3.1 TRAFFIC AND TRAVEL

This section describes existing traffic and circulation conditions in the project corridor and identifies the potential transportation impacts related to the alternatives.

3.1.1 REGULATORY REQUIREMENTS

Federal

Federal Railroad Administration

The Federal Railroad Administration (FRA) was created by the Department of Transportation Act of 1966, and is concerned with intermodal transportation. FRA issues, implements, and enforces safety regulations, selects investments to develop the rail network across the country, and conducts research and technology development.

The Rail Passenger Service Act of 1970 relieved private rail carriers of their obligation to provide passenger rail service and led to the creation of Amtrak in 1971.

The Passenger Rail Investment and Improvement Act of 2008 (PRIIA) created new railroad investment programs and reauthorized Amtrak for five years.

The FRA's Office of Railroad Policy and Development provides financial assistance, quantitative analysis, environmental research, project reviews, research and development, technical assistance, and supports development of intercity passenger rail policy.

State

Caltrans Division of Rail

The Caltrans Division of Rail (DOR) manages and coordinates statewide intercity passenger rail service (Amtrak) that helps to improve the state's air quality and reduce highway congestion and fuel consumption. Caltrans contracts with the National Railroad Passenger Corporation (Amtrak) to provide daily operation and maintenance of Amtrak California service.

Local

Monterey County General Plan

The General Plan for Monterey County includes goals aimed at optimizing the use of the County's transportation facilities, achieving acceptable level of service for County roads and intersections, promoting viable transportation alternatives, and encouraging a rail system that offers efficient and economical transport of people and commodities.

City of Salinas General Plan

The Salinas General Plan contains goals related to providing and maintaining a circulation system that meets the current and future needs of the community, working with other local and regional agencies to develop regional transit and transportation systems, and promoting an efficient public transportation network.

City of Soledad General Plan

The Soledad General Plan outlines goals aimed at providing a safe and efficient circulation network to meet the present and future needs of the city, encouraging the use of alternate forms of transportation, and specifically calling for coordination with appropriate agencies to establish a train station in the city.

City of King (King City) General Plan

The city's General Plan contains goals and policies calling to provide an integrated transportation system that adequately serves residential, commercial, industrial, and recreational uses, as well as public facilities and agricultural properties. Goals also pertain to providing a public street and highway system that accommodates existing and projected traffic volumes within the city.

San Luis Obispo County General Plan

The San Luis Obispo County General Plan outlines goal and objectives related to transportation and circulation including integrating land use and transportation planning so that necessary transportation facilities and services can be provided to accommodate urban and rural development, coordinating the transportation system between different travel modes, and designing a transportation system that provides for safe travel within attainable and feasible economic and technical means.

City of El Paso de Robles (Paso Robles) General Plan

The Paso Robles General Plan contains goals and policies to establish a safe, balanced, efficient, and multimodal circulation system, focusing on the mobility of people, and preserving the city's small town character and quality of life, as well as to promote regional, interstate, and intrastate rail service.

City of San Luis Obispo General Plan

Transportation-related goals outlined in the San Luis Obispo General Plan include encouraging transit development, expansion, coordination, and aggressive marketing throughout San Luis Obispo County to serve a broader range of local and regional transportation needs including commuter service. Additionally, policies supporting increased availability of rail service for travel within the county, state, and among states are encouraged.

3.1.2 METHODS OF EVALUATION

The analysis herein was based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines and FRA's Environmental Procedures.

Construction-Period Effects

To assess potential road traffic and transportation environmental impacts, construction-related roadway traffic impacts resulting from implementation of the various improvements were analyzed qualitatively.

Effects on Rail Operations

To determine potential environmental impacts related to railway transportation and travel, ridership projections and operations modeling (RailOPS) from the Service Development Plan (SDP) were used.[1] The SDP modeled multiple scenarios for three planning horizon years: 2012 (Existing Year), 2020, and 2040. The modeling includes all rail activity in the Corridor, including freight, intercity passenger rail and commuter rail. For the year 2020, the SDP considered whether adding projected passenger and freight volumes and any improvements to the Year 2020 Base Case network could result in achievement of the on-time performance (OTP) goal of 87 percent for all passenger train services.

[1] Caltrans Division of Rail, 2013b.

Effects on Local Roadways

Roadway impacts resulting from operation of the various improvements and new service were qualitatively assessed. The analysis included a review of aerial mapping to determine if any new at-grade crossings would be created. Local traffic impacts resulting from new station areas were assessed qualitatively based on projected ridership and conditions of local roadways providing access to the stations.

3.1.3 AFFECTED ENVIRONMENT

Existing Freight Rail

Freight rail operations in California facilitate the State's participation in both domestic and international markets. The freight railroad system in California is an expansive network comprised of Class 1 railroads,[2] short line railroads, and switching yards and terminals covering over 5,000 miles across the State. Freight rail volume within the project area is relatively low as the Coast Corridor is considered a "secondary" or "relief" line to the busier Central Valley line to the east.

The Union Pacific Railroad (UPRR) owns the railroad and operates freight trains along the Coast Corridor. The 2013 Coast Corridor Service Development Plan (SDP) reports that 2 daily long-haul[3] freight trains run daily between Salinas and San Luis Obispo. Freight service in the Corridor does not follow a particular schedule, and service throughout the network is not uniform. Train length, railcar type, and number of locomotives vary depending on the type(s) of cargo in transit and distance to be traveled.

Outside the Salinas-San Luis Obispo portion being studied here, local freight trains also operate over shorter (less than 50 mile) segments of the Coast Corridor between Salinas and San Jose and between Oxnard and Los Angeles.[4,5]

[2] Class 1 railroads are regulated by the Surface Transportation Board and are subject to the Uniform System of Accounts (49CFR1201) and are defined as carriers with annual carrier operating revenues of $433.2 million or more (2011).

[3] Long-haul refers to freight trains traveling across the entire Corridor or a significant portion of it.

[4] County of San Luis Obispo, 2013, p. 4.12-8

[5] Refer to Section 3.16, Cumulative Impacts, for a discussion of future freight operations on the corridor.

Existing Passenger Rail

Amtrak operates the Coast Starlight passenger train service, which runs between Seattle and Los Angeles, and carried just over 454,000 passengers in 2012.[6] The Coast Starlight runs through the project area on the Coast Corridor. This long-haul passenger train is intended to serve the needs of interstate leisure/recreational travelers. With limited service and relatively few stops between the San Francisco Bay Area and Los Angeles, the Coast Starlight does not provide a widely practical service for intrastate commuters (refer to **Table 3.1-4** for a station arrival schedule).

As of 2014, the Coast Starlight provides one daily round trip between Seattle and Los Angeles. The Coast Starlight makes stops at three stations along the study corridor: Salinas, Paso Robles, and San Luis Obispo. **Table 3.1-1** shows year 2012 ridership (boardings and alightings) for each station, as well as average daily ridership. It should be noted that San Luis Obispo is the northern terminus of Amtrak's Pacific Surfliner route, which provides twice-daily plus weekend service to Los Angeles Union Station and continuing service to San Diego. Ridership reported in **Table 3.1-1** for San Luis Obispo thus comprises both Coast Starlight and Pacific Surfliner passengers.

Table 3.1-1 Coast Corridor Passenger Station Ridership, 2012

Station	Location	Annual Riders	Average Riders per Day
Salinas	11 Station Place	19,879	54.5
Paso Robles	800 Pine Street	11,728	32.1
San Luis Obispo[a]	1011 Railroad Avenue	108,439[a]	297.1[a]
Total		**140,046**	**383.7**

a Ridership includes Pacific Surfliner and Coast Starlight passengers

Source: Amtrak, 2012a

Track capacity constraints and shared-track conflicts exist between passenger and freight trains. According to the SDP, over 90 percent of the Corridor has only single-track operations resulting in constrained passing capabilities. As a result, long freight trains must be given priority over passenger trains when the two meet because most existing sidings are not long enough to accommodate the typically

[6] Amtrak, 2012b

longer length of freight trains.[7] Additionally, all trains, but particularly passenger trains, can "stack" at either end of single-track sections, resulting in delays and thus reducing the attractiveness of passenger rail as a travel mode choice.

Adjacent Roadways

The roadway network in the vicinity of the Corridor is comprised of a US highway, state routes, country routes, and local arterial streets. The majority of the Corridor between Salinas and San Luis Obispo runs parallel to US 101 and the Salinas River. A general overview of the regional transportation network for this section of the Corridor is provided below.

US 101

US Highway 101 (US 101) connects northwestern Washington, Oregon, and California, terminating in Los Angeles. In central California, US 101 is primarily oriented in a north-south direction, and transitions to a rough east-west orientation between Santa Barbara and Los Angeles. It is used most heavily in urban areas (between San Francisco and San Jose and between Santa Barbara and Los Angeles) where it serves as a primary travel corridor. US 101 also provides secondary highway access between San Francisco and Los Angeles (the primary route being Interstate 5). **Table 3.1-2** shows US 101 traffic count data at relevant locations between Salinas and San Luis Obispo.

US 101 roughly parallels the Coast Corridor from Salinas to the Cuesta Grade north of San Luis Obispo. In this area, the railroad tracks are as close as immediately adjacent to the US 101 right of way and as distant as 2-3 miles away. From Salinas to Soledad, US 101 is to the immediate west of the Coast Corridor. At Soledad, the tracks pass underneath US 101. From Soledad south to the Cuesta Grade, US 101 is to the east of the Coast Corridor. North of the peak of the Cuesta Grade, US 101 overpasses the Coast Corridor as the railroad transitions to the west of the freeway.

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

Table 3.1-2 Traffic and Vehicle Data for US 101 (2012)

Region	Location	Average Daily Traffic Volume	Peak Hour Vehicle Trips	Peak Month Vehicle Trips
Salinas	Junction Route 183	73,900	6,700	82,000
	East Market Street	73,900	6,700	82,000
Soledad	North Soledad	38,200	4,250	47,000
King City	First Street	16,500	1,600	20,200
Paso Robles	13th Street	33,300	3,300	36,000
Cuesta Grade	Junction Route 58 East, Santa Margarita	43,800	4,800	47,000
San Luis Obispo	California Blvd	47,400	4,700	52,000
	Junction Route 1 North	60,300	5,900	68,000
	Junction Route 227	67,100	6,700	72,000

Source: Caltrans Traffic Operations Division, 2013

Other Roads

Local circulation in the vicinity of the Coast Corridor is provided by several local roads that parallel and traverse the railway. In Monterey County these roads are primarily two lane rural roads. The railway also crosses several driveways, and other private and agricultural unpaved roads along this portion of the alignment. Within cities and near station areas much of the travel is provided by paved arterial public roadways. In San Luis Obispo County much of the circulation is provided by paved city streets as agricultural uses decline in this portion of the rail corridor. Near Santa Margarita, the railroad crosses under US 101 into the Cuesta Grade. Through the grade, the railroad diverges from US 101 and travels through several tunnels in the mountains before descending into the City of San Luis Obispo.

At-Grade Crossings

As noted in **Chapter 2.0**, **Alternatives,** the existing railroad crosses a number of existing local roads at-grade. As shown in the **Table 3.1-3**, the existing railway crosses public roads in about 36 locations along the Corridor between Salinas and San Luis Obispo. Through Monterey County there are 16 paved, public road at-grade crossings, and there are 20 in San Luis Obispo County. A spectrum of safety provisions are in place at these crossings, ranging from passive warning devices, active warning devices, crossbucks (x-shaped signs), pavement markings, and flashing lights and gates.

The railway also crosses several driveways, and other private and agricultural unpaved roads along the alignment. Safety provisions at these locations are typically minimal, consisting mainly of crossbucks and pavement markings, although many such private crossings are entirely unsigned.

Table 3.1-3 Summary of Existing Paved Public Road At-Grade Crossings

Monterey County	San Luis Obispo County
John Street, Salinas	14th Street, San Miguel
Harkins Road, Salinas	11th Street, San Miguel
Somavia Road, between Salinas and Chualar	Wellsona Road, Paso Robles
Main Street, Chualar	21st Street, Paso Robles
Foletta Road, Gonzales	16th Street, Paso Robles
Katherine Street, Gonzales	13th Street, Paso Robles
Gonzales River Road, Gonzales	12th Street, Paso Robles
Lanini Road, Gonzales	10th Street, Paso Robles
Elm Avenue/G16, Greenfield	Marquita Avenue, Templeton
Spreckels Road, King City	Phillips Road, Templeton
East San Antonio Drive, King City	Chico Road, Atascadero
Lyons Street, King City	Curbaril Avenue, Atascadero
East Pearl Street, King City	Halcon Road, Atascadero
Lonoak Road, King City	Santa Clara Road, Atascadero
Wildhorse Road, south of King City	Asuncion Road, Atascadero

Monterey County	San Luis Obispo County
Hare Canyon Road, south of Bradley	State Route 58/Estrada Avenue, Santa Margarita
	Encina Avenue, Santa Margarita
	Wilhelmina Avenue, Santa Margarita
	Foothill Boulevard, San Luis Obispo
	Marsh Street, San Luis Obispo

Source: Circlepoint, 2013

Station Areas

Salinas

The Salinas train station is located at 11 Station Place, 1 block north of Market Street. The station has a ticket office, enclosed waiting room, payphone, and restrooms. Currently, the station is served by Coast Starlight trains; in 2012, average annual passenger boardings and alightings in Salinas was 8,760, which translates to 54 average daily riders.[8] Amtrak Thruway buses provide connections at the Salinas train station to the Coast Starlight, Capitol Corridor and Pacific Surfliner Routes, as well as to other intermediate destinations.

Automobile access to the station is primarily through two major arterial roadways - West Market Street/State Route 183 (SR 183) and North Main Street/SR 183. West Market Street/SR 183 is a two-way four lane road that travels east/west through central Salinas. North Main Street is oriented in the north to south direction and starts in North Salinas. North Main Street intersects with US 101 at the north of the city and in the center as a four-lane road, then splits off into a couplet of two one-way two-lane roads under the railway until it intersects with West Market Street. From there, it splits into two one-way, three-lane arterials, northbound Monterey Street and southbound Salinas Street. Several two-lane residential collector streets terminate at West Market and North Main Streets. The Salinas General Plan (2002) reports that North Main Street operates at an unacceptable level of service (LOS)[9] E

[8] Amtrak, 2012a

[9] LOS is a qualitative measure of traffic levels. LOS A-C indicates free-flowing traffic with little delay, LOD D-E indicates congestion, and LOS F indicates gridlock and severe delay.

between Market Street and Bernal Drive, adjacent to the train station. The stop-controlled station approach at Station Place and West Market Street operates at LOS F during peak commute hours.[10] Salinas strives to maintain LOS D or better for all intersections and roadways.

Bus service is provided at the Salinas Transit Center, about a quarter mile south of the train station (110 Salinas Street). Access is primarily provided by Salinas Street, Lincoln Avenue, Central Avenue, and West Gabilan Street, all major arterial roadways. Salinas Street is a three-lane one-way street traveling in the north-south direction. Lincoln Avenue, Central Avenue, and West Gabilan Street are all two-lane local roadways. Monterey-Salinas Transit (MST) buses serve the transit center, operating a number of routes throughout Monterey County. Greyhound, located just one block south of the Salinas Transit Center at 19 West Gabilan Street, offers service to major cities including San Francisco, Santa Barbara, and Los Angeles.

New train stations are planned in Pajaro/Watsonville and Castroville to expand the Capitol Corridor passenger rail service 68 miles from San Jose to Salinas. The service is initially expected to offer 2 daily round trips during commute periods, increasing to up to six round trips per day as demand warrants. Projected annual ridership is approximately 150,000 passengers. Capital improvements would include a train layover facility, intermodal bus facility, commuter parking in Salinas, and new platforms and parking facilities at Pajaro/Watsonville and Castroville.[11]

Soledad

At present, there is no passenger train station in Soledad, although passenger (as well as freight) trains pass through the railroad alignment that traverses the city. The Build Alternative includes the construction of a new passenger station in Soledad. The City of Soledad has adopted a Downtown Specific Plan, which anticipates Coast Daylight passenger service and includes a conceptual plan for a train station to be located on Front Street, at the end of Main Street. Both Front Street and Main Street are two-lane major arterial roadways in Soledad. The traffic report prepared for the City of Soledad Downtown Specific Plan (2012) reported that the Front Street and Main Street intersection operates at LOS B.

[10] TAMC, 2006, p. 3

[11] TAMC, 2004

The station area comprises approximately 1.9 acres of the larger 200-acre Specific Plan area. The Specific Plan indicates that the station is to consist of a passenger boarding platform, ticket depot, bus pull outs, and pedestrian and bike connections. The station is envisioned as a multimodal facility, serving both train and bus passengers.[12]

King City

At present there is no passenger train station in King City, although both freight and passenger trains pass through the city on the existing alignment. The Build Alternative includes the construction of a new passenger station in King City. King City has adopted a conceptual plan for a new passenger station near the intersection of First Street and Broadway in downtown King City.

King City also included a conceptual plan for a multi-modal transportation center in two recent plans: the First Street Corridor Master Plan and the Historic Corridor Revitalization Plan. The conceptual plans included in the cited documents call for a 1,200-foot train platform alongside the existing tracks, a station building for ticket sales and restrooms, on-street bus pullout areas, and an off-street parking lot.[13] Primary entry to the station would be via First Street, a two-lane north-south arterial roadway that is also provides connection to US 101. The King City General Plan Final EIR reports that existing traffic operations for First Street and for the US 101/First Street Interchange are at acceptable levels.

Paso Robles

The Paso Robles Intermodal Station is located within the North County Transit Center near the south end of the city at 800 Pine Street. Access to the station is provided via 8th Street and Pine Street, both two lane local streets, which intersect at the station. 8th and 9th Streets are the primary linkages to Spring Street, a four lane arterial thoroughfare that is the main local north-south road on the west side of the city. Traffic volumes on these local streets are generally low. Intersections within the vicinity of the station, namely 13th Street at Paso Robles Street and Spring Street at 1st Street/Niblick Road, have been identified to operate at acceptable LOS levels.[14]

[12] City of Soledad, 2012,Chapter 3

[13] City of King, 2013, pp. 154-156

[14] City of El Paso de Robles, 2006

The station consists of an enclosed waiting and ticketing area, a platform, restroom facilities, and parking/waiting areas. Several buses serve the station, including Amtrak Thruway, Greyhound, Paso Express, San Luis Obispo Regional Transportation Authority (SLORTA), and MST. Station ridership (boarding or alighting from Coast Starlight trains) averages about 11,680 annual riders (about 32 riders per day).[15]

Currently there are 10 short-term and 10 long-term parking spacing onsite, as well as taxi service and car rental opportunities nearby. Bicycle access is available along local roadways in the area. Vine Street, located three blocks east of Spring Street, is designated a Class II bikeway, and several Class II and III bikeways are proposed that would lead directly to the existing Amtrak station.[16]

San Luis Obispo

The Amtrak Station in San Luis Obispo is located at 1011 Railroad Avenue, along the southeast edge of the downtown area. It has an enclosed waiting area, ticket office, self-service ticket kiosk, and restrooms. Access to the station is primarily via Santa Barbara Avenue/Osos Street, Leff Street, and/or Santa Rosa Street. Santa Rosa Street and Osos Street both terminate at Railroad Avenue, providing direct access to the station and associated parking areas. The station provides 20 short-term and 30 long-term parking spaces.[17] Santa Barbara Street/Osos Street operates at an acceptable LOS between Broad Street and Higuera Street.[18]

The station is served by San Luis Obispo Transit, Greyhound, and Amtrak Thruway buses. Car rental and taxi services are available within one mile of the station, as well as an extensive network of Class I, II, and III bicycle routes.

3.1.4 ENVIRONMENTAL CONSEQUENCES

The program of proposed physical improvements and service changes comprising the Build Alternative are specifically intended to expand passenger rail services from existing levels while accommodating existing and anticipated future freight operations. The components of the Build Alternative would have varying potential to result in significant environmental effects related to transportation and travel.

[15] Amtrak, 2012a

[16] City of El Paso de Robles, 2009, p. 24

[17] Amtrak, 2014

[18] City of San Luis Obispo , 2006,. p. 2-53

No Build Alternative

The No Build Alternative represents the continuation of existing operations and physical components, and assumes the perpetuation of existing freight and passenger service.

Rail Operations

Under the No Build Alternative, passenger rail operations between Salinas and San Luis Obispo would not change. Coast Starlight service would continue through the corridor. Pacific Surfliner service to Southern California would continue to originate/terminate in San Luis Obispo. Freight traffic would likely increase from 2 daily long-haul trains to 4 daily long-haul trains by year 2020, per the SDP.

The only physical improvement expected under the No Build Alternative would be the installation of positive train control (PTC) along the Corridor, which would provide increased safety for freight and passenger trains. Therefore, there would be no substantial change to rail operations in the Corridor.

Roadway Operations

Under the No Build Alternative, the existing number of passenger trains traveling the Corridor would increase from existing passenger service. No construction would occur to construct proposed physical improvements. Given that rail service would not be expanded under the No Build Alternative, traffic and transit activity near existing stations would not be expected to increase substantially. The No Build Alternative would not create any new at-grade crossings.

Build Alternative

Operations Modeling

Chapter 9 of the SDP sets forth an estimated timetable for proposed Coast Daylight Service at both existing and proposed stations in the Salinas to San Luis Obispo project corridor. **Table 3.1-4** below summarizes the existing Starlight and projected Daylight station arrival times for the year 2020 and **Table 3.1-5** summarizes the existing Starlight and Projected Daylight station arrival times for the year 2040.

Table 3.1-4 Existing and Projected Station Arrivals for 2020

Station	Southbound		Northbound	
	Starlight	**Daylight**	**Starlight**	**Daylight**
Salinas	11:48am	10:11am	6:47pm	3:31pm
Soledad	NA	10:52am	NA	3:05pm
King City	NA	11:17am	NA	2:40pm
Paso Robles	1:30pm	12:12pm	4:45pm	1:20pm
San Luis Obispo	3:20pm	1:49pm	3:43pm	12:07pm

Source: Caltrans Division of Rail, 2013b, Chapter 9.

Table 3.1-5 Existing and Projected Station Arrivals for 2040

Station	Southbound		Northbound	
	Starlight	**Daylight**	**Starlight**	**Daylight**
Salinas	11:48am	10:11am, 12:10am	6:17pm	3:31pm, 3:26am
Soledad	NA	10:52am, 12:51am	NA	3:05pm, 3:00am
King City	NA	11:17am, 1:11am	NA	2:40pm, 2:39am
Paso Robles	1:50pm	12:12pm, 2:06am	4:15pm	1:20pm, 1:35am
San Luis Obispo	3:20pm	1:49pm, 3:43am	3:13pm	12:07pm, 12:30am

Source: Caltrans Division of Rail, 2013b, Chapter 9.

As shown in the tables above, the proposed new Coast Daylight service would initially reach existing and proposed stations in the Salinas-San Luis Obispo corridor during midday hours - between 10 a.m. and 3:30 p.m., with at least a 90 minute gap between the arrival of southbound and northbound Coast Daylight trains at any single station. Year 2040 expanded service would continue to reach existing and proposed stations in the Salinas-San Luis Obispo corridor during midday hours - between 10 a.m. and 3:30 p.m., and would offer an additional service reaching existing and proposed stations in the Corridor between 12 a.m. and 4 a.m.

Rail Operations

Construction-Period Effects

The Build Alternative includes the potential future construction of one or more physical improvements to facilitate expanded passenger service without disruption of freight services.

Construction of any of the proposed physical improvements would have potential to temporarily disrupt freight and passenger rail; but such effects would be temporary. Some of the physical improvements are more substantial than others (such as track realignments, siding extensions, etc.) and could limit activity on the railway during the construction-period. These potential disruptions would be coordinated with the UPRR and Coast Starlight service to reduce service delays to the maximum extent feasible.

Operational Effects

The SDP attempted a "sensitivity" analysis by testing to see how future performance would be affected by the inclusion of a single improvement, namely the introduction of CTC in the 27-mile stretch of rail alignment from the Santa Margarita siding (milepost 229.6) to the McKay siding (milepost 202.3). Within this 27 mile portion of the alignment are four existing sidings. As many of the delays within the Corridor are attributable to subpar signaling infrastructure, implementing CTC between Santa Margarita and McKay, a single tracked region with four siding locations, could significantly improve on-time-performance (OTP).[19]

The model was run with Year 2020 freight and passenger rail service and the results indicated 100 percent OTP for both Coast Starlight and Coast Daylight at each new existing and proposed station on the Corridor.[20] The SDP determined that with this implementation of CTC (and none of other physical improvements comprising the Build Alternative) existing freight and existing passenger train movement would not be significantly affected by the introduction of expanded passenger service. Moreover, the SDP found that the installation of this "island" CTC would also substantially improve OTP throughout this region. It should be noted that in real-world operations, OTP levels could be somewhat lower due to random and unforeseeable events such as severe weather, and passenger emergencies.

[19] Rail OPS considers a train on-time to a station if it arrives within five minutes of its scheduled arrival time. OTP values in actual operations are likely to be lower than model results due to random real-world delays, such as passenger loading, medical emergencies, severe weather, etc. OTP values of less than 100 percent in model results are typically due to train interference effects only.

[20] Caltrans Division of Rail, 2013b, p. 9-19.

For the year 2040, the SDP considered the impact of projected passenger and freight volumes and any improvements to the Year 2040 Base Case network necessary to reach the OTP goal of 87 percent for all passenger train services operating in 2040. The Year 2040 Base Case model infrastructure is identical to the Year 2020 Base Case model as no necessary improvements were identified for the Year 2020 aside from the implementation of CTC between Santa Margarita and McKay in the Existing Year. The model was run with Year 2040 freight and passenger rail traffic and yielded 100 percent OTP for the Coast Starlight at each station on the Corridor. The Coast Daylight had 100 percent OTP for each station except San Jose, which yielded 96 percent OTP.[21] As in Year 2020, the level of traffic in Year 2040 results in sufficient network capacity to schedule trains such that there is little to no impact from train interference effects, resulting in high OTP levels. In real world operations, OTP levels may be slightly lower due to random and unforeseeable events.

Roadway Operations

Construction-Period Effects

Construction of the proposed improvements under the Build Alternative would result in temporary impacts to local roadways in the form of increased construction traffic (i.e. equipment, trucks, materials hauling, etc.). Construction of the new passenger stations and curve realignments would require more significant construction activities that could result in increased traffic impacts to surrounding roadways in the way of delays and detours. These construction-related impacts would vary by location however, given that the construction period of most improvements would be relatively short term, the impacts of construction on local roadways would not be considered significant.

Operational Effects

Existing and Proposed Stations

With the introduction of new Coast Daylight trains, ridership is anticipated to increase, which may result in increased traffic and transit demand near existing and proposed station areas. **Table 3.1-6** illustrates the estimated ridership between San Jose and San Luis Obispo for 2020 and 2040.[22]

[21] Caltrans Division of Rail, 2013b, pp. 9-26, 9-27

[22] These ridership forecasts have not been disaggregated to distinguish between passengers traveling south to San Luis Obispo and those traveling north through San Luis Obispo. Those passengers travelling from the south are included in these ridership forecasts.

Table 3.1-6 Existing, 2020, and 2040 Ridership Forecasts

Service	Existing Year 2012 (Seattle to Los Angeles)	Forecast Year 2020 (San Jose to San Luis Obispo)	Forecast Year 2040 (San Jose to San Luis Obispo)
Annual Ridership			
Coast Daylight	N/A	124,000	274,000
Coast Starlight	454,443[1]	105,000	150,000
SUBTOTAL	**454,443**	**229,000**	**424,000**

[1] Ridership forecasts are available for the segment from San Jose to San Luis Obispo, existing ridership for the Coast Starlight is only reported for the entirety of the Coast Corridor (Seattle to Los Angeles).

Source: Caltrans Division of Rail, 2013b, Chapter 8; Amtrak, 2012b.

Annual ridership for both the Coast Daylight and Coast Starlight trains is anticipated to increase through the year 2040. In turn, activity at existing stations would increase, and new activity would take place at the new stations. The number of passengers traveling through existing and new stations is unknown. However, based on the increase in ridership, traffic surrounding the stations would likely worsen, and the demand for public transit may increase. Such increases in activity at the new stations are anticipated to some degree in planning documents prepared by Soledad and King City, as discussed in greater detail below.

Both of the cities in which the Build Alternative contemplates new passenger stations have planned for these stations in their General and/or Specific Plans and accompanying environmental documents.

The traffic report prepared for the City of Soledad Downtown Specific Plan reported that all studied intersections currently operate at acceptable LOS. However, several all-way-stop-controlled intersections along Front Street would degrade to unacceptable LOS with buildout of the Specific Plan, which includes development and operation of the proposed passenger station. Installation of traffic signals at these intersections has been recommended to achieve acceptable LOS for year 2030 volumes.

The King City General Plan Final EIR reports acceptable LOS for First Street and for the US 101/First Street Interchange, and with buildout of the General Plan (which again includes development and operation of the new station), LOS is projected to remain at acceptable levels for both.

Ridership projections have not been developed for the proposed new stations. However, it is reasonable to assume that ridership at the new stations would be at or below the current ridership of Paso Robles station (about 10,000 riders per year), since Soledad and King City are smaller communities that are not considered major activity centers. There would be relatively few riders per average day (up to approximately 27 per day, using Paso Robles ridership estimates); given train schedules, most riders would be accessing the stations outside peak road traffic hours. The additional night service commencing in 2040 would pass through in middle of the night, resulting in negligible ridership and low traffic levels. Transit demand may increase around the new station areas; however, given the low levels of riders expected per day, no substantial effects are expected to result.

Given that the new stations are included in city planning documents and the off-peak timing of trains through Soledad and King City, the only potentially significant impact to local roadways would occur in the vicinity of the Soledad station at Front Street. However, the City of Soledad Downtown Specific Plan EIR describes mitigations for each intersection, including those along Front Street, which would, when enacted, achieve acceptable LOS.

As passenger rail activity increases, demand for parking near station areas could increase at both new and existing stations. However, current and planned parking at the existing and new stations will likely be adequate given the low ridership expected with the new service. Additionally, Soledad and King City are relatively small, somewhat isolated communities where abundant street parking is available within reasonable proximity of the rail stations. Projected growth in each community is relatively modest, such that on-street parking would likely remain abundant even with the implementation of new train stations.

Furthermore, parking adequacy itself is not necessarily a physical environmental impact, but inadequate parking can result in secondary physical effects, such as increased traffic congestion and/or air pollutant emissions resulting from the search for available parking. Coast Daylight service would reach existing and proposed stations in the Salinas-San Luis Obispo corridor during midday hours - between 10 a.m. and 3:30 p.m., and expanded service by 2040 would offer an additional service reaching existing and proposed stations in the Corridor between 12 a.m. and 4 a.m. Given that the new service would occur during off-peak hours, anticipated new or increased ridership is anticipated to be relatively low, and other parking is available near stations, it is unlikely that secondary environmental impacts from parking inadequacy would occur.

Existing stations in the Corridor, located in Salinas, Paso Robles, and San Luis Obispo, will experience additional service (two additional stops per day). As noted in **Table 3.1-1** above, existing passenger levels at these stations are generally low (the highest is in San Luis Obispo which averages about 300 passenger trips per day). It is reasonable to estimate that ridership may double by 2020 - based on the SDP ridership projections, and that there will be some increase in traffic that would result.[23] Under these projections, Coast Starlight ridership would not increase significantly; however, 124,000 additional trips north of San Luis Obispo are projected to occur. Given that these trips would be spread across the five stations (existing and proposed) along Coast Corridor, and some of the travel associated with getting to stations would be served by public transit, it is unlikely that any substantial adverse impacts to local roadways would occur as a result of the Build Alternative. Furthermore, roadways serving existing stations are generally large thoroughfares that already accommodate station-related traffic, and are likely adequate to meet projected additional passenger travel demands. Current transit accessing the existing stations may experience an increase in ridership resulting from new train service; however, given the SDP ridership projections, no substantial effects are anticipated.

At-Grade Crossings

As previously discussed, the existing railroad crosses paved public roads at 36 locations along the 130 miles between Salinas and San Luis Obispo. Implementation of the Build Alternative will result in additional trains crossing through these roads. Improved, yet-to-be-determined warning devices would be installed at some of the crossings, which would result in improved safety at these locations. The Build Alternative would result in some minor additional delays occurring from increased train traffic; new passings of each Coast Daylight train would take approximately one minute.

One new at-grade crossing may be created by the track realignment proposed for mile post (MP) 172 at Cattlemen Road. In this area, Cattlemen Road is a two lane, paved rural road about ten miles south of King City. It is unlikely that a significant amount of delay resulting from a new at-grade crossing could occur in this location

[23] Ridership projections for these particular stations have yet to be developed, but it is reasonable to assume that some increase in passenger traffic would occur.

due to its rural/agricultural setting. Furthermore, some type of warning device would be implemented at the new at-grade crossing to ensure the safety of motorists and others at this location.[24]

Additionally, several new at-grade crossings would occur across private, typically dirt roads in agricultural holdings. Traffic levels in these rural areas are very low. The implementation of new and additional at-grade crossings would not be expected to result in any significant travel delays or traffic impacts as a result.

3.1.5 AVOIDANCE, MINIMIZATION, AND MITIGATION STRATEGIES

The following strategies have been identified at this preliminary stage to avoid, minimize, and/or mitigate any potentially significant impacts.

MIN-TRA-1. During the construction of any railway improvements selected for design, disruption to existing rail operations would be minimized to the maximum extent feasible by scheduling construction at times to minimize interference. Appropriate construction and operational strategies would be developed for project-level reviews through coordination between FRA, Amtrak, UPRR, Caltrans DOR, and other interested agencies.

MIN-TRA-2. Transportation System Management (TSM)/Signal Optimization (including retiming, re-phasing, and signal optimization) may be implemented, as well as other measures including turn prohibitions, use of one-way streets, and traffic diversion to alternate routes, to reduce impacts to roadways and intercity travel.

MIN-TRA-3. Local spot widening of existing curved areas of the railroad could be implemented to allow for geometric improvements that could allow for increased rail speeds without significant right-of-way acquisition. Spot widening could avoid or minimize some of the effects associated with full implementation of curve realignments.

[24] In two additional locations, elements of the Build Alternative could result in crossings of paved public roads where the existing rail alignment already causes an at-grade crossing. These additional potential crossings (Lone oak Road by the King City Siding Extension and Asuncion Road by the Henry-Santa Margarita curve realignment) would not be considered “new” at-grade crossings. Both of these existing at-grade crossings occur in areas with low traffic volumes and thus substantial new traffic delay is not expected from any additional crossings that the Build Alternative may create.

MM-TRA-4. Project-level environmental review would include consultation and coordination with public transit services in order to encourage the provision of adequate bus feeder routes to serve proposed station areas which could mitigate potential transit impacts.

Where proposed improvements have the potential to require a new at-grade crossing, the following approaches would apply:

A-TRA-5. Further develop project design to avoid the need for a new at-grade crossing. The one identified new at-grade crossing is associated with a potential track realignment (MP 172, Cattlemen Road). The primary strategy for avoiding the creation of the new at-grade crossing at Cattlemen Road would be to omit the MP 172 Track Realignment all together, or at least any portion that would result in the creation of a new at-grade crossing at Cattlemen Road. No specific layout for that track realignment has been defined to date.

MIN-TRA-6. If the MP 172 Track Realignment is carried forward for further design and the design cannot feasibly avoid the creation of a new at-grade crossing, the development process would include a detailed Traffic Study, consultation and approval from the CPUC, and implementation would be required to follow all pertinent federal, state, and local policies regarding new at-grade crossings.[25]

MM-TRA-7. In the event that any of the Build Alternative improvements are carried forward for funding, design, and construction, and the above measures cannot be successfully employed to avoid or minimize roadway traffic effects, major or minor intersection improvements may be employed to reduce any potential adverse traffic effects. This would likely require significant right-of-way acquisition to accommodate additional left-turn and/or through lanes. Adverse effects from such improvements would be assessed during future project-level review.

3.1.6 SUBSEQUENT ANALYSIS

Construction-Period Effects

Subsequent analysis of potential construction-related effects would need to be conducted once some or all of the proposed improvements are approved. Future project-level environmental review should focus on potential service disruptions resulting from railway construction activities, as well as potential traffic and

[25] CPUC policy typically requires the removal of one or more existing at-grade crossing in order to permit any newly requested at-grade crossings.

roadway effects resulting from detours and delays. Additional avoidance, minimization, and mitigation measures may be identified during the project-level environmental review.

Rail Operations

As the entire program of proposed improvements is currently unfunded, future project-level environmental review would focus on some subset of the proposed improvements. Any improvements identified for an initial phase of construction would need to be analyzed for potential impacts to existing freight and passenger rail, particularly for improvements to the existing railway (CWR/track upgrades, powered switches). This could require modeling of the existing and rail network, along with proposed modifications, to determine the ultimate outcome of the initial phases of construction.

Roadway Operations

Subsequent multimodal access and circulation studies may be conducted at all station areas as plans for alignments, stations, and operations are refined. Additional environmental analysis would be required in conjunction with these studies to ascertain the exact locations of potential project-generated traffic impacts and potential parking demand impacts. Station area circulation studies, including site-specific parking demand evaluations, would be expected as part of project-level environmental documentation. Additionally, as Build Alternative components are further refined, they would need to be analyzed and designed to avoid the new at-grade crossing at Cattlemen Road. Additional mitigation measures may be identified during project-level review as necessary.