

# Chapter 3 Alternatives

## 3.1 Introduction

This chapter describes the alternatives considered by USACE and LAHD in the planning of the Proposed Project, including those that were not carried forward in this Draft EIS for further analysis and evaluation.

## 3.2 Alternative Considered in This EIS

As briefly discussed in Section 2.1, this DEIS considers only one alternative to the Proposed Project, namely the No Federal Action Alternative.

The No Federal Action Alternative required by NEPA (Table 3-1) includes only the construction and operational activities that would reasonably be expected to occur without a DA permit, including current and projected increases in goods movement. These are assumed to include the construction and operation of the proposed WBICTF on-dock railyard expansion, with the addition of the RMG cranes, described in Section 2.6.1, and the installation of necessary infrastructure to support operation of zero-emission cargo-handling equipment. To accommodate expansion of the WBICTF railyard, a new lease would be issued extending through 2055, and current operations as a marine container terminal would continue.

The No Federal Action Alternative would increase the capacity of the WBICTF to handle intermodal cargo but would not alter the terminal's total capacity, which would continue to be berth-constrained and would not be reached until 2062.

**Table 3-1: No Federal Action Alternative**

Activity	No Federal Action Alternative and NEPA Baseline		
	2028	2036	2062
Throughput (millions of TEUs)	478,000	909,000	1,332,000
Annual Ship Calls	104	156	208
Peak Day Ship Transits	3	3	3
Annual One-Way Truck Trips (millions)	0.457	0.803	1.182
Annual Train Trips	157	520	768
Operating Wharf Cranes	5	5	5

1 As discussed in Section 1.6, the No Federal Action Alternative corresponds to the NEPA  
2 baseline. The impacts associated with implementation of this alternative are considered in  
3 Chapter 4.

### 4 **3.3 Alternatives Considered But Not Further** 5 **Evaluated**

6 An EIS must briefly describe the rationale for selection and rejection of alternatives. The  
7 lead agencies may make an initial determination as to which alternatives are ostensibly  
8 feasible and therefore merit in-depth consideration, and which are infeasible. Alternatives  
9 that are remote or speculative, or the effects of which cannot be reasonably predicted,  
10 need not be considered ( NEPA Section 102 (42 U.S.C. §4332) states detailed statements  
11 are to focus on “reasonably foreseeable environmental effects of the proposed agency  
12 action”; “any reasonably foreseeable adverse environmental effects which cannot be  
13 avoided should the proposal be implemented”; and “a reasonable range of alternatives to  
14 the proposed agency action, including an analysis of any negative environmental impacts  
15 of not implementing the proposed agency action in the case of a no action alternative, that  
16 are technically and economically feasible, and meet the purpose and need of the  
17 proposal”).

18 A number of alternatives were considered based on comments received on the April 2014  
19 NOP/NOI and during preparation of this Draft EIS, but were eliminated from further  
20 discussion and detailed, co-equal analysis. These alternatives are described below along  
21 with an explanation of the rationale leading to their exclusion from further analysis.  
22 Alternatives considered but eliminated from further evaluation include the following:

- 23 • Expanded Project with Electrification (the project described in the April 2014  
24 NOI/NOP)
- 25 • Use of West Coast Ports Outside the Port Complex
- 26 • Other Sites in the Port Complex. (two alternatives)

27 These alternatives, along with the NEPA No Federal Action Alternative and the CEQA  
28 No Project Alternative, were also considered in the Draft EIR (Appendix 1 of this DEIS).

#### 29 **3.3.1 Expanded Project with Electrification (Original** 30 **Proposed Project)**

31 This alternative consists of the project that was proposed and described in the Notice of  
32 Intent/Notice of Preparation issued in April 2014 (i.e., it was the original Proposed  
33 Project). The project would be built in two phases. Phase I would consist of deepening  
34 Berths 126-129 to -53 ft. Mean Lower Low Water (MLLW; an allowed two-foot  
35 overdredge would bring the maximum depth to -55 ft. MLLW), demolishing the existing  
36 wharf, constructing a new, 1,260-ft concrete wharf with provision for Alternative  
37 Maritime Power (AMP), replacing three existing wharf cranes with up to ten new cranes  
38 with 100- or 120-ft-gauge crane rails (the new cranes would be approximately 60 feet  
39 taller than the cranes currently at the site), and expanding the on-dock railyard known as  
40 the West Basin Intermodal Container Transfer Facility (WBICTF) by adding two loading  
41 tracks.

1 Phase I closely resembles the Proposed Project described in Chapter 2, except that the  
2 expansion of the railyard would be smaller than that of the Proposed Project. Phase I  
3 construction would take approximately 18 months to complete. Operations would  
4 continue during construction. The proposed improvements would increase the terminal's  
5 capacity to approximately 1,871,405 million TEUs per year.

6 Phase II would consist of realigning the pierhead line at Berths 121-125 by demolishing  
7 the existing wharf and constructing a new, 1,400-foot wharf with 100-ft- or 120-ft-gauge  
8 crane rails and provisions for AMP. Realignment of the pierhead line would require  
9 cutting back the existing land by 3.7 acres and replacing 2.1 acres of land by filling, for a  
10 net gain of 1.6 acres of deep, open-water area. This "cut back" would be required to  
11 accommodate the safe transit of the larger vessels to the berth. The fill area would be  
12 constructed by placing dredged and imported material, including quarry rock. The new  
13 wharf would accommodate up to ten new cranes, for a total of up to 20 on the terminal at  
14 full build-out (the five existing, smaller-gauge cranes would be removed from the  
15 terminal). Berths 121-125 would be deepened to -53 ft. MLLW (an allowed two-foot  
16 overdredge would bring the maximum depth to -55 ft. MLLW). Deepening the berth  
17 would require dredging and disposing of dredged material; some of the dredged material  
18 would be re-used to create the 2.1-acre fill.

19 Phase II would also include expanding the WBICTF by lengthening the loading tracks  
20 and adding two more tracks; demolishing existing buildings and constructing new  
21 buildings; disposing of, or relocating elsewhere in the Port, the remaining five existing  
22 cranes; and installing infrastructure and equipment to support electrified operations.  
23 Phase II would include electrically powered container handling equipment to move  
24 containers around the container yard, load and unload trucks, and manage container  
25 stacks, and electrically powered rail-mounted gantry cranes to load and unload railcars.  
26 Phase II construction would last approximately five years, and the terminal would  
27 continue to operate during construction. The proposed improvements would raise the  
28 terminal's capacity to approximately 2,400,000 TEUs per year.

29 Once Phase II was complete, both berths would be able to accommodate vessels of up to  
30 14,000 TEU capacity, and the WBICTF would feature modern, electric-powered, rail-  
31 mounted cranes for loading and unloading railcars. In addition, the Berths 121-131  
32 Terminal's container-handling operations would be largely electrified with supporting  
33 infrastructure.

34 This alternative would meet the objectives of the Project (see Section 2.4), namely  
35 optimizing land use, providing sufficient depth to accommodate the future fleet of cargo  
36 vessels, improving wharf facilities, and increasing on-dock rail facilities. However, this  
37 alternative would involve substantial rebuilding of the terminal to realign the pierhead  
38 line, construct fill, dredge for a new berth, and electrify the facility.

39 Implementing this scale of project would require the wholesale replacement of existing  
40 facilities and equipment and is estimated to cost approximately \$1.47 billion (LAHD  
41 2022). A cost of that magnitude far outstrips the market value for terminals in the current  
42 and projected future market environment. Given the proposed 30-year permit term, the  
43 estimated rent that would be required to recover the capital investment would be 5 to 7  
44 times current market rates. As such, a project of this scope cannot be undertaken as the  
45 costs are not economically viable to support the rent that would be required to recover the  
46 capital outlay, even with the increase in cargo projected at approximately 2,400,000  
47 TEUs per year at the terminal with the expansion.

1 Due to the substantial capital investment required to construct this alternative and the  
2 inability to recover those costs based on the proposed lease length and current market  
3 parameters, this alternative was found to be economically infeasible and was eliminated  
4 from further consideration. Note that the Proposed Project being evaluated in this Draft  
5 EIS is essentially Phase I of this alternative, and thus represents a reduction, through the  
6 analysis of alternatives, in the magnitude of environmental impacts.

### 7 **3.3.2 Use of West Coast Ports Outside the Port Complex**

8 Under this alternative, the LAHD would not expand the existing Berths 121-131  
9 Terminal, but would instead assume that the additional cargo would be accommodated by  
10 U.S. West Coast ports outside the Port Complex (i.e., Port Hueneme, Oakland, Seattle,  
11 Tacoma, and Portland to the north and San Diego to the south). It is important to note that  
12 the LAHD has no authority to direct cargo to ports outside its jurisdictional boundaries.  
13 The LAHD could only refuse to provide the discretionary actions necessary to increase  
14 Port capacity within its own boundaries, thus providing shippers with an incentive to  
15 route cargo to other ports. Such a course is not consistent with the Tidelands Trust or  
16 Coastal Act.

17 To evaluate this alternative, it is important to recognize the current and expected role of  
18 the Port in U.S. foreign trade. Between 40 and 45 percent of all the containers handled by  
19 U.S. ports come through the Port Complex (USACE and LAHD 2009), and more than 75  
20 percent of all containers shipped through U.S. West Coast ports pass through the Ports of  
21 Los Angeles, Long Beach, and Oakland because those ports are geographically best  
22 positioned to accommodate Asian trade and have the specialized facilities and sufficient  
23 water depth to safely accommodate the new generation of deep-draft ships, some of  
24 which are over 1,300 feet long and draw 50 feet of water (Marine Insight 2023). In 2019,  
25 trade by the Ports of Los Angeles and Long Beach totaled approximately \$446 billion  
26 (CAPA 2021), whereas the value of goods handled by the ports of Oakland, Seattle, and  
27 Tacoma combined was approximately \$117 billion (CAPA 2021; NoSA 2024). As  
28 described in Section 2.4.1 of the Draft EIR, the extensive transportation connections to  
29 the rest of the country make the San Pedro Bay Port Complex a prime destination for  
30 maritime trade.

31 A number of studies of goods movement in California, such as the governor's Goods  
32 Movement Action Plan (Business, Transportation, and Housing Agency and CalEPA  
33 2007) have identified capacity constraints at other U.S. West Coast ports. A review of  
34 U.S. West Coast container ports other than Long Beach (USDOT 2020) shows that their  
35 combined 2019 throughput of containers of approximately 6.5 million TEUs was  
36 considerably below that of the Port of Los Angeles (9,337,633 TEUs).

37 In addition, San Diego and Port Hueneme do not have the depths required to service  
38 larger container vessels expected to be required in the future to transport the throughput  
39 associated with the Proposed Project and would require substantial channel and berth  
40 deepening to accommodate the larger vessels.

41 Other major U.S. West Coast ports have operated at or near current physical capacity,  
42 have recently expanded, or are undergoing expansion to accommodate their projected  
43 future throughput demand. Although small temporary diversions from the Port can be  
44 accommodated elsewhere, large permanent diversions would, in the long-term, require  
45 substantial physical improvements at other major U.S. West Coast ports to accommodate  
46 even the incremental increase in throughput associated with the Proposed Project.

1 This alternative would not meet the underlying fundamental purpose of optimizing  
2 container handling efficiency and capacity within the Port and would actually conflict  
3 with this purpose because the demand for containerized throughput within the Port of Los  
4 Angeles is expected to grow over the long-term, based on cargo forecasts. In addition,  
5 this alternative would not be consistent with the following Project objectives:

- 6 • optimize the use of existing land at the Berths 121-131 Terminal and associated  
7 waterways in a manner that is consistent with the LAHD's public trust  
8 obligations;
- 9 • provide sufficient depth to ensure the terminal's ability to accommodate the  
10 number and size of container ships anticipated to call at the terminal in the  
11 foreseeable future;
- 12 • improve the wharf facilities at the terminal to accommodate loading/unloading of  
13 those larger ships; and
- 14 • increase on-dock rail facilities to accommodate projected increases in the volume  
15 of containers through the terminal as a result of the larger ships.

16 Improvements necessary for other U.S. West Coast ports to meet the objectives of the  
17 Proposed Project would generate environmental impacts similar to or more pronounced  
18 than those associated with the Proposed Project. Moreover, even with the expansion of  
19 other ports, the volume of cargo moving through the Port is expected to grow in the long-  
20 term. Because use of other U.S. West Coast Ports would not achieve Proposed Project  
21 objectives to promote the long-term development and growth of the Port, and would not  
22 otherwise meet the Project objectives, this alternative is considered infeasible.

### 23 **3.3.3 Other Sites in the Port Complex**

24 Under this alternative, the LAHD would develop or expand and reconfigure a different  
25 container terminal in such a way as to accommodate an additional 539,000 TEUs by 2050  
26 (the incremental throughput difference between the Proposed Project and the CEQA No  
27 Project Alternative or No Federal Action Alternative). It is likely that berth dredging and  
28 wharf upgrades and extensions would be needed to accommodate the additional vessel  
29 traffic; the need for additional landfill would be site dependent. Increased backland  
30 acreage would also be required.

31 This alternative would not achieve any of the Project objectives, which focus on  
32 optimizing, expanding, and improving water-dependent facilities at Berths 121-131.  
33 Moreover, other container terminals within the Port Complex already have approved  
34 terminals or expansions, or are expected to be expanded and modernized with associated  
35 NEPA/CEQA review in the near future. There are no other large tracts of land in the Port  
36 with water access and with a minimum of 53-foot MLLW channel depth available at this  
37 time that have the potential to support container terminal operations under the Proposed  
38 Project. The following two locations within the Port Complex were considered:

#### 39 **Alternative Location within the Port of Los Angeles**

40 One alternative site for a new marine container terminal or supplemental backlands  
41 within the Port of Los Angeles was considered. The former LAXT site is approximately  
42 78 acres and does not have direct water access (rail lines are located between the LAXT  
43 site and Seaplane Lagoon). The only feasible way to use the LAXT site for a marine  
44 container terminal would be to reconfigure the on-dock railyard on Pier 300 and the

1 associated rail lines that travel between the LAXT site and Seaplane Lagoon. However,  
2 there is no alternate rail line corridor if the LAXT site is developed as a container  
3 terminal. In addition, vessels would have to access the LAXT site via the shallow water  
4 habitat adjacent to Pier 300, which would also require substantially greater in-water  
5 construction (dredging of the shallow water habitat and the Seaplane Lagoon, and new  
6 wharf construction) than the Proposed Project. Such activities would result in substantial  
7 impacts to a mitigation site and to other biological resources, including loss of California  
8 least tern foraging habitat and substantial eelgrass beds. Due to the site constraints and  
9 substantial environmental impacts, use of the LAXT site as an alternative marine  
10 container terminal site to the Proposed Project site was determined to be infeasible.

## 11 **Alternative Location within the Port of Long Beach**

12 Locations outside of the Port of Los Angeles are not feasible alternatives to the Proposed  
13 Project, primarily because any site outside of the Port is beyond the jurisdiction of the  
14 Board of Harbor Commissioners (BHC) and, thus, not subject to BHC approval. The  
15 chief candidate within the Port Complex but outside of the Port of Los Angeles for an  
16 alternative container terminal location is the Port of Long Beach, because that port is  
17 similar in size to the Port, has modern container terminals, relatively deep-water access,  
18 and is geographically close. However, the Port of Long Beach faces future increases in  
19 cargo volumes and projected vessel size increases similar to those forecasted for the Port  
20 of Los Angeles. To satisfy that demand, the Port of Long Beach, like the Port of Los  
21 Angeles, is implementing its own program of modernization and expansion of container  
22 terminals. Furthermore, even if the proposed container terminal could be located in the  
23 Port of Long Beach, it would have impacts very similar to those of the Proposed Project  
24 at the Port of Los Angeles, given the proximity of the two ports.

25 Theoretically, containerized cargo for the region could be handled by the Port of Long  
26 Beach instead of by the Port of Los Angeles. However, relying on a Port of Long Beach  
27 location would not address the need to improve Port of Los Angeles facilities to be able  
28 to accommodate larger vessels, nor would a Port of Long Beach location meet the Project  
29 objectives of maximizing container land use and operations consistent with the Port  
30 Master Plan or promote the long-term development and growth of the Port of Los  
31 Angeles. In addition, as described in Section 1.2.3 of the Draft EIR (see Attachment 1),  
32 both ports have forecasted growth that would exceed their respective capacities within the  
33 planning horizon. Accordingly, both ports anticipate needing container terminal  
34 development beyond currently planned capacity optimization and maximization to  
35 accommodate future cargo forecasts. Furthermore, given the proximity of the two ports,  
36 diverting cargo to the Port of Long Beach would not eliminate the environmental impacts  
37 of that cargo on area communities and natural resources. Because the use of a location  
38 within the Port of Long Beach would not meet the fundamental Project purpose or  
39 objectives, the Port of Long Beach location has been rejected as an alternative location  
40 for a replacement or supplemental container terminal to the existing terminal.