Chapter 1
Introduction

1.1 Introduction

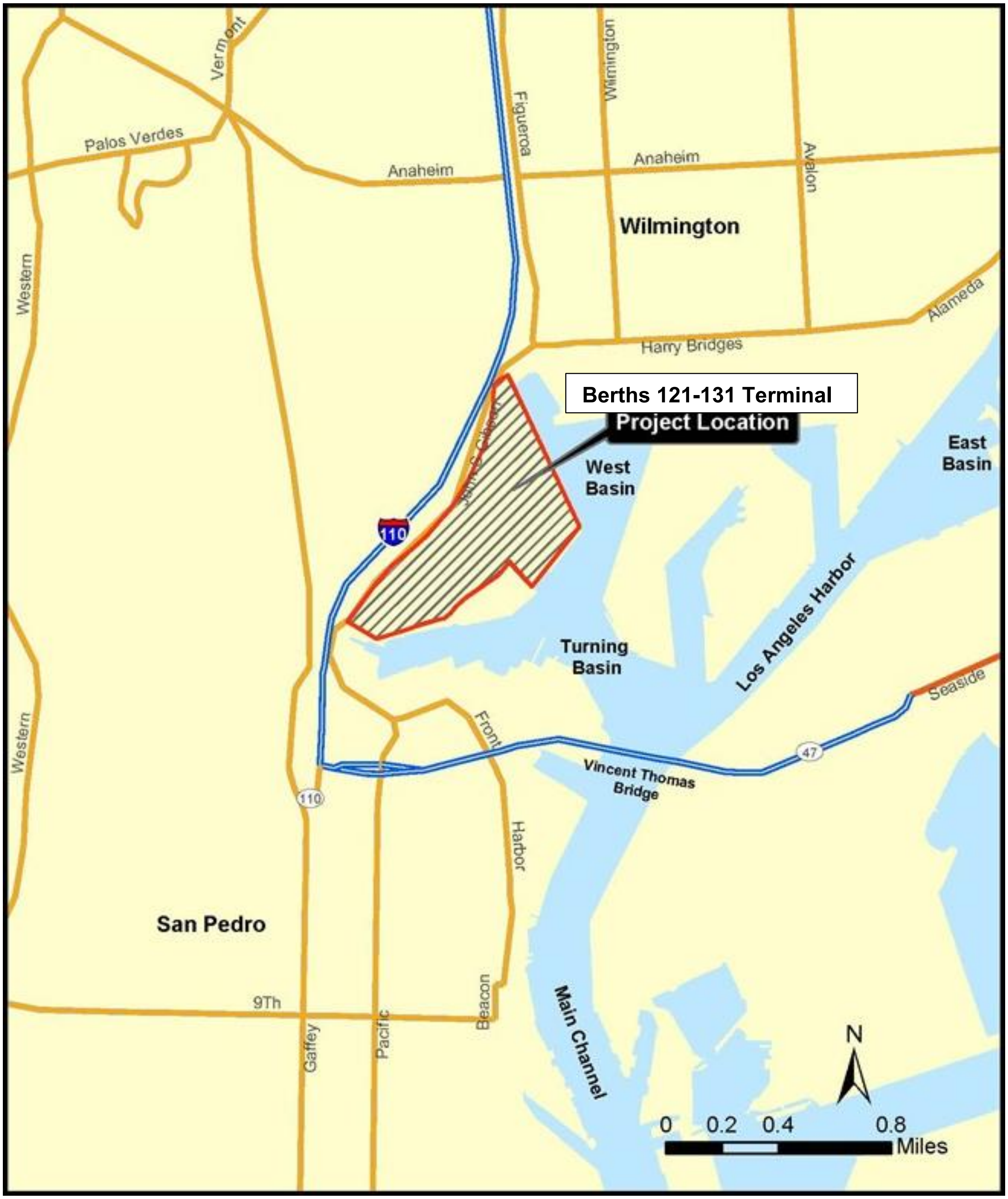
The Port of Los Angeles (Port) proposes to redevelop an existing container terminal located at Berths 121–131 in the West Basin of the Port (Figure 1-1). The proposed improvements (the Proposed Project) would accommodate the berthing, loading, and unloading of containerized cargo on the larger vessels that are anticipated to call at the terminal in the future. The terminal would be operated under a new long-term permit issued to a successful proposer and would improve marine shipping and commerce at the marine container terminal.

The Proposed Project would require approvals and permits from a number of agencies, including the U.S. Army Corps of Engineers (USACE) the Board of Harbor Commissioners of the Los Angeles Harbor Department (LAHD), the California Department of Transportation, the Los Angeles Regional Water Quality Control Board, the South Coast Air Quality Management District, the Los Angeles County Fire Department, and several City of Los Angeles bureaus and departments. Prior to issuance of permits or other project approvals, each of these decision-making bodies must consider the Proposed Project's environmental effects, which, in this case, are identified in this joint Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) prepared by USACE and LAHD to streamline the decision-making processes.

This Draft EIS/EIR has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA; U.S. Code [USC], Title 42, Section 4341 et seq.), and in conformance with the Council on Environmental Quality (CEQ) Guidelines and the USACE NEPA Implementing Regulations (Code of Federal Regulations [CFR], Title 33, Part 325, Appendix B). The document also fulfils the requirements of CEQA (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq.). USACE is the federal lead agency for NEPA and LAHD is the CEQA lead agency.

The Proposed Project and its alternatives are described in detail in Chapter 2, Project Description. The CEQA term "Proposed Project" is used throughout this document rather than the NEPA term "proposed Action" because "Proposed Project" encompasses the broadest set of proposed project components. The CEQA term "Proposed Project" includes all proposed project elements described in Chapter 2, Section 2.6, of this document, whereas the NEPA term "proposed Action" (or "Federal Action") includes only those elements that require federal approval, as described in Section 2.8 of Chapter 2.

1 **Figure 1-1. Project Location.**



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Chapter 3, Environmental Analysis, of this Draft EIS/EIR describes the affected environmental resources and evaluates the potential impacts on those resources that are likely to occur as a result of building and operating the Proposed Project and alternatives. This Draft EIS/EIR will be used to inform decision makers and the public about the environmental effects of the proposed waterside, terminal, and transportation improvements to Berths 121-131, which constitute the Proposed Project.

1.2 Background

1.2.1 Project Location and Brief Project Overview

LAHD operates the Port under the legal mandates of the Port of Los Angeles Tidelands Trust (Los Angeles City Charter, Article VI, Section 601) and the California Coastal Act (PRC Division 20, Section 30700 et seq.), which identify the Port and its facilities as a primary economic and coastal resource of the State of California and an essential element of the national maritime industry for the promotion of commerce, navigation, fisheries, and harbor operations. Activities should be water dependent, and LAHD must give highest priority to navigation, shipping, and necessary support and access facilities to accommodate the demands of foreign and domestic waterborne commerce. LAHD is chartered to develop and operate the Port to benefit maritime uses. It functions as a landlord by leasing Port properties to more than 300 tenants.

The Proposed Project site is located near the communities of San Pedro and Wilmington and is approximately 20 miles south of downtown Los Angeles. The site is a 186-acre marine container terminal which occupies Berths 121 – 131 within an industrial area in the vicinity of the West Basin in Los Angeles Harbor and which also includes an administration building and parking area at 2001 John S. Gibson Boulevard. The LAHD issued Permit No. 787 to Yang Ming Marine Transport Corporation (YM) to use the terminal; from October 11, 1996 through October 10, 2021, the terminal was operated by West Basin Terminal Company under contract to YM, and since that time the Everglades Company Terminal, Inc. has operated the terminal under Permit No. 953.

The Proposed Project (see Chapter 2, Project Description, for a detailed description of the Proposed Project and alternatives) would be constructed over a period of approximately 21 months, from 2026 to 2027. Construction would consist of:

- Demolishing the existing 1,260-ft.-long wharf at Berths 126-129, including removing supporting piles;
- Dredging and disposing of sediments to deepen Berths 126-129 to from -45 to -53 ft. Mean Lower Low Water (MLLW) with a two-foot overdredge allowance for a maximum total depth of -55 ft. MLLW);
- Reconstructing the rock dike at Berths 126-129; installing new concrete piles, and constructing a new concrete, pile-supported wharf at Berth 126-129 with Alternative Maritime Power (AMP) infrastructure;
- Relocating five existing wharf cranes to Berth 121 for re-use and installing up to ten new 100-ft-gauge, electrically powered, rail-mounted gantry cranes for vessel loading/unloading;
- Expanding the on-dock railyard known as the West Basin Intermodal Container Transfer Facility (WBICTF) by adding three or four loading tracks, extending the

existing tracks, and installing up to seven electric-powered, rail-mounted gantry cranes for train loading/unloading; and

- Constructing backland improvements such as repaving, restriping, and relocation of minor support buildings, structures, and utilities.

During construction, operations at the terminal would continue at reduced levels and some vessels would likely be diverted to other marine container terminals in the Port Complex. The actual length of time needed to construct the Proposed Project, including the environmental review process, project design, and associated permitting cannot be determined with certainty at this time; therefore, the various dates and durations are for planning purposes and are intentionally conservative in order to evaluate the potential for environmental impacts.

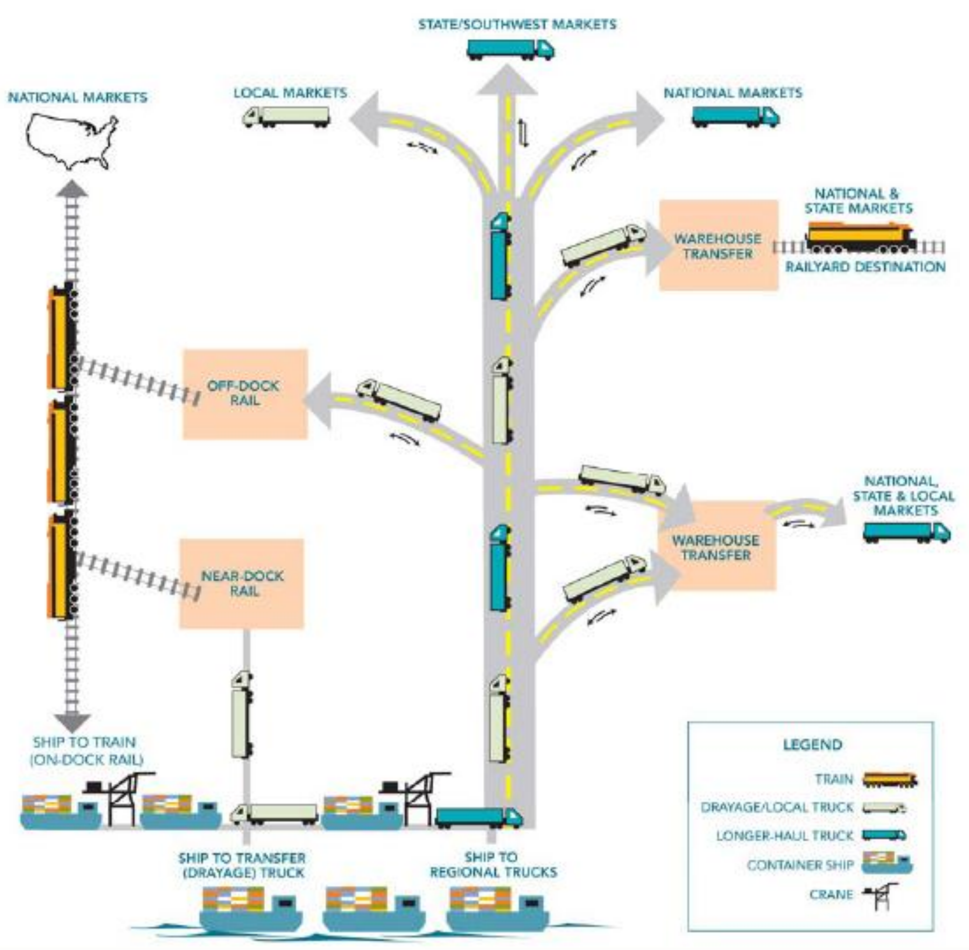
After completion of construction, terminal operations, measured as throughput (see Section 1.2.2.3, Container Terminal Overview, for a definition of throughput), is projected to increase due to the ability of the terminal to accommodate larger vessels. As a result, the maximum throughput (i.e., capacity) of the terminal is ultimately expected to increase from approximately 1,332,000 twenty-foot equivalent units (TEUs, a measure of containerized cargo; see Section 1.2.2, Goods Movement Overview) per year to approximately 1,871,405 TEUs per year. The Proposed Project would require a permit from USACE for the construction phase and the issuance of a new long-term permit by LAHD for both the construction phase as well as operations for a duration of 30 years, from 2025 to 2055, to a future tenant. In support of the San Pedro Bay Ports ’Clean Air Action Plan (CAAP), the long-term permit would require the selected tenant to transition to zero emissions equipment beginning in 2030. Therefore, this Draft EIS/EIR also contains an evaluation of potential future construction of infrastructure to support zero emission cargo handling equipment, as further discussed in Section 2.6.

1.2.2 Goods Movement Overview

The Proposed Project is part of a goods movement chain, a complex international system that moves goods from their points of production to consumers by different modes of transportation (ship, rail, and truck). With respect to the Ports of Los Angeles and Long Beach (Ports [also referred to as the San Pedro Bay Port Complex or Port Complex), the points of production are generally located in foreign countries, while the consumers are in the United States, although for export cargo the reverse is true. The goods movement chain is a coordinated process that includes shippers, shipping lines, third-party logistics providers, stevedoring companies (the entities that load and unload ships), cargo terminal operators, labor (longshore workers, clerks, mechanics, etc.), truckers, railroads, and distribution centers. Manufacturers, retailers, or third-party logistics firms often contract with shipping lines to move goods from origin to destination. Shipping lines own and lease the cargo containers and typically enter into agreements with trucking companies and railroads for the transport of those containers between the manufacturers and retailers and the marine terminals. The ability to move the same container between ships, trucks, and rail is called intermodal transport, which is accomplished through the use of standardized containers that can be easily moved between modes. Figure 1-2 illustrates the flow of containers through the various stages of the goods movement chain.

The goods coming into container terminals such as the Berths 121-131 Terminal arrive in shipping containers that have been transported on container ships. Container cargo volumes are expressed in Twenty-foot Equivalent Units, or TEUs. A TEU is a measure of containerized cargo capacity equal to one standard shipping container 20 feet long by 8 feet wide by 8 feet, 6 inches tall. Although 20-foot containers are still common, presently most maritime containers are 40 feet long, or two TEUs, and 45- and 48-foot-long containers are also common. To account for the mix of container sizes in the cargo throughput, a ratio factor is generally applied to convert TEUs to the actual number of containers. For the Port of Los Angeles, this factor is currently approximately 1.8, meaning one container equals 1.8 TEUs. For example, a ship with a capacity of 5,000 TEUs would carry approximately 2,800 containers (2,800 ÷ 1.8). Containers are also counted in "lifts" (as in a container being lifted onto or off a train or vessel by a crane). A lift is the unit of an individual container of any size; accordingly, the Port-wide conversion factor from lift to TEU is also 1.8. At the Berths 121-131 Terminal, the conversion factor from TEU to container or from TEU to lift was approximately 2.01 in 2019 when YM occupied the terminal. For this Draft EIS/EIR, the 2.01 factor has been used to model baseline conditions, and 1.8 has been used to project future scenarios, consistent with historic practice.

Figure 1-2. Goods Movement Chain: Transportation and Distribution.



1.2.2.1 Container Vessel Operations

Import and export cargo containers arrive at and depart from marine terminals on container ships. Container ships arrive at and depart from the Ports via designated shipping lanes (northern or southern approaches) when near the port area. When ships are within the San Pedro Bay breakwater, they are assisted to their berth by one or two tugboats, as requested by the Port Pilot Service. Container ships are generally between 700 feet and more than 1,000 feet long but are typically described by the number of TEUs they can carry (from a few thousand to more than 20,000). The TEU measure is used to determine the capacity of a container ship because, as described above, container ships carry a variety of container sizes ranging from 20 feet to 45 or even 48 feet in length.

Larger vessels are being deployed into the world fleet to reduce container shipping costs: new container vessel deliveries have increased from 6,600 TEU vessels in 1997 to over 24,000 TEU capacity in 2024. Larger vessels transport more containers, which results in lower average fuel consumption and labor costs per container, and therefore offers greater economies of scale to shipping lines. The San Pedro Bay Ports regularly receive 14,000 TEU and even 18,000 TEU vessels with the occasional 23,000 TEU vessel. Larger vessels do not necessarily mean that more total cargo arrives at Port terminals because cargo volumes are driven by market demand, not vessel size or numbers. However, ports need to have the infrastructure to accommodate these larger vessels to remain competitive in the marketplace. Large container vessels, often referred to as Ultra Large Container Vessels (ULCV), result in a larger volume of containers arriving and needing to be processed during one vessel visit, hence more terminal capacity.

Container vessels normally remain docked at the terminal berth for approximately three or four days. (That is not the case at all ports around the globe, in many of which berthing times are much shorter; the San Pedro Bay Ports are unusual because they are gateway ports, meaning that almost all containers aboard vessels are discharged and a roughly equivalent number of exports and empty containers are loaded, requiring longer port calls.) Traditionally, the main propulsion engine of the ship would be shut down once at berth but one or more of the large diesel auxiliary engines would run continuously to provide electrical power for ship functions, including power for refrigerated containers while at berth. A boiler that heats the fuel for the main engine also runs while at berth to ensure a constant fuel viscosity. In the past ten years, however, many container ships have been able to shut down their auxiliary engines and connect to shore side electrical power, also known as “cold ironing”. The Port of Los Angeles first introduced shore-side electrical power, known as Alternative Maritime Power (AMP) for in-service container vessels in 2004. AMP reduces a vessel’s air emissions while at berth, even when taking into account the emissions associated with electricity generation by the power grid utility. Today, most container ships calling at California ports shut down their auxiliary engines and connect to shore-side power while at berth. The Port completed its AMP power infrastructure at all container berths prior to the January of 2014 effective date of the California Air Resources Board (CARB) “at berth” regulation, which requires that most vessel calls California ports use AMP or an approved alternative compliance measure. Additional details regarding the “at berth” rule and other CARB regulations are provided in Section 3.2, Air Quality and Meteorology.

1.2.2.2 Container Terminal Overview

A modern marine container terminal integrates several different physical components and operational processes in order to load and unload oceangoing container ships and move cargo through the terminal to and from trucks and trains in as cost-effective manner as possible. The physical components of a container terminal consist of berths/wharves (docks), cranes, backland storage areas (container yard), entrance and exit gates, maintenance and administrative buildings, and, in many cases (including the Berths 121-131 Terminal), a railyard (known as an “on- dock” railyard). The operational processes for the terminal include stevedoring (loading and unloading ships), container storage and management, in-terminal container movements, making containers available for drayage (hauling) by truck to off-site locations such as warehouses, peel-off yards, and off-dock railyards, and on-dock rail operations (these components are described below).

At the Port, LAHD develops and owns major terminal container facilities (wharves, container storage yard, and buildings) and issues permits to terminal operators and/or shipping companies for operation of those facilities. A container terminal is operated by a terminal operator, which is often a company that is separate from, yet affiliated with, the major shipping line that uses the terminal. Because many terminal operators are affiliated with shipping lines, those lines often serve as the terminal’s primary customers. Terminal operators also contract with invitee shipping lines. These “third-party invitee” shipping lines traditionally look for three- to six-year terminal and stevedoring agreements to secure their positions in the marketplace, but might, for various business reasons, make agreements with the terminal operator for as little as six months.

The terminal operator orders longshore labor through the Pacific Maritime Association (PMA), the employer. The PMA contracts with the International Longshore and Warehouse Union (ILWU) and negotiates, on a periodic basis, with the ILWU to determine labor rates, working conditions, safety measures, and various operational protocols. Although the terminal operator is largely responsible for terminal operations, different parts of the terminal operation are handled by other entities. For example, shipping lines own and operate container vessels (e.g., terminals do not have direct authority over vessel masters) and shipping containers, manage contracts with tugboat companies, and contract with railroads and trucking companies to move international cargo as a service to importers and exporters to inland destinations. Rail movements within the Port are handled by Pacific Harbor Line (PHL), a rail switching company that operates the rail system in the Port Complex on behalf of the mainline rail companies (BNSF Railway Co. [BNSF] and Union Pacific [UP]).

1.2.2.3 Container Terminal Operations

Vessel Loading and Unloading

When a vessel arrives at a marine container terminal, most of the export cargo to be loaded is already stacked in the yard. Gangs (groups) of longshore workers, contracted by the terminal operator, work to unload and then load the ship using wharf cranes for the ship-to-shore activity, and other terminal equipment such as yard tractors (UTRs or “hostlers”) for the in-terminal movement of containers. The wharf crane operators lift cargo containers between the ships and specialized truck trailers called “chassis”, which are pulled by yard tractors. Typically, a wharf crane can transfer an average of approximately 30 containers per hour. The cranes have specialized equipment, including anti-sway devices, lighting, and adjustable “spreaders” (cargo hooks) that allow attachment to the various container sizes. The number of cranes operating simultaneously on one ship can vary from one to ten, depending on the size of the ship, the number of other vessels at berth, the crane gauge (distance between crane legs), and the availability of cranes.

Container Yard Operations

Once containers have been off-loaded from the ship, they are stored and moved around the container yard using cargo-handling equipment, which may include diesel-powered rubber-tire gantry cranes (RTGs); diesel-powered sidepicks and toppicks; diesel-, propane- or LNG-powered UTRs; and/or electric- or diesel-powered, rail-mounted gantry cranes (RMGs). Recently, zero- and near-zero emissions cargo-handling equipment has been deployed in the Port Complex terminals for use and demonstration purposes, but diesel is still the predominant power source.

Import cargo containers are stored in the container yard (backland) of the terminal, either "grounded" or "stacked" (where containers are stacked on top of each other with the bottom container placed directly on the ground), or "wheeled" (where each container is mounted on a parked chassis). Most terminals use a combination of the two systems. Some import containers are staged near the on-dock railyard to be loaded onto departing trains.

Container Transport

Containers that leave the terminal by truck are drayed either directly to final local destinations, such as retailers or distribution warehouses, or to transloading warehouses (locations where cargo is repackaged between marine containers and larger domestic containers). Some of the containers are hauled to railyards outside the Port, such as UP's East Los Angeles Yard or BNSF's Hobart Yard, to be transported by train to destinations east of the Rocky Mountains; these are containers that are more effectively handled using an off-dock rail yard instead of a terminal's on-dock facility. Finally, a very small proportion of the containers is transported by truck to more distant destinations elsewhere in the U.S.

Normally, export containers arrive at the gate by truck or train one day to one week prior to the scheduled departure of the ship on which the containers are booked. Containers are either unloaded from the trucks onto stacks by RTGs or top-picks or parked on their chassis. In either case, the containers spend some time ("dwell time") in the terminal prior to being loaded onto a ship. Intermodal movement, including factors governing the distribution patterns and mode choices, is discussed in greater detail in Section 1.2.2.4, Intermodal Cargo Operations.

Terminal Capacity Factors

The number of containers that pass through a terminal is called its throughput. Throughput is literally the number of containers moving through a terminal over time. Each container terminal has a "throughput capacity," which is the estimated maximum number of containers the terminal can handle in a year. As described in Section 1.2.3, San Pedro Bay Ports Cargo Growth and Port Capacity, the throughput capacity of a terminal is based on site-specific physical and operational parameters, including terminal configuration, berth length, backland area, the ratio of berth length to backland area, the number and type of truck gates available, the number of rail loading tracks available, and the number and types of equipment in use.

To achieve the optimal throughput capacity of a terminal, the various components must not constrain the movement of cargo through that terminal. Optimal throughput capacity is independent of external influences such as economic cycles or disruptions in transportation systems but is instead a theoretical or ideal figure that is based on an optimal configuration. As a simplified example, a terminal of 500 acres and only one berth would be constrained by the number of ships it could berth ("berth constrained"), while a terminal with five long berths but only 50 acres of backland would be constrained by the amount of cargo that could be handled by the backland ("backland constrained").

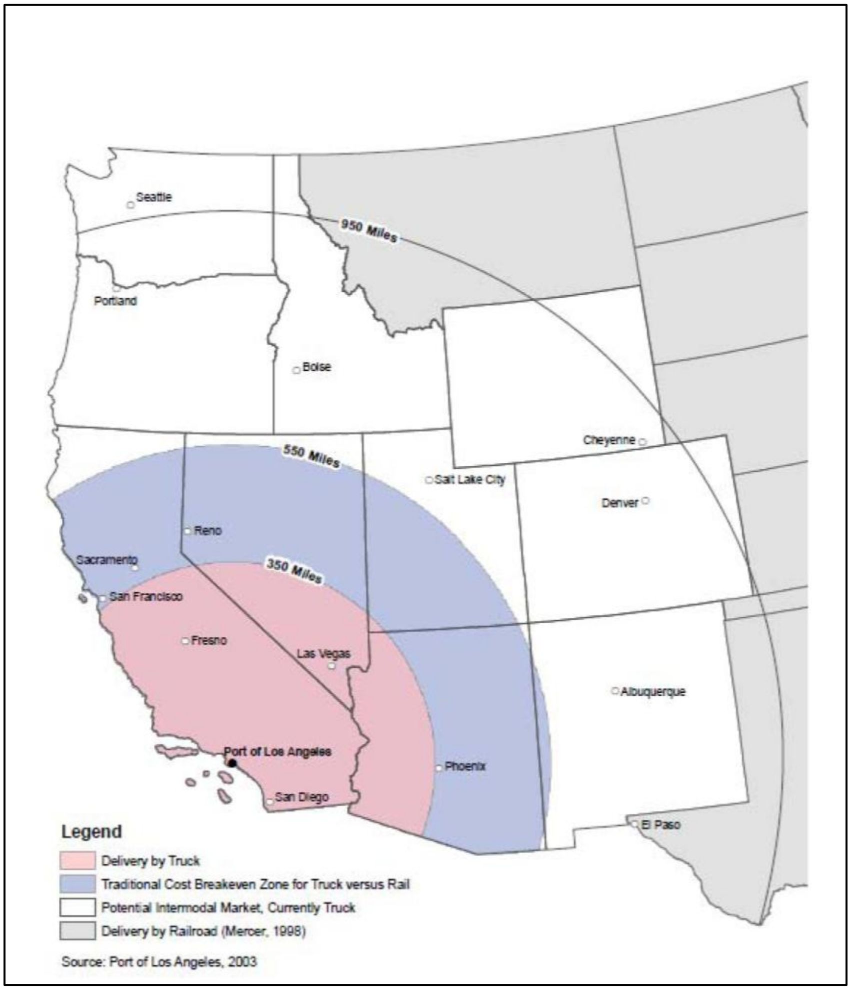
1.2.2.4 Intermodal Cargo Operations

The San Pedro Bay ports serve as a major gateway to international trade because of their location in the midst of a major metropolitan area on the Pacific Ocean. The Rail Study Update (POLA and POLB 2020) estimated that 44% of international containerized freight arriving from the Pacific Rim comes through the San Pedro Bay Ports. The Ports are a vital link in the goods movement chain, providing products to the massive local market in Southern California as well as markets throughout the nation.

As previously described, the goods movement chain of concern to the Proposed Project involves intermodal transport, which is the transportation of freight in containers using a combination of trucks and trains (Figure 1-2). Intermodal container movement can be divided into two categories: (1) transloaded intermodal cargo, and (2) direct intermodal. On the West Coast, cargo with origins and destinations fewer than about 350 miles from the marine terminal is typically transported by truck (Figure 1-2) and is referred to as local. Cargo arriving from or departing to locations more than approximately 550 miles away is typically transported by trains and is referred to as direct intermodal. This pattern is attributable to the fact that the economic breakeven point between truck transport and rail transport is generally between 350 and 550 miles (Figure 1-3). Cargo bound for destinations more than about 950 miles from the marine terminal is moved out of Southern California almost exclusively by rail because of the tremendous cost savings of rail over truck.

Rail transport of intermodal cargo in and out of the region occurs on a system of rail main lines and supporting railyards. These include the Alameda Corridor, between the port area and major railyards near east Los Angeles (see Section 3.9, Ground Transportation); several railyards in the area between east Los Angeles and San Bernardino; and several main lines heading east and southeast from the various yards. As domestic and international commerce have increased, traffic on the rail system has increased to the point that the capacity of the system to accommodate more trains is a consideration in future planning efforts. The system's capacity to accommodate additional trains is driven by mainline capacity rather than the number of railyards. The system of mainline trackage in Southern California is designed and built to accommodate the anticipated rail activity in the region, both now and in the future.

Figure 1-3. Local Cargo Distribution from Port of Los Angeles.



1.2.2.5 Local Transport by Truck

Containers that arrive at the San Pedro Bay Ports for local consumption, i.e., cargo destined for Southern California or the region west of the Rocky Mountains, are moved exclusively by truck. Local trucking firms contract with cargo owners, freight agents, or in some cases terminal operators to pick up containers at the terminals and haul them to the local destinations (the reverse is true for export cargo). There are approximately 20,000 trucks signed up in the Ports' Drayage Truck Registry to provide drayage services at the Port of Los Angeles (POLA), although only approximately 15,000 to 16,000 of those trucks enter POLA container terminals and provide drayage services on a monthly basis. These trucks are governed by concession agreements with the Ports to be operated in accordance with the Clean Air Action Plan (CAAP), which specifies required levels of emission control for port-related trucks (see Section 3.2.3.2 Air Quality).

Trucks may arrive at a terminal as "bobtails," meaning a tractor with no trailer, to pick up a container on a chassis, or a truck may arrive with an empty chassis to pick up a grounded container, or with a container on a chassis for drop off at the terminal. Similarly, trucks may leave bobtailed, hauling a chassis, or hauling a container.

1.2.2.6 Transloaded Intermodal

Transloaded intermodal cargo consists of import containers that arrive at marine terminals and are then drayed by truck to a warehouse or distribution center where they are unloaded. Their cargo is processed (e.g., repackaging, sorting, tagging, labeling) before being reloaded into so-called domestic containers, which are typically 53 feet long, for transport to their local or regional destinations.

For transloaded rail, after the cargo is processed at the warehouse, the new containers are transported to an off-dock railyard (see Section 1.2.2.7, below) for eventual transport out of the region by rail to national markets. Transloaded rail is almost always destined for points east of the Rocky Mountains. A study by Mercator International and Oxford Economics (2016) determined that the contents of approximately 30% of the import containers in 2014 were transloaded to 53-foot domestic intermodal rail containers. An earlier study by the Ports determined that in 2010-2011 an additional 13% of import containers were transloaded to truck-hauled containers for regional and western states distribution/delivery. Accordingly, between 40% and 45% of import marine containers are actually transloaded into domestic containers for further shipment by rail or truck, a fraction that is expected to be maintained at least until 2030.

Export cargo is typically not transloaded into marine containers (i.e., 20-, 40-, 45-, and 48-foot containers) before arriving at the marine terminals for export but is instead packed in marine containers at its origin.

1.2.2.7 Direct Intermodal

"Direct intermodal" is the movement of containers directly between the Port and a railyard. Three types of railyards are used for direct intermodal: on-dock railyards, near-dock railyards, and off-dock railyards. On-dock railyards are located within marine terminals, near-dock railyards are less than five miles from marine terminals, and off-dock railyards are more than five miles from marine terminals. Near- and off-dock railyards generally require draying of containers because those railyards are outside of the marine terminals. As discussed more fully below, there is no draying of containers associated with on-dock railyards because the railyard is located within the marine terminals, although in-terminal movements by cargo-handling equipment are needed to move containers between the railyard and the container yard.

After containers are sorted and loaded onto railcars at on-, near-, or off-dock railyards, they are hauled by rail to their final destination, which is usually east of the Rocky Mountains. In 2019, on-dock and near/off-dock railyards handled 24% and 5.3%, respectively, of the direct intermodal containers moved from the Ports (the remaining cargo was moved by truck, primarily to local destinations, and was therefore not intermodal cargo).

The following sections provide a more detailed description of on-dock, near-dock, and off-dock railyards.

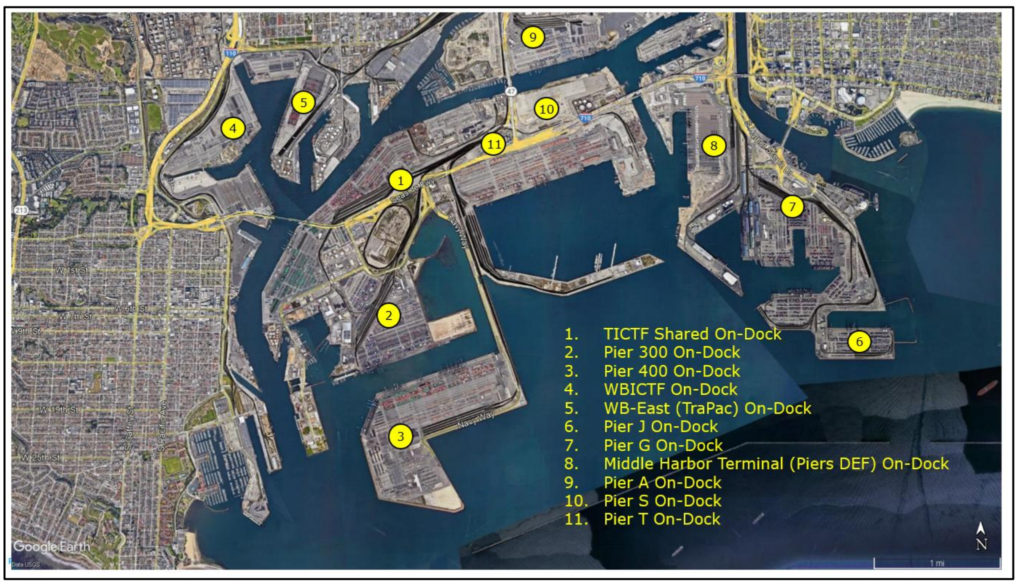
On-Dock Rail

On-dock rail allows containers to be loaded at a marine terminal for transport by rail to areas outside the region, eliminating the need to dray containers to another rail facility outside the marine terminal. On-dock railyards are located within marine cargo terminals at the Ports (Figure 1-4); the railyards are always at the edge of the terminal, never adjacent to the vessel berths, because cargo loading requirements make it impracticable to load containers directly from ships onto trains.

An on-dock railyard consists of loading tracks that are supported by storage tracks to maximize operating efficiency and throughput capacity. They are designed to accommodate various types of container lifting equipment, including RTG cranes, RMG cranes, reach stackers, and toppicks, depending on terminal operator preferences. In general, containers are off-loaded from a cargo ship onto chassis or other trailer-like equipment and moved by yard tractors either directly to a waiting railcar in the on-dock railyard or to a designated container staging area in the terminal's backlands. These containers do not leave the terminal and do not travel on local roadways.

Typically, trains built on-dock consist of railcars that are all bound for the same major-volume destination (i.e., an intermodal railyard east of the Rocky Mountains), although exceptions do occur. Most containers that cannot fill a single-destination train on-dock are drayed to a near-dock or off-dock railyard to be combined with containers from other marine terminals headed for the same destination. Some containers are loaded onto short blocks of rail cars that are transported to support railyards for combination with other blocks from other terminals in a single-destination train.

Figure 1-4. On-Dock Railyards in the Ports of Los Angeles and Long Beach.



Near-Dock Rail

A near-dock railyard is defined as a railyard located less than five miles from the marine terminals, thus generally requiring a short drayage trip on local streets between the terminal and the railyard. A key benefit of near-dock rail over off-dock rail (discussed below) is the shorter drayage truck travel distance between the marine terminal and the railyard. In some cases, small numbers of containers are transported by rail from an on-dock to a near-dock railyard to be joined with other small-destination railcars.

A near-dock railyard permits the railroad to combine cargo from various marine terminals and build trains that efficiently transport cargo to specific destinations throughout the country. For example, a marine terminal may have enough containers to build a unit train (i.e., a train consisting of railcars all bound for the same destination, thereby avoiding switching and other delays, and the associated costs and extra emissions, enroute) to Chicago but may only have a few containers bound for Kansas. The Kansas-bound containers would, therefore, be sent to a near-dock facility to be combined with other Kansas-bound containers from other terminals to make up a unit train to Kansas. Currently, only one near-dock railyard, the UP ICTF located in the City of Los Angeles near Carson, serves the Port Complex (Figure 1-5).

Off-Dock Rail

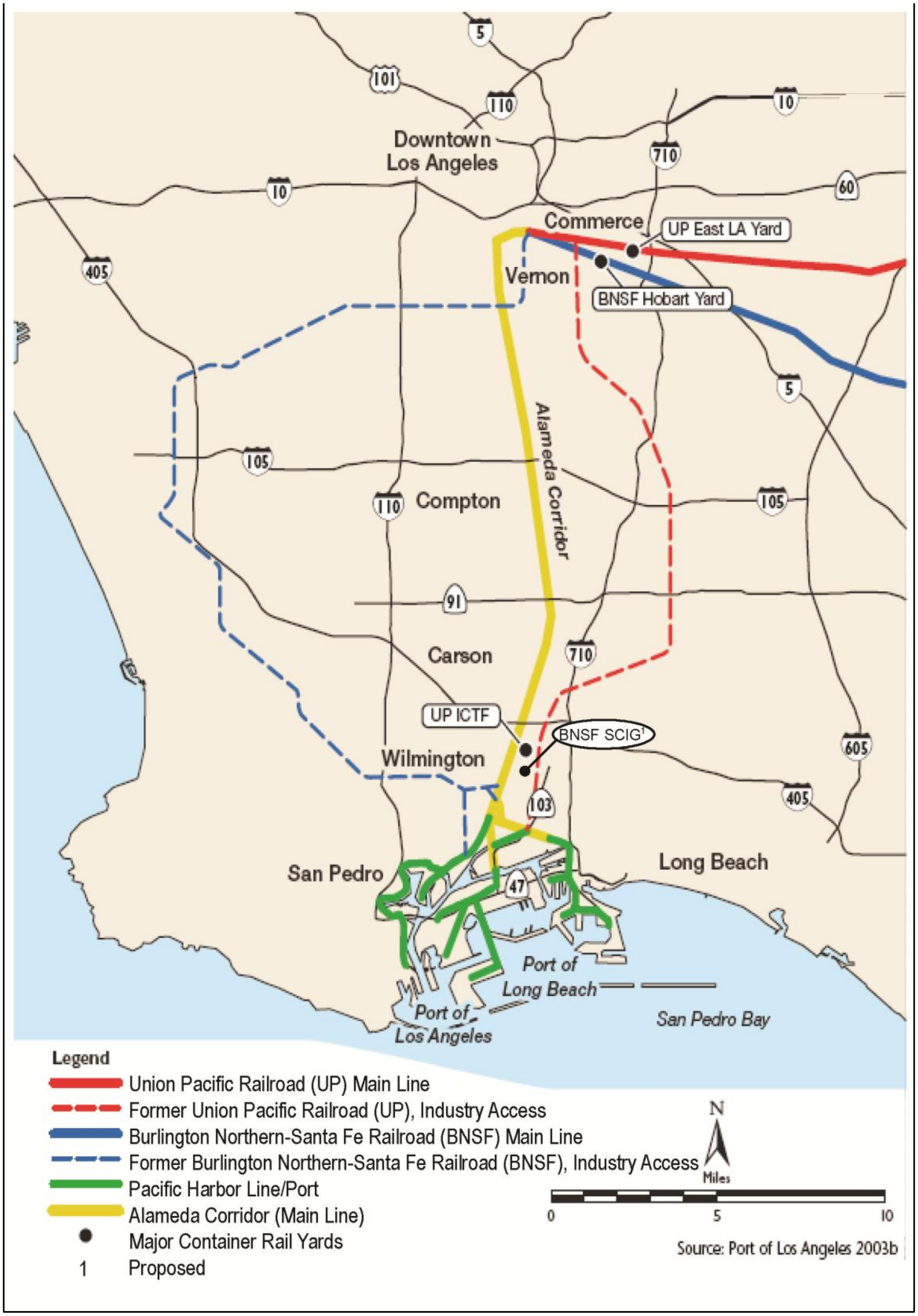
Off-dock railyards are located more than five miles from the marine terminals. Currently, there are five off-dock railyards in the Los Angeles region, three operated by UP and two operated by BNSF, but only two handle substantial numbers of containers from the San Pedro Bay Ports: the BNSF Hobart/Commerce Yard (Hobart Yard) and the UP East Los Angeles (ELA) Yard, both in Los Angeles/Commerce/Vernon (Figure 1-5). Hobart and ELA are located near downtown Los Angeles, approximately 24 miles north of the Ports. The remaining off-dock railyards include the UP Los Angeles Trailer and Container Intermodal Facility, the UP City of Industry yard, and the BNSF San Bernardino yard. The Hobart yard handles most of the international cargo not handled by on-dock yards and the ICTF. All of the off-dock railyards in the region handle more domestic and transloaded containers than direct intermodal international containers.

Off-dock railyards operate in similar fashion to near-dock railyards. Containers are drayed from a marine terminal to an off-dock railyard by truck (from the Port Complex trucks generally travel via Interstate 710). At the off-dock railyard, containers are either immediately loaded onto a railcar or staged temporarily at the railyard until a train bound for the destination of the stored container can be built. Off-dock rail yards can serve multiple marine terminals (including those that do not have on-dock facilities) and more than one port. One drawback of off-dock railyards compared with on-dock or near-dock railyards is that containers must be drayed farther, adding to congestion on roadways, increased air emissions in the region, and other adverse environmental impacts.

Intermodal Railyard Operations

As mentioned above, intermodal railyard operations generally involve trucks, container handling equipment, and trains (although on-dock railyards do not involve on-road trucks). In the case of off-dock and near-dock facilities, drayage trucks arrive at and depart from the facility hauling marine shipping containers on chassis. Most trucks (or, in the case of on-dock facilities, yard tractors) are directed straight to trackside where a mobile crane lifts the container off the chassis and places it on a railcar for further shipment or lifts a container off a railcar and places it on the truck chassis. The cranes at off-dock and near-dock facilities are typically large structures that run on rails (RMGs) or fixed runways (RTGs) and span both the loading tracks and adjacent truck lanes. The cranes at on-dock yards are typically smaller vehicles (called top handlers or toppicks) that operate more like forklifts alongside the tracks, although two on-dock yards (TraPac and Middle Harbor) have RMGs for loading and unloading railcars. Containers not immediately placed on railcars or trucks are stored in a designated container staging area to be loaded at a later time.

Figure 1-5. Locations of Existing Near-Dock and Off-Dock Railyards



Trains entering and leaving intermodal railyards consist of flatcar-like railcars known as “double-stack” or “well” cars, which are designed especially for transporting shipping containers, and several large, diesel-powered locomotives of the type known as “line haul” or “road” locomotives. Containers can be stacked two high on the railcars, thereby doubling the cars’ capacity compared with a conventional flatcar, which cannot handle double stacking. The standard double-stack car consists of five bays (the “wells”), each capable of holding two full-sized or four 20-foot containers, linked by couplers into a single articulated car that can negotiate curves. Five-bay cars are usually approximately 265 feet long, although some are as long as 305 feet. Three-bay and single-bay cars are also used, although they are less common than five-bay cars. A typical intermodal train is composed of as many as 29 such cars, is up to approximately 8,000 feet long (including locomotives and inter-car spaces), and is able to carry approximately 280 containers.

Inbound trains are routed onto the loading tracks. In facilities having locomotive servicing capabilities, the line-haul locomotives are uncoupled and moved to locomotive servicing facilities for necessary inspections, refueling, and servicing. However, because most on-dock facilities do not have locomotive servicing facilities, locomotives that serve such facilities must be moved to the nearest railroad facility for servicing. In the Port Complex, Watson Yard or Terminal Island, for BNSF, or Dolores, for UP, provide locomotive servicing.

Because the loading tracks are typically much shorter than the train, the trains must be broken into two or more blocks, each of which is positioned on a loading track. On-dock railyards are typically shorter than off-dock and near-dock yards; accordingly, more blocks, and therefore more train movements, are necessary to spot the train on the loading tracks. These activities are often handled by relatively small locomotives called “yard locomotives” or “switchers.” In the Port Complex’s on-dock railyards, much of the switching is performed by PHL’s switchers.

Outbound trains are assembled (“built”) and then leave the facility in essentially the reverse process, coupling together two or more blocks of railcars to make a full train. The trains then depart after proper inspections and testing.

Train operations within the Port Complex face physical and operational constraints that cause delay and congestion for rail traffic. The most recent study of the port area rail infrastructure and operations (POLA and POLB 2020) identified three major physical constraints: the Badger Avenue Bridge over the Cerritos Channel, the CP Mole area on Terminal Island, and Pier B/CP Ocean in Long Beach. These are bottlenecks to train movements because they have limited capacity to accommodate trains. None of these bottlenecks directly affects trains in and out of the Berths 121-131 Terminal, but delays at those points can ripple through the system. Operational constraints include, among others, congestion caused by long trains that do not fit entirely into a railyard and therefore block operating tracks while the train is being broken down, trains that must be shoved into stub-end yards, which takes more time and locomotive moves, and trains merging from a branch line, such as the West Basin lead track, onto the Alameda Corridor. The study identified several proposed and recommended projects for addressing these and other constraints to the rail system.

1.2.3 San Pedro Bay Ports Cargo Growth and Port Capacity

This section presents background information on long-term growth of containerized cargo at the Ports. Facilities planning must take into account both the economy's demand for cargo and the capacity of the Ports and associated transportation infrastructure to handle that cargo. Long-term cargo growth forecasts are used as planning tools to understand and predict cargo volumes and Port-related activities for the movement of cargo. Terminal planning involves balancing existing and potential physical and operational capacities with market demand projections for cargo. Thus, the demand forecasts and the capacity modeling demonstrate a need for the Ports to be improved and expanded to accommodate future demand.

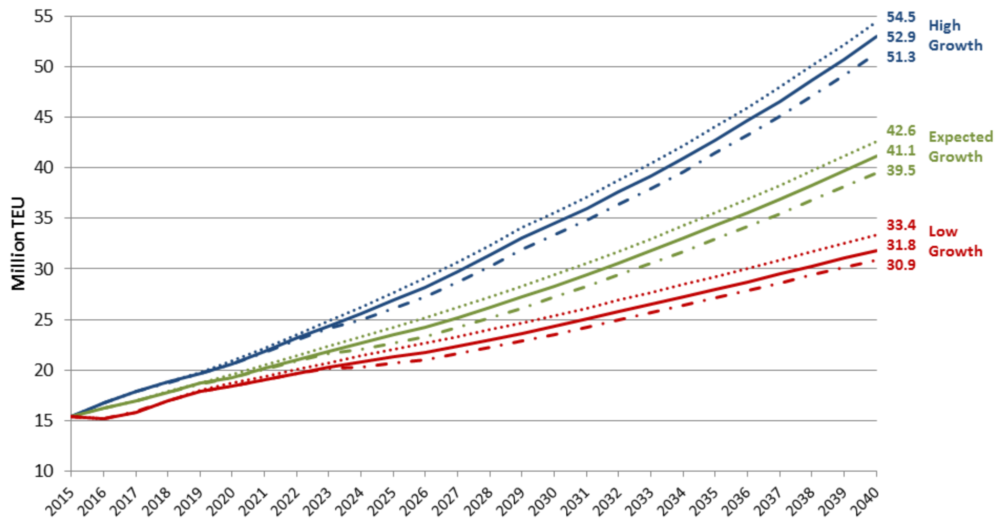
1.2.3.1 Cargo Demand Forecast

In the last 40 years, containerized shipping through West Coast ports in the U.S. has increased twentyfold, driven by increasing U.S. trade with Asian economies. Major West Coast ports, particularly the ports of Los Angeles, Long Beach, and Oakland, have invested billions of dollars to optimize facilities and accommodate these increases. These investments are necessary because most marine terminals across the country were not designed to handle the larger vessels that are entering the fleet mix (see Section 1.2.2). Taller, wider cranes are required to lift from increased stack heights on vessels and to reach across additional rows of containers on the larger vessels. Structural improvements to wharves may be required to support the larger and heavier cranes and/or vessels. Ports have deepened their channels and berths to accommodate larger container ships; demolished existing facilities and built new container terminals in their place; and created new land to provide space for additional container terminal backlands. The Port of Los Angeles and USACE Channel Deepening project was completed in 2013 and involved deepening of the Port's 45-foot deep Main Channel, West Basin Channel and East Basin Channel to a 53-foot depth and is intended to allow for the navigation of these larger vessels in future years (USACE and LAHD, 2009).

Terminal-specific improvements are required, including berth deepening, larger cranes, wharf improvements, expansion of backlands, and rail improvements to accommodate the larger vessels and associated cargo. Some marine terminal operators have purchased high-speed cranes, modernized transportation equipment, and increased automation to move containers more rapidly between ships and trucks or trains. These and other improvements represent an ongoing effort to accommodate the anticipated growth in cargo. Major projects are planned for both the Port of Los Angeles and the Port of Long Beach well into the future.

To plan, design, and construct infrastructure, the Ports periodically develop long-term macro-economic cargo forecasts along with detailed terminal capacities (including micro-simulation). The most recent forecast was prepared in 2016 (Mercator International and Oxford Economics 2016), and it projected unconstrained cargo demand for the ports through 2040 based on nine scenarios of combinations of economic growth rates and rates of cargo diversion to other ports. The "base case" used the expected macro-economic assumption of an average combined annual growth rate (CAGR) for containerized cargo of 4.0% (rather than high or low growth rates), driven primarily by trade with Northeast Asia (China, Japan, and South Korea) and Southeast Asia, for which the Port Complex will continue to be the major gateway, and assumed an intermediate level of cargo diversion. (A high level of cargo diversion to other ports would result in lower cargo volumes through the San Pedro Bay Ports, and vice versa.) That "base case" scenario, which the Ports use for planning purposes, predicts that cargo demand will reach 34.3 million TEUs in 2035 and 41.1 million TEUs in 2040 (Figure 1- 6). The low-economic-growth scenario with a high level of diversion resulted in a demand of 30.9 million TEUs in 2040, and the high-growth/low diversion scenario resulted in a demand of 54.5 million TEUs in 2040.

Figure 1-6. Cargo Demand through the San Pedro Bay Ports, 2015 – 2040.



	High Growth			Expected Growth			Low Growth		
CAGR	Upside	Base	Downside	Upside	Base	Downside	Upside	Base	Downside
2015-2040	5.2%	5.1%	4.9%	4.1%	4.0%	3.8%	3.1%	2.9%	2.8%

1.2.3.2 Container Terminal Capacity

In addition to forecasting future cargo volumes, the Ports evaluate the physical/operational capacity of the marine terminals to handle those volumes. To estimate the future maximum or optimal capacity of each terminal through 2045, the Ports use a methodology that relies on two capacity models: one that analyzes the terminals' backland (i.e., container yard, or CY) capacity and one that analyzes the terminals' berth capacity (a terminal could be berth constrained or backlands constrained or evenly balanced between the two). For the CY capacity, the Port has also utilized a simulation model to aid the estimate of overall terminal capacity, when and where appropriate. The modelers make realistic assumptions regarding different physical improvements (e.g., increasing the length of a berth or adding more container yard) and operating parameters (e.g., increasing the number of hours worked per day or crane productivity, or decreasing the amount of time containers are allowed to remain in the terminal to estimate the future operating capacity of each terminal, including ones projected to be built.

The assumptions, while reasonable, are not conservative; for example, terminals are assumed to be able to reach throughput levels greater than 13,000 TEUs per acre per year compared with current throughput levels of between 5,000 and 8,000 TEUs per acre. This approach allows the Ports and their businesses to identify shortfalls between future cargo volumes and the capacity of the terminals and supporting infrastructure (e.g., roads and railroads) to handle those volumes. POLA regularly updates the capacity analyses for its terminals as part of its long-term planning; the latest POLB terminal capacities were obtained directly from the POLB staff.

The environmental analysis in this Draft EIS/EIR assumes that the physical and operational capacities of the San Pedro Bay Ports container terminals will be fully utilized by future cargo volumes. The results of the capacity modeling show that, with the assumed changes in physical configurations and operating practices, the maximum capacity of the San Pedro Bay Ports is projected to be approximately 35,293,000 TEUs. That estimate of total marine terminal capacity exceeds the forecasted 2035 cargo demand of approximately 34,281,000 TEUs, meaning that the Ports will be able to handle demand at least to 2035 (Mercator International and Oxford Economics 2016). Thereafter, the modeling results show cargo volumes increasing up to the Ports' maximum capacity by 2040. Actual throughput might be lower because of changes in consumer demand patterns and/or economic conditions. However, to be conservative this Draft EIR/EIS assumes that the Ports will operate near their maximum capacity by 2036.

1.2.3.3 Intermodal Cargo Demand and Capacity

In 2019, approximately 29.4% of all containers were conveyed directly between Port terminals and intermodal rail facilities, with the majority of this cargo being transported via on-dock railyards (Table 1-1). Direct intermodal cargo (see Section 1.2.2.6 for definitions) share of the total Ports' throughput has recently trended downward (from 36.6% in 2014 to 29.4% in 2019), but the 2016 cargo forecast predicted that the portion moved via on-dock in the future will be approximately 33% (Mercator International and Oxford Economics 2016).

Table 1-1: San Pedro Bay Ports Direct Intermodal Cargo Throughput and Forecast (TEUs)

Year	2019	2027	2036 - 2045
San Pedro Bay Ports Throughput	16,969,664	25,173,131	35,217,000
On-Dock	4,076,978	5,021,184	9,154,058
(percent of total)	24.0%	20.0%	26.0%
Off-/Near-Dock	906,307	3,008,312	2,467,552
(percent of total)	5.3%	11.9%	7.0%
Total LA/LB Intermodal	4,983,285	8,029,496	11,612,610
(percent of total)	29.4 %	31.9%	33%
Transloaded to rail (via 53-ft containers)	2,287,618	3,891,225	5,322,376

Note: 2019 represents actual intermodal cargo movements, 2027 figures are forecasted demand, and the 2036-2045 figure is maximum capacity. Source: Mercator International and Oxford Economics 2016

A key factor in the current forecast is the future capacity of on-dock rail facilities and their operational constraints, because direct intermodal cargo that cannot be handled by on-dock yards must be handled by near/off-dock yards. The goal of the Ports is to maximize on-dock rail operations within the Ports. To achieve this goal, the Ports encourage the marine terminals to schedule round-the-clock shifts and optimize labor rules, and the railroads have increased operational efficiencies, and hence capacity, at on-dock facilities. Furthermore, both Ports have been expanding their rail infrastructure over the past fifteen years, thereby increasing on-dock rail capacity. Table 1-2 lists the existing and planned on-dock railyard projects within the Port Complex, and Figure 1-4 shows their locations. If all of the proposed changes can be constructed on the assumed timetable (including the proposed Berths 121-131 on-dock railyard expansion analyzed herein), projected on-dock railyard use will reach approximately 9,500,000 TEUs by 2045 (POLA and POLB 2020).

Table 1-2. Existing and Planned On-Dock Railyards and Supporting Facilities

On-Dock Rail Facility	Location and Terminal(s) Served	Status
Terminal Island ICTF	Port of Los Angeles: YTI and Everport terminals	Operating
Pier 300	Port of Los Angeles: Fenix Marine Services Terminal	Operating; expansion under construction
Pier 400	Port of Los Angeles: APM Terminal	Operating; expansion under construction
West Basin Container Terminal	Port of Los Angeles: serving YM and CS	Operating; proposed expansion
TraPac Container Terminal	Port of Los Angeles: TRAPAC	Operating
Pier G	Port of Long Beach: International Transportation Services Terminal	Operating
Middle Harbor	Port of Long Beach: Pier E railyard currently serving LBCT/CUT	Operating
Pier A	Port of Long Beach: SSA Pier A Terminal	Operating
Pier T	Port of Long Beach: TTI Terminal	Operating
Pier B On-Dock Rail Support Facility	Port of Long Beach: Southwest of Anaheim St and I-710 Freeway	Construction underway

1.3 Purpose of an EIS/EIR

1.3.1 NEPA and the Purpose of an EIS

NEPA was enacted by Congress in 1969. It requires federal agency decision makers to document and consider the consequences of their actions or decisions on the quality of the human environment. In enacting NEPA, Congress intended to ensure that environmental information would be available to public officials and citizens before decisions would be made and before actions would be taken. It further was intended that NEPA would help public officials make decisions based on an understanding of the environmental consequences and take action to protect, restore, and enhance the environment.

When a federal agency determines that a federal action associated with a proposed project could result in significant environmental effects, an EIS is prepared, which must provide a full and fair discussion of anticipated significant environmental impacts. The EIS informs decision makers and the public of the reasonable alternatives to avoid or minimize significant impacts or enhance the quality of the human environment. An EIS is not only a disclosure document but also a decision-making aid that is used by federal officials in conjunction with other relevant material to plan actions and make decisions.

1.3.2 CEQA and the Purpose of an EIR

CEQA was enacted by the California Legislature in 1970, with the intent that all agencies of the state government that "regulate activities of private individuals, corporations, and public agencies that are found to affect the quality of the environment shall regulate such activities so that major consideration is given to preventing environmental damage while providing a decent home and satisfying living environment for every Californian" (13 PRC 21000, Legislative Intent). Public agency decision makers are required to consider and document the environmental effects of their actions and, whenever possible, avoid adverse effects on the environment. When a state or local agency determines that a proposed project has the potential to affect the environment significantly, an EIR is prepared. The purpose of an EIR is to identify the significant effects of a proposed project on the physical environment, identify alternatives to reduce the project's significant effects while achieving the project objectives, and indicate the manner in which a project's significant effects can be mitigated or avoided. A public agency must mitigate or avoid significant environmental impacts of projects it carries out or approves whenever feasible. In instances where significant impacts cannot be avoided or mitigated, the project can nonetheless be carried out or approved if the approving agency finds that economic, legal, social, technological, or other benefits outweigh the unavoidable significant environmental effects. Similar to an EIS, an EIR is intended to be a full disclosure document and an aid to the public decision-making process.

1.4 Lead, Responsible, and Trustee Agencies

Both NEPA and CEQA define roles for "lead agencies." Under NEPA, the lead agency is that entity that prepares or takes primary responsibility for preparing the NEPA document. Under CEQA, the lead agency is the public agency that has principal responsibility for carrying out or approving a project. The CEQA lead agency will decide whether an EIR or negative declaration will be required for the project and cause the document to be prepared (Guidelines §15367).

USACE and LAHD are the NEPA and CEQA lead agencies, respectively, for the Proposed Project, including the evaluation of potential impacts and identification of mitigation measures. USACE and LAHD are preparing this joint EIS/EIR in the interest of efficiency and to avoid duplication of effort.

Several other agencies have special roles with respect to the Proposed Project and will use this Draft EIS/EIR as the basis for their decisions to issue any approvals and/or permits that might be required. State CEQA Guidelines §15381 defines a "responsible agency" as:

> …a public agency that proposes to carry out or approve a project for which a lead agency is preparing or has prepared an EIR or negative declaration. For the purposes

> of CEQA, the term "responsible agency" includes all public agencies other than the lead agency that have discretionary approval power over the project.

Additionally, State CEQA Guidelines §15386 defines a "trustee agency" as:

> …a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California.

Table 1-3 lists the lead, responsible, and trustee federal, state, and local agencies that could rely on this Draft EIS/EIR in a review capacity or as a basis for issuance of a permit or other approval for the Proposed Project.

Table 1-3: Agencies that Are Expected to use this EIS/EIR

Agency	Responsibilities, Permits, and Approvals
Federal Agencies	
U.S. Army Corp of Engineers (USACE)	Lead federal agency for implementation of NEPA on the Proposed Project. Responsible for permitting work and structures in navigable waters, discharges of dredged or fill material in waters of the United States, and transport of dredged material for the purpose of ocean disposal at U.S. Environmental Protection Agency (EPA)–designated ocean disposal sites. It is anticipated that a Department of the Army (DA) permit, pursuant to Section 10 of the River and Harbor Act (RHA), Section 404 of the Clean Water Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act (MPRSA), would be required for the Proposed Project.
National Oceanographic and Atmospheric Agency (NOAA) Fisheries/National Marine Fisheries Service (NMFS)	Reviews and submits recommendations to USACE related to federal construction actions and issuance of permits in accordance with the Fish and Wildlife Coordination Act and consultations pursuant to Section 7 of the federal Endangered Species Act (ESA) for non-terrestrial species. Administers Marine Mammal Protection Act (MMPA). Also responsible for Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management Act. Provides EFH information, reviews potential effects of federal action on EFH, and provides conservation recommendations to USACE through consultation. Issues "take" authorizations under the MMPA and ESA for certain species.
U.S. Coast Guard (USCG)	Has jurisdiction over marine facilities, bridges, and vessel transportation in harbor waters. Responsible for ensuring safe navigation and for preventing and responding to oil or hazardous materials releases in the marine environment.
U.S. Environmental Protection Agency (EPA)	Has primary responsibility for implementing the federal Clean Air Act and works with other federal agencies to implement conformity requirements. Has oversight of the federal Clean Water Act regulatory program. Reviews and submits recommendations for Spill Prevention Control and Countermeasure Plans for non-transportation-related onshore and offshore facilities engaged in storing, processing, refining, transferring, distributing, or consuming oil and gas products. Has regulatory authority for evaluating and designating ocean disposal sites in accordance with Section 102 of the MRPSA and determining suitability of dredged sediments for ocean disposal in accordance with Section 103 of the MPRSA.

Table 1-3: Agencies that Are Expected to use this EIS/EIR

Agency	Responsibilities, Permits, and Approvals
	Reviews and submits requirements to USACE related to federal construction actions and issuance of Section 404 and 103 permits, as applicable.
U.S. Federal Railroad Administration	Reviews and approves changes in rail trackage, connections, signage, and bridges.
U.S. Fish and Wildlife Service (USFWS)	Reviews and submits recommendations to USACE related to federal construction actions and issuance of permits in accordance with the Fish and Wildlife Coordination Act and consultations pursuant to Section 7 of the federal ESA for terrestrial and some aquatic species. Issues “take” authorization under the Migratory Bird Treaty Act and ESA for certain species.
State Agencies	
California Air Resources Control Board (CARB)	Permitting/registering authority for various equipment, such as trucks and reefer units. Enforcement authority for shore power regulations, requiring reductions in emissions from ship auxiliary engines (17 CCR 93118.3).
California Coastal Commission (CCC)	Reviews environmental documents to ensure compliance with the California Coastal Act; performs a federal Consistency Determination under the federal Coastal Zone Management Act if ocean disposal of dredge material is proposed; reviews and must approve Port of Los Angeles Master Plan (PMP) amendments.
California Department of Fish and Wildlife (CDFW)	Reviews and submits recommendations in accordance with CEQA and with the Fish and Wildlife Coordination Act. Issuance of Memoranda of Understanding and permits pertaining to take of state-listed species under the California Endangered Species Act.
California Department of Transportation (Caltrans)	Permitting authority for highway improvements and rail trackage, connections, and signage during construction operations.
California Office of Historic Preservation	Consultation under Section 106 of the National Historic Preservation Act regarding impacts on cultural resources (e.g., demolition of buildings and structures) listed or eligible for listing on the National Register of Historic Places.
California Public Utilities Commission (CPUC)	Permitting authority for rail trackage, connections, crossings, and signage during construction operations.
California Integrated Waste Management Board (CIWMB)	Statutory and regulatory authority to control the handling and disposal of solid, non-hazardous waste in a manner that protects public safety, health, and the environment. State law assigns responsibility for solid waste management to local governments.
California Water Resources Control Board	Statutory and regulatory authority to manage water resources throughout the state. Oversees the construction and industrial National Pollutant Discharge Elimination System (NPDES)

Table 1-3: Agencies that Are Expected to use this EIS/EIR

Agency	Responsibilities, Permits, and Approvals
	stormwater permit program under Section 402 of the Clean Water Act (CWA).
California State Lands Commission (CSLC)	Dredging and dredge material disposal activities in state tidelands. CSLC has oversight responsibility for tidal and submerged lands legislatively granted in trust to local jurisdictions and has adopted regulations for the inspection and monitoring of marine terminals. CSLC inspects and monitors all marine facilities for effects on public health, safety, and the environment.
Department of Toxic Substances Control (DTSC) division of the California Environmental Protection Agency (CalEPA)	Regulatory jurisdiction over underground storage tanks containing hazardous material and implements groundwater monitoring provision of the Resource Conservation and Recovery Act. Responsible for general site cleanup outside underground storage tanks (such as state Superfund sites).
Regional Agencies	
Regional Water Quality Control Board, Los Angeles Region (Los Angeles RWQCB)	Regulatory jurisdiction over surface and groundwater in the coastal watersheds of Los Angeles and Ventura counties. Issues Clean Water Act Section 401 water quality certification, Waste Discharge Requirements for discharges, enforces stormwater permits, and issues the municipal separate storm sewer system (MS4) permit to City of Los Angeles. Establishes water quality standards, assesses water and sediment quality under CWA Section 303(d), and promulgates Total Maximum Daily Loads (TMDLs) for the Los Angeles Region Basin Plan.
Los Angeles County Fire Department	Licensing and inspection authority for all hazardous waste generation in the City of Los Angeles. Provides regulation and oversight of site remediation projects involving hazardous waste generators, where surface and subsurface soils are contaminated with hazardous substances.
South Coast Air Quality Management District (SCAQMD)	Permitting authority for construction of landfill and operation of pump stations, storage tanks, and stationary sources at terminal facilities; activities involving hydrocarbon-containing soils (Rule 1166); and new or modified sources of air emissions (New Source Review).
Southern California Association of Governments (SCAG)	Responsible for developing regional plans for transportation and federal conformity, as well as developing growth factors used in forecasting air emissions in the South Coast Air Basin.
Local Agencies	
City of Los Angeles Harbor Department (LAHD)	The City of Los Angeles, through its Harbor Department, is the lead agency for CEQA and the California Coastal Act for most projects within the harbor (via the certified PMP). Other City departments (listed below) have various other approval and permitting responsibilities. Pursuant to its authority, LAHD could issue permits and other approvals (e.g., coastal development permits, leases for occupancy of Port land, approval of operating, and joint venture or other types of agreements for

Table 1-3: Agencies that Are Expected to use this EIS/EIR

Agency	Responsibilities, Permits, and Approvals
	the operation of facilities) for the Proposed Project and alternatives evaluated in this Draft EIS/EIR.
City of Los Angeles Building and Safety Department	Permitting authority for building and grading permits. Approves, in conjunction with the Bureau of Sanitation, any required Standard Urban Stormwater Mitigation Plans or Site Specific Mitigation Plans implementing requirements of the MS4 permit that has been issued by Los Angeles RWQCB to the City of Los Angeles.
City of Los Angeles Bureau of Engineering	Permitting authority for storm drain connections, permit for discharges of stormwater, permits for water discharges to the wastewater collection system, and approval of street vacations.
City of Los Angeles Bureau of Sanitation	Permitting authority for Industrial Waste Permit for discharges of industrial wastewater to the City sewer system. Approves, in conjunction with the Building and Safety Department, any required Standard Urban Stormwater Mitigation Plans or Site Specific Mitigation Plans that may be necessary to implement MS4 permits issued by the regional water quality control board.
City of Los Angeles Fire Department	Approval of Business Plan and Risk Management and Prevention Program. Reviews and submits recommendations regarding design for building permit.
City of Los Angeles Transportation Department	Reviews and approves changes in City street design, construction, signalization, signage, and traffic counts.
City of Los Angeles Planning Department	Zone changes or general plan amendments.

1.5 Scope and Content of the Draft EIS/EIR

The scope of this Draft EIS/EIR was defined on the basis of an Initial Study (IS) prepared pursuant to CEQA (see Appendix A), and comments received during the Notice of Intent (NOI)/Notice of Preparation (NOP) review process, which occurred in 2014. The scope of the Proposed Project described in the NOP was substantially larger than the Proposed Project analyzed in this Draft EIS/EIR. Following the publication of the NOP, the Port re-evaluated the economics of the original proposal and determined that the cut, fill, and new wharf proposed for Berths 121-125 were not economically feasible and dropped those elements from the Proposed Project. In addition, the timeline for the Proposed Project shifted due to lengthy efforts to negotiate an agreement with YM for continued occupancy of the Berths 121-131 premises through 2030, which did not materialize. Because the changes represented an overall decrease in project scope and did not introduce any new elements other than shifting the timing to future dates, the Port determined that a new NOP need not be prepared and circulated for public review and comment. Similarly, as described in Chapter 1 of Part 1 (Draft EIS), the USACE determined that a new NOI was not required.

The CEQA significance thresholds have been revised since the NOP was circulated (2025 CEQA Guidelines Appendix G). The Port has reviewed the revisions and has determined that none of the revisions prompt the preparation and circulation of a new NOP.

The NEPA NOI was published in the *Federal Register* on April 11, 2014, and the CEQA NOP was also posted on April 11, 2014 (see Appendix A). A public scoping hearing was conducted on May 8, 2014, in San Pedro. No public comments were received during the scoping meeting. The public review period ended May 25, 2014, and seven comment letters were received. Table 1-4 summarizes key issues raised in the comment letters and contains references to the sections of this Draft EIS/EIR addressing them. The scope of analysis and technical study work plans, developed as part of preparing this Draft EIS/EIR, were designed to ensure that the comments received from regulatory agencies and the public during the NOI/NOP review process would be addressed.

Considerable time has passed since the NOP was released and public comment received, during which LAHD has kept the public informed of relevant activities. The most recent update to the public/community was made on April 25, 2022, at the City of Los Angeles Neighborhood Council and Chamber Presidents Meeting by the Port's Director of Environmental Management, Chris Cannon. Neighborhood Councils are the closest form of government to the people. They are advisory bodies, who advocate for their communities with City Hall on important issues and projects. Neighborhood Councils are part of the Los Angeles City government, and have annual budgets funded by taxpayer dollars. The Director's announcement was stated as follows "We [the Port of LA] are working on the Draft EIS/EIR for the Berths 121-131 container terminal (formerly known as the Yang Ming terminal). This project has been stalled for a few years now but we are making progress on releasing a draft for public review this summer. The original NOP was issued back in 2014, and the project is smaller in scale than what was originally proposed. There will be advance public notice from both the Port and the US Army Corps of Engineers when we get closer to the release date."

Table 1-4: Summary of Key NOI/NOP Comments

Commenter	Key Issues Raised	Sections Addressed
United States Environmental Protection Agency (USEPA)	• Compare emissions from the projected vessel fleet under the Proposed Project to the fleet under the No Project Alternative. • Discuss the Clean Trucks Program and its relationship to federal emissions and engine standards. • Discuss trucking logistics to reduce bobtail trips.	Section 3.2, Air Quality
Federal Emergency Management Agency (FEMA)	• Ensure that buildings in the flood zone meet applicable codes.	Chapter 2, Project Description, Section 3.13, Water Quality and Hydrology
California Department of Transportation (Caltrans)	• Conducting a traffic study, including a cumulative analysis, mitigation measures, and cost sharing.	Section 3.9, Ground Transportation

Table 1-4: Summary of Key NOI/NOP Comments

Commenter	Key Issues Raised	Sections Addressed
Native American Heritage Commission (NAHC)	• Avoid sacred/historical sites if at all possible. • Include mitigation plans for identification, evaluation, and preservation of archaeological resources and Native American human remains. • Coordinate archaeological inventory and reporting with NAHC, if required. • Conduct a NHPA Section 106 consultation. • Keep information on site locations confidential.	Section 3.4, Cultural Resources
Los Angeles Unified School Districts (LAUSD)	• Consider air quality, hazards, and traffic impacts on local schools	Sections 3.2, Air Quality; 3.6, Hazards, 3.10, Transportation
Joyce Dillard (private citizen)	• Analyze, including costs, TMDLs and include mitigation. • Evaluate the displacement of wildlife. • Disclose air quality impacts and mitigations. • Disclose operational-phase hazardous materials usage and mitigation. • Disclose greenhouse gas emissions and mitigations.	Sections 3.2, Air Quality; 3.3, Biology; 3.5, GHG; 3.13, Water Quality; 3.6, Hazards
Tommy Rosas (private citizen)	• No specific comments	N/A

1.5.1 Scope of Analysis

This Draft EIS/EIR has been prepared in conformance with NEPA (42 USC 4321 et seq.), the USACE NEPA Implementing Regulations at 33 CFR Part 325 Appendix B, CEQA (California PRC §21000 et seq.), and the State CEQA Guidelines (14 CCR §§15000 et seq.). This document includes all of the sections required by NEPA and CEQA.

The criteria for determining the significance of environmental impacts in this Draft EIS/EIR analysis are described in the “Significance Criteria” sections of each resource topic in Chapter 3, Environmental Analysis. The threshold of significance for a given environmental effect is the level at which LAHD or USACE finds a potential effect of the Proposed Project or alternative to be significant.

Under CEQA, a “threshold of significance” can be defined as a “quantitative or qualitative standard, or set of criteria, pursuant to which significance of a given environmental effect could be determined” (State CEQA Guidelines, §5064.7(a)). Except as noted in particular sections of the document, LAHD has adopted the thresholds in Appendix G of the state CEQA Guidelines for purposes of this Draft EIS/EIR. Likewise, USACE has adopted the CEQA Appendix G thresholds for purposes of this

Draft EIS/EIR to achieve its NEPA responsibilities, unless otherwise noted in particular sections of the document.

The following issues are evaluated in this Draft EIS/EIR.

- Aesthetics and Visual Resources
- Air Quality and Meteorology
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Land Use/Planning
- Noise
- Public Services
- Ground Transportation
- Utilities and Service Systems
- Water Quality/Hydrology, Sediments, and Oceanography
- Maritime Transportation
- Socioeconomics
- Cumulative Impacts

The Initial Study included in the NOP for CEQA concluded that the following issues would involve no significant impact and need not be evaluated in the Draft EIR: Agriculture and Forest Resources, Geology and Soils, Mineral Resources, Population and Housing, and Recreation. With respect to the addition of "Wildfire" as a new separate issue in Appendix G of the State CEQA Guidelines, the Initial Study evaluated and dismissed the potential for project impacts related to wildland fires. The Initial Study concluded that for two topics under Public Services, police protection and fire protection, the Proposed Project would have less than significant impacts, but indicated that those topics would be considered in the Draft EIR. The remaining topics in Public Services were not identified for discussion in the Draft EIR.

This Draft EIS/EIR has been prepared by Ramboll under contract to LAHD and has been reviewed independently by USACE and LAHD staff. The scope of the document, methods of analysis and conclusions represent the independent judgments of USACE and LAHD. Staff members from USACE, LAHD, and Ramboll who helped prepare this Draft EIS/EIR are identified in Chapter 9, List of Preparers and Contributors.

1.5.2 Intended Uses of This Draft EIS/EIR

This Draft EIS/EIR has been prepared in accordance with applicable federal and state environmental regulations, policy, and law to inform federal, state, and local decision-makers about the potential environmental impacts of the Proposed Project and alternatives. As an informational document, an EIS/EIR does not recommend approval or denial of a project. The Draft EIS/EIR is being provided to the public for review, comment, and participation in the planning process. After public review and comment, a Final EIS/EIR will be prepared, including responses to comments on the Draft EIS/EIR received from agencies, organizations, and individuals. The Final EIS/EIR will be distributed to provide the basis for decision-making by the NEPA and CEQA lead agencies, as well as other concerned agencies.

As described in Section 1.4 of Part 1, Chapter 1, USACE has statutory authority over the Proposed Project pursuant to Section 10 of the RHA, Section 404 of the CWA, and Section 103 of the MPRSA USACE will consider this document in permit actions that LAHD might undertake to implement the Proposed Project or an alternative.

LAHD has jurisdictional authority over the Proposed Project primarily pursuant to the Tidelands Trust, California Coastal Act, and the Los Angeles City Charter. This Draft

EIS/EIR will be used by LAHD, as the lead agency under CEQA, in making a decision regarding the construction and operation of the Proposed Project or alternative and in informing agencies considering permit applications and other actions required to construct, lease, and operate the Proposed Project or alternative. LAHD's certification of the EIR, Notice of Completion, Findings of Fact, and Statement of Overriding Considerations (if necessary) would document their decision as to the adequacy of the EIR and inform subsequent decisions by LAHD whether to approve and construct the Proposed Project or alternative.

Other agencies (federal, state, regional, and local) that have jurisdiction over some part of the Proposed Project or a resource area affected by the Proposed Project are expected to use this EIS/EIR as part of their approval or permit process as set forth in Table 1-3. Specific approvals that could be required for this Proposed Project include, but are not limited to: a DA Permit (pursuant to Section 10 of the RHA, Section 404 of the CWA, and Section 103 of the MPRSA), building and safety permits, water quality permits (CWA Section 401 Water Quality Certification/Waste Discharge Requirements pursuant to the Porter-Cologne Water Quality Control Act, CWA Section 402 NPDES permits), and construction contracts by LAHD and Los Angeles City Council.

Actions that could be undertaken by LAHD following preparation of the Final EIR include: certification of the EIR, approval of the Proposed Project, completion of final design, issuance of a Coastal Development Permit, issuance of property entitlements, approval of engineering permits, obtaining other agency permits and approvals (e.g., dredge and fill, grading, construction, occupancy, and fire safety), and approval of construction contracts.

1.5.3 Draft EIS/EIR Organization

Table 1-5 contains a list of sections required under NEPA and CEQA and references the specific chapter in this document where the information is located. Note that for the sake of efficiency, Chapter 3, the analysis of impacts, considers impacts under CEQA first, then impacts under NEPA, rather than the more traditional format of NEPA then CEQA, in recognition of the broader scope of the required CEQA impact analysis. This presentation method allows a more efficient presentation of the NEPA impact analysis.

Table 1-5: Organization and Contents of the Draft EIS/EIR

Draft EIS/EIR Section	Description
Executive Summary	Summarizes the Proposed Project and alternatives, potential significant impacts and mitigation measures, the environmentally superior alternative (in accordance with CEQA) and the environmentally preferred alternative (in accordance with NEPA), public comments and concerns, and unresolved issues and areas of controversy.
Chapter 1, Introduction	Summarizes the key proposed project features and elements, an overview of the goods movement chain, a general description of container terminal operations, and a summary of growth projection planning for container throughput in the San Pedro Bay Port Complex. Describes the intended uses of the document and authorizing actions, the purpose of CEQA and NEPA, the scope and content of the document, and the organization of the document.
Chapter 2, Project Description	Describes the Proposed Project, the purpose and need and the objectives of the Proposed Project, alternatives initially considered but not carried forward

Table 1-5: Organization and Contents of the Draft EIS/EIR

Draft EIS/EIR Section	Description
	for detailed review, and alternatives evaluated in the document at a detailed level.
Chapter 3, Environmental Analysis	Describes applicable federal, state, regional and local laws and regulations, the existing conditions for each environmental resource area, criteria for judging significance of an impact, impact assessment methodology, impacts that would result from the Proposed Project and each alternative, mitigation measures that would eliminate or reduce significant impacts, and the mitigation monitoring program.
Chapter 4, Cumulative Analysis	Summarizes significant cumulative impacts and whether the Proposed Project or any of the alternatives makes a cumulatively considerable contribution to those significant impacts.
Chapter 5, Environmental Justice	Addresses the possible effects of the Proposed Project and alternatives on minority and/or low-income populations adjacent to the Proposed Project site.
Chapter 6, Comparison of Alternatives	Compares the environmental impacts of the Proposed Project and alternatives and identifies the Environmentally Preferred and Superior Alternatives.
Chapter 7, Socioeconomics and Environmental Quality	Describes the existing socioeconomic setting and identifies the socioeconomic impacts of the Proposed Project.
Chapter 8, Growth-Inducing Impacts	Discusses the extent to which the Proposed Project would result in growth-inducing impacts.
Chapter 9, Significant Irreversible Changes	Describes the significant irreversible changes to the environment associated with the Proposed Project.
Chapter 10, References	Identifies the materials and documents consulted in preparing this Draft EIS/EIR.
Chapter 11, List of Preparers and Contributors	Lists the individuals involved in preparing this Draft EIS/EIR.
Chapter 12, Acronyms and Abbreviations	Provides the full names for acronyms and abbreviations used throughout this document.
Appendices	Present additional information, data, and technical detail for several of the resource areas.

1.6 Key Principles Guiding Preparation of this Draft EIS/EIR

1.6.1 NEPA and CEQA Baselines

1.6.1.1 NEPA Baseline

The NEPA baseline used in this document is described in detail in Section 1.4 of Part 1, Chapter 1. In brief, the NEPA baseline for determining significance of impacts is the set of conditions defined by examining the full range of construction and operational activities the applicant could implement and is likely to implement absent federal action, in this case issuance of a DA permit, and is equivalent, in this document, to the No Federal Action Alternative.

1.6.1.2 CEQA Baseline

Generally, Section 15125 of the State CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the vicinity of the Proposed Project that exists at the time of the NOP. The CEQA baseline is ordinarily the set of conditions that prevailed at the time the NOP was circulated, and for a container terminal project the baseline year would normally be the first full calendar year preceding publication of the NOP, which was April 2014 (i.e., calendar year 2013). A significant amount of time has passed since publication of the NOP. Furthermore, the Port's analysis of the past ten years of data (2014-2024, LAHD 2025) demonstrated that activity has been highly variable as a result of several factors, notably the COVID-19 pandemic. That analysis concluded that calendar year 2019 was the most appropriate baseline for this Draft EIR, as described in more detail in Section 2.6.1.

It is important to note that the CEQA baseline represents the setting at a fixed point in time, with no projected growth over time, and differs from the No Project Alternative (Alternative 1, discussed in Section 2.9) in that the No Project Alternative addresses what is likely to happen at the site over time, starting from the existing conditions, even if the Proposed Project is not approved. The No Project Alternative allows for natural growth at the project site that would occur without approval of the Proposed Project.

1.6.2 Duty to Mitigate

The USACE's mitigation obligations under NEPA are described in Section 1.1.11 of Part 1 (Draft EIS).

According to State CEQA Guidelines §15126.4(a), each significant impact identified in an EIR must include a discussion of feasible mitigation measures that would avoid or substantially reduce the significant environmental effect. To reduce significant effects, mitigation measures must avoid, minimize, rectify, reduce, eliminate, or compensate for a given impact of the Proposed Project. Mitigation measures must satisfy certain requirements to be considered adequate. Mitigation should be specific and enforceable, define feasible actions that would demonstrably improve significant environmental conditions, and allow monitoring of their implementation. Mitigation measures that merely require further studies or consultation with regulatory agencies and are not tied to a specific action that would directly reduce impacts, or that defer mitigation until some future time, are not adequate.

Effective mitigation measures clearly explain objectives and indicate how a given measure should be implemented, who is responsible for its implementation, and where and when the mitigation would occur. Mitigation measures must be enforceable, meaning that the lead agency must ensure that the measures would be imposed through appropriate permit conditions, agreements, or other legally binding instruments.

State CEQA Guidelines §15041 grants public agencies the authority to require feasible changes (mitigation) that would substantially lessen or avoid a significant effect on the environment associated with activities involved in a project. Public agencies, however, do not have unlimited authority to impose mitigation. A public agency might exercise only those express or implied powers provided by law, aside from those provided by CEQA.

However, where another law grants discretionary powers to a public agency, CEQA authorizes use of discretionary powers (State CEQA Guidelines Section 15040).

In addition to limitations imposed by CEQA, the U.S. Constitution limits the authority of regulatory agencies. The Constitution limits the authority of a public agency to impose conditions to those situations where a clear and direct connection ("nexus," in legal terms) exists between a project impact and the mitigation measure. Finally, a proportional balance must exist between the impact caused by the project and the mitigation measure imposed upon the project applicant. A project applicant cannot be forced to pay more than its fair share of the mitigation, which should be roughly proportional to the impact(s) caused by the project.

1.6.3 Requirements to Evaluate Alternatives

According to NEPA and CEQA regulations, the alternatives section of an EIS/EIR is required to:

- rigorously explore and objectively evaluate a range of reasonable alternatives;
- include reasonable alternatives not within the jurisdiction or congressional mandate of the lead agency, if applicable;
- include No Federal Action (NEPA) and No Project (CEQA) alternatives;
- develop substantial treatment of each alternative, including the proposed action, so that reviewers could evaluate their comparative merits;
- identify the Preferred Alternative of the lead agency;
- include appropriate mitigation measures (when not already part of the proposed action or alternatives); and
- present the alternatives that were eliminated from detailed study and briefly discuss the reason(s) for elimination.

NEPA (40 CFR 1502.14(a)) and State CEQA Guidelines (§15126.6) require that an EIS and an EIR, respectively, describe a reasonable range of feasible alternatives to a proposed project, or to the location of a proposed project that could feasibly attain most of the basic objectives of the proposed project but would avoid or substantially lessen any significant environmental impacts. According to State CEQA Guidelines, the EIR should compare merits of the alternatives and determine an environmentally superior alternative. Section 2.8 in Chapter 2, Project Description, of this Draft EIS/EIR sets forth potential alternatives to the Proposed Project and evaluates their suitability, as required by the State CEQA Guidelines (§15126.6).

Alternatives for an EIS and EIR usually take the form of No Project, No Federal Action (no federal permit; as noted, the No Federal Action Alternative is equivalent to the NEPA baseline in this case), reduced project size, different project design, or suitable alternative project sites ((§15126.6; 40 CFR 1502.14). The range of alternatives discussed in an EIS need not be beyond a reasonable range (40 CFR 1502.14(a)). An EIR is governed by the "rule of reason" that requires the identification of only those alternatives necessary to permit a reasoned choice between the alternatives and a proposed project. An EIS and an EIR need not consider an alternative that would be infeasible. State CEQA Guidelines §15126.6 explains that the evaluation of project alternative feasibility can consider "site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The

EIS/EIR is not required to evaluate an alternative whose effects could not be reasonably identified, or whose implementation is remote, speculative, or would not achieve the basic purposes of the proposed project.

1.7 Availability of the Draft EIS/EIR

The Draft EIS/EIR for the Proposed Project and alternatives is being released to agencies, organizations, and interested groups and persons for comment during the formal review period in accordance with State CEQA Guidelines §15087 and 40 CFR 1506.10 of the CEQ NEPA Regulations. A 45-day comment period has been established during which the Draft EIS/EIR is available in its entirety on the U.S. Environmental Protection Agency District website at:

https://cdxapps.epa.gov/cdx-enepa-II/public/action/eis/search

and on the Port of Los Angeles website at:

https://www.portoflosangeles.org/environment/environmental-documents.

In addition, a printed copy of the Draft EIS/EIR is available to review upon request at the following location:

LAHD Environmental Management Division
425 South Palos Verdes Street
San Pedro, California 90731

Please send your request to ceqacomments@portla.org or call (310) 732-3412 to schedule an appointment to review a copy.

Interested parties may provide written comments on the Draft EIS/EIR, which must be postmarked by the last day of the public comment period. Please address comments to both:

U.S. Army Corps of Engineers
Los Angeles District, Regulatory Division
Ventura Field Office
c/o Crystal L. Huerta
60 South California Street, Suite 201
Ventura, CA 93001-2598

Lisa Wunder, Acting Director
Environmental Management Division
Los Angeles Harbor Department
425 S. Palos Verdes Street
San Pedro, CA 90731

Written comments may also be sent via email to the U.S. Army Corps of Engineers at crystal.l.huerta@usace.army.mil and to the Port of Los Angeles at ceqacomments@portla.org. All correspondence, through mail or email, should include the project title in the subject line.