; all physical features would be the same as the proposed Project (Section 2.4). The operation of the Reduced Project would be the same in nature as the proposed Project (Section 2.4), but its activity level would be limited by lease conditions so that the throughput would be lower. Accordingly, there would be fewer truck and train trips (Table 5-13), and potentially fewer daily shifts.

This alternative would include the same amount of construction as the proposed Project, meaning that noise and vibration from construction would be the same as the proposed Project (Section 3.9). Accordingly, there would be less than significant construction-related impacts under NOI-1 and NOI-2 (City of Los Angeles). Operational noise generated by the Reduced Project Alternative would not exceed significance thresholds at receivers in the City of Los Angeles, therefore there would be less than significant impacts under NOI-3. Nighttime noise at sensitive receptors in Los Angeles would not cause more than 10 percent of the population to awaken (Table 3.9-21). Accordingly, impacts under NOI-4 would be less than significant. Since there are no schools in the City of Los Angeles located near the Reduced Project site there would be no impact upon speech intelligibility under NOI-5.

Under worst-case conditions, construction noise would exceed significance thresholds at all but one of the sensitive receptors, including schools and residences, in the City of Long Beach (Tables 3.9-22, 3.9-23 and 3.9-24). Accordingly, construction impacts under NOI-6 would be significant. Operational noise levels inside classrooms at the sensitive receptors would not exceed municipal code standards for classroom interior spaces or approach or exceed existing ambient interior noise levels. However, operational noise during the daytime from on-site activities and the rail corridor would exceed existing measured ambient noise levels by 3 dBA or greater at the residence at 2789 Webster (R1), Cabrillo High School (R5) and at Stephens Middle School (R30), and during the nighttime at the residence at 2789 Webster (R1) and at the Villages of Cabrillo (R8). Accordingly, there would be a significant impact under NOI-6. These are described in more detail below.

Operational-phase vibration at sensitive receptors in Long Beach would not exceed ambient levels of the FTA criterion of 75VdB. Accordingly, impacts under NOI-7 would be less than significant. The Reduced Project alternative would not result in construction-related or operations-related interior noise levels exceeding 52 dBA at schools in the City

of Long Beach and would thus not affect classroom speech intelligibility. Interior nighttime single event levels would not be expected to exceed 80 dBA at nearby residences in the City of Long Beach and would not result in a significant number of single event awakenings. Accordingly, impacts related to NOI-8, NOI-9 would be less than significant.

Construction and operational noise would not exceed the ambient noise level by 3 dBA or more at the single receiver in the City of Carson, and therefore there would be less than significant impacts under NOI-10. Construction and operational vibration would not exceed significance thresholds at the City of Carson sensitive receiver; accordingly, impacts under NOI-11 would be less than significant. Nighttime noise at sensitive receptors in the City of Carson would not cause more than 10 percent of the population to awaken (Table 3.9-37). Accordingly, impacts under NOI-12 would be less than significant. Since there are no schools in the City of Carson located near the Reduced Project site there would be no impact upon speech intelligibility under NOI-13.

**Alt 2 Impact NOI-6: Construction and operation of the Reduced Project Alternative would cause ambient noise levels to be increased by three dBA or more, or maximum noise levels allowed by the Long Beach Municipal Code would be exceeded.**

Construction-related noise for the Reduced Project Alternative would be identical to that of the proposed Project as described in Section 3.9.4.3 (see tables 3.9-22 through 3.9-24). Noise levels would exceed thresholds established by the City of Long Beach for construction noise, including interior noise levels in classrooms.

Predicted operational noise levels in the Reduced Project Alternative are comprised of roadway noise (Table 5-23) and site operational noise (Table 5-24).

**Table 5-23. Reduced Project Alternative Roadway Traffic Noise Level Changes.**

| Roadway Segment | Existing CNEL @100 ft | Reduced Project Alternative CNEL @100 ft | Reduced Project Increment in Traffic Noise Level, dB |
|---|---|---|---|
| **ALAMEDA ST** | | | |
| n/o Anaheim St | 79.4 | 79 | -0.4 |
| w/o Eubank Ave | 81.5 | 81.5 | 0 |
| s/o PCH | 81.7 | 81.4 | -0.3 |
| s/o Anaheim St | 80.9 | 81.1 | 0.2 |
| **E ANAHEIM ST** | | | |
| between Anaheim and Henry Ford | 76.7 | 77.3 | 0.6 |
| e/o Henry Ford Ave | 76.6 | 77.5 | 0.9 |
| w/o E I St | 76.2 | 77.2 | 1 |
| w/o Anaheim Way | 76.6 | 77.7 | 1.1 |
| **E HARRY BRIDGES BLVD** | | | |
| e/o Avalon Blvd | 81 | 81.1 | 0.1 |
| **E SEPULVEDA BLVD** | | | |
| e/o Alameda St | 75.9 | 75.9 | 0 |
| **JOHN S GIBSON BLVD** | | | |
| n/o I-110 Ramps | 78.5 | 78.1 | -0.4 |
| **LONG BEACH FWY** | | | |
| n/o Imperial Hwy | 88.6 | 87.5 | -1.1 |
| s/o Imperial Hwy | 88.7 | 87.7 | -1.0 |
| n/o I-105 | 88.4 | 87.3 | -1.1 |
| SB s/o I-105 | 85.7 | 84.6 | -1.1 |
| n/o Rosecrans Ave | 88.5 | 87.4 | -1.1 |
| s/o Rosecrans Ave | 89.9 | 89.1 | -0.8 |
| NB between Alondra and Rosecrans | 87.0 | 86.2 | -0.8 |
| n/o Alondra | 90.0 | 89.2 | -0.8 |
| s/o Alondra | 89.8 | 89.0 | -0.8 |
| n/o SR-91 | 89.6 | 88.7 | -0.9 |
| n/o Artesia Blvd | 88.7 | 87.7 | -1.0 |
| s/o Artesia Blvd | 89.2 | 88.4 | -0.8 |
| n/o Long Beach Blvd | 90.5 | 89.7 | -0.7 |
| s/o Long Beach Blvd | 90.1 | 89.3 | -0.8 |
| n/o Del Amo Blvd | 89.8 | 89.0 | -0.8 |
| s/o Del Amo Blvd | 90.1 | 89.3 | -0.8 |
| n/o Wardlow Rd | 90.4 | 89.7 | -0.7 |
| SB s/o Wardlow Rd | 86.6 | 86.0 | -0.6 |
| n/o Willow St | 89.3 | 88.6 | -0.8 |
| s/o Willow St | 89.3 | 88.6 | -0.6 |
| n/o Anaheim St | 89.2 | 88.7 | -0.5 |
| s/o Anaheim St | 89.0 | 88.2 | -0.8 |
| NB s/o off ramp at PCH | 86.2 | 85.8 | -0.4 |
| NB s/o loop off ramp at PCH | 86.4 | 85.9 | -0.5 |
| NB n/o PCH | 86.1 | 85.4 | -0.7 |
| s/o PCH | 88.8 | 88.3 | -0.6 |
| NB n/o I-405 Interchange | 86.8 | 86.2 | -0.6 |
| NB s/o I-405 Interchange Ramp | 86.5 | 86.0 | -0.5 |
| s/o Firestone Blvd | 88.6 | 87.5 | -1.1 |
| n/o 9th St | 89.4 | 88.4 | -1.0 |
| s/o 9th St | 88.5 | 87.4 | -1.1 |
| NB n/o 10th St | 85.9 | 85.1 | -0.8 |
| SB n/o I-405 | 86.7 | 86.0 | -0.7 |
| SB s/o Del Amo Blvd Off ramp | 87.1 | 86.3 | -0.8 |

| Roadway Segment | Existing CNEL @100 ft | Reduced Project Alternative CNEL @100 ft | Reduced Project Increment in Traffic Noise Level, dB |
|---|---|---|---|
| NB n/o Dell Amo Blvd Off Ramp | 87.2 | 86.5 | -0.7 |
| SB s/o On ramp at Del Amo Blvd | 87.1 | 86.2 | -0.9 |
| NB between s/o off ramp at Del Amo Blvd | 86.8 | 86.1 | -0.7 |
| between off/on ramps at Willow St | 89.1 | 88.5 | -0.6 |
| NB Between Ramps at Anaheim St | 86.4 | 86.0 | -0.4 |
| **TERMINAL ISLAND FWY** | | | |
| s/o PCH | 82 | 79.5 | -2.5 |
| n/o PCH | 81 | 78.2 | -2.8 |
| NB between Off and loop On ramp at PCH | 80.1 | 81.8 | 1.7 |
| SB between loop Off and On ramp at PCH | 79.8 | 80.5 | 0.7 |
| NB s/o PCH off ramp | 83.1 | 80.3 | -2.8 |
| SB s/o PCH on ramp | 81 | 79.1 | -1.9 |
| n/o Ocean Blvd | 82.8 | 80.7 | -2.1 |
| SB s/o Henry Ford Ave | 80.9 | 80.7 | -0.2 |
| s/o Henry Ford Ave | 82 | 80.5 | -1.5 |
| NB between Henry Ford Ave and Anaheim St | 81.6 | 81.8 | 0.2 |
| e/o Seaside Ave | 81.3 | 81.4 | 0.1 |
| SB s/o Anaheim Way | 80.9 | 79.1 | -1.8 |
| SB n/o Anaheim St | 78 | 78.7 | 0.7 |
| NB s/o Willow St | 77.6 | 78.4 | 0.8 |
| **W ANAHEIM ST** | | | |
| w/o Harbor Ave | 77.7 | 76.6 | -1.1 |
| e/o Santa Fe Ave | 79.7 | 77.3 | -2.4 |
| w/o Seabright Ave | 78.8 | 70.3 | -8.5 |
| w/o E I St | 76.2 | 70.4 | -5.8 |
| between Seabright Ave and Santa Fe Ave | 78.7 | 80.1 | 1.4 |
| **W HARRY BRIDGES BLVD** | | | |
| between Wilmington Blvd and Neptune Ave | 79.9 | 79.9 | 0 |
| between Hawaiian Ave and Wilmington Blvd | 79.8 | 80.6 | 0.8 |
| between Neptune Ave and Fries Ave | 79 | 80 | 1 |
| between Figueroa St and Mar Vista Ave | 79.7 | 71.6 | -8.1 |
| between Fries Ave and Avalon Blvd | 80.5 | 73.8 | -6.7 |
| between Mar Vista Ave and Hawaiian Ave | 79.8 | 74.2 | -5.6 |
| **W PACIFIC COAST HIGHWAY** | | | |
| between I-710 NB and SB ramps | 80 | 75 | -5 |
| e/o San Gabriel Ave | 80.4 | 74.8 | -5.6 |
| between San Gabriel Ave and Santa Fe Ave | 80.5 | 75.5 | -5 |
| between Terminal Island Fwy SB and NB ramp | 80.2 | 79.4 | -0.8 |
| e/o Santa Fe Ave | 79.6 | 79 | -0.6 |
| e/o Harbor Ave | 79.5 | 79.2 | -0.3 |
| **W WILLOW ST** | | | |
| between NB and SB Terminal Island Fwy | 77.5 | 70.7 | -6.8 |
| between Terminal Island Fwy and Santa Fe | 71.8 | 71.1 | -0.7 |
| between Santa Fe Ave and Easy Ave | 73.1 | 71 | -2.1 |
| e/o Easy Ave | 71 | 70.7 | -0.3 |
| w/o NB I-710 on ramp | 71 | 71 | 0 |

1

2

**Table 5-24. Summary of Predicted Reduced Project Alternative Operational Noise Levels.**

| Receptor Number | Receptor Location | Predicted Reduced Project Operational Noise Level –Year 2023, dBA* | Measured Ambient Noise Level, dBA[1] | Predicted Largest Increase in Ambient Noise Level with Operations Noise, dB | City of Long Beach Noise Ordinance, Exterior Standard, L50, Daytime/Nighttime dBA[2] | Impact Assessment |
|---|---|---|---|---|---|---|
| R1 | Residence at 2789 Webster – rear yard | 54.3 | Day: 49.4 – 55.3<br>Night: 43.1 | Day +6.1<br>Night +11.5 | Day 50<br>Night 45 | Daytime<br>Nighttime |
| R2 | Buddhist Temple at Willow and Webster | 48.8 | Day: 59.9 – 60.3<br>Night: 52.5 | Day +0.3<br>Night +1.5 | Day 50<br>Night 45 | None |
| R3 | Hudson Elementary School - playground | 53.5 | Day: 54.2 – 57.8 | Day +2.7 | Day 50 | None |
| R4 | Hudson Park | 54.5 | Day: 64.1 – 65.3 | Day +0.5 | Day 50 | None |
| R5 | Cabrillo High School – building setback | 51.1 | Day: 51.0 – 52.0 | Day +3.1 | Day 50 | Daytime |
| R6 | Cabrillo Child Development Center | 54.6 | Day: 63.3 – 64.6 | Day +0.5 | Day 50 | None |
| R7 | Bethune School | 54.6 | Day: 63.3 – 64.6 | Day +0.5 | Day 50 | None |
| R8 | Villages of Cabrillo | 54.1 | Day: 61.0 – 62.5<br>Night: 48.0 | Day +0.8<br>Night +7.1 | Day 50<br>Night 45 | Nighttime |
| R30 | Stephens Middle School - playground | 50.8 | Day: 47.2 – 64.0 | Day +5.2 | Day 50 | Daytime |
| R31 | Webster School | 45.4 | Day: 49.2 – 55.7 | Day +1.5 | Day 50 | None |

1) Refer to Table 3.9-4, Summary of Ambient Noise Measurement Data
2) Noise standard for a cumulative period of 30 minutes in a 60 minute period. Higher noise levels are permitted for shorter time periods. If ambient noise level exceeds standard, standard shall be increased by 5 dB increments to encompass or reflect ambient level.
3) Noise standard for a cumulative period of 5 minutes in a 60 minute period. Higher noise levels are permitted for shorter time periods. If ambient noise level exceeds standard, standard shall be increased to reflect ambient level.
* Includes relocation of existing tenants

The Reduced Project Alternative would generate daytime and nighttime noise levels that exceed City of Long Beach thresholds at sensitive receivers including schools and residences.

## Impact Determination

At the maximum levels of construction activity, increases in construction noise at sensitive receivers R1 through R8 and R30 would be more than 5 dB over existing ambient levels. The increase in construction noise would be temporary and during periods of reduced construction activity, noise levels would be lower. However, because the increase would exceed the threshold, the Reduced Project Alternative would have a significant impact associated with construction noise.

Predicted operational noise levels at the proposed Project site would exceed existing measured ambient noise levels by 3 dBA or greater at the residence at 2789 Webster (R1), Cabrillo High School (R5), Villages of Cabrillo (R8) and at Stephens Middle School (R30). These increases represent a significant impact.

Interior noise levels from Reduced Project Alternative operations would not be expected to exceed municipal code standards for classroom interior spaces. Further, interior noise levels are not expected to approach or exceed existing ambient interior noise levels within active classrooms; therefore, classroom noise impacts would be less than significant.

*Mitigation Measures*

Mitigation measures **MM NOI-1** through **MM NOI-3** would be applied to construction and operation of the Reduced Project Alternative. These measures are described in detail in Section 3.9.4.3 and include construction of soundwalls, and noise measures for construction activities.

*Residual Impacts*

With one exception, residual noise impacts under NOI-6 would be less than significant after mitigation. However, nighttime operational noise would remain significant and unavoidable, even after mitigation by **MM NOI-3**, when instances when "high activity " operations (haul trucks, yard tractors, container loading and unloading, train building and maintenance activities) coincide with extremely low nighttime ambient noise levels.

## 5.3.2.10 Transportation and Circulation

In this alternative, all physical features of the proposed Project would be constructed, existing tenants would be relocated to the relocation sites as described in Section 2.3, and the operational details of the facility would be the same as those of the proposed Project. However, the throughput of Alternative 2 would be limited by lease conditions, resulting in lower operational activity levels than with the proposed Project. Because construction activities for the Reduced Project Alternative are identical to those of the proposed Project, there would be less than significant impacts under TRANS-1. Because there would be fewer employees under the Reduced Project Alternative, impacts on public transit facilities under TRANS-3 would be equal to or less than the proposed Project, resulting in a less than significant impact. Reduction of train traffic in the Reduced Project Alternative as compared to the proposed Project would occur between the Hobart Yard and the ports, but the number of train trips beyond downtown Los Angeles would be unaffected by operation of the Reduced Project Alternative. Accordingly, the Reduced Project Alternative would have less than significant impacts for TRANS-5. The design and operation of the Reduced Project Alternative would be identical to that of the proposed Project, accordingly there would be no impacts under TRANS-6 through TRANS-8.

Effects of the Reduced Project Alternative on roadway intersections and freeway segments (TRANS-2 and TRANS-4, respectively) are evaluated below.

**Alt 2 Impact TRANS-2: Vehicular traffic associated with operation of the Reduced Project would not have a significant adverse impact on at least one study intersection's volume/capacity ratios or level of service.**

Quantitative trip generation estimates were developed for the Reduced Project Alternative using the same QuickTrip trip generation model used for the proposed Project (Table 5-25). Traffic generated from the Reduced Capacity alternative would be less than from the proposed Project because its lower throughput would generate fewer truck movements to handle the containers and would require fewer employees.

**Table 5-25. Reduced Project Alternative Peak-Hour Trip Generation and Net Change Compared to CEQA Baseline Conditions (in Passenger Car Equivalents).**

| Year | AM Peak Hour | | | MD Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | In | Out | Total | In | Out | Total | In | Out | Total |
| CEQA Baseline | 565 | 290 | 855 | 295 | 340 | 635 | 360 | 395 | 755 |
| Reduced Project | 480 | 385 | 870 | 510 | 510 | 1020 | 400 | 370 | 770 |
| Net Change | (85) | 95 | 15 | 215 | 170 | 385 | 40 | (25) | 15 |

Similar types of construction activities are expected for the Reduced Project Alternative as those described for the proposed Project (Section 2.4), with no change in the number of vehicle trips as compared to the proposed Project. Study intersections would experience a short-term (two-year) increase in trips, which would be lessened by the standard construction management practices imposed on contractors by POLA (see Section 3.10). That traffic would not cause any of the study intersections to exceed thresholds of significance established by the City of Los Angles, City of Long Beach, City of Carson, or Caltrans and the SCAQMD.

Operation of the Reduced Project Alternative would generate truck trips between the marine terminals and the railyard, but would decrease trips on arterials north of the railyard. However, the overflow trucks not handled at the Reduced Project would still make the trips to Hobart. Therefore, the reduction in truck traffic would not be as great as under the Proposed Project. As Table 5-26 shows, none of the 25 study intersections would experience significant degradation of level of service (LOS), and many would experience improved LOS.

## Impact Determination

No study intersection would experience degradation in LOS, accordingly there would be less than significant impacts.

### *Mitigation Measures*

Mitigation is not required.

### *Residual Impacts*

Less than significant impact.

**Table 5-26. Intersection Level of Service Analysis – Alternative 2 - Reduced Project Alternative.**

| # | Study Intersection | Baseline | | | | | | Baseline Plus Alt. 2 - Reduced Project | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.454 | A | 0.391 | A | 0.466 | A | 0.480 | A | 0.413 | A | 0.468 | 0.026 | 0.022 | 0.002 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.205 | A | 0.334 | A | 0.321 | A | 0.248 | A | 0.371 | A | 0.338 | 0.043 | 0.037 | 0.017 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.302 | A | 0.300 | A | 0.330 | A | 0.328 | A | 0.322 | A | 0.336 | 0.026 | 0.022 | 0.006 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.222 | A | 0.362 | A | 0.351 | A | 0.252 | A | 0.384 | A | 0.364 | 0.030 | 0.022 | 0.013 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.641 | A | 0.363 | B | 0.649 | B | 0.645 | A | 0.369 | B | 0.647 | 0.004 | 0.006 | -0.002 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.307 | A | 0.196 | A | 0.202 | A | 0.312 | A | 0.186 | A | 0.191 | 0.005 | -0.010 | -0.011 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.569 | A | 0.533 | A | 0.597 | A | 0.560 | A | 0.505 | A | 0.569 | -0.009 | -0.028 | -0.028 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | A | 0.526 | A | 0.577 | B | 0.678 | A | 0.539 | A | 0.596 | B | 0.682 | 0.013 | 0.019 | 0.004 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.619 | A | 0.598 | C | 0.722 | B | 0.634 | B | 0.621 | C | 0.723 | 0.015 | 0.023 | 0.001 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | A | 0.526 | A | 0.495 | B | 0.618 | B | 0.631 | B | 0.608 | B | 0.620 | 0.105 | 0.113 | 0.002 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.393 | A | 0.391 | A | 0.560 | A | 0.412 | A | 0.416 | A | 0.574 | 0.019 | 0.025 | 0.014 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.502 | A | 0.597 | C | 0.748 | A | 0.521 | B | 0.611 | C | 0.753 | 0.019 | 0.014 | 0.005 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | A | 0.481 | A | 0.468 | B | 0.612 | A | 0.493 | A | 0.423 | A | 0.575 | 0.012 | -0.045 | -0.037 | N | N | N |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.365 | A | 0.358 | A | 0.331 | A | 0.375 | A | 0.349 | A | 0.322 | 0.010 | -0.009 | -0.009 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.288 | A | 0.377 | A | 0.312 | A | 0.290 | A | 0.372 | 0.014 | 0.002 | -0.005 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.323 | A | 0.263 | A | 0.463 | A | 0.337 | A | 0.265 | A | 0.458 | 0.014 | 0.002 | -0.005 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.338 | A | 0.303 | A | 0.377 | A | 0.350 | A | 0.298 | A | 0.367 | 0.012 | -0.005 | -0.010 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.257 | A | 0.237 | A | 0.332 | A | 0.267 | A | 0.238 | A | 0.328 | 0.010 | 0.001 | -0.004 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.379 | A | 0.373 | A | 0.508 | A | 0.394 | A | 0.375 | A | 0.506 | 0.015 | 0.002 | -0.002 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.415 | A | 0.457 | A | 0.482 | A | 0.420 | A | 0.442 | A | 0.470 | 0.005 | -0.015 | -0.012 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.572 | A | 0.425 | B | 0.680 | A | 0.568 | A | 0.414 | B | 0.671 | -0.004 | -0.011 | -0.009 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.378 | A | 0.444 | A | 0.431 | A | 0.389 | A | 0.449 | A | 0.415 | 0.011 | 0.005 | -0.016 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.745 | B | 0.617 | C | 0.799 | C | 0.718 | A | 0.588 | C | 0.756 | -0.027 | -0.029 | -0.043 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | A | 0.588 | B | 0.649 | C | 0.723 | A | 0.570 | B | 0.632 | B | 0.696 | -0.018 | -0.017 | -0.027 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | B | 0.653 | B | 0.637 | B | 0.665 | B | 0.647 | B | 0.623 | B | 0.637 | -0.006 | -0.014 | -0.028 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using ICU methodology according to City standards.

### Alt 2 Impact TRANS-4: Reduced Project operations would result in a less than significant increase in highway congestion.

With operation of the Reduced Project, overflow truck traffic that cannot be accommodated at the SCIG facility would travel to the Hobart Yard in downtown Los Angeles. This traffic would result in fewer than 150 additional trips at any of the Congestion Management Program freeway monitoring stations, as shown in Table 5-27, which does not meet the minimum needed to warrant analysis.

**Table 5-27. Reduced Project Alternative Freeway Analysis.**

| Fwy. | Location | Baseline | | | | Baseline Plus Proposed Project | | | | Difference | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NB/EB | | SB/WB | | NB/EB | | SB/WB | | NB/EB | | SB/WB | |
| | | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH |
| I-110 | Wilmington, s/o "C"St. | 4,374 | 2,490 | 3,373 | 4,203 | 4,354 | 2,460 | 3,373 | 4,203 | (20) | (30) | 0 | 0 |
| SR-91 | e/o Alameda St/Santa Fe Ave | 6,060 | 8,924 | 10,662 | 7,205 | 6,040 | 8,894 | 10,657 | 7,190 | (20) | (30) | (5) | (15) |
| I-405 | Santa Fe Ave. | 11,533 | 9,863 | 9,543 | 11,162 | 11,528 | 9,858 | 9,538 | 11,137 | (5) | (5) | (5) | (25) |
| I-710 | n/o Jct (PCH), Willow St. | 5,771 | 5,951 | 6,690 | 5,660 | 5,606 | 5,721 | 6,615 | 5,385 | (165) | (230) | (75) | (275) |
| I-710 | n/o Jct Rte 405, s/o Del Amo | 6,370 | 7,742 | 7,807 | 6,783 | 6,185 | 7,487 | 7,722 | 6,468 | (185) | (255) | (85) | (315) |
| I-710 | n/o Rte 105, n/o Firestone | 8,173 | 9,122 | 9,283 | 9,104 | 7,968 | 8,837 | 9,193 | 8,774 | (205) | (285) | (90) | (330) |

### Impact Determination

No freeway monitoring station would experience an increase in truck traffic of greater than 150 trips, accordingly there would be less than significant impacts.

*Mitigation Measures*

Mitigation is not required.

*Residual Impacts*

Less than significant impact.

## 5.3.2.11 Utilities and Public Services

In this alternative, all physical features of the proposed Project would be constructed, existing tenants would be relocated to the relocation sites as described in Section 2.3, and the operational details of the facility would be largely the same as those of the proposed Project. However, the throughput of Alternative 2 would be limited by lease conditions, resulting in lower operational activity levels than with the proposed Project, and potentially fewer daily shifts.

As with the proposed Project, construction of the proposed roadway modifications and utility connections within public rights-of-way for the Reduced Project Alternative would result in temporary interruptions and/or delays for law enforcement and fire protection services, and could require police resources for traffic control. The contractor would be

required to coordinate with relevant police and fire stations to allow for the identification of alternative response routes during all construction phases, and to implement traffic control procedures in accordance with a traffic plan that would be approved by the LA DOT, POLA, and Caltrans (Section 2.4.3.3). Fire hydrants and water supply trunk and distribution pipelines in the Project area and on the relocation sites would be relocated in accordance with the Project Public Services Relocation Plan.

A new storm drain system would be installed to manage storm water runoff from the site which, like baseline conditions, would be largely impervious (although, as described in Section 2.4, some pervious features would be incorporated into the design). Storm water BMPs identical to those of the proposed Project (see sections 2.4.3.1 and 3.12.4.4) that are compliant with the requirements of the LID ordinance and the SUSMP (see Section 3.12.3) would be incorporated into the new storm drain system. No improvements to the off-site sanitary sewer system would be necessary, as future flows would be no greater than under baseline conditions.

Construction (including demolition of existing structures) would generate solid waste**,** including asphalt, concrete, building materials, and solids. To the extent possible material would be recycled on-site, consistent with LEED requirements, state and local law, and City of Los Angeles policy (Section 3.11.3.2), but some would be disposed of at area landfills. Hazardous waste such as asbestos, lead-based paint, and PCBs would likely be generated by the demolition of existing facilities, but these materials would be disposed of at licensed facilities in accordance with federal, state, and local regulations. Construction would result in a demand for diesel fuel for the construction equipment, but that demand would be small in the context of regional fuel use and temporary, lasting only the 36 months of construction.

During operations, some increase in demand for police and fire protection services could occur, but as with the proposed Project, existing facilities are adequate to handle modest increases in demand. As with the proposed Project, the Reduced Project Alternative would use less water and generate less sewerage and solid waste than baseline conditions. Electricity demands of the Reduced Project Alternative would be somewhat less than those of the proposed Project, with a maximum of 5.5 million kWh per year rather than 8.7 million kWh (see Section 3.11.4.4), but still more than under baseline conditions. Both LADWP and Southern California Edison have indicated their ability to supply the necessary power without construction of additional generating facilities. The alternative could generate small increases in the demand for natural gas (for facility heating) and diesel fuel (for trucks and trains).

Construction of the utility relocations and roadway/bridge improvements would result in the temporary interruption and/or delays for police and fire protection services. However, the control measures described above would ensure that construction would not impede emergency response services in and around the Project area and that operations would not substantially increase the demand for police or fire protection services. Therefore, construction-phase impacts under PS-1 and PS-2 would be less than significant. Operation of the Reduced Project Alternative would have similar impacts related to storm water management as the proposed Project, and somewhat fewer impacts related to utilities, including water, wastewater treatment, electricity, natural gas, and fuels. Accordingly, operational impacts under PS-3 through PS-5 and PS-7 would be less than significant.

**Alt 2 Impact PS-6: The Reduced Project Alternative would not result in an increase in solid waste generation that would exceed the capacity of existing solid waste handling and disposal facilities.**

Construction of the Reduced Project Alternative would generate the same amount of solid waste and debris as the proposed Project. Recycling and appropriate disposal techniques during construction would reduce those amounts. As in the case of the proposed Project, solid waste generation would be lower than under baseline conditions, and would be less than the proposed Project. Nevertheless, the Reduced Project Alternative is assumed to continue to generate solid waste.

### Impact Determination

Construction would represent a short-term demand on landfill capacity that is considered to be a less than significant impact. The generation of solid waste under operational conditions, given the current and projected capacity limitations of regional landfills, is considered to be a significant impact.

#### *Mitigation Measures*

Mitigation measures would be imposed on the Reduced Project Alternative to minimize the impacts of construction-related debris in the short term and of operational-phase solid wastes in the future. Mitigation Measure **MM PS-1** would be implemented not to mitigate a significant environmental impact but rather to promote the appropriate recycling of solid wastes that would be generated during construction of the Reduced Project Alternative. Mitigation Measure **MM PS-2** is provided not to mitigate an identified environmental impact, but rather to support development of recycled material markets, to the extent feasible.

Mitigation Measure **MM PS-3** would mitigate potential impacts to solid waste capacity from the Reduced Project Alternative's operation after the anticipated closure of landfills (assumed to be in 2030), because the City's Solid Waste Integrated Resources Plan will set policy regarding landfill capacity, waste generation, and waste stream diversion.

#### *Residual Impacts*

Operational impacts to solid waste capacity would be less than significant through approximately 2030, when existing landfills are projected to close. In the long-term, **MM PS-3** would reduce solid waste generation to negligible amounts, thereby ensuring long-term adequate solid waste management for the proposed Project starting from 2025. Accordingly, long-term impacts to solid waste disposal would be less than significant after mitigation.

## 5.3.2.12 Water Resources

In this alternative, the intermodal facility and relocation facilities described in the proposed Project would be constructed on the site; all physical features would be the same as the proposed Project. The operation of the Reduced Project would be the same in nature as the proposed Project, but its activity level would be limited by lease conditions so that the throughput would be lower.

Construction and operation of the Reduced Project Alternative would not cause substantial erosion, siltation, or inputs of polluted runoff because of the controls that would be employed both in the project's design and through the construction and

operational permits (see section 3.12.4.4 for details). The current topography of the project and relocation sites, which is generally flat, would not be changed, so that surface water flow patterns would not be changed substantially. The storm drain systems would be designed to accommodate anticipated runoff volumes and would incorporate structural BMPs as required by the SUSMP and the industrial stormwater permit. Neither the project site nor the relocation sites are within the 100-year floodplain. Construction of the Reduced Project would be conducted in accordance with controls and pollution prevention measures that would minimize the exposure of soils containing toxic substances (see Section 3.12.4.3). Because construction would only involve relatively shallow features, groundwater would not be affected. Accordingly, impacts of the Reduced Project Alternative would be less than significant under WR-2 through WR-7.

Impacts of the Reduced Project construction on water quality in the Dominguez Channel are described below.

### Alt 2 Impact WR-1: Construction and operation of the Reduced Project Alternative would potentially cause pollution, contamination, or a nuisance as defined in Section 13050 of the CWC or violate regulatory water quality standards or waste discharge requirements.

As with the proposed Project, contaminated soil at the project and relocation sites raises the potential for contaminants to enter storm drains during facility construction and for water quality degradation in the Dominguez Channel during reconstruction of the railroad bridge (see section 3.12.4.4.1 for more detail). In addition, contaminated groundwater could be encountered during construction. During operations, accidents such as fuel and lubricant spills and leaks and spills of hazardous substances from cargo containers could also introduce contaminants to storm drains (see section 3.12.4.4.2 for more detail).

During construction, BMPs specified by the project's NPDES construction permit would be employed to reduce the potential for contamination of surface water from runoff and the discharge of contaminated groundwater, as described in section 3.12.3.1. During operations, as described in section 3.12.3.2, the new storm drain systems at the project and relocation sites, which would incorporate SUSMP requirements, and operational practices conforming to the facility's industrial stormwater permit, would minimize the potential for pollutants of concern to enter surface waters.

#### Impact Determination

Therefore runoff from landside construction activities would not create pollution, contamination, a nuisance, or violate any water quality standards, and impacts on water quality would be less than significant.

Construction activities in and adjacent to the Dominguez Channel could result in discharges or spills of silt, debris, and contaminants to the water. The BMPs required by the federal, state, and local permits and implemented through the SWPPP would reduce the risk and magnitude of those discharges. Nevertheless, the violation of water quality standards that could result from a discharge is considered a significant impact requiring mitigation.

#### *Mitigation Measures*

Mitigation measure **MM WR-1** (see Section 3.12.4.4) would reduce the risk of discharges and spills of silt, debris, and contaminants reaching the waters of the Dominguez Channel by imposing controls and restrictions on construction activities.

*Residual Impacts*

Residual impacts would be less than significant.

# 5.4 Cumulative Analysis of Alternatives

This section presents an analysis of the potential for the No Project and Reduced Project alternatives, together with other past, present, and reasonably foreseeable future projects in the cumulative geographic scope of each resource area, to have significant cumulative effects. The requirements for a cumulative analysis under CEQA are summarized in Section 4.1.1, and the related projects that would, in combination with the alternatives, cause significant cumulative impacts are presented in Section 4.1.2 and Table 4-1.

For this analysis, it is assumed that the impacts of past, present, and reasonably foreseeable future projects are the same as those described in Chapter 4 Cumulative Impacts. Except where noted, the significance criteria used for the cumulative analysis are the same as those used for the proposed Project in Section 3, and the geographic scope of each analysis is the same as described in Chapter 4.

## 5.4.1 No Project Alternative

As described in Section 5.2.1, under the No Project Alternative, the Port would not issue any permits or discretionary approvals associated with the proposed Project, the proposed Project would not be built, and existing uses and operations at the Project site would continue under existing or holdover leases. Existing operations would continue at the proposed Project site, and these operations would grow by 10 percent from baseline levels by 2016, and then remain at 2016 levels for all future years. Drayage trucks that would operate between the marine terminals and the SCIG facility under the proposed Project would instead operate between the marine terminals and the Hobart Yard.

### 5.4.1.1 Aesthetics

As described in Section 4.2.1, the existing landscape is dominated by heavy and light industrial uses and transportation features. Past projects, both public and private, have largely eliminated natural features in the general area and have resulted in a viewshed dominated by man-made industrial features. Existing views in the Project area are considered to be of low sensitivity (Section 3.1.2.3), the surrounding area is not considered a scenic vista for residents in the vicinity, and there are no official scenic vistas or scenic resources in the vicinity (Section 3.1.4.3). The nighttime viewshed is characterized by numerous lights from industrial and transportation facilities. Present and future projects in the area consist mostly of projects that seek to improve infrastructure and cargo operations, intensify industrial development, or add housing stock and commercial facilities. The effect of the related projects will continue to be an intensification of the view, resulting in more buildings and development, including some new open space. This change represents a significant cumulative impact.

The No Project Alternative would not alter the landscape, existing views, or the nighttime light regime in any way because no construction would take place and existing operations would continue. Accordingly, the No Project Alternative's contribution to that intensification would not make a cumulatively considerable contribution to a significant cumulative impact.

### 5.4.1.2 Air Quality

As described in more detail in Section 4.2.2, the SCAB is in non-attainment with respect to several air pollutants. The non-attainment status for two criteria pollutants, $PM_{10}$ and $PM_{2.5}$, is considered a significant cumulative impact of the past, present and reasonably foreseeable future projects.

The construction of reasonably foreseeable future projects in the region will result in emissions that will exceed regulatory thresholds and thus constitute a significant cumulative impact. Because the No Project Alternative would not involve construction it would not make a cumulatively considerable contribution to that impact.

Operation of the related projects, including the No Project Alternative, would result in a significant cumulative air quality impact related to exceedances of the significance thresholds for NOx, $PM_{10}$, and $PM_{2.5}$. As described in Section 5.2.2.2, the No Project Alternative would result in emissions whose increments over the baseline would exceed the SCAQMD ambient off-site concentration thresholds for 1-hour and annual $NO_2$, and 24-hour and annual $PM_{10}$, and the NAAQS 1-hour $NO_2$. These concentration exceedances would constitute a cumulatively considerable contribution to a significant cumulative impact.

The related projects are not considered to have a significant cumulative impact with respect to CO standards, and as described in section 3.2.4.3 and summarized in Table 3.2-31 the No Project Alternative would have less than significant impacts, and thus would not make a cumulatively considerable contribution to a significant cumulative impact. Due to the large number of sources within and near the Project site that emit diesel emissions, and the proximity of residents to industrial operations, odorous emissions in the Project region are considered a significant cumulative impact of past, present, and reasonably foreseeable future projects, including the No Project Alternative. However, because the No Project Alternative would result in only a small increase in activity, and therefore emissions, it would not make a cumulatively considerable contribution to a significant cumulative impact. The past, present, and reasonably foreseeable future projects, would not result in a significant cumulative impact related to obstruction of the AQMP or other air quality plan. Accordingly, the No Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact.

The past, present, and reasonably foreseeable future projects, including the No Project Alternative, are considered to have a significant cumulative impact with respect to emissions of toxic air contaminants (TACs), as evidenced by the results of the MATES III study (SCAQMD, 2008). The No Project Alternative would result in lower emissions of TACs compared to the baseline, and reduced health risks (Section 5.2.2.2). Accordingly, the No Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact.

### 5.4.1.3 Biological Resources

Although the construction and operations of the past, present, and reasonably foreseeable future projects are considered to have a significant cumulative impact on some sensitive species (Section 4.2.3), the No Project Alternative would not make a cumulatively considerable contribution to that impact because there would be no construction activities and the increase in operations of existing businesses would be minimal.

### 5.4.1.4 Cultural Resources

Although the construction of the past, present, and reasonably foreseeable future projects are considered to have a significant cumulative impact on unknown archeological, ethnographic, and paleontological resources (Section 4.2.4), the No Project Alternative would not make a cumulatively considerable contribution to that impact because there would be no construction activities.

### 5.4.1.5 Geology and Soils

As described in Section 4.2.5, the past, present, and reasonably foreseeable future projects would not result in significant cumulative impacts related to geological resources. Accordingly, the No Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact.

### 5.4.1.6 Greenhouse Gases

Past, present, and reasonably foreseeable future projects in the area (Table 4-1) have generated, and will continue to generate, GHGs. Current and future projects will incorporate a variety of measures (CARB, 2008) that are expected to reduce GHG emissions from future projects. However, no specific quantitative level of GHG emissions from related projects in the region, or state-wide has been identified below which no impacts would occur. Therefore these emissions are considered to represent a significant cumulative impact. The No Project Alternative would continue to produce GHG emissions during operation (Section 5.2.2.6), and because there is no feasible mitigation for those emissions, they would make a cumulatively considerable contribution to a significant cumulative impact.

### 5.4.1.7 Hazards and Hazardous Materials

As described in Section 4.2.7, the past, present, and reasonably foreseeable future projects represent a less than significant cumulative impact. Accordingly, the No Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact with respect to existing uses at the Project site. The 10 percent increase in activity levels of existing uses at the Project site, including the handling of hazardous cargos and other materials, that the No Project Alternative would entail is not considered sufficient to constitute a significant impact. With respect to truck trips between the ports and Hobart Yard, although the No Project Alternative would result in an increase in the probable frequency and severity of harm from truck accidents, the volume of truck trips associated with this Alternative is small in comparison to regional traffic on major area roadways and freeways. Thus the No Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact.

### 5.4.1.8 Land Use

As described in Section 4.2.8, past, present, and reasonably foreseeable future projects would not result in significant cumulative impacts related to land use designation inconsistencies, environmental goals and policies in applicable plans, or isolation of communities. The No Project Alternative would not, therefore, contribute to significant cumulative impacts, although the No Project Alternative would have land use impacts of its own under LU-2.

Past, present, and reasonably foreseeable future projects would, however, result in significant cumulative secondary impacts to surrounding land uses as a result of their cumulative impacts related to air quality, traffic, and noise. The No Project Alternative would have significant air quality impacts that cannot be mitigated. Accordingly, the No Project Alternative would make a cumulatively considerable contribution to a significant cumulative secondary impact related to land use.

### 5.4.1.9 Noise

As described in Section 4.2.9, construction and operation of the past, present, and reasonably foreseeable future projects would result in significant cumulative impacts related to noise levels in the City of Long Beach. The No Project Alternative would result in an insubstantial increase in noise levels compared to the baseline as a result of the 10 percent increase in on-site activity levels, but that increase would not constitute a significant impact (Section 5.2.2.9) and would not be sufficient to make a cumulatively considerable contribution to a significant cumulative impact. As described in Section 4.2.9, the cumulative impacts of past, present and reasonably foreseeable projects on sleep disturbance and classroom speech interference cannot be evaluated as the data on sleep disturbance and speech interference are too speculative.

### 5.4.1.10 Transportation and Circulation

The No Project Alternative would continue the existing site uses at 10 percent above baseline levels in all future analysis years. Access from the proposed Project site is from its Pacific Coast Highway entrance which is assumed to maintain baseline geometrics as unsignalized ramps. The No Project Alternative would not cause the displacement of existing uses on the project site, and no project site uses would relocate to sites south of Pacific Coast Highway. The No Project Alternative does not involve construction activity and thus does not make a cumulatively considerable contribution to a cumulative construction traffic impact. The 10 percent increase in on-site activity levels would not be sufficient to make a cumulatively considerable contribution to cumulative public transit impacts. Because there would be no increase in the number of trains east of the Hobart Yard, the No Project Alternative would be similar to the proposed Project in that it would not contribute to a significant cumulative impact related to regional rail traffic.

The No Project Alternative is analyzed for future years 2016, 2023, 2035, and 2046. Off-dock intermodal demand from the San Pedro Bay ports will be handled by a combination of the Modernized ICTF facility, and the downtown Los Angeles railyards: BNSF's Hobart Yard and UPRR's East Los Angeles intermodal yard.

Quantitative trip generation estimates were developed from traffic counts of the existing site driveways during the Baseline and then grown by 10 percent. Table 5.28 shows the No Project Alternative trip generation and net change from Baseline conditions.

**Table 5-28 No Project Site Peak Hour Trip Generation and Net Change Compared to Baseline Conditions (in Passenger Car Equivalents).**

| Year | AM Peak Hour | | | MD Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | In | Out | Total | In | Out | Total | In | Out | Total |
| CEQA Baseline | 565 | 290 | 855 | 430 | 475 | 905 | 480 | 575 | 1055 |
| No Project | 615 | 310 | 925 | 455 | 515 | 970 | 530 | 640 | 1170 |
| Net Change | 50 | 20 | 70 | 25 | 40 | 65 | 50 | 65 | 115 |

#### 5.4.1.10.1 Methodology

Impacts related to the No Project Alternative were assessed using the same methodology as in the assessment of the proposed Project (Chapter 4.2.10). The differences between Future Baseline conditions and the No Project Alternative were quantified. Local traffic growth was forecast for the years 2016, 2023, 2035 and 2046 based on a computerized traffic analysis tool known as the Port Area Travel Demand Model, which includes regional traffic growth as well as growth for the port and the local area. Details of this methodology as well as the thresholds of significance used to determine significant impacts are included in Section 4.2.10.

#### 5.4.1.10.2 Alt 1 Cumulative Impact TRANS-2: Would long-term vehicular traffic have a significant adverse impact on at least one study intersection's volume/capacity ratios or level of service?

##### Impacts of Past, Present, and Reasonably Foreseeable Future Projects Including the Proposed Project

Cumulative impacts were analyzed using a two-step process. An initial comparison was made to compare the cumulative "No Project" LOS condition against baseline conditions to determine if a cumulative impact would occur relative to baseline conditions. A cumulative impact was deemed to occur if it exceeded the allowable threshold of significance. If a cumulative impact was determined, then a second comparison was conducted by calculating the difference in LOS for the future conditions "No Project" and the future conditions "Without Project" levels of service. If the difference in LOS was calculated to exceed the threshold guidelines, then it was determined that the project component of the analysis would comprise a cumulatively considerable contribution of the impact.

Tables 5-29 to 5-32 summarize future intersection operating conditions of the No Project Alternative at each study intersection in 2016, 2023, 2035 and 2046, respectively with the Baseline. A number of the study intersections, especially along Anaheim Street and PCH, will operate at LOS D in 2016 and worsen over the years to LOS E. Tables 5-33 to 5-36 compare the future "Without Project" to the No Project Alternative at each study intersection in 2016, 2023, 2035 and 2046, respectively. Cumulative impacts are shown to occur at one intersection in 2016, at seven locations in 2023, and at nine locations in both 2035 and 2046. Accordingly, past, present, and reasonably foreseeable future projects, including the No Project Alternative, have a significant cumulative impact on study intersections.

**Table 5-29. Intersection Level of Service Analysis – Year 2016 – No Project Alternative.**

| # | Study Intersection | Baseline | | | | | | Year 2016 No Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.454 | A | 0.391 | A | 0.466 | A | 0.504 | A | 0.432 | A | 0.484 | 0.050 | 0.041 | 0.018 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.205 | A | 0.334 | A | 0.321 | A | 0.304 | A | 0.388 | A | 0.342 | 0.099 | 0.054 | 0.021 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.302 | A | 0.3 | A | 0.33 | A | 0.411 | A | 0.416 | A | 0.372 | 0.109 | 0.116 | 0.042 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.222 | A | 0.362 | A | 0.351 | A | 0.257 | A | 0.400 | A | 0.375 | 0.035 | 0.038 | 0.024 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.641 | A | 0.363 | B | 0.649 | B | 0.637 | A | 0.505 | B | 0.652 | -0.004 | 0.142 | 0.003 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.307 | A | 0.196 | A | 0.202 | A | 0.232 | A | 0.409 | A | 0.328 | -0.075 | 0.213 | 0.126 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.569 | A | 0.533 | A | 0.597 | A | 0.591 | C | 0.752 | B | 0.648 | 0.022 | 0.219 | 0.051 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | A | 0.526 | A | 0.577 | B | 0.678 | B | 0.659 | C | 0.728 | C | 0.769 | 0.133 | 0.151 | 0.091 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.619 | A | 0.598 | C | 0.722 | B | 0.691 | B | 0.666 | D | 0.811 | 0.072 | 0.068 | 0.089 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | A | 0.526 | A | 0.495 | B | 0.618 | B | 0.652 | A | 0.596 | C | 0.751 | 0.126 | 0.101 | 0.133 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.393 | A | 0.391 | A | 0.56 | A | 0.261 | A | 0.197 | A | 0.477 | -0.132 | -0.194 | -0.083 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.502 | A | 0.597 | C | 0.748 | A | 0.507 | A | 0.579 | C | 0.737 | 0.005 | -0.018 | -0.011 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | A | 0.481 | A | 0.468 | B | 0.612 | A | 0.492 | A | 0.453 | C | 0.730 | 0.011 | -0.015 | 0.118 | N | N | Y |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.365 | A | 0.358 | A | 0.331 | A | 0.356 | A | 0.184 | A | 0.235 | -0.009 | -0.174 | -0.096 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.288 | A | 0.377 | A | 0.251 | A | 0.180 | A | 0.323 | -0.047 | -0.108 | -0.054 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.323 | A | 0.263 | A | 0.463 | A | 0.487 | A | 0.276 | A | 0.568 | 0.164 | 0.013 | 0.105 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.338 | A | 0.303 | A | 0.377 | A | 0.307 | A | 0.242 | A | 0.350 | -0.031 | -0.061 | -0.027 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.257 | A | 0.237 | A | 0.332 | A | 0.227 | A | 0.154 | A | 0.337 | -0.030 | -0.083 | 0.005 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.379 | A | 0.373 | A | 0.508 | A | 0.435 | A | 0.366 | B | 0.682 | 0.056 | -0.007 | 0.174 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.415 | A | 0.457 | A | 0.482 | A | 0.332 | A | 0.405 | A | 0.368 | -0.083 | -0.052 | -0.114 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.572 | A | 0.425 | B | 0.68 | A | 0.410 | A | 0.468 | A | 0.503 | -0.162 | 0.043 | -0.177 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.378 | A | 0.444 | A | 0.431 | A | 0.177 | A | 0.278 | A | 0.302 | -0.201 | -0.166 | -0.129 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.745 | B | 0.617 | C | 0.799 | C | 0.761 | C | 0.708 | E | 0.903 | 0.016 | 0.091 | 0.104 | N | N | Y |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | A | 0.588 | B | 0.649 | C | 0.723 | B | 0.644 | C | 0.758 | D | 0.805 | 0.056 | 0.109 | 0.082 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.489 | A | 0.511 | A | 0.522 | A | 0.511 | C | 0.707 | A | 0.587 | 0.022 | 0.196 | 0.065 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-30. Intersection Level of Service Analysis – Year 2023 – No Project Alternative.**

| # | Study Intersection | Baseline | | | | | | Year 2023 No Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.454 | A | 0.391 | A | 0.466 | B | 0.613 | A | 0.519 | A | 0.504 | 0.159 | 0.128 | 0.038 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.205 | A | 0.334 | A | 0.321 | A | 0.426 | A | 0.438 | A | 0.350 | 0.221 | 0.104 | 0.029 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.302 | A | 0.3 | A | 0.33 | A | 0.564 | A | 0.500 | A | 0.383 | 0.262 | 0.200 | 0.053 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.222 | A | 0.362 | A | 0.351 | A | 0.507 | A | 0.443 | A | 0.401 | 0.285 | 0.081 | 0.050 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.641 | A | 0.363 | B | 0.649 | B | 0.611 | A | 0.593 | C | 0.708 | -0.030 | 0.230 | 0.059 | N | N | Y |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.307 | A | 0.196 | A | 0.202 | A | 0.391 | A | 0.461 | A | 0.360 | 0.084 | 0.265 | 0.158 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.569 | A | 0.533 | A | 0.597 | E | 0.955 | E | 0.949 | C | 0.734 | 0.386 | 0.416 | 0.137 | Y | Y | N |
| 8 | Anaheim St / Harbor Ave [B] | A | 0.526 | A | 0.577 | B | 0.678 | C | 0.751 | C | 0.799 | C | 0.793 | 0.225 | 0.222 | 0.115 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.619 | A | 0.598 | C | 0.722 | D | 0.860 | C | 0.735 | D | 0.896 | 0.241 | 0.137 | 0.174 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | A | 0.526 | A | 0.495 | B | 0.618 | C | 0.758 | B | 0.663 | D | 0.854 | 0.232 | 0.168 | 0.236 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.393 | A | 0.391 | A | 0.56 | A | 0.342 | A | 0.238 | A | 0.574 | -0.051 | -0.153 | 0.014 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.502 | A | 0.597 | C | 0.748 | B | 0.632 | B | 0.612 | D | 0.816 | 0.130 | 0.015 | 0.068 | N | N | Y |
| 13 | Anaheim St / Alameda St [A] | A | 0.481 | A | 0.468 | B | 0.612 | A | 0.569 | A | 0.514 | E | 0.951 | 0.088 | 0.046 | 0.339 | N | N | Y |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.365 | A | 0.358 | A | 0.331 | A | 0.447 | A | 0.209 | A | 0.244 | 0.082 | -0.149 | -0.087 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.288 | A | 0.377 | A | 0.287 | A | 0.215 | A | 0.400 | -0.011 | -0.073 | 0.023 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.323 | A | 0.263 | A | 0.463 | A | 0.497 | A | 0.325 | B | 0.613 | 0.174 | 0.062 | 0.150 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.338 | A | 0.303 | A | 0.377 | A | 0.333 | A | 0.270 | A | 0.407 | -0.005 | -0.033 | 0.030 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.257 | A | 0.237 | A | 0.332 | A | 0.212 | A | 0.184 | A | 0.372 | -0.045 | -0.053 | 0.040 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.379 | A | 0.373 | A | 0.508 | A | 0.481 | A | 0.391 | C | 0.730 | 0.102 | 0.018 | 0.222 | N | N | Y |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.415 | A | 0.457 | A | 0.482 | A | 0.492 | A | 0.432 | A | 0.443 | 0.077 | -0.025 | -0.039 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.572 | A | 0.425 | B | 0.68 | A | 0.530 | A | 0.587 | B | 0.620 | -0.042 | 0.162 | -0.060 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.378 | A | 0.444 | A | 0.431 | A | 0.260 | A | 0.321 | A | 0.380 | -0.118 | -0.123 | -0.051 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.745 | B | 0.617 | C | 0.799 | E | 0.927 | D | 0.834 | E | 0.989 | 0.182 | 0.217 | 0.190 | Y | N | Y |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | A | 0.588 | B | 0.649 | C | 0.723 | C | 0.722 | C | 0.791 | E | 0.947 | 0.134 | 0.142 | 0.224 | N | N | Y |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.489 | A | 0.511 | A | 0.522 | A | 0.570 | C | 0.774 | B | 0.613 | 0.081 | 0.263 | 0.091 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-31. Intersection Level of Service Analysis – Year 2035 – No Project Alternative.**

| # | Study Intersection | Baseline | | | | | | Year 2035 No Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.454 | A | 0.391 | A | 0.466 | A | 0.557 | A | 0.511 | A | 0.474 | 0.103 | 0.120 | 0.008 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.205 | A | 0.334 | A | 0.321 | A | 0.407 | A | 0.424 | A | 0.347 | 0.202 | 0.090 | 0.026 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.302 | A | 0.3 | A | 0.33 | A | 0.545 | A | 0.502 | A | 0.372 | 0.243 | 0.202 | 0.042 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.222 | A | 0.362 | A | 0.351 | A | 0.545 | A | 0.484 | A | 0.426 | 0.323 | 0.122 | 0.075 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.641 | A | 0.363 | B | 0.649 | B | 0.647 | B | 0.608 | C | 0.718 | 0.006 | 0.245 | 0.069 | N | N | Y |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.307 | A | 0.196 | A | 0.202 | A | 0.333 | A | 0.447 | A | 0.339 | 0.026 | 0.251 | 0.137 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.569 | A | 0.533 | A | 0.597 | E | 0.930 | E | 0.959 | C | 0.718 | 0.361 | 0.426 | 0.121 | Y | Y | N |
| 8 | Anaheim St / Harbor Ave [B] | A | 0.526 | A | 0.577 | B | 0.678 | C | 0.764 | D | 0.814 | D | 0.818 | 0.238 | 0.237 | 0.140 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.619 | A | 0.598 | C | 0.722 | D | 0.888 | C | 0.776 | E | 0.911 | 0.269 | 0.178 | 0.189 | N | N | Y |
| 10 | Anaheim St / E I St / W 9th St [B] | A | 0.526 | A | 0.495 | B | 0.618 | D | 0.807 | C | 0.706 | E | 0.901 | 0.281 | 0.211 | 0.283 | N | N | Y |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.393 | A | 0.391 | A | 0.56 | A | 0.367 | A | 0.280 | B | 0.601 | -0.026 | -0.111 | 0.041 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.502 | A | 0.597 | C | 0.748 | B | 0.687 | B | 0.668 | D | 0.896 | 0.185 | 0.071 | 0.148 | N | N | Y |
| 13 | Anaheim St / Alameda St [A] | A | 0.481 | A | 0.468 | B | 0.612 | B | 0.641 | A | 0.565 | E | 0.990 | 0.160 | 0.097 | 0.378 | N | N | Y |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.365 | A | 0.358 | A | 0.331 | A | 0.485 | A | 0.242 | A | 0.242 | 0.120 | -0.116 | -0.089 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.288 | A | 0.377 | A | 0.301 | A | 0.258 | A | 0.461 | 0.003 | -0.030 | 0.084 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.323 | A | 0.263 | A | 0.463 | A | 0.541 | A | 0.400 | B | 0.693 | 0.218 | 0.137 | 0.230 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.338 | A | 0.303 | A | 0.377 | A | 0.365 | A | 0.297 | A | 0.423 | 0.027 | -0.006 | 0.046 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.257 | A | 0.237 | A | 0.332 | A | 0.257 | A | 0.214 | A | 0.390 | 0.000 | -0.023 | 0.058 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.379 | A | 0.373 | A | 0.508 | B | 0.633 | A | 0.501 | D | 0.800 | 0.254 | 0.128 | 0.292 | N | N | Y |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.415 | A | 0.457 | A | 0.482 | A | 0.494 | A | 0.552 | A | 0.541 | 0.079 | 0.095 | 0.059 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.572 | A | 0.425 | B | 0.68 | A | 0.539 | B | 0.603 | B | 0.625 | -0.033 | 0.178 | -0.055 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.378 | A | 0.444 | A | 0.431 | A | 0.273 | A | 0.346 | A | 0.386 | -0.105 | -0.098 | -0.045 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.745 | B | 0.617 | C | 0.799 | E | 0.938 | D | 0.889 | F | 1.002 | 0.193 | 0.272 | 0.203 | Y | N | Y |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | A | 0.588 | B | 0.649 | C | 0.723 | C | 0.743 | D | 0.839 | E | 0.950 | 0.155 | 0.190 | 0.227 | N | N | Y |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.489 | A | 0.511 | A | 0.522 | B | 0.624 | B | 0.646 | B | 0.664 | 0.135 | 0.135 | 0.142 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-32. Intersection Level of Service Analysis –Year 2046 – No Project Alternative.**

| # | Study Intersection | Baseline | | | | | | Year 2046 No Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.454 | A | 0.391 | A | 0.466 | A | 0.559 | A | 0.528 | A | 0.485 | 0.105 | 0.137 | 0.019 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.205 | A | 0.334 | A | 0.321 | A | 0.407 | A | 0.428 | A | 0.353 | 0.202 | 0.094 | 0.032 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.302 | A | 0.3 | A | 0.33 | A | 0.545 | A | 0.497 | A | 0.378 | 0.243 | 0.197 | 0.048 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.222 | A | 0.362 | A | 0.351 | A | 0.542 | A | 0.476 | A | 0.457 | 0.320 | 0.114 | 0.106 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.641 | A | 0.363 | B | 0.649 | B | 0.654 | B | 0.620 | C | 0.724 | 0.013 | 0.257 | 0.075 | N | N | Y |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.307 | A | 0.196 | A | 0.202 | A | 0.340 | A | 0.447 | A | 0.346 | 0.033 | 0.251 | 0.144 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.569 | A | 0.533 | A | 0.597 | E | 0.937 | E | 0.951 | C | 0.718 | 0.368 | 0.418 | 0.121 | Y | Y | N |
| 8 | Anaheim St / Harbor Ave [B] | A | 0.526 | A | 0.577 | B | 0.678 | C | 0.768 | D | 0.819 | D | 0.811 | 0.242 | 0.242 | 0.133 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.619 | A | 0.598 | C | 0.722 | E | 0.905 | C | 0.781 | E | 0.914 | 0.286 | 0.183 | 0.192 | Y | N | Y |
| 10 | Anaheim St / E I St / W 9th St [B] | A | 0.526 | A | 0.495 | B | 0.618 | D | 0.809 | C | 0.710 | E | 0.906 | 0.283 | 0.215 | 0.288 | N | N | Y |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.393 | A | 0.391 | A | 0.56 | A | 0.373 | A | 0.278 | B | 0.601 | -0.020 | -0.113 | 0.041 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.502 | A | 0.597 | C | 0.748 | B | 0.691 | B | 0.681 | E | 0.907 | 0.189 | 0.084 | 0.159 | N | N | Y |
| 13 | Anaheim St / Alameda St [A] | A | 0.481 | A | 0.468 | B | 0.612 | B | 0.649 | A | 0.572 | F | 1.006 | 0.168 | 0.104 | 0.394 | N | N | Y |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.365 | A | 0.358 | A | 0.331 | A | 0.485 | A | 0.236 | A | 0.242 | 0.120 | -0.122 | -0.089 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.288 | A | 0.377 | A | 0.307 | A | 0.260 | A | 0.465 | 0.009 | -0.028 | 0.088 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.323 | A | 0.263 | A | 0.463 | A | 0.539 | A | 0.406 | B | 0.683 | 0.216 | 0.143 | 0.220 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.338 | A | 0.303 | A | 0.377 | A | 0.365 | A | 0.302 | A | 0.425 | 0.027 | -0.001 | 0.048 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.257 | A | 0.237 | A | 0.332 | A | 0.257 | A | 0.216 | A | 0.390 | 0.000 | -0.021 | 0.058 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.379 | A | 0.373 | A | 0.508 | B | 0.654 | A | 0.505 | D | 0.819 | 0.275 | 0.132 | 0.311 | N | N | Y |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.415 | A | 0.457 | A | 0.482 | A | 0.511 | A | 0.559 | A | 0.548 | 0.096 | 0.102 | 0.066 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.572 | A | 0.425 | B | 0.68 | A | 0.549 | A | 0.599 | B | 0.635 | -0.023 | 0.174 | -0.045 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.378 | A | 0.444 | A | 0.431 | A | 0.281 | A | 0.352 | A | 0.391 | -0.097 | -0.092 | -0.040 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.745 | B | 0.617 | C | 0.799 | E | 0.963 | D | 0.898 | E | 1.000 | 0.218 | 0.281 | 0.201 | Y | N | Y |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | A | 0.588 | B | 0.649 | C | 0.723 | C | 0.747 | D | 0.849 | E | 0.971 | 0.159 | 0.200 | 0.248 | N | N | Y |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.489 | A | 0.511 | A | 0.522 | B | 0.630 | B | 0.640 | B | 0.661 | 0.141 | 0.129 | 0.139 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-33. Intersection Level of Service Analysis – Year 2016 – No Project Alternative.**

| # | Study Intersection | Year 2016 Baseline Without Project | | | | | | Year 2016 No Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.502 | A | 0.431 | A | 0.482 | A | 0.504 | A | 0.432 | A | 0.484 | 0.002 | 0.001 | 0.002 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.303 | A | 0.387 | A | 0.341 | A | 0.304 | A | 0.388 | A | 0.342 | 0.001 | 0.001 | 0.001 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.409 | A | 0.416 | A | 0.370 | A | 0.411 | A | 0.416 | A | 0.372 | 0.002 | 0.000 | 0.002 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.257 | A | 0.400 | A | 0.375 | A | 0.257 | A | 0.400 | A | 0.375 | 0.000 | 0.000 | 0.000 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.636 | A | 0.504 | B | 0.651 | B | 0.637 | A | 0.505 | B | 0.652 | 0.001 | 0.001 | 0.001 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.232 | A | 0.409 | A | 0.328 | A | 0.232 | A | 0.409 | A | 0.328 | 0.000 | 0.000 | 0.000 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.588 | C | 0.749 | B | 0.644 | A | 0.591 | C | 0.752 | B | 0.648 | 0.003 | 0.003 | 0.004 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | B | 0.657 | C | 0.727 | C | 0.768 | B | 0.659 | C | 0.728 | C | 0.769 | 0.002 | 0.001 | 0.001 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.690 | B | 0.666 | D | 0.810 | B | 0.691 | B | 0.666 | D | 0.811 | 0.001 | 0.000 | 0.001 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | B | 0.650 | A | 0.593 | C | 0.750 | B | 0.652 | A | 0.596 | C | 0.751 | 0.002 | 0.003 | 0.001 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.261 | A | 0.197 | A | 0.477 | A | 0.261 | A | 0.197 | A | 0.477 | 0.000 | 0.000 | 0.000 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.504 | A | 0.578 | C | 0.734 | A | 0.507 | A | 0.579 | C | 0.737 | 0.003 | 0.001 | 0.003 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | A | 0.486 | A | 0.451 | C | 0.726 | A | 0.492 | A | 0.453 | C | 0.730 | 0.006 | 0.002 | 0.004 | N | N | N |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.355 | A | 0.184 | A | 0.233 | A | 0.356 | A | 0.184 | A | 0.235 | 0.001 | 0.000 | 0.002 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.248 | A | 0.178 | A | 0.320 | A | 0.251 | A | 0.180 | A | 0.323 | 0.003 | 0.002 | 0.003 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.485 | A | 0.275 | A | 0.565 | A | 0.487 | A | 0.276 | A | 0.568 | 0.002 | 0.001 | 0.003 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.303 | A | 0.240 | A | 0.347 | A | 0.307 | A | 0.242 | A | 0.350 | 0.004 | 0.002 | 0.003 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.225 | A | 0.153 | A | 0.335 | A | 0.227 | A | 0.154 | A | 0.337 | 0.002 | 0.001 | 0.002 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.433 | A | 0.365 | B | 0.679 | A | 0.435 | A | 0.366 | B | 0.682 | 0.002 | 0.001 | 0.003 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.330 | A | 0.403 | A | 0.365 | A | 0.332 | A | 0.405 | A | 0.368 | 0.002 | 0.002 | 0.003 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.402 | A | 0.467 | A | 0.504 | A | 0.410 | A | 0.468 | A | 0.503 | 0.008 | 0.001 | -0.001 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.176 | A | 0.278 | A | 0.300 | A | 0.177 | A | 0.278 | A | 0.302 | 0.001 | 0.000 | 0.002 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.757 | C | 0.707 | D | 0.898 | C | 0.761 | C | 0.708 | E | 0.903 | 0.004 | 0.001 | 0.005 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | B | 0.642 | C | 0.756 | D | 0.802 | B | 0.644 | C | 0.758 | D | 0.805 | 0.002 | 0.002 | 0.003 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.511 | C | 0.700 | A | 0.568 | A | 0.511 | C | 0.707 | A | 0.587 | 0.000 | 0.007 | 0.019 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards
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**Table 5-34. Intersection Level of Service Analysis – Year 2023 – No Project Alternative.**

| # | Study Intersection | Year 2023 Baseline Without Project | | | | | | Year 2023 No Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | B | 0.611 | A | 0.518 | A | 0.502 | B | 0.613 | A | 0.519 | A | 0.504 | 0.002 | 0.001 | 0.002 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.425 | A | 0.438 | A | 0.348 | A | 0.426 | A | 0.438 | A | 0.350 | 0.001 | 0.000 | 0.002 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.563 | A | 0.500 | A | 0.381 | A | 0.564 | A | 0.500 | A | 0.383 | 0.001 | 0.000 | 0.002 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.507 | A | 0.443 | A | 0.401 | A | 0.507 | A | 0.443 | A | 0.401 | 0.000 | 0.000 | 0.000 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.611 | A | 0.592 | C | 0.707 | B | 0.611 | A | 0.593 | C | 0.708 | 0.000 | 0.001 | 0.001 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.391 | A | 0.461 | A | 0.360 | A | 0.391 | A | 0.461 | A | 0.360 | 0.000 | 0.000 | 0.000 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | E | 0.952 | E | 0.946 | C | 0.730 | E | 0.955 | E | 0.949 | C | 0.734 | 0.003 | 0.003 | 0.004 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | C | 0.750 | C | 0.798 | C | 0.792 | C | 0.751 | C | 0.799 | C | 0.793 | 0.001 | 0.001 | 0.001 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | D | 0.860 | C | 0.733 | D | 0.895 | D | 0.860 | C | 0.735 | D | 0.896 | 0.000 | 0.002 | 0.001 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | C | 0.756 | B | 0.661 | D | 0.853 | C | 0.758 | B | 0.663 | D | 0.854 | 0.002 | 0.002 | 0.001 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.342 | A | 0.238 | A | 0.574 | A | 0.342 | A | 0.238 | A | 0.574 | 0.000 | 0.000 | 0.000 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | B | 0.629 | B | 0.611 | D | 0.813 | B | 0.632 | B | 0.612 | D | 0.816 | 0.003 | 0.001 | 0.003 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | A | 0.563 | A | 0.512 | E | 0.947 | A | 0.569 | A | 0.514 | E | 0.951 | 0.006 | 0.002 | 0.004 | N | N | N |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.445 | A | 0.209 | A | 0.242 | A | 0.447 | A | 0.209 | A | 0.244 | 0.002 | 0.000 | 0.002 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.285 | A | 0.213 | A | 0.397 | A | 0.287 | A | 0.215 | A | 0.400 | 0.002 | 0.002 | 0.003 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.495 | A | 0.323 | B | 0.610 | A | 0.497 | A | 0.325 | B | 0.613 | 0.002 | 0.002 | 0.003 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.330 | A | 0.268 | A | 0.402 | A | 0.333 | A | 0.270 | A | 0.407 | 0.003 | 0.002 | 0.005 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.210 | A | 0.183 | A | 0.370 | A | 0.212 | A | 0.184 | A | 0.372 | 0.002 | 0.001 | 0.002 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.479 | A | 0.390 | C | 0.727 | A | 0.481 | A | 0.391 | C | 0.730 | 0.002 | 0.001 | 0.003 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.490 | A | 0.430 | A | 0.440 | A | 0.492 | A | 0.432 | A | 0.443 | 0.002 | 0.002 | 0.003 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.522 | A | 0.587 | B | 0.614 | A | 0.530 | A | 0.587 | B | 0.620 | 0.008 | 0.000 | 0.006 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.257 | A | 0.321 | A | 0.378 | A | 0.260 | A | 0.321 | A | 0.380 | 0.003 | 0.000 | 0.002 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | E | 0.923 | D | 0.834 | E | 0.984 | E | 0.927 | D | 0.834 | E | 0.989 | 0.004 | 0.000 | 0.005 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | C | 0.720 | C | 0.790 | E | 0.944 | C | 0.722 | C | 0.791 | E | 0.947 | 0.002 | 0.001 | 0.003 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.561 | C | 0.767 | A | 0.595 | A | 0.570 | C | 0.774 | B | 0.613 | 0.009 | 0.007 | 0.018 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-35. Intersection Level of Service Analysis – Year 2035 – No Project Alternative.**

| # | Study Intersection | Year 2035 Baseline Without Project | | | | | | Year 2035 No Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.555 | A | 0.510 | A | 0.471 | A | 0.557 | A | 0.511 | A | 0.474 | 0.002 | 0.001 | 0.003 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.406 | A | 0.423 | A | 0.345 | A | 0.407 | A | 0.424 | A | 0.347 | 0.001 | 0.001 | 0.002 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.544 | A | 0.502 | A | 0.370 | A | 0.545 | A | 0.502 | A | 0.372 | 0.001 | 0.000 | 0.002 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.545 | A | 0.484 | A | 0.426 | A | 0.545 | A | 0.484 | A | 0.426 | 0.000 | 0.000 | 0.000 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.647 | B | 0.607 | C | 0.717 | B | 0.647 | B | 0.608 | C | 0.718 | 0.000 | 0.001 | 0.001 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.333 | A | 0.447 | A | 0.339 | A | 0.333 | A | 0.447 | A | 0.339 | 0.000 | 0.000 | 0.000 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | E | 0.927 | E | 0.955 | C | 0.714 | E | 0.930 | E | 0.959 | C | 0.718 | 0.003 | 0.004 | 0.004 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | C | 0.763 | D | 0.814 | D | 0.817 | C | 0.764 | D | 0.814 | D | 0.818 | 0.001 | 0.000 | 0.001 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | D | 0.888 | C | 0.775 | E | 0.910 | D | 0.888 | C | 0.776 | E | 0.911 | 0.000 | 0.001 | 0.001 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | D | 0.806 | C | 0.704 | D | 0.900 | D | 0.807 | C | 0.706 | E | 0.901 | 0.001 | 0.002 | 0.001 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.367 | A | 0.280 | B | 0.601 | A | 0.367 | A | 0.280 | B | 0.601 | 0.000 | 0.000 | 0.000 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | B | 0.684 | B | 0.667 | D | 0.892 | B | 0.687 | B | 0.668 | D | 0.896 | 0.003 | 0.001 | 0.004 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | B | 0.635 | A | 0.563 | E | 0.987 | B | 0.641 | A | 0.565 | E | 0.990 | 0.006 | 0.002 | 0.003 | N | N | N |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.484 | A | 0.242 | A | 0.240 | A | 0.485 | A | 0.242 | A | 0.242 | 0.001 | 0.000 | 0.002 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.257 | A | 0.458 | A | 0.301 | A | 0.258 | A | 0.461 | 0.003 | 0.001 | 0.003 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.538 | A | 0.398 | B | 0.690 | A | 0.541 | A | 0.400 | B | 0.693 | 0.003 | 0.002 | 0.003 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.362 | A | 0.295 | A | 0.418 | A | 0.365 | A | 0.297 | A | 0.423 | 0.003 | 0.002 | 0.005 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.255 | A | 0.213 | A | 0.388 | A | 0.257 | A | 0.214 | A | 0.390 | 0.002 | 0.001 | 0.002 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | B | 0.631 | A | 0.500 | C | 0.798 | B | 0.633 | A | 0.501 | D | 0.800 | 0.002 | 0.001 | 0.002 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.492 | A | 0.550 | A | 0.538 | A | 0.494 | A | 0.552 | A | 0.541 | 0.002 | 0.002 | 0.003 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.532 | B | 0.602 | B | 0.619 | A | 0.539 | B | 0.603 | B | 0.625 | 0.007 | 0.001 | 0.006 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.269 | A | 0.346 | A | 0.383 | A | 0.273 | A | 0.346 | A | 0.386 | 0.004 | 0.000 | 0.003 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | E | 0.934 | D | 0.888 | E | 0.996 | E | 0.938 | D | 0.889 | F | 1.002 | 0.004 | 0.001 | 0.006 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | C | 0.741 | D | 0.838 | E | 0.947 | C | 0.743 | D | 0.839 | E | 0.950 | 0.002 | 0.001 | 0.003 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | B | 0.623 | B | 0.639 | B | 0.662 | B | 0.624 | B | 0.646 | B | 0.664 | 0.001 | 0.007 | 0.002 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-36. Intersection Level of Service Analysis –Year 2046 – No Project Alternative.**

| # | Study Intersection | Year 2046 Baseline Without Project | | | | | | Year 2046 No Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.557 | A | 0.527 | A | 0.483 | A | 0.559 | A | 0.528 | A | 0.485 | 0.002 | 0.001 | 0.002 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.406 | A | 0.428 | A | 0.352 | A | 0.407 | A | 0.428 | A | 0.353 | 0.001 | 0.000 | 0.001 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.544 | A | 0.497 | A | 0.377 | A | 0.545 | A | 0.497 | A | 0.378 | 0.001 | 0.000 | 0.001 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.542 | A | 0.476 | A | 0.457 | A | 0.542 | A | 0.476 | A | 0.457 | 0.000 | 0.000 | 0.000 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.653 | B | 0.619 | C | 0.723 | B | 0.654 | B | 0.620 | C | 0.724 | 0.001 | 0.001 | 0.001 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.340 | A | 0.447 | A | 0.346 | A | 0.340 | A | 0.447 | A | 0.346 | 0.000 | 0.000 | 0.000 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | E | 0.935 | E | 0.947 | C | 0.714 | E | 0.937 | E | 0.951 | C | 0.718 | 0.002 | 0.004 | 0.004 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | C | 0.767 | D | 0.818 | D | 0.811 | C | 0.768 | D | 0.819 | D | 0.811 | 0.001 | 0.001 | 0.000 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | E | 0.905 | C | 0.786 | E | 0.920 | E | 0.905 | C | 0.781 | E | 0.914 | 0.000 | -0.005 | -0.006 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | D | 0.808 | C | 0.709 | E | 0.904 | D | 0.809 | C | 0.710 | E | 0.906 | 0.001 | 0.001 | 0.002 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.373 | A | 0.278 | B | 0.601 | A | 0.373 | A | 0.278 | B | 0.601 | 0.000 | 0.000 | 0.000 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | B | 0.688 | B | 0.680 | E | 0.904 | B | 0.691 | B | 0.681 | E | 0.907 | 0.003 | 0.001 | 0.003 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | B | 0.644 | A | 0.570 | F | 1.003 | B | 0.649 | A | 0.572 | F | 1.006 | 0.005 | 0.002 | 0.003 | N | N | N |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.484 | A | 0.236 | A | 0.240 | A | 0.485 | A | 0.236 | A | 0.242 | 0.001 | 0.000 | 0.002 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.305 | A | 0.258 | A | 0.462 | A | 0.307 | A | 0.260 | A | 0.465 | 0.002 | 0.002 | 0.003 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.537 | A | 0.405 | B | 0.680 | A | 0.539 | A | 0.406 | B | 0.683 | 0.002 | 0.001 | 0.003 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.362 | A | 0.300 | A | 0.420 | A | 0.365 | A | 0.302 | A | 0.425 | 0.003 | 0.002 | 0.005 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.255 | A | 0.215 | A | 0.388 | A | 0.257 | A | 0.216 | A | 0.390 | 0.002 | 0.001 | 0.002 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | B | 0.652 | A | 0.504 | D | 0.817 | B | 0.654 | A | 0.505 | D | 0.819 | 0.002 | 0.001 | 0.002 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.508 | A | 0.557 | A | 0.545 | A | 0.511 | A | 0.559 | A | 0.548 | 0.003 | 0.002 | 0.003 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.542 | A | 0.598 | B | 0.630 | A | 0.549 | A | 0.599 | B | 0.635 | 0.007 | 0.001 | 0.005 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.278 | A | 0.351 | A | 0.389 | A | 0.281 | A | 0.352 | A | 0.391 | 0.003 | 0.001 | 0.002 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | E | 0.959 | D | 0.898 | E | 0.995 | E | 0.963 | D | 0.898 | E | 1.000 | 0.004 | 0.000 | 0.005 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | C | 0.745 | D | 0.848 | E | 0.968 | C | 0.747 | D | 0.849 | E | 0.971 | 0.002 | 0.001 | 0.003 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | B | 0.629 | B | 0.633 | B | 0.659 | B | 0.630 | B | 0.640 | B | 0.661 | 0.001 | 0.007 | 0.002 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

### Contribution of the No Project Alternative

The tables also show future operating conditions with the No Project Alternative. The No Project conditions were compared to baseline and the future without project conditions for each year to determine cumulative and cumulatively considerable impacts, and then the impacts were assessed using the significant impact criteria. Appendix G contains all of the traffic forecasts and LOS calculation worksheets for each analysis scenario.

None of the 25 intersections would exceed the Threshold of Significance criteria in 2016, 2023, 2035, or 2046. Therefore the No Project Alternative would not result in a cumulatively considerable contribution to a significant cumulative impact at an analysis location.

The amount of Project-related traffic that would be added at all other study locations would not be of sufficient magnitude to meet or exceed any of the thresholds of significance. This includes some intersections that would operate at LOS E or F where the amount of Project-related traffic would be too small to trigger a significant traffic impact. Accordingly, the No Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact at other locations.

### Mitigation Measures and Residual Cumulative Impacts

Mitigation is not required and there would be no residual cumulative impacts.

## 5.4.1.10.3 Cumulative Impact TRANS-4: Would No Project operations result in a less than significant increase in highway congestion?

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects Including the Proposed Project

Freeways in the region are affected by new projects that add traffic or change the distribution of traffic. Most of the related projects in Table 4-1 can be expected to add traffic to the freeway system. The effects were evaluated at the freeway monitoring stations expected to be affected by the proposed Project:

- I-110 south of C Street (CMP Station 1045)
- SR-91 east of Alameda Street and Santa Fe Avenue (CMP Station 1033)
- I-405 at Santa Fe Avenue (CMP Station 1066)
- I-710 between Pacific Coast Highway and Willow Street (CMP Station 1078)
- I-710 between I-405 and Del Amo Boulevard (CMP Station 1079)
- I-710 between I-105 and Firestone Boulevard (CMP Station 1080).

Tables 5-37 through 5-40 show the expected volumes of traffic on those segments in the Future Without No Project (i.e., with the related projects and other background growth). The past, present, and reasonably foreseeable future projects would add traffic to the freeway system and at the CMP monitoring stations, resulting in significant cumulative impacts to monitoring stations operating at LOS F or worse.

**Table 5-37. Year 2016 No Project Cumulative Freeway Analysis.**

**AM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Baseline | | | Year 2016 Future With No Project | | | Δ D/C | Cum Imp | Baseline | | | Year 2016 Future With No Project | | | Δ D/C | Cum Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,374 | 0.55 | C | 4,200 | 0.53 | B | -0.02 | No | 3,373 | 0.42 | B | 3,600 | 0.45 | B | 0.03 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 6,060 | 0.51 | B | 8,100 | 0.68 | C | 0.17 | No | 10,662 | 0.89 | D | 8,600 | 0.72 | C | -0.17 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 11,533 | 1.15 | F(0) | 9,400 | 0.94 | E | -0.21 | No | 9,543 | 0.95 | E | 10,400 | 1.04 | F(0) | 0.09 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,771 | 0.96 | E | 6,500 | 1.08 | F(0) | 0.12 | Yes | 6,690 | 1.12 | F(0) | 7,200 | 1.20 | F(0) | 0.09 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 6,370 | 0.80 | D | 6,900 | 0.86 | D | 0.07 | No | 7,807 | 0.98 | E | 8,200 | 1.03 | F(0) | 0.05 | Yes |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,173 | 1.02 | F(0) | 8,200 | 1.03 | F(0) | 0.00 | No | 9,283 | 1.16 | F(0) | 9,100 | 1.14 | F(0) | -0.02 | No |

**PM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Baseline | | | Year 2016 Future With No Project | | | Δ D/C | Cum Imp | Baseline | | | Year 2016 Future With No Project | | | Δ D/C | Cum Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 2,490 | 0.31 | A | 4,200 | 0.53 | B | 0.21 | No | 4,203 | 0.53 | B | 4,800 | 0.60 | C | 0.08 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,924 | 0.74 | C | 10,200 | 0.85 | D | 0.11 | No | 7,205 | 0.60 | C | 9,200 | 0.77 | C | 0.17 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,863 | 0.99 | E | 10,400 | 1.04 | F(0) | 0.05 | Yes | 11,162 | 1.12 | F(0) | 11,200 | 1.12 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,951 | 0.99 | E | 6,500 | 1.08 | F(0) | 0.09 | Yes | 5,660 | 0.94 | E | 6,000 | 1.00 | E | 0.06 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 7,742 | 0.97 | E | 8,100 | 1.01 | F(0) | 0.05 | Yes | 6,783 | 0.85 | D | 6,900 | 0.86 | D | 0.02 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,122 | 1.14 | F(0) | 9,000 | 1.13 | F(0) | -0.02 | No | 9,104 | 1.14 | F(0) | 8,900 | 1.11 | F(0) | -0.03 | No |

**Table 5-38. Year 2023 No Project Cumulative Freeway Analysis.**

| AM Peak Hour | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | Δ D/C | Cum Imp | Southbound/Westbound | | | | | | Δ D/C | Cum Imp |
| | | | | Baseline | | | Year 2023 Future With No Project | | | | | Baseline | | | Year 2023 Future With No Project | | | | |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,374 | 0.55 | C | 4,800 | 0.60 | C | 0.05 | No | 3,373 | 0.42 | B | 4,100 | 0.51 | B | 0.09 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 6,060 | 0.51 | B | 8,600 | 0.72 | C | 0.21 | No | 10,662 | 0.89 | D | 9,000 | 0.75 | C | -0.14 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 11,533 | 1.15 | F(0) | 9,800 | 0.98 | E | -0.17 | No | 9,543 | 0.95 | E | 10,900 | 1.09 | F(0) | 0.14 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,771 | 0.96 | E | 7,800 | 1.30 | F(1) | 0.34 | Yes | 6,690 | 1.12 | F(0) | 8,400 | 1.40 | F(2) | 0.29 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 6,370 | 0.80 | D | 8,200 | 1.03 | F(0) | 0.23 | Yes | 7,807 | 0.98 | E | 9,400 | 1.18 | F(0) | 0.20 | Yes |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,173 | 1.02 | F(0) | 8,600 | 1.08 | F(0) | 0.05 | Yes | 9,283 | 1.16 | F(0) | 9,600 | 1.20 | F(0) | 0.04 | Yes |

| PM Peak Hour | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | Δ D/C | Cum Imp | Southbound/Westbound | | | | | | Δ D/C | Cum Imp |
| | | | | Baseline | | | Year 2023 Future With No Project | | | | | Baseline | | | Year 2023 Future With No Project | | | | |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 2,490 | 0.31 | A | 4,300 | 0.54 | B | 0.23 | No | 4,203 | 0.53 | B | 5,000 | 0.63 | C | 0.10 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,924 | 0.74 | C | 10,500 | 0.88 | D | 0.13 | No | 7,205 | 0.60 | C | 9,500 | 0.79 | D | 0.19 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,863 | 0.99 | E | 10,600 | 1.06 | F(0) | 0.07 | Yes | 11,162 | 1.12 | F(0) | 11,500 | 1.15 | F(0) | 0.03 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,951 | 0.99 | E | 7,200 | 1.20 | F(0) | 0.21 | Yes | 5,660 | 0.94 | E | 6,800 | 1.13 | F(0) | 0.19 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 7,742 | 0.97 | E | 8,800 | 1.10 | F(0) | 0.13 | Yes | 6,783 | 0.85 | D | 7,600 | 0.95 | E | 0.10 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,122 | 1.14 | F(0) | 9,300 | 1.16 | F(0) | 0.02 | Yes | 9,104 | 1.14 | F(0) | 9,200 | 1.15 | F(0) | 0.01 | No |

1 **Table 5-39. Year 2035 No Project Cumulative Freeway Analysis.**

| AM Peak Hour | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | Δ D/C | Cum Imp | Southbound/Westbound | | | | | | Δ D/C | Cum Imp |
| | | | | Baseline | | | Year 2035 Future With No Project | | | | | Baseline | | | Year 2035 Future With No Project | | | | |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,374 | 0.55 | C | 5,000 | 0.63 | C | 0.08 | No | 3,373 | 0.42 | B | 4,200 | 0.53 | B | 0.10 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 6,060 | 0.51 | B | 8,700 | 0.73 | C | 0.22 | No | 10,662 | 0.89 | D | 8,900 | 0.74 | C | -0.15 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 11,533 | 1.15 | F(0) | 9,900 | 0.99 | E | -0.16 | No | 9,543 | 0.95 | E | 10,900 | 1.09 | F(0) | 0.14 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,771 | 0.96 | E | 8,300 | 1.38 | F(2) | 0.42 | Yes | 6,690 | 1.12 | F(0) | 8,700 | 1.45 | F(2) | 0.34 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 6,370 | 0.80 | D | 8,700 | 1.09 | F(0) | 0.29 | Yes | 7,807 | 0.98 | E | 9,700 | 1.21 | F(0) | 0.24 | Yes |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,173 | 1.02 | F(0) | 8,900 | 1.11 | F(0) | 0.09 | Yes | 9,283 | 1.16 | F(0) | 9,800 | 1.23 | F(0) | 0.07 | Yes |
| | | | | | | | | | | | | | | | | | | | |
| **PM Peak Hour** | | | | | | | | | | | | | | | | | | | |
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | Δ D/C | Cum Imp | Southbound/Westbound | | | | | | Δ D/C | Cum Imp |
| | | | | Baseline | | | Year 2035 Future With No Project | | | | | Baseline | | | Year 2035 Future With No Project | | | | |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 2,490 | 0.31 | A | 4,700 | 0.59 | C | 0.28 | No | 4,203 | 0.53 | B | 5,100 | 0.64 | C | 0.11 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,924 | 0.74 | C | 10,500 | 0.88 | D | 0.13 | No | 7,205 | 0.60 | C | 9,500 | 0.79 | D | 0.19 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,863 | 0.99 | E | 10,400 | 1.04 | F(0) | 0.05 | Yes | 11,162 | 1.12 | F(0) | 11,500 | 1.15 | F(0) | 0.03 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,951 | 0.99 | E | 7,300 | 1.22 | F(0) | 0.23 | Yes | 5,660 | 0.94 | E | 7,000 | 1.17 | F(0) | 0.22 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 7,742 | 0.97 | E | 9,000 | 1.13 | F(0) | 0.16 | Yes | 6,783 | 0.85 | D | 7,800 | 0.98 | E | 0.13 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,122 | 1.14 | F(0) | 9,500 | 1.19 | F(0) | 0.05 | Yes | 9,104 | 1.14 | F(0) | 9,400 | 1.18 | F(0) | 0.04 | Yes |

2

3

**Table 5-40. Year 2046 No Project Cumulative Freeway Analysis.**

| AM Peak Hour | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | | Southbound/Westbound | | | | | | | |
| | | | | Baseline | | | Year 2046 Future With No Project | | | Δ D/C | Cum Imp | | Baseline | | | Year 2046 Future With No Project | | | Δ D/C | Cum Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,374 | 0.55 | C | 5,000 | 0.63 | C | 0.08 | No | | 3,373 | 0.42 | B | 4,200 | 0.53 | B | 0.10 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 6,060 | 0.51 | B | 8,700 | 0.73 | C | 0.22 | No | | 10,662 | 0.89 | D | 8,900 | 0.74 | C | -0.15 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 11,533 | 1.15 | F(0) | 9,900 | 0.99 | E | -0.16 | No | | 9,543 | 0.95 | E | 10,900 | 1.09 | F(0) | 0.14 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,771 | 0.96 | E | 9,300 | 1.55 | F(3) | 0.59 | Yes | | 6,690 | 1.12 | F(0) | 9,500 | 1.58 | F(3) | 0.47 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 6,370 | 0.80 | D | 9,600 | 1.20 | F(0) | 0.40 | Yes | | 7,807 | 0.98 | E | 10,500 | 1.31 | F(1) | 0.34 | Yes |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,173 | 1.02 | F(0) | 9,200 | 1.15 | F(0) | 0.13 | Yes | | 9,283 | 1.16 | F(0) | 10,000 | 1.25 | F(0) | 0.09 | Yes |

| PM Peak Hour | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | | Southbound/Westbound | | | | | | | |
| | | | | Baseline | | | Year 2046 Future With No Project | | | Δ D/C | Cum Imp | | Baseline | | | Year 2046 Future With No Project | | | Δ D/C | Cum Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 2,490 | 0.31 | A | 4,700 | 0.59 | C | 0.28 | No | | 4,203 | 0.53 | B | 5,100 | 0.64 | C | 0.11 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,924 | 0.74 | C | 10,500 | 0.88 | D | 0.13 | No | | 7,205 | 0.60 | C | 9,500 | 0.79 | D | 0.19 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,863 | 0.99 | E | 10,400 | 1.04 | F(0) | 0.05 | Yes | | 11,162 | 1.12 | F(0) | 11,500 | 1.15 | F(0) | 0.03 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,951 | 0.99 | E | 7,800 | 1.30 | F(1) | 0.31 | Yes | | 5,660 | 0.94 | E | 7,500 | 1.25 | F(0) | 0.31 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 7,742 | 0.97 | E | 9,500 | 1.19 | F(0) | 0.22 | Yes | | 6,783 | 0.85 | D | 8,200 | 1.03 | F(0) | 0.18 | Yes |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,122 | 1.14 | F(0) | 9,700 | 1.21 | F(0) | 0.07 | Yes | | 9,104 | 1.14 | F(0) | 9,600 | 1.20 | F(0) | 0.06 | Yes |

#### Contribution of the No Project

The No Project Alternative would not result in a change to trips on the surrounding freeway system, as drayage operations currently serving the intermodal yards near downtown Los Angeles would continue without the No Project. Accordingly, the No Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact.

#### Mitigation Measures and Residual Cumulative Impacts

Mitigation is not required and there would be no residual cumulative impacts.

### 5.4.1.11 Utilities and Public Services

The past, present, and reasonably foreseeable future related projects would not result in significant cumulative impacts on utilities and public services with the exception of solid waste disposal (Section 4.2.11). Accordingly, the No Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact with respect to those resource areas. In the case of solid waste, the continued generation of solid waste by the No Project Alternative would make a cumulatively considerable contribution to a significant cumulative impact.

### 5.4.1.12 Water Resources

The past, present, and reasonably foreseeable future related projects are considered to have a significant cumulative impact on surface water quality in the project area, as a result of stormwater and point-source discharges, but not on drainage, water flows, exposure of contaminated soils, or ground water resources (Section 4.2.12). Although operational activity levels under the No Project Alternative would increase, the resulting discharges of pollutants would be negligible, and operations would not result in additional water quality violations, waste discharges, or changes to existing drainage, runoff, and groundwater resources within the Project area. Accordingly, the No Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact related to water resources.

## 5.4.2 Reduced Project Alternative

As describe in Section 5.3.2, under the Reduced Project Alternative, the SCIG facility and relocated tenant facilities described in the proposed Project would be constructed, but SCIG's activity level would be limited by lease conditions. All physical features would be the same as the proposed Project, and the construction methods and schedule would be the same as the proposed Project (Section 2.4.3). At full operation, the Reduced Project would handle approximately 1.85 million TEUs per year (instead of the 2.8 million TEU associated with the proposed Project), and it is anticipated it would reach its operational capacity in its first year of operation (2016).

Because the construction and physical details would be identical to the proposed Project, the cumulative impacts of the Reduced Project Alternative related to construction, and most of the impacts related to operations, would be the same as described for the proposed Project in Chapter 4. The impacts that would be the same are not repeated in this section; the reader is referred to Chapter 4. The only difference between the proposed Project and the Reduced Project that would affect cumulative impacts is that under the

Reduced Project more trucks (approximately 670,000 trips per year) would be traveling on I-710 between the ports and the Hobart Yard. These trips represent the demand that could not be accommodated at the SCIG facility and would instead be handled by Hobart. These additional trips would result in different impacts on air, hazards, and traffic, as described in Section 5.2.2, and the consequences of those impacts for the cumulative analyses of those resources are addressed below.

#### 5.4.2.1 Air Quality

As described in Section 4.2.2, the related past, present, and reasonably foreseeable future projects in the project area would have significant cumulative air quality impacts related to construction and operation. Construction of the Reduced Project Alternative would make a cumulatively considerable contribution to the significant cumulative impacts of construction of the related projects.

Operation of the Reduced Project Alternative, as in the case of the proposed Project, would not make a cumulatively considerable contribution to the significant cumulative impact related to criteria pollutant emissions. The Reduced Project Alternative would result in somewhat lower offsite ambient concentrations of key air pollutants than the proposed Project (see Tables 5-16 and 3.2-25, respectively), but would nevertheless make a cumulatively considerable contribution to a significant cumulative impact. Given the Reduced Project Alternative's distance from sensitive receptors and the localized nature of the emissions, operations would not result in cumulatively considerable contributions to a significant cumulative odor impact. The past, present, and reasonably foreseeable future projects, including the Reduced Project Alternative, would not result in a significant cumulative impact related to obstruction of the AQMP or other air quality plan. Accordingly, the Reduced Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact. Operation of the Reduced Project Alternative would result in emissions of TACs, but because those emissions would be considerably less than under baseline conditions, the Reduced Project Alternative would result in lower cancer risks and less-than-significant hazard indices compared to the baseline (Table 5-19), and lower cancer risks and hazard indices than for the proposed Project (Table 3.2-32). Accordingly, like the proposed Project, the Reduced Project Alternative would not make a cumulatively considerable contribution to significant cumulative health risk impacts.

#### 5.4.2.2 Hazards and Hazardous Materials

As described in Section 4.2.7, the past, present, and reasonably foreseeable future projects represent a less than significant cumulative impact. Accordingly, although risks would be somewhat greater under the Reduced Project than under the proposed Project, as a result of the increased truck miles that would be traveled, the Reduced Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact.

#### 5.4.2.3 Transportation

The Reduced Project Alternative includes the construction of the Proposed SCIG intermodal railyard, and its lead track. The Proposed Project would open in 2016 and operate at a "reduced" capacity of one million container lifts per year (1.85 million twenty-foot equivalents per year). Access from the proposed Project site is from its Pacific Coast Highway entrance which is assumed to maintain baseline geometrics as

unsignalized ramps. The Reduced Project would displace existing uses on the project site, with some of the uses moving to relocation sites south of Pacific Coast Highway. The Reduced Project Alternative would generate identical construction trips as the proposed Project, and similarly to the proposed Project (Section 4.2.10) does not make a cumulatively considerable contribution to a cumulative construction traffic impact. Similar to the proposed Project (Section 4.2.10) the Reduced Project Alternative would not make a cumulatively considerable contribution to cumulative public transit impacts. Because there would be no increase in the number of trains east of the Hobart Yard, the Reduced Project Alternative would be similar to the proposed Project in that it would not contribute to a significant cumulative impact related to regional rail traffic.

The Reduced Capacity Project alternative is analyzed for future years 2016, 2023, 2035, and 2046. The remaining market share of off-dock intermodal trips from the San Pedro Bay Ports would be allocated to the Union Pacific ICTF facility, modernized to 2.8 million TEUs per year capacity, and the downtown Los Angeles railyards: BNSF's Hobart Yard and UP's East Los Angeles intermodal yard.

Quantitative trip generation estimates were developed for the Reduced Capacity alternative using the same QuickTrip trip generation model as used for the Reduced Capacity project and compared to the Future Baseline (No Project with ICTF Modernization Alternative) scenario. Traffic generated from Reduced Capacity alternative would be less than for the Project across all years of analysis and modes (truck and auto). Because Reduced Project alternative would have lower TEU throughput than the proposed Project, it would generate fewer truck movements to handle the containers and would require fewer employees due to the lower throughout. Table 5-41 shows the trip generation potential of the Reduced Project Alternative as compared to the proposed Project. The Reduced Project Alternative would also generate less total train movements and fewer total peak hour rail trips than the proposed Project.

**Table 5-41. Reduced Project Alternative Pacific Coast Highway Entrance Peak Hour Trip Generation (in Passenger Car Equivalents).**

| Year | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|
| | In | Out | In | Out | In | Out |
| 2016 | 140 | 215 | 410 | 400 | 280 | 240 |
| 2023 | 275 | 300 | 380 | 370 | 240 | 200 |
| 2035 | 275 | 300 | 380 | 370 | 240 | 200 |
| 2046 | 275 | 300 | 380 | 370 | 240 | 200 |

For all analysis years the annual activity at the Reduced Project occurs at the same level (one million container lifts). In analysis year 2016 port worker shifts are assumed to be more focused on day shift activities, therefore drayage activity would be lower in the AM peak hour and higher in the MD and PM peak hours.

Table 5-42 shows the net change in trip generation from the project site with the construction of the Reduced Project Alternative, which represents an incremental change over the baseline conditions at the project site—existing uses operating at existing activity levels.

**Table 5-42. Reduced Capacity Alternative Net Change in Peak Hour Trips Proposed Project Pacific Coast Highway Entrance (in Passenger Car Equivalents).**

| Year | AM Peak Hour | | | MD Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | In | Out | Total | In | Out | Total | In | Out | Total |
| 2016 | (200) | 65 | (135) | 210 | 165 | 375 | 30 | 5 | 35 |
| 2023 | (65) | 150 | 85 | 180 | 135 | 315 | (10) | (35) | (45) |
| 2035 | (65) | 150 | 85 | 180 | 135 | 315 | (10) | (35) | (45) |
| 2046 | (65) | 150 | 85 | 180 | 135 | 315 | (10) | (35) | (45) |

#### 5.4.2.3.1 Methodology

Impacts related to the Reduced Project Alternative were assessed using the same methodology as in the assessment of the proposed Project Alternative (Chapter 4.2.10). The differences between Future Baseline conditions and the Reduced Project Alternative were quantified. Local traffic growth was forecast for the years 2016, 2023, 2035 and 2046 based on a computerized traffic analysis tool known as the Port Area Travel Demand Model, which includes regional traffic growth as well as growth for the port and the local area. Details of this methodology as well as the thresholds of significance used to determine significant impacts are included in Section 4.2.10.

#### 5.4.2.3.2 Alt 2 Cumulative Impact TRANS-2: Would long-term vehicular traffic have a significant adverse impact on at least one study intersection's volume/capacity ratios or level of service?

##### Impacts of Past, Present, and Reasonably Foreseeable Future Projects Including the Reduced Project

Cumulative impacts were analyzed using a two-step process. An initial comparison was made to compare the cumulative "Reduced Project" LOS condition against baseline conditions to determine if a cumulative impact would occur relative to baseline conditions. A cumulative impact was deemed to occur if it exceeded the allowable threshold of significance. If a cumulative impact was determined, then a second comparison was conducted by calculating the difference in LOS for the future conditions "Reduced Project" and the future conditions "Without Project" levels of service. If the difference in LOS was calculated to exceed the threshold guidelines, then it was determined that the project component of the analysis would comprise a cumulatively considerable contribution of the impact.

Tables 5-43 to 5-46 summarize future intersection operating conditions of the Reduced Project Alternative at each study intersection in 2016, 2023, 2035 and 2046, respectively with the Baseline. A number of the study intersections, especially along Anaheim Street and PCH, will operate at LOS D in 2016 and worsen over the years to LOS E. Tables 5-47 to 5-50 compare the future "Without Project" to the Reduced Project Alternative at each study intersection in 2016, 2023, 2035 and 2046, respectively. Cumulative impacts are shown to occur at one intersection in 2016, at seven locations in 2023, and at nine locations in both 2035 and 2046. Accordingly, past, present, and reasonably foreseeable future projects, including the Reduced Project Alternative, have a significant cumulative impact on study intersections.

**Table 5-43. Intersection Level of Service Analysis – Year 2016 – Reduced Project Alternative.**

| # | Study Intersection | Baseline | | | | | | Year 2016 Reduced Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.454 | A | 0.391 | A | 0.466 | A | 0.518 | A | 0.452 | A | 0.496 | 0.064 | 0.061 | 0.030 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.205 | A | 0.334 | A | 0.321 | A | 0.311 | A | 0.402 | A | 0.350 | 0.106 | 0.068 | 0.029 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.302 | A | 0.3 | A | 0.33 | A | 0.420 | A | 0.441 | A | 0.387 | 0.118 | 0.141 | 0.057 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.222 | A | 0.362 | A | 0.351 | A | 0.266 | A | 0.4 | A | 0.375 | 0.044 | 0.038 | 0.024 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.641 | A | 0.363 | B | 0.649 | B | 0.631 | A | 0.502 | B | 0.649 | -0.010 | 0.139 | 0.000 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.307 | A | 0.196 | A | 0.202 | A | 0.216 | A | 0.409 | A | 0.328 | -0.091 | 0.213 | 0.126 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.569 | A | 0.533 | A | 0.597 | A | 0.578 | C | 0.727 | B | 0.625 | 0.009 | 0.194 | 0.028 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | A | 0.526 | A | 0.577 | B | 0.678 | B | 0.665 | C | 0.748 | C | 0.776 | 0.139 | 0.171 | 0.098 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.619 | A | 0.598 | C | 0.722 | B | 0.697 | B | 0.69 | D | 0.815 | 0.078 | 0.092 | 0.093 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | A | 0.526 | A | 0.495 | B | 0.618 | C | 0.712 | C | 0.717 | C | 0.787 | 0.186 | 0.222 | 0.169 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.393 | A | 0.391 | A | 0.56 | A | 0.272 | A | 0.215 | A | 0.488 | -0.121 | -0.176 | -0.072 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.502 | A | 0.597 | C | 0.748 | A | 0.495 | A | 0.596 | C | 0.734 | -0.007 | -0.001 | -0.014 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | A | 0.481 | A | 0.468 | B | 0.612 | A | 0.461 | A | 0.414 | C | 0.709 | -0.020 | -0.054 | 0.097 | N | N | Y |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.365 | A | 0.358 | A | 0.331 | A | 0.355 | A | 0.182 | A | 0.231 | -0.010 | -0.176 | -0.100 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.288 | A | 0.377 | A | 0.252 | A | 0.187 | A | 0.322 | -0.046 | -0.101 | -0.055 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.323 | A | 0.263 | A | 0.463 | A | 0.488 | A | 0.278 | A | 0.568 | 0.165 | 0.015 | 0.105 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.338 | A | 0.303 | A | 0.377 | A | 0.293 | A | 0.237 | A | 0.345 | -0.045 | -0.066 | -0.032 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.257 | A | 0.237 | A | 0.332 | A | 0.220 | A | 0.157 | A | 0.338 | -0.037 | -0.080 | 0.006 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.379 | A | 0.373 | A | 0.508 | A | 0.438 | A | 0.369 | B | 0.685 | 0.059 | -0.004 | 0.177 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.415 | A | 0.457 | A | 0.482 | A | 0.327 | A | 0.383 | A | 0.363 | -0.088 | -0.074 | -0.119 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.572 | A | 0.425 | B | 0.68 | A | 0.395 | A | 0.44 | A | 0.474 | -0.177 | 0.015 | -0.206 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.378 | A | 0.444 | A | 0.431 | A | 0.179 | A | 0.268 | A | 0.288 | -0.199 | -0.176 | -0.143 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.745 | B | 0.617 | C | 0.799 | C | 0.728 | B | 0.696 | D | 0.856 | -0.017 | 0.079 | 0.057 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | A | 0.588 | B | 0.649 | C | 0.723 | B | 0.622 | C | 0.739 | C | 0.775 | 0.034 | 0.090 | 0.052 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.489 | A | 0.511 | A | 0.522 | A | 0.507 | B | 0.647 | A | 0.484 | 0.018 | 0.136 | -0.038 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-44. Intersection Level of Service Analysis – Year 2023 – Reduced Project Alternative.**

| # | Study Intersection | Baseline | | | | | | Year 2023 Reduced Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.454 | A | 0.391 | A | 0.466 | B | 0.623 | A | 0.532 | A | 0.507 | 0.169 | 0.141 | 0.041 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.205 | A | 0.334 | A | 0.321 | A | 0.438 | A | 0.45 | A | 0.355 | 0.233 | 0.116 | 0.034 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.302 | A | 0.3 | A | 0.33 | A | 0.581 | A | 0.523 | A | 0.394 | 0.279 | 0.223 | 0.064 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.222 | A | 0.362 | A | 0.351 | A | 0.507 | A | 0.448 | A | 0.401 | 0.285 | 0.086 | 0.050 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.641 | A | 0.363 | B | 0.649 | B | 0.608 | A | 0.589 | C | 0.706 | -0.033 | 0.226 | 0.057 | N | N | Y |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.307 | A | 0.196 | A | 0.202 | A | 0.391 | A | 0.461 | A | 0.360 | 0.084 | 0.265 | 0.158 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.569 | A | 0.533 | A | 0.597 | E | 0.944 | E | 0.927 | C | 0.708 | 0.375 | 0.394 | 0.111 | Y | Y | N |
| 8 | Anaheim St / Harbor Ave [B] | A | 0.526 | A | 0.577 | B | 0.678 | C | 0.753 | D | 0.815 | C | 0.796 | 0.227 | 0.238 | 0.118 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.619 | A | 0.598 | C | 0.722 | D | 0.850 | C | 0.746 | D | 0.897 | 0.231 | 0.148 | 0.175 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | A | 0.526 | A | 0.495 | B | 0.618 | D | 0.837 | C | 0.754 | D | 0.884 | 0.311 | 0.259 | 0.266 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.393 | A | 0.391 | A | 0.56 | A | 0.356 | A | 0.259 | A | 0.583 | -0.037 | -0.132 | 0.023 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.502 | A | 0.597 | C | 0.748 | B | 0.636 | B | 0.641 | D | 0.817 | 0.134 | 0.044 | 0.069 | N | N | Y |
| 13 | Anaheim St / Alameda St [A] | A | 0.481 | A | 0.468 | B | 0.612 | A | 0.558 | A | 0.482 | E | 0.944 | 0.077 | 0.014 | 0.332 | N | N | Y |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.365 | A | 0.358 | A | 0.331 | A | 0.440 | A | 0.204 | A | 0.238 | 0.075 | -0.154 | -0.093 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.288 | A | 0.377 | A | 0.290 | A | 0.215 | A | 0.397 | -0.008 | -0.073 | 0.020 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.323 | A | 0.263 | A | 0.463 | A | 0.500 | A | 0.325 | B | 0.612 | 0.177 | 0.062 | 0.149 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.338 | A | 0.303 | A | 0.377 | A | 0.315 | A | 0.277 | A | 0.387 | -0.023 | -0.026 | 0.010 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.257 | A | 0.237 | A | 0.332 | A | 0.210 | A | 0.185 | A | 0.370 | -0.047 | -0.052 | 0.038 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.379 | A | 0.373 | A | 0.508 | A | 0.485 | A | 0.394 | C | 0.729 | 0.106 | 0.021 | 0.221 | N | N | Y |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.415 | A | 0.457 | A | 0.482 | A | 0.475 | A | 0.39 | A | 0.437 | 0.060 | -0.067 | -0.045 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.572 | A | 0.425 | B | 0.68 | A | 0.482 | A | 0.557 | A | 0.588 | -0.090 | 0.132 | -0.092 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.378 | A | 0.444 | A | 0.431 | A | 0.243 | A | 0.314 | A | 0.367 | -0.135 | -0.130 | -0.064 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.745 | B | 0.617 | C | 0.799 | D | 0.899 | D | 0.829 | E | 0.940 | 0.154 | 0.212 | 0.141 | N | N | Y |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | A | 0.588 | B | 0.649 | C | 0.723 | C | 0.704 | C | 0.773 | E | 0.917 | 0.116 | 0.124 | 0.194 | N | N | Y |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.489 | A | 0.511 | A | 0.522 | A | 0.548 | C | 0.739 | B | 0.601 | 0.059 | 0.228 | 0.079 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-45. Intersection Level of Service Analysis – Year 2035 – Reduced Project Alternative.**

| # | Study Intersection | Baseline | | | | | | Year 2035 Reduced Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.454 | A | 0.391 | A | 0.466 | A | 0.568 | A | 0.526 | A | 0.478 | 0.114 | 0.135 | 0.012 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.205 | A | 0.334 | A | 0.321 | A | 0.425 | A | 0.445 | A | 0.356 | 0.220 | 0.111 | 0.035 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.302 | A | 0.3 | A | 0.33 | A | 0.564 | A | 0.527 | A | 0.383 | 0.262 | 0.227 | 0.053 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.222 | A | 0.362 | A | 0.351 | A | 0.545 | A | 0.484 | A | 0.426 | 0.323 | 0.122 | 0.075 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.641 | A | 0.363 | B | 0.649 | B | 0.643 | B | 0.603 | C | 0.717 | 0.002 | 0.240 | 0.068 | N | N | Y |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.307 | A | 0.196 | A | 0.202 | A | 0.333 | A | 0.447 | A | 0.339 | 0.026 | 0.251 | 0.137 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.569 | A | 0.533 | A | 0.597 | E | 0.916 | E | 0.936 | B | 0.693 | 0.347 | 0.403 | 0.096 | Y | Y | N |
| 8 | Anaheim St / Harbor Ave [B] | A | 0.526 | A | 0.577 | B | 0.678 | C | 0.766 | D | 0.83 | D | 0.821 | 0.240 | 0.253 | 0.143 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.619 | A | 0.598 | C | 0.722 | D | 0.879 | C | 0.792 | E | 0.918 | 0.260 | 0.194 | 0.196 | N | N | Y |
| 10 | Anaheim St / E I St / W 9th St [B] | A | 0.526 | A | 0.495 | B | 0.618 | D | 0.870 | C | 0.8 | E | 0.934 | 0.344 | 0.305 | 0.316 | N | N | Y |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.393 | A | 0.391 | A | 0.56 | A | 0.389 | A | 0.307 | B | 0.616 | -0.004 | -0.084 | 0.056 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.502 | A | 0.597 | C | 0.748 | B | 0.697 | C | 0.704 | E | 0.900 | 0.195 | 0.107 | 0.152 | N | Y | Y |
| 13 | Anaheim St / Alameda St [A] | A | 0.481 | A | 0.468 | B | 0.612 | B | 0.611 | A | 0.549 | E | 0.989 | 0.130 | 0.081 | 0.377 | N | N | Y |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.365 | A | 0.358 | A | 0.331 | A | 0.480 | A | 0.238 | A | 0.238 | 0.115 | -0.120 | -0.093 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.288 | A | 0.377 | A | 0.312 | A | 0.267 | A | 0.462 | 0.014 | -0.021 | 0.085 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.323 | A | 0.263 | A | 0.463 | A | 0.552 | A | 0.41 | B | 0.695 | 0.229 | 0.147 | 0.232 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.338 | A | 0.303 | A | 0.377 | A | 0.353 | A | 0.3 | A | 0.410 | 0.015 | -0.003 | 0.033 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.257 | A | 0.237 | A | 0.332 | A | 0.262 | A | 0.223 | A | 0.393 | 0.005 | -0.014 | 0.061 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.379 | A | 0.373 | A | 0.508 | B | 0.644 | A | 0.513 | D | 0.806 | 0.265 | 0.140 | 0.298 | N | N | Y |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.415 | A | 0.457 | A | 0.482 | A | 0.485 | A | 0.497 | A | 0.538 | 0.070 | 0.040 | 0.056 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.572 | A | 0.425 | B | 0.68 | A | 0.514 | B | 0.606 | B | 0.607 | -0.058 | 0.181 | -0.073 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.378 | A | 0.444 | A | 0.431 | A | 0.263 | A | 0.349 | A | 0.378 | -0.115 | -0.095 | -0.053 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.745 | B | 0.617 | C | 0.799 | E | 0.918 | D | 0.896 | E | 0.956 | 0.173 | 0.279 | 0.157 | Y | N | Y |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | A | 0.588 | B | 0.649 | C | 0.723 | C | 0.730 | D | 0.833 | E | 0.922 | 0.142 | 0.184 | 0.199 | N | N | Y |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.489 | A | 0.511 | A | 0.522 | A | 0.579 | C | 0.717 | B | 0.648 | 0.090 | 0.206 | 0.126 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-46. Intersection Level of Service Analysis –Year 2046 – Reduced Project Alternative.**

| # | Study Intersection | Baseline | | | | | | Year 2046 Reduced Project Alternative | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.454 | A | 0.391 | A | 0.466 | A | 0.559 | A | 0.528 | A | 0.485 | 0.105 | 0.137 | 0.019 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.205 | A | 0.334 | A | 0.321 | A | 0.407 | A | 0.428 | A | 0.353 | 0.202 | 0.094 | 0.032 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.302 | A | 0.3 | A | 0.33 | A | 0.545 | A | 0.497 | A | 0.378 | 0.243 | 0.197 | 0.048 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.222 | A | 0.362 | A | 0.351 | A | 0.542 | A | 0.476 | A | 0.457 | 0.320 | 0.114 | 0.106 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.641 | A | 0.363 | B | 0.649 | B | 0.654 | B | 0.620 | C | 0.724 | 0.013 | 0.257 | 0.075 | N | N | Y |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.307 | A | 0.196 | A | 0.202 | A | 0.340 | A | 0.447 | A | 0.346 | 0.033 | 0.251 | 0.144 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.569 | A | 0.533 | A | 0.597 | E | 0.937 | E | 0.951 | C | 0.718 | 0.368 | 0.418 | 0.121 | Y | Y | N |
| 8 | Anaheim St / Harbor Ave [B] | A | 0.526 | A | 0.577 | B | 0.678 | C | 0.768 | D | 0.819 | D | 0.811 | 0.242 | 0.242 | 0.133 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.619 | A | 0.598 | C | 0.722 | E | 0.905 | C | 0.781 | E | 0.914 | 0.286 | 0.183 | 0.192 | Y | N | Y |
| 10 | Anaheim St / E I St / W 9th St [B] | A | 0.526 | A | 0.495 | B | 0.618 | D | 0.809 | C | 0.710 | E | 0.906 | 0.283 | 0.215 | 0.288 | N | N | Y |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.393 | A | 0.391 | A | 0.56 | A | 0.373 | A | 0.278 | B | 0.601 | -0.020 | -0.113 | 0.041 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.502 | A | 0.597 | C | 0.748 | B | 0.691 | B | 0.681 | E | 0.907 | 0.189 | 0.084 | 0.159 | N | N | Y |
| 13 | Anaheim St / Alameda St [A] | A | 0.481 | A | 0.468 | B | 0.612 | B | 0.649 | A | 0.572 | F | 1.006 | 0.168 | 0.104 | 0.394 | N | N | Y |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.365 | A | 0.358 | A | 0.331 | A | 0.485 | A | 0.236 | A | 0.242 | 0.120 | -0.122 | -0.089 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.288 | A | 0.377 | A | 0.307 | A | 0.260 | A | 0.465 | 0.009 | -0.028 | 0.088 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.323 | A | 0.263 | A | 0.463 | A | 0.539 | A | 0.406 | B | 0.683 | 0.216 | 0.143 | 0.220 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.338 | A | 0.303 | A | 0.377 | A | 0.365 | A | 0.302 | A | 0.425 | 0.027 | -0.001 | 0.048 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.257 | A | 0.237 | A | 0.332 | A | 0.257 | A | 0.216 | A | 0.390 | 0.000 | -0.021 | 0.058 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.379 | A | 0.373 | A | 0.508 | B | 0.654 | A | 0.505 | D | 0.819 | 0.275 | 0.132 | 0.311 | N | N | Y |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.415 | A | 0.457 | A | 0.482 | A | 0.511 | A | 0.559 | A | 0.548 | 0.096 | 0.102 | 0.066 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.572 | A | 0.425 | B | 0.68 | A | 0.549 | A | 0.599 | B | 0.635 | -0.023 | 0.174 | -0.045 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.378 | A | 0.444 | A | 0.431 | A | 0.281 | A | 0.352 | A | 0.391 | -0.097 | -0.092 | -0.040 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.745 | B | 0.617 | C | 0.799 | E | 0.963 | D | 0.898 | E | 1.000 | 0.218 | 0.281 | 0.201 | Y | N | Y |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | A | 0.588 | B | 0.649 | C | 0.723 | C | 0.747 | D | 0.849 | E | 0.971 | 0.159 | 0.200 | 0.248 | N | N | Y |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.489 | A | 0.511 | A | 0.522 | B | 0.630 | B | 0.640 | B | 0.661 | 0.141 | 0.129 | 0.139 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-47. Intersection Level of Service Analysis – Year 2016 Reduced Project Alternative.**

| # | Study Intersection | Year 2016 Baseline Without Project | | | | | | Year 2016 With Reduced Project | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.502 | A | 0.431 | A | 0.482 | A | 0.518 | A | 0.452 | A | 0.496 | 0.016 | 0.021 | 0.014 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.303 | A | 0.387 | A | 0.341 | A | 0.311 | A | 0.402 | A | 0.350 | 0.008 | 0.015 | 0.009 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.409 | A | 0.416 | A | 0.370 | A | 0.420 | A | 0.441 | A | 0.387 | 0.011 | 0.025 | 0.017 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.257 | A | 0.4 | A | 0.375 | A | 0.266 | A | 0.4 | A | 0.375 | 0.009 | 0.000 | 0.000 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.636 | A | 0.504 | B | 0.651 | B | 0.631 | A | 0.502 | B | 0.649 | -0.005 | -0.002 | -0.002 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.232 | A | 0.409 | A | 0.328 | A | 0.216 | A | 0.409 | A | 0.328 | -0.016 | 0.000 | 0.000 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | A | 0.588 | C | 0.749 | B | 0.644 | A | 0.578 | C | 0.727 | B | 0.625 | -0.010 | -0.022 | -0.019 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | B | 0.657 | C | 0.727 | C | 0.768 | B | 0.665 | C | 0.748 | C | 0.776 | 0.008 | 0.021 | 0.008 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | B | 0.690 | B | 0.666 | D | 0.810 | B | 0.697 | B | 0.69 | D | 0.815 | 0.007 | 0.024 | 0.005 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | B | 0.650 | A | 0.593 | C | 0.750 | C | 0.712 | C | 0.717 | C | 0.787 | 0.062 | 0.124 | 0.037 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.261 | A | 0.197 | A | 0.477 | A | 0.272 | A | 0.215 | A | 0.488 | 0.011 | 0.018 | 0.011 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | A | 0.504 | A | 0.578 | C | 0.734 | A | 0.495 | A | 0.596 | C | 0.734 | -0.009 | 0.018 | 0.000 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | A | 0.486 | A | 0.451 | C | 0.726 | A | 0.461 | A | 0.414 | C | 0.709 | -0.025 | -0.037 | -0.017 | N | N | N |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.355 | A | 0.184 | A | 0.233 | A | 0.355 | A | 0.182 | A | 0.231 | 0.000 | -0.002 | -0.002 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.248 | A | 0.178 | A | 0.320 | A | 0.252 | A | 0.187 | A | 0.322 | 0.004 | 0.009 | 0.002 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.485 | A | 0.275 | A | 0.565 | A | 0.488 | A | 0.278 | A | 0.568 | 0.003 | 0.003 | 0.003 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.303 | A | 0.24 | A | 0.347 | A | 0.293 | A | 0.237 | A | 0.345 | -0.010 | -0.003 | -0.002 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.225 | A | 0.153 | A | 0.335 | A | 0.220 | A | 0.157 | A | 0.338 | -0.005 | 0.004 | 0.003 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.433 | A | 0.365 | B | 0.679 | A | 0.438 | A | 0.369 | B | 0.685 | 0.005 | 0.004 | 0.006 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.330 | A | 0.403 | A | 0.365 | A | 0.327 | A | 0.383 | A | 0.363 | -0.003 | -0.020 | -0.002 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.402 | A | 0.467 | A | 0.504 | A | 0.395 | A | 0.44 | A | 0.474 | -0.007 | -0.027 | -0.030 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.176 | A | 0.278 | A | 0.300 | A | 0.179 | A | 0.268 | A | 0.288 | 0.003 | -0.010 | -0.012 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | C | 0.757 | C | 0.707 | D | 0.898 | C | 0.728 | B | 0.696 | D | 0.856 | -0.029 | -0.011 | -0.042 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | B | 0.642 | C | 0.756 | D | 0.802 | B | 0.622 | C | 0.739 | C | 0.775 | -0.020 | -0.017 | -0.027 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.511 | C | 0.7 | A | 0.568 | A | 0.507 | B | 0.647 | A | 0.484 | -0.004 | -0.053 | -0.084 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-48. Intersection Level of Service Analysis – Year 2023 Reduced Project Alternative.**

| # | Study Intersection | Year 2023 Baseline Without Project | | | | | | Year 2023 With Reduced Project | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | B | 0.611 | A | 0.518 | A | 0.502 | B | 0.623 | A | 0.532 | A | 0.507 | 0.012 | 0.014 | 0.005 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.425 | A | 0.438 | A | 0.348 | A | 0.438 | A | 0.45 | A | 0.355 | 0.013 | 0.012 | 0.007 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.563 | A | 0.5 | A | 0.381 | A | 0.581 | A | 0.523 | A | 0.394 | 0.018 | 0.023 | 0.013 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.507 | A | 0.443 | A | 0.401 | A | 0.507 | A | 0.448 | A | 0.401 | 0.000 | 0.005 | 0.000 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.611 | A | 0.592 | C | 0.707 | B | 0.608 | A | 0.589 | C | 0.706 | -0.003 | -0.003 | -0.001 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.391 | A | 0.461 | A | 0.360 | A | 0.391 | A | 0.461 | A | 0.360 | 0.000 | 0.000 | 0.000 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | E | 0.952 | E | 0.946 | C | 0.730 | E | 0.944 | E | 0.927 | C | 0.708 | -0.008 | -0.019 | -0.022 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | C | 0.750 | C | 0.798 | C | 0.792 | C | 0.753 | D | 0.815 | C | 0.796 | 0.003 | 0.017 | 0.004 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | D | 0.860 | C | 0.733 | D | 0.895 | D | 0.850 | C | 0.746 | D | 0.897 | -0.010 | 0.013 | 0.002 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | C | 0.756 | B | 0.661 | D | 0.853 | D | 0.837 | C | 0.754 | D | 0.884 | 0.081 | 0.093 | 0.031 | N | N | N |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.342 | A | 0.238 | A | 0.574 | A | 0.356 | A | 0.259 | A | 0.583 | 0.014 | 0.021 | 0.009 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | B | 0.629 | B | 0.611 | D | 0.813 | B | 0.636 | B | 0.641 | D | 0.817 | 0.007 | 0.030 | 0.004 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | A | 0.563 | A | 0.512 | E | 0.947 | A | 0.558 | A | 0.482 | E | 0.944 | -0.005 | -0.030 | -0.003 | N | N | N |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.445 | A | 0.209 | A | 0.242 | A | 0.440 | A | 0.204 | A | 0.238 | -0.005 | -0.005 | -0.004 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.285 | A | 0.213 | A | 0.397 | A | 0.290 | A | 0.215 | A | 0.397 | 0.005 | 0.002 | 0.000 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.495 | A | 0.323 | B | 0.610 | A | 0.500 | A | 0.325 | B | 0.612 | 0.005 | 0.002 | 0.002 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.330 | A | 0.268 | A | 0.402 | A | 0.315 | A | 0.277 | A | 0.387 | -0.015 | 0.009 | -0.015 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.210 | A | 0.183 | A | 0.370 | A | 0.210 | A | 0.185 | A | 0.370 | 0.000 | 0.002 | 0.000 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | A | 0.479 | A | 0.39 | C | 0.727 | A | 0.485 | A | 0.394 | C | 0.729 | 0.006 | 0.004 | 0.002 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.490 | A | 0.43 | A | 0.440 | A | 0.475 | A | 0.39 | A | 0.437 | -0.015 | -0.040 | -0.003 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.522 | A | 0.587 | B | 0.614 | A | 0.482 | A | 0.557 | A | 0.588 | -0.040 | -0.030 | -0.026 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.257 | A | 0.321 | A | 0.378 | A | 0.243 | A | 0.314 | A | 0.367 | -0.014 | -0.007 | -0.011 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | E | 0.923 | D | 0.834 | E | 0.984 | D | 0.899 | D | 0.829 | E | 0.940 | -0.024 | -0.005 | -0.044 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | C | 0.720 | C | 0.79 | E | 0.944 | C | 0.704 | C | 0.773 | E | 0.917 | -0.016 | -0.017 | -0.027 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | A | 0.561 | C | 0.767 | A | 0.595 | A | 0.548 | C | 0.739 | B | 0.601 | -0.013 | -0.028 | 0.006 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-49. Intersection Level of Service Analysis – Year 2035 Reduced Project Alternative.**

| # | Study Intersection | Year 2035 Baseline Without Project | | | | | | Year 2035 With Reduced Project | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.555 | A | 0.51 | A | 0.471 | A | 0.566 | A | 0.524 | A | 0.478 | 0.011 | 0.014 | 0.007 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.406 | A | 0.423 | A | 0.345 | A | 0.423 | A | 0.444 | A | 0.355 | 0.017 | 0.021 | 0.010 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.544 | A | 0.502 | A | 0.370 | A | 0.563 | A | 0.525 | A | 0.383 | 0.019 | 0.023 | 0.013 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.545 | A | 0.484 | A | 0.426 | A | 0.545 | A | 0.484 | A | 0.426 | 0.000 | 0.000 | 0.000 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.647 | B | 0.607 | C | 0.717 | B | 0.642 | B | 0.602 | C | 0.716 | -0.005 | -0.005 | -0.001 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.333 | A | 0.447 | A | 0.339 | A | 0.333 | A | 0.447 | A | 0.339 | 0.000 | 0.000 | 0.000 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | E | 0.927 | E | 0.955 | C | 0.714 | E | 0.916 | E | 0.936 | B | 0.693 | -0.011 | -0.019 | -0.021 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | C | 0.763 | D | 0.814 | D | 0.817 | C | 0.773 | D | 0.841 | D | 0.826 | 0.010 | 0.027 | 0.009 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | D | 0.888 | C | 0.775 | E | 0.910 | D | 0.889 | D | 0.803 | E | 0.919 | 0.001 | 0.028 | 0.009 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | D | 0.806 | C | 0.704 | D | 0.900 | E | 0.915 | D | 0.861 | E | 0.950 | 0.109 | 0.157 | 0.050 | Y | N | Y |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.367 | A | 0.28 | B | 0.601 | A | 0.389 | A | 0.308 | B | 0.616 | 0.022 | 0.028 | 0.015 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | B | 0.684 | B | 0.667 | D | 0.892 | C | 0.701 | C | 0.706 | D | 0.899 | 0.017 | 0.039 | 0.007 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | B | 0.635 | A | 0.563 | E | 0.987 | A | 0.598 | A | 0.537 | E | 0.987 | -0.037 | -0.026 | 0.000 | N | N | N |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.484 | A | 0.242 | A | 0.240 | A | 0.480 | A | 0.238 | A | 0.238 | -0.004 | -0.004 | -0.002 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.298 | A | 0.257 | A | 0.458 | A | 0.310 | A | 0.265 | A | 0.462 | 0.012 | 0.008 | 0.004 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.538 | A | 0.398 | B | 0.690 | A | 0.550 | A | 0.407 | B | 0.693 | 0.012 | 0.009 | 0.003 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.362 | A | 0.295 | A | 0.418 | A | 0.352 | A | 0.293 | A | 0.408 | -0.010 | -0.002 | -0.010 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.255 | A | 0.213 | A | 0.388 | A | 0.260 | A | 0.222 | A | 0.393 | 0.005 | 0.009 | 0.005 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | B | 0.631 | A | 0.5 | C | 0.798 | B | 0.642 | A | 0.51 | D | 0.804 | 0.011 | 0.010 | 0.006 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.492 | A | 0.55 | A | 0.538 | A | 0.483 | A | 0.497 | A | 0.530 | -0.009 | -0.053 | -0.008 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.532 | B | 0.602 | B | 0.619 | A | 0.489 | A | 0.569 | B | 0.614 | -0.043 | -0.033 | -0.005 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.269 | A | 0.346 | A | 0.383 | A | 0.253 | A | 0.338 | A | 0.371 | -0.016 | -0.008 | -0.012 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | E | 0.934 | D | 0.888 | E | 0.996 | E | 0.909 | D | 0.885 | E | 0.949 | -0.025 | -0.003 | -0.047 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | C | 0.741 | D | 0.838 | E | 0.947 | C | 0.724 | D | 0.819 | E | 0.918 | -0.017 | -0.019 | -0.029 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | B | 0.623 | B | 0.639 | B | 0.662 | B | 0.620 | A | 0.586 | B | 0.648 | -0.003 | -0.053 | -0.014 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-50. Intersection Level of Service Analysis –Year 2046 Reduced Project Alternative.**

| # | Study Intersection | Year 2046 Baseline Without Project | | | | | | Year 2046 With Reduced Project | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 1 | Ocean Blvd (WB) / Terminal Island Fwy [A] | A | 0.557 | A | 0.527 | A | 0.483 | A | 0.569 | A | 0.543 | A | 0.490 | 0.012 | 0.016 | 0.007 | N | N | N |
| 2 | Ocean Blvd (EB) / Terminal Island Fwy [A] | A | 0.406 | A | 0.428 | A | 0.352 | A | 0.425 | A | 0.45 | A | 0.363 | 0.019 | 0.022 | 0.011 | N | N | N |
| 3 | Ocean Blvd (WB) / Pier S Ave [A] | A | 0.544 | A | 0.497 | A | 0.377 | A | 0.564 | A | 0.522 | A | 0.389 | 0.020 | 0.025 | 0.012 | N | N | N |
| 4 | Ocean Blvd (EB) / Pier S Ave [A] | A | 0.542 | A | 0.476 | A | 0.457 | A | 0.542 | A | 0.476 | A | 0.457 | 0.000 | 0.000 | 0.000 | N | N | N |
| 5 | Seaside Ave / Navy Wy [A] | B | 0.653 | B | 0.619 | C | 0.723 | B | 0.650 | B | 0.616 | C | 0.723 | -0.003 | -0.003 | 0.000 | N | N | N |
| 6 | Ferry St (Seaside Ave) / SR-47 Ramps [A] | A | 0.340 | A | 0.447 | A | 0.346 | A | 0.340 | A | 0.447 | A | 0.346 | 0.000 | 0.000 | 0.000 | N | N | N |
| 7 | Pico Ave / Pier B St / 9th St / I-710 Ramps [B] | E | 0.935 | E | 0.947 | C | 0.714 | E | 0.924 | E | 0.928 | B | 0.693 | -0.011 | -0.019 | -0.021 | N | N | N |
| 8 | Anaheim St / Harbor Ave [B] | C | 0.767 | D | 0.818 | D | 0.811 | C | 0.770 | D | 0.835 | D | 0.815 | 0.003 | 0.017 | 0.004 | N | N | N |
| 9 | Anaheim St / Santa Fe Ave [B] | E | 0.905 | C | 0.786 | E | 0.920 | D | 0.896 | D | 0.803 | E | 0.922 | -0.009 | 0.017 | 0.002 | N | N | N |
| 10 | Anaheim St / E I St / W 9th St [B] | D | 0.808 | C | 0.709 | E | 0.904 | D | 0.872 | C | 0.800 | E | 0.939 | 0.064 | 0.091 | 0.035 | Y | N | Y |
| 11 | Anaheim St / Farragut Ave [A] | A | 0.373 | A | 0.278 | B | 0.601 | A | 0.395 | A | 0.305 | B | 0.616 | 0.022 | 0.027 | 0.015 | N | N | N |
| 12 | Anaheim St / Henry Ford Ave [A] | B | 0.688 | B | 0.68 | E | 0.904 | C | 0.701 | C | 0.716 | E | 0.911 | 0.013 | 0.036 | 0.007 | N | N | N |
| 13 | Anaheim St / Alameda St [A] | B | 0.644 | A | 0.57 | F | 1.003 | B | 0.623 | A | 0.556 | F | 1.005 | -0.021 | -0.014 | 0.002 | N | N | N |
| 14 | Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A] | A | 0.484 | A | 0.236 | A | 0.240 | A | 0.480 | A | 0.233 | A | 0.238 | -0.004 | -0.003 | -0.002 | N | N | N |
| 15 | Harry Bridges Blvd / Broad Ave [A] | A | 0.305 | A | 0.258 | A | 0.462 | A | 0.318 | A | 0.268 | A | 0.465 | 0.013 | 0.010 | 0.003 | N | N | N |
| 16 | Harry Bridges Blvd / Avalon Blvd [A] | A | 0.537 | A | 0.405 | B | 0.680 | A | 0.550 | A | 0.417 | B | 0.685 | 0.013 | 0.012 | 0.005 | N | N | N |
| 17 | Harry Bridges Blvd / Fries Ave [A] | A | 0.362 | A | 0.300 | A | 0.420 | A | 0.353 | A | 0.305 | A | 0.412 | -0.009 | 0.005 | -0.008 | N | N | N |
| 18 | Harry Bridges Blvd / Neptune Ave [A] | A | 0.255 | A | 0.215 | A | 0.388 | A | 0.262 | A | 0.225 | A | 0.393 | 0.007 | 0.010 | 0.005 | N | N | N |
| 19 | Harry Bridges Blvd / Wilmington Blvd [A] | B | 0.652 | A | 0.504 | D | 0.817 | B | 0.665 | A | 0.517 | D | 0.825 | 0.013 | 0.013 | 0.008 | N | N | N |
| 20 | Harry Bridges Blvd / Figueroa St [A] | A | 0.508 | A | 0.557 | A | 0.545 | A | 0.502 | A | 0.503 | A | 0.537 | -0.006 | -0.054 | -0.008 | N | N | N |
| 21 | Pacific Coast Hwy / Alameda St Ramp [A] | A | 0.542 | A | 0.598 | B | 0.630 | A | 0.525 | B | 0.603 | B | 0.628 | -0.017 | 0.005 | -0.002 | N | N | N |
| 22 | Pacific Coast Hwy / Site Entrance [A] | A | 0.278 | A | 0.351 | A | 0.389 | A | 0.271 | A | 0.354 | A | 0.383 | -0.007 | 0.003 | -0.006 | N | N | N |
| 23 | Pacific Coast Hwy / Santa Fe Ave [B] | E | 0.959 | D | 0.898 | E | 0.995 | E | 0.943 | E | 0.906 | E | 0.954 | -0.016 | 0.008 | -0.041 | N | N | N |
| 24 | Pacific Coast Hwy / Harbor Ave [B] | C | 0.745 | D | 0.848 | E | 0.968 | C | 0.734 | D | 0.836 | E | 0.943 | -0.011 | -0.012 | -0.025 | N | N | N |
| 25 | Sepulveda Blvd / Alameda St Ramp [C] | B | 0.629 | B | 0.633 | B | 0.659 | A | 0.579 | C | 0.711 | B | 0.645 | -0.050 | 0.078 | -0.014 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

## Contribution of the Reduced Project

The tables also show future operating conditions with the Reduced Project. The Reduced Project conditions were compared to future without project conditions for each year to determine cumulative and cumulatively considerable impacts, and then the impacts were assessed using the significant impact criteria. Appendix G contains all of the traffic forecasts and LOS calculation worksheets for each analysis scenario.

The analysis indicates that the proposed Project would result in a reduction in the volume/capacity ratio (an improvement in intersection performance) at a number of study locations. This is due to several factors:

- The proposed SCIG project would operate more efficiently than the existing intermodal facilities, thus producing fewer total truck trips than would have been generated without the project.
- Relocated land uses would shift the majority of existing tenant trips to Anaheim Street from Pacific Coast Highway and Sepulveda Boulevard.
- Proposed Project truck trip routing would limit trucks to designated truck routes.
- New ramps providing access between the Project site and PCH would improve local traffic conditions.

None of the 25 intersections would exceed the Threshold of Significance criteria in 2016 and 2023. In 2035 and 2046, the intersection of Anaheim Street/E I Street/W 9$^{th}$ Street would exceed the City of Long Beach Threshold of Significance criteria. Therefore the project would result in a cumulatively considerable contribution to a significant cumulative impact at this location.

The amount of Project-related traffic that would be added at all other study locations would not be of sufficient magnitude to meet or exceed any of the thresholds of significance. This includes some intersections that would operate at LOS E or F where the amount of Project-related traffic would be too small to trigger a significant traffic impact. Accordingly, the proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact at other locations.

## Mitigation Measures

The applicant would be required to apply **MM TRANS-1**, which requires that the applicant ensure that ATSAC/ATCS retrofit and communication enhancements that tie the system together with the City of Los Angeles ATSAC/ATCS system along Anaheim Street study intersections to the I-710 freeway are installed. Installation of these retrofits and communication enhancements would mitigate the Project's cumulatively considerable impacts at the intersection of Anaheim Street/E I Street/W 9$^{th}$ Street, as shown in Tables 5-51 and 5-52.

## Residual Cumulative Impacts

After application of **MM TRANS-1**, the Reduced Project's contribution to a significant cumulative impact would not be cumulatively considerable.

**Table 5-51. Intersection Level of Service Analysis –Year 2035 Reduced Project Alternative with Mitigation.**

| # | Study Intersection | Year 2035 Baseline Without Project | | | | | | Year 2035 With Reduced Project with Mitigation | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 10 | Anaheim St / E I St / W 9th St [B] | D | 0.806 | C | 0.704 | D | 0.900 | C | 0.770 | C | 0.700 | D | 0.834 | -0.036 | -0.004 | -0.066 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

**Table 5-52. Intersection Level of Service Analysis –Year 2046 Reduced Project Alternative with Mitigation.**

| # | Study Intersection | Year 2046 Baseline Without Project | | | | | | Year 2046 With Reduced Project with Mitigation | | | | | | Change in V/C | | | Sig. Imp. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | AM Peak Hour | | MD Peak Hour | | PM Peak Hour | | | | | | | |
| | | 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 | AM | MD | PM | AM | MD | PM |
| 10 | Anaheim St / E I St / W 9th St [B] | D | 0.808 | C | 0.709 | E | 0.904 | C | 0.772 | C | 0.700 | D | 0.839 | -0.036 | -0.009 | -0.065 | N | N | N |

A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using CMA methodology according to City standards.

#### 5.4.2.3.3 Alt 2 Cumulative Impact TRANS-4: Would Reduced Project operations result in a less than significant increase in highway congestion?

### Impacts of Past, Present, and Reasonably Foreseeable Future Projects Including the Reduced Project

Freeways in the region are affected by new projects that add traffic or change the distribution of traffic. Most of the related projects in Table 4-1 can be expected to add traffic to the freeway system. The effects were evaluated at the freeway monitoring stations expected to be affected by the Reduced Project:

- I-110 south of C Street (CMP Station 1045)
- SR-91 east of Alameda Street and Santa Fe Avenue (CMP Station 1033)
- I-405 at Santa Fe Avenue (CMP Station 1066)
- I-710 between Pacific Coast Highway and Willow Street (CMP Station 1078)
- I-710 between I-405 and Del Amo Boulevard (CMP Station 1079)
- I-710 between I-105 and Firestone Boulevard (CMP Station 1080).

The Reduced Project would result in fewer truck trips on the surrounding freeway system, as the Reduced Project would shift drayage operations currently serving the intermodal yards near downtown Los Angeles to the Reduced Project site in the Port area. However, the Proposed Project would not reduce traffic on the freeway system in proportion to its throughput due to latent demand of freeway facilities in future years. Much of the capacity freed up by shifting off-dock intermodal volume to the Reduced Project would be replaced by regional traffic that would otherwise use parallel routes to the freeway system for their trip making. The capacity freed up due to the Reduced Project would attract enough latent demand to the freeway system to nearly the without Reduced Project conditions. Tables 5-53 through 5-56 summarize the changes to freeway monitoring locations due to the Reduced Project Alternative for years 2016, 2023, 2035 and 2046.

**Table 5-53. Year 2016 Reduced Project Freeway Analysis.**

| Fwy. | Location | Year 2016 Future Baseline | | | | Year 2016 With Proposed Project | | | | Difference | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NB/EB | | SB/WB | | NB/EB | | SB/WB | | NB/EB | | SB/WB | |
| | | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH |
| I-110 | Wilmington, s/o "C"St. | 4,200 | 4,200 | 3,600 | 4,900 | 4,100 | 4,100 | 3,600 | 4,800 | (100) | (100) | - | (100) |
| SR-91 | e/o Alameda Street/Santa Fe | 8,100 | 10,200 | 8,600 | 9,200 | 8,000 | 10,200 | 8,600 | 9,200 | (100) | - | - | - |
| I-405 | Santa Fe Ave. | 9,400 | 10,400 | 10,400 | 11,200 | 9,400 | 10,200 | 10,400 | 11,200 | - | (200) | - | - |
| I-710 | n/o Jct Rte 1 (PCH), Willow St. | 6,500 | 6,500 | 7,300 | 6,100 | 6,400 | 6,400 | 7,200 | 6,000 | (100) | (100) | (100) | (100) |
| I-710 | n/o Jct Rte 405, s/o Del Amo | 6,900 | 8,100 | 8,300 | 7,000 | 6,800 | 8,100 | 8,200 | 6,900 | (100) | - | (100) | (100) |
| I-710 | n/o Rte 105, n/o Firestone | 8,200 | 9,000 | 9,300 | 9,000 | 8,100 | 8,900 | 9,100 | 8,900 | (100) | (100) | (200) | (100) |

**Table 5-54. Year 2023 Reduced Project Freeway Analysis.**

| Fwy. | Location | Year 2023 Future Baseline | | | | Year 2023 With Proposed Project | | | | Difference | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NB/EB | | SB/WB | | NB/EB | | SB/WB | | NB/EB | | SB/WB | |
| | | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH |
| I-110 | Wilmington, s/o "C"St. | 4,800 | 4,300 | 4,100 | 5,000 | 4,700 | 4,300 | 4,100 | 5,000 | (100) | - | - | - |
| SR-91 | e/o Alameda Street/Santa Fe | 8,600 | 10,500 | 9,000 | 9,500 | 8,600 | 10,500 | 9,000 | 9,500 | - | - | - | - |
| I-405 | Santa Fe Ave. | 9,800 | 10,600 | 10,900 | 11,500 | 9,800 | 10,500 | 10,900 | 11,500 | - | (100) | - | - |
| I-710 | n/o Jct Rte 1 (PCH), Willow St. | 7,800 | 7,200 | 8,400 | 6,800 | 7,600 | 7,000 | 8,200 | 6,700 | (200) | (200) | (200) | (100) |
| I-710 | n/o Jct Rte 405, s/o Del Amo | 8,200 | 8,800 | 9,400 | 7,600 | 8,100 | 8,700 | 9,300 | 7,600 | (100) | (100) | (100) | - |
| I-710 | n/o Rte 105, n/o Firestone | 8,600 | 9,300 | 9,600 | 9,200 | 8,500 | 9,300 | 9,400 | 9,200 | (100) | - | (200) | - |

**Table 5-55. Year 2035 Reduced Project Freeway Analysis.**

| Fwy. | Location | Year 2035 Future Baseline | | | | Year 2035 With Proposed Project | | | | Difference | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NB/EB | | SB/WB | | NB/EB | | SB/WB | | NB/EB | | SB/WB | |
| | | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH |
| I-110 | Wilmington, s/o "C"St. | 5,000 | 4,700 | 4,200 | 5,100 | 5,000 | 4,600 | 4,200 | 5,100 | - | (100) | - | - |
| SR-91 | e/o Alameda Street/Santa Fe | 8,700 | 10,500 | 8,900 | 9,500 | 8,700 | 10,500 | 8,900 | 9,500 | - | - | - | - |
| I-405 | Santa Fe Ave. | 9,900 | 10,400 | 10,900 | 11,500 | 9,900 | 10,400 | 10,900 | 11,500 | - | - | - | - |
| I-710 | n/o Jct Rte 1 (PCH), Willow St. | 8,300 | 7,300 | 8,700 | 7,000 | 8,200 | 7,200 | 8,600 | 7,000 | (100) | (100) | (100) | - |
| I-710 | n/o Jct Rte 405, s/o Del Amo | 8,700 | 9,000 | 9,700 | 7,800 | 8,600 | 8,900 | 9,600 | 7,800 | (100) | (100) | (100) | - |
| I-710 | n/o Rte 105, n/o Firestone | 8,900 | 9,500 | 9,800 | 9,400 | 8,800 | 9,500 | 9,600 | 9,400 | (100) | - | (200) | - |

**Table 5-56. Year 2046 Reduced Project Freeway Analysis.**

| Fwy. | Location | Year 2046 Future Baseline | | | | Year 2046 With Proposed Project | | | | Difference | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NB/EB | | SB/WB | | NB/EB | | SB/WB | | NB/EB | | SB/WB | |
| | | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH | AM PH | PM PH |
| I-110 | Wilmington, s/o "C"St. | 5,000 | 4,700 | 4,200 | 5,100 | 5,000 | 4,600 | 4,200 | 5,100 | - | (100) | - | - |
| SR-91 | e/o Alameda Street/Santa Fe | 8,700 | 10,500 | 8,900 | 9,500 | 8,700 | 10,500 | 8,900 | 9,500 | - | - | - | - |
| I-405 | Santa Fe Ave. | 9,900 | 10,400 | 10,900 | 11,500 | 9,900 | 10,400 | 10,900 | 11,500 | - | - | - | - |
| I-710 | n/o Jct Rte 1 (PCH), Willow St. | 9,300 | 7,800 | 9,500 | 7,500 | 9,200 | 7,700 | 9,400 | 7,500 | (100) | (100) | (100) | - |
| I-710 | n/o Jct Rte 405, s/o Del Amo | 9,600 | 9,500 | 10,500 | 8,200 | 9,500 | 9,400 | 10,400 | 8,200 | (100) | (100) | (100) | - |
| I-710 | n/o Rte 105, n/o Firestone | 9,200 | 9,700 | 10,000 | 9,600 | 9,100 | 9,700 | 9,800 | 9,600 | (100) | - | (200) | - |

## Contribution of the Reduced Project

The Reduced Project would result in fewer truck trips on the surrounding freeway system, as drayage operations currently serving the intermodal yards near downtown Los Angeles would be switched to the proposed Project site. Thus, the existing longer-distance freeway trips from the ports to downtown railyards would be replaced by shorter-distance trips to/from the Reduced Project. However, much of the capacity freed up by shifting off-dock intermodal volume to the Reduced Project would be replaced by regional traffic that would otherwise use parallel routes to the freeway system. The cumulative analysis, as shown in Tables 5-57 through 5-60, shows cumulative impacts projected to occur at many locations. However, the analysis of the cumulatively considerable conditions, shown in Tables 5-61 through 5-64, show that no cumulatively considerable impact would occur with implementation of the Reduced Project. The effect of the Reduced Project on actual freeway traffic volumes would be minor, as shown in Tables 5-55 through 5-56, and would not exceed the minimum CMP threshold for analysis of 150 trips on a freeway segment. Accordingly, the Reduced Project would not make a cumulatively considerable contribution to a significant cumulative impact.

## Mitigation Measures and Residual Cumulative Impacts

Mitigation is not required and there would be no residual cumulative impacts.

1 **Table 5-57. Year 2016 Reduced Project Cumulative Freeway Analysis.**

**AM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Baseline | | | Year 2016 Future With Reduced Project | | | Δ D/C | Cum Imp | Baseline | | | Year 2016 Future With Reduced Project | | | Δ D/C | Cum Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,374 | 0.55 | C | 4,100 | 0.51 | B | -0.03 | No | 3,373 | 0.42 | B | 3,600 | 0.45 | B | 0.03 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 6,060 | 0.51 | B | 8,000 | 0.67 | C | 0.16 | No | 10,662 | 0.89 | D | 8,600 | 0.72 | C | -0.17 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 11,533 | 1.15 | F(0) | 9,400 | 0.94 | E | -0.21 | No | 9,543 | 0.95 | E | 10,400 | 1.04 | F(0) | 0.09 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,771 | 0.96 | E | 6,400 | 1.07 | F(0) | 0.11 | Yes | 6,690 | 1.12 | F(0) | 7,200 | 1.20 | F(0) | 0.09 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 6,370 | 0.80 | D | 6,800 | 0.85 | D | 0.05 | No | 7,807 | 0.98 | E | 8,200 | 1.03 | F(0) | 0.05 | Yes |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,173 | 1.02 | F(0) | 8,100 | 1.01 | F(0) | -0.01 | No | 9,283 | 1.16 | F(0) | 9,100 | 1.14 | F(0) | -0.02 | No |

**PM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Baseline | | | Year 2016 Future With Reduced Project | | | Δ D/C | Cum Imp | Baseline | | | Year 2016 Future With Reduced Project | | | Δ D/C | Cum Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 2,490 | 0.31 | A | 4,100 | 0.51 | B | 0.20 | No | 4,203 | 0.53 | B | 4,800 | 0.60 | C | 0.08 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,924 | 0.74 | C | 10,200 | 0.85 | D | 0.11 | No | 7,205 | 0.60 | C | 9,200 | 0.77 | C | 0.17 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,863 | 0.99 | E | 10,200 | 1.02 | F(0) | 0.03 | Yes | 11,162 | 1.12 | F(0) | 11,200 | 1.12 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,951 | 0.99 | E | 6,400 | 1.07 | F(0) | 0.08 | Yes | 5,660 | 0.94 | E | 6,000 | 1.00 | E | 0.06 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 7,742 | 0.97 | E | 8,100 | 1.01 | F(0) | 0.05 | Yes | 6,783 | 0.85 | D | 6,900 | 0.86 | D | 0.02 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,122 | 1.14 | F(0) | 8,900 | 1.11 | F(0) | -0.03 | No | 9,104 | 1.14 | F(0) | 8,900 | 1.11 | F(0) | -0.03 | No |

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3

1 **Table 5-58. Year 2023 Reduced Project Cumulative Freeway Analysis.**

**AM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Baseline | | | Year 2023 Future With Reduced Project | | | Δ D/C | Cum Imp | Baseline | | | Year 2023 Future With Reduced Project | | | Δ D/C | Cum Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,374 | 0.55 | C | 4,700 | 0.59 | C | 0.04 | No | 3,373 | 0.42 | B | 4,100 | 0.51 | B | 0.09 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 6,060 | 0.51 | B | 8,600 | 0.72 | C | 0.21 | No | 10,662 | 0.89 | D | 9,000 | 0.75 | C | -0.14 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 11,533 | 1.15 | F(0) | 9,800 | 0.98 | E | -0.17 | No | 9,543 | 0.95 | E | 10,900 | 1.09 | F(0) | 0.14 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,771 | 0.96 | E | 7,600 | 1.27 | F(1) | 0.31 | Yes | 6,690 | 1.12 | F(0) | 8,200 | 1.37 | F(2) | 0.25 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 6,370 | 0.80 | D | 8,100 | 1.01 | F(0) | 0.22 | Yes | 7,807 | 0.98 | E | 9,300 | 1.16 | F(0) | 0.19 | Yes |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,173 | 1.02 | F(0) | 8,500 | 1.06 | F(0) | 0.04 | Yes | 9,283 | 1.16 | F(0) | 9,400 | 1.18 | F(0) | 0.02 | No |

**PM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Baseline | | | Year 2023 Future With Reduced Project | | | Δ D/C | Cum Imp | Baseline | | | Year 2023 Future With Reduced Project | | | Δ D/C | Cum Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 2,490 | 0.31 | A | 4,300 | 0.54 | B | 0.23 | No | 4,203 | 0.53 | B | 5,000 | 0.63 | C | 0.10 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,924 | 0.74 | C | 10,500 | 0.88 | D | 0.13 | No | 7,205 | 0.60 | C | 9,500 | 0.79 | D | 0.19 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,863 | 0.99 | E | 10,500 | 1.05 | F(0) | 0.06 | Yes | 11,162 | 1.12 | F(0) | 11,500 | 1.15 | F(0) | 0.03 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,951 | 0.99 | E | 7,000 | 1.17 | F(0) | 0.18 | Yes | 5,660 | 0.94 | E | 6,700 | 1.12 | F(0) | 0.17 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 7,742 | 0.97 | E | 8,700 | 1.09 | F(0) | 0.12 | Yes | 6,783 | 0.85 | D | 7,600 | 0.95 | E | 0.10 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,122 | 1.14 | F(0) | 9,300 | 1.16 | F(0) | 0.02 | Yes | 9,104 | 1.14 | F(0) | 9,200 | 1.15 | F(0) | 0.01 | No |

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**Table 5-59. Year 2035 Reduced Project Cumulative Freeway Analysis.**

| AM Peak Hour | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | Δ D/C | Cum Imp | Southbound/Westbound | | | | | | Δ D/C | Cum Imp |
| | | | | Baseline | | | Year 2035 Future With Reduced Project | | | | | Baseline | | | Year 2035 Future With Reduced Project | | | | |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,374 | 0.55 | C | 5,000 | 0.63 | C | 0.08 | No | 3,373 | 0.42 | B | 4,200 | 0.53 | B | 0.10 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 6,060 | 0.51 | B | 8,700 | 0.73 | C | 0.22 | No | 10,662 | 0.89 | D | 8,900 | 0.74 | C | -0.15 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 11,533 | 1.15 | F(0) | 9,900 | 0.99 | E | -0.16 | No | 9,543 | 0.95 | E | 10,900 | 1.09 | F(0) | 0.14 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,771 | 0.96 | E | 8,200 | 1.37 | F(2) | 0.41 | Yes | 6,690 | 1.12 | F(0) | 8,600 | 1.43 | F(2) | 0.32 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 6,370 | 0.80 | D | 8,600 | 1.08 | F(0) | 0.28 | Yes | 7,807 | 0.98 | E | 9,600 | 1.20 | F(0) | 0.22 | Yes |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,173 | 1.02 | F(0) | 8,800 | 1.10 | F(0) | 0.08 | Yes | 9,283 | 1.16 | F(0) | 9,600 | 1.20 | F(0) | 0.04 | Yes |
| | | | | | | | | | | | | | | | | | | | |
| **PM Peak Hour** | | | | | | | | | | | | | | | | | | | |
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | Δ D/C | Cum Imp | Southbound/Westbound | | | | | | Δ D/C | Cum Imp |
| | | | | Baseline | | | Year 2035 Future With Reduced Project | | | | | Baseline | | | Year 2035 Future With Reduced Project | | | | |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 2,490 | 0.31 | A | 4,600 | 0.58 | C | 0.26 | No | 4,203 | 0.53 | B | 5,100 | 0.64 | C | 0.11 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,924 | 0.74 | C | 10,500 | 0.88 | D | 0.13 | No | 7,205 | 0.60 | C | 9,500 | 0.79 | D | 0.19 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,863 | 0.99 | E | 10,400 | 1.04 | F(0) | 0.05 | Yes | 11,162 | 1.12 | F(0) | 11,500 | 1.15 | F(0) | 0.03 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,951 | 0.99 | E | 7,200 | 1.20 | F(0) | 0.21 | Yes | 5,660 | 0.94 | E | 7,000 | 1.17 | F(0) | 0.22 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 7,742 | 0.97 | E | 8,900 | 1.11 | F(0) | 0.15 | Yes | 6,783 | 0.85 | D | 7,800 | 0.98 | E | 0.13 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,122 | 1.14 | F(0) | 9,500 | 1.19 | F(0) | 0.05 | Yes | 9,104 | 1.14 | F(0) | 9,400 | 1.18 | F(0) | 0.04 | Yes |

1 **Table 5-60. Year 2046 Reduced Project Cumulative Freeway Analysis.**

**AM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Baseline | | | Year 2046 Future With Reduced Project | | | Δ D/C | Cum Imp | Baseline | | | Year 2046 Future With Reduced Project | | | Δ D/C | Cum Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,374 | 0.55 | C | 5,000 | 0.63 | C | 0.08 | No | 3,373 | 0.42 | B | 4,200 | 0.53 | B | 0.10 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 6,060 | 0.51 | B | 8,700 | 0.73 | C | 0.22 | No | 10,662 | 0.89 | D | 8,900 | 0.74 | C | -0.15 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 11,533 | 1.15 | F(0) | 9,900 | 0.99 | E | -0.16 | No | 9,543 | 0.95 | E | 10,900 | 1.09 | F(0) | 0.14 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,771 | 0.96 | E | 9,200 | 1.53 | F(3) | 0.57 | Yes | 6,690 | 1.12 | F(0) | 9,400 | 1.57 | F(3) | 0.45 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 6,370 | 0.80 | D | 9,500 | 1.19 | F(0) | 0.39 | Yes | 7,807 | 0.98 | E | 10,400 | 1.30 | F(1) | 0.32 | Yes |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,173 | 1.02 | F(0) | 9,100 | 1.14 | F(0) | 0.12 | Yes | 9,283 | 1.16 | F(0) | 9,800 | 1.23 | F(0) | 0.07 | Yes |

**PM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Baseline | | | Year 2046 Future With Reduced Project | | | Δ D/C | Cum Imp | Baseline | | | Year 2046 Future With Reduced Project | | | Δ D/C | Cum Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 2,490 | 0.31 | A | 4,600 | 0.58 | C | 0.26 | No | 4,203 | 0.53 | B | 5,100 | 0.64 | C | 0.11 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,924 | 0.74 | C | 10,500 | 0.88 | D | 0.13 | No | 7,205 | 0.60 | C | 9,500 | 0.79 | D | 0.19 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,863 | 0.99 | E | 10,400 | 1.04 | F(0) | 0.05 | Yes | 11,162 | 1.12 | F(0) | 11,500 | 1.15 | F(0) | 0.03 | Yes |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 5,951 | 0.99 | E | 7,700 | 1.28 | F(1) | 0.29 | Yes | 5,660 | 0.94 | E | 7,500 | 1.25 | F(0) | 0.31 | Yes |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 7,742 | 0.97 | E | 9,400 | 1.18 | F(0) | 0.21 | Yes | 6,783 | 0.85 | D | 8,200 | 1.03 | F(0) | 0.18 | Yes |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,122 | 1.14 | F(0) | 9,700 | 1.21 | F(0) | 0.07 | Yes | 9,104 | 1.14 | F(0) | 9,600 | 1.20 | F(0) | 0.06 | Yes |

2

**Table 5-61. Year 2016 Reduced Project Cumulatively Considerable Freeway Analysis.**

**AM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Year 2016 Future Without Project | | | Year 2016 Future With Reduced Project | | | Δ D/C | Cum Con Imp | Year 2016 Future Without Project | | | Year 2016 Future With Reduced Project | | | Δ D/C | Cum Con Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,200 | 0.53 | B | 4,100 | 0.51 | B | -0.01 | No | 3,600 | 0.45 | B | 3,600 | 0.45 | B | 0.00 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,100 | 0.68 | C | 8,000 | 0.67 | C | -0.01 | No | 8,600 | 0.72 | C | 8,600 | 0.72 | C | 0.00 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,400 | 0.94 | E | 9,400 | 0.94 | E | 0.00 | No | 10,400 | 1.04 | F(0) | 10,400 | 1.04 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 6,500 | 1.08 | F(0) | 6,400 | 1.07 | F(0) | -0.02 | No | 7,300 | 1.22 | F(0) | 7,200 | 1.20 | F(0) | -0.02 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 6,900 | 0.86 | D | 6,800 | 0.85 | D | -0.01 | No | 8,300 | 1.04 | F(0) | 8,200 | 1.03 | F(0) | -0.01 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,200 | 1.03 | F(0) | 8,100 | 1.01 | F(0) | -0.01 | No | 9,300 | 1.16 | F(0) | 9,100 | 1.14 | F(0) | -0.03 | No |

**PM Peak Hour**

| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Year 2016 Future Without Project | | | Year 2016 Future With Reduced Project | | | Δ D/C | Cum Con Imp | Year 2016 Future Without Project | | | Year 2016 Future With Reduced Project | | | Δ D/C | Cum Con Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,200 | 0.53 | B | 4,100 | 0.51 | B | -0.01 | No | 4,900 | 0.61 | C | 4,800 | 0.60 | C | -0.01 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 10,200 | 0.85 | D | 10,200 | 0.85 | D | 0.00 | No | 9,200 | 0.77 | C | 9,200 | 0.77 | C | 0.00 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 10,400 | 1.04 | F(0) | 10,200 | 1.02 | F(0) | -0.02 | No | 11,200 | 1.12 | F(0) | 11,200 | 1.12 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 6,500 | 1.08 | F(0) | 6,400 | 1.07 | F(0) | -0.02 | No | 6,100 | 1.02 | F(0) | 6,000 | 1.00 | E | -0.02 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 8,100 | 1.01 | F(0) | 8,100 | 1.01 | F(0) | 0.00 | No | 7,000 | 0.88 | D | 6,900 | 0.86 | D | -0.01 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,000 | 1.13 | F(0) | 8,900 | 1.11 | F(0) | -0.01 | No | 9,000 | 1.13 | F(0) | 8,900 | 1.11 | F(0) | -0.01 | No |

**Table 5-62. Year 2023 Reduced Project Cumulatively Considerable Freeway Analysis.**

| AM Peak Hour | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
| | | | | Year 2023 Future Without Project | | | Year 2023 Future With Reduced Project | | | Δ D/C | Cum Con Imp | Year 2023 Future Without Project | | | Year 2023 Future With Reduced Project | | | Δ D/C | Cum Con Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,800 | 0.60 | C | 4,700 | 0.59 | C | -0.01 | No | 4,100 | 0.51 | B | 4,100 | 0.51 | B | 0.00 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,600 | 0.72 | C | 8,600 | 0.72 | C | 0.00 | No | 9,000 | 0.75 | C | 9,000 | 0.75 | C | 0.00 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,800 | 0.98 | E | 9,800 | 0.98 | E | 0.00 | No | 10,900 | 1.09 | F(0) | 10,900 | 1.09 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 7,800 | 1.30 | F(1) | 7,600 | 1.27 | F(1) | -0.03 | No | 8,400 | 1.40 | F(2) | 8,200 | 1.37 | F(2) | -0.03 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 8,200 | 1.03 | F(0) | 8,100 | 1.01 | F(0) | -0.01 | No | 9,400 | 1.18 | F(0) | 9,300 | 1.16 | F(0) | -0.01 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,600 | 1.08 | F(0) | 8,500 | 1.06 | F(0) | -0.01 | No | 9,600 | 1.20 | F(0) | 9,400 | 1.18 | F(0) | -0.03 | No |
| | | | | | | | | | | | | | | | | | | | |
| **PM Peak Hour** | | | | | | | | | | | | | | | | | | | |
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
| | | | | Year 2023 Future Without Project | | | Year 2023 Future With Reduced Project | | | Δ D/C | Cum Con Imp | Year 2023 Future Without Project | | | Year 2023 Future With Reduced Project | | | Δ D/C | Cum Con Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,300 | 0.54 | B | 4,300 | 0.54 | B | 0.00 | No | 5,000 | 0.63 | C | 5,000 | 0.63 | C | 0.00 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 10,500 | 0.88 | D | 10,500 | 0.88 | D | 0.00 | No | 9,500 | 0.79 | D | 9,500 | 0.79 | D | 0.00 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 10,600 | 1.06 | F(0) | 10,500 | 1.05 | F(0) | -0.01 | No | 11,500 | 1.15 | F(0) | 11,500 | 1.15 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 7,200 | 1.20 | F(0) | 7,000 | 1.17 | F(0) | -0.03 | No | 6,800 | 1.13 | F(0) | 6,700 | 1.12 | F(0) | -0.02 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 8,800 | 1.10 | F(0) | 8,700 | 1.09 | F(0) | -0.01 | No | 7,600 | 0.95 | E | 7,600 | 0.95 | E | 0.00 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,300 | 1.16 | F(0) | 9,300 | 1.16 | F(0) | 0.00 | No | 9,200 | 1.15 | F(0) | 9,200 | 1.15 | F(0) | 0.00 | No |

1 **Table 5-63. Year 2035 Reduced Project Cumulatively Considerable Freeway Analysis.**

| AM Peak Hour | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | | Southbound/Westbound | | | | | | |
| | | | | Year 2035 Future Without Project | | | Year 2035 Future With Reduced Project | | | Δ D/C | Cum Con Imp | | Year 2035 Future Without Project | | | Year 2035 Future With Reduced Project | | | Δ D/C | Cum Con Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 5,000 | 0.63 | C | 5,000 | 0.63 | C | 0.00 | No | | 4,200 | 0.53 | B | 4,200 | 0.53 | B | 0.00 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,700 | 0.73 | C | 8,700 | 0.73 | C | 0.00 | No | | 8,900 | 0.74 | C | 8,900 | 0.74 | C | 0.00 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,900 | 0.99 | E | 9,900 | 0.99 | E | 0.00 | No | | 10,900 | 1.09 | F(0) | 10,900 | 1.09 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 8,300 | 1.38 | F(2) | 8,200 | 1.37 | F(2) | -0.02 | No | | 8,700 | 1.45 | F(2) | 8,600 | 1.43 | F(2) | -0.02 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 8,700 | 1.09 | F(0) | 8,600 | 1.08 | F(0) | -0.01 | No | | 9,700 | 1.21 | F(0) | 9,600 | 1.20 | F(0) | -0.01 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 8,900 | 1.11 | F(0) | 8,800 | 1.10 | F(0) | -0.01 | No | | 9,800 | 1.23 | F(0) | 9,600 | 1.20 | F(0) | -0.03 | No |
| | | | | | | | | | | | | | | | | | | | | |
| **PM Peak Hour** | | | | | | | | | | | | | | | | | | | |
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | | Southbound/Westbound | | | | | | |
| | | | | Year 2035 Future Without Project | | | Year 2035 Future With Reduced Project | | | Δ D/C | Cum Con Imp | | Year 2035 Future Without Project | | | Year 2035 Future With Reduced Project | | | Δ D/C | Cum Con Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,700 | 0.59 | C | 4,600 | 0.58 | C | -0.01 | No | | 5,100 | 0.64 | C | 5,100 | 0.64 | C | 0.00 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 10,500 | 0.88 | D | 10,500 | 0.88 | D | 0.00 | No | | 9,500 | 0.79 | D | 9,500 | 0.79 | D | 0.00 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 10,400 | 1.04 | F(0) | 10,400 | 1.04 | F(0) | 0.00 | No | | 11,500 | 1.15 | F(0) | 11,500 | 1.15 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 7,300 | 1.22 | F(0) | 7,200 | 1.20 | F(0) | -0.02 | No | | 7,000 | 1.17 | F(0) | 7,000 | 1.17 | F(0) | 0.00 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 9,000 | 1.13 | F(0) | 8,900 | 1.11 | F(0) | -0.01 | No | | 7,800 | 0.98 | E | 7,800 | 0.98 | E | 0.00 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,500 | 1.19 | F(0) | 9,500 | 1.19 | F(0) | 0.00 | No | | 9,400 | 1.18 | F(0) | 9,400 | 1.18 | F(0) | 0.00 | No |

2

**Table 5-64. Year 2046 Reduced Project Cumulatively Considerable Freeway Analysis.**

| AM Peak Hour | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
| | | | | Year 2046 Future Without Project | | | Year 2046 Future With Reduced Project | | | Δ D/C | Cum Con Imp | Year 2046 Future Without Project | | | Year 2046 Future With Reduced Project | | | Δ D/C | Cum Con Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 5,000 | 0.63 | C | 5,000 | 0.63 | C | 0.00 | No | 4,200 | 0.53 | B | 4,200 | 0.53 | B | 0.00 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 8,700 | 0.73 | C | 8,700 | 0.73 | C | 0.00 | No | 8,900 | 0.74 | C | 8,900 | 0.74 | C | 0.00 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 9,900 | 0.99 | E | 9,900 | 0.99 | E | 0.00 | No | 10,900 | 1.09 | F(0) | 10,900 | 1.09 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 9,300 | 1.55 | F(3) | 9,200 | 1.53 | F(3) | -0.02 | No | 9,500 | 1.58 | F(3) | 9,400 | 1.57 | F(3) | -0.02 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 9,600 | 1.20 | F(0) | 9,500 | 1.19 | F(0) | -0.01 | No | 10,500 | 1.31 | F(1) | 10,400 | 1.30 | F(1) | -0.01 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,200 | 1.15 | F(0) | 9,100 | 1.14 | F(0) | -0.01 | No | 10,000 | 1.25 | F(0) | 9,800 | 1.23 | F(0) | -0.03 | No |
| | | | | | | | | | | | | | | | | | | | |
| **PM Peak Hour** | | | | | | | | | | | | | | | | | | | |
| Fwy. | Post Mile | Location | Capacity | Northbound/Eastbound | | | | | | | | Southbound/Westbound | | | | | | | |
| | | | | Year 2046 Future Without Project | | | Year 2046 Future With Reduced Project | | | Δ D/C | Cum Con Imp | Year 2046 Future Without Project | | | Year 2046 Future With Reduced Project | | | Δ D/C | Cum Con Imp |
| | | | | Demand | D/C | LOS | Demand | D/C | LOS | | | Demand | D/C | LOS | Demand | D/C | LOS | | |
| I-110 | 2.77 | Wilmington, s/o "C" St. | 8,000 | 4,700 | 0.59 | C | 4,600 | 0.58 | C | -0.01 | No | 5,100 | 0.64 | C | 5,100 | 0.64 | C | 0.00 | No |
| SR-91 | 10.62 | e/o Alameda Street/Santa Fe Ave | 12,000 | 10,500 | 0.88 | D | 10,500 | 0.88 | D | 0.00 | No | 9,500 | 0.79 | D | 9,500 | 0.79 | D | 0.00 | No |
| I-405 | 8.02 | Santa Fe Ave. | 10,000 | 10,400 | 1.04 | F(0) | 10,400 | 1.04 | F(0) | 0.00 | No | 11,500 | 1.15 | F(0) | 11,500 | 1.15 | F(0) | 0.00 | No |
| I-710 | 7.6 | n/o Jct Rte 1 (PCH), Willow St. | 6,000 | 7,800 | 1.30 | F(1) | 7,700 | 1.28 | F(1) | -0.02 | No | 7,500 | 1.25 | F(0) | 7,500 | 1.25 | F(0) | 0.00 | No |
| I-710 | 10.31 | n/o Jct Rte 405, s/o Del Amo | 8,000 | 9,500 | 1.19 | F(0) | 9,400 | 1.18 | F(0) | -0.01 | No | 8,200 | 1.03 | F(0) | 8,200 | 1.03 | F(0) | 0.00 | No |
| I-710 | 19.1 | n/o Rte 105, n/o Firestone | 8,000 | 9,700 | 1.21 | F(0) | 9,700 | 1.21 | F(0) | 0.00 | No | 9,600 | 1.20 | F(0) | 9,600 | 1.20 | F(0) | 0.00 | No |

# 5.5 Comparison of Alternatives and the Proposed Project

The impacts of the two alternatives and the proposed Project, and the mitigation measures applied to each impact, are summarized in Table 5-27 and described in sections 5.5.2 and 5.5.3. The impacts of the two alternatives relative to the proposed Project are compared in Table 5-41, and the environmentally superior alternative is identified in Section 5.5.4.

## 5.5.1 Impacts and Mitigations

Significant impacts of the proposed Project and the Reduced Project Alternative were identified in nine resource areas: Aesthetics, Air Quality, Biology, Cultural Resources, Greenhouse Gases, Land Use, Noise, Utilities and Public Services, and Water Resources (Table 5-65). For the No Project Alternative significant impacts were identified in the areas of Air Quality, Greenhouse Gases, Hazards and Hazardous Materials, Transportation and Utilities and Public Services. Table 5-65 presents summary versions of the mitigation measures – the detailed mitigation measures are presented in the impact analyses of each environmental resource area for the proposed Project and Alternatives.

Some of the significant impacts could not be mitigated to less than significant by the mitigation measures; those issues are discussed in Section 5.5.2. The remaining significant impacts could be reduced to less than significant by the identified mitigation; those impacts are discussed in Section 5.5.3.

**Table 5-65. Impacts of the Proposed Project and Alternatives.**

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| **3.1 Aesthetics** | | | | |
| Proposed Project | **AES-1:** The proposed Project would cause a substantial degradation of the existing visual character or quality of the site and its surroundings. | **Significant impact** | **MM CR-2:** Archival Documentation and Interpretative Display<br>**MM CR-3:** Salvage Plan for Noteworthy Elements<br>See Cultural Resources summary, below, for text of MM CR-2 and MM CR-3 | **Significant and unavoidable** |
| Alternative 1 (No Project) | **AES-1:** Alternative 1 would not cause a substantial degradation of the existing visual character or quality of the site and its surroundings. | No impact | Mitigation not required. | No impact |
| Alternative 2 (Reduced Project) | **AES-1:** Alternative 2 would cause a substantial degradation of the existing visual character or quality of the site and its surroundings. | **Significant impact** | **MM CR-2:** Archival Documentation and Interpretative Display<br>**MM CR-3:** Salvage Plan for Noteworthy Elements<br>See Cultural Resources summary, below, for text of MM CR-2 and MM CR-3 | **Significant and unavoidable** |
| Proposed Project | **AES-2:** The proposed Project would result in a new source of light or glare that would not adversely affect day or nighttime views in the area. | Less than significant impact | Mitigation not required, but recommended.<br>**MM AES-1:** Shielding and focusing exterior lighting. All proposed lighting installed with the proposed Project and at the relocation sites shall be in compliance with the applicable requirements of POLA's Terminal Lighting Design Guidelines. Light levels shall be measured at strategic points prior to the installation of the new lighting system and at the same points after the new lighting system is installed and operational to evaluate offsite light spill. Corrective measures to be implemented as determined by the Port if light levels in guidelines are exceeded. | Less than significant impact |
| Alternative 1 (No Project) | **AES-2:** Alternative 1 would not result in a new source of light or glare that would adversely affect day or nighttime views in the area**.** | No impact | Mitigation not required. | No impact |
| Alternative 2 (Reduced Project) | **AES-2:** Alternative 2 would result in a new source of light or glare that would adversely affect day or nighttime views | Less than significant impact | Mitigation not required, but recommended.<br>**MM AES-1:** Shielding and focusing exterior lighting | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | in the area. | | See Section 3.1 for mitigation measure details | |
| Proposed Project | **AES-3:** The proposed Project would not result in substantial shadow effects on nearby shadow-sensitive land uses. | No impact | Mitigation not required | No impact |
| Alternative 1 (No Project) | **AES-3:** Alternative 1 would not result in substantial shadow effects on nearby shadow-sensitive land uses. | No impact | Mitigation not required. | No impact |
| Alternative 2 (Reduced Project) | **AES-3:** Alternative 2 would not result in substantial shadow effects on nearby shadow-sensitive land uses. | No impact | Mitigation not required | No impact |
| **3.2 Air Quality and Meteorology** | | | | |
| Proposed Project | **AQ-1**: The proposed Project would result in construction-related emissions that exceed an SCAQMD threshold of significance. | **Significant impact** | **MM AQ-1**: Fleet Modernization for Construction Equipment<br>• **Tier Specifications:**<br>a. From January 1, 2012, to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 hp, except marine vessels and harbor craft, will meet Tier-3 off-road emission standards at a minimum. In addition, all construction equipment greater than 50 hp will be retrofitted with a CARB-verified Level 3 DECS. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. This mitigation measure was quantified and included in the mitigated construction emissions in Tables 3.2-14 and 3.2-15.<br>b. From January 1, 2015 on: All off-road diesel-powered construction equipment greater than 50 hp, except marine vessels and harbor craft, will meet Tier-4 off-road emission standards at a minimum. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined | **Significant and unavoidable** |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | | | by CARB regulations. This mitigation measure was quantified and included in the mitigated construction emissions in Tables 3.2-14 and 3.2-15.<br><br>A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. The above "Tier Specifications" measures shall be met, unless one of the following circumstances exists, and the contractor is able to provide proof that any of these circumstances exists:<br><br>• A piece of specialized equipment is unavailable as specified in 3(a), 3(b) or 3(c) within 200 miles of the Port of Los Angeles, including through a leasing agreement. If this circumstance exists, the equipment must comply with one of the options contained in the Step Down Schedule as shown in Table A below. At no time shall equipment meet less than a Tier 1 engine standard with a CARB-verified Level 2 DECS.<br>• The availability of construction equipment shall be reassessed in conjunction with the years listed in the above Tier Specifications (Prior to December 31, 2011, January 1, 2012 and January 15, 2015) on an annual basis. For example, if a piece of equipment is not available prior to December 31, 2011, the contractor shall reassess this availability on January 1, 2012.<br>• Construction equipment shall incorporate, where feasible emissions-savings technology such as hybrid drives and specific fuel economy standards. This mitigation measure was not quantified in the mitigated construction emissions.<br>• Idling shall be restricted to a maximum of 5 minutes when not in use. This mitigation measure was not quantified in the mitigated construction emissions.<br><br>**MM AQ-2**: Fleet Modernization for On-Road Trucks<br>• Trucks used in construction will be required to | |

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| | | | comply with EPA Standards as described below. These standards were quantified and included in the mitigated construction emissions in Tables 3.2-14 and 3.2-15:<br><br>a. On-Road Trucks except for Import Haulers and Earth Movers: From January 1, 2012 on: All on-road heavy-duty diesel trucks with a GVWR of 19,500 pounds or greater used at the Port of Los Angeles will comply with EPA 2007 on-road emission standards for PM10 and NOx (0.01 g/bhp-hr and at least 1.2 g/bhp-hr, respectively).<br><br>b. For Import Haulers Only: From January 1, 2012 on: All on-road heavy-duty diesel trucks with a GVWR of 19,500 pounds or greater used to move dirt to and from the construction site via public roadways at the Port of Los Angeles will comply with EPA 2004 on-road emission standards for PM10 and NOx (0.10 g/bhp-hr and 2.0 g/bhp-hr, respectively).<br><br>c. For Earth Movers Only: From January 1, 2012 on: All heavy-duty diesel trucks with a GVWR of 19,500 pounds or greater used to move dirt within the construction site at the Port of Los Angeles will comply with EPA 2004 on-road emission standards for PM10 and NOx (0.10 g/bhp-hr and 2.0 g/bhp-hr, respectively).<br><br>d. A copy of each unit's certified EPA rating and each unit's CARB or SCAQMD operating permit, will be provided at the time of mobilization of each applicable unit of equipment. The above standards/specifications shall be met unless one of the following circumstances exists and the contractor is able to provide proof that any of these circumstances exists:<br><br>• A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement; | |

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| | | | • A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the proposed Project, but the application process is not yet approved, or the application has been approved, but funds are not yet available; or<br>• A contractor has ordered a control device for a piece of equipment planned for use on the proposed Project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the proposed Project has the controlled equipment available for lease.<br>• Trucks hauling material such as debris or any fill material will be fully covered while operating off Port property. This mitigation measure was not quantified in the mitigated construction emissions.<br>• Idling will be restricted to a maximum of 5 minutes when not in use. This mitigation measure was not quantified in the mitigated construction emissions.<br>**MM AQ-3**: Additional Fugitive Dust Controls<br>• SCAQMD's Best Available Control Technology (BACT) measures must be followed on all projects. They are outlined on Table 1 in Rule 403. Large construction projects (on a property which contains 50 or more disturbed acres) shall also follow Rule 403 Tables 2 and 3.<br>• Active grading sites shall be watered three times per day.<br>• Contractors shall apply approved non-toxic chemical soil stabilizers to all inactive construction areas or replace groundcover in disturbed areas.<br>• Contractors shall provide temporary wind fencing around sites being graded or cleared. | |

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| | | | • Trucks hauling dirt, sand, or gravel shall be covered or shall maintain at least 2 feet of freeboard in accordance with Section 23114 of the California Vehicle Code. ("Spilling Loads on Highways").<br>• Construction contractors shall install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off tires of vehicles and any equipment leaving the construction site.<br>• The grading contractor shall suspend all soil disturbance activities when winds exceed 25 mph or when visible dust plumes emanate from a site; disturbed areas shall be stabilized if construction is delayed.<br>• Open storage piles (greater than 3 feet tall and a total surface area of 150 square feet) shall be covered with a plastic tarp or chemical dust suppressant.<br>• Stabilize the materials while loading, unloading and transporting to reduce fugitive dust emissions.<br>• Belly-dump truck seals should be checked regularly to remove trapped rocks to prevent possible spillage.<br>• Comply with track-out regulations and provide water while loading and unloading to reduce visible dust plumes.<br>• Waste materials should be hauled off-site immediately.<br>• Pave road and road shoulders where available.<br>• Traffic speeds on all unpaved roads shall be reduced to 15 mph or less.<br>• Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.<br>• Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the extent practicable.<br>• Require the use of clean-fueled sweepers pursuant | |

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| | | | to SCAQMD Rule 1186 and Rule 1186.1 certified street sweepers. Sweep streets at the end of each day if visible soil is carried onto paved roads on-site or roads adjacent to the site to reduce fugitive dust emissions.<br>• Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to $PM_{10}$ generation.<br>**MM AQ-4**: Best Management Practices<br>The following measures are required on construction equipment (including onroad trucks):<br>• Use diesel oxidation catalysts and catalyzed diesel particulate traps.<br>• Maintain equipment according to manufacturers' specifications.<br>• Restrict idling of construction equipment to a maximum of 5 minutes when not in use.<br>• Install high-pressure fuel injectors on construction equipment vehicles.<br>• LAHD shall implement a process by which to select additional BMPs to further reduce air emissions during construction. The LAHD shall determine the BMPs once the contractor identifies and secures a final equipment list.<br>• Because the effectiveness of this measure has not been established and includes some emission reduction technology which may already be incorporated into equipment as part of the Tier level requirement in **MM AQ-1**, it is not quantified in this study.<br>**MM AQ-5**: General Construction Mitigation Measure<br>For any of the above construction mitigation measures (MM AQ-1 through AQ-3), if a CARB-certified technology becomes available and is shown to be equal or more effective in terms of emissions performance than the existing measure, the technology could replace the existing measure pending approval by the LAHD. Because the effectiveness of this measure | |

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| | | | cannot be established, it is not quantified in this study.<br>**MM AQ-6**: Special Precautions near Sensitive Sites<br>When construction activities are planned within 1,000 feet of sensitive receptors (defined as schools, playgrounds, day care centers, and hospitals), the construction contractor shall notify each of these sites in writing at least 30 days before construction activities begin. Because the effectiveness of this measure has not been established, it is not quantified in this study. | |
| Alternative 1 (No Project) | **AQ-1**: The No Project Alternative would not result in construction-related emissions that exceed an SCAQMD threshold of significance. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **AQ-1**: Alternative 2 would result in construction-related emissions that exceed an SCAQMD threshold of significance. | **Significant impact** | **MM AQ-1:** Fleet Modernization for Construction Equipment<br>**MM AQ-2:** Fleet Modernization for On-Road Trucks<br>**MM AQ-3:** Additional Fugitive Dust Controls<br>**MM AQ-4.** Best Management Practices<br>**MM AQ-5.** General Mitigation Measure<br>**MM AQ-6.** Special Precautions near Sensitive Sites | **Significant and unavoidable** |
| Proposed Project | **AQ-2**: The proposed Project construction would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance. | **Significant impact** | **MM AQ-1:** Fleet Modernization for Construction Equipment<br>**MM AQ-2:** Fleet Modernization for On-Road Trucks<br>**MM AQ-3:** Additional Fugitive Dust Controls | **Significant and unavoidable** |
| Alternative 1 (No Project) | **AQ-2**: Alternative 1 would not result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance because no construction would occur. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **AQ-2**: Alternative 2 construction would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance. | **Significant impact** | **MM AQ-1:** Fleet Modernization for Construction Equipment<br>**MM AQ-2:** Fleet Modernization for On-Road Trucks<br>**MM AQ-3:** Additional Fugitive Dust Controls | **Significant and unavoidable** |
| Proposed | **AQ-3**: The proposed Project would | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
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| Project | result in operational emissions that exceed 10 tons per year of VOCs and SCAQMD thresholds of significance. | | | |
| Alternative 1 (No Project) | **AQ-3:** Alternative 1 would not result in operational emissions that exceed 10 tons per year of VOCs and SCAQMD thresholds of significance. | Less than significant | Mitigation not required | Less than significant |
| Alternative 2 (Reduced Project) | **AQ-3**: Alternative 2 would not result in operational emissions that exceed 10 tons per year of VOCs and SCAQMD thresholds of significance. | No impact | Mitigation not required. | No impact. |
| Proposed Project | **AQ-4**: The proposed Project operations would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance. | **Significant impact** | **MM AQ-7**: On-site sweeping at SCIG facility<br>BNSF shall sweep the SCIG facility on-site, along routes used by drayage trucks, yard hostlers, service trucks and employee commuter vehicles, on a weekly basis using a commercial street sweeper or any technology with equivalent fugitive dust control. | **Significant and unavoidable** |
| Alternative 1 (No Project) | **AQ-4:** Alternative 1 operations would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance. | **Significant impact** | No feasible mitigation available | **Significant and unavoidable** |
| Alternative 2 (Reduced Project) | **AQ-4**: Alternative 2 operations would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance. | **Significant impact** | **MM AQ-7**: On-site sweeping at SCIG facility. | **Significant and unavoidable** |
| Proposed Project | **AQ-5:** The proposed Project would not generate on-road traffic that would contribute to an exceedance of the 1-hour or 8-hour CO standards. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **AQ-5:** Alternative 1 would not generate on-road traffic that would contribute to an exceedance of the 1-hour or 8-hour CO standards. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **AQ-5:** Alternative 2 would not generate on-road traffic that would contribute to an exceedance of the 1-hour or 8-hour CO standards. | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
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| Proposed Project | **AQ-6**: The proposed Project would not create objectionable odors at the nearest sensitive receptor. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **AQ-6:** Alternative 1 would not create objectionable odors at the nearest sensitive receptor. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **AQ-6**: Alternative 2 would not create objectionable odors at the nearest sensitive receptor. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **AQ-7**: The proposed Project would not expose receptors to significant levels of TACs. | Less than significant impact | Mitigation not required, but recommended.<br>**MM AQ-1:** Fleet Modernization for Construction Equipment<br>**MM AQ-2:** Fleet Modernization for On-Road Trucks<br>**MM AQ-3:** Additional Fugitive Dust Controls | Less than significant impact |
| Alternative 1 (No Project) | **AQ-7:** Alternative 1 would not expose receptors to significant levels of TACs. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **AQ-7**: Alternative 2 would not expose receptors to significant levels of TACs. | Less than significant impact | Mitigation not required, but recommended.<br>**MM AQ-1:** Fleet Modernization for Construction Equipment<br>**MM AQ-2:** Fleet Modernization for On-Road Trucks<br>**MM AQ-3:** Additional Fugitive Dust Controls | Less than significant impact |
| Proposed Project | **AQ-8:** The proposed Project would not conflict with or obstruct implementation of an applicable air quality plan. | No impact | Mitigation not required | No impact |
| Alternative 1 (No Project) | **AQ-8:** Alternative 1 would conflict with or obstruct implementation of an applicable air quality plan. | **Significant impact** | No feasible mitigation available | **Significant and unavoidable** |
| Alternative 2 (Reduced Project) | **AQ-8:** Alternative 2 would not conflict with or obstruct implementation of an applicable air quality plan. | No impact | Mitigation not required | No impact |
| **3.3 Biological Resources** | | | | |
| Proposed Project | **BIO-1**: Construction and operation of the proposed Project would result in the loss of individuals of, or have a substantial adverse effect, either directly | **Significant impact** | **MM BIO-1a**: Migratory Bird Nest Surveys and Protection Measures<br>Should tree or vegetation removal, or bridge replacement and renovation, occur within the BSA | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
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| | or through habitat modifications, on federally listed critical habitat or species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS. | | during the breeding season for migratory non-game native bird species (generally March 1 – September 1 but as early as February 15 and as late as September 15 for raptors), weekly bird surveys shall be conducted to detect any protected native birds in the vegetation to be removed and other suitable nesting habitat within 300 feet of the construction work area (500 feet for raptors). The surveys shall be conducted 30 days prior to the disturbance of suitable nesting habitat by a qualified biologist with experience in conducting nesting bird surveys. The surveys shall continue on a weekly basis with the last survey being conducted no more than 3 days prior to the initiation of clearance/construction work. If a protected native bird is found, the Operator shall delay all clearance/ construction activities within 300 feet of nesting habitat (within 500 feet for raptor nesting habitat) until August 31 or continue surveys in order to locate any nests. If an active nest is located, clearing and construction within 300 feet of the nest (within 500 feet for raptor nests) will be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest shall be established in the field with flagging and stakes or construction fencing. Construction personnel will be instructed on the sensitivity of the area. The results of this measure shall be recorded to document compliance with applicable State and Federal laws pertaining to the protection of native birds.<br><br>**MM BIO-1b:** Bat Roosting and Nesting Surveys and Protection Measures<br><br>The following activities shall be required with regard to bat roosting habitat:<br><br>a. Prior to construction, a qualified biologist shall conduct three focused bat surveys between March and November to conclude presence/absence of roosting bats within Pacific Coast Highway Bridge and Dominguez Channel Bridge. A pre-construction survey for roosting bats shall be performed within 30 days prior to removal of palms within the BSA. If no active roosts are found, then no further action | |

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| | | | will be needed. If either a maternity roost or hibernacula (structures used by bats for hibernation) is present, the measures below will be implemented to avoid and reduce impacts to roosting bats;<br>b. Prior to the anticipated bat roosting season (March to November) exclusionary devices will be installed. Installation of these devices will be completed prior to February 1 (beginning of bird breeding season) and will remain until construction is completed. A pre-clearance survey will be conducted at least one day prior to installing exclusionary devices to determine if bats are present. Exclusionary devices installed will include plastic sheeting, plastic or wire mesh, expanding foam, or plywood sheets. A pre-construction survey will also be completed at least one week prior to construction to verify exclusionary devices are successful and no bats are present. If bats are detected, an agency-approved bat biologist will be consulted to discuss additional measures to exclude bats.<br>c. If active maternity roosts or hibernacula are found in trees or structures to be removed or renovated as part of project construction, the project should be redesigned to avoid the loss of the occupied roost if it is possible to do so. If an active maternity roost is located and the project cannot be redesigned to avoid removal of the occupied palm or structure, demolition should commence before maternity colonies form (i.e., prior to March 1) or after young are flying, i.e., after July 31). Disturbance-free buffer zones as determined by a qualified biologist in consultation with CDFG should be observed during the maternity roost season (March 1 – July 31).<br>d. If a non-breeding bat hibernacula is found in a structure scheduled for removal, the individuals should be safely evicted, under the direction of a qualified biologist (as determined by a MOU to be negotiated with CDFG), by opening the roosting area to allow airflow through the cavity. Demolition will take place at least one night after initial disturbance for airflow. This action should allow | |

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| | | | bats to leave during darkness, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. Structures with roosts that need to be removed will first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours.<br>e. During bridge construction, alternative bat habitat (e.g., large bat houses) suitable for these species will be provided and installed prior to the roosting season (March to November), in coordination with a qualified biologist, CDFG, and the City of Los Angeles. The design of the alternative bat habitat will be approved by a wildlife biologist familiar with bat roosting requirements. The acceptance of artificial roosts appears to have a higher success rate if the artificial habitat is treated with guano. Guano shall be collected immediately after the bats have vacated the roost in order to maximize the collection of guano. Upon construction of artificial habitat features or artificial structures, they will be treated with an application of guano slurry to maximize their potential for use by bats returning to roost in the bridge.<br>f. Use of the bat alternative habitat will be monitored by a bat specialist every 2 weeks. During the known annual monitoring period (March to November) a determination will be made on the bats' use of the alternative habitat, which species are present, and the duration of use. If no bats are found to use the alternative habitat by April 31, surveys in the vicinity of the previously occupied bridge will be conducted to determine if bats have relocated to establish another roosting location. A bat specialist will be consulted to determine the limits of this survey area. If no bats are found within the area, it will be assumed they have relocated to an area outside of the vicinity of the bridge or palms, and no additional mitigation shall be required.<br>g. Bridge design will incorporate suitable bat habitat. The bridge design will include roughened concrete and incorporate appropriately sized (0.75 to 1.25 inches wide, at least 12 inches deep) longitudinal | |

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| | | | crevices.<br>h. A post-construction survey conducted during the bat roosting season (March to November) will be required to ensure success of the new bat habitat within the restored bridge. | |
| Alternative 1 (No Project) | **BIO-1**: Construction and operation of Alternative 1 would not result in the loss of individuals of, or have a substantial adverse effect, either directly or through habitat modifications, on federally listed critical habitat or species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **BIO-1**: Construction and operation of Alternative 2 would result in the loss of individuals of, or have a substantial adverse effect, either directly or through habitat modifications, on federally listed critical habitat or species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS. | **Significant impact** | **MM BIO-1a**: Migratory Bird Nest Surveys and Protection Measures<br>**MM BIO-1b:** Bat Roosting and Nesting Surveys and Protection Measures | Less than significant impact |
| Proposed Project | **BIO-2:** Construction and operation of the proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS. | No impact | Mitigation not required | No impact |
| Alternative 1 (No Project) | **BIO-2**: Construction and operation of Alternative 1 would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced | **BIO-2:** Construction and operation of Alternative 2 would not have a substantial adverse effect on any | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
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| Project) | riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS. | | | |
| Proposed Project | **BIO-3:** Construction/demolition activities associated with the proposed Project would not alter or have a substantial adverse effect on any federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. | No impact | Mitigation not required | No impact |
| Alternative 1 (No Project) | **BIO-3**: Alternative 1 would not involve construction and therefore there would be no effects on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Operation of Alternative 1 would not adversely affect those resources. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **BIO-3**: Construction activities associated with Alternative 2 could potentially alter, but would not have a substantial adverse effect on, federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Operation of the Reduced Project Alternative would not adversely affect those resources. | No impact | Mitigation not required | No impact |
| Proposed Project | **BIO-4:** Construction/demolition activities associated with the proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife | Less than significant impact | Mitigation not required | Less than significant impact |

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| | species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. | | | |
| Alternative 1 (No Project) | **BIO-4**: No features would be constructed under Alternative1; operation of Alternative 1 would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **BIO-4:** Construction and operation of Alternative 2 would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. | Less than significant impact | Mitigation not required | Less than significant impact |
| **3.4 Cultural Resources** | | | | |
| Proposed Project | **CR-1:** Construction of the proposed Project would potentially disturb, destroy, or degrade unknown archaeological or ethnographic resources, and thus cause a substantial adverse change in the significance of such resources as defined in §15064.5. | **Significant impact** | **MM CR-1:** Archaeological and Ethnographic Monitoring and Recovery<br>An archaeological monitor shall be present during all initial grading and excavation activities at the proposed Project site. In the event any cultural resources are encountered during earthmoving activities, the construction contractor shall cease activity in the affected area until the discovery can be evaluated by a qualified archaeologist in accordance with the provisions of CEQA §15064.5. The archaeologist shall complete any requirements for the mitigation of adverse effects on any resources determined to be significant and implement appropriate treatment measures. The treatment plan may include methods for: (1) subsurface testing after demolition of existing buildings, (2) data recovery of archaeological or ethnographic deposits, and (3) post-construction documentation. A detailed historic context that clearly demonstrates the themes under which any identified | Less than significant impact |

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| | | | subsurface deposits would be determined significant would be included in the treatment plan, as well as anticipated artifact types, artifact analysis, report writing, repatriation of human remains and associated grave goods, and curation.<br><br>A preconstruction information and safety meeting should be held to make construction personnel aware of archaeological monitoring procedures and the types of archaeological resources that might be encountered. All construction equipment operators shall attend a pre-construction meeting presented by a professional archaeologist retained by LAHD that shall review types of cultural resources and artifacts that would be considered potentially significant, to ensure operator recognition of these materials during construction.<br><br>Human Remains: Prior to beginning construction, BNSF and LAHD shall ensure that applicable Native American groups (e.g., the Gabrieliño-Tongva Tribal Council) have been consulted regarding proposed ground-disturbing activities and offered an opportunity to monitor the construction along with the project archeologist. If human remains are encountered, there shall be no further excavation or disturbance of the site within 100 feet of the find or any nearby area reasonably suspected to overlie adjacent human remains. The Los Angeles County Coroner shall be contacted to determine the age and cause of death of the deceased. If the remains are not of Native American heritage, construction in the area may recommence after authorized by the coroner.<br><br>If the remains are determined to be Native American, state laws relating to the disposition of Native American burials that fall within the jurisdiction of the NAHC (PRC §5097) will be implemented by the appropriate parties. The coroner must contact the NAHC to determine the most likely living descendant(s). BNSF and LAHD shall consult with the most likely descendant(s) to identify a mutually acceptable strategy for treating and disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC§5097.98. | |

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| | | | If the NAHC is unable to identify a most likely descendant, the descendant fails to make a recommendation within 24 hours of being notified by the NAHC and LAHD and the descendant are not capable of reaching a mutually acceptable strategy through mediation by the NAHC, the Native American human remains and associated grave goods shall be reburied with appropriate dignity on the proposed Project site in a location not subject to further subsurface disturbance. | |
| Alternative 1 (No Project) | **CR-1:** As no features would be constructed under Alternative 1, no physical disturbance to the project site that could affect archaeological, historic, or paleontological resources would occur. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **CR-1:** Construction of Alternative 2 could potentially disturb, destroy, or degrade unknown archaeological or ethnographic resources, and thus cause a substantial adverse change in the significance of an archaeological or ethnographic resource as defined in §15064.5. | **Significant impact** | **MM CR-1:** Archaeological and Ethnographic Monitoring and Recovery | Less than significant impact |
| Proposed Project | **CR-2:** Construction of the proposed Project would require demolition of the existing Sepulveda Boulevard Bridge, and thus cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. | **Significant impact** | **MM CR-2:** Archival Documentation and Interpretative Display<br>Prior to the start of construction of the new Sepulveda Boulevard railroad bridge, BNSF will prepare archival documentation and an interpretative display of the historical resource.<br>**Documentation:** A Historic American Engineering Record (Level II or less) will be prepared to provide a physical description of the historic bridge, discuss its significance under applicable CRHR criteria, and address the historical context for its construction, purpose, and function. Large-format black and white photographs will be taken showing the Sepulveda Boulevard Bridge in context, as well as details of its historic engineering features. The photographs will be fully captioned and processed for archival permanence. Copies of the report will be offered to the | **Significant and unavoidable** |

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| | | | local historical society and any other repository or organization determined by LAHD.<br><br>**Interpretive Display:** An interpretive exhibit, in the form of a permanent plaque, will be prepared, and once construction of the new bridge is complete, the plaque will be installed at the bridge site that provides a brief history of the structure, a description of its engineering features and characteristics, and the reasons for and date of its demolition and replacement.<br><br>**MM CR-3:** Salvage Plan for Noteworthy Elements<br><br>Prior to the start of the Sepulvada Bridge component of the proposed Project, BNSF shall prepare a plan for salvaging noteworthy elements of the structure for re-use either elsewhere or in the new bridge. The plan shall identify the elements to be salvaged, which shall be determined in consultation with a qualified architectural historian. Suitable re-use would include as decorative elements either on the new bridge or elsewhere in the region, or as an interpretive display. The plan shall be approved by LAHD, and the existing bridge and abutments shall not be demolished or altered until said approval has been granted. | |
| Alternative 1 (No Project) | **CR-2:** As no features would be constructed under Alternative 1, no physical disturbance to the project site that could affect cultural resources would occur. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **CR-2:** Construction of the Alternative 2 would cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. | **Significant impact** | **MM CR-2:** Archival Documentation and Interpretative Display<br><br>**MM CR-3:** Salvage Plan for Noteworthy Elements | **Significant and unavoidable** |
| Proposed Project | **CR-3:** Construction of the proposed Project would potentially disturb, destroy, or degrade unknown paleontological resource, and thus directly or indirectly destroy a unique paleontological resource. | **Significant impact** | **MM CR-4:** Paleontological Monitoring and Recovery<br><br>Paleontological monitoring of ground disturbing activities shall be conducted by a qualified paleontologist. Ground disturbing activities include, but are not limited to, pavement/asphalt removal, boring, trenching, grading, excavating, and the demolition of building foundations. A preconstruction information and safety meeting should be held to make | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | | | construction personnel aware of paleontological monitoring procedures and paleontological sensitivity.<br>In the event that paleontological resources are encountered, the contractor shall stop construction within 10 meters (30 feet) of the exposure. A qualified paleontologist will evaluate the significance of the resource. Additional monitoring recommendations may be made at that time. If the resource is found to be significant, the paleontologist shall systematically remove and stabilize the specimen in anticipation of its preservation. Curation of the specimen shall be in a qualified research facility, such as the Los Angeles County Natural History Museum. | |
| Alternative 1 (No Project) | **CR-3:** As no features would be constructed under Alternative 1, no physical disturbance to the project site that could affect paleontological resources would occur. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **CR-3:** Construction of Alternative 2 would potentially disturb, destroy, or degrade unknown paleontological resource, and thus directly or indirectly destroy a unique paleontological resource. | **Significant impact** | **MM CR-4:** Paleontological Monitoring and Recovery | Less than significant impact |
| **3.5 Geology** | | | | |
| Proposed Project | **GEO-1:** Seismic activity along the Palos Verdes and Newport-Inglewood faults, as well as other regional faults, have the potential to produce fault rupture, seismic ground shaking, liquefaction, or other seismically induced ground failure but would not expose the population and structures to substantial risk from construction and operation of the proposed Project. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **GEO-1:** No features would be constructed under Alternative 1; Seismic activity along the Palos Verdes and Newport-Inglewood faults, as well as other regional faults, have the potential | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | to produce fault rupture, seismic ground shaking, liquefaction, or other seismically induced ground failure but would not expose the population and structures to substantial risk from operation of Alternative 1. | | | |
| Alternative 2 (Reduced Project) | **GEO-1:** Seismic activity along the Palos Verdes and Newport-Inglewood faults, as well as other regional faults, have the potential to produce fault rupture, seismic ground shaking, liquefaction, or other seismically induced ground failure but would not expose the population and structures to substantial risk from construction and operation of Alternative 2 | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **GEO-2:** Construction and operation of the proposed Project would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from tsunamis and seiches. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **GEO-2:** No features would be constructed under Alternative 1; operation of Alternative 1 would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from tsunamis and seiches. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **GEO-2:** Construction and operation of Alternative 2 would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from tsunamis and seiches. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **GEO-3:** Construction and operation of the proposed Project would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | subsidence/soil settlement. | | | |
| Alternative 1 (No Project) | **GEO-3:** No features would be constructed under Alternative 1; operation of Alternative 1 would not result in damage to structures or infrastructure, or expose people to risk of injury from subsidence/soil settlement. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **GEO-3:** Construction and operation of Alternative 2 would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from subsidence/soil settlement. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **GEO-4:** Construction and operational activities related to the proposed Project would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from soil expansion. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **GEO-4:** No features would be constructed under Alternative 1; operational activities related to Alternative 1 would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from soil expansion. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **GEO-4:** Construction and operational activities related to Alternative 2 would not result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury from soil expansion. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **GEO-5:** Construction and operation of the proposed Project would not result in or expose people or property to a substantial risk of earth movement or slides including landslides, rockslides or mud-flows. | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Alternative 1 (No Project) | **GEO-5:** No features would be constructed under Alternative 1; operation of Alternative 1 would not result in or expose people or property to a risk of earth movement or slides including landslides, rockslides or mud-flows. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **GEO-5:** Construction and operation of Alternative 2 would not result in or expose people or property to a substantial risk of earth movement or slides including landslides, rockslides or mud-flows. | No impact | Mitigation not required | No impact |
| Proposed Project | **GEO-6:** Shallow groundwater, which would cause unstable soil conditions, may be encountered during demolition and construction, but would not expose people or structures to substantial risk of injury or damage. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **GEO-6:** No features would be constructed under Alternative 1; accordingly, shallow groundwater and unstable soils would not be encountered. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **GEO-6:** Shallow groundwater, which would cause unstable soil conditions, may be encountered during demolition and construction, but would not expose people or structures to substantial risk of injury or damage. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **GEO-7:** Construction and operation of the proposed Project would not cause destruction, permanent coverage, material or adverse modification to one or more distinct and prominent geologic topographic features. | No impact | Mitigation not required | No impact |
| Alternative 1 (No Project) | **GEO-7:** No features would be constructed; operation of Alternative 1 would not cause destruction, permanent | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | coverage, material or adverse modification to one or more distinct and prominent geologic topographic features. | | | |
| Alternative 2 (Reduced Project) | **GEO-7:** Construction and operation of Alternative 2 would not cause destruction, permanent coverage, material or adverse modification to one or more distinct and prominent geologic topographic features. | No impact | Mitigation not required | No impact |
| Proposed Project | **GEO-8:** Construction and operation of the proposed Project would not result in substantial erosion or loss of topsoil. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **GEO-8:** No features would be constructed under Alternative 1; operation of Alternative 1 would not result in substantial erosion or loss of topsoil. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **GEO-8:** Construction and operation of Alternative 2 would not result in substantial erosion or loss of topsoil. | Less than significant impact | Mitigation not required | Less than significant impact |
| **3.6 Greenhouse Gas Emissions and Climate Change** | | | | |
| Proposed Project | **GHG-1:** The proposed Project would result in an increase in construction-related and operation-related GHG emissions. | **Significant impact** | **MM GHG-1:** Increased Fuel Efficiency for Construction Equipment<br>Construction equipment idling is to be restricted to a maximum of 5 minutes when not in use and when feasible, and the use of electrified construction equipment where feasible.<br>**MM GHG-2:** Solar Panels<br>The Port shall review the feasibility of including the future SCIG site on their Inventory of Potential PV Solar Sites at POLA from their December 2007 Climate Action Plan.<br>**MM GHG-3**: Recycling<br>The tenant shall ensure a minimum of 40 percent of all waste generated during project construction is recycled and 60 percent of all waste generated in all buildings is recycled by the facility opening year of 2016. | **Significant and unavoidable** |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | | | Recycled materials shall include: (a) white and colored paper; (b) post-it notes; (c) magazines; (d) newspaper; (e) file folders; (f) all envelopes including those with plastic windows; (g) all cardboard boxes and cartons; (h) all metal and aluminum cans; (i) glass bottles and jars; and; (j) all plastic bottles.<br><br>**MM GHG-4:** Tree Planting<br>The applicant shall plant shade trees around the main administration building and the tenant shall maintain all trees through the life of the lease.<br><br>**MM GHG-5:** Water Conservation<br>As part of the facility construction, the applicant shall install a water recirculation system at potential wash racks, install low-flow devices in new buildings and low irrigation landscaping, and maintain these through the life of the lease.<br><br>**MM GHG-6:** Compact Fluorescent Light Bulbs<br>All interior buildings on the SCIG facility shall exclusively use compact fluorescent light bulbs for ambient lighting. The applicant shall also maintain and replace any Port-supplied compact fluorescent light bulbs. Fluorescent light bulbs produce less waste heat and use substantially less electricity than incandescent light bulbs. Although not quantified in this analysis, implementation of this measure is expected to reduce the Project's GHG emissions by less than 0.1 percent.<br><br>**MM GHG-7:** Energy Audit<br>The applicant shall conduct a third party energy audit every 5 years and install innovative power saving technology where feasible, such as power factor correction systems and lighting power regulators. Such systems help to maximize usable electric current and eliminate wasted electricity thereby lowering overall electricity use. | |
| Alternative 1 (No Project) | **GHG-1:** Alternative 1 would result in an increase in operation-related GHG emissions. | **Significant impact** | No feasible mitigation available | **Significant and unavoidable** |
| Alternative 2 (Reduced | **GHG-1:** Alternative 2 would result in an increase in construction-related and | **Significant impact** | **MM GHG-1:** Increased Fuel Efficiency for | **Significant and unavoidable** |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Project) | operation-related GHG emissions. | | Construction Equipment<br>**MM GHG-2:** Solar Panels<br>**MM GHG-3**: Recycling<br>**MM GHG-4:** Tree Planting<br>**MM GHG-5:** Water Conservation<br>**MM GHG-6:** Compact Fluorescent Light Bulbs<br>**MM GHG-7:** Energy Audit | |
| Proposed Project | **GHG-2:** The proposed Project would not conflict with State and local plans and policies. The proposed Project would be subject to sea level rise impacts from climate change. | **Significant impact** | No feasible mitigation is available | **Significant and unavoidable** |
| Alternative 1 (No Project) | **GHG-2:** Alternative 1 would conflict with State and local plans and policies. Alternative 1 would be subject to sea level rise impacts from climate change. | **Significant impact** | No feasible mitigation is available | **Significant and unavoidable** |
| Alternative 2 (Reduced Project) | **GHG-2:** Alternative 2 would not conflict with State and local plans and policies. Alternative 2 would be subject to sea level rise impacts from climate change. | **Significant impact** | No feasible mitigation is available | **Significant and unavoidable** |
| **3.7 Hazards and Hazardous Materials** | | | | |
| Proposed Project | **RISK-1**: The proposed Project would not substantially increase the probable frequency and severity of consequences to people or property as a result of a potential accidental release or explosion of a hazardous substance. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **RISK-1**: Alternative 1 would not increase the probable frequency and severity of consequences to people or property as a result of a potential accidental release or explosion of a hazardous substance. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **RISK-1**: Alternative 2 would not substantially increase the probable frequency and severity of consequences | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | to people or property as a result of a potential accidental release or explosion of a hazardous substance. | | | |
| Proposed Project | **RISK-2a**: Construction of the proposed Project would increase the probable frequency and severity of consequences to people from exposure to health hazards.<br>**RISK-2b**: Operation of the proposed Project would not increase the probable frequency and severity of consequences to people from exposure to health hazards. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **RISK-2**: No features would be constructed; operation of Alternative 1 would increase the probable frequency and severity of consequences to people from exposure to health hazards. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **RISK-2a**: Construction of the Reduced Project Alternative would increase the probable frequency and severity of consequences to people from exposure to health hazards.<br>**RISK-2b**: Operation of the Reduced Project Alternative would not increase the probable frequency and severity of consequences to people from exposure to health hazards. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **RISK-3**: The proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **RISK-3**: No features would be constructed; operation of Alternative 1 would not change the routine transport, use, or disposal of hazardous materials. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced | **RISK-3**: Alternative 2 would not create a significant hazard to the public or the | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Project) | environment through the routine transport, use, or disposal of hazardous materials. | | | |
| Proposed Project | **RISK-4**: The proposed Project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **RISK-4**: No features would be constructed; Alternative 1 is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **RISK-4**: Alternative 2 would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **RISK-5:** The proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **RISK-5**: Alternative 1 would not materially change hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **RISK-5:** Alternative 2 would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Proposed Project | **RISK-6**: The proposed Project would not increase the probability of an accidental spill due to project-related modifications, if a tsunami were to occur. | No impact | Mitigation not required | No impact |
| Alternative 1 (No Project) | **RISK-6**: Alternative 1 would not increase the probability of an accidental spill due to project-related modifications, if a tsunami were to occur. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **RISK-6**: Alternative 2 would not increase the probability of an accidental spill due to project-related modifications, if a tsunami were to occur. | No impact | Mitigation not required | No impact |
| Proposed Project | **RISK-7**: The proposed Project would not result in a measurable increase in the probability of a terrorist attack due to project-related modifications, which would result in adverse consequences to the proposed Project site and nearby areas. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **RISK-7**: Alternative 1 would not result in any increase in the probability of a terrorist attack because there would be no project-related modifications. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **RISK-7**: Alternative 2 would not result in a measurable increase in the probability of a terrorist attack due to project-related modifications, which would result in adverse consequences to the project site and nearby areas. | Less than significant impact | Mitigation not required | Less than significant impact |
| **3.8 Land Use** | | | | |
| Proposed Project | **LU-1:** The proposed Project would be consistent with the adopted land use/density designation in the Community Plan, redevelopment plan, or specific plan for the site. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **LU-1:** No features would be constructed; baseline land use conditions would continue at the site. | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Alternative 2 (Reduced Project) | **LU-1:** Alternative 2 would be consistent with the adopted land use/density designation in the Community Plan, redevelopment plan, or specific plan for the site. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **LU-2:** The proposed Project would be consistent with the General Plan or adopted environmental goals or policies contained in other applicable plans adopted for the purpose of avoiding or mitigating an environmental impact. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **LU-2:** Alternative 1 would be inconsistent with policies of the Los Angeles Harbor Department with respect to avoiding or mitigating environmental impact associated with goods movement. | **Significant impact** | No feasible mitigation available | **Significant and unavoidable** |
| Alternative 2 (Reduced Project) | **LU-2:** Alternative 2 would be consistent with the General Plan or adopted environmental goals or policies contained in other applicable plans adopted for the purpose of avoiding or mitigating an environmental impact. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **LU-3:** The proposed Project would not isolate or divide existing neighborhoods, communities, or land uses. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **LU-3:** No features would be constructed; baseline land use conditions would continue at the site. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **LU-3:** Alternative 2 would not isolate or divide existing neighborhoods, communities, or land uses. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **LU-4:** The proposed Project would cause secondary impacts to surrounding land uses. | **Significant impact** | **MM AQ-1:** Fleet Modernization for Construction Equipment<br>**MM AQ-2:** Fleet Modernization for On-Road Trucks<br>**MM AQ-3:** Additional Fugitive Dust Controls<br>**MM AQ-4.** Best Management Practices | **Significant and unavoidable** |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | | | **MM AQ-5.** General Mitigation Measure<br>**MM AQ-6.** Special Precautions near Sensitive Sites<br>**MM AQ-7**: On-site sweeping at SCIG facility.<br>See Air Quality, above<br>**MM NOI-1**: 12-Foot High Sound wall.<br>**MM NOI-2**: Construction Noise Reduction Measures<br>**MM NOI-3**: 24-Foot-High Sound Barrier.<br>(See Noise, below) | |
| Alternative 1 (No Project) | **LU-4:** Alternative 1 would not cause secondary impacts to surrounding land uses. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **LU-4:** Alternative 2 would cause secondary impacts to surrounding land uses. | **Significant impact** | **MM AQ-1:** Fleet Modernization for Construction Equipment<br>**MM AQ-2:** Fleet Modernization for On-Road Trucks<br>**MM AQ-3:** Additional Fugitive Dust Controls<br>**MM AQ-4.** Best Management Practices<br>**MM AQ-5.** General Mitigation Measure<br>**MM AQ-6.** Special Precautions near Sensitive Sites<br>**MM AQ-7**: On-site sweeping at SCIG facility.<br>See Air Quality, above<br>**MM NOI-1**: 12-Foot High Sound Wall.<br>**MM NOI-2**: Construction Noise Reduction Measures<br>**MM NOI-3**: 24-Foot-High Sound Barrier.<br>(See Noise, below) | **Significant and unavoidable** |
| **3.9 Noise** | | | | |
| Proposed Project | **NOI-1:** The proposed Project would not cause noise levels from daytime construction lasting more than 1 day to exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use; or for construction activities lasting more than 10 days in a 3-month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use in the City of Los Angeles. | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Alternative 1 (No Project) | **NOI-1:** No features would be constructed under Alternative 1. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **NOI-1:** Alternative 2 would not cause noise levels from daytime construction lasting more than 1 day to exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use; or for construction activities lasting more than 10 days in a 3-month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use in the City of Los Angeles. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **NOI-2:** Construction activities would not exceed the ambient noise level by 5 dBA at a noise sensitive use in the City of Los Angeles between the hours of 9:00 PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or at any time on Sunday. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **NOI-2:** No features would be constructed under Alternative 1. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **NOI-2:** Construction activities would not exceed the ambient noise level by 5 dBA at a noise sensitive use in the City of Los Angeles between the hours of 9:00 PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or at any time on Sunday. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **NOI-3:** The proposed Project would not cause the ambient noise level measured at the property line of affected uses within the City of Los Angeles to increase by 3 dBA in CNEL to or within the 'normally unacceptable' or 'clearly unacceptable category,' or any 5 dBA or greater noise increase. | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Alternative 1 (No Project) | **NOI-3:** Operation of Alternative 1 would not cause ambient noise levels measured at the property line of affected uses within the City of Los Angeles to increase by 3 dBA in CNEL to or within the 'normally unacceptable' or 'clearly unacceptable category,' or any 5 dBA or greater noise increase. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **NOI-3:** Alternative 2 would not cause the ambient noise level measured at the property line of affected uses within the City of Los Angeles to increase by 3 dBA in CNEL to or within the 'normally unacceptable' or 'clearly unacceptable category,' or any 5 dBA or greater noise increase. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **NOI-4:** Construction and operation of the proposed Project would not cause sleep awakenings at residences within the City of Los Angeles. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **NOI-4:** No construction would occur; operation of Alternative 1would not cause sleep awakenings at residences within the City of Los Angeles. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **NOI-4:** Construction and operation of Alternative 2 would not cause sleep awakenings at residences within the City of Los Angeles | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **NOI-5:** Operation of the proposed Project would not expose City of Los Angeles schools to interior noise levels above 52 dBA, sufficient for momentary disruption of speech intelligibility in classroom teaching situations. | No impact | Mitigation not required | No impact |
| Alternative 1 (No Project) | **NOI-5:** Operation of Alternative 1 would not expose City of Los Angeles schools to interior noise levels above 52 dBA, sufficient for momentary | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | disruption of speech intelligibility in classroom teaching situations. | | | |
| Alternative 2 (Reduced Project) | **NOI-5:** Operation of Alternative 2 would not expose City of Los Angeles schools to interior noise levels above 52 dBA, sufficient for momentary disruption of speech intelligibility in classroom teaching situations. | No impact | Mitigation not required | No impact |
| Proposed Project | **NOI-6:** Construction and operation of the proposed Project would cause ambient noise levels to be increased by three dBA or more, or maximum noise levels allowed by the Long Beach Municipal Code would be exceeded. | **Significant impact** | **MM NOI-1**: 12-Foot High Sound Wall<br>Prior to the start of construction of the proposed Project, BNSF shall first construct a permanent 12-foot high soundwall along the easterly right-of-way of the Terminal Island Freeway, from West 20th Street to Sepulveda Boulevard, as shown in Figure 3.9-6, to reduce construction noise. The final height and location of the soundwall shall be verified by an acoustical consultant as part of the final engineering design of the soundwall. After construction of the soundwall, BNSF shall install landscaping along the length of the soundwall. The final landscaping plan with selected native plant species and irrigation shall be determined as part of the final engineering design. Upon completion, BNSF will be responsible for long-term maintenance. Right-of-way acquisition necessary for the soundwall and landscaping shall be the responsibility of BNSF.<br>**MM NOI-2**: Construction Noise Reduction Measures<br>The following noise control measures shall be implemented during construction of the proposed Project. This mitigation measure applies to BNSF and the relocated tenants. These measures were not quantitatively evaluated.<br>a) Construction Hours. Limit construction to the hours of 7:00 am to 9:00 pm on weekdays, between 8:00 am and 6:00 pm on Saturdays, and prohibit construction equipment noise anytime on Sundays and holidays as prescribed in the City of Los Angeles Noise Ordinance, except where nighttime construction is necessary on the PCH grade separation. | **Significant and unavoidable** |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | | | b) Construction Days. Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work).<br><br>c) Temporary Noise Barriers. When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) shall be located between noise-generating construction activities and sensitive receptors.<br><br>d) Construction Equipment. Properly muffle and maintain all construction equipment powered by internal combustion engines.<br><br>e) Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near noise sensitive areas.<br><br>f) Equipment Location. Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as is practical from existing noise sensitive land uses.<br><br>g) Quiet Equipment Selection. Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance.<br><br>h) Notification. Notify residents adjacent to the proposed Project site of the construction schedule in writing.<br><br>Portable Generators. Avoid the use of portable generators if electricity can be obtained from the local power grid.<br><br>Noise Complaints. Assign a disturbance counselor to respond to noise complaints. Post contact information at the construction site.<br><br>Pile Driving Hours. Restrict pile driving to the hours between 9 AM and 5 PM, Monday through Friday, and from 10 AM to 4 PM on Saturdays.<br><br>A Construction Noise Monitoring and Management Plan will be required to evaluate the construction process prior to the commencement. The plan should | |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | | | evaluate each piece of construction equipment and the need for administrative and engineering noise control for each construction element. A noise monitoring plan should be prepared to document construction noise levels during the process.<br><br>**MM NOI-3**: 24-Foot-High Sound Barrier<br><br>Prior to the start of construction, BNSF shall first construct a permanent 24-foot high sound barrier as an extension to the existing 24-ft high sound barrier along the easterly right-of-way of the Terminal Island Freeway north of Sepulveda Blvd, as shown in Figure 3.9-6. The barrier would close the present gap between the existing barrier and a warehouse to the south, removing line-of-sight from the Project site to receiver R1 (the residence at 2789 Webster) and receiver R30 (Stephens Middle School). The final height and location of the soundwall shall be verified by an acoustical consultant as part of the final engineering design of the soundwall. Right-of-way acquisition necessary for the soundwall shall be the responsibility of BNSF. | |
| Alternative 1 (No Project) | **NOI-6:** No features would be constructed under Alternative 1; operation of Alternative 1 would not cause ambient noise levels to be increased by three dBA or more, or maximum noise levels allowed by the Long Beach Municipal Code to be exceeded.. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **NOI-6:** Construction and operation of Alternative 2 would cause ambient noise levels to be increased by three dBA or more, or maximum noise levels allowed by the Long Beach Municipal Code would be exceeded. | **Significant impact** | **MM NOI-1**: 12-Foot High Sound Wall.<br>**MM NOI-2**: Construction Noise Reduction Measures<br>**MM NOI-3**: 24-Foot-High Sound Barrier.<br>See Section 3.9 for mitigation measure details | **Significant and unavoidable** |
| Proposed Project | **NOI-7:** Construction and operation of the proposed Project would not have a significant vibration impact on ground vibration levels for residential structures within the City of Long Beach that would exceed the acceptability limits | Less than significant impact. | Mitigation not required. | Less than significant impact. |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | prescribed by the FTA. | | | |
| Alternative 1 (No Project) | **NOI-7:** No features would be constructed; operation of Alternative 1 would not have a significant vibration impact on ground vibration levels for residential structures within the City of Long Beach that would exceed the acceptability limits prescribed by the FTA. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **NOI-7:** Construction and operation of Alternative 2 would not have a significant vibration impact on ground vibration levels for residential structures within the City of Long Beach that would exceed the acceptability limits prescribed by the FTA. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **NOI-8:** Operation of the proposed Project would not expose City of Long Beach residences to interior nighttime SEL above 80 dBA SEL, sufficient to awaken at least 10 percent of residents. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **NOI-8:** Operation of Alternative 1 would not expose City of Long Beach residences to interior nighttime SEL above 80 dBA SEL, sufficient to awaken at least 10 percent of residents. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **NOI-8:** Operation of Alternative 2 would not expose City of Long Beach residences to interior nighttime SEL above 80 dBA SEL, sufficient to awaken at least 10 percent of residents. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **NOI-9:** Operation of the proposed Project would not expose City of Long Beach schools to interior noise levels above 52 dBA, sufficient for momentary disruption of speech intelligibility in classroom teaching situations. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 | **NOI-9:** Operation of Alternative 1 | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| (No Project) | would not expose City of Long Beach schools to interior noise levels above 52 dBA, sufficient for momentary disruption of speech intelligibility in classroom teaching situations. | | | |
| Alternative 2 (Reduced Project) | **NOI-9:** Operation of Alternative 2 would not expose City of Long Beach schools to interior noise levels above 52 dBA, sufficient for momentary disruption of speech intelligibility in classroom teaching situations. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **NOI-10:** Construction and operation of the proposed Project would not increase ambient noise levels by three dBA or more; or maximum noise levels allowed by the City of Carson would be exceeded. | Less than significant impact. | Mitigation not required. | Less than significant impact. |
| Alternative 1 (No Project) | **NOI-10:** No features would be constructed; operation of Alternative 1 would not increase ambient noise levels by three dBA or more; or exceed maximum noise levels allowed by the City of Carson. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **NOI-10:** Construction and operation of Alternative 2 would not increase ambient noise levels by three dBA or more; or exceed maximum noise levels allowed by the City of Carson. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **NOI-11:** Construction and operation of the proposed Project would not cause ground vibration levels for residential structures within the City of Carson to exceed the acceptability limits prescribed by the FTA. | Less than significant impact. | Mitigation not required. | Less than significant impact. |
| Alternative 1 (No Project) | **NOI-11:** No features would be constructed; baseline land use conditions would continue at the site, and there would be no change in the noise environment. | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Alternative 2 (Reduced Project) | **NOI-11:** Construction and operation of Alternative 2 would not cause ground vibration levels for residential structures within the City of Carson to exceed the acceptability limits prescribed by the FTA. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **NOI-12:** Operation of the proposed Project would not expose City of Carson residences to interior nighttime SEL above 80 dBA SEL, sufficient to awaken at least 10 percent of residents. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **NOI-12:** Operation of Alternative 1 would not expose City of Carson residences to interior nighttime SEL above 80 dBA SEL, sufficient to awaken at least 10 percent of residents. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **NOI-12:** Operation of Alternative 2 would not expose City of Carson residences to interior nighttime SEL above 80 dBA SEL, sufficient to awaken at least 10 percent of residents. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **NOI-13:** Operation of the proposed Project Alternative would not expose City of Carson schools to interior noise levels above 52 dBA, sufficient for momentary disruption of speech intelligibility in classroom teaching situations. | No impact | Mitigation not required | No impact |
| Alternative 1 (No Project) | **NOI-13:** Operation of Alternative 1 would not expose City of Carson schools to interior noise levels above 52 dBA, sufficient for momentary disruption of speech intelligibility in classroom teaching situations. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **NOI-13:** Operation of Alternative 2 would not expose City of Carson schools to interior noise levels above 52 dBA, sufficient for momentary disruption of speech intelligibility in | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | classroom teaching situations. | | | |
| **3.10 Transportation/Circulation** | | | | |
| Proposed Project | **TRANS-1:** Construction would result in a short-term, temporary increase in truck and auto traffic. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **TRANS-1**: As construction would not take place, there would be no increase in traffic. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **TRANS-1:** Construction would result in a short-term, temporary increase in truck and auto traffic. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **TRANS-2:** Vehicular traffic associated with operation of the proposed Project would not have a significant adverse impact on at least one study intersection's volume/capacity ratios or level of service. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **TRANS-2:** Vehicular traffic associated with operation of the Alternative 1 would not have a significant adverse impact on at least one study intersection's volume/capacity ratios or level of service. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **TRANS-2:** Vehicular traffic associated with operation of the Alternative2 would not have a significant adverse impact on at least one study intersection's volume/capacity ratios or level of service. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **TRANS-3:** An increase in on-site employees due to proposed Project operations would result in a less than significant increase in related public transit use. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **TRANS-3:** An increase in on-site employees due to Alternative 1 operations would result in a less than significant | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | increase in related public transit use. | | | |
| Alternative 2 (Reduced Project) | **TRANS-3:** An increase in on-site employees due to Alternative 2 operations would result in a less than significant increase in related public transit use. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **TRANS-4:** Proposed Project operations would result in a less than significant increase in freeway congestion. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **TRANS-4:** Alternative 1 operations would result in a less than significant increase in freeway congestion. | **Significant impact** | No feasible mitigation is available | **Significant and unavoidable** |
| Alternative 2 (Reduced Project) | **TRANS-4:** Alternative 2 operations would result in a less than significant increase in freeway congestion. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **TRANS-5:** Project operations would not cause an increase in rail activity, causing potential delays in regional traffic. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **TRANS-5:** Alternative 1 operations would not cause an increase in rail activity, and would not cause delays in regional traffic. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 2 (Reduced Project) | **TRANS-5:** Alternative 2 operations would neither cause traffic delay at at-grade crossings nor generate enough trains to exceed the capacity of the regional rail infrastructure. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **TRANS-6:** Proposed Project operations would not substantially increase hazards due to a design feature. | No impact | Mitigation not required | No impact |
| Alternative 1 (No Project) | **TRANS-6:** Alternative 1 operations would not substantially increase hazards due to a design feature. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **TRANS-6:** Alternative 2 operations would not substantially increase hazards due to a design feature. | No impact | Mitigation not required | No impact |
| Proposed Project | **TRANS-7:** Proposed Project operations would not result in inadequate emergency access. | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Alternative 1 (No Project) | **TRANS-7:** Alternative 1 operations would not result in inadequate emergency access. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **TRANS-7:** Alternative 2 operations would not result in inadequate emergency access. | No impact | Mitigation not required | No impact |
| Proposed Project | **TRANS-8:** Proposed Project operations would not conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. | No impact | Mitigation not required | No impact |
| Alternative 1 (No Project) | **TRANS-8:** Alternative 1 operations would not conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **TRANS-8:** Alternative 2 operations would not conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. | No impact | Mitigation not required | No impact |
| **3.11 Utilities and Public Services** | | | | |
| Proposed Project | **PS-1**: The proposed Project would not burden existing police staff levels and facilities such that the police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **PS-1**: No features would be constructed; baseline conditions would continue at the site, and there would be no substantial change in the demand for public services. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **PS-1**: Alternative 2 would not burden existing police staff levels and facilities such that the police would not be able to maintain an adequate level of service without additional facilities, the | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | construction of which could cause significant environmental effects. | | | |
| Proposed Project | **PS-2**: Development of the proposed Project would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **PS-2**: No features would be constructed; baseline conditions would continue at the site, and there would be no substantial change in the demand for public services. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **PS-2**: Development of Alternative 2 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **PS-3**: The proposed Project would not result in a substantial increase in water supply demand that would exceed the capacity of existing facilities in the Project area. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **PS-3**: No features would be constructed; baseline conditions would continue at the site, and there would be no change in the demand for water used at the site. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **PS-3**: Alternative 2 would not result in a substantial increase in water supply demand that would exceed the capacity of existing facilities in the Project area. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **PS-4**: The proposed Project would not result in a substantial increase in wastewater flows that would exceed the wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board or exceed the capacity of existing treatment facilities. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **PS-4**: No features would be constructed; baseline conditions would continue at the site, and there would be no substantial change in the demand for wastewater | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | treatment facilities. | | | |
| Alternative 2 (Reduced Project) | **PS-4**: Alternative 2 would not result in a substantial increase in wastewater flows that would exceed the wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board or exceed the capacity of existing treatment facilities. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **PS-5:** The proposed Project would not generate substantial surface runoff that would exceed the capacity of existing municipal storm drain systems. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **PS-5**: No features would be constructed; baseline conditions would continue at the site, and there would be no change in the demand for stormwater facilities. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **PS-5:** Alternative 2 would not generate substantial surface runoff that would exceed the capacity of existing municipal storm drain systems. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **PS-6**: Operation of the proposed Project would generate solid waste that is assumed to exceed landfill capacity after 2030. | **Significant impact** | **MM PS-1**: Recycling of Construction Materials Demolition and/or excess construction materials shall be separated onsite for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials shall be provided onsite.<br>**MM PS-2**: Materials with Recycled Content Materials with recycled content shall be used in Project construction where feasible. Chippers onsite during construction shall be used to further reduce excess wood for landscaping cover.<br>**MM PS-3**: Compliance With City of Los Angeles Solid Waste Integrated Resources Plan (SWIRP) To ensure adequate long-term solid waste management, the proposed Project will be required to comply with policies and standards set forth in the City's Solid Waste Integrated Resources Plan (SWIRP) following 2025. | Less than significant impact |
| Alternative 1 | **PS-6**: No features would be constructed; | **Significant impact** | No feasible mitigation available | **Significant and unavoidable** |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| (No Project) | baseline conditions would continue at the site, and there would be no substantial change in the demand for solid waste disposal facilities. | | | |
| Alternative 2 (Reduced Project) | **PS-6:** Operation of Alternative 2 would generate solid waste that is assumed to exceed landfill capacity after 2030. | **Significant impact** | **MM PS-1**: Recycling of Construction Materials.<br>**MM PS-2**: Materials with Recycled Content.<br>**MM PS-3:** Compliance With City of Los Angeles Solid Waste Integrated Resources Plan (SWIRP). | Less than significant impact |
| Proposed Project | **PS-7**: Implementation of the proposed Project would not generate increases in energy demands or require new, offsite energy supply and distribution infrastructure, or capacity enhancing alterations to existing facilities that are not anticipated by adopted plans, programs, or the proposed Project. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **PS- 7**: No features would be constructed or operated; baseline conditions would continue at the site, and there would be no change in the demand for public services or the amounts of water, wastewater, solid waste, and energy used or generated at the site. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **PS-7**: Implementation of the Alternative 2 would not generate increases in energy demands or require new, offsite energy supply and distribution infrastructure, or capacity enhancing alterations to existing facilities that are not anticipated by adopted plans, programs, or the proposed Project. | Less than significant impact | Mitigation not required | Less than significant impact |
| **3.12 Water Resources** | | | | |
| Proposed Project | **WR-1:** Construction could create discharges that cause pollution, contamination, or a nuisance as defined in Section 13050 of the California Water Code (CWC) or that cause regulatory standards to be violated, as defined in the applicable NPDES | **Significant impact** | **MM WR-1:** Construction Controls in the Dominguez Channel<br>1. No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to erosion or could flow into the channel. Construction materials shall not be stored in contact | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | stormwater permits or Water Quality Control Plan for the receiving water body. | | with the soil.<br>2. Floating booms shall be used to assist in containing debris discharged into Dominguez Channel, and any debris discharged shall be removed as soon as possible but no later than the end of each day.<br>3. A silt curtain shall be utilized to help control turbidity during reconstruction of the Dominguez Channel Bridge. BNSF shall limit, to the greatest extent possible the suspension of benthic sediments into the water column.<br>4. Reasonable and prudent measures shall be taken to prevent all discharge of fuel or oily waste from heavy machinery or construction equipment or power tools into the Dominguez Channel. Such measures include deployed oil booms and a silt curtain around the proposed construction zone at all times to minimize the spread of any accidental fuel spills, turbid construction-related water discharge, and debris; training construction workers on emergency spill notification procedures; proper storage of fuels and lubricants; and provisions for on-site spill response kits. | |
| Alternative 1 (No Project) | **WR-1:** No features would be constructed. Operation would not cause pollution, contamination, or a nuisance as defined in Section 13050 of the CWC or violate regulatory water quality standards or waste discharge requirements. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **WR-1:** Construction of Alternative 2 could potentially cause pollution, contamination, or a nuisance as defined in Section 13050 of the CWC or violate regulatory water quality standards or waste discharge requirements. | **Significant impact** | **MM WR-1:** Construction Controls in the Dominguez Channel | Less than significant impact |
| Proposed Project | **WR-2**: Construction and operation would not accelerate natural processes of wind and water erosion and sedimentation resulting in sediment runoff or deposition that would not be | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | contained or controlled onsite | | | |
| Alternative 1 (No Project) | **WR-2**: No features would be constructed. Operation would not accelerate natural processes of wind and water erosion and sedimentation resulting in sediment runoff or deposition that would not be contained or controlled onsite. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **WR-2**: Construction and operation would not accelerate natural processes of wind and water erosion and sedimentation resulting in sediment runoff or deposition that would not be contained or controlled onsite. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **WR-3**: Construction and operation would not substantially alter the existing drainage pattern of the site or area in a manner which would produce a substantial change in the current or direction of water flow. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **WR-3:** No features would be constructed. Operation would not substantially alter the existing drainage pattern of the site or area in a manner which would produce a substantial change in the current or direction of water flow. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **WR-3**: Construction and operation would not substantially alter the existing drainage pattern of the site or area in a manner which would produce a substantial change in the current or direction of water flow. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **WR-4**: Construction would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Alternative 1 (No Project) | **WR-4**: No features would be constructed. Operation would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **WR-4** Construction and operation would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **WR-5:** Construction and operation would not place within a 100-year floodplain structures which would impede or redirect flood flows or have the potential to harm people or damage property. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **WR-5:** No features would be constructed. Operation would not place within a 100-year floodplain structures which would impede or redirect flood flows or have the potential to harm people or damage property. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **WR-5:** Construction and operation would not place within a 100-year floodplain structures which would impede or redirect flood flows or have the potential to harm people or damage property. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **WR-6:** Construction could expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, which would be deleterious to humans, based on regulatory standards established by the lead agency for the site. Operation would not expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, which | Less than significant impact | Mitigation not required | Less than significant impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| | would be deleterious to humans, based on regulatory standards established by the lead agency for the site. | | | |
| Alternative 1 (No Project) | **WR-6:** No features would be constructed. Operation would not expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, which would be deleterious to humans, based on regulatory standards established by the lead agency for the site. | No impact | Mitigation not required | No impact |
| Alternative 2 (Reduced Project) | **WR-6**: Construction of Alternative 2 could expose soils containing toxic substances and petroleum hydrocarbons that would be deleterious to humans, based on regulatory standards established by the lead agency. Operation would not expose soils containing toxic substances and petroleum hydrocarbons, associated with prior operations, which would be deleterious to humans, based on regulatory standards established by the lead agency for the site. | Less than significant impact | Mitigation not required | Less than significant impact |
| Proposed Project | **WR-7:** Construction and operation would not cause changes in the rate or direction of movement of existing groundwater contaminants, expansion of the area affected by contaminants, or increased level of groundwater contamination, which would increase risk of harm to humans. | Less than significant impact | Mitigation not required | Less than significant impact |
| Alternative 1 (No Project) | **WR-7:** No features would be constructed. **:** Operation would not cause changes in the rate or direction of movement of existing groundwater contaminants, expansion of the area affected by contaminants, or increased level of groundwater contamination, which would increase risk of harm to humans. | No impact | Mitigation not required | No impact |

| Alternative | Environmental Impacts | Impact Determination | Mitigation Measures | Impacts after Mitigation |
|---|---|---|---|---|
| Alternative 2 (Reduced Project) | **WR-7:** Construction and operation would not cause changes in the rate or direction of movement of existing groundwater contaminants, expansion of the area affected by contaminants, or increased level of groundwater contamination, which would increase risk of harm to humans. | Less than significant impact | Mitigation not required | Less than significant impact |

§ Unless otherwise noted, all impact descriptions for each of the Alternatives are the same as those described for the proposed Project.

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## 5.5.2 Alternatives and Resources With Unavoidable Significant Impacts

### 5.5.2.1 Aesthetics

Both the proposed Project and the Reduced Project Alternative would necessitate removal of the Sepulveda Boulevard railroad bridge in order to replace it with a bridge capable of carrying three tracks. The bridge, which dates from the early 1900s, is considered a significant visual resource. Efforts to locate an entity willing to reuse or salvage of the structure were unsuccessful, meaning that it will be demolished. Although some elements may be re-used in the new bridge, the structure as a whole would be lost, which would be a significant impact under AES-1. Mitigation measures **MM CR-2** and **MM CR-3**, which require documentation of the resource and preparation of a salvage plan, would reduce the impact, but the impact would remain significant and unavoidable. Because there would be no physical changes to any structure or view, the No Project Alternative would have no impacts relative to AES-1.

The proposed Project and Reduced Project Alternative would install new lighting at the proposed railyard. The modern design of the lighting and the distance of the facility from sensitive receivers, however, mean that the impact under AES-2 would be less than significant. A mitigation measure requiring compliance with the Port's terminal lighting guidelines and follow-up monitoring and corrective measures would further reduce the impact. Because there would be no lighting added, the No Project Alternative would have no impacts relative to AES-2.

Neither the proposed Project nor Reduced Project Alternative would introduce new sources of shadow that could affect sensitive uses, and would therefore have no impact relative to AES-3. Because there would be no physical changes to any structure, the No Project Alternative would have no impacts relative to AES-3.

### 5.5.2.2 Air Quality

For both the proposed Project and the Reduced Project Alternative, construction would result in emissions of criteria air pollutants that would exceed SCAQMD significance thresholds for all criteria pollutants except SOx, and would cause off-site ambient concentrations exceeding SCAQMD thresholds of significance for 1-hour and annual $NO_2$, 24-hour and annual $PM_{10}$, and 24-hour $PM_{2.5}$. This would result in a significant impact under AQ-1 and AQ-2. Mitigation measures **MM AQ-1** through **MM AQ-6**, which would be applied to both alternatives to control equipment and construction practices, would reduce those impacts, but not to below the relevant thresholds. Accordingly, impacts would remain significant and unavoidable. The No Project Alternative would have no impact under AQ-1 and AQ-2 because it would not involve construction.

Operation of the proposed Project and the Reduced Project would result in emissions of criteria pollutants less than under baseline conditions, therefore there would be no impact under AQ-3. The reduction in criteria pollutant emissions relative to the baseline at full capacity would be greater in the Reduced Project versus the proposed Project. Operation of the No Project would result in emissions of some criteria pollutants less than under baseline conditions, and emissions of some pollutants greater than under baseline conditions but below significance thresholds, therefore impacts under AQ-3 for the No

Project Alternative would be less than significant. The reduction in criteria pollutant emissions relative to the baseline at full capacity would be less in the No Project Alternative versus the proposed Project with the exception of NOx emissions. Operation of the proposed Project and the Reduced Project would result in exceedances of the SCAQMD thresholds for 1-hour and annual $NO_2$, 24-hour and annual $PM_{10}$, and 24-hour $PM_{2.5}$. Operation of the No Project Alternative would cause exceedances of the SCAQMD ambient thresholds for 1-hour and annual $NO_2$, 24-hour and annual $PM_{10}$. All three would also cause exceedances of the NAAQS for 1-hour $NO_2$. These exceedances would be significant impacts under AQ-4. The magnitude of the impacts of the No Project and Reduced Project Alternative under AQ-4 would be less than for the proposed Project because the activity levels would be less, but the impacts would still be significant. In the case of the Reduced Project Alternative, much of the site-related activity would be lesser in magnitude than the proposed Project due to the limit in the capacity of the facility. In the case of the No Project Alternative, because no construction activities or changes in the operations of existing tenants would occur, no changes in the locations of emission sources would occur relative to the baseline, which reduces the impacts under AQ-4. Mitigation measures **MM AQ-7** would be applied to the proposed Project and the Reduced Project Alternative, but would not eliminate the exceedances; no mitigation can be applied to the No Project Alternative. Accordingly, those impacts would remain significant and unavoidable.

Operation and construction of the proposed Project and Reduced Project Alternative and operation of the No Project Alternative would expose sensitive receptors in the vicinity of the Project to emissions of TACs, but because the health risk impacts would be less than under baseline conditions, impacts under AQ-7 would be less than significant. Although not required, mitigation measures **MM AQ-1** through **MM AQ-3** would further reduce these impacts. No mitigation can be applied to the No Project Alternative.

None of the alternatives would have significant impacts related to AQ-5, AQ-6 and AQ-8, but in the case of AQ-6, the two build alternatives would have less than significant impacts while the No Project Alternative would have no impact. The proposed Project, Reduced Project and No Project Alternatives would have no impact under AQ-8.

### 5.5.2.3 Cultural Resources

Construction of the proposed Project and the Reduced Project Alternative could disturb previously unknown archeological or ethnographic resources (i.e., Native American artifacts). The risk of destroying such resources represents a significant impact under CR-1. Mitigation measure **MM CR-1**, which calls for preparation of a plan and on-site monitoring, would reduce the impact to less than significant. Because the No Project Alternative would not involve any ground-disturbing activities it would have no impact under CR-1.

Construction of the proposed Project and the Reduced Project Alternative would require demolition of the existing Sepulveda Boulevard Bridge, The bridge, which dates from the early 1900s, is considered a significant historical resource. Efforts to locate an entity willing to reuse or salvage the structure were unsuccessful, meaning that it will be demolished. Although some elements may be re-used in the new bridge, the structure as a whole would be lost, which would be a significant impact under CR-2. Mitigation measures **MM CR-2** and **MM CR-3**, which would require archival documentation and the salvage and re-use of noteworthy elements of the bridge, would reduce those impacts, but the necessary demolition of the bridge would be a significant, unavoidable impact.

The No Project Alternative would have no impact relative to CR-2 because no culturally significant structures would be demolished or altered.

Construction of the proposed Project and the Reduced Project Alternative could disturb previously unknown paleontological resources. The risk of destroying such resources represents a significant impact under CR-3. Mitigation measure **MM CR-4**, which calls for on-site monitoring and worker training, would reduce the impact to less than significant. Because the No Project Alternative would not involve any ground-disturbing activities it would have no impact under CR-3.

### 5.5.2.4 Greenhouse Gases

Construction and operation of the proposed Project and the Reduced Project Alternative, and operation of the No Project Alternative would result in emissions of greenhouse gases above baseline levels. As any increase is considered a significant impact, the proposed Project and the two alternatives would have significant impacts relative to GHG-1. The proposed Project would have the least impact, the No Project the greatest impact. Mitigation measures **MM GHG-1** through **MM GHG-7**, requiring increased fuel efficiency in construction equipment where feasible, the use of solar panels, increased recycling, tree planting, and water conservation would be applied to the proposed Project and Reduced Project Alternative. These measures would reduce GHG emissions, but because those reductions cannot be reasonably quantified, significant unavoidable impacts would remain. No mitigation can be applied to the No Project Alternative; consequently, impacts would remain significant and unavoidable.

Because they would result in more efficient movement of cargo in California, both the proposed Project and the Reduced Project Alternative would be consistent with the goals of AB32, and there would be no impact with respect to GHG-2. The No Project Alternative would not be consistent with GHG reduction policies, but no impact determination can be made for the No Project Alternative with respect to GHG-2.

### 5.5.2.5 Hazards and Hazardous Materials

Construction and operation of the proposed Project and Reduced Project Alternative would cause increased risks of accidents and upsets as a result of the use and transport of hazardous materials and the possibility of ruptures and spills during construction and operation. Application of standard controls and precautions such as emergency planning and response would reduce the frequency and consequences of such events to Risk Code 4, which is characterized as “acceptable”. Three schools are located within one-quarter-mile of the site, but the implementation of safety measures would prevent any hazardous emissions that could affect those schools. The risk of terrorist actions would not be increased by construction or operation of the proposed Project and Reduced Project Alternative. Accordingly, impacts under RISK-1 through RISK-5 and RISK-7 would be less than significant for the proposed Project and Reduced Project Alternative. The Reduced Project Alternative would involve longer truck trips for the containers that would still be drayed to the Hobart facility under this alternative (approximately 670,000 per year), which would increase the risk of accidents and upsets, and therefore the magnitude of the impact, compared to the proposed Project. Because the site is outside the area of potential inundation from a tsunami, there would be no impact under RISK-6 for the proposed Project and Reduced Project Alternative.

The No Project Alternative would have an increased risk of spills and upsets compared to both the proposed Project and the Reduced Project Alternative because activity levels at

the site, including the handling of hazardous cargos and other materials, would increase by 10 percent and because truck trips between the ports and the Hobart railyard would increase with future increases in cargo throughput. The number of additional truck trips to Hobart at full operation under the No Project Alternative, compared to the proposed Project, would increase from 1,800 per average day in 2016 to 4,150 per day in 2023 (Section 5.2.1), which would increase the risk of accidents proportionately. This increase represents a significant impact, and because no mitigation can be applied to the No Project Alternative, the impacts under RISK-2b would remain significant and unavoidable.

### 5.5.2.6 Land Use

The proposed Project and the Reduced Project Alternative would be consistent with existing zoning, would not affect any areas designated for environmental preservation, would be consistent with the General Plan and other plan goals and policies, and would not physically divide or isolate any communities. Accordingly, both would have less than significant impacts related to LU-1through LU-3. Because the No Project Alternative would not result in any physical change to the environment it would have no impacts under LU-1 and LU-3. The No Project's inconsistency with the environmental goals of the Port of Los Angeles Plan, the SCAG RTP, and the Goods Movement Action Plan would constitute a less than significant impact under LU-2.

The proposed Project and the Reduced Project Alternative would have secondary adverse effects on land uses in the project area as a result of their significant and unavoidable impacts related to air quality and noise. These effects constitute a significant impact, and because the mitigations applied to air quality and noise (see sections 5.5.2.2 and 5.5.2.7) would not reduce those impacts to less than significant, secondary impacts under LU-4 would remain significant and unavoidable. The No Project Alternative would have no impact related to LU-4.

### 5.5.2.7 Noise

For both the proposed Project and the Reduced Project Alternative, construction and operation would have less than significant noise impacts related to NOI-1 through NOI-4 (City of Los Angeles). The No Project Alternative would have no impacts related to NOI-1 and NOI-2 because there would be no construction and only a small increase in operational activity. Since there are no schools in the City of Los Angeles located near the Project site there would be no impact upon speech intelligibility under NOI-5 for the proposed Project and the two alternatives.

Construction and operation of the proposed Project and the Reduced Project Alternative would cause ambient noise levels to be increased above City of Long Beach Municipal Code thresholds, which would constitute a significant impact under NOI-6. The magnitude of the impact of the Reduced Project Alternative could be slightly less than that of the proposed Project because of the reduced activity level. Mitigation measures **MM NOI-1** through **MM NOI-3**, which require construction noise controls and sound walls, would reduce construction noise to less than significant, but operational noise would remain significant after mitigation if operational activities at the facility occur during certain nighttime periods. This would be an unavoidable significant impact. The proposed Project and the Reduced Project would cause increased vibration, sleep disturbance and speech interference in the City of Long Beach but the increases would not exceed allowable thresholds. Therefore the proposed Project and Reduced Project

would have less than significant impacts related to NOI-7 through NOI-9. The No Project Alternative would have less than significant impacts related to NOI-6 through NOI-9.

Construction and operation of the proposed Project and the Reduced Project Alternative would cause increased noise, vibration, sleep disturbance and speech interference in the City of Carson, but the increases would not exceed allowable thresholds. Therefore the proposed Project and Reduced Project would have less than significant impacts under NOI-10 through NOI-12. Likewise, operation of the No Project Alternative would have less than significant impacts under NOI-10 through NOI-12 because activity levels would increase by only 10 percent. Since there are no schools in the City of Carson located near the Project site there would be no impact upon speech intelligibility under NOI-13 for the proposed Project and the two alternatives.

#### 5.5.2.8 Transportation

Construction of the proposed Project and Reduced Project Alternative would cause temporary increases in traffic related to construction that would constitute a less than significant impact under TRANS-1. No construction would occur under the No Project Alternative, so there would be no impact under TRANS-1.

The proposed Project and the two alternatives would have less than significant impacts under TRANS-2, the difference being that because under the Reduced Project Alternative some truck trips would continue to go to Hobart, some intersections would not experience as much improvement in V/C ratios as under the proposed Project. Due to the predicted volume to capacity ratios, levels of service at all study intersections would not exceed significance criteria.

Increased employment would have little or no effect on public transit because of the availability of on-site parking and the availability of capacity on local and regional transit services. The elimination or reduction of truck trips between the ports and the Hobart railyard in the proposed Project and Reduced Project Alternative would reduce freeway congestion, although the magnitude of the reduction would be greater in the proposed Project than the Reduced Project Alternative. In the case of the No Project Alternative, there would be increased truck trips between the ports and the Hobart Yard and there would be a significant impact under TRANS-4. Accordingly, the proposed Project and the Reduced Project Alternative would have less than significant impacts under TRANS-3 and TRANS-4, and the No Project would have a significant and unavoidable impact under TRANS-4.

Under the proposed Project, the No Project Alternative, and the Reduced Project Alternative rail traffic would increase as a result of future increases in cargo throughput at the ports. However, the increased traffic would not exceed the capacity of the regional rail network and would not significantly increase delay at intersections east of Hobart (south of Hobart all trains would use the Alameda Corridor, which is completely grade separated to eliminate rail-surface traffic conflicts). Accordingly, the proposed Project, the No Project Alternative, and the Reduced Project Alternative would all have less than significant impacts under TRANS-5.

None of the alternatives would increase hazards due to a design flaw, impede emergency access, or conflict with adopted plans, policies, or programs regarding mass transit or public access. Accordingly, the proposed Project and the two alternatives would have no impact with regard to TRANS-6 through TRANS-8.

### 5.5.2.9 Utilities and Public Services

Construction and operation of the proposed Project and the Reduced Project Alternative would generate increased demand for police and fire protection. Operation would not generate additional storm water, sewage, water demand or solid waste, but would consume more electricity than under baseline conditions, and more than the No Project Alternative. The demands for police, fire, and electricity could be met by the existing infrastructure. Accordingly, impacts under PS-1 through PS-5 would be less than significant. The No Project Alternative would have no impact under PS-1 through PS-5.

Although solid waste generation by the proposed Project and Reduce Project Alternative would be less than under baseline conditions, solid waste would be generated, and that waste is assumed to exceed landfill capacity after 2030, when area landfills are expected to close. The potential for landfill capacity to be exceeded is a significant impact under PS-6. Because activity levels and employment under the Reduced Project Alternative would be less than the proposed Project, the magnitude of the impact is assumed to be correspondingly less. Mitigation measure **MM PS-3**, requiring compliance with the City of Los Angeles SWIRP, would reduce the impact to less than significant.

The No Project Alternative would have significant impacts related to PS-6, the generation of solid waste from existing operations at the Project site. Because no construction activities or changes in operation would occur under the No Project, there would be no changes that would require discretionary actions subject to CEQA, and therefore no mitigation measures are feasible.

## 5.5.3 Alternatives and Resources With Significant Impacts That Can Be Mitigated to Less Than Significant

### 5.5.3.1 Biological Resources

Construction of the proposed Project and the Reduced Project Alternative could adversely affect nesting habitat of bird and bat species protected under the Migratory Bird Treaty Act and the Endangered Species Act. These effects would be a significant impact under BIO-1. Mitigation measure **MM BIO-1**, calling for pre-construction surveys and avoidance measures, would reduce those impacts to less than significant. The No Project Alternative would have no impacts related to BIO-1 because no construction would occur.

Construction and operation of the proposed Project, the No Project Alternative, and the Reduced Project Alternative would have no impact on riparian or other sensitive natural communities, because no such resources exist in or near the site, and would not interfere with wildlife movements or migration because no wildlife corridors or nursery areas exist near the site. Accordingly, the proposed Project and the two alternatives would have no impact related to BIO-2 and BIO-3.

### 5.5.3.2 Water Resources

Construction of the proposed Project and the Reduced Project Alternative could potentially cause pollution of the Dominguez Channel from construction site runoff or spills, and could expose contaminated soils that could be deleterious to human health,

which would be significant impacts under WR-1a. Mitigation measure **MM WR-1**, requiring implementation of pollution control measures, would reduce the impacts to less than significant. The No Project Alternative would have no impacts related to WR-1a because no construction would occur.

Construction and operation of the proposed Project and the Reduced Project Alternative would not cause substantial erosion, siltation, or inputs of polluted runoff because of the controls that would be employed both in design and through the relevant permits. Patterns of water flow would not be changed, and the amount of stormwater would not exceed the capacity of the new system that would be installed. Construction and operation would not involve activities that would reach or otherwise disturb groundwater. Accordingly, impacts would be less than significant under WR 2 through WR-5, WR-6, and WR-7. The No Project Alternative would have no impacts related to WR-1, WR-2 through WR-7. Because no facilities would be constructed within the 100-floodplain, the there would be no impact relative to WR-5 for the proposed Project and the two alternatives.

## 5.5.4 Alternatives and Resources With Less Than Significant Impacts

### 5.5.4.1 Geology and Soils

Construction of the proposed Project and the Reduced Project Alternative would occur on a site that is subject to seismic activity, which could cause severe shaking, ground surface rupture, and liquefaction. However, appropriate design and construction, as well as emergency planning, would reduce the level of damage and risk of injury during a seismic event, and impacts under GEO-1 would be less than significant. Soil settlement and expansion and site subsidence, if encountered, would be managed with appropriate engineering techniques, and the site is outside of the zone that could be inundated by a tsunami. Accordingly, impacts under GEO-2 through GEO-4 would be less than significant. Because construction and operation would not affect groundwater, and the flat nature of the site would prevent the loss of substantial amounts of topsoil. Accordingly, impacts under GEO-6 and GEO-8 would be less than significant for both the proposed Project and the Reduced Project Alternative. The proposed Project and the Reduced Project Alternative would have no impact related to GEO-5 and GEO-7 because the site is essentially flat, meaning that there would be little risk of earth movement or slides that could affect people or property, and there are no distinct or prominent geological features on or near the site.

The No Project Alternative would have no impacts related to geological resources because there would be no construction, and the 10 percent increase in operational activities would not result in substantial physical changes.

## 5.5.5 Environmentally Superior Alternative

CEQA requires identification of the environmentally superior alternative in an EIR. There is no set methodology for comparing the alternatives or determining the environmentally superior alternative under CEQA. Therefore, the number of significant adverse impacts for each of the Project, Reduced Alternative, and No Project Alternative are compared. The alternative with the least number of significant unavoidable impacts is considered the Environmentally Superior Alternative.

**Table 5-66. Comparison of the Proposed Project and Alternatives Showing Significant and Unavoidable Impacts After Mitigation.**

| Issue Area | Proposed Project | No Project (Alt 1) | Reduced Project (Alt 2) |
|---|---|---|---|
| Aesthetics | AES-1 | | AES-1 |
| Air Quality | AQ-1, AQ-2, AQ-4 | AQ-4, AQ-8 | AQ-1, AQ-2, AQ-4 |
| Biology | | | |
| Cultural | CR-2 | | CR-2 |
| Geology and Soils | | | |
| Greenhouse Gases | GHG-1, GHG-2 | GHG-1, GHG-2 | GHG-1, GHG-2 |
| Hazards and Hazardous Materials | | | |
| Land Use | LU-4 | LU-2 | LU-4 |
| Noise | NOI-6 | | NOI-6 |
| Transportation | | TRANS-4 | |
| Utilities | | PS-6 | |
| Water Resources | | | |
| **Total** | **9** | **7** | **9** |

Notes:
Shaded cells indicate no significant and unavoidable impact after mitigation.

As shown, the No Project Alternative is the alternative with the least significant impacts when compared to the Proposed Project and the Reduced Project Alternative. Similarly, since the Reduced Project Alternative has, by definition, less activity than the proposed Project, it is the Environmentally Superior Alternative outside of the No Project Alternative.

Nevertheless, the Proposed Project takes into consideration increased activity at the proposed site versus reduced activity on the 710 and in the area of the downtown railyards. Greater use of rail is contrasted with continued use of trucks for longer hauls. Impacts exist under both scenarios, although the specific impacts occur in different locations and in different severity. The Environmentally Superior Alternative analysis above is a simplified way to look at these issues, but cannot substitute for a review of the analysis in the EIR itself.