



LOSSAN RAIL CORRIDOR AGENCY BUSINESS PLAN

Prepared for California State Transportation Agency

FY 2024-2025 / FY 2025-2026





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EXECUTIVE SUMMARY

The Los Angeles – San Diego – San Luis Obispo (LOSSAN) Rail Corridor Agency (Agency) is a joint powers authority (JPA) formed in 1989 that works to increase ridership, revenue, capacity, reliability, coordination, and safety on the rail corridor between San Diego, Los Angeles, and San Luis Obispo. On September 29, 2012, Governor Jerry Brown signed Senate Bill (SB) 1225 (Chapter 802, Statutes of 2012), which authorized the LOSSAN Agency to oversee the state-supported Pacific Surfliner intercity passenger rail service operating on the LOSSAN rail corridor, subject to approval of an interagency transfer agreement (ITA) with the State of California. The ITA became effective on July 1, 2015 and is currently executed through June 30, 2021. The Orange County Transportation Authority (OCTA) serves as the managing agency for the LOSSAN Agency and provides management and administrative support as outlined in the Administrative Support Agreement (ASA) between the LOSSAN Agency and OCTA.

The Pacific Surfliner service travels along a 351-mile coastal rail corridor through six counties in Southern California: San Diego, Orange, Los Angeles, Ventura, Santa Barbara, and San Luis Obispo. It is currently the second busiest intercity passenger rail corridor in the United States, and the busiest state-supported Amtrak route. The LOSSAN Agency is governed by a Board of Directors (Board) composed of 11 voting members representing rail owners, operators, and planning agencies along the LOSSAN rail corridor, as well as four non-voting, ex-officio members, as detailed below.

Member Agencies

- San Diego Metropolitan Transit System (SDMTS)
- San Diego Association of Governments (SANDAG)
- North County Transit District (NCTD)
- OCTA
- Riverside County Transportation Commission (RCTC)
- Los Angeles County Metropolitan Transportation Authority (Metro)
- Ventura County Transportation Commission (VCTC)
- Santa Barbara County Association of Governments (SBCAG)
- San Luis Obispo Council of Governments (SLOCOG)

Ex-Officio Members

- Amtrak
- California Department of Transportation (Caltrans)
- California High-Speed Rail Authority (CHSRA)
- Southern California Association of Governments (SCAG)

As required by SB 1225, and per the terms of the ITA, the LOSSAN Agency must submit an annual business plan by April 1 of each year to the Secretary of the California State Transportation Agency (CalSTA). The primary purpose of the business plan is to identify the major goals and objectives for the LOSSAN Agency's management of the Pacific Surfliner intercity passenger rail service, as well as the budget necessary to administer, market, and operate the Pacific Surfliner service during the upcoming two-year period. The business plan summarizes operations, service levels, budget, and capital improvements that have contributed to the success of the

Pacific Surfliner service and identifies improvements to sustain and grow its success moving forward.

Historical Performance of Pacific Surfliner Service

Since 1971, service on the Pacific Surfliner route increased from the original six daily trips to 27 daily trips. To accommodate the drastic decline in ridership while maintaining essential lifeline service during the novel coronavirus (COVID-19) pandemic, service was reduced to 12 daily trips (or six round trips) during the second half of FFY 2019-20. In June 2021, the Pacific Surfliner began its COVID-19 service restoration, and increased service from 12 daily trips to 18 daily trips (or nine round trips). Six (6) of these 9 round trips operated between San Diego and Los Angeles, two (2) round trips operated between San Diego and Goleta, and one (1) round trip operated between San Diego and San Luis Obispo. Despite the reduced service levels, the Pacific Surfliner remains the busiest state-supported route in the entire Amtrak national system.

Operating costs for the Pacific Surfliner service are funded through the Public Transportation Account, which is primarily supported through the state sales tax on diesel fuel. The annual operating subsidy for Pacific Surfliner service has fluctuated significantly throughout the years. This fluctuation has never been as significant as was experienced during the COVID-19 pandemic. During the pandemic, the increased costs combined with revenue decline from the significant ridership loss increased the subsidy much more than anticipated. The subsidy for FY 2024-25 is anticipated to normalize somewhat, provided the frequent closures in San Clemente cease. These closures require bus bridge connections to maintain connectivity, with the operational costs of these additional buses being much higher than the standard costs of train operations.



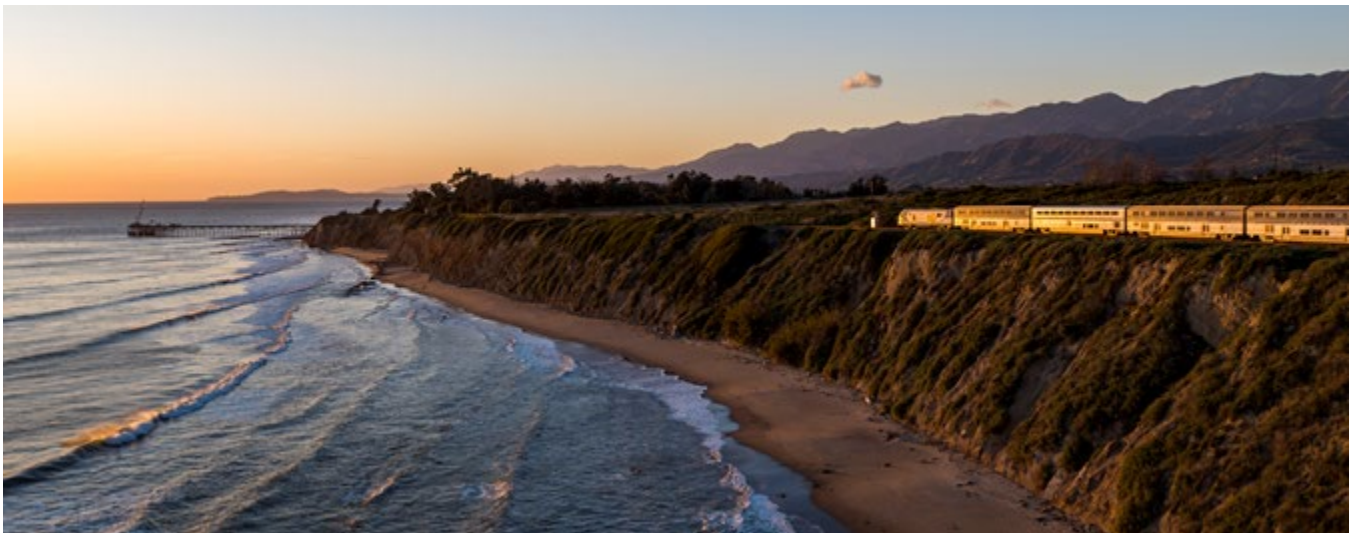
Operating Plan and Strategies

At the beginning of FY 2019-20, Amtrak operated 13 daily Pacific Surfliner roundtrips between San Diego and Los Angeles. Of those, five daily roundtrips (the 700-series trains) extended north of Los Angeles to Santa Barbara and Goleta, with two roundtrips extending further north to serve San Luis Obispo. The drastic ridership decline on the Pacific Surfliner as a direct result of the COVID-19 pandemic forced the reduction of Pacific Surfliner and connecting thruway bus service. In March 2020, service was cut from 13 daily Pacific Surfliner roundtrips between San Diego and Los Angeles, to six roundtrips. In FY 2020-21, as travel restrictions through the state were relaxed, additional roundtrips were restored. Currently, the Pacific Surfliner is operating 10 roundtrips between San Diego and Los Angeles, with four roundtrips between San Diego and Goleta, and two of these trains extending north to San Luis Obispo.

The ability to expand Pacific Surfliner service has historically been constrained by both equipment availability as well as existing access and shared-use agreements with the host railroads on which the Pacific Surfliner service operates. While this constraint remains along several segments of the rail corridor, the ability to restore Pacific Surfliner service levels is now primarily dependent on equipment availability and the availability of state funding. When funding levels and ridership growth present an opportunity to restore additional service, the LOSSAN Agency will work collaboratively with Caltrans and Amtrak on establishing a business case that lays out the need and potential profitability of the service restoration or expansion. Though ridership demand, equipment and staff availability are important, it is understood that financial performance is the key factor in determining service increases due to the structural deficit that California Intercity Rail Operations is facing in the coming fiscal years.

The business case for service growth will be based on three central considerations:

1. Funding – Does adequate funding exist to support the service? This will include quantifying the net revenue (revenue over operating costs) gained from the additional service,
2. Equipment availability – Is sufficient equipment available? Will additional equipment need to be procured or leased in support of this effort?
3. Amtrak staff availability – Are crews available for the additional service?



Performance Standards and Metrics

As required by SB 1225, CalSTA has established a set of uniform performance standards (UPS) for the three state-supported intercity passenger rail corridors, including the Pacific Surfliner service, to control cost and improve efficiency. These standards measure the ongoing success of the service in three specific areas: usage (ridership and passenger miles), efficiency (farebox recovery and cost per passenger mile), and service quality (endpoint / all-station on-time performance and operator caused delays).

As a result of the impact of the COVID-19 pandemic on ridership, revenue, and available state funding, on March 30, 2020, the LOSSAN Agency formally requested relief from the Uniform Performance Standards, as dictated by the Interagency transfer Agreement, Appendix G. The need for relief was further exacerbated by the ongoing closures of the rail corridor in the City of San Clemente. For over 270 days total, the southern corridor has been bifurcated and connections maintained through bus bridges. This has seriously impacted both revenue and ridership levels. Relief is requested at least until state funding allows for the restoration of service to pre-pandemic levels and the corridor closures have been reopened.

In FY 2022-23, the Pacific Surfliner service saw a 4.9 percent increase in ridership and a farebox recovery of 46.3 percent. Endpoint on-time performance has improved considerably, but still continues to lag behind the goal of 90 percent, averaging 79.5 percent in FY 2022-23.

Capital Improvements



Though much progress has been made over the years, many segments of the LOSSAN rail corridor are still limited by the lack of passing sidings or second main tracks. There are currently more than \$16 billion in unfunded capital needs that have been identified on various portions of the LOSSAN rail corridor, including additional track capacity, station improvements, and signal and communications improvements.

The LOSSAN Agency continues to coordinate with member agencies and station owners to pursue funding opportunities that bring benefits to the larger rail corridor. As part of that effort, the

LOSSAN Agency has worked with key stakeholders to update its Capital Improvement Program (CIP). The CIP compiles all identified projects into a comprehensive list. While each member agency or host railroad is responsible for the implementation of its respective capital improvement projects, the LOSSAN Agency takes a lead role in funding and legislative pursuits, with a focus on leveraging existing funds to advance capital projects that have a corridorwide benefit. In addition to the major capital improvements planned for the LOSSAN rail corridor, the state annually allocates approximately \$500,000 to cover minor projects, such as station improvements, signage, and minor safety enhancements.

Fare Policy

Pacific Surfliner trains currently offer travel in unreserved coach class and reserved business class. Fares are largely static year-round with the exception of slight increases on select holidays during peak travel periods. Amtrak also offers discounted multi-ride tickets, discounts for group travel, as well as a Rail 2 Rail Program that allows Metrolink and COASTER commuter rail pass holders to ride Pacific Surfliner trains at no additional cost, subject to certain restrictions. The last fare increase on the Pacific Surfliner service took place in June 2013, and a fare restructuring was implemented in March 2018, which normalized fares to eliminate inconsistent pricing methodology and application of discounts along the Pacific Surfliner route.



In the coming year, the LOSSAN Agency will implement a demand pricing model for its fare structure, following extensive analysis and thorough development process. Additionally, significant effort will be focused on integration with both Metrolink and NCTD, modifying the Rail2Rail program to achieve that goal. The LOSSAN Agency is also looking into enhanced mobile ticketing through a front-end app based ticketing platform designed and branded specifically for the Pacific Surfliner. This app also has the potential to include fare media for Metrolink and NCTD, along with trip planning and a customer rewards program.

Network Integration and High-Speed Rail

An integrated passenger rail network is a key initiative included in the 2018 California State Rail Plan, with the goal to plan and implement a statewide passenger rail system that maximizes the performance potential of intercity passenger rail as a time- and cost-competitive travel option for meeting the state’s transportation needs.

The LOSSAN Agency works in close coordination with CalSTA, Caltrans, the Coast Rail Coordinating Council (CRCC), transit and rail operators along the LOSSAN rail corridor, and other stakeholders on efforts to expand and improve rail and transit connections. This includes working to create an integrated passenger rail and transit network with coordinated schedules, which will provide additional travel options throughout the state, allowing passengers to seamlessly transfer from service to service to reach their desired destinations. In October 2021 a pulsed or clockface schedule was implemented. This is just the first step in the implementation of the optimization study recommendations. The LOSSAN Agency continues to work our partners at LA Metro, Metrolink, NCTD and SDMTS to align the schedules for the maximum connection and service enhancement opportunities.

The passenger rail services along the LOSSAN rail corridor act as a backbone for transportation throughout the California coastal region. As such, the LOSSAN rail corridor will provide critical connections and feeder/distributor service to support and compliment any future high-speed rail

(HSR) service. Integration between the LOSSAN rail corridor and HSR system will provide mutual benefits to each service and must be planned carefully to build upon the existing success of the Pacific Surfliner service.

Passenger Amenities

The LOSSAN Agency continues to work with Amtrak to implement initiatives designed to enhance amenities and improve the overall passenger experience, effectively positioning the Pacific Surfliner as the premier travel option in Southern California. Amenities are designed to enhance customer perception and support ridership objectives, but also provide the Pacific Surfliner with clear points of differentiation from other regional rail operators. Programs including complimentary upgraded Wi-Fi, food and beverage options, and business class upgrades help incentivize riders to choose train travel while boosting customer satisfaction.

All Pacific Surfliner Business Class seats have been upgraded with new leather upholstery. A new pet reservation program was instituted that allows passengers to travel with their dog or cat (with certain restrictions). The LOSSAN Agency plans to pursue a number of strategies for enhancing passenger amenities in the coming two years, including improved food and beverage offerings, seating availability and train capacity notifications, an upgrade passenger loyalty program, special event service, and passenger information and station improvements.



Equipment

Before the pandemic related service reductions, the Pacific Surfliner fleet currently consisted of 10 train sets operating 27 daily trains. As a result of the COVID Pandemic, service has been temporarily reduced from 26 daily Pacific Surfliner trips using 10 train sets, to 20 daily Pacific Surfliner trips using 8 train sets.

Equipment availability continues to be one of the key hurdles to future expansion of the Pacific Surfliner service. Currently service levels must remain static until such time as additional consists are available. The LOSSAN Agency, in coordination with Caltrans DRMT, is evaluating the possibility of purchasing the remaining 39 Amtrak owned Surfliner bi-level cars and some additional Superliner bi-level cars currently owned by a private third-party.

In June and December of 2022, a working group comprised of staff representing the LOSSAN Agency, CCJPA, SJJPA, and Caltrans DRMT met to discuss how best to redeploy the bi-level fleet as the Siemens Venture car trainsets were put into revenue service. Once this occurs, the fleet redeployment plan identifies 16 additional bi-level cars to be added to the Pacific Surfliner fleet, which will provide sufficient equipment to restore Pacific Surfliner service to pre-COVID service levels. Amtrak staff is responsible for all maintenance activities related to the Pacific Surfliner service as part of the annual operating contract with the LOSSAN Agency. The LOSSAN Agency is responsible for administration and maintenance supervision of the Pacific Surfliner fleet, particularly the state-owned railcars and Charger locomotives.



Marketing

The marketing plan outlined for FY 2024 and 2025 aims to boost ridership and revenue for the Pacific Surfliner. The strategy focuses on enhancing brand awareness among target audiences and influencing their travel choices. The plan is focused on prioritizing measurable and trackable marketing initiatives to maximize return on investment and recover ridership after steep declines due to the COVID-19 pandemic and the San Clemente track closure.



Annual Funding and Separation of Funding

The primary purpose of the business plan is to guide the allocation of funds necessary for the LOSSAN Agency to administer, operate, maintain equipment, and market the Pacific Surfliner service. The total net State funding request for FY 2024-25 is proposed at \$61,308,725 which includes the net operating subsidy as well as administrative and marketing funding. The estimated net Amtrak operating subsidy is \$51,881,625, based on the assumption of restoring approximately 95-percent of the pre-COVID pandemic service levels. However, reinstating the two round trips between San Diego and Los Angeles is subject to the availability of funding, equipment, and crews.

The business plan assumes that Caltrans will continue to have a separate agreement with Amtrak to directly fund equipment capital charges for Amtrak-owned railcars and locomotives used on the three state-supported rail corridors. Therefore, equipment capital charges are not included in the operating agreement between Amtrak and the LOSSAN Agency. Additional supplemental funding is requested for minor projects at \$500,000. This amount consists of \$500,000 of new FY 2024-25 funding, consistent with prior year requests.

The FY 2024-25 administrative funding is proposed at \$7,370,100. Included in this amount is \$6,019,200 for managing agency administrative salaries at fully burdened rates. This includes staffing of 18 full-time positions. This amount assumes the managing agency overhead at the current rate, which is calculated on an annual basis based on prior fiscal year actuals. The administrative budget currently assumes administrative employee performance-based salary increases consistent with OCTA's FY 2024-25 budget and personnel and salary resolution.

For FY 2024-25, the proposed administrative funding request encompasses \$190,500 for legal, travel, insurance, membership dues, and banking fees. Additionally, professional services funding is proposed at \$1,083,200. This includes \$1,050,000 allocated for consulting services in planning, engineering, modeling, grant writing, and project and construction management. The remaining \$33,200 is earmarked for audit and insurance brokerage services. Furthermore, the administrative fees include a yearly allocation of \$77,200 for insurance costs. These costs cover the LOSSAN Agency's general liability, errors & omissions, and crime insurance.

The FY 2024-25 marketing funding request is proposed at \$2,000,000, consistent with the operating service assumption of restoring service to pre-pandemic levels.

To ensure state funding for the Pacific Surfliner service is kept separate from funding for OCTA projects and programs, a separation of funding has been established within the LOSSAN managing agency.

Government Relations and Advocacy

One of the benefits gained through local governance of the Pacific Surfliner service by the LOSSAN Agency is added flexibility in advocating for policies at the state and federal level to improve rail operations, increase funding for operations and capital needs, and allow better coordination and interoperability with connecting transit and rail services..

The annual legislative program adopted by the LOSSAN Board provides overall guidance to LOSSAN Agency advocacy activities, and staff will continue to provide regular legislative updates and bill analyses to the LOSSAN Board consistent with that program. The 2024 LOSSAN Legislative Program provides detail on legislative priorities, including:

- Secure sustainable funding
- Support the implementation of transportation policies that promote the adequate and equitable funding of rail transit and capital improvements, while ensuring transparency in the use of these funds.
- Seek opportunities to support connectivity and integration for the LOSSAN rail corridor, including with emerging rail corridors, services, and high-speed rail.
- Support efforts to fund infrastructure, service, and safety improvements, with a focus on resiliency.

At the local level, LOSSAN Agency staff will continue to work with LOSSAN member agencies, local communities, and stakeholder organizations to build awareness of passenger rail services along the LOSSAN rail corridor, developing strategic partnerships to better evolve the services to meet local needs. Increased awareness of these services by local officials can then be leveraged to back consensus based operational improvements and policy activities.

Safety and Security

Protecting the safety and security of passenger rail service is key to attracting and retaining riders and ensuring efficient operation of passenger trains on the LOSSAN rail corridor. The goal of the LOSSAN Agency safety program is to instill a comprehensive safety culture that will govern all of the activities associated with the operations and maintenance of the service, while efficiently meeting operational performance goals. The FRA and the CPUC are responsible for overseeing general railroad safety along the LOSSAN rail corridor. The LOSSAN Agency continues to work with Amtrak, host railroads, and other stakeholders to ensure a detailed program for system safety

and security is in place to protect Pacific Surfliner passengers and crew, as well as the general public. As part of this effort, the LOSSAN Agency will continue to:

- Continue the implementation of Operations Safe Surfs, a rail safety and suicide prevention campaign
- Assess ongoing rail safety and security awareness efforts to identify areas for improvement
- Work with host railroads to identify “hot spots” for trespassing and vehicle strikes
- Develop outreach programs that meet the needs of the public, as well as stakeholders
- Work with Amtrak and stakeholders to ensure a continued safety culture for all who work and travel on Pacific Surfliner trains and utilize Pacific Surfliner stations
- Prioritize rail capital project funding for projects that include a goal of improved safety and security wherever possible
- Work with host railroads and rail operators to coordinate training with local first responders to help expedite emergency response and accident investigation services in the event of an incident
- Support Operation Lifesaver, a national rail safety program with the goal of improving public awareness of safety around railroad tracks
- Seek out and leverage state and federal grant funds for additional safety and security improvements

The LOSSAN Agency will continue to attend regularly scheduled safety meetings hosted by Amtrak for front-line employees to reiterate that safety of our passengers and crew is always the first priority in delivering Pacific Surfliner service. The LOSSAN Agency will also meet monthly with Amtrak Police to facilitate coordination and communication. The LOSSAN Agency will continue to work with right-of-way owners and rail operators to enhance safety and improve the response to incidents along the right-of-way. Public information efforts will include both traditional and social media to build awareness of rail safety.

Emerging Corridors

In addition to administering the existing Pacific Surfliner rail service, the LOSSAN Agency will continue to work with member agencies to study and pursue expansion opportunities on emerging corridors that provide connectivity within southern California and beyond. Specifically, the LOSSAN Agency expects to focus on connectivity to the eastern communities throughout Riverside County and the Coachella Valley, and coastal communities up to San Luis Obispo and north to the San Francisco Bay Area. These connections will provide seamless travel opportunities by rail throughout the region and state. System improvements on existing and emerging rail corridors will contribute to the success of the LOSSAN rail corridor, support future statewide and regional rail operations, and provide enhanced connectivity with local transit systems.

Chapter 1: Introduction



The Los Angeles – San Diego – San Luis Obispo (LOSSAN) Rail Corridor Agency (Agency) is the joint powers authority (JPA) tasked with increasing ridership, revenue, capacity, reliability, coordination, and safety on the rail line between San Diego, Los Angeles, and San Luis Obispo. This includes responsibility for management and administration of the state supported Pacific Surfliner service, subject to negotiation of an Interagency Transfer Agreement (ITA) with the State of California. The LOSSAN Agency’s annual business plan for FY 2024-25 and FY 2025-26 identifies the LOSSAN Agency’s major goals and objectives for management for the Pacific Surfliner intercity passenger rail service, as well as the budget necessary to administer, market, and operate the Pacific Surfliner service during that two-year period.

Since 2020, the LOSSAN Agency has continued to work closely with the state, Amtrak, and the LOSSAN member agencies to respond to the coronavirus (COVID-19) pandemic and promote the health and safety of our passengers and crew. This included implementing service adjustments, operational changes, and health and safety improvements on the Pacific Surfliner service. As equipment, personnel, and other resources become available, the LOSSAN Agency continues to work with our partners towards restoring service to pre-pandemic levels. In addition, the LOSSAN Agency and its partners are working together to ensure the Pacific Surfliner remains a safe, reliable, and cost-effective transportation alternative that is integrated with connecting transit services and other two state-supported intercity passenger rail corridors in California.



Overview of the LOSSAN Rail Corridor

The Pacific Surfliner service travels along the 351-mile LOSSAN Rail Corridor through a six-county region in Southern California, which is comprised of San Diego, Orange, Los Angeles, Ventura, Santa Barbara, and San Luis Obispo counties. The Pacific Surfliner is the busiest state-supported, Amtrak-operated intercity passenger rail service in the nation, as well as the second busiest route in Amtrak’s entire system. The LOSSAN Corridor is made up of seven different right-of-way (ROW) owners, including both public agencies and freight railroads (See Image 1.1, and is used by three different passenger rail services (Amtrak, COASTER, Southern California Regional Rail Authority (Metrolink)) and two freight rail services (BNSF and UPRR).

Overview of the LOSSAN Agency and its Responsibilities

The LOSSAN Agency was formed as a joint powers authority in 1989 for the primary purpose of improving passenger rail service along the LOSSAN Rail Corridor. In September 2012, SB 1225 (Chapter 208, Statutes of 2012) authorized the LOSSAN Agency to assume responsibility for management and administration of the state supported Pacific Surfliner service. The initial ITA between the LOSSAN Agency and the State of California took effect on July 1, 2015, for a three-year period ending on June 30, 2018. Most recently, the ITA was renegotiated for an additional four-year term that remains effective through September 25, 2025. Consistent with the requirements of the ITA, the LOSSAN Agency must submit an annual business plan by April 1 of each year to the Secretary of CalSTA. Upon review and approval by the Secretary, the business plan is used to develop an annual appropriation request to the state legislature.

In accordance with the provisions of SB 1225, the ITA requires the LOSSAN Agency to maintain the existing Pacific Surfliner service and facilities, as well as to implement service expansions as warranted by ridership demand and available revenue. Furthermore, the ITA requires that the State will provide the funding necessary for service operations, administration, and marketing of the Pacific Surfliner service. Caltrans DRMT remains responsible for the development of the California State Rail Plan, as well as the coordination and integration between the three state-supported intercity passenger rail services, as outlined in the ITA.



Image 1.1: LOSSAN Rail Corridor ROW Owners

Organizational Structure of the LOSSAN Agency

The LOSSAN Agency is governed by an 11-member Board of Directors (Board) comprised of officials representing rail owners, operators, and planning agencies along the LOSSAN Rail Corridor. The LOSSAN Board includes representatives from nine member agencies (Metro, NCTD, OCTA, RCTC, SANDAG, SDMTS, SLOCOG, SBCAG, and VCTC). Amtrak, Caltrans DRMT, CHSRA, and SCAG are non-voting, ex-officio members of the LOSSAN Board.

In August 2013, following a competitive request for proposals, OCTA was selected as the managing agency of the LOSSAN Agency. As the managing agency, OCTA provides all management and administrative support for the LOSSAN Agency as outlined in the Administrative Support Agreement (ASA) executed between the two agencies. The LOSSAN Agency currently consists of 18 full-time positions.

Agency Roles and Responsibilities

The following list provides a summary of the agencies involved in providing passenger rail service along the LOSSAN rail corridor, and those that the LOSSAN Agency will continue to coordinate with in managing the Pacific Surfliner service.

LOSSAN Agency: JPA legislatively permitted to assume administrative and oversight responsibility of the state supported Pacific Surfliner intercity passenger rail service on the LOSSAN rail corridor effective July 1, 2015.

LOSSAN Member Agencies: The LOSSAN Agency is comprised of nine voting member agencies. The member agencies are key partners that provide important technical and policy input at both the Technical Advisory Committee (TAC) and Board level.

CalSTA: State office responsible for the funding and oversight of California's three state-supported intercity rail corridors, as well as CHSRA, and oversight of state grant programs such as State Rail Assistance and the Transit and Intercity Rail Capital Program.

Caltrans DRMT: The department within Caltrans that is responsible for development of the State Rail Plan, development of a fleet management plan for the state-owned rail equipment, and overall funding for and coordination with the three state-supported intercity rail corridors.

Amtrak: The contracted operator and maintainer of the state supported Pacific Surfliner service and owner of most of the rail cars currently utilized in providing Pacific Surfliner service.

Capitol Corridor JPA (CCJPA): Responsible for the administration and oversight of the state-supported Capitol Corridor intercity passenger rail service between San Jose, Oakland, Sacramento, and Auburn. It was the first non-state agency to assume administrative responsibility and oversight for state supported passenger rail service in California in 1998. Bay Area Rapid Transit was selected as the managing agency for this rail corridor to act on behalf of the CCJPA, like OCTA's role on behalf of the LOSSAN Agency.

San Joaquin JPA (SJJPA): Administers the state supported San Joaquins intercity passenger rail service between Bakersfield, Stockton, Oakland, and Sacramento. The San Joaquin Regional Rail Commission was selected as the managing agency for this rail corridor to act on behalf of the SJJPA, like OCTA's role on behalf of the LOSSAN Agency.

OCTA: Selected by the LOSSAN Agency Board as the managing agency for the LOSSAN Agency, responsible for providing administrative services and daily management of the Pacific Surfliner service, marketing, and capital programs.

In addition to the agencies listed above, there are several stakeholders who are engaged with the LOSSAN Agency on an ongoing basis. These stakeholders include rail operators such as SCRRA, NCTD, and the freight railroads, as well as ROW owners along the rail corridor and the CHSRA. A list of those additional stakeholders is provided below:

Rail Operators

Amtrak
BNSF
NCTD (operator of COASTER)
SCRRA (operator of Metrolink)
UPRR

ROW Owners

BNSF
Metro
NCTD
OCTA
SDMTS
VCTC
UPRR

Regional Planning Agencies

SANDAG
SBCAG
SCAG
SLOCOG

Others Key Stakeholders/Partners

CHSRA
Coachella Valley Technical Advisory Committee
Coast Rail Coordinating Council (CRCC)
FRA
Members of the California State Legislature
Members of the United States Congress
Pacific Surfliner station cities and local elected officials
Rail Passenger Association of California and other transit/rail advocacy groups
Current and prospective rail passengers

Chapter 2: Historical Performance of the Pacific Surfliner Service

Overview

In 1976, the State of California began to provide financial assistance for Amtrak to operate intercity passenger rail service. The three state-supported intercity passenger rail services are the Pacific Surfliner, Capitol Corridor, and San Joaquins. In FFY 2022-23, these three routes combined carried nearly 3.3 million passengers (See Figure 2.1). These routes continue to represent three of the five busiest state-supported rail services in the entire Amtrak national system: Pacific Surfliner at No. 1 with about 1.5 million¹ passengers, the Capitol Corridor at No. 4 with 921 thousand passengers, and the San Joaquins Corridor at No. 5 with about 847 thousand passengers in FFY 2022-23.² California’s investment in intercity passenger rail service operations and capital projects over the past nearly five decades has led the state to boast the highest Amtrak ridership of any state in the country, with the three state-supported corridors being responsible for over 11 percent of the ridership of the entire Amtrak national system.

Figure 2.1: California Passenger Rail Routes



Source: LOSSAN. 2024

Pacific Surfliner train service is complemented by state-funded Amtrak Thruway buses, which provide scheduled connections to the Central Coast, Bay Area, Coachella Valley, and to the San Joaquins intercity rail corridor via Bakersfield. Two Amtrak long-distance trains (the Coast Starlight and Southwest Chief) also traverse portions of the LOSSAN rail corridor.

¹ During FY 2022-23, two long-term track closures occurred in San Clemente which resulted in modified train service operating between Los Angeles and San Diego. These two track closures consisted of track stabilization work near the Cyprus Shore Homeowners Association and construction of a temporary barrier wall after falling debris from an adjacent hillside near the Casa Romantica Cultural Center and Gardens. During these track closures, modified train service operated in segments from Los Angeles to San Juan Capistrano and from Oceanside to San Diego, with a bus connection operated between Irvine and Oceanside to connect the two segments. Passengers completing one-way travel that included both rail segments and the bus connection had two different train numbers appear on their itinerary to represent the two rail segments. Due to limitations with Amtrak’s fare collection system, passengers completing a train-bus-train trip were counted for ridership purposes once for each train number appearing on their itinerary, or a total of twice for completing one-way travel. The ridership reported for FY 2022-23 is sourced from official Amtrak data provided for the Pacific Surfliner, which has also been included in Amtrak’s national reporting.

² Amtrak Route Ridership and Gross Ticket Revenue, October 2022-September 2023

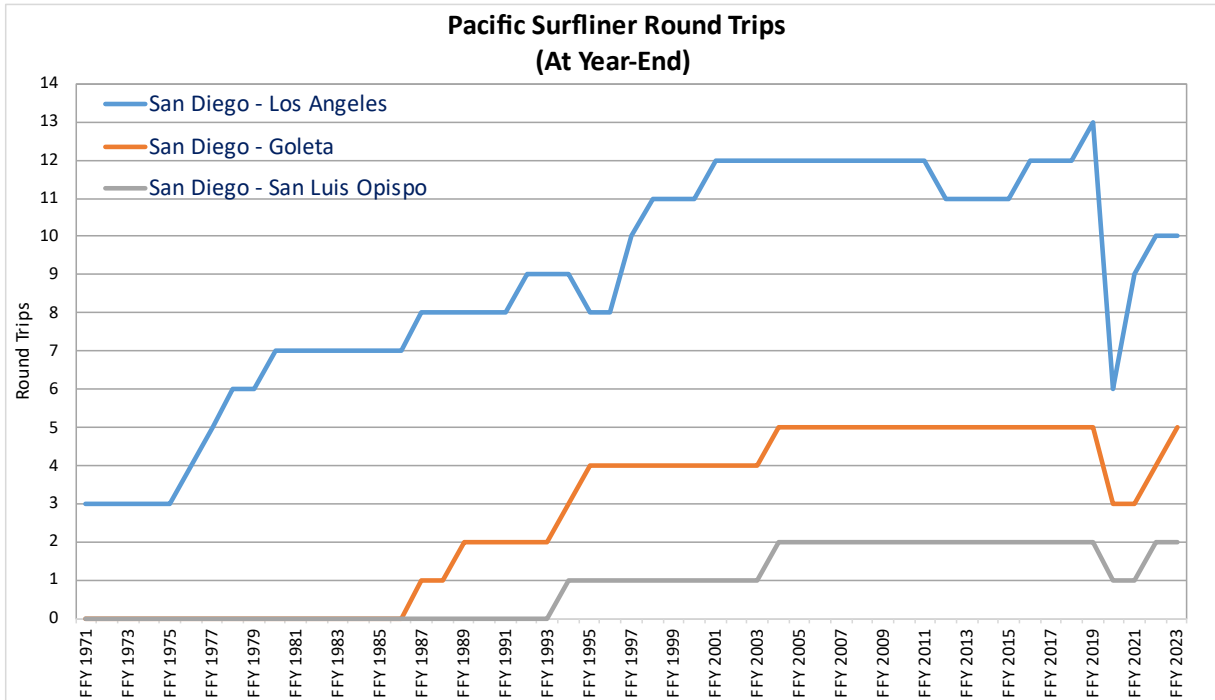
History of Pacific Surfliner Service

In May 1971, Amtrak assumed operation of the *San Diegan* passenger rail service along the corridor, which then comprised of two round trips between Los Angeles and San Diego. The *San Diegan* service was extended to Santa Barbara in 1988, and then to San Luis Obispo in 1995. In 2000, the *San Diegan* serviced was renamed the Pacific Surfliner. By then, 11 round trips operated along the main portion of the corridor, between Los Angeles and San Diego. Before the COVID-19 global pandemic hit in early 2020, Pacific Surfliner service had been increasing steadily in alignment with ridership demand. Effective October 14, 2019 (the last pre-pandemic schedule change date), the Pacific Surfliner operated 13 round trips between Los Angeles and San Diego. In total, this schedule included 27 one-way trains, with 17 operating between San Diego and Los Angeles, five between San Diego and Santa Barbara/Goleta, four between San Diego and San Luis Obispo, and one from Los Angeles to Goleta.



As all transit services across the nation, the Pacific Surfliner experienced drastic declines in ridership and revenue in early 2020, attributable to the COVID-19 pandemic. Following Governor Newsom’s safer-at-home order implemented on March 15, 2020, service reduced to six round trips (or 12 one-way trains). Four of these six round trips operated between San Diego and Los Angeles, one round trip operated between San Diego to Goleta, and one round trip operated between San Diego and San Luis Obispo. In June 2021, the Pacific Surfliner began its COVID-19 service restoration, and increased service from six to nine round trips (or 18 one-way trains). On October 25, 2021, more service was restored, and the new schedule comprised of 10 round trips between San Diego and Los Angeles. Four of these 10 round trips extended north to Goleta, and of those, two extended further north to San Luis Obispo. During FY 2022-23, a round trip previously operating between San Diego and Los Angeles was extended north to Goleta, increasing the number of round trips to Goleta to five. Figure 2.2 illustrates the growth and geographic limits of Pacific Surfliner train round trips since Amtrak assumed operation in 1971.

Figure 2.2: Pacific Surfliner Service Growth



Historical Ridership and Revenue Performance

Table 2.1 shows annual ridership and financial performance data from when the State of California began to fund the service in 1976. Values presented in this table are not adjusted for inflation.

Total ridership on the Pacific Surfliner for FY 2022-23 was 1,542,198³, a 4.9 percent increase over the prior year (1,469,800) and is shown in Figure 4.1. During FY 2022-23, the service achieved a farebox recovery of 46.3 percent.

Details on ridership, farebox recovery, and other service performance metrics are discussed in Chapter 4.

³ The ridership reported for FY 2022-23 is sourced from official Amtrak data provided for the Pacific Surfliner, which has also been included in Amtrak’s national reporting.

Table 2.1: Pacific Surfliner Historical Performance

Year	Ridership	Total Revenue	Total Operating Cost	State Subsidy (Cost - Revenue)	Farebox Recovery
FFY 1976-77	607,976	\$ 598,140	\$ 1,662,714	\$ 1,064,574	36.0%
FFY 1977-78	753,246	\$ 1,446,036	\$ 3,768,065	\$ 2,322,029	38.4%
FFY 1978-79	967,316	\$ 2,203,403	\$ 4,333,602	\$ 2,130,199	50.8%
FFY 1979-80	1,218,196	\$ 3,341,561	\$ 5,536,840	\$ 2,195,279	60.4%
FFY 1980-81	1,238,135	\$ 4,032,480	\$ 6,572,539	\$ 2,540,059	61.4%
FFY 1981-82	1,167,718	\$ 4,097,254	\$ 6,607,395	\$ 2,510,141	62.0%
FFY 1982-83	1,131,146	\$ 4,094,750	\$ 6,928,334	\$ 2,833,584	59.1%
FFY 1983-84	1,221,256	\$ 4,842,400	\$ 6,337,083	\$ 1,494,683	76.4%
FFY 1984-85	1,240,003	\$ 5,410,502	\$ 6,411,308	\$ 1,000,806	84.4%
FFY 1985-86	1,394,320	\$ 5,658,915	\$ 6,424,634	\$ 765,719	88.1%
FFY 1986-87	1,461,003	\$ 6,072,523	\$ 6,510,113	\$ 437,590	93.3%
FFY 1987-88	1,661,512	\$ 8,223,462	\$ 7,859,783	\$ (363,679)	104.6%
FFY 1988-89	1,717,539	\$ 11,458,084	\$ 10,563,459	\$ (894,625)	108.5%
FFY 1989-90	1,746,673	\$ 12,189,942	\$ 11,808,251	\$ (381,691)	103.2%
FFY 1990-91	1,791,781	\$ 13,306,307	\$ 13,364,150	\$ 57,843	99.6%
FFY 1991-92	1,673,107	\$ 13,152,063	\$ 13,245,924	\$ 93,861	99.3%
FFY 1992-93	1,810,572	\$ 13,692,612	\$ 13,254,709	\$ (437,903)	103.3%
FFY 1993-94	1,699,882	\$ 12,725,094	\$ 14,017,591	\$ 1,292,497	90.8%
FFY 1994-95	1,464,577	\$ 11,805,859	\$ 16,061,849	\$ 4,255,990	73.5%
FFY 1995-96	1,480,674	\$ 13,553,553	\$ 23,983,026	\$ 10,429,473	56.5%
FFY 1996-97	1,617,641	\$ 14,804,355	\$ 39,563,546	\$ 24,759,191	37.4%
FFY 1997-98	1,624,693	\$ 15,194,498	\$ 44,769,723	\$ 29,575,225	33.9%
FFY 1998-99	1,563,275	\$ 16,401,625	\$ 40,391,845	\$ 23,990,220	33.9%
FFY 1999-00	1,567,318	\$ 17,883,725	\$ 37,497,489	\$ 19,613,764	47.7%
FFY 2000-01	1,661,704	\$ 20,430,153	\$ 38,215,732	\$ 17,785,579	53.5%
FFY 2001-02	1,742,768	\$ 20,922,453	\$ 39,374,190	\$ 18,451,737	53.1%
FFY 2002-03	2,030,491	\$ 22,247,564	\$ 42,331,531	\$ 20,083,967	52.6%
FFY 2003-04	2,307,010	\$ 24,559,183	\$ 45,300,782	\$ 20,741,599	54.2%
FFY 2004-05	2,484,768	\$ 26,660,048	\$ 48,105,899	\$ 21,445,851	55.4%
FFY 2005-06	2,657,773	\$ 31,604,715	\$ 55,570,797	\$ 23,966,082	56.9%
FFY 2006-07	2,707,188	\$ 34,753,372	\$ 58,389,864	\$ 23,636,492	59.5%
FFY 2007-08	2,898,859	\$ 37,266,009	\$ 60,444,082	\$ 23,178,073	61.7%
FFY 2008-09	2,592,996	\$ 34,857,678	\$ 61,635,574	\$ 26,777,896	56.6%
FFY 2009-10	2,613,604	\$ 35,822,186	\$ 67,012,735	\$ 31,190,549	53.5%
FFY 2010-11	2,786,972	\$ 38,739,760	\$ 69,156,690	\$ 30,416,930	56.0%
FFY 2011-12	2,640,342	\$ 42,884,431	\$ 74,494,543	\$ 31,610,112	57.6%
FFY 2012-13	2,705,823	\$ 64,446,130	\$ 104,521,098	\$ 40,074,968	61.7%
FY 2013-14	2,673,170	\$ 69,013,724	\$ 102,066,682	\$ 33,052,958	67.6%
FY 2014-15	2,796,591	\$ 75,244,336	\$ 105,431,402	\$ 30,187,066	71.4%
FY 2015-16	2,889,067	\$ 77,797,080	\$ 101,431,356	\$ 23,634,276	76.7%
FY 2016-17	2,972,807	\$ 82,177,246	\$ 103,071,841	\$ 20,894,595	79.7%
FY 2017-18	2,998,296	\$ 85,909,320	\$ 110,629,740	\$ 24,720,419	77.7%
FY 2018-19	2,777,822	\$ 85,690,569	\$ 117,766,350	\$ 32,075,782	72.8%
FY 2019-20	2,075,229	\$ 62,599,044	\$ 114,636,207	\$ 52,037,163	54.6%
FY 2020-21	596,251	\$ 20,922,069	\$ 76,613,613	\$ 55,691,544	27.3%
FY 2021-22	1,469,800	\$ 51,142,786	\$ 94,994,511	\$ 43,851,726	53.8%
FY 2022-23	1,542,198	\$ 49,787,649	\$ 107,598,616	\$ 57,810,967	46.3%

Notes: Historic data is reported by federal fiscal year, since that is Amtrak's reporting period. Recent data is reported in state fiscal year to align with Uniform Performance Standards set by CalSTA.

Ridership data source: Amtrak BOBJ Portal. The LOSSAN Agency has record of ridership data from September 2004 to present.

Financial data source: Amtrak Billing Packages. The LOSSAN Agency has record of financial data from July 2014 to present. Financial values are not adjusted for inflation.

The ridership reported for FY 2022-23 is sourced from official Amtrak data provided for the Pacific Surfliner, which has also been included in Amtrak's national reporting.

Chapter 3: Operating Plan and Strategies

Service Levels

At the beginning of fiscal year 2019-20, Amtrak operated 13 daily Pacific Surfliner roundtrips between San Diego and Los Angeles. Of those, five daily roundtrips (the 700-series trains) extended north of Los Angeles to serve Santa Barbara and Goleta, with two of those roundtrips extending further north to serve San Luis Obispo. Dedicated Amtrak Thruway bus connections supplemented Pacific Surfliner service by providing transportation to and from Santa Barbara and San Luis Obispo and points north along the Central Coast to Oakland to connect with the Capitol Corridor, as well as transportation between Fullerton and points east to the Coachella Valley. Additional thruway bus service, managed by the San Joaquin Joint Powers Authority provided connections between the Pacific Surfliner and the San Joaquins in Bakersfield.



COVID-19 Related Reductions and On-Going Restoration Efforts

In March 2020, ridership dropped significantly as a result of the COVID-19 pandemic, forcing the reduction of Pacific Surfliner and connecting thruway bus service. As can be seen in Figure 3.1¹, on March 22, 2020, service was cut from 13 daily Pacific Surfliner roundtrips between San Diego and Los Angeles, to six roundtrips. Of these, two daily roundtrips remained between Los Angeles and Goleta and Pacific Surfliner service to San Luis Obispo was suspended. To maintain a vital lifeline connection to the north end of the corridor, one roundtrip to San Luis Obispo along with a third roundtrip between Los Angeles and Goleta was reinstated on June 1, 2020.

As travel restrictions through the state were relaxed, three additional roundtrips between San Diego and Los Angeles were restored on June 28, 2021. As travel demand increased, the October 25, 2021 schedule change, which introduced a pulsed schedule pattern for the service, as well as restored the 10th roundtrip between San Diego and Los Angeles and 4th between Los Angeles and Goleta, with two of



¹ Does not capture temporary service reductions associated with absolute work windows or other temporary track closures

these trains extending north to San Luis Obispo. Despite the extended rail closure in south Orange County between October 2022 and July 2023, demand necessitated the restoration of the 5th roundtrip north of Los Angeles to Goleta. With the restoration of this 5th roundtrip, full pre-COVID service north of Los Angeles was restored.

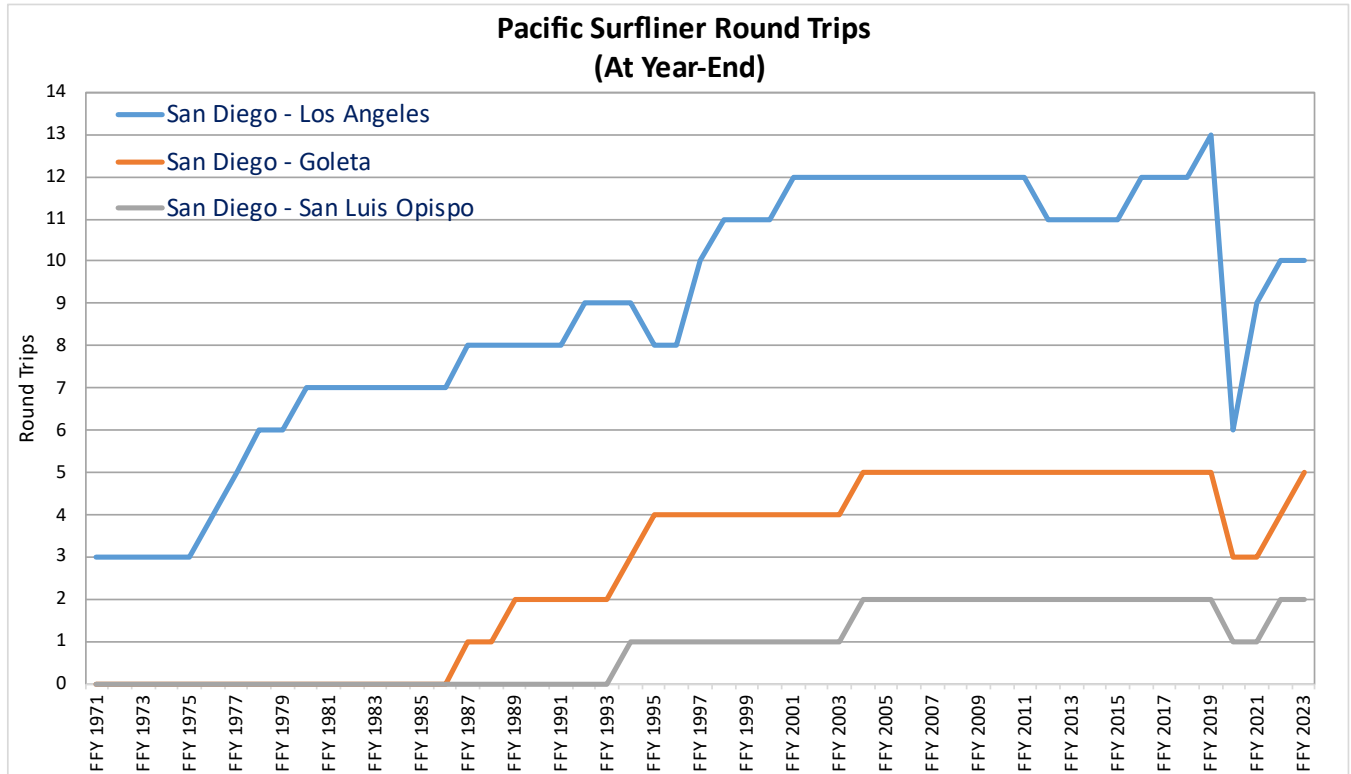


Figure 3.1

Future Service Restoration

The ability to expand Pacific Surfliner service has historically been constrained due to both equipment availability, and to a lesser extent the shared-use agreements with the host railroads on which the Pacific Surfliner operates. While the latter constraint remains along several segments of the rail corridor, the ongoing restoration of the Pacific Surfliner service is currently dependent on both equipment availability and availability of state funding. This, combined with crew availability and ridership demand present a complicated process for future service expansion. The LOSSAN Agency is regularly reviewing ridership and revenue trends on the Pacific Surfliner and coordinating with both the California Department of Transportation (Caltrans) and the California State Transportation Agency (CalSTA) on current and projected funding levels. When ridership growth presents an opportunity to restore additional service, the LOSSAN Agency will work collaboratively with Caltrans and Amtrak on establishing a business case that lays out the need and potential profitability of the service restoration or expansion. Though ridership demand, equipment and staff availability are important, it is understood that financial performance is the key factor in determining service increases due to the ongoing possibility of a structural deficit for California Intercity Rail Operations in the coming fiscal years.

In general, the business case for traditional service growth for the Pacific Surfliner will be based on three central considerations:

1. Funding – Does adequate funding exist to support the service? This will include quantifying the net revenue (revenue over operating costs) gained from the additional service,
2. Equipment availability – Is sufficient equipment available? Will additional equipment need to be procured or leased in support of this effort?
3. Amtrak staff availability – Are crews available for the additional service?

The one exception to this approach is the proposed restoration of the Ventura-Santa Barbara peak period commuter service. In 2023, the Santa Barbara County Association of Governments and the Ventura County Transportation Commission approached the LOSSAN Agency about restoring the early morning northbound train to Goleta to help mitigate the traffic impacts associated with the work being performed on US Highway 101. The intent of this service will be to focus on commuter travelers. The funding for this service as currently planned will be sources other than the intercity funding provided by the State of California through the Public Transportation Account.

The TIRCP grant funds previously awarded to the LOSSAN Agency, along with State Rail Assistance, State Transportation Improvement Program, and reprogrammed Proposition 1B funds, has also allowed efforts to continue moving forward with implementing layover facility expansions in San Luis Obispo, Goleta and San Diego, as well as necessary capacity enhancements north of Los Angeles on the UPRR to allow for additional roundtrips to be extended north to Santa Barbara and San Luis Obispo in the future, which are key short term development goals articulated in the 2023 State Rail Plan. (see chapter 5 for additional discussion of these capital improvements) The restoration of the commuter service to Goleta would utilize one of the additional slots on the UPRR now available thanks to the previous investments made to the capacity of the corridor by the LOSSAN Agency.

Stations

The Pacific Surfliner services 29 stations (Figure 3.2), 19 of which are between San Luis Obispo and Los Angeles, with the remaining 10 located south of Los Angeles in Orange and San Diego Counties (for station specific information,





please refer to the “LOSSAN Corridorwide Facilities, Equipment and Operations Inventory”² report prepared April 2013). The San Clemente Pier station has limited service (not all trains stop at this station).

Amtrak Thruway Bus Service and Transit Connections

Pacific Surfliner rail service is supplemented by a network of state-funded Thruway buses that connect passengers throughout the LOSSAN rail corridor and beyond. At the request of the LOSSAN Agency, Amtrak contracts with private bus operators to provide this service, including both operating staff and vehicles. The bus routes function as part of the Pacific Surfliner service, with coordinated connections, guaranteed seating, integrated fares and ticketing procedures, and inclusion in Amtrak’s central information and reservation system in the same manner as trains.

The Amtrak Thruway bus routes currently managed by the LOSSAN Agency are summarized below:

- **Route 17:** Santa Barbara to San Luis Obispo to Oakland (where it connects with Capitol Corridor). Three daily trips in each direction.
- **Route 39:** Fullerton to Palm Springs and Coachella Valley. Two daily trips in each direction.

In December 2023, the LOSSAN Agency discontinued Route 4, operating between Los Angeles, Santa Barbara, and Goleta due to high cost and consistently low ridership. This route provided only 1 daily roundtrip between these destinations and supplemented existing Pacific Surfliner train service.

In addition, the LOSSAN Agency partners with local transit agencies to offer expanded options for transit connections throughout the LOSSAN rail corridor. The LOSSAN Agency continues to manage the Pacific Surfliner Transit Transfer Program, which was launched in July 2016, and provides free connections between the Pacific Surfliner and 11 local transit services.

Additionally, there are Amtrak Thruway bus routes managed by the CCJPA and SJJPA that provide even more connectivity between the Pacific Surfliner and the Capitol Corridor and San Joaquins services.

Current Fiscal Year Operating Plan and Accomplishments

The LOSSAN Agency’s current operating plan is based on the December 30, 2023 reduced service schedule, which reflects the limited equipment and crew resources available following the decision by Caltrans to release 11 leased Superliner bi-level cars back to Amtrak as a result of service reductions necessary in response to the COVID-19 pandemic. The current Operating Plan can be seen in table 3.1.

² http://www.octa.net/pdf/publicationid_1748_15821.pdf

Table 3.1: Pacific Surfliner Service Levels

Route Segments	FY 2023-24
San Diego – Los Angeles	20 trains – 10 RTs
San Diego – Goleta	10 trains – 5 RTs
San Diego – San Luis Obispo	4 trains – 2 RTs

Beginning on September 30, 2022, the rail corridor was closed between Orange and San Diego County’s in response to land movement from an ancient landslide adjacent to the rail corridor. This closure of the rail corridor required modifying the schedule to include a bus bridge providing connections between trains serving the Irvine and Oceanside stations. Various iterations of this modified schedule were implemented throughout the closure period to address work window requirements and reflect restoration of weekend service. Restoration of 10 roundtrips between Los Angeles and San Diego occurred on July 17, 2023.



The LOSSAN Agency continues coordination efforts with all freight and passenger rail operators along the LOSSAN rail corridor through joint scheduling meetings and absolute work window planning meetings to improve connectivity and customer service and minimize passenger inconvenience. However, with the Olympics coming to Los Angeles in 2028, Metrolink is pushing extensive capital improvements along the Ventura and Orange Subdivisions, as well as at Los Angeles Union Station. With these improvements, the number of work windows that require weekend shutdowns of the railroad has significantly increased. In calendar year 2024, eleven work windows are planned, not including additional overnight work windows by NCTD and SANDAG to implement repairs to the Del Mar Bluffs. The LOSSAN Agency is continuing to coordinate with Metrolink and NCTD to minimize the overall impact to passenger rail services along the corridor as a result of these weekend shutdowns.

FY 2024-25 and FY 2025-26 Operating Plan

In FY 2024-25 and 2025-26, the LOSSAN Agency will continue to work cooperatively with Caltrans to ensure sufficient state funding is available to operate the Pacific Surfliner and Amtrak Thruway bus services, while also exploring opportunities to fully restore and expand service, as well as enhance ridership, revenue, and OTP. Included in this will be concerted efforts to ensure our ability to safely and consistently operate the Pacific Surfliner is not impinged by bluff instability or the impacts of extreme weather events and climate change.



OTP on the Pacific Surfliner improved significantly following the pandemic service reductions. As the service is restored to pre-COVID levels, the LOSSAN Agency will continue to monitor OTP and work with Amtrak and host railroads to evaluate and pursue cost-effective opportunities to maintain the current OTP on the Pacific Surfliner service.

This will no doubt be enhanced by the TIRCP funded capitalized access and incentive agreements. An incentive agreement has been in place with NCTD since July 2019 and a franchise access fee and service improvement agreement was executed with UPRR in December 2022. These agreements allow for financial incentives to the host railroads to help maintain and improve the current infrastructure and level of OTP. Additional details on the efforts currently being undertaken to maintain OTP are included in Chapter 4.

In late FY 2024-25, the LOSSAN Agency, Caltrans and Amtrak anticipate restoring approximately 95-percent of the pre-COVID pandemic Pacific Surfliner service levels on the LOSSAN rail corridor (Table 3.2). Full restoration of pre-COVID service levels is currently anticipated in FY2025-26, pending the availability of equipment. Two options have been identified for restoring a level of service equal to pre-pandemic. Option 1 would preserve the equipment and slot for introducing a third roundtrip between San Diego and San Luis Obispo once the Central Coast Layover Facility is complete. Option 2 would restore pre-pandemic service, including the 13th roundtrip between San Diego and Los Angeles, but would not introduce the third roundtrip to San Luis Obispo.

Table 3.2

Route Segments	FY 2024-25	FY 2025-26 (Option 1)	FY 2025-26 (Option 2)
San Diego – Los Angeles	24 trains – 12 ³ RTs	24 trains – 12 RTs	26 trains – 13 RTs
San Diego – Goleta ⁴	12 trains – 6 RTs	12 trains – 6 RTs	12 trains – 6 RTs
San Diego – San Luis Obispo	4 trains – 2 RTs	6 trains – 3 ⁵ RTs	4 trains – 2 RTs

³ Expansion to 12 RTs contingent on equipment and funding availability as well as State approval

⁴ Assumes the Los Angeles – Ventura – Santa Barbara commuter service roundtrip.

⁵ Preserve equipment and slot for 3rd roundtrip to San Luis Obispo following completion of Central Coast Layover Facility.

In addition, the LOSSAN Agency will continue pursuing the restoration and expansion of the successful seasonal and special event services, including the Del Mar Races, Oxnard Strawberry Festival, San Diego Comic-Con International, and sporting events along the Pacific Surfliner route. The Del Mar Races and San Diego Comic-Con always result in a significant boost in ridership for the Pacific Surfliner. The LOSSAN Agency will continue to work with its member agencies and host railroads to help identify opportunities to extend special services to other regional events.

To enhance the Pacific Surfliner service, the LOSSAN Agency remains committed to working with Caltrans, SJJPA, Metrolink, NCTD, Amtrak, and regional and local transit providers to improve transit and rail connections to the Pacific Surfliner. To help achieve this, the LOSSAN Agency will continue moving forward with integrated ticketing concepts in collaboration with Caltrans, NCTD, and Metrolink. Ongoing efforts include a regional ticketing application (app) in cooperation with Metrolink and NCTD. This app will create a user friendly and standard interface for passengers to purchase tickets and transfer between services along the LOSSAN rail corridor. Efforts are currently underway to engage with rideshare companies such as Uber or Lyft to assist passengers who need more flexibility in their first and last mile connections.

The LOSSAN Agency will continue working with local transit agencies to explore the feasibility of direct shuttle connections from Pacific Surfliner stations to John Wayne Airport in Orange County, the Los Angeles International Airport, and the San Diego International Airport. The Pacific Surfliner already directly serves the Hollywood Burbank Airport.

Amtrak Thruway bus service has also been affected by the COVID-19 pandemic. Coinciding with the reduced train service, the thruway bus service was also reduced in response to lower ridership demand. No additional changes are currently planned to Amtrak Thruway bus service during this period. However, with the passage of Senate Bill 742 in 2019, which allows passengers to purchase a ticket for a bus only trip without a connecting ticket on the Pacific Surfliner, the LOSSAN Agency is reviewing potential opportunities for adjusting or expanding thruway bus services through our strategic planning process and will coordinate with CCJPA and SJJPA in developing potential schedules for improving the service. Currently, when looked at separately from the Pacific Surfliner intercity rail service, the Amtrak Thruway bus service under the management of the LOSSAN Agency exceeds a 100 percent farebox recovery rate.





Service Optimization

Though it already has the distinction of being the second-busiest intercity passenger rail corridor in the United States, the Pacific Surfliner service has great potential for increased ridership, revenue, enhanced service coordination, and improved on-time performance. Through the implementation of the recommendations in the LOSSAN Corridor Optimization study, the LOSSAN Agency looks to a full build out of up to 18 roundtrips for the Pacific Surfliner between Los Angeles and San Diego, eight roundtrips between San Diego and Goleta and three roundtrips between San Diego and San Luis Obispo. This will achieve the implementation of many of the early infrastructure and service objectives outlined in Metrolink’s Southern California Optimized Rail Expansion (SCORE) program and the LOSSAN Agency’s 2018 TIRCP Building Up program.

The optimization study was completed in December 2021 and the near-term recommendations of the study were partially implemented as part of the October 25, 2021 schedule change. The service strategies and infrastructure recommendations presented in the optimization study align with both regional service needs and objectives as well as the goals presented in the 2022 California State Rail Plan and allow frequency and reliability increases for services operating along the LOSSAN rail corridor. The recommendations presented in the optimization study will be further enhanced through the coordination the LOSSAN Agency will continue to perform related to identifying and evaluating root causes for major delays, crew and equipment utilization, and improvements to service disruption responses and recovery.

Chapter 4: Performance Standards and Metrics



Background

The LOSSAN Agency strives for continuous improvement of the Pacific Surfliner passenger rail service. Pursuant to SB 1225, the Secretary of CalSTA was required to establish a set of Uniform Performance Standards (UPS) for the state’s three intercity passenger rail corridors to control costs and improve efficiency. These standards measure the ongoing success of the service in three specific areas: **usage** (ridership and passenger miles), **efficiency** (farebox recovery and cost per passenger mile), and **service quality** (endpoint / all-station on-time performance and operator caused delays). These standards also provide the basis for service changes and help guide the planning efforts for the LOSSAN Agency.

Required Metrics

For reporting performance metrics, the state fiscal year (FY) will be used. This chapter presents the performance of the Pacific Surfliner against the established UPS for FY 2022-23, as well as additional metrics that help track the performance of the service. Table 4.1 summarizes the status of all required UPS metrics. A colored box illustrates whether or not the standard is being met (green: standard met or exceeded; red: standard not met).

Table 4.1: UPS Metrics

Category	Metric	Description / Required Performance Standard	Usage Baseline		Cost Efficiency Baseline		Prior Year	Latest Reporting Year	Status of Required Performance Standards						
			FY 2014	FY 2015	FY 2022	FY 2023			% Change from Baseline (Yes / No)	Growth in Usage v. Population Standard Met? (Yes / No)	% Change from Prior Year (Yes / No)	Standard Met? (Yes / No)	50% Farebox Recovery Standard Met?	90% OTP Standard Met?	Operator Delays Standard Met?
Reference Metric	Corridor Population	Total population combined for six counties served by the Pacific Surfliner	18,050,546	18,154,292	18,369,028	17,735,470	-1.7%								
	Rail Passenger Miles*	Includes rail passenger trips; growth at least as fast as growth in total corridor population, and improvement relative to previous year and to FY 2014 baseline	230,263,155	243,480,015	142,279,508	124,591,049	-45.9%	No	-12.4%	No					
Usage	Bus Passenger Miles*	Includes bus passenger trips only; growth at least as fast as growth in total corridor population, and improvement relative to previous year and to FY 2014 baseline	Bus NA	Bus NA	12,288,589	15,015,634			22.2%	Yes					
	Rail Ridership**	Includes rail passenger trips; growth at least as fast as growth in total corridor population, and improvement relative to previous year and to FY 2014 baseline	2,673,170	2,796,591	1,469,800	1,542,198	-42.3%	No	4.9%	Yes					
Reference Metric	Bus Ridership	Includes bus passenger trips only; growth at least as fast as growth in total corridor population, and improvement relative to previous year and to FY 2014 baseline	Bus NA	Bus NA	71,029	83,766			17.9%	Yes					
	CA Consumer Price Index (CPI)*	Calculated by the CA Department of Finance	Bus NA	247,445	308,452	327,020									
Cost Efficiency	Farebox Recovery	50 percent or above inclusive of bus and rail services; calculated by dividing Total Revenue by Total Operating Cost		71.4%	53.8%	46.3%						No			
	Cost per Passenger Mile (CPI-Adjusted)	Improvement relative to previous year and to FY 2015 baseline; measured in constant baseline year dollars		\$ 0.43	\$ 0.54	\$ 0.65							No		
Service Quality	Endpoint OTP	90 percent or more of endpoint station arrivals are within 15 minutes of schedule	77.6%	77.6%	82.2%	79.5%								No	
	All-Station OTP*	90 percent or more of arrivals at all station stops are within 15 minutes of schedule	85.2%	87.2%	85.3%	79.5%								No	
	Operator Responsible Delays per 10,000 Train Miles	Fewer than 325 minutes of delay per 10,000 train miles	360	468	469	613									No

Raw Data Source: Amtrak
 Note: Required UPS metrics are highlighted in blue. Cells highlighted in grey indicate that the missing values are not available or not required UPS metrics.
 *One passenger traveling one mile = one passenger mile
 **California Department of Finance, CA CPI report (used May 2022 version of Fiscal Year averages: from 1950-51)
 *Bus NA = Amtrak confirmed that historic FY 2013-FY 2016 bus ridership and bus passenger miles data are not available.
 **Note: FY2014 All-Station OTP is only based on data for May-June 2014. Amtrak has no historic All-Station OTP data prior to May 2014.
 ** Ridership for FY 2022-23 is sourced from official Amtrak ridership figures, including during periods when temporary track closures were in effect in San Clemente.

Usage and Environmental Performance Metrics

In addition to the required usage metrics, there are additional performance indicators that, while not required to be reported to the state, are helpful in analyzing the value of the service. Some of these indicators fall under the environmental performance category. Tables 4.2 lists reported metrics that fall under the usage and environmental performance category.

Table 4.2: Usage and Environmental Performance Metrics

Category	Metric	Description / Required Performance Standard
Reference Metric	Corridor Population	Total population combined for six counties served by the Pacific Surfliner
Usage	Rail Passenger Miles*	Includes rail passenger trips; growth at least as fast as growth in total corridor population, and improvement relative to previous year and to FY 2014 baseline
	Bus Passenger Miles*	Includes bus passenger trips only; growth at least as fast as growth in total corridor population, and improvement relative to previous year and to FY 2014 baseline
	Rail Ridership**	Includes rail passenger trips; growth at least as fast as growth in total corridor population, and improvement relative to previous year and to FY 2014 baseline
	Bus Ridership	Includes bus passenger trips only; growth at least as fast as growth in total corridor population, and improvement relative to previous year and to FY 2014 baseline
Environment	Greenhouse Gas Reduction^^	Tons of carbon dioxide (CO2) emissions avoided, calculated using corridor passenger miles, factors average pounds of carbon dioxide (CO2) emissions per passenger mile in a private automobile versus emissions per passenger mile in a train
	Gallons of Gasoline Avoided^^	Calculated as equivalent of the tons of carbon dioxide (CO2) emissions avoided

Note: Required UPS metrics are highlighted in blue.

* One passenger traveling one mile = one passenger mile

** Ridership for FY 2022-23 is sourced from official Amtrak ridership figures, including during periods when temporary track closures were in effect in San Clemente.

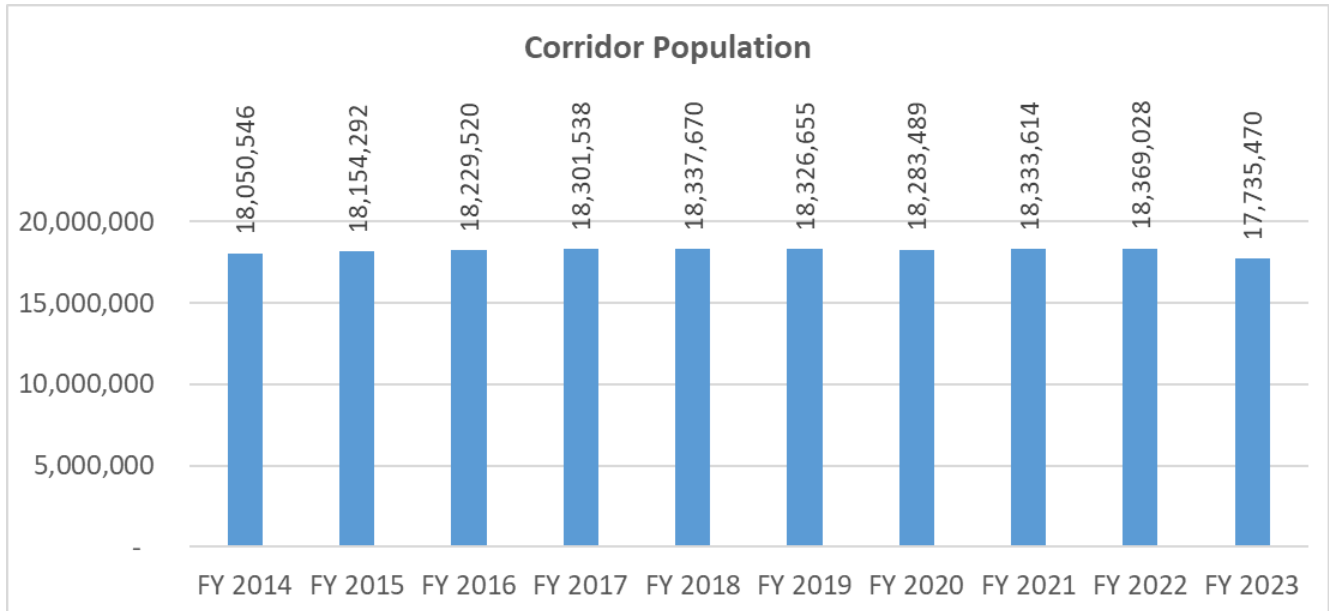
^^Source: Public Transportation’s Role in Responding to Climate Change, Federal Transit Administration, 2010.

<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PublicTransportationsRoleInRespondingToClimateChange2010.pdf>.

Emissions calculator: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

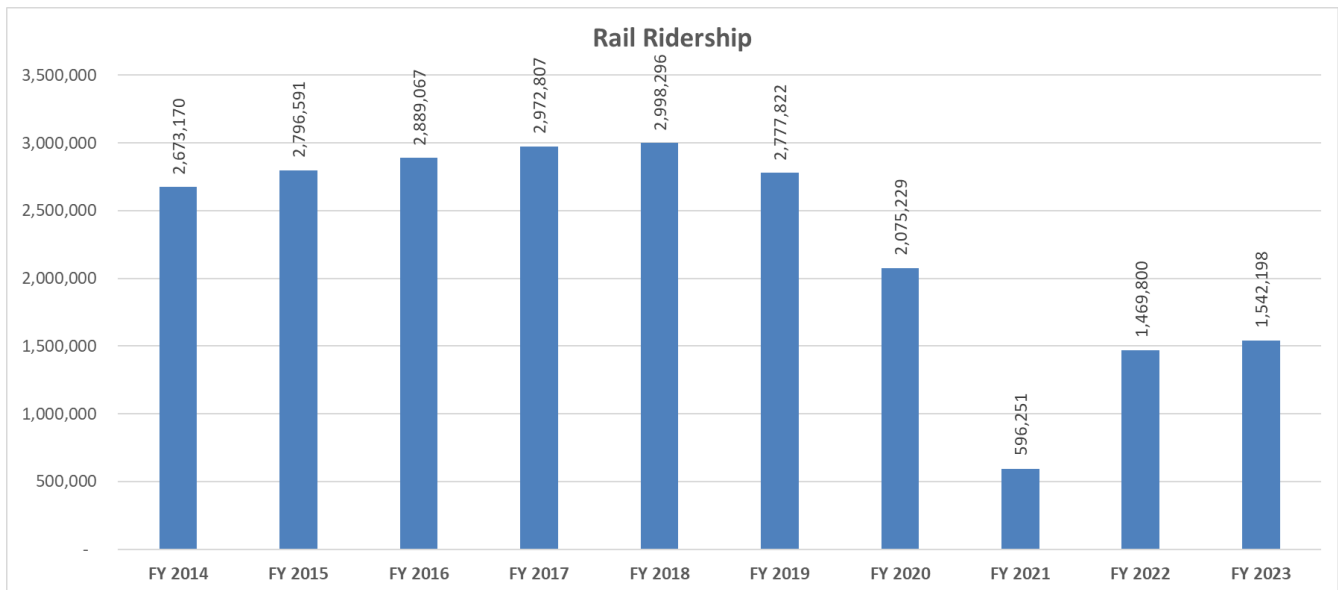
Total corridor population, including the counties of San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego, has remained relatively stable since baseline FY 2013-14. Overall, **the population decreased by 1.8 percent from FY 2013-14 to FY 2022-23**. Figure 4.1 shows Pacific Surfliner corridor population over time.

Figure 4.1: Pacific Surfliner Corridor Population



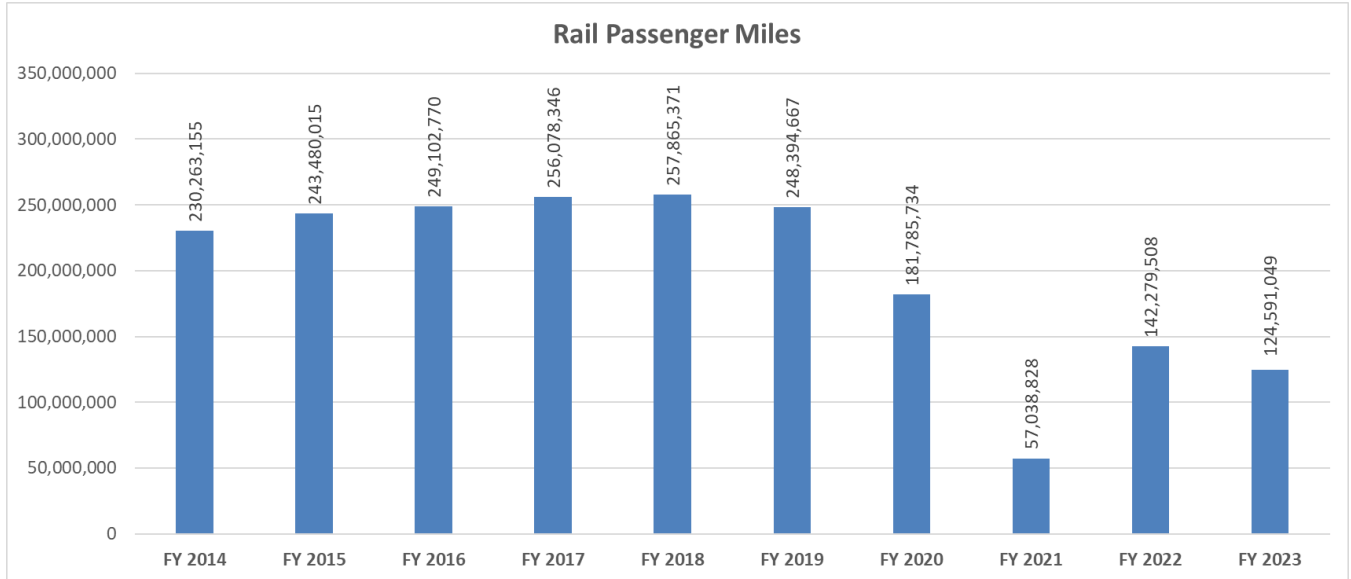
Total ridership on the Pacific Surfliner for FY 2022-23 was 1,542,198¹, a 4.9 percent increase over the prior year (1,469,800) and is shown in Figure 4.2.

Figure 4.2: Pacific Surfliner Corridor Ridership



¹ The ridership reported for FY 2022-23 is sourced from official Amtrak data provided for the Pacific Surfliner, which has also been included in Amtrak’s national reporting.

Figure 4.3: Pacific Surfliner Passenger Miles



Factoring in the average pounds of carbon dioxide (CO₂) emissions per passenger mile in a private automobile versus riding on passenger rail², the 124 million rail passenger miles for the Pacific Surfliner resulted in a **reduction of nearly 45,000 tons of greenhouse gases (GHG)**. The impact that this has on the environment cannot be understated. The CO₂ emissions saved is the equivalent of burning nearly 4 million gallons of gasoline.

Cost Efficiency Metrics

In addition to the required cost efficiency metrics, there are additional performance indicators that are helpful in analyzing the financial performance of the service. Both required and additional cost efficiency metrics are summarized in Table 4.3 below.

² Source: *Public Transportation’s Role in Responding to Climate Change*, Federal Transit Administration, 2010. <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PublicTransportationsRoleInRespondingToClimateChange2010.pdf>

Table 4.3: Cost Efficiency Metrics

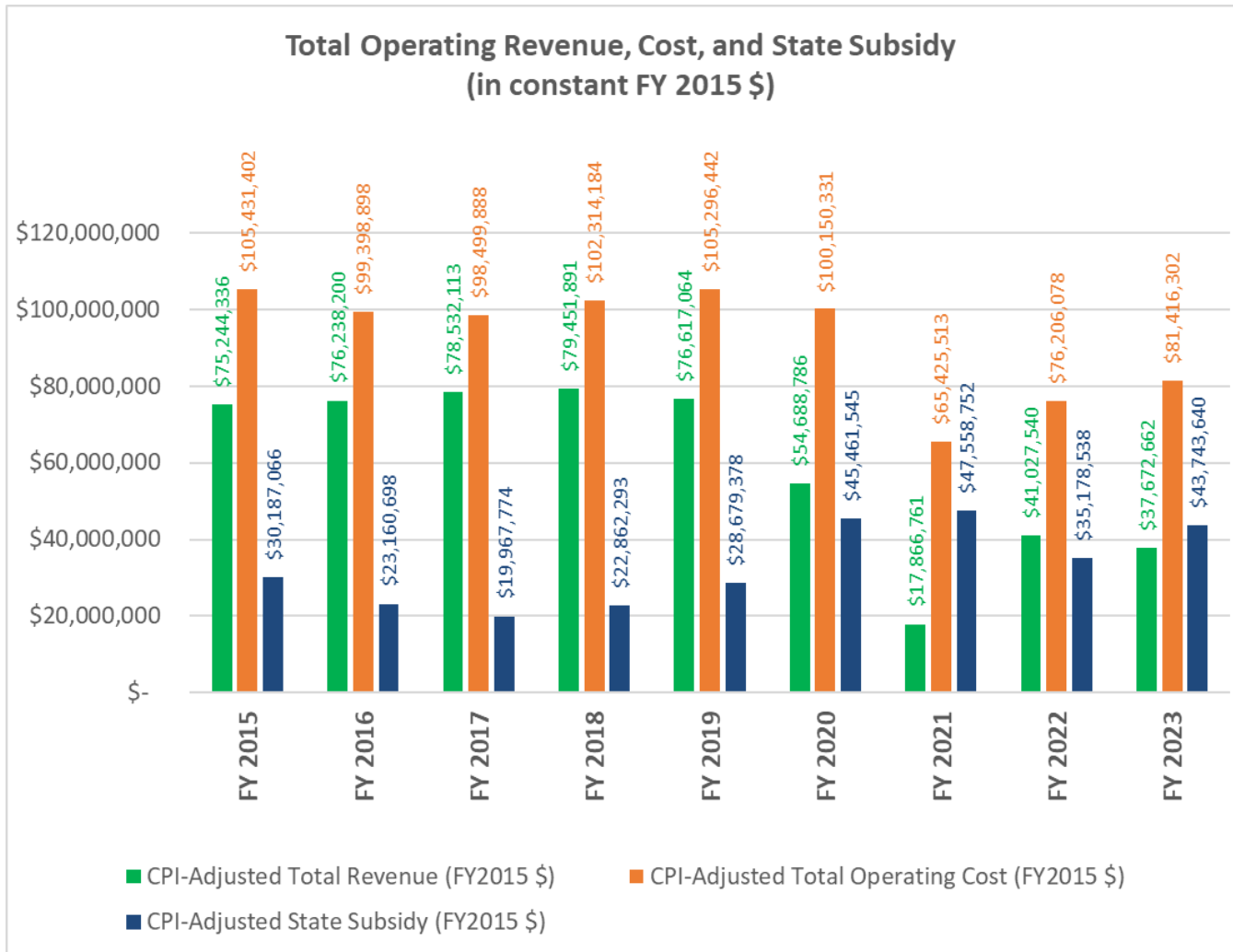
Category	Metric	Description / Required Performance Standard
Reference Metric	CA Consumer Price Index (CPI) [†]	Calculated by the CA Department of Finance
Cost Efficiency	Total Revenue (CPI-Adjusted)	Total combined ticket, food and beverage, and other ancillary revenue as reported by the corridor operator
	Total Operating Cost (CPI-Adjusted)	Total costs associated with the operations of the corridor, including third party costs, route costs, additives, and other costs
	State Subsidy (CPI-Adjusted)	Calculated by subtracting Total Revenue from Total Operating Cost
	Farebox Recovery	50 percent or above inclusive of bus and rail services; calculated by dividing Total Revenue by Total Operating Cost
	Cost per Passenger Mile (CPI-Adjusted)	Improvement relative to previous year and to FY 2015 baseline; measured in constant baseline year dollars

Note: Required UPS metrics are highlighted in blue.

†California Department of Finance, CA CPI report (used May 2022 version of "Fiscal Year averages: from 1950-51")

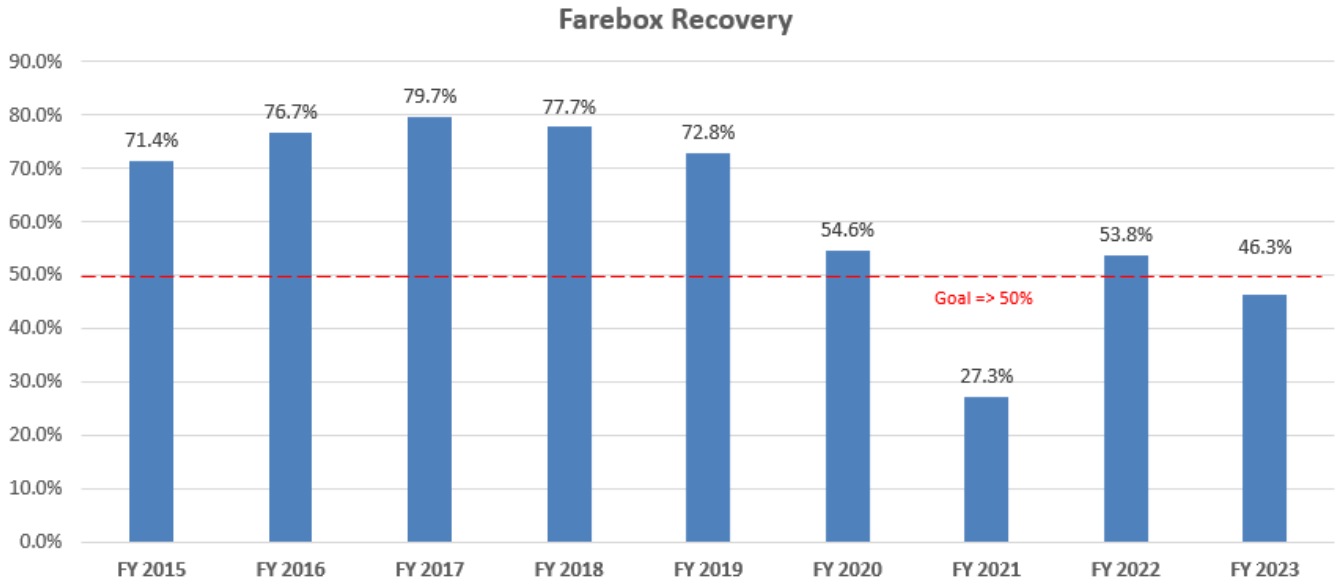
The massive decline in ridership due to the COVID-19 pandemic significantly lowered both ticket and café car sales. Unfortunately, the reduction in service has not been commensurate with a reduction in costs and overall state subsidy need. While the Pacific Surfliner has been operating on a reduced service schedule since March 2020, some costs, such as station staffing, remain constant. Figure 4.4 shows Pacific Surfliner passenger **total revenue, total operating cost, and state subsidy over time.**

Figure 4.4: Pacific Surfliner Revenue, Cost, and State Subsidy



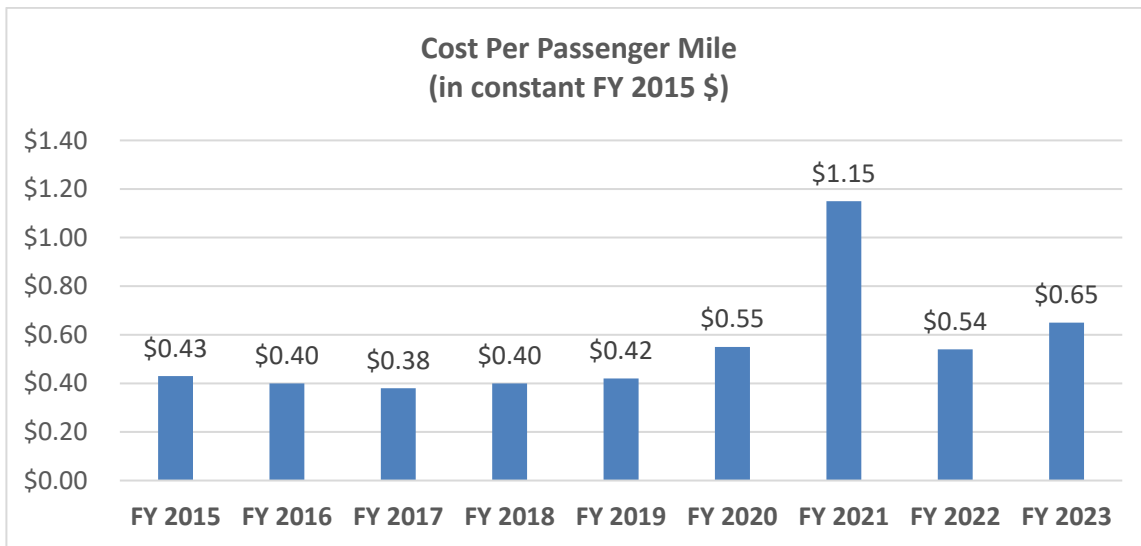
In FY 2021-22, total revenue and total operating cost were \$38 million and \$81 million, respectively (in constant FY 2014-15 dollars). This resulted in a state subsidy of approximately \$44 million (in constant FY 2014-15 dollars), and a farebox recovery percentage of 46.3 percent, which is below the 50 percent standard. With the completion of the temporary barrier wall near the Casa Romantica Cultural Center and Gardens and the resulting restoration of regular train service through San Clemente on July 17, 2023, it is anticipated that farebox recovery will increase as passengers are able to travel without requiring the use of limited bus connections. Figure 4.5 shows Pacific Surfliner farebox recovery over time.

Figure 4.5: Pacific Surfliner Farebox Recovery



Cost per passenger mile for FY 2023-24 was \$0.65 (in constant FY 2014-15 dollars), representing a 20.4 percent increase from the prior year (\$0.54 per passenger mile). Figure 4.6 illustrates Pacific Surfliner cost per passenger mile over time.

Figure 4.6: Pacific Surfliner Cost per Passenger Mile



Service Quality Metrics

Pacific Surfliner service quality metrics are summarized in table 4.4 below.

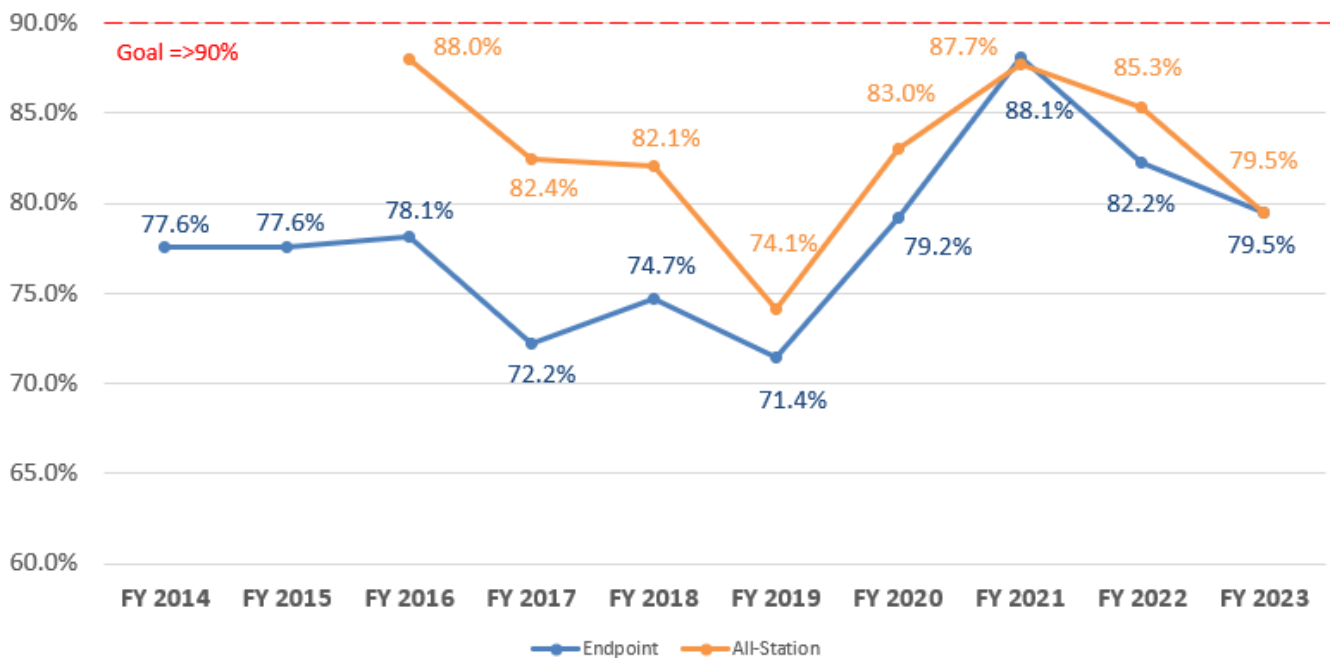
Table 4.4: Service Quality Metrics

Category	Metric	Description / Required Performance Standard
Service Quality	Train Miles	Total number of miles operated on all Pacific Surfliner trains
	Trains On-Time	Total trains arriving to endpoint station within 15 minutes of schedule
	Trains Operated	Total number of Pacific Surfliner trains operated
	Endpoint OTP	90 percent or more of endpoint station arrivals are within 15 minutes of schedule
	All-Station OTP	90 percent or more of arrivals at all station stops are within 15 minutes of schedule
	Operator Responsible Delays per 10,000 Train Miles	Fewer than 325 minutes of delay per 10,000 train miles

Note: Required UPS metrics are highlighted in blue.

In FY 2022-23, 6,366 out of a total of 8,005 operated trains arrived to their endpoint station within 15 minutes of their scheduled arrival time. This represents an **endpoint OTP score of 79.5 percent for FY 2022-23, which is below the 90 percent standard**. Similarly, **all-station OTP for FY 2021-22 was 79.5 percent**, also below the 90 percent standard. Figure 4.7 illustrates endpoint and all-station OTP over time.

Figure 4.7: Pacific Surfliner Endpoint and All-Station OTP (Add Goal Line)



About 66 percent of all FY 2022-23 delays fell under host railroads' responsibility. The origins of these delays vary by individual train but can often be traced back to signal system failure and slow orders. These delays can then cascade and cause trains to meet at non-planned locations, resulting in further delay, and are reflected as passenger train and commuter train interference. The LOSSAN Agency continues to work with the hosts to determine the root cause of delays and come up with operational solutions that improve schedule reliability. Details on train delays incurred during FY 2022-23 are shown in Figures 4.8 through 4.11.

Figure 4.8: Distribution of Systemwide Delays

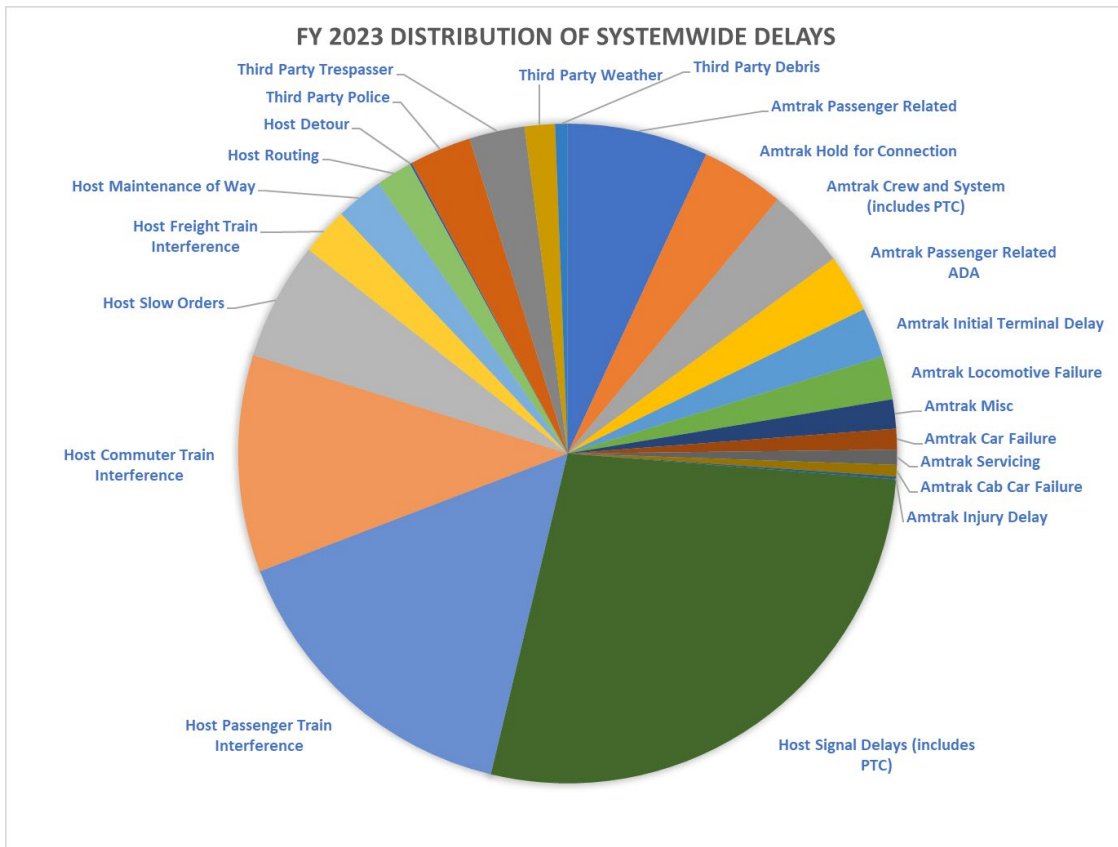


Figure 4.9: Rate of Delay by Responsible Party

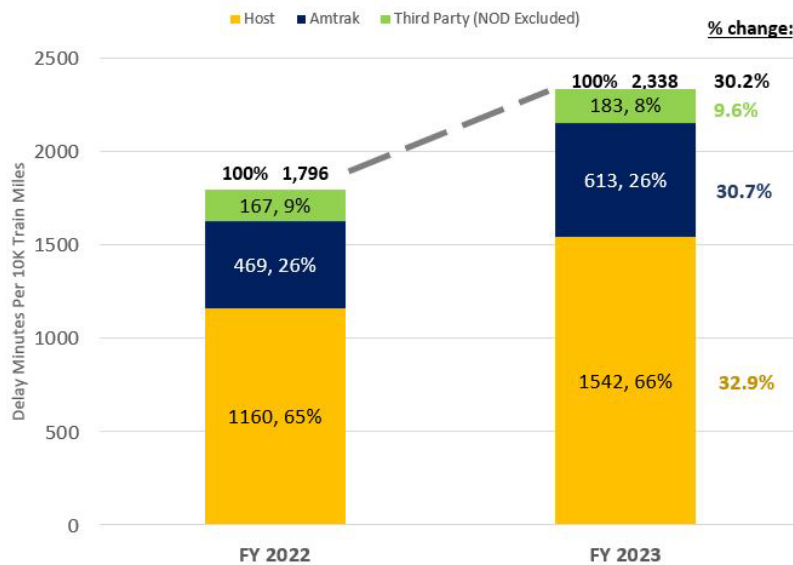
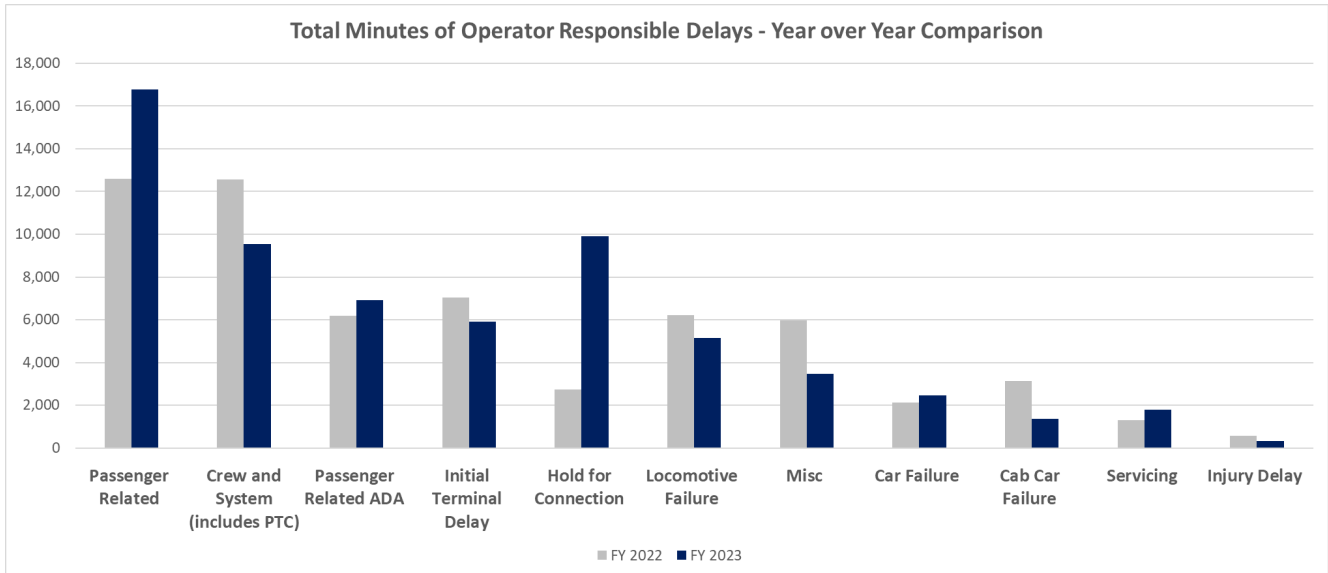


Figure 4.9 shows the rate of delay by responsible party. The rate of delay is calculated by dividing the total minutes of delay by the total number of miles traveled by all operated trains, then multiplying the value by 10,000. **In FY 2022-23, there were approximately 2,338 minutes of delay per 10,000 train miles, representing a 30 percent increase from the previous year.** As noted previously, Host responsible delays make up most of the overall delays experienced by the Pacific Surfliner service.

Host responsible delays increased by 32.9 percent compared to the prior year. Of the total host responsible delays in FY 2022-23, 39 percent resulted from commuter or passenger train interference. In many cases, these delay types tie back to cascading delays from signal failure issues, but in others, dispatching priority is involved. In response to this, the LOSSAN Agency is working with both NCTD and the UPRR to maintain OTP incentive programs. Funded via a 2018 TIRCP grant, these programs provide incentive performance payments for meeting Pacific Surfliner OTP goals. The LOSSAN Agency executed the OTP incentive program with UPRR on December 15, 2022. The first OTP incentive program agreement was executed with NCTD, and was effective from July 1, 2019 through December 31, 2021. A revised agreement continues the NCTD program from January 1, 2022 through June 30, 2025.

In FY 2022-23, the rate of Operator responsible delays increased by 30.7 percent when compared to the prior year. Passenger-related delays were the top operator delay, followed by holding for connections with other trains. Combined, these two delay types represented about 53 percent of all Operator delays in FY 2022-23. Details on the year over year comparison for Operator delay types can be found in Figure 4.10.

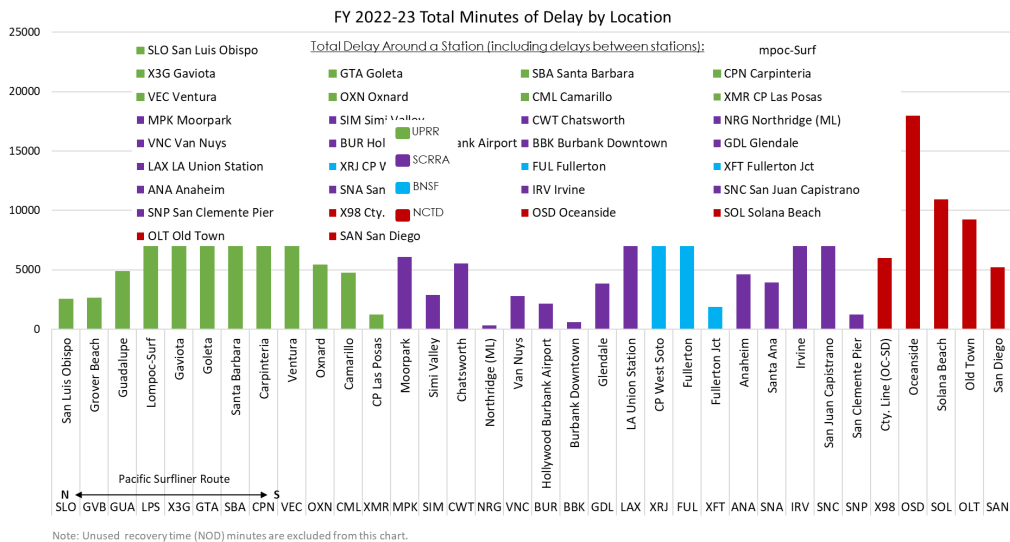
Figure 4.10: Operator Responsible Delays



For FY 2022-23, the Pacific Surfliner averaged 613 minutes of Operator delays per 10,000 train miles. This continues to be an area wherein the Pacific Surfliner service does not meet the required standard, and the LOSSAN Agency will continue to work with Amtrak and our host railroads to ensure that this performance standard improves.

Effort was made to locate specific “delay hot spots” along the corridor, as illustrated in Figure 4.11. Total delay around a station or other specific location along the corridor is calculated by combining delays approaching, dwelling, and leaving each location. This has helped to isolate specific areas that need infrastructure improvements, such as signal upgrades or siding improvements, or need schedule adjustments due to ongoing construction activities.

Figure 4.11: Total Minutes of Delay by Location



Note: Unused recovery time (NOD) minutes are excluded from this chart.

Customer Service Metric

Table 4.5 below describes the metric used to measure and track how satisfied riders are with the Pacific Surfliner service.

Table 4.5: Customer Service Metric

Category	Metric	Description / Required Performance Standard
Customer Service	Customer Satisfaction Score	Score representing an 'average overall satisfied' percentage of Pacific Surfliner passengers surveyed via the Amtrak electronic Customer Satisfaction Index survey (eCSI)

Note: Required UPS metrics are highlighted in blue.

Amtrak reports monthly customer service scores in which an 'average overall satisfied' percentage is calculated out of 100 passengers surveyed. The Pacific Surfliner scored an average of **79.1 percent for FY 2022-23**.

FY 2023-24 and FY 2024-25 Action Plan

The LOSSAN Agency will continue to monitor system performance on a monthly basis and report to the Board via the quarterly LOSSAN rail corridor trends report. Ridership and revenue is forecast to increase steadily as it restores service reductions that arose during the COVID-19 pandemic, and from the operational impact of the emergency track closures around San Clemente. The impact to ridership and revenue has prompted LOSSAN Agency staff to work with CalSTA and Amtrak on cost cutting measures and operational efficiencies that will facilitate improvement to farebox recovery. Additionally, LOSSAN Agency staff is working with NCTD and UPRR to continue OTP improvements resulting from both the OTP incentive programs and capital improvements along the corridor. The LOSSAN Agency will continue to develop and implement schedule adjustments as problem areas are identified and as the pandemic subsides and service restoration continues. Ongoing discussions continue with the hosts regarding chronic signal failure issues, as well as dispatching policies associated with PTC malfunction related delays. Other identified issues will be addressed with the Corridor Improvement Team, which includes all rail operators and host railroads.

Modification of Performance Standards

The UPS document identifies several factors that may lead to the need to modify the adopted UPS. Currently, no basis for modifications of the standards exist. However, on March 30, 2020, the LOSSAN Agency formally requested relief from the Uniform Performance Standards, as dictated by the Interagency transfer Agreement, Appendix G. Relief has been requested at least until such time as pre-COVID-19 service levels have been restored and the current coastal erosion related closures have been remedied.

Chapter 5: Capital Improvement Program

Since 1990, the State of California has made a significant investment to fund capital improvements on the state's three intercity passenger rail corridors. During that time, LOSSAN Agency member agencies have also been successful in securing state and federal grants for preliminary engineering, environmental documentation, final design, and construction of capital projects along the LOSSAN rail corridor, in addition to local investments by self-help counties using countywide sales-tax measures. These improvements have allowed for significant enhancements in safety, improvements in operational efficiency, and increases in capacity. Despite these investments, more than half of the rail corridor remains single track, most of which is along the corridor north of Los Angeles. This remaining single track will continue to hinder the expansion of service and overall efficiency. An extensive capital improvement program of over \$5 billion in additional capacity, station improvements, signal and communications improvements, and other capital projects remains unfunded.

There are seven different ROW owners along the LOSSAN rail corridor and each has made investments within their territory; however, the capital needs of the corridor well outweigh the available funding resources. A significant hurdle for the intercity passenger rail services in California has been the lack of a long-term sustainable capital funding source. The approval of SB 1 by the California legislature in April 2017 has helped provide a more reliable funding source for these major (and minor) capital needs but is still insufficient by itself to fully fund the identified capital improvements along the LOSSAN rail corridor. The LOSSAN Agency will continue to coordinate with its partners and member agencies to pursue additional funding opportunities that bring benefits to the larger corridor.



Surf Station Improvements

Since 2022, the LOSSAN Agency has worked actively with the State and various stakeholders, to update the capital projects list for the LOSSAN rail corridor. This was done to compile a comprehensive list of all identified capital projects, including the status of each project as well as any programmed funding. The list serves as a resource to aid in the future service expansion plans of SCRRA, NCTD, and the Pacific Surfliner. The updated capital projects list can be found in tables 5.1 through 5.3. The project list is split into projects that are in implementation and/or have a funding commitment, and those in the planning process and/or without funding currently committed.

While each member agency or host railroad is responsible for the implementation of their own respective capital improvement programs, the LOSSAN Agency will use the updated Capital Projects list in both funding and legislative pursuits, with a focus on leveraging any existing funds to advance capital projects that benefit the entire LOSSAN rail corridor. This unified voice

advocating for capital funding and key projects makes the LOSSAN Agency's requests more compelling and competitive.

Capital Improvement Plan Funding

In addition to a list of all capital improvements planned by various stakeholders throughout the corridor, the LOSSAN Agency also maintains a Capital Improvement Program (CIP) that consists of projects that the LOSSAN Agency funds and has direct management of. On January 30, 2019, the LOSSAN Board approved a comprehensive CIP that programmed all project funding available to the LOSSAN Agency for the next two years. The approved CIP focused on projects that addressed safety and/or security needs and included some projects that improve the passenger experience. On June 15, 2020, with the reduction in ridership and subsequent loss in revenue that have resulted from the global COVID-19 pandemic, the LOSSAN Board approved the reprogramming of \$12,031,047 in SRA funding to a reserve fund that could be used if necessary to cover the costs of ongoing operations of the Pacific Surfliner intercity rail service if funding were reduced. Fortunately, the utilization of these funds was not necessary to maintain service and a significant portion of these funds were reprogrammed to capital projects in FY 2023-24. The remaining portion of these funds will be reprogrammed in FY 2024-25.

Since the approval of the CIP, the LOSSAN Agency has initiated several additional projects with LOSSAN Board approval, which include the planning and design efforts associated with the expansion of layover and maintenance facilities for the Pacific Surfliner in San Luis Obispo, Goleta and San Diego. Below are the funding programs currently being used as part of these efforts, as well as other programs that can be pursued in the future.



Canada Honda Bridge

State Rail Assistance Program: California Senate Bill 1 (SB 1) includes approximately \$454 million directed specifically to commuter and intercity rail services through the SRA program. SRA is intended to fund both operational and capital improvements through a combination of formula and competitive distribution. SRA was created to provide intercity rail agencies with a dependable source of supplemental revenue that is flexible and can be used to fund a variety of rail service improvements. The SRA program formula distribution process began with state FY 2017-18, and the LOSSAN Agency has been allocated the complete first round of available SRA formula funds (\$13.9 million) to projects vital to the preservation of Pacific Surfliner passenger service. In addition, LOSSAN has received an additional \$719 thousand in competitive SRA funding for an Integrated Wayfinding Signage Upgrade project. Round two of SRA funding is projected to be \$29.8 million over a five-year period. Of this \$29.8 million, approximately \$15.8 million has been received for five projects. This funding is expected to include additions and improvements to the Pacific Surfliner passenger fleet. Future allocation estimates will be updated annually and can fluctuate with the current price of diesel fuel.

CalSTA TIRCP: The Transit and Intercity Rail Capital Program (TIRCP) was created to provide grants for capital improvements that modernize California’s intercity, commuter, and urban rail systems. The goal of these improvements is the reduction of GHG emissions and vehicle miles travelled. In April 2016, the LOSSAN Agency submitted a TIRCP grant application in partnership with SANDAG, NCTD and OCTA. In total, CalSTA awarded \$82 million in TIRCP grant funds to the LOSSAN Agency, representing the single largest award to any agency at the time. On January 12, 2018, the LOSSAN Agency coordinated the submittal of three separate applications requesting over \$700 million in capital and operational improvement CalSTA awarding \$188.3 million in TIRCP funds, including \$147.9 million for projects in Ventura, Santa Barbara, and San Luis Obispo Counties, and \$40.4 million for projects in San Diego County. In 2020, LOSSAN was awarded \$10.3 million for the Central Coast Layover Project in San Luis Obispo and \$28.4 million for the first phase of the San Diego Maintenance and Layover Facility. Additionally, in 2023, the LOSSAN Agency received supplemental funding totaling \$31.0 million. \$17.0 million was awarded to assist in the stabilization of slope and bluffs in Ventura and Santa Barbara Counties. The remaining \$14.0 million was awarded for the completion of the Central Coast Layover Facility.



San Luis Obispo Station

California Transportation Commission SCCP: The Solutions for Congested Corridors Program (SCCP) is a statewide, competitive program that provides funding to achieve a balanced set of transportation, environmental, and community access improvements to reduce congestion throughout the state. The program was created by the Road Repair and Accountability Act of 2017 (SB 1).

The SCCP makes \$250 million available annually to projects that implement specific transportation performance improvements and are part of a comprehensive corridor plan, by providing more transportation choices while preserving the character of local communities and creating opportunities for neighborhood enhancement.

In 2023, the LOSSAN Agency (through coordination with VCTC), was awarded \$43.5 million in funding for the Leesdale Passing Siding project. This brought the total amount of funding to \$69.5 million for all of the phases of the project. This project is to upgrade, power, and extend the existing 3,330-ft siding to the west 3.7 miles to accommodate freight trains and eliminate the need for passenger trains to wait as much as 10 minutes on a regular basis at the Oxnard Station.

State Minor Capital Project Funding: In addition to the major capital improvements funded by various sources as discussed above, the state annually sets aside an allocation of approximately \$500,000 to cover minor projects related to the Pacific Surfliner service. Projects funded under this program include station improvements, signage, and minor safety and security

enhancements. A project to upgrade amenities and make safety improvements at Grover Beach and Guadalupe Stations is scheduled to be complete by May 2024.

US Department of Transportation’s Multimodal Project Discretionary Grant Opportunity:

The Multimodal Project Discretionary Grant (MPDG) program contains three distinct elements: the National Infrastructure Project Assistance grants program (Mega), the Nationally Significant Multimodal Freight and Highways Projects grants program (INFRA), and the Rural Surface Transportation Grant program (Rural). The grants are awarded on a competitive basis for surface transportation infrastructure projects. These include capital improvement projects for intercity passenger rail, as well as railway-highway grade crossings or separations. Applications for the MPDG grants are evaluated based on criteria that includes safety improvements; beneficial impacts to climate resilience and environment sustainability; equity, multimodal options and quality of life; and innovation areas such as technology, project delivery, and financing.

Other Capital Funding: In addition to the funding sources discussed above, the LOSSAN Agency and its member agencies have and will continue to utilize a variety of other federal, state and local funding sources to advance capital improvements and other programs along the LOSSAN rail corridor. LOSSAN has been accepted into the FRA’s Corridor Identification and Development Program. Once a service development plan is completed, LOSSAN will be well placed to compete for federal grant opportunities including the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program, Federal-State Partnership for State of Good Repair (SOGR) grants, Consolidated Rail Infrastructure and Safety Improvement grants (CRISI), and local transportation sales-tax measures. The LOSSAN Agency will continue to explore all local, state, and federal funding opportunities.

Current and Programmed Capital Projects

The LOSSAN Agency updates the CIP each year consistent with the development of the annual business plan. The needs identified in the CIP often exceed the available funding, and projects are prioritized with safety-related projects given the highest priority. The CIP can be adjusted mid-cycle to account for project savings or projects that may need to be advanced, delayed, added, or deleted. As these needs arise, the LOSSAN Agency will work with the LOSSAN TAC to prioritize additional projects for inclusion in the approved CIP. The list of projects included in the CIP is supplemented by additional capital projects along the rail corridor that have been identified or programmed by member agencies. A summary of the LOSSAN Agency programmed projects are listed in Table 5.1, including programmed funding sources and estimated costs. A list of member or partner agency-led (third party) capital projects along the LOSSAN corridor that are funded and/or in progress is provided in Table 5.2. A list of member or partner agency-led capital projects that are planned and/or unfunded is provided in Table 5.3.

As of this cycle, included in the capital projects list is a column to denote whether the benefits of the project support the strategic goals of environmental sustainability and coastal resiliency. For additional discussion, see chapter 15 of this document.

Table 5.1: Capital Improvement Projects List – LOSSAN Lead

No.	Project Name	Type of Project	Climate Resiliency	Project Description	Host	Project Phase	Project Location (Subdivision, MP)	Capital Cost Estimate	Funding Commitment	Project Benefits	Current Status	Anticipated Completion
1	Central Coast Layover Facility Expansion (Phase 1)	Layover Facility	Y	The project is located in the City of San Luis Obispo adjacent to the San Luis Obispo Amtrak station. This would be an expansion and relocation of the existing layover track and facility in San Luis Obispo at the northern end of the corridor.	UP	Planning	Santa Barbara Subdivision	\$ 43,995,593	\$ 40,514,000	The proposed project is needed to improve the efficiency, on-time performance and frequency of intercity passenger rail services along the LOSSAN rail corridor. A new or expanded layover facility will improve intercity passenger rail service. The Pacific Surfliner would be able to improve the ride time, revenue, and expand service through additional layover capacity. This additional capacity would allow additional passenger trains to be added to the LOSSAN rail corridor. The project will also allow the City of San Luis Obispo and the Pacific Surfliner to have the opportunity to add and service additional train sets used for further expansion of the service. The project will facilitate the maintenance of equipment mid-route and at route terminals.	Environmental complete. Final design underway.	Late 2026
2	Install Centralized Traffic Control (Goleta to San Luis Obispo)	CTC	Y	The scope of this project is to provide equipment to enable the installation of Centralized Traffic Control at locations along a 129-mile section of track in San Luis Obispo and Santa Barbara counties in order to allow for the installation of CTC. This project will be constructed by the Union Pacific Railroad on the LOSSAN Rail Corridor. This project goes hand in hand with the upgrade of non-powered switches and detail. This project encompasses the signal work associated with installation of CTC and corresponds with the 3 phases of switch installation.	UP	Construction	Santa Barbara Subdivision	\$ 22,500,000	\$ 22,500,000	The 129-mile section of track in San Luis Obispo and Santa Barbara counties currently operates under Track Warrant Control which limits operational flexibility and reliability. The project improves operational flexibility and reliability and allows for service expansion which will result in reduced travel time, increased ridership and reliability, and GHG emission reduction.	Project is currently in the Planning phase.	COMPLETE
3	Goleta Layover Facility Improvements	Layover Facility	N	The scope of this project is to expand Amtrak's Goleta storage facility by providing additional layover tracks by as much as 800 feet to allow an additional seven-car Pacific Surfliner trains to lay over and receive turnaround servicing in Santa Barbara County.	UP	Design	Santa Barbara Subdivision	\$ 12,945,163	\$ 14,400,000	The benefits of this project include doubling the size of the servicing area, providing new track, a powered switch, a new repair roadway, ground power maintenance area lighting, as well as the construction of a new maintenance storage building and security fence.	Final design in process.	Late 2025
4	Ortega Siding Project	Track	Y	The scope of this project is the design and construction of an approximately 3,100 foot passing siding, two powered switches and a new bridge over Franklin Creek to allow for bi-directional train operation and meets. The project includes expanding the highway-rail at-grade crossing of Linden Avenue in support of the second track and the design and construction of a pedestrian grade separated crossing under the existing track.	UP	Planning	Santa Barbara Subdivision	\$ 33,048,080	\$ 10,677,970	The project improves operational flexibility and allows for reduced travel time, increased ridership and reliability, GHG emission reduction, and also improves safety, including a Safe Route to School serving a nearby elementary school. It facilitates construction of a second platform at the Carpinteria station, further expanding the reliability and service of the Pacific Surfliner service.	A Project Study Report was prepared in FY22-23. The next phase is anticipated to begin in 2024.	Mid 2026
5	Leesdale Siding Extension	Siding	Y	The scope of this project is to extend the existing 3,330 foot (0.6 mi) Leesdale Siding approximately 16,170 feet on the west end of the existing siding. This will create a roughly 19,500 foot siding (3.7 miles) that allow greater operational flexibility in Ventura County for both Pacific Surfliner and Metrolink trains in Ventura County on the LOSSAN Rail Corridor. This project will equip the siding with CTC powered remote controlled switching equipment and modify nearby grade crossing signal systems to accommodate the siding extension.	UP	Design	Santa Barbara Subdivision	\$ 68,500,000	\$ 68,500,000	The project extends the existing Leesdale siding to a 19,500 foot length. Benefits of this project include operational flexibility, improved reliability, increased ridership and reliability, and reduced GHG emission.	A RFR was completed for the project in 2021. Project is currently in design.	Mid 2026
6	Camarillo Station Improvements	Station	N	The project will enhance operation use of the Camarillo station platforms and UPRR tracks in the station area, by improving pedestrian access and ADA compliance between station platforms and parking areas, allowing for improved optimization of train operations on both tracks and platforms.	UP	Design	Santa Barbara Subdivision	\$ 18,000,000	\$ 18,000,000	The new underpass will create a safer and more convenient grade-separated path between the two passenger platforms at the Camarillo station, one of which is not currently used due to the poor pedestrian access between platforms.	The City of Camarillo is the lead on this project. In coordination with Union Pacific.	Late 2025
7	Seacalf Siding Extension	Siding	Y	The Seacalf Siding Extension Project is located on UPRR Santa Barbara Sub. Project corridor is generally 100 feet wide. The existing siding is located adjacent to and east of the main line, with the northern switch located at approximately 385.28 and the southern switch approximately seven miles north of the City of Ventura at MP 386.38. The existing siding is approximately 5,900 feet in length. The proposed Project would begin at the existing southern switch (MP 386.38) and continue south to MP 387.45 in unincorporated Ventura County, which would add an estimated 5,650-foot extension and provide a total siding length of approximately 11,550 feet. The proposed Project would also include wayside signal indications located south of the proposed siding extension track 1 mi.	UP	On Hold	Santa Barbara Subdivision	\$ 20,500,000	\$ -	The project is to allow freight trains to pass through, thus making allow the shorter passenger trains to pass through, thus making the passenger service more efficient and less time consuming.	No progress is being made on this project. No funding programmed at this time. PARD was completed for the project was put on hold.	TBD
8	Signal Respecting and Optimization Project	Signalling	N	This project will construct intermediate and absolute signals at two key locations along the corridor – along Miramar Hill where existing signals have the longest passenger-to-passenger headways and near the Santa Fe Depot terminus. Add new signals, both railroad eastbound and westbound, in several locations along Miramar Hill and between the Old Town Transit Center and Santa Fe Depot and construct associated improvements including trackwork and retaining walls.	NCTD	Construction	San Diego Subdivision	\$ 17,600,000	\$ 17,600,000	The project will improve speed and safety in the south portion of the LOSSAN corridor.		Late 2024
9	North San Diego County Fencing Project	Safety	N	The project will design and construct a dedicated maintenance, support and storage location for the Pacific Surfliner service at the southern end of the LOSSAN rail corridor. The original site location that was identified is no longer available due to changing economics and based on final changes to local plans. A new site is in the process of being identified.	NCTD	Open to Public	San Diego Subdivision	\$ 1,300,000	\$ 1,300,000	Completion of this project will reduce delays caused from the trespasser strikes and as a result increase on time performance on the corridor and improve the safety of the railroad and general public.		COMPLETE
10	San Diego County Maintenance and Layover Facility (Phase 1)	Maintenance and Layover Facility	Y	This project will design and construct a dedicated maintenance, support and storage location for the Pacific Surfliner service at the southern end of the LOSSAN rail corridor. The original site location that was identified is no longer available due to changing economics and based on final changes to local plans. A new site is in the process of being identified.	NSRF, NCTD	Planning	N/A	\$ 28,739,660	\$ 28,739,660	Provides a dedicated maintenance and storage facility for the Pacific Surfliner fleet, which improves fleet utilization and helps to support LOSSAN's service expansion and enhancement goals with the goal of providing a safe and reliable service. The project also provides an opportunity for integration and connectivity to the regional transit network.	Project is currently in the Planning phase.	Late 2026
11	Los Alamos Creek Bridge (Nation) Replacement	Bridge	Y	The scope of this project is a replacement of a bridge dating from 1896, and new track infrastructure across San Antonio Creek in Santa Barbara County. The reconstruction will be with the same or similar materials and design to the existing 720 foot long bridge.	UP	Open to Public	Santa Barbara Subdivision	\$ 22,000,000	\$ 22,000,000	This is a track improvement project that will protect services on Amtrak long-distance, Pacific Surfliner and other freight services on the LOSSAN rail corridor. The project will improve operational flexibility and reliability by providing a safe and reliable crossing, which will result in reduced travel time, increased ridership and reliability, and GHG emission reduction.	The project has been identified. Environmental monitoring is ongoing.	COMPLETE

Table 5.1: Capital Improvement Projects List – LOSSAN Lead

No.	Project Name	Type of Project	Climate Resiliency	Project Description	Host	Project Phase	Project Location (Subdivision, MP)	Capital Cost Estimate	Funding Commitment	Project Benefits	Current Status	Anticipated Completion
12	Canada Honda Creek Bridge Replacement	Bridge	Y	This is a track improvement project that will include the replacement of the existing 124-year old steel truss open-deck across Canada Honda Creek in Santa Barbara County.	UP	Construction	Santa Barbara Subdivision \$	47,300,000	\$ 40,300,000	The replacement of the Canada Honda Bridge crossing will be with the same or similar materials and design, and will serve to improve the reliability of the crossing for freight and passenger operations. The project benefits include improved operational flexibility and reliability by removing existing speed restrictions and to allow for service expansion, which will result in reduced travel time, increased ridership and reliability, and GHG emission reduction.	Project is in the early construction phase.	Late 2025
13	Santa Ynez River Bridge Replacement	Bridge	N	This is a track improvement project that will include the replacement of the existing century old concrete, brick and steel open-deck bridge across the Santa Ynez River in Santa Barbara County.	UP	Planning	Santa Barbara Subdivision	TBD	\$ 15,383,900	This project will ensure that the northern part of the LOSSAN corridor will remain safe for train travel, both for passengers and pedestrians close to the rail line.	Project is in early planning. Environmental and design will be lead by UPRR.	Late 2029
14	Corridor Handing Improvements (Safety)	Safety	N	The project will provide Corridor Handing Improvements along the Santa Barbara subdivision including slope full rail, security lighting, signage, and other safety improvements. Project locations include Bufile at Honda (MP 302.89), Jajama (MP 318.69), Surfing Cowboy (MP 324.328), El Capitán (MP 347.3), Capitanina Bufile (MP 379.9). Secondary concerns are for Tajigas (MP 340.5) and Jajama Shavari (MP 319).	UP	Construction	Santa Barbara Subdivision \$	90,000,000	\$ 34,571,000	This project will ensure that the northern part of the LOSSAN corridor will remain safe for train travel, both for passengers and pedestrians close to the rail line.	Sensitive bluff areas are being identified and plan put in place to address.	Mid 2025
15	Franchise Access Fee, Cap. Access and Incentive (UPRR)		N	The project provides a capitalized track access fee payment to UPRR to allow two additional slots for Pacific Surfliner trains to operate between Los Angeles and Santa Barbara/San Luis Obispo. One additional slot will be provided for UPRR freight operations on the LOSSAN rail corridor and one for Pacific Surfliner trains that is dispatched by UPRR.	UP	N/A	Santa Barbara Subdivision \$	45,204,000	\$ 45,204,000	These payments will allow for additional Pacific Surfliner trips on the Union Pacific Railroad and improved on-time performance.	Executed	N/A
16	On-Time Performance Incentive Program (NCTD)		N	The project provides incentive payments to NCTD, which dispatches trains on the San Diego Subdivision for meeting Pacific Surfliner on-time performance levels.	NCTD	N/A	San Diego Subdivision \$	22,892,000	\$ 22,892,000	This project will provide a revised speed limit and operating procedure for NCTD to better reflect the operations and impact that the Pacific Surfliner has on the corridor. These payments will allow for the future expansion of service, by allowing one additional Pacific Surfliner roundtrip to be run in NCTD territory, and provide performance-based payments to NCTD based on the on-time performance (OTP) goals realized within NCTD territory, with maximum incentive payment requiring OTP goals of more than 99 percent, and receive payment for the additional OTP attributes, based on an agreed upon graduated scale.	Original agreement executed in 2019. Amended agreement being negotiated for execution in 2024.	N/A
17	Pre-1949 Rail Replacement	Track	Y	The project will improve the overall track infrastructure by replacing approximately 230.30 miles of rail that was laid prior to 1949 between mileposts 249 and 356 along the Union Pacific Santa Barbara Subdivision to enhance overall operations and reliability of passenger rail service.	UP	Construction	Santa Barbara Subdivision \$	15,100,000	\$ 15,100,000	The rail relocation and fit/replacement, slow orders may need to be implemented along the LOSSAN rail corridor and may result in some operational flexibility and reliability by removing existing speed restrictions and to allow for service expansion, which will result in reduced travel time, increased ridership and reliability, and GHG emission reduction.	Projects are being identified to improve corridor safety.	COMPLETE
18	Safety Improvement Funds	Safety		The Safety Improvement Program is to provide for as needed safety enhancements along the corridor and could include dealing with homeless encampments, tree removal, improving crossings or pedestrian access, etc.	UP	Planning	Santa Barbara Subdivision \$	2,500,000	\$ 2,500,000	This project will ensure that the northern part of the LOSSAN corridor will remain safe for train travel, both for passengers and pedestrians close to the rail line.	Projects are being identified to improve corridor safety.	Mid 2025
19	The Replacement	Track	Y	This project will improve the overall track infrastructure by replacing approximately 125 miles of old railroad ties between mileposts 274.72 and 335.4, to be completed in 2021, and also between 358 and 423.1, scheduled for 2023, along the Union Pacific Santa Barbara Subdivision to enhance overall operations and reliability of passenger rail service.	UP	Construction	Santa Barbara Subdivision \$	8,900,000	\$ 8,900,000	The ties are deteriorating and fit/replacement, may result in the implementation of slow orders along the LOSSAN rail corridor and Pacific Surfliner service may be interrupted. The project improves operational flexibility and reliability by removing existing speed restrictions and to allow for service expansion, which will result in reduced travel time, increased ridership and reliability, and GHG emission reduction.	COMPLETE	
20	Upgrade of Non-Powered Switches	Track	Y	The project will replace 16 hand operated switches with power switches and 1 hand operated derailer for power at select locations along a 104-mile section of track in San Luis Obispo and Santa Barbara counties in order to reduce travel time. The project is being constructed by the Union Pacific Railroad on the LOSSAN Rail Corridor. These switches are part of the CTC expansion project.	UP	Construction	Santa Barbara Subdivision \$	6,700,000	\$ 6,700,000	The 104-mile section of track in San Luis Obispo and Santa Barbara counties will be replaced with power switches which will allow for forced train crews to stop a train, manually retrain the switch, and then wait for the train to clear the switch before the signal can be used. Each of these switches can take between five and 10 minutes to clear, resulting in increased travel time, and increased potential for delay. The project will result in reduced travel time, increased ridership and GHG emission reduction. It is estimated that conversion from a hand-thrown to a powered switch will save 3-10 minutes of travel time per switch.	COMPLETE	
21	Station Wayfinding Signage	Station	N	New information signage to upgrade and improve static passenger information and wayfinding signage at the 41 passenger rail stations along the 351-mile LOSSAN rail corridor between San Diego, Los Angeles and San Luis Obispo. This project will provide an updated, integrated set of wayfinding signage that will facilitate regional rail and transit connectivity, and address cluttered and unclear directions.	N/A	Construction	Corridorwide	TBD	\$ 7,181,750	Signs are being made and installed in coordination with Amtrak.	Mid 2024	
22	Bi-Level Equipment Procurement	Equipment	N	The scope of this project is to procure passenger vehicles to replace current vehicles and accommodate for increased service.	N/A	Planning	NA	TBD	\$ 7,595,120	Purchasing or overhauling the cars along with the state-wide fleet management plan objectives, allows for improved weight of maintenance and rehabilitation programs and will extend the useful life of the equipment at least another 20 - 30 years. As vehicles are procured, consideration will be given to zero emission vehicles.	Negotiations for purchase of equipment is ongoing.	N/A

Table 5.2: Capital Improvement Projects List – In Implementation/Funded

No.	Project Name	Type of Project	Climate Resiliency	Project Description	Host	Project Lead	Project Phase	Project Location (Subdivision, MP)	Capital Cost Estimate	Funding Commitment	Project Benefits	Current Status	Anticipated Completion
LOSSAN NORTH													
1	Goleta Station Project	Layover Facility	N	The Goleta Train Depot Project is the development of a new multi-modal train station next to the existing Santa Barbara station. The project will improve the rail station's accessibility and provide a safe and secure environment for passengers. Through the completion of a full-service station, the project will improve connections to bus transit, accommodate transit service to/from the Santa Barbara Airport and the University of California, Santa Barbara (UCSB), add new bicycle and pedestrian facilities, and allow accommodation for a potential future additional train storage that will support increased commuter rail needs.	UP	UP	Planning / Design	UPRR Santa Barbara 3582	\$ 19,000,000	Yes	Improvements will make the station more accessible and inviting. The Project site is adjacent to the existing Amtrak platform at the northern end of South La Patena Lane.	PS&E	2024
2	Carmelito Station Pedestrian Undercrossing Project	Station, Grade Separation	N	This project will construct an undercrossing to improve pedestrian access between station platforms and parking areas, train operations via utilization of both platforms, and ADA accessibility.	UP	UP	Planning / Design	UPRR Santa Barbara 412.44	\$ 18,000,000	Programmed; Funded by TriMetrop TBIDA	The new undercrossing will create a safer and more convenient grab-separated path between the two platforms at the station. The project will improve safety and overall accessibility, reduce travel time, and accommodate future service growth.	N/A	TBD
3	Rice Avenue Grade Separation	Grade Separation	N	Grade Separation to Improve Safety	UP	UP	Planning / Design	UPRR Santa Barbara 406.230	\$ 132,500,000	Yes	Reduce conflicts between vehicles and trains	Design	TBD
4	Simi Valley Double Track	Track	N	Addition of 2.15 miles of track, improvement at three at grade crossings, or realigning a quiet zone. New pedestrian crossing and Simi Valley Station Improvements	SCRRA	VCTC	Planning / Design	Ventura Sub Multiple MPs	\$ 69,501,000	Yes	The project will provide more service and improve service reliability, safer walkway for pedestrians	Design	2025
5	Arroyo Simi Bridge Scour Design	Bridge	N	Environmental clearance and superstructure concrete deck replacement for double track bridge over the LA river	SCRRA	VCTC	Planning / Design	Ventura Sub Multiple MPs	\$ 13,000,000	Yes	The new bridge will improve the load and storm capacity, increase safety, and reduce maintenance needs.	Early Design	2024
6	Devonshire St Safety Improvements	Safety Improvements	N	Grade crossing and safety improvements	SCRRA	LA Metro	Planning / Design	Ventura Sub MP 445.17		Yes	Improve pedestrian safety		TBD
7	Chateworth Station Improvements	Station	N	The project includes a safety improvement of the platform, as well as a new pedestrian crossing at Chateworth Station. In the project area, there is one at-grade crossing in the station that will be replaced with a new Metro's standard pedestrian crossing that includes delineators, active warning devices, pedestrian gates and channelization which allows safer passenger movements between side platforms and improved operations resulting in a safer and safer transfers.	SCRRA	LA Metro	Planning / Design	Ventura Sub MP 445.5	\$ 25,150,000	yes	The project will enhance safety by new pedestrian crossing, replacing of an at grade crossing	Final Design	2024
8	Burbank Corridor Safety Improvements - Burbank Airport	Safety Improvements	N	The Project would enhance safety, efficiency and reliability of commuter and intercity passenger rail services between Burbank Airport-South and Glendale stations, would reduce train congestion and increase on-time performance on track shared with other passenger and freight rail services. Platform and walkway improvements would improve pedestrian access and safety. The proposed improvements would be entirely within the existing railroad ROW	SCRRA	LA Metro	Planning / Design	Ventura Sub MP 460.61	Included in Burbank Corridor Safety Improvement - Glendale	Yes	The Project would enhance safety, efficiency and reliability of commuter and intercity passenger and freight rail systems. Platform and walkway improvements would improve pedestrian access and safety	Design	TBD
9	Burbank Junction Speed Improvements	Safety Improvements	N	The project would replace the existing Brighton Siding, right-hand track, with a larger siding track. This would realign a small portion of existing main line track, to accommodate the larger siding track, allowing the junction to service trains more efficiently while providing smaller headways between trains	SCRRA	LA Metro	Planning / Design	Valley Sub MP 11.4	\$ 17,950,000	Yes	The project will create a safer and more reliable service, reduce the commute time for passengers and will reduce emissions by having less idling time	Construction	2023
10	Burbank Corridor Safety Improvements - Burbank Downtown	Safety Improvements	N	The Project would enhance safety, efficiency and reliability of commuter and intercity passenger and freight rail systems. Improvements to the tracks and signal controls between Metrolink's Burbank Airport-South and Glendale stations would reduce train congestion and increase on-time performance on track shared with other passenger and freight rail services. Platform and walkway improvements would improve pedestrian access and safety. The proposed improvements would be entirely within the existing railroad ROW	SCRRA	LA Metro	Planning / Design	Valley Sub MP 10.81	Included in Burbank Corridor Safety Improvement - Glendale	Yes	The Project would enhance safety, efficiency and reliability of commuter and intercity passenger and freight rail systems. Platform and walkway improvements would improve pedestrian access and safety	Design	TBD
11	Doran St Grade Crossing	Grade Crossing	N	Includes signal modifications, automatic warning devices, a new pedestrian crossing and temporary two-way road configuration with "Quiet Zone Ready" improvements.	SCRRA	LA Metro	Planning / Design	Valley Sub MP 7.99	Included in the Grade Separation	Yes	The project will improve safety by separating vehicle and pedestrians from trains, enhance mobility and quality of life and minimize disruption to residents, businesses and commuters	Final Design	2022
12	Doran St Grade Separation	Grade Separation	N	The purpose of the project is to improve safety and mobility, while maintaining suitable access to existing businesses and surrounding residential areas	SCRRA	LA Metro	Planning / Design	Valley Sub MP 7.99	\$ 58,300,000	Yes	The project will improve safety by separating vehicle and pedestrians from trains, enhance mobility and quality of life and minimize disruption to residents, businesses and commuters	Final Design	Interim 2022
13	Signal Improvements Burbank to LA	Signal	N	Signal programming and timing improvements	SCRRA	LA Metro	Construction	Valley Sub MP 3.5 to MP 11.4	\$ 800,000	Thu Construction	The project will provide walkway safety, lighting	Final Design	2021
14	Burbank Corridor Safety Improvements - Glendale	Safety Improvements	N	The Project would enhance safety, efficiency and reliability of commuter and intercity passenger and freight rail systems. Improvements to the tracks and signal controls between Metrolink's Burbank Airport-South and Glendale stations would reduce train congestion and increase on-time performance on tracks shared with other passenger and freight rail services. Platform and walkway improvements would improve pedestrian access and safety. The proposed improvements would be entirely within the existing railroad ROW	SCRRA	LA Metro	Planning / Design	Valley Sub MP 5.79	\$ 21,400,000	Yes	The Project would enhance safety, efficiency and reliability of commuter and intercity passenger and freight rail systems. Platform and walkway improvements would improve pedestrian access and safety	Design	TBD

Table 5.2: Capital Improvement Projects List – In Implementation/Funded

No.	Project Name	Type of Project	Climate Resiliency	Project Description	Host	Project Lead	Project Phase	Project Location (Subdivision, MP)	Capital Cost Estimate	Funding Commitment	Project Benefits	Current Status	Anticipated Completion
LOSSAN SOUTH													
15	OMF North End Connection and Tail Track	Track	N	The project would reconfigure the existing connection track at the north end of OMF to increase operational flexibility and efficiency at OMF. In addition, the existing tail track would be realigned to parallel the reconfigured connection track. This realignment would eliminate an existing at-grade rail-highway crossing at the entrance of CMF.	SCRRRA	LA Metro	Planning / Design	River 4.8		Yes	Improve safety and accommodate redevelopment of the surrounding area, including a pedestrian/bicycle connection to the Los Angeles area currently under construction by the City of Los Angeles.	Final Design	TBD
16	Link US Phase A: Track and Signal Modernization	Bridges, Track, Signal, Station	N	Phase A of Link US includes two new run-through tracks on a new viaduct, which accommodates up to a total of nine run-through tracks in the future, over the US-101 freeway from Platform No. 4 at Los Angeles Union Station south to the mainline tracks on the west bank of the Los Angeles River near First Street; new rail bridges over Center St and Arroyo Blvd; the BNSF and Union Pacific tracks; and new signal, track, and station including new signal houses at CP, Mission and CP Terminal, right of way acquisition, utility relocation and street improvements including active transportation improvements.	SCRRRA	LA Metro	Planning / Design	River 0.2	\$ 960,398,000	Proposition 1A, TRCP, Metro, SCRRRA and other	Reduce travel times. Will allow trains to run through the station rather than having to change ends and reverse. Currently in 35% funding availability. Station construction of track and signals will be included.	Completed FEIR in July 2019. Currently in 35% funding availability. Preliminary Environmental Design.	2026
17	6th St Bridge Replacement	Bridge	N	A new viaduct to replace an existing aged bridge. Upon completion of the new viaduct, the bridge will be demolished and the site will provide access to the Los Angeles River, public art, recreational programming.	SCRRRA	LA Metro	Construction	MP 141.7	\$ 588,000,000	Yes	The project will build a safer bridge and will be the basis for future transit and public access to LA river and public art.	Construction	2024
18	Commerce Station Relocation	Station, Track	N	Relocate Commerce station from MP 148.3 to its new location (TBC) subject to engineering feedback on its feasibility of phasing. The station could remain decommissioned until the Commerce flyover is complete. Enables COTCOM to be remodelled with extended tracks. Enables passenger and freight traffic separation.	BNSF	BNSF	Planning / Design	BNSF SB SUB 148.5	\$ 30,000,000	Yes	Increase ability to serve passenger at commerce station.	Environmental Phase	2026
19	Rosecrans/Marquardt Grade Separation	Grade Separation	Y	The project will grade separate this intersection from the existing diagonal at grade crossing. It will also improve the efficiency of train movements along the rail corridor; permit the completion of a third mainline track.	BNSF	BNSF	Construction	BNSF SB SUB 157.8	\$ 106,400,000	Yes	Substantially enhance the capacity of regional and national passenger and freight movements; reduce greenhouse gas emissions by reducing vehicle idling and improve safety through grade separation.	Construction	2025
20	Third Track CP Solo to Fullerton	Track	N	Completion of third track construction between CP Solo and Fullerton	BNSF	BNSF	Construction	BNSF SB SUB 148.5		Yes	Increase rail capacity through corridor.	In construction	TBD
21	Fullerton Interlocking Plan	Track	N	Construction of a new Fullerton interlocking at Fullerton Jct	BNSF	BNSF	Planning / Design	BNSF SB SUB 165.3		Funded through EMS \$3M(CRSI) grant awarded for CON.	Allows for operation flexibility to accommodate ultimate Fullerton station layout.	Environmental Clearance	2026
22	Lincoln Ave Bridge Retaining Wall	Retaining Wall	N	The project is being built in three segments and includes numerous roadway, structural and operational improvements, including new general purpose lanes, improved intersections and widened ramps.	SCRRRA	OCTA	Construction	Orange 174.88	\$ 565,000,000	Yes	The project is part of the I5 freeway project.	Construction	2025
23	Orange County Maintenance Facility - Phase 1	Facility	N	New maintenance facility in Irvine, required prior to increasing services on OC and I-OC Lines	SCRRRA	OCTA	Planning / Design	Orange 183.3 - 184.2	\$ 100,000,000	Yes (only funded for Phase 1 at the time and not the entire Phase 1 estimate)	30% Design and Preliminary Environment Assessment	2023-2025 (possibly coordinate with Link US coming online. Phasing 2025/26)	
24	Irvine Station Improvements - Phase 1	Track, Station	N	Phase 1 which includes signal respacing and a pedestrian underpass	SCRRRA	OCTA	Planning / Design	Orange 184.0 - 186.9		For Phase 1 only	Enable cross platform transfers between different rail lines and optimize train operations between MP 184.0 and MP 186.9.	5% Design and Preliminary Environment Assessment	2026
25	La Paz Rd OH Widening	Widening	N	The project is being built in three segments and includes numerous roadway, structural and operational improvements, including new general purpose lanes, improved intersections and widened ramps.	SCRRRA	OCTA	Planning / Design	Orange 190.3	\$ 965,000,000	yes	Under the direction of OCTA and Caltrans District 12, the San Diego Freeway (I-5) San Juan Capistrano (SJC) to El Toro Road (SR-73) to El Toro Road is intended to increase capacity, improve operations and enhance safety in southern Orange County.	Construction	2025
26	El Toro Bridge Widening	Bridge	N	The project is being built in three segments and includes numerous roadway, structural and operational improvements, including new general purpose lanes, improved intersections and widened ramps.	SCRRRA	OCTA	Construction	Orange 190.5	\$ 965,000,000	Yes	Under the direction of OCTA and Caltrans District 12, the San Diego Freeway (I-5) Widening Project from San Juan Capistrano (SJC) to El Toro Road (SR-73) to El Toro Road is intended to increase capacity, improve operations and enhance safety in southern Orange County.	Construction	2025
27	Crown Valley/OH Widening	Widening	Y	The project will include the addition of a fourth westbound lane on Crown Valley Parkway from the I-5 southbound off-ramp to the Oco Creek Bridge, completing the planned improvements on the north side. The project requires widening of the Oco Creek Bridge and overhead bridge spanning the railroad.	SCRRRA	OCTA	Planning / Design	Orange 193.3	\$ 922,000	thru design	The project will provide an acceptable level of service to match with the ongoing development.	Design	TBD
28	San Juan Creek Bridge replacement	Track, Structures	Y	This project will replace the existing 100-year old railroad bridge over San Juan Creek in San Juan Capistrano. The existing bridge foundation does not meet current design standards and the bridge itself does not meet current railroad design load standards. The new bridge will be built on the western side of the existing bridge to minimize interruption to passenger and freight train services.	SCRRRA	OCTA	Construction	Orange 197.87	\$ 38,333,000	Yes	The new bridge will improve the used and storm capacity, and reduce maintenance needs.	Design and Environmental Assessment	2026

Table 5.2: Capital Improvement Projects List – In Implementation/Funded

No.	Project Name	Type of Project	Climate Resiliency	Project Description	Host	Project Lead	Project Phase	Project Location (Subdivision, MP)	Capital Cost Estimate	Funding Commitment	Project Benefits	Current Status	Anticipated Completion
LOSSAN SOUTH													
29	Serra Siding Extension - South	Track	Y	The project will extend the existing siding track from CP Serra, MP 199.5, for 1.14 miles to west of Beach Road, MP 201.0. Existing CP Serra with one #20 turnout will be replaced by a new control point with universal #20 crossovers. A new control point will be added west of Beach Road where siding track is merged to existing Main Track.	SCRRA	OCTA	Planning / Design	Orange 199.5 - 201.0	\$ 36,916,000	Yes	The siding extension will provide additional capacity for train operations between the Main Track and Beach Road. This siding extension configuration will improve the safety and reliability of the corridor, and minimize the risk of operations shut-down.	5% Design and Preliminary Environment Assessment	2026
30	Signal Respacing CP Avery to CP Songs	Signal	N	Alternative 1: (PREFERRED) - Remove 2 intermediate signals. - Add 6 new intermediate signals. Alternative 2: - Remove 2 intermediate signals. - Add 7 new intermediate signals. - Additional intermediate signal is located at West of San Juan Capistrano Station.	SCRRA	OCTA	Planning / Design	Orange 199.5 - 209.18	\$ 14,836,000	Yes	Respacing the intermediate signals allows for express train operations and higher passenger operating speeds up to 90 mph. The signal improvements ultimately reduce travel time and increase on time performance.	5% Design and Preliminary Environment Assessment	TBD
31	Songs Siding Extension	Track	Y	The project provides 1.55 miles of new siding track and includes two new bridges. PDR evaluates two alternatives for providing a new siding track from MP 207.7 to CP Songs at MP 209.3. - Alternative 1 includes a new siding track, a new double track bridge at MP 207.8, and a new single track bridge over San Onofre Creek at MP 208.6. The existing main line track alignment is to be replaced by a new siding track, a new double track bridge at MP 207.8, and a new double track bridge over San Onofre Creek at MP 208.6. The existing main line track bridge over San Onofre Creek will be removed and replaced.	SCRRA	OCTA	Planning / Design	Orange 207.7 - 209.25	\$ 53,322,000	Yes	The siding extension will provide additional capacity for train operations between MP 207.7 and CP Songs (MP 209.3). This siding extension configuration will improve the safety and reliability of the commuter rail system, as well as increase the capacity of the corridor and minimize the risk of operations shut-down due to maintenance issues or emergency incidents on single track.	Construction	12/20/2024
32	San Onofre to Pulgas Double Track Phase 2	Track	Y	Phase 2 of this project includes the construction of a 1.6-mile segment of second main track (MP 216.5 to MP 218.1) and bridges at MP 217.3 and MP 218.0.	NCTD	NCTD	Planning / Design	San Diego 216.5 - 218.1	\$ 35,527,000	Funding (not yet received by CTO) thru construction.	1.6 mi of additional double track as replacement of Bridges 217.3 and 218.0.	Final Design	2026
33	San Dieguito Double Track and Platform-Phase 1	Track	Y	Provide a second main track from CP Valley (MP 242.2) to the north end of the proposed future San Dieguito River Bridge and Platform (MP 243.0).	NCTD	NCTD	Planning / Design	San Diego 242.2 - 243.0	\$ 74,658,814	Funded through construction	8 mi of additional double track	Final Design	2026
34	Del Mar Bluffs Stabilization - 5	SOGR	Y	Adds slope stability improvements of the Del Mar Bluffs in the City of Del Mar. This phase of the project will construct the following improvements at locations between MP 244.1 and MP 245.7: deep driven piles to provide seismic stability to portions of the bluff, retaining walls, drainage improvements, and erosion control measures.	NCTD	NCTD	Planning / Design	San Diego 244.1 - 245.7	\$ 87,814,470	Funded through construction	Safety, State of good repair	Final Design	2026
35	Batiquitos Lagoon Double Track	Track	Y	Adds 6 miles of second main track from CP Point (MP 234.5) to MP 235.1. Also includes replacement of Batiquitos Lagoon Bridge 234.8	NCTD	NCTD	Planning / Design	San Diego 234.5 - 237.2	\$ 117,796,429	Funded thru final design	0.6 mi of additional double track and Batiquitos Lagoon Bridge replacement.	Final Design	2026
36	San Diego Convention Center Station	Track, Station	N	Design and construction of a new siding and station platform between 1st and 5th Avenue between the Convention Center, Expo Park, and the Seaplane Quarter. Includes 0.8 mile stretch of BNSF track and three new control points.	NCTD / BNSF	BNSF	Planning / Design	San Diego 268.77 - 268.78	\$ 38,200,000	Funded through construction	New station at San Diego Convention Center. Associated track and signal improvements south of Broadway to allow revenue service.	Design	2026
37	Bridge 257.2 Replacement	Bridge	Y	This project replaces the aging traffic double track bridge 257.2 with new double track bridge at a higher elevation, requiring additional track replacement on both sides to maintain existing profile. Includes environmental clearance, right-of-way, final design and public outreach for the relocation of the rail alignment from the Del Mar bluffs to a double track, higher speed alignment between the San Dieguito Lagoon basin and the north end of Sorrento Valley in the City of San Diego.	NCTD	SDMTS	Planning / Design	San Diego 257.2	\$ 15,607,296	Funded through construction	Safety, State of good repair	Final Design	2026
38	San Dieguito to Sorrento Valley Double Track (SDS/DT) - PEEN/ROW/Final Design	Track	Y	Modernize existing signal/crossing equipment throughout San Diego Subdivision. Project has been divided into five phases as follows: Phase 1: EC4 Legacy Replacements Phase 2: Carlebad Crossings Phase 3: San Diego Crossings Phase 4: Encinitas/Del Mar Crossings Phase 5: Scope of Phase 5 will be determined based on remaining funding within the program and may include Sorrento Valley Blvd.	NCTD	NCTD/SDMTS	Planning / Design	San Diego 244 - 248	\$ 300,000,000	No	5 miles of double track, grade separated, higher speed rail tunnel	Planning	2025
39	Signal Respacing and Optimization Improvements	Signal	Y		NCTD	NCTD/SDMTS	Construction	San Diego 249.8 - 268.9	\$ 40,000,000	Funded through Phase 4	Operational flexibility	Design for all phases is complete and construction of Phase 1 is complete. Construction of Phases 2 thru 4 have been awarded to BNSF.	2025

Table 5.3: Capital Improvement Projects List – Planned/Unfunded

No.	Project Name	Type of Project	Climate Resiliency	Project Description	Host	Project Lead	Project Phase	Project Location (Subdivision, MP)	Capital Cost Estimate	Funding Commitment	Project Benefits	Current Status	Anticipated Completion
LOSSAN NORTH													
1	Ventura County Seaside Sliding Upgrade and Extension	Sliding	Y	This project would add an estimated 5,650-foot extension and provide a total siding of 11,550 feet. The proposed project would also include wayside signal modifications located south of the proposed siding extension track limit.	UP	UP	Conceptual	UPRR Santa Barbara 386.38 - 387.45	\$ 20,600,000	No	Allow freight trains to wait on the siding while shorter passenger trains pass through, thus making the passenger service more efficient and less time consuming.		TBD
2	Moorpark to Sim Valley Double Track	Track	N	The 3.7 miles between CP Medina and CP Colton will be double tracked. A new control point will be installed with universal crossovers east of Moorpark Station. Five new bridges will need to be built to cross the Arroyo Simi Channel waterway in the City of Moorpark.	SCORRA	VCTC/UP	Conceptual	Ventura, MP 427.4-431.1	\$ 200,000,000	No	Necessary to extend 15 minute headways to Moorpark.	Conceptual	TBD
3	CP Las Posas to MP 423 Second Main Track	Track	N	Double track on UP main line between Oxnard and Camarillo	SCORRA	VCTC/UP	Conceptual	CP Las Posas to MP 423					TBD
4	Oxnard Station Second Platform	Station	N	Install a second platform at the Oxnard Station.	UP	VCTC/UP	Conceptual	Oxnard	\$ 80,000,000				TBD
5	Moorpark Area Maintenance Facility Buildout	Facility	N	A new maintenance facility in Moorpark, CA that would service vehicles with fueling, cleaning, and dump facilities. Overhead feed cables are required for storage tracks.	SCORRA	VCTC/UP	Conceptual	Ventura, MP 427-428	\$ 153,605,000	No	Facility would support service patterns that include 15 min headways and 15 min electrified headways in electrified headways between Moorpark, Woodland and Moorpark. Would support the effort in merging the Ventura County Line and Orange County Line services		TBD
6	CMF Modernization Phase 1	Facility	N	Priority set of improvements to modernize the operation of CMF	SCORRA		Conceptual		TBD	No	Supports State of Good Repair and operational efficiency in the Burbank to Los Angeles corridor	Conceptual, functional studies completed	TBD
7	CMF Modernization Phase 2	Facility	N	Intermediate set of improvements to modernize the operation of CMF and prepare for alternative fueling	SCORRA		Conceptual		TBD	No	Supports State of Good Repair and operational efficiency in the Burbank to Los Angeles corridor	Conceptual, functional studies completed	TBD
8	North CMF Connection and Tail Track	Facility	N	Connects CMF to the north to allow a through running operation and reduce deadhead movements on the track between LAUS and CMF	SCORRA		Conceptual		TBD	No	Supports operational efficiency in the Burbank to Los Angeles corridor		TBD
9	Burbank to Los Angeles Third Track	Track	N	Dedication of one new track for freight	SCORRA, Amtrak, UP, HSR		Conceptual		TBD	No			TBD
10	Sonoma Avenue, Grandview Avenue and Power Street Grade Separations Project	Grade Separation	N	Existing and proposed tracks are partially raised and existing roadway crossings are partially lowered in Glendale to eliminate grade crossings for the future HSR projects.	SCORRA, Amtrak, UP, HSR	LA Metro	Conceptual	Valley Sub, 8.8	\$ 230,000,000	No	Safety	ROD/NOD completed (2023)	TBD
11	Arroyo Simi Bridges Rehabilitation	Track, Bridge	N	Rehabilitation of a series of four bridges in the vicinity of Moorpark	UP	VCTC	Planning / Design	UPRR Ventura Sub 427.8 - 428.18 - 428.63 - 429.28	\$ 13,000,000	No	Pending Funding		TBD
12	Link US Phase B	Bridges, Track, Signal, Station	N	Phase B includes the raising of all the tracks and platforms at LAUS, a new and expanded passageway with enhanced transit and retail amenities including new outdoor plazas, a new lead track in the throat area north of Los Angeles Union Station, new rail bridges over Cesar Chavez Ave and Agnes St, and a total of up to nine run-through tracks including six tracks for freight service and up to four for future high-speed rail service, with 2 tracks that are interseparable.	SCORRA	LA Metro	Planning / Design	River 0.2	\$ 2,597,000,000	No	Improve connectivity, increase rail service capacity, reduce train idling times, future development, improve pedestrian access, increase passenger experience, improve US-101 and local roadways	Completed FERR July 2019	2031
13	Southside Turn Facility	Station	N	New platform to function as a supplemental terminal for LAUS during construction of Phase 2 of Link US. Near BNSF 1st street yard, south of LinkUS. North of 6th Street bridge being constructed over the River.	SCORRA	LA Metro	Planning / Design	River 141.7	TBD	No	Long-term support of HSR service goals, requiring more than two tracks. To support Phase 2 of Link US - necessary for completion of Link US	Envelope of site has been cleared with HSR environmental clearance	Prior to LinkUS Phase B
14	Fourth Track 1-611710 to CP Soto	Track	N	Construction of a fourth track from the west end of the 1611710 River to CP Soto and completion of the staging yard at Hobart, including property acquisition	BNSF	BNSF	Planning / Design	BNSF SB SUB 148	TBD	No	It allows for the corridor to be built for the ultimate configuration	Not environmentally cleared	2026
15	Upgrade of Signal System	Signal	N	Construction of a new signal system with 1.25-mile spacing	BNSF	BNSF	Planning / Design	BNSF SB SUB 148	TBD	No	Signal system would be prepared to accommodate construction and ultimate configuration	Not environmentally cleared	2026
16	28th Street ROW Acquisition/West Bank Yard Relocation	Track	N	Acquisition of the northern half of 28th Street to allow BNSF to construct new tracks at Hobart Yard, allowing BNSF to vacate the West Bank Yard. Relocating BNSF's West Bank Yard activity is a prerequisite to enable full utilization of the first run-through tracks at Los Angeles Union Station, which are to be operational by 2026	BNSF	BNSF	Planning / Design	BNSF SB SUB 148	\$ 286,913,000	Potential funding through SB1 SCPP and/or Trade Corridor Enhancement Program		Environmental Phase	2026
17	LA-SB Dedicated Passenger Corridor: Hobart Yard Relocation	Track, Signal, Station	N	Potential phasing element of LA-SB Dedicated Passenger Corridor	BNSF	BNSF	Planning / Design	BNSF SB SUB 146	\$ 422,100,000	No	Separates freight and passenger rail and enables 5 minute passenger train headways from LA to Fullerton	Metrolink planning for funding	2032
18	LA-SB Dedicated Passenger Corridor: Construct 3rd Main Track on the BNSF SB Route	Track, Signal	N	Potential phasing element of LA-SB Dedicated Passenger Corridor	BNSF	BNSF	Planning / Design	BNSF SB SUB 144-165.5	\$ 604,700,000	No	Separates freight and passenger rail and enables 5 minute passenger train headways from LA to Fullerton	Metrolink planning for funding	2032

Table 5.3: Capital Improvement Projects List – Planned/Unfunded

No. Project Name	Type of Project	Climate Resiliency	Project Description	Host	Project Lead	Project Phase	Project Location (Subdivision, MP)	Capital Cost Estimate	Funding Commitment	Project Benefits	Current Status	Anticipated Completion
LOSSAN NORTH												
19	LA-SB Dedicated Passenger Corridor: Emily Track, Signal, Station Start on 4th Main Hobart through Commerce	N	Design and construct 20 miles of mainline and structures between CP Solo and the new Commerce Station, including necessary land acquisition and relocation of parking for intermodal operations for Hobart Yard, construct 8 miles of lead tracks at Hobart Yard, relocate old Commerce Station to new location, including property costs, design and construct new Commerce Station, design and construct 20 miles of staging tracks at Commerce Yard, complete design of Hobart staging area and storage tracks. All signal and crossover work is included.	BNSF	BNSF	Planning / Design	BNSF SB SUB 144-149	\$ 777,100,000	No	Provides early benefit with the relocation of the Commerce Station and helps lay the foundation for which separates freight and passenger rail and enables 5 minute passenger train headways from LA to Fullerton	Metrolink planning for funding	TBD
20	LA-SB Dedicated Passenger Corridor: Construct 4th Main Track LA to Fullerton	N	Potential phasing element of LA-SB Dedicated Passenger Corridor	BNSF	BNSF	Planning / Design	BNSF SB SUB 144-185.5	\$ 886,800,000	No	Construction of 5-mile passenger train headways from LA to Fullerton	Metrolink planning for funding	2028
21	I-6710 Flyover	N	Construct a two-track, passenger-only elevated structure to carry passenger trains over freight tracks to the south side of BNSF ROW, eliminating passenger-versus-freight conflicts	BNSF	BNSF	Planning / Design	BNSF SB SUB 146.3	\$ 489,510,500	Potential funding through SB 1 SCOP and/or Trade Enhancement Program	It allows for the corridor to be built for the ultimate configuration	Environmental Phase	2028
22	New Commerce Intermodal Facility	N	Project is a component of the LA Urban Mobility Corridor improvements between LA and Fullerton that will expand the BNSF Commerce MP, including purchase of additional right of way and related infrastructure for the I-710 to I-5 Rail Flyover Project as part of BNSF investment plans for the facility.	BNSF	BNSF	Planning / Design	BNSF SB SUB 148.5	\$ 184,250,000	Potential funding through SB 1 SCOP and/or Trade Enhancement Program	It allows for the corridor to be built for the ultimate while maintaining passenger rail traffic	Environmental Phase	2026
23	Norwalk Blvd/Los Nietos Road Grade Separations	N	Two new grade crossings that were part of the HSR plans and has been folded into the Metrolink SCORE Program	BNSF	BNSF	Planning / Design	BNSF SB SUB 153.2	\$ 280,000,000	No	Safety	Metrolink planning for funding	2028
24	Pioneer Blvd Grade Separation	N	New grade crossing that was part of the HSR plans and has been folded into the Metrolink SCORE Program	BNSF	BNSF	Planning / Design	BNSF SB SUB 154.3	\$ 160,000,000	No	Safety	Metrolink planning for funding	2022
25	Fourth Track: Buena Park to Fullerton	N	Construction of a fourth track from Buena Park to Fullerton and start of the staging yard adjacent to Hobart	BNSF	BNSF	Planning / Design	BNSF SB SUB 160.2-165.5	TBD	No	It allows for the corridor to be built for the ultimate configuration and increases the capacity of the ultimate build	Not environmentally cleared	2026
26	Norwalk & Fullerton rail over rail crossing rail under rail crossing	N	Construction of the over/under at Norwalk and Fullerton	BNSF	BNSF	Planning / Design	BNSF SB SUB 156-165.5	TBD	No	It allows for the corridor to be built for the ultimate configuration and increases the capacity of the ultimate build	Not environmentally cleared	2026
LOSSAN SOUTH												
27	Signal Respacing: La Palma to College	Y	Respacing of intermediate signals	SCRRA	OCTA	Planning / Design	Orange 167.3 - 169.8	\$ 4,900,000	No	The respacing of signals allows for express train operations and higher passenger operating speeds up to 80 mph, reducing travel time.	Metrolink planning for funding	2022
28	Commerce Station Relocation	N	Relocation of Commerce Station to facilitate freight movements and provide more frequent service to Commerce Station	BNSF (SCRRA and HSR)	BNSF	Planning / Preliminary Design	San Bernardino Subdivision	TBD	No	Improves operational efficiency, freight capacity and frequency of passenger service	Currently under environmental review as part of the Los Angeles to Anaheim segment of the Commerce HSR program	TBD
29	Track and Platform Reconfigurations at Norwalk, Buena Park (Orange County) and Fullerton (Orange County)	N	Reconfigures station track and platform faces to create a separate freight and passenger tracks along the Los Angeles to Fullerton segment of the San Bernardino Subdivision	BNSF (SCRRA and HSR)	BNSF	Planning / Preliminary Design	San Bernardino Subdivision	TBD	No	Improve operational efficiency, freight capacity, reduce safety conflicts between freight and passenger rail traffic	Currently under environmental review as part of the Los Angeles to Anaheim segment of the Commerce HSR program	TBD
30	Orange/Olive Junction and Wy	N	New crossover and faster turnouts	SCRRA	OCTA	Planning / Design	Orange 172.2	\$ 3,900,000	No	Line Capacity	Metrolink planning for funding	2023
31	Orange - Olive Junction Improvements and Wy - Full Buildout	Y	The existing Wy consists of a single, uncontrolled track and will require modifications to provide PTC-ready track and signal systems. A new crossover will need to be constructed west of the existing Wy. Existing ties will be replaced with concrete ties. New control points will be installed. Grade crossings will need to be upgraded to meet state zone requirements. A drainage system that includes grading and new catch basins may be necessary pending further preliminary investigation.	SCRRA	OCTA	Planning / Design	Orange 172.4 - 192.2	\$ 4,900,000	No	The respacing of intermediate signals allows for express train operations and higher passenger operating speeds up to 80 mph, reducing travel time.	Metrolink planning for funding	2023
32	Signal Respacing: Maple to Solow	N	Respace existing intermediate signals	SCRRA	OCTA	Planning / Design	Orange 183.3 - 184.2	\$ 153,200,000	No	Line Capacity	Not started	2022
33	Orange County Maintenance Facility - Full Buildout	N	New maintenance facility in Irvine, required prior to increasing services on OC and I-OC Lines	SCRRA	OCTA	Planning / Design	Orange 187.4 - 188.1	\$ 36,916,000	No	Improve the safety and reliability of the commuter rail system as well as increase the capacity of the system. Reduce the risk of operations shut-down due to maintenance issues or emergency incidents on a single track.	No progress	TBD

Table 5.3: Capital Improvement Projects List – Planned/Unfunded

No. Project Name	Type of Project	Climate Resiliency	Project Description	Host	Project Lead	Project Phase	Project Location (Subdivision, MP)	Capital Cost Estimate	Funding Commitment	Project Benefits	Current Status	Anticipated Completion
LOSSAN SOUTH												
35	SONGS Double Track (formerly San Onofre Creek DT)	Y	This project includes installation of approximately 1.5 miles of second main track from new CP Songs (MP207.1) to Existing CP Songs (MP209.2). This project includes replacement of a timber span of Bridge 207.7, replacement of aging timber bridge 207.8 with a double track bridge, and installation of a second rail bridge adjacent to existing bridge 208.6.	NCTD	NCTD	Planning / Design	San Diego 207.7 To MP 209.2	\$ 40,130,000	No	1.5 mile of second track, replace timber span bridge and aging timber bridge, and installation of second rail bridge	Planning	2035
36	San Onofre Bridges Replacements (Bridge 209.9)	Y	Replacement of three timber trestle railway bridges at MP 209.9.	NCTD	NCTD	Planning / Design	San Diego 209.9	\$ 1,819,279	No	Safety, State of good repair	Planning	2025
37	Stuart Mesa Maintenance Facility Capacity Enhancement	N	Increase capacity of Stuart Mesa Maintenance Facility located on Camp Pendleton Marine Corp Base.	NCTD	NCTD	Planning / Design	San Diego 222	\$ 49,300,000	No	7000 feet of additional track with new service line for fueling, washing and laundry.	Planning	2035
38	Eastbrook to Shell Double Track (San Luis Rey River Bridge)	Y	Second main track between CP Eastbrook (MP 225.3) and CP Shell (MP 225.9) and replacement of San Luis Rey River Bridge (MP 225.4).	NCTD	NCTD	Planning / Design	San Diego 225.3 - 225.9	\$ 111,276,673	Partial construction funding (\$27.3M) through SOGR grant	0.6 mi of additional double track and Bridge 225.4 replacement.	Design	2025
39	Carlsbad Village Trench	Y	Grade separation of the railroad tracks in Carlsbad Village Area. Includes Construction of 1.0 mile of second main track from CP Longboard (MP 228.4) to CP Car (MP 229.5) in Carlsbad and a new bridge over Buena Vista Lagoon.	NCTD	NCTD	Planning / Design	San Diego 228.0 - 230.6	\$ 560,776,832	No	Safety	Planning	2035
40	Encinitas Pedestrian Crossings	N	New pedestrian undercrossings within the City of Encinitas.	NCTD	NCTD	Planning / Design	San Diego 237.7 - 238.6	\$ 24,200,000	No	Safety	Planning	2035
41	San Diego Double Track and Platform - Phase 2	Y	Replacement of the San Diego river bridge (built in 1916), a new special events platform, and additional double track, signal, and communications improvements to complete the new passing track for the LOSSAN corridor.	NCTD	NCTD	Planning / Design	San Diego 243.0 - 243.9	\$ 233,328,406	Funded thru final design	Double tracking, new station design	Design	2035
42	Del Mar Bluffs Stabilization - 6	Y	This phase of the project will construct the following improvements at locations between MP 244.1 and MP 245.7: bulb toe protection, retaining walls, drainage improvements, and erosion control measures.	NCTD	NCTD	Planning / Design	San Diego 244.1 - 245.7	\$ 8,700,000	Funded through design	Safety, State of good repair	Environmental	2025
43	SDSVOT - Construction	Y	Relocation of the rail alignment from the Del Mar bluffs to a doubletrack, higher-speed alignment between the San Diego Lagoon basin and the north end of Sorrento Valley in the City of San Diego.	NCTD	NCTD/SDMTS	Planning / Design	San Diego 244 - 248	\$ 3,413,732,081	No	5 miles of double track, grade separated, higher speed rail tunnel	Planning	2035
44	Sorrento to Miramar Phase 2	Y	Construction of second main track and curve realignment from temporary CP Scripps (MP 251.2) to CP Miramar (MP 251.0). The project also includes a retaining wall construction, over 1 million cubic yards of earthwork excavation, and ROW acquisitions throughout.	NCTD	SDMTS	Planning / Design	San Diego 251.0 - 253.0	\$ 249,548,000	Funded thru final design	Curve realignment / straightening on Miramar Hill	In final design	2028
45	Miramar Tunnel	Y	Relocation of the rail alignment to a double track tunnel alignment that bypasses Miramar Hill and replaces the Sorrento Valley station with a new station.	NCTD	SDMTS	Planning / Design	San Diego 250 - 257	\$ 5,000,000,000	No	5 miles of double track, grade separated, higher speed rail tunnel	Planning	2050
46	Rose Canyon Bridge Replacements	Y	Replaces three aging timber trestle railway bridges at MP 254.7, 255.1 and 255.3 that were built in the 1940s.	NCTD	SDMTS	Planning / Design	San Diego 254.7, 255.1, 255.3	\$ 14,790,000	Funded through Environmental	Safety, State of good repair	Planning	2027
47	Quiet Zones	N	To reduce noise around 20 at-grade rail crossings for nearby residents and businesses, the project includes the LOSSAN rail corridor (including Lurie Street, Coast Boulevard and Chesterfield Drive).	NCTD	NCTD/SDMTS	Planning / Design	San Diego 267 - 207	\$ 16,800,000	No	Safety, State of good repair	Planning	2025
48	San Diego MTS Yard Improvements	N	Construction of layover yard track at MTS yard located adjacent to 12th & Imperial highways	NCTD	BNSF/SDMTS	Planning / Design	San Diego 269	\$ 15,854,700	No	Operational flexibility	Planning	2035

Chapter 6: Fare Policy

Two classes of service are currently offered for travel on the Pacific Surfliner, consisting of unreserved coach class and reserved business class. If traveling in unreserved coach class, passengers normally are not required to make an advanced reservation for a specific train and may choose to ride a different train up to one year after the date indicated on their ticket. Exceptions apply during designated peak travel periods for holidays and special events, when advanced reservations are required to travel in coach class as a means of managing capacity onboard trains. Meanwhile, business class requires an advanced reservation for a specific train and is offered at a 50 percent upgrade fee, with a minimum upgrade fee of \$10. In addition to a guaranteed seat, passengers traveling in business class enjoy additional benefits such as additional legroom, refreshed seat upholstery and carpeting, complimentary snacks and beverages, and a dedicated business class attendant on most trains.



Pacific Surfliner fares are largely static year-round and do not vary by day of the week, with nominal increases only during select peak travel periods. Ticket types available on the Pacific Surfliner include one-way and round-trip options, as well as 10-trip and monthly pass options for unreserved coach. Roundtrip tickets are priced at twice the one-way fare between a station pair. The 10-trip ticket is valid for ten one-way trips between a specific station pair within a 60-day period from date of first use and can be used by more than one passenger. Ten-trip tickets are discounted below one-way and roundtrip tickets, with all station pairs priced at a consistent 40 percent off the equivalent total of single ride fares for the station pair. Monthly tickets are valid for unlimited travel for an entire month for the passenger named on the ticket.



The last fare adjustment the LOSSAN Agency implemented was a fare restructuring in March 2018, which is the only fare adjustment to take place since the ITA was executed in 2015. Currently, the LOSSAN Agency is developing the fare tables necessary for the implementation of a demand pricing model. The schedule for this is tentatively set for April 1, 2024. The history of fare adjustments for the Pacific Surfliner is provided in Table 6.1.

Table 6.1: Historic Pacific Surfliner Fare Adjustments

Date	Increase
June 2003	3 percent
June 2004	3 percent
June 2005	5 percent
December 2005	5 percent
June 2006	5 percent
October 2006	5 percent
February 2009	N/A -- fare restructuring
February 2010	2 percent
June 2010	3 percent
June 2011	2 percent
September 2011	Seasonal fare change eliminated
August 2012	2 percent
June 2013	2 percent
March 2018	N/A – fare restructuring
April 2024 (<i>Planned</i>)	Demand Pricing Implementation

Demand Pricing Model

In the July 2022, the LOSSAN Agency conducted a passenger survey that focused on travel patterns and the various factors that impacted the day and time individuals traveled. The goal of the survey was to determine a way to encourage use of off-peak and midweek Pacific Surfliner trains that are currently underutilized. One series of questions sought to determine the role that ticket price played in the time that passengers chose to travel. As the bulk of passengers on the Pacific Surfliner are traveling for leisure purposes, approximately 80 percent of respondents indicated that they had flexibility in their travel plans and would change the day and/or time that they travel to take advantage of lower ticket fares.

Concurrent with our internal effort, Amtrak national was beginning an effort to implement a demand pricing model on many of their state supported routes. Discussions with Amtrak on the potential for adjusting the Pacific Surfliner fare policy began in May 2023. After considerable analysis and modeling, a preliminary 15-tier demand pricing model was developed. The adjustment to fares can range from a 10 percent increase on the most heavily utilized peak period trains down to a 40 percent decrease for trains traveling midday and midweek. The high side of the projections developed through the process gave up 12 percent increase in ridership and a nearly 20 percent increase in revenue. Initial discussions on the potential implementation of this began in early 2023. November 2023, the LOSSAN Agency Board approved the implementation of a demand pricing model for a 12 month pilot period to determine its effectiveness.

Impacts of Demand Pricing Model

The implementation of the demand pricing pilot will have operational impacts on the Pacific Surfliner. Currently, unreserved coach fares, although purchased for a specific train, can be used on any train traveling between the same station pairs. However, under a demand pricing model, tickets would be train specific as departure time is a factor in fare determination. If a passenger purchases a ticket for a lower fare train and attempts to take a higher fare train, they would be responsible for paying the delta. This same limitation would apply to both multi-ride and monthly passes.

California Everyday Discounts Program

The Pacific Surfliner, along with the Capitol Corridor and San Joaquins, offers the California Everyday Discounts Program in addition to discounted multi-ride tickets. Under the program, seniors aged 62 and older, passengers with disabilities, active U.S. military personnel, and U.S. military veterans are eligible to receive a 15 percent discount off fares. The 15 percent discount provided through the program offers increased savings compared to Amtrak's national 10 percent discount programs for each of the passenger types. Through the program, the Pacific Surfliner also expanded the eligible age range of the student discount from 13 to 25 years old, compared to the age range of 17 to 24 years old for Amtrak's national student discount of 15 percent.



Discounts for Children and Infants

The Pacific Surfliner offers Amtrak's national discount of 50 percent off the fare of children ages 2 to 12 who are accompanied by a fare-paying adult aged 18 and older. In addition, the Pacific Surfliner also offers Amtrak's national "Infants Ride Free" program, where infants under the age of two, not occupying a seat, may ride free with a fare-paying adult aged 18 and older.

Other Discount Programs

The LOSSAN Agency and Amtrak occasionally partner with local destinations and/or convention and visitors bureaus to offer special discounts for travel to a specific location. For example, the Santa Barbara and San Luis Obispo Car Free programs offer a 20 percent discount off Pacific Surfliner tickets for travel to stations in those counties. For one-time events or other promotional needs, the LOSSAN Agency has the ability to request for Amtrak to create special promotional codes which customers can redeem during the checkout process for discounted fares.

Groups of at least 15 passengers traveling together on the Pacific Surfliner can be eligible for a discount of 20 percent off regular fares. The group discount program is offered on select trains based on projected seat inventory and season of travel. For school and youth groups, the Kids 'n' Trains Program provides reduced fares for travel on select mid-week trains between October and June.

An additional option offered by Amtrak is the California Rail Pass, which offers travel for up to seven days over a period of 21 consecutive days on all three state-supported intercity routes in California, as well as on the Coast Starlight within California. Travel on most connecting Thruway bus services associated with these rail services is also eligible with the California Rail Pass. The pass is offered at flat rates for both adults and children, requires an advanced reservation before use on a train, and entitles the passholder to travel in regular coach. Passengers have the ability to upgrade to business class or sleeping accommodations by paying the applicable accommodation fees.

Rail 2 Rail Programs

The Rail 2 Rail programs are joint efforts between the Pacific Surfliner and Southern California commuter rail operators Metrolink and NCTD to expand the departure options for traveling by train along the LOSSAN Rail Corridor. Rail 2 Rail programs allow for designated Metrolink and NCTD passholders to travel on Pacific Surfliner trains, within the station pairs of their pass, at no additional charge. Similarly, Pacific Surfliner monthly passholders may also ride Metrolink or COASTER trains, within the station pairs of their pass, at no additional charge. Rail 2 Rail programs are subject to blackout dates to manage capacity during peak travel periods due to holidays and special events. Additional details of the Rail 2 Rail Program with each commuter rail operator are as follows:

Metrolink: This Rail 2 Rail program allows Metrolink monthly pass holders who travel on Metrolink's Orange and Ventura County lines to travel on Pacific Surfliner trains within the limits of the station pairs of their pass at no additional charge, including on Saturday and Sunday. The Rail 2 Rail program does not apply to Metrolink one-way, roundtrip, and seven-day passes, except on Pacific Surfliner trains between Los Angeles and Burbank Airport and select "code share" or shared use trains operating between Los Angeles and Oxnard. Pacific Surfliner monthly pass holders may also ride any Metrolink train within the station pairs on their Amtrak monthly pass. Amtrak conductors scan the Metrolink passes and Metrolink is billed for each Rail 2 Rail boarding at a reimbursement rate of \$7.00 per boarding.

Under the Rail 2 Rail agreement with Metrolink, four trains (trains 761, 770, 777, 784) are designated as codeshare between Los Angeles Union Station and Ventura Station (in the Amtrak system, also known as "Ventura-Downtown/Beach Station" in the Metrolink system). For these trains and between the designated station pairs, all Metrolink fare media is honored and Metrolink is billed a reimbursement rate of \$10.00 per passenger boarding.

COASTER: NCTD currently has a modified Rail 2 Rail program agreement whereby COASTER passengers may travel on any Pacific Surfliner trains using a valid COASTER Regional day or monthly pass. As of the current FY, NCTD reimburses Amtrak \$4.03 per Rail 2 Rail rider, which

is the approximate average fare collected per passenger boarding on the COASTER service. Pacific Surfliner monthly pass holders and one-way and roundtrip ticket holders may also ride any COASTER train within the station pairs on their Amtrak ticket at no additional charge.



Expanded Codeshare Pilot Program

Throughout 2023, the LOSSAN Agency worked with Metrolink to develop and implement an expanded codeshare pilot program on the north end of the LOSSAN rail corridor. Starting October 23, 2023, and extending through April 31, 2024, **all** Pacific Surfliner trains between Los Angeles Union Station and Ventura station will honor all Metrolink fare media. Upon conclusion of the pilot period, the program may be extended by mutual agreement. Without an extension, after the pilot period ends, only Metrolink monthly passes will be honored for any trains beyond the four identified in the original code share program.

Future of Rail 2 Rail

As the LOSSAN Agency continues working with Metrolink and NCTD to plan for the future of the Rail 2 Rail programs, opportunities for integration between the different fare systems used by each operator continue to be explored. Integration has the potential to offer new opportunities such as a regional pass on fare media that can be validated by all three rail operators, additional expansion of existing codeshare arrangements, or even implementing another mutually agreed upon and beneficial program in place of Rail 2 Rail.

Over the course of the next fiscal year, the LOSSAN Agency will continue working with Metrolink and NCTD to revise the Rail 2 Rail programs to achieve a more equitable distribution of both revenue and expenses.

Opportunities for Enhanced Mobile Ticketing Solutions

Per the operating and maintenance agreement for the Pacific Surfliner, Amtrak currently is responsible for all ticket sales and fare collection activities. This includes offering mobile ticketing for the Pacific Surfliner through the Amtrak mobile application used throughout its national system. As Amtrak has exclusive rights over its mobile application, the LOSSAN Agency does not have the ability to control available features or user experience for passengers who use the mobile application to travel on the Pacific Surfliner. Passengers requiring route-specific information such as multimodal connections, destination information, or promotions outside of Amtrak's national discount programs must rely on a secondary source for information in addition to the Amtrak mobile application. Furthermore, the LOSSAN Agency receives only limited passenger demographic and travel behavior data from Amtrak, making it challenging to segment the Pacific Surfliner passenger base for creating targeted marketing campaigns to encourage ridership.



In FY 2022-23, the LOSSAN Agency developed a draft scope of work and released a Request for Information for a project concept to provide a front-end mobile ticketing platform designed and branded specifically for the Pacific Surfliner. Based on the responses received, the current state budget situation has led to this effort was put on hold as it will require a significant outlay of limited capital dollars.

Also during FY 2022-23 the LOSSAN Agency also began participating in discussions with Metrolink and NCTD regarding a potential regional rail mobile ticketing application concept. This concept proposes for passengers to have the ability to get information about and purchase mobile tickets for each of the three passenger rail operators within a single mobile application. Through those discussions, NCTD determined that participation for them would be problematic as they had just recently introduced new fare media. The LOSSAN Agency is continuing discussions with Metrolink to determine if a combined app is feasible.

Additional Fare Enhancement Opportunities

In FY 2024-25, as the LOSSAN Agency works with Amtrak to restore service and rebuild ridership, appropriate opportunities will be explored that increase fare revenue, while encouraging new riders and retaining existing ones. These include:

- Implement marketing campaigns as appropriate to ensure riders confidence in the safety and cleanliness of the Pacific Surfliner.



- Increasing public awareness of existing everyday discount programs, especially student and group discounts.
- Continue partnerships with sports, concert, and other venues as these locations begin holding events once the ongoing pandemic makes it safe to do so. These include partnerships with the San Diego Padres, Del Mar Racetrack, Anaheim Ducks, Disneyland, the San Diego Zoo, and other event organizers. Attempts will be made to promote taking the Pacific Surfliner to sporting events, concerts, and other special events as appropriate for passenger safety.
- Enhance existing customer loyalty and referral programs, including the Amtrak Guest Rewards program, while developing a potential standalone rewards program specifically for the Pacific Surfliner and its passengers.

Chapter 7: Network Integration, Coordination and High-Speed Rail

An integrated passenger rail network is a key initiative included in the 2023 California State Rail Plan, with the goal to plan and implement a statewide passenger rail system that maximizes the performance potential of intercity passenger rail as a time- and cost-competitive travel option for meeting the state’s transportation needs. Several opportunities exist for better integrating the Pacific Surfliner service with the existing, planned and proposed transit and rail network along the 351-mile LOSSAN rail corridor.

Statewide and Regional Coordination

The LOSSAN Agency works in close coordination with CalSTA, Caltrans, transit and rail operators along the LOSSAN rail corridor, as well as other stakeholders on efforts to improve rail and transit connections. This includes working to create an integrated passenger rail and transit network with coordinated schedules, which will provide additional travel options throughout the state, allowing passengers to seamlessly transfer from service to service to reach their desired destinations.



Specifically, the LOSSAN Agency has worked with rail operators and stakeholders along the LOSSAN rail corridor to identify and address on-time performance and operating issues that impact the ability to better integrate the services. The group includes participation from the LOSSAN Agency, NCTD, Metrolink, BNSF, SJJPA, Amtrak and UPRR. Together the members are working collaboratively to improve rail service through service optimization efforts and coordinated analysis of the root causes of delay.

The LOSSAN corridor optimization study has identified a number of integrated operating strategies that can help define optimized service concepts for existing and planned services that provide repeatable hourly “anywhere to anywhere” connectivity between rail and transit providers throughout southern California. The operating strategies identified as part of the study can be especially beneficial now as we continue the phased restoration of, not only the Pacific Surfliner, but all of the collective services along the rail corridor that were reduced during the COVID-19 pandemic.

In October 2021 a pulsed or clockface schedule was implemented. This is just the first step in the implementation of the optimization study recommendations. The LOSSAN Agency continues to work our partners at LA Metro, Metrolink, NCTD and SDMTS to align the schedules for the maximum connection and service enhancement opportunities.

Transit Connections

The LOSSAN Agency continues to work well with the regional transit operators along the rail corridor. The LOSSAN Agency implemented the Pacific Surfliner Transit Transfer Program, which continues to provide seamless transfers to 11 local public transit services along the LOSSAN rail corridor. This is just one element of the LOSSAN Agency’s efforts to improve first- and last-mile connections.

In the fall of 2022, the LOSSAN Agency began pursuing relationships with Uber and Lyft, the locally available rideshare services, to investigate the feasibility of including a discounted ride program for use in areas that have no access the Transit Transfer program. An RFI was released and vendor participation was good. However, the implementation of the program was paused as questions arose regarding the availability of wheelchair accessible vehicles. The program will need to be separated, with the wheelchair accessible vehicles handled under a separate service. With the state budget crisis, this proved to be temporarily cost prohibitive. However, this may be pursued for implementation in future fiscal years.



The LOSSAN Agency managed Amtrak Thruway bus service is a key element to the overall statewide integration efforts. is coordinated with the San Joaquins and Capitol Corridor intercity rail services, providing connectivity to the statewide rail system. The passage of Senate Bill 742 in 2019 allows greater flexibility in the planning and scheduling of thruway bus routes. The LOSSAN Agency continues to work with Amtrak, CCJPA, SJJPA and Caltrans to review operations of the Thruway bus service and look for opportunities to improve connectivity and efficiency as part of the service restoration effort. Pacific Surfliner trains also provide timed connections in Los Angeles to three Amtrak long-distance trains serving destinations including Chicago, New Orleans, Portland, and Seattle.

Integrated Fare Structure and Ticketing

There are several efforts being evaluated or undertaken by the State to introduce a more integrated and seamless ticketing system for passenger rail and connecting transit services. The California Integrated Travel Project (Cal-ITP) is one such effort. Supported by CalSTA and Caltrans) through a grant from the TIRCP, the Cal-ITP is a statewide solution to make travel simpler and cost-effective for everyone through the implementation of technology solutions that would make using the entire California transit network a seamless experience. In addition to the ongoing state efforts, the LOSSAN Agency is continuing to pursue a number of efforts to increase the integration of the various LOSSAN service providers. The LOSSAN Agency manages the Rail 2 Rail programs with both Metrolink and NCTD. When first implemented, the Rail 2 Rail Program was intended to leverage available capacity on the Pacific Surfliner trains for the mutual

benefit of Metrolink, NCTD and Pacific Surfliner passengers. However, as ridership has grown on the Pacific Surfliner, the intent of the program has had to be reevaluated, now primarily focusing on providing flexibility and additional transit options for passengers traveling along the corridor.

LOSSAN Agency staff, with the assistance of the State, has been working with Metrolink, Amtrak, NCTD, as well as Metro and MTS, on solutions that provide easier integration for passengers between services. In October 2023, an expanded codeshare pilot program was initiated that opened up all Pacific Surfliner trains operating north of Los Angeles to the codeshare program. A codeshare expansion south of Los Angeles would potentially begin with “off peak” trains that routinely have capacity. A number of elements still remain to be addressed for any codeshare expansion south, such as the rate of reimbursement and a potential additional subsidy from the State. Some discussion has also centered around a possible regional fare media that would be good on any service. Discussions will continue with the goal of incorporating any additional adjustments into the schedule in FY 2024-25.

LOSSAN Agency staff will also continue to coordinate with our partners and member agencies to work toward the goal of expanded passenger rail services on the north end of the LOSSAN corridor, including the potential restoration of peak period service through Ventura and Santa Barbara counties.

Regional and Sub-Regional Transit and Rail Integration Studies

Beyond the corridorwide and statewide efforts and strategies noted above, several LOSSAN member agencies have studied more localized passenger rail service alternatives along the LOSSAN rail corridor. These local efforts are listed below and will join the Optimization study in being the groundwork for future network integration.

- *Freight Pathing Study between Atwood-San Diego and Passenger Service extensions south of San Diego*
- *San Bernardino Pathing Study*
- *SBCAG Regional Transit and Rail Planning and Integration Study*
- *Coast Rail Corridor Service Implementation Plan*
- *Transportation Agency of Monterey County (TAMC) Rail Network Integration Study*
- *San Diego Regional Rail Higher Speed and Enhanced Safety Alternatives Advanced Planning Study*
- *Coachella Valley Rail Corridor Service Development Plan*

Link Union Station

The Link Union Station (Link US) project, which is being managed by Metro, will transform LAUS from a “stub-end” station, to a “run-through” station by extending tracks south over the US 101 freeway, resulting in reduced travel times, particularly for Pacific Surfliner passengers traveling through Los Angeles. Link US will also reconfigure station entry tracks and station boarding platforms to improve efficiency, and create a new passenger concourse with improved retail, food and passenger waiting areas. Metro is also working with CHSRA to explore options to incorporate future HSR service at LAUS.

SCORE Program

The SCORE program is a multi-year, \$10 billion program managed by Metrolink to upgrade the regional rail system in Ventura, Los Angeles, Orange, San Bernardino, and Riverside Counties to meet the current and future needs of the traveling public. The SCORE program is more than just adding tracks, grade separations and upgrading signal systems across the Metrolink system. The vision is to provide the infrastructure necessary to operate more trains with greater frequency and reliability, making regional rail travel easier and more convenient. The LOSSAN Agency is an important partner in this program, working with Metrolink, BNSF, Caltrans, CHSRA, and CalSTA in the development of a phased implementation strategy for the program that begins the integration of the regional passenger rail services, aligning with the operating strategies identified as part of the LOSSAN optimization study, and allows for the eventual introduction of high-speed rail as part of the regional rail network.

High-Speed Rail Connection

The HSR system is planned to be an integral component of the statewide passenger rail system, and key to the statewide network integration effort. The passenger rail services along the LOSSAN rail corridor serve as a backbone for transportation throughout the central and southern California coastal regions. As such, the LOSSAN rail corridor will provide critical connections to support and compliment the HSR system in whatever form it eventually takes. Integration between the LOSSAN rail corridor and HSR system will provide mutual benefits to each service.

Figure 7.1: California High-Speed Rail Statewide System



Source: CHSRA, 2019



The CHSRA's most recent Business Plan continues to recognize the interregional importance of the Burbank to Anaheim segment of the HSR system and the need to make strategic investments that will help link rail systems together over time. As originally planned, Phase 2 of the CHSRA project will extend HSR from Los Angeles to San Diego via an inland route. This would change the role of the Pacific Surfliner into more of a feeder route to HSR, particularly for coastal communities in Orange and San Diego counties.

Chapter 8: Passenger Amenities

The LOSSAN Agency has worked with Amtrak to implement initiatives designed to improve the overall passenger experience. This chapter focuses specifically on enhancements to passenger services and amenities that have been prioritized by the LOSSAN Agency for the Pacific Surfliner service in FY 2024-25 and FY 2025-26.

Onboard Amenities

Bicycle Storage: Each Pacific Surfliner train has storage space for seven bicycles in the cab car. Passengers can reserve a spot for their bicycle free of charge when they book a train ticket. The LOSSAN Agency is leading efforts to expand onboard bicycle storage by creating space for three additional bicycles. The expansion would make it possible to accommodate larger bicycles, such as tandem bikes, which have not been previously allowed onboard. The modifications to allow for the larger bicycles are currently ongoing, with one car already completed. The LOSSAN Agency continues to work with Amtrak to evaluate ways to improve the bicycle reservation process for Amtrak multi-ride ticket holders. Efforts at expanded bicycle reservations to Metrolink Rail 2 Rail passengers have thus far not been successful as reservations are tied to passenger reservations, which does not exist with Rail 2 Rail passengers.



Business Class: Business Class is a popular amenity on the Pacific Surfliner. The reserved service provides a guaranteed seat for passengers, onboard assistance from a dedicated attendant, and bonus Amtrak Guest Rewards points. The Business Class cars have recently been refreshed to improve the passenger experience for those who choose to upgrade to this service. The refresh included leather upholstery for the seats, new carpeting and curtains. Self-serve coffee, tea, and pastries are offered in the morning, and at-seat snack and beverage service are provided in the

afternoon. Passengers also receive priority boarding at the Santa Fe Depot in San Diego. The LOSSAN Agency will explore updates to the Business Class food and beverage offerings, which may include the addition of new items, a broadened selection, and at-seat ordering.

Checked Baggage: Pacific Surfliner trains do not currently offer checked baggage service at stations. Checked baggage was suspended at the height of the COVID-19 pandemic due to Amtrak ticket window closures and reduced travel demand and has continued due to cost and staffing constraints. LOSSAN Agency staff continues to work with Amtrak in developing a

sustainable staffing plan to allow for the reopening of some stations and the restoration of checked baggage at these stations.

Comfortable Seating: All Pacific Surfliner trains offer reclining seats in both Business Class and Unreserved Coach. The LOSSAN Agency continues to work closely with Amtrak to upgrade the seat cushions in a majority of Unreserved Coach cars as well, utilizing repurposed equipment from Amtrak’s Acela service. Most seats have a leg rest and drop-down tray table, as well as overhead lights and access to power outlets. Power outlets are available at each seat to allow for the charging of mobile devices or other electronics. Group seating is available for parties of three or four.



Food and Beverage: Packaged snacks, light meals, soft drinks, and alcoholic beverages are available for sale in the onboard Market Café. The LOSSAN Agency, in partnership with Amtrak, regularly introduces new food items and local craft beers through menu “refreshes”. The seasonal menu updates have led to a net increase in food and beverage revenue, as well as overall customer satisfaction. Prior data collected on food and drink preferences indicate a strong preference for menu items to accommodate a range of dietary restrictions, as well as items that are locally sourced

and organic. Previous plans to refresh the menu were put on hold during the corridor closures and the cost saving measure needed during the state budget crisis. Throughout FY 2024-2025, the LOSSAN Agency will continue work to update and expand the Market Café menu in response to the needs and wants of our passengers, as well as explore sustainable packaging for fresh food products.

Pet Reservations: Passengers may include a paid reservation for their small dog or cat when booking a ticket. There is a limit of five pet reservations per train (coach seating only), not counting service animals. In addition, pets must be in a carrier and weigh less than 20 pounds. The program continues to be well utilized. A number of positive comments have been received from customers, many indicating that the ability to bring a pet with them has increased their mobility as they are transit dependent.



Restrooms: Pacific Surfliner train cars have restrooms that feature electric hand dryers, soap dispensers, handrails, flushing toilets, running water, and infant diaper changing tables. There is a large, handicap-accessible restroom on the lower level as well as smaller restrooms on the upper level.

Sanitizer and Wipes: At the height of the pandemic, the LOSSAN Agency worked with Amtrak to install sanitizing stations onboard all Pacific Surfliner trains. At key locations throughout the train, passengers have access to a variety of protective products including alcohol-based hand sanitizer and antibacterial surface wipes. Packaged cleansing towelettes, which were available previously, are also stocked in the café car. These items will continue to be available onboard.

Wi-Fi: All Pacific Surfliner trains offer complimentary Wi-Fi service, which is a popular passenger amenity that distinguishes the Pacific Surfliner from other train services that operate along the corridor. The LOSSAN Agency worked with Amtrak and Caltrans to install new hardware on Pacific Surfliner trains that made the onboard Wi-Fi faster, more reliable, and capable of handling higher-bandwidth activities. Additional options are being explored to further improve the quality of onboard Wi-Fi service, such as offering paid upgraded Wi-Fi service that would allow for streaming of entertainment.



Service Amenities

Accessibility: Pacific Surfliner trains are accessible to passengers with disabilities. The lower level of each train car is reserved for passengers with disabilities, as this level has space for wheelchairs and a wheelchair-accessible restroom. Passengers can specify during the booking process if they will need assistance in boarding or detraining. Service animals that are trained to perform a specific task for the benefit of a person with a disability are permitted in all areas where passengers are allowed.



Customer Communication: The LOSSAN Agency continues to have an active presence on social media and has seen a consistent growth in followers on all Pacific Surfliner social media pages. Through these channels, LOSSAN Agency staff highlights service adjustment details, travel tips, safety updates, and inspiration for travel using the Pacific Surfliner. Through an ongoing collaboration between the LOSSAN Agency and Amtrak, real-time service alerts are shared on the @PacSurfliners X (formerly Twitter) channel to inform customers of delays, cancellations, and

other issues that may affect their trip. This complements other channels used by Amtrak to provide train status information, including announcements at staffed stations, Passenger

Information Display System signs on station platforms, and online through the “train status” feature on Amtrak.com and the Amtrak mobile app. The LOSSAN Agency will continue to collaborate with Amtrak to enhance the availability of information to passengers through push notifications, emails, and other channels. The LOSSAN Agency will also explore options to use passenger data retained by Amtrak to send follow-up correspondence to passengers after major delays that explains the cause of the delay and acknowledges the inconvenience they experienced.

Flexible Fares: To give passengers more options in managing their travel plans, Pacific Surfliner fares fall under the “Flexible Fares” category in the Amtrak booking system. As “Flexible Fares”, Pacific Surfliner tickets can be cancelled with a full refund to original form of payment with no fees if canceled before departure. There are also no change fees. Under the previous “Value Fares” category, there was a 25 percent fee charged if a trip was cancelled more than one hour after purchase. Amtrak has been waiving cancellation fees on a temporary basis during the ongoing pandemic, but this change will ensure that the flexibility will remain into the future. These options will remain even with the implementation of the Demand Pricing Model pilot.

Joint Promotions: The LOSSAN Agency continues to foster relationships with partners across Southern California to provide additional incentives to ride the Pacific Surfliner. Special ticket offers are available to Pacific Surfliner riders at attractions such as the Disneyland Resort and the San Diego Zoo. There are also regional discounts in Santa Barbara and San Luis Obispo Counties for visitors who arrive by train. The LOSSAN Agency continues to look for opportunities to grow existing partnerships and identify new ones with relevant destinations and organizations along the rail corridor.



Loyalty Program: Amtrak currently offers the Amtrak Guest Rewards (AGR) program that provides a mechanism for customers to earn points on travel that can be redeemed for reward train travel, hotels, car rentals, gift cards, and more. Over the course of 2023, the LOSSAN Agency has been working with Amtrak to improve the passenger experience as it relates to the AGR program. Positive results have come from these efforts. The points necessary to redeem for travel rewards has been lowered significantly, and the LOSSAN Agency is working with Amtrak to simplify the reward redemption process. In addition, the LOSSAN Agency intends to continue to explore the feasibility and practicality of implementing a directly managed customer loyalty program that complements the AGR program. Enhanced incentives would encourage first-time passengers to continue riding the Pacific Surfliner and promote the train as a viable transportation option to key destinations throughout Southern California. A directly managed program would also improve the quality of data collected by the LOSSAN Agency related to passenger demographics and travel behavior.

Rail 2 Rail Program: The LOSSAN Agency will continue to work with Amtrak, Metrolink, and NCTD to offer a Rail 2 Rail program benefit to customers that provides an equitable reimbursement rate to the Pacific Surfliner for carrying Metrolink and COASTER pass holders

on state-funded intercity trains. The program provides more departure options for customers traveling along the rail corridor. The shared use or “codeshare” arrangement under Rail 2 Rail allows all Metrolink ticketholders, regardless of ticket type, to utilize four specific Pacific Surfliner trains traveling between Los Angeles and Ventura. In October 2023, the codeshare arrangement with Metrolink was modified for a pilot program that now includes all trains between those stations. The pilot will extend through April 2024 and can be extended by mutual agreement. This provides more opportunities for ridership north of Los Angeles and increases options for travelers in Los Angeles and Ventura Counties.

Special Event Service: The LOSSAN Agency will work with Amtrak to expand Pacific Surfliner service to special events that draw large crowds including the Del Mar Racing Season, San Diego Comic-Con, and major sporting events and festivals. To accommodate anticipated demand, the LOSSAN Agency will also ensure that appropriate resources (rolling stock, staffing, etc.) are available.

Transit Transfer Program: The Pacific Surfliner Transit Transfer Program was implemented in 2016 as a result of a successful Transit and Intercity Rail Capital Program (TIRCP) grant, and offers seamless connectivity to local public transit services along the LOSSAN rail corridor. Originally intended as a one-year pilot program, this program was extended using remaining TIRCP funds. Although the grant funds have now expired, the LOSSAN Agency has continued the program using annual operating funds. The LOSSAN Agency is working with local transit providers to refine and possibly expand the program as well as increase marketing efforts.



Station Amenities

Station Host Program: The LOSSAN Agency will investigate the feasibility of launching a pilot program to provide station ambassadors at select Pacific Surfliner stations, including best practices from other state-supported Amtrak routes with similar programs. The station host program would assign trained volunteers to provide service-related information at select Pacific Surfliner stations.

Station Improvements: Using previous studies and input from member agencies and station owners, the LOSSAN Agency prepared a Capital Improvements Program (CIP) that includes several station-related improvements that are candidates for minor capital program funds, as well as state and federal safety and security funds, State Rail Assistance (SRA) Program funds, and future Transit and Intercity Rail Capital Program (TIRCP) funds. The CIP (as detailed in Chapter 5) prioritizes funding for station and platform improvements, including enhanced wayfinding signage at Pacific Surfliner stations and safety upgrades.

Chapter 9: Equipment

The cars primarily used on the Pacific Surfliner were purchased by Amtrak and have been in service since 2000. Additional cars were purchased by the State of California in 2002 to supplement the Amtrak owned fleet by adding seating capacity and additional Pacific Surfliner service. To further support service growth and demand, several Superliner cars from Amtrak’s long-distance fleet have also been leased over the years.

As a result initially of the COVID Pandemic, service has been reduced from 26 daily Pacific Surfliner trips using 10 train sets, to 20 daily Pacific Surfliner trips using 8 train sets. A typical train set consists of one locomotive and six passenger cars, including one business class car, one Superliner flex car for additional business class or coach seating, one Café car with coach seating, two coach cars, and one cab/baggage car with additional coach seating. This typical train set provides approximately 487 passenger seats. Additional passenger cars are added when available to accommodate anticipated increases in demand associated with holidays and special events.

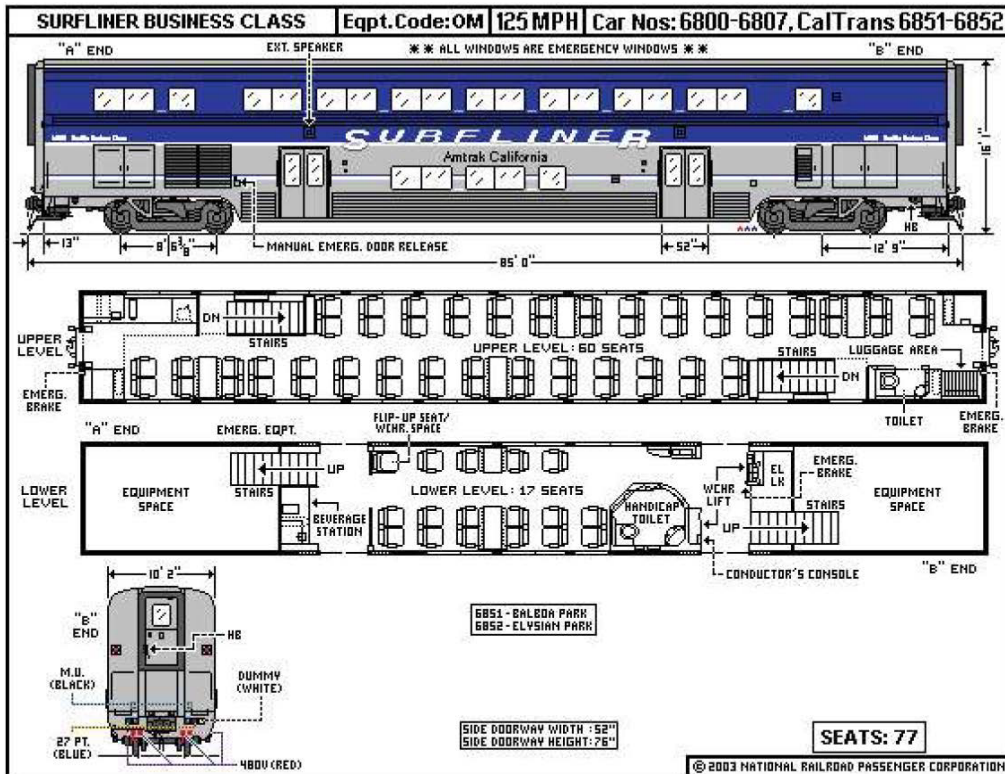
A description and schematic layout of the types of bi-level cars that are used most often in Pacific Surfliner service are provided in Table 9.1 and associated Exhibits.

Table 9.1: Pacific Surfliner Fleet Description

Type	Car Description	Seating Capacity ¹
Surfliner Business Class	Reserved seating on upper and lower levels with dedicated attendant; complimentary at-seat snack and beverage service	74
Superliner Flex Business Class or Coach	Upper level used for business class or coach seating. Additional seating on the lower level that can also be used for business class or coach ADA	74 to 96
Superliner Sightseer Café	Lounge and booth seating on upper level and Café area with food and beverage service on lower level	70
Surfliner Café	Unreserved coach seating on upper level; booth seating and Café area with food and beverage service on lower level	83
Surfliner Coach	Unreserved seating on upper level with limited seating for seniors/disabled on lower level	90
Surfliner Cab/Baggage	Unreserved seating on upper level and cab area for engineer to operate train; limited senior/disabled seating, bike rack accommodating seven bikes, and secured area for storage of checked baggage on lower level	76

¹ Some Superliner cars used as either the second business class car or coach have 96 seats.

Exhibit 9.1: Pacific Surfliner Business Class Car



Note: Business class cars have been reconfigured to add a lower level luggage rack and improved lower-level seating, resulting in a net reduction of five seats, for a total of 72.

Exhibit 9.2: Pacific Surfliner Café Car

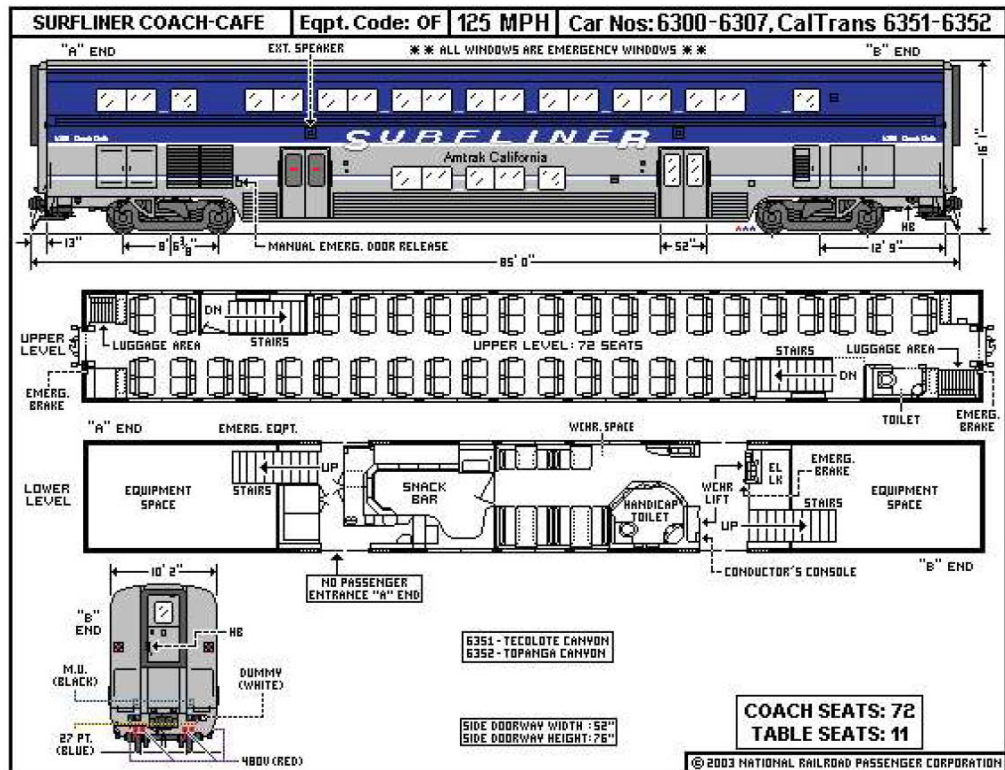


Exhibit 9.3: Pacific Surfliner Coach Car

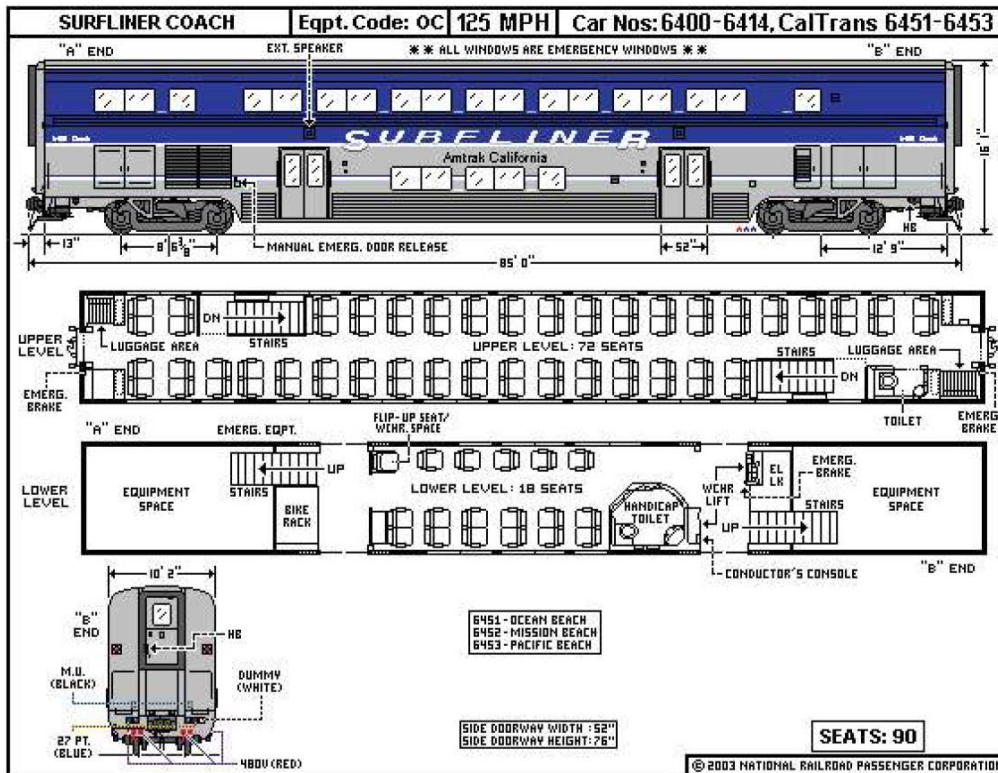


Exhibit 9.4: Pacific Surfliner Cab/Baggage Car

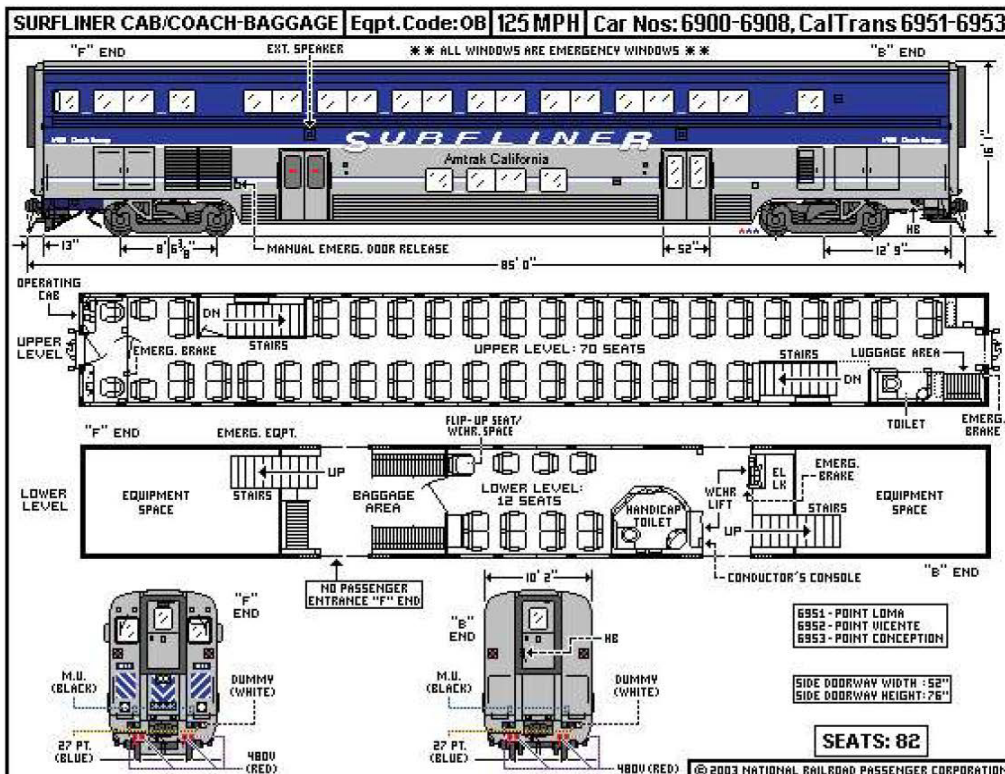
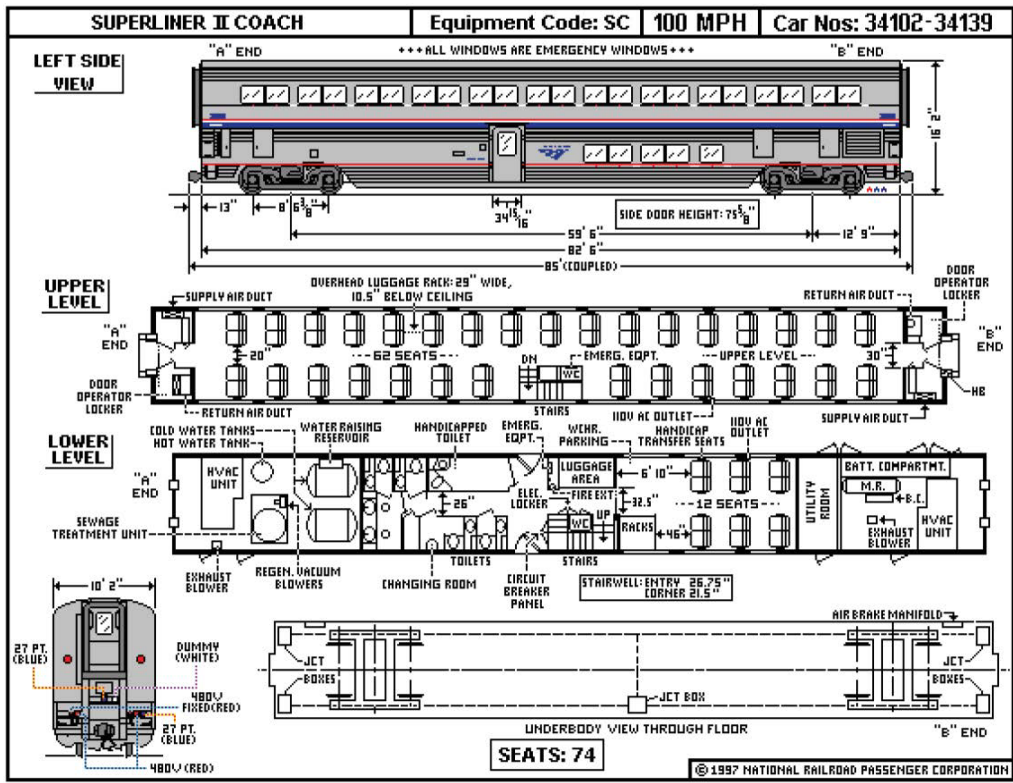


Exhibit 9.5: Pacific Surfliner Superliner Coach Car



The locomotives and passenger cars used to provide the Pacific Surfliner service have historically been primarily owned by Amtrak and leased by Caltrans for use on the service. The lease fees and capital equipment charges associated with the Amtrak-owned equipment are included in a separate agreement between Caltrans and Amtrak.

Included in the Pacific Surfliner fleet are 52 bi-level Surfliner passenger cars, 13 of which are owned by the State of California and the remaining 39 by Amtrak. In addition to the 52 Pacific Surfliner or California-branded bi-level cars, the State of California, through Caltrans, leases (11) eleven Amtrak-owned bi-level Superliner coach cars, and one Superliner Sightseer Café car for the California State Supported Services. Currently nine of the bi-level Superliner coach cars and the Superliner Sightseer Café car are utilized for Pacific Surfliner service. These cars are typically used on Amtrak’s long-distance trains but have been modified to run in “push-pull” operation and have also been equipped to support the Wi-Fi service offered on Pacific Surfliner trains. Eight of these



Siemens Charger Locomotive, Source: LOSSAN

Superliner cars are regularly used on the Pacific Surfliner service as a flex car for additional business class or coach seating with the remaining two being used to rotate the eight regular cars out for maintenance.

In 2021, all legacy locomotives that provided power to the Pacific Surfliner service were fully replaced with state-owned Siemens Charger SC-44 locomotives. These locomotives meet EPA Tier-4 emissions levels, significantly reducing the greenhouse gas and diesel particulate emissions along the entire route. Beginning in 2023, these locomotives now operate exclusively on renewable diesel fuel, further benefiting the environment. Amtrak also routinely positions a spare “protect” locomotive in San Diego and Los Angeles that is available to assist in the event a train encounters a mechanical issue. A summary of the equipment currently used to provide daily Pacific Surfliner service, and its ownership, is provided in Table 9.2.

Table 9.2: Pacific Surfliner Equipment Breakdown for FY2023-24

	FY2023-24	
	State-Owned	Leased from Amtrak
Surfliner Cab Car	3*	8
Surfliner Coach	6	15
Surfliner Business Class	2	8
Surfliner Café Car	2	8
Superliner Coach	0	9
Superliner Sightseer Café Car	0	1
Total Rolling Stock	13	49
Siemens Charger SC-44	14	0
Total Locomotives	14	0

Source: Caltrans and LOSSAN, 2021

* One cab car incurred significant damage in a vehicle strike in December 2023 and is not currently available for use in service.

Overhaul of Equipment

Nearly 80 percent of the bi-level passenger cars used on the Pacific Surfliner are owned by Amtrak. This makes it difficult at times to implement in an expeditious manner any improvements or overhaul programs to the passenger cars desired and expected of our passengers (such as installation of more current and informative passenger information systems). By comparison, the fleets used on the Capital Corridor and San Joaquins are more than 90 percent owned by the State of California already. The LOSSAN Agency, in coordination with Caltrans, are continuing to evaluate the possibility of purchasing the remaining 39 Surfliner bi-level cars and some additional Superliner bi-level cars currently owned by a private third-party. Purchasing the equipment, will allow for the cars being used on the Pacific Surfliner to better integrate into the statewide fleet management plan and allow for the sharing of resources more easily and efficiently with the other two state-supported corridors.

In 2023, SJJPA, under agreement with Caltrans, the LOSSAN Agency and CCJPA, began overseeing the contract to overhaul and rebuild the wheel trucks of all state-owned bi-level cars. With the equipment over 20 years old, this overhaul of the wheel trucks is necessary to continue ensuring a positive passenger experience by maintaining a smooth ride and safe operation. This project is anticipated to take several years to complete, performing the work on only two cars at a time to limit service disruptions for the three state-supported services.

New Equipment

Caltrans, along with the Illinois Department of Transportation, received federal funds through the High-Speed Intercity and Passenger Rail competitive grant program to procure new rolling stock for California's three state-supported intercity rail services. In December 2011, the California Transportation Commission approved the allocation of \$42 million of Prop 1B funds as a local match to \$168 million in federal funds for both railcars and locomotives. In November 2012, Caltrans awarded a \$352 million contract to Sumitomo Corporation of America to build new railcars that meet the federal standards required of the Next Generation Equipment Committee. Design and testing issues led to delays in the production of the new railcars and ultimately Siemens was chosen as a subcontractor to provide a total of 137 single-level Venture passenger railcars, including 49 for use on the San Joaquins route in California. The first trainset was put into revenue service in December 2023. These railcars meet Buy America provisions and are being manufactured in Sacramento and will be operated on the San Joaquins route, freeing up the existing bi-level passenger car equipment used on the San Joaquins for use to further restore and hopefully expand service on the Capitol Corridor and Pacific Surfliner routes.

Fleet Redeployment Plan

In June and December of 2022, a working group comprised of staff representing the LOSSAN Agency, CCJPA, SJJPA, and Caltrans met to discuss how best to redeploy the bi-level fleet as the Siemens Venture car trainsets were put into revenue service on the San Joaquins. The fleet redeployment plan developed by the working group identifies the number and classification of bi-level cars to be redeployed from northern California to southern California as each single-level Venture car set is put into revenue service on the San Joaquins.

Once all the Venture car trainsets are placed into revenue service, the fleet redeployment plan currently identifies 16 additional bi-level cars to be added to the Pacific Surfliner fleet, for a new total of 29 state-owned and 49 Amtrak-owned cars. These additional cars are sufficient to restore Pacific Surfliner service to pre-COVID service levels.

In addition, use of the Venture car trainsets on the San Joaquins may also allow for additional equipment to be deployed to southern California. With the request from Santa Barbara and Ventura for the restoration of peak period commuter service to help to mitigate the traffic impacts associated with the multi-year construction planned for US Highway 101, additional equipment will be necessary.

Equipment Maintenance

The primary maintenance facility for all Pacific Surfliner rolling stock is currently Amtrak’s Los Angeles Maintenance Facility located adjacent to the LOSSAN rail corridor near downtown Los Angeles. This facility includes locomotive and vehicle repair shops that perform safety inspections, servicing, and maintenance of all Amtrak locomotives and rolling stock. Amtrak utilizes smaller servicing facilities in Goleta and San Luis Obispo for fueling, cleaning, and overnight train inspections. In San Diego, these services are performed at the Santa Fe Depot, while in San Luis Obispo and Goleta, the Pacific Surfliner trainset is stored on a designated layover and servicing track separate from the station. The Los Angeles maintenance facility is owned by Amtrak, while the San Diego, Goleta and San Luis Obispo facilities are through long-term lease agreements with the right-of-way owners.



Expansion of the facilities in San Diego, Goleta and San Luis Obispo is currently under the planning or design phase. The expansion or relocation of these facilities is necessary to support additional service growth on the Pacific Surfliner and allow for a more flexible and robust maintenance program that does not require all trainsets to rotate into the Los Angeles Maintenance Facility once every four days, which limits the flexibility of how the existing equipment can be utilized.

Amtrak is currently responsible for all maintenance activities related to the Pacific Surfliner service as part of the annual operating agreement with the LOSSAN Agency. The LOSSAN Agency is responsible for administration and maintenance supervision of the Pacific Surfliner fleet, particularly the 13 state-owned railcars and 14 Siemens Charger Locomotives. This relationship is further defined in the Equipment Lease Agreement between Caltrans and the LOSSAN Agency, which is included as an appendix to the ITA.

The LOSSAN Agency is also responsible for ensuring the Pacific Surfliner fleet is operated and maintained to the high standards of reliability, cleanliness, and safety set by Amtrak and the state on a day-to-day basis. LOSSAN Agency staff continue to participate in weekly meetings with Amtrak, Caltrans and the other JPA’s on improving the overall performance and availability of the fleet. The LOSSAN Agency will continue to work closely with Caltrans and Amtrak into FY 2024-25 to refine the maintenance and operations programs to further improve the reliability, safety, and the cost-effectiveness of the fleet.

Caltrans is responsible for overseeing wreck repair and also participating in the oversight of modifications to state-owned equipment. Additionally, Caltrans is responsible for statewide fleet planning and deployment of equipment between the three state-supported intercity rail corridors (Pacific Surfliner, Capitol Corridor, San Joaquins) in consultation with each agency.

Amtrak Thruway Bus Service

At the request of the LOSSAN Agency, Amtrak manages the contracts with private bus companies to provide the state-funded Amtrak Thruway bus services connecting to the Pacific Surfliner route, and the private bus operators provide the vehicles used in the service, which must comply with specified requirements, including Wi-Fi accessibility, electronic destination signs, a restroom, and power outlets.



Chapter 10: Marketing



The marketing plan outlined for FY 2024 and 2025 aims to boost ridership and revenue for the Pacific Surfliner. The strategy focuses on enhancing brand awareness among target audiences and influencing their travel choices. The plan is focused on prioritizing measurable and trackable marketing initiatives to maximize return on investment and recover ridership after steep declines due to the COVID-19 pandemic and the San Clemente track closure.

In FY 2024-25, the LOSSAN Agency marketing program will advance established objectives while introducing new initiatives. The approach involves continuous measurement and optimization of strategies introduced in FY 23-24 to increase ridership and build brand awareness.

Emphasizing data-driven initiatives, the LOSSAN Agency will implement processes for ongoing data collection and evaluation. This will refine target audiences and increase awareness of the Pacific Surfliner brand. The focus will be on specific segments:

- Individuals between the ages of 18 to 45, interested in domestic leisure travel
- Families near Pacific Surfliner stations
- Children and students
- Seniors
- Spanish-speaking households
- Business travelers attending conferences at key destinations accessible by the Pacific Surfliner
- Individuals traveling to key destinations and events near Pacific Surfliner stations
- Customers who have ridden the train in the past 12 months

For each marketing campaign, the LOSSAN Agency will conduct monthly reviews, adjusting programs for continuous improvement for return on investment, trip bookings, and other key performance indicators.

The marketing goals for FY 2024-25 and FY 2025-26, along with planned tactics, are outlined below:

Marketing Goals and Tactics

Increase ridership among new and returning riders: Grow the number of new riders through targeted advertising to key audiences with high ridership potential. Incentivize existing customers to ride more often.

Tactics:

- Develop integrated advertising and outreach campaigns for potential new customers within target audiences.
- Pilot incentive programs to increase student and child ridership.
- Expand targeted email campaigns and social media advertising to encourage repeat ridership and frequency of travel.
- Maintain a focus on equity and identify opportunities to expand accessibility of the Pacific Surfliner service to all members of the community.
- Explore the development of a loyalty and rewards program for Pacific Surfliner to encourage repeat ridership.
- Partner with events and venues to create integrated marketing efforts similar to the successful X Games and Visit Ventura partnership in FY 23-24.



Increase awareness of the Pacific Surfliner brand: Rebuild and expand awareness of the Pacific Surfliner brand to regain ridership that was lost during the prolonged pandemic and months-long track closure in San Clemente.

Tactics:

- Generate media interest through targeted public relations campaigns.
- Maintain a robust media contacts list and distribute press releases regularly.
- Explore and test new marketing channels and work with bloggers, podcasters, and online influencers to promote visibility and awareness of Pacific Surfliner to new and younger audiences.
- Expand brand awareness through partnerships with Convention and Visitors Bureaus, cities, sports teams, attractions, event venues, and others.
- Refine digital marketing and social media channels for creative content and increased engagement.

Grow paid and owned marketing efforts: Maximize digital platforms for paid and owned media by focusing on measurable marketing efforts that lead to increased sales and referrals to Amtrak.com.

Tactics:

- Maximize digital platforms for measurable marketing efforts. Expand pay-per-click (PPC) advertising to increase ridership as well as the percentage of ticket sales that initiate at PacificSurfliner.com.
- Enhance website content for improved reach and search engine optimization.
- Refine email marketing efforts to build direct relationships with customers, increase return ridership, and improve customer retention.
- Expand reach though social media channels such as Instagram, TikTok, Facebook, YouTube, and Twitter.



Grow statewide rail ridership: Continue to collaborate with the other joint powers authorities (JPAs) in California to develop coordinated marketing efforts that promote rail travel throughout the state.

Tactics:

- Collaborate with the other JPAs on building out the AmtrakCalifornia.com website. The three JPAs collectively purchased the domain in FY 23-24 as this branding is prominent on existing equipment.
- Remain engaged with the State Amtrak Intercity Passenger Rail Committee (SAIPRC) Marketing Working Group to collaborate with other managing agencies for state-supported Amtrak routes across the country.

Enhance passenger communications: Continue to communicate service updates with customers in a timely manner.



Tactics:

- Regularly share informational messages and critical passenger updates regarding service impacts to both customers planning trips and passengers in transit via the Pacific Surfliner website, social media accounts, and other relevant channels.
- Work with Amtrak to explore ways to build on these efforts through integrations with other channels such as texting and the Amtrak app. Clear, timely, and transparent notifications help improve customer satisfaction.

Chapter 11: Annual Funding and Separation of Funding

The annual funding process for the three state-supported intercity passenger rail corridors starts with Caltrans DRMT's initial funding request in the State's FY budget. Once the State's budget is approved and funds have been included for the service, CalSTA is responsible for allocating the funds to each of the three intercity passenger rail corridors through the approval of the annual business plans. Simultaneously with this process, the LOSSAN Agency negotiates with Amtrak regarding the operating and maintenance contract, which is managed on a FFY basis (October – September). The current Amtrak agreement was executed on an annual basis covering FFY 2023-24. A new Amtrak operating agreement is anticipated to be executed for FFY 2024-25.



Every year, the LOSSAN Agency will present a proposed budget to the LOSSAN Board for approval, covering the administration, marketing, and operations of the Pacific Surfliner. Consistent with this budget, a funding request will be included in the annual business plan for submittal to the Secretary of CalSTA by April 1 of each year. The LOSSAN Agency will submit its annual business plan, including a draft funding request, by April 1, 2024. An updated funding request may follow by June 30, 2024, incorporating final operating revenue and expense estimates from Amtrak and forecast modeling jointly developed with Caltrans DRMT and the two other California JPAs.

State funding for operations of all three intercity rail corridors is provided through the Public Transportation Account, which is funded primarily through the state sales tax on diesel fuel.

FFY 2024-25 and FFY 2025-26 Operating Funding Request

The total net State funding proposal for FY 2024-25 is \$62,687,260, encompassing both the net operating subsidy and funding for administrative and marketing activities. The estimated net Amtrak operating subsidy is \$53,260,160, based on the assumption of restoring approximately 95-percent of the pre-COVID pandemic service levels. However, reinstating the two round trips between San Diego and Los Angeles is subject to the availability of funding, equipment, and crews. Additional information on restoring services levels is provided in Chapter 3.

The total net State operating funding request encompasses \$57,000 for transit connectivity and integration. This figure includes projections for the ongoing Transit Transfer Program.

The business plan anticipates that Caltrans DRMT will maintain a separate contract with Amtrak, directly funding equipment capital charges for Amtrak-owned railcars and locomotives on the three



state-supported rail corridors. Consequently, these equipment capital charges are not part of the operating agreement between Amtrak and the LOSSAN Agency.

Furthermore, an additional request for supplemental funding of \$500,000 is proposed for minor projects. This amount is in line with new FY 2024-25 funding and aligns with requests from previous years.

For FY 2025-26, the total net State funding proposal is set at \$64,772,835, including an anticipated net Amtrak operating subsidy of \$55,053,935. This subsidy estimate is based on the goal of fully restoring service levels to pre-pandemic standards, aiming for a total of thirteen round trips between San Diego and Los Angeles, thereby enhancing regional connectivity and transit efficiency.

FY 2024-25 and FY 2025-26 Administrative and Marketing Funding Request

In addition to Amtrak's contract costs for operating and maintaining the Pacific Surfliner service, there is an administrative component that is filled by OCTA as the LOSSAN managing agency. The LOSSAN Agency employs a select number of essential staff roles, supplemented by OCTA staff as required. This approach ensures that both the LOSSAN Agency and the state derive maximum value at minimal cost, funding only the necessary services and support essential for administering the Pacific Surfliner service.

OCTA continues to provide a host of services through the support function including:

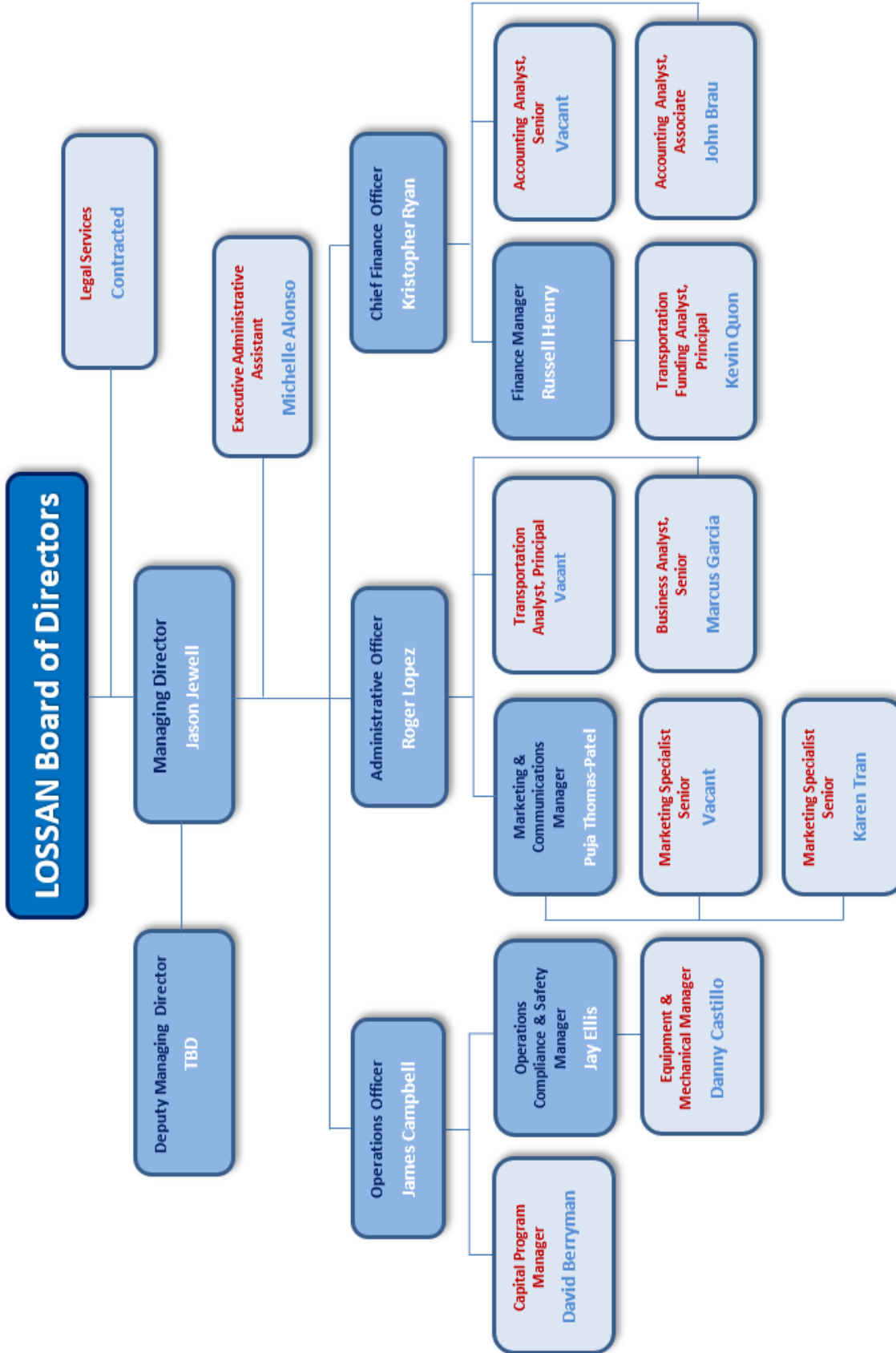
- Contracting and Procurement
- Financial Management and Budget
- General Administrative Services
- Human Resources
- Legal
- Legislative Advocacy and Government Relations
- Marketing
- Operations
- Planning
- Risk Management
- Stakeholder Outreach

The proposed administrative funding for FY 2024-25 is set at \$7,370,100. This includes \$6,019,200 allocated for managing agency administrative salaries at fully burdened rates, covering 18 full-time positions. Additionally, this funding incorporates an overhead rate as per the Managing Agency's Cost Allocation Plan (CAP). The administrative budget currently factors in employee performance-based salary increases, aligning with OCTA's FY 2023-24 standards and salary resolutions. However, this may be subject to revision during the OCTA's FY 2024-25 budget development, with potential updates to be reflected in the June 2024 funding request.

Furthermore, the LOSSAN Agency expects to offset direct administrative staff costs and other grant-related administrative expenses through grant funding reimbursements. It is proposed that any reductions in administrative fund usage due to these reimbursements will be reconciled bi-annually, subsequently decreasing the upcoming administrative fund payments to the LOSSAN Agency.

The dedicated staff positions necessary to support the LOSSAN Agency are included in the organizational chart in Figure 11.1 on the following page.

Figure 11.1: LOSSAN Rail Corridor Agency Organization Chart



Shared services provided by OCTA include: Contracts & Procurement, Human Resources, State & Federal Programming, Clerk of the Board, Risk Management, Information Technology, Government Relations and Finance.



For FY 2024-25, the proposed administrative funding request encompasses \$190,500 for legal, travel, membership dues, advocacy fees, and banking fees. Additionally, professional services funding is proposed at \$1,083,200. This includes \$1,050,000 allocated for consulting services in planning, engineering, modeling, grant writing, and project and construction management. The remaining \$33,200 is earmarked for audit and insurance brokerage services. Furthermore, the administrative fees include a yearly allocation of \$77,200 for insurance costs. These costs cover the LOSSAN Agency’s general liability, errors & omissions, and crime insurance.

The FY 2024-25 marketing funding request is proposed at \$2,000,000, consistent with the operating service assumption of restoring service to pre-pandemic levels.

The LOSSAN Agency's funding request for net Amtrak operating costs, as well as administrative and marketing expenses for FY 2024-25 and FY 2025-26, is outlined in Table 11.2. For a detailed breakdown of the administrative funding request for these fiscal years, refer to Table 11.3 on the following page.

Table 11.2: LOSSAN Rail Corridor Agency Net Operating, Administrative & Marketing State Funding Requests: FY 2023-24 Approved, FY 2024-25 and FY 2025-26 Proposed

	FY 2023-24 Approved Funding	FY 2024-25 Proposed Funding	FY 2025-26 Proposed Funding
Amtrak Operating			
Total Amtrak Operating Costs	\$ 130,248,073	\$ 136,832,434	\$ 143,240,782
Total Amtrak Operating Revenue	\$ (79,221,062)	\$ (83,572,274)	\$ (88,186,847)
Net Amtrak Operating Costs (Expenses less Revenues)	\$ 51,027,011	\$ 53,260,160	\$ 55,053,935
LOSSAN Funding Requirement			
Net Amtrak Operating Costs ¹	\$ 51,027,011	\$ 53,260,160	\$ 55,053,935
Transit Connectivity and Integration ²	\$ 40,000	\$ 57,000	\$ 57,000
LOSSAN Net Operating Funding Request	\$ 51,067,011	\$ 53,317,160	\$ 55,110,935
Administrative Funding Request	\$ 7,781,378	\$ 7,370,100	\$ 7,661,900
Marketing Funding Request	\$ 1,600,000	\$ 2,000,000	\$ 2,000,000
Total LOSSAN Funding Request	\$ 60,448,389	\$ 62,687,260	\$ 64,772,835
Supplemental Allocations			
Minor Projects Funding Request	\$ 500,000	\$ 500,000	\$ 500,000

¹ Additional service levels and available funding in FY 2024-25 will be evaluated in coordination with the State and JPA working group.

² Transit Connectivity and Integration includes funding for the continuation of the Transit Transfer Program.

Table 11.3: LOSSAN Rail Corridor Agency Administrative Funding Request Detail: FY 2023-24 Approved, FY 2024-25 and FY 2025-26 Proposed

LOSSAN Rail Corridor Agency Administrative Budget Detail (FY 2023-24 Approved, FY 2024-25 Proposed, FY 2025-26 Proposed)			
Expense Category	FY 2023-24 Approved Funding	FY 2024-25 Proposed Funding	FY 2025-26 Proposed Funding
Administrative Fees to Managing Agency	\$ 6,588,578	\$ 6,019,200	\$ 6,299,200
Professional Services - Legal	\$ 75,000	\$ 75,000	\$ 75,000
Professional Services - On Call Program Management	\$ 950,000	\$ 1,050,000	\$ 1,050,000
Professional Services - Audit	\$ 23,800	\$ 23,200	\$ 23,800
Professional Services - Insurance Brokerage	\$ 10,000	\$ 10,000	\$ 10,000
Insurance Premiums	\$ 60,000	\$ 77,200	\$ 88,400
Dues and Memberships	\$ 14,000	\$ 9,000	\$ 9,000
Federal Advocacy Fee	\$ -	\$ 44,000	\$ 44,000
Misc Expense	\$ -	\$ 2,500	\$ 2,500
Travel	\$ 60,000	\$ 60,000	\$ 60,000
Total LOSSAN Funding Request	\$ 7,781,378	\$ 7,370,100	\$ 7,661,900

Grant Programs

Apart from the FY 2024-25 State funding request, the LOSSAN Agency's annual budget for the same fiscal year includes various grant revenues and expenses for operational programs and capital projects. From 2015 to 2023, the agency received \$342.3 million in Transit and Intercity Rail Capital Program (TIRCP) grants for multiple operating and capital improvements. Of this amount, approximately \$46.9 million in TIRCP funded projects is budgeted in FY 2024-25. These projects include capitalized track maintenance and incentives programs with North County Transit District (NCTD) and Union Pacific Railroad (UPRR), the environmental phase of the Ortega Passing Siding, and construction of both the Goleta Layover Facility and Canada Honda Bridge.

Additionally, the LOSSAN Agency has secured two rounds of State Rail Assistance (SRA) formula and competitive funds for corridor improvements. The first round includes \$13.9 million in formula funding and \$719,000 in competitive funding. On November 16, 2020, the LOSSAN Board approved a second round of formula funding totaling \$29.8 million, allocated over five years to four key projects that are expected to greatly benefit the entire corridor. For FY 2024-25, the agency anticipates using \$6.2 million of these funds, budgeting project expenses as required.

The FY 2024-25 budget also sets aside \$16.9 million in Prop 1B grant funds for the Canada Honda Bridge construction on UPRR territory and design and construction for the Camarillo station improvements.

Budget amendments for grant-funded projects will be presented to the LOSSAN Agency Board as needed, based on project timelines and new funding opportunities.

Ventura-Santa Barbara Peak Period Commuter Service

As highlighted in Chapter 3, the initiative to restore the Ventura-Santa Barbara peak period commuter service is crucial for mitigating the traffic disruptions caused by construction on US Highway 101. Primarily aimed at serving commuters, this initiative is a joint venture spearheaded by the Santa Barbara County Association of Governments (SBCAG) and the Ventura County Transportation Commission (VCTC) to add one roundtrip between Goleta and Los Angeles. Diverging from the usual funding model reliant on the State of California's Public Transportation Account (CalSTA), this project will instead draw on a diversified pool of financial resources accessible to SBCAG and VCTC. Among these is the potential for securing Federal Transit Administration (FTA) formula grant funds, along with other funding mechanisms. Such grants are pivotal in bolstering public transportation systems that not only improve commuter mobility but also contribute to environmental conservation.

California Passenger Information Display System (CA PIDS)

In alignment with the statewide efforts to enhance passenger rail services, the LOSSAN Agency acknowledges and appreciates the role of the Capital Corridor JPA (CCJPA) in managing the California Passenger Information Display System (CA PIDS). As detailed in the CCJPA's annual business plan, since October 2022, CCJPA has taken over the management responsibilities of the CA PIDS from Amtrak, ensuring continued high-quality information services for rail passengers across California. Importantly for the LOSSAN Agency, the financial arrangements for the management and operation & maintenance (O&M) of the CA PIDS are structured in a manner that does not impose direct costs on our agency. The CCJPA has secured additional annual supplemental allocations from Caltrans for special projects, including the CA PIDS, that benefit all California Intercity Passenger Rails (IPRs) but are primarily managed by CCJPA. For the fiscal year 2024-25, CCJPA is requesting funds to cover the vendor costs associated with the oversight, operations, and maintenance of the CA PIDS, as well as their labor costs for administrative management. This arrangement ensures that the LOSSAN corridor continues to benefit from the CA PIDS without incurring direct financial obligations.

Separation of Funding

To ensure state funding for the Pacific Surfliner service is kept separate from funding for OCTA projects and programs, a separation of funding has been established within the LOSSAN managing agency. The funding received from the state is managed through the treasurer and controller of OCTA, as the managing agency. The JPA specifically calls for the treasurer to be the depository of funds and to have custody of all funds of the LOSSAN Agency. The LOSSAN Agency follows OCTA-established policies and procedures that fully comply with the generally accepted accounting principles. The LOSSAN Agency utilizes OCTA's existing accounting system, which is built on a robust platform, and has established a completely segregated accounting system for LOSSAN Agency-related business. This system and established policies/procedures, overseen by the treasurer and controller, as well as the LOSSAN Manager of Finance and Administration, will ensure the preservation of the state's investment and a completely accurate accounting for administration of the Pacific Surfliner service, as well as provide for an accurate and timely reconciliation and return of any surplus funds.

Chapter 12: Government Relations and Legislative Advocacy

One of the benefits gained through local governance of the Pacific Surfliner service by the LOSSAN Agency is added flexibility in advocating for policies at the state and federal level to improve rail operations, increase funding for operations and capital needs, and allow better coordination and interoperability with connecting transit and rail services. In addition, the LOSSAN Agency can conduct targeted outreach to local governments and community organizations to help expand awareness of the services provided on the LOSSAN rail corridor and more directly respond to local needs. As the pandemic subsides, the LOSSAN Agency will continue work to ensure safety and rebuild ridership.

The key to successful advocacy is the ability to partner with stakeholders to jointly advocate for mutually beneficial policies. The LOSSAN Agency has worked closely with CCJPA, SJJPA, the CRCC, and RCTC, to jointly advocate for common policy positions. Additionally, the LOSSAN Agency remains active with CCJPA and SJJPA in California's Intercity Rail Corridors Linking Everyone (CIRCLE), a California intercity passenger rail coalition. This advocacy coalition seeks to educate federal policymakers on the unique nature of Amtrak state-supported services, raise awareness of California's growing passenger rail system and proposed investments, and build stronger relationships with intercity rail stakeholders.

The LOSSAN Agency will, as practical, participate in advocacy trips, either virtual or in-person, to Sacramento and Washington, D.C. to attend any select committees formed to discuss passenger rail issues and also participate in the State's and Amtrak Intercity Passenger Rail groups. The LOSSAN Agency and Board members will continue participating in meetings with key legislators representing the LOSSAN rail corridor delegation and Administration officials, allowing for the specific objectives of the LOSSAN Agency to be discussed in detail. These meetings are vital to generating a greater understanding of policy impacts on intercity rail and the need for greater recognition of the importance of the LOSSAN rail corridor in the overall Amtrak system. The annual legislative program adopted by the LOSSAN Agency Board provides overall guidance to LOSSAN Agency advocacy activities, and staff will continue to provide regular legislative updates and bill analyses to the LOSSAN Agency Board consistent with that program.

From both a national and state perspective, the LOSSAN rail corridor is underinvested, but could greatly enhance mobility in Southern California with additional funding for capital and operational improvements. Efforts will be made to pursue resources and funding that will provide for much needed investments in infrastructure. Specifically, it will be important to evaluate which new and existing programs may be the most beneficial to the LOSSAN Agency and allow for proactive planning to deliver rail improvements. Alongside maximizing funding available to benefit the LOSSAN rail corridor in the federal infrastructure package, the LOSSAN Agency will also be engaged in the continued implementation of California's transportation funding package, SB 1.

Staff will continue to provide legislative updates to the LOSSAN Agency Board on policy and regulatory issues of importance, including those related to implementation of the IIJA, state budget, and other federal funding or financing opportunities, and intercity rail policy matters. It is anticipated that the LOSSAN Agency will be focused on numerous policy issues at the state, federal, and local levels. These efforts fall under these primary categories:

- Secure sustainable funding
- Support the implementation of transportation policies that promote the adequate and equitable funding of rail transit and capital improvements, while ensuring transparency in the use of these funds.
- Seek opportunities to support connectivity and integration for the LOSSAN rail corridor, including with emerging rail corridors, services, and high-speed rail.
- Support efforts to fund infrastructure, service, and safety improvements, with a focus on resiliency.

The 2024 LOSSAN Legislative Program provides further detail on the LOSSAN Agency's legislative priorities, and includes four top priorities for 2024:

- Support efforts to pursue dedicated funding and long-term solutions for resiliency planning and infrastructure needs along the LOSSAN Corridor, including funding opportunities to address immediate impacts of sea level rise and coastal erosion.
- Maximize the share of long-term, sustainable funding sources to support passenger rail operations and capital projects on the LOSSAN rail corridor, including the continued eligibility for the LOSSAN Agency to compete for state and federal funding.
- Support policies and programs that encourage efforts to rebuild intercity rail service to pre-pandemic levels and enable future expansion.
- Support efforts to further enhance connectivity of regional and intercity rail and local transit services within LOSSAN rail corridor.

At the local level, staff will continue to work with LOSSAN member agencies and local stakeholders to build awareness of passenger rail services along the LOSSAN rail corridor, developing strategic partnerships to better evolve the services to meet local needs. Regular communication and outreach on service improvements and priority projects will foster a better understanding of issues faced along the LOSSAN rail corridor. Increased awareness of these services by local officials can then be leveraged to support consensus-based operational improvements and policy activities.

In addition to the specific priorities identified by the LOSSAN Agency Board, the LOSSAN Agency will continue to monitor policies impacting Amtrak service, including the development of the California High-Speed Rail project, and commuter rail services in the LOSSAN rail corridor. The need for cohesive policies to allow for integration of rail services within the state, and improved access from other transportation modes, has never been more evident as the state works toward achieving goals related to improved mobility, environmental sustainability, and safety.

Chapter 13: Safety and Security



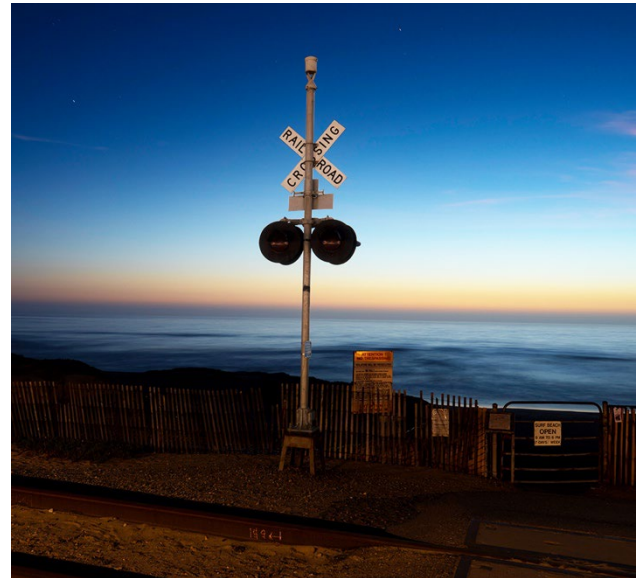
Protecting the safety and security of our passengers and passenger rail service on the LOSSAN Rail Corridor is key to attracting and retaining riders, as well as for ensuring the efficient operation of the Pacific Surfliner service. A key objective of the LOSSAN Agency’s safety program is to instill a comprehensive safety culture that governs all the activities associated with the operations and maintenance of the Pacific Surfliner service, while also efficiently meeting operational performance goals. The LOSSAN Agency continues to work with Amtrak, host railroads, and other stakeholders to ensure a detailed program for system safety and security is in place to protect Pacific Surfliner passengers and crew, as well as the general public.

As part of this effort, the LOSSAN Agency will continue to:

- In addition to ongoing rail safety and security awareness efforts, continue the implementation of Operation Safe Surfs, expanded the reach of the program based on its efficacy
- Work to implement technology solutions that can address “hot spots” for trespassing and vehicle strikes
- Develop outreach programs that meet the needs of the public, as well as stakeholders
- Work with Amtrak and stakeholders to ensure a continued safety culture for all who work and travel on Pacific Surfliner trains and utilize Pacific Surfliner stations
- Prioritize rail capital project funding for projects that include a goal of improved safety and security wherever possible
- Work with host railroads and rail operators to coordinate training with local first responders to help expedite emergency response and accident investigation services in the event of an incident
- Continue our partnership and support of Operation Lifesaver, a national rail safety program with the goal of improving public awareness of safety around railroad tracks
- Seek out and leverage state and federal grant funds for additional safety and security improvements

Regulatory Requirements and Reporting for the Pacific Surfliner

The Pacific Surfliner intercity passenger rail service is operated by Amtrak and is subject to federal safety standards and regulations in accordance with the U.S. Code of Federal Regulations (Title 49, Subtitle B, Chapter 11). Responsible regulatory agencies overseeing general railroad safety along the LOSSAN Rail Corridor include the Federal Railroad Administration (FRA) and the California Public Utilities Commission (CPUC). The FRA Office of Railroad Safety promotes and regulates safety throughout the nation’s railroad industry by issuing, implementing, and enforcing railroad safety regulations. The CPUC is the state agency responsible for ensuring the safety of freight, intercity, and commuter railroads, as well as highway-railroad crossings throughout the state.



The CPUC performs these railroad responsibilities through the Railroad Operations and Safety Branch of the Safety & Enforcement Division. The Transportation Security Administration (TSA) also plays a role in the security of passenger rail service through the TSA-sponsored Visible Intermodal Prevention and Response Program.

Amtrak is responsible for all required reporting of Pacific Surfliner safety data to federal, state, and local agencies, including the FRA and CPUC. Operational, track, and other safety inspections are completed through coordination between the ROW owners, rail operators, and regulatory agencies, which include Amtrak, Metrolink, NCTD, UPRR, BNSF, CPUS, and FRA. The LOSSAN Agency coordinates with these stakeholders to ensure that all reporting requirements are fulfilled at the federal and state levels.

LOSSAN Rail Corridor Safety Coordination and Emergency Response

The LOSSAN Agency coordinates safety and security activities with various stakeholders and ROW owners along the corridor, including the State of California, LOSSAN member agencies, Amtrak, UPRR, BNSF, Metrolink, NCTD, Operation Lifesaver, U.S. Department of Homeland Security, and first responder agencies along the LOSSAN rail corridor. In addition, the LOSSAN Agency is continuing to pursue new agreements with local transit providers to provide emergency bus bridge service during major incidents along the LOSSAN Rail Corridor, such as the agreement implemented with OCTA. This model is similar to the emergency bus bridge programs used by Metrolink and NCTD that allows for coordinating with local transit agencies for bus bridges when an emergency incident occurs in their respective territories. In addition, Amtrak, Metrolink, and NCTD often transport each other’s passengers in the event of service disruptions along the LOSSAN Rail Corridor.

Safety and Security Onboard Trains

The LOSSAN Agency primarily serves in an oversight and coordination role regarding safety and security onboard trains, relying on the extensive onboard safety and security practices already put in place by Amtrak. LOSSAN Agency staff will continue to attend regularly scheduled safety meetings hosted by Amtrak for front-line employees, reiterating that safety is the first priority in delivering Pacific Surfliner service.

Positive Train Control

In accordance with a federal mandate, Positive Train Control (PTC) is fully operational on all Pacific Surfliner trains. PTC is a predictive collision avoidance technology designed to stop a train in motion when its continued movement may result in an accident. The safety-enhancing goals of PTC include preventing train-to-train collisions, speeding and over-speed derailments, incursions into track work zones, and the movement of a train through a switch left in the wrong position. The primary benefits of PTC include saving the lives of train crews, passengers, and railroads, improving passenger and freight train operational efficiency, and providing real-time train location information.

Camera System

All Pacific Surfliner cab cars and locomotives are currently equipped with a “forward-facing” camera system to assist with accident investigations. This system provides crews and first responders with a valuable tool to assist with post-accident investigation and can help clear an incident scene more quickly so that trains can proceed. In addition, Amtrak is currently in the process of installing “inward-facing” cameras on locomotives and cab cars throughout its nationwide fleet, similar to those currently used for the Metrolink fleet. The Charger locomotives in use for the Pacific Surfliner are already equipped with inward-facing cameras. In addition, the Charger locomotives in use for the Pacific Surfliner meet or exceed the latest federal rail safety regulations, including enhanced carbody structure safety with crash energy management components like a locomotive cab safety cage and push-back couplers.

Amtrak Police Department

One part of Amtrak’s existing security program which Pacific Surfliner passengers benefit from is the Amtrak Police Department, where positions exclusively assigned to the Pacific Surfliner include nine officers, one detective, one sergeant, and one captain. These officers are based out of three substations, San Diego Santa Fe Depot, Los Angeles Union Station, and the Santa Barbara Amtrak station. Of the nine officer positions, six are assigned in the patrol capacity, while three serve with K-9 units. In addition, there are five positions from the Amtrak Special Operations Unit (SOU) that can be called upon. The functions of each of the three units are as follows:

- **Patrol Units:** Officers serving in a patrol capacity fulfill traditional policing functions and act as a deterrent to crime in stations, on trains, in and around Amtrak facilities, and out on the railroad ROW. Patrol Officers enforce the law, perform checked baggage screening and onboard security checks, conduct follow-up investigations on any crimes involving Amtrak facilities or its passengers, and provide support during special events.

- **K-9 Units:** The K-9 units provide a psychological and physical deterrent to potential threats from explosives. The teams undergo intensive training that includes vapor wake training, which allows the K-9 units to be alert not only to the scents of explosives found in stationary baggage, but also left in the wake of passing individuals.
- **SOU:** Members of the SOU support patrol operations by providing rapid response and enhanced capabilities to assist in keeping Amtrak passengers and employees safe. Although SOU members are not exclusively assigned to the Pacific Surfliner, the SOU is prepared at any time to deploy personnel and equipment for tactical response, conduct low-visibility surveillance, investigations, and provide enhanced support for special events. The SOU also conducts training on railroad-specific tactical response and procedures for fellow Amtrak Police Department members and external law enforcement partner agencies.

Amtrak Police Department and LOSSAN Agency Coordination

The LOSSAN Agency has instituted an increased focus on communication and coordination with Amtrak Police. Quarterly meetings with Amtrak police leadership have been implemented. This allows for the discussion of any safety hotspots and a discussion of policing priorities along corridor. In an effort to keep the LOSSAN Board better informed, Amtrak police leadership have assisted staff in the preparation of a system safety and incident report. This report is prepared for the Board quarterly and presents system safety and incident information covering reported crimes on Pacific Surfliner trains or at stations, as well as the response and mitigation measures to these crimes.

Operation Safe Surfs – A Rail Safety Initiative

Along the LOSSAN Corridor that the Safety incidents along the railroad ROW can include injuries and fatalities associated with incidents at grade crossings and trespassing on railroad property. The situations not only impact the service operationally, but have a profound impact on our communities. In 2022, the LOSSAN Agency began a detailed analysis of over 3 years’ worth of detailed trespasser strike data. The analysis was intended to identify the specific locations that saw the highest incidence of trespasser strikes. As can be seen in Image 13.1, a heat map was then developed to visually represent where efforts should be focused.

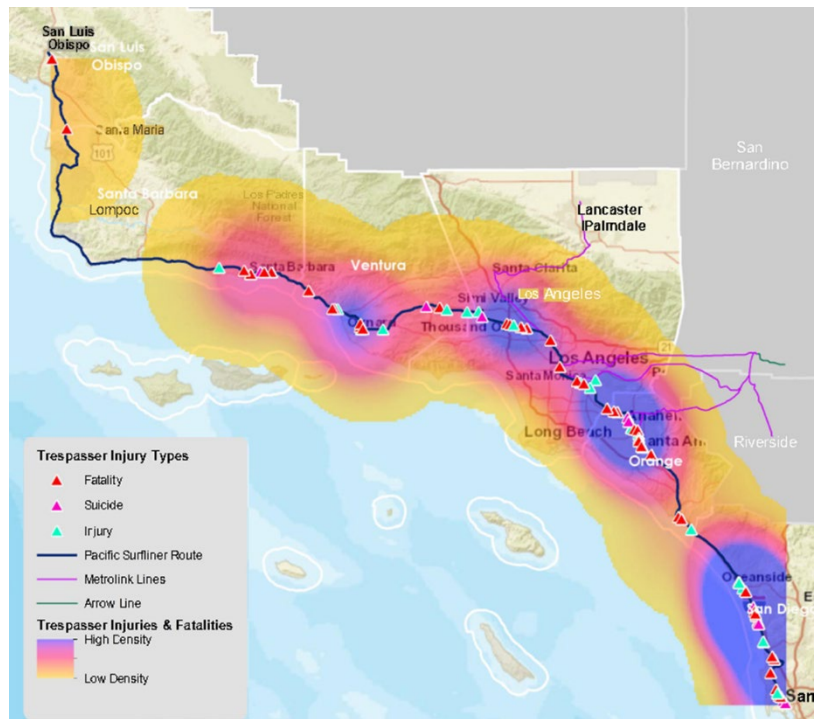


Image 13.1

This analysis was the catalyst for the development of Operation Safe Surfs, the LOSSAN Agency’s ongoing rail safety initiative. Operation Safe Surfs uses a four pronged approach to address the route causes of trespasser strikes. These include:

- Rail safety ads on connected televisions, streaming television, and digital radio.
- Geofenced safety messaging around hot spot sections of the tracks, selected educational facilities, and problematic at-grade railroad crossings.
- Installation of combination railroad safety and suicide prevention signage (sample show in image 13.2).
- Outreach to the homeless encampments that are adjacent or in the vicinity of the railroad right of way.



Image 13.2

Additionally, a pilot implementation of the RailSentry safety technology is being explored. This system, installed at at-grade crossings, uses traditional cameras, Lidar, and artificial intelligence to immediately identify any persons or vehicles that are actively obstructing a crossing. The system then notifies train personnel to allow for sufficient time and distance to bring the train safely to a stop before a strike occurs.

The LOSSAN Agency will continue to support and assist in the coordination of projects undertaken by host railroads, LOSSAN member agencies, and other stakeholders that improve safety at both grade crossings and along the railroad ROW. Examples of projects to improve safety include track and signal upgrades, fencing along the ROW to prevent unauthorized access, gate and warning systems, and grade separations that eliminate at-grade crossings.

Track Safety and Public Outreach

In addition, the LOSSAN Agency will continue to support public awareness campaigns designed to educate the public about the risks of trespassing on railroad property and the importance of using caution around railroad tracks and trains. One campaign which the LOSSAN Agency supports is Operation Lifesaver, a national rail safety coalition committed to preventing collisions, injuries, and fatalities on and around railroad tracks and grade crossings. The coalition is a voluntary effort by railroads, safety experts, law enforcement, public agencies, and the general public, with several LOSSAN member agencies and partners participating in Operation Lifesaver. The LOSSAN Agency will continue seeking new opportunities to further its participation in the program, as well as continue working with Operation Lifesaver to implement rail safety marketing and outreach campaigns that promote safe behavior around the tracks used by the Pacific Surfliner.

Safety at Stations

The LOSSAN Agency primarily serves in an oversight, coordination, and funding role regarding the safety and security of the various station facilities that exist along the LOSSAN Rail Corridor. Many of the stations served by the Pacific Surfliner are city-owned and operated, with some station owners electing to contract directly for security guards and long-term parking security services, while other station owners do not provide such services. Meanwhile, Amtrak currently only contracts directly for security services for Santa Fe Depot in San Diego, due to this station housing equipment overnight.



Although only some Pacific Surfliner stations have security services contracted directly by the station owner, most stations are outfitted with security cameras that feed directly to a local sheriff’s office or operations center that can dispatch emergency services. Beginning in 2017, the LOSSAN Agency as a recipient of CalOES CTSGP funds began constructing improvements to upgrade existing video surveillance systems (VSS) at six Pacific Surfliner stations, add new VSS at six additional stations, and establish a central monitoring location in Los Angeles, which is now complete. Local law enforcement will be provided remote access to the security cameras at the stations within their jurisdiction.

Ongoing Health and Safety Practices Onboard Trains

Several measures implemented in the early days of the COVID-19 pandemic continue in place to promote the health and safety of both passengers and crew while onboard Pacific Surfliner trains. These efforts help to ensure that our passengers have confidence in riding the Pacific Surfliner service as the pandemic continues and health guidelines evolve over time. Measures taken specifically to address public health and safety are as follows:



- Sanitizing stations with alcohol-based hand sanitizer and antibacterial surface wipes are provided in every train car
- Plexiglass barriers are installed in the Café Car on all Pacific Surfliner trains to separate the Café Car attendant from customers
- Complimentary face coverings are available for customers who forget their own, regardless of whether or not Pacific Surfliner passengers are subject to a public health mandate requiring use of face coverings

Chapter 14: Emerging Corridors



In addition to managing the Pacific Surfliner rail service, the LOSSAN Agency works with member agencies to study corridor enhancements and expansion opportunities that provide connectivity within Southern California and beyond. In addition to the ongoing coordination with the development of the California HSR system (see Chapter 7), the LOSSAN Agency’s focus has been on continuing to coordinate connectivity with two developing or emerging corridors and one corridor enhancement or expansion; 1) the Coast Corridor, connecting the coastal communities north of San Luis Obispo and the San Francisco Bay Area with the Pacific Surfliner service area, 2) the Coachella Valley Rail Service, connecting the eastern communities throughout Riverside County and Coachella Valley, and 3) enhancements and expansion of service along the Antelope Valley Line between Los Angeles, Santa Clarita and Palmdale. These connections will provide seamless travel opportunities by rail throughout the region and state. System improvements on existing and emerging rail corridors will contribute to the success of the LOSSAN rail corridor, support future statewide and regional rail operations, and provide enhanced connectivity with local transit systems.

The Coast Corridor (“Coast Route” Service)

The 474-mile Coast Corridor, which runs from San Francisco to Los Angeles, shown in Figure 14.1, currently serves a full complement of urban commuters, as well as regional, intercity, and interstate travelers. Constructed by the Southern Pacific Railroad between the late 19th and early 20th centuries, the Coast Corridor was originally built as a one-seat ride that moved passengers between San Francisco and Los Angeles. While the present adaptation has service in every region of the Coast Rail Corridor, there is currently no one-seat ride option that serves the entire length of the corridor.

Current passenger rail services that operate on segments of the Coast Corridor include Caltrain, CCJPA, Amtrak Pacific Surfliner, Amtrak Coast Starlight, and Metrolink. Freight rail services are operated by UPRR, which currently operates infrequent service north of Oxnard and limited service of one or two trains south of Oxnard, with more regular service operated in the San Fernando

Valley. For the UPRR, the Coast Rail Line is considered a “secondary” or “relief” line to the much busier Central Valley Line to the east, which connects Northern and Southern California via the Central Valley.

Implementing State-supported rail service between San Luis Obispo and San Jose to connect the State’s two Megaregions by 2027 is a goal in the State Rail Plan, with service every 4 hours between San Luis Obispo and Salinas, and bi-hourly service between Salinas and Gilroy. This proposed service would fill a gap in passenger rail services between Northern and Southern California. One option for filling this gap in the State rail network is to extend Pacific Surfliner service north of San Luis Obispo.

The Coast Rail Coordinating Council (CRCC) consists of a technical and policy committee made up of staff and elected officials representing coastal agencies focused on improving passenger rail service along the Coast Route. In October 2018, SLOCOG, SBCAG, VCTC, Santa Cruz County Regional Transportation Commission (SCCRTC), and Transportation Agency for Monterey County (TAMC) formalized their relationship through a Memorandum of Understanding establishing themselves as the CRCC, with SLOCOG acting as the managing/administering agency for meeting coordination, grant submission, and other administrative responsibilities. The LOSSAN Agency is a participating agency of the CRCC and works with the CRCC member agencies and the State to help evaluate the options for developing and operating state-supported intercity rail service between San Luis Obispo and San Jose.

The Amtrak Coast Starlight is a daily long-distance train operating through the Coast Corridor that serves the needs of long-distance travelers between Seattle, the San Francisco Bay Area, Los Angeles, and points in between. New Coast Route rail service would operate between Los Angeles and San Jose and complement the Coast Starlight schedule with a reliable intercity service to meet the needs of communities between the San Francisco Bay Area and Los Angeles.

The LOSSAN Agency has been participating as a stakeholder in three separate but related studies that recently concluded to evaluate options on the feasibility of implementing new or expanded intercity passenger rail or transit services along the Coast Corridor. These included the Rail Network Integration Study that is being led by TAMC, the Coast Rail Corridor Study led by SLOCOG on behalf of the CRCC, and SBCAG’s Regional Transit and Rail Planning and Integration Study.

Several actions are needed to advance any new or expanded Coast Route rail service, in priority order:

1. Secure track access from host railroads
2. Secure state operating support
3. Secure equipment
4. Secure legislative authority to administer the service (regardless of who the managing agency will be)

- Deliver critical infrastructure improvements, such as the completion of the Central Coast Layover facility, and other improvements such as sidings, powering of switches, and stations, to deliver the integrated service plan

With respect to Coast Route service, the LOSSAN Agency business plan includes adequate staff resources to monitor and participate in continued planning efforts led by CRCC staff or other partner agencies.



Coachella Valley Rail Service

The Coachella Valley Rail Project is a proposed 144-mile-long intercity passenger rail corridor between Los Angeles Union Station and the Coachella Valley, with the terminus located in the City of Coachella. This intercity passenger rail service would run similar to the Pacific Surfliner service through a wide variety of densely populated areas in Los Angeles and Orange Counties to rapidly growing areas of the Inland Empire, including the City of Riverside and the Coachella Valley.

As envisioned, the service would operate on the BNSF Railway through Los Angeles, Orange counties, western Riverside County, and Union Pacific Railroad from Riverside through Palm Springs to the City of Coachella. The proposed service would have from two to five daily round trips and serve up to nine proposed stations along the route. Currently, Amtrak's long-distance Sunset Limited is the only passenger rail service between Los Angeles and Palm Springs on its way to New Orlean. Unfortunately, it only operates three times per week with overnight stops. This is why a more frequent daily service is desperately needed.

The proposed service would connect jobs and education, transforming how Southern California residents travel and creating a car and stress-free option between major destinations along the route. Significant travel demand is based on current travel patterns along parallel highways, including Interstate 5, State Routes 91 and 60, and Interstate 10. The Coachella Valley portion of the corridor is one of the fastest-growing areas of Southern California due to increasing residential development and exponential population growth. In addition, the Coachella Valley

has many tourist destination events such as mega music festivals, resorts, gaming, and sporting events that attract regional trips from Los Angeles and Orange counties and national and international visitors.

The RCTC certified the Tier 1 program-level environmental document in 2022. RCTC and Caltrans are now actively working to start work on the Tier 2 project-level environmental studies, which will outline detailed engineering and environmental topics, including station locations. Cities along the route in the Coachella Valley have also shown interest in the service and have started planning for potential station areas. The project was also awarded funding in the FRA Corridor ID program to advance the project development.

Antelope Valley Line Capacity and Service Improvements Program

The Antelope Valley Line (AVL) is a 76.6-mile rail corridor that connects downtown Los Angeles and the Antelope Valley cities of Palmdale and Lancaster, serving intermediate cities that include Glendale, Burbank, San Fernando, Newhall and Santa Clarita. It is owned by LA Metro and used by Metrolink commuter rail service and Union Pacific freight trains. The AVL Capacity and Service Improvements Program is intended to enable improved service along the AVL by constructing capital improvements at key locations strategically selected along the AVL corridor that were previously identified as part of the AVL Study, which was completed in 2019.

The Pacific Surfliner currently operates over 11.4 miles of the AVL between Los Angeles and Burbank Junction, through the Cities of Glendale and Burbank. At Burbank Junction, the Pacific Surfliner follows the LOSSAN rail corridor towards Ventura County. In addition, the San Joaquins Joint Powers Authority provides 12 connecting thruway bus routes between Los Angeles and Bakersfield, linking the Pacific Surfliner and San Joaquins intercity passenger rail services, while also serving some of the communities along the AVL.

The 2023 California State Rail Plan identifies as a service goal and improvement the integration of rail services that connect communities along the North LOSSAN region with the rest of southern California, including communities along the Antelope Valley Line and in the Central Valley. The LOSSAN Agency will continue to participate in the process with LA Metro on potential next steps with implementing the improvements to the AVL to ensure connectivity with the Pacific Surfliner.

Summary

Moving forward, the LOSSAN Agency will continue to work with member agencies to participate in planning efforts for passenger rail service in these emerging and expanding corridors, with a focus on creating seamless connections between the Pacific Surfliner and future passenger rail services on the Coast, Antelope Valley and Coachella Valley corridors.

Chapter 15: Environmental Sustainability and Coastal Resiliency

Sustainability Defined

One definition of environmental sustainability is “meeting the needs of the present without compromising the ability of future generations to meet their own needs”¹. More simply, it is maintaining an ecological balance, ensuring that what we take from the finite resources of our planet does not exceed what we can put back or what can be regenerated naturally.

As with environmental sustainability, coastal resiliency can be defined in a number of different ways. For the purposes of this discussion, coastal resiliency is the capacity of the socioeconomic and natural systems in a coastal environment to cope with disturbances, induced by factors such as extreme weather events, sea level rise, or direct human impacts, while maintaining their essential functions.

The Impacts on Southern California

Over the last two years, the impacts of climate change have been felt across the entire LOSSAN rail corridor. Repeated closures of the tracks resulted in nearly 10 months of bifurcation on our busiest stretch of corridor, between Orange and San Diego counties. These closures have come as a direct result of coastal erosion and landslides that have been spurred by extreme weather events.



As an example of the service impacts these events cause, landslides in San Clemente in two main areas shutdown rail service for 251 days out of FFY 2022-23. This resulted in a significant increase in operational costs as bus bridges were required to maintain lifeline service through this area of South Orange County. The cost of just the physical repairs associated with these two closures exceeded \$19 million. Not as easily quantified is the overall impact these closures have on public perception of the Pacific Surfliner service. If these climate change related impacts continue, the unreliability of the service could have significant impacts on ridership recovery and future growth.

Senate Bill 677

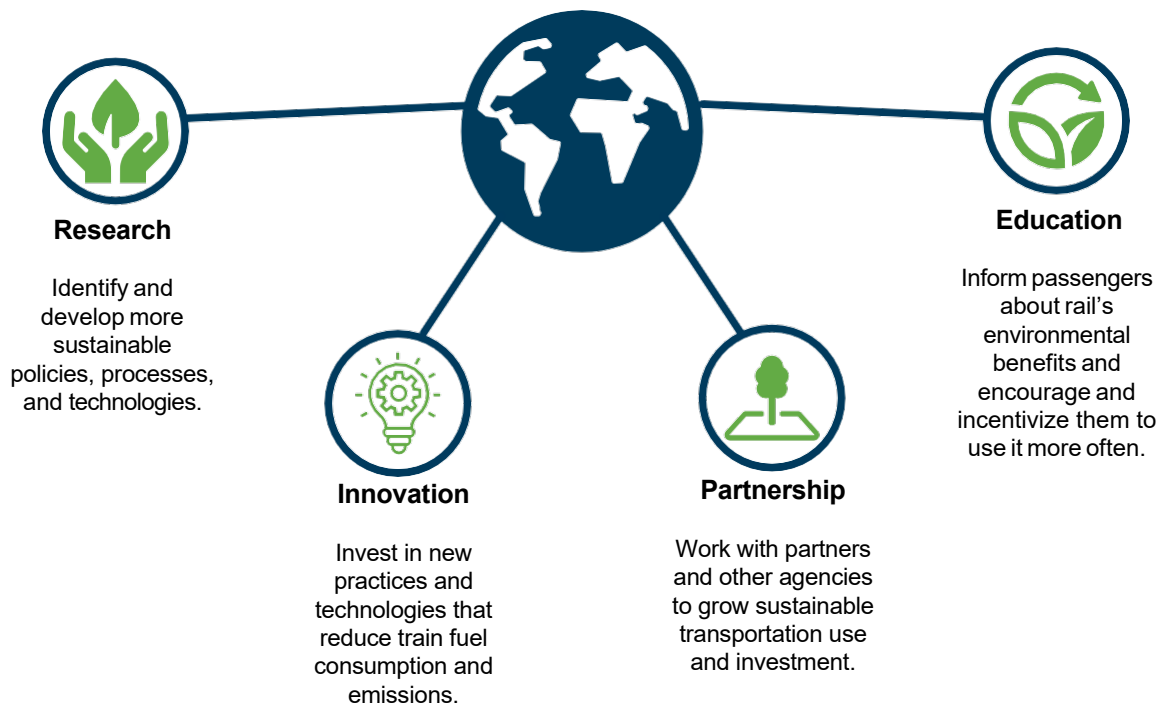
On Saturday, October 7, 2023, Governor Gavin Newsom signed into law Senate Bill (SB) 677 (Blakespear, D-Encinitas). SB 677 seeks to provide increased transparency about the impacts associated with climate change along the LOSSAN rail corridor. It required a new chapter (chapter 15) in the LOSSAN Agency’s annual business plan to provide an opportunity to identify climate change related challenges to the corridor and assist in identifying solutions to address these challenges. These new requirements to the LOSSAN Agency business plan aligns with the goals laid out in the LOSSAN Agency 2023 Strategic Plan and helps address the mitigation of climate-related impacts on rail within the State.

¹ <https://www.un.org/en/academic-impact/sustainability>

The Role of the LOSSAN Agency

The LOSSAN Agency aspires to be environmentally conscious and to be known for effective, consistent efforts to:

- Operate in a sustainable manner, encourage environmental resiliency, and use renewable resources where possible;
- Champion capital improvement projects that are transformative and directly contribute to a corridor that is sustainable and resilient; and
- Regularly analyze our services and operations to identify new policies or actions to eliminate or minimize negative environmental impacts.



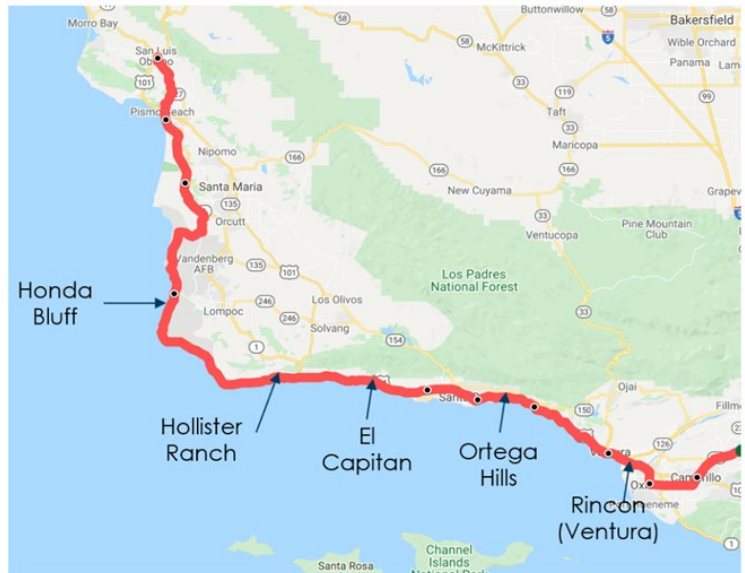
The role of the LOSSAN Agency, especially as it relates to capital improvement projects, is primarily one of coordination. However, even in this capacity, much can be done to increase the viability of projects that promote the afore-mentioned environmental goals. Chapter 5 of this business plan includes an exhaustive listing of all capital improvement projects that are both planned and in process along the length of the entire LOSSAN rail corridor. As of this business plan cycle, any projects that incorporate sustainability or resiliency elements will be highlighted on that list.

This identification process allows a more coordinated effort in seeking funding for planned projects that incorporate these types of elements. As both federal and state funding programs that support environmental sustainability are identified, the information in the capital projects list can facilitate the grant submittal process.

Current and Future Efforts

There are several ongoing efforts that are aimed at addressing the coastal resiliency challenges being experienced on the LOSSAN rail corridor. These fall into two categories, short-term repairs and stabilization, and long-term plans for either track relocation or other solutions to address future resiliency issues.

The LOSSAN Agency is working with the UP on long-term stabilization efforts at 5 key areas on the north end of the LOSSAN corridor. Extreme weather events and sea level rise have contributed to the coast erosion on the hillsides immediately adjacent to the tracks. Several key bridge structures have likewise been impacted by weather related erosion. A funding plan to address the project costs is being developed.



OCTA recently began the Coastal Rail Resiliency Study (CRRS), which is the first step towards exploring solutions that will protect in place approximately seven miles of the LOSSAN rail corridor for up to 30 years. This effort was funded with a \$1.77 million federal Surface Transportation Block Grant and over \$230,000 of local measure funds. Key milestones of this 24-month study include conducting a vulnerability assessment to identify and evaluate locations at immediate risk; establishing evaluation criteria to vet potential alternative concepts; and ultimately presenting draft and final feasibility study reports. In December 2023, the California Transportation Commission awarded \$12 million in Local Transportation Climate Adaptation Program funds to OCTA to support environmental studies for the CRRS.

A separate long-term study will look at potential rail line relocation away from the Pacific Ocean. Given the potential magnitude of this effort, it will require significant involvement of state and federal agencies. Discussions are underway with the state to determine which agency is best positioned to lead the long-term effort.

The City of San Clemente is currently engaged in a nature-based Coastal Resiliency Project Feasibility Study that seeks to develop project concepts that will address coastal erosion through sand retention and replenishment. These projects would complement existing and planned beach restoration projects, such as those being undertaken by the US Army Corps of Engineers and SANDAG. The concepts in development include the installation of breakwaters to retain existing sand and the establishment of living shorelines to increase sand reserves and natural sand nourishment.

SANDAG is also leading a series of efforts to address coastal resiliency for the LOSSAN Corridor in San Diego County. This year, they will begin Phase 5 of their bluff stabilization efforts in Del Mar to continue addressing immediate coastal needs. For the long term, they are working on the



environmental document for a planned track relocation, which would move the tracks away from the eroding bluffs and into an inland tunnel running through or around the Del Mar community. Additionally, the San Dieguito Double Track and Batiquitos Lagoon Double Track projects have been fully funded and will replace century old trestle bridges, contributing to the resiliency of the Corridor.

Glossary of Terms

ADA	Americans with Disabilities Act
Agency	Rail Corridor Agency
ASA	Administrative Support Agreement
Board	Board of Directors
BNSF	BNSF Railway
CalOES	California Governor's Office of Emergency Services
CalSTA	California State Transportation Agency
Caltrans	California Department of Transportation
CCJPA	Capitol Corridor Joint Powers Authority
CHSRA	California High Speed Rail Authority
CIP	Capital Improvement Program
CP	Control Point
CPUC	California Public Utilities Commission
CRCC	Coast Rail Coordinating Council
CTSGP	California Transit Security Grant Program
DRMT	Division of Rail and Mass Transportation
FAST Act	Fixing America's Surface Transportation Act
FY	Fiscal Year
FFY	Federal Fiscal Year
FRA	Federal Railroad Administration
FY	Fiscal Year
GHG	Greenhouse Gas
HP	Horsepower
HSR	High-speed rail
ITA	Interagency Transfer Agreement
JPA	Joint Powers Authority/Agreement
LAUS	Los Angeles Union Station
Link US	Link Union Station
LOSSAN	Los Angeles – San Diego – San Luis Obispo
Metro	Los Angeles County Metropolitan Transportation Authority
Metrolink	Southern California Regional Rail Authority
MP	Mile Post
NCTD	North County Transit District
OBIS	On Board Information System
OCTA	Orange County Transportation Authority
OTP	On-time performance
Plan	California State Rail Plan
PTC	Positive Train Control
Prop 1B	Proposition 1B
RCTC	Riverside County Transportation Commission
ROW	Right-of-way
SANDAG	San Diego Association of Governments
SB	Senate Bill
SBCAG	Santa Barbara County Association of Governments
SCAG	Southern California Association of Governments



SCORE	Southern California Optimized Rail Expansion
SCRRA	Southern California Regional Rail Authority
SDMTS	San Diego Metropolitan Transit System
SDP	Service Development Plan
SJJPA	San Joaquin Joint Powers Authority
SLOCOG	San Luis Obispo Council of Governments
SOU	Special Operations Unit
SRA	State Rail Assistance
STIP	State Transportation Improvement Program
TAC	Technical Advisory Committee
TIRCP	Transit and Intercity Rail Capital Program
UPRR	Union Pacific Railroad
UPS	Uniform Performance Standards
TSA	Transportation Security Administration
VCTC	Ventura County Transportation Commission
VSS	Video Surveillance System

