Chapter 1
Introduction

CHAPTER SUMMARY

The proposed Project involves improvement of the existing Yusen Terminals Inc. (YTI) Terminal at Berths 212–224 on Terminal Island within the Port of Los Angeles (Port). This chapter provides an overview of the Port as a whole, including an overview of the goods movement chain. Chapter 2 describes the proposed Project and alternatives to be analyzed, using the methodologies discussed in Chapter 3, Environmental Analysis.

This chapter presents the following:

- a brief summary of 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 (i.e., the Ports of Los Angeles and Long Beach [POLA/POLB]).

This chapter also provides an overview of the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) processes, which, respectively, require the preparation of an Environmental Impact Statement (EIS) or Environmental Impact Report (EIR) for projects that could significantly affect the environment. In addition, the chapter contains the following information:

- a summary of the scope and content of this EIS/EIR;
- a description of how the U.S. Army Corps of Engineers (USACE) and the Los Angeles Harbor Department (LAHD) would use the EIS/EIR;
- a summary of the key principles that were used to guide the preparation of this EIS/EIR;
- a description of environmental initiatives currently under way to improve the Port setting; and
- a summary of public comments and concerns raised during the scoping process.

1.1 Introduction

The proposed Project would improve marine shipping and commerce at the existing Yusen Terminals, Inc. (YTI) Terminal located at Berths 212–224 on Terminal Island within the Port. The proposed Project involves improvement of an existing container terminal to accommodate the berthing, loading, and unloading of larger vessels, which are anticipated to call at the YTI Terminal in the future.

The proposed Project would require a permit from USACE and approval from the Los Angeles Board of Harbor Commissioners (Harbor Commission). 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 an EIS prepared by USACE and an EIR prepared by LAHD. For the proposed Project, a joint EIS/EIR has been prepared to streamline the decision-making processes.

This Draft EIS/EIR has been prepared in accordance with the requirements of NEPA (U.S. Code [USC], Title 42, Section 4341 et seq.) and in conformance with the Council for Environmental Quality (CEQ) Guidelines and the USACE NEPA Implementing Regulations (Code of Federal Regulations [CFR], Title 33, Parts 230 and 325). The document also fulfills 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 NEPA lead agency for this proposed Project, 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.

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 212–224, 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 at 701 New Dock Street on Terminal Island, within an industrial area in the vicinity of the East Basin and Turning Basin in Los Angeles Harbor. Currently, YTI operates a container terminal on approximately 185 acres at Berths 212–224 under LAHD Permit No. 692. The site is generally bounded on the north by the confluence of the Cerritos and East Basin Channels, SA Recycling at Berths 210–211 to the east, Seaside Avenue and State Route (SR) 47 to the south, and the East Basin Channel to the west. The berths and container yard occupy approximately 161 acres. In addition, YTI operates approximately 24 acres of the Terminal Island Container Transfer Facility (TICTF) on-dock rail yard, which it shares with the adjacent Evergreen container terminal.

The proposed Project would be constructed in two phases over a period of approximately 22 months. It is expected to begin in mid-2015. Phase I, which is expected to last approximately 12 months, consists of deepening Berths 217–220 (including the installation of sheet piles), extending the 100-foot gauge crane rail, expanding the TICTF, relocating two Port-owned cranes, relocating and realigning two YTI cranes, delivering and installing up to four new cranes, raising and extending up to six YTI cranes, and providing backland surface improvements. Phase II, which is expected to take approximately 10 months, involves deepening Berths 214–216 (including the installation of king piles and sheet piles) and providing backland surface improvements. No physical changes would occur at Berths 221–224, except for paving work in the backland area. The improvements to Berths 217–220, including the extension of the 100-foot gauge crane rail, would add a new operating berth at the YTI Terminal.

The improvements that would occur at the terminal include the following:

- Extending the height and outreach of up to six existing cranes;
- Replacing up to four existing non-operating cranes;
- Dredging and installing sheet piles and king piles at Berths 214–216 and 217–220;
- Extending the existing 100-foot gauge landside crane rail to Berths 217–220;
- Performing ground repairs and maintenance activities in the backlands area; and
- Expanding the TICTF on-dock rail by adding a single operational rail track.

Chapter 2, Project Description, provides a more detailed description of proposed project components as well as alternatives. After completion of the proposed Project, capacity[1] at the YTI Terminal is projected to increase from approximately 1,692,000 twenty-foot equivalent units[2] (TEUs) to approximately 1,913,000 TEUs.

[1] Terminal capacity refers to the theoretical maximum amount of throughput that can move through the terminal given the physical upgrades and all known operational changes.

[2] A TEU is a measure of container cargo capacity based on the volume of a 20-foot-long by 8-foot-wide by 8-foot, 6-inch-tall container. When the measure was first developed, shipping containers were generally 20 feet long or 1 TEU. Currently, most containers are 40 feet long or 2 TEUs. See page 1-4 for more information.

1.2.2 Goods Movement Overview

The proposed Project is part of a goods movement chain,[3] 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.[4] The goods movement chain is a coordinated process that includes shippers, shipping lines, third-party logistics providers, stevedoring companies,[5] port cargo terminal operators, labor, 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 container equipment and typically enter into agreements with trucking companies and railroads for the transport of international cargo 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,[6] which is accomplished through the use of standardized containers that can be easily moved between modes. Figure 1-1 illustrates the flow of containers through the various stages of the goods movement chain.

Section 1.2.2.1 describes how a container terminal operates. The sections that follow describe key links in the chain of goods movements and include discussions of container ships, truck transport, and rail transport.

The majority of the goods coming into the Ports arrive in shipping containers that have been transported on container ships. The existing YTI Terminal accommodates vessels that transport these shipping containers. It does not handle vessels that transport non-containerized materials, such as automobiles or bulk cargo.

Container ships arrive at and depart from the Ports via designated shipping lanes (northern or southern approaches), typically with the assistance of a tugboat. Container ships are generally 700 feet to more than 1,000 feet long but are described by the number of TEUs they can carry (from a few thousand to more than 18,000 TEUs).

A TEU is a measure of containerized cargo capacity equal to one standard 20-foot-long by 8-foot-wide by 8-foot, 6-inch-tall shipping container. Presently, most maritime containers are 40 feet long, or two TEUs. To account for the ratio between 20- and 40-foot boxes (and to account for the small number of boxes that are between 45 and 48 feet long), a factor is generally applied to convert TEUs to the actual number of containers. Currently, Port of Los Angeles-wide, this factor is approximately 1.80, meaning one container equals 1.80 TEUs. For example, a ship that holds 2,778 containers would be carrying 5,000 TEUs after application of the conversion factor (or 2,778 x 1.80). Containers are also counted in "lifts" (as in a container being lifted onto or off a train or vessel by an A-frame crane). A lift is the unit of an individual container of any size. The Port-wide conversion from lift to TEU is also based on the 1.80 conversion factor.

[3] A complex international system that moves goods from their points of production to consumers by different modes of transportation (ship, rail, and truck).

[4] In 2012, Los Angeles handled two-way trade totaling $403.96 billion and was a major gateway for imports, with inbound shipments accounting for $282.6 billion (70% of the value of the freight it handled in 2012) (World City 2013).

[5] The entity that unloads and loads a ship. At the Port of Los Angeles, the terminal operator usually operates the stevedoring operations along with the terminal operation.

[6] Intermodal transport is a change in mode of transport (e.g., from ship to truck to rail).

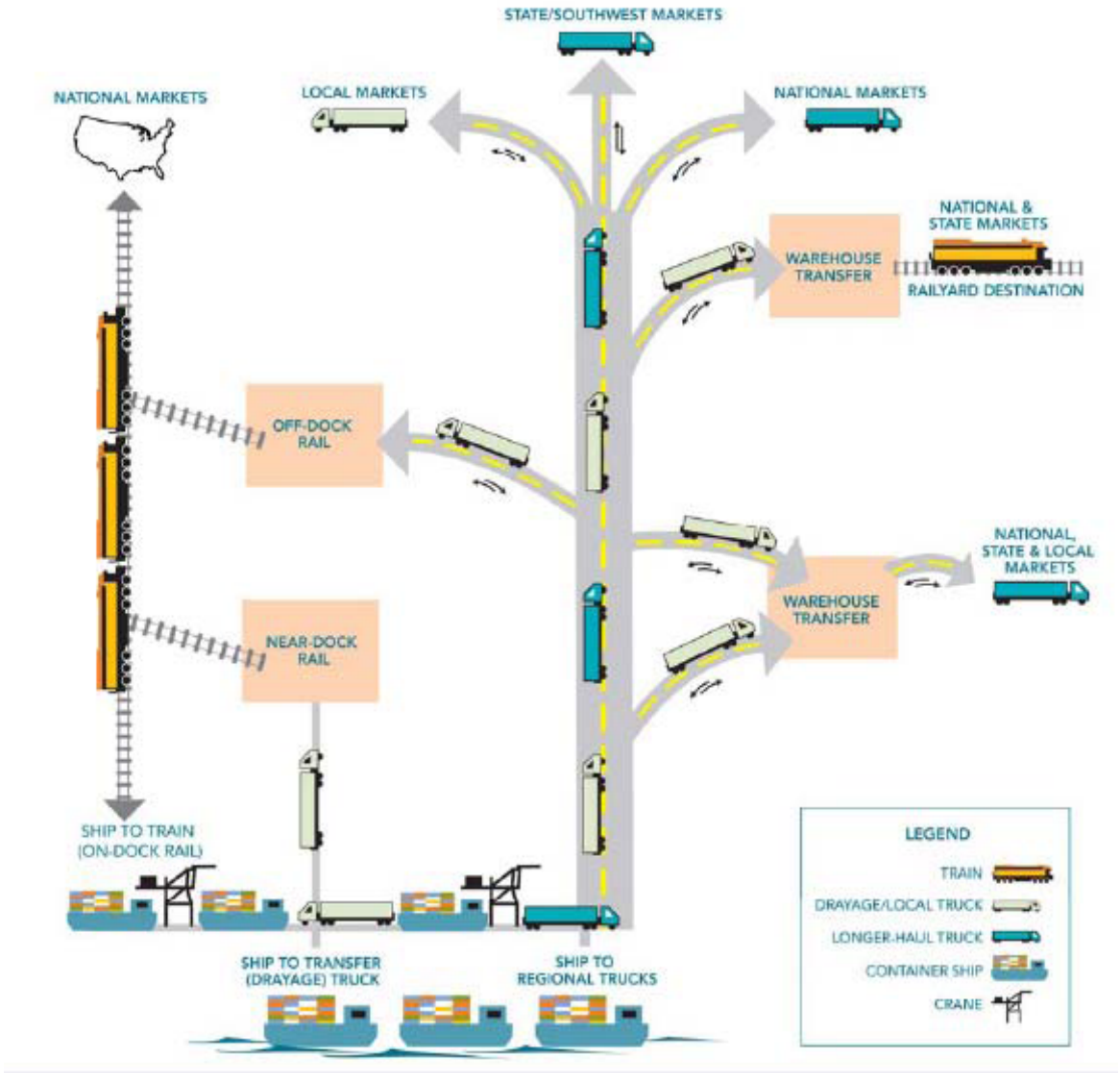


Figure 1-1
Goods Movement Chain: Transportation Distribution
Berths 212-224 (YTI) Container Terminal Improvements Project

At the YTI Terminal, the conversion factor from TEU to container or from TEU to lift was approximately 1.726 in 2012. This difference from the Port-wide metric exists because YTI's customers use a slightly smaller proportion of 40-foot containers versus 20-foot containers, thereby reducing the conversion factor. For this Draft EIS/EIR, the 1.726 factor has been used to model baseline conditions, and 1.75 has been used to project future scenarios. As detailed in Section 1.2.2.1, container ships are moored at the terminal, and the container terminal operator is responsible for hiring labor to unload the ships, storing containers for a brief period of time in an area known as the backlands, and coordinating with trucking and rail operators to deliver containers to their final destinations.

1.2.2.1 Container Terminal Overview

A modern marine container terminal is a facility that integrates several different physical components and operational processes 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 container ships, berths/wharves (docks), cranes, backland storage areas (container yard), entrance and exit gates, and maintenance and administrative buildings (see Figure 1-2). The existing YTI Terminal also includes an on-dock railyard. The operational processes for the terminal include shipping, stevedoring (loading/unloading ships), container storage and management, in-terminal drayage (hauling), trucking to off-site locations such as warehouses and off-dock railyards, and on-dock rail operations.

At the Port, LAHD develops and owns major terminal container infrastructure (wharves, container storage yard, and buildings) and leases terminals to terminal operators and/or shipping companies for operation. A container terminal is operated by a terminal operator, which is often a company that is separate from, yet affiliated with, the shipping line. Because many terminal operators are affiliated with shipping lines, these lines often serve as the terminal's primary customers. For example, YTI is a wholly owned subsidiary of Nippon Yusen Kabushiki Kaisha (NYK Line). It is assumed that YTI would be the primary shipping line that would be served by the proposed Project.

Terminal operators may also contract with invitee shipping lines to fill extra berth space. These "third-party invitee" shipping lines traditionally look for longer term terminal and stevedoring agreements to secure their positions in the market place for at least five years; however, invitee shipping lines might make agreements with the terminal operator for as little as six months because terminal operators are not always able to offer longer term agreements because of requirements to serve the parent company's core businesses.

Under the anticipated proposed project approval, the YTI Terminal would continue to be operated by YTI under an extended lease. YTI would own and operate all terminal equipment (such as yard tractors, toppicks, and sidepicks). This includes the wharf gantry cranes (an example is shown on Figure 1-2), which directly affect terminal productivity and require regular maintenance.

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 lease container equipment, manage contracts with tug companies, and manage railroad agreements for international cargo. Shipping lines, often with the involvement of manufacturers, retailers, and others, also may arrange contracts with trucking companies to move loaded containers to and from the Port Complex. Railroad agreements for international cargo are also usually handled by the shipping lines; however, the rail companies often subcontract switching activities to another provider. Pacific Harbor Line (PHL) is a rail switching company that is responsible for building the trains that the mainline rail companies will transport outside the Port Complex.

1.2.2.2 Terminal Operations

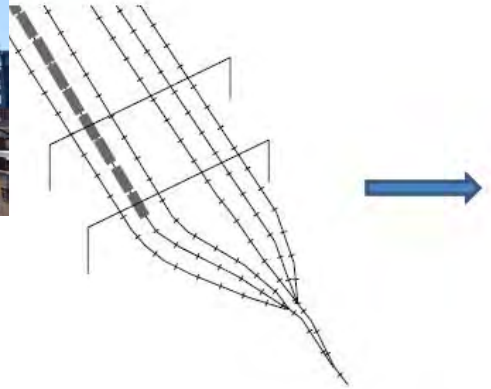
Operationally, imported containers arrive at, and exported containers depart from, the Port via container ships, typically with the assistance of one or two tugboats. For YTI, two tugboats are generally required. When the vessel arrives, most of the export cargo to be loaded is already stacked in the yard. Gangs (groups) of longshore workers, contracted by YTI, work to unload and load the ship using A-frame cranes, as shown on Figure 1-2.

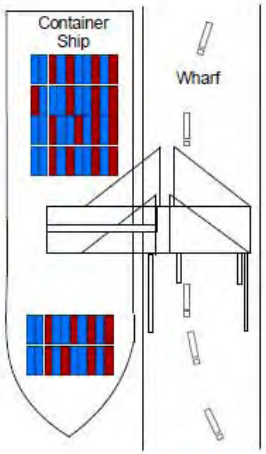
Dockside crane operators lift cargo containers to and from the ships on and off specialized trailers pulled by yard tractors. Typically, cranes can transfer 25 to 40 containers per hour. The cranes have specialized equipment, including anti-sway devices, lighting, and adjustable "spreaders" (cargo hooks) that allow attachment to the various container sizes. The number of cranes operating simultaneously on one ship can vary from 1 to 10, depending on the size of the ship, the number of vessels at berth, the crane gauge (distance between crane legs), and the availability of cranes.

The ships typically "hotel" or remain docked at the terminal for approximately 36 hours, or 1.5 days, but the largest ships might stay as long as 3 days. Traditionally, the main propulsion engine of the ship is shut down, but one or more of the large diesel auxiliary engines runs continuously to provide electrical power for ship functions, including power for refrigerated containers while at berth. A boiler that heats the fuel for the ship also runs while at berth to ensure a constant viscosity. However, by the end of 2013, Alternative Maritime Power (AMP) will be installed at all YTI berths. AMP allows a ship to plug in and use shore-supplied electricity for its power needs in lieu of running the auxiliary diesel engines. This alternative power source allows a fleet to reduce its air emissions by substantial amounts, even when taking into account the emissions associated with electricity generation. In 2014, the California Air Resources Board (CARB) will begin mandating that a certain percentage of calling ships use AMP and abide by certain operational constraints. Details regarding these regulations are provided in Table 2-5 in Chapter 2, Project Description, and Section 1.7.2.1, Clean Air Action Plan, of this chapter as well as in Section 3.2, Air Quality and Meteorology.

Once containers have been off-loaded from the ship or received through the gates on trucks and trains, the containers are stored and moved around the storage yards using cargo-handling equipment, which may include electric- or diesel-powered rail-mount gantry cranes (RMGs), diesel-powered rubber-tire gantry cranes (RTGs), and/or diesel-powered sidepicks, toppicks, and yard tractors. YTI does not use RMGs in its operations. In future years, stricter standards will apply to emissions generated by these equipment types.

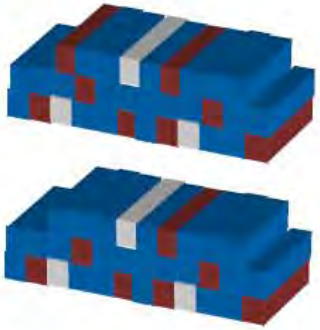
Containers loaded/unloaded to train cars at on-dock railyard



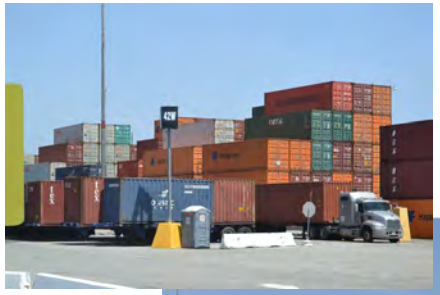


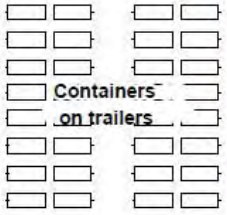
A-frame cranes transfer containers between ship and yard tractors for transport to backlands or on-dock railyard

Stacked containers stored in backlands



Containers leave the facilty via rail (regional) or by truck (local or delivery to off-dock railyard)





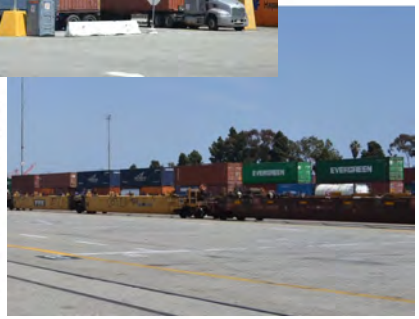


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Figure 1-2
General Container Terminal Operations
Berths 212-224 (YTI) Container Terminal Improvements Project

Containers are stored on the container yard (backlands) of the terminal using either a grounded or "stacked" system (where containers are stacked on top of each other, up to five containers high, with the bottom container placed directly on the ground) or a chassis (trailer) or "wheeled" system (where the containers are stored directly on one chassis [or trailer], not stacked). Terminals commonly use a combination of the two storage methods. The YTI Terminal uses primarily the grounded system, with limited chassis storage.

As shown on Figure 1-2, import cargo is shifted to stacks or wheeled trailer locations in the backlands. Some import containers are shifted to stacks near the on-dock railyard to be loaded onto departing trains. Others are delivered to trucks that arrive to pick up the cargo. As shown on Figure 1-2, cargo containers loaded on trucks are then processed out of the terminal at the exit gate.

Imported containers that leave the terminal by truck are hauled to off-Port railyards, such as Union Pacific's (UP's) Intermodal Container Transfer Facility (ICTF) or Burlington Northern-Santa Fe's (BNSF's) Hobart Yard. Import containers are also transported to transloading[7] warehouses or directly to final destinations, such as a retailer or distribution warehouse.

Containers destined for export typically arrive at the gate by truck a day to a week prior to the scheduled departure of the ship on which the containers are booked to travel. The waiting containers are stored in the terminal prior to being loaded onto the ship. Export containers from distant locations typically arrive at the terminal via rail and are stored, parked as wheeled cargo, or grounded by toppicks or RTG cranes. Intermodal movement, including factors governing the distribution patterns and mode choices, is discussed in greater detail in Section 1.2.2.3, Port Intermodal Cargo Transport. At the YTI Terminal, imported containers can also be moved through the TICTF (on-dock rail yard). On-dock railyards are dedicated to a specific terminal operator and are typically located in the backland area of Port container terminals to enhance the efficient utilization of land and avoid dockside disruption to vessel operations. An on-dock railyard consists of loading rail tracks that are complemented by nearby storage rail tracks to maximize operating efficiency and throughput capacity. They are designed to accommodate various types of container lifting equipment, including rubber-tire gantry cranes, rail-mounted gantry cranes, reach stackers, and toppicks, depending on terminal operator preferences.

Export containers from distant locations typically arrive at the terminal via rail and are stored, parked as wheeled cargo, or grounded by toppicks or RTG cranes. Containers are transferred by toppicks from the rail cars to chassis hauled by yard tractors. The tractors then drive to preplanned locations in the yard where the container is either lifted to grounded locations by toppicks or RTGs or parked on the chassis. Thereafter, the containers at the YTI Terminal are either parked on wheeled trailers or grounded by toppicks. Intermodal movement, including factors governing the distribution patterns and mode choices, is discussed in greater detail in Section 1.2.2.3, Port Intermodal Cargo Transport.

[7] Transloading is the process of transferring a shipment from one mode of transportation to another. It is most commonly employed when one mode cannot be used for the entire trip. Because of the different capacities of the different modes, the facilities typically require some storage facility, such a warehouse.

The number of containers that pass through a terminal is called its throughput. Throughput is literally the movement of containers over time. It is a dynamic number that is often measured in annual terms to avoid distortions caused by seasonal fluctuations (i.e., more goods are moved at certain times of the year, such as the Christmas holidays and back-to-school shopping periods). Each container terminal has an annual "throughput capacity" (i.e., the anticipated high end of the realistic operating range 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. That number is a function of terminal configuration, berth length, backland area, the ratio of berth length to backland area, and the number and types of equipment in use. To achieve the optimal throughput capacity of the terminals, the various components must not constrain the movement of cargo through the terminals. Optimal throughput capacity is independent of external influences such as economic cycles or disruptions in local, regional, or national transportation systems.

Historically, not all terminals at the Port were designed to optimize throughput capacity but were built instead to conform to the physical space available at the time. Accordingly, most terminal capacities are limited by one or more of their components, such as the amount of berth space available to accommodate the newest/largest ships in the fleet, the number and size of cranes used to load and unload the ships, the amount and shape of backland adjacent to the berth, the adequacy gate facilities for trucks, or access to on-dock railyards. 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 backlands (backland constrained). Because shipping contracts with manufacturers and retailers are dynamic and third-party accounts that use berth space can increase the throughput rates, terminal planning is based more on optimal capacity rates and long-term supply-and-demand forecasts rather than individual shipping company business plans.

1.2.2.3 Port Intermodal Cargo Transport

The Ports serve as a major gateway to international trade because of their location near the Pacific Ocean. The Rail Study Update (Parsons Transportation Group 2006) estimated that 40% of all containerized freight flowing through the nation arrives or departs through the San Pedro Bay Ports. The Ports are a link in the goods movement chain, providing products for the local market in Southern California as well as markets throughout the nation.

The goods movement chain of concern to the proposed Project involves intermodal transport, the transportation of freight in containers with use of multiple modes of transportation, such as ship, rail, and truck (Figure 1-2). This is accomplished through the use of containers that can be easily moved between the different modes of transport.

The majority of goods coming into the Ports arrive in shipping containers transported on container ships. Once the containers have been off-loaded from ships onto a marine terminal, they are sorted by destination and transported out of the terminal by truck or train. Containers may be placed on trains inside the terminal (on-dock rail), loaded onto truck chassis (a trailer designed to hold containers) to be hauled to their final destination,

or loaded onto truck chassis to be drayed[8] to a railyard outside the terminal (near-dock or off-dock rail). In some cases, cargo transported by truck from the marine terminals is handled or repackaged through a warehouse or distribution center somewhere in the Greater Los Angeles region. This is known as transloading. For containers that are exported, the process is reversed; the containers are transported to the marine terminal via truck or train and then loaded onto ships.

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 downtown Los Angeles (see Section 1.1.3.3); several railyards in the area between downtown 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. There is a limit to the number of trains each line can handle (i.e., its capacity). Once that capacity is approached, expansion projects would be undertaken by the railroad companies, as the owners and operators of the rail lines, with environmental review as appropriate (individual shippers and carriers would not undertake expansion projects).

Intermodal container movement can be divided into three categories: (1) local transport by truck, (2) transloaded intermodal cargo, and (3) 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 1-3), whereas cargo arriving from or departing to locations more than 550 miles away is typically transported by trains. This pattern is attributable to the fact that the economic breakeven boundary between truck transport and rail transport is between 350 and 550 miles. Cargo bound for destinations more than 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. For large quantities of containerized cargo bound for destinations far inland of the seacoast or on the other side of the country, trains are generally the most cost-effective and the most environmentally beneficial way of getting that cargo to those destinations.

1.2.2.4 Local Transport by Truck

Local transport of containers that arrive at the San Pedro Bay Ports are moved exclusively by truck. This cargo is destined for Southern California or the region west of the Rocky Mountains.

1.2.2.5 Transloaded Intermodal

Transloaded intermodal cargo consists of containers that arrive at marine terminals and are then drayed to a warehouse or distribution center for processing, such as repackaging, sorting, tagging, and labeling, before being reloaded into containers for transport to their

[8] Drayage: haul on a dray, which formerly referred to a strong cart or wagon without sides. Currently, drayage means the transportation of containerized cargo by specialized trucking companies between railyards, marine terminals, and local warehouses.

final destinations. There are two types of transloaded intermodal cargo: transloaded trucks and transloaded rail containers (Figure 1-4). For transloaded trucks, after the cargo is repackaged at the warehouse, the resultant containers are transported by trucks to their local or regional destinations. For transloaded rail, after the cargo is repackaged at the warehouse, the resultant containers are transported to an off-dock railyard (see Section 1.2.2.6, 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 conducted by the Ports of Los Angeles and Long Beach in 2012 determined that about 27% of the import containers (and their cargo contents) in 2011/2012 were transloaded to 53-foot domestic intermodal rail containers. An additional 13% of import containers were transloaded to trucks for regional and western states distribution/delivery. The amount of transloaded import cargo to rail is forecast to be about 30% in 2030 (for the purposes of this EIS/EIR, 30% is also applied to the 2026 analysis year, the final year analyzed). The amount of transloaded cargo to trucks is forecast to be 13% in 2030 (applied to 2026 analysis year).

1.2.2.6 Direct Intermodal

"Direct intermodal" is the movement of containers directly between the Port and a railyard. As shown in Figure 1-5, 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. 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 truck movements are needed to re-position containers.

Near- and off-dock railyards do require draying of containers because those railyards are outside of the marine terminals. After containers are sorted and loaded onto railcars at an on-, near-, or off-dock railyard, they are moved by rail to their final destination, which is usually east of the Rocky Mountains. In 2012, on-dock and near/off-dock railyards handled 25% and 11.2%, respectively, of the containers moved from the Ports (the remaining cargo was moved by truck [including the aforementioned containers with transloaded imported cargo to rail and trucks], primarily to local destinations) (see Section 1.2.2.5 for more detail).

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 (the railyards are never adjacent to the vessel berths, because cargo loading requirements make it impracticable to load containers directly from ships onto trains, but rather at one edge of the terminal). In general, containers are off-loaded from a cargo ship by cranes onto chassis or other trailer-like equipment and moved by yard tractors either directly to a waiting railcar in the on-dock railyard or a designated container staging area in the terminal's backlands. Containers are moved from ships or the terminal's backlands to the railyard without having to go through the terminal gate and onto local roadways.

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Figure 1-3
Local Cargo Distribution from Port of Los Angeles
Berths 212-224 (YTI) Container Terminal Improvements Project

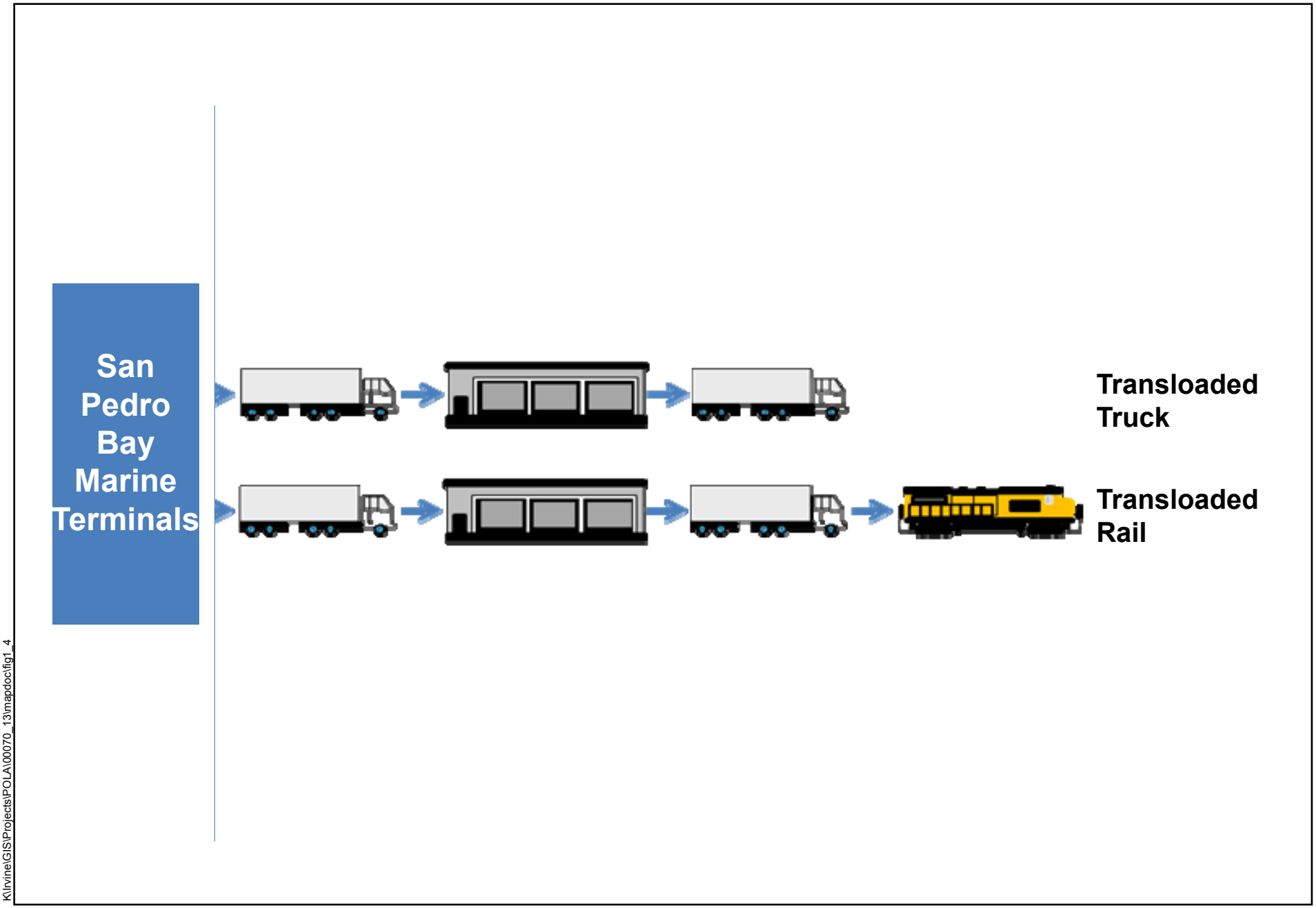

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Figure 1-4
Transloaded Intermodal Cargo Flow
Berths 212-224 (YTI) Container Terminal Improvements Project

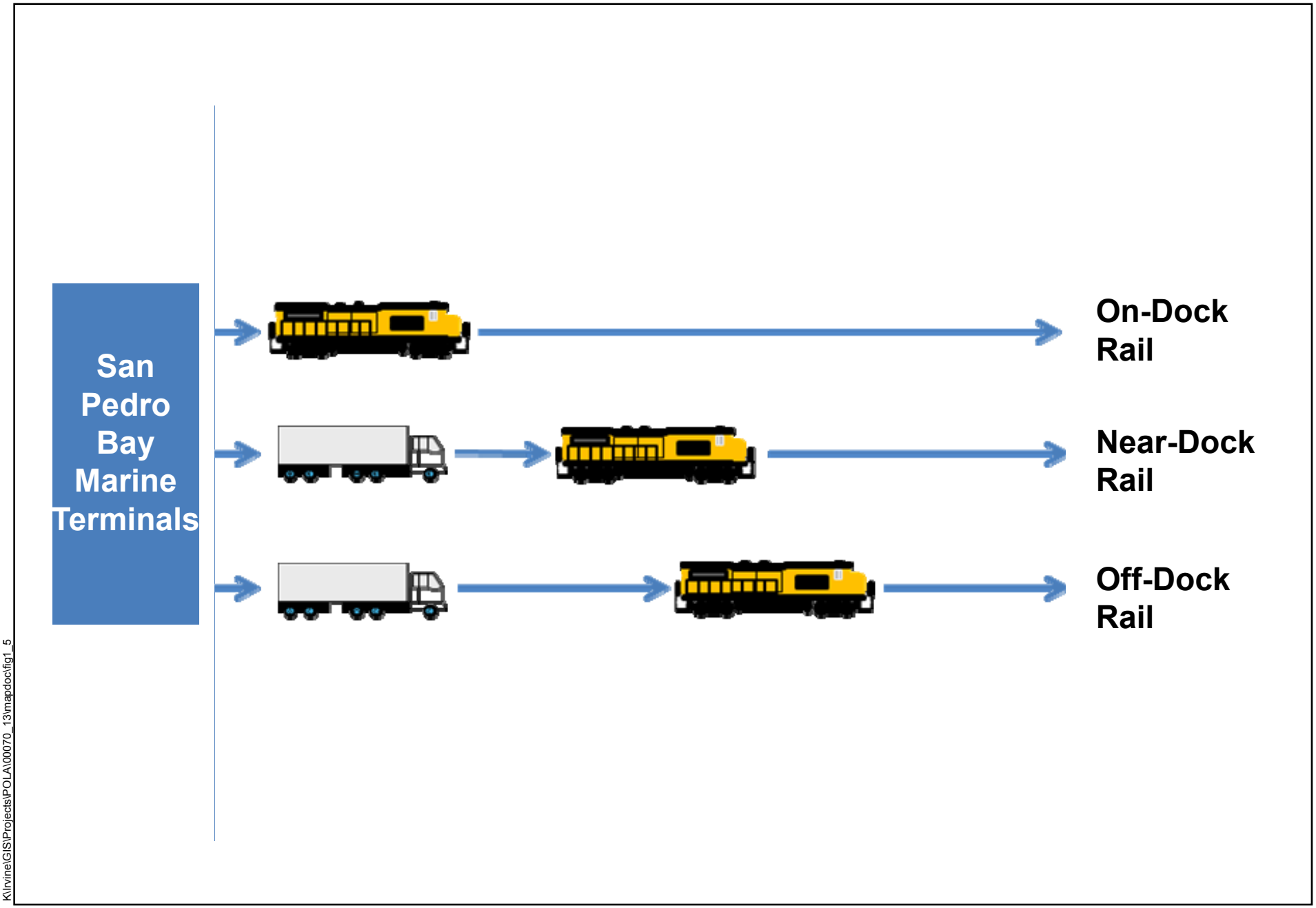

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Figure 1-5
Direct Intermodal Cargo Flow
Berths 212-224 (YTI) Container Terminal Improvements Project

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

Near-Dock Rail

A near-dock railyard is defined as a railyard located less than five miles outside of the marine terminal, thus requiring a short truck trip from the marine terminal to the railyard via local streets. 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 terminal may have enough containers to build a unit train[9] to Chicago but may only have enough containers bound for Kansas to build half a train. 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 1-6). Certification of the Final EIR for the Southern California International Gateway Project, a proposed near-dock railyard to be located primarily on Port property approximately four miles north of the Port, occurred in March 2013. A key benefit of near-dock rail compared with off-dock rail (discussed below) is the shorter drayage truck travel distance between the marine terminal and the railyard.

Off-Dock Rail

Off-dock railyards are located farther (more than five miles) from marine terminals. Currently, there are five off-dock railyards in the 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) in Los Angeles/Commerce/Vernon and the UP East Los Angeles Yard (East LA Yard) (Figure 1-6). Both railyards 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 East LA and Hobart yards handled 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 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, generally 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). One drawback of off-dock railyards compared with on-dock or near-dock railyards is that containers must be drayed greater distances, adding to congestion on roadways and increased air emissions in the region and other environmental impacts.

[9] A unit train, also called a block train, is a railway train in which all of the cars that make it up are shipped from the same origin to the same destination, without being split up or stored en route. This saves time and money as well as the hassle, delay, and confusion associated with assembling and disassembling trains at railyards near the origin and destination.

Intermodal Railyard Operations

As mentioned above, intermodal railyard operations generally involve trucks, container handling equipment, and trains. On-dock railyards, however, typically do not involve on-road trucks because containers are moved between the railyard and the ships or storage yard within the terminal by yard equipment. In the case of off-dock and near-dock facilities, drayage trucks arrive at and depart from the facility hauling 20- or 40-foot shipping containers on chassis. The majority of 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 mobile cranes at off-dock and near-dock facilities are typically large structures that run on rails or fixed runways and span both rail tracks and truck lanes. The cranes at on-dock yards are typically smaller vehicles (called toplifts) that operate more like forklifts alongside of the tracks. Containers not immediately placed on railcars or trucks are stored in a designated container staging area to be loaded at a later time. Truck tractors with an empty chassis often pick up a container for an outbound trip to the marine terminals, although many leave empty.

Trains entering and leaving intermodal railyards consist of flatcar-like railcars known as double-stack cars, which are designed especially for transporting shipping containers, and several diesel-powered locomotives. Containers are stacked two high on the railcars, thereby doubling the cars' capacity compared with a flatcar, which cannot handle double stacking. The standard double-stack car is approximately 265 feet long, although some are as long as 305 feet, and includes five bays, or wells, connected by articulated couplers that allow the car to negotiate curves. 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, approximately 8,000 feet long (including locomotives and inter-car spaces), and able to carry approximately 280 containers.

The average train length handled by the YTI Terminal on-dock facility is approximately 7,500 feet, which reflects limitations on the length and capacity of the on-dock track segments and adjacent storage yard where trains are coupled and uncoupled prior to arrival at the on-dock facility.

Inbound trains are routed onto loading tracks, known as "strip tracks." Because the strip tracks are typically much shorter than the train, the trains are uncoupled to break them into two or more blocks, each of which is positioned on a strip track. On-dock railyards are typically shorter than off-dock and near-dock yards; as such, more blocks, and therefore more train movements, are necessary. The locomotives are uncoupled and moved to locomotive servicing facilities for necessary inspections, refueling, and servicing; however, because many on-dock facilities do not have locomotive servicing facilities, locomotives that frequent such facilities must be moved to the nearest railroad facility—such as Watson, for BNSF, or Dolores, for UP, for servicing. These switching activities are handled by locomotives called "yard locomotives." Such locomotives have less horsepower than "line haul" locomotives, which move completed trains over long distances to their ultimate destinations. 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.

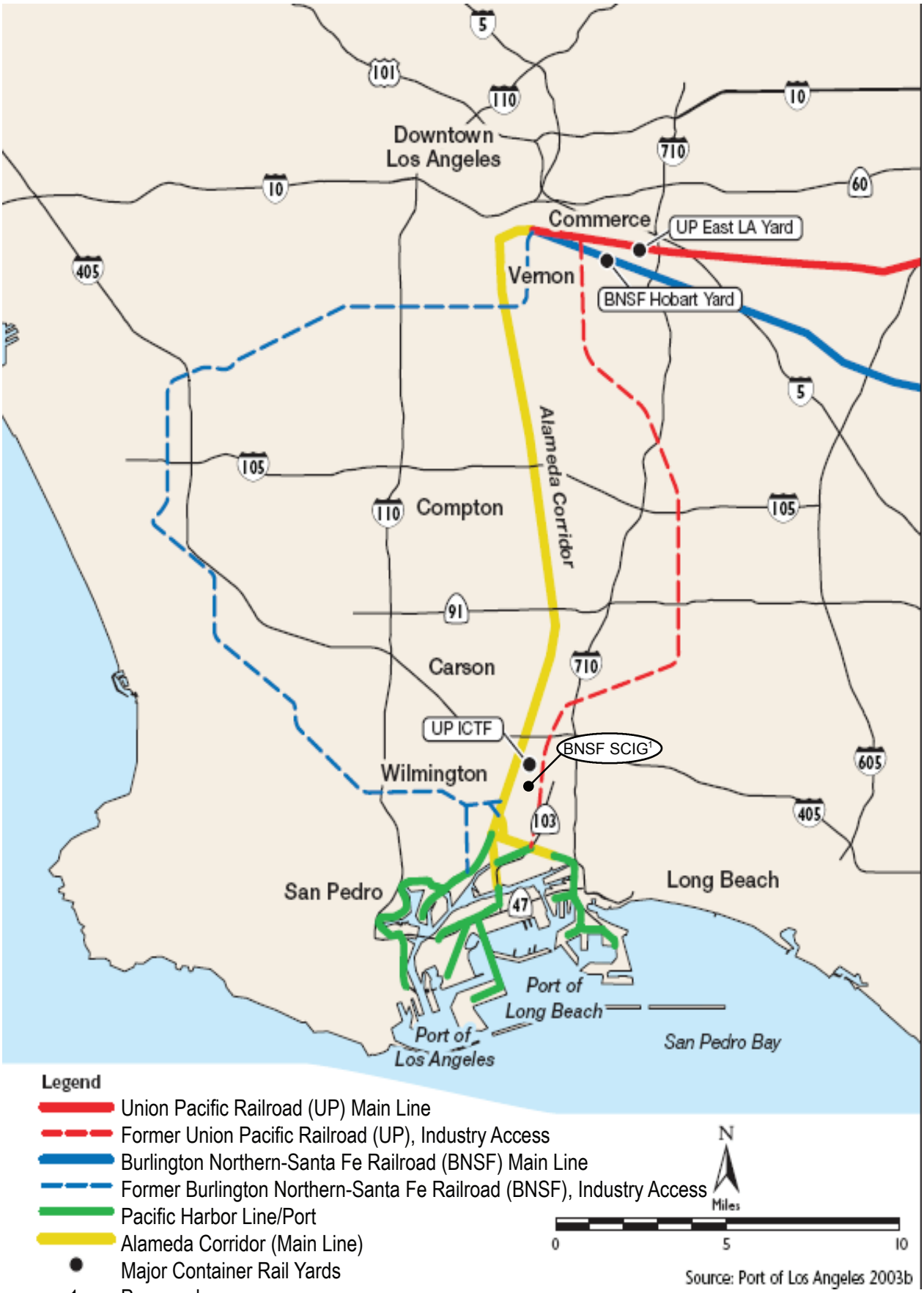

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Figure 1-6
Location of Existing Near-Dock and Off-Dock Railyards
Berths 212-224 (YTI) Container Terminal Improvements Project

1.2.3 San Pedro Bay Ports Cargo Growth and Port Capacity

This section presents background information on long-term containerized cargo growth 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. In 2010, the value of waterborne trade through West Coast ports reached $494.7 billion; that number increased to $566.3 billion in 2011. Major West Coast ports, particularly the ports of Los Angeles, Long Beach, and Oakland, have continued to invest billions of dollars to optimize facilities and accommodate increases in containerized shipping. These ports have deepened their harbors to accommodate large, deep-draft 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. 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 frequently develop detailed macro-economic cargo forecasts along with detailed terminal capacities (including micro-simulation). Anticipating the continued importance of containerized shipping, the Port of Los Angeles and Port of Long Beach, along with USACE, conducted a series of studies to forecast cargo volumes through 2020 and evaluate the capacity of the San Pedro Bay Ports with respect to accommodating such cargo volumes. The cargo forecasts predicted significant increases in containerized cargo from Pacific Rim countries to the Pacific West Coast and the San Pedro Bay Ports. These forecasts were used as a basis for development of an operations, facilities, and infrastructure study. That study concluded that the Ports needed to provide substantial additional physical facilities and make operational improvements to provide the necessary capacity.

The resulting San Pedro Bay 2020 Plan included the construction of new container terminals and the optimization of existing terminals at the Ports. From the early 1990s to 2007, actual volumes of containerized cargo passing through the two Ports exceeded the forecasts used to develop the San Pedro Bay 2020 Plan. Following the 2020 Plan, the Ports commissioned two market-based forecasts, one in 2007 (The Tioga Group Inc. et al. 2007) and an update in 2009 (The Tioga Group Inc. and HIS Global Insight 2009).

Even with the recession of 2001, up until 2007, the Ports experienced dramatic growth in cargo volumes, with an average growth rate of more than 10% per year between 1995 and 2006. In 2007, Global Insight and Tioga Group prepared a long-term cargo forecast through 2030 for the Ports (The Tioga Group Inc. et al. 2007). That forecast was a demand-based (i.e., unconstrained) forecast that assumed transportation and infrastructure capacity would be available to meet the demand. The forecast approach was a long-term average trend projection that did not attempt to capture the timing of economic booms and recession cycles but instead plotted the average path around which those cycles would move.

Following the 2007 cargo forecast of 65,100,000 TEUs in 2030, the U.S. and world economies entered a severe recession that dramatically affected international trade, resulting in volumes at the Ports that were significantly below 2006 peak volumes. As a result, the Ports reexamined the forecast cargo projections given the new economic conditions in 2009 (The Tioga Group Inc. and HIS Global Insight 2009), which started from a lower base volume than the 2007 forecast, and predicted continuing declines in cargo volume through 2009, with 2010 marking the end of the recession and a return to positive cargo growth rates. Essentially, the update predicted that it will take the Ports 6 to 7 years to return to the peak volumes of 2006 and that the Ports will continue to grow at a slower pace than predicted in the 2007 forecast. The lower growth rates mean that the gap between the new and the old forecasts will widen over time, eventually resulting in a 47% gap in 2030.

The 2009 forecast projected an annual throughput of 34,600,000 TEUs through the Port Complex by 2030 (The Tioga Group Inc. and HIS Global Insight 2009). Figure 1-7 shows the updated forecast compared to the 2007 forecast. The Ports have extended this market forecast to 2035 for use in long-range planning, design, and construction. The additional growth forecast in 2035 is a direct extrapolation of the 2030 volumes, using a growth rate of approximately 4.5% until each terminal's physical capacity is reached. The forecast volumes will now reach an annual throughput of 41,369,000 TEUs in the Port Complex by 2035.

Containerized cargo trade with China is projected to remain the largest and fastest growing segment over the forecast period. Port-wide growth in imports from China are expected to slow from the rates experienced in the early 2000s, averaging 5.5% per year between 2020 and 2030. Containerized cargo from Southeast Asia is projected to become the second-largest source of imports by 2030, averaging 4.6% per year between 2020 and 2030. Demand for ocean cargo tonnage from Latin American countries through the Ports is projected to increase slowly, reflecting a loss of import market share to Asia (The Tioga Group Inc. and HIS Global Insight 2009).

1.2.3.2 Container Terminal Capacity

The Ports evaluate the physical/operational capacity of the terminals to provide an accurate and realistic forecast of future cargo throughput. To estimate the future maximum or optimal capacity of each terminal through 2035, the Ports use a methodology that relies on two capacity models, one that analyzes the terminals' backland capacity and one that analyzes the terminals' berth capacity (a terminal could be berth constrained or backlands constrained or evenly balanced between the two). The modelers make realistic assumptions regarding different physical improvements (e.g., increasing the length of a berth or adding more container yard) and operating

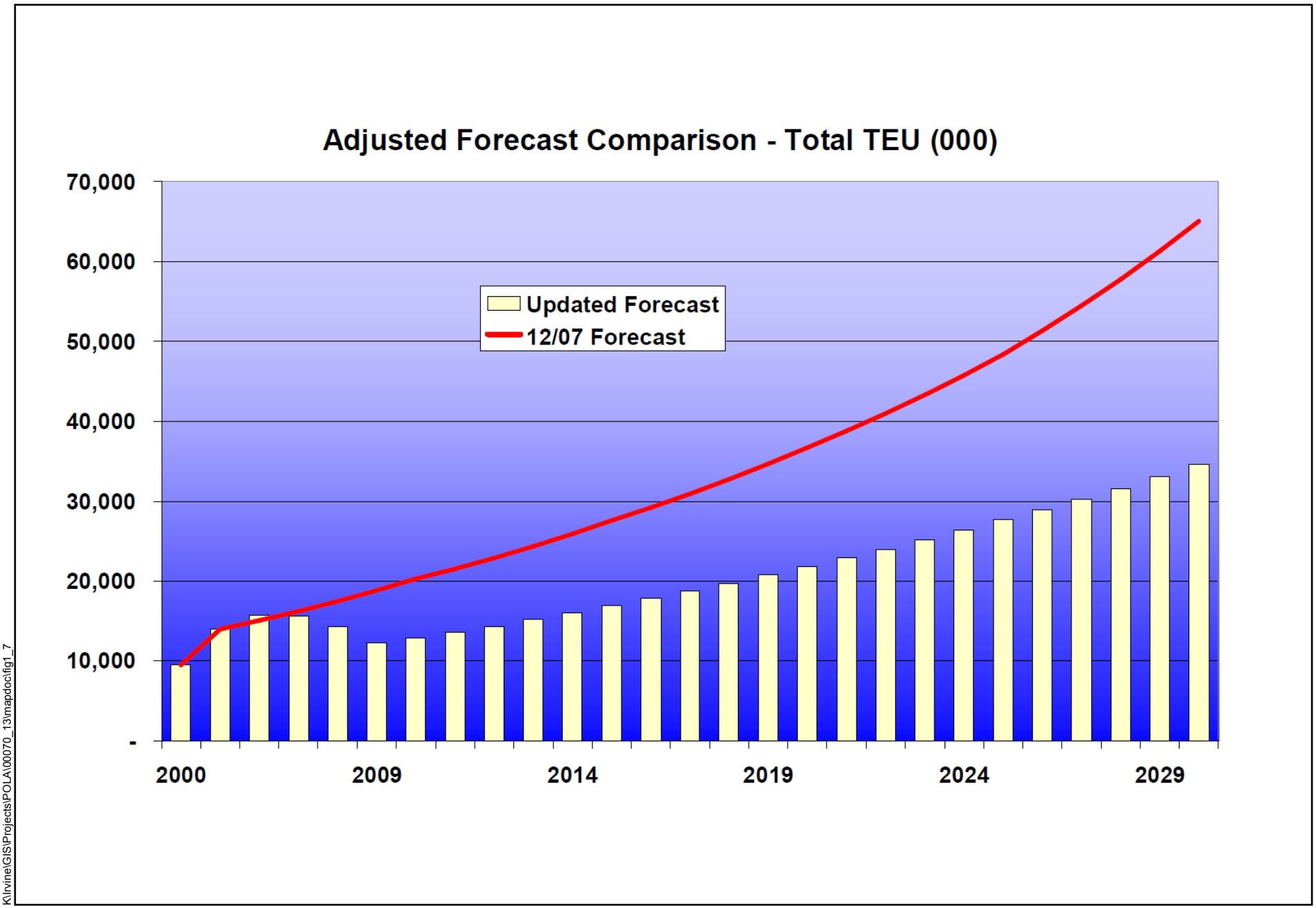

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Figure 1-7
Cargo Forecasts for the San Pedro Bay Port Complex
Berths 212-224 (YTI) Container Terminal Improvements Project

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 10,000 TEUs per acre per year compared with current throughput levels of between 5,000 and 7,000 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.

The results of the capacity modeling show that, even with the assumed changes in physical configurations and operating practices, future throughput at the San Pedro Bay Ports will be constrained at 41,369,000 TEUs (POLA/POLB 2013). Comparing the unconstrained 2009 market demand forecast with the Ports' estimate of total marine terminal capacity shows that the 2030 cargo demand of 34,600,000 TEUs will not exceed future capacity of 41,360,000 TEUs. Therefore, to identify the year in which demand will reach or exceed capacity, a continual annualized growth rate of approximately 4.5% was assumed to extend the forecast until the aggregate capacity of the Ports is reached. The results show cargo volumes increasing from approximately 34,600,000 TEUs in 2030 to approximately 41,369,000 TEUs by 2035. However, because of the different capacities of the terminals, the terminals will reach capacity at various years between 2030 and 2035.

The environmental analysis in this EIS/EIR assumes that the physical and operational capacities of Port container terminals will be fully utilized by future cargo volumes. Actual throughput might be lower because of changes in consumer demand patterns and/or economic conditions, but for the purposes of this EIR/EIS, it is assumed that the Ports will operate at a maximum capacity of 41,369,000 TEUs by 2035. This fundamental assumption is based on the most current cargo forecast and container terminal capacity data available at the time of this analysis.

1.2.3.3 Intermodal Cargo Demand and Capacity

In 2009, approximately 40% 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. In 2012, the direct intermodal share decreased nominally to approximately 36.2% because of lower cargo volumes; however, direct intermodal cargo (see Section 1.2.2.6 for definitions) has generally remained at around 40% for the last 10 to 15 years and is projected to remain at this level for the foreseeable future. Table 1-1 summarizes the Port Complex intermodal projections used in this EIS/EIR.

Table 1-1: San Pedro Bay Ports Direct Intermodal Cargo Forecast

Year	2012[a]	2020	2030	2035
Total Port of Los Angeles/Port of Long Beach	14,123,376	21,827,000	34,563,000	41,369,000
On-Dock	3,534,017	7,117,834	10,951,946	11,445,931
	25%	32.6%	31.7%	27.7%
Off-/Near-Dock	1,582,886	1,612,966	2,873,254	5,101,669
	11.2%	7.4%	8.3%	12.3%
Total Port of Los Angeles/Port of Long Beach Intermodal	36.2%	40%	40%	40%
Transloaded imports to rail, TEU (via 53-foot containers)	1,931,826	2,814,157	4,456,211	6,513,187

Notes:
[a] 2012 represents actual intermodal cargo movements.

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 plan to expand their rail infrastructure over the next ten years. The proposed changes are expected to increase on-dock rail capacity by more than threefold. Table 1-2 identifies the existing and planned on-dock railyards within the Port Complex, and Figure 1-8 shows the location of each of the on-dock facilities.

Table 1-2: Existing and Planned On-Dock Railyards

On-Dock Rail Facility	Location	Status
Terminal Island ICTF	Port of Los Angeles: YTI and Evergreen Terminals	Operating: proposed expansion by YTI, analyzed herein
Pier 300 Rail Facility	Port of Los Angeles: American President Lines Terminal	Operating: proposed expansion
Pier 400 Rail Facility	Port of Los Angeles: APM/Maersk Terminal	Operating: proposed expansion
West Basin Container Terminal	Port of Los Angeles: West Basin Container Terminal (serving YML and CS)	Operating: proposed expansion
TraPac Container Terminal	Port of Los Angeles: TRAPAC	Approved for construction
Seaside Rail Yard	Port of Los Angeles: Evergreen	Proposed Project: conceptual planning
Pier J	Port of Long Beach: SSA Pacific Container Terminal	Operating: proposed expansion

Figure 1-8
San Pedro Bay Port Complex On-Dock Railyards
Berths 212-224 [YTI] Container Terminal Improvements Project

Table 1-2: Existing and Planned On-Dock Railyards

On-Dock Rail Facility	Location	Status
Pier G	Port of Long Beach: International Transportation Services Terminal	Operating: expansion under construction
Middle Harbor	Port of Long Beach: (Pier F Railyard currently serving LBCT/CUT)	Expansion under construction (LBCT IY currently operating)
Pier A	Port of Long Beach: SSA Pier A Terminal	Operating: proposed expansion
Pier S	Port of Long Beach: unnamed terminal	Proposed Project: Final EIS/Supplemental EIR in preparation
Pier T	Port of Long Beach: TTI Terminal	Operating: proposed expansion

If all of the proposed changes can be constructed on the assumed timetable, projected on-dock railyard use will reach approximately 11,500,000 TEUs by 2035 (this includes the proposed YTI on-dock railyard expansion analyzed herein).

1.3 Purpose of an EIS/EIR

This section provides an overview of NEPA and CEQA, which respectively require the preparation of an EIS or an EIR for projects that could significantly affect the environment.

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 Section 15367).

USACE and LAHD are the NEPA and CEQA, respectively, lead agencies for the proposed Project, including the evaluation of potential impacts and identification of mitigation measures under the federal NEPA and state CEQA laws, respectively. 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. Section 15381 of the State CEQA Guidelines 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, Section 15386 of the State CEQA Guidelines 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 and disposal of dredged material at U.S. Environmental Protection Agency– (EPA-) designated sites in ocean waters. It is anticipated that a USACE permit, pursuant to Section 10 of the River and Harbor Act (RHA) 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) with respect to certain species. 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. 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. Regulatory authority for determining suitability of dredged sediments for ocean transport and disposal in accordance with Section 103 of the MPRSA. Reviews and submits recommendations 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.

Table 1-3: Agencies that Are Expected to Use This EIS/EIR

Agency	Responsibilities, Permits, and Approvals
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 permits under the Migratory Bird Treaty Act. Issues take authorizations under the MMPA 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 through 2020 (17 CCR 93118.3).
California Coastal Commission (CCC)	Reviews environmental documents to ensure compliance with the federal Coastal Zone Management Act and consistency with the California Coastal Act; performs a federal Consistency Determination 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. Consultation in accordance 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, nonhazardous waste in a manner that protects public safety, health, and the environment. State law assigns responsibility for solid waste management to local governments.
Regional Water Quality Control Board, Los Angeles Region (Los Angeles RWQCB)	Permitting authority for federal Clean Water Act (CWA) Section 401 Water Quality Certifications; permitting authority for California Waste Discharge Requirements pursuant to the state Porter-Cologne Water Quality Control Act; and responsible for issuance of both construction and industrial National Pollutant Discharge Elimination System (NPDES) stormwater permits under Section 402 of the CWA. Issuing authority of municipal separate storm sewer system (MS4) permit to City of Los Angeles.

Table 1-3: Agencies that Are Expected to Use This EIS/EIR

Agency	Responsibilities, Permits, and Approvals
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	
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 have various approval and permitting responsibilities, however, and are listed separately below for the sake of clarity. 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 the operation of facilities) for the proposed Project and alternatives evaluated in this Draft EIS/EIR. LAHD has leasing authority for Port land, permitting authority for engineering construction, and is responsible for general regulatory compliance and activities of other City of Los Angeles departments for the proposed Project and alternatives evaluated in this Draft EIS/EIR.

Table 1-3: Agencies that Are Expected to Use This EIS/EIR

Agency	Responsibilities, Permits, and Approvals
City of Los Angeles Building and Safety Department	Permitting authority for building and grading permits. Approves, in conjunction with City of Los Angeles Bureau of Sanitation, any required Standard Urban Stormwater Mitigation Plans or Site Specific Mitigation Plans. Such plans implement 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 City of Los Angeles 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.

The NEPA NOI was published in the *Federal Register* on April 5, 2013, and the CEQA NOP was also posted on April 5, 2013 (see Appendix A). A public scoping hearing was conducted on April 23, 2013, in San Pedro. No public comments were received during the scoping meeting. The public review period was extended from the original date of May 6, 2013, to May 20, 2013, and ten comment letters were received. Table 1-4 summarizes key issues raised in the comment letters.

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. Table 1-4 presents a summary of the key comments received during the NOI/NOP public comment period and references to the sections of this Draft EIS/EIR addressing them.

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

Commenter	Key Issues Raised	Sections Addressed
Federal Emergency Management Agency (FEMA)	• Requested that LAHD review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the City and County of Los Angeles. • Provided information on the National Flood Insurance Program (NFIP) floodplain building requirements.	Section 3.14, Water Quality, Sediments, and Oceanography
South Coast Air Quality Management District (SCAQMD)	• Recommends LAHD to use the SCAQMD CEQA Air Quality Handbook (1993) to assist with preparation of the air quality analysis. • Identify any potential adverse air quality impacts from all phases of the proposed Project and all air pollutant sources related to the proposed Project. • Calculate air quality impacts from both construction and operations. • Quantify particulate matter smaller than or equal to 2.5 microns in diameter (PM2.5) emissions and compare results to the recommended PM2.5 thresholds using SCAQMD methodology and guidance. • Calculate localized air quality impacts using SCAQMD methodology and guidance, and compare the results to SCAQMD's localized significance thresholds (LSTs) or performing dispersion modeling if necessary. • Perform mobile-source health risk assessment using SCAQMD guidance. • Analyze all toxic air contaminant impacts due to the decommissioning or use of equipment generating such pollutants. • Identify and include all feasible mitigation measures, including those that go beyond what is required by law. Refer to SCAQMD's *CEQA Air Quality Handbook* for sample mitigation measures, SCAQMD's *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, guidance on siting incompatible land uses in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective*, and other SCAQMD CEQA web resources. • Provides SCAQMD rules and relevant air quality reports and data location through the Public Information Center and SCAQMD website.	Chapter 2, Project Description; Section 3.2, Air Quality and Meteorology; Chapter 6, Project Alternatives

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

Commenter	Key Issues Raised	Sections Addressed
	• Recommends that the Draft EIR analyze an alternative that moves the increase in throughput via on-dock rail yards. • Requests copy of Draft EIR along with all appendices and related technical documents.	
Southern California Association of Governments (SCAG)	• Draft EIS/EIR should include a review and consideration of the adopted Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) goals, and analysis should reflect the most recently adopted growth forecasts. • Requests copy of environmental documentation be sent to SCAG's Los Angeles office or via e-mail for the full comment period.	Section 3.6, Ground Transportation; Chapter 8, Growth-Inducing Impacts
California State Lands Commission (CSLC)	• Presents CSLC's jurisdiction and management authority over all ungranted tidelands, submerged lands, and beds of navigable lakes and waterways, as well as residual and review authority for tidelands and submerged lands granted in trust to local jurisdictions. • Indicates that the state holds these lands for the benefit of all people of the state for statewide Public Trust purposes, which include, but are not limited to, waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. • Acknowledges that the proposed Project is located on sovereign submerged lands that have been transferred, in trust, to the City of Los Angeles (Statute of 1911, Chapter 656), and that no CSLC authorization would be required. • Indicates that CSLC retains residual and review authority over granted lands, which are subject to the protections of the Public Trust Doctrine. • USACE and LAHD should conduct queries of CDFW's California Natural Diversity Database and USFWS's Special Status Species Database to identify any special-status plant or wildlife species that may occur in the proposed project area. Coordination with CDFW and USFWS, as well as direct surveys or data collection, should be performed. • USACE and LAHD should consult with CDFW, USFWS, and NOAA's NMFS for information on other species that may be present and possible mitigation.	Section 3.2, Air Quality and Meteorology; Section 3.3, Biological Resources; Section 3.4, Cultural Resources

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

Commenter	Key Issues Raised	Sections Addressed
	• The Draft EIS/EIR should analyze the potential for species to occur in the proposed project area, and if impacts on special-status species are found to be significant, adequate mitigation should be identified. • The Draft EIS/EIR should consider the proposed Project's potential to encourage the establishment or proliferation of marine invasive species, and consider the impacts of introduced species on the proposed Project. If significant impacts are determined, mitigation should be considered including contracting vessels and barges from nearby, or requiring hull cleaning. • The Draft EIS/EIR should evaluate construction noise and vibration on fish and birds from construction in the water and pile driving. Mitigation could include species-specific work windows. • A greenhouse gas (GHG) emissions analysis consistent with the California Global Warming Solutions Act (Assembly Bill 32) and required by the State CEQA Guidelines should be included, and should identify a threshold for significance for GHG emissions, calculate the level of GHGs that would be emitted as a result of construction and ultimate build-out of the proposed Project, determine the significance of the impacts of those emissions, and, if impacts are significant, identify mitigation measures. • The Draft EIS/EIR should consider the effects of sea level rise on all resource categories potentially affected by the proposed Project. Identify adaptation strategies and consult CSLS's staff report, "A Report on Sea Level Rise Preparedness," to consider mitigation. • The Draft EIS/EIR should evaluate potential impacts on submerged cultural resources in the proposed project area, including consultation with CSLC's shipwrecks database. • Notes that any submerged archaeological site or submerged historic resource that has remained in state waters for more than 50 years is presumed to be significant, and that title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands is vested in the state and under the jurisdiction of the CSLC.	

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

Commenter	Key Issues Raised	Sections Addressed
	• Requests copies of Final EIS/EIR, Mitigation Monitoring and Reporting Program (MMRP), Notice of Determination (NOD), CEQA Findings, and Statement of Overriding Considerations (SOC) when/if available.	
Department of Toxic Substances Control (DTSC)	• Draft EIS/EIR should evaluate whether conditions in the proposed project area pose a threat to human health or the environment. • Provides a list of regulatory databases to be consulted. • Identify a mechanism to initiate/remediate any site within the proposed project area that may be contaminated. • Any environmental investigations, sampling, or remediation for a site should be conducted under a work plan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. • For structures planned to be demolished, an investigation should be conducted for the presence of hazardous chemicals, mercury, and asbestos. Any contaminants should be remediated in compliance with California environmental regulations. • Soil sampling may be required if excavation or filling is conducted. Contaminated soil must be properly disposed and may be subject to Land Disposal Restrictions. • Imported soils for backfill should be sampled to ensure they are free of contamination. • Human health and environmentally sensitive receptors should be protected during construction and demolition. A health risk assessment may be required and should be conducted by a qualified health risk assessor. • Any hazardous waste generated should be managed in accordance with the California Hazardous Waste Control Law. • DTSC can provide cleanup oversight through an Environmental Oversight Agreement or a Voluntary Cleanup Agreement.	Section 3.7, Groundwater and Soils
Native American Heritage Commission (NAHC)	• NAHC has jurisdiction and special expertise over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.	Section 3.4, Cultural Resources

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

Commenter	Key Issues Raised	Sections Addressed
	• Perform a record search of the proposed project area to determine if the area has been surveyed for cultural resources. • Known traditional cultural resources recorded on or adjacent to the area of potential effect (APE) should be listed in the Draft EIS/EIR. • Coordinate archaeological inventory and reporting with NAHC, if required. • All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure. • A Sacred Lands File Check has been requested and a list of appropriate Native American contacts has been provided for consultation. • Include in mitigation plans provisions for evaluation and identification of accidentally discovered archaeological resources. • Monitoring of ground-disturbing activities should be included in areas of identified archaeological sensitivity by a certified archaeologist and a culturally affiliated Native American. • Include in mitigation plans provisions for the disposition of recovered artifacts in consultation with culturally affiliated Native Americans. • Include provisions for discovery of Native American human remains in mitigation plans.	
California Public Utilities Commission (CPUC)	• CPUC has jurisdiction over the safety of highway-rail crossings in the state. • CPUC requires approval for construction or alteration of crossings and grants the Commission exclusive power on design, alteration, and/or closure of crossings. • Crossings along the Port of Los Angeles Red Car Line near the TICTF should be identified and evaluated for necessary safety improvements and mitigations. • Additional tracks shall be constructed in accordance with Commission General Order Nos. 26-D, 72-B, and 75-D. • Construction or modification of a public crossing requires the authorization from the Commission.	Section 3.6, Ground Transportation

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

Commenter	Key Issues Raised	Sections Addressed
Los Angeles County Metropolitan Transportation Authority (LACMTA)	• A Traffic Impact Analysis (TIA) with roadway and transit components is required under the California Congestion Management Plan (CMP), and shall include: • All CMP arterial monitoring intersections, including monitored freeway on/off-ramp intersections, where the proposed Project would add 50 or more trips during either the a.m. or p.m. weekday peak hour (of adjacent street traffic); • If CMP arterial segments are being analyzed rather than intersections, the study area must include all segments where the proposed Project would add 50 or more peak hour trips (total of both directions); within the study area, the TIA must analyze at least one segment between monitored CMP intersections; • Mainline freeway-monitoring locations where the proposed Project would add 150 or more trips, in either direction, during either the a.m. or p.m. weekday peak hour; and • Caltrans must also be consulted through the NOP process to identify other specific locations to be analyzed on the state highway system. • The CMP TIA requirement also contains two separate impact studies covering roadways and transit. If the TIA identifies no facilities for study based on the criteria above, no further traffic analysis is required. However, projects must still consider transit impacts. • Requests a copy of the draft EIR	Section 3.6, Ground Transportation
City of Rancho Palos Verdes	• Reasonable foreseeable upset and accident conditions involving the likely release of hazardous material into the environment should also include assessment of the movement of cargo at the YTI facility, not just the risk of unearthing contaminated soil during site excavation. • Inconsistencies (if any) with the PMP Update should be fully analyzed in the Draft EIS/EIR.	Section 3.7, Groundwater and Soils; Section 3.8, Hazards; Section 3.9, Land Use

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

Commenter	Key Issues Raised	Sections Addressed
California Department of Transportation (Caltrans)	• A traffic study should be prepared prior to the Draft EIS/EIR, and Caltrans' traffic study guide should be consulted. • Assumptions and methods should be presented that are used to develop trip generation, trip distribution, travel mode, and assignments of trips on SR-47, SR-110, and SR-710, and all on/off ramps within a two-mile radius of the proposed Project. • All freeway segments and interchanges within five miles of the proposed Project should be analyzed. • Analysis of average daily traffic (ADT), and AM and PM peak-hour volumes for both the existing and future conditions in the affected area should be presented. • Utilization of transit lines and vehicles, and of all facilities, should be realistically estimated. Future conditions would include build-out of all projects and any plan-horizon years. • Analysis should include existing traffic, traffic generated from the proposed Project, cumulative traffic generated from all specific approved developments in the area, and traffic growth other than from the proposed Project and developments. • Discussion of mitigation measures appropriate to alleviate anticipated traffic impacts should be presented and shall include, but not be limited to, the following: • Description of Transportation Infrastructure Improvements • Financial Costs, Funding Sources, and Financing • Sequence and Scheduling Considerations • Implementation Responsibilities, Controls, and Monitoring • Any mitigation involving transit or Transportation Demand Management (TDM) should be justified and the results conservatively estimated. Improvements involving dedication of land or physical construction may be favorably considered. • Caltrans may accept fair share contributions toward pre-established or future improvements on the state highway system. Please use the following ratio when estimating proposed project equitable share responsibility:	Section 3.6, Ground Transportation

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

Commenter	Key Issues Raised	Sections Addressed
	additional traffic volume due to proposed project implementation IS divided by the total increase in the traffic volume. • Caltrans has authority to determine the required freeway analysis for the proposed Project and is responsible for obtaining measures that would offset proposed project vehicle trip generation that worsens state highway facilities. Caltrans should be consulted for the analysis of state facilities. • The state routes should be analyzed, preferably using methods suggested in Caltrans' Traffic Impact Study Guide. A select zone model run is the preferred method. • Caltrans requests a scoping meeting prior to the preparation of the traffic study to determine the study area and methodology used for the analysis.	

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 Parts 230 and 325, CEQA (California PRC Section 21000 et seq.), the State CEQA Guidelines (14 CCR 15000 et seq.), and the City of Los Angeles *L.A. CEQA Thresholds Guide*. 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, Section 15064.7(a)). Except as noted in particular sections of the document, LAHD has adopted the City of Los Angeles *L.A. CEQA Thresholds Guide* for purposes of this Draft EIS/EIR (City of Los Angeles 2006). Likewise, USACE has adopted the City of Los Angeles *L.A. CEQA Thresholds Guide* for purposes of this Draft EIS/EIR to achieve its NEPA responsibilities, unless otherwise noted in particular sections of the document.

The scope of the federal review is normally defined by 33 CFR 325, Appendix B, which states:

> …the [USACE] district engineer should establish the scope of the NEPA document to address the impacts of the specific activity regarding the Department of the Army (DA) permit and those portions of the entire project over which the district engineer has sufficient control and responsibility to warrant Federal review.

USACE regulations require USACE to determine if its "scope of review" or "scope of analysis" should be expanded to account for indirect and/or cumulative effects of the issuance of a permit (Appendix B in 33 CFR 325). The four factors considered in determining "sufficient control and responsibility" are:

- whether or not the regulated activity comprises merely a link in a corridor-type project;
- whether there are aspects of the upland facility in the immediate vicinity of the regulated activity affect the location and configuration of the regulated activity;
- the extent to which the entire project will fall within USACE jurisdiction; and
- the extent of cumulative federal control and responsibility

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

- Aesthetics and Visual Resources
- Air Quality and Meteorology
- Biological Resources
- Cultural Resources
- Geology
- Greenhouse Gas Emissions
- Ground Transportation
- Groundwater and Soils
- Hazards and Hazardous Materials
- Land Use
- Marine Transportation
- Noise
- Public Services
- Utilities and Service Systems
- Water Quality, Sediments, and Oceanography

This Draft EIS/EIR has been prepared by ICF International (ICF) 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 ICF who helped prepare this Draft EIS/EIR are identified in Chapter 11, 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.

1.5.2.1 USACE Use

USACE has jurisdictional authority over the proposed Project pursuant to Section 10 of the RHA and potentially Section 103 of the MPRSA; EPA also has approval authority for actions involving 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. This document does not serve as a public notice of application for any Department of the Army permits at this time. Rather, such public notice of any permit application is being published separately from and concurrently with the public review period for this Draft EIS/EIR.

USACE's Record of Decision will document USACE's decision on the proposed Project or alternative, including issuance of any permit pursuant to Section 10 of the RHA and/or Section 103 of the MPRSA, as well as any required environmental mitigation commitments.

1.5.2.2 LAHD Use

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 EIS/EIR, Notice of Completion, Findings of Fact, and Statement of Overriding Considerations (if necessary) would document their decision as to the adequacy of the EIS/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: USACE Permit (pursuant to Section 10 of the RHA and potentially 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 EIS/EIR include: certification of the EIS/EIR, approval of the proposed Project, completion of final design, issuance of a Coastal Development Permit, 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 specific 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.

A detailed discussion of the evaluation of the proposed Project with regards to the four factors considered in determining sufficient control and responsibility, as summarized above, can be found in Section 2.7 of this Draft EIS/EIR (in Chapter 2, Project Description). Considering all four factors USACE has determined that the federal direct and indirect scope of analysis should consist of (1) work (including dredging) and placement of structures in or over the waters of the United States and (2) impacts on the adjacent upland area expected to be used temporarily for staging and storage of equipment and materials to complete the in-water and over-water activities (i.e., an approximately 100-foot-wide strip of upland area adjacent to the shoreline). The federal analysis would also include any ocean transport and disposal of the dredged material to designated ocean disposal site(s), as well as any beneficial reuse of dredged materials in waters of the United States.

USACE has no authority or responsibility to regulate activities, such as upland operations, that are presently occurring or could occur absent a USACE permit. These activities and resulting conditions, therefore, compose the NEPA baseline, which is discussed in Section 2.6.2 of this Draft EIS/EIR.

The scope of analysis for evaluating cumulative impacts is addressed in Chapter 4, Cumulative Analysis, of this Draft EIS/EIR.

Based on the Initial Study Checklist (Appendix A of this Draft EIS/EIR) and scoping comments received, USACE has identified potentially significant indirect and cumulative effects within the scope of federal control that could occur as a result of operation of the proposed Project due to the replacement/extension of the gantry cranes and dredging of the berth to accommodate larger vessels. Although operational impacts in the uplands are normally outside the jurisdiction of USACE, NEPA requires USACE to fully disclose potentially significant indirect and cumulative impacts occurring as a result of a proposed permit action. Therefore, USACE is preparing an EIS for the proposed action and its alternatives.

Normally, any ultimate permit decision would focus on direct impacts on the aquatic environment, as well as indirect and cumulative impacts in the uplands determined to be within the scope of federal control and responsibility as part of the required public interest review. These impacts typically are defined by comparing the proposed Project or alternative to the NEPA baseline, which analyzes the work and impacts that could occur without a permit from USACE (see Section 2.6.2). The NEPA baseline is equivalent to the No Federal Action Alternative in this case.

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	Provides a brief summary of 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 proposed Project's relationship to existing plans and policies, 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 for detailed review, and alternatives evaluated in the document at a detailed level.
Chapter 3, Environmental Analysis	Describes 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 proposed project alternative, mitigation measures that would eliminate or reduce significant impacts, and the mitigation monitoring program.
Chapter 4, Cumulative Analysis	Provides a summary of 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 each proposed project alternative on minority and/or low-income populations adjacent to the proposed project site.
Chapter 6, Comparison of Alternatives	Compares the significant environmental impacts of the proposed Project and proposed project alternatives and identifies the Environmentally Preferred and Superior Alternatives.
Chapter 7, Socioeconomics and Environmental Quality	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 background information and technical detail for several of the resource areas.

1.6 Key Principles Guiding Preparation of this Draft EIS/EIR

1.6.1 Emphasis on Significant Environmental Effects

This Draft EIS/EIR focuses on the significant environmental effects of the proposed Project and alternatives, and their relevance to the decision-making process. The following sections describe the general framework for analysis under NEPA and CEQA. These summaries are not meant to capture the legal nuances that have developed through the passage and amendment of various statutes and regulations, and from corresponding judicial decisions; rather, the summaries are meant to communicate a general understanding of these two acts.

NEPA requires the lead federal agency to rely on a "scientific and analytical basis for the comparison of alternatives" (40 CFR 1502.16) in making its decisions. Commonly, when preparing a joint document, the lead federal agency will use the CEQA significance thresholds as the standard or basis for determining a project's impacts in terms of context and intensity, unless otherwise noted (certain instances are noted in this document).

"Environmental impacts," as defined by CEQA, include physical effects on the environment. In this document, the term is used synonymously with the term "environmental effects" under NEPA. The State CEQA Guidelines (Section 15360) define the environment as follows:

> The physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

This definition does not include strictly economic impacts (e.g., changes in property values) or social impacts (e.g., a particular group of persons moving into an area). The State CEQA Guidelines (Section 15131[a]) state that "economic or social effects of a project shall not be treated as significant effects on the environment." However, economic or social effects are relevant to physical effects in two situations. In the first, according to Section 15131(a) of the State CEQA Guidelines: "An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes…to physical changes caused in turn by the economic or social changes." In other words, if an economic or social impact leads to a physical impact, this ultimate physical impact would be evaluated in the EIR. In the second instance, according to Section 15131(b) of the State CEQA Guidelines: "Economic or social effects of a project may be used to determine the significance of physical changes caused by the project."

As with economic or social impacts, psychological impacts are outside the definition of the term "environmental." While not specifically discussed in the State CEQA Guidelines, the exclusion of psychological impacts was specifically affirmed in the 1999 court decision *National Parks and Conservation Association v. County of Riverside 71 Cal. App. 4th 1341 and 1364 (1999*).

In view of these legal precedents, LAHD is not required to treat economic, social, or psychological impacts as significant environmental impacts absent a related physical effect on the environment. Therefore, such impacts are discussed only to the extent necessary to determine the significance of the physical impacts of the proposed Project and alternatives. Additionally, this Draft EIS/EIR addresses Environmental Justice (Chapter 5) and Socioeconomics (Chapter 7).

1.6.2 Forecasting

In this Draft EIS/EIR, USACE and LAHD and its consultants have made their best efforts to predict and evaluate the reasonable, foreseeable, direct, indirect, and cumulative environmental impacts of the proposed Project and alternatives. NEPA and CEQA do not require USACE and LAHD to engage in speculation about impacts that are not reasonably foreseeable (State CEQA Guideline Sections 15144 and 15145). CEQA does not require a worst-case analysis. Similarly, NEPA does not require a worst-case analysis when confronted with incomplete or unavailable information (40 CFR 1502.22).

1.6.3 Reliance on Environmental Thresholds and Substantial Evidence

The identification of impacts as "significant" or "less than significant" is one of the important functions of an EIS/EIR. While impacts determined to be "less than significant" need only be acknowledged as such, an EIR must identify mitigation measures for any impact identified as "significant." In preparing this document, LAHD has based its conclusions about the significance of environmental impacts on identifiable thresholds and has supported these conclusions with substantial scientific evidence. USACE has adopted the City of Los Angeles CEQA Thresholds to meet its NEPA responsibilities for this EIS/EIR, unless otherwise noted in particular sections of this document for the NEPA analysis.

The criteria for determining the significance of environmental impacts in this analysis are described in each resource section in Chapter 3, Environmental Analysis. The "threshold of significance" under CEQA for a given environmental effect is the level at which LAHD finds a potential effect of the proposed Project or alternative to be significant. "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 may be determined" (State CEQA Guidelines, Section 15064.7(a)).

1.6.4 Disagreement among Experts

During preparation of the Draft EIS/EIR, it is possible that evidence that might raise disagreements will be presented during the public review of the Draft EIS/EIR. Such disagreements will be noted and will be considered by the decision-makers during the public hearing process. However, to be adequate under CEQA and NEPA, the Draft EIS/EIR need not resolve all such disagreements.

In accordance with the provisions of the State CEQA Guidelines, conflict of evidence and expert opinions on an issue concerning the environmental impacts of the proposed Project—when LAHD is aware of these controversies—has been identified in this Draft EIS/EIR. The Draft EIS/EIR has summarized the conflicting opinions and has included

sufficient information to allow the public and decision-makers to take intelligent account of the environmental consequences of their actions.

In rendering a decision on a project where there is a disagreement exists among experts, the decision-makers are not obligated to select the most conservative, environmentally protective or liberal viewpoint. Decision-makers might give more weight to the views of one expert than to those of another and need not resolve a dispute among experts. In their proceedings, the decision-makers must consider the comments received and address any objections, but need not follow said comments or objections so long as the decision-makers state the basis for their decision and the decision is supported by substantial evidence.

1.6.5 NEPA and CEQA Baselines

1.6.5.1 NEPA Baseline

In analyzing a proposed project in a joint NEPA/CEQA format, USACE may distinguish the scientific and analytical basis for its decisions separately from the CEQA lead agency decision. Fundamental to this analysis is establishing the NEPA baseline. 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 permit from USACE (e.g., air emissions and traffic likely to occur without issuance of a permit to dredge berths or replace/modify gantry cranes). The NEPA baseline determination is based on direct statements and empirical data from the applicant, as well as on the judgment and experience of USACE.

For the proposed Project evaluated in this Draft EIS/EIR, under the NEPA baseline scenario, there would be no improvements to the waterside of the container terminal, such as dredging and any associated ocean transport and disposal of the material, or adding/modifying cranes. There would also be limited upland improvements, as discussed further in Section 2.7.2. However, under the NEPA baseline scenario, the existing lease would be extended through 2026, and current operations would continue at the existing container terminal. Therefore, the NEPA baseline is equivalent to the No Federal Action Alternative, and these terms are used interchangeably throughout this document.

Unlike the CEQA baseline, which is defined by conditions at a point in time, the NEPA baseline is not bound by statute to a “flat” or “no-growth” scenario; therefore, the NEPA baseline could include upland terminal construction and increases in upland operations over the life of a project, which do not require federal action or approval.

1.6.5.2 CEQA Baseline

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 the set of conditions that prevailed at the time the NOP was circulated. For purposes of the EIR, the CEQA baseline includes the throughput for the 12-month period preceding the NOP date (i.e., calendar year 2012). For the 12-month period between January 1 and December 31, 2012, the YTI Terminal

encompassed approximately 185 acres under its long-term lease, supported 14 cranes (10 operating), and handled approximately 996,109 TEUs.

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 (discussed in Section 2.7.1) 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 proposed project site that would occur without approval of the proposed Project.

1.6.6 Duty to Mitigate

Under NEPA, 40 CFR 1505.3 requires that:

> …mitigation and other conditions established in the environmental impact statement or during its review and committed as part of the decision shall be implemented by the lead agency or other appropriate consenting agency.

Although USACE could identify and analyze impacts outside its jurisdiction, USACE limits the placement of special conditions in USACE permits (requirements for mitigation) to areas within USACE jurisdiction (i.e., areas directly subject to its permitting authority under Section 404 of the CWA, Section 10 of the RHA, and Section 103 of the MPRSA). USACE cannot constrain operations outside its jurisdiction where, absent a USACE permit for construction in navigable waters or discharges into waters of the United States, the federal government has no authority over operations that could otherwise occur. Therefore, while upland indirect and/or cumulative effects within the USACE scope of analysis (i.e., traceable to the issuance of a permit) may exist and are disclosed in this environmental document, USACE would not place special conditions on those upland impacts because activities in the uplands are not within USACE jurisdiction, and some portion of those impacts would occur without a USACE permit. However, it should be noted that mitigation would be applied to address upland impacts under CEQA.

According to Section 15126.4(a) of the State CEQA Guidelines, 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.

Section 15041 of the State CEQA Guidelines 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.

1.6.7 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);
- 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 (Section 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 (Section 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 (40 CFR 1502.14(c)). The range of alternatives discussed in an EIS need not be beyond a reasonable range (40 CFR 1502.14(a)), and 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 Section 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 Port of Los Angeles Environmental Initiatives

LAHD's Environmental Management Policy, as described in this section, was approved by the Harbor Commission on April 27, 2003. The purpose of the Environmental Management Policy is to provide an introspective, organized approach to environmental management; further incorporate environmental considerations into day-to-day Port operations; and achieve continual environmental improvement.

The Environmental Management Policy includes existing environmental initiatives for LAHD and its customers, such as the voluntary Vessel Speed Reduction Program (VSRP), Source Control Program, Least Tern Nesting Site Agreement, Hazardous Materials Management Policy, and the Clean Engines and Fuels Policy. In addition, the Policy encompasses initiatives such as the Environmental Management System (EMS) with LAHD's Construction and Maintenance Division and a Clean Marina Program. These programs are Port-wide initiatives to reduce environmental pollution. Many of the programs relate to the proposed Project. The following discussion includes details on a number of the programs and their goals.

1.7.1 LAHD's Environmental Policy

LAHD is committed to managing resources and conducting Port developments and operations in an environmentally and fiscally responsible manner. LAHD strives to improve the quality of life and minimize the impacts of its development and operations on the environment and surrounding communities. This is done through the continuous improvement of its environmental performance and the implementation of pollution-prevention measures, in a feasible and cost-effective manner that is consistent with LAHD's overall mission and goals and with those of its customers and the community.

To ensure this policy is successfully implemented, LAHD will develop and maintain an environmental management program that will:

- ensure that environmental policy is communicated to LAHD staff, its customers, and the community;

- ensure compliance with all applicable environmental laws and regulations;
- ensure that environmental considerations include feasible and cost-effective options for exceeding applicable regulatory requirements;
- define and establish environmental objectives, targets, and best management practices (BMPs), and monitor performance;
- ensure LAHD maintains a Customer Outreach Program to address common environmental issues; and
- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations through environmental awareness and communication with employees, customers, regulatory agencies, and neighboring communities.

LAHD is committed to the spirit and intent of this policy and the laws, rules, and regulations, which give it foundation.

1.7.2 Environmental Plans and Programs

LAHD has implemented a variety of plans and programs to reduce the environmental effects associated with operations at the Port. These programs include the San Pedro Bay Port Complex Clean Air Action Plan (CAAP), Water Resources Action Plan (WRAP), deepening the channels of the Port to accommodate larger and more efficient ships, and converting to electric and alternative-fuel vehicles. All of these efforts ultimately reduce environmental effects.

1.7.2.1 Clean Air Action Plan

The Ports of Los Angeles and Long Beach, with the participation and cooperation of the staff of the EPA, CARB, and SCAQMD, prepared the San Pedro Bay Port Complex CAAP, a planning and policy document that sets goals and implementation strategies to reduce air emissions and health risks associated with Port operations while allowing Port development to continue. In addition, the CAAP sought the reduction of criteria pollutant emissions to the levels that assure Port-related sources decrease their "fair share" of regional emissions to enable the South Coast Air Basin to attain state and federal ambient air quality standards. Each individual CAAP measure is a proposed strategy for achieving these emissions reductions goals. The Ports approved the first CAAP in November 2006. Specific strategies to significantly reduce the health risks posed by air pollution from Port-related sources include:

- aggressive milestones with measurable goals for air quality improvements;
- specific goals set forth as standards for individual source categories to act as a guide for decision-making;
- recommendations to eliminate emissions of ultrafine particulates;
- technology advancement programs to reduce greenhouse gases; and
- public participation processes with environmental organizations and the business communities.

The CAAP focuses primarily on reducing diesel particulate matter (DPM), along with nitrogen oxide (NO_X) and sulfur oxides (SO_X). This reduces emissions and health risk and thereby allows for future Port growth while progressively controlling the impacts

associated with growth. The CAAP includes emission control measures as proposed strategies that are designed to further these goals expressed as Source-Specific Performance Standards which may be implemented through the environmental review process, or could be included in new leases or Port-wide tariffs, Memoranda of Understanding (MOU), voluntary action, grants, or incentive programs.

The CAAP Update, adopted in November 2010, includes updated and new emission control measures as proposed strategies that support the goals expressed as the Source-Specific Performance Standards and the Project-Specific Standards. In addition, the CAAP Update includes the recently developed San Pedro Bay Standards, which establish emission and health risk reduction goals to assist the Ports in their planning for adopting and implementing strategies to significantly reduce the effects of cumulative Port-related operations.

The goals set forth as the San Pedro Bay Standards are the most significant addition to the CAAP and include both a Bay-wide health risk reduction standard and a Bay-wide mass emission reduction standard. Ongoing Port-wide CAAP progress and effectiveness will be measured against these Bay-wide Standards, which consist of the following reductions as compared to 2005 emissions levels:

- Health Risk Reduction Standard: 85% reduction in DPM by 2020
- Emission Reduction Standards:
  - By 2014, reduce emissions by 72% for DPM, 22% for NO_X, and 93% for SO_X
  - By 2023, reduce emissions by 77% for DPM, 59% for NO_X, and 92% for SO_X

The Project-Specific Standard remains as adopted in the original CAAP in 2006, that new projects meet the 10 in 1,000,000 excess residential cancer risk threshold, as determined by health risk assessments conducted subject to CEQA statutes, regulations, and guidelines, and implemented through required CEQA mitigations and/or lease negotiations. Although each Port has adopted the Project-Specific Standard as a policy, the Board of Harbor Commissioners retain the discretion to consider and approve projects that exceed this threshold if the Board deems it necessary by adoption of a statement of overriding considerations at the time of project approval.

This Draft EIS/EIR analysis assumes compliance with the CAAP. Proposed project-specific mitigation measures applied to reduce air emissions and public health impacts are consistent with, and in some cases exceed, the emission-reduction strategies of the CAAP.

1.7.2.2 Water Resources Action Plan

Both LAHD and the Port of Long Beach face ongoing challenges from contaminants that remain in Port sediments, flow into the harbor from Port land, and flow from upstream sources in the watershed, well beyond the Ports' boundaries. Therefore, the Ports undertook a collaborative, scientific effort to address existing and potential sources of water and sediment pollution. Building on the collaborative model developed by the CAAP, under the WRAP the Ports will continue to work together and with other stakeholders to achieve further progress in water and sediment quality improvement. The

WRAP establishes a program of water quality improvement measures necessary to achieve the goals and targets that will be established by the Los Angeles RWQCB in upcoming regulations. The WRAP targets the four basic types of potential sources of pollutants to harbor waters (land use discharges, on-water discharges, sediments, and watershed discharges) and includes control measures zeroing in on known and potential sources of water and sediment contamination in the harbor area (POLA/POLB 2009).

1.7.2.3 Port of Los Angeles Sustainable Construction Guidelines

LAHD adopted the Port of Los Angeles Sustainable Construction Guidelines in February 2008 and revised them in November of 2009. The guidelines are used to establish air emission criteria for inclusion in bid specifications for construction. The guidelines reinforce and require sustainability measures during performance of the contracts, balancing the need to protect the environment, be socially responsible, and provide for the economic development of the Port. Future resolutions are anticipated to expand the guidelines to cover other aspects of construction, as well as planning and design. These guidelines support the Port Sustainability Program.

The intent of the guidelines is to facilitate the integration of sustainable concepts and practices into all capital projects at the Port and to phase in the implementation of these procedures in a practical, yet aggressive, manner (LAHD 2009). These guidelines are made a part of all construction specifications advertised for bids.

Significant features of the guidelines include, but are not limited to:

- all ships and barges used primarily to deliver construction-related materials for LAHD construction contracts shall comply with the VSRP and use low-sulfur fuel within 40 nautical miles of Point Fermin;
- harbor craft shall meet EPA Tier-3 engine emission standards;
- all dredging equipment shall be electric;
- on-road heavy-duty trucks shall comply with EPA 2007 on-road emission standards for inhalable particulate matter (PM_{10}) and NO_X;
- construction equipment (excluding on-road trucks, derrick barges, and harbor craft) shall meet Tier 3 emission off-road standards; the requirement will be raised to Tier 4 by January 1, 2015; in addition, construction equipment shall be retrofitted with a CARB-certified Level 3 diesel emissions control device;
- equipment will comply with SCAQMD Rule 403 regarding fugitive dust, and other fugitive dust control measures; and
- additional Best Management Practices, based largely on Best Available Control Technology (BACT), will be required on construction equipment (including on-road trucks) to reduce air emissions further.

1.7.2.4 Other Environmental Programs

Air Quality

Alternative Maritime Power. AMP reduces emissions from container vessels docked at the Port. Normally, ships shut off their propulsion engines when at berth, but use auxiliary diesel generators to power electrical needs such as lights, pumps, and

refrigerator units. These generators emit an array of pollutants, primarily NO_X, SO_X, and particulate matter (PM_{10} and $PM_{2.5}$). The Port is in the process of providing shore-based electricity as an alternative to running the generators (a process also referred to as cold ironing). The AMP program allows ships to "plug-in" to shoreside electrical power while at dock instead of using on-board generators, a practice that will dramatically reduce emissions. Before being used at the Port, AMP was used commercially only by the cruise ship industry in Juneau, Alaska. Now, AMP facilities have been installed and are currently in use at China Shipping Terminal, Yusen Terminal, Evergreen Terminal, TraPac Terminal, and the Cruise Ship Terminal. AMP has been incorporated into the CAAP as a project-specific measure.

Off-Peak Program. Extending cargo terminal operations by five night and weekend work shifts, the Off-Peak Program, managed by PierPASS (an organization created by marine terminal operators) has been successful in increasing cargo movement, reducing the waiting time for trucks inside Port terminals, and reducing truck traffic during peak daytime commuting periods.

On-Dock Rail and the Alameda Corridor. Use of rail for long-haul cargo is acknowledged as an air quality benefit. Four existing on-dock railyards at the Port, including the existing on-dock facility on the proposed project site (another two on-dock yards are proposed—refer to Figure 1-7), significantly reduce the number of short-distance truck trips (the trips that normally would convey containers to and from off-site railyards). Combined, these intermodal facilities eliminate an estimated 1,400,000 truck trips per year and the emissions and traffic congestion that go along with them. A partner in the Alameda Corridor project, the Port is using the corridor to transport cargo to downtown railyards at 10 to 15 miles per hour faster. Use of the Alameda Corridor allows cargo to travel the 20 miles to downtown Los Angeles at a faster pace and promotes the use of rail versus truck. In addition, the Alameda Corridor eliminates 200 rail/street crossings and emissions produced by cars with engines idling while the trains pass.

Tugboat Retrofit Project. The engines of several tugboats in the Port were replaced with ultra-low-emission diesel engines. This was the first time such technology had been applied to such a large engine. Emissions testing showed a reduction of more than 80 tons of NO_X per year, nearly three times better than initial estimates. Under the Carl Moyer Program,[10] the majority of tugboats operating in the Port Complex have been retrofitted.

Electric and Alternative Fuel Vehicles. LAHD has converted more than 35% of its fleet to electric or alternative-fuel vehicles. These include heavy-duty vehicles and passenger vehicles. LAHD proactively has embarked on the use of emulsified fuels that are verified by CARB to reduce diesel particulates by more than 60% compared to diesel-powered equipment.

Electrified Terminal Operating Equipment. The 85 ship-loading cranes currently in use at the Port operate under electric power. In addition, numerous other terminal operations equipment has been fitted with electric motors.

[10] The Carl Moyer Program is a grant program implemented by CARB and administered by SCAQMD to fund the incremental cost of cleaner-than-required engines.

Yard Equipment Retrofit Program. Over the past five years, diesel oxidation catalysts have been applied to nearly all yard tractors at the Port. This program has been carried out with Port funds and funding from the Carl Moyer Program.

Vessel Speed Reduction Program. Under this voluntary program, oceangoing vessels slow to 12 knots when within 20 and 40 nautical miles of the entrance to Los Angeles Harbor, thus reducing emissions from main propulsion engines. Currently, approximately 94% of ships comply with the voluntary program within 20 nautical miles and 79% comply within 40 nautical miles.

Greenhouse Gas Reduction. Under a December 2007 agreement with the Attorney General's office, LAHD conducts annual comprehensive inventories of Port-related greenhouse gas emissions, tracking these emissions from their foreign sources to domestic distribution points throughout the United States. LAHD reports this data annually to the California Climate Action Registry. The annual reports include emissions of all ships bound to and from the Port terminals, encompassing points of origin and destination; emissions of all rail transit to and from Port terminals, encompassing major rail cargo destination and distribution points in the United States; and emissions of all truck transit to and from Port terminals, encompassing major truck destinations and distribution points. The Port-wide inventory will be conducted annually until Assembly Bill (AB) 32 regulations become effective.[11] Under the agreement, LAHD will also construct a 10-megawatt photovoltaic solar system to offset approximately 17,000 metric tons of carbon dioxide equivalent annually. In addition to the agreement with the Attorney General, many of the environmental programs described in this section (such as the Green Terminal Program, the Recycling Program, the Green Ports Program, and all of the air quality improvement programs described above) will serve to reduce greenhouse gas emissions.

Water Quality

Clean Marinas Program. To help protect water and air quality in the harbor, LAHD developed a Clean Marinas Program. The program advocates that marina operators and boaters use BMPs—environmentally friendly alternatives to some common boating activities that could cause pollution or contaminate the environment. The program also includes several innovative clean water measures unique to the Port. The Clean Marinas Program features voluntary components and measures required through Port leases, CEQA mitigation requirements, or established federal, state, and local regulations.

Water Quality Monitoring. LAHD has been monitoring water quality at 31 established stations in San Pedro Bay since 1967, and the water quality today at the Port is among the best of any industrialized port in the world. Samples are tested on a monthly basis for dissolved oxygen, biological oxygen demand, and temperature. Other observations are noted, such as odor and color, as well as the presence of oil, grease, and floating solids. The overall results of this long-term monitoring initiative show the tremendous improvement in harbor water quality that has occurred over the last four decades.

[11] The California Global Warming Solutions Act of 2006, also known as AB 32, requires CARB to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with the program. In general, the bill requires CARB to reduce statewide greenhouse gas emissions to the equivalent of those in 1990 by 2020.

Inner Cabrillo Beach Water Quality Improvements. The Port is one of the few industrial ports in the world to have a swimming beach. Inner Cabrillo Beach provides quiet water for families with small children. However, in recent years, upland runoff has resulted in high levels of bacteria in shoreline waters. LAHD has invested hundreds of thousands of dollars in water circulation/quality models and studies to investigate the problem. Recently, LAHD repaired storm drains and sewer lines, replaced poor quality beach sand with clean sand, removed the groin at the north end of the beach, and installed a bird exclusion device, all as part of its commitment to make sure that Inner Cabrillo Beach continues to be an important regional recreational asset, but more importantly—improve water quality. In 2004, the Los Angeles Regional Water Quality Control Board adopted an Amendment to the Water Quality Control Plan to incorporate the Los Angeles Harbor Bacteria Total Maximum Daily Load (TMDL). The TMDL was developed to address impairments of water quality standards by coliform and beach closures at Inner Cabrillo Beach and the Main Ship Channel at the Port. A TMDL specifies the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and allocates the pollutant loadings to point and nonpoint sources.

Habitat Management and Endangered Species

California Least Tern Site Management. The federal- and state-endangered California least tern (a species of small sea bird) nests from April through August on Pier 400 in the Port adjacent to the Pier 400 container terminal. Through an interagency nesting site agreement, LAHD maintains, monitors, and protects the approximately 15-acre nesting site on Pier 400.

Interagency Biomitigation Team. As part of the development of mitigation for the Deep-Draft Navigation Improvements, including the Pier 400 Landfill, the Port Complex helped establish an interagency mitigation team to evaluate and provide solutions for impacts of landfill and terminal construction on marine resources in the Ports. The primary agencies involved include USACE, USFWS, NMFS, and CDFW. A number of mitigation agreements have been established through this coordination, and the team continues to meet as necessary to address environmental issues associated with Port development and operations.

General Port Environmental Programs

Green Building Policy. In August 2007, LAHD adopted a Green Building Policy, which outlines the environmental goals for newly constructed and existing buildings, dictates the incorporation of solar power and technologies that are efficient with respect to the use of energy and water, dedicates staffing for the advancement and refinement of sustainable building practices, and maintains communication with other City of Los Angeles departments for the benefit of the community. The policy incorporates sustainable building design and construction guidelines based on the United States Green Building Council – Leadership in Energy and Environmental Design Green Building Rating System (POLA 2007).

Recycling. LAHD incorporates a variety of innovative environmental ideas into its construction projects. For example, when building an on-dock rail facility, LAHD saved nearly $1,000,000 and thousands of cubic yards of landfill space by recycling existing asphalt pavement instead of purchasing new pavement. LAHD also maintains an annual contract to crush and recycle broken concrete and asphalt. In addition, LAHD

successfully has used recycled plastic products, such as fender piles and protective front-row piles, in many wharf construction projects.

1.8 Availability of the Draft EIS/EIR

The Draft EIS/EIR for the proposed Project and alternatives is being distributed directly to agencies, organizations, and interested groups and persons for comment during the formal review period in accordance with Section 15087 of the State CEQA Guidelines and 40 CFR 1506.10 of the CEQ NEPA Regulations. A 45-day comment period has been established, which begins on May 2, 2014, and ends on June 16, 2014, during which the Draft EIS/EIR is available for general public review at the following locations:

LAHD
Environmental Management Division
222 W. 6th Street, Suite 1080
San Pedro, California 90731

Los Angeles Public Library
Central Branch
630 West 5th Street
Los Angeles, California 90071

Los Angeles Public Library
San Pedro Branch
921 South Gaffey Street
San Pedro, California 90731

Los Angeles Public Library
Wilmington Branch
1300 North Avalon Boulevard
Wilmington, California 90744

In addition to printed copies of the Draft EIS/EIR, electronic versions are available. Due to the size of the document, the electronic versions have been prepared as a series of PDF files to facilitate downloading and printing. Members of the public can request a CD containing this document. The Draft EIS/EIR is available in its entirety on the Port of Los Angeles website at:
http://www.portoflosangeles.org/environment/public_notices.asp.

Interested parties may provide written comments on the Draft EIS/EIR, which must be postmarked by June 16, 2014. Please address comments to both:

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Los Angeles District, Regulatory Division
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