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. Pursuant to CEQA, a reasonable range of alternatives was considered.

5.1.1 CEQA Requirements

CEQA's requirements for an EIR to evaluate alternatives are described fully in Chapter 1. Briefly, the CEQA Guidelines, Section 15126.6, require that an EIR present a range of reasonable alternatives to a proposed Project, or to the location of a proposed 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 (see Section 5.1.3), and need not consider every conceivable alternative to a project (CEQA Guidelines Section 12156.6(a)).

5.1.2 Background and Evaluation Criteria

5.1.1.1 Background

The public scoping process for the proposed Project identified a number of areas of concern that resulted in project modifications, reflected in Section 2.4 (e.g., dedicated truck routes and job programs for SCIG). In addition, the scoping process raised issues to be considered in the formulation of alternatives and suggested some concepts for potential alternatives. Comments received on the Draft EIR were also considered in this revised analysis for the Recirculated Draft EIR. The central issue raised by commenters was the need for the LAHD to minimize the impact of a new railyard on surrounding communities. The commenters suggested this could be done by not building a railyard at all, but if one is built, by choosing a location away from the community.

Other general concepts that were suggested by commenters included increasing on-dock and/or off-dock (i.e., inland railyard) capacity instead of building the SCIG Project; finding an alternate site for the facility; and building a facility that would incorporate alternative container delivery options, including use of developing technologies such as electric trucks and magnetic-levitation-type dedicated conveyor systems. Some of these concepts are not appropriate as true CEQA alternatives to the proposed Project because

they do not meet several of the evaluation criteria described below, but they are nevertheless discussed in this section.

5.1.1.2 Evaluation Criteria

As described above, CEQA requires that an EIR describe "a range of reasonable alternatives to the project, or to the location of the project". CEQA indicates that the range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. As a result, potential alternatives must be limited to those that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that LAHD determines could feasibly attain most of the basic objectives of the project as discussed in Section 2.3.

Feasibility. Feasibility is one of the evaluation criteria for consideration of alternatives to a proposed project. CEQA provides that among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of technology and/or infrastructure, whether the alternative can be accomplished within a reasonable period of time, and whether the proponent can reasonably acquire, control or otherwise have access to the alternate site (or the site is already owned by the proponent).

Cost. Development and operation of a rail yard or a container handling facility is based on an operating paradigm that requires containers to be delivered at a cost that would provide an acceptable rate of return to cover: (a) the investment required to build the facility; and, (b) the operating costs of the facility and of the transport of the containers to their destinations. However, potential alternatives and other concepts were not subjected to formal detailed cost analyses and comparisons because too little data are available on the costs of advanced technology. Some concepts would obviously be far more expensive than the proposed Project – for example a system incorporating magnetic-levitation or linear induction technology to deliver containers – but in those cases other factors were judged to make those concepts infeasible, and none was rejected on the basis of cost alone.

Commercial Availability. Certain technologies that are considered in this EIR are very promising and may offer environmental benefits. Nevertheless, while most of these technologies may have been developed through varying stages of testing and prototypes, none has progressed to the point of being commercially feasible, and therefore are not proven or available for design, manufacture, or sale to meet the near-term demand for container handling facilities that is a feature of the proposed Project. In particular, safety, reliability, and security issues, together with environmental impacts, would need to be studied carefully and proven before these technologies could be proposed for use in the San Pedro Bay Port area. These issues are identified and described more fully as part of the evaluation for each alternative or concept.

Compatibility with Existing Port and Railroad Infrastructure and Operations. The existing container movement system in the Ports is a complex operation involving multiple transportation modes and extensive infrastructure that has developed over a period of decades. Certain alternatives that are evaluated for this EIR would require that infrastructure and operating procedures at the Ports, and in some cases regional transportation networks as well, undergo massive re-design and reconstruction to support a new operating paradigm that would rely less on trains and trucks, and more on alternative transfer technologies. It is unreasonable to expect one project to force the

abandonment of the entire existing container movement system. Accordingly, one evaluation criteria applied to the various concepts is how compatible each would be with the existing infrastructure and operation of terminals at the Ports and beyond.

Property Availability. Some potential alternatives – an alternate location is one example– could require the acquisition of new property. One of the screening criteria, therefore, is whether any new property would be required to make a potential alternative feasible, and, if so, whether the project proponent would have the ability to reasonably acquire, control or otherwise have access to such new property.

Environmental Benefits. Potential alternatives and concepts were also evaluated on the basis of their environmental benefits and impacts. The evaluation was generally based on a screening-level, professional-judgment appraisal of likely impacts and benefits, rather than the type of quantitative analysis used to compare the alternatives that were carried through the EIR. The environmental evaluation was not used as a feasibility criterion, but rather as an additional screening criterion. The environmental factors included proximity to the community, air emissions (including displaced emissions), energy balance, hazardous waste (e.g., battery manufacture and disposal) issues, traffic volumes, noise, biological resources, and aesthetic considerations.

5.1.3 Alternatives and Concepts Considered But Rejected From Further Consideration

Several alternatives to the proposed Project were considered during preparation of this EIR. This section presents four alternatives considered but rejected from further evaluation, including the rationale for eliminating the alternatives from detailed analysis, and also introduces several concepts that, while not alternatives under CEQA, nevertheless merit discussion..

Alternatives and concepts considered but eliminated include the following:

1. Alternate sites outside the two ports;
2. Alternate sites inside the ports;
3. Different layouts for the proposed facility;
4. Different access to the site; and
5. Several concepts suggested during the NOP scoping process and Draft EIR public review period that, although they do not constitute alternatives to building a near-dock railyard, are nevertheless discussed in Section 5.2.

5.1.3.1 Alternate Sites Outside of the Ports

In this alternative, BNSF would construct a near-dock railyard at a location outside of the ports. It should be noted that some of these sites would be outside of the LAHD's jurisdiction and the LAHD would not be the lead agency for purposes of conducting CEQA environmental review, nevertheless these sites are considered in this alternative. This alternative resembles the proposed Project in that it involves the construction of a new railyard, but it differs in that it would use a different site than the proposed Project site.

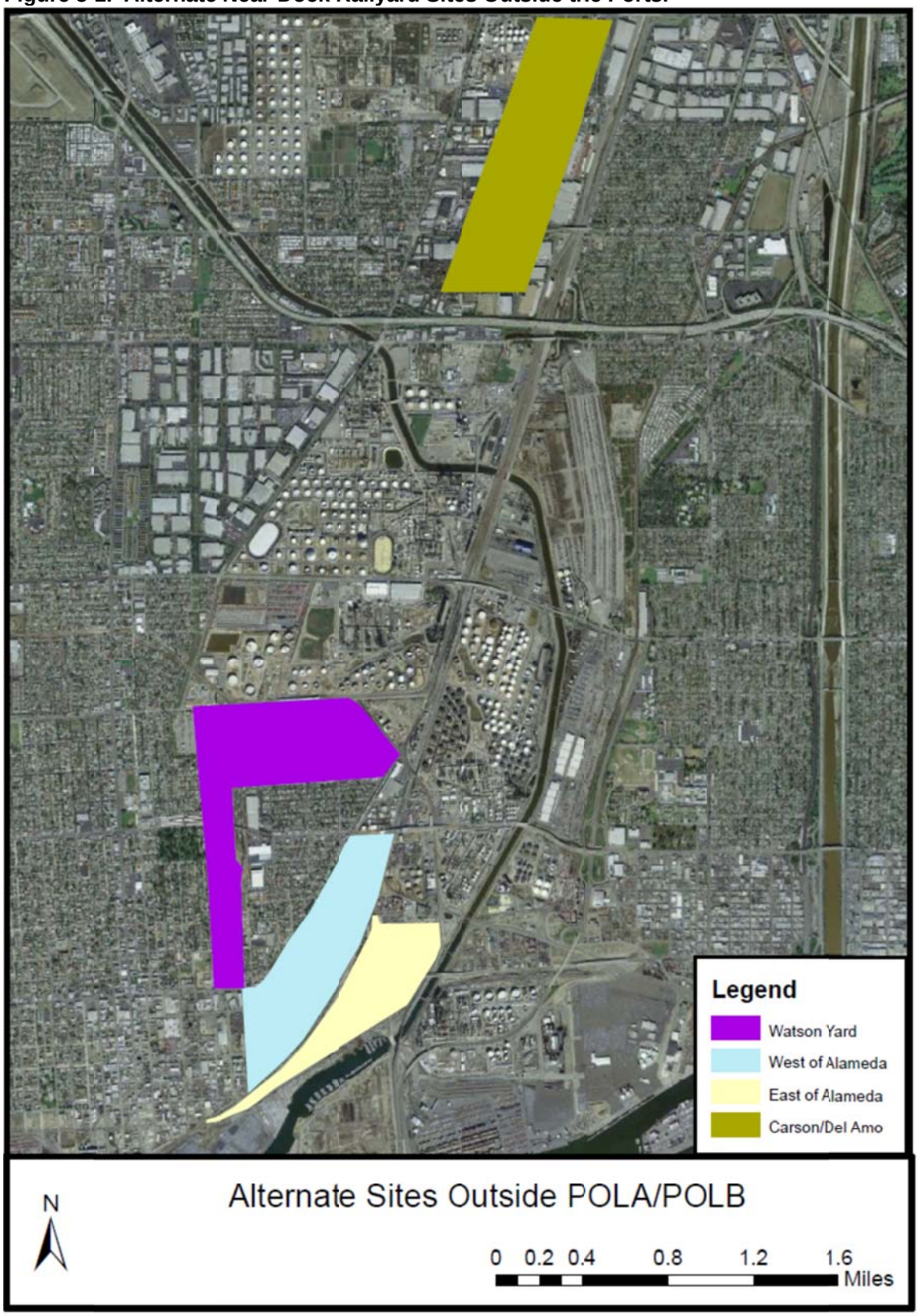
The results of the San Pedro Bay Ports Rail Market Study – Part 2 (Parsons, 2004) were used to determine feasibility of other potential locations for a near-dock railyard outside the ports. That study considered areas that could be served by rail infrastructure from the

Alameda Corridor, and identified six potential sites for further evaluation: Watson Yard, West of Alameda, East of Alameda, Carson St.-Del Amo/West Alameda St, South of ICTF, and Eighth Street (Pier B) Yard. These alternate sites were evaluated based on their size/configuration, acquisition issues, engineering issues, environmental issues, and community impacts. The South of ICTF site is the proposed Project site, described in detail in Section 2.4 and carried forward in this EIR as the proposed Project. The Eighth Street (Pier B) Yard site is inside the POLB, and is considered in the next section. Accordingly, only four of the sites identified by the Parsons (2004) study (Figure 5.1) are discussed in this section.

Site 1: Watson Yard. Site 1 is already occupied by a railyard, operated by BNSF, that serves the Port area. Watson Yard is used primarily as a switching yard for non-intermodal cars and for car storage and locomotive servicing. The site is too small and poorly shaped (including being bifurcated by PCH) to accommodate the trackage and structures needed for a line-haul intermodal facility with the capacity needs identified in the Rail Study Update (RSU)(Parsons, 2006) and the California Goods Movement Action Plan. In addition, the RSU notes stability and potential contamination issues, as a portion of the site is a former industrial and municipal dump. Conversion of Watson Yard for use as an intermodal facility would result in a smaller railyard than the proposed Project and deprive major industries of important rail services, as Watson Yard is the service center for delivery of approximately 26,000 loaded rail cars annually to port tenants and to local refineries and chemical plants in the South Bay area.

A smaller near-dock facility at Site 1 would be compatible with existing intermodal technology. However, it would not meet the needs identified in California's 2007 Goods Movement Action Plan (CARB, 2007), which specifically identifies the construction of SCIG as a project that is necessary to meet the growing cargo demand at the Ports. The Goods Movement Action Plan does not contemplate other, smaller near-dock facilities such as would result from the conversion of Watson Yard to an intermodal facility. Replacing Watson Yard's functions would require construction of another railyard in the area, which would involve extensive land acquisition. Construction of two railyards (SCIG and Watson Yard's replacement) would presumably result in more environmental impacts than the construction of SCIG alone. For these reasons, Site 1 was rejected as an alternate site.

Figure 5-1. Alternate Near-Dock Railyard Sites Outside the Ports.



Site 2: West of Alameda. Site 2 is currently occupied by numerous businesses, as well as the International Longshore and Warehouse Union (ILWU) training area, on individual land parcels generally no more than five to ten acres in size. A significant portion of the West of Alameda Site is located in the Wilmington Redevelopment District. A near-dock yard at Site 2 would be compatible with existing terminal operations and would use conventional technology. The site is closer to the Alameda Corridor than the proposed Project. According to Parsons (2004) and the RSU, however, the site is too small to accommodate the trackage and other facilities needed to accommodate the line-haul intermodal facility with the capacity needs identified in the RSU and the California Goods Movement Action Plan. Construction would necessitate extensive property acquisition and business relocations, as well as a new grade separation at Anaheim Street and street closures that would curtail local access. The site is also closer to residences in Wilmington than the proposed Project site.

Parsons (2004) concluded that Site 2 should not be considered further as a potential location for a near-dock facility. For the reasons cited above, Site 2 was rejected as an alternate site.

Site 3: East of Alameda. Site 3 is located in an area of light industry and vacant land just east and north of the existing TraPac container terminal. It should be noted that portions of this site are within the POLA boundaries. A near-dock facility there would be compatible with existing intermodal technology. Since the Parsons report was prepared, however, a portion of Site 3 has been designated as part of the relocation site for the Pier A Railyard (switching and support railyard), as part of the Berths 137-149 TraPac Container Terminal Project (USACE & POLA, 2007). More recently, the site was also approved for the construction of a new ILWU dispatch hall south of Anaheim and Alameda Streets at 1500 E. Anaheim Street (POLA, 2011a). Even before that, the site was considered by Parsons (2004) to be too small and poorly configured to accommodate the trackage and structures needed for a line-haul intermodal facility with the capacity needs identified in the Rail Study Update and the California Goods Movement Action Plan. Furthermore, its conversion to an intermodal yard would require a new grade separation at Anaheim Street, and it is adjacent to the Wilmington Community.

Because the site is currently under construction for the new Pier A Railyard and ILWU dispatch hall projects and is much too small to support a modern intermodal railyard, it was eliminated from further consideration.

Site 4: Carson Street/Del Amo/West Alameda Street. Site 4 is located in an area of light industrial and commercial uses. A near-dock railyard at this site would be compatible with existing intermodal technology. It would necessitate substantial property acquisition and relocation. However, Parsons (2004) determined that the site is too small and poorly configured to accommodate the trackage and structures needed for a line-haul intermodal facility with the capacity needs identified in the RSU and the California Goods Movement Action Plan. Because the site is less suited to a railyard than the proposed site, it was eliminated from further consideration.

5.1.3.2 Alternate Sites Inside the Ports

In this alternative, the POLA would authorize construction of a near-dock railyard inside the POLA, or POLB would authorize construction inside the Port of Long Beach. Note that a location inside the POLB would be outside of the POLA's jurisdiction, and would require authorization by the POLB Board of Harbor Commissioners; nevertheless, POLB locations are considered in this alternative.

Possible locations for a near-dock railyard inside the harbor districts (Figure 5-2)include: a facility on POLB's Pier S; a facility on POLB's Pier B; the former LAXT site on Pier 300 in POLA; Berth 200site in POLA currently occupied by the Wallenius Wilhelmsen Logistics (WWL) Vehicles Services automobile import facility; and a new landfill on the POLA/POLB border near Pier 400 (a concept termed the Terminal Island Joint Intermodal Terminal or Terminal Island Intermodal Gateway). While all of these sites would be available for consideration for development into a near-dock yard because all are under the control of the POLA and POLB Boards of Harbor Commissioners, they would require analyses of issues associated with the Tidelands Trust and California Coastal acts. All, like the proposed Project, would use commercially available technology (i.e., conventional railroad). All sites inside the ports would meet at least some of the project objectives, and all except the POLB Pier B site would likely have fewer community issues than the proposed Project site because they would be farther away from residences and sensitive uses.

5.1.3.2.1 POLB Pier S

In this alternative, the POLB would authorize construction of a near-dock railyard on Pier S, located on the northeastern corner of Terminal Island. The new facility would connect to the Terminal Island lead track across the Cerritos Channel near the Badger Avenue Bridge. The 170-acre site is currently largely vacant. It is wholly owned by the Long Beach Harbor Department, and therefore outside the jurisdiction and authority of the LAHD. Furthermore, the site has been designated by the Port of Long Beach for a container terminal or multi-use container storage facility; the Draft EIS/EIR for the project was released in September 2011 (USACE and POLB 2011). Accordingly, the Pier S site is no longer available for a near-dock intermodal railyard.

Regardless of its availability, Parsons (2004) points out that the Pier S site is not long enough to accommodate 4,000-foot, double-ended strip tracks; it is likely that the facility would have to have single-ended tracks, which would introduce severe operational constraints as trains would tie up the Terminal Island lead track as they were doubled into and out of the facility. This would result in heavy congestion, potentially reducing the throughput of other Terminal Island facilities, and would require a greater number of locomotive moves, both of which would result in an increase in air emissions. Furthermore, it is possible that construction of a large railyard would conflict with the soil and groundwater remedy that underlies the northern portion of the site, as grading to provide level trackage is not possible on the remediation cells.

5.1.3.2.2 POLB Eighth Street/Pier B

The Pier B site in POLB, which includes the area designated in the Parsons study as the Eighth Street Yard, has been considered for an intermodal facility. However, the RSU (Parsons, 2006) identified the need for a storage and transfer yard to support on-dock operations, and concluded that the Pier B site should be developed for that purpose. The POLB released a Notice of Preparation/Initial Study for such a facility in 2009 (http://www.polb.com/environment/docs.asp). In any case, the Parsons study (Parsons, 2004) identified serious engineering constraints to building a functional near-dock facility on the Pier B site, and pointed out that the site is too small to provide adequate capacity. Accordingly, the Pier B site is not a feasible alternative for a near-dock facility and was eliminated from further consideration.

5.1.3.2.3 POLA LAXT Site

In this alternative, LAHD would authorize construction of a railyard on a portion of the Pier 300 site formerly occupied by LAXT. The existing trackage would be reconfigured or demolished, as needed. No land acquisition or creation would be needed. The railyard would be located roughly parallel to the existing Pier 300 on-dock yard used by the APL Terminal, and would connect to the Terminal Island lead track in the vicinity of the existing TICTF on-dock yard used by the Evergreen and Yusen terminals. The facility would operate similar to the proposed Project. Construction of a railyard on the LAXT site would have essentially the same environmental impacts as the proposed Project and would take place in approximately the same time frame.

This alternate site is not viable, as LAHD has proposed through its Terminal Island planning efforts (POLA, 2012a) to reconfigure the existing trackage and to add new trackage to provide storage and staging support for the existing Terminal Island on-dock yards and a separate on-dock railyard for Berths 226-236 (Evergreen/STS terminal). This additional rail infrastructure would allow the exclusive use of the existing Terminal Island Container Facility (TCTF) by the YTI terminal and would provide more support track for all on-dock-terminals on Terminal Island. The previously cited on-dock railyard capacities depend on these particular improvements, and thus cannot be assumed for a new common-use railyard. In addition a portion of this site is proposed for construction of tanks for the storage of crude oil and for possible future location of certain existing liquid bulk storage in the Wilmington District of the Port. Accordingly, the property is not available for conversion to a near-dock facility, and this alternative was eliminated from further consideration.

5.1.3.2.4 POLA Berth 200

The Berth 200 site in POLA could support a small near-dock facility that would connect to the Alameda Corridor via the adjacent Los Angeles Lead Track. However, Parsons (2004) identified the need for a transfer and storage yard as described in Section 5.1.3.1 adjacent to the Berth 200 site which will be developed for that purpose and was approved for this use by the Los Angeles Board of Harbor Commissioners in their approval of the Trapac Container Terminal Project on December 6, 2007 (Order No. 6941). In addition, the Berth 200 site is currently occupied by WWL Vehicles Services which plans to upgrade the existing wharf structure, add additional rail loading tracks, and extend their lease with the LAHD for another 15 years in order to meet current and projected needs. The Los Angeles Board of Harbor Commissioners approved the WWL Vehicles Services project on August 16, 2012. Accordingly, the Berth 200 site is not a feasible alternative for a near-dock facility and was eliminated from further consideration.

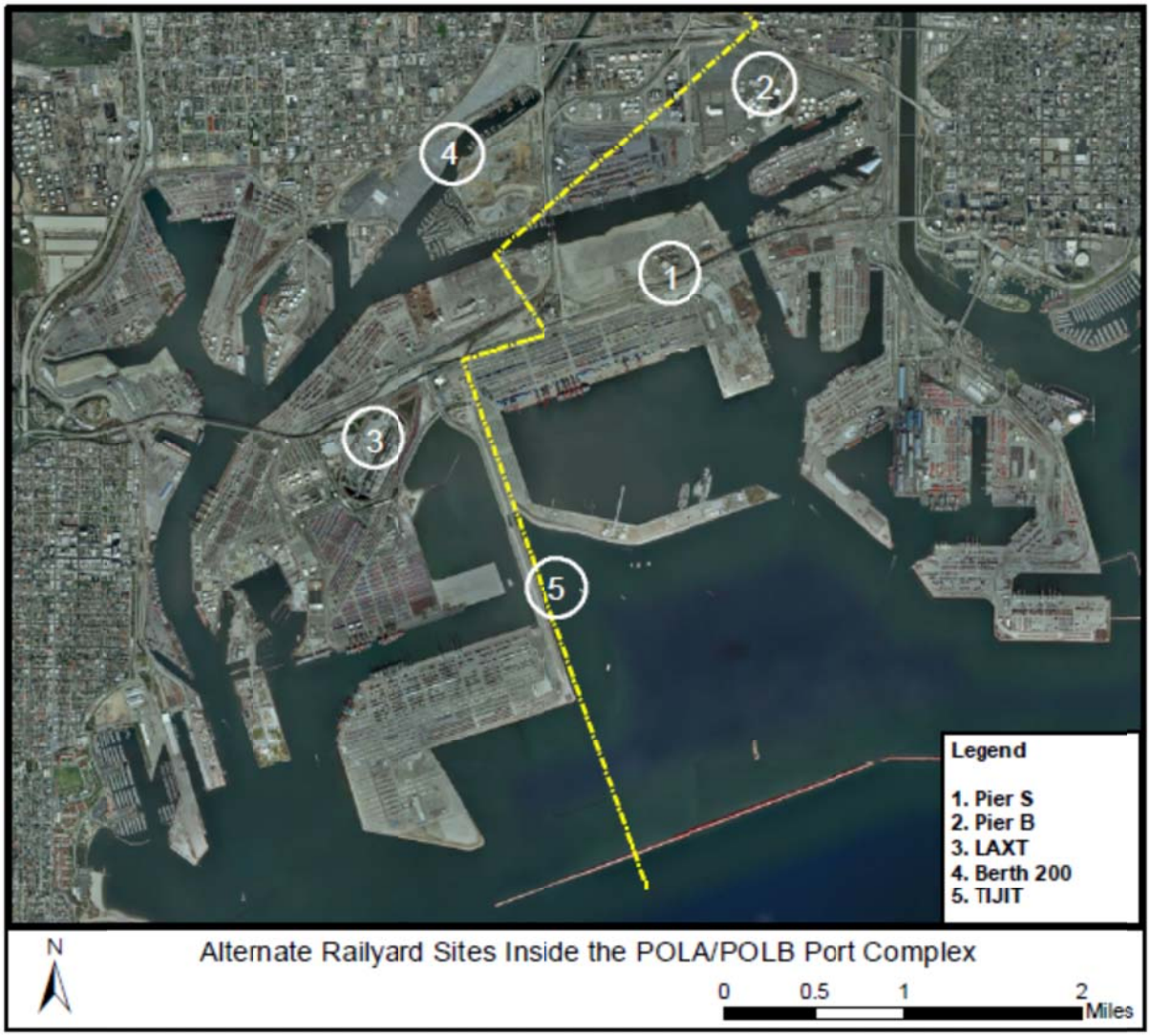
5.1.3.2.5 POLA/POLB Terminal Island Joint Intermodal Terminal (TIJIT)

In this alternative, the two ports would cooperate to authorize a near-dock railyard on new land that the ports would create along the Pier 400 Transportation Corridor, largely on the POLB side of the harbor. The railyard would resemble the proposed Project in size and capacity (approximately 1.5 million containers per year). According to LAHD engineering estimates, the project would require the construction of approximately 166 acres of new land at a cost of approximately $230 million (railyard and Port infrastructure costs would be at least another $375 million). The facility would connect to the Pier 400 lead track used by the Maersk Terminal, and would share the Terminal Island lead track across the Cerritos Channel with the on-dock railyards of the Maersk, APL, Evergreen,

Yusen, and Total Terminals International terminals. The facility would operate in a manner similar to the proposed Project.

Construction of new land for a railyard for the TIJIT would have substantial biological impacts, due to the loss of productive marine habitat and the impacts of the dredging required to supply fill material (e.g., U.S. Army Corps of Engineers 1992). Although the impacts would be incompatible with existing Clean Water Act policy, which emphasizes avoiding and minimizing losses of marine habitat to the extent possible and selection of a "least damaging practicable alternative" which avoids impacts to Waters of the U.S., they could be mitigated to less than significant by the application of mitigation fill credits. The Port does not currently have enough fill credits to apply to a fill of the size that would be required, and although the Port of Long Beach may possess enough credits, the LAHD has no authority to commit those credits.

Figure 5-2.Alternate Near-Dock Railyard Sites Inside the Ports.



A rail simulation study commissioned by the LAHD (Parsons, 2006) concluded that the TIJIT landfill and LAXT intermodal railyard concepts (and the Pier S concept) are infeasible because of the impossibility of handling the resultant train volumes over the amount of additional trackage that could be built to connect Terminal Island to the Alameda Corridor. The study showed that train traffic from existing and planned on-dock facilities on Terminal Island will overwhelm the mainline connection by 2015 even after planned improvements to the mainline; there will be no additional capacity for a new near-dock facility. Given their logistical constraints, therefore, TIJIT and the LAXT site were rejected as alternate sites for a near-dock facility.

5.1.3.3 Alternative Layouts for the Proposed Project Site

5.1.3.3.1 Single-Ended Track Layout

A single-ended railyard would eliminate the need for the north lead trackage and would permit slightly longer strip tracks, since there would be no ladder tracks at the north end of the railyard. The alternative would not require any additional land, could be less expensive to build than the proposed Project, and would likely have somewhat fewer interactions with the communities at the north end of the site. This alternative would meet the objectives of the project and is technically feasible to implement. However, the single-ended layout would force all train operations to occur at the south end of the railyard, including breaking and doubling the trains (see section 2.4.4.2), which would require additional engine moves to accomplish. The result would be congestion on the south lead tracks and, possibly, on the Alameda Corridor. The added congestion would, in turn, cause additional air emissions, and those emissions would be from the sources that are hardest to control, namely the locomotives. Because the single-ended layout would result in less efficient operations without clearly reducing environmental impacts, it was eliminated from further consideration.

5.1.3.3.2 Double-Ended, Standard Track Centers Layout

The double-ended, standard-width track center layout represents the conventional layout of existing large intermodal yards. The yard would be serviced by conventional diesel-powered rubber-tired gantry cranes (RTGs) for stacking and railcar loading and unloading, although the cranes would be of a modern design that would incorporate emissions-reduction features such as advanced exhaust controls. This alternative differs from the proposed Project in requiring more land and not utilizing all-electric RTG cranes. Electric cranes are not feasible for a conventional track layout because the wider track spacing precludes their use – only RTGs could be employed. The facility would also require the use of mobile yard cranes and yard hostlers, both of which would probably be LNG-powered. It is possible that this alternative would require more land than the proposed Project. Train movements would be similar to those of the proposed Project (Section 2.4.4.2).

This alternative would meet the project's objectives and is technically feasible to implement, but it would result in greater environmental impacts than the proposed Project (from the use of more polluting yard equipment such as hostlers, RTGs, and mobile cranes) without realizing greater operational efficiency or other operating advantages, and would not reduce any environmental impacts compared to the proposed Project. Accordingly, this alternative was eliminated from further consideration.

5.1.3.4 Different Access to the Proposed Project Site

The existing site has limited access from the PCH for trucks and other vehicles that visit the businesses on the site. In order to provide adequate access for the future volumes of trucks that would service the facility, the access must be improved. In addition to the access configuration included in the proposed Project, another possible configuration was considered to provide access without significantly increasing congestion on the PCH. In that alternative, access to the site would be provided from Sepulveda Boulevard at the north end of the facility.

The northern access concept would route SCIG truck traffic to and from the marine terminals onto Sepulveda Boulevard. The alternative is technically feasible and would

achieve the Project's objectives. The route would be longer (between the marine terminals and the Project site) than the PCH route that is part of the proposed Project, thus increasing emissions, and it would also introduce additional traffic to a segment of Sepulveda Boulevard that already accommodates all of the traffic to and from the ICTF. In addition, the northern access concept would route truck traffic along the Terminal Island Freeway between PCH and Sepulveda, increasing impacts to areas with sensitive land uses east of the Terminal Island Freeway. Accordingly, the Sepulveda Boulevard access concept was eliminated from further consideration.

5.2 Assessment of Other Goods Movement Concepts

As mentioned above, a number of concepts for reducing the environmental and community impacts of the proposed Project were suggested during the NOP scoping process and Draft EIR public review period, in both written and oral comments. The concepts that could be considered project alternatives under CEQA were presented in Section 5.1.3. The remaining concepts cannot be considered alternatives because they either do not eliminate the need for a near-dock intermodal facility or they address other aspects of the goods movement chain than handling intermodal rail traffic. These concepts fall into two major groups:

1. Concepts for avoiding building a near-dock railyard; and
2. Other approaches to moving containers in the region.

These concepts focus on eliminating diesel trucks from local and regional highways either by using trains for short-haul transport (currently economically disadvantageous, see Section 1.1.3.1) or by using advanced technologies to move containers. The concepts are considered here in order to provide more information on goods movement issues, but it is important to recognize that most, if not all of them, are not within the authority of the LAHD to implement.

5.2.1 Approaches to Avoiding Building a Near-Dock Yard

5.2.1.1 Additional On-dock Railyards

As discussed in detail in Section 1.1.5.3 and Appendix G2, additional on-dock capacity or use beyond the volumes presented in Table 1.2 cannot be achieved. Hence, the use of additional on-dock railyards is not a viable alternative. The Ports have maximized the size of planned and proposed on-dock railyards and support rail infrastructure via detailed master planning (which includes detailed container terminal and rail system computer modeling/simulation, e.g., Parsons, 2006), preliminary engineering, and final design for some of the infrastructure. Detailed rail system simulation (Parsons, 2006 and 2012) has determined that the rail network within the Ports will reach capacity with forecasted operations from existing and planned on-dock facilities by 2035, even with implementation of all planned rail improvement projects. Accordingly, additional on-dock facilities would not yield higher capacity or greater utilization of rail transport.

5.2.1.2 Inland Port/Remote Railyard

A concept that has received considerable attention in recent years is a rail-based system in which containers would be transported by shuttle train between the marine terminals and an inland railyard, essentially a remote off-dock yard, where they would be sorted onto and off of trains to and from points east. An inland port is a facility that receives eastbound loaded marine containers via either or both Class I railroads for one or more of the following activities: (a) reorganizing unsorted or blocked trains for a follow-on train move to destinations east of the Rocky Mountains; (b) drayage by truck to destinations near the point of terminus; (c) backhaul drayage by truck to destinations throughout the region; and (d) transferring cargo into larger domestic intermodal containers for a follow-on train move to destinations east of the Rocky Mountains. This last type of activity is sometimes referred to as transloading and can include value-added activities such as packaging and tagging.

Example concepts include "Sprint Trains", "Block Swap Train Building", "Agile Port/Efficient Marine Terminal Concept", and the "Inland Port for Local Distribution." In these concepts, most, if not all, import cargo would be loaded onto trains at on-dock railyards and sent to the inland facility for sorting and distribution. Cargo bound for destinations up to approximately 550 miles east of the inland facility (e.g., Nevada and Arizona) would be put on trucks to be hauled to its destinations, as would cargo headed back into the Los Angeles Basin; the rest would be put on eastbound trains. Export cargo and empty containers would move in reverse. This concept would eliminate the port-area truck trips associated with draying containers to near-dock and off-dock railyards, thus reducing port-area traffic impacts and some truck emissions. It is not clear, given the complexities of assembling shuttle trains in on-dock railyards and routing them on the regional rail network, whether locomotive emissions would be reduced. Such a concept could, however, present an opportunity to use dedicated locomotives with advanced emissions reduction features, since the locomotives would probably not travel outside the SCAB and would certainly not leave California. Traffic and air emissions would be increased in the Inland Empire as a result of additional, and possibly longer, truck trips, grade crossing blockages, and truck and locomotive emissions. It is not clear at this level of analysis whether the net effect would be a reduction in environmental impacts.

Currently, none of the region's inland rail yards and logistics centers functions as a true inland port. It would be necessary to identify specific candidate locations for an inland port in order to calculate costs, revenues, and other benefits. These sites can be existing rail yards or logistics centers, or, more generally, locations that are currently undeveloped or developed by other land uses. Furthermore, as described in the Parsons rail study update (2006), it is unlikely that the railroad mainlines have adequate capacity to handle substantial numbers of shuttle trains east of the Alameda Corridor. This alternative would require: (1) acquiring land and entitlements and constructing a new railyard in the Inland Empire (San Bernardino and Riverside counties and Los Angeles County east of I-605) near the existing BNSF and/or UP mainline tracks; (2) acquiring right of way and constructing trackage to enhance the Alameda Corridor and the BNSF and UP mainlines and to provide connections to the new facility; and (3) converting marine terminals in the port area to emphasize on-dock railyards over on-site container management and local delivery. Acquiring railyard land would be feasible. Acquiring additional mainline right of way, particularly west of the Inland Empire, would be challenging given community resistance to new rail facilities and the scarcity of available land. Converting marine terminals in both ports to rail-based facilities would cost several billion dollars, take at

least two decades to implement, and result in substantial disruptions to the goods movement industry as terminals were taken out of service.

For reasons mostly related to market feasibility and rail capacity, developing one or more inland ports in Southern California remains a challenge today. Rail service costs would increase since more line-haul capacity would be needed to accommodate both long- and short-haul moves. Simulation modeling undertaken by the Ports (Parsons, 2006 and 2012) indicates that the Port-area rail network will reach capacity with planned and existing on-dock, near-dock, and off-dock facilities, so that the addition of shuttle trains carrying local cargo may not be feasible. Moreover, even if these rail network capacity constraints are removed, the Ports do not have the ability or authority to mandate that the terminals load/unload, and the railroads operate, "shuttle" trains or unsorted unit trains from the on-dock railyards. However ACTA is planning to implement a pilot program rail shuttle service between the ports' on-dock rail facilities and a rail facility in Colton. The pilot program will consist of a daily train to and from Colton. The containers will be trucked between the Colton rail facility and the beneficial cargo owners' facility. This will help reduce the number of trucks on the freeways and improve truck driver turn time. Due to the added handling in rail and trucking costs vs. trucking, ACTA is seeking $5 million in subsidies to offset the difference in costs. In the long-term, ACTA is looking for a permanent inland location, added track capacity and the ability to operate five shuttle trains per day (POLA, 2012b).

5.2.2 Alternative Container Transport Systems

Recently, considerable interest has developed in reducing the extent to which the southern California goods movement system relies on diesel trucks for moving containers between the marine terminals in the ports of Los Angeles and Long Beach and their immediate destinations at intermodal railyards and major distribution centers throughout the region. The goals of the effort are to reduce traffic on local highways, but more importantly to reduce the diesel emissions associated with goods movement. The term "Zero Emissions Container Movement System", or ZECMS, has been applied to these alternative container movement concepts because most of them, relying on electric power alone, would not cause direct emissions in the local area. ZECMS could be viewed as either an alternative to the proposed Project or an alternative project element. In the first case, such technology would replace the proposed SCIG facility and the technology would link the marine terminals directly to a final destination. In the latter case, such technology would replace truck trips from marine terminals to the proposed Project site. As described below, ZECMS has not yet reached the point of being feasible, and therefore cannot be carried through this EIR as an alternative in either form. Nevertheless, ZECMS concepts are considered here as an indication of potential future developments related to the ZECMS concept, and because the Port believes it is necessary to continue further demonstration of these technologies, BNSF will be required by conditions of project approval and the terms of its lease to participate with the Ports in a ZECMS demonstration program (see Section 3.2.5 for details).

Within the general concept of ZECMS two basic approaches have been proposed: a) systems based on new, dedicated guideways, and b) systems based on existing guideways (highways and rail lines). In each approach, several technologies are being explored by a variety of academic, institutional, and commercial entities. ZECMS technologies for Port applications (i.e., between the marine terminals and near-dock intermodal railyards) have been extensively evaluated via a number of efforts, beginning with studies commissioned by the Ports in 2006/2007. The latest efforts are the Ports of Long Beach/Los Angeles

Alternative Container Transportation Technology Study, described below, and the I-710 Corridor Project EIR/EIS, which produced two key reports addressing the issue (URS, 2009a, b). Both efforts examined numerous concepts from both general approaches, which are described in more detail below. In addition, ZECMS for a regional system (i.e., extending to off-dock railyards and inland warehouses and distribution centers) is currently being investigated and evaluated in the SCAG Comprehensive Regional Goods Movement Plan and Implementation Strategy.

5.2.2.1 New Dedicated Guideways

In broad terms, the dedicated guideways approach consists of fixed, generally elevated, guideways to move containers using magnetic levitation (maglev), linear synchronous motor (LSM), or similar technology, as has been applied in people movers, to convey containers. In this approach, containers would be loaded onto specialized shuttles conveyed between the Port terminals and local destinations (near-dock railyards in the Port-related efforts) along track-like guideways, either monorail or some other configuration. The guideways would be purpose-built, which would likely require right-of-way acquisition, and, given how intensely developed the area is, would likely be elevated, which implies high capital costs. Magnetic levitation and linear synchronous motor technology are entirely electric, drawing power from the grid; accordingly, these systems would produce no local exhaust emissions, although the generation of the required electricity would produce power plant emissions.

5.2.2.2 Use of Existing Infrastructure

This approach would use existing roads and rail lines as the basis for construction of new guideways. This second approach, in turn, has two basic variations: a) specialized shuttle vehicles powered by technologies such as LSM would use rail lines as guideways; b) electric trucks (or fuel cell/electric trucks) would move containers along roads using the roads as fixed truck guideways.

Linear Synchronous Motor (LSM) Adaptation to Existing Rail. In the first variation, LSM adapted to standard railroad tracks could move containers in three possible ways: a) a specialized propelled bogie (tow vehicle) would pull containers loaded on conventional railcars; b) conventional railcars would be retrofitted with permanent magnets and be self-propelled; or c) a new type of self-propelled railcar would be designed and manufactured. The system would use the existing rail network in the Port area, which would require sharing the tracks with current conventional trains. This approach would avoid most of the capital costs associated with building a new, dedicated guideway.

Automated Fixed-Track Truck System/Zero Emission Trucks. In the other variation, electric-powered trucks would interact with ports and rail terminals as conventional trucks do today, but would operate on road-based guideways subject to controls that would safely optimize capacity. This technology (which does not exist as a commercial product today) would incorporate characteristics of various existing freight and passenger technologies. Trucks powered by electric motors (including linear induction or linear synchronous motors) would draw wayside electric power (for example, from overhead wires) on the highway segment and operate on battery power at the port terminals, intermodal rail facilities, and inland destinations. This concept has been extensively explored in the I-710 Corridor Project EIR/EIS but did not emerge as a proposal under the Ports' Alternative Container Transportation Technology Study.

Another truck-based approach would not use guideways, but instead involves zero-emission (all-electric) or very low emissions heavy-duty trucks operating on area roads just as conventional diesel trucks do. These could be battery- or fuel-cell-powered trucks, such as are being developed for Port of Los Angeles applications, or hybrid diesel-electric trucks, as proposed under the Alternative Container Transportation Technology Study (see below).

5.2.2.3 Ports of Long Beach/Los Angeles Alternative Container Transportation Technology Study

On June 3, 2009, the Port of Long Beach, in collaboration with the LAHD and the ACTA, issued a formal "Request for Concepts and Solutions (RFCS) to design, build, finance, and operate/maintain a ZECMS between the ports and the existing ICTF and proposed near-dock rail facilities. The seven responses to the RFCS that were received included both fixed-guideway systems and road-and-rail-based systems (Table 5-1). The ports assembled an evaluation team comprised of staff from each port and the ACTA, legal counsel, and a panel of experts chosen by the Keston Institute of USC.

Table 5-1. Respondents to the 2009 Request for Concepts and Solutions.

Respondent	Technology Basis
American Maglev Technology	Magnetic Levitation/New Elevated Guideway
Bombardier	Magnetic Levitation/New Surface-Level Guideway
Flight Rail	Vacuum Propulsion/ New Elevated Guideway
Freight Shuttle Partners	Linear Synchronous Motors/New Elevated Guideway
Magnaforce (LEVX California Freight Systems)	Magnetic Levitation /New Elevated Guideway
General Atomics/Innovative Transportation Systems Corp.	Linear Synchronous Motor/Existing Guideway (Rail Lines)
Tetra Tech	Hybrid Diesel Trucks/Existing Guideway (Road)

The panel's review and conclusions considered both the financial and technological viability of the proposals (Keston Institute, 2010). The panel reviewed the financial plans and the assumed construction and operating costs contained in the proposals that provided such information. Considering the capital-intensive nature of the proposed systems and the best-case assumptions regarding growth in container volume, market share, capital costs, and system level of development, the panel concluded that, absent other drivers (e.g., environmental regulations and/or a subsidy provided by the Ports or others), a ZECMS would have difficulty competing economically with conventional truck drayage (at least two of the respondents to the RFCS recognized the need for subsidies, both for building and for operating the system). They noted that if ZECMS rates exceed truck drayage rates, then the system would not be financially viable on its own. Furthermore, the panel doubted the financial assumptions (e.g., construction costs, right-of-way costs, market share) that most of the proposals were based on. For example, a 2006 study commissioned by the Ports and conducted by General Atomics estimated a construction cost of approximately $575 million for a magnetic levitation system running 4.7 miles between the Ports and the ICTF, but a later proposal by another vendor assumed a capital cost of only $161 million for a similar system two miles long.

From a technology standpoint, the panel determined that none of the proposals demonstrated that the intended ZECMS objectives could be achieved. The panel concluded that successful operation in a light-duty application (e.g., test track without a

container, or people mover) cannot be construed as a guarantee of success in a port environment. Accordingly, the panel stated that prior to the selection and deployment of any system, additional testing needs to be carried out in an environment that simulates actual container handling and transfer operations. None of the systems proposed was deemed sufficiently mature, at this time, to commit valuable Port and other public rights-of-way and resources to a full-scale operational deployment. As a note, the I-710 Corridor Project EIR/EIS reached the same conclusions with respect to the various technologies it evaluated, but identified a truck guideway concept as sufficiently promising to include as a component of one of the alternatives carried forward in the document.

5.2.2.4 Constraints to Applying ZECMS Technologies in the Ports

The ZECMS technologies are not yet viable as alternatives to truck-based drayage for three reasons. First and foremost, an operational prototype of a freight-moving system for either LSM or maglev does not presently exist anywhere in the world. Accordingly, an extensive development, testing, and demonstration process is required before deployment of any of the dedicated fixed-guideway systems as a pilot project could be considered. Second, the likely very considerable capital and operating costs of fixed guideway systems have not been developed, and cannot be until technology development has proceeded further. Third, self-propelled railcars are currently prohibited by the United States Department of Transportation (USDOT) and the Federal Railroad Administration (FRA), which would preclude development of those variants of the LMS existing guideway concept. In addition, although some excess capacity exists on the port area rail system at this time, that capacity may be exceeded in the foreseeable future, as described in Section 1.1.5, which could inhibit the rail-based concepts.

5.2.2.5 Opportunities for ZECMS Technology

Nevertheless, ZECMS concepts have sufficient promise that the ports are actively pursuing their development. For the LMS concept, the ports are collaborating with General Atomics (GA), the Lawrence Livermore National Laboratory, and the Center for Commercial Deployment of Transportation Technologies (CCDoTT, a partnership of California State University, Long Beach and the United States departments of Defense and Transportation). The partners are pursuing the deployment of a proof-of-concept project that would demonstrate a system's ability to move loaded containers in a rigorous duty cycle. Although the LSM concept has not yet proven commercially or technologically feasible, this document identifies a project condition subject to approval requiring that the proposed Project applicant participate in demonstrations of proof of concept rail technologies as described in Section 3.2.5.

In the case of road-based systems, electric trucks are being actively developed for port applications. For example, the Ports, through the Technology Advancement Program, have partnered with the SCAQMD to fund and demonstrate an electric-powered heavy duty truck for drayage service, including the demonstration of the world's first plug-in battery-electric class 8 truck that was built by Balqon Corporation. The original truck was powered by lead-acid batteries. However, with significant advances in battery technologies and availability, a new version of the Balqon electric truck, Model MX-30, is powered by lithium-ion batteries, which have better performance and higher energy density as compared to the lead-acid batteries. The increased energy density and operational efficiencies are expected to result in over a 150 mile range unloaded. The Balqon MX-30 electric drayage truck has recently been demonstrated on a laboratory testing facility, and it is currently being evaluated in an in-use testing program for its

feasibility in short haul applications between terminals and warehouses or near dock railyards.

In addition to the Balqon MX-30 electric drayage truck demonstration, the Port is also looking at hydrogen fuel cell technologies to achieve zero emissions. Through the Technology Advancement Program, the Port has partnered with the Port of Long Beach and Vision Industries to fund the development and testing of a hydrogen fuel cell powered class 8 truck. The Vision's Tyranno electric truck is powered by a lithium ion battery that is charged on-board by a hydrogen fuel cell generator. This truck is expected to achieve 200 miles on a single tank of hydrogen. The truck is currently being evaluated by a local drayage company.

Issues to be evaluated include the vehicles' ability to perform the demanding duty cycle required of drayage trucks; maintenance and reliability issues; costs of fuel, maintenance, and replacements; and logistical details of recharging (for example, 30 miles between recharging may not get the vehicle through a full work shift). Although the results to date are promising (TIAX, 2011), the concept has not yet been proven commercially or technologically feasible. Nevertheless, it is very possible that zero-emission drayage trucks will become feasible. Accordingly, this document identifies a project condition (i.e., as part of project approval) requiring that the Project applicant commit to a demonstration test and eventual deployment of zero-emission trucks when they are determined to be commercially and economically feasible. The demonstration program is further described in Section 3.2.5.

5.2.2.6 Summary

The zero emissions container transport concepts, while not ready for full-scale deployment or actually available at this time, are nonetheless potentially feasible future options for development by the ports and other elements of the goods movement industry. To this end, the ports and ACTA pursued the ZECMS solicitation described above, and continue to investigate promising technologies for transporting containers between port terminals and near-dock railyards. In a related effort, the I-710 Corridor Project is also investigating promising alternatives to conventional truck drayage.

Additionally, through the CAAP the Ports have committed to evaluating, and if feasible bringing to commercial reality, alternative technologies with the intention of encouraging the application in the port area of clean technologies for moving cargo. It is the express charge of the CAAP's Technology Evaluation Program both to solicit proposals to develop specific technologies and to evaluate unsolicited proposals for emerging technologies, and the CAAP establishes a formal process for proposal evaluation and funding.

5.2.3 Different Access to the Site

In order to provide different access to the proposed Project, a flyover could be constructed from the Terminal Island Freeway that would descend into the facility. A flyover would provide the same traffic benefits as the proposed Project but at a significantly greater cost and possibly with greater environmental impacts, as trucks would produce greater emissions climbing the flyover grade than they would on the at-grade additional lane. Accordingly, the flyover concept is not a valid alternative under CEQA and was eliminated from further consideration.

5.3 Alternatives Carried Forward for Analysis

Two alternatives are carried forward in this EIR for analysis under CEQA. They are:

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

The No Project Alternative considers what would reasonably be expected to occur if the proposed Project was not built. The Reduced Project Alternative would consist of the same near-dock railyard described in the proposed Project, but with activity levels limited by lease conditions. These two alternatives and their impacts are described and analyzed in Sections 5.4 and 5.5, and their cumulative impacts are evaluated in Section 5.6.

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 analytic and scientific judgment of the report preparers. The specific criteria employed in this document are described in Chapter 3 for the proposed Project, and are the same for the alternatives. The impact assessment methodology described in Chapter 3 for the proposed Project was applied to the alternatives, as well. However, pursuant to CEQA Guidelines section 15126.6 (d), the analysis is not to the same level of detail as the proposed Project.

Section 5.7.2 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 Section 5.7.3.

No Project Alternative Comparative Analysis

Comparative analyses of the proposed Project minus the No Project Alternative are included for air quality (including health risk, see Section 5.4.2). This includes a direct comparison between the expected future conditions with the proposed SCIG facility and the expected future conditions without SCIG. This evaluation is included for informational purposes only and is not used in the determination of significant impacts under CEQA; however, it does provide a meaningful perspective on the effects of implementing the proposed Project. Air quality is the only resource area for which this type of analysis is presented. For noise, the analysis of Project minus No Project is not a meaningful evaluation because the No Project scenario at receptors around the SCIG site is essentially the existing baseline condition (which for the most part is dominated by sources extraneous to the existing site operations). A comparison of the Project minus existing conditions has already been analyzed and discussed in Chapter 3.9. Furthermore, analysis of a No Project scenario on the SCIG site would require an analysis of the existing site operations and calibration of a noise model for which no cumulative near field data exists. For traffic, the cumulative analysis of transportation in Chapter 4 and in Section 5.4 below presents a comparison of the Project to the future No Project traffic conditions. For all other resource areas, no detailed quantitative analysis is conducted because there is expected to be little difference between the baseline conditions and the No Project such that the existing impact analysis described in Chapter 3 is comparable to that of the Project minus No Project.

5.4 Alternative 1: No Project

5.4.1 Project Description

The No Project Alternative considers what would reasonably be expected to occur if the LAHD did not approve the proposed Project (CEQA Guidelines Section 15126.6(e)(3)(C)). Under the No Project Alternative, the LAHD 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 remain at the site (see Section 2.2.2 for a list of current businesses). As it is reasonable to expect that existing uses would experience some growth in the future, despite site constraints, the No Project alternative assumes a 10 percent growth in activity levels of the existing uses at the Project site by 2016.

Forecasted increases in cargo throughput at the two San Pedro Bay Ports, including intermodal cargo, would still occur as the improvements in operational efficiencies at the Ports described in Chapter 1 are implemented. BNSF has represented that, in the No Project Alternative, the additional intermodal cargo (direct intermodal, transloaded, and domestic) would be handled at the Hobart/Commerce Railyard, east of downtown Los Angeles, approximately 24 miles north of the San Pedro Bay Ports (BNSF, 2012).

BNSF has already undertaken physical modifications and operational changes that have expanded the capacity of the Hobart Yard. To accommodate future increased cargo volumes at Hobart, BNSF would undertake additional operational and physical changes. Operationally, BNSF would re-organize its Southern California operations to handle primarily international (i.e., port) cargo at Hobart and shift the domestic cargo currently occupying a share of Hobart's capacity to other regional intermodal facilities. BNSF would implement additional physical changes to the Hobart and Commerce facilities that would increase their capacity; BNSF represents that those changes could be implemented without discretionary permits (BNSF, 2012). Those improvements would include shifting a portion of the operation from wheeled storage to a stacked operation, extending existing loading tracks to handle 8,000-foot trains, and adding new loading tracks. Although the specific changes that would be made have not been determined, examples include construction of five additional 8,000-foot tracks configured for use with several new wide-span cranes, addition of 250 wheeled parking spaces on property currently owned by or otherwise available to BNSF, and an additional 3,700 container stacking spaces under the wide-span cranes. The operational changes and the approved expansions would allow Hobart/Commerce to handle approximately 3 million lifts (5.4 million TEUs) per year by 2035, which is approximately 1 million lifts more than its existing capacity. The Port independently undertook engineering analyses of the Hobart/Commerce Yard that confirmed BNSF's representations of the potential to expand capacity at these facilities (AECOM, 2012).

Direct and transloaded intermodal cargo is forecasted to continue to grow in accordance with the cargo projections presented in Chapter 1. Domestic intermodal cargo can also be assumed to increase in the future. Under the No Project Alternative, transloaded and domestic intermodal cargo would continue to be drayed from regional warehouses to the region's intermodal railyards, including Hobart/Commerce. A portion of transloaded cargo comes from warehouses in the port area, and that cargo would continue to be drayed 20 or more miles to the Hobart/Commerce Yard.

This alternative assumes that existing business operations would continue at the proposed Project site; Table 5-2 summarizes baseline (2010) operations and estimated future business operations. The alternative also assumes that existing business 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 (California Cartage, 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 continue to operate between the marine terminals and the Hobart/Commerce Yard. Accordingly, the No Project Alternative would result in 212 additional truck trips on I-710 above the baseline per average day between the Project site and the Hobart/Commerce Yards in each direction in 2023 and increasing to 6,082 additional trips per day in 2035 and thereafter (see Table 2-2). 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.

Table 5-2. Traffic at the Project Site Under the No Project Alternative.

Scenario	Total annual truck roundtrips
CEQA Baseline (2010)	
Hobart trucks	466,818
Business operation trucks	515,349
Total trucks in CEQA Baseline	**982,167**
No Project	
Hobart trucks	1,561,520
Business operation trucks	587,488
Total trucks in No Project	**2,149,008**
Net Change (No Project minus CEQA Baseline)	**1,166,841**

Under the No Project Alternative, no line-haul train trips would occur between the Project site and the Hobart/Commerce Yards. However, there would continue to be limited onsite locomotive activity associated with existing California Cartage and L.A. Harbor Grain Terminal operations.

Train, truck, and equipment activity within the Hobart/Commerce Yards is not analyzed in this document for the No Project Alternative. Those activities are accounted for in the environmental analyses conducted under the CARB Memorandum of Understanding with BNSF. This assumption is conservative, as it avoids the possibility of overstating impacts of the No Project Alternative. BNSF represents that the expansion of Hobart/Commerce Yards will occur whether or not SCIG is constructed; the difference would be whether the facility would handle primarily domestic and transloaded cargo (if SCIG is built) or a mixture of domestic, transloaded, and international cargo (if SCIG is not built).

5.4.2 Impact Analysis

5.4.2.1 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.

5.4.2.2 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. Businesses currently occupying the Project site would continue to utilize their existing facilities, and the activities of these businesses 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 but would exceed a SCAQMD threshold of significance.

Table 5-3 presents unmitigated average daily criteria pollutant emissions associated with the No Project Alternative for the analysis years of 2016, 2023, 2035, 2046, and 2066 (note that 2066 emissions are identical to 2046 emissions, since a quantitative calculation for 2066 is not possible). The average daily emissions represent the annual emissions divided by 360 days per year. No Project Alternative emissions are compared to the baseline (2010) to determine significance.

Table 5-4 presents peak daily unmitigated emissions estimated for the No Project Alternative in years 2016, 2023, 2035, 2046, and 2066. Peak daily emissions represent theoretical upper-bound estimates of activity levels at the existing business 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 5-3. 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 2016						
Trucks On-Site	14	50	95	0	5	2
Trucks Off-Site [b, c]	53	224	837	2	81	29
CHE	16	1566	148	1	8	7
Employee Commute On-Site	0	5	0	0	1	0
Employee Commute Off-Site [b]	3	111	10	0	46	12
Existing Business Locomotive Activities	0	0	3	0	0	0
Locomotives Off-site [b]	15	45	517	1	11	10
Total - Project Year 2016 [d]	102	2,002	1,609	4	153	61
CEQA Impacts						
CEQA Baseline Emissions	140	1958	2175	21	178	84
No Project minus CEQA Baseline	-38	44	-566	-17	-25	-23
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2023						
Trucks On-Site	13	50	55	0	5	2
Trucks Off-Site [b, c]	48	198	463	3	102	36
CHE	11	874	97	1	7	6
Employee Commute On-Site	0	3	0	0	1	0
Employee Commute Off-Site [b]	1	68	6	0	46	12
Existing Business Locomotive Activities	0	0	3	0	0	0
Locomotives Off-site [b]	15	71	557	1	8	7
Total - Project Year 2023 [d]	89	1,264	1,182	5	170	64
CEQA Impacts						
CEQA Baseline Emissions	140	1958	2175	21	178	84
No Project minus CEQA Baseline	-51	-694	-993	-16	-8	-20
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2035						
Trucks On-Site	13	49	52	0	5	2
Trucks Off-Site [b, c]	107	453	1028	7	257	90
CHE	9	865	45	1	4	3
Employee Commute On-Site	0	2	0	0	1	0
Employee Commute Off-Site [b]	1	57	5	0	46	12
Existing Business Locomotive Activities	0	0	3	0	0	0
Locomotives Off-site [b]	16	129	629	2	9	8
Total - Project Year 2035 [d]	146	1,556	1,763	11	322	115
CEQA Impacts						
CEQA Baseline Emissions	140	1958	2175	21	178	84
No Project minus CEQA Baseline	6	-402	-412	-10	144	31
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2046						
Trucks On-Site	13	49	54	0	5	2
Trucks Off-Site [b, c]	107	449	1193	7	256	89
CHE	10	874	46	1	4	4
Employee Commute On-Site	0	2	0	0	1	0
Employee Commute Off-Site [b]	1	57	5	0	46	12
Existing Business Locomotive Activities	0	0	3	0	0	0
Locomotives Off-site [b]	10	120	385	2	5	5
Total - Project Year 2046 [d]	141	1,552	1,687	10	318	112
CEQA Impacts						

Source Category	Average Daily Emissions (lb/day) [a, e]					
	VOC	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
CEQA Baseline Emissions	140	1958	2175	21	178	84
No Project minus CEQA Baseline	1	-406	-489	-11	141	28
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2066						
Trucks On-Site	14	55	61	0	6	2
Trucks Off-Site [b, c]	120	502	1336	8	287	100
CHE	11	979	52	1	4	4
Employee Commute On-Site	0	2	0	0	1	0
Employee Commute Off-Site [b]	1	57	5	0	46	12
Existing Business Locomotive Activities	0	0	3	0	0	0
Locomotives Off-site [b]	12	162	441	2	5	5
Total - Project Year 2066 [d]	159	1,758	1,897	11	350	123
CEQA Impacts						
CEQA Baseline Emissions	157	2180	2458	21	192	91
No Project minus CEQA Baseline	1	-422	-561	-10	158	32
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	Yes	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)Off-site trucks include existing business trucks and trucks that would have gone to SCIG but instead are going to Hobart Yard.
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.

1

Table 5-4. 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 2016						
Trucks On-Site	16	56	106	0	6	2
Trucks Off-Site [b, c]	59	251	937	2	91	33
CHE	18	1753	165	1	9	8
Employee Commute On-Site	0	5	0	0	1	0
Employee Commute Off-Site [b]	3	111	10	0	46	12
Existing Business Locomotive Activities	0	0	3	0	0	0
Locomotives Off-site [b]	18	62	595	1	11	10
Total - Project Year 2016 [d]	115	2,239	1,816	5	164	66
CEQA Impacts						
CEQA Baseline Emissions	157	2180	2458	21	192	91
No Project minus CEQA Baseline	-42	59	-642	-17	-28	-25
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2023						
Trucks On-Site	15	56	62	0	6	2
Trucks Off-Site [b, c]	54	221	519	3	115	41
CHE	12	979	109	1	8	7
Employee Commute On-Site	0	3	0	0	1	0
Employee Commute Off-Site [b]	1	68	6	0	46	12
Existing Business Locomotive Activities	0	0	3	0	0	0
Locomotives Off-site [b]	18	97	642	1	8	7
Total - Project Year 2023 [d]	100	1,425	1,341	6	183	69
CEQA Impacts						
CEQA Baseline Emissions	157	2180	2458	21	192	91
No Project minus CEQA Baseline	-57	-755	-1118	-16	-8	-21
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2035						
Trucks On-Site	14	55	59	0	6	2
Trucks Off-Site [b, c]	120	507	1151	8	288	100
CHE	10	969	51	1	4	4
Employee Commute On-Site	0	2	0	0	1	0
Employee Commute Off-Site [b]	1	57	5	0	46	12
Existing Business Locomotive Activities	0	0	3	0	0	0
Locomotives Off-site [b]	18	174	723	2	9	8
Total - Project Year 2035 [d]	164	1,765	1,991	12	354	127
CEQA Impacts						
CEQA Baseline Emissions	157	2180	2458	21	192	91
No Project minus CEQA Baseline	7	-415	-467	-10	162	36
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	Yes	No
Project Year 2046						
Trucks On-Site	14	55	61	0	6	2
Trucks Off-Site [b, c]	120	502	1336	8	287	100
CHE	11	979	52	1	4	4
Employee Commute On-Site	0	2	0	0	1	0
Employee Commute Off-Site [b]	1	57	5	0	46	12
Existing Business Locomotive Activities	0	0	3	0	0	0

Source Category	Peak Daily Emissions (lb/day) [a, e]					
	VOC	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
Locomotives Off-site [b]	12	162	441	2	5	5
Total - Project Year 2046 [d]	159	1,758	1,897	11	350	123
CEQA Impacts						
CEQA Baseline Emissions	157	2180	2458	21	192	91
No Project minus CEQA Baseline	1	-422	-561	-10	158	32
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	Yes	No
Project Year 2066						
Trucks On-Site	14	55	61	0	6	2
Trucks Off-Site [b, c]	120	502	1336	8	287	100
CHE	11	979	52	1	4	4
Employee Commute On-Site	0	2	0	0	1	0
Employee Commute Off-Site [b]	1	57	5	0	46	12
Existing Business Locomotive Activities	0	0	3	0	0	0
Locomotives Off-site [b]	12	162	441	2	5	5
Total - Project Year 2066 [d]	159	1,758	1,897	11	350	123
CEQA Impacts						
CEQA Baseline Emissions	157	2180	2458	21	192	91
No Project minus CEQA Baseline	1	-422	-561	-10	158	32
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	Yes	No

a) Peak emissions assume the simultaneous occurrence of maximum theoretical daily equipment activity levels. Such levels would rarely occur during day-to-day operations.
b) Truck, train, and worker commute emissions include transport within the South Coast Air Basin.
c) Off-site trucks include existing business trucks and trucks that would have gone to SCIG but instead are going to Hobart Yard.
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

The impacts of this alternative would be less than significant for all pollutants except for PM_{10}which exceed the threshold in 2035, 2046 and 2066.

Mitigation Measures

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

Residual Impacts

The residual impacts of the No Project Alternative would remain significant and unavoidable for PM_{10} operational emissions in years 2035, 2046 and 2066.

No Project/Proposed Project Comparison

In response to comments on the Draft EIR, the difference in mass air emissions between the proposed Project and the No Project Alternative was calculated and presented below in Table 5-5 for average daily emissions and Table 5-6 for peak daily emissions. Although this analysis is not required by CEQA and is not being used to evaluate impacts, it is being presented for informational purposes.

Table 5-5. Average Daily Operational Emissions Without Mitigation (Project minus No Project).

Source Category	Average Daily Emissions (lb/day) [a, e]					
	VOC	CO	NOx	SOx	PM10	PM2.5
Project Year 2016						
Locomotives On-Site	1	4	25	0	1	1
Locomotives Off-Site [b]	20	58	654	1	14	13
Trucks On-Site	11	38	75	0	8	2
Trucks Off-Site [b]	6	24	94	0	8	3
Railyard Equipment	6	204	3	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	4	0	0	2	1
Refueling Trucks On-Site	0	0	0	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	6	23	46	0	2	1
Trucks Off-Site [b]	6	24	115	0	10	4
CHE	5	400	56	0	3	3
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	1	23	2	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	19	1,192	135	1	9	6
Total - Project Year 2016 [d]	82	1,996	1,207	3	68	35
No Project Emissions	102	2,002	1,609	4	153	61
Proposed Project minus No Project	-20	-6	-402	-2	-84	-26
Project Year 2023						
Locomotives On-Site	1	6	28	0	1	1
Locomotives Off-Site [b]	20	91	708	1	10	10
Trucks On-Site	12	45	61	0	12	3
Trucks Off-Site [b]	6	22	55	0	11	4
Railyard Equipment	8	296	4	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	4	1
Refueling Trucks On-Site	0	0	0	0	0	0
Refueling Trucks Off-Site [b]	0	0	0	0	0	0
Alternate Business Location Sources						
Trucks On-Site	6	25	27	0	2	1
Trucks Off-Site [b]	5	18	46	0	10	3
CHE	4	234	49	0	3	3
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	14	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	14	662	73	1	8	5
Total - Project Year 2023 [d]	76	1,420	1,054	3	71	33
No Project Emissions	89	1,264	1,182	5	170	64
Proposed Project minus No Project	-13	156	-128	-2	-99	-31

Source Category	Average Daily Emissions (lb/day) [a, e]					
	VOC	CO	NOx	SOx	PM10	PM2.5
Project Year 2035						
Locomotives On-Site	1	9	29	0	1	0
Locomotives Off-Site [b]	21	169	793	3	11	11
Trucks On-Site	38	150	197	1	41	12
Trucks Off-Site [b]	18	66	163	1	36	12
Railyard Equipment	8	937	9	0	0	0
TRU	0	0	0	0	0	0
Employee Commute On-Site	0	1	0	0	1	0
Employee Commute Off-Site [b]	0	15	1	0	12	3
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	6	25	26	0	2	1
Trucks Off-Site [b]	5	17	42	0	10	3
CHE	3	231	14	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	13	656	58	1	7	4
Total - Project Year 2035 [d]	113	2,290	1,337	6	132	50
No Project Emissions	146	1,556	1,763	11	322	115
Proposed Project minus No Project	-33	734	-426	-5	-190	-65
Project Year 2046						
Locomotives On-Site	1	9	19	0	0	0
Locomotives Off-Site [b]	14	158	484	3	7	6
Trucks On-Site	38	150	217	1	41	12
Trucks Off-Site [b]	18	65	188	1	36	12
Railyard Equipment	8	938	10	0	0	0
TRU	0	0	0	0	0	0
Employee Commute On-Site	0	1	0	0	1	0
Employee Commute Off-Site [b]	0	14	1	0	12	3
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	6	25	26	0	2	1
Trucks Off-Site [b]	5	17	44	0	10	3
CHE	3	232	14	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	13	663	60	1	7	4
Total - Project Year 2046 [d]	105	2,286	1,067	6	127	46
No Project Emissions	141	1,552	1,687	10	318	112
Proposed Project minus No Project	-36	734	-620	-5	-191	-66
Project Year 2066						
Locomotives On-Site	1	9	19	0	0	0
Locomotives Off-Site [b]	14	158	484	3	7	6
Trucks On-Site	38	150	217	1	41	12
Trucks Off-Site [b]	18	65	188	1	36	12
Railyard Equipment	8	938	10	0	0	0
TRU	0	0	0	0	0	0
Employee Commute On-Site	0	1	0	0	1	0
Employee Commute Off-Site [b]	0	14	1	0	12	3
Refueling Trucks On-Site	0	1	1	0	0	0

Source Category	Average Daily Emissions (lb/day) [a, e]					
	VOC	CO	NOx	SOx	PM10	PM2.5
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	6	25	26	0	2	1
Trucks Off-Site [b]	5	17	44	0	10	3
CHE	3	232	14	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	13	663	60	1	7	4
Total - Project Year 2066 [d]	105	2,286	1,067	6	127	46
No Project Emissions	141	1,552	1,687	10	318	112
Proposed Project minus No Project	-36	734	-620	-5	-191	-66

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) Given the absence of specific site locations where the displaced businesses would move to, only on-site emissions from businesses displaced by the Project could be reasonably estimated.
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 5-6. Peak Daily Operational Emissions Without Mitigation (Project minus No Project).

Source Category	Peak Daily Emissions (lb/day) [a, e]					
	VOC	CO	NOx	SOx	PM10	PM2.5
Project Year 2016						
Locomotives On-Site	1	5	28	0	1	1
Locomotives Off-Site [b]	24	79	757	1	14	13
Trucks On-Site	12	42	84	0	9	3
Trucks Off-Site [b]	7	27	105	0	9	3
Railyard Equipment	12	339	25	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	4	0	0	2	1
Refueling Trucks On-Site	0	0	0	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	7	26	52	0	2	1
Trucks Off-Site [b]	7	26	128	0	11	4
CHE	5	447	63	0	3	3
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	1	23	2	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	22	1,334	151	1	10	6
Total - Project Year 2016 [d]	99	2,367	1,407	3	74	39
No Project Emissions	115	2,239	1,816	5	164	66
Proposed Project minus No Project	-15	128	-409	-2	-90	-27
Project Year 2023						
Locomotives On-Site	1	7	31	0	1	1
Locomotives Off-Site [b]	24	124	821	1	11	10
Trucks On-Site	13	51	69	0	13	4
Trucks Off-Site [b]	6	24	61	0	12	4

Source Category	Peak Daily Emissions (lb/day) [a, e]					
	VOC	CO	NOx	SOx	PM10	PM2.5
Railyard Equipment	14	443	26	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	4	1
Refueling Trucks On-Site	0	0	0	0	0	0
Refueling Trucks Off-Site [b]	0	0	0	0	0	0
Alternate Business Location Sources						
Trucks On-Site	7	28	30	0	2	1
Trucks Off-Site [b]	5	20	51	0	11	4
CHE	4	262	55	0	3	3
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	14	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	15	741	82	1	8	5
Total - Project Year 2023 [d]	93	1,736	1,240	4	77	36
No Project Emissions	100	1,425	1,341	6	183	69
Proposed Project minus No Project	-8	311	-101	-2	-106	-33
Project Year 2035						
Locomotives On-Site	1	11	33	0	1	1
Locomotives Off-Site [b]	25	227	916	3	12	11
Trucks On-Site	42	168	221	1	46	13
Trucks Off-Site [b]	20	73	183	1	40	14
Railyard Equipment	14	1,161	32	0	1	1
TRU	2	16	11	0	0	0
Employee Commute On-Site	0	1	0	0	1	0
Employee Commute Off-Site [b]	0	15	1	0	12	3
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	7	28	29	0	2	1
Trucks Off-Site [b]	5	19	47	0	11	4
CHE	3	258	15	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	14	735	65	1	7	4
Total - Project Year 2035 [d]	134	2,724	1,557	7	144	55
No Project Emissions	164	1,765	1,991	12	354	127
Proposed Project minus No Project	-30	959	-434	-5	-210	-72
Project Year 2046						
Locomotives On-Site	1	10	21	0	0	0
Locomotives Off-Site [b]	16	211	557	3	7	6
Trucks On-Site	42	168	243	1	46	13
Trucks Off-Site [b]	20	73	211	1	40	14
Railyard Equipment	14	1,161	32	0	1	1
TRU	2	16	11	0	0	0
Employee Commute On-Site	0	1	0	0	1	0
Employee Commute Off-Site [b]	0	14	1	0	12	3
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	7	28	29	0	2	1
Trucks Off-Site [b]	5	19	50	0	11	4
CHE	3	260	16	0	1	1

Source Category	Peak Daily Emissions (lb/day) [a, e]					
	VOC	CO	NOx	SOx	PM10	PM2.5
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	15	742	67	1	7	4
Total - Project Year 2046 [d]	125	2,717	1,241	6	140	51
No Project Emissions	159	1,758	1,897	11	350	123
Proposed Project minus No Project	-33	959	-656	-5	-211	-72
Project Year 2066						
Locomotives On-Site	1	10	21	0	0	0
Locomotives Off-Site [b]	16	211	557	3	7	6
Trucks On-Site	42	168	243	1	46	13
Trucks Off-Site [b]	20	73	211	1	40	14
Railyard Equipment	14	1,161	32	0	1	1
TRU	2	16	11	0	0	0
Employee Commute On-Site	0	1	0	0	1	0
Employee Commute Off-Site [b]	0	14	1	0	12	3
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	7	28	29	0	2	1
Trucks Off-Site [b]	5	19	50	0	11	4
CHE	3	260	16	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	15	742	67	1	7	4
Total - Project Year 2066 [d]	125	2,717	1,241	6	140	51
No Project Emissions	159	1,758	1,897	11	350	123
Proposed Project minus No Project	-33	959	-656	-5	-211	-72

a) Emissions assume the simultaneous occurrence of maximum theoretical daily equipment activity levels. Such levels would rarely if ever occur during day-to-day operations of the facility.
b) Truck, train, and worker commute emissions include transport within the South Coast Air Basin.
c) Given the absence of specific site locations where the displaced businesses would move to, only on-site emissions from businesses displaced by the Project could be reasonably estimated.
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.

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.

The No Project Alternative includes growth in activity by existing businesses at the Project site, as well as trucks traveling to the downtown Hobart Yard. These activities would affect ambient air pollutant concentrations relative to the baseline.

Tables 5-7 and 5-8 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.

Table 5-7. 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	907	245	**1,152**	338
	1-hour [d]	907	142	**1,049**	(189)[f]
	Annual	20	40	**60**	56
CO	1-hour	2,878	5,842	8,719	23,000
	8-hour	602	4,467	5,069	10,000
SO_2	1-hour	7.2	236	243	655
	1-hour [e]	7.2	51	58	(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 2008, 2009, and 2010 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 2008, 2009, and 2010.
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 2008, 2009, and 2010.
f) A standard not yet adopted as a threshold of significance by SCAQMD.

Table 5-8. 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	8.3	6.5	**4.8**	2.5
	Annual	3.6	1.7	**2.3**	1.0
$PM_{2.5}$	24-hour	3.5	3.8	1.6	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 business lease agreements or operations that would require discretionary actions subject to CEQA.

Residual Impacts

The residual impacts of the No Project Alternative would remain significant and unavoidable for 1-hour and annual NO_2 and 24-hour and annual PM_{10}, and for 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.

As shown in Table 5-9, maximum 1-hour and 8-hour CO concentrations predicted at locations 3 meters from the edge of the intersection would not exceed the CO standards during any analysis year for the No Project Alternative.

Table 5-9. 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	8.4	6.2
2046 and 2066	7.4	5.5
Most stringent standard	20	9

Notes:

a) 1-hour concentrations include a background concentration of 5.1 ppm for 2016 and 2046 (SCAQMD, 2005) which was also assumed for 2066.
b) 8-hour concentrations include a background concentration of 3.9 for 2016 and 2046 which was also assumed for 2066.
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 EMFAC2011 for link speeds of 27 mph for all movements except the southbound approach/northbound departure for which 25 mph was used.
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

Residual impacts would be less than significant.

Alt 1 Impact AQ-7: The No Project Alternative would 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 accounts for 10% growth for existing businesses and associated operational emissions, as well as trucks traveling to the downtown Hobart Yard equivalent to the growth in cargo throughput forecasted for the ports.

For residential receptors, the main sources of TACs from this alternative would be trucks going to and from the Hobart Yard, as well as existing business offsite trucks. For occupational receptors, DPM emissions from Hobart trucks 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 5-10 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 the No Project Alternative, floating baseline, and floating increment (No Project minus floating baseline), as well as the CEQA baseline and CEQA increment (No Project minus CEQA baseline).

Table 5-10. Maximum Health Impacts Associated with the No Project Alternative.

Health Impact	Receptor Type	Maximum Predicted Impact					Significance Threshold
		Project	CEQA Baseline	CEQA Increment	Floating Baseline	Floating Increment	
Cancer Risk	Residential	71×10^{-6} (71 in a million)	68×10^{-6} (68 in a million)	**28×10^{-6} (28 in a million)**	34×10^{-6} (34 in a million)	**37×10^{-6} (37 in a million)**	10×10^{-6} (10 in a million)
	Occupational	22×10^{-6} (22 in a million)	51×10^{-6} (51 in a million)	4.9×10^{-6} (4.9 in a million)	21×10^{-6} (21 in a million)	7.4×10^{-6} (7.4 in a million)	
	Sensitive	42×10^{-6} (42 in a million)	45×10^{-6} (45 in a million)	6.1×10^{-6} (6.1 in a million)	20×10^{-6} (20 in a million)	**22×10^{-6} (22 in a million)**	
	Student	0.9×10^{-6} (0.9 in a million)	0.9×10^{-6} (0.9 in a million)	0.1×10^{-6} (0.1 in a million)	0.3×10^{-6} (0.3 in a million)	0.6×10^{-6} (0.6 in a million)	
	Recreational	27×10^{-6} (27 in a million)	78×10^{-6} (78 in a million)	**11×10^{-6} (11 in a million)**	22×10^{-6} (22 in a million)	**15×10^{-6} (15 in a million)**	
Chronic Hazard Index	Residential	0.08	0.06	0.04	0.06	0.04	1.0
	Occupational	0.2	0.2	0.05	0.2	0.05	
	Sensitive	0.07	0.06	0.02	0.07	0.02	
	Student	0.07	0.06	0.01	0.07	0.01	
	Recreational	0.2	0.2	0.05	0.2	0.05	
Acute Hazard Index	Residential	0.1	0.1	0.01	0.1	0.01	1.0
	Occupational	0.3	0.3	0.02	0.3	0.02	
	Sensitive	0.11	0.10	0.009	0.1	0.006	
	Student	0.10	0.09	0.007	0.1	0.003	
	Recreational	0.3	0.3	0.02	0.3	0.02	

a) Exceedances of the significance thresholds are in **bold**. The significance thresholds apply to the floating 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 floating 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 floating increment represents Project minus floating 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 Project is not built. It accounts for approximately 10% growth for existing businesses and significant growth in trips to Hobart Yard, equivalent to the growth in cargo throughput forecasted for the ports.

Consistent with Port policy, 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 Project is not built, but that existing business operations at the site increase over time. The data in Table 5-10 show that the cancer risk floating increment at the MEI location of the No Project Alternative is predicted to be 37 in a million (37×10^{-6}), which would occur at a residential receptor. This risk value exceeds the significance threshold of 10 in a million. The receptor location for the maximum No Project Alternative impact for residential receptors is adjacent to Interstate 710 (the Long Beach Freeway). Additionally, the floating incremental risks for sensitive and recreational receptors exceed the CEQA significance threshold of 10 in a million.

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

Understanding Reported Results

As discussed in detail in Section3.2 for the Project, the maximum incremental health impacts for each receptor type do not necessarily occur at the same receptor location as the maximum impacts. This means that the increments cannot necessarily be determined by subtracting the baseline impact from the Alternative impact. Instead, the subtraction must be done at each receptor, for all modeled receptors, and the maximum result selected from this series of calculations. The methods used to calculate the maximum incremental health impact for each receptor type shown in Table 5-10 are the same as described in Section3.2 for the Project.

Particulates: Morbidity and Mortality

Consistent with Port policy, a cancer burden analysis is not required for the No Project Alternative, and thus none is provided here.

As noted in Impact AQ-4 in Section 3.2, concentrations of $PM_{2.5}$would not exceed the 24-hour $PM_{2.5}$ SCAQMD significance threshold of 2.5 $\mu g/m^3$for the No Project Alternative. Consequently, $PM_{2.5}$ concentrations 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 was completed (see Appendix C3).

Impact Determination

The No Project Alternative would cause exceedances of the SCAQMD cancer risk threshold of $10 \times 10^{-6}$for residential, sensitive, and recreational receptors.

Mitigation Measures

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

Residual Impacts

Residual impacts relative to AQ-7 would be significant and unavoidable.

No Project/Proposed Project Comparison

In response to comments on the Draft EIR, the difference in health risk estimates between the proposed Project and the No Project Alternative was calculated and presented below in Table 5-11. Although this analysis is not required by CEQA and is not being used to evaluate impacts, it is being presented for informational purposes.

Table 5-11. Comparison of Maximum Health Impacts from the Mitigated Project and the No Project Alternative.

Health Impact	Receptor Type	Maximum Predicted Impact		
		Mitigated Project	No Project Alternative	Mitigated Project minus No Project Alternative Increment
Cancer Risk	Residential	9.8×10^{-6} (9.8 in a million)	71×10^{-6} (71 in a million)	-5.6×10^{-6} (-5.6 in a million)
	Occupational	20×10^{-6} (20 in a million)	22×10^{-6} (22 in a million)	8.9×10^{-6} (8.9 in a million)
	Sensitive	9.7×10^{-6} (9.7 in a million)	42×10^{-6} (42 in a million)	-7.2×10^{-6} (-7.2 in a million)
	Student	0.9×10^{-6} (0.9 in a million)	0.4×10^{-6} (0.4 in a million)	0.5×10^{-6} (0.5 in a million)
	Recreational	11×10^{-6} (11 in a million)	27×10^{-6} (27 in a million)	6.1×10^{-6} (6.1 in a million)
Chronic Hazard Index	Residential	0.09	0.08	0.03
	Occupational	0.4	0.2	0.2
	Sensitive	0.09	0.07	0.03
	Student	0.09	0.07	0.02
	Recreational	0.4	0.2	0.2
Acute Hazard Index	Residential	0.1	0.1	0.06
	Occupational	0.5	0.3	0.2
	Sensitive	0.1	0.1	0.07
	Student	0.1	0.1	0.06
	Recreational	0.5	0.3	0.2

a 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 No Project impact from the Mitigated Project impact. Rather, the subtraction must be done at each receptor, for all modeled receptors, and the maximum result selected.

b When the maximum increment for a receptor type is negative, the maximum increment displayed is the increment at the maximum project receptor location.

c 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.

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 business lease agreements or operations that would require discretionary actions subject to CEQA. Thus emissions and subsequent air quality impacts from these operations would only be subject to existing and future local, state and federal rules and regulations, including AQMP control measures adopted into SCAQMD rules and regulations and the Port's tariff or concession agreements for those existing businesses who are licensed motor carriers under Port drayage truck concessions. Therefore, compliance with these requirements would ensure that the No Project Alternative would not conflict with or

obstruct implementation of the AQMP. Because there would be no lease mechanism to trigger requirements for these operations to meet more stringent requirements in the CAAP before future regulations meet or exceed CAAP requirements, the No Project Alternative would conflict with the goals of the CAAP in the near-term only.

Impact Determination

Because the No Project Alternative would conflict with the goals of the CAAP in the near-term only, this alternative would have a significant impact until future regulations meet or exceed CAAP requirements.

Mitigation Measures

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

Residual Impacts

The residual impacts relative to AQ-8 would be significant and unavoidable.

5.4.2.3 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.

5.4.2.4 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.

5.4.2.5 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 be 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.

5.4.2.6 Greenhouse Gases

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

Table 5-12 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, including trucks traveling to the downtown Hobart Yard to accommodate the projected increase in cargo throughput forecasted for the ports. 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 5-12. Annual Operational GHG Emissions – No Project Alternative.

Source Category	Annual Emissions (metric tons/year) [a, e]			
	CO_2	CH_4	N_2O	CO_2e
Project Year 2016				
Trucks On-Site	2,392	0	0	2,401
Trucks Off-Site [b, c]	37,131	0	1	37,530
CHE	9,750	5	0	9,848
Employee Commute On-Site	340	0	0	341
Employee Commute Off-Site [b]	4,539	0	0	4,559
Existing Business Locomotive Activities	15	0	0	15
Locomotives Off-Site [b]	26,320	2	1	26,577
Electricity	2,667	0	0	2,679

Source Category	Annual Emissions (metric tons/year) [a, e]			
	CO_2	CH_4	N_2O	CO_2e
Total - Project Year 2016 [d]	83,154	8	2	83,950
CEQA Impacts				
CEQA Baseline Emissions	97,089	11	2	97,859
No Project minus CEQA Baseline	-13,935	-3	0	-13,909
Thresholds				0
Significant?				No
Project Year 2023				
Trucks On-Site	2,363	0	0	2,373
Trucks Off-Site [b, c]	47,211	0	2	47,713
CHE	9,792	4	0	9,886
Employee Commute On-Site	341	0	0	341
Employee Commute Off-Site [b]	4,504	0	0	4,517
Existing Business Locomotive Activities	15	0	0	15
Locomotives Off-Site [b]	39,480	3	1	39,866
Electricity	2,667	0	0	2,679
Total - Project Year 2023 [d]	106,374	8	3	107,389
CEQA Impacts				
CEQA Baseline Emissions	97,089	11	2	97,859
No Project minus CEQA Baseline	9,285	-2	1	9,530
Thresholds				0
Significant?				Yes
Project Year 2035				
Trucks On-Site	2,362	0	0	2,371
Trucks Off-Site [b, c]	120,719	1	4	122,029
CHE	9,742	4	0	9,834
Employee Commute On-Site	341	0	0	341
Employee Commute Off-Site [b]	4,493	0	0	4,504
Existing Business Locomotive Activities	15	0	0	15
Locomotives Off-Site [b]	105,281	8	3	106,309
Electricity	2,667	0	0	2,679
Total - Project Year 2035 [d]	245,620	14	7	248,083
CEQA Impacts				
CEQA Baseline Emissions	97,089	11	2	97,859
No Project minus CEQA Baseline	148,531	3	5	150,223
Thresholds				0
Significant?				Yes
Project Year 2046				
Trucks On-Site	2,363	0	0	2,372
Trucks Off-Site [b, c]	121,264	1	4	122,578
CHE	9,742	4	0	9,834
Employee Commute On-Site	341	0	0	341
Employee Commute Off-Site [b]	4,529	0	0	4,540
Existing Business Locomotive Activities	15	0	0	15
Locomotives Off-Site [b]	105,281	8	3	106,309
Electricity	2,667	0	0	2,679
Total - Project Year 2046 [d]	246,201	14	7	248,668
CEQA Impacts				

Source Category	Annual Emissions (metric tons/year) [a, e]			
	CO_2	CH_4	N_2O	CO_2e
CEQA Baseline Emissions	97,089	11	2	97,859
No Project minus CEQA Baseline	149,112	3	5	150,809
Thresholds				0
Significant?				Yes
Project Year 2066				
Trucks On-Site	2,363	0	0	2,372
Trucks Off-Site [b, c]	121,264	1	4	122,578
CHE	9,742	4	0	9,834
Employee Commute On-Site	341	0	0	341
Employee Commute Off-Site [b]	4,529	0	0	4,540
Existing Business Locomotive Activities	15	0	0	15
Locomotives Off-Site [b]	105,281	8	3	106,309
Electricity	2,667	0	0	2,679
Total - Project Year 2066 [d]	246,201	14	7	248,668
CEQA Impacts				
CEQA Baseline Emissions	97,089	11	2	97,859
No Project minus CEQA Baseline	149,112	3	5	150,809
Thresholds				0
Significant?				Yes

a)Emissions represent annual emissions.

b)Truck, train, and worker commute emissions include transport within the boundaries of the State of California.

c)Off-site trucks include existing business drayage trucks and drayage trucks that travel between Hobart Yard and the Port terminals.

d)Emissions might not precisely add due to rounding. For further explanation, refer to the discussion in Section3.2.4.1.

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 – Project Emissions

The No Project Alternative 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 business lease agreements or operations that would require discretionary actions subject to CEQA. Future rulemaking 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

The residual impacts of GHG emissions during operation would be significant and unavoidable.

Alt 1 Impact GHG-2: The No Project Alternative would conflict with State and local plans and policies adopted for the purpose of reducing the emissions of GHGs.

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' 2012 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, 2012). 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

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

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

Residual Impacts

The residual impacts related to consistency with plans and policies adopted for the purpose of reducing GHG emissions would be significant and unavoidable.

5.4.2.7 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 alternate business sites would continue and the activities of these businesses would be expected to grow by 10 percent from baseline levels by 2016, after which no further growth is assumed. 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

936,090 one-way trips in 2010 to approximately 2.9 million one-way trips by 2035 and thereafter.

Impact Determination

For operation of the No Project Alternative, the LACFD risk matrix (see Section 3.7.4.1.1 and Table 3.7-1) 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 alternate business 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 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. A newer truck fleet would result in fewer accidents as newer trucks are more reliable than older trucks. The TWIC program also will help identify and exclude truck drivers that lack the proper licensing and training. Using newer trucks reportedly reduces the probability of accidents that occur as a result of mechanical failure by approximately 10 percent (ADL, 1990). In addition, proper driver training, or more specifically, the reduction in the number of drivers that do not meet minimum training specifications, would reduce potential accidents. The combination of newer and more reliable trucks under the Clean Trucks Program and participation in the TWIC program would reduce the impact under RISK-2b to less than significant.

With respect to the train trips from the Hobart Yard to the California border, at an average distance of 240 miles per one-way trip, this distance is shorter than that evaluated for the proposed Project. The same number of train trips would originate from the Hobart Yard in the No Project Alternative as would originate from the SCIG facility in the proposed Project. These train trips represent a less than significant impact under RISK-2b for the proposed Project as discussed in Section 3.7.4.3, and therefore also represent a less than significant impact for the No Project Alternative under RISK-2b as the trip distance is shorter.

Mitigation Measures

No mitigation is required.

Residual Impacts

Residual impacts would be less than significant.

5.4.2.8 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 alternate business sites are assumed to continue and the activities of these

businesses would be expected to grow by 10 percent from baseline levels by 2016, after which no further growth is assumed.

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 and, therefore, there would be no potential for uses on the alternate business sites to affect offsite neighborhoods, communities, or land uses adversely.

As discussed previously, the No Project Alternative would not help to meet the demand for efficient rail transport as contemplated by the LAHD's Intermodal Rail Policy, (LAHD, Resolution 6297, adopted on August 11, 2004 (LAHD, 2004)), which calls for on-dock and near-dock intermodal facilities for shippers, carriers, terminal operators, and Class I Railroads. The No Project Alternative would also not achieve the strategic benefit of having competitively balanced, near-dock intermodal container transfer facilities, ensuring access for both of the two Class I Railroads that serve the Ports. This benefit was acknowledged in LAHD Resolution 6339 (LAHD, 2005), adopted February 9, 2005. Finally, 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 land use 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 business lease agreements or operations that would require discretionary actions subject to CEQA, there is no mechanism for imposing mitigation.

Residual Impacts

Residual impacts related to LU-2 would be significant and unavoidable.

5.4.2.9 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 businesses. 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 5-13. 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.

Table 5-13. 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	71.9	72.5	0.6
w/o Eubank Ave	73.6	75.2	1.6
s/o PCH	73.8	74.3	0.5
s/o Anaheim St	74.5	75.8	1.3
E ANAHEIM ST			
between Anaheim and Henry Ford	71.7	72.9	1.2
e/o Henry Ford Ave	73.0	74.3	1.3
w/o E I St	72.2	72.6	0.4
w/o Anaheim Way	73.0	74.3	1.3
E HARRY BRIDGES BLVD			
e/o Avalon Blvd	72.1	73.5	1.4
E SEPULVEDA BLVD			
e/o Alameda St	70.7	69.8	-0.9
JOHN S GIBSON BLVD			
n/o I-110 Ramps	70.7	71.8	1.1
LONG BEACH FWY			
n/o Imperial Hwy	85.8	87.0	1.2
s/o Imperial Hwy	86.1	87.2	1.1
n/o I-105	85.7	86.9	1.2
s/o I-105	85.7	86.9	1.2
n/o Rosecrans Ave	85.7	86.9	1.2
s/o Rosecrans Ave	86.9	86.9	0.0
between Alondra and Rosecrans	86.9	88.3	1.4
n/o Alondra	86.9	88.3	1.4
s/o Alondra	89.8	88.3	-1.5
n/o SR-91	86.3	87.8	1.5
n/o Artesia Blvd	85.5	87.2	1.7
s/o Artesia Blvd	86.3	88.2	1.9
n/o Long Beach Blvd	86.5	88.4	1.9
s/o Long Beach Blvd	86.3	88.3	2.0
n/o Del Amo Blvd	86.4	88.4	2.0
s/o Del Amo Blvd	86.5	88.4	1.9
n/o Wardlow Rd	85.0	87.4	2.4
s/o Wardlow Rd	85.6	87.7	2.1
n/o Willow St	84.6	87.1	2.5
s/o Willow St	85.4	87.6	2.2
n/o Anaheim St	84.7	86.9	2.2

ROADWAY SEGMENT	Existing CNEL @ 100 ft	No Project Alternative CNEL @100 ft	Project Increment in Traffic Noise Level, dB
s/o Anaheim St	84.5	86.7	2.2
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	84.5	86.7	2.2
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	86.0	87.2	1.2
n/o 9th St	82.8	85.7	2.9
s/o 9th St	81.8	85.9	4.1
n/o 10th St	83.3	86.3	3.0
SB n/o I-405	86.7	86.8	0.1
SB s/o Del Amo Blvd Off ramp	86.4	88.3	1.9
NB n/o Dell Amo Blvd Off Ramp	87.2	87.3	0.1
SB s/o On ramp at Del Amo Blvd	86.4	88.4	2.0
NB between s/o off ramp at Del Amo Blvd	86.8	86.8	0.0
between off/on ramps at Willow St	85.4	87.7	2.3
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.

5.4.2.10 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 2016, after which no further growth is assumed and 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 5-14).

Table 5-14. 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	535	275	810	400	445	845	455	535	990
No Project	590	305	895	450	485	935	515	595	1110
Net Change	55	30	85	50	40	90	60	60	120

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 5-2) to the baseline traffic conditions described in section 3.10 to determine potential impacts on study area intersections. The comparison (Table 5-15) 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

Residual impacts would remain 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.

Table 5-15. 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	0.335	A	0.398	A	0.375	A	0.335	A	0.398	A	0.375	0.000	0.000	0.000	No	No	No
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.215	A	0.379	A	0.348	A	0.215	A	0.379	A	0.348	0.000	0.000	0.000	No	No	No
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.266	A	0.313	A	0.341	A	0.266	A	0.313	A	0.341	0.000	0.000	0.000	No	No	No
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.209	A	0.364	A	0.340	A	0.209	A	0.364	A	0.34	0.000	0.000	0.000	No	No	No
5	Seaside Ave / Navy Wy [A]	A	0.501	A	0.396	B	0.609	A	0.501	A	0.397	B	0.61	0.000	0.001	0.001	No	No	No
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.212	A	0.344	A	0.242	A	0.212	A	0.347	A	0.246	0.000	0.003	0.004	No	No	No
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.435	A	0.519	A	0.499	A	0.439	A	0.532	A	0.508	0.004	0.013	0.009	No	No	No
8	Anaheim St / Harbor Ave [B]	A	0.453	A	0.455	A	0.560	A	0.454	A	0.456	A	0.561	0.001	0.001	0.001	No	No	No
9	Anaheim St / Santa Fe Ave [B]	A	0.473	A	0.508	A	0.578	A	0.474	A	0.51	A	0.579	0.001	0.002	0.001	No	No	No
10	Anaheim St / E I St / W 9th St [B]	A	0.501	A	0.525	A	0.529	A	0.503	A	0.531	A	0.531	0.002	0.006	0.002	No	No	No
11	Anaheim St / Farragut Ave [A]	A	0.377	A	0.328	A	0.386	A	0.377	A	0.328	A	0.386	0.000	0.000	0.000	No	No	No
12	Anaheim St / Henry Ford Ave [A]	A	0.400	A	0.516	B	0.660	A	0.404	A	0.516	B	0.66	0.004	0.000	0.000	No	No	No
13	Anaheim St / Alameda St [A]	A	0.461	A	0.425	A	0.568	A	0.463	A	0.425	A	0.572	0.002	0.000	0.004	No	No	No
14	Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A]	A	0.178	A	0.225	A	0.267	A	0.178	A	0.225	A	0.267	0.000	0.000	0.000	No	No	No
15	Harry Bridges Blvd / Broad Ave [A]	A	0.243	A	0.215	A	0.318	A	0.245	A	0.218	A	0.322	0.002	0.003	0.004	No	No	No
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.255	A	0.182	A	0.338	A	0.257	A	0.185	A	0.33	0.002	0.003	-0.008	No	No	No
17	Harry Bridges Blvd / Fries Ave [A]	A	0.223	A	0.227	A	0.303	A	0.225	A	0.232	A	0.308	0.002	0.005	0.005	No	No	No
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.153	A	0.128	A	0.227	A	0.155	A	0.13	A	0.228	0.002	0.002	0.001	No	No	No
19	Harry Bridges Blvd / King Ave [A]	A	0.219	A	0.177	A	0.302	A	0.221	A	0.179	A	0.304	0.002	0.002	0.002	No	No	No
20	Harry Bridges Blvd / Figueroa St [A]	A	0.335	A	0.337	A	0.392	A	0.335	A	0.337	A	0.393	0.000	0.000	0.001	No	No	No
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.605	A	0.511	B	0.661	B	0.606	A	0.512	B	0.663	0.001	0.001	0.002	No	No	No
22	Pacific Coast Hwy / Site Entrance [A]	A	0.315	A	0.268	A	0.381	A	0.315	A	0.268	A	0.381	0.000	0.000	0.000	No	No	No
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.773	B	0.699	D	0.821	C	0.779	C	0.703	D	0.829	0.006	0.004	0.008	No	No	No
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.628	B	0.603	C	0.733	B	0.632	B	0.605	C	0.739	0.004	0.002	0.006	No	No	No
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.679	A	0.484	B	0.612	B	0.683	A	0.493	B	0.622	0.004	0.009	0.010	No	No	No

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 5-16. 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.	4,200	3,000	3,000	4,100	4,245	3,030	3,000	4,100	45	30	-	-
SR-91	e/o Alameda St/Santa Fe Ave	7,400	15,200	9,900	6,000	7,450	15,230	9,915	6,020	50	30	15	20
I-405	Santa Fe Ave.	11,500	8,900	8,600	10,700	11,510	8,905	8,625	10,730	10	5	25	30
I-710	n/o Jct (PCH), Willow St.	5,500	5,100	5,400	5,100	5,895	5,350	5,645	5,420	395	250	245	320
I-710	n/o Jct Rte 405, s/o Del Amo	7,900	7,800	8,400	7,600	8,340	8,075	8,680	7,970	440	275	280	370
I-710	n/o Rte 105, n/o Firestone	10,200	10,800	7,500	7,800	10,690	11,110	7,795	8,190	490	310	295	390

Note: ( ) denotes negative value

Table 5-17. 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	4,200	0.53	B	4,245	0.53	B	0.01	No	3,000	0.38	B	3,000	0.38	B	0.00	No
SR-91	10.62	e/o Alameda St/Santa Fe Ave	12,000	7,400	0.62	C	7,450	0.62	C	0.00	No	9,900	0.83	D	9,915	0.83	D	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	11,500	1.15	F(0)	11,510	1.15	F(0)	0.00	No	8,600	0.86	D	8,625	0.86	D	0.00	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,500	0.92	D	5,895	0.98	E	0.07	No	5,400	0.90	D	5,645	0.94	E	0.04	No
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,900	0.99	E	8,340	1.04	F(0)	0.06	Yes	8,400	1.05	F(0)	8,680	1.09	F(0)	0.04	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,200	1.28	F(1)	10,690	1.34	F(1)	0.06	Yes	7,500	0.94	E	7,795	0.97	E	0.04	No

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	3,000	0.38	B	3,030	0.38	B	0.00	No	4,100	0.51	B	4,100	0.51	B	0.00	No
SR-91	10.62	e/o Alameda St/Santa Fe Ave	12,000	15,200	1.27	F(1)	15,230	1.27	F(1)	0.00	No	6,000	0.50	C	6,020	0.50	B	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	8,900	0.89	D	8,905	0.89	D	0.00	No	10,700	1.07	F(0)	10,730	1.07	F(0)	0.00	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,100	0.85	D	5,350	0.89	D	0.04	No	5,100	0.85	E	5,420	0.90	D	0.05	No
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,800	0.98	E	8,075	1.01	F(0)	0.03	Yes	7,600	0.95	D	7,970	1.00	E	0.05	No
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,800	1.35	F(1)	11,110	1.39	F(2)	0.04	Yes	7,800	0.98	F(0)	8,190	1.02	F(0)	0.05	Yes

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 is required.

Residual Impacts

Residual impacts would be less than significant.

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 international cargo 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 265 trips totaled over the three daily peak hours (Table 5-14). All of the Congestion Management Program(CMP) intersections in the study area currently operate at LOS C or better (Table 5-15), and most would not be adversely affected by the addition of a portion of those 265 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 5-16) shows that some freeway segments would experience as many as 490 additional trucks in a peak hour, which would represent a six percent increase. As shown in Table 5-17, these additional trips would exceed the significance threshold at two locations on I-710.

Impact Determination

Two freeway locations would exceed the significance threshold under No Project Conditions: I-710 north of I-405 (northbound AM and PM peak hours and southbound in the AM peak hour) and I-710 north of I-105 (northbound AM and PM peak hours and southbound in the PM peak hour). Therefore the No Project Alternative would cause a significant impact related to highway congestion.

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

Residual impacts would be significant and unavoidable.

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 3.10.3.5 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 the number of train trips would be equivalent to that of the proposed Project east of Hobart Yard.

Mitigation Measures

No mitigation is required.

Residual Impacts

Residual impacts would be less than significant.

5.4.2.11 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 alternate business sites are assumed to continue and the activities of these businesses would be expected to grow by 10 percent from baseline levels by 2016, after which no further growth is assumed. 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 and unavoidable.

5.4.2.12 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 and the activities of these businesses would be expected to grow by 10 percent from baseline levels by 2016, after which no further growth is assumed. 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 are assumed in this analysis not to 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.

5.5 Alternative 2: Reduced Project

5.5.1 Project Description

Under this alternative, the SCIG facility and facilities on the alternate business sites described in the proposed Project would be constructed, but SCIG's activity level would be limited by lease conditions. The disposition of the existing businesses would be the same as described for the proposed Project. While a reduced project alternative would normally be considered to have a smaller footprint, thereby requiring less construction, in this case BNSF has represented that the physical and operational requirements of modern intermodal rail operations dictate a minimum size to a near-dock or off-dock facility. For example, 4,000-foot tracks with switch leads at both ends are required in order to handle efficiently the typical 8,000-foot intermodal train. The facility must have adequate on-site space for truck queuing and container stacking, and it must be readily accessible from major regional roads and highways. BNSF represents that the proposed Project is the minimum size that can be operated efficiently and economically. Accordingly, all physical features of the Reduced Project Alternative 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 2035. 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 (Table 5-18). The operational details of the facility would be largely the same as those of the proposed Project (Section 2.4.4), although the facility might only operate two shifts per day to handle the reduced throughput. Because of the reduced cargo capacity of the Reduced Project Alternative, the remaining cargo demand not handled by the SCIG facility under the Reduced Project Alternative would continue to be handled at Hobart/Commerce or other railyards such as the UP ICTF. This assumption is based on the projections of regional intermodal demand and the market share of that demand handled by both Class I railroads, described in Chapter 1, that will occur independently of the Reduced Project Alternative.

Table 5-18. Operations at the Project Site under the Reduced Project Alternative.

Element	Analysis Year				
	2016	2023	2035	2046	2066
Trucks (one-way trips per year)[1]	410,365	580,597	1.33 million	1.33 million	1.33 million
Trains (round trips per day)[2]	2	3	6	6	6
TEUs per year	570,808	807,597	1.85 million	1.85 million	1.85 million
Employees	93	131	300	300	300

[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).

5.5.2 Impact Analysis

5.5.2.1 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 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 alternate business 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) 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 alternate business 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

Residual impacts for the Reduced Project Alternative under Impact AES-1 would remain significant and unavoidable.

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 alternate business 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 3.1.3.1.5, 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 **PC AES-2** (see Section 3.1.5) would ensure that impacts remain less than significant.

Residual Impacts

Residual impacts would remain less than significant.

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 alternate business 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.

5.5.2.2 Air Quality

Under the Reduced Project Alternative, all construction activities would be identical to those described under the proposed Project. Project operations would be similar in nature to the proposed Project, but reduced in the cargo capacity of the SCIG facility. Alternate business locations and their subsequent activities at the 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 5-19 presents unmitigated average daily criteria pollutant emissions associated with the Reduced Project Alternative for the analysis years of 2016, 2023, 2035, 2046, and 2066. The average daily emissions represent the annual emissions divided by 360 days per year. Reduced Project emissions are compared to the baseline (2010) to determine significance.

Table 5-20 presents peak daily unmitigated emissions estimated for the Reduced Project Alternative in years 2016, 2023, 2035, 2046, and 2066. Peak daily emissions represent theoretical upper-bound estimates of activity levels at the facility and the alternate business locations. 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 5-19. 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 2016						
Locomotives On-Site	1	4	25	0	1	1
Locomotives Off-Site [b]	20	58	654	1	14	13
Trucks On-Site	11	38	75	0	8	2
Trucks Off-Site [b]	6	24	94	0	8	3

Source Category	Average Daily Emissions (lb/day) [a,e]					
	VOC	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
Railyard Equipment	6	204	3	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	4	0	0	2	1
Refueling Trucks On-Site	0	0	0	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	6	23	46	0	2	1
Trucks Off-Site [b]	6	24	115	0	10	4
CHE	5	400	56	0	3	3
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	1	23	2	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	19	1,192	135	1	9	6
Total - Project Year 2016 [d]	82	1,996	1,207	3	68	35
CEQA Impacts						
CEQA Baseline Emissions	140	1,958	2,175	21	178	84
Reduced Project minus CEQA Baseline	-58	38	-968	-18	-109	-49
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2023						
Locomotives On-Site	1	6	28	0	1	1
Locomotives Off-Site [b]	20	91	708	1	10	10
Trucks On-Site	12	45	61	0	12	3
Trucks Off-Site [b]	6	22	55	0	11	4
Railyard Equipment	8	296	4	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	4	1
Refueling Trucks On-Site	0	0	0	0	0	0
Refueling Trucks Off-Site [b]	0	0	0	0	0	0
Alternate Business Location Sources						
Trucks On-Site	6	25	27	0	2	1
Trucks Off-Site [b]	5	18	46	0	10	3
CHE	4	234	49	0	3	3
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	14	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	14	662	73	1	8	5
Total - Project Year 2023 [d]	76	1,420	1,054	3	71	33
CEQA Impacts						
CEQA Baseline Emissions	140	1,958	2,175	21	178	84
Reduced Project minus CEQA Baseline	-64	-537	-1,122	-18	-107	-52
Thresholds	55	550	55	150	150	55
Significant?	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	100	132	0	27	8
Trucks Off-Site [b]	12	44	109	1	24	8

Source Category	Average Daily Emissions (lb/day) [a,e]					
	VOC	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
Railyard Equipment	8	632	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	10	1	0	8	2
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	6	25	26	0	2	1
Trucks Off-Site [b]	5	17	42	0	10	3
CHE	3	231	14	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	13	656	58	1	7	4
Total - Project Year 2035 [d]	88	1,863	1,009	5	99	38
CEQA Impacts						
CEQA Baseline Emissions	140	1,958	2,175	21	178	84
Reduced Project minus CEQA Baseline	-52	-95	-1,167	-16	-79	-46
Thresholds	55	550	55	150	150	55
Significant?	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	100	145	0	27	8
Trucks Off-Site [b]	12	43	125	1	24	8
Railyard Equipment	8	632	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	10	1	0	8	2
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	6	25	26	0	2	1
Trucks Off-Site [b]	5	17	44	0	10	3
CHE	3	232	14	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	13	663	60	1	7	4
Total - Project Year 2046 [d]	83	1,863	803	4	95	35
CEQA Impacts						
CEQA Baseline Emissions	140	1,958	2,175	21	178	84
Reduced Project minus CEQA Baseline	-57	-95	-1,372	-17	-82	-49
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2066						
Locomotives On-Site	1	7	15	0	0	0
Locomotives Off-Site [b]	10	119	363	2	5	5
Trucks On-Site	25	100	145	0	27	8
Trucks Off-Site [b]	12	43	125	1	24	8

Source Category	Average Daily Emissions (lb/day) [a,e]					
	VOC	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
Railyard Equipment	8	632	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	10	1	0	8	2
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	6	25	26	0	2	1
Trucks Off-Site [b]	5	17	44	0	10	3
CHE	3	232	14	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	13	663	60	1	7	4
Total - Project Year 2066 [d]	83	1,863	803	4	95	35
CEQA Impacts						
CEQA Baseline Emissions	140	1,958	2,175	21	178	84
Reduced Project minus CEQA Baseline	-57	-95	-1,372	-17	-82	-49
Thresholds	55	550	55	150	150	55
Significant?	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) On-site emissions from businesses displaced by the Reduced Project.

d) Emissions might not precisely add due to rounding. For further explanation, refer to the discussion in Section3.2.4.1.

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 5-20. 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 2016						
Locomotives On-Site	1	5	28	0	1	1
Locomotives Off-Site [b]	24	79	757	1	14	13
Trucks On-Site	12	42	84	0	9	3
Trucks Off-Site [b]	7	27	105	0	9	3
Railyard Equipment	12	339	25	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	4	0	0	2	1
Refueling Trucks On-Site	0	0	0	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	7	26	52	0	2	1
Trucks Off-Site [b]	7	26	128	0	11	4
CHE	5	447	63	0	3	3
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	1	23	2	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0

Source Category	Peak Daily Emissions (lb/day) [a,e]					
	VOC	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
Displaced Businesses [c]	22	1,334	151	1	10	6
Total - Project Year 2016 [d]	99	2,367	1,407	3	74	39
CEQA Impacts						
CEQA Baseline Emissions	157	2,180	2,458	21	192	91
Reduced Project minus CEQA Baseline	-58	187	-1,051	-18	-117	-52
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2023						
Locomotives On-Site	1	7	31	0	1	1
Locomotives Off-Site [b]	24	124	821	1	11	10
Trucks On-Site	13	51	69	0	13	4
Trucks Off-Site [b]	6	24	61	0	12	4
Railyard Equipment	14	443	26	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	4	1
Refueling Trucks On-Site	0	0	0	0	0	0
Refueling Trucks Off-Site [b]	0	0	0	0	0	0
Alternate Business Location Sources						
Trucks On-Site	7	28	30	0	2	1
Trucks Off-Site [b]	5	20	51	0	11	4
CHE	4	262	55	0	3	3
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	14	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	15	741	82	1	8	5
Total - Project Year 2023 [d]	93	1,736	1,240	4	77	36
CEQA Impacts						
CEQA Baseline Emissions	157	2,180	2,458	21	192	91
Reduced Project minus CEQA Baseline	-65	-444	-1,219	-18	-115	-55
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2035						
Locomotives On-Site	1	9	26	0	0	0
Locomotives Off-Site [b]	18	170	687	2	9	8
Trucks On-Site	28	112	147	0	30	9
Trucks Off-Site [b]	13	49	122	1	27	9
Railyard Equipment	14	819	29	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	10	1	0	8	2
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	7	28	29	0	2	1
Trucks Off-Site [b]	5	19	47	0	11	4
CHE	3	258	15	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	14	735	65	1	7	4

Source Category	Peak Daily Emissions (lb/day) [a,e]					
	VOC	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
Total - Project Year 2035 [d]	107	2,238	1,182	5	108	42
CEQA Impacts						
CEQA Baseline Emissions	157	2,180	2,458	21	192	91
Reduced Project minus CEQA Baseline	-51	58	-1,276	-16	-84	-49
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2046						
Locomotives On-Site	1	8	17	0	0	0
Locomotives Off-Site [b]	12	158	418	2	5	5
Trucks On-Site	28	112	162	0	31	9
Trucks Off-Site [b]	13	48	140	1	27	9
Railyard Equipment	14	819	29	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	10	1	0	8	2
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	7	28	29	0	2	1
Trucks Off-Site [b]	5	19	50	0	11	4
CHE	3	260	16	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	15	742	67	1	7	4
Total - Project Year 2046 [d]	100	2,235	943	5	105	39
CEQA Impacts						
CEQA Baseline Emissions	157	2,180	2,458	21	192	91
Reduced Project minus CEQA Baseline	-57	55	-1,516	-17	-87	-52
Thresholds	55	550	55	150	150	55
Significant?	No	No	No	No	No	No
Project Year 2066						
Locomotives On-Site	1	8	17	0	0	0
Locomotives Off-Site [b]	12	158	418	2	5	5
Trucks On-Site	28	112	162	0	31	9
Trucks Off-Site [b]	13	48	140	1	27	9
Railyard Equipment	14	819	29	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	10	1	0	8	2
Refueling Trucks On-Site	0	1	1	0	0	0
Refueling Trucks Off-Site [b]	0	0	1	0	0	0
Alternate Business Location Sources						
Trucks On-Site	7	28	29	0	2	1
Trucks Off-Site [b]	5	19	50	0	11	4
CHE	3	260	16	0	1	1
Employee Commute On-Site	0	1	0	0	0	0
Employee Commute Off-Site [b]	0	12	1	0	10	3
Alternate Business Location Locomotive Activities	0	0	0	0	0	0
Displaced Businesses [c]	15	742	67	1	7	4
Total - Project Year 2066 [d]	100	2,235	943	5	105	39

Source Category	Peak Daily Emissions (lb/day) [a,e]					
	VOC	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
CEQA Impacts						
CEQA Baseline Emissions	157	2,180	2,458	21	192	91
Reduced Project minus CEQA Baseline	-57	55	-1,516	-17	-87	-52
Thresholds	55	550	55	150	150	55
Significant?	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) On-site emissions from businesses displaced by the Reduced Project.
d) Emissions might not precisely add due to rounding. For further explanation, refer to the discussion in Section3.2.4.1.
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

The emissions of the Reduced Project Alternative minus the baseline are below the CEQA thresholds, therefore impacts are less than significant for this alternative related to operational emissions.

Mitigation Measures

No mitigation is required.

Residual Impacts

Residual impacts would remain less than significant.

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 5-21 and 5-22 present the maximum off-site ground level concentrations of criteria pollutants estimated for the Reduced Project Alternative construction and operations.

Table 5-21. 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	791	245	**1,036**	338
	1-hour [d]	791	142	**933**	(189)[f]
	Annual	22	40	**62**	56
CO	1-hour	1,358	5,842	7,200	23,000
	8-hour	464	4,467	4,931	10,000
SO_2	1-hour	1.9	236	238	655
	1-hour [e]	1.9	51	53	(196)[f]
	24-hour	0.3	31	32	105

a) Exceedances of the thresholds are indicated in **bold**. Modeled concentrations of NO2, SO2, 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). NO2 and SO2 background concentrations were obtained from the North Long Beach Monitoring Station. Unless noted otherwise, the maximum concentrations during the years of 2008, 2009, and 2010 were used.
c) NO2 concentrations were calculated assuming a 75 percent conversion rate from NOx to NO2 for the annual averaging period and an 80 percent conversion rate from NOx to NO2 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 2008, 2009, and 2010.
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 2008, 2009, and 2010.
f) f) A standard not yet adopted as a threshold of significance by SCAQMD.

Table 5-22. 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	10.1	6.5	**6.6**	2.5
	Annual	5.1	1.7	**3.7**	1.0
$PM_{2.5}$	24-hour	5.2	3.8	**4.4**	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. This measure was analyzed by assuming that sweeping on a weekly basis would result in a 26% control of paved road fugitive dust PM_{10} and $PM_{2.5}$ emissions from on-road vehicles traveling within the SCIG facility (Countess Environmental, 2006). Tables 5-23 and 5-24present the ambient peak off-site pollutant concentrations for the mitigated Reduced Project Alternative.

Table 5-23. 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	791	245	**1,036**	338
	1-hour[d]	791	142	**933**	(189)[f]
	Annual	22	40	**62**	56
CO	1-hour	1,358	5,842	7,200	23,000
	8-hour	464	4,467	4,931	10,000
SO_2	1-hour	1.9	236	238	655
	1-hour[e]	1.9	51	53	(196)[f]
	24-hour	0.3	31	32	105

a) Exceedances of the thresholds are indicated in **bold**. Modeled concentrations of NO2, SO2, 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). NO2 and SO2 background concentrations were obtained from the North Long Beach Monitoring Station. Unless noted otherwise, the maximum concentrations during the years of 2008, 2009, and 2010 were used.
c) NO2 concentrations were calculated assuming a 75 percent conversion rate from NOx to NO2 for the annual averaging period and an 80 percent conversion rate from NOx to NO2 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 2008, 2009, and 2010.
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 2008, 2009, and 2010.
f) A standard not yet adopted as a threshold of significance by SCAQMD.

Table 5-24. MaximumOffsite 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]	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	8.9	6.5	**6.5**	2.5
	Annual	4.5	1.7	**3.0**	1.0
$PM_{2.5}$	24-hour	5.1	3.8	**4.3**	2.5

a) Exceedances of the threshold are indicated in **bold**. The thresholds for PM10 and PM2.5 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 and unavoidable for 1-hour and annual NO_2, 24-hour and annual PM_{10}, and 24-hour $PM_{2.5}$concentrations during operation.

Alt 2 Impact AQ-7: The Reduced Project Alternative would 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 the residential receptor. For the occupational receptors, the main sources of TACs are CHE operating at the alternate business locations and SCIG offsite trucks.

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

Table 5-25 presents the maximum predicted health impacts associated with the Reduced Project Alternative. The table includes estimates of individual lifetime cancer risk, chronic non-cancer HI, and acute non-cancer HI at the maximally exposed receptors. Results are presented for this alternative for the floating baseline, and the floating increment (Reduced Project minus floating baseline), as well as the CEQA baseline and the CEQA increment (Reduced Project minus CEQA increment).

Table 5-25. Maximum Health Impacts Associated with the Unmitigated Reduced Project Alternative.

Health Impact	Receptor Type	Maximum Predicted Impact					Significance Threshold
		Project	CEQA Baseline	CEQA Increment	Floating Baseline	Floating Increment	
Cancer Risk	Residential	23×10^{-6} (23 in a million)	68×10^{-6} (68 in a million)	-15×10^{-6} (-15 in a million)	34×10^{-6} (34 in a million)	**11×10^{-6} (11 in a million)**	10×10^{-6} (10 in a million)
	Occupational	22×10^{-6} (22 in a million)	51×10^{-6} (51 in a million)	8.5×10^{-6} (8.5 in a million)	21×10^{-6} (21 in a million)	**11×10^{-6} (11 in a million)**	
	Sensitive	22×10^{-6} (22 in a million)	45×10^{-6} (45 in a million)	-20×10^{-6} (-20 in a million)	20×10^{-6} (20 in a million)	8.5×10^{-6} (8.5 in a million)	
	Student	2.1×10^{-6} (2.1 in a million)	0.9×10^{-6} (0.9 in a million)	1.1×10^{-6} (1.1 in a million)	0.3×10^{-6} (0.3 in a million)	1.7×10^{-6} (1.7 in a million)	
	Recreational	29×10^{-6} (29 in a million)	78×10^{-6} (78 in a million)	6.7×10^{-6} (6.7 in a million)	22×10^{-6} (22 in a million)	**16×10^{-6} (16 in a million)**	
Chronic Hazard Index	Residential	0.07	0.06	0.02	0.06	0.02	1.0
	Occupational	0.4	0.2	0.3	0.2	0.3	
	Sensitive	0.08	0.06	0.03	0.07	0.03	
	Student	0.08	0.06	0.03	0.07	0.02	
	Recreational	0.4	0.2	0.3	0.2	0.3	
Acute Hazard Index	Residential	0.2	0.1	0.08	0.1	0.07	1.0
	Occupational	0.5	0.3	0.3	0.3	0.3	
	Sensitive	0.2	0.10	0.10	0.1	0.09	
	Student	0.2	0.09	0.09	0.1	0.08	
	Recreational	0.5	0.3	0.3	0.3	0.3	

Notes:

a) Exceedances of the significance thresholds are in **bold**. The significance thresholds apply to the floating 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 floating 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 floating increment represents Project minus floating 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.

Cancer risks exceed CEQA significance thresholds for residential, occupational, and recreational receptors (Table 5-25). Estimated cancer risks for the sensitive and student receptors are within acceptable levels.

Chronic and acute HIs are below the CEQA significance threshold of 1.0 for all receptor categories.

Residential cancer risks attributable to the Reduced Project were estimated to exceed 1 x 10^{-6} (one in a million), and cancer burden was calculated consistent with the Port's policy. Those calculations indicate that the cancer burden of the population in the area of impact of the Reduced Project (6,963 individuals) is 0.018, which is below the significance threshold of > 0.5 (see Appendix C3, Attachment C3-3).

Understanding Reported Results

Chapter 3.2 contains a description of the methods used to calculate the maximum incremental health impact for each receptor type. As noted in that discussion, the maximum incremental health impacts for each receptor type do not necessarily occur at the same receptor location as the maximum impacts. This means that the increments cannot necessarily be determined by subtracting the baseline impact from the Alternative impact. Instead, the subtraction must be done at each receptor, for all modeled receptors, and the maximum result selected from this series of calculations.

Particulates: Morbidity and Mortality

As described in **Impact Alt 2 AQ-4**, the results of ambient air dispersion modeling indicated that operation of the Reduced Project Alternative prior to mitigation would result in off-site 24-hour $PM_{2.5}$ concentrations that exceed the 24-hour 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 (POLA, 2011), 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 within the footprint of the Project or of the alternate business locations. 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 5-25 show that the floating cancer risk increment at the MEI location of the Reduced Project Alternative, which is a residential receptor, is predicted to be 11 in a million (11 x 10^{-6}), at. This risk value exceeds 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 226 meters east of the Southeastern site boundary. The increments would also exceed the significance threshold at occupational and recreational receptors.

The maximum floating 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

Mitigation measures **MM-AQ-1** to **MM AQ-2**, 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. In addition, **MM-AQ-8**, **MM-AQ-9**, and M**M AQ-10**would also apply to the Reduced Project Alternative.

Table 5-26 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 -3.5 in a million (negative 3.5 x 10^{-6}) which is lower than the maximum residential cancer risk associated with the unmitigated Reduced Project Alternative by approximately 66 percent. The maximum residential chronic HI would be approximately equal to the Reduced Project. The maximum residential acute hazard index would be reduced by about 50 percent relative to the Reduced Project.

The data in Table 5-26show that the cancer risk increment at the location of the mitigated Reduced Project Alternative MEI is predicted to be -3.5 in a million (-3.5 x 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 for all receptor categories, including occupational, sensitive, student, and recreational.

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

Residential cancer risks attributable to the mitigated Reduced Project Alternative floating increment exceed 1 x 10^{-6} (one in a million), and consequently, cancer burden was calculated consistent with the Port's policy. As shown in Appendix C (Attachment C3-4), the cancer burden of the population in the area of impact (56 individuals) is 0.00005, and is far below the significance threshold of > 0.5.

Understanding Reported Results

The methods used to calculate the maximum incremental health impact for each receptor type were described in Chapter 3.2 for the Project. As noted in that discussion, the maximum incremental health impacts for each receptor type do not necessarily occur at the same receptor location as the maximum impacts. This means that the increments cannot necessarily be determined by subtracting the baseline impact from the Alternative impact. Instead, the subtraction must be done at each receptor, for all modeled receptors, and the maximum result selected from this series of calculations.

Residual Impacts

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

Table 5-26. Maximum Health Impacts Associated with the Mitigated Reduced Project Alternative.

Health Impact	Receptor Type	Maximum Predicted Impact					Significance Threshold
		Project	CEQA Baseline	CEQA Increment	Floating Baseline	Floating Increment	
Cancer Risk	Residential	7.9×10^{-6} (7.9 in a million)	68×10^{-6} (68 in a million)	-30×10^{-6} (-30 in a million)	34×10^{-6} (34 in a million)	-3.5×10^{-6} (-3.5 in a million)	10×10^{-6} (10 in a million)
	Occupational	20×10^{-6} (20 in a million)	51×10^{-6} (51 in a million)	7.2×10^{-6} (7.2 in a million)	21×10^{-6} (21 in a million)	9.7×10^{-6} (9.7 in a million)	
	Sensitive	7.9×10^{-6} (7.9 in a million)	45×10^{-6} (45 in a million)	-34×10^{-6} (-34 in a million)	20×10^{-6} (20 in a million)	-5.3×10^{-6} (-5.3 in a million)	
	Student	0.9×10^{-6} (0.9 in a million)	0.9×10^{-6} (0.9 in a million)	0.1×10^{-6} (0.1 in a million)	0.3×10^{-6} (0.3 in a million)	0.6×10^{-6} (0.6 in a million)	
	Recreational	9.5×10^{-6} (9.5 in a million)	78×10^{-6} (78 in a million)	4.1×10^{-6} (4.1 in a million)	22×10^{-6} (22 in a million)	6.9×10^{-6} (6.9 in a million)	
Chronic Hazard Index	Residential	0.07	0.06	0.02	0.06	0.01	1.0
	Occupational	0.3	0.2	0.2	0.2	0.1	
	Sensitive	0.07	0.06	0.01	0.07	0.01	
	Student	0.07	0.06	0.01	0.07	0.01	
	Recreational	0.3	0.2	0.2	0.2	0.1	
Acute Hazard Index	Residential	0.1	0.1	0.06	0.1	0.05	1.0
	Occupational	0.5	0.3	0.2	0.3	0.2	
	Sensitive	0.1	0.10	0.07	0.1	0.06	
	Student	0.1	0.09	0.06	0.1	0.06	
	Recreational	0.5	0.3	0.2	0.3	0.2	

Notes:

a) Exceedances of the significance thresholds are in **bold**. The significance thresholds apply to the floating 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 floating 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 floating increment represents Project minus floating 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 and LNG trucks are used; it is otherwise equivalent to the Unmitigated Reduced Project Alternative.

5.5.2.3 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). 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.

5.5.2.4 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-2and **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.

5.5.2.5 Geology and Soils

In this alternative, the 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. 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.

5.5.2.6 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 5-27compares 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).

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 in 2016 and in 2023, but emissions would exceed the baseline in 2035, 2046, and 2066 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-9**, 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 **MM GHG-1** through **MM GHG-9**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 additional protections for SLR are not warranted at this time for the proposed Project site, given the current state of scientific understanding of SLR and related climatic variables.

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, using improved projections of sea level rise from a recent Port study, the Reduced Project Alternative would be unlikely to be subject to impacts from sea level rise, and these impacts are considered less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

No residual impacts.

Table 5-27. 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 2016					
Locomotives On-Site	439	0	0	0	444
Locomotives Off-Site [b]	28,545	2	1	0	28,823
Trucks On-Site	2,763	0	0	0	2,780
Trucks Off-Site [b]	4,190	0	0	0	4,233
Railyard Equipment	219	0	0	0	224
TRU	5	0	0	0	15
Employee Commute On-Site	24	0	0	0	24
Employee Commute Off-Site [b]	303	0	0	0	304
Refueling Trucks On-Site	6	0	0	0	6
Refueling Trucks Off-Site [b]	27	0	0	0	27
Electricity	588	0	0	0	590
Alternate Business Location Sources					
Trucks On-Site	1,119	0	0	0	1,123
Trucks Off-Site [b]	4,579	0	0	0	4,626
CHE	3,233	1	0	0	3,258
Employee Commute On-Site	83	0	0	0	84
Employee Commute Off-Site [b]	1,019	0	0	0	1,023
Alternate Business Location Locomotive Activities	2	0	0	0	2
Electricity	653	0	0	0	656
Displaced Businesses [c]	20,310	4	0	0	20,484
Total - Project Year 2016 [d]	68,107	8	1	0	68,726
CEQA Impacts					
CEQA Baseline Emissions	97,089	11	2	0	97,859
Reduced Project minus CEQA Baseline	-28,982	-3	0	0	-29,140
Thresholds					0
Significant?					No
Project Year 2023					
Locomotives On-Site	601	0	0	0	607
Locomotives Off-Site [b]	42,817	3	1	0	43,235
Trucks On-Site	3,832	0	0	0	3,855
Trucks Off-Site [b]	5,560	0	0	0	5,616
Railyard Equipment	220	0	0	0	226
TRU	7	0	0	0	117
Employee Commute On-Site	34	0	0	0	34
Employee Commute Off-Site [b]	422	0	0	0	423
Refueling Trucks On-Site	9	0	0	0	9
Refueling Trucks Off-Site [b]	40	0	0	0	40
Electricity	832	0	0	0	835
Alternate Business Location Sources					
Trucks On-Site	1,107	0	0	0	1,110
Trucks Off-Site [b]	4,492	0	0	0	4,538
CHE	3,233	1	0	0	3,256
Employee Commute On-Site	84	0	0	0	84
Employee Commute Off-Site [b]	1,002	0	0	0	1,004
Alternate Business Location Locomotive	2	0	0	0	2

Source Category	Annual Emissions (metric tons/year) [a,e]				
	CO_2	CH_4	N_2O	HFC	CO_2e
Activities					
Electricity	653	0	0	0	656
Displaced Businesses [c]	20,262	4	0	0	20,426
Total - Project Year 2023 [d]	85,207	9	2	0	85,974
CEQA Impacts					
CEQA Baseline Emissions	97,089	11	2	0	97,859
Reduced Project minus CEQA Baseline	-11,882	-2	0	0	-11,891
Thresholds					0
Significant?					No
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	8,773	0	0	0	8,825
Trucks Off-Site b	12,398	0	0	0	12,523
Railyard Equipment	224	0	0	0	237
TRU	7	0	0	0	17
Employee Commute On-Site	77	0	0	0	77
Employee Commute Off-Site [b]	984	0	0	0	986
Refueling Trucks On-Site	19	0	0	0	19
Refueling Trucks Off-Site [b]	80	0	0	0	81
Electricity	1,905	0	0	0	1,913
Alternate Business Location Sources					
Trucks On-Site	1,107	0	0	0	1,111
Trucks Off-Site [b]	4,540	0	0	0	4,586
CHE	3,233	1	0	0	3,256
Employee Commute On-Site	84	0	0	0	84
Employee Commute Off-Site [b]	1,027	0	0	0	1,029
Alternate Business Location Locomotive Activities	2	0	0	0	2
Electricity	653	0	0	0	656
Displaced Businesses [c]	20,120	4	0	0	20,282
Total - Project Year 2035 [d]	141,941	12	3	0	143,241
CEQA Impacts					
CEQA Baseline Emissions	97,089	11	2	0	97,859
Reduced Project minus CEQA Baseline	44,852	2	2	0	45,381
Thresholds					0
Significant?					Yes
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	8,784	0	0	0	8,837
Trucks Off-Site [b]	12,370	0	0	0	12,495
Railyard Equipment	224	0	0	0	237
TRU	7	0	0	0	17
Employee Commute On-Site	77	0	0	0	77
Employee Commute Off-Site [b]	973	0	0	0	975
Refueling Trucks On-Site	19	0	0	0	19
Refueling Trucks Off-Site [b]	80	0	0	0	80
Electricity	1,905	0	0	0	1,913
Alternate Business Location Sources					
Trucks On-Site	1,107	0	0	0	1,111
Trucks Off-Site [b]	4,516	0	0	0	4,562
CHE	3,233	1	0	0	3,256

Source Category	Annual Emissions (metric tons/year) [a,e]				
	CO_2	CH_4	N_2O	HFC	CO_2e
Employee Commute On-Site	84	0	0	0	84
Employee Commute Off-Site [b]	1,022	0	0	0	1,024
Alternate Business Location Locomotive Activities	2	0	0	0	2
Electricity	653	0	0	0	656
Displaced Businesses [c]	20,227	4	0	0	20,389
Total - Project Year 2046 [d]	141,991	12	3	0	143,292
CEQA Impacts					
CEQA Baseline Emissions	97,089	11	2	0	97,859
Reduced Project minus CEQA Baseline	44,902	2	2	0	45,433
Thresholds					0
Significant?					Yes
Project Year 2066					
Locomotives On-Site	1,076	0	0	0	1,087
Locomotives Off-Site [b]	85,634	7	2	0	86,470
Trucks On-Site	8,784	0	0	0	8,837
Trucks Off-Site [b]	12,370	0	0	0	12,495
Railyard Equipment	224	0	0	0	237
TRU	7	0	0	0	17
Employee Commute On-Site	77	0	0	0	77
Employee Commute Off-Site [b]	973	0	0	0	975
Refueling Trucks On-Site	19	0	0	0	19
Refueling Trucks Off-Site [b]	80	0	0	0	80
Electricity	1,905	0	0	0	1,913
Alternate Business Location Sources					
Trucks On-Site	1,107	0	0	0	1,111
Trucks Off-Site [b]	4,516	0	0	0	4,562
CHE	3,233	1	0	0	3,256
Employee Commute On-Site	84	0	0	0	84
Employee Commute Off-Site [b]	1,022	0	0	0	1,024
Alternate Business Location Locomotive Activities	2	0	0	0	2
Electricity	653	0	0	0	656
Displaced Businesses [c]	20,227	4	0	0	20,389
Total - Project Year 2066 [d]	141,991	12	3	0	143,292
CEQA Impacts					
CEQA Baseline Emissions	97,089	11	2	0	97,859
Reduced Project minus CEQA Baseline	44,902	2	2	0	45,433
Thresholds					0
Significant?					Yes

a)Emissions represent annual emissions.
b) Truck, train, and worker commute emissions include transport within the South Coast Air Basin.
c)Emissions from businesses displaced by the Reduced Project.
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.

1
2

5.5.2.7 Hazards and Hazardous Materials

In this alternative, the SCIG facility and the facilities on alternate business locations 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 train trips from the facility to the California border, fewer cargo containers carrying hazardous materials handled at the facility, and a lower level of maintenance activity .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 3.7-1) 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 forRISK-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-5 and RISK 7, and no impact would be associated with RISK-6.

5.5.2.8 Land Use

In the Reduced Project Alternative, all physical features of the proposed Project would be constructed, existing businesses would be moved to alternate sites as described in Section 2.4.2.1, 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 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-10** 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.

5.5.2.9 Noise

In this alternative, the SCIG facility and the facilities on the alternate business locations 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 5-18), 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). Operational noise during the nighttime would exceed existing measured ambient noise levels at the residence at 2789 Webster (R1), at the Buddhist Temple (R2), and at the Villages of Cabrillo (R7A). 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 (65VdB for highly sensitive land uses). 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 5-28) and site operational noise (Table 5-29).

Table 5-28. 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	71.9	72.0	0.1
w/o Eubank Ave	73.6	75.2	1.6
s/o PCH	73.8	73.9	0.1
s/o Anaheim St	74.5	75.9	1.4
E ANAHEIM ST			
between Anaheim and Henry Ford	71.7	73.3	1.6
e/o Henry Ford Ave	73.0	74.8	1.8
w/o E I St	72.2	73.3	1.1
w/o Anaheim Way	73.0	74.9	1.9
E HARRY BRIDGES BLVD			
e/o Avalon Blvd	72.1	73.5	1.4
E SEPULVEDA BLVD			
e/o Alameda St	70.7	69.8	-0.9
JOHN S GIBSON BLVD			
n/o I-110 Ramps	70.7	71.9	1.2
LONG BEACH FWY			
n/o Imperial Hwy	85.8	86.0	0.2
s/o Imperial Hwy	86.1	86.2	0.1
n/o I-105	85.7	85.8	0.1
s/o I-105	85.7	85.7	0.0
n/o Rosecrans Ave	85.7	85.8	0.1
s/o Rosecrans Ave	86.9	87.5	0.6
NB between Alondra and Rosecrans	86.9	87.5	0.6
n/o Alondra	86.9	87.5	0.6
s/o Alondra	89.8	87.5	-2.3
n/o SR-91	86.3	86.9	0.6
n/o Artesia Blvd	85.5	86.1	0.6
s/o Artesia Blvd	86.3	87.4	1.1
n/o Long Beach Blvd	86.5	87.6	1.1
s/o Long Beach Blvd	86.3	87.6	1.3
n/o Del Amo Blvd	86.4	87.6	1.2
s/o Del Amo Blvd	86.5	87.7	1.2
n/o Wardlow Rd	85.0	86.7	1.7
s/o Wardlow Rd	85.6	87.1	1.5
n/o Willow St	84.6	87.1	2.5
s/o Willow St	85.4	86.9	1.5
n/o Anaheim St	84.7	86.3	1.6

Roadway Segment	Existing CNEL @100 ft	Reduced Project Alternative CNEL @100 ft	Reduced Project Increment in Traffic Noise Level, dB
s/o Anaheim St	84.5	86.2	1.7
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	84.5	86.2	1.7
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	86.0	86.2	0.2
n/o 9th St	82.8	86.1	3.3
s/o 9th St	81.8	85.3	3.5
n/o 10th St	83.3	85.8	2.5
SB n/o I-405	86.7	86.0	-0.7
SB s/o Del Amo Blvd Off ramp	86.4	87.6	1.2
NB n/o Dell Amo Blvd Off Ramp	87.2	86.5	-0.7
s/o On ramp at Del Amo Blvd	86.4	87.6	-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	85.4	87.0	-0.6
NB Between Ramps at Anaheim St	86.4	86.0	-0.4
TERMINAL ISLAND FWY			
s/o PCH	76.1	74.4	-1.7
n/o PCH	75.3	69.1	-6.2
between Off and loop On ramp at PCH	76.1	75.6	-0.5
SB between loop Off and On ramp at PCH	79.8	80.5	0.7
s/o PCH off ramp	78.0	79.6	1.6
s/o PCH on ramp	81	79.1	-1.9
n/o Ocean Blvd	72.8	75.9	3.1
SB s/o Henry Ford Ave	80.9	80.7	-0.2
s/o Henry Ford Ave	74.2	77.6	3.4
between Henry Ford Ave and Anaheim St	76.5	78.9	2.4
e/o Seaside Ave	75.0	76.7	1.7
SB s/o Anaheim Way	80.9	79.1	-1.8
SB n/o Anaheim St	78	78.7	0.7
s/o Willow St	71.5	63.1	-8.4
W ANAHEIM ST			
w/o Harbor Ave	71.3	72.3	1.0
e/o Santa Fe Ave	73.1	73.6	0.5
w/o Seabright Ave	71.9	72.6	0.7
w/o E I St	69.8	71.2	1.4
between Seabright Ave and Santa Fe Ave	71.6	72.4	0.8
W HARRY BRIDGES BLVD			
between Wilmington Blvd and Neptune Ave	71.5	72.6	1.1
between Hawaiian Ave and Wilmington Blvd	72.0	72.7	0.7
between Neptune Ave and Fries Ave	70.9	71.3	0.4
between Figueroa St and Mar Vista Ave	72.0	72.6	0.6
between Fries Ave and Avalon Blvd	72.2	73.4	1.2
between Mar Vista Ave and Hawaiian Ave	72.0	72.7	0.7
W PACIFIC COAST HIGHWAY			
between I-710 NB and SB ramps	72.7	74.2	1.5
e/o San Gabriel Ave	73.9	74.7	0.8
between San Gabriel Ave and Santa Fe Ave	73.9	74.8	0.9
between Terminal Island Fwy SB and NB ramp	72.6	74.0	1.4
e/o Santa Fe Ave	73.7	74.7	1.0

Roadway Segment	Existing CNEL @100 ft	Reduced Project Alternative CNEL @100 ft	Reduced Project Increment in Traffic Noise Level, dB
e/o Harbor Ave	72.5	74.0	1.5
W WILLOW ST			
between NB and SB Terminal Island Fwy	71.7	68.6	-3.1
between Terminal Island Fwy and Santa Fe	69.1	69.0	-0.1
between Santa Fe Ave and Easy Ave	68.9	68.8	-0.1
e/o Easy Ave	70.0	69.7	-0.3
w/o NB I-710 on ramp	69.5	68.8	-0.7

Table 5-29. Summary of Predicted Reduced Project Alternative Operational Noise Levels.

Receptor Number	Receptor Location	Predicted Reduced Project Operational Noise Level – Year 2023, L50, dBA*	Measured Ambient Noise Level, L50, 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]
R1	Residence at 2789 Webster – rear yard	54.3	Day: 45.2 - 51.6 Night: 37.7 - 46.3	Day +9.6 Night +16.7	Day 50 Night 45
R2	Buddhist Temple at Willow and Webster	48.8	Day: 58.6 - 60.2 Night: 46.1 - 57.4	Day +0.4 Night +4.6	Day 50 Night 45
R3	Hudson Elementary School - playground	53.5	Day: 56.3 - 64.1	Day +1.8	Day 50
R4	Hudson Park	54.5	Day: 62.4 – 64.3	Day +0.7	Day 50
R5	Cabrillo High School – building setback	51.1	Day: 52.6 - 58.1	Day +2.3	Day 50
R6	Cabrillo Child Development Center	54.6	Day: 61.5 – 65.3	Day +0.8	Day 50
R7	Bethune School	54.6	Day: 61.5 – 65.3	Day +0.8	Day 50
R7A	Villages of Cabrillo	54.1	Day: 59.2 – 63.2 Night: 51.1 - 58.6	Day +1.2 Night +4.8	Day 50 Night 45
R7B	Cabrillo Park	54.8	Day: 60.2 – 65.2	Day +1.1	Day 50
R30	Stephens Middle School - playground	50.8	Day: 47.8 – 64.2	Day +4.8	Day 50
R31	Webster School	45.4	Day: 48.3 – 58.0	Day +1.8	Day 50
R34	Mambo Sound & Recording Studio	45.6	Day: 62.8 – 68.4 Night: 58.0 – 63.4	Day +0.1 Night +0.2	Day 50 Night 45

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.
* Includes operations at the alternate business locations

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 R7B, R30, and R34 would be more than 3 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), at the Buddhist Temple (R2), and at the Century Villages at Cabrillo (R7A). These increases would 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. With one exception, residual noise impacts under NOI-6 would be less than significant after mitigation. However, nighttime operational noise would remain significant even after mitigation with implementation of **MM NOI-3**, in 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.

Residual Impacts

Residual nighttime operational noise would remain significant and unavoidable in 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.

5.5.2.10 Transportation and Circulation

In this alternative, all physical features of the proposed Project would be constructed, existing businesses would move to the alternate sites as described in Section 2.4.2.1, 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 5-30). 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 5-30. 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	535	275	810	400	445	845	455	535	990
Reduced Project	465	385	850	550	555	1,105	395	360	755
Net Change	(70)	110	40	150	110	260	(60)	(175)	(235)

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 Angeles, City of Long Beach, City of Carson, or Caltrans.

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 international intermodal 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 5-31 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 5-31. 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	0.335	A	0.398	A	0.375	A	0.375	A	0.434	A	0.395	0.040	0.036	0.020	No	No	No
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.215	A	0.379	A	0.348	A	0.266	A	0.425	A	0.374	0.051	0.046	0.026	No	No	No
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.266	A	0.313	A	0.341	A	0.302	A	0.347	A	0.356	0.036	0.034	0.015	No	No	No
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.209	A	0.364	A	0.340	A	0.248	A	0.400	A	0.360	0.039	0.036	0.020	No	No	No
5	Seaside Ave / Navy Wy [A]	A	0.501	A	0.396	B	0.609	A	0.512	A	0.402	B	0.612	0.011	0.006	0.003	No	No	No
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.212	A	0.344	A	0.242	A	0.228	A	0.365	A	0.249	0.016	0.021	0.007	No	No	No
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.435	A	0.519	A	0.499	A	0.438	A	0.488	A	0.471	0.003	-0.031	-0.028	No	No	No
8	Anaheim St / Harbor Ave [B]	A	0.453	A	0.455	A	0.560	A	0.469	A	0.478	A	0.567	0.016	0.023	0.007	No	No	No
9	Anaheim St / Santa Fe Ave [B]	A	0.473	A	0.508	A	0.578	A	0.488	A	0.527	A	0.584	0.015	0.019	0.006	No	No	No
10	Anaheim St / E I St / W 9th St [B]	A	0.501	A	0.525	A	0.529	A	0.583	B	0.637	A	0.554	0.082	0.112	0.025	No	No	No
11	Anaheim St / Farragut Ave [A]	A	0.377	A	0.328	A	0.386	A	0.404	A	0.360	A	0.404	0.027	0.032	0.018	No	No	No
12	Anaheim St / Henry Ford Ave [A]	A	0.400	A	0.516	B	0.660	A	0.419	A	0.546	B	0.677	0.019	0.030	0.017	No	No	No
13	Anaheim St / Alameda St [A]	A	0.461	A	0.425	A	0.568	A	0.479	A	0.442	A	0.563	0.018	0.017	-0.005	No	No	No
14	Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A]	A	0.178	A	0.225	A	0.267	A	0.189	A	0.222	A	0.262	0.011	-0.003	-0.005	No	No	No
15	Harry Bridges Blvd / Broad Ave [A]	A	0.243	A	0.215	A	0.318	A	0.260	A	0.212	A	0.317	0.017	-0.003	-0.001	No	No	No
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.255	A	0.182	A	0.338	A	0.272	A	0.187	A	0.340	0.017	0.005	0.002	No	No	No
17	Harry Bridges Blvd / Fries Ave [A]	A	0.223	A	0.227	A	0.303	A	0.243	A	0.235	A	0.303	0.020	0.008	0.000	No	No	No
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.153	A	0.128	A	0.227	A	0.160	A	0.132	A	0.225	0.007	0.004	-0.002	No	No	No
19	Harry Bridges Blvd / King Ave [A]	A	0.219	A	0.177	A	0.302	A	0.229	A	0.181	A	0.300	0.010	0.004	-0.002	No	No	No
20	Harry Bridges Blvd / Figueroa St [A]	A	0.335	A	0.337	A	0.392	A	0.332	A	0.323	A	0.385	-0.003	-0.014	-0.007	No	No	No
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.605	A	0.511	B	0.661	A	0.599	A	0.504	B	0.655	-0.006	-0.007	-0.006	No	No	No
22	Pacific Coast Hwy / Site Entrance [A]	A	0.315	A	0.268	A	0.381	A	0.317	A	0.271	A	0.381	0.002	0.003	0.000	No	No	No
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.773	B	0.699	D	0.821	C	0.746	B	0.685	C	0.790	-0.027	-0.014	-0.031	No	No	No
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.628	B	0.603	C	0.733	B	0.610	A	0.596	C	0.714	-0.018	-0.007	-0.019	No	No	No
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.679	A	0.484	B	0.612	B	0.673	A	0.448	A	0.587	-0.006	-0.036	-0.025	No	No	No

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, international intermodal 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 5-32, which does not meet the minimum needed to warrant analysis.

Table 5-32. 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.	4,200	3,000	3,000	4,100	4,200	3,000	3,000	4,100	-	-	-	-
SR-91	e/o Alameda St/Santa Fe Ave	7,400	15,200	9,900	6,000	7,400	15,200	9,900	6,000	-	-	-	-
I-405	Santa Fe Ave.	11,500	8,900	8,600	10,700	11,500	8,900	8,600	10,700	-	-	-	-
I-710	n/o Jct (PCH), Willow St.	5,500	5,100	5,400	5,100	5,520	5,110	5,410	5,115	20	10	10	15
I-710	n/o Jct Rte 405, s/o Del Amo	7,900	7,800	8,400	7,600	7,920	7,815	8,415	7,620	20	15	15	20
I-710	n/o Rte 105, n/o Firestone	10,200	10,800	7,500	7,800	10,225	10,815	7,515	7,820	25	15	15	20

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.

5.5.2.11 Utilities and Public Services

In this alternative, all physical features of the proposed Project would be constructed, existing businesses would be moved to the alternate sites as described in Section 2.4.2.1, 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 alternate business sites would be moved 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. 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.

Residual Impacts

Residual impacts would be less than significant.

5.5.2.12 Water Resources

In this alternative, the SCIG facility and the facilities at alternate business locations 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 alternate business 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 alternate business 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 alternate business 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 section3.12.4.4.1 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 alternate business 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.

5.6 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.

5.6.1 No Project Alternative

As described in Section 5.4, under the No Project Alternative, the LAHD 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 and the activities of these businesses would be expected to grow by 10 percent from baseline levels by 2016, after which no further growth is assumed 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.

5.6.1.1 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.

5.6.1.2 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 reasonably foreseeable future projects in the region will result in emissions that exceed regulatory thresholds and thus constitute a significant cumulative impact. The operational emissions of the No Project Alternative would 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, and PM_{10}. As described in Section 5.4.2.2, 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 increased health risks (Section 5.4.2.2). Accordingly, the No Project Alternative would make a cumulatively considerable contribution to a significant cumulative impact.

5.6.1.3 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.

5.6.1.4 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.

5.6.1.5 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.

5.6.1.6 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 5.4.2.6), and because there is no feasible mitigation for those emissions, they would make a cumulatively considerable contribution to a significant cumulative impact.

5.6.1.7 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.

5.6.1.8 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.

5.6.1.9 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 5.4.2.9) 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.

5.6.1.10 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 the 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 that would move to sites south of Pacific Coast Highway.

Alternative 1 was analyzed for future years 2016, 2023, 2035, 2046, and 2066. 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 5-33illustrates that Alternative 1 – No Project Alternative trip generation and net change from Baseline conditions.

Table 5-33. Alternative 1 – 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	535	275	810	400	445	845	455	535	990
No Project	590	305	895	450	485	935	515	595	1110
Net Change	55	30	85	50	40	90	60	60	120

5.6.1.10.1 Methodology

Impacts related to the No Project Alternative were assessed using the same methodology as in the assessment of the proposed Project (Section 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, 2035,2046, and 2066 (assumed equal to 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.

5.6.1.10.2 Cumulative Impact TRANS-1: Would construction result in a short-term impact to streets?

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

Past construction activities resulted in short-term, temporary impacts at selected roadway links, intersections and ramps. Construction period traffic handling measures were implemented to mitigate these impacts. Once construction was completed, no further construction traffic impacts occurred.

Contribution of the No Project Alternative

No construction activities are expected for Alternative 1 – No Project Alternative.

Mitigation Measures and Residual Cumulative Impacts

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

5.6.1.10.3 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 5-34 to 5-38 summarize future intersection operating conditions of the No Project Alternative at each study intersection in 2016, 2023, 2035,2046, and 2066, respectively, with the CEQA 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 5-39 to 5-43 compare the future "Without Project" to the No Project Alternative at each study intersection in 2016, 2023, 2035,2046, and 2066, respectively. Cumulative

impacts are shown to occur at one intersection in 2016, at seven locations in 2023, and at four locations in both 2035 and eight locations in 2046 and 2066. Accordingly, past, present, and reasonably foreseeable future projects, including the No Project Alternative, have a significant cumulative impact on study intersections.

Table 5-34. Intersection Level of Service Analysis – Year 2016 Alternative 1 – No Project Alternative.

#	Study Intersection	CEQA Baseline						Year 2016 Alt. 1 – No Project Alternative						Change in V/C			Sig. Cum. 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	0.335	A	0.398	A	0.375	A	0.452	A	0.365	A	0.466	0.117	-0.033	0.091	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.215	A	0.379	A	0.348	A	0.217	A	0.277	A	0.366	0.002	-0.102	0.018	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.266	A	0.313	A	0.341	A	0.305	A	0.300	A	0.373	0.039	-0.013	0.032	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.209	A	0.364	A	0.34	A	0.207	A	0.306	A	0.456	-0.002	-0.058	0.116	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.501	A	0.396	B	0.609	A	0.578	A	0.274	B	0.684	0.077	-0.122	0.075	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.212	A	0.344	A	0.242	A	0.193	A	0.288	A	0.347	-0.019	-0.056	0.105	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.435	A	0.519	A	0.499	A	0.51	A	0.516	C	0.705	0.075	-0.003	0.206	N	N	N
8	Anaheim St / Harbor Ave [B]	A	0.453	A	0.455	A	0.56	B	0.634	B	0.672	C	0.782	0.181	0.217	0.222	N	N	N
9	Anaheim St / Santa Fe Ave [B]	A	0.473	A	0.508	A	0.578	B	0.654	B	0.611	D	0.832	0.181	0.103	0.254	N	N	N
10	Anaheim St / E I St / W 9th St [B]	A	0.501	A	0.525	A	0.529	A	0.592	A	0.543	C	0.772	0.091	0.018	0.243	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.377	A	0.328	A	0.386	A	0.237	A	0.216	A	0.536	-0.140	-0.112	0.150	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.4	A	0.516	B	0.66	A	0.503	A	0.549	C	0.794	0.103	0.033	0.134	N	N	Yes
13	Anaheim St / Alameda St [A]	A	0.461	A	0.425	A	0.568	A	0.496	A	0.419	B	0.684	0.035	-0.006	0.116	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.178	A	0.225	A	0.267	A	0.267	A	0.171	A	0.233	0.089	-0.054	-0.034	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.243	A	0.215	A	0.318	A	0.258	A	0.180	A	0.347	0.015	-0.035	0.029	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.255	A	0.182	A	0.338	A	0.485	A	0.250	A	0.550	0.230	0.068	0.212	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.223	A	0.227	A	0.303	A	0.318	A	0.222	A	0.347	0.095	-0.005	0.044	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.153	A	0.128	A	0.227	A	0.24	A	0.148	A	0.355	0.087	0.020	0.128	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.219	A	0.177	A	0.302	A	0.429	A	0.323	B	0.654	0.210	0.146	0.352	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	A	0.335	A	0.337	A	0.392	A	0.55	A	0.367	C	0.737	0.215	0.030	0.345	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.605	A	0.511	B	0.661	A	0.466	A	0.442	B	0.628	-0.139	-0.069	-0.033	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.383	A	0.283	A	0.542	A	0.219	A	0.326	A	0.431	-0.164	0.043	-0.111	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.773	B	0.699	D	0.821	C	0.757	B	0.640	E	0.921	-0.016	-0.059	0.100	N	N	Yes
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.628	B	0.603	C	0.733	B	0.643	B	0.661	D	0.871	0.015	0.058	0.138	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.679	A	0.484	B	0.612	A	0.509	A	0.536	A	0.583	-0.170	0.052	-0.029	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 2023 Alternative 1 – No Project Alternative.

#	Study Intersection	CEQA Baseline						Year 2023 Alt. 1 – No Project Alternative						Change in V/C			Sig. Cum. 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	0.34	A	0.4	A	0.38	A	0.495	A	0.367	A	0.458	0.160	-0.031	0.083	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.22	A	0.38	A	0.35	A	0.336	A	0.306	A	0.303	0.121	-0.073	-0.045	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.27	A	0.31	A	0.34	A	0.377	A	0.302	A	0.331	0.111	-0.011	-0.010	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.21	A	0.36	A	0.34	A	0.284	A	0.301	A	0.298	0.075	-0.063	-0.042	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.5	A	0.4	B	0.61	B	0.666	A	0.356	B	0.638	0.165	-0.040	0.029	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.21	A	0.34	A	0.24	A	0.225	A	0.305	A	0.198	0.013	-0.039	-0.044	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.44	A	0.52	A	0.5	B	0.653	A	0.575	A	0.580	0.218	0.056	0.081	N	N	N
8	Anaheim St / Harbor Ave [B]	A	0.45	A	0.46	A	0.56	B	0.648	B	0.678	B	0.691	0.195	0.223	0.131	N	N	N
9	Anaheim St / Santa Fe Ave [B]	A	0.47	A	0.51	A	0.58	C	0.705	B	0.622	C	0.773	0.232	0.114	0.195	N	N	N
10	Anaheim St / E I St / W 9th St [B]	A	0.5	A	0.53	A	0.53	B	0.653	A	0.543	C	0.776	0.152	0.018	0.247	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.38	A	0.33	A	0.39	A	0.351	A	0.257	A	0.528	-0.026	-0.071	0.142	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.4	A	0.52	B	0.66	A	0.575	A	0.568	D	0.802	0.175	0.052	0.142	N	N	Yes
13	Anaheim St / Alameda St [A]	A	0.46	A	0.43	A	0.57	A	0.475	A	0.421	C	0.711	0.014	-0.004	0.143	N	N	Yes
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.18	A	0.23	A	0.27	A	0.331	A	0.171	A	0.231	0.153	-0.054	-0.036	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.24	A	0.22	A	0.32	A	0.252	A	0.180	A	0.315	0.009	-0.035	-0.003	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.26	A	0.18	A	0.34	A	0.492	A	0.262	A	0.598	0.237	0.080	0.260	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.22	A	0.23	A	0.3	A	0.322	A	0.232	A	0.362	0.099	0.005	0.059	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.15	A	0.13	A	0.23	A	0.223	A	0.140	A	0.343	0.070	0.012	0.116	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.22	A	0.18	A	0.3	A	0.440	A	0.379	B	0.667	0.221	0.202	0.365	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	A	0.34	A	0.34	A	0.39	A	0.557	A	0.403	C	0.707	0.222	0.066	0.315	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.61	A	0.51	B	0.66	A	0.485	A	0.452	B	0.603	-0.120	-0.059	-0.058	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.38	A	0.28	A	0.54	A	0.281	A	0.333	A	0.371	-0.102	0.050	-0.171	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.77	B	0.7	D	0.82	C	0.787	B	0.645	D	0.862	0.014	-0.054	0.041	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.63	B	0.6	C	0.73	B	0.648	B	0.684	C	0.794	0.020	0.081	0.061	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.68	A	0.48	B	0.61	A	0.539	A	0.529	B	0.615	-0.140	0.045	0.003	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 2035 Alternative 1 – No Project Alternative.

#	Study Intersection	CEQA Baseline						Year 2035 Alt. 1 – No Project Alternative						Change in V/C			Sig. Cum. 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	0.34	A	0.4	A	0.38	A	0.499	A	0.533	A	0.391	0.164	0.135	0.016	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.22	A	0.38	A	0.35	A	0.435	A	0.502	A	0.387	0.220	0.123	0.039	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.27	A	0.31	A	0.34	A	0.519	A	0.475	A	0.387	0.253	0.162	0.046	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.21	A	0.36	A	0.34	A	0.429	A	0.491	A	0.394	0.220	0.127	0.054	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.5	A	0.4	B	0.61	B	0.675	A	0.576	B	0.648	0.174	0.180	0.039	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.21	A	0.34	A	0.24	A	0.395	A	0.463	A	0.372	0.183	0.119	0.130	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.44	A	0.52	A	0.5	D	0.821	D	0.888	B	0.627	0.386	0.369	0.128	N	N	N
8	Anaheim St / Harbor Ave [B]	A	0.45	A	0.46	A	0.56	B	0.699	C	0.709	B	0.634	0.246	0.254	0.074	N	N	N
9	Anaheim St / Santa Fe Ave [B]	A	0.47	A	0.51	A	0.58	B	0.613	B	0.615	C	0.754	0.140	0.107	0.176	N	N	N
10	Anaheim St / E I St / W 9th St [B]	A	0.5	A	0.53	A	0.53	C	0.733	B	0.656	C	0.722	0.232	0.131	0.193	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.38	A	0.33	A	0.39	A	0.403	A	0.332	A	0.440	0.026	0.004	0.054	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.4	A	0.52	B	0.66	B	0.609	B	0.633	C	0.747	0.209	0.117	0.087	N	N	Yes
13	Anaheim St / Alameda St [A]	A	0.46	A	0.43	A	0.57	A	0.484	A	0.437	B	0.682	0.023	0.012	0.114	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.18	A	0.23	A	0.27	A	0.253	A	0.129	A	0.182	0.075	-0.096	-0.085	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.24	A	0.22	A	0.32	A	0.245	A	0.175	A	0.337	0.002	-0.040	0.019	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.26	A	0.18	A	0.34	A	0.458	A	0.317	A	0.565	0.203	0.135	0.227	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.22	A	0.23	A	0.3	A	0.245	A	0.228	A	0.358	0.022	0.001	0.055	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.15	A	0.13	A	0.23	A	0.128	A	0.067	A	0.260	-0.025	-0.061	0.033	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.22	A	0.18	A	0.3	A	0.373	A	0.235	A	0.344	0.154	0.058	0.042	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	A	0.34	A	0.34	A	0.39	B	0.660	A	0.530	C	0.782	0.325	0.193	0.390	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.61	A	0.51	B	0.66	A	0.521	A	0.471	B	0.635	-0.084	-0.040	-0.026	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.38	A	0.28	A	0.54	A	0.385	A	0.313	A	0.453	0.002	0.030	-0.089	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.77	B	0.7	D	0.82	E	0.965	D	0.845	E	0.979	0.192	0.146	0.158	Yes	N	Yes
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.63	B	0.6	C	0.73	C	0.761	C	0.747	E	0.920	0.133	0.144	0.187	N	N	Yes
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.68	A	0.48	B	0.61	A	0.542	A	0.467	B	0.609	-0.137	-0.017	-0.003	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 5-37. Intersection Level of Service Analysis –Year 2046 Alternative 1 – No Project Alternative.

#	Study Intersection	CEQA Baseline						Year 2046 Alt. 1 – No Project Alternative						Change in V/C			Sig. Cum. 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	0.34	A	0.4	A	0.38	B	0.609	A	0.510	A	0.478	0.274	0.112	0.103	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.22	A	0.38	A	0.35	A	0.433	A	0.377	A	0.364	0.218	-0.002	0.016	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.27	A	0.31	A	0.34	A	0.527	A	0.442	A	0.378	0.261	0.129	0.037	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.21	A	0.36	A	0.34	A	0.402	A	0.435	A	0.441	0.193	0.071	0.101	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.5	A	0.4	B	0.61	D	0.844	A	0.559	C	0.723	0.343	0.163	0.114	Yes	N	Yes
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.21	A	0.34	A	0.24	A	0.395	A	0.467	A	0.370	0.183	0.123	0.128	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.44	A	0.52	A	0.5	D	0.893	D	0.868	C	0.707	0.458	0.349	0.208	N	N	N
8	Anaheim St / Harbor Ave [B]	A	0.45	A	0.46	A	0.56	C	0.775	D	0.820	C	0.746	0.322	0.365	0.186	N	N	N
9	Anaheim St / Santa Fe Ave [B]	A	0.47	A	0.51	A	0.58	D	0.811	C	0.730	E	0.932	0.338	0.222	0.354	N	N	Yes
10	Anaheim St / E I St / W 9th St [B]	A	0.5	A	0.53	A	0.53	C	0.764	B	0.636	D	0.842	0.263	0.111	0.313	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.38	A	0.33	A	0.39	A	0.403	A	0.334	A	0.558	0.026	0.006	0.172	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.4	A	0.52	B	0.66	C	0.712	C	0.701	D	0.873	0.312	0.185	0.213	Yes	Yes	Yes
13	Anaheim St / Alameda St [A]	A	0.46	A	0.43	A	0.57	B	0.621	A	0.488	C	0.772	0.160	0.063	0.204	N	N	Yes
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.18	A	0.23	A	0.27	A	0.442	A	0.171	A	0.229	0.264	-0.054	-0.038	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.24	A	0.22	A	0.32	A	0.292	A	0.222	A	0.433	0.049	0.007	0.115	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.26	A	0.18	A	0.34	A	0.535	A	0.390	B	0.693	0.280	0.208	0.355	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.22	A	0.23	A	0.3	A	0.345	A	0.285	A	0.397	0.122	0.058	0.094	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.15	A	0.13	A	0.23	A	0.243	A	0.192	A	0.392	0.090	0.064	0.165	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.22	A	0.18	A	0.3	A	0.585	A	0.490	C	0.798	0.366	0.313	0.496	N	N	Yes
20	Harry Bridges Blvd / Figueroa St [A]	A	0.34	A	0.34	A	0.39	B	0.683	A	0.520	D	0.807	0.348	0.183	0.415	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.61	A	0.51	B	0.66	A	0.530	A	0.553	B	0.649	-0.075	0.042	-0.012	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.38	A	0.28	A	0.54	A	0.349	A	0.419	A	0.450	-0.034	0.136	-0.092	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.77	B	0.7	D	0.82	E	0.928	C	0.792	E	0.988	0.155	0.093	0.167	Yes	N	Yes
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.63	B	0.6	C	0.73	C	0.714	C	0.795	E	0.934	0.086	0.192	0.201	N	N	Yes
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.68	A	0.48	B	0.61	A	0.550	A	0.590	B	0.639	-0.129	0.106	0.027	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 5-38. Intersection Level of Service Analysis –Year 2066 Alternative 1 – No Project Alternative.

#	Study Intersection	CEQA Baseline						Year 2066 Alt. 1 – No Project Alternative						Change in V/C			Sig. Cum. 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	0.34	A	0.4	A	0.38	B	0.609	A	0.510	A	0.478	0.274	0.112	0.103	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.22	A	0.38	A	0.35	A	0.433	A	0.377	A	0.364	0.218	-0.002	0.016	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.27	A	0.31	A	0.34	A	0.527	A	0.442	A	0.378	0.261	0.129	0.037	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.21	A	0.36	A	0.34	A	0.402	A	0.435	A	0.441	0.193	0.071	0.101	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.5	A	0.4	B	0.61	D	0.844	A	0.559	C	0.723	0.343	0.163	0.114	Yes	N	Yes
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.21	A	0.34	A	0.24	A	0.395	A	0.467	A	0.370	0.183	0.123	0.128	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.44	A	0.52	A	0.5	D	0.893	D	0.868	C	0.707	0.458	0.349	0.208	N	N	N
8	Anaheim St / Harbor Ave [B]	A	0.45	A	0.46	A	0.56	C	0.775	D	0.820	C	0.746	0.322	0.365	0.186	N	N	N
9	Anaheim St / Santa Fe Ave [B]	A	0.47	A	0.51	A	0.58	D	0.811	C	0.730	E	0.932	0.338	0.222	0.354	N	N	Yes
10	Anaheim St / E I St / W 9th St [B]	A	0.5	A	0.53	A	0.53	C	0.764	B	0.636	D	0.842	0.263	0.111	0.313	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.38	A	0.33	A	0.39	A	0.403	A	0.334	A	0.558	0.026	0.006	0.172	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.4	A	0.52	B	0.66	C	0.712	C	0.701	D	0.873	0.312	0.185	0.213	Yes	Yes	Yes
13	Anaheim St / Alameda St [A]	A	0.46	A	0.43	A	0.57	B	0.621	A	0.488	C	0.772	0.160	0.063	0.204	N	N	Yes
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.18	A	0.23	A	0.27	A	0.442	A	0.171	A	0.229	0.264	-0.054	-0.038	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.24	A	0.22	A	0.32	A	0.292	A	0.222	A	0.433	0.049	0.007	0.115	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.26	A	0.18	A	0.34	A	0.535	A	0.390	B	0.693	0.280	0.208	0.355	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.22	A	0.23	A	0.3	A	0.345	A	0.285	A	0.397	0.122	0.058	0.094	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.15	A	0.13	A	0.23	A	0.243	A	0.192	A	0.392	0.090	0.064	0.165	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.22	A	0.18	A	0.3	A	0.585	A	0.490	C	0.798	0.366	0.313	0.496	N	N	Yes
20	Harry Bridges Blvd / Figueroa St [A]	A	0.34	A	0.34	A	0.39	B	0.683	A	0.520	D	0.807	0.348	0.183	0.415	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.61	A	0.51	B	0.66	A	0.530	A	0.553	B	0.649	-0.075	0.042	-0.012	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.38	A	0.28	A	0.54	A	0.349	A	0.419	A	0.450	-0.034	0.136	-0.092	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.77	B	0.7	D	0.82	E	0.928	C	0.792	E	0.988	0.155	0.093	0.167	Yes	N	Yes
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.63	B	0.6	C	0.73	C	0.714	C	0.795	E	0.934	0.086	0.192	0.201	N	N	Yes
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.68	A	0.48	B	0.61	A	0.550	A	0.590	B	0.639	-0.129	0.106	0.027	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 5-39. Intersection Level of Service Analysis – Year 2016 – No Project Alternative.

#	Study Intersection	Year 2016 Without Project						Year 2016 Alt. 1 – No Project Alternative						Change in V/C			Considerable Contribution?.		
		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	0.452	A	0.365	A	0.466	A	0.452	A	0.365	A	0.466	0.000	0.000	0.000	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.217	A	0.277	A	0.366	A	0.217	A	0.277	A	0.366	0.000	0.000	0.000	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.305	A	0.300	A	0.373	A	0.305	A	0.300	A	0.373	0.000	0.000	0.000	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.207	A	0.306	A	0.456	A	0.207	A	0.306	A	0.456	0.000	0.000	0.000	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.578	A	0.274	B	0.684	A	0.578	A	0.274	B	0.684	0.000	0.000	0.000	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.193	A	0.288	A	0.347	A	0.193	A	0.288	A	0.347	0.000	0.000	0.000	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.510	A	0.510	C	0.700	A	0.510	A	0.516	C	0.705	0.000	0.006	0.005	N	N	N
8	Anaheim St / Harbor Ave [B]	B	0.633	B	0.671	C	0.782	B	0.634	B	0.672	C	0.782	0.001	0.001	0.000	N	N	N
9	Anaheim St / Santa Fe Ave [B]	B	0.653	B	0.610	D	0.832	B	0.654	B	0.611	D	0.832	0.001	0.001	0.000	N	N	N
10	Anaheim St / E I St / W 9th St [B]	A	0.592	A	0.542	C	0.770	A	0.592	A	0.543	C	0.772	0.000	0.001	0.002	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.237	A	0.216	A	0.536	A	0.237	A	0.216	A	0.536	0.000	0.000	0.000	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.499	A	0.549	C	0.794	A	0.503	A	0.549	C	0.794	0.004	0.000	0.000	N	N	N
13	Anaheim St / Alameda St [A]	A	0.489	A	0.416	B	0.681	A	0.496	A	0.419	B	0.684	0.007	0.003	0.003	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.267	A	0.171	A	0.233	A	0.267	A	0.171	A	0.233	0.000	0.000	0.000	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.257	A	0.177	A	0.345	A	0.258	A	0.180	A	0.347	0.001	0.003	0.002	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.483	A	0.247	A	0.550	A	0.485	A	0.250	A	0.550	0.002	0.003	0.000	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.315	A	0.218	A	0.347	A	0.318	A	0.222	A	0.347	0.003	0.004	0.000	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.237	A	0.145	A	0.355	A	0.240	A	0.148	A	0.355	0.003	0.003	0.000	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.427	A	0.319	B	0.654	A	0.429	A	0.323	B	0.654	0.002	0.004	0.000	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	A	0.550	A	0.367	C	0.737	A	0.550	A	0.367	C	0.737	0.000	0.000	0.000	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp [A]	A	0.464	A	0.432	B	0.621	A	0.466	A	0.442	B	0.628	0.002	0.010	0.007	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.219	A	0.325	A	0.428	A	0.219	A	0.326	A	0.431	0.000	0.001	0.003	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.754	B	0.640	E	0.917	C	0.757	B	0.640	E	0.921	0.003	0.000	0.004	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.641	B	0.661	D	0.869	B	0.643	B	0.661	D	0.871	0.002	0.000	0.002	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	A	0.504	A	0.534	A	0.570	A	0.509	A	0.536	A	0.583	0.005	0.002	0.013	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 5-40. Intersection Level of Service Analysis – Year 2023 – No Project Alternative.

#	Study Intersection	Year 2023 Without Project						Year 2023 Alt. 1 – No Project Alternative						Change in V/C			Considerable Contribution?.		
		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	0.495	A	0.367	A	0.458	A	0.495	A	0.367	A	0.458	0.000	0.000	0.000	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.336	A	0.306	A	0.303	A	0.336	A	0.306	A	0.303	0.000	0.000	0.000	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.377	A	0.302	A	0.331	A	0.377	A	0.302	A	0.331	0.000	0.000	0.000	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.284	A	0.301	A	0.297	A	0.284	A	0.301	A	0.298	0.000	0.000	0.001	N	N	N
5	Seaside Ave / Navy Wy [A]	B	0.666	A	0.356	B	0.638	B	0.666	A	0.356	B	0.638	0.000	0.000	0.000	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.225	A	0.305	A	0.198	A	0.225	A	0.305	A	0.198	0.000	0.000	0.000	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	B	0.650	A	0.571	A	0.574	B	0.653	A	0.575	A	0.580	0.003	0.004	0.006	N	N	N
8	Anaheim St / Harbor Ave [B]	B	0.647	B	0.677	B	0.690	B	0.648	B	0.678	B	0.691	0.001	0.001	0.001	N	N	N
9	Anaheim St / Santa Fe Ave [B]	C	0.704	B	0.622	C	0.773	C	0.705	B	0.622	C	0.773	0.001	0.000	0.000	N	N	N
10	Anaheim St / E I St / W 9th St [B]	B	0.648	A	0.539	C	0.775	B	0.653	A	0.543	C	0.776	0.005	0.004	0.001	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.351	A	0.257	A	0.528	A	0.351	A	0.257	A	0.528	0.000	0.000	0.000	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.571	A	0.568	D	0.802	A	0.575	A	0.568	D	0.802	0.004	0.000	0.000	N	N	N
13	Anaheim St / Alameda St [A]	A	0.475	A	0.418	C	0.711	A	0.475	A	0.421	C	0.711	0.000	0.003	0.000	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.331	A	0.171	A	0.231	A	0.331	A	0.171	A	0.231	0.000	0.000	0.000	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.252	A	0.178	A	0.315	A	0.252	A	0.180	A	0.315	0.000	0.002	0.000	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.492	A	0.260	A	0.598	A	0.492	A	0.262	A	0.598	0.000	0.002	0.000	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.322	A	0.232	A	0.362	A	0.322	A	0.232	A	0.362	0.000	0.000	0.000	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.223	A	0.140	A	0.343	A	0.223	A	0.140	A	0.343	0.000	0.000	0.000	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.440	A	0.379	B	0.667	A	0.440	A	0.379	B	0.667	0.000	0.000	0.000	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	A	0.557	A	0.403	C	0.707	A	0.557	A	0.403	C	0.707	0.000	0.000	0.000	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp [A]	A	0.485	A	0.447	B	0.602	A	0.485	A	0.452	B	0.603	0.000	0.005	0.001	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.279	A	0.333	A	0.369	A	0.281	A	0.333	A	0.371	0.002	0.000	0.002	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.785	B	0.645	D	0.857	C	0.787	B	0.645	D	0.862	0.002	0.000	0.005	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.647	B	0.684	C	0.792	B	0.648	B	0.684	C	0.794	0.001	0.000	0.002	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	A	0.539	A	0.523	B	0.614	A	0.539	A	0.529	B	0.615	0.000	0.006	0.001	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 5-41. Intersection Level of Service Analysis – Year 2035 – No Project Alternative.

#	Study Intersection	Year 2035 Without Project						Year 2035 Alt. 1 – No Project Alternative						Change in V/C			Considerable Contribution?.		
		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	0.497	A	0.531	A	0.391	A	0.499	A	0.533	A	0.391	0.002	0.002	0.000	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.435	A	0.502	A	0.387	A	0.435	A	0.502	A	0.387	0.000	0.000	0.000	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.517	A	0.473	A	0.387	A	0.519	A	0.475	A	0.387	0.002	0.002	0.000	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.429	A	0.491	A	0.394	A	0.429	A	0.491	A	0.394	0.000	0.000	0.000	N	N	N
5	Seaside Ave / Navy Wy [A]	B	0.675	A	0.576	B	0.648	B	0.675	A	0.576	B	0.648	0.000	0.000	0.000	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.395	A	0.463	A	0.372	A	0.395	A	0.463	A	0.372	0.000	0.000	0.000	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	D	0.819	D	0.883	B	0.622	D	0.821	D	0.888	B	0.627	0.002	0.005	0.005	N	N	N
8	Anaheim St / Harbor Ave [B]	B	0.698	C	0.707	B	0.633	B	0.699	C	0.709	B	0.634	0.001	0.002	0.001	N	N	N
9	Anaheim St / Santa Fe Ave [B]	B	0.612	B	0.615	C	0.753	B	0.613	B	0.615	C	0.754	0.001	0.000	0.001	N	N	N
10	Anaheim St / E I St / W 9th St [B]	C	0.728	B	0.651	C	0.721	C	0.733	B	0.656	C	0.722	0.005	0.005	0.001	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.403	A	0.332	A	0.440	A	0.403	A	0.332	A	0.440	0.000	0.000	0.000	N	N	N
12	Anaheim St / Henry Ford Ave [A]	B	0.605	B	0.633	C	0.747	B	0.609	B	0.633	C	0.747	0.004	0.000	0.000	N	N	N
13	Anaheim St / Alameda St [A]	A	0.481	A	0.437	B	0.679	A	0.484	A	0.437	B	0.682	0.003	0.000	0.003	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.253	A	0.129	A	0.182	A	0.253	A	0.129	A	0.182	0.000	0.000	0.000	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.245	A	0.172	A	0.337	A	0.245	A	0.175	A	0.337	0.000	0.003	0.000	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.458	A	0.313	A	0.565	A	0.458	A	0.317	A	0.565	0.000	0.004	0.000	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.240	A	0.220	A	0.353	A	0.245	A	0.228	A	0.358	0.005	0.008	0.005	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.127	A	0.065	A	0.258	A	0.128	A	0.067	A	0.260	0.001	0.002	0.002	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.371	A	0.235	A	0.342	A	0.373	A	0.235	A	0.344	0.002	0.000	0.002	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	B	0.660	A	0.530	C	0.782	B	0.660	A	0.530	C	0.782	0.000	0.000	0.000	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp [A]	A	0.518	A	0.470	B	0.635	A	0.521	A	0.471	B	0.635	0.003	0.001	0.000	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.383	A	0.311	A	0.450	A	0.385	A	0.313	A	0.453	0.002	0.002	0.003	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	E	0.962	D	0.845	E	0.976	E	0.965	D	0.845	E	0.979	0.003	0.000	0.003	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	C	0.759	C	0.746	E	0.918	C	0.761	C	0.747	E	0.920	0.002	0.001	0.002	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	A	0.542	A	0.461	A	0.559	A	0.542	A	0.467	B	0.609	0.000	0.006	0.050	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 5-42. Intersection Level of Service Analysis –Year 2046 – No Project Alternative.

#	Study Intersection	Year 2046 Without Project						Year 2046 Alt. 1 – No Project Alternative						Change in V/C			Considerable Contribution?.		
		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	0.607	A	0.509	A	0.478	B	0.609	A	0.51	A	0.478	0.002	0.001	0.000	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.433	A	0.377	A	0.364	A	0.433	A	0.377	A	0.364	0.000	0.000	0.000	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.525	A	0.441	A	0.378	A	0.527	A	0.442	A	0.378	0.002	0.001	0.000	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.402	A	0.435	A	0.441	A	0.402	A	0.435	A	0.441	0.000	0.000	0.000	N	N	N
5	Seaside Ave / Navy Wy [A]	D	0.844	A	0.559	C	0.723	D	0.844	A	0.559	C	0.723	0.000	0.000	0.000	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.395	A	0.467	A	0.370	A	0.395	A	0.467	A	0.370	0.000	0.000	0.000	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	D	0.891	D	0.863	C	0.702	D	0.893	D	0.868	C	0.707	0.002	0.005	0.005	N	N	N
8	Anaheim St / Harbor Ave [B]	C	0.774	D	0.819	C	0.745	C	0.775	D	0.820	C	0.746	0.001	0.001	0.001	N	N	N
9	Anaheim St / Santa Fe Ave [B]	D	0.811	C	0.730	E	0.931	D	0.811	C	0.730	E	0.932	0.000	0.000	0.001	N	N	N
10	Anaheim St / E I St / W 9th St [B]	C	0.759	B	0.631	D	0.840	C	0.764	B	0.636	D	0.842	0.005	0.005	0.002	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.403	A	0.465	A	0.558	A	0.403	A	0.334	A	0.558	0.000	-0.131	0.000	N	N	N
12	Anaheim St / Henry Ford Ave [A]	C	0.709	C	0.701	D	0.873	C	0.712	C	0.701	D	0.873	0.003	0.000	0.000	N	N	N
13	Anaheim St / Alameda St [A]	B	0.618	A	0.484	C	0.768	B	0.621	A	0.488	C	0.772	0.003	0.004	0.004	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.442	A	0.171	A	0.229	A	0.442	A	0.171	A	0.229	0.000	0.000	0.000	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.292	A	0.218	A	0.433	A	0.292	A	0.222	A	0.433	0.000	0.004	0.000	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.535	A	0.387	B	0.693	A	0.535	A	0.390	B	0.693	0.000	0.003	0.000	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.343	A	0.280	A	0.392	A	0.345	A	0.285	A	0.397	0.002	0.005	0.005	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.242	A	0.192	A	0.392	A	0.243	A	0.192	A	0.392	0.001	0.000	0.000	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.585	A	0.490	C	0.798	A	0.585	A	0.490	C	0.798	0.000	0.000	0.000	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	B	0.683	A	0.520	D	0.807	B	0.683	A	0.520	D	0.807	0.000	0.000	0.000	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp [A]	A	0.526	A	0.551	B	0.649	A	0.53	A	0.553	B	0.649	0.004	0.002	0.000	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.347	A	0.418	A	0.447	A	0.349	A	0.419	A	0.450	0.002	0.001	0.003	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	E	0.924	C	0.792	E	0.985	E	0.928	C	0.792	E	0.988	0.004	0.000	0.003	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	C	0.711	C	0.794	E	0.932	C	0.714	C	0.795	E	0.934	0.003	0.001	0.002	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	A	0.547	C	0.756	B	0.637	A	0.550	A	0.590	B	0.639	0.003	-0.166	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 5-43. Intersection Level of Service Analysis –Year 2066 – No Project Alternative.

#	Study Intersection	Year 2066 Without Project						Year 2066 Alt. 1 – No Project Alternative						Change in V/C			Considerable Contribution?.		
		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	0.607	A	0.509	A	0.478	B	0.609	A	0.51	A	0.478	0.002	0.001	0.000	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.433	A	0.377	A	0.364	A	0.433	A	0.377	A	0.364	0.000	0.000	0.000	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.525	A	0.441	A	0.378	A	0.527	A	0.442	A	0.378	0.002	0.001	0.000	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.402	A	0.435	A	0.441	A	0.402	A	0.435	A	0.441	0.000	0.000	0.000	N	N	N
5	Seaside Ave / Navy Wy [A]	D	0.844	A	0.559	C	0.723	D	0.844	A	0.559	C	0.723	0.000	0.000	0.000	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.395	A	0.467	A	0.370	A	0.395	A	0.467	A	0.370	0.000	0.000	0.000	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	D	0.891	D	0.863	C	0.702	D	0.893	D	0.868	C	0.707	0.002	0.005	0.005	N	N	N
8	Anaheim St / Harbor Ave [B]	C	0.774	D	0.819	C	0.745	C	0.775	D	0.820	C	0.746	0.001	0.001	0.001	N	N	N
9	Anaheim St / Santa Fe Ave [B]	D	0.811	C	0.730	E	0.931	D	0.811	C	0.730	E	0.932	0.000	0.000	0.001	N	N	N
10	Anaheim St / E I St / W 9th St [B]	C	0.759	B	0.631	D	0.840	C	0.764	B	0.636	D	0.842	0.005	0.005	0.002	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.403	A	0.465	A	0.558	A	0.403	A	0.334	A	0.558	0.000	-0.131	0.000	N	N	N
12	Anaheim St / Henry Ford Ave [A]	C	0.709	C	0.701	D	0.873	C	0.712	C	0.701	D	0.873	0.003	0.000	0.000	N	N	N
13	Anaheim St / Alameda St [A]	B	0.618	A	0.484	C	0.768	B	0.621	A	0.488	C	0.772	0.003	0.004	0.004	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.442	A	0.171	A	0.229	A	0.442	A	0.171	A	0.229	0.000	0.000	0.000	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.292	A	0.218	A	0.433	A	0.292	A	0.222	A	0.433	0.000	0.004	0.000	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.535	A	0.387	B	0.693	A	0.535	A	0.390	B	0.693	0.000	0.003	0.000	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.343	A	0.280	A	0.392	A	0.345	A	0.285	A	0.397	0.002	0.005	0.005	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.242	A	0.192	A	0.392	A	0.243	A	0.192	A	0.392	0.001	0.000	0.000	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.585	A	0.490	C	0.798	A	0.585	A	0.490	C	0.798	0.000	0.000	0.000	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	B	0.683	A	0.520	D	0.807	B	0.683	A	0.520	D	0.807	0.000	0.000	0.000	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp [A]	A	0.526	A	0.551	B	0.649	A	0.53	A	0.553	B	0.649	0.004	0.002	0.000	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.347	A	0.418	A	0.447	A	0.349	A	0.419	A	0.450	0.002	0.001	0.003	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	E	0.924	C	0.792	E	0.985	E	0.928	C	0.792	E	0.988	0.004	0.000	0.003	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	C	0.711	C	0.794	E	0.932	C	0.714	C	0.795	E	0.934	0.003	0.001	0.002	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	A	0.547	C	0.756	B	0.637	A	0.550	A	0.590	B	0.639	0.003	-0.166	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, 2046, or 2066. 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.

5.6.1.10.4 Cumulative Impact TRANS-3: Would an increase in on-site employees during operations result in a substantial increase in public transit use?

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

As described in Section 3.10.3, existing public transit in the general area of the proposed Project operates well under capacity. For example, observations of transit usage in the area for bus routes that serve the project area (Metro routes 220 and Long Beach Transit Route 191, 192 and 193) revealed that the buses are currently not operating anywhere near capacity and would be able to accommodate the estimated increase in demand. As with the project, other cumulative port growth would result in negligible increases in demand for transit usage because port terminal workers drive to the union terminals and work sites. Accordingly, the related projects in Table 4-1 are not expected to have a significant cumulative impact on public transit.

Contribution of the No Project Alternative

Although the No Project would result in additional on-site employees, the increase in work-related trips using public transit would be negligible. Intermodal facilities generate extremely low transit demand for several reasons. The primary reason that proposed Project workers generally would not use public transit is their work shift schedule. Most workers prefer to use a personal automobile to facilitate timely commuting, and in any case would live throughout the Southern California region and not have access to the few bus routes that serve the Port. Finally, parking at No Project site would be readily available and free for employees. Therefore, it is expected that fewer than ten work trips per day would be made on public transit, which could easily be accommodated by existing transit services and would not result in a demand for transit services which

would exceed the supply of such services. Accordingly, the 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.

5.6.1.10.5 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 5-44 through 5-48 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 5-44. 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	4,200	0.53	B	4,400	0.55	C	0.03	No	3,000	0.38	B	3,200	0.40	B	0.03	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,400	0.62	C	7,500	0.63	C	0.01	No	9,900	0.83	D	9,900	0.83	D	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	11,500	1.15	F(0)	11,700	1.17	F(0)	0.02	Yes	8,600	0.86	D	8,700	0.87	D	0.01	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,500	0.92	D	6,500	1.08	F(0)	0.17	Yes	5,400	0.90	D	6,900	1.15	F(0)	0.25	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,900	0.99	E	8,300	1.04	F(0)	0.05	Yes	8,400	1.05	F(0)	8,400	1.05	F(0)	0.00	No
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,200	1.28	F(1)	8,700	1.09	F(0)	-0.19	No	7,500	0.94	E	8,500	1.06	F(0)	0.13	Yes

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	3,000	0.38	B	3,200	0.40	B	0.03	No	4,100	0.51	B	4,200	0.53	B	0.01	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,200	1.27	F(1)	15,300	1.28	F(1)	0.01	No	6,000	0.50	B	6,100	0.51	B	0.01	No
I-405	8.02	Santa Fe Ave.	10,000	8,900	0.89	D	9,000	0.90	D	0.01	No	10,700	1.07	F(0)	10,800	1.08	F(0)	0.01	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,100	0.85	D	7,100	1.18	F(0)	0.33	Yes	5,100	0.85	D	6,800	1.13	F(0)	0.28	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,800	0.98	E	9,300	1.16	F(0)	0.19	Yes	7,600	0.95	E	8,400	1.05	F(0)	0.10	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,800	1.35	F(1)	9,600	1.20	F(0)	-0.15	No	7,800	0.98	E	9,300	1.16	F(0)	0.19	Yes

Table 5-45. 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	4,200	0.53	B	4,600	0.58	C	0.05	No	3,000	0.38	B	3,400	0.43	B	0.05	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,400	0.62	C	7,700	0.64	C	0.03	No	9,900	0.83	D	10,000	0.83	D	0.01	No
I-405	8.02	Santa Fe Ave.	10,000	11,500	1.15	F(0)	11,900	1.19	F(0)	0.04	Yes	8,600	0.86	D	8,800	0.88	D	0.02	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,500	0.92	D	7,200	1.20	F(0)	0.28	Yes	5,400	0.90	D	7,500	1.25	F(0)	0.35	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,900	0.99	E	8,400	1.05	F(0)	0.06	Yes	8,400	1.05	F(0)	8,900	1.11	F(0)	0.06	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,200	1.28	F(1)	8,800	1.10	F(0)	-0.18	No	7,500	0.94	E	9,000	1.13	F(0)	0.19	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	3,000	0.38	B	3,400	0.43	B	0.05	No	4,100	0.51	B	4,300	0.54	B	0.03	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,200	1.27	F(1)	15,400	1.28	F(1)	0.02	No	6,000	0.50	B	6,200	0.52	B	0.02	No
I-405	8.02	Santa Fe Ave.	10,000	8,900	0.89	D	9,000	0.90	D	0.01	No	10,700	1.07	F(0)	11,000	1.10	F(0)	0.03	Yes
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,100	0.85	D	7,200	1.20	F(0)	0.35	Yes	5,100	0.85	D	6,900	1.15	F(0)	0.30	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,800	0.98	E	9,200	1.15	F(0)	0.18	Yes	7,600	0.95	E	8,200	1.03	F(0)	0.08	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,800	1.35	F(1)	9,500	1.19	F(0)	-0.16	No	7,800	0.98	E	9,300	1.16	F(0)	0.19	Yes

Table 5-46. 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	4,200	0.53	B	5,100	0.64	C	0.11	No	3,000	0.38	B	3,800	0.48	B	0.10	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,400	0.62	C	8,000	0.67	C	0.05	No	9,900	0.83	D	10,100	0.84	D	0.02	No
I-405	8.02	Santa Fe Ave.	10,000	11,500	1.15	F(0)	12,300	1.23	F(0)	0.08	Yes	8,600	0.86	D	9,100	0.91	D	0.05	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,500	0.92	D	8,300	1.38	F(2)	0.47	Yes	5,400	0.90	D	8,700	1.45	F(2)	0.55	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,900	0.99	E	8,700	1.09	F(0)	0.10	Yes	8,400	1.05	F(0)	9,700	1.21	F(0)	0.16	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,200	1.28	F(1)	8,900	1.11	F(0)	-0.16	No	7,500	0.94	E	9,800	1.23	F(0)	0.29	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	3,000	0.38	B	3,700	0.46	B	0.09	No	4,100	0.51	B	4,600	0.58	C	0.06	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,200	1.27	F(1)	15,500	1.29	F(1)	0.03	Yes	6,000	0.50	B	6,300	0.53	B	0.03	No
I-405	8.02	Santa Fe Ave.	10,000	8,900	0.89	D	9,200	0.92	D	0.03	No	10,700	1.07	F(0)	11,200	1.12	F(0)	0.05	Yes
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,100	0.85	D	7,300	1.22	F(0)	0.37	Yes	5,100	0.85	D	7,000	1.17	F(0)	0.32	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,800	0.98	E	9,000	1.13	F(0)	0.15	Yes	7,600	0.95	E	7,800	0.98	E	0.03	No
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,800	1.35	F(1)	9,500	1.19	F(0)	-0.16	No	7,800	0.98	E	9,400	1.18	F(0)	0.20	Yes

Table 5-47. 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	4,200	0.53	B	5,500	0.69	C	0.16	No	3,000	0.38	B	4,200	0.53	B	0.15	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,400	0.62	C	8,300	0.69	C	0.08	No	9,900	0.83	D	10,200	0.85	D	0.03	No
I-405	8.02	Santa Fe Ave.	10,000	11,500	1.15	F(0)	12,700	1.27	F(1)	0.12	Yes	8,600	0.86	D	9,300	0.93	D	0.07	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,500	0.92	D	9,300	1.55	F(3)	0.63	Yes	5,400	0.90	D	9,500	1.58	F(3)	0.68	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,900	0.99	E	9,600	1.20	F(0)	0.21	Yes	8,400	1.05	F(0)	10,500	1.31	F(1)	0.26	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,200	1.28	F(1)	9,200	1.15	F(0)	-0.13	No	7,500	0.94	E	10,000	1.25	F(0)	0.31	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	3,000	0.38	B	4,100	0.51	B	0.14	No	4,100	0.51	B	4,800	0.60	C	0.09	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,200	1.27	F(1)	15,700	1.31	F(1)	0.04	Yes	6,000	0.50	B	6,500	0.54	C	0.04	No
I-405	8.02	Santa Fe Ave.	10,000	8,900	0.89	D	9,300	0.93	D	0.04	No	10,700	1.07	F(0)	11,500	1.15	F(0)	0.08	Yes
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,100	0.85	D	7,800	1.30	F(1)	0.45	Yes	5,100	0.85	D	7,500	1.25	F(0)	0.40	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,800	0.98	E	9,500	1.19	F(0)	0.21	Yes	7,600	0.95	E	8,200	1.03	F(0)	0.08	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,800	1.35	F(1)	9,700	1.21	F(0)	-0.14	No	7,800	0.98	E	9,600	1.20	F(0)	0.23	Yes

Table 5-48. Year 2066 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 2066 Future With No Project					Baseline			Year 2066 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	4,200	0.53	B	5,500	0.69	C	0.16	No	3,000	0.38	B	4,200	0.53	B	0.15	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,400	0.62	C	8,300	0.69	C	0.08	No	9,900	0.83	D	10,200	0.85	D	0.03	No
I-405	8.02	Santa Fe Ave.	10,000	11,500	1.15	F(0)	12,700	1.27	F(1)	0.12	Yes	8,600	0.86	D	9,300	0.93	D	0.07	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,500	0.92	D	9,300	1.55	F(3)	0.63	Yes	5,400	0.90	D	9,500	1.58	F(3)	0.68	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,900	0.99	E	9,600	1.20	F(0)	0.21	Yes	8,400	1.05	F(0)	10,500	1.31	F(1)	0.26	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,200	1.28	F(1)	9,200	1.15	F(0)	-0.13	No	7,500	0.94	E	10,000	1.25	F(0)	0.31	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 2066 Future With No Project					Baseline			Year 2066 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	3,000	0.38	B	4,100	0.51	B	0.14	No	4,100	0.51	B	4,800	0.60	C	0.09	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,200	1.27	F(1)	15,700	1.31	F(1)	0.04	Yes	6,000	0.50	B	6,500	0.54	C	0.04	No
I-405	8.02	Santa Fe Ave.	10,000	8,900	0.89	D	9,300	0.93	D	0.04	No	10,700	1.07	F(0)	11,500	1.15	F(0)	0.08	Yes
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,100	0.85	D	7,800	1.30	F(1)	0.45	Yes	5,100	0.85	D	7,500	1.25	F(0)	0.40	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,800	0.98	E	9,500	1.19	F(0)	0.21	Yes	7,600	0.95	E	8,200	1.03	F(0)	0.08	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,800	1.35	F(1)	9,700	1.21	F(0)	-0.14	No	7,800	0.98	E	9,600	1.20	F(0)	0.23	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.

5.6.1.10.6 Cumulative Impact TRANS-5: Would proposed Project operations cause an increase in rail activity and delays in regional traffic?

Impacts of Past, Present, and Reasonably Foreseeable Future Projects Including the No Project Alternative

Under the No 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 No Project Alternative would have less than significant impacts under TRANS-5.

Contribution of the No Project Alternative

The No Project Alternative would not result in a change in rail trips or delays in regional traffic.

Mitigation Measures and Residual Cumulative Impacts

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

5.6.1.10.7 Impact TRANS-6: Proposed Project operations would not substantially increase hazards due to a design feature.

The proposed project site does not include any public roadways, and the No Project Alternative would not result in altered design features.

Contribution of the No Project Alternative

The No Project Alternative would not result in a contribution to a cumulative significant impact.

Mitigation Measures and Residual Cumulative Impacts

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

5.6.1.10.8 Impact TRANS-7: No Project Alternative operations would not result in inadequate emergency access.

The proposed project site has primary access through the main entrance gate at the south end of the primary Project site from the PCH, but also has at the north end of the primary Project site from Sepulveda Boulevard. Therefore adequate emergency access is provided to the site.

Contribution of the No Project Alternative

The No Project Alternative would not result in a contribution to a cumulative significant impact.

Mitigation Measures and Residual Cumulative Impacts

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

5.6.1.10.9 Impact TRANS-8: No Project Alternative 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.

The No Project Alternative would not conflict with policies, plans or programs regarding alternative transportation. Transit access will continue to occur on area roadways, the proposed bicycle facilities in the local area will remain the same, and no pedestrian facilities will be removed as part of the No Project Alternative.

Contribution of the No Project Alternative

The No Project Alternative would not result in a contribution to a cumulative significant impact.

Mitigation Measures and Residual Cumulative Impacts

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

5.6.1.11 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.

5.6.1.12 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.

5.6.2 Reduced Project Alternative

As describe in Section 5.5.2, under the Reduced Project Alternative, the SCIG facility and facilities at the alternate business locations 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 2035.

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.

5.6.2.1 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 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 5-21 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 CO concentrations from intersection hot spots. The Reduced Project Alternative would have fewer truck trips than the proposed Project, which was shown to have a less than significant impact for 1-hour or 8-hour CO concentrations due to on-road traffic. Accordingly the Reduced Project Alternative would not make a cumulatively considerable contribution to a significant cumulative 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. The Reduced Project Alternative would result in less-than-significant cancer risks, with mitigation, and less-than-significant hazard indices compared to the baseline (Table 5-25), 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 make a cumulatively considerable contribution to significant cumulative health risk impacts.

5.6.2.2 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.

5.6.2.3 Transportation

The Reduced Project Alternative includes the construction of the Proposed SCIG intermodal railyard, and its lead track. It 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 to the Reduced Project site would beat 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 alternate sites south of Pacific Coast Highway.

The Reduced Project Alternative was analyzed for future years 2016, 2023, 2035, 2046, and 2066 (assumed to be the same as 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 Project Alternative using the same QuickTrip trip generation model as used for the proposed Project and compared to the Future Baseline (No Project with ICTF Modernization Alternative) scenario. Traffic generated from Reduced Project Alternative would be less than for the proposed Project across all years of analysis and modes (truck and auto). Because the Reduced Project Alternative would have lower 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 5-49 illustrates 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 5-49. Alternative 2 – 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	40	65	125	125	85	75
2023	120	130	165	160	105	85
2035	275	300	380	370	240	200
2046	275	300	380	370	240	200
2066	275	300	380	370	240	200

For all analysis years the annual activity at the Reduced Project Alternative would occur 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 5-50 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 5-50. Alternative 2 – 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	(305)	(125)	(430)	(105)	(135)	(240)	(215)	(300)	(515)
2023	(225)	(60)	(285)	(65)	(100)	(165)	(195)	(290)	(485)
2035	(70)	110	40	150	110	260	(60)	(175)	(235)
2046	(70)	110	40	150	110	260	(60)	(175)	(235)
2066	(70)	110	40	150	110	260	(60)	(175)	(235)

5.6.2.3.1 Methodology

Impacts related to the Alternative 2 – Reduced Project Alternative were assessed using the same methodology as in the assessment of the proposed Project Alternative (Section 4.2.10). The differences between Future Baseline conditions and the Alternative 2 – Reduced Project Alternative were quantified. Local traffic growth was forecast for the years 2016, 2023, 2035, 2046, and 2066 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.

5.6.2.3.2 Cumulative Impact TRANS-1: Would construction result in a short-term impact to streets?

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

Past construction activities resulted in short-term, temporary impacts at selected roadway links, intersections and ramps. Construction period traffic handling measures were implemented to mitigate these impacts. Once construction was completed, no further construction traffic impacts occurred.

Contribution of the Reduced Project

Construction activities would generate vehicular traffic associated with construction workers' vehicles and trucks delivering equipment and fill material to the site. This site-generated traffic would potentially result in increased traffic volumes on the study area roadways during the three-year duration of construction (2013 – 2015).

The Reduced Project Alternative construction period traffic would be the same as for the proposed Project as shown in Chapter 3.10. The construction traffic would not cause a study intersection to exceed the thresholds for a significant impact. Accordingly, construction of 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.

5.6.2.3.3 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 5-51 to 5-55 summarize future intersection operating conditions of the Reduced Project Alternative at each study intersection in 2016, 2023, 2035, 2046, and 2066, respectively with the CEQA Baseline. A number of the study intersections, especially along Anaheim Street and PCH, are forecast to operate at LOS D in 2016 and worsen over the years to LOS E. Tables 5-56 to 5-59 compare the future "Without Project" to the Reduced Project Alternative at each study intersection in 2016, 2023, 2035, and 2046/ 2066, respectively. Cumulative impacts are shown to occur at two intersections in 2016, at two locations in 2023, at three locations in 2035, and at eight locations in 2046 and 2066. Accordingly, past, present, and reasonably foreseeable future projects, including the Reduced Project Alternative, would have a significant cumulative impact on study intersections.

Table 5-51. Intersection Level of Service Analysis – Year 2016 Alternative 2 – Reduced Project Alternative.

#	Study Intersection	CEQA Baseline						Year 2016 Alt. 2 – Reduced Project Alternative						Change in V/C			Sig. Cum. 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	0.335	A	0.398	A	0.375	A	0.454	A	0.369	A	0.468	0.119	-0.029	0.093	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.215	A	0.379	A	0.348	A	0.217	A	0.278	A	0.370	0.002	-0.101	0.022	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.266	A	0.313	A	0.341	A	0.306	A	0.305	A	0.375	0.040	-0.008	0.034	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.209	A	0.364	A	0.340	A	0.209	A	0.311	A	0.456	0.000	-0.053	0.116	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.527	A	0.416	B	0.641	B	0.613	A	0.294	C	0.724	0.086	-0.122	0.083	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.212	A	0.344	A	0.242	A	0.193	A	0.288	A	0.347	-0.019	-0.056	0.105	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.435	A	0.519	A	0.499	A	0.497	A	0.488	B	0.683	0.062	-0.031	0.184	N	N	N
8	Anaheim St / Harbor Ave [B]	A	0.453	A	0.455	A	0.560	B	0.629	B	0.675	C	0.781	0.176	0.220	0.221	N	N	N
9	Anaheim St / Santa Fe Ave [B]	A	0.473	A	0.508	A	0.578	B	0.651	B	0.615	D	0.832	0.178	0.107	0.254	N	N	N
10	Anaheim St / E I St / W 9th St [B]	A	0.501	A	0.525	A	0.529	B	0.606	A	0.584	C	0.790	0.105	0.059	0.261	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.377	A	0.328	A	0.386	A	0.243	A	0.227	A	0.544	-0.134	-0.101	0.158	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.400	A	0.516	B	0.660	A	0.490	A	0.566	C	0.793	0.090	0.050	0.133	N	N	Yes
13	Anaheim St / Alameda St [A]	A	0.461	A	0.425	A	0.568	A	0.444	A	0.391	B	0.618	-0.017	-0.034	0.050	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.178	A	0.225	A	0.267	A	0.265	A	0.169	A	0.231	0.087	-0.056	-0.036	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.243	A	0.215	A	0.318	A	0.245	A	0.165	A	0.340	0.002	-0.050	0.022	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.255	A	0.182	A	0.338	A	0.472	A	0.232	A	0.545	0.217	0.050	0.207	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.223	A	0.227	A	0.303	A	0.293	A	0.202	A	0.338	0.070	-0.025	0.035	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.153	A	0.128	A	0.227	A	0.218	A	0.132	A	0.352	0.065	0.004	0.125	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.219	A	0.177	A	0.302	A	0.415	A	0.302	B	0.652	0.196	0.125	0.350	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	A	0.335	A	0.337	A	0.392	A	0.55	A	0.357	C	0.730	0.215	0.020	0.338	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.605	A	0.511	B	0.661	A	0.452	A	0.387	A	0.570	-0.153	-0.124	-0.091	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.383	A	0.283	A	0.542	A	0.222	A	0.307	A	0.407	-0.161	0.024	-0.135	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.773	B	0.699	D	0.821	C	0.731	B	0.635	D	0.885	-0.042	-0.064	0.064	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.628	B	0.603	C	0.733	B	0.625	B	0.658	D	0.850	-0.003	0.055	0.117	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.679	A	0.484	B	0.612	A	0.5	A	0.528	A	0.537	-0.179	0.044	-0.075	N	N	N

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

Table 5-52. Intersection Level of Service Analysis – Year 2023 Alternative 2 – Reduced Project Alternative.

#	Study Intersection	CEQA Baseline						Year 2023 Alt. 2 – Reduced Project Alternative						Change in V/C			Sig. Cum. 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	0.335	A	0.398	A	0.375	A	0.499	A	0.370	A	0.460	0.164	-0.028	0.085	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.215	A	0.379	A	0.348	A	0.336	A	0.306	A	0.302	0.121	-0.073	-0.046	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.266	A	0.313	A	0.341	A	0.381	A	0.306	A	0.333	0.115	-0.007	-0.008	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.209	A	0.364	A	0.340	A	0.284	A	0.305	A	0.300	0.075	-0.059	-0.040	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.527	A	0.416	B	0.641	C	0.705	A	0.380	B	0.676	0.178	-0.036	0.035	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.212	A	0.344	A	0.242	A	0.225	A	0.305	A	0.198	0.013	-0.039	-0.044	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.435	A	0.519	A	0.499	B	0.632	A	0.543	A	0.547	0.197	0.024	0.048	N	N	N
8	Anaheim St / Harbor Ave [B]	A	0.453	A	0.455	A	0.560	B	0.650	B	0.689	B	0.693	0.197	0.234	0.133	N	N	N
9	Anaheim St / Santa Fe Ave [B]	A	0.473	A	0.508	A	0.578	C	0.708	B	0.633	C	0.777	0.235	0.125	0.199	N	N	N
10	Anaheim St / E I St / W 9th St [B]	A	0.501	A	0.525	A	0.529	B	0.676	A	0.567	C	0.775	0.175	0.042	0.246	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.377	A	0.328	A	0.386	A	0.354	A	0.260	A	0.530	-0.023	-0.068	0.144	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.400	A	0.516	B	0.660	A	0.555	A	0.573	C	0.792	0.155	0.057	0.132	N	N	Yes
13	Anaheim St / Alameda St [A]	A	0.461	A	0.425	A	0.568	A	0.454	A	0.396	B	0.691	-0.007	-0.029	0.123	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.178	A	0.225	A	0.267	A	0.329	A	0.169	A	0.229	0.151	-0.056	-0.038	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.243	A	0.215	A	0.318	A	0.248	A	0.175	A	0.310	0.005	-0.040	-0.008	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.255	A	0.182	A	0.338	A	0.488	A	0.255	A	0.593	0.233	0.073	0.255	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.223	A	0.227	A	0.303	A	0.312	A	0.223	A	0.353	0.089	-0.004	0.050	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.153	A	0.128	A	0.227	A	0.222	A	0.137	A	0.340	0.069	0.009	0.113	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.219	A	0.177	A	0.302	A	0.438	A	0.375	B	0.663	0.219	0.198	0.361	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	A	0.335	A	0.337	A	0.392	A	0.55	A	0.397	C	0.700	0.215	0.060	0.308	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.605	A	0.511	B	0.661	A	0.482	A	0.438	A	0.596	-0.123	-0.073	-0.065	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.383	A	0.283	A	0.542	A	0.271	A	0.332	A	0.364	-0.112	0.049	-0.178	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.773	B	0.699	D	0.821	C	0.756	B	0.638	D	0.826	-0.017	-0.061	0.005	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.628	B	0.603	C	0.733	B	0.629	B	0.680	C	0.773	0.001	0.077	0.040	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.679	A	0.484	B	0.612	A	0.536	A	0.467	B	0.600	-0.143	-0.017	-0.012	N	N	N

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

Table 5-53. Intersection Level of Service Analysis – Year 2035 Alternative 2 – Reduced Project Alternative.

#	Study Intersection	CEQA Baseline						Year 2035 Alt. 2 – Reduced Project Alternative						Change in V/C			Sig. Cum. 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	0.335	A	0.398	A	0.375	A	0.523	A	0.561	A	0.406	0.188	0.163	0.031	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.215	A	0.379	A	0.348	A	0.473	A	0.549	A	0.416	0.258	0.170	0.068	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.266	A	0.313	A	0.341	A	0.545	A	0.508	A	0.405	0.279	0.195	0.064	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.209	A	0.364	A	0.340	A	0.429	A	0.524	A	0.399	0.220	0.160	0.059	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.527	A	0.416	B	0.641	C	0.712	B	0.609	B	0.686	0.185	0.193	0.045	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.212	A	0.344	A	0.242	A	0.395	A	0.463	A	0.372	0.183	0.119	0.130	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.435	A	0.519	A	0.499	D	0.813	D	0.864	B	0.603	0.378	0.345	0.104	N	N	N
8	Anaheim St / Harbor Ave [B]	A	0.453	A	0.455	A	0.560	C	0.71	C	0.734	B	0.646	0.257	0.279	0.086	N	N	N
9	Anaheim St / Santa Fe Ave [B]	A	0.473	A	0.508	A	0.578	B	0.627	B	0.642	C	0.763	0.154	0.134	0.185	N	N	N
10	Anaheim St / E I St / W 9th St [B]	A	0.501	A	0.525	A	0.529	D	0.815	C	0.756	C	0.764	0.314	0.231	0.235	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.377	A	0.328	A	0.386	A	0.436	A	0.373	A	0.466	0.059	0.045	0.080	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.400	A	0.516	B	0.660	B	0.626	B	0.682	C	0.777	0.226	0.166	0.117	N	N	Yes
13	Anaheim St / Alameda St [A]	A	0.461	A	0.425	A	0.568	A	0.474	A	0.433	B	0.658	0.013	0.008	0.090	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.178	A	0.225	A	0.267	A	0.251	A	0.127	A	0.178	0.073	-0.098	-0.089	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.243	A	0.215	A	0.318	A	0.25	A	0.175	A	0.335	0.007	-0.040	0.017	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.255	A	0.182	A	0.338	A	0.463	A	0.317	A	0.565	0.208	0.135	0.227	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.223	A	0.227	A	0.303	A	0.243	A	0.232	A	0.360	0.020	0.005	0.057	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.153	A	0.128	A	0.227	A	0.127	A	0.067	A	0.258	-0.026	-0.061	0.031	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.219	A	0.177	A	0.302	A	0.371	A	0.235	A	0.342	0.152	0.058	0.040	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	A	0.335	A	0.337	A	0.392	B	0.613	A	0.470	C	0.770	0.278	0.133	0.378	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.605	A	0.511	B	0.661	A	0.518	A	0.468	B	0.637	-0.087	-0.043	-0.024	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.383	A	0.283	A	0.542	A	0.372	A	0.310	A	0.442	-0.011	0.027	-0.100	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.773	B	0.699	D	0.821	E	0.937	D	0.842	E	0.937	0.164	0.143	0.116	Yes	N	Yes
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.628	B	0.603	C	0.733	C	0.743	C	0.734	D	0.894	0.115	0.131	0.161	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.679	A	0.484	B	0.612	A	0.539	A	0.517	A	0.534	-0.140	0.033	-0.078	N	N	N

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

Table 5-54. Intersection Level of Service Analysis –Year 2046 Alternative 2 – Reduced Project Alternative.

#	Study Intersection	CEQA Baseline						Year 2046 Alt. 2 – Reduced Project Alternative						Change in V/C			Sig. Cum. 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	0.335	A	0.398	A	0.375	B	0.633	A	0.538	A	0.492	0.298	0.140	0.117	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.215	A	0.379	A	0.348	A	0.470	A	0.384	A	0.393	0.255	0.005	0.045	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.266	A	0.313	A	0.341	A	0.553	A	0.475	A	0.395	0.287	0.162	0.054	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.209	A	0.364	A	0.340	A	0.402	A	0.467	A	0.441	0.193	0.103	0.101	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.527	A	0.416	B	0.641	D	0.890	A	0.592	C	0.765	0.363	0.176	0.124	Yes	N	Yes
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.212	A	0.344	A	0.242	A	0.395	A	0.467	A	0.370	0.183	0.123	0.128	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.435	A	0.519	A	0.499	D	0.885	D	0.844	B	0.683	0.450	0.325	0.184	N	N	N
8	Anaheim St / Harbor Ave [B]	A	0.453	A	0.455	A	0.560	C	0.786	D	0.845	C	0.755	0.333	0.390	0.195	N	N	N
9	Anaheim St / Santa Fe Ave [B]	A	0.473	A	0.508	A	0.578	D	0.814	C	0.757	E	0.941	0.341	0.249	0.363	N	N	Yes
10	Anaheim St / E I St / W 9th St [B]	A	0.501	A	0.525	A	0.529	D	0.847	C	0.737	D	0.873	0.346	0.212	0.344	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.377	A	0.328	A	0.386	A	0.436	A	0.375	A	0.584	0.059	0.047	0.198	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.400	A	0.516	B	0.660	C	0.732	C	0.753	E	0.902	0.332	0.237	0.242	Yes	Yes	Yes
13	Anaheim St / Alameda St [A]	A	0.461	A	0.425	A	0.568	A	0.589	A	0.474	C	0.747	0.128	0.049	0.179	N	N	Yes
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.178	A	0.225	A	0.267	A	0.440	A	0.169	A	0.227	0.262	-0.056	-0.040	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.243	A	0.215	A	0.318	A	0.297	A	0.222	A	0.432	0.054	0.007	0.114	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.255	A	0.182	A	0.338	A	0.540	A	0.390	B	0.693	0.285	0.208	0.355	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.223	A	0.227	A	0.303	A	0.323	A	0.300	A	0.378	0.100	0.073	0.075	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.153	A	0.128	A	0.227	A	0.242	A	0.192	A	0.390	0.089	0.064	0.163	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.219	A	0.177	A	0.302	A	0.588	A	0.490	C	0.798	0.369	0.313	0.496	N	N	Yes
20	Harry Bridges Blvd / Figueroa St [A]	A	0.335	A	0.337	A	0.392	B	0.637	A	0.460	C	0.795	0.302	0.123	0.403	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.605	A	0.511	B	0.661	A	0.499	A	0.540	B	0.630	-0.106	0.029	-0.031	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.383	A	0.283	A	0.542	A	0.336	A	0.417	A	0.439	-0.047	0.134	-0.103	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.773	B	0.699	D	0.821	E	0.903	C	0.792	E	0.946	0.130	0.093	0.125	Yes	N	Yes
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.628	B	0.603	C	0.733	B	0.695	C	0.782	E	0.908	0.067	0.179	0.175	N	N	Yes
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.679	A	0.484	B	0.612	A	0.523	B	0.640	B	0.623	-0.156	0.156	0.011	N	N	N

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

Table 5-55. Intersection Level of Service Analysis –Year 2066 Alternative 2 – Reduced Project Alternative.

#	Study Intersection	CEQA Baseline						Year 2066 Alt. 2 – Reduced Project Alternative						Change in V/C			Sig. Cum. 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	0.335	A	0.398	A	0.375	B	0.633	A	0.538	A	0.492	0.298	0.140	0.117	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.215	A	0.379	A	0.348	A	0.470	A	0.384	A	0.393	0.255	0.005	0.045	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.266	A	0.313	A	0.341	A	0.553	A	0.475	A	0.395	0.287	0.162	0.054	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.209	A	0.364	A	0.340	A	0.402	A	0.467	A	0.441	0.193	0.103	0.101	N	N	N
5	Seaside Ave / Navy Wy [A]	A	0.527	A	0.416	B	0.641	D	0.890	A	0.592	C	0.765	0.363	0.176	0.124	Yes	N	Yes
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.212	A	0.344	A	0.242	A	0.395	A	0.467	A	0.370	0.183	0.123	0.128	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.435	A	0.519	A	0.499	D	0.885	D	0.844	B	0.683	0.450	0.325	0.184	N	N	N
8	Anaheim St / Harbor Ave [B]	A	0.453	A	0.455	A	0.560	C	0.786	D	0.845	C	0.755	0.333	0.390	0.195	N	N	N
9	Anaheim St / Santa Fe Ave [B]	A	0.473	A	0.508	A	0.578	D	0.814	C	0.757	E	0.941	0.341	0.249	0.363	N	N	Yes
10	Anaheim St / E I St / W 9th St [B]	A	0.501	A	0.525	A	0.529	D	0.847	C	0.737	D	0.873	0.346	0.212	0.344	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.377	A	0.328	A	0.386	A	0.436	A	0.375	A	0.584	0.059	0.047	0.198	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.400	A	0.516	B	0.660	C	0.732	C	0.753	E	0.902	0.332	0.237	0.242	Yes	Yes	Yes
13	Anaheim St / Alameda St [A]	A	0.461	A	0.425	A	0.568	A	0.589	A	0.474	C	0.747	0.128	0.049	0.179	N	N	Yes
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.178	A	0.225	A	0.267	A	0.440	A	0.169	A	0.227	0.262	-0.056	-0.040	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.243	A	0.215	A	0.318	A	0.297	A	0.222	A	0.432	0.054	0.007	0.114	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.255	A	0.182	A	0.338	A	0.540	A	0.390	B	0.693	0.285	0.208	0.355	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.223	A	0.227	A	0.303	A	0.323	A	0.300	A	0.378	0.100	0.073	0.075	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.153	A	0.128	A	0.227	A	0.242	A	0.192	A	0.390	0.089	0.064	0.163	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.219	A	0.177	A	0.302	A	0.588	A	0.490	C	0.798	0.369	0.313	0.496	N	N	Yes
20	Harry Bridges Blvd / Figueroa St [A]	A	0.335	A	0.337	A	0.392	B	0.637	A	0.460	C	0.795	0.302	0.123	0.403	N	N	Yes
21	Pacific Coast Hwy / Alameda St Ramp [A]	B	0.605	A	0.511	B	0.661	A	0.499	A	0.540	B	0.630	-0.106	0.029	-0.031	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.383	A	0.283	A	0.542	A	0.336	A	0.417	A	0.439	-0.047	0.134	-0.103	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.773	B	0.699	D	0.821	E	0.903	C	0.792	E	0.946	0.130	0.093	0.125	Yes	N	Yes
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.628	B	0.603	C	0.733	B	0.695	C	0.782	E	0.908	0.067	0.179	0.175	N	N	Yes
25	Sepulveda Blvd / Alameda St Ramp [C]	B	0.679	A	0.484	B	0.612	A	0.523	B	0.640	B	0.623	-0.156	0.156	0.011	N	N	N

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

Table 5-56. Intersection Level of Service Comparison– Year 2016.

#	Study Intersection	Year 2016 Without Project						Year 2016 Alt. 2 – Reduced Project Alternative						Change in V/C			Considerable Contribution?		
		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	0.452	A	0.365	A	0.466	A	0.454	A	0.369	A	0.468	0.002	0.004	0.002	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.217	A	0.277	A	0.366	A	0.217	A	0.278	A	0.370	0.000	0.001	0.004	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.305	A	0.3	A	0.373	A	0.306	A	0.305	A	0.375	0.001	0.005	0.002	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.207	A	0.306	A	0.456	A	0.209	A	0.311	A	0.456	0.002	0.005	0.000	N	N	N
5	Seaside Ave / Navy Wy [A]	B	0.614	A	0.294	C	0.725	B	0.613	A	0.294	C	0.724	-0.001	0.000	-0.001	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.193	A	0.288	A	0.347	A	0.193	A	0.288	A	0.347	0.000	0.000	0.000	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	A	0.510	A	0.51	C	0.700	A	0.497	A	0.488	B	0.683	-0.013	-0.022	-0.017	N	N	N
8	Anaheim St / Harbor Ave [B]	B	0.633	B	0.671	C	0.782	B	0.629	B	0.675	C	0.781	-0.004	0.004	-0.001	N	N	N
9	Anaheim St / Santa Fe Ave [B]	B	0.653	B	0.61	D	0.832	B	0.651	B	0.615	D	0.832	-0.002	0.005	0.000	N	N	N
10	Anaheim St / E I St / W 9th St [B]	A	0.592	A	0.542	C	0.770	B	0.606	A	0.584	C	0.790	0.014	0.042	0.020	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.237	A	0.216	A	0.536	A	0.243	A	0.227	A	0.544	0.006	0.011	0.008	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.499	A	0.549	C	0.794	A	0.490	A	0.566	C	0.793	-0.009	0.017	-0.001	N	N	N
13	Anaheim St / Alameda St [A]	A	0.489	A	0.416	B	0.681	A	0.444	A	0.391	B	0.618	-0.045	-0.025	-0.063	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.267	A	0.171	A	0.233	A	0.265	A	0.169	A	0.231	-0.002	-0.002	-0.002	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.257	A	0.177	A	0.345	A	0.245	A	0.165	A	0.340	-0.012	-0.012	-0.005	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.483	A	0.247	A	0.550	A	0.472	A	0.232	A	0.545	-0.011	-0.015	-0.005	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.315	A	0.218	A	0.347	A	0.293	A	0.202	A	0.338	-0.022	-0.016	-0.009	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.237	A	0.145	A	0.355	A	0.218	A	0.132	A	0.352	-0.019	-0.013	-0.003	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.427	A	0.319	B	0.654	A	0.415	A	0.302	B	0.652	-0.012	-0.017	-0.002	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	A	0.550	A	0.367	C	0.737	A	0.550	A	0.357	C	0.730	0.000	-0.010	-0.007	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp [A]	A	0.464	A	0.432	B	0.621	A	0.452	A	0.387	A	0.570	-0.012	-0.045	-0.051	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.219	A	0.325	A	0.428	A	0.222	A	0.307	A	0.407	0.003	-0.018	-0.021	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.754	B	0.64	E	0.917	C	0.731	B	0.635	D	0.885	-0.023	-0.005	-0.032	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.641	B	0.661	D	0.869	B	0.625	B	0.658	D	0.850	-0.016	-0.003	-0.019	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	A	0.504	A	0.534	A	0.570	A	0.500	A	0.528	A	0.537	-0.004	-0.006	-0.033	N	N	N

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

Table 5-57. Intersection Level of Service Comparison– Year 2023.

#	Study Intersection	Year 2023 Without Project						Year 2023 Alt. 2 – Reduced Project Alternative						Change in V/C			Considerable Contribution?		
		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	0.495	A	0.367	A	0.458	A	0.499	A	0.37	A	0.460	0.004	0.003	0.002	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.336	A	0.306	A	0.303	A	0.336	A	0.306	A	0.302	0.000	0.000	-0.001	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.377	A	0.302	A	0.331	A	0.381	A	0.306	A	0.333	0.004	0.004	0.002	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.284	A	0.301	A	0.297	A	0.284	A	0.305	A	0.300	0.000	0.004	0.003	N	N	N
5	Seaside Ave / Navy Wy [A]	C	0.706	A	0.380	B	0.677	C	0.705	A	0.380	B	0.676	-0.001	0.000	-0.001	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.225	A	0.305	A	0.198	A	0.225	A	0.305	A	0.198	0.000	0.000	0.000	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 [B]	B	0.650	A	0.571	A	0.574	B	0.632	A	0.543	A	0.547	-0.018	-0.028	-0.027	N	N	N
8	Anaheim St / Harbor Ave [B]	B	0.647	B	0.677	B	0.690	B	0.650	B	0.689	B	0.693	0.003	0.012	0.003	N	N	N
9	Anaheim St / Santa Fe Ave [B]	C	0.704	B	0.622	C	0.773	C	0.708	B	0.633	C	0.777	0.004	0.011	0.004	N	N	N
10	Anaheim St / E I St / W 9th St [B]	B	0.648	A	0.539	C	0.775	B	0.676	A	0.567	C	0.775	0.028	0.028	0.000	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.351	A	0.257	A	0.528	A	0.354	A	0.26	A	0.530	0.003	0.003	0.002	N	N	N
12	Anaheim St / Henry Ford Ave [A]	A	0.571	A	0.568	D	0.802	A	0.555	A	0.573	C	0.792	-0.016	0.005	-0.010	N	N	N
13	Anaheim St / Alameda St [A]	A	0.475	A	0.418	C	0.711	A	0.454	A	0.396	B	0.691	-0.021	-0.022	-0.020	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.331	A	0.171	A	0.231	A	0.329	A	0.169	A	0.229	-0.002	-0.002	-0.002	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.252	A	0.178	A	0.315	A	0.248	A	0.175	A	0.310	-0.004	-0.003	-0.005	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.492	A	0.26	A	0.598	A	0.488	A	0.255	A	0.593	-0.004	-0.005	-0.005	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.322	A	0.232	A	0.362	A	0.312	A	0.223	A	0.353	-0.010	-0.009	-0.009	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.223	A	0.14	A	0.343	A	0.222	A	0.137	A	0.340	-0.001	-0.003	-0.003	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.440	A	0.379	B	0.667	A	0.438	A	0.375	B	0.663	-0.002	-0.004	-0.004	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	A	0.557	A	0.403	C	0.707	A	0.550	A	0.397	C	0.700	-0.007	-0.006	-0.007	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp [A]	A	0.485	A	0.447	B	0.602	A	0.482	A	0.438	A	0.596	-0.003	-0.009	-0.006	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.279	A	0.333	A	0.369	A	0.271	A	0.332	A	0.364	-0.008	-0.001	-0.005	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	C	0.785	B	0.645	D	0.857	C	0.756	B	0.638	D	0.826	-0.029	-0.007	-0.031	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	B	0.647	B	0.684	C	0.792	B	0.629	B	0.68	C	0.773	-0.018	-0.004	-0.019	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	A	0.539	A	0.523	B	0.614	A	0.536	A	0.467	B	0.600	-0.003	-0.056	-0.014	N	N	N

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

Table 5-58. Intersection Level of Service Comparison– Year 2035.

#	Study Intersection	Year 2035 Without Project						Year 2035 Alt. 2 – Reduced Project Alternative						Change in V/C			Considerable Contribution?		
		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	0.497	A	0.531	A	0.391	A	0.523	A	0.561	A	0.406	0.026	0.030	0.015	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.435	A	0.502	A	0.387	A	0.473	A	0.549	A	0.416	0.038	0.047	0.029	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.517	A	0.473	A	0.387	A	0.545	A	0.508	A	0.405	0.028	0.035	0.018	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.429	A	0.491	A	0.394	A	0.429	A	0.524	A	0.399	0.000	0.033	0.005	N	N	N
5	Seaside Ave / Navy Wy [A]	C	0.716	B	0.611	B	0.687	C	0.712	B	0.609	B	0.686	-0.004	-0.002	-0.001	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.395	A	0.463	A	0.372	A	0.395	A	0.463	A	0.372	0.000	0.000	0.000	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	D	0.819	D	0.883	B	0.622	D	0.813	D	0.864	B	0.603	-0.006	-0.019	-0.019	N	N	N
8	Anaheim St / Harbor Ave [B]	B	0.698	C	0.707	B	0.633	C	0.710	C	0.734	B	0.646	0.012	0.027	0.013	N	N	N
9	Anaheim St / Santa Fe Ave [B]	B	0.612	B	0.615	C	0.753	B	0.627	B	0.642	C	0.763	0.015	0.027	0.010	N	N	N
10	Anaheim St / E I St / W 9th St [B]	C	0.728	B	0.651	C	0.721	D	0.815	C	0.756	C	0.764	0.087	0.105	0.043	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.403	A	0.332	A	0.440	A	0.436	A	0.373	A	0.466	0.033	0.041	0.026	N	N	N
12	Anaheim St / Henry Ford Ave [A]	B	0.605	B	0.633	C	0.747	B	0.626	B	0.682	C	0.777	0.021	0.049	0.030	N	N	N
13	Anaheim St / Alameda St [A]	A	0.481	A	0.437	B	0.679	A	0.474	A	0.433	B	0.658	-0.007	-0.004	-0.021	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 [A]	A	0.253	A	0.129	A	0.182	A	0.251	A	0.127	A	0.178	-0.002	-0.002	-0.004	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.245	A	0.172	A	0.337	A	0.250	A	0.175	A	0.335	0.005	0.003	-0.002	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.458	A	0.313	A	0.565	A	0.463	A	0.317	A	0.565	0.005	0.004	0.000	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.240	A	0.22	A	0.353	A	0.243	A	0.232	A	0.360	0.003	0.012	0.007	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.127	A	0.065	A	0.258	A	0.127	A	0.067	A	0.258	0.000	0.002	0.000	N	N	N
19	Harry Bridges Blvd / King Ave [A]	A	0.371	A	0.235	A	0.342	A	0.371	A	0.235	A	0.342	0.000	0.000	0.000	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	B	0.660	A	0.53	C	0.782	B	0.613	A	0.47	C	0.770	-0.047	-0.060	-0.012	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp [A]	A	0.518	A	0.47	B	0.635	A	0.518	A	0.468	B	0.637	0.000	-0.002	0.002	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.383	A	0.311	A	0.450	A	0.372	A	0.31	A	0.442	-0.011	-0.001	-0.008	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	E	0.962	D	0.845	E	0.976	E	0.937	D	0.842	E	0.937	-0.025	-0.003	-0.039	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	C	0.759	C	0.746	E	0.918	C	0.743	C	0.734	D	0.894	-0.016	-0.012	-0.024	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	A	0.542	A	0.461	A	0.559	A	0.539	A	0.517	A	0.534	-0.003	0.056	-0.025	N	N	N

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

Table 5-59. Intersection Level of Service Comparison–Year 2046 and 2066.

#	Study Intersection	Year 2046 and 2066 Without Project						Year 2046 and 2066 Reduced Project Alternative						Change in V/C			Considerable Contribution?		
		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	0.607	A	0.509	A	0.478	B	0.633	A	0.538	A	0.492	0.026	0.029	0.014	N	N	N
2	Ocean Blvd (EB) / Terminal Island Fwy [A]	A	0.433	A	0.377	A	0.364	A	0.470	A	0.384	A	0.393	0.037	0.007	0.029	N	N	N
3	Ocean Blvd (WB) / Pier S Ave [A]	A	0.525	A	0.441	A	0.378	A	0.553	A	0.475	A	0.395	0.028	0.034	0.017	N	N	N
4	Ocean Blvd (EB) / Pier S Ave [A]	A	0.402	A	0.435	A	0.441	A	0.402	A	0.467	A	0.441	0.000	0.032	0.000	N	N	N
5	Seaside Ave / Navy Wy [A]	D	0.894	A	0.594	C	0.767	D	0.890	A	0.592	C	0.765	-0.004	-0.002	-0.002	N	N	N
6	Ferry St (Seaside Ave) / SR-47 Ramps [A]	A	0.395	A	0.467	A	0.370	A	0.395	A	0.467	A	0.370	0.000	0.000	0.000	N	N	N
7	Pico Ave / Pier B St / 9th St / I-710 Ramps [B]	D	0.891	D	0.863	C	0.702	D	0.885	D	0.844	B	0.683	-0.006	-0.019	-0.019	N	N	N
8	Anaheim St / Harbor Ave [B]	C	0.774	D	0.819	C	0.745	C	0.786	D	0.845	C	0.755	0.012	0.026	0.010	N	N	N
9	Anaheim St / Santa Fe Ave [B]	D	0.811	C	0.73	E	0.931	D	0.814	C	0.757	E	0.941	0.003	0.027	0.010	N	N	N
10	Anaheim St / E I St / W 9th St [B]	C	0.759	B	0.631	D	0.840	D	0.847	C	0.737	D	0.873	0.088	0.106	0.033	N	N	N
11	Anaheim St / Farragut Ave [A]	A	0.403	A	0.465	A	0.558	A	0.436	A	0.375	A	0.584	0.033	-0.090	0.026	N	N	N
12	Anaheim St / Henry Ford Ave [A]	C	0.709	C	0.701	D	0.873	C	0.732	C	0.753	E	0.902	0.023	0.052	0.029	N	Yes	Yes
13	Anaheim St / Alameda St [A]	B	0.618	A	0.484	C	0.768	A	0.589	A	0.474	C	0.747	-0.029	-0.010	-0.021	N	N	N
14	Henry Ford Ave / Pier A Wy / SR-47/103 Ramps [A]	A	0.442	A	0.171	A	0.229	A	0.440	A	0.169	A	0.227	-0.002	-0.002	-0.002	N	N	N
15	Harry Bridges Blvd / Broad Ave [A]	A	0.292	A	0.218	A	0.433	A	0.297	A	0.222	A	0.432	0.005	0.004	-0.001	N	N	N
16	Harry Bridges Blvd / Avalon Blvd [A]	A	0.535	A	0.387	B	0.693	A	0.540	A	0.39	B	0.693	0.005	0.003	0.000	N	N	N
17	Harry Bridges Blvd / Fries Ave [A]	A	0.343	A	0.28	A	0.392	A	0.323	A	0.3	A	0.378	-0.020	0.020	-0.014	N	N	N
18	Harry Bridges Blvd / Neptune Ave [A]	A	0.242	A	0.192	A	0.392	A	0.242	A	0.192	A	0.390	0.000	0.000	-0.002	N	N	N
19	Harry Bridges Blvd / Wilmington Blvd [A]	A	0.585	A	0.49	C	0.798	A	0.588	A	0.49	C	0.798	0.003	0.000	0.000	N	N	N
20	Harry Bridges Blvd / Figueroa St [A]	B	0.683	A	0.52	D	0.807	B	0.637	A	0.46	C	0.795	-0.046	-0.060	-0.012	N	N	N
21	Pacific Coast Hwy / Alameda St Ramp [A]	A	0.526	A	0.551	B	0.649	A	0.499	A	0.54	B	0.630	-0.027	-0.011	-0.019	N	N	N
22	Pacific Coast Hwy / Site Entrance [A]	A	0.347	A	0.418	A	0.447	A	0.336	A	0.417	A	0.439	-0.011	-0.001	-0.008	N	N	N
23	Pacific Coast Hwy / Santa Fe Ave [B]	E	0.924	C	0.792	E	0.985	E	0.903	C	0.792	E	0.946	-0.021	0.000	-0.039	N	N	N
24	Pacific Coast Hwy / Harbor Ave [B]	C	0.711	C	0.794	E	0.932	B	0.695	C	0.782	E	0.908	-0.016	-0.012	-0.024	N	N	N
25	Sepulveda Blvd / Alameda St Ramp [C]	A	0.547	C	0.756	B	0.637	A	0.523	B	0.64	B	0.623	-0.024	-0.116	-0.014	N	N	N

Notes:
A) City of Los Angeles intersection, analyzed using CMA methodology according to City standards.
B) City of Long Beach intersection analyzed using ICU methodology according to City standards.
C) City of Carson intersection analyzed using 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.
- Land uses moved to the alternate business sites would shift the majority of existing site-related trips to Anaheim Street from Pacific Coast Highway and Sepulveda Boulevard.
- Reduced Project Alternative 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, 2023, and 2035.In 2046 and 2066,the intersection of Anaheim Street at Henry Ford Avenue (study intersection #12) would be considered to have a significant impact in the midday and P.M. peak hours per City of Los Angeles Threshold of Significance criteria. Therefore the Reduced Project Alternative would result in a cumulatively considerable contribution to a significant cumulative impact at this location.

The amount of Reduced 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 Reduced Project Alternative would not make a cumulatively considerable contribution to a significant cumulative impact at other locations.

Mitigation Measures

The following mitigation measure would be required to be implemented by the project applicant BNSF to mitigate the significant traffic impact of the Reduced Project Alternative.

MM TRANS-1:In 2046, BNSF shall contribute funding for the reconfiguration of the northbound shared left/through lane of Anaheim Street at Henry Ford Avenue to a through lane, and to changing the northbound and southbound phasing from split phasing to protected left-turn phasing. BNSF's contribution shall be proportionate to its share of the impact at that intersection.

Table 5-60 presents the level-of-service results with implementation of the mitigation measure in 2046 and 2066.

Residual Cumulative Impacts

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

5.6.2.3.4 Cumulative Impact TRANS-3: Would an increase in on-site employees during operations result in a substantial increase in public transit use?

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

As described in Section 3.10.3, existing public transit in the general area of the proposed Project operates well under capacity. For example, observations of transit usage in the area for bus routes that serve the project area (Metro routes 220 and Long Beach Transit Route 191, 192 and 193) revealed that the buses are currently not operating anywhere near capacity and would be able to accommodate the estimated increase in demand. As with the project, other cumulative port growth would result in negligible increases in demand for transit usage because port terminal workers drive to the union terminals and work sites. Accordingly, the related projects in Table 4-1 are not expected to have a significant cumulative impact on public transit.

Contribution of the Reduced Project Alternative

Although the Reduced Project would result in additional on-site employees, the increase in work-related trips using public transit would be negligible. Intermodal facilities generate extremely low transit demand for several reasons. The primary reason that Reduced Project workers generally would not use public transit is their work shift schedule. Most workers prefer to use a personal automobile to facilitate timely commuting, and in any case would live throughout the Southern California region and not have access to the few bus routes that serve the Port. Finally, parking at Reduced Project site would be readily available and free for employees. Therefore, it is expected that fewer than ten work trips per day would be made on public transit, which could easily be accommodated by existing transit services and would not result in a demand for transit services which would exceed the supply of such services. Accordingly, the Reduced 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.

Table 5-60. Intersection Level of Service Comparison–Years 2046 and 2066 Reduced Project Alternative with Mitigation.

#	Study Intersection	Year 2046 and 2066 Without Project						Year 2046 and 2066Reduced Project Alternative with Mitigation						Change in V/C			Considerable Contribution?		
		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
12	Anaheim St / Henry Ford Ave [A]	C	0.709	C	0.701	D	0.873	C	0.716	C	0.735	D	0.884	0.007	0.034	0.011	N	N	N

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

5.6.2.3.5 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 5-61 through 5-64summarize the changes to freeway monitoring locations due to the Reduced Project Alternative for years 2016, 2023, 2035 and 2046/2066.

Table 5-61. 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.	4,400	3,200	3,200	4,200	4,300	3,100	3,200	4,100	(100)	(100)	-	(100)
SR-91	e/o Alameda Street/Santa Fe	7,500	15,300	9,900	6,100	7,400	15,300	9,900	6,100	(100)	-	-	-
I-405	Santa Fe Ave.	11,700	9,000	8,700	10,800	11,700	8,800	8,700	10,800	-	(200)	-	-
I-710	n/o Jct Rte 1 (PCH), Willow St.	6,500	7,100	6,900	6,800	6,400	7,000	6,800	6,700	(100)	(100)	(100)	(100)
I-710	n/o Jct Rte 405, s/o Del Amo	8,300	9,300	8,400	8,400	8,200	9,300	8,300	8,300	(100)	-	(100)	(100)
I-710	n/o Rte 105, n/o Firestone	8,700	9,600	8,500	9,300	8,600	9,500	8,300	9,200	(100)	(100)	(200)	(100)

Table 5-62. 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.	4,600	3,400	3,400	4,300	4,500	3,400	3,400	4,300	(100)	-	-	-
SR-91	e/o Alameda Street/Santa Fe	7,700	15,400	10,000	6,200	7,700	15,400	10,000	6,200	-	-	-	-
I-405	Santa Fe Ave.	11,900	9,000	8,800	11,000	11,900	8,900	8,800	11,000	-	(100)	-	-
I-710	n/o Jct Rte 1 (PCH), Willow St.	7,200	7,200	7,500	6,900	7,000	7,000	7,300	6,800	(200)	(200)	(200)	(100)
I-710	n/o Jct Rte 405, s/o Del Amo	8,400	9,200	8,900	8,200	8,300	9,100	8,800	8,200	(100)	(100)	(100)	-
I-710	n/o Rte 105, n/o Firestone	8,800	9,500	9,000	9,300	8,700	9,500	8,800	9,300	(100)	-	(200)	-

Table 5-63. 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.	5,100	3,700	3,800	4,600	5,100	3,600	3,800	4,600	-	(100)	-	-
SR-91	e/o Alameda Street/Santa Fe	8,000	15,500	10,100	6,300	8,000	15,500	10,100	6,300	-	-	-	-
I-405	Santa Fe Ave.	12,300	9,200	9,100	11,200	12,300	9,200	9,100	11,200	-	-	-	-
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 5-64. Year 2046 and 2066 Reduced Project Freeway Analysis.

Fwy.	Location	Year 2046/2066 Future Baseline				Year 2046/2066 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.	5,500	4,100	4,200	4,800	5,500	4,000	4,200	4,800	-	(100)	-	-
SR-91	e/o Alameda Street/Santa Fe	8,300	15,700	10,200	6,500	8,300	15,700	10,200	6,500	-	-	-	-
I-405	Santa Fe Ave.	12,700	9,300	9,300	11,500	12,700	9,300	9,300	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 Reduced 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 5-65 through 5-68, shows cumulative impacts projected to occur at many locations. However, the analysis of the cumulatively considerable conditions, shown in Tables 5-69 through 5-72, show that no cumulatively considerable impact would occur with implementation of the Reduced Project Alternative. The effect of the Reduced Project Alternative on actual freeway traffic volumes would be minor, as shown in Tables 5-61 through 5-64, 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.

Table 5-65. 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	4,200	0.53	B	4,300	0.54	B	0.01	No	3,000	0.38	B	3,200	0.40	B	0.03	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,400	0.62	C	7,400	0.62	C	0.00	No	9,900	0.83	D	9,900	0.83	D	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	11,500	1.15	F(0)	11,700	1.17	F(0)	0.02	Yes	8,600	0.86	D	8,700	0.87	D	0.01	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,500	0.92	D	6,400	1.07	F(0)	0.15	Yes	5,400	0.90	D	6,800	1.13	F(0)	0.23	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,900	0.99	E	8,200	1.03	F(0)	0.04	Yes	8,400	1.05	F(0)	8,300	1.04	F(0)	-0.01	No
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,200	1.28	F(1)	8,600	1.08	F(0)	-0.20	No	7,500	0.94	E	8,300	1.04	F(0)	0.10	Yes

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	3,000	0.38	B	3,100	0.39	B	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	15,200	1.27	F(1)	15,300	1.28	F(1)	0.01	No	6,000	0.50	B	6,100	0.51	B	0.01	No
I-405	8.02	Santa Fe Ave.	10,000	8,900	0.89	D	8,800	0.88	D	-0.01	No	10,700	1.07	F(0)	10,800	1.08	F(0)	0.01	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,100	0.85	D	7,000	1.17	F(0)	0.32	Yes	5,100	0.85	D	6,700	1.12	F(0)	0.27	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,800	0.98	E	9,300	1.16	F(0)	0.19	Yes	7,600	0.95	E	8,300	1.04	F(0)	0.09	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,800	1.35	F(1)	9,500	1.19	F(0)	-0.16	No	7,800	0.98	E	9,200	1.15	F(0)	0.18	Yes

Table 5-66. Year 2023 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 2023 Future With Reduced Project					Baseline			Year 2023 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	4,200	0.53	B	4,500	0.56	C	0.04	No	3,000	0.38	B	3,400	0.43	B	0.05	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,400	0.62	C	7,700	0.64	C	0.03	No	9,900	0.83	D	10,000	0.83	D	0.01	No
I-405	8.02	Santa Fe Ave.	10,000	11,500	1.15	F(0)	11,900	1.19	F(0)	0.04	Yes	8,600	0.86	D	8,800	0.88	D	0.02	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,500	0.92	D	7,000	1.17	F(0)	0.25	Yes	5,400	0.90	D	7,300	1.22	F(0)	0.32	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,900	0.99	E	8,300	1.04	F(0)	0.05	Yes	8,400	1.05	F(0)	8,800	1.10	F(0)	0.05	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,200	1.28	F(1)	8,700	1.09	F(0)	-0.19	No	7,500	0.94	E	8,800	1.10	F(0)	0.16	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 Reduced Project					Baseline			Year 2023 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	3,000	0.38	B	3,400	0.43	B	0.05	No	4,100	0.51	B	4,300	0.54	B	0.03	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,200	1.27	F(1)	15,400	1.28	F(1)	0.02	No	6,000	0.50	B	6,200	0.52	B	0.02	No
I-405	8.02	Santa Fe Ave.	10,000	8,900	0.89	D	8,900	0.89	D	0.00	No	10,700	1.07	F(0)	11,000	1.10	F(0)	0.03	Yes
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,100	0.85	D	7,000	1.17	F(0)	0.32	Yes	5,100	0.85	D	6,800	1.13	F(0)	0.28	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,800	0.98	E	9,100	1.14	F(0)	0.16	Yes	7,600	0.95	E	8,200	1.03	F(0)	0.08	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,800	1.35	F(1)	9,500	1.19	F(0)	-0.16	No	7,800	0.98	E	9,300	1.16	F(0)	0.19	Yes

Table 5-67. Year 2035 Reduced Project Cumulative Freeway Analysis.

AM Peak Hour																			
Fwy.	Post Mile	Location	Capacity	Northbound/Eastbound								Southbound/Westbound							
				Baseline			Year 2035 Future With Reduced Project			Δ D/C	Cum Imp	Baseline			Year 2035 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	4,200	0.53	B	5,100	0.64	C	0.11	No	3,000	0.38	B	3,800	0.48	B	0.10	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,400	0.62	C	8,000	0.67	C	0.05	No	9,900	0.83	D	10,100	0.84	D	0.02	No
I-405	8.02	Santa Fe Ave.	10,000	11,500	1.15	F(0)	12,300	1.23	F(0)	0.08	Yes	8,600	0.86	D	9,100	0.91	D	0.05	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,500	0.92	D	8,200	1.37	F(2)	0.45	Yes	5,400	0.90	D	8,600	1.43	F(2)	0.53	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,900	0.99	E	8,600	1.08	F(0)	0.09	Yes	8,400	1.05	F(0)	9,600	1.20	F(0)	0.15	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,200	1.28	F(1)	8,800	1.10	F(0)	-0.18	No	7,500	0.94	E	9,600	1.20	F(0)	0.26	Yes
PM Peak Hour																			
Fwy.	Post Mile	Location	Capacity	Northbound/Eastbound								Southbound/Westbound							
				Baseline			Year 2035 Future With Reduced Project			Δ D/C	Cum Imp	Baseline			Year 2035 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	3,000	0.38	B	3,000	0.38	B	0.00	No	4,100	0.51	B	4,600	0.58	C	0.06	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,200	1.27	F(1)	15,500	1.29	F(1)	0.03	Yes	6,000	0.50	B	6,300	0.53	B	0.03	No
I-405	8.02	Santa Fe Ave.	10,000	8,900	0.89	D	9,200	0.92	D	0.03	No	10,700	1.07	F(0)	11,200	1.12	F(0)	0.05	Yes
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,100	0.85	D	7,200	1.20	F(0)	0.35	Yes	5,100	0.85	D	7,000	1.17	F(0)	0.32	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,800	0.98	E	8,900	1.11	F(0)	0.14	Yes	7,600	0.95	E	7,800	0.98	E	0.03	No
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,800	1.35	F(1)	9,500	1.19	F(0)	-0.16	No	7,800	0.98	E	9,400	1.18	F(0)	0.20	Yes

Table 5-68. Years 2046 and 2066 Reduced Project Cumulative Freeway Analysis.

AM Peak Hour

Fwy.	Post Mile	Location	Capacity	Northbound/Eastbound								Southbound/Westbound							
				Baseline			Year 2046/2066 Future With Reduced Project			Δ D/C	Cum Imp	Baseline			Year 2046/2066 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	4,200	0.53	B	5,500	0.69	C	0.16	No	3,000	0.38	B	4,200	0.53	B	0.15	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,400	0.62	C	8,300	0.69	C	0.08	No	9,900	0.83	D	10,200	0.85	D	0.03	No
I-405	8.02	Santa Fe Ave.	10,000	11,500	1.15	F(0)	12,700	1.27	F(1)	0.12	Yes	8,600	0.86	D	9,300	0.93	D	0.07	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,500	0.92	D	9,200	1.53	F(3)	0.62	Yes	5,400	0.90	D	9,400	1.57	F(3)	0.67	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,900	0.99	E	9,500	1.19	F(0)	0.20	Yes	8,400	1.05	F(0)	10,400	1.30	F(1)	0.25	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,200	1.28	F(1)	9,100	1.14	F(0)	-0.14	No	7,500	0.94	E	9,800	1.23	F(0)	0.29	Yes

PM Peak Hour

Fwy.	Post Mile	Location	Capacity	Northbound/Eastbound								Southbound/Westbound							
				Baseline			Year 2046/2066 Future With Reduced Project			Δ D/C	Cum Imp	Baseline			Year 2046/2066 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	3,000	0.38	B	4,000	0.50	B	0.13	No	4,100	0.51	B	4,800	0.60	C	0.09	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,200	1.27	F(1)	15,700	1.31	F(1)	0.04	Yes	6,000	0.50	B	6,500	0.54	C	0.04	No
I-405	8.02	Santa Fe Ave.	10,000	8,900	0.89	D	9,300	0.93	D	0.04	No	10,700	1.07	F(0)	11,500	1.15	F(0)	0.08	Yes
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	5,100	0.85	D	7,700	1.28	F(1)	0.43	Yes	5,100	0.85	D	7,500	1.25	F(0)	0.40	Yes
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	7,800	0.98	E	9,400	1.18	F(0)	0.20	Yes	7,600	0.95	E	8,200	1.03	F(0)	0.08	Yes
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	10,800	1.35	F(1)	9,700	1.21	F(0)	-0.14	No	7,800	0.98	E	9,600	1.20	F(0)	0.23	Yes

Table 5-69. 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	4,400	0.55	C	4,300	0.54	B	-0.01	No	3,200	0.40	B	3,200	0.40	B	0.00	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,500	0.63	C	7,400	0.62	C	-0.01	No	9,900	0.83	D	9,900	0.83	D	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	11,700	1.17	F(0)	11,700	1.17	F(0)	0.00	No	8,700	0.87	D	8,700	0.87	D	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	6,900	1.15	F(0)	6,800	1.13	F(0)	-0.02	No
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	8,300	1.04	F(0)	8,200	1.03	F(0)	-0.01	No	8,400	1.05	F(0)	8,300	1.04	F(0)	-0.01	No
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	8,700	1.09	F(0)	8,600	1.08	F(0)	-0.01	No	8,500	1.06	F(0)	8,300	1.04	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	3,200	0.40	B	3,100	0.39	B	-0.01	No	4,200	0.53	B	4,100	0.51	B	-0.01	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,300	1.28	F(1)	15,300	1.28	F(1)	0.00	No	6,100	0.51	B	6,100	0.51	B	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	9,000	0.90	D	8,800	0.88	D	-0.02	No	10,800	1.08	F(0)	10,800	1.08	F(0)	0.00	No
I-710	7.6	n/o Jct Rte 1 (PCH), Willow St.	6,000	7,100	1.18	F(0)	7,000	1.17	F(0)	-0.02	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	9,300	1.16	F(0)	9,300	1.16	F(0)	0.00	No	8,400	1.05	F(0)	8,300	1.04	F(0)	-0.01	No
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	9,600	1.20	F(0)	9,500	1.19	F(0)	-0.01	No	9,300	1.16	F(0)	9,200	1.15	F(0)	-0.01	No

Table 5-70. 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	4,600	0.58	C	4,500	0.56	C	-0.01	No	3,400	0.43	B	3,400	0.43	B	0.00	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	7,700	0.64	C	7,700	0.64	C	0.00	No	10,000	0.83	D	10,000	0.83	D	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	11,900	1.19	F(0)	11,900	1.19	F(0)	0.00	No	8,800	0.88	D	8,800	0.88	D	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	7,500	1.25	F(0)	7,300	1.22	F(0)	-0.03	No
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	8,400	1.05	F(0)	8,300	1.04	F(0)	-0.01	No	8,900	1.11	F(0)	8,800	1.10	F(0)	-0.01	No
I-710	19.1	n/o Rte 105, n/o Firestone	8,000	8,800	1.10	F(0)	8,700	1.09	F(0)	-0.01	No	9,000	1.13	F(0)	8,800	1.10	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	3,400	0.43	B	3,400	0.43	B	0.00	No	4,300	0.54	B	4,300	0.54	B	0.00	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,400	1.28	F(1)	15,400	1.28	F(1)	0.00	No	6,200	0.52	B	6,200	0.52	B	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	9,000	0.90	D	8,900	0.89	D	-0.01	No	11,000	1.10	F(0)	11,000	1.10	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	6,900	1.15	F(0)	6,800	1.13	F(0)	-0.02	No
I-710	10.31	n/o Jct Rte 405, s/o Del Amo	8,000	9,200	1.15	F(0)	9,100	1.14	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	9,500	1.19	F(0)	9,500	1.19	F(0)	0.00	No	9,300	1.16	F(0)	9,300	1.16	F(0)	0.00	No

Table 5-71. 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	5,100	0.64	C	5,100	0.64	C	0.00	No	3,800	0.48	B	3,800	0.48	B	0.00	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	8,000	0.67	C	8,000	0.67	C	0.00	No	10,100	0.84	D	10,100	0.84	D	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	12,300	1.23	F(0)	12,300	1.23	F(0)	0.00	No	9,100	0.91	D	9,100	0.91	D	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	3,700	0.46	B	3,600	0.45	B	-0.01	No	4,600	0.58	C	4,600	0.58	C	0.00	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,500	1.29	F(1)	15,500	1.29	F(1)	0.00	No	6,300	0.53	B	6,300	0.53	B	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	9,200	0.92	D	9,200	0.92	D	0.00	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	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

Table 5-72. Years 2046 and 2066 Reduced Project Cumulatively Considerable Freeway Analysis.

AM Peak Hour																			
Fwy.	Post Mile	Location	Capacity	Northbound/Eastbound								Southbound/Westbound							
				Year 2046/2066 Future Without Project			Year 2046/2066 Future With Reduced Project			Δ D/C	Cum Con Imp	Year 2046/2066 Future Without Project			Year 2046/2066 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	5,500	0.69	C	5,500	0.69	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	8,300	0.69	C	8,300	0.69	C	0.00	No	10,200	0.85	D	10,200	0.85	D	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	12,700	1.27	F(1)	12,700	1.27	F(1)	0.00	No	9,300	0.93	D	9,300	0.93	D	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 2046/2066 Future Without Project			Year 2046/2066 Future With Reduced Project			Δ D/C	Cum Con Imp	Year 2046/2066 Future Without Project			Year 2046/2066 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	4,100	0.51	B	4,000	0.50	B	-0.01	No	4,800	0.60	C	4,800	0.60	C	0.00	No
SR-91	10.62	e/o Alameda Street/Santa Fe Ave	12,000	15,700	1.31	F(1)	15,700	1.31	F(1)	0.00	No	6,500	0.54	C	6,500	0.54	C	0.00	No
I-405	8.02	Santa Fe Ave.	10,000	9,300	0.93	D	9,300	0.93	D	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

5.6.2.3.6 Cumulative Impact TRANS-5: Would Reduced Project operations cause an increase in rail activity and delays in regional traffic?

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

Under 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 Reduced Project Alternative would have less than significant impacts under TRANS-5.

Contribution of the Reduced Project Alternative

The Reduced Project Alternative would not result in a change in rail trips or delays in regional traffic.

Mitigation Measures and Residual Cumulative Impacts

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

5.6.2.3.7 Impact TRANS-6: Reduced Project operations would not substantially increase hazards due to a design feature.

The proposed project site does not include any public roadways, therefore no increased hazards due to design features would occur. The improvements made to the PCH grade separation at the southern end of the primary Project site would improve traffic flow into and out of the facility and thus would also not pose any additional hazards.

Contribution of the Reduced Project Alternative

The Reduced Project Alternative would not result in a contribution to a cumulative significant impact.

Mitigation Measures and Residual Cumulative Impacts

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

5.6.2.3.8 Impact TRANS-7: Reduced Project operations would not result in inadequate emergency access.

The proposed project site has primary access through the main entrance gate at the south end of the primary Project site from the PCH, but will also provide an emergency access gate at the north end of the primary Project site from Sepulveda Boulevard. Therefore adequate emergency access will be provided to the site.

Contribution of the Reduced Project Alternative

The Reduced Project Alternative would not result in a contribution to a cumulative significant impact.

Mitigation Measures and Residual Cumulative Impacts

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

5.6.2.3.9 Impact TRANS-8: Reduced 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.

The Reduced Project Alternative would not conflict with policies, plans or programs regarding alternative transportation. Transit access will continue to occur on area roadways, the proposed bicycle facilities in the local area will remain the same, and no pedestrian facilities will be removed as part of the No Project Alternative.

Contribution of the Reduced Project Alternative

The Reduced Project Alternative would not result in a contribution to a cumulative significant impact.

Mitigation Measures and Residual Cumulative Impacts

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

5.7 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 5-73 and described in sections 5.4.2 and 5.5.2.The impacts of the two alternatives relative to the proposed Project are compared in Table 5-74, and the environmentally superior alternative is identified in Section 5.7.5.

5.7.1 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 5-73). 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 5-73 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 5.7.2. The remaining significant impacts could be reduced to less than significant by the identified mitigation; those impacts are discussed in Section 5.7.3.

1 **Table 5-73.Impacts of the Proposed Project and Alternatives.**

Project and Alternatives	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 **MM CR-3:** Salvage Plan for Noteworthy Elements 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 **MM CR-3:** Salvage Plan for Noteworthy Elements 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.	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 in the area**.**	Less than significant impact	Mitigation not required.	Less than significant impact
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

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
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 • Tier Specifications: 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. 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 by CARB regulations. This mitigation measure was quantified and included in the mitigated construction emissions in Tables 3.2-14 and 3.2-15. • 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.	**Significant and unavoidable**

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			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: • 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. • 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. • 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. • 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. **MM AQ-2**: Fleet Modernization for On-Road Trucks Trucks used in construction will be required to 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:	

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			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). 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). 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). 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: • A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement; • 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	

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			approved, but funds are not yet available; or • 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. • 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. • 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. **MM AQ-3**: Additional Fugitive Dust Controls 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. • Active grading sites shall be watered three times per day. • Contractors shall apply approved non-toxic chemical soil stabilizers to all inactive construction areas or replace groundcover in disturbed areas. • Contractors shall provide temporary wind fencing around sites being graded or cleared. • Trucks hauling dirt, sand, or gravel shall be covered or shall maintain at least 2 feet of	

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			freeboard in accordance with Section 23114 of the California Vehicle Code. ("Spilling Loads on Highways"). • 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. • 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. • 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. • Stabilize the materials while loading, unloading and transporting to reduce fugitive dust emissions. • Belly-dump truck seals should be checked regularly to remove trapped rocks to prevent possible spillage. • Comply with track-out regulations and provide water while loading and unloading to reduce visible dust plumes. • Waste materials should be hauled off-site immediately. • Pave road and road shoulders where available. • Traffic speeds on all unpaved roads shall be reduced to 15 mph or less. • Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow. • Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the extent practicable. • Require the use of clean-fueled sweepers pursuant to SCAQMD Rule 1186 and Rule 1186.1 certified	

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			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. • 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. **MM AQ-4**: Best Management Practices The following measures are required on construction equipment (including onroad trucks): • Use diesel oxidation catalysts and catalyzed diesel particulate traps. • Maintain equipment according to manufacturers' specifications. • Restrict idling of construction equipment to a maximum of 5 minutes when not in use. • Install high-pressure fuel injectors on construction equipment vehicles. • 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. • 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. **MM AQ-5**: General Construction Mitigation Measure 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 cannot be established, it	

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			is not quantified in this study. **MM AQ-6**: Special Precautions near Sensitive Sites 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 **MM AQ-2:** Fleet Modernization for On-Road Trucks **MM AQ-3:** Additional Fugitive Dust Controls **MM AQ-4.** Best Management Practices **MM AQ-5.** General Mitigation Measure **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 **MM AQ-2:** Fleet Modernization for On-Road Trucks **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 **MM AQ-2:** Fleet Modernization for On-Road Trucks **MM AQ-3:** Additional Fugitive Dust Controls	**Significant and unavoidable**

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Proposed Project	**AQ-3**: The proposed Project would not result in operational emissions that exceed 10 tons per year of VOCs and SCAQMD thresholds of significance.	Less than significant	Mitigation not applicable	Less than significant
Alternative 1 (No Project)	**AQ-3:** Alternative 1 would not result in operational emissions that exceed 10 tons per year of VOCs but would exceed a SCAQMD thresholds of significance.	**Significant impact**	No feasible mitigation available.	**Significant and unavoidable**.
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.	Less than significant	Mitigation not applicable	Less than significant
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 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	**AQ-5:** Alternative 2 would not generate on-road traffic that would contribute to	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Project)	an exceedance of the 1-hour or 8-hour CO standards.			
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 expose receptors to significant levels of TACs.	**Significant impact**	**MM AQ-1:** Fleet Modernization for Construction Equipment **MM AQ-2:** Fleet Modernization for On-Road Trucks **MM AQ-8:** Low-Emission Drayage Trucks This proposed measure would require drayage trucks calling on the SCIG facility to meet an emission reduction in diesel particulate matter emissions (DPM) of 95% by mass relative to the federal 2007 on-road heavy-duty diesel engine emission standard ("low-emission" trucks). The requirement for the percentage of trucks calling on the SCIG facility to be low-emission trucks is as follows: 10 percent in 2016; 12 percent in 2017; 15 percent in 2018; 20 percent in 2019; 25 percent in 2020; 35 percent in 2021; 50 percent in 2022; 75 percent in 2023; 80 percent in 2024; 85% in 2025; and 90 percent in 2026. BNSF will be required to install Radio-Frequency Identification (RFID) readers to control access at the gate to the SCIG facility. Truck logs will be provided to the LAHD Environmental Management Division for tracking and reporting. **MM AQ-9:** Period Review of New Technology and Regulations Potential technologies that may further reduce emission and/or result in cost-savings benefits for BNSF may be identified through future work on the CAAP. Over the course of the lease, BNSF and the	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			Port shall work together to identify potential new technology. Such technology shall be studied for feasibility, in terms of cost, technical and operational feasibility. As partial consideration for the Port agreement to issue the permit to BNSF, BNSF shall implement not less frequently than once every five (5) years following the effective date of the permit, new air quality technological advancements, subject to mutual agreement on operational feasibility and cost sharing, which shall not be unreasonably withheld. The effectiveness of this measure depends on the advancement of new technologies and the outcome of future feasibility or pilot studies. **MM AQ-10:** Substitution of New Technology If any kind of technology becomes available and is shown to be as good or as better in terms of emissions reduction performance than an existing measure, the technology could replace the existing measure pending approval by the Port. The technology's emissions reductions must be verifiable through USEPA, CARB, or other reputable certification and/or demonstration studies to the Port's satisfaction.	
Alternative 1 (No Project)	**AQ-7:** Alternative 1 would expose receptors to significant levels of TACs.	**Significant impact**	No feasible mitigation available	**Significant and unavoidable**
Alternative 2 (Reduced Project)	**AQ-7**: Alternative 2 would expose receptors to significant levels of TACs.	**Significant impact**	**MM AQ-1:** Fleet Modernization for Construction Equipment **MM AQ-2:** Fleet Modernization for On-Road Trucks **MM AQ-8:** Low-Emission Drayage Trucks **MM AQ-9:** Period Review of New Technology and Regulations **MM AQ-10:** Substitution of New Technology	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**

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
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 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 Should tree or vegetation removal, or bridge replacement and renovation, occur within the BSA 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. **MM BIO-1b:** Bat Roosting and Nesting Surveys and Protection Measures	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			The following activities shall be required with regard to bat roosting habitat: 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 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; 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. 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	

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			buffer zones as determined by a qualified biologist in consultation with CDFG should be observed during the maternity roost season (March 1 – July 31). 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 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. 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. 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	

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			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. 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 crevices. 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 **MM BIO-1b:** Bat Roosting and Nesting Surveys and Protection Measures	Less than significant impact
Proposed	**BIO-2:** Construction and operation of	No impact	Mitigation not required	No impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Project	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.			
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 Project)	**BIO-2:** Construction and operation of Alternative 2 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
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	No impact	Mitigation not required	No impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	resources.			
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 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
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

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
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 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 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. 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. 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	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			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. 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. 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	**Significant impact**	**MM CR-1:** Archaeological and Ethnographic Monitoring and Recovery	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	significance of an archaeological or ethnographic resource as defined in §15064.5.			
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 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. **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 local historical society and any other repository or organization determined by LAHD. **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. **MM CR-3:** Salvage Plan for Noteworthy Elements 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	**Significant and unavoidable**

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			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 **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 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 construction personnel aware of paleontological monitoring procedures and paleontological sensitivity. 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.	Less than significant impact
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	**CR-3:** Construction of Alternative 2	**Significant impact**	**MM CR-4:** Paleontological Monitoring and Recovery	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
(Reduced Project)	would potentially disturb, destroy, or degrade unknown paleontological resource, and thus directly or indirectly destroy a unique paleontological resource.			
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 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.	No impact	Mitigation not required	No impact
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	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	substantial damage to structures or infrastructure, or expose people to substantial risk of injury from tsunamis and seiches.			
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 subsidence/soil settlement.	Less than significant impact	Mitigation not required	Less than significant impact
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	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	people to substantial risk of injury from soil expansion.			
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 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	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	people or structures to substantial risk of injury or damage.			
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 coverage, material or adverse modification to one or more distinct and prominent geologic topographic features.	No impact	Mitigation not required	No impact
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	No impact	Mitigation not required	No impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	result in substantial erosion or loss of topsoil.			
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**: Idling Restriction and Electrification for Construction Equipment. Construction equipment idling will be restricted to a maximum of 5 minutes when not in use and when feasible, and the use of electrified construction equipment where feasible. **MM GHG-2:** Solar Panels. The Port shall require installation of solar panels on all buildings constructed on POLA property where feasible. The Port, in consultation with the Tenant, will undertake a feasibility review and will make a determination as part of the Tenants final design on the solar panel requirement. **MM GHG-3:** Recycling. 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. 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. **MM GHG-4:** Tree Planting. The applicant shall plant shade trees around the main administration building and the tenant shall maintain all trees through the life of the lease. **MM GHG-5:** Water Conservation. 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. **MM GHG-6:** Energy Efficient Light Bulbs. In	**Significant and unavoidable**

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			addition to the SCIG facility main administration building, which would be LEED certified, all other interior buildings shall exclusively use energy efficient light bulbs (compact florescent, LED, or other equally efficient) for ambient lighting. The businesses on their alternate locations on Port-owned property shall also maintain and replace any Port-supplied energy efficient light bulbs. CFL and LED bulbs produce less waste heat and use substantially less electricity than incandescent light bulbs. **MM GHG-7:** Energy Audit. 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. **MM GHG-8**: Solar Canopy on Parking Area. The Tenant shall construct a canopy or canopies over the employee parking area at the SCIG facility that shall be equipped with photovoltaic (PV) solar panels for generating on-site electrical power. **MM GHG-9**: Alternative Fuel Service Trucks. The Tenant shall utilize only alternative-fuel service trucks within the SCIG facility.	
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 Project)	**GHG-1:** Alternative 2 would result in an increase in construction-related and operation-related GHG emissions.	**Significant impact**	**MM GHG-1:** Idling Restriction and Electrification for Construction Equipment **MM GHG-2:** Solar Panels **MM GHG-3**: Recycling **MM GHG-4:** Tree Planting **MM GHG-5:** Water Conservation **MM GHG-6:** Energy Efficient Light Bulbs **MM GHG-7:** Energy Audit **MM GHG-8:** Solar Canopy on Parking Area **MM GHG-9:** Alternative Fuel Service Trucks	**Significant and unavoidable**

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Proposed Project	**GHG-2:** The proposed Project would not conflict with State and local plans and policies. The proposed Project would not be subject to significant sea level rise impacts from climate change.	Less than significant impact	No feasible mitigation is available	Less than significant impact
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 not be subject to significant sea level rise impacts from climate change.	Less than significant impact	No feasible mitigation is available	Less than significant impact
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 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
Proposed Project	**RISK-2a**: Construction of the proposed Project would increase the probable frequency and severity of consequences to people from exposure to health	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	hazards. **RISK-2b**: Operation of the proposed Project would not increase the probable frequency and severity of consequences to people from exposure to health hazards.			
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. **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 Project)	**RISK-3**: Alternative 2 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
Proposed Project	**RISK-4**: The proposed Project would not be located on a site which is included on a list of hazardous materials sites	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.			
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
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

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
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 2 (Reduced Project)	**LU-1:** Alternative 2 would be consistent with the adopted land use/density designation in the	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	Community Plan, redevelopment plan, or specific plan for the site.			
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 **MM AQ-2:** Fleet Modernization for On-Road Trucks **MM AQ-3:** Additional Fugitive Dust Controls **MM AQ-4.** Best Management Practices **MM AQ-5.** General Mitigation Measure	**Significant and unavoidable**

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			MM AQ-6. Special Precautions near Sensitive Sites **MM AQ-7**: On-site sweeping at SCIG facility. **MM AQ-8**: Low-emission drayage trucks **MM AQ-9:** Period Review of New Technology and Regulations **MM AQ-10:** Substitution of New Technology See Air Quality, above **MM NOI-1**: 12-Foot High Sound wall. **MM NOI-2**: Construction Noise Reduction Measures **MM NOI-3**: 24-Foot-High Sound Barrier. (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 **MM AQ-2:** Fleet Modernization for On-Road Trucks **MM AQ-3:** Additional Fugitive Dust Controls **MM AQ-4.** Best Management Practices **MM AQ-5.** General Mitigation Measure **MM AQ-6.** Special Precautions near Sensitive Sites **MM AQ-7**: On-site sweeping at SCIG facility. **MM AQ-8**: Low-emission drayage trucks **MM AQ-9:** Period Review of New Technology and Regulations **MM AQ-10:** Substitution of New Technology See Air Quality, above **MM NOI-1**: 12-Foot High Sound Wall. **MM NOI-2**: Construction Noise Reduction Measures **MM NOI-3**: 24-Foot-High Sound Barrier. (See Noise, below)	**Significant and unavoidable**

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
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 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	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	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.			
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 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	**NOI-4:** Construction and operation of Alternative 2 would not cause sleep	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Project)	awakenings at residences within the City of Los Angeles			
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 disruption of speech intelligibility in classroom teaching situations.	No impact	Mitigation not required	No impact
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 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.	**Significant and unavoidable**

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			MM NOI-2: Construction Noise Reduction Measures The following noise control measures shall be implemented during construction of the proposed Project. This mitigation measure applies to BNSF and the businesses moved to the designated alternate sites. These measures were not quantitatively evaluated. 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. For construction activities that occur within the City of Long Beach (e.g. the North Lead Track construction and sound wall construction), limit construction to the hours of 7:00am and 7:00pm on weekdays and between 9:00am and 6;00pm on Saturdays, as prescribed in the City of Long Beach Noise Ordinance. b) Construction Days. Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work). 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. d) Construction Equipment. Properly muffle and maintain all construction equipment powered by internal combustion engines. e) Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near noise sensitive areas. 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. g) Quiet Equipment Selection. Select quiet	

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance. h) Notification. Notify residents adjacent to the proposed Project site of the construction schedule in writing. i) Portable Generators. Avoid the use of portable generators if electricity can be obtained from the local power grid. j) Noise Complaints. Assign a disturbance counselor to respond to noise complaints. Post contact information at the construction site. k) 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. l) A Construction Noise Monitoring and Management Plan will be required to evaluate the construction process prior to the commencement. The plan should 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. **MM NOI-3**: 24-Foot-High Sound Barrier 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.	

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
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. **MM NOI-2**: Construction Noise Reduction Measures **MM NOI-3**: 24-Foot-High Sound Barrier. 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 prescribed by the FTA.	Less than significant impact.	Mitigation not required.	Less than significant impact.
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	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	SEL above 80 dBA SEL, sufficient to awaken at least 10 percent of residents.			
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 (No Project)	**NOI-9:** Operation of Alternative 1 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 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	**NOI-10:** No features would be	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
(No Project)	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.			
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 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	**NOI-12:** Operation of Alternative 2	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
(Reduced 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.			
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 classroom teaching situations.	No impact	Mitigation not required	No impact
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	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	intersection's volume/capacity ratios or level of service.			
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 increase in related public transit use.	Less than significant impact	Mitigation not required	Less than significant impact
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

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
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 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

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
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 construction of which could cause significant environmental effects.	Less than significant impact	Mitigation not required	Less than significant impact
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	**PS-2**: No features would be constructed; baseline conditions would continue at the	No impact	Mitigation not required	No impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
(No Project)	site, and there would be no substantial change in the demand for public services.			
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 treatment facilities.	No impact	Mitigation not required	No impact
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	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	existing treatment facilities.			
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. **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. **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 (No Project)	**PS-6**: No features would be constructed; baseline conditions would continue at the site and would generate solid waste to landfills that are projected to be at or near capacity.	**Significant impact**	No feasible mitigation available	**Significant and unavoidable**
Alternative 2	**PS-6:** Operation of Alternative 2 would	**Significant impact**	**MM PS-1**: Recycling of Construction Materials.	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
(Reduced Project)	generate solid waste that is assumed to exceed landfill capacity after 2030.		**MM PS-2**: Materials with Recycled Content. **MM PS-3:** Compliance With City of Los Angeles Solid Waste Integrated Resources Plan (SWIRP).	
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 stormwater permits or Water Quality Control Plan for the receiving water body.	**Significant impact**	**MM WR-1:** Construction Controls in the Dominguez Channel 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 with the soil. 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.	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
			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. 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 contained or controlled onsite	Less than significant impact	Mitigation not required	Less than significant impact
Alternative 1 (No Project)	**WR-2**: No features would be constructed. Operation would not accelerate natural processes of wind and water erosion and sedimentation	No impact	Mitigation not required	No impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	resulting in sediment runoff or deposition that would not be contained or controlled onsite.			
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 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	No impact	Mitigation not required	No impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
	provide substantial additional sources of polluted runoff.			
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 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

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
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 2 (Reduced	**WR-7:** Construction and operation would not cause changes in the rate or	Less than significant impact	Mitigation not required	Less than significant impact

Project and Alternatives	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Project)	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.			

Note that unless otherwise indicated, all impact descriptions for each of the alternatives are the same as those described for the proposed Project.

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5.7.2 Alternatives and Resource Areas With Significant and Unavoidable Impacts

5.7.2.1 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 abridge 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.

5.7.2.2 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, with the exception of 24-hour $PM_{2.5}$, the off-site ambient concentration of which would be below the SCAQMD threshold of significance. 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 Reduced Project would result in emissions of criteria pollutants less than the CEQA thresholds, therefore impacts would be less than significant under AQ-3. Operation of the No Project would result in emissions of criteria pollutants exceeding CEQA thresholds for PM_{10}, which would be a significant impact under AQ-3. Because no mitigations can be applied to the No Project Alternative, this impact would remain significant and unavoidable. 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, with the exception of some pollutants in the No Project Alternative, 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 businesses would occur, no changes in the locations of emission sources would occur relative to the baseline, which reduces many of the impacts under AQ-4. Mitigation measure **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.

Construction and operation 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, and impacts under AQ-7 would be significant. Mitigation measures **MM AQ-1** through **MM AQ-2,** and **MMAQ-8**through **MM AQ-10** would reduce these impacts to less than significant. No mitigation can be applied to the No Project Alternative and thus No Project health risk impacts would be significant and unavoidable.

None of the alternatives would have significant impacts related to AQ-5, AQ-6, 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 and Reduced Project would have no impact under AQ-8, but the No Project would have significant and unavoidable impacts related to AQ-8.

5.7.2.3 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.

5.7.2.4 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.

5.7.2.5 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 plans, the SCAG RTP, and the Goods Movement Action Plan would constitute a 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 5.5.2.9) 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.

5.7.2.6 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.

5.7.2.7 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 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.

5.7.2.8 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 Alternative, there would be no changes that would require discretionary actions subject to CEQA, and therefore mitigation measures would not be applicable to this alternative.

5.7.3 Alternatives and Resource Areas With Significant Impacts That Can Be Mitigated to Less Than Significant

5.7.3.1 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 and federally protected wetlands, 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 and less than significant impact under BIO-4.

5.7.3.2 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, there would be no impact relative to WR-5 for the proposed Project and the two alternatives.

5.7.4 Alternatives and Resource Areas With Less Than Significant Impacts

5.7.4.1 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.

5.7.4.2 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 above the baseline to Hobart at full operation under the No Project Alternative would increase from 212 per average day in 2023 to 6,082 per day in 2035 (Section 5.4.1),, which would increase the risk of accidents proportionately. This increase represents a less than significant impact under RISK-2b.

5.7.5 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 5-74. Comparison of the Proposed Project and Alternatives Showing Significant and Unavoidable Impacts After Mitigation.

Issue Area	Proposed Project	No Project Alternative (Alt 1)	Reduced Project Alternative (Alt 2)
Aesthetics	AES-1		AES-1
Air Quality	AQ-1, AQ-2, AQ-4	AQ-3, AQ-4, AQ-7, AQ-8	AQ-1, AQ-2, AQ-4
Biology			
Cultural	CR-2		CR-2
Geology and Soils			
Greenhouse Gases	GHG-1	GHG-1, GHG-2	GHG-1
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	8	9	8

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

As shown, the proposed Project and Reduced Project Alternative are the alternatives with the least significant impacts. Since the Reduced Project Alternative has, by definition, less activity than the proposed Project, it is the Environmentally Superior Alternative.

Nevertheless, the proposed Project takes into consideration increased activity at the proposed Project site versus reduced activity on the I-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 differ in 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.