1.0 PURPOSE AND NEED

1.1 INTRODUCTION

This chapter describes the purpose of and need for conventional rail improvements on California's existing Coast Corridor rail alignment, with a focus on the portion between Salinas and San Luis Obispo intended to enable expanded passenger rail service on the entire Coast Corridor (from San Francisco to Los Angeles).

Figure 1-1 shows the entire length of the 470-mile-long Coast Corridor rail line.

The Coast Corridor rail line consists of three segments:

- Northern Segment - 77 miles from San Francisco to Gilroy, also known as the Caltrain Corridor
- Middle Segment - 171 miles from Gilroy to San Luis Obispo - inclusive of the entirety of the project area considered in this document (Salinas - San Luis Obispo)
- Southern Segment - 222 miles from San Luis Obispo to Los Angeles. Corresponds to the northern half of the Pacific Surfliner Corridor, also known as the LOSSAN Corridor[1]

The entire Coast Corridor spans eight counties: Los Angeles, Ventura, Santa Barbara, San Luis Obispo, San Benito, Monterey, Santa Clara, San Mateo, and San Francisco.

The Coast Corridor serves as a transportation link between Los Angeles and the San Francisco Bay Area. This corridor is also served by air and highway systems. In terms of seat capacity, the most heavily traveled air route in the US connects Los Angeles International Airport and San Francisco International Airport. Additional

[1] The LOSSAN Corridor is a 351 mile long intercity and commuter rail corridor, stretching from San Diego in the south, up to San Luis Obispo County. Currently a programmatic EIS/EIR is underway for LOSSAN North (the segment of the LOSSAN Corridor between Los Angeles and San Luis Obispo.

heavily traveled air routes spanning the corridor serve the Oakland, San José, Burbank and Long Beach airports.[2]

Interstate 5 (I-5) in the Central Valley – east of the corridor – serves as the main highway transportation system connecting the two dominant metropolitan regions at either end of the corridor. US Highway 101 (US 101) is the secondary north-south connector route between the Bay Area and Los Angeles regions. US Highway 1 (US 1) serves local access and recreational travel through Monterey and San Luis Obispo Counties (particularly between Carmel on the north and Morro Bay to the south). In addition to these north-south routes, several state routes provide east-west access from the US 101 corridor to the Pacific Coast and or Central Valley (State Routes 68, 46, 41 and 198).

While travel between the ends of the Coast Corridor today is facilitated predominantly by air and automobile, rail plays an increasingly important role in corridor mobility. Current passenger rail services in the corridor include:

- *Pacific Surfliner* intercity service between San Luis Obispo and San Diego, operated by Amtrak and funded by Caltrans
- *Coast Starlight* long distance service between Seattle and Los Angeles, operated and funded by Amtrak
- *Capitol Corridor* intercity service between Placer and Santa Clara Counties, for which a planned service extension to Salinas (by 2019) has completed environmental review and is currently in design/engineering work[3]
- *Metrolink Ventura County Line* commuter rail service, sharing the same route as Pacific Surfliner trains between Los Angeles Union Station and Oxnard, with additional service to East Ventura Station in Ventura
- *Caltrain* commuter rail service between San Francisco and Gilroy

California High-Speed Rail (CA HSR) represents an emerging passenger rail service. By 2029, the system will run from San Francisco to the Los Angeles basin in under

[2] Additional smaller airports exist along the Corridor; those listed are the 4 next largest regional airports.

[3] The Transportation Agency for Monterey County (TAMC) certified an EIR for the Salinas Rail Extension project in 2006 and subsequently adopted a CEQA Addendum for the proposed extension of commuter rail service from San Jose to Salinas. These environmental documents identify proposed physical components ~~improvements~~ associated with the planned rail extension. Such components ~~improvements~~ would occur between San Jose and Salinas. At present, no NEPA documentation has been completed for this project, but would be required if federal funding were proposed to implement any of the proposed improvements.

three hours at speeds capable of over 200 miles per hour. The system will eventually extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations. While the bulk of the CA HSR alignment will traverse the San Joaquin Valley, the Coast Corridor as a whole will provide several connection points to the proposed high speed rail system. None of these potential Coast Corridor/CA HSR connection points are in the Salinas to San Luis Obispo corridor that is the subject of this Program EIS/EIR. To the north, the closest major connection points would be Diridon Station in San José and the Gilroy Caltrain Station. To the south, the closest connection points would be Los Angeles Union Station and Burbank Airport.

Corridor freight rail services are operated by Union Pacific Railroad (UPRR), providing service that roughly parallels the Interstate 5/US 101 corridors between the Bay Area and Los Angeles. Currently, the Coast Corridor carries low levels of freight traffic and is primarily considered a "secondary" or "relief" line to the much busier Central Valley line to the east. The Coast Corridor does not see any containerized traffic, but does carry bulk commodities such as fertilizer, lumber, aggregate, fuel, and coal.

In addition, there is some activity related to repositioning empty rail cars from the Port of Oakland to Southern California to balance the inbound/outbound disparity of goods traffic. Coast Corridor freight rail service provides access to Port Hueneme in Ventura County, the only deep-water port between the adjacent Ports of Long Beach/Los Angeles and Oakland. Port-related cargo includes a mix of agricultural products and bulk commodities.

As of ~~2014~~ 2015, San Luis Obispo County is preparing the Final EIR for ~~the considering~~ a proposal to extend a rail spur to the Phillips 66 Nipomo Mesa oil refinery in unincorporated San Luis Obispo County so that crude oil could be delivered to the refinery via rail. The refinery is approximately 20 miles south of the City of San Luis Obispo and, thus, outside the corridor considered here. Up to 5 trains of 80 cars per week are anticipated. Trains are proposed to arrive at the refinery from points north (including Utah, North Dakota, and Canada) via the Coast Corridor.

1.2 PURPOSE AND NEED FOR IMPROVED INTERCITY RAIL TRANSPORTATION BETWEEN SALINAS AND SAN LUIS OBISPO

1.2.1 PURPOSE

The purpose of the proposed rail improvements to the Coast Corridor is to enhance safety and develop a faster and more reliable passenger and freight rail system that provides added capacity in response to increased travel demand between Los Angeles and San Francisco and the intermediate cities along the US 101 corridor. The existing capacity of the Corridor's transportation system is insufficient to meet existing and future demand, and the current and projected future system congestion will continue to result in reduced reliability, slower travel speeds, increased travel times, and deteriorated air quality. In addition to providing new direct passenger rail service, another purpose of the proposed rail improvements is to foster improved rail connectivity to the proposed CA HSR system.

The greater Coast Corridor region from San Francisco to Los Angeles faces significant mobility challenges today, further detailed below. These challenges apply to the portion of the Coast Corridor between Salinas and San Luis Obispo and are likely to continue in the future as continued growth in population, employment, and tourism activity is expected to generate increased travel demand. By 2040, statewide population is expected to grow substantially, further straining the existing transportation network. An effective rail system is necessary to meet the future mobility needs of residents, businesses, and visitors.

In light of the transportation challenges listed above, Caltrans Division of Rail (DOR) and the Coast Rail Coordinating Council, a partnership of local transportation planning agencies, have identified a number of potential rail improvements to the Coast Corridor that are individually and collectively intended to improve mobility and reliability in this congested part of the state's rail system. This slate of potential improvements includes individual projects that would contribute, individually and/or collectively, to creating a more reliable, safe, competitive, and attractive intercity travel option.

The proposed increase in intercity passenger rail service would also allow flexibility for passengers who may prefer other means of transportation over automobiles. Such an increase in service would provide additional transportation system capacity that could relieve some of the projected near- and long-term demand on the highway system, potentially slowing the need to further expand highways and

airports in this portion of the corridor, or reduce the scale of those expansions, including their associated cost and impacts on communities and the environment. Rail improvements would augment the highway system, creating an interconnected, multimodal solution, allowing for better mobility throughout the corridor. Improved rail infrastructure would contribute to the economic viability of the Coast Corridor and provide connectivity with local transit systems.

An investment in rail improvements to the Coast Corridor would complement and support other transportation systems that currently or are planned to interface with the rail service. Like the Coast Corridor, the Pacific Surfliner Corridor and Capitol Corridor experience similar challenges regarding travel demand growth, congestion, and capacity constraints. Because many trips span the service of the Coast, Pacific Surfliner, and Capitol Corridors, improvements and upgrades would indirectly benefit all corridors. The Coast Corridor ~~will~~ would connect to the future CA HSR system at Burbank, Los Angeles, Gilroy, and San José, offering a feeder service to passengers originating in counties without proposed high-speed rail stations (such as Santa Cruz, Monterey, San Luis Obispo, Santa Barbara and Ventura). New communities ~~will~~ would gain access to rail services with the upgrades of existing stations and construction of new stations that are not currently served. In all, many communities between San Francisco and Los Angeles ~~will~~ would see improved transportation access.

1.2.2 NEED

The need for the proposed action stems from a number of challenges facing transportation along the Coast Corridor, including but not limited to the following:

- *Constrained Travel Options* – While the Coast Corridor is served by a transportation system that includes air, highway, and rail modes, system access and capacity is insufficient to meet future travel demand. Air access is limited for many residents because major airports are located at a substantial distance from the Salinas to San Luis Obispo portion of the corridor.

  This portion of the corridor is served by a single major highway – US 101 – which experiences frequent congestion and travel delays, particularly in the San Francisco Bay Area and between Santa Barbara and Los Angeles. Both highway and rail operations in the corridor can be unduly affected by weather conditions in distant locations. For example, winter closures of I-5 at the Grapevine/Tejon Pass Area can divert auto traffic to US 101 because of its lower elevation passes which makes it much less subject to closure. Fires or accidents along the I-5 corridor can also result in substantial diversions to US 101.

Amtrak offers a single daily Coast Starlight passenger service along the corridor. Trains are often delayed due to the rail system operating beyond its design capacity, which is primarily single-tracked between Salinas and San Luis Obispo with few sidings of the length necessary to allow passenger trains consistent priority over the typically much longer freight trains.

- *Anticipated Population Growth* – The entire Coast Corridor region (San Francisco to Los Angeles) is home to over 15 million people. By 2040, this population is projected to grow by approximately 32 percent –an additional five million people.[4] While most of the existing population and projected growth is along the four counties outside the current project's study area (San Francisco, San Mateo, Santa Clara, and Los Angeles), the four "inner" counties (Monterey, San Luis Obispo, Santa Barbara, and Ventura) serve a population of about two million people, projected to grow by 36 percent by the year 2040.
- *Significant Highway Congestion* – While travel by automobile is expected to meet the majority of future travel demand, anticipated increases in automobile use will result in worsening of existing congestion. Congestion is particularly acute within the corridor's urban areas and will worsen, making travel times unreliable.
- *Constrained Rail System Capacity* – The existing Coast Starlight service is often fully booked during peak travel periods. Current passenger service is further constrained by a largely single-track railroad with few sidings of the length necessary to accommodate the longer freight trains. Consequently, passenger trains can experience substantial delays which would only worsen in the event of higher levels of freight traffic.
- *Aging Rail Infrastructure* – Investment in corridor rail service has not kept pace with population and travel demand growth. Particularly within the Salinas to San Luis Obispo portion of the corridor, many tracks, signals, and bridges have not been upgraded or improved in decades – and in some cases are over 100 years old. Aging infrastructure in need of maintenance or replacement can result in a decrease in operating safety and can impede trains from operating at top speeds. Aging infrastructure if not properly maintained can, therefore, translate to longer travel times and decrease the attractiveness of rail as a transportation option.

[4] Caltrans Division of Rail. 2013b, p. 2-5

- *Safety* –Although rail travel is one of the safest modes of transportation in the nation (particularly relative to automobile travel)~~.~~ Rail traffic congestion and aging infrastructure in poor condition can be contributing factors in accidents. According to data compiled by Federal Railroad Administration (FRA), for fiscal year 2013, 34 percent of all train accidents nationwide were related to signal or track failures. Another 39 percent of all accidents during that same time period were related to human factors.[5] And according to data compiled by FRA's Office of Safety Analysis, a substantial number of accidents between 2005 and 2014 in Monterey and San Luis Obispo Counties were related to track conditions (including derailments) and human factors (which relates to older signaling systems). Given the age and condition of the Coast Corridor infrastructure, whose signaling system is heavily dependent on human factors, there is substantial potential for accidents along this single-tracked corridor. Whether or not any of the ~~Build~~ Preferred Alternative components ~~improvements~~ move forward, corridor safety is expected to be enhanced by the implementation of Positive Train Control (PTC) by December 2015.[6] This analysis assumes that given requirements set forth in the Rail Safety Improvement Act, the railroad owner (UPRR) will install and primarily fund the installation of PTC, with Amtrak sharing expenses for existing service.
- *Need to reduce Air Pollutant Emissions from Mobile Sources* – Existing air quality in most coastal portions of California is considered to be poor to deteriorating. The affected air basins are in non-attainment with state standards for ozone and respirable particulate matter (PM_{10}), both of which are heavily linked to mobile sources (cars and trucks). Reducing vehicle miles traveled (VMT) would have substantial benefits in reducing air pollutant emission and improving air quality in the region. Increasing rail travel capacity could reduce VMT and air pollutant emissions by shifting automobile travel to a more environmentally efficient mode.[7] By fostering connectivity to the proposed CA HSR Project, rail improvements for the Coast Corridor will further help expand travel capacity in a more environmentally sensitive manner than via roadway expansion or "short-hop" air flights.

[5] FRA, 2014, p. 2.

[6] PTC systems are integrated command, control, communications, and information systems for controlling train movements with safety, security, precision, and efficiency.

[7] FRA 2010.

1.3 ANTICIPATED ENVIRONMENTAL TIERING

The San Luis Obispo Council of Governments (SLOCOG) and FRA have mutually commenced this environmental review process to comply with federal and state laws, in particular the National Environmental Policy Act of 1969 (NEPA) (42 USC § 432, et seq.) and the California Environmental Quality Act (CEQA) (California Public Resources Code § 21000, et seq.).

NEPA requires federal agencies to prepare an environmental impact statement (EIS) for proposed actions that have the potential to cause significant adverse environmental impacts. Because of possible FRA actions regarding potential rail system components ~~improvements~~, FRA is the lead federal agency, working with SLOCOG as the lead state agency, for the environmental review required by NEPA and related statutes. FRA has further determined that the preparation of a program-level ~~(Tier 1)~~ EIS for the proposed rail components ~~improvements~~ is the appropriate NEPA document because of the comprehensive nature and scope of the corridor improvements proposed to date and the conceptual stage of planning and decision-making. Any future decisions related to advancing and ultimately constructing the proposed rail components ~~improvements~~ may constitute a federal action if federal funding or other federal permits are required and may thus require additional project-level environmental review under NEPA. Other federal agencies in addition to FRA may also rely on these project-level environmental reviews to support future decision making. In preparing this environmental document, FRA ~~has~~ coordinated with the US Environmental Protection Agency (EPA), US Army Corps of Engineers (USACE), the US Army, the US Fish and Wildlife Service (USFWS), and the United States Forest Service (USFS).

The proposed rail corridor components ~~improvements~~ are also subject to environmental review under CEQA. SLOCOG is both the project sponsor and the lead agency for purposes of CEQA compliance. SLOCOG has identified the Caltrans Division of Rail and Transportation Agency for Monterey County as key responsible agencies. SLOCOG determined that a program environmental impact report (EIR) would be the appropriate CEQA document for this project at this conceptual stage of planning and decision-making.

No permits will be sought in this phase of environmental review. ~~If the Build Alternative is selected at the conclusion of the Program EIS/EIR process, one or more of the physical improvements may be carried forward for detailed design and, if necessary, any project level review and permits will be sought at that time.~~ If and when any of the physical components comprising the Preferred Alternative are carried forward for detailed design and project-level environmental review, permits would be sought at that time.

This document is being prepared as a combined Program EIS/EIR for compliance with both NEPA and CEQA. The Program EIS/EIR will enable public agencies to evaluate the broad environmental effects of the proposed rail components ~~improvements~~, evaluate the components ~~improvements~~ against the No Build Alternative, and determine which elements of the Build Alternative, if any, to carry forward.

The required contents of a Program EIS/EIR are the same as those of a project-level document. However, the level of detail provided in the two types of documents is different. This program level document evaluated the potential environmental effects of the alternatives based on a general design of the proposed program. Future project-level environmental reviews will be based on detailed and site-specific engineering and design data.

A Program EIS/EIR is an informational document intended to analyze and to disclose to the public and to public decision-makers the environmental effects and benefits of a proposed program and its alternatives. The preparation, circulation, and review of a draft Program EIS/EIR provides for the evaluation of alternatives, including a No Build Alternative; the assessment of all significant/adverse environmental impacts; identification of the appropriate measures to mitigate potential impacts; and the opportunity for public input and comments to help inform the decision-making process.

This program-level document has been prepared to allow the lead agencies to consider a future program of improvements to the Salinas to San Luis Obispo portion of the Coast Corridor and to provide information to decide between the No Build Alternative and the Build Alternative. The Build Alternative may include some or all of the service and physical components ~~improvements~~ assessed in this environmental document. As full funding for all components ~~improvements~~ is not available at present, the most likely scenario is that proposed components ~~improvements~~ would be constructed in phases. Exact phasing is contingent on what components ~~improvements~~ are prioritized for detailed, construction-level design, funding availability, and further environmental review. As described in Chapter 3 of this document, this would include site-specific studies ~~as well as~~ and agency coordination, specific measures to avoid or minimize impacts, and an approved mitigation plan.

FRA has authority to regulate the safety of railroads, including the ~~proposed~~ project, under 49 United States Code (USC) 20101 et seq. FRA also manages certain financial assistance programs for rail capital investments, for which this project may be eligible.

1.4 RELATIONSHIP TO CALIFORNIA HIGH-SPEED RAIL

The California High-Speed Rail Authority (CHSRA), established in 1996, proposes to implement high-speed rail service that would run from the San Diego, Orange County, and Los Angeles metropolitan areas north through California's Central Valley to the San Francisco Bay Area and Sacramento regions. FRA and the CHSRA have completed two Programmatic EIS/EIRs and project-level EIS/EIRs are underway for all segments of the proposed California High-Speed service, two of which has been completed and certified (Merced to Fresno and Fresno to Bakersfield).

In addition, the CHSRA applied for and was selected to receive funding under FRA's High-Speed Intercity Passenger Rail Program. The CHSRA and FRA have entered into a cooperative agreement and will complete the necessary project-level environmental analysis and preliminary engineering for all segments, as well as for the final design and construction of an operable segment in California's Central Valley. These funds are being made available through the American Recovery and Reinvestment Act (ARRA) and the Department of Transportation and Housing and Urban Development Appropriations Act of 2010.

As shown in **Figure 1-2,** the proposed high-speed rail system will have multiple connections to the Coast Corridor, including major connection points at Los Angeles Union Station and Burbank Airport to the south and San Jose Diridon and San Francisco to the north (all of which are outside the Salinas to San Luis Obispo segment being studied here). However, these connection points, as well as a secondary connection in Gilroy, will enable travelers originating from the Central Coast region (Monterey, San Luis Obispo, Santa Barbara, and Ventura counties) to gain rail access to the statewide high-speed rail system. The Coast Corridor can serve as a feeder to the high-speed rail system, particularly if the Coast Corridor sees increased passenger service.

1.5 ISSUES RAISED DURING SCOPING

FRA initiated the formal scoping process by publishing a Notice of Intent (NOI) to prepare a Program EIS/EIR in the Federal Register on August 17, 2012.

Table 1-1 summarizes when the two public scoping meetings were held as part of the public scoping process.

Table 1-1 Public Scoping Meetings

Salinas	San Luis Obispo
Transportation Agency for Monterey County	San Luis Obispo City/County Library
55-B Plaza Circle	995 Palm Street
August 28, 2012	August 29, 2012
3:30 p.m. – 6:00 p.m.	3:30 p.m. – 6:00 p.m

These meetings provided an opportunity for the public and agencies to comment on the scope of environmental topics ~~that will be~~ analyzed in the Draft Program EIS/EIR. Approximately 25 members of the public attended the scoping meetings.

Appendix A includes all comments received during scoping. Issues raised included questions about the viability of the project in terms of funding, concerns about the current use of some existing sidings as long-term "parking" or storage for train cars, anticipated operating characteristics and costs of expanded passenger service, and the range of physical components ~~improvements~~ to be contemplated in the environmental document.

In addition to the formal scoping meetings, SLOCOG conducted outreach to potentially affected agencies and organizations in preparing this document. **Chapter 5.0, Comments and Coordination**, identifies agencies consulted.

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Coast Corridor **Figure 1-1**

Source: California State Rail Plan, 2013

State Rail System

Figure 1-2

Source: CAlifornia State Rail Plan, 2013