Chapter 1
Introduction

This chapter presents background and introductory information for the proposed near-dock intermodal rail facility by the Burlington Northern Santa Fe (BNSF) Railway Company, called the Southern California International Gateway Project (the proposed Project, or SCIG). The proposed Project would be located approximately four miles north of the ports of Los Angeles and Long Beach (Ports), in an area where the cities of Los Angeles, Carson, and Long Beach converge. This chapter presents the authorities of the Los Angeles Harbor Department (LAHD), the Lead Agency preparing this Draft Environmental Impact Report (EIR), the scope and content of the EIR, list of Responsible and Trustee agencies, and the public outreach for the proposed Project.

This Draft EIR has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) (Pub. Res. Code §21000 et seq.) and the State CEQA Guidelines (Cal. Code of Regs. Tit. 14, §15000 et seq.). The Draft EIR describes the affected resources and evaluates the potential adverse environmental impacts to those resources. The proposed Project and alternatives are described in detail in Chapter 2 and Chapter 5. This Draft EIR will be used: to inform decision-makers and the public about the environmental effects associated with the construction and operation of the proposed Project; to evaluate reasonable and feasible alternatives to the proposed Project; and to propose mitigation measures that would avoid or reduce the significant adverse environmental effects of the proposed Project.

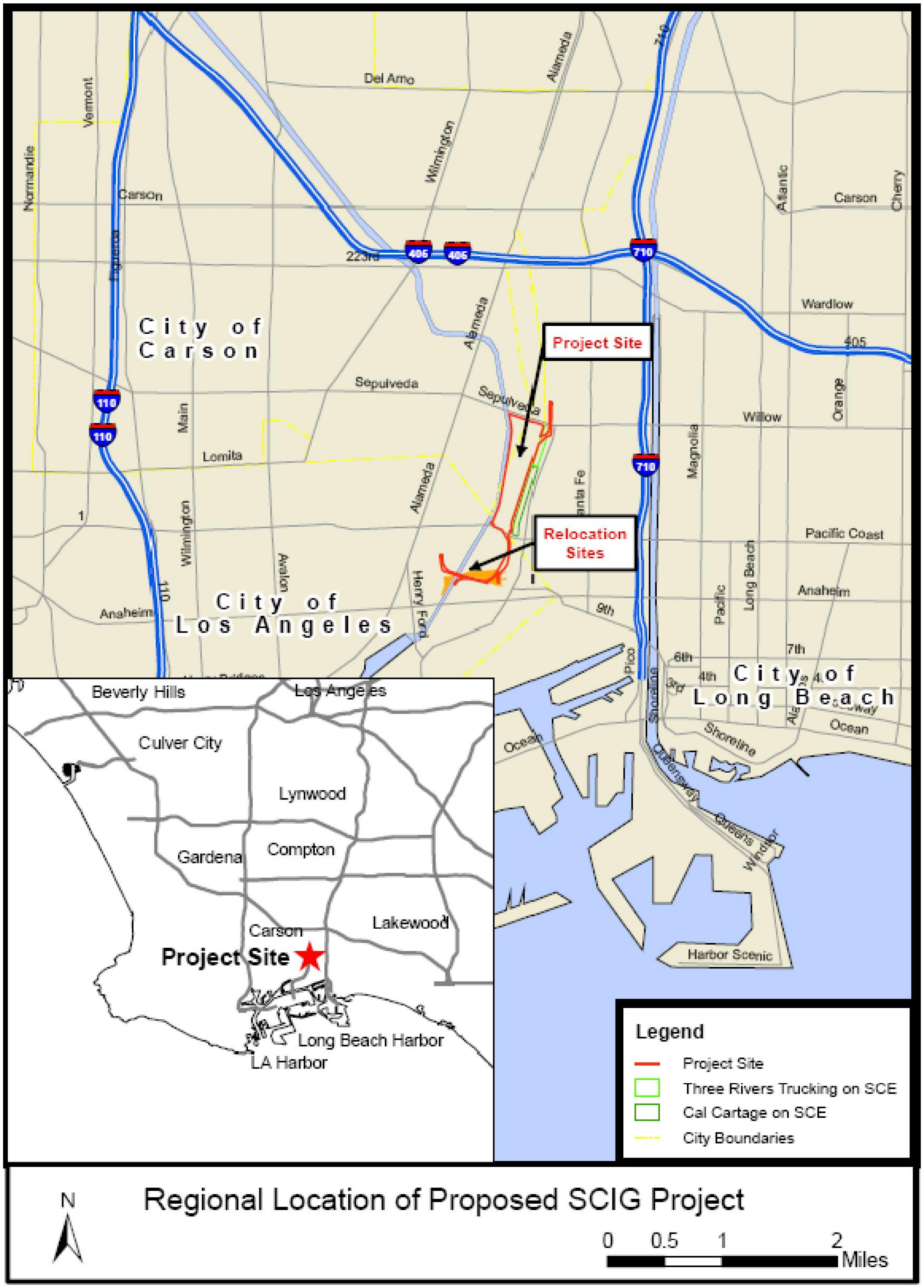
1.1 Background

1.1.1 Project Location and Brief Project Overview

LAHD operates the Port under legal mandates of the Port of Los Angeles Tidelands Trust (Los Angeles City Charter, Article VI, Sec. 601) and the Coastal Act (Pub. Res. Code §§ 30000 et seq.), which identify the Port and its facilities as a primary economic/coastal resource of the State and an essential element of the national maritime industry for any of the following purposes, including commerce, navigation, fisheries, recreation, environmental protection, and harbor operations. According to the Tidelands Trust, port-related activities should be water dependent and should give highest priority to navigation, shipping and necessary support and access facilities to accommodate the demands of foreign and domestic waterborne commerce.

The proposed Project would be located approximately four miles north of the Ports, primarily on land owned by the LAHD within the City of Los Angeles (Figure 1-1). Other portions of the proposed Project would be located on nearby land in the cities of Carson and Long Beach. The proposed Project would occupy 96 acres of LAHD property and approximately 57 acres of non-LAHD property, for a combined total of 153 acres.

Figure 1-1. Regional location of proposed SCIG Project.



The proposed Project site is located near the Wilmington community to the west and the City of Long Beach to the east, in a primarily industrial area bounded generally by Sepulveda Boulevard to the north, Pacific Coast Highway (PCH) to the south, the Dominguez Channel to the west, and the Terminal Island Freeway to the east (Figure 1-1). The proposed Project also includes adjacent locations for the proposed lead tracks south of PCH and north of Sepulveda Boulevard and nearby tenant relocation sites. The general area is characterized by heavy industry, goods handling facilities and port-related commercial uses consisting of warehousing operations, trucking, cargo operations, transloading, container and truck maintenance, servicing and storage, and rail service.

The proposed Project involves constructing and operating an intermodal railyard that would handle and transport containerized cargo to and from the Ports (see Section 1.1.2, below, for definitions of goods movement terms such as "intermodal"). The proposed Project area is currently occupied by port-related businesses on LAHD land under existing leases to holdover tenants. The proposed Project would therefore result in the termination of these holdover leases, and in some tenants relocating to nearby sites. Other non-LAHD land would require property acquisition by BNSF and the removal of existing businesses. Construction of the proposed Project would occur from approximately 2013 through 2015. For the purposes of this EIR it is assumed that BNSF would operate SCIG under a new 30-year lease with LAHD starting in 2016 and ending in 2046. The proposed Project would provide BNSF with the capacity to handle an estimated 1.5 million containers per year at full build-out and operation. The proposed facility would incorporate an operational model that emphasizes the efficient movement of trucks and trains by incorporating design elements to enhance fluidity of operations and providing direct rail access to the Alameda Corridor, thereby increasing the benefits expected from the Alameda Corridor's use (see Section 2.4.4 for details).

A detailed proposed Project description is provided in Chapter 2. Major elements of the proposed Project evaluated in this EIR include:

- Property acquisition, relocation and/or tenancy termination of existing businesses, and the offering of new leases and licenses by LAHD and SCE to some of the existing site occupants (see Section 2.4 for details);
- Demolition of existing structures and construction of some replacement tenant facilities on nearby sites;
- Constructing and operating an intermodal railyard consisting of loading and storage tracks for trains, electric-powered rail-mounted cranes incorporating regenerative braking technology, container loading and storage areas, locomotive service area, administrative and maintenance facilities, lighting, paved roadways, and a truck gate complex;
- Constructing lead rail tracks by widening the Dominguez Channel rail bridge to connect the railyard to the Alameda Corridor and reconstructing the Sepulveda Boulevard rail bridge and the PCH overpass to accommodate Project operations;
- Constructing roadway improvements to provide truck access to the proposed Project site; and
- Specifying the use of CAAP-compliant (2010 Update) drayage trucks on designated truck routes between SCIG and the Ports in contracts for dray services.

BNSF has also offered a number of community enhancement elements, including requiring its operating contractor to give qualified local residents priority for all new job offers at SCIG, and providing funds for a workforce training program in partnership with local institutions to assist area residents in obtaining these jobs. BNSF has also included a number of environmentally beneficial features in the project, including electric-powered container cranes that regenerate power to the grid, LNG-fueled (or equivalent) yard equipment, plug-in (as opposed to diesel-powered) refrigeration units while on site, LEED-certified administration buildings, and a design that eliminates on-street queuing. BNSF will also implement the CARB-railroad MOU related to reducing locomotive emissions (see Section 1.6).

As trade with Pacific Rim countries has continued to increase, the Ports have worked to support and accommodate the development of rail facilities needed to expedite the movement of cargo. Developments have included the Intermodal Container Transfer Facility just north of I-405, the Alameda Corridor, track and signal improvements within the Ports, and on-dock railyards (see Section 1.1.3 for a definition of on-dock) in nine marine terminals. The proposed Project would help to meet the demand for efficient rail transport as contemplated by the LAHD's Intermodal Rail Policy, adopted in Resolution 6297 on August 11, 2004, which calls for on-dock and near-dock intermodal facilities for shippers, carriers, terminal operators, and Class I Railroads. In addition, in a Resolution adopted February 9, 2005 (LAHD, Resolution 6339), the LAHD found that there would be a strategic benefit to having competitively balanced, near-dock intermodal container transfer facilities, ensuring access for both of the Class I Railroads that serve the Ports. Through a public process involving solicitation of expressions of interest, the Port selected BNSF to propose a near-dock rail intermodal facility.

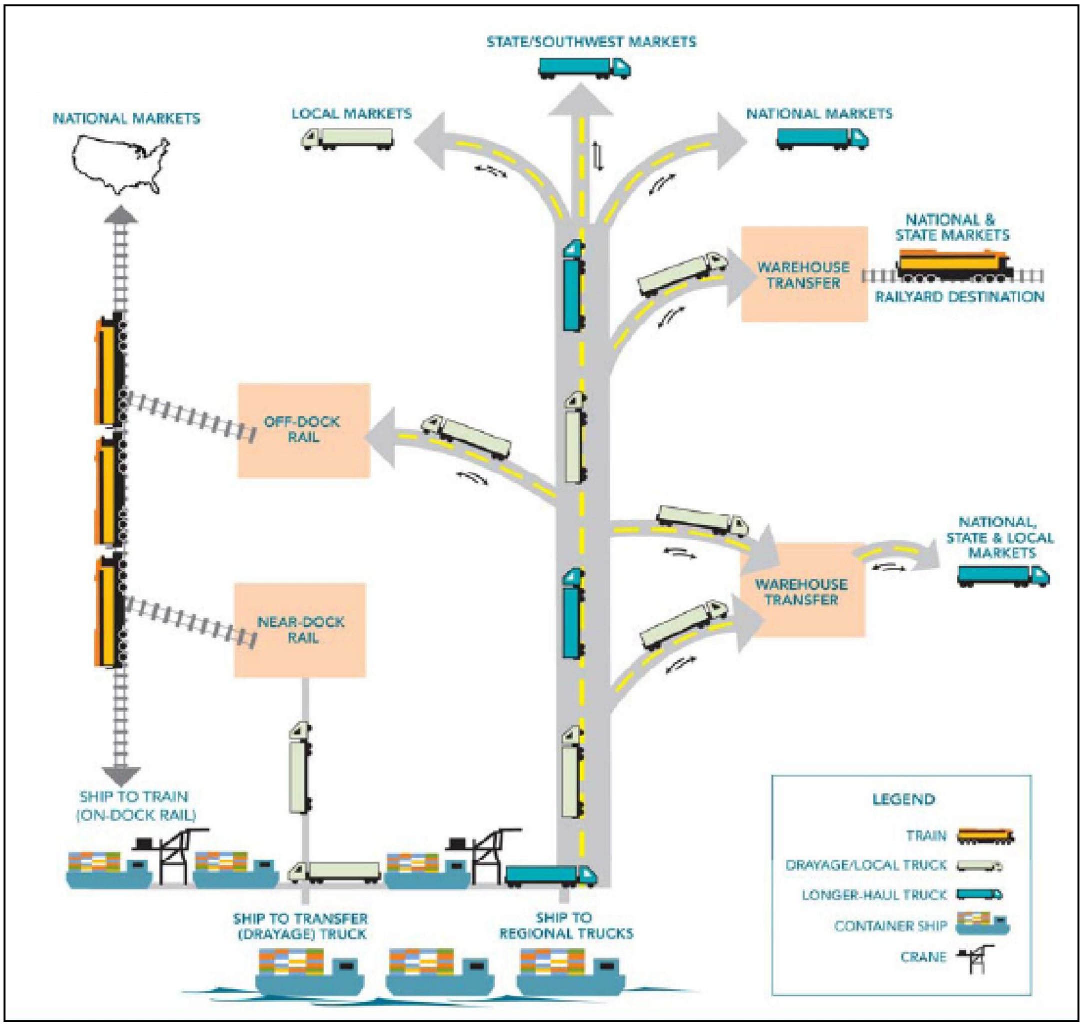
The proposed Project would provide BNSF with a near-dock railyard in close proximity to the Ports and to the existing Union Pacific (UP) Intermodal Container Transfer Facility (ICTF) yard north of the proposed project, near Carson. The proposed Project would also be consistent with the *San Pedro Bay Ports Rail Study Update* (Parsons, 2006), which encourages the use of near-dock railyards to meet increasing intermodal cargo volumes arriving at numerous marine terminals as well as to provide a competitive near-dock option for the Ports' customers. This chapter discusses the overall goods movement and rail network in the Port and describes the proposed Project's relationship to overall LAHD planning and policy goals.

1.1.2 Goods Movement Overview

The Ports serve as a major gateway to international trade because of their location near the Pacific Ocean. The Rail Study Update (Parsons, 2006) estimated that 40 percent 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 this Project involves the transportation of freight in containers, using multiple modes of transportation such as ship, rail, and truck (Figure 1-2). This change in mode of transport, from ship to truck to rail, for example, is called intermodal transport and is accomplished through the use of containers that can be easily moved between the different modes of transport. A more detailed description of intermodal cargo transport is presented in the next section.

Figure 1-2. Overview of the Goods Movement Process (METRO, 2008).



Volumes of containerized cargo are often measured in Twenty-foot Equivalent Units (TEUs). For example, container ships are described by the number of TEUs they can carry (between a few thousand to over 10,000), rather than by their length or weight. A TEU is a measure of containerized cargo capacity equal to one standard 20-foot [length] by 8-foot [width] by 8-foot 6-inch [height] marine shipping container, or "box". Presently, most marine containers are actually 40 feet long, or two TEUs. To account for the ratio between 20- and 40-foot boxes (and to account for a small number of boxes that are 45- and 48-feet long), a factor is generally applied to convert TEUs to the actual number of containers. Currently at the Port, this factor is approximately 1.85. Therefore, one container equals 1.85 TEUs (for example, a ship that can hold 2,703 containers is said to have a capacity of 5,000 TEUs (2,703 multiplied by 1.85 = 5,000).

Key Definitions

Twenty-foot Equivalent Unit (TEU) = One 20-foot-long x 8-foot-wide x 8-foot-6-inch-high shipping container.

Lift = Unit of individual container of any size.

One Container or Lift = 1.85 TEUs

Containers are also counted in "lifts" (as in a container being lifted onto or off of a train or vessel). A lift is equivalent to an individual container of any size, and the same conversion factor, 1.85, relates lifts to TEUs. In this document, cargo volumes and port capacity are expressed in TEUs, because that is the basis of port planning and statistical analysis, but railyard capacity is usually expressed in lifts or containers because those are the common units used to measure rail activity.

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 based on destination and transported out of the terminal by truck or train. Containers may be placed on trains inside the terminal (on-dock rail), they may be loaded onto truck chassis (trailers designed to hold containers) to be hauled to their final destination, or they may be loaded onto truck chassis to be drayed 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 between the Ports and railyards, which is known as transloading. For containers that are exported, the process is reversed and the containers are transported to the marine terminal via truck or train, and then loaded onto ships.

Key Definitions

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.

1.1.3 Port Intermodal Cargo Transport

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 almost exclusively by rail, due to the tremendous cost savings of rail over truck. There are large quantities of containerized cargo bound for destinations far inland of the seacoast or on the other side of the country, and trains are generally the most cost-effective and the most environmentally beneficial way of getting that cargo to those destinations.

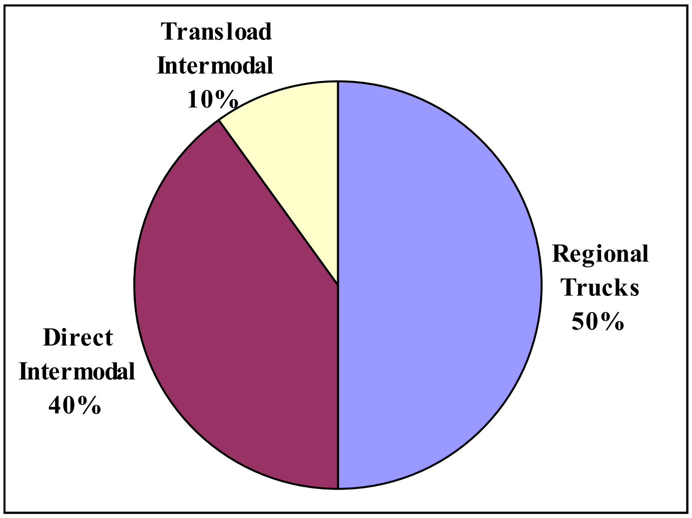
According to the Rail Study Update (Parsons, 2006), local transport by truck represents 50 percent of intermodal cargo coming into the Ports. Transloaded intermodal represents 10 percent and direct intermodal represents 40 percent of cargo coming into the Ports (Figure 1-4), and long-haul transport by truck represents less than one percent of the cargo coming into the Ports.

1.1.3.1 Local Transport by Truck

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

Figure 1-3. Typical Range of Cargo Transport Modes.

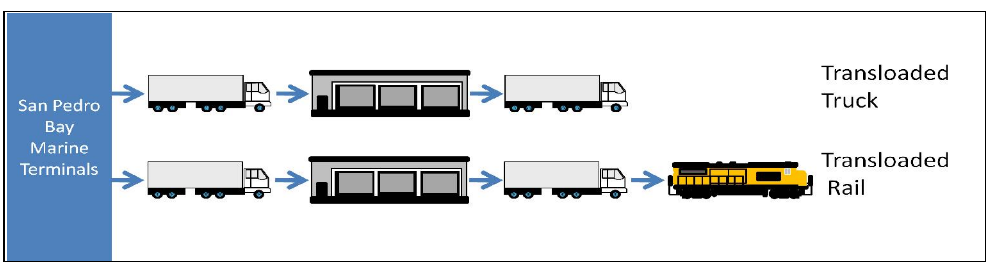
Figure 1-4. Distribution of Containers by Mode and Distribution of Direct Intermodal Containers by Rail (Source: Parsons, 2006).



1.1.3.2 Transloaded Intermodal

"Transloaded intermodal cargo" consists of containers that arrive at marine terminals and are drayed to a warehouse or distribution center for processing, such as repackaging, sorting, tagging, and labeling before being transported to their final destination. There are two types of transloaded intermodal cargo: transloaded trucks and transloaded rail (Figure 1-5). For transloaded trucks, after the container is repackaged at the warehouse, the containers are transported by trucks to their local or regional destination. For transloaded rail, after the container is repackaged at the warehouse, the containers are transported to an off-dock railyard (see section 1.1.3.3.3, 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.

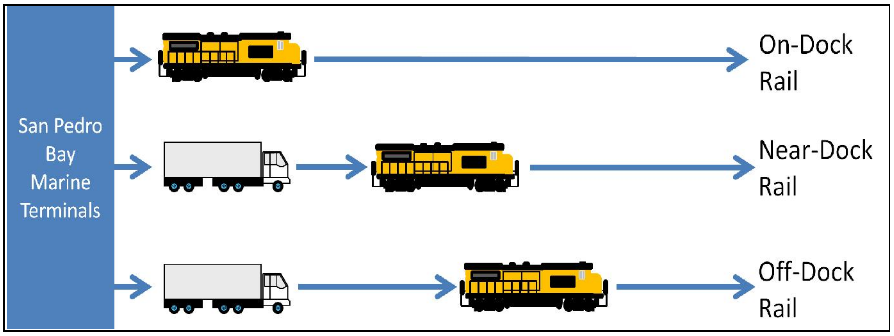
Figure 1-5. Transloaded Intermodal Cargo Flow.



1.1.3.3 Direct Intermodal

"Direct intermodal" is the movement of containers directly between the Port and a railyard. As shown in Figure 1-6, there are three types of railyards used for direct intermodal: on-dock railyards, near-dock railyards, and off-dock railyards. On-dock railyards are located on 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 since the railyard is located within the marine terminals. Near- and off-dock railyards do require draying of containers since those railyards are outside of the marine terminals. After cargo is 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 2008, on-, near-, and off-dock railyards handled 23.7 percent, 7.4 percent, and 11.1 percent, respectively, of the containers moved from the Ports (the remaining cargo was moved by truck, primarily to local destinations). The following provides a more detailed description of on-dock, near-dock and off-dock railyards.

Figure 1-6. Direct Intermodal Cargo Flow.



1.1.3.3.1 On-Dock Rail

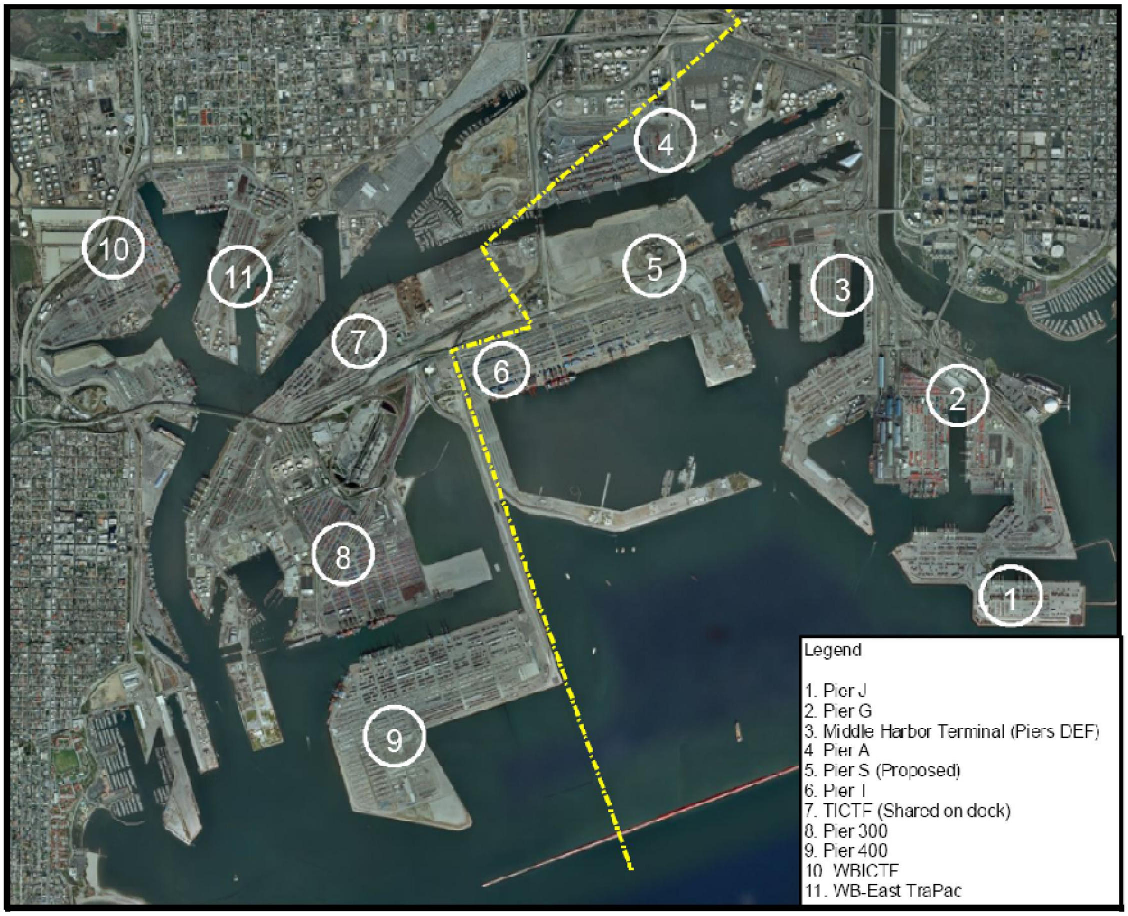
> *Key Definitions*
>
> **On-Dock Railyard**: railyard located within a marine cargo terminal.

On-dock rail allows for containers to be loaded at a marine terminal for transportation by rail to outside of the region, eliminating the need to dray containers to another rail facility outside of the marine terminal. On-dock railyards are located within marine cargo terminals at the Ports. In general, containers are offloaded from a cargo ship and moved by a yard tractor either directly to a waiting railcar in the on-dock railyard or to 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 onto local roadways.

Typically, trains built on-dock consist of railcars 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 because those railyard facilities can provide space to hold containers from multiple terminals and assemble them into blocks for common destinations. Some intermodal containers are loaded onto trains on-dock and transported in blocks of rail cars to supporting railyards for combination with other cargo in a single-destination train. The Port of Long Beach has issued a Notice of Preparation (NOP) to expand the Pier B railyard to serve such a function. Support railyards are used for storage and staging of rail cars and are different from intermodal railyards in that they do not load containers onto trains.

There are currently nine operating on-dock railyards at the Ports, with two more (WB-East Trapac and Middle Harbor) permitted for construction, and a third (Pier S) proposed (Figure 1-7). Four of the existing on-dock railyards are located at the Port of Los Angeles and five at the Port of Long Beach. Both ports have plans to expand existing on-dock railyards and construct new ones in the future (Chapter 2 has more detail regarding these future plans and the anticipated demand and capacity of on-dock railyards). Containers handled at the on-dock railyards leave the port area via the Alameda Corridor, a 20-mile long, multiple-track rail system with no at-grade (i.e. street level) crossings that links the rail facilities of the ports with the transcontinental rail network of the UP and BNSF near downtown Los Angeles (Figure 1-8). The Alameda Corridor was constructed with objective of facilitating rail access to the Ports while reducing potentially adverse impacts of Port operations due to truck and train traffic, most notably noise in residential areas, air pollution, and highway delay and congestion (ACTA, 1992).

Figure 1-7. Existing and Proposed On-Dock Railyards in the San Pedro Bay Ports.



1.1.3.3.2 Near-Dock Rail

> *Key Definitions*
>
> **Near-Dock Railyard:** railyard located less than five miles outside of the marine terminal requiring a short truck trip from the marine terminal to the railyard via local streets.

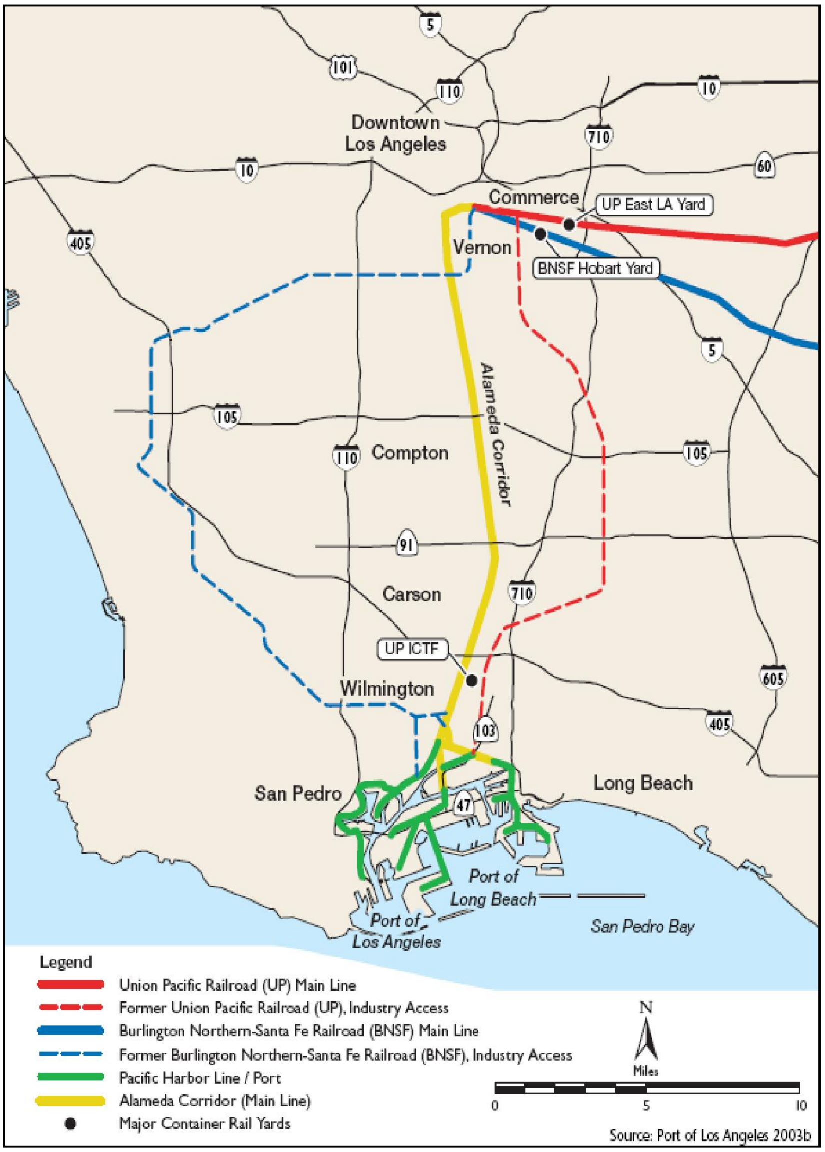
Near-dock intermodal railyards are located generally within five miles of their port area and can serve more than one marine terminal. The UP's ICTF, located five miles north of the ports near the City of Carson (Figure 1-8), is presently the only near-dock railyard that serves the Ports. In 2008 the ICTF handled 1,085,000 TEUs, nearly 90 percent of the international cargo carried by UP. The proposed Project would provide a second facility immediately south of the ICTF, in accordance with the Port's rail policy.

Intermodal containers from the San Pedro Bay marine terminals are transported to the near-dock railyard via trucks on local roads. Containers that arrive at the near-dock railyard are either loaded onto a railcar or staged temporarily at the railyard until a train is built bound for the destination of the staged container.

A near-dock railyard permits the railroad to combine cargo from various marine terminals to build trains for specific destinations throughout the country. By providing a location for staging containers outside the marine terminal, a near-dock facility helps maximize the efficiency and fluidity of all on-dock railyards because the limited on-dock space is not congested with containers awaiting trains for specific locations.

Near-dock and off-dock railyards generally have longer loading tracks (known as "strip tracks") than do on-dock railyards. Longer strip tracks provide for more efficient train movement because they allow trains to be managed in fewer blocks of railcars, as described in Section 1.1.4. In addition, some marine terminals do not have on-dock railyards because they lack sufficient space for one or because their on-dock yards are out of service during construction; the only intermodal options for such terminals are near-dock and off-dock facilities. However, shipping via near-dock rail is not as efficient as on-dock rail in other respects, because it requires each container to be drayed to the near-dock railyard. It is more efficient than off-dock rail (discussed below), however, due to the shorter drayage trip between the marine terminal and the near-dock railyard.

Figure 1-8. Location of Existing Near-Dock and Off-Dock Railyards.



1.1.3.3.3 Off-Dock Rail

Off-dock railyards are located farther (more than five miles) from marine terminals. Currently, there are a total of five off-dock railyards, 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 Yard in Los Angeles/Commerce/Vernon and the UP East Los Angeles Yard (Figure 1-8). 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 (LATC), UP City of Industry yard, and the BNSF San Bernardino yard. In 2008 the East LA and Hobart yards handled most of the international cargo not handled by on-dock yards and the ICTF: 136,000 TEUs by East LA and 1.48 million by Hobart, which currently handles all of BNSF's non-on-dock international cargo. All of the off-dock railyards in the region, including Hobart, handle more domestic and transloaded containers than international containers.

> ***Key** Definitions*
>
> **Off-Dock Railyard**: railyard located more than five miles from a marine terminal.

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 the I-710 freeway. At the off-dock railyard containers are either loaded onto a railcar or staged temporarily at the railyard until a train is built bound for the destination of the stored container. Off-dock rail yards can serve multiple marine terminals (including those that do not have on-dock facilities). One drawback of off-dock railyards as compared to on-dock or near-dock railyards is that containers must be drayed greater distances, adding to congestion on roadways in the region and other environmental impacts.

1.1.4 General Intermodal Railyard Operations

The physical components of an intermodal railyard consist of loading/unloading tracks (known as "strip tracks"), lead tracks connecting the railyard to the main rail line, container staging areas, mobile cranes and other cargo-handling equipment, maintenance and administrative buildings, and entrance and exit gates for trucks. The operational processes include loading and unloading of containers, container staging and management, truck gate operations (processing inbound and outbound trucks hauling containers), and managing train operations. On-dock railyards, however, typically do not involve drayage trucks, since containers are moved between the railyard and the ships or storage yard by yard equipment. These operations are described in more detail below.

In existing off-dock and near-dock intermodal railyards, on-road drayage trucks arrive at and depart from the facility hauling containers on chassis. The majority of trucks are directed to staging areas where their containers are placed until ready for loading, although in the proposed Project most trucks would go straight to track side. Containers placed in staging areas are later moved by yard equipment or an unloaded drayage truck to the loading tracks.

At the loading tracks, a mobile crane (Figure 1-9) 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. Most mobile cranes at existing off-dock and near-dock facilities are large, diesel-powered, rubber-tired gantry cranes that run on fixed runways and span both rail tracks and truck lanes, although state-of-the-art technology, which the proposed

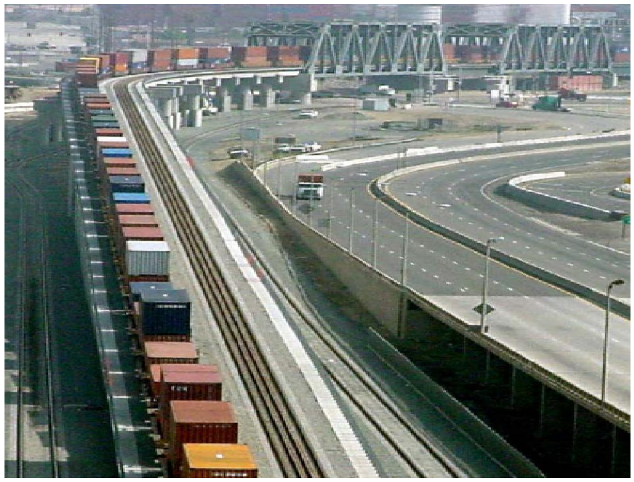
Project would use, employs electric-powered, wide-span, rail-mounted cranes. Cranes at on-dock yards are typically smaller vehicles that operate more like forklifts along the side of the tracks.

Figure 1-9. General Depiction of Train Loading/Unloading at an Intermodal Railyard.

Containers not immediately placed on railcars or trucks are staged in a designated container staging area, to be loaded at a later time. Containers are stored using one of three systems: (1) grounded or stacked system where containers are stacked on top of each other (the proposed Project would be primarily grounded, with the exception of small numbers of refrigerated containers stored on chassis at plug-in sites), (2) chassis or "wheeled" system where containers are staged on one chassis and are not stacked, or (3) a combination of grounded/chassis system. Truck tractors with an empty chassis often pick up a container for an outbound trip to the marine terminals, although some leave empty. The proposed Project is designed to decrease the number of tractors arriving at and leaving the facility without containers.

An intermodal train consists of flat-car-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 to a standard flatcar that cannot handle double-stacking. The standard international 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, is approximately 8,000 feet long (including locomotives and inter-car spaces), and carries up to approximately 280 containers.

Figure 1-10. Assembled Container Train.



Inbound trains are routed onto strip tracks. In cases where the strip tracks are much shorter than the train, the trains are uncoupled to break them into two or more blocks of railcars, each of which is positioned (“spotted”) on a strip track; on-dock railyards are typically shorter than off-dock and near-dock yards, so that more blocks, and therefore more train movements, are necessary to spot the railcars. The locomotives are uncoupled and moved to locomotive servicing facilities for any necessary inspections, refueling, and servicing; many on-dock facilities do not have locomotive servicing facilities, so that the locomotives must be moved some distance to the nearest railroad facility such as Terminal Island, for BNSF, or Dolores, for UP (the proposed Project, however, includes an on-site maintenance facility). Outbound trains are assembled (“built”) and leave the facility in essentially the reverse process, coupling together two or more blocks of railcars to make a full train. The trains depart after proper inspections and testing.

In recent years, intermodal operations have increased markedly in efficiency, largely in response to the need to increase the capacity of existing facilities. The Port of Los Angeles’s Rail Policy and the Rail Study Update (Parsons, 2006) call for the maximization of utilization of on-dock rail, and the Port of Long Beach’s Strategic Plan recognizes the benefits of on-dock rail. To that end, BNSF and UP have increased the operational efficiency of on-dock rail by operating more trains and increasing the number of containers on each train. For example, between 2004 and 2006, the average number of containers on BNSF trains increased nearly 15 percent, from 235 to 265, through increased slot utilization, while the average length of the trains remained at approximately 8,000 feet (BNSF communication 6-16-2010). The railroads have increased use of rail cars designed for international, rather than domestic, containers (i.e., cars with 40-foot slots instead of the 53-foot slots typical of domestic cars) – from 40 percent of the fleet to over 60 percent -- and discontinued the use of trailer-on-flatcar railcars, thus reducing wasted space and ensuring efficient utilization of container slots.

Improving locomotive fueling arrangements (for example, by transferring locomotive servicing to Terminal Island BNSF has reduced turnaround times from 24 hours to 12 hours), storing and staging railcars and trains within the Ports (e.g., on the LAXT loop tracks at Pier 300) instead of at more remote yards, improving communications and coordination among the railroads (including Pacific Harbor Line, which operates port-area trackage and dispatches trains in the port area), upgrading dispatching and signaling systems, and eliminating inefficient car configurations have also accounted for significant improvements in efficiency. BNSF represents that through these improvements, it increased on-dock utilization nearly three-fold between 2002 and 2006, from 423,000 containers to nearly 1.3 million containers, which is double the percent increase in Port throughput. BNSF further represents that with slot utilization at 96 percent and train length from some on-dock yards at its practical maximum, further efficiency gains at on-dock facilities will be limited.

1.1.5 San Pedro Bay Ports Cargo Growth and Port Capacity

This section presents background information on long-term containerized cargo growth at the Ports both prior to and after the recent economic downturn. 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.

1.1.5.1 Cargo Demand Forecast

Between 1970 and 2006, containerized shipping through U.S. West Coast ports has increased twentyfold, driven by increasing United States (U.S.) trade with Asian economies. In 2000, the value of waterborne trade through West Coast ports reached $309 billion, a 400 percent increase since 1980. Major West Coast ports, particularly the ports of Los Angeles, Long Beach, and Oakland, have continued to invest billions of dollars optimizing facilities to 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 on-going effort to accommodate the anticipated growth in cargo. Major projects are planned for both Ports well into the future.

Anticipating the continued importance of containerized shipping, the ports of Los Angeles and Long Beach, along with the United States Army Corps of Engineers (USACE) conducted a series of studies to forecast cargo volumes through the year 2020 and to evaluate the capacity of the San Pedro Bay Ports to accommodate those 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 (OFI) 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 land for new container terminals and the optimization of existing terminals at both ports. Since the early 1990s, actual volumes of containerized cargo passing through the two San Pedro Bay Ports have greatly exceeded the WEFA forecasts and subsequent projections.

Following the 2020 Plan, the ports commissioned two recent market-based forecasts, one one in 2007 (Tioga, 2007), and an update in 2009 (Tioga, 2009).

The San Pedro Bay Ports experienced dramatic growth in cargo volumes through 2006. Even with the recession of 2001, the average growth rate between 1995 and 2006 was over 10 percent per year. Accordingly, Global Insight and Tioga Group prepared a new long-term cargo forecast, this time through 2030, for the San Pedro Bay Ports (Tioga, 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 booms and recessions, but instead plotted the average path around which those cycles would move.

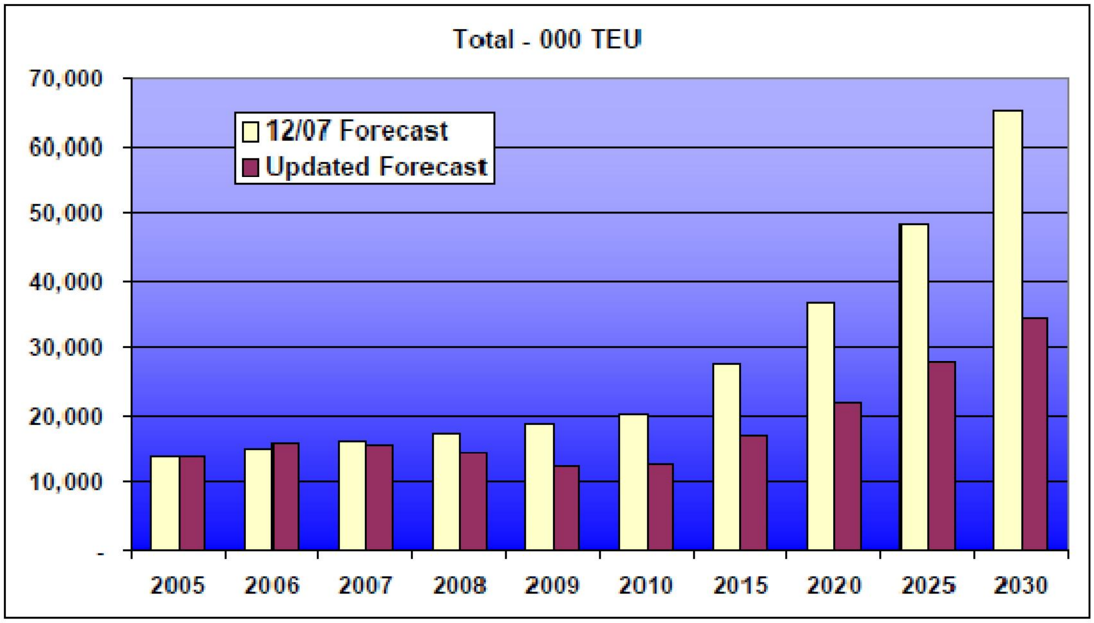
The 2007 forecast predicted that market demand for cargo through the Ports would be 65.1 million TEUs in 2030. The range of TEU forecast scenarios (cases) incorporated high and low growth rates and market shares. The base case/base share scenario (Table 1-1) is meant to represent the most likely container cargo growth path for the San Pedro Bay Ports.

Table 1-1. 2007 Base Case/Base Share Cargo Demand Forecast, in thousands of TEUs (Tioga, 2007).

000 TEU							
Scenario	**2005**	**2006**	**2010**	**2015**	**2020**	**2025**	**2030**
Unadjusted Base Case Forecast							
	14,194	**15,760**	**21,208**	**29,161**	**39,014**	**51,757**	**70,018**
High Growth Adjusted Forecast							
High Share	14,194	15,760	22,152	30,945	42,766	58,859	81,553
Base Share	14,194	15,760	21,813	30,386	41,877	57,492	79,455
Low Share	14,194	15,760	21,041	29,474	40,643	55,833	77,216
Base Case Adjusted Forecast							
High Share	14,194	15,760	20,747	28,305	37,854	50,204	67,937
Base Share	**14,194**	**15,760**	**20,260**	**27,570**	**36,723**	**48,396**	**65,052**
Low Share	14,194	15,760	19,141	26,180	34,764	45,780	61,544
Low Growth Adjusted Forecast							
High Share	14,194	15,760	19,071	24,569	31,190	39,050	50,776
Base Share	14,194	15,760	18,605	23,816	29,979	37,170	47,829
Low Share	14,194	15,760	17,500	22,594	28,416	35,186	45,294

Since the 2007 cargo forecast, the U.S. and world economies have entered a severe recession. This recession has dramatically impacted international trade, and volumes at the Ports are significantly below 2006 peak volumes. As a result, the Ports reexamined the forecasted cargo projections based on new economic conditions. The 2009 forecast update (Tioga, 2009), which started from a lower base volume than the 2007 forecast, predicts continuing declines in cargo volume through 2009, with 2010 marking the end of the recession and a return to positive cargo growth rates (Figure 1-11 illustrates the difference between the 2007 cargo forecast and 2009 update). Essentially, the update predicts that it will take the Ports six to seven years to return to the peak volumes of 2006, and 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 widens over time, eventually resulting in a 47 percent gap in 2030. The 2007 forecast predicted that market demand for cargo through the Ports would be 65.1 million TEUs in 2030, whereas the updated 2009 forecast predicted a 2030 market demand of 34.6 million TEUs.

Figure 1-11. 2007 (Base Case/Base Share) and 2009 Cargo Demand Forecast Comparison, in thousands of TEUs (Tioga, 2009).



1.1.5.2 Container Terminal Capacity

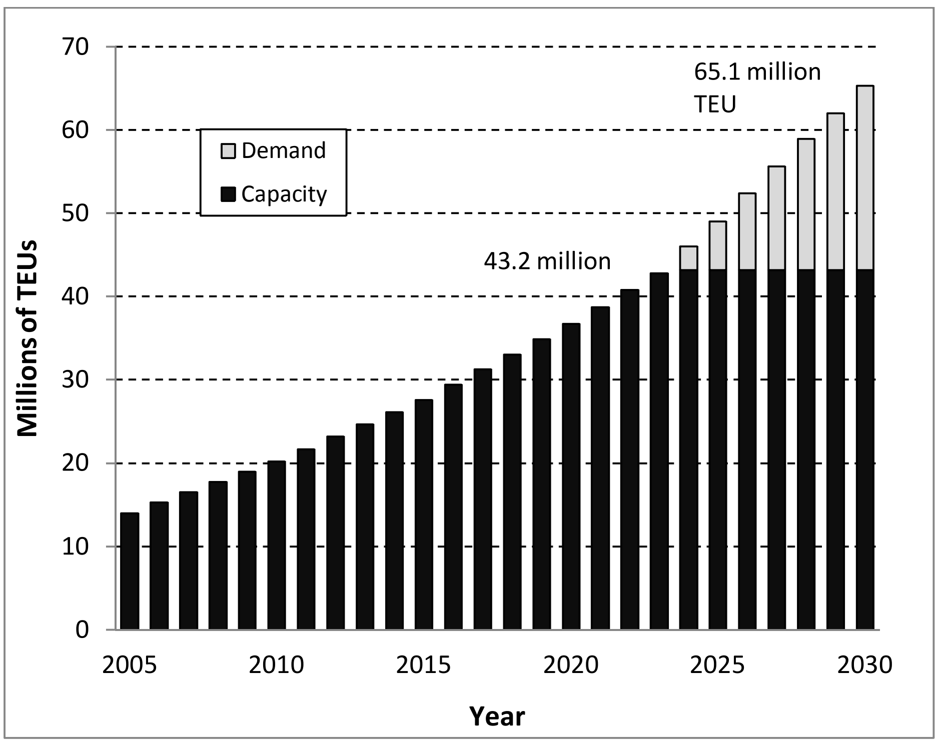
Because the cargo forecasts provided by Mercer and the Tioga Group are demand based forecasts that do not account for practical constraints on the ability of individual terminals in the Ports to accommodate the projected cargo, the Ports also evaluate the physical/operational capacity of Port terminals in order to provide an accurate and realistic forecast of port-related activities.

The recent Tioga Group cargo forecasts prompted the Ports to make new terminal capacity estimates that reflect key assumptions about how much land will ultimately be available for container use and how the terminals on that land will operate. To estimate the future maximum or optimal capacity of each terminal through the year 2030, the Ports use a methodology based 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 parameters (e.g., increasing the number of hours worked per day or crane productivity, decreasing the amount of time containers are allowed to remain in the terminal) in order 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 of 10,000 TEU per acre per year, as compared to current throughput levels of between 5,000 and 7,000 TEUs per acre. The number of containers that pass through a terminal is called its throughput. This approach allows the Ports and their tenants 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 42.7 million TEUs (POLA/POLB, 2008). However, more recently the Ports revised this estimate based on the Port of Long Beach planned Pier S on-dock railyard and other terminal refinements, which have increased the overall capacity estimate to 43.2 million TEUs. Future operational improvements could increase the capacity of Port container terminals beyond that figure, but at present such improvements are speculative for technical, economic, or social reasons. Should new feasible technology become available, or other issues result that would increase Port capacity beyond that anticipated, improvements to implement the new technology would require discretionary actions and environmental evaluation in accordance with CEQA to evaluate potential environmental effects.

Comparing the 2007 unconstrained market demand forecast and the Ports' estimate of total marine terminal capacity (Figure 1-12) shows that the 2007 forecasted demand for 2030 of 65.1 million TEUs (shown in lighter shaded bars) will exceed future port capacity of 43.2 million TEUs (shown in darker shaded bars) starting in approximately 2023.

Figure 1-12. 2007 Cargo Demand Forecast and Capacity of the San Pedro Bay Ports, in Millions of TEUs.

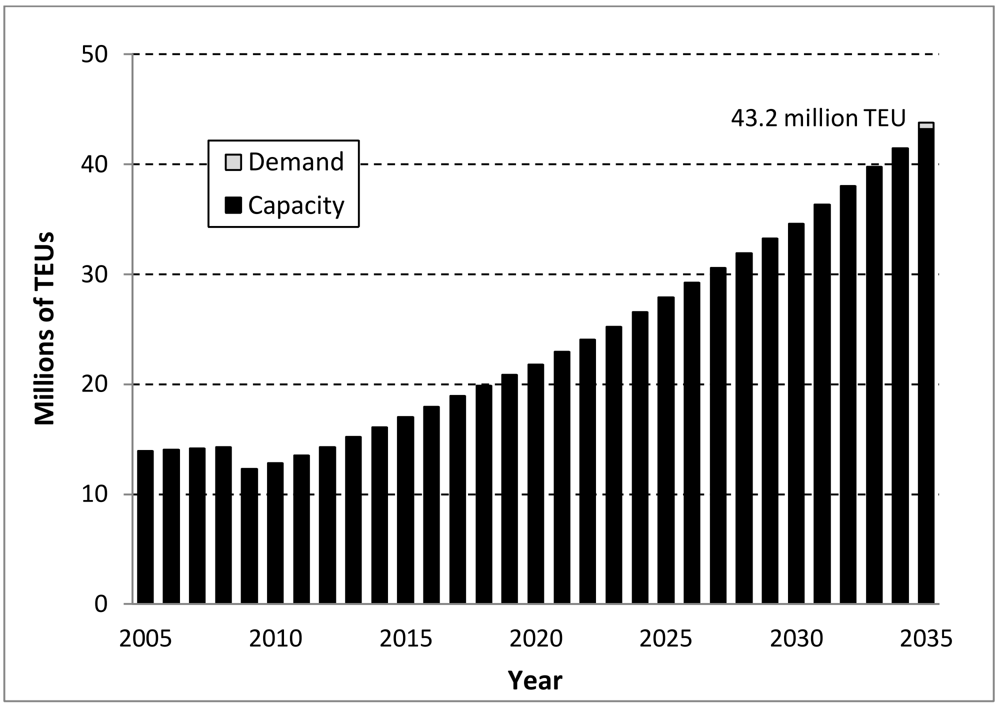


Notes:

Years 2005 through 2008 represent actual data, years 2009 through 2030 are projections.

For the revised 2009 forecast, however, the 2030 cargo demand of 34.6 million TEU will still not exceed the ports' estimate of total marine terminal capacity (Figure 1-13). Therefore, the Tioga Group study sought to identify the year in which demand would reach or exceed capacity. A continual annualized growth rate of 4.7 percent was assumed to extend the forecast. The results showed cargo volumes increasing from approximately 34.6 million TEUs in 2030 to approximately 43.2 million TEUs by the year 2035, thereby reaching the capacity of the Port terminals. Accordingly, the 2009 forecast predicts that 2035 is the last year in which the Ports will be able to accommodate the actual demand: beyond 2035, demand will exceed capacity. Note that the 2009 forecast is based on conditions at the height of the economic downturn; actual throughput in 2010 and early 2011 has exceeded the 2009 forecast, (14.1 million TEUs in 2010, equaling the prediction for 2013), suggesting that future throughput will be somewhere between the 2007 and 2009 forecasts. In that case, demand will exceed capacity sooner than 2035.

Figure 1-13. 2009 Cargo Demand Forecast and Capacity of the San Pedro Bay Ports, in Millions of TEUs.



Notes:

Years 2005 through 2008 represent actual data, years 2009 through 2035 are projections.

The environmental analysis in this EIR assumes that the physical and operational capacities of Port container terminals would be fully utilized by future cargo volumes. Actual throughput might be lower due to changes in consumer demand patterns and/or economic conditions, but for the purposes of this EIR, it is assumed the Ports will operate at a maximum capacity of 43.2 million TEUs by no later than 2035.

1.1.5.3 Intermodal Cargo Demand and Capacity

In 2008, approximately 42 percent of import containers were conveyed directly to intermodal rail facilities, to leave the port area on trains, with the majority of this cargo being transported via on-dock railyards (Table 1-2). This direct intermodal cargo (see section 1.1.3.3 for definitions) has remained at around 40 percent for the last 10 to 15 years, and is projected to remain generally at this level for the foreseeable future. Accordingly, the Ports expect that of the more than 43 million TEUs of containerized cargo projected for the year 2035 by the most recent forecast, approximately 40 percent will be direct intermodal and thus will need to be handled by the various intermodal (on-dock, near-dock, and off-dock) railyards serving the Ports.

Of the remaining cargo, Table 1-2 shows that approximately eight percent of import containers are transloaded to domestic intermodal containers, a portion of which may then be drayed to an intermodal railyard for transport by rail to their eastern destinations. The remaining 50 percent of containerized cargo is moved by truck to local destinations for consumption in the region. In the analyses that follow, these mode splits are assumed to apply to all future years.

Table 1-2. Mode Split of Containers Handled at the Ports of Los Angeles and Long Beach in 2008.

Container Mode	TEUs (Millions)	Percent of Total
Direct Rail (Direct Intermodal)		
- On-Dock	(3.4)	(23.7)
- Near-Dock	(1.06)	(7.4)
- Off-Dock	(1.68)	(11.1)
Total Direct Rail	6.14	42.2
Transload	1.12	7.8
Local/Domestic (Truck only)	7.07	50.0
Total	14.33	100%

Source: POLA, 2009.

The Ports have projected intermodal cargo demand to the year 2030/2035 using both the 2007 and 2009 cargo forecasts, and compared it to the expected capacity of the intermodal infrastructure. Assuming a constant 40 percent of the total San Pedro Bay Ports container terminal capacity will be intermodal, as described above, the total estimated intermodal demand coming from the Ports will reach 17.3 million TEUs.

A key factor in these forecasts is the future capacity of on-dock rail facilities, 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, as described above, 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 in accordance with the Port Rail Enhancement Plan (REP) described in Parsons (2006) and listed in Table 1-3. The proposed changes are expected to increase on-dock rail capacity by more than three-fold.

Assuming that all proposed changes can be constructed on that timetable, projected on-dock railyard capacity, with the planned expansions and new facilities under the REP, will reach 12.9 million TEUs by 2030/2035 (Parsons, 2006). Maximizing the use of on-dock railyard capacity is an assumed condition for the purpose of this analysis, given the ports' and railroads' commitments described in this document. Of the 17.3 million TEUs for intermodal demand, 12.9 million will be handled by the on-dock yards and the remaining demand of 4.4 million TEUs will need to be handled by near/off-dock railyards.

Table 1-3. Existing and Planned On-dock Railyards (see Figure 1-8 for locations).

On-Dock Rail Facility	Location	Status
Pier 300 Rail Facility	Port of Los Angeles – American President Lines Terminal	Operating – Proposed expansion possible
Terminal Island ICTF	Port of Los Angeles – YTI & Evergreen Terminals	Operating
Pier 400 Rail Facility	Port of Los Angeles – APM/Maersk Terminal	Operating – Expansion possible
West Basin Container Terminal	Port of Los Angeles – West Basin Container Terminal	Operating – Proposed expansion possible
West Basin Container Terminal East	Port of Los Angeles – TRAPAC	Approved for construction
Seaside Rail Yard	Port of Los Angeles – Evergreen, APL	Proposed Project - Conceptual planning
Middle Harbor	Port of Long Beach (Pier F Railyard currently serving LBCT/CUT)	Approved for Construction
Pier J	Port of Long Beach –SSA Pacific Container Terminal	Operating – Proposed expansion possible
Pier G	Port of Long Beach – International Transportation Services Terminal	Operating – Approved for expansion
Pier A	Port of Long Beach – SSA Pier A Terminal	Operating – Proposed expansion possible
Pier S	Port of Long Beach – unnamed terminal	Proposed Project - Conceptual planning
Pier T	Port of Long Beach – TTI Terminal	Operating – Proposed expansion possible

Tables 1-4 and 1-5 illustrate projected cargo volumes, on-dock rail volumes, and near/off-dock rail volumes over time beginning with 2008 actual data. Note that in the 2007 forecast, identical volumes are shown in 2030 and 2035 because the 2007 forecast did not extend to 2035; that year is presented in order to allow comparison with the 2009 forecast (presented below), which did extend to 2035. In the tables, Total Direct Intermodal is the sum of the on-dock, near-dock, and off-dock rail volumes. The tables show the share of forecasted cargo volumes for on-dock railyards at each forecast year, with near/off-dock railyards handling the remaining share of direct intermodal volume.

In the 2007 forecast (Table 1-4), capacity at the Ports will be constrained at 43.2 million TEUs sometime between 2023 and 2030. At that point, on-dock railyards will be totally built out and will be able to handle approximately 30 percent of total cargo or 75 percent of total direct intermodal cargo. Near/off-dock railyards will be required to handle approximately 10 percent of total cargo or 25 percent of total direct intermodal cargo. Note that the share of near/off-dock railyard volumes is actually projected to increase prior to 2023 and decrease between 2023 and 2030 during the time when on-dock railyards are being fully built out with future planned improvements and expansions.

Table 1-4. 2007 San Pedro Bay Ports Direct Intermodal Cargo Forecast.

2007 San Pedro Bay Ports Direct Intermodal Cargo Forecast (shown in Million TEUs)							
Year	**2008 (Actual)**	**2012**	**2016**	**2020**	**2023**	**2030**	**2035**
Total San Pedro Bay Ports Cargo Volume	14.3	23.4	29.9	36.4	42.8	43.2	43.2
Total Direct Intermodal	6.0 (42.2%)	9.4 (40.0%)	12.0 (40.0%)	14.6 (40.0%)	17.1 (40.0%)	17.3 (40.0%)	17.3 (40.0%)
On-Dock Rail Throughput (share)	3.4 (23.7%)	5.5 (23.5%)	7.9 (26.5%)	10.3 (28.4%)	11.7 (27.0%)	12.9 (29.8%)	12.9 (29.8%)
Near-/Off-Dock Rail Throughput (share)	2.7 (18.5%)	3.9 (16.5%)	4.0 (13.5%)	4.2 (13.0%)	5.4 (12.6%)	4.4 (10.2%)	4.4 (10.2%)

Table 1-5. 2009 San Pedro Bay Ports Direct Intermodal Cargo Forecast.

2009 San Pedro Bay Ports Direct Intermodal Cargo Forecast (shown in Million TEUs)							
Year	**2008 (Actual)**	**2012**	**2016**	**2020**	**2023**	**2030**	**2035**
Total San Pedro Bay Ports Cargo Volume	14.3	14.3	17.8	21.8	25.2	34.6	43.2
Total Direct Intermodal	6.1 (42.2%)	5.7 (40.0%)	7.1 (40.0%)	8.7 (40.0%)	10.1 (40.0%)	13.8 (40.0%)	17.3 (40.0%)
On-Dock Rail Throughput (share)	3.4 (23.7%)	3.7 (25.7%)	6.0 (33.4%)	7.3 (33.3%)	8.2 32.5%)	11.5 (33.3%)	12.9 (29.8%)
Near-/Off-Dock Rail Throughput (share)	2.7 (18.5%)	2.0 (14.3%)	1.2 (6.6%)	1.5 (6.7%)	1.9 (7.6%)	2.3 (6.7%)	4.4 (10.2%)

Under the 2009 forecast (Table 1-5), capacity at the Ports would not be constrained until 2035, a delay of approximately 12 years compared to the 2007 forecast. The 2009 forecast assumes that on-dock facilities will be built out by 2030, but that on-dock facilities will be able to handle a much larger share of the direct intermodal cargo in the preceding years than under the 2007 forecast scenario (because the total throughput will be less). However, a lower growth rate, and the resulting lower cargo volumes, would mean that near/off-dock railyard capacity would not be reached until 2035. As noted above, cargo volumes in 2010 and early 2011 suggest that the 2009 forecast underestimates future volumes, meaning that railyard capacity will be reached earlier than 2035.

Notwithstanding the improvements described in Table 1-3, the Rail Study Update (Parsons, 2006) concluded that on-dock rail yards will be unable to handle all of the future intermodal demand: on-dock capacity in the ports will begin to be exceeded by the demand as early as 2010 and will fall short of demand by 2020. That prediction is supported by the recent explosive growth in on-dock throughput: in 2000 the on-dock facilities in the two ports handled approximately 550,000 TEUs, whereas in 2003 they handled nearly 2 million TEUs (Parsons, 2004) and in 2008, approximately 3.4 million TEUs (Table 1-4). Some of the increase is attributable to three new facilities (Pier 400, Pier A, and Pier T) coming into service, but much of the growth was at existing facilities. Data supplied by BNSF indicates that the number of containers loaded at on-dock railyards increased between 2002 and 2006 twice as fast as the rate of cargo growth would predict.

Recent railyard studies conducted by the Port for this project, along with data from the I-710 EIR/EIS and the Ports' Rail Study Update (Parsons, 2006), show there will always be a need for near-dock/off-dock facilities, and expansion of near/off-dock rail capacity will be necessary to accommodate projected increases in intermodal cargo volumes.

As described in the Rail Study Update (Parsons, 2006) there are other major reasons why the anticipated increase in demand cannot be handled entirely by on-dock facilities and why near-dock facilities are a vital component of the intermodal infrastructure. There is a limit to the amount of space that will be available for future growth of on-dock facilities. Marine terminal and on dock railyard expansions already planned in both ports will consume all available land as well as requiring the creation of additional land (Parsons, 2006). In addition, not all of the planned expansions may be built: most of the terminal expansion projects that are needed to add new and expand existing on-dock railyards still require environmental approvals, and some will require Port Master Plan amendments. Finally, there is a physical limit to the size of on-dock railyards within terminals, as optimum terminal configuration requires a balance between container handling space, terminal operations space, and railyard space.

Not all intermodal container cargo can be placed on trains in the marine terminals. First, the small size of some on-dock facilities prevents them from meeting the demand (and the small size of some terminals precludes the use of on-dock rail altogether). Second, if there are not enough containers unloaded from a ship that are going to the same place to make a full train at an on-dock rail yard, the containers are sent to a near-dock or off-dock facility to be staged and later mixed with containers from the other marine terminals that are bound for the same destination. This activity is not performed at an on-dock location because of the relatively small size of these facilities and to avoid delaying cargo to wait for a full trainload. Near- and off-dock facilities are more suited to this type of container staging because their larger size and multiple users allow for a greater number of destinations and more frequent schedules.

Containers requiring transloading are typically not handled by on-dock yards. Since transloading facilities are generally located at some distance from the ports, shipping the transloaded containers from on-dock yards would require a second, return truck trip to the marine terminal and an additional gate transaction.

There is a physical limit to the capacity of the rail network between the on-dock yards and the Alameda Corridor, especially for on-dock yards on Terminal Island. Port rail infrastructure and the rail infrastructure between the marine terminals and the Alameda Corridor are inadequate to maintain the level of service required to handle increased volumes of international traffic. As described in Parsons (2004) and the Rail Study Update (Parsons, 2006), the planned rail improvements, including a new rail bridge across the Cerritos Channel being proposed by ACTA, would not accommodate all of the projected intermodal traffic from the marine terminals on Terminal Island.

The LAHD has determined that, given the increasing volumes of intermodal cargo expected to come through the ports in the future, and the limitations of existing and planned rail facilities serving the ports, additional near-dock facilities will continue to be needed to satisfy future LAHD intermodal needs. In its recently adopted Rail Policy, LAHD encourages the expansion of on-dock facilities but also cites development of a new near-dock facility as a goal; the Port of Long Beach Strategic Plan also expresses support for an enhanced rail infrastructure. Accordingly, one key criterion for evaluating the alternatives considered in this EIR is their ability to help make up for the forecasted San Pedro Bay ports railyard capacity short-fall.

The project evaluated in this Draft EIR represents part of a continued effort to meet the goals and objectives of the joint federal, state, and local planning process initiated by the

2020 Plan and continued in the Port Rail Policy and San Pedro Bay Ports Rail Study Update.

1.2 CEQA and the Purposes of an EIR

CEQA was enacted by the California Legislature in 1970 and requires public agency decision makers to consider the environmental effects of their actions. When a state or local agency determines that a proposed project has the potential for significantly adverse environmental effects after mitigation, an EIR is required to be prepared. The purpose of an EIR is to identify potentially significant adverse effects of a proposed project on the environment, to identify alternatives to the proposed project, and to indicate the manner in which those significant effects can be mitigated or avoided.

In accordance with CEQA Guidelines §15121(a), the purpose of an EIR is to serve as an informational document that: “will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.” The proposed Project requires discretionary approval from the LAHD and, therefore, it is subject to the requirements of CEQA. This Draft EIR has been prepared in accordance with the requirements of CEQA.

1.3 Lead, Responsible, and Trustee Agencies

CEQA requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment (Pub. Res. Code §21067). The proposed Project requires discretionary approvals from the LAHD for a land lease and development permits. Therefore, the LAHD has the primary responsibility for supervising or approving the project as a whole and is the appropriate public agency to act as lead agency (CEQA Guidelines §15051(b)).

CEQA Guidelines §15381 defines a “responsible agency” as “a public agency which 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.” A “trustee agency” is a “state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California” (CEQA Guidelines §15386). The list of responsible and trustee agencies that may rely on this EIR in a review capacity or as a basis for issuance of a permit for the proposed Project or related actions are summarized in Table 1-6. For convenience, all the agencies are referred to generally as Responsible Agencies in this EIR.

1 **Table 1-6. Agencies Expected to Use this EIR.**

Responsible and Trustee Agencies	
Agency	**Responsibilities, Permits and Approvals**
State	
California Department of Transportation (CalTrans)	Responsible agency with permitting authority under Streets and Highways Code for modifications to State roads. The proposed Project would include modifications to State roads including SR 1 (Pacific Coast Highway).
California Department of Toxic Substances Control (DTSC)	Responsible agency with permitting authority under the Health and Safety Code (Hazardous Waste Control Law) to issue permits for the storage, treatment or disposal of hazardous waste.
California Air Resources Board (CARB)	Responsible agency with permitting authority under California Code of Regulations Titles 13 and 17 over mobile sources and fuels. CARB also has a Portable Equipment Registration Program.
California Public Utilities Commission (CPUC)	The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The proposed project requires CPUC approval for modifications to electrical towers for railroad operations clearance within the SCE right-of-way.
Local	
South Coast Air Quality Management District	Responsible agency with permitting authority for new or modified stationary sources of air emissions. The proposed Project would include operation of a fuel storage tank subject to Rule 461 which requires a permit to construct and operate. AQMD may also use this EIR for enforcement of air pollution regulations to ensure that ambient air meets federal and state air quality standards such as activities involving hydrocarbon-containing soils (Rule 1166) and construction emissions (Rule 402/403).
Regional Water Quality Control Board, Los Angeles Region	Responsible agency with permitting authority to issue Waste Discharge Requirements for discharges that may affect surface or ground water, and National Pollutant Discharge Elimination System (NPDES) permit for discharge of wastewater into surface waters. The proposed Project would require a General Industrial Activities Storm Water permit. The proposed Project would also require a Section 401 (Clean Water Act) certification for construction dredging and filling activities in the Dominguez Channel.
Trustee Agencies	
California Department of Fish and Game (CDFG)	CDFG is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. The Fish and Game Code (Section 1602) requires an entity to notify CDFG of any proposed activity that may substantially modify a river, stream, or lake. CDFG requires notification of any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. A Lake or Streambed Alteration Agreement for construction activities within the Dominguez Channel would be required for the proposed Project.

Responsible and Trustee Agencies	
Other Agencies	
Agency	**Responsibilities, Permits and Approvals**
United States Army Corps of Engineers (USACE)	The Clean Water Act (CWA) Section 404 establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. USACE administers the program, including individual permit decisions and jurisdictional determinations; develops policy and guidance; and enforces Section 404 provisions. The proposed Project would require a Section 404 permit or letter of permission for construction activities in the Dominguez Channel.
Southern California Association of Governments	Metropolitan planning organization that undertakes variety of planning and policy initiatives and is mandated by federal and state law to research and create plans for transportation growth management, hazardous waste management and air quality.
Los Angeles County Department of Public Works	County Department to construct and operate water supply, flood control, water quality, and water conservation facilities.
City of Los Angeles Harbor Department	Leasing authority for POLA land, permitting authority for construction. Proposed Project would require approval of land lease and development permits from the LAHD.
City of Los Angeles City Council	Reviews and approves LAHD lease. Public Resources Code Section 21151(c) provides that CEQA determination by a non-elected decision—making body may be appealed to the agency's elected decision-making body. In the case of the LAHD, decisions may be appealed to the City Council.
City of Los Angeles Building Department	Permitting authority for building and grading permits.
City of Los Angeles Bureau of Engineering	Agency with permit authority for storm drain connections and storm water discharges.
City of Los Angeles Bureau of Sanitation	Issues Industrial Waste Permit.
City of Los Angeles Department of Water and Power	Reviews and approves water and electrical service connections and meters.
City of Los Angeles Department of Transportation	Reviews and approves changes in City street design construction, signalization, signage and traffic counts. Also approves traffic control plans during construction.
City of Long Beach Department of Development Services	Issues planning, building and construction permits.
City of Long Beach Public Works Department	Administers Municipal NPDES Permit.
City of Carson	Issues construction permits; reviews and approves changes in City street design.

1.4 Scope and Content of the Draft EIR

The LAHD issued a Notice of Preparation (NOP) and Initial Study (IS) to inform responsible and trustee agencies, public agencies, and the public that the LAHD was preparing an EIR for the proposed Project, pursuant to CEQA The NOP/IS (State Clearinghouse Number 2005091116) was circulated for a 30-day comment period from September 20, 2005, to October 19, 2005, to neighboring jurisdictions, responsible agencies, other public agencies, and interested individuals in order to solicit input on the scope of the environmental analysis to be included in the EIR. The LAHD held public scoping meetings on October 6, 2005 and October 13, 2005. A Supplemental NOP was issued on October 31, 2005, in response to comments, and the review period ended November 29, 2005. A total of 35 individuals commented at the meetings on the proposed Project and the NOP/IS, and 48 letters commenting on the NOP/IS or supporting or opposing the Project were received during the public comment period. Table 1-7 presents a summary of the key comments received during the NOP public comment period and references to the sections of this Draft EIR addressing them. The NOP/IS, the Supplemental NOP, and the comment letters received on those documents can be found in Appendix A.

Table 1-7. Summary of Key NOP Comments.

Commenter	Key Issues Raised	Sections Addressed
Governmental Agencies		
USEPA	Have USACE use construction equipment that will meet Tier 3 or cleaner non-road engine standards Include Draft Conformity Information in the Draft EIS/EIR	Chapter 2.0 Project Description Section 3.2 Air Quality
Caltrans Dist 7	Direction on traffic analysis Need for mitigation and cost-sharing	Section 3.10 Transportation
Caltrans	Oppose separate CEQA and NEPA documents	No NEPA document needed
California Public Utilities Commission	Include rail safety features, including grade separations and crossing improvements	Section 2.4 Proposed Project
South Coast Air Quality Management District	Direction concerning the air quality and health risk analyses Consider alternatives to a near-dock facility Mitigate line-haul locomotive emissions and other emissions Design project to minimize exposure of residents, including site access modifications and buffer zones	Section 3.2 Air Quality Section 2.5 Alternatives Section 3.2 Air Quality Section 2.4 Proposed Project
SCAG	Near-dock facility is needed for the Southern California goods movement system	Section 2.1.1 Need for a near-dock facility
Department of Toxic Substances Control	Identify potential contaminated sites and remedial actions Recommendations for managing soil contamination during construction	Section 3.7 Hazards and Hazardous Materials
LADOT	Direction on traffic analysis and study intersections	Section 3.10 Transportation
SANBAG	Assess additional traffic and its impacts in San Bernardino County Assess impact of new railyard on existing rail facilities in SB County	Section 3.10 Transportation

Commenter	Key Issues Raised	Sections Addressed
Port of Long Beach	Consider alternate locations BNSF should commit to project features that reduce impacts (e.g., cleaner trucks, advanced truck gate technology) Broaden the project objectives to admit alternatives other than a near-dock yard Consider project's relationship to the ICTF Rail operations should not compromise the existing rail infrastructure POLB must be consulted on changes to lands that POLB owns or has an operational interest in A new soundwall and landscaping will be required Consider impacts of re-routing traffic through neighborhoods, evaluate need for roadway upgrades and other mitigation Require trucks to have current CVSA or CHP inspections	Section 2.5 Alternatives Section 2.4 Proposed Project Section 2.3 Project Objectives Chapter 4 Cumulative Analysis Section 2.4 Proposed Project & Section 3.10 Transportation Section 3.8 Land Use, Table 1-6 Section 2.4 Proposed Project and 3.9 Noise Section 3.10 Transportation Chapter 1, Section 3.10 Transportation
City of Long Beach	Provide a more detailed project description, including an accurate description of the project boundaries that includes areas outside the Primary Project Area Project objectives are too narrow; include objectives that permit a wider range of alternatives Identify all entitlements and responsible agencies Compare proposed land uses with permitted uses per Planning Commission decision Analysis of socioeconomic impacts and discussion of blight Direction on traffic analysis, including impacts of relocation of trucking facilities Expand the range of alternatives to include an on-dock alternative, a different near-dock site, and a reduced project Include POLB projects and ICTF in the cumulative analysis Mitigation measures should be consistent with the Green Port policies, should incorporate alternative container delivery systems and routes, and should eliminate diesel-powered equipment and reduce locomotive idling	Section 2.4 Proposed Project Section 2.3 Project Objectives Section 1.3 Responsible Agencies Section 3.8 Land Use Chapter 7 Socioeconomics Section 3.10 Transportation Section 2.5 Alternatives Section 2.4 Cumulative Analysis Section 3 Environmental Analysis
MTA	Direction on traffic impact analysis	Section 3.10 Transportation
Non-Governmental Agencies and Business Entities		
Wilmington Chamber of Commerce	Consider impacts on existing businesses Install modern equipment	Chapter 3 Environmental Analysis Section 2.4 Proposed Project
Wilmington Neighborhood Council	Evaluate the impact of increased truck traffic on aging infrastructure Evaluate a primary entrance on Sepulveda Blvd and flyovers/ramps off PCH	Responsibility of another agency Section 2.4 Project Description and 2.5

Commenter	Key Issues Raised	Sections Addressed
	Use innovative technology to increase efficiency in ways that will reduce highway congestion Evaluate traffic diversion and potential congestion and conflicts in relation to neighborhoods, the proposed SR 47 truck expressway, and local businesses	Alternatives Section 2.4 Project Description Section 3.10 Transportation
San Pedro and Peninsula Homeowners' Coalition	Use non-diesel delivery of containers Consider on-dock rail alternative and alternative, in-port locations Aesthetic impacts Environmental justice impacts	Section 2.5 Alternatives Section 2.5 Alternatives Section 3.1 Aesthetics Chapter 6 Environmental Justice
Long Beach Unified School District	Hazardous air emissions Noise Hazardous materials Title 5 siting criteria Mitigation of AQ and health impacts through construction of school facilities Impacts of relocating businesses	Section 3.2 Air Quality Section 3.9 Noise Section 3.7 Hazards Section 3.8 Land Use Section 3.2 Air Quality Chapter 3
Natural Resources Defense Council (12/7/2005)	Consider alternatives other than a new railyard	Section 2.5 Alternatives
NRDC et al. (12/15/2005)	Broaden the objectives and range of alternatives to allow consideration of other alternatives than a near-dock facility Clarify the project description Present an accurate baseline Address water quality impacts of diesel exhaust Mitigate all impacts consistent with No Net Increase Conduct a comprehensive HRA following SCAQMD protocol	Section 2.3 Project Objectives and Section 2.5 Alternatives Section 2.4 Proposed Project Section 2.6 Project Baseline Section 3.12 Water Resources Chapter 3 Environmental Analysis Section 3.2 Air Quality
Port Community Citizens' Advisory Committee	Use the EIR Template developed by POLA and PCAC Evaluate aesthetic impacts and provide mitigation Use an air quality baseline of 2001 consistent with the no net increase policy Incorporate the 2003 PCAC publication on health effects of diesel exhaust and a corresponding Health Hazard Index Address AQMP conformance Suggestions on the conduct of the air quality analysis Mitigation should include use of alternative fuels, electrification of equipment, and off-port measures to achieve no net increase Evaluate SENELs as well as CNELs in the noise analysis Evaluate the role of Port industrialization in the creation of blight in surrounding communities, including impacts related to aesthetics, cultural resources, public health and safety, and	EIR meets PCAC template with changes per CEQA and LAHD protocol. Section 3.1 Aesthetics Section 3.2 Air Quality Section 3.2 Air Quality Section 3.2 Air Quality Section 3.2 Air Quality Section 3.2 Air Quality Section 3.9 Noise Chapter 7 Socioeconomic Analysis

Commenter	Key Issues Raised	Sections Addressed
	property values Mitigation should include a Harbor Community Health Survey, trust funds for off-site improvements, and environmental improvement programs Alternatives should include alternate sites and a reduced project.	Chapter 3 Environmental Analysis Section 2.5 Alternatives
Keck School of Medicine Community Outreach and Education Program	Clarify the project description Address relocation through separate EIRs or put more detail in this document Suggestions for conducting the air quality and health risk analyses and describing health effects of air pollution Accurately evaluate effects of the Project on truck traffic on I-710 Emphasize on-dock or alternative locations Use non-diesel container delivery systems, Alameda Corridor electrification, and electric switchers Implement rail and trucking measures in NNI, CARB 2005 Railroad MOU, and SCAQMD rules	Section 2.4 Proposed Project Section 3.2 Air Quality Section 3.10 Transportation Section 2.5 Alternatives Sections 2.4 Project Description and 2.5 Alternatives Section 2.4 Project Description and 3.10 Transportation
UP Railroad	Support the project	NA
Fast Lane, Inc.	Consider impacts of project configuration and operation on on-site business access Impacts of relocation on businesses	Section 2.4 Project Description and 3.10 Transportation
Coalition for a Safe Environment	Consider alternative container transport systems incl gravity and solar power	Section 2.5 Alternatives
26 private individuals and other non-governmental entities	Public health related to air quality, especially at schools and in nearby neighborhoods Truck traffic in neighborhoods, railroad crossing delays, and freeway congestion Noise, nighttime lighting Contamination of adjacent properties by dust Incompatible land use issues and cumulative socioeconomic impacts Use of alternative fuels and cargo transport technologies Use of on-dock instead of near-dock rail	Section 3.2 Air Quality Section 3.10 Transportation Section 3.9 Noise, Section 3.1 Aesthetics Section 3.7 Hazards Section 3.8 Land Use, Chapter 7 Socioeconomics Section 2.6 Other Goods Movement Concepts

1.4.1 Scope of Analysis

This Draft EIR has been prepared in conformance with CEQA, the State CEQA Guidelines, and Port of Los Angeles Guidelines for the Implementation of CEQA; it includes all of the sections required by CEQA. This Draft EIR relies on policies and guidelines of the City of Los Angeles, including the Port of Los Angeles.

The criteria for determining the significance of environmental impacts in this Draft EIR analysis are described in the section titled “Significance Criteria” (also referred to as the “threshold of significance”) under each resource topic in Chapter 3. A “Threshold of significance” is an identified “quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant" (CEQA Guidelines §15064.7 (a)). Except as noted in particular sections of the document, the City of Los Angeles CEQA Thresholds Guide (City of Los Angeles, 2006) will be used for purposes of this Draft EIR, although some criteria were adapted to the specific circumstances of this project.

The scope of analysis and technical work plans developed as part of preparing this Draft EIR were designed to ensure that the comments received from regulatory agencies and the public during the NOP review process would be addressed.

The NOP concluded that the following issues were potentially significant and would therefore be evaluated in this Draft EIR.

- aesthetics and visual resources
- air quality and public health
- biological resources
- cultural resources
- geology and soils
- greenhouse gas emissions
- hazards and hazardous materials
- land use
- noise
- transportation and traffic
- utilities and public services
- water resources

In addition to the above, other topics are evaluated including, alternatives, cumulative impacts, significant irreversible impacts, and growth inducing impacts. The NOP/IS concluded that the proposed Project would not create significant adverse environmental impacts to the following areas: agricultural resources, geology and soils, land use and planning, mineral resources, population and housing, and recreation. However, Chapter 3 discusses each of the resources that could be affected by the proposed Project, including most of the resource areas for which the potential for significant impacts was not identified in the NOP/IS. Mitigation measures to reduce impacts to a less than significant level are proposed whenever feasible. Evaluation of alternatives is discussed in Chapter 5.

Other topics not required by CEQA but evaluated in this EIR include an expanded health risk analysis in Section 3.2, a regional rail assessment in Section 3.10, a combined ICTF and SCIG analysis for air quality and health risk, noise and traffic in Chapter 4, an Environmental Justice analysis in Chapter 6, and a Socioeconomics discussion in Chapter 7.

This Draft EIR has been prepared by Environ International Corporation under contract to the LAHD and has been independently reviewed by the LAHD. The scope of the document, methods of analyses, and conclusions represent the independent judgment of the LAHD. Staff members from the LAHD and consultants who helped prepare this Draft EIR are identified in Chapter 11 (List of Preparers and Contributors).

1.4.2 Intended Uses of this Draft EIR

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

The LAHD has the authority as lead agency for any environmental determinations made under CEQA. This 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. The LAHD's certification of the EIR, Notice of Completion, Findings of Fact, and Statement of Overriding Considerations (if necessary) would document the LAHD's decision as to the adequacy of the EIR and inform subsequent decisions by the LAHD whether to approve the proposed Project or alternative and grant the necessary permits and lease.

Other agencies (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 EIR as part of their approval or permit process as set forth in Table 1-6. Specific approvals that could be required for this proposed Project include, but are not limited to: City of Los Angeles Building and Safety Permits, SCAQMD Permit to Construct and Operate, LAFD approval of Hazardous Materials Business Plan, Water Quality Permits, LAHD approval of the lease and issuance of development permits, and City of Carson and City of Long Beach street improvements and building permits.

Actions that could be undertaken by the LAHD following preparation of the Final EIR include: certification of the EIR, approval of the proposed Project, lease approvals, and approval of engineering permits. The applicant would be responsible for obtaining, for its facility, other agency permits and approvals (e.g., grading, construction, occupancy, and fire safety), and approval of construction contracts as required.

1.4.3 Draft EIR Organization

Table 1-8 contains a list of sections required under CEQA, and references the specific chapter in this document where the specific information is located. To easily obtain information about the proposed Project and alternatives, and including specific impacts, this Draft EIR is organized into the chapters described below.

Table 1-8. Organization and Contents of the Draft EIR.

Draft EIR Section	Description
Executive Summary	Summary of the proposed Project and alternatives, potential significant adverse impacts and mitigation measures, the environmentally superior alternative, public comments and concerns, unresolved issues, and areas of controversy.
Chapter 1: Introduction	Summarizes the proposed Project and describes the background, intended uses of the document, authorizing actions, the relationship to existing plans and policies, scope and content of the document, and the organization of the document.
Chapter 2: Project Description	Describes the purpose, need, and objectives of the proposed Project. Describes the proposed project modifications and alternatives evaluated in this document and describes alternatives considered but eliminated from further consideration.
Chapter 3: Environmental Analysis	Describes for each environmental resource area, the baseline conditions; significance criteria; impact assessment methodology; impacts that would result from the proposed Project; applicable mitigation measures that would eliminate or reduce significant impacts; and mitigation monitoring

Draft EIR Section	Description
	procedures.
Chapter 4: Cumulative Analysis	Provides analysis of whether or not the proposed Project would contribute to cumulative impacts from past, present, and reasonably foreseeable future projects within the same scope of analysis and evaluates the overall cumulative impacts.
Chapter 5: Alternatives	Describes for each environmental resource area, the baseline conditions; significance criteria; impact assessment methodology; impacts that would result from each proposed project alternative; applicable mitigation measures that would eliminate or reduce significant impacts; mitigation monitoring procedures; and a comparison of significant impacts of the proposed project alternatives.
Chapter 6: Environmental Justice	Addresses the potential effects of the proposed Project on minority populations and low-income communities adjacent to the proposed Project site.
Chapter 7: Socioeconomics and Environmental Quality	Identifies the proposed Project's socioeconomic effects including potential blight effects.
Chapter 8: Growth-Inducing Impacts	Addresses whether or not the proposed Project would result in growth-inducing impacts.
Chapter 9: Significant Irreversible Changes	Describes the significant adverse irreversible changes associated with the proposed Project.
Chapter 10: References	Identifies the documents consulted in preparing this EIR.
Chapter 11: List of Preparers	Lists the individuals involved in preparing this EIR.
Chapter 12: Acronyms	Provides the full names of acronyms used in this EIR and also provides a glossary of key technical terms used throughout the document.
Appendices	Presents additional background information and technical detail for several of the resource areas.

1.5 Key Principles Guiding Preparation of this Draft EIR

1.5.1 Emphasis on Significant Environmental Effects

This Draft EIR focuses on the potential significant adverse environmental impacts of the proposed Project's and each project alternative and the relevance of those impacts to the decision-making process. "Environmental impact," as defined by CEQA includes physical effects on the environment. CEQA Guidelines §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."

Environmental impacts required to be analyzed under CEQA do 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). CEQA Guidelines §15131(a) state "economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus on the analysis shall be on the physical changes." The economic or social effects of a project may be used to determine the significance of physical changes caused by the project (CEQA Guidelines §15131(b)).

Based on CEQA Guidelines and statutes, the LAHD is not required to treat economic or social impacts as significant environmental impacts absent a related physical effect on the environment. Therefore, such impacts are only discussed to the extent necessary to determine the significance of physical impacts of the proposed Project and alternatives. Additionally, this EIR addresses Environmental Justice in Chapter 6, and Socioeconomics and Environmental Quality in Chapter 7.

1.5.2 Forecasting

In this Draft EIR, the 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. However, CEQA does not require the LAHD to engage in speculation about impacts that are not reasonably foreseeable (CEQA Guidelines §15144, 15145). In these instances, CEQA does not require a worst-case analysis.

1.5.3 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 EIR. While impacts determined to be "less than significant" need only be acknowledged as such, an EIR must identify mitigation measures for an impacts identified as "significant." In preparing this document, the LAHD has based its conclusions about the significance of environmental impacts on identifiable thresholds (i.e., the Los Angeles CEQA Thresholds Guide (City of Los Angeles, 2006) and SCAQMD CEQA significance thresholds) and/or other scientific and analytical bases, and has supported these conclusions with substantial scientific evidence.

The criteria for determining the significance of environmental impacts are described in each resource section in Chapter 3. The threshold of significance under CEQA for a given environmental effect is the level at which the LAHD finds a potential effect of the proposed Project or alternative to be significant. Threshold of significance is defined under the CEQA Guidelines (CEQA Guidelines §15064.7(a)) as "an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant."

1.5.4 Disagreement Among Experts

It is possible that during the public review process experts may disagree with assumptions, analysis, conclusions, and other materials presented in the Draft EIR. The Draft EIR has summarized the conflicting opinions, where such information is known in advance. All such information will be considered by the decision-makers during the public review process. However, to be adequate under CEQA, the Draft EIR need not resolve all such disagreements among experts.

In rendering a decision on a project where there is a disagreement among experts, the decision makers are not obligated to select the most conservative, environmentally protective, or liberal viewpoint. They may 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, they must consider the comments received and address objections, but need not follow said comments or objections so long as they state the basis for their decision and that decision is supported by substantial evidence. Disagreement among experts does not make an EIR inadequate (CEQA Guidelines §15151).

1.5.5 CEQA Environmental Setting and Baseline

CEQA Guidelines state that "an EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published…from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which the Lead Agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives." (CEQA Guidelines §15125(a)).

The NOP was released in September 2005. Therefore, the baseline conditions for the proposed Project are the operational activities that occurred, and conditions as they existed, in 2005. However, CEQA Guidelines and case law recognize that the date for establishing an environmental baseline cannot be rigid as conditions may fluctuate or vary with time. In some instances new data has been developed or major changes have occurred that are unrelated to the proposed Project since the time of the NOP that prompt use of later years as the baseline. In other instances the Draft EIR may use data prior to date of the NOP which is considered representative of the time of the NOP. For more detailed discussion of the environmental setting and baseline see the "Environmental Setting" discussions at the beginning of the individual resource analyses in Chapter 3 of the Draft EIR.

1.5.6 Authority to Mitigate

According to CEQA Guidelines § 15126.4(a), an EIR shall describe feasible measures which could minimize significant adverse impacts. However, mitigation measures are not required for effects which are not found to be significant (CEQA Guidelines Section 15126.4(a)(3)). Public agencies have 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, subject to certain limitations (CEQA Guidelines Section 15040, 15041).

1.5.7 Requirement to Evaluate Alternatives

CEQA Guidelines §15126.6 require that an EIR describe a range of reasonable alternatives to a proposed project, or to the location of the project, that could feasibly attain most of the basic objectives of the proposed project but would avoid or substantially lessen any significant environmental impacts. The EIR should compare merits of the alternatives, including the No Project Alternative, and determine an environmentally superior alternative. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. There is no iron clad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. Section 2.5 of this Draft EIR sets forth potential alternatives to the proposed Project and evaluates their suitability.

1.6 Other Environmental Programs

In addition to CEQA requirements, there are several federal, state and local environmental programs that have a direct bearing on the proposed Project construction and operations. These are discussed below.

1.6.1 San Pedro Bay Ports Clean Air Action Plan (CAAP)

The Ports of Los Angeles and Long Beach, with the participation and cooperation of the staff of the U.S. Environmental Protection Agency, California Air Resources Board and South Coast Air Quality Management District, developed a strategy to reduce the health risks posed by air pollution from port-related sources. 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 Basin to attain state and federal ambient air quality standards. The Ports approved the San Pedro Bay Ports Clean Air Action Plan (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
- Recommendations to eliminate emissions of ultrafine particulates
- Technology advancement programs to reduce greenhouse gases
- Public participation processes with environmental organizations and the business communities

The CAAP focuses primarily on reducing diesel particulate matter (DPM), along with nitrogen oxides (NOx) and sulfur oxides (SOx). This reduces emissions and health risk and thereby allows for future port growth while progressively controlling the impacts associated with growth. The CAAP includes, as strategies for achieving this goal, emission control measures that are designed to meet Source-Specific Performance Standards which are implemented mainly through the environmental review process and included in new leases or through Port-wide tariffs, Memoranda of Understanding (MOU), voluntary action, and incentive programs.

The Ports approved the 2010 CAAP Update (CAAP Update) in November 2010. The CAAP Update includes updated and new emission control measures which support the updated Source-Specific Performance Standards and the Project-Specific Standard from the original CAAP. In addition, the CAAP Update includes the recently developed San Pedro Bay Standards which encompass the Source- and Project-Specific Standards and provide long-term goals for reducing 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 percent reduction in DPM by 2020
- Emission Reduction Standards:
- By 2014, reduce emissions by 72 percent for DPM, 22 percent for NOx, and 93 percent for SOx
- By 2023, reduce emissions by 77 percent for DPM, 59 percent for NOx, and 92 percent for SOx

The Project-Specific Standard remains set such that new projects must meet the 10 in 1,000,000 excess residential cancer risk threshold, as determined by health risk assessments conducted pursuant to CEQA statute, regulations and guidelines, and implemented through required CEQA mitigations associated with lease negotiations.

The Source-Specific Performance Standards of the CAAP address a variety of port-related emission sources – ships, trucks, trains, cargo-handling equipment and harbor craft – and outline specific strategies to reduce emissions from each source category. The Source-Specific Performance Standards have been updated as detailed in Section 2 of the CAAP Update and the applicable emission control measures (as detailed in Section 4 of the CAAP Update) for the proposed Project are discussed in Section 1.6.1.1 below.

In addition to meeting the CAAP standards, tenants must comply with all applicable federal, state, and local air quality regulations, unless an applicable CAAP emission reduction control measure is more stringent than the applicable regulation.

The following measures prescribed by the CAAP Update are applicable to the proposed Project in order to meet the Source-Specific Performance Standards.

Heavy-Duty Vehicles (HDV)-1 – Performance Standards for On-Road Heavy Duty Vehicles (Clean Truck Program): All on-road trucks entering the ports will need to comply with the Clean Truck Program. In response to the CAAP on-road heavy-duty vehicle control strategies, both Ports adopted a Clean Truck Program in 2007. Although there are differences between the two Ports' programs, the emissions reduction goals of the programs are the same. The main emissions reduction elements include the following progressive truck bans which will significantly reduce emissions from this source category:

- October 1, 2008: All pre-1989 trucks are banned from entering the Port.
- January 1, 2010: 1989-1993 trucks will be banned, in addition to 1994-2003 trucks that have not been retrofitted to achieve 85 percent DPM reduction and 25 percent NOx reduction through use of a CARB approved Level 3 VDECS.
- January 1, 2012: All trucks that do not meet the 2007 federal on-road standards will be banned from the Ports starting in 2014, CARB's Drayage Truck Regulation aligns with the Clean Truck Program. CARB's On-Road Heavy-Duty Diesel Truck and Bus Rule incorporates the Drayage Truck Regulation and will further require that trucks operating at the ports meet 2010 federal on-road standards by 2021.

Cargo Handling Equipment (CHE)-1 – Performance Standards for CHE: This emission control measure applies to all diesel powered cargo handling equipment. By the end of 2010, all yard tractors must meet 2007 federal on-road or Tier 4 off-road engine standards. By the end of 2012, all non-road terminal equipment other than yard tractors with horse-power rating of 750 or less must meet 2007 federal on-road or Tier 4 off-road engine standards. This same equipment with horse-power rating of greater than 750 must meet Tier 4 off-road engine standards by the end of 2012.

RL-2 – Class 1 Line-haul and Switch Fleet Modernization: This control measure focuses on Class 1 locomotive operations related to the ports and requires the implementation of clean technologies as required by USEPA regulation and an agreement with CARB. RL-2 recites the agreement between BNSF and CARB under the 2005 MOU that at least 80 percent of the fuel supplied in California to locomotives operating intrastate within California be ULSD fuel, and that at least 99 percent of all Class 1 line-haul and switcher engines based in California be equipped with 15-minute idle restrictors. In addition, RL-2 includes the 2005 agreement's provision that, by 2010, all Class 1 locomotives operating in the South Coast Air Basin have a fleet average emissions equivalent to USEPA Tier 2 locomotive standards, and that by no later than 2013 and thereafter, at the time of major overhaul, Tier 2 locomotives must be rebuilt to Tier 3 standards, under the 2008 USEPA rule. Finally, RL-2 establishes as a goal the locomotive absorption forecast made by USEPA in connection with its 2008 rulemaking that by 2023, all Class 1 locomotives entering the ports meet USEPA Tier 3 locomotive standards.

RL-3 – New and Redeveloped Near-Dock Rail Yards: This control measure requires the Class 1 locomotive fleet associated with new and redeveloped near-dock rail yards to use 15-minute idle restrictors, use ULSD or alternative fuels, and, at a minimum, meet a performance standard of an emissions equivalent of at least 50 percent Tier 4 line-haul locomotives and 40 percent Tier 3 line-haul locomotives when operating on port properties by 2023. RL-3 further requires that, by the end of 2015, all Class 1 switcher locomotives operating on port property will meet USEPA Tier 4 non-road standards. In addition, with the assistance of the ports' regulatory agency partners and in concert with CARB's stated goals, the ports' will support the achievement of accelerating the natural turnover of the line-haul locomotive fleet resulting in a state-wide fleet comprised of at least 95 percent USEPA Tier 4 locomotive engines by 2020. Finally, the measure requires consistency with HDV-1 and CHE-1.

1.6.2 Ports Trucks (Heavy Duty Vehicles) Program

In response to the CAAP on-road vehicle heavy-duty vehicle control strategies, both Ports adopted a Clean Truck Program in 2008. Though, there are differences between the two Ports' programs the main elements of the programs are the same. The main elements include:

- October 1, 2008 All pre-1989 trucks are banned from entering the Port.
- January 1, 2010 1989-1993 trucks will be banned in addition to 1994-2003 trucks that have not been retrofitted.
- January 1, 2012 All trucks that do not meet the 2007 Federal Clean Truck Emissions Standards will be banned from the Ports

1.6.3 U.S. Environmental Protection Agency Locomotive Rule

Pursuant to U.S. Environmental Protection Agency regulations, the locomotive rule sets forth Tier 3 emission standards for newly-built locomotives, provisions for clean switch locomotives, and idle reduction requirements for new and remanufactured locomotives.

The rule will cut PM emissions from these engines by as much as 90 percent and NOx emissions by as much as 80 percent when fully implemented. Specifically, by 2011, all diesel-powered Class 1 switcher and helper locomotives entering Port facilities must be Tier 3, and must use 15-minute idle limit devices. In addition, after January 1, 2007 Class 1 switchers and helper locomotives must use ultra-low sulfur diesel (ULSD) fuels.

Beginning in 2012 and fully implemented by 2014, the fleet average for Class 1 long-haul locomotives calling at Port properties must be Tier 3 equivalent (Tier 2 equipped with diesel particulate filters (DPF) and selective catalytic reduction (SCR) or new locomotives meeting Tier 3) PM and NOx and will use 15-minute idle restrictors. Class 1 long-haul locomotives must operate on ultra low sulfur diesel (USLD) while on Port properties by the end of 2007.

Finally, the rule establishes long-term, Tier 4, standards for newly-built engines based on the application of high-efficiency catalytic after-treatment technology, beginning in 2015.

1.6.4 California Air Resources Board (CARB) Drayage Truck Regulation

Drayage trucks are diesel-fueled, heavy-duty trucks that transport containers, bulk, and break-bulk goods to and from ports and intermodal railyards to other locations. CARB estimates that there are approximately 100,000 drayage trucks statewide and nearly 20,000 of them frequently service ports and railyards.

The drayage truck regulation applies to diesel-fueled drayage trucks having a gross vehicle weight rating greater than 33,000 pounds operating at specified California ports, intermodal railyards, or both. The regulation sets two compliance deadlines that will affect all drayage trucks operating at specific California's ports and intermodal railyards:

- Phase 1: By December 31, 2009, all pre-1994 model year (MY) engines are to be retired or replaced with 1994 and newer MY engines. Furthermore, all drayage trucks with 1994 – 2003 MY engines are required to achieve an 85 percent PM emission reduction through the use of an ARB-approved level 3 verified diesel emission control strategy (VDECS).
- Phase 2: By December 31, 2013, all trucks would be required to further reduce emissions to meet the 2007 MY California or federal heavy-duty diesel-fueled on-road emission standards.

All drayage trucks involved in work at affected ports and railyards would be registered in a drayage truck registry (DTR) by late 2009 and would be required to affix a compliance label to the driver's side door.

1.6.5 California Air Resources Board (CARB) Mobile Cargo Handling Equipment Regulation

Mobile cargo handling equipment refers to any motorized vehicle used to handle cargo delivered by ship, train, or truck. The type of equipment used depends on the type of cargo handled or the type of activity. Equipment that handles cargo containers includes yard trucks, top handlers, side handlers, reach stackers, forklifts, and rubber-tired gantry cranes. Equipment that is used to handle bulk cargo includes dozers, excavators, loaders, mobile cranes, railcar movers, and sweepers. Forklifts, aerial lifts, mobile cranes, and sweepers used in maintenance operations at ports and intermodal railyards are also considered cargo handling equipment. There are approximately 3,700 pieces of cargo handling equipment at California's ports and intermodal railyards.

The regulation, effective December 6, 2006, establishes best available control technology (BACT) for new and in-use cargo handling equipment that operate at California's ports and intermodal railyards. Below is a list of the general requirements.

New Yard Trucks

For DMV-registered on-road vehicles, the new equipment must meet the certified on-road engine standards for the model year in which the engine is purchased. New yard trucks that are not DMV-registered onroad vehicles must meet the 2007 or later certified on-road diesel engine standards or the final Tier 4 off-road diesel engine standards.

New Cargo Handling Equipment (Non-Yard Trucks)

Non-yard truck equipment must meet the 2007 or later certified on-road diesel engine standards or Tier 4 off-road diesel engine standards. If that is not available, the engines must meet the highest level certified off-road diesel engine standards and apply a verified diesel emission control strategy (VDECS) within one year (or within 6 months of the VDECS becoming available).

In-Use Yard Trucks

The regulation requires in-use yard trucks to meet BACT performance standards primarily through accelerated turnover of older yard trucks to those equipped with cleaner, on-road engines (2007 model year or later). Owners or operators who have installed a VDECS prior to the end of 2006, or who are already using certified on-road engines, are given additional time to comply. In addition, compliance is phased in for owners and operators who have more than three yard trucks in their fleet.

In-Use Cargo Handling Equipment (Non-Yard Trucks)

Non-yard truck equipment are also required to meet BACT, which, for them, is a menu of options that includes replacement to cleaner on-road or off-road engines and/or the use of retrofits. For owners or operators that elect to use retrofits, a second compliance step, which would require replacement to Tier 4 off-road engines or installation of a Level 3 VDECS (85 percent diesel PM reduction), may be required, depending on the equipment category and level of VDECS applied.

Compliance Schedule

Compliance with the regulation will be phased in beginning in 2007 based on the age of the engine, whether or not it is equipped with VDECS, and the size of the fleets. The regulation includes provisions that would allow operators to delay compliance with the in-use performance standards if an engine is within one year of retirement, if no VDECS are available for non-yard truck equipment, if an experimental diesel PM emission control strategy is used for non-yard truck equipment, or if there are delivery delays.

1.6.6 Memoranda of Understanding (MOU) Between California Air Resources Board (CARB), Union Pacific Railroad (UP) and BNSF Railway (BNSF)

1998 MOU

CARB, the California railroads, and the USEPA signed an MOU in July 1998 that required a locomotive fleet average in the SCAB equivalent to USEPA's Tier 2 locomotive standard by 2010. The 1998 has a fleet-wide average requirement, in which each railroad must demonstrate that it has not exceeded its Fleet Average Target for the preceding year, beginning in 2010. Under the MOU, early reductions are bankable and the two railroads are making use of this feature by building up emission credits toward the 2010 fleet wide average. Because of the banking and credit provisions of the MOU, there is no guarantee that the railroads will operate all locomotives meeting the Tier 2 emission standards. The MOU addressed NOx emissions from locomotives. Under the MOU, NOx levels from locomotives will be reduced by 67 percent.

2005 Agreement

On June 30, 2005, the California Air Resources Board (CARB) entered into a pollution reduction agreement with Union Pacific Railroad (UP) and BNSF Railway (BNSF). The railroads committed to implementing numerous actions to reduce pollutant emissions from rail operations throughout the state. In addition, an HRA completed by CARB evaluated the railroad-prepared designated railyard emissions inventories that CARB used for CARB railyard-specific health risk assessments for diesel particulate matter.

When fully implemented, the agreement is expected to achieve a 20 percent reduction in locomotive diesel particulate matter emissions near railyards. To do this, BNSF has:

- Phased out non-essential idling and installed idling reduction devices on California-based locomotives, resulting in a reduction in idling by a larger class of locomotives and at an earlier date than required by regulation.
- Identified and expeditiously repaired locomotives with excessive smoke and ensured that at least 99 percent of the locomotives operating in California passed smoke inspections.
- Maximized the use of ultra low sulfur (15 parts per million) diesel fuel by January 1, 2007, for locomotives fueled in California, six years before such fuel is required by regulation.

The Southern California Major Class I railyards covered in the agreement include BNSF's Hobart Yard. As required by the Agreement, BNSF has submitted Idling, Visible Emission Reduction Plan, Review of Impacts of Air Emissions, and Assessment of Toxic Air Contaminants, among other elements, for the designated yards. CARB inspects the railyards, including Hobart, yearly for compliance.

1.6.7 Other Environmental Programs -- Air Quality

- **Off-Peak Program**. The Off-Peak Program, managed by PierPASS, extends cargo terminal operations. PierPASS 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 on-dock rail yards at the Port of Los Angeles and five on-dock facilities at the Port of Long Beach significantly reduce the number of short-distance truck trips (the trips that normally would convey containers to and from offsite rail yards). Combined, these intermodal facilities eliminate an estimated 1.4 million truck trips per year, and the emissions and traffic congestion that go along with them. As participants in the Alameda Corridor project, the Ports and the railroads are using the corridor to transport cargo through downtown rail yards for transport to destinations east of California at 10 to 15 miles per hour faster than traveling city streets and/or interstate highways, further promoting 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.
- **Near-Dock Rail**. The increasing volumes of intermodal cargo expected to come through the San Pedro Bay ports in the future and the limitations of existing and planned rail facilities serving the ports together establish the need for an additional near-dock intermodal facility. Near-dock rail facilities are able to provide needed intermodal capacity, while greatly reducing truck impacts, compared to more remote off-dock facilities. In 2004, as described in section 1.1.1, the Port of Los Angeles Board of Harbor Commissioners adopted an Intermodal Rail Policy (discussed in Parsons, 2006) to guide the development of additional rail facilities, to reduce the number and length of truck trips in the Port area, and to achieve reductions in rail-related air emissions. The Port Resolution:
    - Provides for on-dock and comparable near-dock intermodal facilities for shippers, carriers, terminal operators, and Class I Railroads;
    - Ensures all Port customers are utilizing on-dock intermodal rail to the fullest extent feasibly possible;
    - Ensures sufficient rail capacity is maintained to increase rail usage, meet future demand, and adapt to evolving intermodal rail operations;
    - Provides the opportunity to direct local movements of cargo from truck to rail;
    - Encourages Port customers to pool container cargo and share on-dock and-near dock rail facilities to the fullest extent feasible.

In addition, in its resolution of February 9, 2005 (Resolution Number 339), the Board found that there is a strategic benefit to the Port to providing near-dock intermodal container transfer facilities for both Class I railroads serving the Port.

1.6.8 Port of Los Angeles Leasing Policy

The proposed Project is to construct an intermodal railyard on LAHD land. On February 1, 2006, the Board of Harbor Commissioners approved a comprehensive Leasing Policy for the Port of Los Angeles that not only establishes a formalized, transparent process for tenant selection, but also includes environmental requirements as a provision in Port leases. In January of 2008, the Board approved a First Amendment to Port of Los Angeles Leasing Policy incorporating additional environmental requirements.

Specific emission-reducing provisions contained in the Leasing Policy are:

- Use of clean "low emission" trucks and locomotives to service the terminal
- Cargo Handling Equipment purchases must meet one of the following standards:
- Cleanest available nitrogen oxide (NOx) alternative-fueled engine, meeting 0.01 g/bhp-hr PM, or
- Cleanest available NOx diesel-fueled engine, meeting 0.01 g/bhp-hr PM, or, if 0.01 g/bhp-hr PM engines are unavailable,
- Cleanest available engine (either fuel type) and install cleanest Verified Diesel Emissions Controls (VDEC) available.

1.6.9 Port of Los Angeles Sustainable Construction Guidelines

The Port of Los Angeles Sustainable Construction Guidelines was adopted in February 2008. The guidelines will be used to establish air emission criteria for inclusion in bid specifications for construction. The guidelines will 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. These guidelines will be made a part of all construction specifications advertised for bids.

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

- On-road heavy-duty trucks shall comply with EPA 2004 on-road emission standards for PM_{10} and NOx and shall be equipped with a CARB-verified Level 3 device. Emission standards will be raised to EPA 2007 on-road emission standards for PM_{10} and NOx by January 1, 2012.
- Construction equipment (excluding on-road trucks, derrick barges, and harbor craft) shall meet Tier 2 emission off-road standards. The requirement will be raised to Tier 3 by January 1, 2012, and to Tier 4 by January 1, 2015. In addition, construction equipment shall be retrofitted with a CARB-certified Level 3 diesel emissions control device.
- Comply with SCAQMD Rule 403 regarding fugitive dust, and other fugitive dust control measures.
- 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 Availability of the Draft EIR

The Draft EIR has been distributed directly to numerous agencies, organizations, and interested groups and persons for comment during the 90-day formal public review period in accordance with CEQA Guidelines §15087 and §15105. During the public review period, the Draft EIR is available for review at the following locations:

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

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

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

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

Carson Regional Library
151 E. Carson St.
Carson, CA 90745

Long Beach Public Library
101 Pacific Avenue
Long Beach, CA 90822

Bret Harte Neighborhood Library
1595 W. Willow Street
Long Beach CA 90810

In addition to printed copies of the draft EIR, electronic versions are also 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. The draft EIR is available in its entirety on the LAHD web site at: http://www.portoflosangeles.org/. Members of the public can also request a CD containing the draft EIR by accessing the LAHD website.